Bonds, Banks and Bears

Global Equity Update



Jeff Morrison, MFS Investment Management Josh Wilson, Clarity Funds

April 26th 2023



Important Notes

This communication (and attachment if applicable) is for New Zealand resident professional financial intermediaries and institutional investors only who are "wholesale clients" for the purposes of the Financial Markets Conduct Act 2013.

It has been provided by The Investment Store based on information provided by the issuer of the investment products referred to. The information is believed to be accurate in all material respects as at the date of issue. Neither The Investment Store, nor any of its directors or employees, give any warranty as to the reliability, accuracy, suitability or currency of the information in this presentation. Nothing contained in this presentation is, or shall be deemed to constitute, financial, investment, taxation or other advice from The Investment Store, to retail investors or a recommendation from The Investment Store to retail investors to purchase or dispose of any product or service. The information provided in this presentation is for discussion purposes only and should not be relied on in making investment decisions. To the maximum extent permitted by law, neither The Investment Store nor its directors or employees will have any liability for any loss or damage, however caused (including through negligence), arising in connection with your use of, or reliance on information contained in this presentation.

Important Notes - The Investment Store's directors and employees are not permitted to provide investment or taxation advice and any financial advice is only provided to wholesale clients. Accordingly, The Investment Store is not required to obtain a market services licence, or to provide disclosure statements under the Financial Markets Conduct Act 2013 or be a member of a dispute resolution scheme under the Financial Service Providers (Registration and Dispute Resolution) Act 2008. Any investment product information issued with this communication (or its attachments) is being transmitted from the issuer of the investment products referred to. Neither The Investment Store, nor any of its directors or employees, give any warranty as to the reliability, accuracy, suitability or currency of the information in this communication. Nothing contained in this communication is, or shall be deemed to constitute, financial, investment, taxation or other advice from The Investment Store or a recommendation from The Investment Store to purchase any product or service. The information provided in this communication is for discussion purposes only and should not be relied on in making investment decisions. Investment decisions are very important. They often have long-term consequences. You should seek professional advice before committing yourself to any investment. To the maximum extent permitted by law, neither The Investment Store nor its directors or employees will have any liability for any loss or damage, however caused (including through negligence), arising in connection with your use of, or reliance on information contained in, this communication. The Investment Store is registered on the Financial Service Providers Register (see www.business.govt.nz/fsp). The Investment Store reserves the right to immediately cease providing any further services to you if you notify us that you opt out of being a wholesale client pursuant to Schedule 5 of the Financial Markets Conduct A



Disclaimer

Please note, This information is made available to NZ resident professional financial intermediaries and institutional investors only who are Wholesale Clients as currently defined by the Financial Markets Conduct Act 2013. This information should not be shared or reproduced without the permission of the Manager/Presenter.

This presentation is for information purposes only and contains summarised information. It does not take into account your investment needs or personal circumstances and so is not intended to be viewed as investment or financial advice. Should you require financial advice you should always speak to your Authorised Financial Adviser.

A Product Disclosure Statement (PDS) for the fund/s mentioned in this presentation is available from Clarity Funds Management Limited (Clarity). Investors should read and understand the PDS for the relevant fund(s) in which they invest and satisfy themselves they understand all the terms and conditions of investment in the fund/s.

The price, value and income derived from investments may fluctuate because values can go down as well as up and investors may get back less than originally invested. Past performance is not indicative of future results and no representation or warranty, express or implied, is made regarding future performance. Neither Clarity nor any related company of Clarity, guarantees any particular rate of return on, or the performance of, the Clarity Funds, nor do they guarantee the repayment of capital from the Clarity Funds.

Reference to taxation or the impact of taxation does not constitute tax advice. The levels and bases of taxation may change. Where an investment is denominated in a foreign currency, changes in rates of exchange may have adverse effect on the value, price or income of the investment. This presentation has been prepared from published information and other sources believed to be reliable, accurate and complete at the time of preparation. While every effort has been made to ensure accuracy, Clarity, nor any person involved in this publication, accept any liability for any errors or omission.



Clarity Global Shares Fund Summary

Key Features

Actively managed and diversified global equity strategy	80 – 140 stock holdings; holdings may differ significantly from underlying benchmark index
In partnership with leading global equity manager	MFS, a US based global asset manager
Responsible investment approach	ESG integration; excludes controversial weapons & tobacco
Focus to exceed the return of broader global equity markets (benchmark) over medium term (at least 5 years) net of fees and expenses	Benchmarked to the MSCI All Country World ex- tobacco Index, 50% hedged to NZD ¹
Competitive pricing	1.00% p.a. ²
Designed for NZ investors	PIE structure, 50% NZD hedged Current FUM - \$148.5M (as at 31/03/2023)
Unique investment approach (combines quantitative and qualitative research)	Potential for strong risk-adjusted results across changing market environments



²Please refer to the PDS for Clarity Funds Management (dated 30 September 2022) for full details on fees. The fees stated above were charged in the year ending 31 March 2021.

Clarity Global Shares Fund

Performance (to 31 March 2023)

	3 months	1 year	2 years (p.a.)	3 years (p.a.)	5 years (p.a.)	Inception (p.a.)
Clarity Global Shares Fund*	7.5%	1.9%	5.6%	16.1%	8.7%	8.9%
Benchmark Index**	7.8%	-2.2%	2.9%	14.1%	8.7%	9.0%
Relative	-0.3%	4.1%	2.7%	2.0%	0.0%	-0.1%

^{*}These returns are after deductions for charges and before tax. **Benchmark returns reflects no deduction for charges and tax. The Fund incepted on 26 April 2017. Past performance is not necessarily indicative of future performance. The Quarterly Fund Update is available at https://clarityfunds.co.nz/quarterly-fund-updates-and-commentaries.







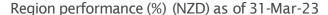
Banks, Bonds and Bears - Global Equity Update

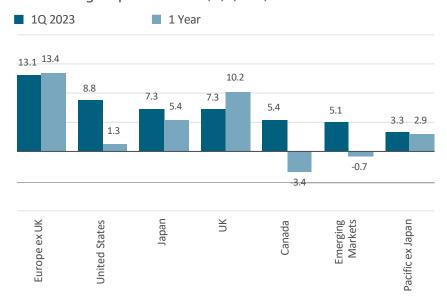
Jeff Morrison Institutional Portfolio Manager

The views expressed in this presentation are those of the speaker and are subject to change at any time. These views should not be relied upon as investment advice, as securities recommendations, or as an indication of trading intent on behalf of any other MFS investment product. No forecasts can be guaranteed.

Market Overview





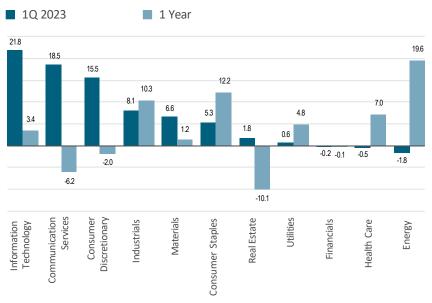


Source: FactSet. Region performance based on MSCI regional/country indexes.

Market review as of 31-Mar-2023

- After a strong start in early 2023, global equity markets fluctuated in Q1, driven by shifting interest rate expectations. The market appreciation year to date has been concentrated in the largest stocks.
- Long-duration, growth-oriented stocks benefited from lower bond yields, while high-beta, lower-quality stocks rose on hopes of central bank dovishness on the horizon.

Sector performance (%) (NZD) as of 31-Mar-23



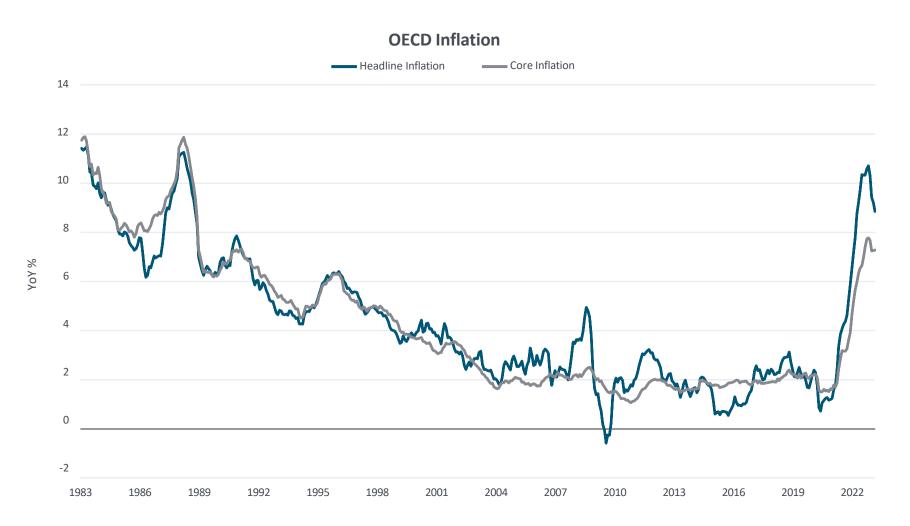
Source: FactSet. Sector performance based on MSCI sector classification. The analysis of MSCI AC World ex Tobacco Index constituents are broken out by MSCI defined sectors.

- The liquidity crisis in the banking industry, which is leading to tighter credit conditions for consumers and companies alike, could accelerate the pathway to a recession.
- As inflation remains elevated, central banks may try to balance financial stability with inflation fight.
- The lagged effects of higher interest rates are likely to impact both earnings and equity returns.

Global Inflation at Highest Level in over 30 Years

OECD Area CPI & Core CPI





Source: Bloomberg, OECD. Monthly data 31 January 1985 to 28 February (latest available). Inflation is measured by the consumer price index. Core inflation is inflation excluding food and energy.

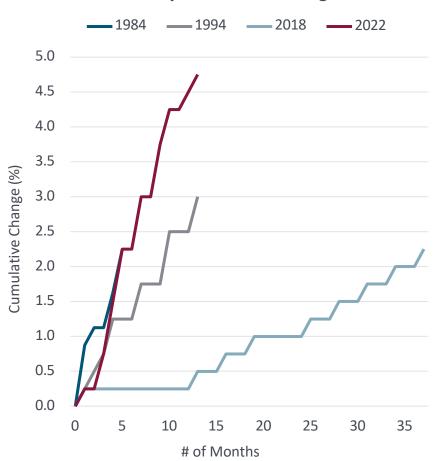
Emerging signs of a peak

Pace of Fed Tightening Has Been Aggressive

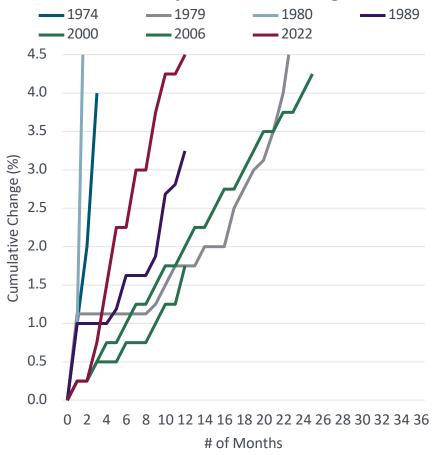
Rate hike cycles since 1974







Current Cycle vs. Hard Landings



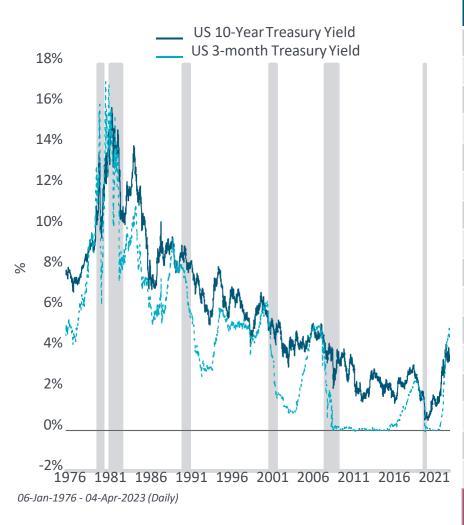
Source: FactSet. Monthly data from 31 August 1971 to 31 March 2023. Soft landings are defined as periods where Fed hiking rates was not followed by a recession and hard landings are defined as periods where a recession occurred following Fed hiking rates.

Rhymes with a hard landing

Problems Happen When Rates Rise Sharply

Interest Rates & Historical Events





Year	Event
1970	Penn Central Bankruptcy
1974	Franklin National
1980	First Penn
1982	LatAm
1984	Continental Illinois
1987	Black Monday
1990	S&L Crisis
1994	Orange County
1995	Mexico
1997	Pac Rim
1998	Russia/LTCM
2000	Nasdaq Collapse
2007	Subprime
2011	US Debt Downgrade
2011/2012	Europe
2013	Taper Tantrum
2022/2023	FTX Crypto Currency, Commercial Real Estate, SVB Financial Group

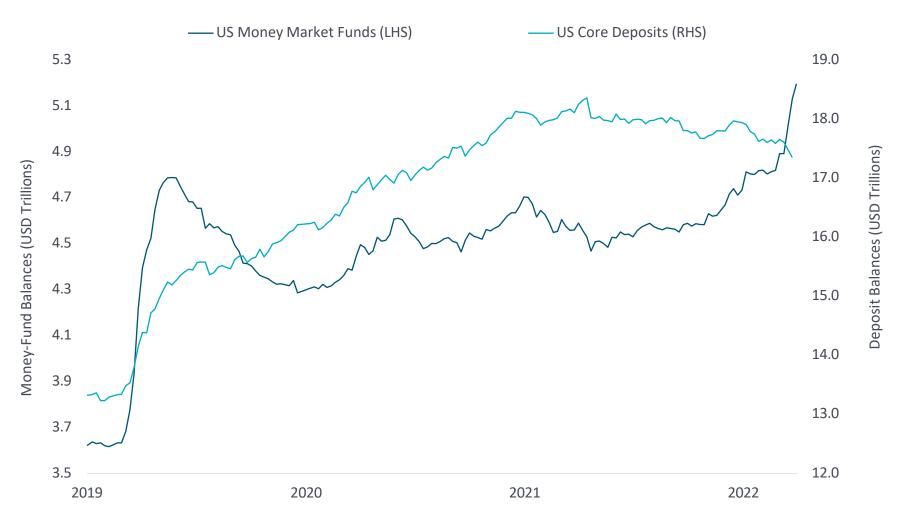
Source: FactSet, PSC Economics. Shaded areas = US recessions.

Something typically breaks

US Regional Bank Liquidity Crisis

Bank deposits fled to more attractive options





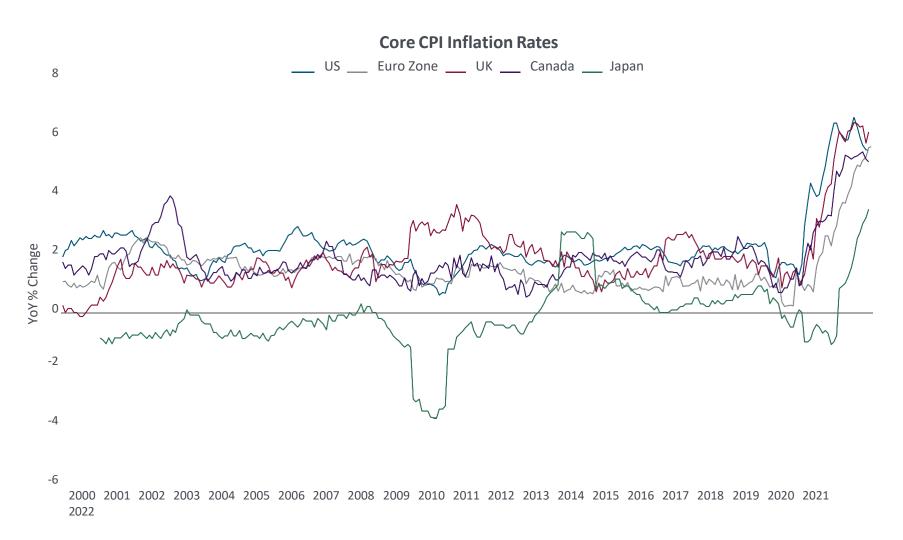
Source: Money market funds data from ICI and Bloomberg, US core deposits are deposits for all commercial banks, not seasonally adjusted, and from Federal Reserve H.8. Weekly data from 18 December 2019 to 29 March 2023 (money-market funds) and 22 March 2023 (deposits).

Historically problems emerged when rates rise sharply

Banking Sector Issues Make Inflation Fight More Challenging

Developed Market inflation rates





Source: FactSet. Monthly data from 31 December 1999 to 28 February 2023 (US, UK, Canada & Japan) and 31 March 2023 (Eurozone).

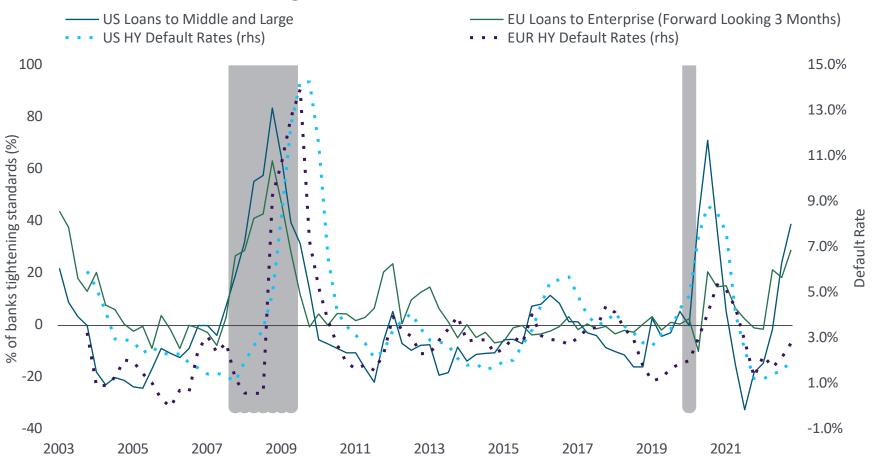
Core inflation remains sticky

Credit Conditions Were Already Tight Before SVB

Lending Conditions vs. Default Rates



Lending Conditions Historical Effect on Markets



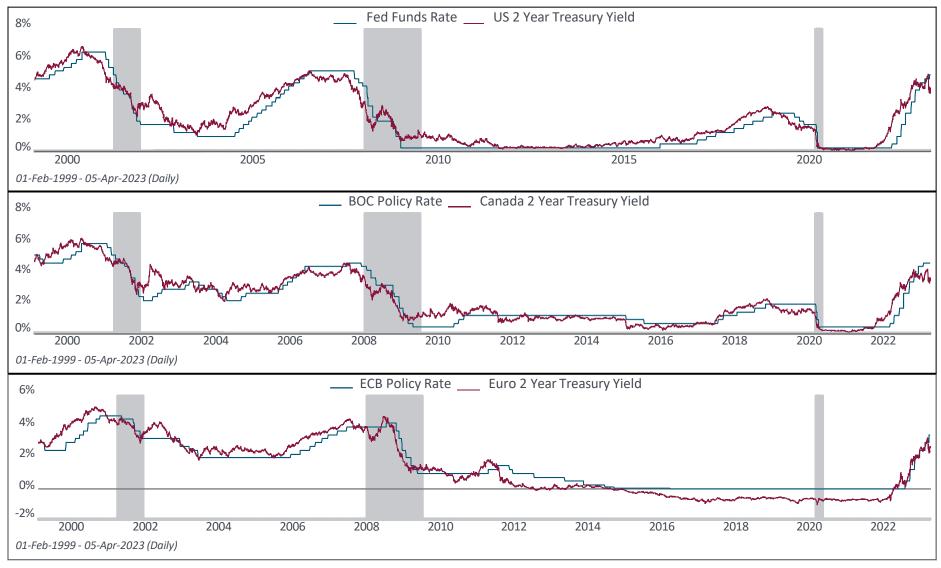
Source: Bloomberg, European Central Bank, Federal Reserve, Moody's Investor Services, National Bureau of Economic Research. Quarterly data from 31 December 2022. Shaded areas represent NBER defined recession in the US. HY = High Yield. US Loans to Middle and Large lending standards = Net % of domestic respondents tightening standards for commercial and industrial loans. EU Loans to Enterprise lending standards = Change in credit standards for loans to enterprise – forward looking 3 months.

Suggests default rates go higher

Market Is Telling CB's They Have Seen Enough Rate Hikes

2-year Treasury Yield vs. Policy Rates





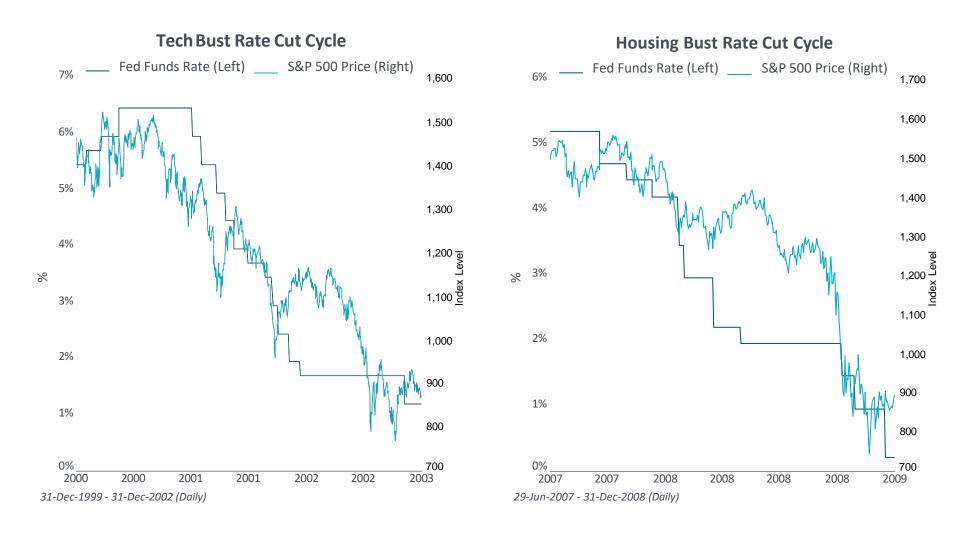
Source: FactSet.

Historically, a reliable signal of a Fed pause & recession

Rate Cuts may not help equity markets

Tech bust & GFC cycles





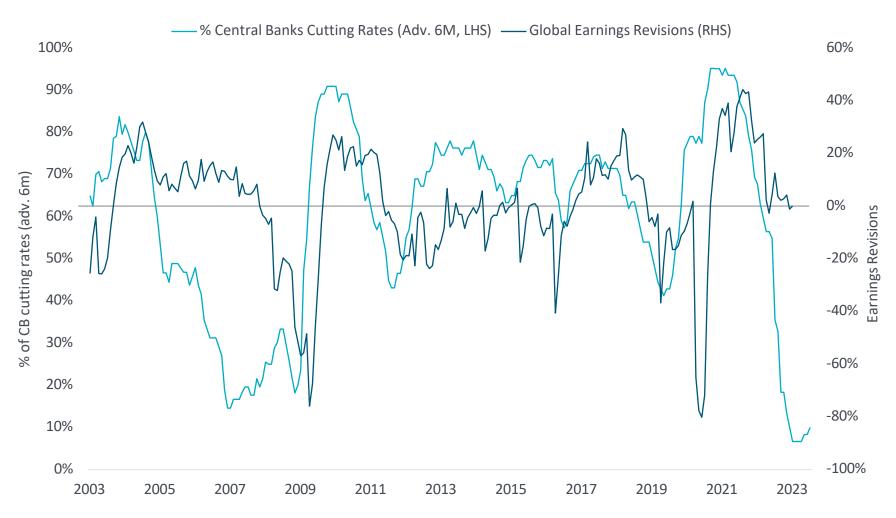
Source: FactSet.

A recession may negate impact of a policy shift

Central Bank Policies Point to Further Earnings Weakness

Global central bank policy & global earnings revisions index





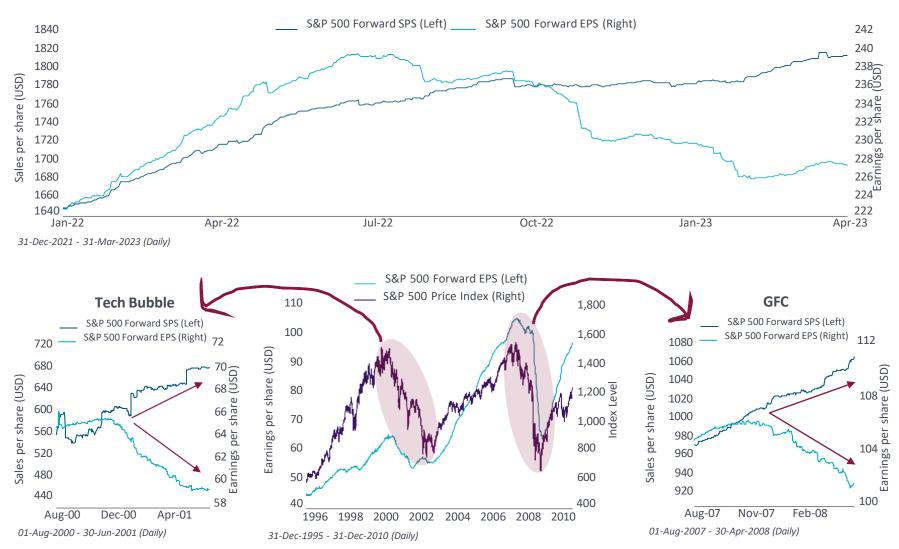
Source: FactSet. Monthly data from 31 March 2003 to 31 March 2023. Central banks look at 63 major central banks around the world. Earnings revisions = upgraded (upward revisions – downward revisions) divided by total measured with a three-month rolling window for MSCI World companies.

Earnings downgrades may have further to go

EPS Decline Has Been About Margins So Far

Topline holding up for now





Source: FactSet. Forward sales per share (SPS) and earnings per share (EPS) are next-twelve-months.

An ominous sign for future earnings

Factor Leadership When Earnings Decline

Outperformers vs. underperformers



ွှာ	Peak in NTM EPS	Trough in NTM EPS	Return on Assets	Net Income Margin	Return on Equity	Asset Turnover	
Outperformers	Jan-86 Sep-89 Sep-00 Oct-07 Sep-14 Feb-20	May-86 Apr-91 Nov-01 May-09 May-16 May-20 Average Hit Rate	10.0% 36.9% 0.5% 7.4% 4.8% 14.7%	7.9% 29.9% 2.6% 4.4% 4.3% 15.0%	10.9% 19.2% 3.6% 6.8% 6.6% 9.0% 9.3% 100.0%	4.7% 11.7% 5.3% 2.7% 7.0% 7.9% 6.6% 100.0%	These Factors Outperformed in Every Episode Where NTM EPS Fell
formers	EPS Jan-86	Trough in NTM EPS May-86	Beta -5.0%	Sales Variance -1.7%	Long Term Volatility -3.8%	Negative Earnings -10.3%	These Factors
Underperformers	Sep-89 Sep-00 Oct-07 Sep-14 Feb-20	Apr-91 Nov-01 May-09 May-16 May-20	-2.7% -19.5% -4.1% -19.6% -5.4%	-8.7% -15.8% -19.5% -20.1% -1.1%	-16.7% -24.7% -10.8% -20.1% -4.7%	-17.2% -10.0% -16.6% -27.9% -11.3%	Underperformed in Every Episode Where NTM EPS Fell
		Average Hit Rate	-9.4% 0.0%	-11.1% 0.0%	-13.5% 0.0%	-15.6% 0.0%	ı

Source: Piper Sandler. S&P Factor performance, high to low, sector adjusted, average performance during the periods listed.

Quality metrics historically outperform a negative earnings environment

The Correlation of Factors and Global Economic Drivers

MSCI All Country World Index 5-year and 10-year correlations



5 Year Correlation

	Global PMI	German 10 Yr	US 10 Yr	WTI Oil	Natural Gas
Sales Yield	0.43	0.70	0.86	0.65	0.57
Book Yield	0.38	0.77	0.84	0.56	0.52
Cash Flow Yield	0.35	0.67	0.82	0.57	0.65
Revisions Ratio	0.62	0.43	0.54	0.62	0.66
Beta	0.68	0.15	0.35	0.79	0.48
Earnings Yield	-0.01	0.77	0.69	0.17	0.40
Momentum	-0.32	0.05	-0.13	-0.34	-0.06
ROE	-0.42	-0.27	-0.41	-0.48	-0.21
ROIC	-0.50	-0.41	-0.63	-0.65	-0.43
Earnings Growth	-0.36	-0.74	-0.92	-0.56	-0.62

1.00
0.50
0.00
-0.50
-1.00

10 Year Correlation

	Global PMI	German 10 Yr	US 10 Yr	WTI Oil	Natural Gas
Cash Flow Yield	0.34	0.55	0.75	0.54	0.62
Sales Yield	0.41	0.57	0.82	0.52	0.46
Book Yield	0.37	0.56	0.76	0.45	0.45
Beta	0.67	0.22	0.44	0.69	0.44
Earnings Yield	0.04	0.57	0.48	0.18	0.30
Revisions Ratio	0.50	0.18	0.26	0.31	0.30
Momentum	-0.27	0.01	-0.11	-0.37	-0.16
ROE	-0.29	-0.17	-0.43	-0.25	-0.20
ROIC	-0.35	-0.24	-0.56	-0.35	-0.32
Farnings Growth	-0.32	-0.65	-0.89	-0.50	-0 57

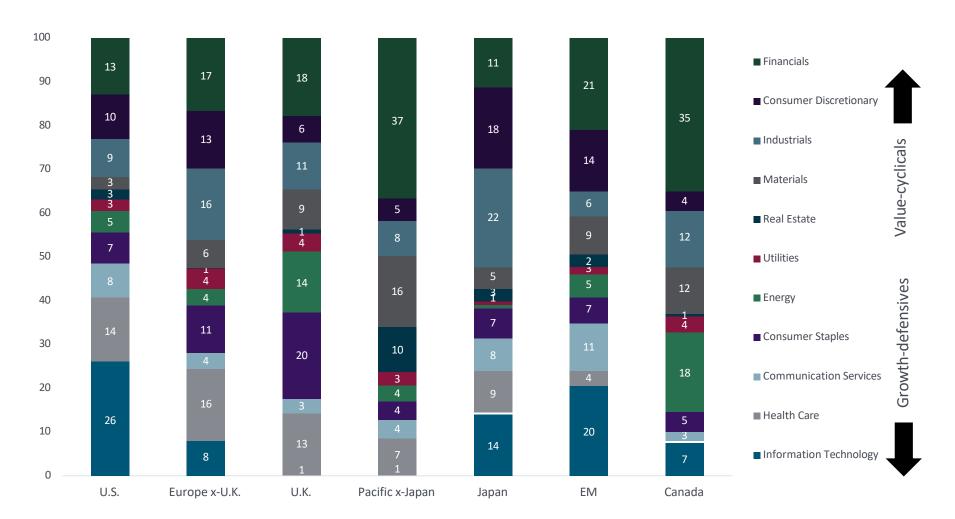
Source: Piper Sandler. 5-year correlations from 12/31/17 to 12/30/22. 10-year correlations from 12/31/2012 to 12/30/2022.

Current economic data suggests a rotation to quality factor leadership

Business Cycle Will Also Impact Regional Leadership

Regional Sector weights





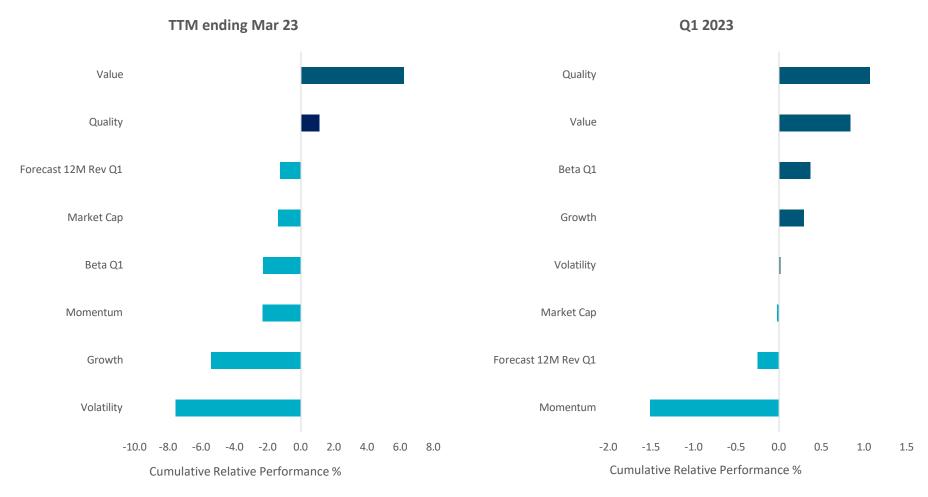
Source: FactSet. Data as of 31 March 2023. US = S&P 500. Europe x-UK = MSCI Europe x-U.K. U.K. = MSCI United Kingdom. Pacific x-Japan = MSCI Pacific x-Japan. Japan = MSCI Japan. EM = MSCI Emerging Markets (EM). Canada = MSCI Canada.

Sector Composition an important factor

Global Factor Performance

Significant rotation in Q1





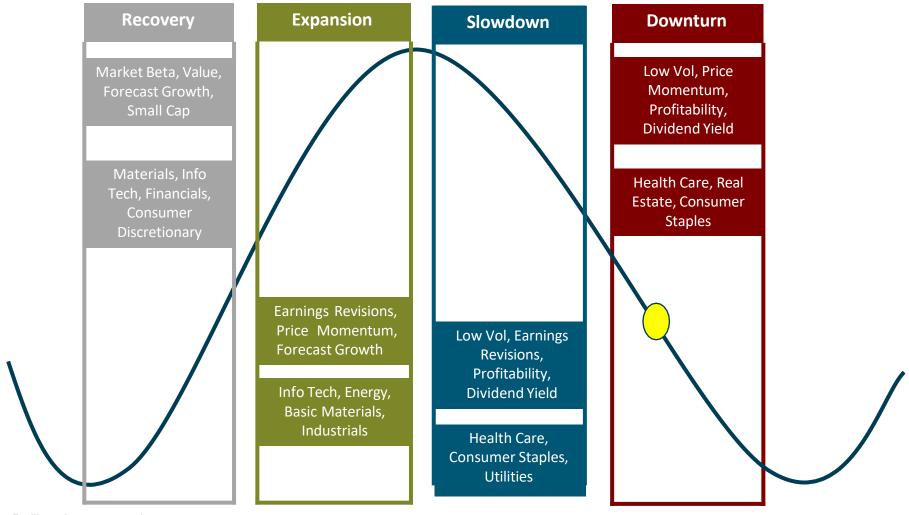
Source: Style Analytics. Performance is Q1 – Universe. Trailing twelve months (TTM). "TTM ending Mar 2023" = 31 Mar 2022 to 31 Mar 2023. "1Q 2023" = 31 Dec 2022 to 31 Mar 2023. The Global Equity universe includes approximately the 2,800 largest stocks, including both developed and emerging markets countries. Returns of the hypothetical factor quintile portfolios is relative to the overall universe. Factor buckets are equal-weighted, and country and sector adjusted. "EPS Revisions" = Forecast next 12M Revisions. The factor identification and construction methodology used by Style Analytics may differ from the methodology used by MFS. While the data are based on sources believed to the reliable, MFS does not represent that it is accurate or complete and should not be relied on as such or be the basis for an investment decision. See end of presentation for additional information and factor definitions.

Expect quality leadership to persist

Global Economic Cycle

Factor and sector performance varies through the cycle





For illustrative purposes only.

Source: Style Analytics, FactSet and OECD. Style Analytics uses custom equity universes per MFS specification and includes approximately the 1,650 largest stocks in the developed countries. For sector performance, the MSCI World Index is used by FactSet. Total returns (gross) are in US dollars for the top-level, style and respective sector-level indices. Cycle phase is based on OECD monthly Composite Leading Indicators (CLIs). Mid/Expansion is defined as CLI increasing and above 100; Late/Slowdown is defined as CLI decreasing but above 100; Contraction/Downturn is defined as CLI decreasing and below 100; Early/Recovery is defined as CLI increasing but below 100.

The factor identification and construction methodology used by Style Analytics may differ from the methodology used by MFS. While the data are based on sources believed to the reliable,

The factor identification and construction methodology used by Style Analytics may differ from the methodology used by MFS. While the data are based on sources believed to the reliable, MFS does not represent that it is accurate or complete and should not be relied on as such or be the basis for an investment decision. See end of presentation for additional information and factor definitions.

16



Clarity Global Shares Fund – Q1 Update

Performance Drivers - Sectors



Relative to MS((NZD) - first qu	CI AC World ex Tobacco Index uarter 2023	Average relative weighting (%)	Portfolio returns (%)	Benchmark returns (%)	Sector allocation ¹ (%)	+ Stock + selection ² (%) +	Currency effect (%)	Relative contribution (%)
Contributors	Energy	-0.3	8.4	-1.8	0.0	0.5	-0.0	0.6
	Industrials	-1.1	14.1	8.1	0.0	0.5	-0.0	0.5
	Utilities	-0.6	10.3	0.6	0.1	0.2	0.0	0.3
	Consumer Discretionary	0.3	17.2	15.5	0.0	0.2	-0.0	0.2
	Health Care	-0.3	-0.1	-0.5	0.0	0.0	0.0	0.1
	Real Estate	-0.3	4.5	1.8	0.0	0.1	-0.0	0.1
	Index Options	0.5	9.2	_	0.0	_	0.0	0.0
Detractors	Financials	0.6	-4.2	-0.2	-0.0	-0.6	-0.0	-0.6
	Materials	-0.4	-4.5	6.6	0.0	-0.6	0.0	-0.6
	Communication Services	0.3	12.5	18.5	0.0	-0.4	-0.0	-0.4
	Information Technology	-0.4	20.9	21.8	-0.1	-0.2	-0.0	-0.3
	Consumer Staples	0.2	1.8	5.3	0.0	-0.2	-0.1	-0.2
	Cash	1.7	1.2	_	-0.0	_	-0.0	-0.0
Total excluding	currency hedge		_	_	0.1	-0.5	-0.1	-0.4
Currency hedg	je		_	_	-0.0	0.2	0.1	0.2
Total including	currency hedge		7.9	8.1	0.1	-0.3	0.0	-0.2

¹ Sector allocation is calculated based upon each security's price in local currency.

Attribution results are generated by the FactSet application utilizing a methodology that is widely accepted in the investment industry. Results are based upon daily holdings using a buy-and-hold methodology to generate individual security returns and do not include fees or expenses. As such, attribution results are essentially estimates and do not aggregate to the total return of the portfolio, which can be found elsewhere in this presentation. Recent geopolitical events may have impacted or disrupted the pricing of specific securities including the use of fair valuation approaches. Fair valuation practices across pricing sources index providers, pricing vendors, MFS - may not align due to security specific considerations or timing of fair valuation parameters. For instance, decisions to use stale prices vs fair value or on the level of haircut when fair valuing securities are typical sources of discrepancy between pricing sources observed during the events. This may further compound differences between attribution results and actual performance. To obtain the contribution calculation methodology and a complete list of every holding's contribution to the overall portfolio's performance during the measurement period, please email plattributionGrp@MFS.com.

The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI, Inc. and S&P Global Market Intelligence Inc. ("S&P Global Market Intelligence"). GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by MFS. MFS has applied its own internal sector/industry classification methodology for equity securities and non-equity securities that are unclassified by GICS.

² Stock selection is calculated based upon each security's price in local currency and included interaction effect. Interaction effect is the portion of the portfolio's relative performance attributable to combining allocation decisions with stock selection decisions. This effect measures the relative strength of the manager's convictions. The interaction effect is the weight differential times the return differential.

Performance Drivers - Stocks



		Average W	/eighting (%)	Retu	rns (%)	
Relative to MSCI AC World	ex Tobacco Index (NZD) - first quarter 2023	Portfolio	Benchmark	Portfolio ¹	Benchmark	Relative contribution (%)
Contributors	Booking Holdings Inc	1.6	0.2	33.0	33.0	0.3
	Cadence Design Systems Inc	1.2	0.1	32.2	32.2	0.2
	Applied Materials Inc	1.5	0.2	27.8	27.8	0.2
	Bayer	1.4	0.1	25.0	25.0	0.2
	China Petroleum & Chemical Corp (Eq)	1.2	0.0	23.7	24.4	0.2
Detractors	Nvidia Corp	0.1	0.9	18.5	92.2	-0.5
	Cigna Group	1.3	0.2	-21.7	-21.7	-0.4
	Slm Corp	0.9	_	-24.0	-	-0.3
	MetLife Inc	1.2	0.1	-18.5	-18.5	-0.3
	Tesla Inc	0.3	0.8	70.3	70.3	-0.2

 $^{^{\}mbox{\scriptsize 1}}$ Represents performance for the time period stock was held in portfolio.

Attribution results are generated by the FactSet application utilizing a methodology that is widely accepted in the investment industry. Results are based upon daily holdings using a buy-and-hold methodology to generate individual security returns and do not include fees or expenses. As such, attribution results are essentially estimates and do not aggregate to the total return of the portfolio, which can be found elsewhere in this presentation. Recent geopolitical events may have impacted or disrupted the pricing of specific securities including the use of fair valuation approaches. Fair valuation practices across pricing sources index providers, pricing vendors, MFS - may not align due to security specific considerations or timing of fair valuation parameters. For instance, decisions to use stale prices vs fair value or on the level of haircut when fair valuing securities are typical sources of discrepancy between pricing sources observed during the events. This may further compound differences between attribution results and actual performance. To obtain the contribution calculation methodology and a complete list of every holding's contribution to the overall portfolio's performance during the measurement period, please email plattributionGrp@MFS.com.

Significant Transactions



From 01-Jan-23 t	to 31-Mar-23	Transaction type	Trade (%)	Ending weight (%)
Purchases	JPMORGAN CHASE & CO	Add	0.8	1.2
	NOVARTIS AG	New position	0.6	0.6
	EQUINIX INC	Add	0.5	0.9
	UNITED STATES STEEL CORP	New position	0.5	0.4
	AIR CANADA	New position	0.4	0.4
Sales	WEYERHAEUSER CO	Eliminate position	-0.7	-
	HUMANA INC	Eliminate position	-0.6	_
	FUJITSU LTD	Eliminate position	-0.6	_
	MAGNA INTERNATIONAL INC	Eliminate position	-0.6	_
	LEAR CORP	Eliminate position	-0.5	_

Top Overweight and Underweight Positions



As of 31-Mar-23		Portfolio (%)	Benchmark^ (%)
Overweight	BOOKING HOLDINGS INC	1.7	0.2
	KIRIN HOLDINGS CO LTD	1.4	0.0
	APPLIED MATERIALS INC	1.6	0.2
	BAYER AG	1.4	0.1
	ENI SPA	1.4	0.1
Underweight	APPLE INC	3.2	4.4
	EXXON MOBIL CORP	-	0.8
	NVIDIA CORP	0.4	1.1
	UNITEDHEALTH GROUP INC (EQ)	_	0.7
	BERKSHIRE HATHAWAY INC (EQ)	-	0.7

[^] MSCI AC World ex Tobacco Index

Characteristics



As of 31-Mar-23	Portfolio	Benchmark^
Fundamentals - weighted average	TOTTIONO	Belletillark.
IBES long-term EPS growth ¹	9.9%	10.5%
Price/earnings (12 months forward)	12.6x	16.1x
PEG ratio	1.8x	1.9x
Price/book	2.4x	2.6x
Price/sales	1.1x	1.8x
Dividend yield	2.4%	2.2%
Return on equity (3-year average)	24.7%	24.6%
Return on invested capital	14.4%	13.8%
Long term debt/capital	38.7%	37.8%
Market capitalization		
Market capitalization (NZD) ²	517.1 bn	562.9 bn
Diversification		
Top ten holdings	21%	16%
Number of holdings	140	2,879
Turnover		
Trailing 1 year turnover ³	63%	_
Risk profile (current)		
Active share	74%	_
Barra predicted tracking error ⁴	2.10%	_
Risk/reward (5 year)		
Beta	1.01	_
Information ratio	0.30	_

[^] MSCI AC World ex Tobacco Index

Past performance is no guarantee of future results.

No forecasts can be guaranteed.

- ¹ Source: FactSet
- ² Weighted average.
- ³ US Turnover Methodology: (Lesser of Purchase or Sales)/Average Month End Market Value
- ⁴ Source Barra. The Barra information may not be redistributed, may not be reproduced or redisseminated in any form and may not be used to create any financial instruments or products or any indices. The Barra information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. Barra, each of its affiliates and each other person involved in or related to compiling, computing or creating any Barra information (collectively, the "Barra Parties") expressly disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall any Barra Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages.

Style Analytics Factor Calculation

Value: An equal-weighted composite of the following factors

Book to Price Per Share

The ratio of the company's book value (the sum of shareholders' equity plus accumulated retained earnings from the P&L account) to its share price. This factor has been one of the most successful measures of the intrinsic value of company shares.

Earnings Yield

Annual earnings (adjusted for amortizations of intangibles, extraordinary charges and credits) per share divided by the share price.

This factor measures the worth of a company's shares according to the company's ability to support each share with after tax earnings.

Cash Flow Yield

Annual cash flow per share divided by the share price.

This factor is related to earnings yield but also includes other items, specifically: depreciation, amortizations, and provisions for deferred liabilities. It is intended to capture the cash availability of the company as a multiple of the share price, and offers a value criteria based on the stream of accessible cash earnings.

Sales to Price

Net sales per share divided by the share price.

This factor measures the worth of a company's shares according to the annual sales volume supporting the company business. The item is considered by many analysts to be less susceptible to manipulation than other valuation criteria; it is, however, a less comprehensive measure of accompany's range of activities.

EBITDA to Price

The ratio of the company's EBITDA to Price. EBITDA is Earnings Before Interest, Taxes and Depreciation and is calculated by taking the pretax income and adding back interest expense on debt and depreciation, depletion and amortization and subtracting interest capitalized.

The factor is a measure of a company's core profitability as a multiple of its share price.

Forecast Sales Yield

The consensus 1 year forecast annual sales per share divided by the share price.

Forecast Earnings Yield

The consensus 1 year forecast annual earnings per share divided by the share price.

Source: Style Analytics

Free Cash Flow Yield

Annual cash flow per share minus capital expenditure per share divided by the share price. Free Cash Flow is the amount of money available to the company after paying out for the maintenance and renewal of fixed assets.

Inverse PEG

The annual earnings (adjusted for amortizations of intangibles, extraordinary charges and credits) per share, multiplied by forecast 12 month earnings growth, divided by the share price. I.e. adjusted earnings per share(t)* forecast earnings growth(t)/ share price(t).

Momentum

Momentum 12-1

The total return of the stock over the last 12 months, excluding the total return over the most recent month since reversal effects are often associated with one-month returns.

Profitability: An equal-weighted composite of the following factors

Return on Equity

Net income before preferred dividends divided by the book value of shareholders' common equity. Return on Equity measures the profitability of the operations of the company as a proportion of the total amount of equity in the company. Since ROE multiplied by the reinvestment rate (the proportion of earnings not paid as dividends but reinvested in the company) gives the warranted growth rate of a company, ROE is a traditional measure of a company'sgrowth potential.

Net Profit Margin

The "net margin", annual net income before preferred dividends (plus policyholders' surplus for insurance companies), divided by annual net sales. This measure attempts to assessthe company's potential for profitable, sustained expansion orgrowth.

Return on Invested Capital

(Net income + ((interest expense on debt - interest capitalized) * (1-tax rate))) / average of last year's and current year's (total capital + short term debt & current portion of long term debt). The Return on Invested Capital (also known as Return on Capital) measures the profitability of a company as measured by its operating income in relation to the total capital invested in the company.

Style Analytics Factor Calculation

Continued

Return on Assets

(Net income + ((interest expense on debt - interest capitalized) * (1-tax rate)))/ average of last year's and current year's total assets. The Return on Assets (ROA) of a company measures its operating efficiency in terms of the profits generated from its total assets. This provides a measure as to how efficient management is at using its assets to generate operating earnings.

Gross Profit Margin

Gross profit divided by net sales. Gross profit may be preferred as an alternative over earnings or free cash flow to consider a company's true economic profitability without subtracting expenses that may in fact be increasing a company's production advantage or competitive advantage e.g. advertising, R&D, or capital expenditure.

Gross Profits to Assets

Gross profits divided by total assets. Gross profit is a company's total revenue minus the cost of goods sold. Gross profit may be preferred as an alternative over earnings or free cash flow to consider a company's true economic profitability without subtracting expenses that may in fact be increasing a company's production advantage or competitive advantage e.g. advertising, R&D, or capital expenditure. Gross profits are divided by assets, not shareholder's equity, because gross profits exclude interest payments, and are therefore independent of leverage.

Operating Profit Margin

Operating income/revenues. Operating margin measures the profitability of the firm based on earnings before interest and tax.

Dividend Yield

The annual dividend paid per share divided by the share price. This factor measures the value of company shares according to the stream of dividend income resulting from share ownership.

Forecast 12M Revisions

Forecast 12M Earnings Rev3M

IBES balance of earnings forecast revisions for the over the next 12 months. Calculated as the difference between the number of upwards revisions minus the number of downwards revisions (as sampled over the past 3 month period), expressed as a percentage of the number of estimates. The 12 month earnings revisions is calculated on a pro-rata basis from the forecasts for each of the company's next 2 annual reporting periods.

Growth: An equal-weighted composite of the following factors

Earnings Growth

The average annual growth rate of earnings (adjusted for amortizations of intangibles, extraordinary charges and credits) over a trailing three years. Earnings Growth is, perhaps, the clearest of the growth factors. However, it is subject to the distortions of reporting conventions and manipulation and, particularly in some markets, only known after a considerable lag.

Sales Growth

The average annual growth rate of net sales per share over a trailing three years. Although growth in sales per share might be only a narrow measure of a company's business growth, and may be subject to a number of distortions, it is less subject to differences in reporting conventions or manipulation than many other balance sheet or profit and loss items.

Forecast Growth 12M

IBES consensus forecast growth of earnings over the next 12 months. The IBES 12 Month Forward is calculated on a pro-rata basis from the forecasts for each company's next 2 annual reporting periods.

Forecast Earnings Growth Long Term

This factor takes the longest available 2 year earnings growth forecast for a stock. For stocks with a 5 year forward consensus forecast the growth rate will be calculated from fiscal year 3 to fiscal year 5. For stocks with a 4 year forward consensus forecast the growth rate will be calculated from fiscal year 2 to fiscal year 4.

Forecast Sales Growth Long Term

This factor takes the longest available 2 year sales growth forecast for a stock. Forecast Sales Growth 12M. Consensus forecast growth of sales over the next 12 months. The 12 month growth is calculated on a pro-rata basis from the forecasts for each of the company's next 2 annual reporting periods. For stocks with a 3 year forward consensus forecast the growth rate will be calculated from fiscal year 1 to fiscal year 3. If forecasts are not available for fiscal years 3 to 5, then the factor is set to null.

Source: Style Analytics

Style Analytics Factor Calculation

Continued

Earnings Growth 5 Year

The average annual growth rate of earnings (adjusted for amortizations of intangibles, extraordinary charges and credits) over a trailing five years. Earnings Growth is, perhaps, the clearest of the growth factors. However, it is subject to the distortions of reporting conventions and manipulation and, particularly in some markets, only known after a considerable lag.

Sales Growth 5 Year

The average annual growth rate of net sales per share over a trailing five years. Although growth in sales per share might be only a narrow measure of a company's business growth, and may be subject to a number of distortions, it is less subject to differences in reporting conventions or manipulation than many other balance sheet or profit and loss items.

Dividend Growth 5 Year

The average annual growth rate of dividends over a trailing five years.

Low Accruals

This quality factor measures accruals as a percentage of total assets. Accruals are an overhang on the balance sheet from one accounting period to the next. High accruals to assets potentially indicate that managers are not running the company as tightly as they could. High accruals may also be an indicator that earnings figures are being manipulated to influence market perceptions, and hence there could be disappointment in subsequent accounting periods. Low Accruals =-([total current assets(t)-total current assets(t-1)]-[cash balance(t) - cash balance(t-1)] - [total current liabilities(t) - total current liabilities(t-1)] + [short term debt(t) - short term debt(t-1)] + [taxes payable(t) - taxes payable(t-1)]) / total assets.

Leverage: An equal-weighted composite of the following factors

Debt to Equity

Totaldebt as a percentage of total common equity.

The Debt to Equity ratio measures leverage, or gearing, a particular feature of share price risk. The higher the ratio the more changes in a company's fortune might be reflected in changes in the payment of dividends. The influence of this criterion is, however, especially subject to a number of particular specific considerations (e.g. sector differences, interest rate sensitivity). Consequently it is considered separately from the other "risk" criteria.

Assets to Equity

Total assets divided by common equity. The Assets to Equity ratio is an indicator of how much leverage has been used to finance the firm.

Interest Coverage Ratio (ex-financials)

Earnings Before Interest and Taxes (EBIT) divided by the company's interest on outstanding debt over the previous year. Interest Coverage Ratio indicates how easy it is for a company to service its debt. This factor is not available for financial companies.

Current Ratio (ex-financials)

The ratio of a company's total current assets to its total current liabilities. A higher Current Ratio indicates the company is more likely to be able to meet its short term obligations. This factor is not available for financial companies.

Quick Ratio (ex-financials)

The ratio of a company's cash, marketable securities and accounts receivable to its total current liabilities. A higher Quick Ratio indicates the company is more likely to be able to meet its short term obligations. This factor is not available for financial companies.

Volatility: An equal-weighted composite of the following factors

Market Beta

The "slope coefficient", (β), from the simple regression: Security monthly return = $\beta + \beta *$ market monthly return + random error. The regression is carried out over 36 month periods. Where sufficient information is not available, β =1 is assumed.

Volatility 3 Year

The standard deviation of the last 36 months of total returns, expressed as an annualized percentage.

Volatility 1 Year

The standard deviation of the last 12 months of total returns, expressed as an annualized percentage.

Daily Volatility 1 Year

The standard deviation of the last year of daily total returns, expressed as an annualized percentage.



Thank You

Index data source: MSCI. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed or produced by MSCI.

Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg neither approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

MFS International Australia Pty Ltd ("MFS Australia") (ABN 68 607 579 537) holds an Australian financial services license number 485343. MFS Australia is regulated by the Australian Securities and Investments Commission.

This material is directed at investment professionals for general information use only with no consideration given to the specific investment objective, financial situation and particular needs of any specific person. Any securities and/or sectors mentioned herein are for illustration purposes and should not be construed as a recommendation for investment. Investment involves risk. Past performance is not indicative of future performance. The information contained herein may not be copied, reproduced or redistributed without the express consent of MFS Investment Management ("MFS"). While the information is believed to be accurate, it may be subject to change without notice. MFS does not warrant or represent that it is free from errors or omissions or that the information is suitable for any particular person's intended use. Except in so far as any liability under any law cannot be excluded, MFS does not accept liability for any inaccuracy or for the investment decisions or any other actions taken by any person on the basis of the material included. MFS does not authorise distribution to retail investors.

Unless otherwise indicated, logos, product and services names are trademarks of MFS and its affiliates and may be registered in certain countries.

54669.2