S&P Dow Jones Indices

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Introducing the S&P/ASX 200 GARP Index

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Introduction

In the papers <u>Bridging Value and Growth: Designing a GARP Strategy for Australia</u> and <u>Introducing the S&P World Ex-Australia GARP Index</u>, we documented the growth at a reasonable price (GARP) strategy's effectiveness in markets outside of Australia. We also highlighted that, due to the unique nature of the Australian equity market, certain aspects of index construction may need to be modified to better fit local characteristics.

How does S&P DJI approach the GARP strategy within the Australian equity market?

In this paper, we introduce the <u>S&P/ASX 200 GARP Index</u>, an innovative index that applies the GARP framework to the <u>S&P/ASX 200</u> universe. This index is built upon the well-established S&P GARP Index Series, focusing on growth opportunities while balancing valuation and quality considerations. The index methodology has also been adjusted to better align with the local market dynamics.

In this paper, we will delve into the index construction, historical performance and characteristics of the index to show how GARP works in Australia. This paper aims to provide insight into how an indexing approach can implement the GARP framework in a more localized manner.

Index Construction

On Aug. 9, 2024, S&P Dow Jones Indices (S&P DJI) launched the S&P/ASX 200 GARP Index. This index begins by selecting the top 150 stocks with the highest Growth Scores from the S&P/ASX 200. The Growth Score is a composite metric that combines three-year sales-per-share (SPS) growth with three-year earnings-per-share (EPS) growth.

From this pool of 150 stocks, the S&P/ASX 200 GARP Index subsequently selects the top 50 stocks based on the highest quality and value (QV) composite score. The QV composite score is derived from two key metrics that assess both quality and valuation: return on equity (ROE) and earnings-to-price ratio. ROE serves as a prominent metric for evaluating a company's quality, while the earnings-to-price ratio is widely recognized as a valuation metric.

The selected 50 stocks are then weighted according to the product of their float market capitalization (FMC) and QV composite score, subject to a 0.1% single-stock floor and a 10% single-stock cap. The index also incorporates a relative single GICS® sector cap of no more than 10% above the corresponding GICS sector weight in the S&P/ASX 200. The index is rebalanced on a semiannual basis in June and December.

While the design of the S&P/ASX 200 GARP Index mirrors the framework of the broader GARP methodology, several adjustments have been made to better align with the characteristics of the Australian market.

- Mild Selection on Growth Metrics: We exclude only the bottom 50 stocks with poor growth characteristics from the S&P/ASX 200 universe. Our previous paper, Bridging Value and Growth: Designing a GARP Strategy for Australia, indicated that when assigning stocks in the S&P/ASX 200 into quintile compositions, the results of the historical growth performance of both EPS and SPS are not monotonic. Additionally, the Australian equity market tends to be more cyclical than the U.S. equity market, with over 50% of the S&P/ASX 200 weight concentrated in Financials and Materials as of August 2024. A moderate screening of growth metrics can eliminate poor growth stocks while helping to smooth out some cyclical fluctuations in the underlying market.
- Exclusion of Leverage Ratio: We have removed the leverage ratio from the calculation of the QV composite score. In Bridging Value and Growth: Designing a GARP Strategy for Australia, we discovered that the leverage ratio is not a suitable metric for the Australian market, which is heavily weighted toward Financials—particularly banks—which has accounted for more than 30% of the S&P/ASX 200 weight on average over the past decade. Leverage ratios may not effectively reflect the riskiness of a company's financial profile, especially with regard to banks.

- Amplified Contribution from QV Composite Score: By selecting 50 stocks with high QV composite scores from the top 150 Growth Score-screened companies and weighting the constituents based on the product of their FMC and QV composite score, we enhance the index's construction. Based on our research in Bridging Value and Growth: Designing a GARP Strategy for Australia, it seems that ROE and earnings-to-price ratios are effective metrics in the Australian market. Identifying companies with strong profitability and reasonable valuations within the growth universe is crucial for finding well-priced opportunities.
- Capping Adjustments: The single-stock cap is set at 10%, and the GICS sector cap is established at a relative 10% against the S&P/ASX 200. This approach better reflects the characteristics of the S&P/ASX 200, which is a more concentrated index with fewer stocks compared to the S&P World Ex-Australia.

More details of the research can be found in the paper <u>Bridging Value and Growth: Designing</u> a <u>GARP Strategy for Australia</u>. For an overview of the index methodology, see Exhibit 1.

Exhibit 1: S&P/ASX 200 GARP Index Methodology

Criteria	Details				
Universe	S&P/ASX 200				
Eligibility Criteria	 Have both a Growth z-score and QV z-score, which are defined in Selection Process Positive Underlying Current Three-Year Fiscal Year EPS: Have positive underlying EPS current fiscal year data point for a given stock's three-year EPS Growth Positive ROE: Have positive underlying EPS or book value per share (BVPS) for a given stock's ROE Trading History: Have been trading for at least 10 months Multiple Share Classes: Each company is represented once by the Designated Listing 				
Selection Process	 Compute a Growth z-score and QV composite z-score for each of the stocks that satisfy the eligibility criteria 				
	Style Factor Component				
	Growth (1) Three-year EPS growth (2) Three-year SPS growth				
	QVComposite (1) ROE (Quality Factor) (2) Earnings-to-price ratio (Value Factor)				
	Rank stocks by Growth z-scores, the top 150 of Growth stocks remaining eligible for S&P/ASX 200 GARP Index inclusion				
	Rank the remaining eligible stocks by QV composite z-score, selecting the top 50 ranked count of QV stocks, with a 20% buffer applied for current constituents				
Weighting	FMC * QV Composite Score				
Constituent Capping	 0.1% flooring and 10% capping on single constituent Single GICS sector capped at S&P/ASX 200 sector weight + 10% 				
Rebalancing	Semiannual, effective date the close on the third Friday of June and December				
First Value Date	June 18, 2004				
Launch Date	Aug. 9, 2024				

Source: S&P Dow Jones Indices LLC. Data as of July 31, 2024. Table is provided for illustrative purposes.

Historical Returns

During the back-tested period from July 1, 2004, to July 31, 2024, the S&P/ASX 200 GARP Index demonstrated strong performance, outperforming the S&P/ASX 200 by 1.59% per year (see Exhibit 2). While these results are based on back-tested data, the index's robust long-term performance highlights its potential to effectively navigate various market cycles. By leveraging the power of compounding, the level of the S&P/ASX 200 GARP Index increased by more than 30% compared to the S&P/ASX 200 over the past 20 years.

An examination of the back-tested history of the S&P/ASX 200 GARP Index reveals that performance occurred in cycles. The past one- and three-year periods have presented challenges for the S&P/ASX 200 GARP Index, which underperformed relative to the S&P/ASX 200. In certain periods, the S&P/ASX 200 GARP Index exhibited higher volatility than the S&P/ASX 200. Overall, the long-term tracking error has been approximately 6%, with an information ratio ranging between 0.2 and 0.3.

When analyzing price returns since July 2004, the S&P/ASX 200 GARP Index demonstrated robust performance compared to the S&P/ASX 200. Australia is known for being a high dividend market compared to other developed equity markets. The price return of the S&P/ASX 200 GARP Index stood at 5.68% per year, which is 147 bps higher than the price return of the S&P/ASX 200. The S&P/ASX 200 GARP Index outperformed the S&P/ASX 200 in both price return and total return (including dividends and reinvestment). Notably, the total return contribution for the S&P/ASX 200 GARP Index is primarily driven by price appreciation rather than dividends and reinvestments. This suggests that excess returns for the GARP index align more closely with capital appreciation, characteristic of a growth strategy.

Exhibit 2: Historical Performance of the S&P/ASX 200 GARP Index versus the S&P/ASX 200

200	S&P/ASX 200	S&P/ASX 200 GARP Index	
Period	Annualized Compoun	Excess Return (%)	
Full Period	8.72	10.31	1.59
1-Year	13.53	4.15	-9.38
3-Year	7.44	2.89	-4.55
5-Year	7.52	8.37	0.84
10-Year	8.03	10.08	2.04
15-Year	8.88	10.26	1.38
Period	Annualized Standard		Tracking Error (%)
Full Period	13.81	14.48	6.22
1-Year	11.76	13.05	5.96
3-Year	13.71	14.37	6.07
5-Year	16.47	15.48	7.31
10-Year	14.01	14.01 13.32	
15-Year	13.42	13.04	5.74
Period	Risk-Adjusted	d Return	Information Ratio
Full Period	0.63	0.71	0.25
1-Year	1.15	0.32	-1.43
3-Year	0.54	0.20	-0.70
5-Year	0.46	0.54	0.08
10-Year	0.57	0.76	0.28
15-Year	0.66	0.66 0.79	
Period	Annualized Compound	Difference	
Full Period	4.21	5.68	1.47
Period	Return from Dividend an	Difference	
Full Period	4.50	4.63	0.12
Period	Total Return from Dividend	and Reinvestment (%)	Difference
Full Period	51.66	44.87	-6.78

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Performance across Market Environments

Historically, the S&P/ASX 200 GARP Index outperformed the S&P/ASX 200 approximately 56.43% of the time based on monthly returns. Notably, while it outperformed in more than 50% of both up and down months, its performance contrasts with that of the S&P World Ex-Australia GARP Index, which typically showed stronger outperformance during up months. Specifically, the S&P/ASX 200 GARP Index outperformed 54.55% of the time in up months, achieving an average monthly excess return of 4 bps. In down months, it outperformed 59.77% of the time, with an average monthly excess return of 9 bps.¹

This performance can be attributed to the index design, which emphasizes a tilt toward quality and value while carefully managing exposure to growth. As a result, the index effectively reflects some upside potential while providing defensive characteristics during market downturns (see Exhibit 3).

Exhibit 3: Performance of the S&P/ASX 200 GARP Index versus the S&P/ASX 200 during Up and Down Markets

Period	Hit Rate (%)	Monthly Excess Return (%)
All Months	56.43	0.13
Up Months	54.55	0.04
Down Months	59.77	0.09

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Over the past 20 years, the Australian market has experienced four major drawdowns, allowing us to segment the 20-year performance into nine distinct cycles (see Exhibit 4). Prior to March 2020, the S&P/ASX 200 GARP Index outperformed in five out of six cycles, with its only underperformance (of 3.8%) occurring during the Global Financial Crisis. Between March 2016 and January 2020, the S&P/ASX 200 GARP Index had a strong performance, surpassing the S&P/ASX 200 by 29.58%. However, since the onset of the COVID-19 pandemic, the S&P/ASX 200 GARP Index has faced some performance challenges. While it outpaced the S&P/ASX 200 during the two drawdowns in 2020 and 2022, it underperformed during the subsequent bounce-back periods. We will delve deeper into performance attribution in the following section.

Up months are defined as months when the S&P/ASX 200 return is positive. Down months are defined as months when the S&P/ASX 200 return is negative

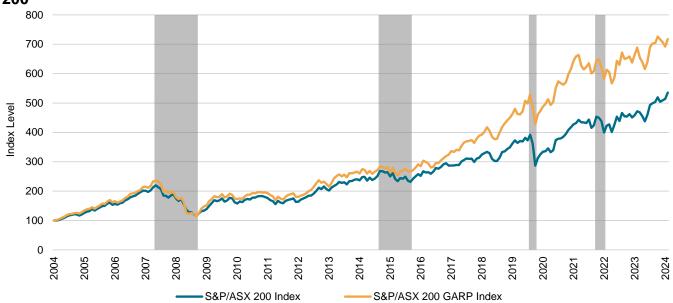


Exhibit 4: Historical Index Levels of the S&P/ASX 200 GARP Index versus the S&P/ASX 200

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. Index levels rebased to 100 on June 30, 2004. Shaded periods represent bear markets. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Next, we explored whether extending the investment horizon would be an effective strategy to mitigate the cyclicality of performance over time. Exhibit 5 illustrates the variation in rolling 3-, 5- and 10-year excess returns of the S&P/ASX 200 GARP Index compared to the S&P/ASX 200.

The data indicates that a longer performance measurement period correlates with a higher probability of outperformance against the underlying benchmark. From July 2004 to July 2024, there were 206 observations spanning a three-year performance horizon. During this timeframe, the S&P/ASX 200 GARP Index outperformed the S&P/ASX 200 in 73.3% of instances, yielding an average excess return of 1.99% per year.

Expanding the sample horizon to 10 years revealed even more compelling results. In 97.5% of the observed instances over this extended period, the S&P/ASX 200 GARP Index consistently outperformed the S&P/ASX 200, achieving an average excess return of 1.94% per year. These findings underscore the potential efficacy of adopting longer investment horizons to achieve historically robust performance outcomes.

Exhibit 5: Rolling Performance Observations of the S&P/ASX 200 GARP Index

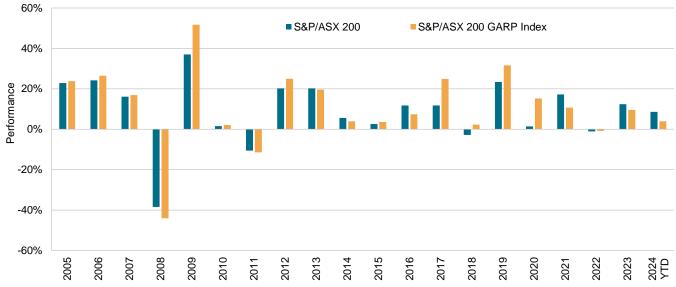
Period	Number of Observations	Number of Outperformance Observations	Percent of Outperformance Observations	Average Excess Return (%)
3-Year	206	151	73.3	1.99
5-Year	182	167	91.76	2.24
10-Year	122	119	97.5	1.94

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Performance Attribution

Throughout the past two decades, the S&P/ASX 200 GARP Index has demonstrated strong overall performance. However, as noted, the index has faced some performance challenges since March 2020, particularly in 2021 and again since 2023 (see Exhibit 6).

Exhibit 6: S&P/ASX 200 GARP Index Calendar Year Performance



Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

A closer examination of the underperformance between April 2020 and July 2024 reveals valuable insights, as illustrated in Exhibit 7. The primary drivers of this underperformance stem from the allocation effect rather than the selection effect. The S&P/ASX 200 GARP Index underweighted the Financials sector and overweighted Consumer Staples, which negatively affected performance during the strong rally of Financials in the rising interest rate environment.

Additionally, the index experienced a negative selection effect in the Energy, Financials and Real Estate sectors. However, positive allocation effects in Consumer Discretionary and Materials, along with positive selection effects in Health Care and Materials, helped to offset some of the performance headwinds.

Exhibit 7: Three-Factor Brinson Performance Attribution

	S&P/ASX 200		S&P/ASX 200 GARP Index		Attribution Analysis			
Sector	Average Weight (%)	Total Return (%)	Average Weight (%)	Total Return (%)	Allocation Effect (%)	Selection Effect (%)	Interaction Effect (%)	Total Effect (%)
Energy	5.17	127.38	5.83	-33.95	-3.53	-8.99	1.52	-11.00
Financials	28.79	125.46	6.98	91.26	-7.02	-5.20	2.80	-9.42
Consumer Staples	5.13	23.83	12.53	16.55	-4.80	-0.72	0.27	-5.25
Real Estate	6.50	90.35	8.31	33.81	-1.77	-3.43	1.66	-3.55
Utilities	1.07	9.31	1.17	-41.89	0.09	-1.10	-1.22	-2.23
Industrials	6.77	61.37	7.29	91.00	0.40	1.67	-3.19	-1.12
Information Technology	3.38	134.99	1.64	182.76	-0.57	1.80	-0.87	0.36
Communication Services	3.58	78.04	1.08	66.53	0.32	1.22	-0.68	0.85
Health Care	10.29	18.33	12.41	37.27	-1.88	3.63	-0.51	1.24
Consumer Discretionary	7.15	126.86	11.36	110.12	5.61	-0.40	0.58	5.79
Materials	22.18	98.88	31.39	133.11	2.07	7.83	2.63	12.52
Total	100.00	86.66	100.00	74.82	-11.13	-3.70	2.99	-11.84

Source: S&P Dow Jones Indices LLC, FactSet. Data from March 31, 2020, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Sector Relative Weights

Exhibit 8 provides a detailed analysis of historical sector weights, highlighting the relative overweight and underweight positions of the GICS sectors within the S&P/ASX 200 GARP Index compared to the S&P/ASX 200. The exhibit presents a time series of the relative weight of each sector in the S&P/ASX 200 GARP Index against the S&P/ASX 200.

The historical data indicates a consistent underweight in sectors such as Financials. Fluctuations in relative weights have been observed in sectors like Energy and Information Technology. In contrast, sectors such as Health Care, Materials, Consumer Staples and Consumer Discretionary have been overweight for most of the period.

On average, Health Care, Materials and Communication Services have historically been the most overweight sectors. As of June 30, 2024, the index displayed a 12% overweight in the Materials sector and a 10% overweight in Consumer Discretionary. For comprehensive historical GICS sector weights, please refer to Exhibit 12 in the Appendix.

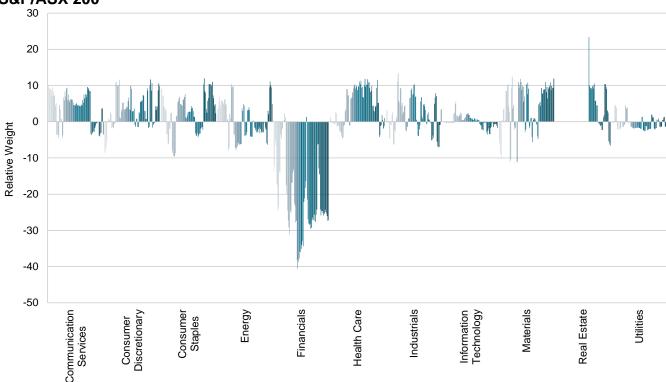


Exhibit 8: Relative GICS Sector Weights of the S&P/ASX 200 GARP Index against the S&P/ASX 200

Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Historical Characteristics

The S&P/ASX 200 GARP Index integrates multiple fundamental metrics into a cohesive framework, enabling us to examine the index's historical characteristics and its exposure to various metrics of growth, valuation and quality. Exhibit 9 presents the historical quarterly averages and a snapshot of these fundamentals as of the end of Q2 2024.

The S&P/ASX 200 GARP Index demonstrated a higher EPS and SPS growth ratio, highlighting its strong growth characteristics. Additionally, the index exhibited low valuation as measured by the price-to-earnings ratio, superior ROE and a lower long-term debt-to-capital ratio (despite not targeting this in the index construction). Furthermore, it historically maintained higher operating and net margins.

These characteristics collectively illustrate that the index maintained a well-balanced exposure to multiple factors, reinforcing its objective of being a "quality growth" strategy—aligning with the GARP fundamentals of growth at a reasonable price.

Exhibit 9: Index Characteristics

Characteristic	S&P/ASX 200	S&P/ASX 200 GARP Index
As of June 30, 2024		
Historical 3-Year EPS Growth	18.70	25.27
Historical 3-Year Sales Growth	16.37	21.02
Price/Earnings	19.70	13.34
Price/Cash Flow	10.88	7.20
Dividend Yield	3.71	4.14
ROE	14.77	26.34
Return on Assets (ROA)	6.33	13.47
Long Term Debt to Capital	35.63	33.31
Operating Margin	24.22	27.61
Net Margin	15.93	18.43
Quarterly Average from June 30 2004, to June 3	30, 2024	
Historical 3-Year EPS Growth	11.40	25.27
Historical 3-Year Sales Growth	10.52	16.79
Price/Earnings	15.58	12.64
Price/Cash Flow	11.29	7.46
Dividend Yield	4.16	4.47
ROE	16.89	28.48
ROA	7.06	14.37
Long Term Debt to Capital	38.05	32.89
Operating Margin	23.19	26.70
Net Margin	15.43	20.54

Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to Jun 30, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Exhibit 10 illustrates the historical turnover levels of the S&P/ASX 200 GARP Index. With semiannual rebalancing, the index maintained an average annual one-way turnover of 67%. The turnover per rebalance varied between 20% and 40% over the past five years, depending on market volatility.

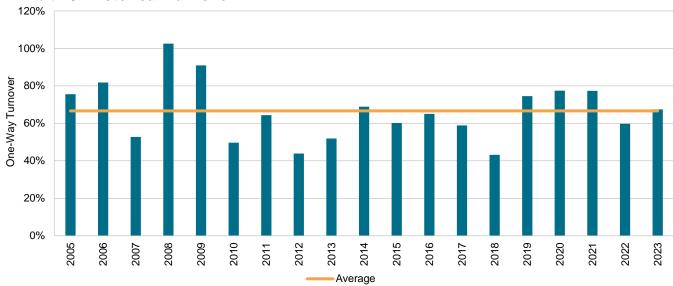


Exhibit 10: Historical Turnover

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

Combination with the S&P/ASX 200

Incorporating a global GARP strategy into an Australia-based strategy, such as the S&P/ASX 200, can yield several potential benefits. To illustrate this, we examine the hypothetical outcomes of combining the S&P/ASX 200 GARP Index with the S&P/ASX 200. Over the period from July 2004 to July 2024, a hypothetical weight of 100% to the S&P/ASX 200 generated an annual total return of 8.72%, accompanied by an annualized volatility of 13.81%.

Exhibit 11 presents the change in risk-adjusted returns resulting from adding hypothetical weights to the S&P/ASX 200 GARP Index in 10% increments alongside the S&P/ASX 200. Back-tested historical performance data indicates that as the weight shifted toward the S&P/ASX 200 GARP Index, the overall risk-adjusted return improved. A 100% weight to the S&P/ASX 200 GARP Index generated an annual total return of 10.31%, with an annualized volatility of 14.48%.

This combination demonstrates the potential for enhanced historical performance when integrating an Australian GARP strategy into a broad market equity strategy.

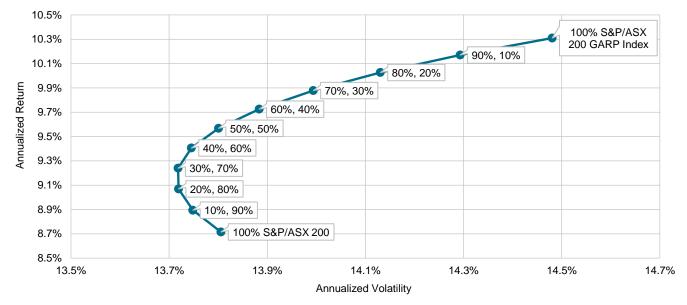


Exhibit 11: Index Combination Risk/Return Profile

All compositions are hypothetical compositions.

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. 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.

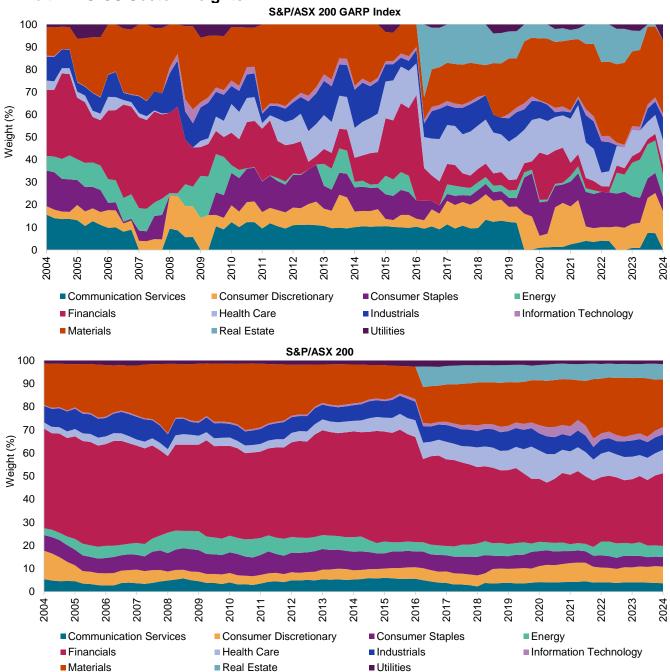
Conclusion

The introduction of the S&P/ASX 200 GARP Index marks a significant advancement in the launch of the GARP index strategy within the Australian equity market. By thoughtfully integrating growth, quality and valuation metrics, this framework could help identify growth companies while taking into account valuation and profitability.

The back-tested historical analysis demonstrated that the S&P/ASX 200 GARP Index often outperformed the S&P/ASX 200, showcasing its resilience across various market cycles. This performance not only highlights the index's ability to reflect growth opportunities but also emphasizes its defensive characteristics during market downturns. By focusing on companies with strong fundamentals, the index aligns with the principles of quality growth investing, reinforcing the idea that growth and value can coexist harmoniously. Incorporating the GARP framework into a broad market strategy enhanced historical risk-adjusted returns, which could allow for the possibility to methodically identify well-priced growth companies.

Appendix

Exhibit 12: GICS Sector Weights



Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. All data prior to such date is back-tested hypothetical data. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect 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 Disclosure/Back-Tested Data

The S&P/ASX 200 GARP Index was launched Aug. 9, 2024. 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.spglobal.com/spdi. Past performance of the Index is not an indication of future results. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results. Please refer to the methodology for the Index 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. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

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