S&P Dow Jones Indices

A Division of S&P Global

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Introducing the S&P World Ex-Australia GARP Index

Introduction

Since the 2008 Global Financial Crisis, the U.S. equity market has undergone a prolonged period of large-cap growth, characterized by remarkable performance. Between February 2009 and July 2024, the <u>S&P 500® Growth</u> posted an impressive return of 1,083.34%, significantly outperforming the <u>S&P 500</u>'s return of 913.77% and the <u>S&P 500 Value</u>, which returned 712.37%. Over this more than 15year horizon—a substantial timeframe for performance evaluation value investing has faced considerable challenges, often raising questions about its effectiveness in a rapidly evolving market landscape.

Against this backdrop, market participants have increasingly turned to innovative strategies for growth investing, with one approach gaining notable traction: growth at a reasonable price (GARP).

In this paper, we introduce the <u>S&P World Ex-Australia GARP Index</u>, a pioneering index that applies the GARP framework to the <u>S&P</u> <u>World Ex-Australia Index</u> universe. This index offers Australian market participants a unique opportunity to assess the performance of companies that exhibit strong growth characteristics while emphasizing reasonable valuation, high profitability and low leverage ratios. The index provides valuable insights into the intersection of growth and value investing. Through our exploration, we aim to illuminate the historical performance and characteristics of this index, presenting a compelling case for its integration into investment strategies focused on growth opportunities beyond the Australian market.

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Index Construction

On Aug. 9, 2024, S&P Dow Jones Indices (S&P DJI) launched the S&P World Ex-Australia GARP Index. This index begins by selecting the top 500 stocks with the highest Growth Scores from the S&P World Ex-Australia Index. The S&P World Ex-Australia Index measures the large- and mid-cap universe of developed stocks outside Australia, which collectively represent approximately 85% of each relevant market's total available capital. 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 500 stocks, the S&P World Ex-Australia GARP Index subsequently selects the top 250 stocks based on the highest Quality and Value (QV) composite score. The QV composite score is derived from three metrics that assess both quality and valuation: the financial leverage ratio, return on equity and earnings-to-price ratio. The first two metrics evaluate the quality of the company, while the earnings-to-price ratio serves as a valuation metric. The selected 250 stocks are then weighted according to the product of their float market capitalization (FMC) and Growth Score, subject to a 0.1% single-stock floor, a 5% single stock cap and a 40% single GICS[®] sector cap. The index is rebalanced on a semiannual basis in June and December.

The S&P World Ex-Australia GARP Index closely mirrors the construction of the <u>S&P 500</u> <u>GARP Index</u>, with two notable exceptions.

- The weighting of constituents is based on the FMC * Growth Score, rather than solely on the Growth Score used in the S&P 500 GARP Index. This adjustment is essential because the S&P World Ex-Australia GARP Index allocates across more than 20 developed markets, making it important to incorporate FMC in the weighting scheme to ensure that market weight does not deviate significantly from the underlying S&P World Ex-Australia Index.
- The single-stock floor has been increased from 0.05% in the S&P 500 GARP Index to 0.1%. This change is due to the target stock count of the S&P 500 GARP Index being 75, compared to 250 in the S&P World Ex-Australia GARP Index. Raising the stock floor helps mitigate situations where smaller stocks hold a negligible share of the index, thereby improving implementation.

For an overview of the index methodology, see Exhibit 1.

Criteria	Details			
Universe	S&P World Ex-Australia Index			
Eligibility Criteria	 Have both a Growth z-score and QV z-score, as 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 3-year EPS growth Positive Return on Equity (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 			
	 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			
Selection Process	QV Composite(1) Financial leverage ratio (Quality factor)QV Composite(2) ROE (Quality factor)(3) Earnings-to-price ratio (Value factor)			
	 Rank stocks by Growth z-scores, the top 500 of Growth stocks remaining eligible for S&P World Ex- Australia GARP Index inclusion 			
	3. Rank the remaining eligible stocks by QV composite z-score, selecting the top 250 ranked count of QV stocks, with a 20% buffer applied for current constituents			
Weighting	FMC * Growth Score			
Constituent Capping	 0.1% flooring and 5% capping on single constituent 40% capping on single GICS sector 			
Rebalancing	Semiannual, effective date is the close on the third Friday of June and December			
First Value Date	June 18, 2004			
Launch Date	Aug. 9, 2024			

Exhibit 1: S&P World Ex-Australia GARP Index Methodology

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 spanning July 1, 2004, to July 31, 2024, the S&P World Ex-Australia GARP Index demonstrated strong performance, outpacing the S&P World Ex-Australia Index by 3.77% per year. Although this is based on back-tested results, this strong historical long-term performance underscores the index's potential ability to navigate various market cycles effectively. Leveraging the power of compounding, the level of the S&P World Ex-Australia GARP Index was nearly double that of the S&P World Ex-Australia Index over the past 20 years.

By examining the back-tested history of the S&P World Ex-Australia GARP Index, we can derive valuable insights from the past two decades. Across various time horizons, ranging from 1 to 15 years, the S&P World Ex-Australia GARP Index consistently outperformed the S&P World Ex-Australia Index, as evidenced in Exhibit 2. This outperformance was accompanied by a higher level of volatility, with a historical long-term tracking error ranging between 3% and 5%. Overall, the strong outperformance compensated for the elevated risk, resulting in historically higher risk-adjusted returns. The information ratio of the S&P World Ex-Australia GARP Index is approximately 0.75 over the full period.

When examining price returns since July 2004, the S&P World Ex-Australia GARP Index demonstrated robust price performance compared to the S&P World Ex-Australia Index. The contribution from dividends and reinvestment represented 16.82% of the total return of the S&P World Ex-Australia GARP Index, which is lower than the 27.6% contribution from dividends and reinvestment in the S&P World Ex-Australia Index. This suggests that excess returns for the GARP index are primarily driven by capital appreciation rather than dividends and reinvestment, aligning with the characteristics typical of a growth strategy.

Pariod	S&P World Ex-Australia Index	S&P World Ex-Australia GARP Index	Excess Return (%)	
Period	Annualized Comp	ound Return (%)		
Full Period	9.20	12.97	3.77	
1-Year	23.17	26.63	3.46	
3-Year	11.68	15.19	3.51	
5-Year	13.89	19.45	5.56	
10-Year	14.14	17.43	3.29	
15-Year	13.05	16.18	3.13	
Period	Annualized Standa	ard Deviation (%)	Tracking Error (%)	
Full Period	11.35	12.39	4.74	
1-Year	10.66	10.18	3.26	
3-Year	11.97	14.63	5.02	
5-Year	11.78	14.01	4.55	
10-Year	11.21	13.08	4.04	
15-Year	10.77	12.11	3.92	
Period	Risk-Adjust	ted Return	Information Ratio	
Full Period	0.81	1.05	0.75	
1-Year	2.17	2.61	0.85	
3-Year	0.98	1.04	0.69	
5-Year	1.18	1.39	1.12	
10-Year	1.26	1.33	0.77	
15-Year	1.21	1.34	0.74	
Period	Annualized Compour	nd Price Return (%)	Difference	
Full Period	6.66	10.79	4.13	
Period	Return from Dividend a	and Reinvestment (%)	Difference	
Full Period	2.54	2.18	-0.36	
Period	Total Return from Dividen	nd and Reinvestment (%)	Difference	
Full Period	27.60	16.82	-10.78	

Exhibit 2: Historical Performance of the S&P World Ex-Australia GARP Index versus the S&P World Ex-Australia Index

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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

During the back-tested period from July 2004 to July 2024, the S&P World Ex-Australia GARP Index demonstrated a compelling track record, consistently outperforming the S&P World Ex-Australia Index across various market conditions. The index surpassed the S&P World Ex-Australia Index approximately 48.35% of the time during down months, while it outperformed 59.33% of the time during up months.¹

Throughout all months, the S&P World Ex-Australia GARP Index posted an average excess return of 0.30%. During down months, the index exhibited a slight outperformance of 0.06% on average. However, its pro-cyclical characteristics revealed additional value during up months, where it achieved an average excess return of 0.24%. This indicates that a significant portion of the S&P World Ex-Australia GARP Index's overall excess return originated from its outperformance during bull markets (see Exhibit 3).

Exhibit 3: Performance of the S&P World Ex-Australia GARP Index versus the S&P World Ex-Australia Index during Up and Down Markets

Period	Hit Rate (%)	Monthly Excess Return (%)
All Months	55.19	0.30
Up Months	59.33	0.24
Down Months	48.35	0.06

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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.

As shown in Exhibit 4, on average, the S&P World Ex-Australia Index outperformed during up markets. Indeed, during the five historical bull runs since July 2004, the S&P World Ex-Australia GARP Index consistently outperformed the S&P World Ex-Australia Index, with the largest outperformance of 9.7% per year occurring between April 2020 and December 2021. This strong outperformance was followed by a drawdown in the first half of 2022, during which the S&P World Ex-Australia GARP Index declined by 20.06%, compared to a 16.06% drop in the S&P World Ex-Australia Index. We can use the four major drawdown events of the S&P World Ex-Australia Index to split the historical performance since July 2004 into performance subperiods. Notably, during the nine performance subperiods, the S&P World Ex-Australia GARP Index decimed twice, with the other underperformance of 1.64% occurring between October 2018 and December 2018, a period when the market declined by 10.89%.

¹ Up months are defined as months when the S&P World Ex-Australia Index return is positive. Down months are defined as months when the S&P World Ex-Australia Index return is negative.



Exhibit 4: Historical Index Levels of the S&P World Ex-Australia GARP Index versus the S&P World Ex-Australia Index

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 World Ex-Australia GARP Index compared to the S&P World Ex-Australia Index.

The data indicates that a longer performance measurement period correlated with a higher probability of outperformance against the underlying benchmark. Over the period from July 2004 to July 2024, there were 206 observations spanning a three-year performance horizon. During this timeframe, the S&P World Ex-Australia GARP Index outperformed the S&P World Ex-Australia Index in 89.8% of instances, yielding an average excess return of 3.57% per year.

Expanding the sample horizon to 10 years revealed even more compelling results. In all observed instances over this extended period, the S&P World Ex-Australia GARP Index consistently outperformed the S&P World Ex-Australia Index, achieving an average excess return of 3.01% per year. These findings underscore the possible efficacy of adopting longer investment horizons to achieve historically robust performance outcomes.

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 World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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.

Period	Number of Observations	Number of Outperformance Observations	Percent of Outperformance Observations	Average Excess Return (%)
3-Year	206	185	89.8	3.57
5-Year	182	174	95.6	3.42
10-Year	122	122	100.0	3.01

Exhibit 5: Rolling Performance Observations of the S&P World Ex-Australia GARP Index

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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 World Ex-Australia GARP Index has demonstrated strong overall performance. After underperforming the S&P World Ex-Australia Index by 4% in the first half of 2022, the S&P World Ex-Australia GARP Index experienced a robust rebound, showcasing the strategy's resilience as the market shifted toward a bull run (see Exhibit 6).



Exhibit 6: S&P World Ex-Australia GARP Index Calendar Year Performance

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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 outperformance observed over the past two years reveals valuable insights, as shown in Exhibit 7. The S&P World Ex-Australia GARP Index's outperformance during this period stemmed from both allocation and selection effects. Its overweight position in the information technology sector contributed more than 4% of the excess return, while the selection effect within the information technology sector added another 5.91%. Additionally,

the selection effect within the Communication Services sector contributed 2.54%. Overall, the selection effect generated more excess returns than the allocation and interaction effects combined.

	S&P World Ex-Australia Index		S&P World Ex-Australia GARP Index		Attribution Analysis			
Sector	Average Weight (%)	Total Return (%)	Average Weight (%)	Total Return (%)	Allocation Effect (%)	Selection Effect (%)	Interaction Effect (%)	Total Effect (%)
Information Technology	23.82	93.58	33.66	124.68	4.21	5.91	2.98	13.10
Communication Services	7.23	62.95	9.07	97.22	-0.45	2.54	1.16	3.26
Consumer Staples	7.35	23.40	3.84	24.55	0.90	0.15	0.24	1.30
Utilities	2.87	19.61	0.58	31.52	0.97	0.70	-0.66	1.02
Real Estate	2.33	12.85	0.96	13.86	0.72	0.12	-0.03	0.80
Financials	13.22	63.64	7.85	73.88	-0.16	1.40	-1.18	0.06
Energy	13.22	29.64	15.28	30.55	-1.39	0.31	0.97	-0.11
Health Care	4.83	44.53	8.66	32.46	-0.30	-0.55	0.65	-0.20
Materials	3.58	41.01	3.83	36.68	-0.23	-0.11	-0.19	-0.53
Industrials	10.69	65.02	7.55	56.49	-0.29	-0.78	0.19	-0.87
Consumer Discretionary	10.85	41.62	8.73	28.72	0.18	-1.45	-0.84	-2.11
Total	100.00	55.11	100.00	70.82	4.17	8.26	3.29	15.71

Exhibit 7: Three-Factor Brinson Performance Attribution

Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2022, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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 and Region 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 World Ex-Australia GARP Index compared to the S&P World Ex-Australia Index. The exhibit presents a time series of the relative weight of each sector in the S&P World Ex-Australia GARP Index against the S&P World Ex-Australia Index.

The historical data indicates a consistent overweight in sectors such as Information Technology, while sectors like Financials, Utilities, Real Estate and Industrials have been underweight most of the time. Fluctuations in relative weights have been observed in sectors such as Communication Services, Consumer Discretionary, Consumer Staples, Energy, Health Care and Materials. This variability aligns with the cyclical nature of the economy, wherein certain sectors may experience growth during specific market environments. On average, Information Technology has historically been the most overweight sector. However, as of the latest quarter end on June 30, 2024, the index displayed a 12% overweight in the Energy sector. For comprehensive historical GICS sector weights, please refer to Exhibit 13 in the Appendix.





Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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.

Similarly, Exhibit 9 provides a breakdown of historical regional weights. Given the large number of markets covered by the index, we cluster some markets in Europe and Asia Pacific (APAC) into "Rest of Europe" and "Rest of APAC." The U.K., France, Germany, Switzerland and Japan are highlighted separately due to their significant weight representation in the region. The data shows that the S&P World Ex-Australia GARP Index has generally overweighted the U.S. and the Rest of APAC (including Hong Kong, Singapore, New Zealand and Israel), while underweighting France and Germany. However, similar to sectors, we also observe a rotation of weights across regions historically, a result of the different growth cycles of different markets. As of June 30, 2024, the S&P World Ex-Australia GARP Index exhibited a neutral overall market weight, with a modest overweight in Denmark, the Netherlands and the United States, while being underweight in Japan, Switzerland and Germany. For a comprehensive historical regional weight, please see Exhibit 14 in the Appendix.



Exhibit 9: Relative Regional Weights of the S&P World Ex-Australia GARP Index against the S&P World Ex-Australia Index

Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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 World Ex-Australia GARP Index integrates multiple fundamental metrics into a cohesive framework, allowing us to examine the index's historical characteristics and its exposure to various metrics of growth, valuation and quality. Exhibit 10 presents both the historical quarterly averages and the latest quarter-end snapshot of these fundamentals. The S&P World Ex-Australia 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, a superior ROE, a lower long-term debt-to-capital ratio (leverage) and historically higher operating and net margins. These characteristics collectively illustrate that the index maintained a well-balanced exposure to multiple factors, reinforcing its objective of a "quality growth" strategy—or the GARP fundamentals: growth at a reasonable price.

Exhibit 10: Index Characteristics

Characteristic	S&P World Ex-Australia Index	S&P World Ex-Australia GARP Index			
As of June 30, 2024					
Historical 3-Year EPS Growth	24.82	52.27			
Historical 3-Year Sales Growth	16.10	23.74			
Price/Earnings	22.60	18.60			
Price/Cash Flow	14.05	12.38			
Dividend Yield	1.72	1.43			
ROE	24.46	31.99			
ROA	11.51	15.55			
Long Term Debt to Capital	36.35	26.96			
Operating Margin	23.20	26.05			
Net Margin	17.90	22.40			
Quarterly Average from June 30, 2004, to June 30, 2024					
Historical 3-Year EPS Growth	14.64	31.27			
Historical 3-Year Sales Growth	8.73	16.12			
Price/Earnings	16.84	15.12			
Price/Cash Flow	9.39	10.57			
Dividend Yield	2.29	1.86			
ROE	18.26	28.03			
ROA	7.85	13.30			
Long Term Debt to Capital	32.60	25.36			
Operating Margin	18.99	23.75			
Net Margin	12.78	18.17			

Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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 11 illustrates the historical turnover levels of the S&P World Ex-Australia GARP Index. With semiannual rebalancing, the index maintained an average annual one-way turnover of 60%. The turnover per rebalance varied between 20% and 40%, depending on market volatility.



Exhibit 11: Historical Turnover

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. All data prior to index launch 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 <u>S&P/ASX</u> <u>200</u>, could have several potential benefits. To illustrate this, we examine the hypothetical outcomes of combining the S&P World Ex-Australia GARP Index with the S&P/ASX 200. Over the period from July 2004 to July 2024, a hypothetical composition that allocated 100% to the S&P/ASX 200 generated an annual total return of 8.72%, with an annualized volatility of 13.81%.

Exhibit 12 presents the change in risk-adjusted returns resulting from the introduction of weight to the S&P World Ex-Australia GARP Index in increments of 10% to the S&P/ASX 200. Back-tested historical performance data indicates that a 90% weight to the S&P World Ex-Australia GARP Index and 10% weight to the S&P/ASX 200 improved the total return by 390 basis points per year while simultaneously reducing volatility by 183 basis points, resulting in the highest risk-adjusted return—slightly better than a 100% weight to the S&P World Ex-Australia GARP Index.

While it is common for local market participants to exhibit some home bias, this composition combination demonstrates the power of diversification and the potential for enhanced historical performance when integrating a global GARP strategy into a domestically focused equity strategy.





All compositions are hypothetical compositions.

Source: S&P Dow Jones Indices LLC. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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

In this paper, we examined the GARP strategy within the context of the global equity market. We began by introducing the index methodology of the S&P World Ex-Australia GARP Index, highlighting its robust performance relative to the S&P World Ex-Australia Index across various back-tested time horizons. Our analysis delved deeper into the index's performance attribution, sector and regional weights and fundamental characteristics, offering a comprehensive overview of an index-based approach to identify growth opportunities beyond the Australian market. Finally, we demonstrated the advantages of diversification and historical return enhancement through a hypothetical composition that integrates the S&P World Ex-Australia GARP Index within the Australian equity landscape. This exploration underscores the GARP framework's potential value in a dynamic market environment.

Appendix

Exhibit 13: GICS Sector Weights



Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch 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.

Exhibit 14: Regional Weights



Source: S&P Dow Jones Indices LLC, FactSet. Data from June 30, 2004, to July 31, 2024. The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 2024. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart 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.

Switzerland

Germany

Rest of Europe

Japan

Rest of APAC

■U.S.

Canada

U.K.

France

Performance Disclosure/Back-Tested Data

The S&P World Ex-Australia GARP Index was launched Aug. 9, 2024. The S&P World Ex-Australia Index was launched Sept. 3, 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/spdji. 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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