ACTIVE VERSUS PASSIVE MANAGEMENT

GUIDING PRINCIPLES

August 2016

GUIDING PRINCIPLES

MERCER'S BELIEFS

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- If markets were perfectly efficient, there would be a reasonably even chance of winning or losing, so the expected return from active management would be zero before fees except. In practice active managers do charge fees, and incur other costs, so if markets were efficient active management would not make sense.
- Mercer believes that professional investors should have a better than average chance of 'winning' at the expense of retail investors, unskilled investors and sufficient levels of non-profit maximising investors (for example, passive, liquidity or liability driven investors, government institutions with different objectives etc).
- Furthermore, some professional investors are bound to be better than others (better educated and experienced individuals with better resources and better tools)
  - The art is being able to identify the source of their comparative advantage

GUIDING PRINCIPLES
MERCER'S BELIEFS

- We believe that the success of active management at the investor level is driven by three interconnected considerations:

1 • RAW MARKET POTENTIAL FOR OUTPERFORMANCE

2 • INVESTMENT MANAGER ISSUES

3 • INVESTOR DECISION AND PROCESS ISSUES

- That is, active management should be pursued in markets (if any) which offer the opportunity for the skilled investment manager to better forecasts and results provided its insights can be implemented fully, cost-effectively and the investor's governance structure and behaviours conform to certain standards.

GUIDING PRINCIPLES
MERCER'S BELIEFS

- Markets will have varying raw potential for outperformance depending on factors such as the quality and speed of information dissemination, degree of institutionalisation, state of development of the market, level of liquidity / cost of trading.
- Active management will be most suitable where the raw market potential for outperformance is sufficiently large to overcome the implementation issues that function as drags or frictions on the investment process.
- The approach to active management should be pragmatic, rather than focused solely on the perceived 'efficiency' of the market (for example, it should look at factors such as the actual track record of active management and the level of active fees paid).
- The debate on the merits of active management should also consider the governance framework of the client.
- There is a place for both active and passive management to give the desired risk/reward balance in a portfolio from the frame of reference of the investor.

MARKET POTENTIAL FOR OUTPERFORMANCE

THE EX ANTE OPPORTUNITY SET

MARKET POTENTIAL
EFFICIENCY

- The theoretical definition of an efficiently priced security (in accordance with the ‘strong’ form of the Efficient Market Hypothesis) is one whose price instantly incorporates all that is known or knowable about a security.
  - In practice, this translates to a security’s price capturing the expectations of market participants
- We do not believe the theoretical definition of efficiency is strictly true in any market.
  - If it was, then the logical conclusion would be that no amount of research or analysis could deliver outperformance
- However, it is more likely to be true in markets with more investors, more analysts and higher degrees of institutionalisation, for example, the perception that small numbers of large cap stocks are more efficiently priced than vast numbers of small stocks seems valid.
- The assessment of market efficiency and therefore potential, should consider a range of factors such as the breadth of the market, availability of information and the level of diversification.

MARKET POTENTIAL
FACTORS TO CONSIDER

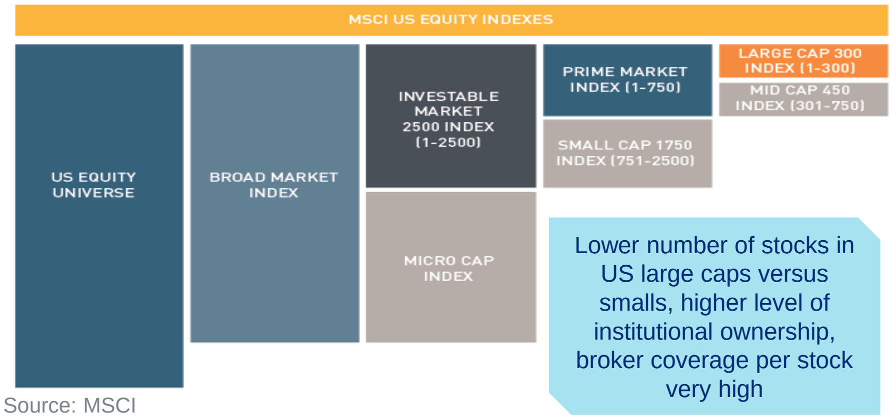
	BREADTH	INSIGHT	DIVERSIFICATION
PRINCIPLE	WIDE POOL OF INVESTMENT OPPORTUNITIES	AVAILABILITY OF BETTER INFORMATION OR BETTER JUDGEMENT OVER THE AVAILABLE INFORMATION	NOT OVERLY DEPENDENT ON SINGLE SECTORS OR SECURITIES
DRIVERS	• **Breadth of market** – number of investible securities • **Market liquidity** – Ideally, a market should have sufficient liquidity that positions can be efficiently implemented – Not be so liquid as a result of efficiency that any price discrepancy has disappeared too quickly to be captured by active management	• **Information flow** – what is the quality of the available information/ research on a security? – How fast and widely is that information disseminated? • **Degree of institutionalisation** – what level of sophistication does a 'typical' investor exhibit in a particular marketplace, do they have access to quality research or information on a security? • **Non profit maximising participants** – for example, regulations, taking positions to meet other goals (e.g. liability driven investors) • **Efficient trading** – do highly efficient trading and settlement systems exist in the market in order to effectively capture opportunities?	• **Low correlation** – level of differentiation in stocks/sectors in a market, that is, low correlation amongst securities in a market is ideal from an active management perspective • **Market structure / concentration** – Ideally, a market should not be highly concentrated in a small number of large names, so positions taken by active managers are more symmetric in nature

MARKET POTENTIAL
LARGE AND SMALL CAPITALISATION EQUITY

	BREADTH	INSIGHT	DIVERSIFICATION
LARGE CAP	• High levels of liquidity and trading volume	• High levels of broker coverage in large cap markets, particularly the US, though other developed markets are gaining coverage • Market communication infrastructure and regulatory structure have fostered broad and rapid communication of virtually all market-impacting information	• Cross sectional volatility analysis suggests: – Large caps have significantly lower levels of cross sectional volatility than the small cap market (Exhibit 3)
SMALL CAP	• Relatively illiquid market, particularly at smallest market capitalisations. General provision of market liquidity has been reduced following global stresses in financial services industry • Extremely deep market provides greater number of stock names and increases likelihood of identifying undervalued opportunities (Slide 9)	• Fewer market participants and lower institutional ownership means greater number of naïve investors in the space, aiding alpha generation potential • Number of market-makers and available capital likely to have reduced following financial crisis • More stock specific characteristics and informational asymmetries than large cap markets	• Large and small cap equity markets are reasonably uncorrelated • Lower levels of correlation in European and Pacific Basin markets relative to the US suggest additional diversification opportunities (Exhibit 2)
SUMMARY	• **Large cap equity markets are more information-efficient than small caps, due to higher analyst coverage and institutional ownership.** • **The US large cap market is very efficient and has the least raw market potential for outperformance compared to other developed large and small cap markets.**		

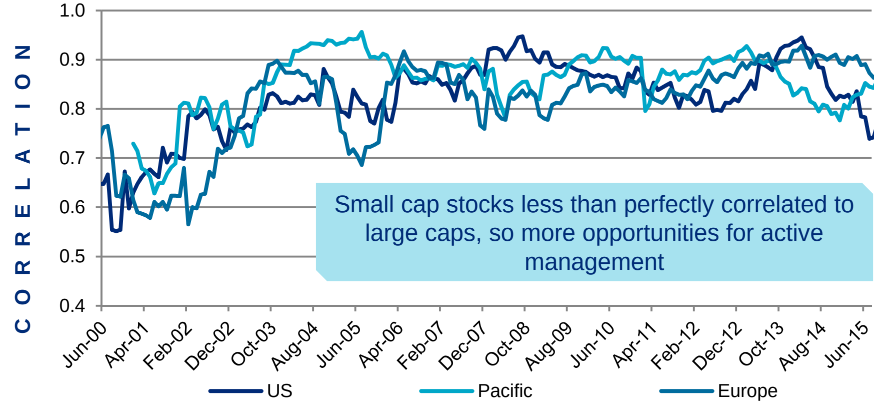
MARKET POTENTIAL
LARGE AND SMALL CAPITALISATION EQUITY

EXHIBIT 1.
MSCI US EQUITY: MARKET CAP SEGMENTS AND INDICES



Source: MSCI

EXHIBIT 2.
DEVELOPED LARGE AND SMALL CAP MARKETS: 2-YEAR CORRELATIONS

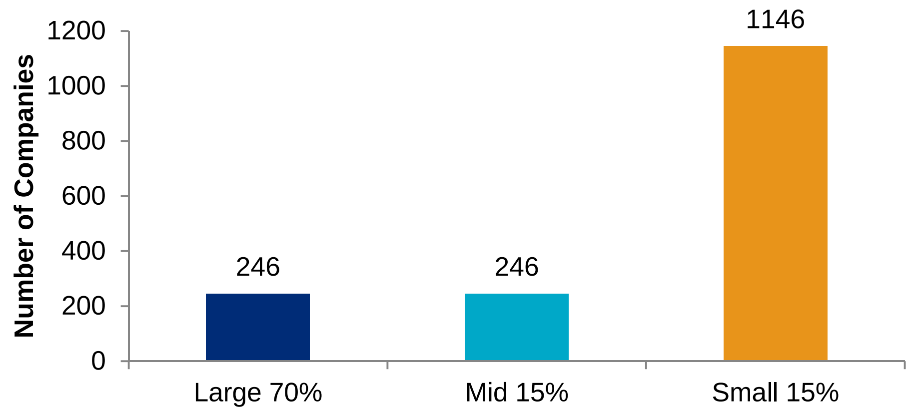


Source: Thomson Reuters Datastream

EXHIBIT 3.
CROSS SECTIONAL VOLATILITY

Source: Parametric

EXHIBIT 4.
MSCI WORLD INDEX



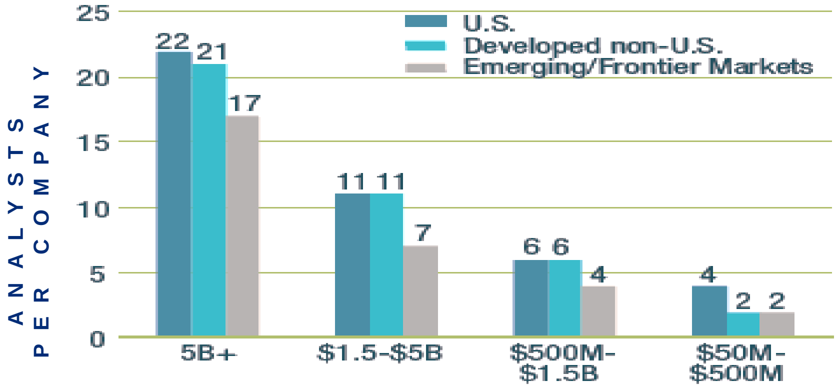
Source: Thomson Reuters Datastream

MARKET POTENTIAL
EMERGING MARKETS

	BREADTH	INSIGHT	DIVERSIFICATION
EMERGING	• Lower liquidity than developed markets (Exhibit 5) • Large number of securities • Differentiated countries – many emerging market securities are heavily influenced by their local markets • Faster growth gives rise to greater opportunities • 'Avoiding the losers' is an attractive strategy (for example, political risk)	• Less broker and research coverage than developed markets (Exhibit 5) • Higher levels of family/controlling interests owning companies may lead to less transparent reporting than may otherwise be the case • Proprietary research has more potential to add value given lower level of research availability	• Lower correlation of emerging markets in totality with developed markets over time (Exhibit 6) • Consistently higher volatility than developed markets, although the gap has narrowed in recent years (Exhibit 7) • Higher levels of cross sectional volatility than the US or ex-US developed markets (Exhibit 8)
SUMMARY	**• Emerging markets are highly volatile and offer a wide and differentiated range of securities. • Although emerging Markets are more efficient that they were 10 years ago, they are still relatively inefficient relative to development markets. Combined with the above, they still off good raw potential for active management.**		

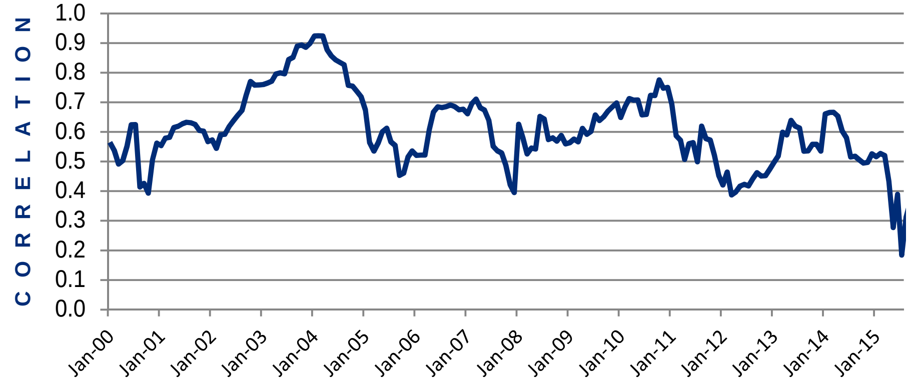
MARKET POTENTIAL
EMERGING MARKETS

EXHIBIT 5.
COMPANIES WITH ANALYST COVERAGE BY REGION



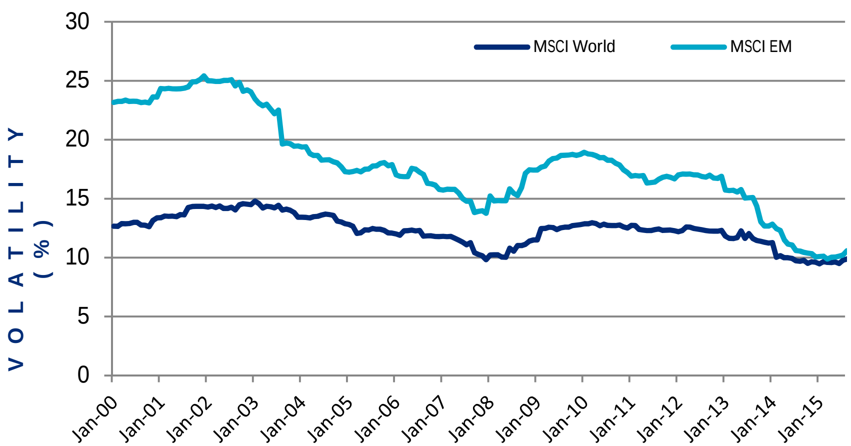
Source: CapitalIQ & Metis as at 30 April 2015

EXHIBIT 6.
DEVELOPED VERSUS EMERGING: 2-YEAR CORRELATIONS



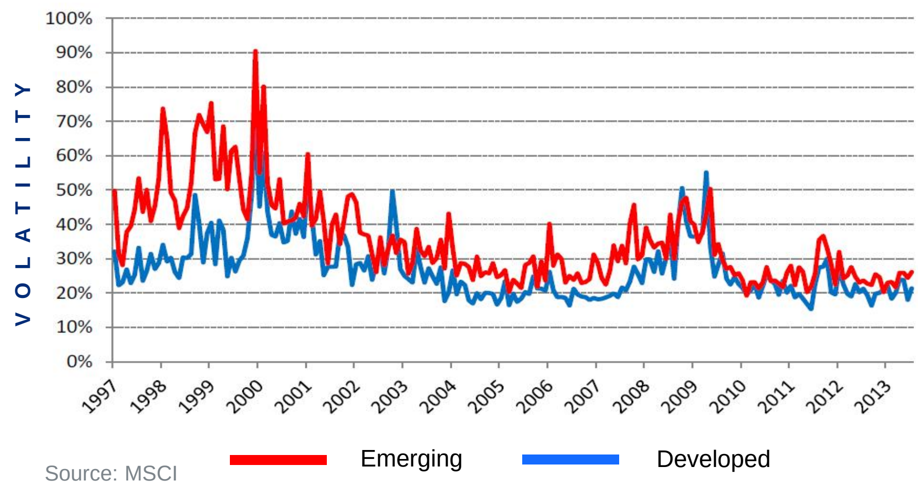
Source: Thomson Reuters Datastream

EXHIBIT 7.
ROLLING 5-YEAR VOLATILITY



Source: Thomson Reuters Datastream

EXHIBIT 8.
CROSS SECTIONAL VOLATILITY



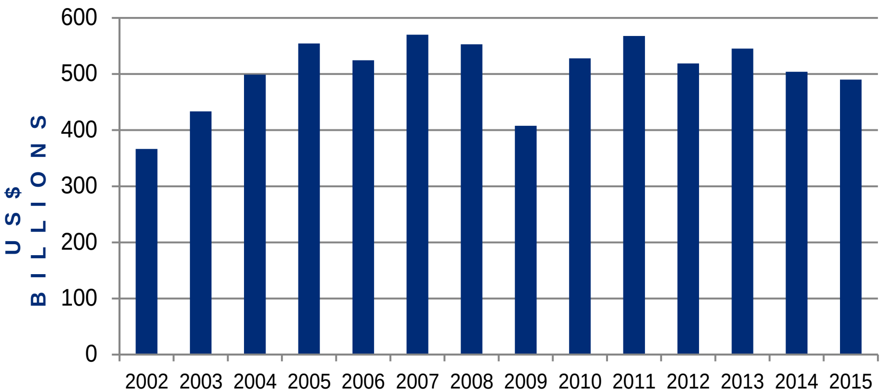
Source: MSCI

MARKET POTENTIAL
FIXED INCOME MARKETS

	BREADTH	INSIGHT	DIVERSIFICATION
SOVEREIGN	• High levels of depth and liquidity • Average daily trading volume remains strong (Exhibit 9) • Government bonds account for the majority of global bond markets, although the amount of bonds outstanding has been impacted by quantitative easing initiatives over recent years	• Pricing, executing and settling a trade is very efficient and inexpensive • In Europe just 5% of investors in bonds are individual investors, in the US this is around 10%. • High institutional ownership indicate limited alpha potential • However, increasing level of non-profit maximising participants, including investors seeking to hedge liability risk without price as the dominant variable	• Debt dynamics have grown increasingly worrisome in some advanced economies, and are expected to continue. This provides potentially rich pickings for active managers to add value (Exhibit 10)
CREDIT	• Reasonable levels of liquidity, but turnover has reduced in recent years • Investment grade market was approximately US$ 5 trillion in 2014, with trading volume of US$ 3 trillion (Exhibit 11) • Non-Government bonds account for c.30% of world bond markets	• Current volatile conditions and a heightened risk of default provide arguments in favour of active management	• Provide investors with the opportunity to choose from a wide variety of sectors, structures and credit-quality characteristics • Global credit universe offers greater diversification by sector and issuer than regional markets (Exhibit 12); though care needed in constructing mandates
SUMMARY	**• Government bond markets are highly efficient and liquid markets, offering limited opportunity for active management over long time horizons. However, current market conditions may provide opportunities in the short to medium term. • Credit markets offer active management potential for the skilled investor able to anticipate downgrades, defaults, upgrades or manage rating misclassifications.**		

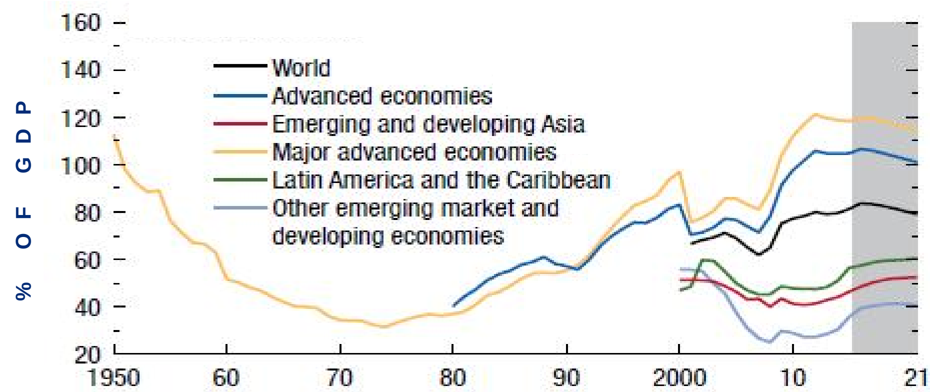
MARKET POTENTIAL
FIXED INCOME MARKETS

EXHIBIT 9.
AVERAGE DAILY TRADING VOLUMES OF US TREASURIES



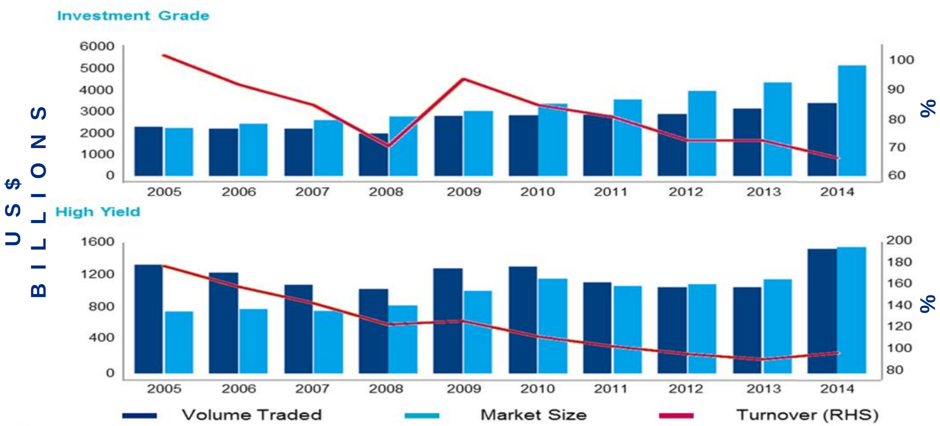
Source: SIFMA

EXHIBIT 10.
GROSS PUBLIC DEBT



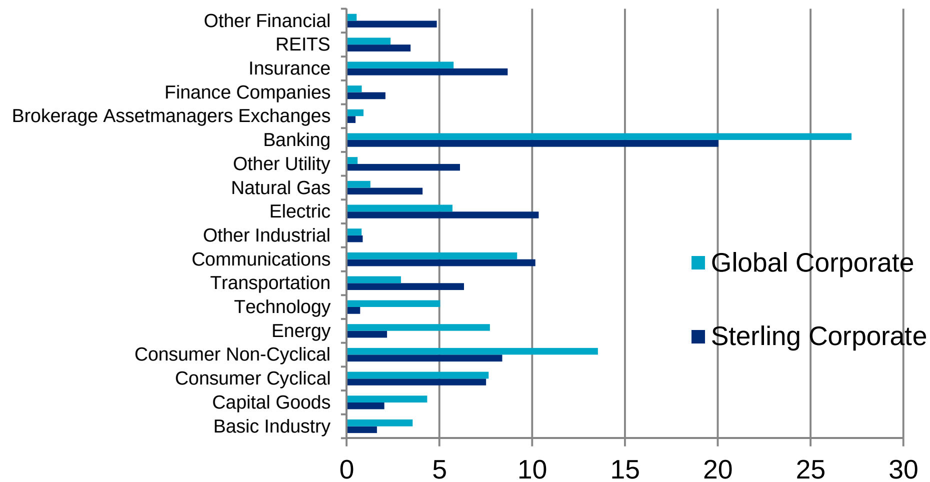
Source: IMF World Economic Outlook April 2016

EXHIBIT 11.
TRADING NOT KEEPING PACE WITH MARKET GROWTH



Source: Barclays and AB

EXHIBIT 12.



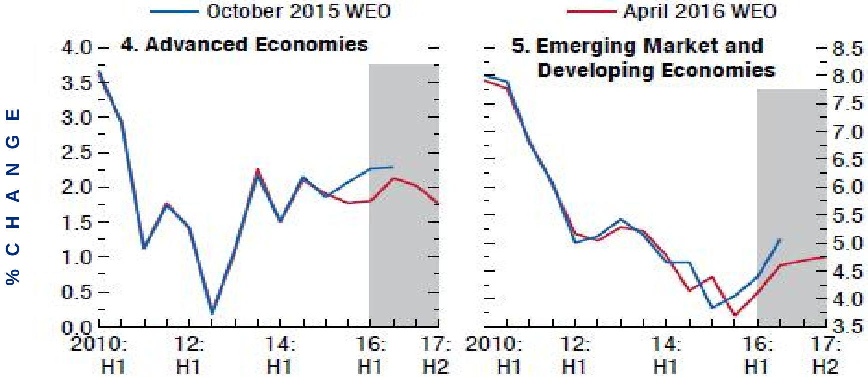
Source: Barclays

MARKET POTENTIAL
FIXED INCOME MARKETS

	BREADTH	INSIGHT	DIVERSIFICATION
EMERGING MARKET DEBT	• Emerging market government and corporate bonds have seen good issuance in recent years driven by an increasing share of global consumption and investor demand (Exhibit 13) • Bonds issued by emerging markets now form 8% of the global bond universe	• Fewer market participants than developed, so market is likely to be less efficient	• In the past decade, emerging market debt has become more diversified and has grown dramatically (Exhibits 14 and 15) • Credit quality of the sector is structurally improving
HIGH YIELD	• Issuers from US and Europe raised record amounts of high yield debt in 2010, up 66% over 2010 to $217 billion and up 46% to $56 billion respectively • Size difference to emerging market debt has narrowed markedly over the last decade; over the last two years emerging market corporate debt has eclipsed global high yield in size (Exhibit 15)	• Secondary markets are generally well functioning and include a number of dealers and market participants. However, there are times when liquidity evaporates, particularly during periods of heightened risk aversion and flight to quality environments • Market is less efficient than larger sectors (for example, government bonds)	• High yield market has grown substantially over the past 25 years, and is now a more common part of general investor portfolios • Sector can still be highly cyclical, which provides potential opportunities for skilled investors
SUMMARY	**• Improved risk profile and greater prospective depth of emerging market debt has increased the efficiency of the market, though opportunities are still high for active management.** **• High yield markets offer active management potential using skilled managers able to recognise macro and micro risks, provide high depth of coverage and have a deep knowledge of company fundamentals.**		

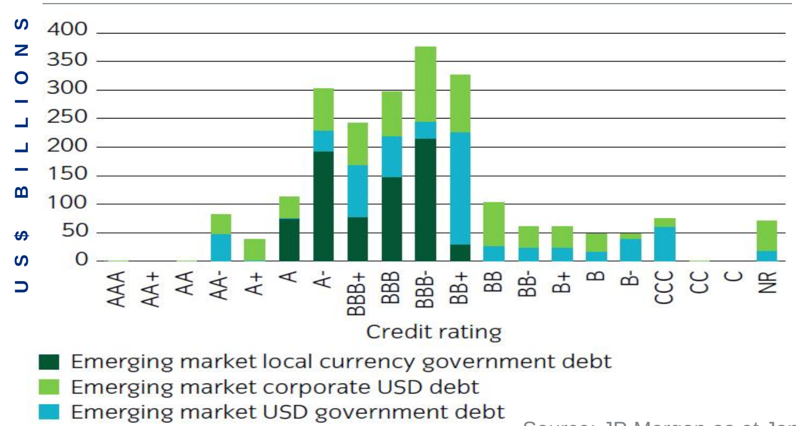
MARKET POTENTIAL
FIXED INCOME MARKETS

EXHIBIT 13.
GDP GROWTH (ANNUALISED SEMI-ANNUAL %CHANGE)



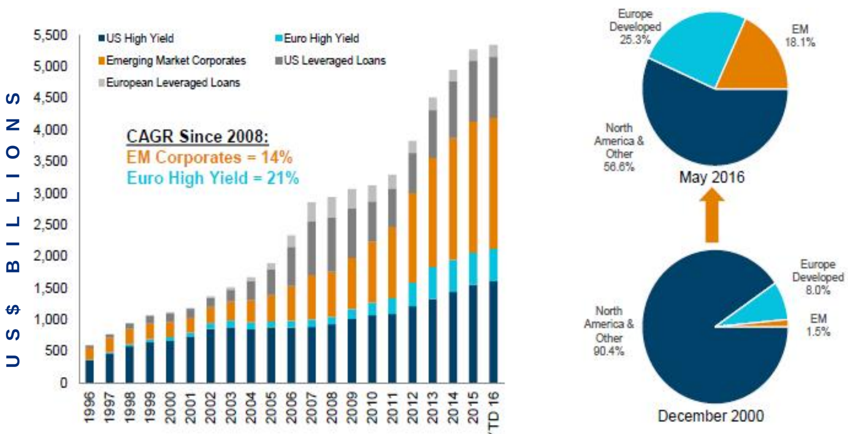
Source: IMF World Economic Outlook April 2016

EXHIBIT 14.
MARKET VALUE OF EM SECTORS (US$BN) BY CREDIT RATING



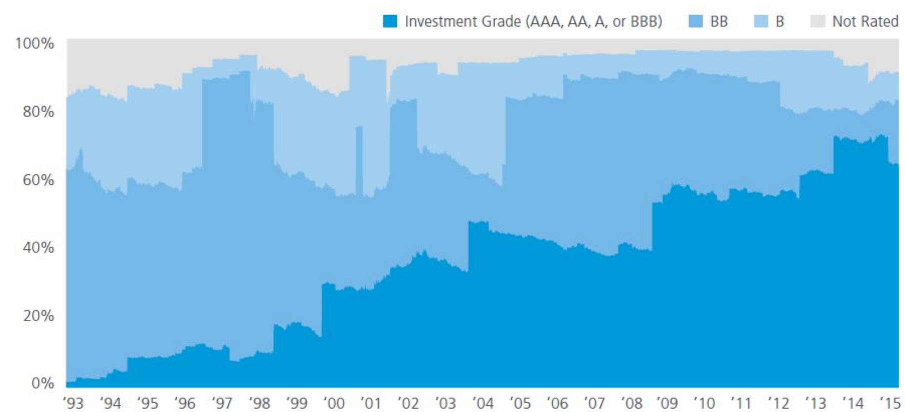
Source: JP Morgan as at January 2016

EXHIBIT 15.
MARKET GROWTH: 1996 THROUGH MARCH 2016



Source: BIS BofA/ML and Credit Suisse

EXHIBIT 16.
IMPROVING CREDIT QUALITY OF EMERGING MARKET BONDS



[2] Source: MFS research, as of 6/30/15
[3] Source: JPMorgan, as of 6/30/15
[4] Ratings shown in the S&P and Fitch scale (e.g., AAA).

MARKET POTENTIAL
SUMMARY – EX ANTE OPPORTUNITY

MARKET POTENTIAL	EQUITIES	FIXED INCOME
HIGH	• Small Caps • Global Emerging Markets	• Emerging Market Debt • High Yield
MEDIUM	• Large Cap	• Credit (investment grade) • Aggregate Fixed Income (broad based)
SOME	• US large cap	• Government (sovereign)

ACTUAL DELIVERY OF OUTPERFORMANCE

THE EX POST ACTIVE MANAGER RESULTS

ACTUAL DELIVERY OF OUTPERFORMANCE
EQUITY MARKETS

- The following tables show the historical excess returns of the median manager across equity markets over the 1,3,5 and 10 years to 31 December 2015, on both a gross and net of fees basis.
- 'Chain linked' annual medians have been used to reduce survivorship bias issues.
- To highlight evidence of 'alpha' we have ranked the 10 year excess historical performance of each asset class on the following basis:

ALPHA RANKING (%PA)	
HIGH	Greater than 2.00%
GOOD	1.00% to 2.00%
MEDIUM	0.50% to 1.00%
SOME	0.00% to 0.50%
LOW	Less than 0.00%

- The results on a gross and net of fee basis indicate:
  - The median developed global equity manager has modestly outperformed the index on a gross of fees basis in the long term. Fees have eroded the alpha gained over the 10 year period to December 2015
  - Mixed evidence of historic alpha in regional developed markets. Australian, Canadian, Europe (ex UK), Pacific (inc Japan), equity managers have outperformed on both a gross and net of fees basis.
  - US large cap equity managers have provided some evidence of outperformance, gross of fees, over time. However, there is no evidence of outperformance net of fees, across all periods analysed
  - Strong evidence of outperformance by the median small cap manager over the 10 year period, with Australian and UK managers consistently outperforming the index over all time periods and easily clearing the fee hurdle rate
  - The median emerging market manager has provided evidence of outperformance over the 10 years gross of fees. However, high fees have eroded most the alpha gained, with net results behind over the 10 year period

EQUITY MARKETS: ACTIVE MANAGER RELATIVE PERFORMANCE, GROSS OF FEES

ASSET CLASS		MEDIAN VERSUS INDEX (GROSS OF FEES)[1] (% PA)				TYPICAL FEE HURDLE[4]	ALPHA RANKING[2]
		1 YEAR	3 YEARS	5 YEARS	10 YEARS		
Developed Global	Global Equity	0.40	-0.17	-0.50	0.38	0.66	SOME
	Global ex-US Equity	0.60	0.32	0.46	0.94	0.65	MEDIUM
Developed Regional	US Large Cap Equity	0.30	0.19	0.04	0.08	0.50	SOME
	UK Equity	4.50	4.11	2.97	1.50	0.63	GOOD
	Europe inc UK Equity	4.80	2.45	2.09	1.29	0.60	GOOD
	Europe ex UK Equity	5.50	3.20	2.39	1.79	0.63	GOOD
	Japanese Equity	0.70	0.71	0.49	0.23	0.58	SOME
	Pacific Basin inc Japan Equity	2.00	1.78	1.41	1.12	0.60	GOOD
	Pacific Basin ex Japan Equity	1.20	1.57	0.56	0.84	0.70	MEDIUM
	Australian Equity	2.40	2.16	1.50	1.51	0.48	GOOD
	Canadian Equity	3.80	3.94	2.78	1.80	0.29	GOOD
Developed Small Cap	Global ex-US Small Cap Equity	4.40	3.18	2.95	1.69	0.89	GOOD
	US Small Cap Equity	2.30	1.82	2.00	1.03	0.79	GOOD
	UK Small Cap Equity[3]	8.80	3.76	3.46	4.38	0.75	HIGH
	Europe Small Cap Equity	3.60	0.14	0.17	0.94	0.82	MEDIUM
	Japan Small Cap Equity	2.70	5.89	3.39	0.90	0.80	MEDIUM
	Australian Small Cap Equity	7.10	10.15	10.74	8.06	0.74	HIGH
Emerging	Emerging Markets Equity	1.00	1.36	1.02	0.74	0.88	MEDIUM

[1] 'Chain linked' median manager annual return versus index in $US to 31 December 2015. Indices used are provided in the Appendix
[2] Evidence of skill grading ("alpha ranking") based on rolling 10 year median of universe and index returns
[3] Not all managers use the same benchmark index, results should be interpreted with caution
[4] Based on Mercer's Global Asset Management Fee Survey 2014 for a $100m mandate. $US Segregated vehicles have been used where available

EQUITY MARKETS: ACTIVE MANAGER RELATIVE PERFORMANCE, NET OF FEES

ASSET CLASS		MEDIAN VERSUS INDEX (NET OF FEES)[1] (% PA)				ALPHA RANKING[2]
		1 YEAR	3 YEARS	5 YEARS	10 YEARS	
Developed Global	Global Equity	-0.26	-0.83	-1.16	-0.28	LOW
	Global ex-US Equity	-0.05	-0.33	-0.19	0.29	SOME
Developed Regional	US Large Cap Equity	-0.20	-0.31	-0.46	-0.42	LOW
	UK Equity	3.87	3.48	2.34	0.87	MEDIUM
	Europe inc UK Equity	4.20	1.85	1.49	0.69	MEDIUM
	Europe ex UK Equity	4.87	2.57	1.76	1.16	GOOD
	Japanese Equity	0.12	0.13	-0.09	-0.35	LOW
	Pacific Basin inc Japan Equity	1.40	1.18	0.81	0.52	MEDIUM
	Pacific Basin ex Japan Equity	0.50	0.87	-0.14	0.14	SOME
	Australian Equity	1.92	1.68	1.02	1.03	GOOD
	Canadian Equity	3.51	3.65	2.49	1.51	GOOD
Developed Small Cap	Global ex-US Small Cap Equity	3.51	2.29	2.06	0.80	MEDIUM
	US Small Cap Equity	1.51	1.03	1.21	0.24	SOME
	UK Small Cap Equity[3]	8.05	3.01	2.71	3.63	HIGH
	Europe Small Cap Equity	2.78	-0.68	-0.65	0.12	SOME
	Japan Small Cap Equity	1.90	5.09	2.59	0.10	SOME
	Australian Small Cap Equity	6.36	9.41	10.00	7.32	HIGH
Emerging	Emerging Markets Equity	0.12	0.48	0.14	-0.14	LOW

[1] 'Chain linked' median manager annual return versus index in $US to 31 December 2015. Results obtained by deducting the average manager fee shown on previous slide
[2] Evidence of skill grading ("alpha ranking") based on annual rolling 10 year relative returns
[3] Not all managers use the same benchmark index, results should be interpreted with caution

ACTUAL DELIVERY OF OUTPERFORMANCE
FIXED INCOME MARKETS

- The following tables show the historical excess returns of the median manager across fixed income markets over the 1,3,5 and 10 years to 31 December 2015, on both a gross and net of fees basis.
- 'Chain linked' annual medians have been used to reduce survivorship bias issues
- To highlight evidence of 'alpha' we have ranked the 10 year excess historical performance of each asset class on the following basis:

ALPHA RANKING (%PA)	
HIGH	Greater than 1.00%
GOOD	0.50% to 1.00%
MEDIUM	0.25% to 0.50%
SOME	0.00% to 0.25%
LOW	Less than 0.00%

- The results on a gross and net of fee basis indicate:
  - Evidence of historic alpha in all aggregate bond markets, gross of fees, and with the exception of Eurozone bonds, also after fees
  - Varying levels of positive alpha evident across regional government markets, gross of fees, with even global government managers demonstrating median levels of alpha net of fees
  - Evidence of historic outperformance by the median non-government global, US and European fixed income managers. Investment management fees have eroded any gains in the UK non-government market over the 10 year period
  - Evidence of historical alpha in high yield debt gross of fees, but only modest alpha, net of fees, over the 10 year period
  - Little evidence of historical alpha in emerging market debt, gross and net of fees

FIXED INCOME MARKETS: ACTIVE MANAGER RELATIVE PERFORMANCE, GROSS OF FEES

ASSET CLASS		MEDIAN VERSUS INDEX (GROSS OF FEES)[1] (% PA)				TYPICAL FEE HURDLE[2]	ALPHA RANKING[3]
		1 YEAR	3 YEARS	5 YEARS	10 YEARS		
Fixed Income	Global Fixed	0.20	0.38	0.68	0.64	0.35	GOOD
	US Fixed	0.20	0.38	0.48	0.63	0.28	GOOD
	UK Fixed	0.30	0.36	0.71	0.64	0.28	GOOD
	Eurozone Fixed	-0.10	0.27	0.28	0.25	0.28	SOME
	Australian Fixed	0.30	0.47	0.23	0.38	0.33	MEDIUM
	Canadian Fixed	-0.10	0.20	0.34	0.32	0.20	MEDIUM
Sovereign	Global Government	0.30	0.81	0.97	0.66	0.30	GOOD
	US Government	0.40	-0.02	-0.41	-0.15	0.23	LOW
	UK Government	0.10	0.11	0.20	0.24	0.25	SOME
	Eurozone Government	0.10	-0.10	0.23	0.25	0.21	SOME
Credit	Global Non-Government	0.50	0.76	0.70	0.95	0.35	GOOD
	US Non-Government	0.50	0.56	0.67	0.74	0.29	GOOD
	UK Non-Government	0.40	0.50	0.53	0.27	0.29	MEDIUM
	Eurozone Non-Government	0.50	0.58	0.74	0.50	0.27	GOOD
High Yield	Global High Yield	2.10	1.71	1.05	0.68	0.50	GOOD
Emerging	Emerging Markets Debt	-1.00	-0.84	-0.21	0.15	0.55	SOME

[1] 'Chain linked' median manager annual return v index in $US to 31 December 2015. Indices used are provided in the Appendix

[2] Based on Mercer's Global Asset Management Fee Survey 2014 for a $100m mandate. $US Segregated vehicles have been used where available

[3] Evidence of skill grading ("alpha ranking") based on annual rolling 10 year relative returns

FIXED INCOME MARKETS: ACTIVE MANAGER RELATIVE PERFORMANCE, NET OF FEES

ASSET CLASS		MEDIAN VERSUS INDEX (NET OF FEES)[1] (% PA)				ALPHA RANKING[2]
		1 YEAR	3 YEARS	5 YEARS	10 YEARS	
Fixed Income	Global Fixed	-0.15	0.03	0.33	0.29	MEDIUM
	US Fixed	-0.08	0.10	0.20	0.35	MEDIUM
	UK Fixed	0.02	0.08	0.43	0.36	MEDIUM
	Eurozone Fixed	-0.38	-0.01	0.00	-0.03	LOW
	Australian Fixed	-0.03	0.14	-0.10	0.05	SOME
	Canadian Fixed	-0.30	0.00	0.14	0.12	SOME
Sovereign	Global Government	0.00	0.51	0.67	0.36	MEDIUM
	US Government	0.17	-0.25	-0.64	-0.38	LOW
	UK Government	-0.15	-0.14	-0.05	-0.01	LOW
	Eurozone Government	-0.11	-0.31	0.02	0.04	SOME
Credit	Global Non-Government	0.15	0.41	0.35	0.60	GOOD
	US Non-Government	0.21	0.27	0.38	0.45	MEDIUM
	UK Non-Government	0.11	0.21	0.24	-0.02	LOW
	Eurozone Non-Government	0.23	0.31	0.47	0.23	SOME
High Yield	Global High Yield	1.60	1.21	0.55	0.18	SOME
Emerging	Emerging Markets Debt	-1.55	-1.39	-0.76	-0.40	LOW

[1] 'Chain linked' median manager annual return versus index in $US to 31 December 2015. Results obtained by deducting the average manager fee shown on previous slide

[2] Evidence of skill grading ("alpha ranking") based on annual rolling 10 year relative returns

IMPACTS ON THE LIKELY SUCCESS OF ACTIVE MANAGEMENT

IMPACTS
INVESTMENT MANAGER ISSUES

- Despite the factors making markets increasing information-efficient, it is possible that research can identify opportunities that can be exploited to generate outperformance.
- For any given manager however, there is likely to be a limited number of these opportunities or ‘best ideas’ that a manager can identify at a given time.
- A portfolio containing strictly these best ideas has a significantly higher potential for outperformance versus a broadly diversified portfolio.
- There are however, three interrelated real-world factors that limit the benefit of these best ideas for the investment manager’s investors.

IMPACTS
FURTHER CONSIDERATIONS

	BREADTH	INSIGHT	DIVERSIFICATION
PRINCIPLE	WIDE POOL OF INVESTMENT OPPORTUNITIES	AVAILABILITY OF BETTER INFORMATION OR BETTER JUDGEMENT OVER THE AVAILABLE INFORMATION	ACTIVE MANAGEMENT SHOULD BE CONSIDERED NET OF ALL COSTS
DRIVERS	• Number of independent decisions within the benchmark – the wider the range of decisions the greater the greater the potential to generate alpha • Frequency of decisions – the more frequent the decisions, the more likely it will allow skill (or otherwise) to become evident • Symmetrical decision-making – market benchmarks with more even (less concentrated) security weights or use of short selling assists in managers calibrating active positions more evenly • Portfolio constraints – including non benchmark opportunities where appropriate can provide greater investment freedom for the skilled investor	• Benchmark inefficiency – evidence of exploitable inefficiencies within the construction of the index • Note in some markets (such as emerging market equity and particularly in high yield debt), the structure of the index and costs of execution make it hard for even passive managers to match the index. In the former above, underperformance is typically modest, but the latter can be in the order of 50bps per annum or higher. Hence active manager results should be viewed in this context	• Transaction costs – in some markets, transaction costs may limit investors from regularly changing their portfolios to reflect their best ideas and current market conditions, for example, transaction costs in emerging markets are higher and liquidity lower than in developed markets • This should include explicit (commissions, stamp duty, taxes) and implicit costs (market impact), which are typically higher for active then passive funds, due to higher turnover • Active manager fees – active fees in areas such as emerging market equity, small caps, emerging market debt and high yield can be expensive. These higher fees need to be allowed for in any assessment of the likelihood of success in adding value

IMPACTS
LIMITS ON MANAGERS' BEST IDEAS PORTFOLIOS

ALPHA CAPACITY

- Investment ideas have a limited capacity for investment.

PRODUCT DESIGN

- Historically, many investment products have often been over-diversified due to:
  − A limited market for concentrated best ideas portfolios (until more recent years)
  − Managers' business models require a range of mandates to meet market needs
  − Managers are incentivised to ration best ideas portfolios

INCENTIVE STRUCTURE

- Assets under management drives revenue, profitability and market-value of investment management firms.
  – A manager just needs to avoid underperforming to risk termination and reduction in assets under management
- Performance based fees, if well structured, can provide a better alignment between the manager and the client.

CONCLUSIONS

EQUITY MARKETS
CONCLUSION

Asset class	Market opportunity (ex ante)	Actual manager results (ex-post)[1]	Active management conviction	Rationale	Preference
Large Cap	Medium	Some	Medium	• Large cap markets are more efficient than small cap markets, due to higher liquidity, the availability of information and analyst coverage • Performance history provides evidence of out-performance across global and regional equity markets, though alpha has been eroded in Japan after fees, over both 5 and 10 years	For active management if: • Investors have strong conviction in managers' skill • Manager fees are reasonable and targets are aligned
US Large Cap	Low	Low	Low	• High institutional ownership, the availability of information, greater number of analyst coverage and liquidity makes the large cap market efficient • No evidence of historic alpha by the median US large cap manager over periods analysed, net of fees	For passive management (in particular alternative indexation), unless investor has ability to use high tracking error mandates and has robust governance structure
Small Cap	High	High	High	• Inefficient market due to less available information, fewer market participants and lower institutional ownership • Long data history available showing strong evidence of added value by active managers	Clear preference for active management
Global Emerging Markets	High	Low	Medium	• Relatively inefficient and highly volatile markets provide opportunity • Alpha has generally been added by active managers gross of fees, but results after the high fees in the sector are modest or negative over all periods. • However, even passive managers typically modestly underperform in this sector	For active management if: • Investors have strong conviction in managers' skill • Attractive manager fees can be negotiated (compared to the typically high fees in the sector)

[1] Based on "alpha ranking" score of fixed income markets on annual rolling 10 year relative returns to 31 December 2015

FIXED INCOME MARKETS
CONCLUSION

Asset class	Market opportunity (ex ante)	Actual manager results (ex-post)[1]	Active management conviction	Rationale	Preference
Fixed Income (broad based)	Medium	Medium	Medium	• Evidence of added value by active managers, net of fees, across all markets except Europe	For active management if: • Investors have strong conviction in managers' skill • Manager fees are reasonable and targets are aligned
Sovereign	Low	Some	Some	• Efficient and liquid markets, which at face value offer limited opportunity for active management • However, some evidence of alpha from active managers, in particular in global government markets, though more limited added value in regional mandates after fees	For passive management, though: • Investors should be aware current market environment might provide opportunities for active managers • Active global sovereign mandates can still be justified if fees are attractive
Credit	Medium	Medium	Medium	• Offers active management potential for the skilled investor able to anticipate downgrades, defaults, misclassifications • Asymmetry of risk of sector also favours active management • Evidence of added value by active managers, gross of fees, though alpha eroded by fees in the UK	For active management if: • Investors have strong conviction in managers' skill • Manager fees are reasonable and targets are aligned
Global High Yield	High	Some	Medium	• Less efficient market should provide opportunities for active managers • Some evidence that the median manager has added value after fees. Passive managers tend to underperform the index by a material margin in this sector	For active management if: • High conviction in managers' skill • Attractive fees relative to sector norms
Emerging Market Debt	High	Low	Medium	• Offers high raw market potential for outperformance; fewer market participants than developed and low overall correlations to other asset classes • Long data history available showing little evidence of added value by active managers	For active management if: • Investors have strong conviction in managers' skill

[1] Based on "alpha ranking" score of fixed income markets on annual rolling 10 year relative returns to 31 December 2015

APPENDIX

EQUITY MARKETS

PRODUCT CATEGORY	CATEGORY	INDEX	MERCER UNIVERSE
Global Equity	Developed	MSCI World Free Index	Global Equity (Core)
Global ex-US Equity	Developed	MSCI EAFE Index	World ex US/EAFE Equity (Core)
US Large Cap Equity	Developed	Russell 1000 Index	US Equity Large Cap Core (Active)
UK Equity	Developed	FTSE All Share Index	UK Active Equity (UK Active Equity)
Europe inc UK Equity	Developed	FTSE W Europe Index	Europe inc UK Equity
Europe ex UK Equity	Developed	FTSE W Europe ex UK Index	Europe ex UK Equity
Japanese Equity	Developed	TOPIX Index	Japanese Equity (Core)
Pacific Basin inc Japan Equity	Developed	MSCI AC Pacific (Free) Index	Pacific inc Japan Equity
Pacific Basin ex Japan Equity	Developed	MSCI AC Pacific (Free) ex Japan Index	Pacific ex Japan Equity
Australian Equity	Developed	S&P/ASX 300 Index	Australian Shares (Long Only)
Canadian Equity	Developed	S&P/TSX Composite Index	Composites – Canadian Equities (GIPS®) (Core)
Global ex-US Small Cap Equity	Developed	S&P Developed ex-US Small Cap Index	World ex US/EAFE Equity Small Cap (Core)
US Small Cap Equity	Developed	Russell 2000 Index	US Equity Small Cap Core
UK Small Cap Equity	Developed	FTSE UK Small Cap Index	UK Small Company Equity
Europe Small Cap Equity	Developed	S&P Europe Small Cap Index	Europe inc UK Equity Small Cap
Japan Small Cap Equity	Developed	Russell/Nomura Small Cap Index	Japanese Small Cap Equity
Australian Small Cap Equity	Developed	S&P/ASX Small Ordinaries Index	Australian Small Companies
Emerging Markets Equity	Emerging	MSCI EM Index	Emerging Markets Equity

FIXED INCOME MARKETS

PRODUCT CATEGORY	CATEGORY	INDEX	MERCER UNIVERSE
Global Fixed	Developed	Barclays Capital Global Aggregate Index	Global Fixed Unhedged Broad Market/Aggregate
US Fixed	Developed	Barclays US Aggregate Index	US Fixed Core Investment Grade
UK Fixed	Developed	Markit iBoxx £ Overall Index	UK Fixed Income (Govt & Non-Govt) (50/50 All Stock G/ All Stock NG)
Eurozone Fixed	Developed	Barclays Capital Euro Aggregate Index	Eurozone Fixed (Govt & Non-Govt)
Australian Fixed	Developed	Bloomberg Ausbond Composite Bond Index	Australian Fixed Income (Core)
Canadian Fixed	Developed	FTSE TMX Canada Universe Bond Index	Composites – Canadian Fixed Income (GIPS®)
Global Government	Developed	Citigroup WGBI Index	Global Fixed Unhedged Sovereign
US Government	Developed	Barclays US Government Index	US Fixed Government
UK Government	Developed	FTSE Gilts All Stocks Index	UK Fixed Income (Govt)(All Stocks)
Eurozone Government	Developed	JP Morgan EMU Government Index	Eurozone Fixed (Govt)
Global Non-Government	Developed	Barclays Capital Global Aggregate Credit Index	Global Credit Unhedged
US Non-Government	Developed	Barclays US Corporate Investment Grade Index	US Fixed Credit
UK Non-Government	Developed	Markit iBoxx Non-Gilts Overall Index	UK Fixed Income (Non-Govt)(All Stocks)
Eurozone Non-Government	Developed	Barclays Capital Euro Aggregate Corporate Index	Eurozone Fixed (Non-Govt)
Global High Yield	Developed	BofAML Global High Yield Index	Global High Yield (High Yield Only)
Emerging Markets Debt	Emerging	JP Morgan EMBI Global Diversified Index	Emerging Market Debt

IMPORTANT NOTICES

MERCER

MAKE
TOMORROW,
TODAY