



Executive Summary

Emerging market equity funds offer investors access to countries that are undergoing an economic transition from low income, to a modern industrial economy with a higher standard of living. The appeal for investors is that the asset class offers exposure to countries where economic growth typically outpaces the economic growth in developed markets, in turn potentially offering higher equity returns, albeit at higher volatility.

While there are huge potential gains awaiting investors that can identify the right emerging market investment at the right time, the risks involved are sometimes not well understood. Risks include political instability, fragmented economic cycles and currency volatility.

In this paper, we explore the efficacy of active manager, single and multi-factor investment strategies across emerging markets to help determine which approach investors should consider when investing in emerging markets equities.

Emerging markets

Emerging markets (EM) are those countries considered 'developing'. These are nations undergoing an economic transition from low income, to a modern industrial economy with a higher standard of living. Levels of household income, quality of financial systems and growth rates are all popular criteria for country classification, but treatment differs between institutions. The widely recognised EM equity market benchmark is the MSCI EM Index which consists of 23 countries. Countries in this index include India, Mexico, South Korea, South Africa, Pakistan, Saudi Arabia, China and Brazil.

Chart 1: MSCI EM coverage



Source: MSCI

The appeal of EM investing is multi-faceted. EM economic growth typically outpaces growth in developed markets (DM), in turn potentially offering higher equity returns, albeit at higher volatility. EM equities, as represented by the MSCI EM Index have outperformed developed markets (represented by the MSCI World Index) on a cumulative basis since 2001. The asset class also offers investors diversification benefits with returns lowly correlated to traditional asset classes.

-100 Developed Markets - Emerging Markets

Chart 2: Developed versus Emerging Markets Cumulative Performance

Source: Bloomberg, Developed Markets as MSCI World Index, Emerging Markets Index as MSCI Emerging Markets Index. USD returns. 1 January 2001 to 31 December 2023. Past performance is not indicative of future performance. You cannot invest in an index.

Table 1: Correlation matrix

Asset class	Emerging markets equities	International equities	Australian equities	Australian Property	Global Bonds	Bank Bills	Australian Bonds
Emerging markets equities	1.00						
International equities	0.50	1.00					
Australian equities	0.52	0.55	1.00				
Australian Property	0.35	0.52	0.77	1.00			
Global Bonds	0.20	0.15	0.28	0.46	1.00		
Bank Bills	0.01	-0.04	-0.02	0.01	0.30	1.00	
Australian Bonds	0.09	0.22	0.08	0.34	0.76	0.27	1.00

Source: Morningstar Direct, 15 year correlation to 31 December 2023. Results are calculated monthly and assume immediate reinvestment of all dividends. You cannot invest in an index. Past performance is not a reliable indicator of future performance. Indices used Bank Bills – Bloomberg AusBond Bank Bill Index, Global Bonds – Barclays Global Aggregate Bond Index A\$ Hedged, Australian Bonds – Bloomberg AusBond Composite 0+ years, Australian Property – S&P/ASX 200 A-REITs Index, International Equities – MSCI World ex Australia Index, Australian Equities – S&P/ASX 200 Accumulation Index, Emerging markets equities – MSCI Emerging Markets Index.

The 'active' approach to emerging markets

The most popular way for Australian investors to access EM equities has been via active funds. Investing directly in EM is expensive and financial laws, taxes and access vary from country to country, so it has made sense to pay a professional fund manager to navigate the EM equities complex.

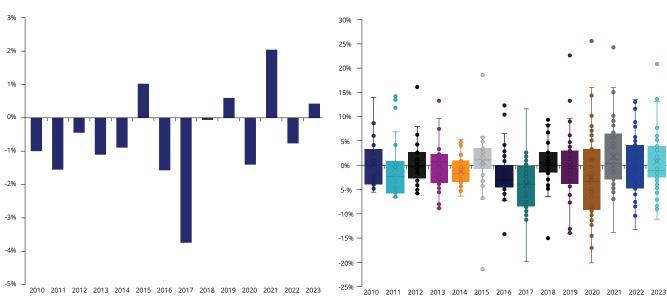
An 'active' manager approach, over a passive approach, for emerging market equities makes sense on the surface. Active management allows managers to avoid those countries with weaker fundamentals and exploit high country and stock return dispersion. Information is not as easily available or shared in EM, and this inefficiency creates opportunities for active managers to uncover attractive investment opportunities before these are reflected in market prices.

However, based on historical performance, many active managers have underperformed.

The median active manager, according to Morningstar data, has underperformed MSCI EM in 10 out of 14 calendar years. Dispersion in active returns year on year is also significant with some managers underperforming by up to 20%. High conviction increases active risk return which unfortunately has been a drawback for many active managers.

Chart 3: Median manager active returns





Source: Morningstar Direct. Past performance is not indicative of future performance.

Source: Morningstar Direct. Past performance is not indicative of future performance.

The results highlight the challenge for investors. They must be selective in their choice of manager, or they can just consider a purely passive approach.

Another 'passive' approach to EM is factor investing. Factor investing has been popular in international developed markets (DM) equity investing, so it is worthwhile examining its efficacy in EM.

An introduction to factor investing

Factor investing selects a set of companies with similar fundamentals, price behaviour or a combination of both. These strategies are implemented with the aim of achieving targeted investment outcomes. Factor definitions are backed by a range of robust academic findings and empirical results. A lot of active manager outperformance can be attributed to factor exposures.

Over the past two decades, access to passive factor investing (also known as smart beta) has become readily available via ETFs. Factor-based ETFs combine the best aspects of active and passive management by tracking indices with defined rules, designed to deliver a targeted investment outcome while retaining transparency, liquidity and ease of trading for investors. MSCI is a global leader in constructing factor index strategies.

For the purposes of this paper, we assess the performance and characteristics of the factor strategies - momentum, size, value and quality – the foundation for MSCI's diversified multi-factor approach.

Table 2: Single factor strategy definitions

Factor	Objective	Academic research	MSCI single factor criterion
Value	Value investing selects 'cheap' companies trading a low price to valuation multiples relative to peers. Value seeks to provide excess returns as company valuations relative to price return to market average.	The value factor is also grounded on the work of Benjamin Graham and David Dodd in the 1930s and academic research by Basu (1977) ¹ and Fama and French (1992) ²	 Book value to price ratio Forward price to earnings Enterprise value to cash flow from operations
Size	Size investing up weights exposure to mid and small caps relative to large caps.	Investing in small companies is supported by academics including Banz (1981) ³ , Fama and French (1992)2.	• Equal weighting
Quality	Quality investing selects companies considered financially healthy, providing stable earnings growth, high return on equity and low financial leverage. Quality is a defensive strategy as it seeks to outperform in late cycle economic environments.	Research supporting quality includes Benjamin Graham and David Dodd in the 1930s. Subsequent empirical studies show that quality growth stocks have historically outperformed the market with relatively low volatility over long time periods (Novy-Marx 2014) ⁴ and a portfolio of quality stocks produces better Sharp ratios (risk-adjusted returns) than the market (Asness, Frazzini, and Pedersen 2013) ⁵ .	 High return on equity Stable year-on-year earnings growth Low debt to equity ratio
Momentum	Momentum investing select companies that recently had strong positive pricing sentiment. The strategy seeks to provide excess returns by investing in companies with strong pricing historical performance tailwinds.	Momentum, as a factor, is supported by academic research by Jegadeesh and Titman (1993) ⁶ which was reinforced by Carhart (1997) ⁷ and Rowenhorst (1998) ⁸ .	 6 month local share price return 12 month local share price return

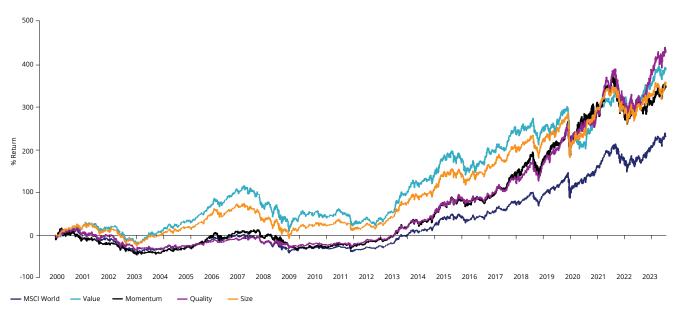
Source: MSCI, VanEck.

Benefits of factor investing

Factor investing has historically achieved excess market returns over the long term in developed and emerging market equity strategies.

When active managers succeed it is often due to their assessment of the macroeconomic environment. That is why factor strategies must perform as designed, that is they exhibit factor efficacy.

Chart 5: Global equity cumulative factor returns



Source: MSCI, USD returns, January 2000 to December 2023, MSCI World Factor Indices, Value is MSCI World Enhanced Value. Past performance is not indicative of future performance. You cannot invest in an index.

Chart 6: Emerging markets cumulative factor returns



Source: MSCI, USD returns, January 2001 to December 2023, MSCI EM Factor Indices, Value Index used is MSCI EM Enhanced Value. Past performance is not indicative of future performance. You cannot invest in an index.

Using single factors in developed markets

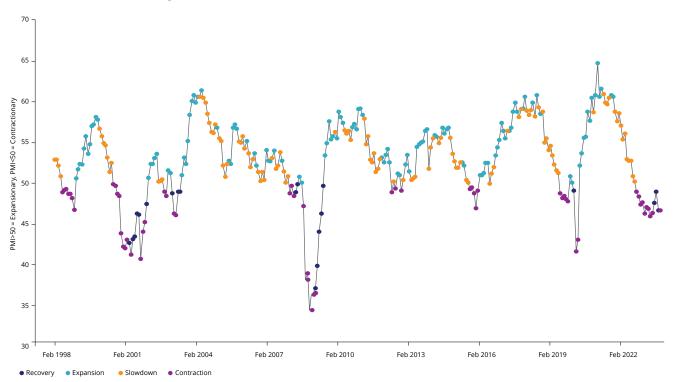
VanEck has released an extensive amount of research supporting the use case for single factor investing, namely value and quality across developed markets. In terms of how each factor typically performs, quality is defensive and value is pro-cyclical.

This is demonstrated when comparing the cumulative relative performance of each factor to the benchmark against four distinct phases in the economic cycle. The direction and the pace of economic activity identify these cycles.

- An expansionary environment is when growth is expanding at a faster rate;
- A slowdown occurs when economic activity is expansion at a declining rate;
- · A contraction occurs when economic growth is negative and it is still falling; and
- A recovery is when economic growth, after the trough of a contraction, starts to head toward growth.

The Purchasing Managers' Index (PMI) is an index used to measure the prevailing direction of economic trends in the manufacturing and service sectors. It measures the change in production levels across the economy from month-to-month so is considered a key indicator of the state of the economy. The chart below shows the three-month rolling PMI changes since 1997, highlighting the stage of the economic cycle at that time.

Chart 7: ISM Manufacturing PMI Index



Source: VanEck, Bloomberg. As at 31 December 2023

Overlaying the relative performance of single factor developed market strategies, the graphs below demonstrate that quality has historically outperformed in a slowdown/contraction and value during a recovery/expansion in developed markets.

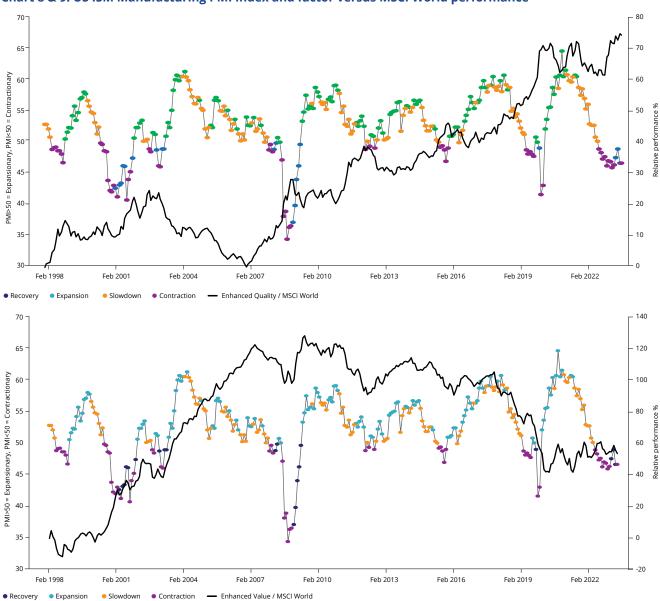


Chart 8 & 9: US ISM Manufacturing PMI Index and factor versus MSCI World performance

Source: ISM, MSCI, to 31 December 2023 Past performance is not indicative of future performance. You cannot invest in an index. Quality is MSCI World Quality Index. Enhanced Value is MSCI World Enhanced Value.

In the US, the average economic cycle lasted 4 years between 2000 and 2023. The US was in a slowdown or contractionary phase for 53% of the time during these 23 years. Because of the higher proportion of time in slowdown and contraction, the juxtaposition of factor target outcomes across macroeconomic conditions and the multi-year time persistency in each phase, the outcome that stands out is a quality and value blended approach. This could potentially be an appropriate way to invest across the investment cycle. Investment framework below;

- Quality exposure as core. Highest proportion of time in slowdown/contraction
- · Dialing up and down exposure to value versus quality depending on the phase of the economic cycle

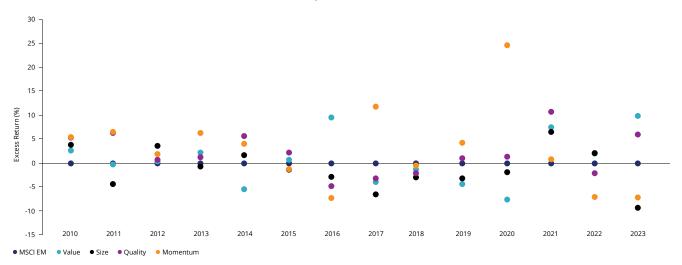
The overall benefit is that while single factors have outperformed over the long term in developed markets, short-term performance can also be attributed to macroeconomic regimes. This opens the opportunity to achieve further potential outperformance if factor tilts are timed correctly over shorter time periods.

Now that we have confirmed that single factor strategies work in developed markets, it's worthwhile to assess whether the EM complex is fit for implementing a single factor approach.

Applying factors in emerging markets

While single factors have outperformed over the long term in emerging markets over the short term, calendar year performance is volatile, and the dispersion of returns is high. We can see below, that finding a single factor that has outperformed consistently over a multi-year period is difficult. Momentum had strong periods of outperformance but also underperformance year on year. Quality and value saw multiple years where both underperformed despite by design to operate inversely. The high volatility of momentum and inconsistent performance of value and quality is due to two distinct reasons, EM's economic cycles and the return disprsion between countries.

Chart 10: EM MSCI Factor excess returns: Calendar year

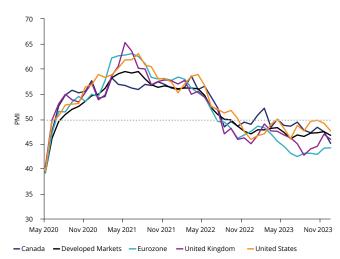


Source: MSCI, USD returns, January 2010 to December 2023, MSCI EM Factor Indices, Value Index used is MSCI EM Enhanced Value. Past performance is not indicative of future performance. You cannot invest in an index.

Economic cycles

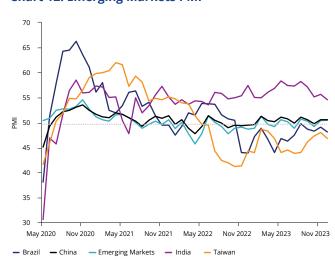
EM countries' stages in the economic cycle are out of step. We can see below that following COVID-19, India delivered a consistent period of positive economic activity (as represented by PMI), excluding a few months. In contrast, economic activity surged in Taiwan, peaking in late 2020, and reverting to contractionary by 2022. On the other hand, developed markets experienced consistent phases of the economic cycle.

Chart 11: Developed Markets PMI



Source: Bloomberg, Markit.

Chart 12: Emerging Markets PMI



Source: Bloomberg, Markit.

This observation is also true when analysing calendar year real GDP growth. Before 2019, China consistently saw growth above 5%. Brazil experienced a severe economic crisis in 2015 and 2016. In contrast, developed markets have moved in unison, recording two distinct recessions – the global financial crisis and COVID-19.

Chart 13: Developed Markets Real GDP Growth

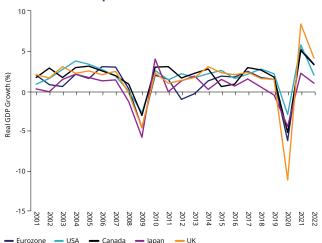
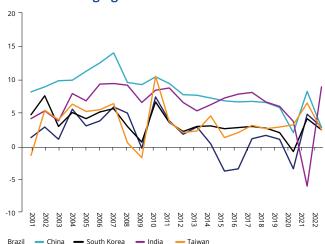


Chart 14: Emerging Markets Real GDP Growth



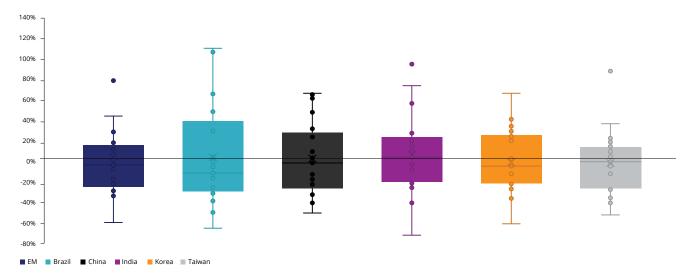
Source: Bloomberg. Source: Bloomberg.

The overarching challenge is that because emerging market countries operate at different phases of the economic cycle, it makes it difficult to time implement single factor investment strategies. For example, Quality has been shown to outperform just before and during a recession. However, if one country is expanding and another contracting – like in EM – the effectiveness of applying a pure quality strategy is diminished. Cycles need to be in unison like developed markets to time when to implement single factor strategies.

Country return dispersion

There is a high dispersion of country returns in EM. This wide dispersion in performance is reinforced when looking at the cross-sectional volatility of the emerging-market stock universe in three systematic factor categories: countries, sectors and styles. MSCI analysis below shows that country exposure represented between 55-85% of total volatility. In developed markets, the three factor categories all had similar contributions to stock-return dispersions. In other words, the general risk and performance profile of an EM strategy is highly sensitive to active country exposure relative to the benchmark.

Chart 15: Major EM economies calendar year performance: 2002 to 2023



Source: MSCI Country Indices, USD returns. Past performance is not indicative of future performance. You cannot invest in an index.

90 80 70 % of factor contributions 60 40 30 20 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 Industries Countries

Chart 16: MSCI EM Index cross-sectional volatility (CSV) contribution by factor groups

Source: MSCI, "Emerging Market country allocation matters" (2019).

This has major implications for single factor returns as the screening process results in high active country weights. For example, value had up to 37.5% in active exposure to a single country. This presents challenges because if a factor is overweight a country but performs poorly, while the macro environment may bode well for a factor – the active country exposure diminishes the efficacy.

40% - 37.5% 37.5% 29.5% 20.3% 20.3% 20.3% Value Momentum Quality Low Size

Chart 17: Emerging markets single factor max active country weights: 2002 to 2023

Source: MSCI, as at December 2023, MSCI EM Factor Indices.

The benefits of single factor investing have been demonstrated in development markets. However, there is a gap in achieving similar efficacy across emerging markets.

Emerging markets are difficult for investors to navigate.

Single factor approaches cannot be relied upon. Active managers have failed to exploit factor and qualitative approaches and combinations of these, nor have they been able to exploit high country return dispersion to achieve excess returns.

An alternative passive approach for investors involves multiple factors.

Multi-factor investing: A different approach to emerging markets equities

Multi-factor investing combines the characteristics of single factors with the aim of achieving targeted investment outcomes and, ultimately, outperformance over the medium and long term.

The method, designed by MSCI uses a bottom-up approach, selecting the top ranked companies based on a range of fundamentals and historical price performance, as the investment portfolio.

In this section, we explore what MSCI found to be the most optimal combination of factors, determine if any investability constraints improved investment outcomes and analyse how multi-factor addresses the challenges that single factors present in emerging markets.

Target factor selection

The choice of target factors is an important consideration in the design of a diversified multifactor index. MSCI has identified six single factors – value, momentum, quality, low volatility, size and yield – that have historically generated excess returns, supported by academic research.

Table 3: Summary statistics for bottom-up multi-factor index simulations

	MSCI World	2 Factors (Val, Mom)	3 Factors (Val, Mom, Qty)	DMF	5 Factors (DMF, Vol)	6 Factors (DMF, Vol, Yld)	Cyclical (Val, Size, Mom)	Defensive (Vol, Qty, Yld)
Total Return (%)	5.4	8.7	9.9	10.7	11.1	10.9	9.6	9.3
Total Risk (%)	15.2	15	14.6	15.4	13.5	13.3	15.3	12.3
Return/Risk	0.35	0.58	0.68	0.69	0.82	0.82	0.63	0.76
Sharpe Ratio	0.23	0.45	0.55	0.57	0.68	0.68	0.5	0.6
Active Return (%)	0	3.3	4.5	5.3	5.8	5.6	4.2	3.9
Tracking Error (%)	0	4.2	3.9	4.2	4.8	5.1	4.3	5.5
Information Ratio	NaN	0.79	1.17	1.26	1.21	1.09	0.99	0.71
Historical Beta	1	0.95	0.93	0.97	0.85	0.83	0.97	0.76
No of Stocks	1631	227	214	418	415	383	462	218
Turnover(%)	3	40	40	40	40	40	40	39.9
Price to book	2.2	1.6	1.9	1.8	1.9	1.8	1.6	2.3
Price to earnings	18.4	12.2	13.6	14.3	14.4	13.9	13.4	15.9
Dividend yield (%)	2.3	2.5	2.5	2.3	2.5	3.5	2.3	3.9
Value		0.66	0.41	0.38	0.35	0.43	0.54	0.09
Quality		0	0.67	0.53	0.52	0.42	-0.04	0.63
Momentum		0.25	0.22	0.23	0.18	0.1	0.25	-0.04
Size		-0.21	-0.16	-0.85	-0.91	-0.74	-0.97	-0.13
Volatility		-0.03	-0.11	-0.18	-0.49	-0.53	-0.14	-0.63
Yield		0.15	0.09	-0.03	0.05	0.57	0	0.73

Source: MSCI, "How can factors be combined" (2018), Gross Returns annualised in USD from 30 November 1999 to 31 January 2018. Past performance is not indicative of future performance. You cannot invest in an index.

The table above compares the investment metrics of several multi-factor combinations from the panel of six single factors. In summary, MSCI Diversified Multi-Factor, which targets four factors (value, low size, momentum, quality) was found to produce the most optimal metrics – the highest historical IR and Sharpe ratio. Adding volatility to the four-factor mix reduced the information ratio and markedly lower beta. Cyclical (value, momentum and size) and defensive (quality, minimum volatility and high yield) combinations underperformed.

MSCI Emerging Markets Diversified Multiple-Factor Index (DMF) has historically outperformed the market capitalisation benchmark over the long term. DMF has consistently outperformed, drawing on cyclical factor (value, momentum and low size) exposures in up markets and the defensive nature of quality in down markets. The strategy has delivered the highest information and Sharpe ratio over 20 years relative to the benchmark and single factors. Superior metric ratios and a mix of cyclical and defensive single factor characteristics position the strategy as an all-season investment approach.

\$120,000 \$100,000 \$80,000 \$60,000 \$40,000 \$20,000 \$0 2005 2006 2007 2008 2012 2015 2016 2017 2019 2022 2002 2003 2004 2009 2010 2011 2013 2014 2018 MSCI Emerging Markets Index EMKT Index

Chart 18: Hypothetical growth of \$10,000 Index inception to 31 December 2023

Source: Morningstar. Inception date is 29 December 2000. Returns in Australian dollars. Past performance of the index is not a reliable indicator of future performance of EMKT. You cannot invest directly in an index. EMKT index is the MSCI Emerging Markets Diversified Multiple-Factor Index that was launched on Feb 17, 2015. Data prior to the launch date is back-tested data. Past performance is not indicative of future performance. You cannot invest in an index. The MSCI Emerging Markets Index ("MSCI EMI") is shown for comparison purposes as it is the widely recognised benchmark used to measure the performance of emerging markets large- and mid-cap companies, weighted by market capitalisation. EMKT's index measures the performance of emerging markets companies selected on the basis of their exposure to value, momentum, low size and quality factors, while maintaining a total risk profile similar to that of the MSCI EMI, at rebalance. EMKT's index has fewer companies and different country and industry allocations than MSCI EMI.

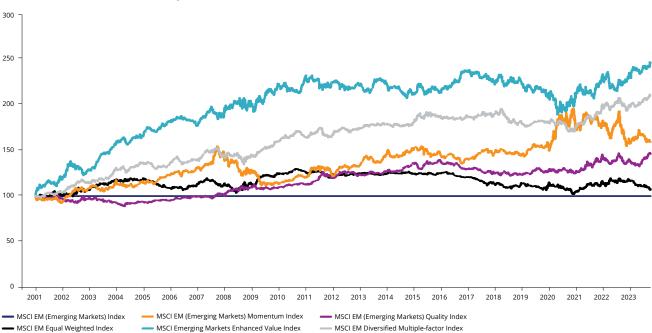


Chart 19: Relative return comparison

Source: MSCI, USD returns, January 2001 to December 2023, MSCI EM Factor Indices. Past performance is not indicative of future performance. You cannot invest in an index.

Table 4: Key Metrics comparison

	MSCI EM Index	Enhanced Value	Equal Weighted	Quality	Momentum	Diversified Multiple-Factor
Total Return* (%)	7.8	12.1	8.6	9.3	10.2	11.3
Total Risk (%)	21.2	23.9	21.1	20.0	22.1	22.1
Return / Risk	0.37	0.51	0.41	0.47	0.46	0.51
Sharpe Ratio	0.30	0.45	0.34	0.40	0.40	0.45
Active Return (%)	0.0	4.3	0.8	1.5	2.4	3.4
Tracking Error (%)	0.0	6.6	4.6	4.7	8.0	4.6
Information Ratio		0.65	0.17	0.32	0.30	0.75
Historical Beta	1.00	1.08	0.97	0.92	0.97	1.02
Number of Constituents***	910	248	910	199	224	208
Turnover** (%)	6.9	28.6	22.6	28.0	85.7	39.8

Period: Dec 29, 2000 to Dec 31, 2023. *Gross returns annualised in USD. **Annualised one-way index turnover over index reviews. *** Monthly averages. Past performance is not indicative of future performance. You cannot invest in an index.

The investment approach embodies sought after characteristics of the single factors making up the diversified multi-factor index. This is demonstrated in a range of metrics;

Capture ratios

The benefit of DMF is two-fold. First, when MSCI EM increases, DMF has historically outperformed. Upside capture ratio well above 100 illustrates that the MSCI multiple factor index has outperformed during periods of positive returns. DMF is also the highest out of the single factors, drawing on cyclical factor exposure benefits. Second, DMF has shown to outperform in down markets. Downside capture less than 100 indicates DMF has lost less than its benchmark. Downside protection is a function of the multi-factor exposure which relates to defensive exposure to quality.

Table 5: Up and down capture ratios

	Up Capture Ratio	Down Capture Ratio
Momentum	106.03	99.26
Quality	96.53	83.77
High Dividend	90.00	82.02
Minimum Volatility	72.60	53.73
Value	102.28	99.28
Multi-factor	106.17	93.98
MSCI Emerging Markets Index	100	100

Source: MSCI, Morningstar Direct VanEck. Results are calculated monthly and assume immediate reinvestment of all dividends. Data is in Australian dollars converted from US dollars returns. You cannot invest in an index. Past performance is not a reliable indicator of future performance. Indices used: Momentum – MSCI Emerging Markets Momentum Index, Quality – MSCI Emerging Markets Quality Index, High Dividend – MSCI Emerging Markets High Dividend Index, Multi-factor - MSCI Emerging Markets Diversified Multiple-Factor Index, Minimum Volatility – MSCI Emerging Markets Minimum Volatility Index, Value – MSCI Emerging Markets Value Weighted Index.

Calendar year returns

The combination of the four factors capturing both cyclical and defensive characteristics reduces the need to implement factor timing as a potential way to outperform. DMF has outperformed the benchmark 9 of the last 14 years and most single factors. We do note that past performance is not indicative of future performance.

Chart 20: Calendar year excess returns

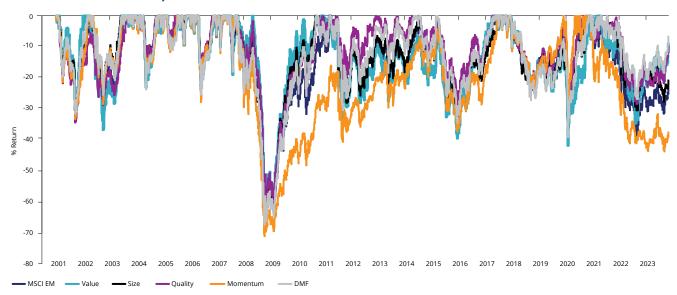


Source: MSCI, USD returns, January 2010 to December 2023, MSCI EM Factor Indices, Value Index used is MSCI EM Enhanced Value. Past performance is not indicative of future performance. You cannot invest in an index.

Drawdown

DMF drawdown historically has been in line with the benchmark during market events, the 2001 Dot Com Bubble and the Global Financial Crisis. Quality factor has offset cyclical factor influences (size, momentum and value), resulting in a net zero effect. The comparison to single factors also highlights the risk of a single factor approach given the significant drawdown of momentum relative to the benchmark and DMF.

Chart 21: Drawdown comparison

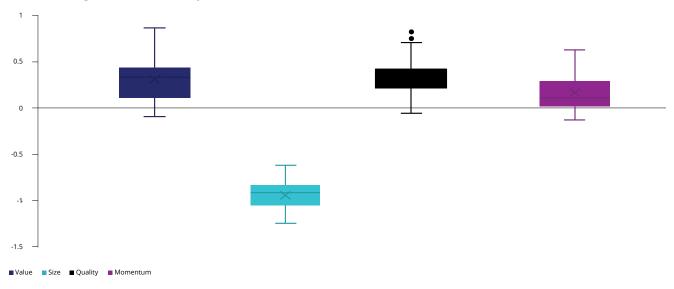


Source: MSCI, USD returns, January 2000 to December 2023, MSCI EM Factor Indices, Value Index used is MSCI EM Enhanced Value. Past performance is not indicative of future performance. You cannot invest in an index.

Active exposure

DMF approach has captured consistent active exposures to the four factors historically. There is not a single factor that has diluted active exposure to the other three factors.

Chart 22: Single factor active exposure of MSCI EM Diversified Multi-Factor Index



Source: MSCI, 1 January 2001 to 31 December 2023.

Average financial ratios

Superior return on equity and debt to equity on average relative to the benchmark, akin to quality. Lower price to book and earnings like value.

Table 6: Average financial ratios comparison

	MSCI EM (Emerging Markets) Index	MSCI Emerging Markets Multi-Factor Select Index
Price to Book	1.7	1.4
Price to Cash Earnings	8.4	7.1
Price to Earnings	13.7	10.4
Dividend Yield (%)	2.6	3.4
LT Fwd EPS G (%)	14.5	14.2
Sustainable Growth Rate (%)	8.4	8.8
ROE (%)	13.0	13.7
Debt to Equity	1.3	0.7

Period: Dec 29, 2000 to Dec 29, 2023.

Monthly averages

Investability constraints

A drawback of single factor investment strategies in emerging markets is high active country exposure which overshadows the intended factor efficacy. DMF addresses this by capping country weight caps relative to the benchmark. Specifically, if a country is >2.5% in the EM Index +/-5% country weight, for those <2.5% capped at 3 times EM Index weight – mitigating active country return risk. We can see below, that the DMF approach has historically had the lowest active single-country exposure compared to single factors.

40% | 35% - 37.5% | 29.5% | 29.5% | 21.2% | 20.3% | 9.8% | 9.8% | Momentum | Ouality | Low Size | Multi-Factor |

Chart 23: Maximum active single country exposures: 2002 to 2023

Source: MSCI, as at 31 December 2023, MSCI EM Factor Indices. Multi-Factor as MSCI EM Diversified Multi-Factor Index.

MSCI analysis found that country weight caps used by DMF achieved the most optimal Sharpe ratio and active exposures to the target factors while minimising country selection volatility. Comparisons ranged from neutral country exposure to no country cap.

Access to EM Diversified Multi-Factor Exposure

The VanEck MSCI Multifactor Emerging Markets Equity ETF (ASX: EMKT) launched in April 2018 and is a passive strategy that tracks the MSCI Emerging Markets Multi-Factor Select Index. Since April 2018 many investors have benefited from using EMKT as the core of their Emerging Markets equities exposure.

The performance of the fund has been as follows.

Table 7: Trailing performance as at 31 December 2023

	1 Mth (%)	3 Mths (%)	6 Mths (%)	1 Yr (%)	3 Yr (% p.a.)	5 Yr (% p.a.)	Since inception (% p.a.)
EMKT	2.56	2.32	6.09	20.08	6.41	7.74	4.04
MSCI Emerging Markets Index	0.97	2.02	2.15	9.15	-1.10	4.34	2.35
Difference	+1.59	+0.30	+3.94	+10.93	+7.51	+3.40	+1.69

^{*}Inception date is 10 April 2018.

Source: VanEck. Results are calculated to the last business day of the month and assume immediate reinvestment of distributions. EMKT results are net of management costs and expenses, but before brokerage fees or bid/ask spreads incurred when investors buy/sell on the ASX. Past performance is not a reliable indicator of future performance. The MSCI Emerging Markets Index ("MSCI EMI") is shown for comparison purposes as it is the widely recognised benchmark used to measure the performance of emerging markets large- and mid-cap companies, weighted by market capitalisation. EMKT's index measures the performance of emerging markets companies selected on the basis of their exposure to value, momentum, low size and quality factors, while maintaining a total risk profile similar to that of the MSCI EMI, at rebalance. EMKT's index has fewer companies and different country and industry allocations than MSCI EMI.

Conclusion

Single factor investing in DM has been an effective way to achieve excess returns over the long term. However, when single factor strategies are applied in EM equities they fail to achieve factor efficacy for two reasons; Fragmented economic cycles and high active country exposures.

Active managers have also failed to generate on average higher excess returns.

One alternative is a diversified multi-factor approach. It is an all-seasons approach that has historically outperformed the benchmark over the long term. The bottom-up approach and selection of four factors quality, value, momentum and low size were found to be the most optimal for maximizing Sharpe and information ratios.

High country performance dispersion reinforces the importance of applying country weight caps in the MSCI DMF approach.

Key Risks: Investing in Emerging Markets has risks. These risks a generally more pronounced than the Australian market. The key risks associated with an investment in EMKT includes ASX trading time differences, emerging markets, financial markets generally, individual company management, industry sectors, foreign currency, country or sector concentration, political, regulatory and tax risks, fund operations, liquidity and tracking an index. See the PDS for details.

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