

Global Factor Performance Summary

June 2014

Earnings & Sentiment Factors were top performers across the world, being particularly strong in Emerging Markets. Price Momentum continued to do well after the underperformance earlier in the year. It continues to struggle in Australia, though. Value was poor in Asia Ex but did well in other Emerging markets, Japan and Australia. It has failed for the second straight month in Europe. Quality continued to outperform in Europe and EM (x Asia) but was less impressive in rest of the developed world. A common theme emerging based on feedback from several clients suggests that 'Quality at a Reasonable Price' is gaining more traction, perhaps reflecting some of the uncertainty seen on the macro front.

Our generic multi-Factor Q-Score Model was strong in the Emerging Markets and Japan but struggled to impress in Europe, US and Australia.

This monthly publication summarizes performance of a range of popular Quant factors. In all, nine (MSCI based) universes are included in the report: US, Europe, Japan, Australia, Asia ex Japan, GEM, EM ex Asia, Global Developed and All World.

For each universe we include a summary of performance over the last month, 12 months, QTD and YTD for four popular composite alpha sources that we refer to as the Value, Earnings, Quality and Price families.

We also include a table detailing performance over the last month for 42 popular alpha and risk factors.

Monthly L/S Returns for June 2014 around the world

Universe	Valuation	Earnings	Price	Quality	Model
Asia Ex Jp	-1.7%	2.9%	3.3%	0.5%	2.9%
Japan	0.9%	0.9%	0.8%	-1.9%	3.1%
Australia	1.9%	0.2%	-3.6%	-2.9%	-1.5%
Europe	-1.7%	0.7%	1.1%	2.6%	-1.5%
US	0.0%	0.3%	0.4%	-0.8%	-0.4%
GEM	-1.0%	3.3%	3.9%	1.4%	4.4%
EM x Asia	3.2%	3.4%	5.2%	2.6%	6.0%
GDM	0.0%	0.9%	-0.1%	-1.5%	-0.5%
World	-0.7%	1.3%	0.9%	-0.8%	0.9%

Source: Barra, MSCI, Thomson Reuters, J.P. Morgan

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Introduction

This report published monthly summarises factor returns for a range of popular quant factors in a range of global universes.

All factors are normalized relative to country or sector as appropriate. Returns are equal weighted and monthly rebalanced. The long portfolio consists of the top 10% (decile 1) of stocks for the relevant Factor with the short portfolios consisting of the bottom 10% (decile 10).

The Universes included are shown in the table below. Factor definitions can be found at the end of this report.

Table 1: Universes Included

Universe	Normalisation Method	Analysis Style
Asia Ex Jp	Country Neutral	Decile
Japan	Sector Neutral	Decile
Australia	Free	Quintile
Europe	Sector Neutral	Decile
US	Sector Neutral	Decile
GEM	Country Neutral	Decile
EM x Asia	Country Neutral	Decile
GDM	Sector Neutral	Decile
World	Country Neutral	Decile

Source: J.P. Morgan

Family Summary

For each universe we include a summary of performance over the last month, 12 months, YTD and QTD for 4 popular composite alpha sources that we refer to as the Value, Earnings, Quality and Price families. We also include performance information for a simple combination of these family factors (refer to factor definitions for more information).

Factor Summary

We also include a table detailing performance over the last month for 42 popular alpha and risk factors. For each factor we provide returns data as well as the monthly Information coefficient (IC) calculated by correlating start of month scores with subsequent returns. This provides a more robust picture on factor efficacy than returns alone given it is possible for the returns to be distorted by outliers.

Factors are shown in two tables. One is sorted by L/S return over the month and one by factor family.

Factor Summary Chart

For a quick visual reference the same 42 factors are charted for each universe. The chart shows monthly L/S returns and average monthly L/S returns over the last year.

For more information on this product or for any custom backtest requests please contact Quant Strategy (quant_strategy@jpmorgan.com).

Quick summary

Earnings & Sentiment Factors were top performers across the world, being particularly strong in Emerging Markets. Price Momentum continued to do well after the underperformance earlier in the year. Value was poor in Asia Ex but did well in other Emerging markets, Japan and Australia. Quality continued to outperform in Europe and EM (x Asia) but was less impressive in rest of the developed world.

Our generic multi-Factor Q-Score Model was strong in the Emerging Markets and Japan but struggled to impress in Europe, US and Australia.

Table 2: Monthly L/S Returns for June 2014 for global universes

Universe	Valuation	Earnings	Price	Quality	Model
Asia Ex Jp	-1.7%	2.9%	3.3%	0.5%	2.9%
Japan	0.9%	0.9%	0.8%	-1.9%	3.1%
Australia	1.9%	0.2%	-3.6%	-2.9%	-1.5%
Europe	-1.7%	0.7%	1.1%	2.6%	-1.5%
US	0.0%	0.3%	0.4%	-0.8%	-0.4%
GEM	-1.0%	3.3%	3.9%	1.4%	4.4%
EM x Asia	3.2%	3.4%	5.2%	2.6%	6.0%
GDM	0.0%	0.9%	-0.1%	-1.5%	-0.5%
World	-0.7%	1.3%	0.9%	-0.8%	0.9%

Source: Barra, MSCI, Thomson Reuters, J.P. Morgan

Earnings & Sentiment Factors were strong across the world with all regions showing flat to positive returns.

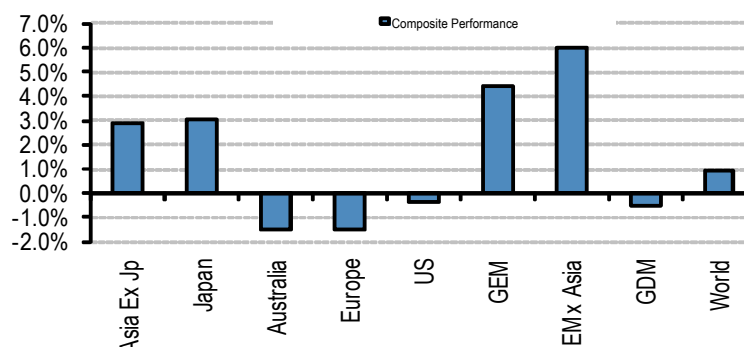
Our Q-Score Model was strong in Emerging Markets and Japan but underperformed in rest of the developed markets.

Table 3: Monthly Information Coefficients for June 2014 for global universes

Universe	Valuation	Earnings	Price	Quality	Model
Asia Ex Jp	-2.9%	14.2%	18.9%	4.4%	15.4%
Japan	11.8%	9.1%	9.9%	-10.4%	13.8%
Australia	16.9%	-0.7%	-23.2%	-11.6%	-5.9%
Europe	-20.3%	1.1%	-1.2%	13.0%	-5.5%
US	-0.9%	4.2%	4.3%	-15.7%	-1.9%
GEM	-0.5%	14.2%	18.6%	6.8%	17.4%
EM x Asia	15.4%	13.3%	17.7%	7.4%	24.5%
GDM	-5.1%	11.2%	-4.6%	-10.1%	-1.6%
World	-2.0%	11.9%	2.8%	-4.7%	4.8%

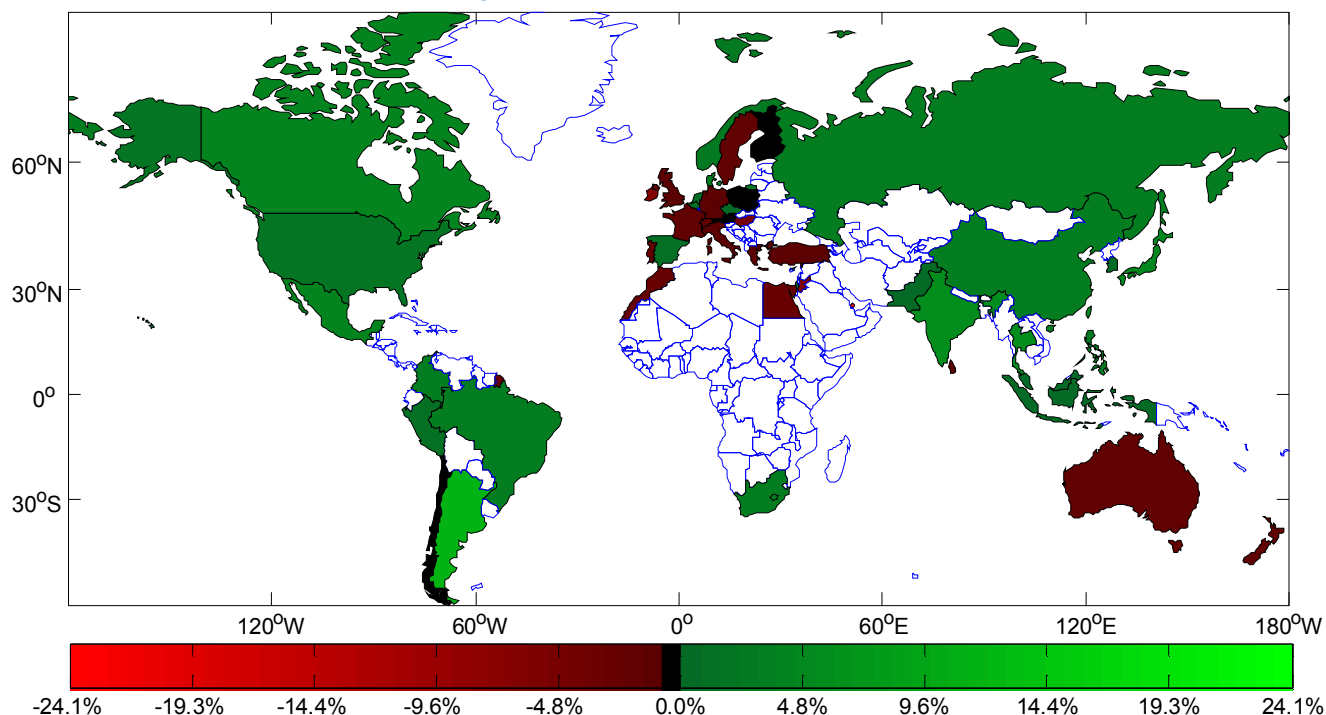
Source: Barra, MSCI, Thomson Reuters, J.P. Morgan

Figure 1: Performance of a simple Quant composite signal through June



Source: Barra, MSCI, Thomson Reuters, J.P. Morgan

MSCI All World Country Performance – June 2014



CTY	Country	Market	Local Total Return	CTY	Country	Market	Local Total Return
AllWld	World	DM	1.8%	ACWF	All World	DM+EM	1.9%
AT	Austria	DM	-0.6%	AR	Argentina	EM	11.8%
AU	Australia	DM	-1.5%	CL	Chile	EM	-0.5%
BE	Belgium	DM	1.1%	CN	China	EM	3.3%
BR	Brazil	DM	3.6%	CO	Colombia	EM	3.6%
CA	Canada	DM	4.0%	CZ	Czech Republic	EM	0.6%
CH	Switzerland	DM	-1.3%	EG	Egypt	EM	-2.5%
DE	Germany	DM	-1.0%	GR	Greece	DM	-1.1%
DK	Denmark	DM	3.3%	HU	Hungary	EM	-5.0%
ES	Spain	DM	1.4%	ID	Indonesia	EM	0.5%
FI	Finland	DM	-0.3%	IL	Israel	EM	2.0%
FR	France	DM	-1.7%	IN	India	EM	5.8%
GB	UK	DM	-1.3%	JO	Jordan	EM	-6.0%
HK	Hong Kong	DM	0.7%	KR	Korea	EM	0.0%
IE	Ireland	DM	-6.4%	LK	Sri Lanka	EM	-1.4%
IT	Italy	DM	-0.9%	MA	Morocco	EM	-3.1%
JP	Japan	DM	4.8%	MX	Mexico	EM	3.9%
MY	Malaysia	DM	0.7%	PE	Peru	EM	1.5%
NL	Netherlands	DM	0.6%	PH	Phil	EM	2.4%
NO	Norway	DM	2.9%	PK	Pakistan	EM	0.4%
NZ	New Zealand	DM	-1.8%	PL	Poland	EM	-0.3%
PT	Portugal	DM	-2.8%	QA	Qatar	EM	4.5%
SE	Sweden	DM	-1.7%	TH	Thailand	EM	5.6%
SG	Singapore	DM	-0.8%	TR	Turkey	EM	-1.2%
US	USA	DM	2.1%	TW	Taiwan	EM	4.5%
				XB	Israel	EM	2.0%
				UAE	United Arab Emirates	EM	-24.1%
				QA	Qatar	EM	-21.8%
				ZA	South Africa	EM	3.5%

Source: MSCI, Bloomberg, J.P. Morgan

Family Summary – MSCI Asia ex Japan

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	-1.7%	2.9%	3.3%	0.5%	2.9%
IC	-2.9%	14.2%	18.9%	4.4%	15.4%
12mth Perf	12.6%	4.5%	1.7%	-1.4%	11.8%
YTD Perf	6.6%	-2.3%	-0.2%	-0.9%	6.6%

Last Month Performance

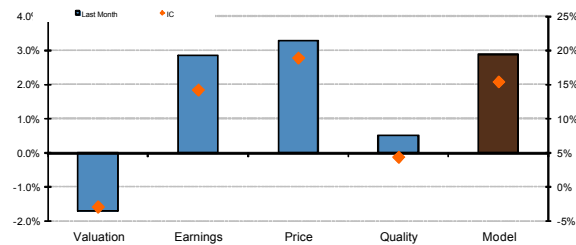
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	0.6%	0.5%	-0.1%	0.0%	0.3%	100.6	100.5	99.9	100.0	100.3
3-Jun-14	-0.1%	0.8%	0.8%	0.2%	0.2%	100.5	101.3	100.7	100.2	100.5
4-Jun-14	0.0%	0.0%	0.0%	-0.1%	0.1%	100.5	101.3	100.7	100.1	100.7
5-Jun-14	0.4%	0.2%	0.4%	0.0%	0.4%	100.9	101.5	101.1	100.1	101.1
6-Jun-14	0.1%	0.5%	-0.3%	-0.1%	0.0%	101.0	102.0	100.8	100.0	101.0
9-Jun-14	0.3%	-0.3%	-0.2%	-0.4%	-0.5%	101.3	101.7	100.6	99.6	100.6
10-Jun-14	-0.6%	0.2%	-0.3%	-0.5%	-0.3%	100.8	101.9	100.3	99.1	100.2
11-Jun-14	-0.8%	0.3%	0.4%	0.6%	0.6%	100.0	102.1	100.7	99.7	100.8
12-Jun-14	0.2%	-0.3%	0.0%	-0.1%	0.0%	100.2	101.9	100.7	99.5	100.8
13-Jun-14	-0.1%	-0.3%	-0.1%	0.1%	-0.2%	100.1	101.5	100.5	99.7	100.7
16-Jun-14	-0.3%	0.0%	-0.5%	0.0%	-0.1%	99.8	101.5	100.0	99.6	100.5
17-Jun-14	0.0%	0.0%	0.1%	-0.6%	-0.1%	99.8	101.5	100.1	99.0	100.4
18-Jun-14	-0.6%	0.2%	0.7%	-0.4%	-0.1%	99.2	101.6	100.8	98.6	100.3
19-Jun-14	-0.6%	0.3%	0.3%	0.4%	0.3%	98.6	102.0	101.1	99.0	100.6
20-Jun-14	0.0%	-0.1%	0.3%	0.1%	0.1%	98.6	101.9	101.5	99.1	100.7
23-Jun-14	-0.3%	0.2%	0.0%	0.4%	0.3%	98.3	102.1	101.5	99.4	101.0
24-Jun-14	-0.1%	0.2%	0.0%	-0.1%	0.2%	98.2	102.4	101.5	99.3	101.2
25-Jun-14	0.6%	0.2%	0.3%	0.6%	0.6%	98.8	102.5	101.8	99.9	101.8
26-Jun-14	-0.6%	0.3%	0.7%	0.5%	0.2%	98.2	102.8	102.5	100.4	102.0
27-Jun-14	-0.2%	-0.6%	0.4%	0.1%	-0.1%	98.0	102.2	102.9	100.5	102.0
30-Jun-14	0.3%	0.6%	0.3%	0.0%	0.9%	98.3	102.9	103.3	100.5	102.9

Last 12 Month Performance

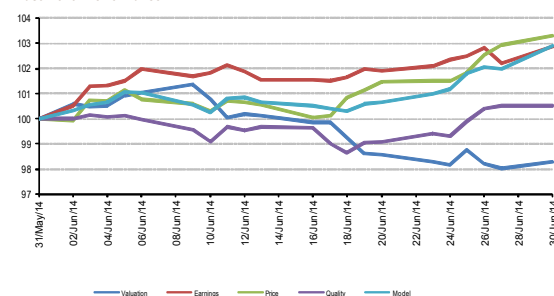
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	-4.2%	1.6%	2.5%	2.3%	2.2%	95.8	101.6	102.5	102.3	102.2
31-Aug-13	4.0%	4.1%	-6.7%	-3.1%	0.2%	99.7	105.8	95.7	99.1	102.4
30-Sep-13	1.5%	-0.5%	-0.5%	-1.7%	-0.6%	101.2	105.3	95.2	97.4	101.8
31-Oct-13	2.2%	0.4%	3.8%	1.8%	1.5%	103.4	105.8	98.8	99.2	103.3
30-Nov-13	2.8%	0.1%	2.1%	-0.4%	2.1%	106.4	105.9	100.8	98.8	105.5
31-Dec-13	-0.7%	0.9%	1.1%	0.6%	-0.6%	105.7	106.9	101.9	99.5	104.9
31-Jan-14	-1.4%	-3.1%	1.8%	0.6%	1.0%	104.2	103.6	103.8	100.1	105.9
28-Feb-14	2.0%	0.2%	4.9%	0.4%	1.8%	106.3	103.8	108.9	100.5	107.9
31-Mar-14	4.0%	-0.7%	-5.7%	-0.3%	-0.7%	110.5	103.0	102.6	100.2	107.1
30-Apr-14	0.7%	-1.9%	-3.0%	-1.5%	-0.9%	111.3	101.0	99.6	98.7	106.1
31-May-14	2.9%	0.5%	-1.1%	-0.6%	2.4%	114.6	101.5	98.5	98.1	108.7
30-Jun-14	-1.7%	2.9%	3.3%	0.5%	2.9%	112.6	104.5	101.7	98.6	111.8

Stock Universe : ASIA EX JP ; stock # : 603 ; Normalization mode : Country Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

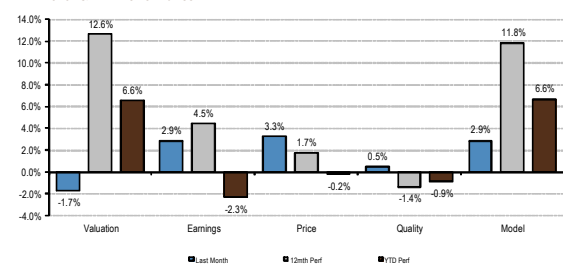
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI Asia ex Japan

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC
Forward Earnings Momentum (3Mth Change)	5.0%	5.4%	0.4%	3.3%	2.7%	4.8%	5%
Composite Forward Earnings Momentum	4.8%	5.2%	0.4%	2.3%	3.0%	3.6%	5%
Price Acceleration 6M	3.6%	4.2%	0.6%	-2.2%	3.5%	1.7%	16%
12mth Change In ROE	3.4%	4.8%	1.4%	3.1%	3.2%	1.3%	5%
12M Price Mom, vol adjusted	3.4%	4.6%	1.2%	-4.6%	-4.1%	-2.6%	18%
Net Revisions to FY2	2.9%	4.8%	1.9%	3.1%	-3.0%	1.6%	15%
12 Mth Price Momentum	2.8%	4.6%	1.7%	-2.5%	-4.6%	-3.8%	6%
Forward Earnings Momentum / Co-Eff Of Variation	2.7%	4.5%	1.8%	13.1%	5.8%	6.4%	11%
6 Mth Price Momentum	2.6%	3.9%	1.3%	6.5%	4.6%	4.0%	4%
Forward Earnings Momentum (1Mth Change)	1.9%	3.8%	1.9%	10.0%	7.6%	5.0%	5%
3 Mth Change in Consensus Recommendation	1.6%	3.4%	1.8%	13.4%	5.5%	4.2%	-3%
Historical P/Cash Earnings Ratio	1.3%	3.1%	1.7%	7.6%	6.4%	6.8%	-1%
Net Revisions to FY1	1.3%	4.2%	2.9%	12.1%	5.2%	3.3%	10%
Percent Off 52 Week High	1.3%	2.7%	1.4%	-3.7%	-3.9%	-0.3%	7%
Historical Return On Equity	1.1%	2.3%	1.2%	-2.4%	-1.4%	-2.2%	-4%
Consensus Recommendation	1.1%	3.0%	1.9%	10.6%	4.5%	2.4%	-4%
ROA (FY1)	1.0%	3.1%	2.0%	5.4%	-1.3%	-2.3%	9%
5 years Historical Earnings Growth	0.9%	2.8%	1.8%	6.8%	2.9%	0.4%	1%
Forecast PE Relative To History	0.9%	2.2%	1.3%	16.0%	12.2%	6.8%	-4%
Number of Consensus Estimates (FY1)	0.9%	3.4%	2.6%	-1.2%	-1.8%	0.8%	11%
MSCI Beta vs Local Country Index	0.8%	3.3%	2.5%	8.9%	6.8%	4.9%	9%
Forecast Earnings Growth FY1 to FY2	0.7%	3.2%	2.4%	-0.4%	-1.5%	-1.9%	-3%
Price Acceleration 3M	0.7%	3.7%	3.0%	-6.5%	-2.9%	1.6%	7%
1 Mth Change in Consensus Recommendation	0.7%	2.7%	2.1%	4.7%	0.0%	0.7%	-4%
Forecast PE Relative To Sector	0.4%	2.8%	2.4%	1.9%	3.9%	2.8%	-2%
1 Mth Price Momentum	0.3%	2.7%	2.4%	0.1%	-5.0%	-0.3%	7%
Historical Earnings Yield	0.2%	1.8%	1.6%	7.2%	3.3%	2.9%	-4%
RSI 30 day	0.2%	2.4%	2.2%	4.1%	1.1%	0.6%	5%
Composite Co-Efficient of Variation	0.1%	1.9%	1.8%	1.3%	-0.6%	0.7%	4%
RSI 10 day	-0.1%	1.8%	1.9%	0.5%	2.4%	1.9%	-2%
3 Mth Price Momentum	-0.1%	2.7%	2.8%	-4.9%	-7.7%	1.3%	8%
Historical P/Sales Ratio	-0.4%	2.8%	3.2%	9.2%	2.9%	1.8%	-1%
1 year forward forecast PE	-0.8%	1.3%	2.1%	7.0%	5.0%	4.1%	-6%
60 Day Volatility	-0.9%	1.7%	2.6%	-12.6%	-10.1%	-2.3%	2%
Historical Dividend Yield	-0.9%	2.0%	2.9%	4.3%	5.9%	5.2%	-11%
Historical P/Book Value Ratio	-1.3%	1.5%	2.8%	2.9%	4.1%	3.8%	-12%
Cash Flow Yield Mean of FY1 and FY2	-1.4%	1.4%	2.8%	4.1%	3.4%	0.8%	-3%

Family	Name	Jun-2014 L/S	12mth Avg	IC
Value	Cash Flow Yield Mean of FY1 and FY2	-1.4%	0.4%	-3%
Value	Historical P/Book Value Ratio	-1.3%	0.3%	-12%
Value	Historical Dividend Yield	-0.9%	0.4%	-11%
Value	1 year forward forecast PE	-0.8%	0.6%	-6%
Value	Historical P/Sales Ratio	-0.4%	0.8%	-1%
Value	Historical Earnings Yield	0.2%	0.6%	-4%
Value	Forecast PE Relative To Sector	0.4%	0.2%	-2%
Value	Forecast PE Relative To History	0.9%	1.3%	-4%
Value	Historical P/Cash Earnings Ratio	1.3%	0.6%	-1%
Sentiment	1 Mth Change in Consensus Recommendation	0.7%	0.4%	-4%
Sentiment	Consensus Recommendation	1.1%	0.9%	-4%
Sentiment	3 Mth Change in Consensus Recommendation	1.6%	1.1%	-3%
Risk	MSCI Beta vs Local Country Index	0.8%	0.7%	9%
Quality	Composite Co-Efficient of Variation	0.1%	0.1%	4%
Quality	Number of Consensus Estimates (FY1)	0.9%	-0.1%	11%
Quality	ROA (FY1)	1.0%	0.5%	9%
Quality	Historical Return On Equity	1.1%	-0.2%	-4%
Quality	12mth Change In ROE	3.4%	0.3%	5%
Price	60 Day Volatility	-0.9%	-1.1%	2%
Price	3 Mth Price Momentum	-0.1%	-0.3%	8%
Price	RSI 10 day	-0.1%	0.1%	-2%
Price	RSI 30 day	0.2%	0.4%	5%
Price	1 Mth Price Momentum	0.3%	0.0%	7%
Price	Price Acceleration 3M	0.7%	-0.5%	7%
Price	Percent Off 52 Week High	1.3%	-0.3%	7%
Price	6 Mth Price Momentum	2.6%	0.6%	4%
Price	12 Mth Price Momentum	2.8%	-0.1%	6%
Price	12M Price Mom, vol adjusted	3.4%	-0.3%	18%
Price	Price Acceleration 6M	3.6%	-0.2%	16%
Earnings	Forecast Earnings Growth FY1 to FY2	0.7%	0.0%	-3%
Earnings	5 years Historical Earnings Growth	0.9%	0.6%	1%
Earnings	Net Revisions to FY1	1.3%	1.0%	10%
Earnings	Forward Earnings Momentum (1Mth Change)	1.9%	0.8%	5%
Earnings	Forward Earnings Momentum / Co-Eff Of Variation	2.7%	1.0%	11%
Earnings	Net Revisions to FY2	2.9%	0.3%	15%
Earnings	Composite Forward Earnings Momentum	4.8%	0.2%	5%
Earnings	Forward Earnings Momentum (3Mth Change)	5.0%	0.3%	5%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI Japan

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	0.9%	0.9%	0.8%	-1.9%	3.1%
IC	11.8%	9.1%	9.9%	-10.4%	13.8%
12mth Perf	2.3%	2.0%	-2.3%	-5.1%	-4.2%
YTD Perf	4.1%	2.9%	-6.5%	2.4%	-0.4%

Last Month Performance

Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	-0.3%	-0.5%	0.0%	-0.3%	-0.3%	99.7	99.5	100.0	99.7	99.7
3-Jun-14	0.0%	0.4%	1.3%	0.5%	1.0%	99.8	99.9	101.3	100.2	100.7
4-Jun-14	0.4%	0.1%	0.2%	0.2%	0.5%	100.2	100.0	101.4	100.4	101.1
5-Jun-14	0.1%	0.2%	-0.2%	0.1%	-0.1%	100.3	100.3	101.2	100.6	101.0
6-Jun-14	0.4%	-0.4%	-0.9%	0.0%	0.2%	100.7	99.9	100.2	100.6	101.2
9-Jun-14	-0.3%	-1.1%	-0.5%	0.0%	-0.3%	100.4	98.8	99.7	100.6	100.9
10-Jun-14	0.2%	0.9%	0.7%	0.0%	0.2%	100.6	99.8	100.4	100.6	101.1
11-Jun-14	0.8%	0.3%	-0.3%	0.4%	0.6%	101.4	100.0	100.1	101.0	101.7
12-Jun-14	0.9%	0.1%	0.0%	-0.1%	0.8%	102.4	100.1	100.1	100.8	102.5
13-Jun-14	-0.6%	-0.4%	-0.2%	-0.7%	-0.8%	101.8	99.7	100.0	100.2	101.6
16-Jun-14	-0.3%	0.1%	-0.6%	-0.3%	-0.3%	101.5	99.8	99.4	99.9	101.4
17-Jun-14	-0.8%	-0.2%	0.1%	0.3%	-0.1%	100.6	99.6	99.5	100.2	101.2
18-Jun-14	0.0%	0.9%	0.7%	0.1%	1.0%	100.6	100.5	100.2	100.3	102.2
19-Jun-14	0.2%	0.1%	0.7%	-0.7%	0.4%	100.9	100.6	100.9	99.6	102.7
20-Jun-14	-0.8%	0.5%	0.9%	-0.4%	0.1%	100.1	101.1	101.8	99.2	102.8
23-Jun-14	0.9%	-0.4%	-0.5%	0.4%	0.2%	100.9	100.6	101.3	99.6	103.0
24-Jun-14	-0.5%	0.2%	0.3%	0.2%	-0.1%	100.5	100.9	101.6	99.8	102.9
25-Jun-14	0.0%	0.4%	-0.1%	-0.5%	-0.1%	100.5	101.3	101.5	99.3	102.9
26-Jun-14	0.0%	0.1%	-0.1%	-0.3%	-0.1%	100.5	101.4	101.4	99.0	102.8
27-Jun-14	0.4%	-0.4%	-0.6%	-0.1%	0.0%	100.9	101.0	100.8	98.9	102.8
30-Jun-14	0.0%	0.0%	0.0%	-0.8%	0.3%	100.9	100.9	100.8	98.1	103.1

Last 12 Month Performance

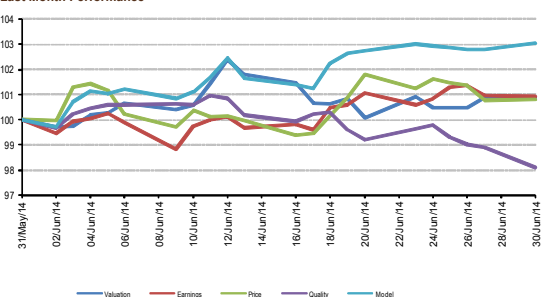
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	0.8%	-0.4%	-2.5%	0.3%	1.2%	100.8	99.6	97.5	100.3	101.2
31-Aug-13	-0.4%	-2.4%	-1.1%	-1.2%	-4.4%	100.5	97.2	96.4	99.1	96.8
30-Sep-13	1.4%	0.2%	8.3%	1.1%	3.1%	101.9	97.4	104.4	100.1	99.8
31-Oct-13	-0.6%	1.1%	-3.4%	1.1%	-2.3%	101.3	98.5	100.9	101.2	97.5
30-Nov-13	-1.0%	-3.1%	3.7%	-8.8%	-2.1%	100.2	95.5	104.7	92.2	95.4
31-Dec-13	-1.9%	3.9%	-0.2%	0.5%	0.8%	98.3	99.2	104.5	92.7	96.2
31-Jan-14	3.5%	1.2%	-1.8%	4.4%	0.4%	101.7	100.4	102.6	96.7	96.6
28-Feb-14	2.3%	-1.7%	-3.9%	-0.9%	-3.4%	104.1	98.7	98.6	95.9	93.3
31-Mar-14	-4.2%	1.4%	-1.0%	-1.8%	-1.8%	99.7	100.1	97.7	94.2	91.5
30-Apr-14	0.5%	-0.1%	-2.8%	0.5%	-2.8%	100.2	100.1	94.9	94.6	88.9
31-May-14	1.2%	1.1%	2.1%	2.2%	4.5%	101.4	101.1	96.9	96.7	92.9
30-Jun-14	0.9%	0.9%	0.8%	-1.9%	3.1%	102.3	102.0	97.7	94.9	95.8

Stock Universe : JP ; stock # : 311 ; Normalisation mode : Sector Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

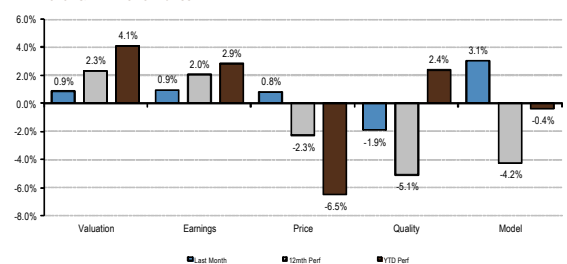
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI Japan

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC
Composite Co-Efficient of Variation	3.2%	7.0%	3.8%	1.4%	-1.5%	-1.3%	0%
1 year forward forecast PE	2.6%	6.0%	3.4%	-1.6%	3.7%	4.8%	16%
Forecast PE Relative To Sector	2.6%	6.0%	3.4%	-1.6%	3.7%	4.8%	14%
Historical P/Book Value Ratio	2.3%	5.8%	3.6%	14.4%	5.7%	2.4%	15%
MSCI Beta vs Local Country Index	1.5%	5.9%	4.4%	-3.0%	-8.2%	-2.4%	17%
Forward Earnings Momentum / Co-Eff Of Variation	1.2%	6.2%	5.0%	-0.6%	-2.1%	2.3%	13%
Historical Earnings Yield	1.2%	6.2%	5.0%	-9.2%	0.6%	1.5%	8%
Historical Return On Equity	0.9%	6.1%	5.2%	-5.8%	-0.5%	0.9%	-7%
Forward Earnings Momentum (1Mth Change)	0.9%	6.4%	5.5%	3.0%	0.8%	1.6%	5%
3 Mth Change in Consensus Recommendation	0.9%	5.6%	4.7%	7.4%	4.2%	5.6%	-3%
Composite Forward Earnings Momentum	0.7%	6.5%	5.8%	1.6%	1.0%	2.7%	8%
1 Mth Change in Consensus Recommendation	0.7%	4.5%	3.8%	-0.6%	0.8%	2.0%	-3%
12M Price Mom, vol adjusted	0.7%	6.9%	6.2%	-5.1%	-7.4%	-0.1%	4%
12 Mth Price Momentum	0.5%	6.3%	5.8%	-5.0%	-10.2%	-1.1%	9%
12mth Change In ROE	0.5%	6.3%	5.8%	-2.9%	-0.9%	0.9%	11%
Historical P/Cash Earnings Ratio	0.4%	5.6%	5.2%	0.4%	-2.1%	-1.3%	5%
Net Revisions to FY1	0.4%	5.9%	5.5%	-0.5%	0.9%	5.0%	5%
3 Mth Price Momentum	0.4%	6.5%	6.1%	-10.6%	-8.2%	-3.3%	-3%
Forecast PE Relative To History	0.3%	5.6%	5.2%	8.4%	5.5%	5.1%	-2%
Historical P/Sales Ratio	0.3%	4.5%	4.2%	6.2%	5.8%	1.5%	3%
Net Revisions to FY2	0.2%	5.0%	4.8%	-1.8%	0.3%	0.6%	5%
Consensus Recommendation	-0.3%	5.7%	6.0%	4.7%	2.7%	5.3%	6%
Forward Earnings Momentum (3Mth Change)	-0.4%	6.0%	6.4%	-5.1%	-5.2%	-1.8%	9%
6 Mth Price Momentum	-0.4%	4.9%	5.3%	-7.9%	-7.9%	-1.5%	-1%
ROA (FY1)	-0.5%	4.6%	5.0%	-7.1%	2.6%	2.9%	-15%
Cash Flow Yield Mean of FY1 and FY2	-0.5%	5.2%	5.7%	-7.0%	-0.1%	0.5%	8%
Historical Dividend Yield	-0.7%	5.1%	5.9%	-1.5%	5.1%	-0.6%	-2%
Percent Off 52 Week High	-0.7%	5.2%	5.9%	-6.2%	-3.9%	0.2%	-4%
Price Acceleration 3M	-1.1%	4.6%	5.7%	-4.2%	-4.4%	0.3%	-5%
Forecast Earnings Growth FY1 to FY2	-1.3%	5.6%	6.8%	2.6%	-0.3%	1.3%	-8%
5 years Historical Earnings Growth	-1.8%	6.2%	8.0%	-8.1%	-5.0%	-1.9%	1%
RSI 30 day	-1.9%	4.2%	6.1%	-8.2%	-7.4%	-4.9%	-14%
Number of Consensus Estimates (FY1)	-2.2%	4.0%	6.2%	-6.8%	-8.3%	-5.2%	-11%
Price Acceleration 6M	-2.3%	4.0%	6.3%	-6.6%	-8.7%	-4.2%	-7%
RSI 10 day	-2.4%	4.9%	7.3%	-16.3%	-9.1%	-5.9%	-12%
1 Mth Price Momentum	-2.8%	3.8%	6.6%	-17.1%	-8.9%	-6.8%	-10%
60 Day Volatility	-2.9%	3.7%	6.6%	4.9%	14.8%	4.4%	-3%

Family	Name	Jun-2014 L/S	12mth Avg	IC
Value	Historical Dividend Yield	-0.7%	-0.1%	-2%
Value	Cash Flow Yield Mean of FY1 and FY2	-0.5%	-0.6%	8%
Value	Historical P/Sales Ratio	0.3%	0.5%	3%
Value	Forecast PE Relative To History	0.3%	0.7%	-2%
Value	Historical P/Cash Earnings Ratio	0.4%	0.0%	5%
Value	Historical Earnings Yield	1.2%	-0.8%	8%
Value	Historical P/Book Value Ratio	2.3%	1.1%	15%
Value	1 year forward forecast PE	2.6%	-0.1%	16%
Value	Forecast PE Relative To Sector	2.6%	-0.1%	14%
Sentiment	Consensus Recommendation	-0.3%	0.4%	6%
Sentiment	1 Mth Change in Consensus Recommendation	0.7%	0.0%	-3%
Sentiment	3 Mth Change in Consensus Recommendation	0.9%	0.6%	-3%
Risk	MSCI Beta vs Local Country Index	1.5%	-0.2%	17%
Quality	Number of Consensus Estimates (FY1)	-2.2%	-0.6%	-11%
Quality	ROA (FY1)	-0.5%	-0.6%	-15%
Quality	12mth Change In ROE	0.5%	-0.2%	11%
Quality	Historical Return On Equity	0.9%	-0.5%	-7%
Quality	Composite Co-Efficient of Variation	3.2%	0.1%	0%
Price	60 Day Volatility	-2.9%	0.5%	-3%
Price	1 Mth Price Momentum	-2.8%	-1.5%	-10%
Price	RSI 10 day	-2.4%	-1.5%	-12%
Price	Price Acceleration 6M	-2.3%	-0.6%	-7%
Price	RSI 30 day	-1.9%	-0.7%	-14%
Price	Price Acceleration 3M	-1.1%	-0.3%	-5%
Price	Percent Off 52 Week High	-0.7%	-0.5%	-4%
Price	6 Mth Price Momentum	-0.4%	-0.7%	-1%
Price	3 Mth Price Momentum	0.4%	-0.9%	-3%
Price	12 Mth Price Momentum	0.5%	-0.4%	9%
Price	12M Price Mom, vol adjusted	0.7%	-0.4%	4%
Earnings	5 years Historical Earnings Growth	-1.8%	-0.7%	1%
Earnings	Forecast Earnings Growth FY1 to FY2	-1.3%	0.2%	-8%
Earnings	Forward Earnings Momentum (3Mth Change)	-0.4%	-0.4%	9%
Earnings	Net Revisions to FY2	0.2%	-0.1%	5%
Earnings	Net Revisions to FY1	0.4%	0.0%	5%
Earnings	Composite Forward Earnings Momentum	0.7%	0.2%	8%
Earnings	Forward Earnings Momentum (1Mth Change)	0.9%	0.3%	5%
Earnings	Forward Earnings Momentum / Co-Eff Of Variation	1.2%	0.0%	13%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI Australia

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	1.9%	0.2%	-3.6%	-2.9%	-1.5%
IC	16.9%	-0.7%	-23.2%	-11.6%	-5.9%
12mth Perf	0.3%	6.9%	3.2%	4.9%	7.5%
YTD Perf	-4.9%	0.4%	-8.8%	-10.1%	-7.4%

Last Month Performance

Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	-0.5%	-0.7%	0.2%	0.3%	-0.1%	99.5	99.3	100.2	100.3	99.9
3-Jun-14	0.6%	0.2%	-0.1%	-0.2%	0.1%	100.1	99.5	100.1	100.1	100.0
4-Jun-14	-0.1%	0.3%	-0.1%	-0.7%	-0.5%	99.9	99.8	100.0	99.3	99.5
5-Jun-14	0.3%	0.0%	0.7%	0.7%	0.8%	100.3	99.9	100.7	100.0	100.2
6-Jun-14	0.3%	-0.1%	-0.5%	-0.2%	-0.4%	100.5	99.7	100.2	99.8	99.9
9-Jun-14	0.0%	0.0%	0.0%	0.0%	0.0%	100.5	99.7	100.2	99.8	99.9
10-Jun-14	-0.1%	0.5%	0.1%	-0.1%	0.4%	100.4	100.2	100.3	99.7	100.3
11-Jun-14	-0.2%	-0.1%	0.1%	-0.1%	-0.2%	100.2	100.1	100.4	99.6	100.1
12-Jun-14	-0.9%	-0.3%	-0.1%	-0.4%	0.0%	99.3	99.8	100.3	99.2	100.1
13-Jun-14	-0.1%	0.6%	-1.5%	-1.2%	-1.1%	99.2	100.4	98.8	98.1	99.0
16-Jun-14	-0.1%	0.4%	-1.0%	-0.8%	-0.2%	99.1	100.8	97.8	97.3	98.8
17-Jun-14	-0.7%	0.3%	0.4%	-0.5%	-0.3%	98.4	101.2	98.3	96.8	98.5
18-Jun-14	0.9%	-0.1%	0.7%	0.7%	0.9%	99.2	101.1	99.0	97.5	99.4
19-Jun-14	1.0%	0.3%	-0.3%	0.3%	0.6%	100.3	101.4	98.6	97.8	100.0
20-Jun-14	-0.6%	0.2%	-1.2%	-1.1%	-0.9%	99.6	101.6	97.4	96.7	99.1
23-Jun-14	0.6%	0.1%	0.3%	0.4%	0.8%	100.2	101.8	97.7	97.0	99.9
24-Jun-14	-0.1%	0.3%	0.1%	0.0%	0.2%	100.2	102.1	97.8	97.0	100.1
25-Jun-14	0.0%	-0.5%	-0.9%	-0.6%	-0.6%	100.1	101.6	96.9	96.4	99.4
26-Jun-14	0.7%	-1.2%	-0.1%	0.0%	-1.0%	100.8	100.4	96.8	96.4	98.4
27-Jun-14	1.1%	0.6%	-0.4%	0.6%	0.5%	101.9	101.0	96.4	97.0	98.9
30-Jun-14	0.0%	-0.8%	-0.1%	0.1%	-0.4%	101.9	100.2	96.4	97.1	98.5

Last 12 Month Performance

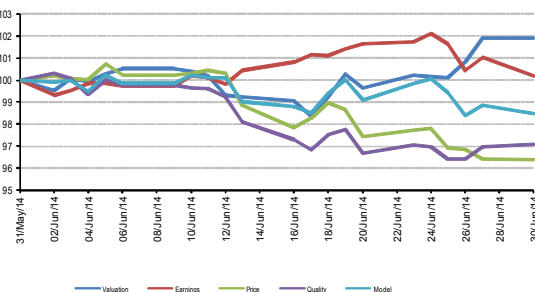
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	4.5%	0.7%	2.7%	3.2%	2.2%	104.5	100.7	102.7	103.2	102.2
31-Aug-13	1.6%	-0.5%	-1.3%	1.4%	0.6%	106.2	100.2	101.4	104.7	102.8
30-Sep-13	4.4%	-0.7%	0.4%	1.6%	1.3%	110.8	99.5	101.8	106.3	104.1
31-Oct-13	-2.0%	4.0%	8.4%	5.4%	6.8%	108.6	103.5	110.3	112.1	111.1
30-Nov-13	-0.9%	4.7%	2.3%	2.9%	5.6%	107.6	108.3	112.8	115.3	117.4
31-Dec-13	-2.0%	-1.7%	0.2%	1.3%	-1.1%	105.5	106.5	113.1	116.7	116.1
31-Jan-14	-0.8%	-0.1%	-2.0%	-1.3%	-4.3%	104.6	106.4	110.8	115.3	111.2
28-Feb-14	-3.8%	1.5%	2.2%	0.7%	3.1%	100.6	107.9	113.3	116.1	114.6
31-Mar-14	0.7%	4.0%	3.9%	3.5%	6.5%	101.3	112.3	117.6	120.2	122.0
30-Apr-14	-0.1%	-1.7%	-3.7%	-5.8%	-5.8%	101.2	110.3	113.3	113.2	115.0
31-May-14	-2.7%	-3.3%	-5.5%	-4.6%	-5.1%	98.4	106.7	107.1	108.0	109.2
30-Jun-14	1.9%	0.2%	-3.6%	-2.9%	-1.5%	100.3	106.9	103.2	104.9	107.5

Stock Universe : AU ; stock # : 69 ; Normalisation mode : Country Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

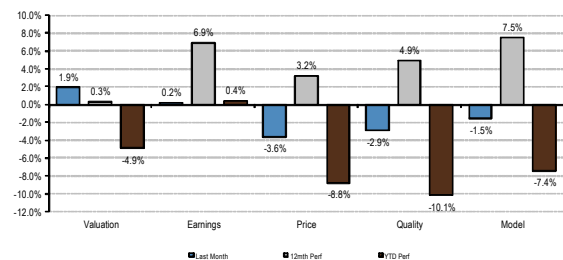
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI Australia

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC	Family	Name	Jun-2014 L/S	12mth Avg	IC
Forecast PE Relative To History	5.0%	0.7%	-4.4%	14.4%	2.6%	10.8%	46%	Value	Historical P/Sales Ratio	-2.1%	-0.2%	-22%
Historical P/Book Value Ratio	4.8%	1.7%	-3.1%	-3.9%	11.7%	14.8%	33%	Value	Historical P/Cash Earnings Ratio	-1.4%	1.4%	-28%
Price Acceleration 6M	3.3%	0.5%	-2.9%	-12.7%	-3.3%	-1.1%	19%	Value	Forecast PE Relative To Sector	0.9%	0.8%	18%
1 year forward forecast PE	3.2%	0.0%	-3.3%	9.3%	-6.0%	0.4%	25%	Value	Historical Earnings Yield	1.0%	1.5%	-1%
Historical Dividend Yield	3.0%	0.5%	-2.5%	5.3%	2.4%	8.7%	29%	Value	Cash Flow Yield Mean of FY1 and FY2	1.9%	0.5%	-11%
Price Acceleration 3M	2.2%	-0.2%	-2.4%	-6.5%	0.2%	5.4%	15%	Value	Historical Dividend Yield	3.0%	0.5%	29%
Cash Flow Yield Mean of FY1 and FY2	1.9%	-0.7%	-2.6%	5.0%	-2.4%	3.8%	-11%	Value	1 year forward forecast PE	3.2%	0.8%	25%
Forward Earnings Momentum / Co-Eff Of Variation	1.4%	0.6%	-0.8%	6.7%	4.0%	-1.1%	7%	Value	Historical P/Book Value Ratio	4.8%	-0.3%	33%
Forward Earnings Momentum (3Mth Change)	1.3%	0.1%	-1.2%	19.8%	5.2%	-0.1%	17%	Value	Forecast PE Relative To History	5.0%	1.2%	46%
Net Revisions to FY2	1.3%	0.4%	-0.9%	3.9%	2.0%	-3.7%	2%	Sentiment	3 Mth Change in Consensus Recommendation	-1.8%	0.7%	11%
Historical Earnings Yield	1.0%	0.1%	-0.8%	18.5%	-5.5%	-0.4%	-1%	Sentiment	Consensus Recommendation	-1.7%	0.3%	8%
Forecast PE Relative To Sector	0.9%	-1.1%	-2.0%	9.9%	-4.8%	2.4%	18%	Sentiment	1 Mth Change in Consensus Recommendation	-1.2%	-0.4%	5%
Composite Forward Earnings Momentum	0.5%	-0.7%	-1.2%	18.5%	3.5%	-1.5%	17%	Risk	MSCI Beta vs Local Country Index	-1.6%	0.5%	-8%
60 Day Volatility	0.5%	-0.7%	-1.2%	-6.8%	-9.1%	-4.1%	-3%	Quality	Historical Return On Equity	-2.5%	1.0%	-3%
RSI 10 day	0.3%	-1.1%	-1.4%	-6.9%	-1.1%	1.9%	-11%	Quality	ROA (FY1)	-2.1%	0.1%	-25%
6 Mth Price Momentum	0.2%	-1.7%	-1.9%	3.1%	-1.6%	-5.9%	-2%	Quality	12mth Change In ROE	-1.3%	-1.0%	-6%
Percent Off 52 Week High	0.0%	-0.3%	-0.3%	1.1%	-4.0%	-2.5%	-6%	Quality	Number of Consensus Estimates (FY1)	-1.2%	-0.3%	-4%
3 Mth Price Momentum	0.0%	-2.3%	-2.2%	-1.7%	-7.3%	-5.1%	-7%	Quality	Composite Co-Efficient of Variation	-0.4%	0.2%	-19%
RSI 30 day	-0.2%	-1.7%	-1.5%	0.8%	2.2%	-1.7%	-2%	Price	12 Mth Price Momentum	-3.9%	0.3%	-30%
Composite Co-Efficient of Variation	-0.4%	-1.4%	-1.1%	2.1%	3.4%	3.7%	-19%	Price	1 Mth Price Momentum	-1.9%	0.2%	-14%
Forward Earnings Momentum (1Mth Change)	-0.4%	0.1%	0.6%	5.1%	1.3%	-0.8%	12%	Price	12M Price Mom, vol adjusted	-1.4%	0.4%	-22%
Forecast Earnings Growth FY1 to FY2	-0.5%	-2.1%	-1.6%	2.5%	9.0%	0.1%	-20%	Price	RSI 30 day	-0.2%	0.1%	-2%
Net Revisions to FY1	-0.6%	-1.6%	-1.0%	4.9%	-1.1%	-6.0%	0%	Price	3 Mth Price Momentum	0.0%	-0.1%	-7%
1 Mth Change in Consensus Recommendation	-1.2%	-1.4%	-0.2%	-4.7%	0.2%	-2.3%	5%	Price	Percent Off 52 Week High	0.0%	0.1%	-6%
Number of Consensus Estimates (FY1)	-1.2%	-1.8%	-0.7%	-4.0%	-8.6%	-3.7%	-4%	Price	6 Mth Price Momentum	0.2%	0.3%	-2%
12mth Change In ROE	-1.3%	-1.4%	0.0%	-11.0%	-9.8%	-3.7%	-6%	Price	RSI 10 day	0.3%	-0.6%	-11%
12M Price Mom, vol adjusted	-1.4%	-1.1%	0.3%	3.6%	-9.2%	-11.9%	-22%	Price	60 Day Volatility	0.5%	-0.5%	-3%
Historical P/Cash Earnings Ratio	-1.4%	-2.2%	-0.8%	17.5%	-5.1%	0.8%	-28%	Price	Price Acceleration 3M	2.2%	-0.5%	15%
MSCI Beta vs Local Country Index	-1.6%	-1.4%	0.2%	6.0%	1.5%	-2.9%	-8%	Price	Price Acceleration 6M	3.3%	-1.1%	19%
Consensus Recommendation	-1.7%	-2.6%	-0.9%	3.1%	-12.4%	-10.4%	8%	Earnings	5 years Historical Earnings Growth	-2.5%	-0.6%	-15%
3 Mth Change in Consensus Recommendation	-1.8%	-1.9%	-0.1%	7.5%	-1.5%	-9.4%	11%	Earnings	Net Revisions to FY1	-0.6%	0.4%	0%
1 Mth Price Momentum	-1.9%	-2.2%	-0.3%	1.4%	-2.2%	-4.9%	-14%	Earnings	Forecast Earnings Growth FY1 to FY2	-0.5%	0.3%	-20%
ROA (FY1)	-2.1%	-3.4%	-1.3%	1.1%	-10.8%	-8.3%	-25%	Earnings	Forward Earnings Momentum (1Mth Change)	-0.4%	0.4%	12%
Historical P/Sales Ratio	-2.1%	-2.9%	-0.8%	-2.6%	-5.3%	-1.4%	-22%	Earnings	Composite Forward Earnings Momentum	0.5%	1.4%	17%
Historical Return On Equity	-2.5%	-3.4%	-0.9%	12.0%	-10.8%	-12.6%	-3%	Earnings	Net Revisions to FY2	1.3%	0.3%	2%
5 years Historical Earnings Growth	-2.5%	-2.9%	-0.3%	-7.9%	-11.1%	-11.6%	-15%	Earnings	Forward Earnings Momentum (3Mth Change)	1.3%	1.5%	17%
12 Mth Price Momentum	-3.9%	-3.4%	0.5%	2.9%	-11.0%	-14.2%	-30%	Earnings	Forward Earnings Momentum / Co-Eff Of Variation	1.4%	0.6%	7%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI Europe

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	-1.7%	0.7%	1.1%	2.6%	-1.5%
IC	-20.3%	1.1%	-1.2%	13.0%	-5.5%
12mth Perf	15.9%	0.4%	-2.3%	-12.6%	2.2%
YTD Perf	2.7%	0.3%	-3.1%	-0.4%	-0.2%

Last Month Performance

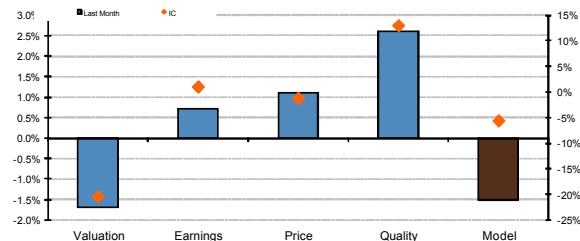
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	-0.2%	0.1%	0.3%	0.7%	0.5%	99.8	100.1	100.3	100.7	100.5
3-Jun-14	-0.3%	0.3%	-0.1%	0.4%	0.2%	99.5	100.4	100.1	101.1	100.7
4-Jun-14	0.1%	0.2%	0.2%	0.3%	0.3%	99.7	100.6	100.4	101.4	101.0
5-Jun-14	0.8%	0.8%	1.5%	-0.6%	1.2%	100.5	101.4	101.8	100.8	102.2
6-Jun-14	0.1%	-0.2%	1.1%	-0.8%	0.4%	100.6	101.2	102.9	99.9	102.6
9-Jun-14	0.6%	-0.4%	0.0%	-0.3%	-0.2%	101.2	100.8	102.9	99.6	102.5
10-Jun-14	-0.3%	0.0%	-0.3%	0.3%	-0.4%	100.8	100.8	102.6	100.0	102.0
11-Jun-14	-0.5%	-0.6%	-0.7%	0.8%	-1.1%	100.4	100.2	102.0	100.7	100.9
12-Jun-14	-0.2%	0.4%	0.2%	0.4%	0.0%	100.1	100.6	102.1	101.2	100.9
13-Jun-14	0.6%	-0.6%	-0.1%	-0.6%	-0.4%	100.7	100.0	102.1	100.5	100.5
16-Jun-14	-0.5%	0.3%	-0.2%	0.6%	-0.2%	100.2	100.3	101.9	101.2	100.4
17-Jun-14	-0.2%	-0.2%	0.1%	-0.2%	-0.1%	100.0	100.1	102.0	101.0	100.2
18-Jun-14	0.3%	0.3%	0.7%	-0.1%	0.3%	100.3	100.4	102.7	100.9	100.6
19-Jun-14	-0.2%	0.0%	-0.5%	0.1%	0.2%	100.1	100.4	102.2	101.0	100.3
20-Jun-14	-0.1%	0.3%	-0.2%	0.3%	-0.6%	100.0	100.7	102.0	101.3	99.8
23-Jun-14	-0.2%	-0.4%	-0.1%	-0.1%	-0.4%	99.8	100.3	101.9	101.3	99.4
24-Jun-14	0.0%	0.2%	-0.6%	0.0%	-0.3%	99.8	100.5	101.3	101.3	99.0
25-Jun-14	0.1%	0.0%	0.5%	-0.4%	0.2%	99.9	100.5	101.9	100.9	99.3
26-Jun-14	-0.7%	0.4%	0.6%	0.6%	0.2%	99.2	100.9	102.5	101.6	99.4
27-Jun-14	-0.6%	0.0%	-0.2%	0.2%	-0.1%	98.6	100.8	102.2	101.8	99.3
30-Jun-14	-0.3%	-0.1%	-1.1%	0.8%	-0.8%	98.3	100.7	101.1	102.6	98.5

Last 12 Month Performance

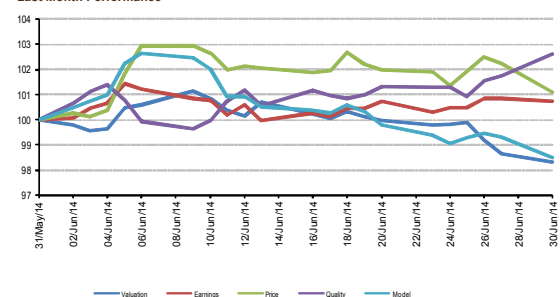
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	2.8%	-0.9%	0.1%	-3.0%	0.5%	102.8	99.1	100.1	97.0	100.5
31-Aug-13	2.0%	-2.3%	-5.5%	-3.0%	-2.2%	104.8	96.8	94.6	94.1	98.3
30-Sep-13	2.9%	-0.6%	2.6%	-4.3%	0.0%	107.9	96.2	97.1	90.0	98.2
31-Oct-13	4.0%	1.3%	0.6%	-3.0%	2.0%	112.2	97.5	97.6	87.4	100.3
30-Nov-13	1.5%	1.6%	1.8%	-0.7%	1.5%	113.9	99.0	99.3	86.8	101.8
31-Dec-13	-1.0%	1.1%	1.5%	1.1%	0.6%	112.8	100.1	100.8	87.7	102.4
31-Jan-14	2.8%	1.5%	0.2%	-5.6%	1.8%	116.0	101.6	101.1	82.8	104.3
28-Feb-14	-0.3%	0.0%	0.7%	-0.6%	0.3%	115.7	101.6	101.8	82.3	104.6
31-Mar-14	3.1%	0.5%	-1.3%	0.2%	1.9%	119.3	102.1	100.5	82.5	106.6
30-Apr-14	1.5%	-0.5%	-4.4%	0.7%	-0.6%	121.1	101.6	96.1	83.1	105.9
31-May-14	-2.6%	-2.0%	0.6%	2.5%	-2.0%	117.9	99.6	96.7	85.1	103.8
30-Jun-14	-1.7%	0.7%	1.1%	2.8%	-1.5%	115.9	100.4	97.7	87.4	102.2

Stock Universe : EUROPE ; stock # : 436 ; Normalisation mode : Sector Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

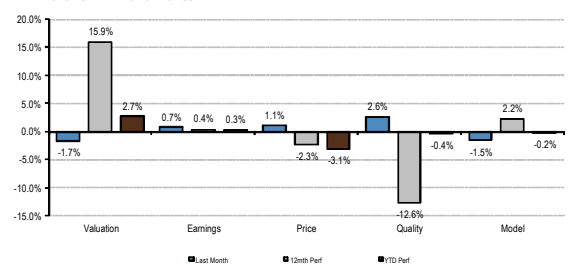
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI Europe

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC	Family	Name	Jun-2014 L/S	12mth Avg	IC
60 Day Volatility	4.0%	-0.6%	-4.6%	-10.2%	3.2%	8.2%	-15%	Value	Historical P/Sales Ratio	-3.8%	1.4%	-8%
Forward Earnings Momentum / Co-Eff Of Variation	3.8%	1.3%	-2.5%	3.0%	2.4%	0.3%	11%	Value	Historical P/Cash Earnings Ratio	-2.2%	1.3%	3%
Net Revisions to FY1	3.6%	0.9%	-2.7%	2.5%	3.5%	1.6%	13%	Value	Forecast PE Relative To Sector	-1.5%	1.1%	-9%
Net Revisions to FY2	3.5%	0.2%	-3.3%	-0.9%	4.0%	2.0%	13%	Value	Historical P/Book Value Ratio	-1.3%	1.6%	-14%
Percent Off 52 Week High	3.3%	-0.4%	-3.6%	-4.7%	3.4%	4.3%	16%	Value	Cash Flow Yield Mean of FY1 and FY2	-0.9%	1.1%	-5%
Forward Earnings Momentum (3Mth Change)	3.1%	0.5%	-2.5%	-6.0%	1.2%	-0.5%	-1%	Value	1 year forward forecast PE	0.6%	0.5%	-3%
Historical Return On Equity	3.0%	-0.2%	-3.2%	-8.9%	1.2%	6.0%	10%	Value	Historical Earnings Yield	0.6%	-0.4%	11%
12mth Change In ROE	2.6%	0.8%	-1.7%	-1.7%	-0.7%	3.1%	3%	Value	Forecast PE Relative To History	1.4%	0.5%	7%
Composite Forward Earnings Momentum	2.4%	-0.2%	-2.6%	-8.3%	-0.7%	-1.8%	0%	Value	Historical Dividend Yield	2.2%	0.2%	14%
Forward Earnings Momentum (1Mth Change)	2.4%	-0.8%	-3.1%	-4.8%	2.2%	1.5%	11%	Sentiment	1 Mth Change in Consensus Recommendation	-3.7%	-0.2%	17%
5 years Historical Earnings Growth	2.3%	-0.4%	-2.7%	-13.8%	-0.8%	-0.5%	9%	Sentiment	3 Mth Change in Consensus Recommendation	-1.7%	0.6%	9%
Historical Dividend Yield	2.2%	-0.4%	-2.7%	2.5%	4.6%	11.6%	14%	Sentiment	Consensus Recommendation	-0.4%	-0.3%	6%
3 Mth Price Momentum	2.2%	-0.8%	-3.0%	-3.8%	-2.3%	-3.5%	17%	Risk	MSCI Beta vs Local Country Index	-1.6%	1.0%	-21%
ROA (FY1)	2.1%	0.4%	-1.7%	-7.1%	0.9%	2.8%	18%	Quality	Composite Co-Efficient of Variation	-1.9%	1.7%	0%
12M Price Mom, vol adjusted	2.0%	-1.0%	-3.0%	-5.9%	-3.5%	-1.1%	8%	Quality	Number of Consensus Estimates (FY1)	-0.2%	-0.5%	0%
Price Acceleration 3M	1.8%	-0.4%	-2.2%	2.0%	-1.4%	-1.6%	16%	Quality	ROA (FY1)	2.1%	-0.6%	18%
Price Acceleration 6M	1.8%	-0.7%	-2.5%	-0.5%	1.9%	-0.7%	16%	Quality	12mth Change In ROE	2.6%	-0.1%	3%
RSI 30 day	1.5%	-0.4%	-2.0%	-2.7%	-0.1%	0.6%	14%	Quality	Historical Return On Equity	3.0%	-0.7%	10%
Forecast PE Relative To History	1.4%	-1.7%	-3.1%	5.5%	9.6%	9.2%	7%	Price	RSI 10 day	-0.2%	-1.1%	-2%
6 Mth Price Momentum	1.1%	-2.3%	-3.4%	-5.5%	-2.1%	-7.8%	9%	Price	12 Mth Price Momentum	0.6%	-0.5%	-1%
1 Mth Price Momentum	0.9%	-1.4%	-2.2%	-6.4%	-4.2%	-0.4%	5%	Price	1 Mth Price Momentum	0.9%	-0.5%	5%
12 Mth Price Momentum	0.6%	-1.3%	-2.0%	-6.7%	-4.8%	-3.9%	-1%	Price	6 Mth Price Momentum	1.1%	-0.4%	9%
Historical Earnings Yield	0.6%	-1.7%	-2.3%	-4.6%	0.1%	5.8%	11%	Price	RSI 30 day	1.5%	-0.2%	14%
1 year forward forecast PE	0.6%	-1.5%	-2.0%	6.4%	2.7%	1.8%	-3%	Price	Price Acceleration 6M	1.8%	0.0%	16%
Number of Consensus Estimates (FY1)	-0.2%	0.1%	0.3%	-6.3%	-3.0%	-0.2%	0%	Price	Price Acceleration 3M	1.8%	0.2%	16%
RSI 10 day	-0.2%	-1.2%	-0.9%	-12.3%	-3.5%	-0.5%	-2%	Price	12M Price Mom, vol adjusted	2.0%	-0.5%	8%
Consensus Recommendation	-0.4%	-1.2%	-0.9%	-3.8%	-4.1%	0.4%	6%	Price	3 Mth Price Momentum	2.2%	-0.3%	17%
Cash Flow Yield Mean of FY1 and FY2	-0.9%	-2.4%	-1.5%	12.9%	3.0%	-3.1%	-5%	Price	Percent Off 52 Week High	3.3%	-0.4%	16%
Historical P/Book Value Ratio	-1.3%	-2.2%	-0.9%	20.7%	3.1%	-1.9%	-14%	Price	60 Day Volatility	4.0%	-0.8%	-15%
Forecast PE Relative To Sector	-1.5%	-2.2%	-0.6%	13.6%	1.6%	-1.8%	-9%	Earnings	Forecast Earnings Growth FY1 to FY2	-4.6%	0.6%	-31%
MSCI Beta vs Local Country Index	-1.6%	-1.8%	-0.3%	11.9%	-1.7%	-2.4%	-21%	Earnings	5 years Historical Earnings Growth	2.3%	-1.2%	9%
3 Mth Change in Consensus Recommendation	-1.7%	-2.4%	-0.6%	7.2%	1.3%	-2.4%	9%	Earnings	Forward Earnings Momentum (1Mth Change)	2.4%	-0.4%	11%
Composite Co-Efficient of Variation	-1.9%	-2.4%	-0.5%	21.4%	0.4%	-4.8%	0%	Earnings	Composite Forward Earnings Momentum	2.4%	-0.7%	0%
Historical P/Cash Earnings Ratio	-2.2%	-2.1%	0.0%	16.9%	4.9%	0.1%	3%	Earnings	Forward Earnings Momentum (3Mth Change)	3.1%	-0.5%	-1%
1 Mth Change in Consensus Recommendation	-3.7%	-3.0%	0.7%	-2.9%	-5.4%	-6.8%	17%	Earnings	Net Revisions to FY2	3.5%	0.0%	13%
Historical P/Sales Ratio	-3.8%	-2.1%	1.7%	17.5%	-0.2%	-3.0%	-8%	Earnings	Net Revisions to FY1	3.6%	0.2%	13%
Forecast Earnings Growth FY1 to FY2	-4.6%	-3.8%	0.8%	7.4%	-2.6%	-10.3%	-31%	Earnings	Forward Earnings Momentum / Co-Eff Of Variation	3.8%	0.3%	11%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI US

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	0.0%	0.3%	0.4%	-0.8%	-0.4%
IC	-0.9%	4.2%	4.3%	-15.7%	-1.3%
12mth Perf	10.1%	2.5%	16.8%	-4.2%	9.4%
YTD Perf	-2.4%	3.5%	2.6%	-5.9%	1.8%

Last Month Performance

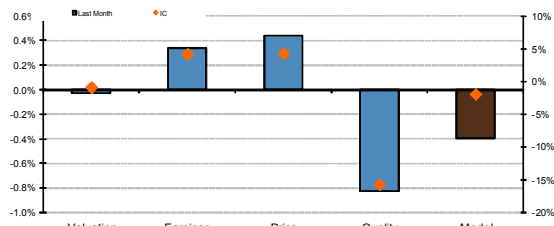
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	0.2%	0.4%	0.6%	0.2%	0.7%	100.2	100.4	100.6	100.2	100.7
3-Jun-14	0.4%	0.1%	-0.4%	0.0%	0.2%	100.6	100.5	100.2	100.1	100.9
4-Jun-14	0.1%	-0.1%	0.3%	0.2%	0.0%	100.6	100.4	100.5	100.4	100.9
5-Jun-14	-0.4%	-0.2%	-0.4%	-0.5%	-0.8%	100.3	100.2	100.1	99.9	100.1
6-Jun-14	0.4%	0.0%	0.0%	0.5%	0.2%	100.7	100.3	100.1	100.4	100.3
9-Jun-14	0.8%	-0.5%	-0.6%	0.2%	-0.6%	101.3	99.8	99.3	100.6	99.7
10-Jun-14	0.2%	0.5%	0.2%	-0.1%	0.4%	101.5	100.2	99.5	100.6	100.1
11-Jun-14	-0.4%	0.5%	0.3%	-0.4%	-0.1%	101.0	100.7	99.8	100.2	100.0
12-Jun-14	-0.3%	-0.6%	-0.6%	0.1%	-0.4%	100.7	100.1	99.2	100.2	99.5
13-Jun-14	0.3%	0.2%	0.2%	-0.3%	0.1%	101.0	100.3	99.4	99.9	99.6
16-Jun-14	0.3%	0.0%	0.0%	-0.1%	-0.2%	101.2	100.3	99.4	99.8	99.4
17-Jun-14	0.6%	-0.2%	0.2%	-0.2%	0.0%	101.9	100.1	99.7	99.6	99.5
18-Jun-14	0.0%	0.2%	0.4%	0.1%	0.4%	101.9	100.3	100.1	99.7	99.9
19-Jun-14	-0.2%	0.3%	0.3%	0.1%	0.6%	101.7	100.6	100.3	99.8	100.5
20-Jun-14	-0.2%	0.3%	0.3%	0.1%	0.4%	101.4	100.9	100.7	100.0	100.9
23-Jun-14	0.5%	-0.4%	-0.3%	0.0%	-0.1%	101.9	100.5	100.4	99.9	100.7
24-Jun-14	-1.1%	-0.5%	-0.9%	-0.7%	-0.9%	100.8	100.0	99.5	99.2	99.8
25-Jun-14	-0.2%	0.5%	0.8%	0.1%	0.2%	100.7	100.5	100.3	99.4	100.1
26-Jun-14	-0.4%	0.0%	0.2%	-0.1%	0.0%	100.2	100.5	100.5	99.2	100.0
27-Jun-14	-0.2%	-0.1%	0.1%	0.2%	-0.2%	100.1	100.4	100.6	99.5	99.9
30-Jun-14	-0.1%	-0.1%	-0.1%	-0.3%	-0.2%	100.0	100.3	100.4	99.2	99.6

Last 12 Month Performance

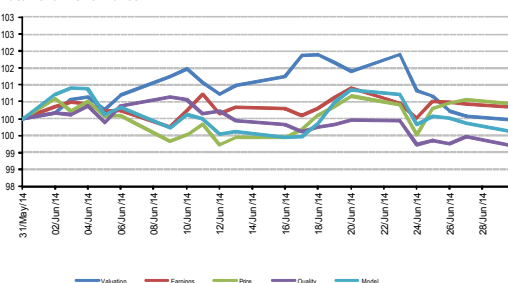
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	1.4%	-2.8%	3.0%	-0.7%	1.0%	101.4	97.2	103.0	99.3	101.0
31-Aug-13	1.4%	0.5%	0.6%	0.2%	1.1%	102.8	97.7	103.7	99.5	102.1
30-Sep-13	0.9%	0.9%	3.2%	0.2%	0.1%	103.8	98.5	106.9	99.7	102.2
31-Oct-13	1.3%	-0.5%	2.9%	0.3%	0.9%	105.2	98.1	110.0	100.0	103.2
30-Nov-13	5.2%	-0.3%	3.0%	1.6%	3.7%	110.6	97.8	113.3	101.6	107.0
31-Dec-13	1.9%	1.2%	0.5%	0.3%	0.4%	112.8	99.0	113.9	101.9	107.4
31-Jan-14	-5.0%	1.5%	-0.3%	-3.9%	-0.5%	107.1	100.5	113.5	97.9	106.9
28-Feb-14	-0.7%	1.4%	2.9%	-2.9%	0.2%	106.4	101.9	116.7	95.1	107.1
31-Mar-14	3.3%	-0.8%	-2.0%	2.9%	2.4%	109.9	101.1	114.4	97.8	109.7
30-Apr-14	1.5%	0.6%	-2.5%	0.8%	1.0%	111.5	101.6	111.6	98.5	110.7
31-May-14	-1.2%	0.5%	4.2%	-1.9%	-0.8%	110.1	102.1	116.3	96.6	109.9
30-Jun-14	0.0%	0.3%	0.4%	-0.8%	-0.4%	110.1	102.5	116.8	95.8	109.4

Stock Universe : US ; stock # : 617 ; Normalisation mode : Sector Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

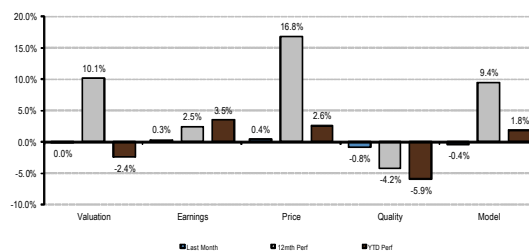
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI US

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC	Family	Name	Jun-2014 L/S	12mth Avg	IC
Forecast Earnings Growth FY1 to FY2	3.3%	4.6%	1.3%	2.7%	-5.1%	1.5%	4%	Value	Historical Earnings Yield	-2.2%	0.0%	-4%
1 Mth Price Momentum	2.2%	3.6%	1.4%	-0.3%	-1.4%	-0.7%	6%	Value	Forecast PE Relative To History	-1.9%	-0.3%	-1%
Consensus Recommendation	1.8%	3.5%	1.6%	7.5%	1.9%	2.8%	-6%	Value	1 year forward forecast PE	-1.7%	0.5%	-2%
RSI 10 day	1.8%	3.5%	1.7%	6.1%	-0.6%	-0.5%	8%	Value	Forecast PE Relative To Sector	-1.6%	0.3%	-5%
RSI 30 day	1.4%	3.4%	1.9%	-1.5%	-2.7%	-1.1%	1%	Value	Historical P/Book Value Ratio	-1.2%	0.3%	5%
3 Mth Change in Consensus Recommendation	1.4%	3.3%	1.9%	-2.4%	0.1%	0.6%	-5%	Value	Historical P/Cash Earnings Ratio	-1.1%	0.2%	5%
1 Mth Change in Consensus Recommendation	1.2%	3.4%	2.1%	5.2%	3.3%	2.1%	1%	Value	Historical P/Sales Ratio	-1.0%	0.8%	-14%
6 Mth Price Momentum	0.9%	3.8%	2.9%	8.2%	2.2%	1.4%	9%	Value	Cash Flow Yield Mean of FY1 and FY2	-0.2%	1.3%	8%
Forward Earnings Momentum / Co-Eff Of Variation	0.9%	2.7%	1.9%	-0.1%	4.3%	1.1%	0%	Value	Historical Dividend Yield	0.7%	-0.1%	-4%
Net Revisions to FY1	0.8%	3.6%	2.8%	3.0%	7.1%	3.1%	5%	Sentiment	1 Mth Change in Consensus Recommendation	1.2%	0.4%	1%
Price Acceleration 6M	0.8%	3.4%	2.6%	0.6%	0.6%	0.1%	0%	Sentiment	3 Mth Change in Consensus Recommendation	1.4%	-0.2%	-5%
Net Revisions to FY2	0.8%	3.2%	2.4%	2.0%	4.2%	2.4%	7%	Sentiment	Consensus Recommendation	1.8%	0.6%	-6%
Composite Co-Efficient of Variation	0.8%	3.6%	2.9%	3.2%	4.1%	2.5%	1%	Risk	MSCI Beta vs Local Country Index	0.3%	0.8%	10%
Historical Dividend Yield	0.7%	2.7%	2.0%	-0.8%	3.2%	3.2%	-4%	Quality	ROA (FY1)	-4.0%	-0.9%	-21%
12 Mth Price Momentum	0.5%	3.9%	3.4%	9.5%	-1.2%	-0.2%	7%	Quality	Historical Return On Equity	-1.6%	-0.5%	-2%
12mth Change In ROE	0.4%	2.7%	2.3%	-4.3%	1.1%	1.3%	-4%	Quality	Number of Consensus Estimates (FY1)	-0.3%	-0.1%	4%
MSCI Beta vs Local Country Index	0.3%	3.0%	2.7%	10.1%	2.0%	-0.3%	10%	Quality	12mth Change In ROE	0.4%	-0.4%	-4%
5 years Historical Earnings Growth	0.2%	3.0%	2.8%	1.2%	-3.0%	-2.1%	-2%	Quality	Composite Co-Efficient of Variation	0.8%	0.3%	1%
Cash Flow Yield Mean of FY1 and FY2	-0.2%	4.7%	4.8%	16.8%	8.0%	6.7%	8%	Price	60 Day Volatility	-1.6%	-0.5%	13%
Number of Consensus Estimates (FY1)	-0.3%	2.3%	2.6%	-1.3%	-3.4%	-2.8%	4%	Price	12M Price Mom, vol adjusted	-1.0%	0.6%	0%
Forward Earnings Momentum (1Mth Change)	-0.4%	2.5%	2.9%	-2.1%	0.7%	-0.2%	-2%	Price	Price Acceleration 3M	-0.7%	0.0%	-2%
3 Mth Price Momentum	-0.5%	2.9%	3.4%	-7.0%	-4.8%	-2.2%	-4%	Price	Percent Off 52 Week High	-0.6%	0.1%	-9%
Percent Off 52 Week High	-0.6%	3.0%	3.6%	1.4%	-2.3%	-3.3%	-9%	Price	3 Mth Price Momentum	-0.5%	-0.6%	-4%
Price Acceleration 3M	-0.7%	2.4%	3.2%	0.4%	-0.5%	-0.4%	-2%	Price	12 Mth Price Momentum	0.5%	0.8%	7%
Composite Forward Earnings Momentum	-0.9%	2.0%	3.0%	2.3%	5.4%	0.6%	-3%	Price	Price Acceleration 6M	0.8%	0.1%	0%
12M Price Mom, vol adjusted	-1.0%	2.6%	3.6%	6.8%	-3.5%	-2.0%	0%	Price	6 Mth Price Momentum	0.9%	0.7%	9%
Historical P/Sales Ratio	-1.0%	1.6%	2.7%	9.9%	-4.0%	-0.4%	-14%	Price	RSI 30 day	1.4%	-0.1%	1%
Historical P/Cash Earnings Ratio	-1.1%	3.8%	4.9%	2.0%	2.6%	3.7%	5%	Price	RSI 10 day	1.8%	0.5%	8%
Historical P/Book Value Ratio	-1.2%	2.5%	3.7%	4.1%	1.8%	-0.9%	5%	Price	1 Mth Price Momentum	2.2%	0.0%	6%
Forward Earnings Momentum (3Mth Change)	-1.4%	1.6%	2.9%	4.2%	6.2%	1.2%	-2%	Earnings	Forward Earnings Momentum (3Mth Change)	-1.4%	0.3%	-2%
Forecast PE Relative To Sector	-1.6%	2.8%	4.3%	3.3%	-5.5%	-1.0%	-5%	Earnings	Composite Forward Earnings Momentum	-0.9%	0.2%	-3%
60 Day Volatility	-1.6%	2.4%	4.0%	-5.9%	-4.6%	0.8%	13%	Earnings	Forward Earnings Momentum (1Mth Change)	-0.4%	-0.2%	-2%
Historical Return On Equity	-1.6%	2.6%	4.2%	-6.1%	-6.8%	-2.7%	-2%	Earnings	5 years Historical Earnings Growth	0.2%	0.1%	-2%
1 year forward forecast PE	-1.7%	2.6%	4.3%	4.8%	-4.9%	-0.5%	-2%	Earnings	Net Revisions to FY2	0.8%	0.2%	7%
Forecast PE Relative To History	-1.9%	1.8%	3.7%	-3.3%	-0.5%	-0.1%	-1%	Earnings	Net Revisions to FY1	0.8%	0.3%	5%
Historical Earnings Yield	-2.2%	1.7%	3.9%	0.1%	-3.7%	-1.7%	-4%	Earnings	Forward Earnings Momentum / Co-Eff Of Variation	0.9%	0.0%	0%
ROA (FY1)	-4.0%	0.9%	4.8%	-10.7%	-6.0%	-4.5%	-21%	Earnings	Forecast Earnings Growth FY1 to FY2	3.3%	0.3%	4%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI GEM

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	-1.0%	3.3%	3.9%	1.4%	4.4%
IC	-0.5%	14.2%	18.6%	6.8%	17.4%
12mth Perf	13.2%	10.8%	4.4%	-1.4%	21.9%
YTD Perf	5.0%	1.2%	3.8%	2.3%	11.6%

Last Month Performance

Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	0.6%	0.5%	0.0%	-0.1%	0.4%	100.6	100.5	100.0	99.9	100.4
3-Jun-14	0.1%	0.8%	0.7%	0.2%	0.3%	100.7	101.3	100.8	100.2	100.7
4-Jun-14	-0.2%	0.2%	0.2%	0.2%	0.3%	100.5	101.5	100.9	100.4	101.0
5-Jun-14	0.3%	0.5%	0.4%	0.3%	0.6%	100.8	101.9	101.4	100.7	101.7
6-Jun-14	0.4%	0.1%	0.1%	0.3%	0.4%	101.3	102.1	101.5	101.0	102.0
9-Jun-14	0.6%	-0.1%	0.0%	-0.1%	0.0%	101.8	102.0	101.4	100.9	102.1
10-Jun-14	-0.4%	0.0%	-0.2%	0.0%	0.0%	101.4	102.0	101.3	100.8	102.0
11-Jun-14	-0.4%	0.4%	0.5%	0.3%	0.7%	101.0	102.4	101.8	101.2	102.7
12-Jun-14	0.3%	-0.4%	-0.3%	-0.2%	-0.1%	101.3	102.0	101.5	101.0	102.6
13-Jun-14	-0.1%	-0.2%	0.2%	0.2%	-0.1%	101.1	101.7	101.7	101.2	102.5
16-Jun-14	-0.2%	-0.2%	0.2%	0.1%	0.0%	100.9	101.6	101.9	101.3	102.5
17-Jun-14	-0.1%	-0.2%	0.2%	-0.5%	-0.1%	100.7	101.3	102.1	100.8	102.4
18-Jun-14	-0.4%	0.0%	0.8%	-0.2%	0.0%	100.3	101.3	103.0	100.7	102.4
19-Jun-14	-0.5%	0.3%	-0.2%	0.3%	0.1%	99.8	101.6	102.8	101.0	102.4
20-Jun-14	-0.2%	0.2%	0.0%	-0.1%	0.1%	99.6	101.9	102.7	100.9	102.5
23-Jun-14	-0.1%	0.2%	-0.4%	-0.2%	0.1%	99.5	102.0	102.4	100.8	102.7
24-Jun-14	-0.1%	0.4%	0.0%	-0.2%	0.2%	99.5	102.4	102.3	100.6	102.9
25-Jun-14	0.3%	0.3%	0.4%	0.7%	0.7%	99.8	102.7	102.8	101.3	103.6
26-Jun-14	-0.6%	0.3%	0.5%	0.1%	0.0%	99.2	103.1	103.3	101.4	103.7
27-Jun-14	-0.3%	-0.2%	0.3%	0.0%	0.0%	98.9	102.8	103.6	101.3	103.7
30-Jun-14	0.1%	0.5%	0.3%	0.1%	0.7%	99.0	103.3	103.9	101.4	104.4

Last 12 Month Performance

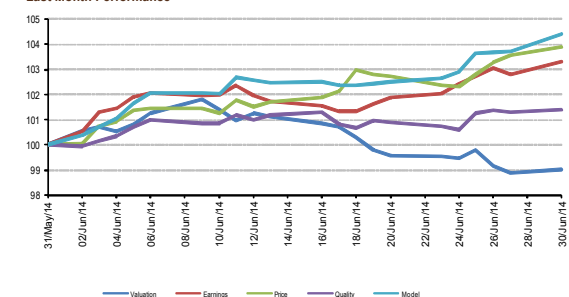
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	-3.0%	2.2%	1.4%	0.2%	1.9%	97.0	102.2	101.4	100.2	101.9
31-Aug-13	6.2%	4.6%	-6.9%	-4.5%	2.8%	103.0	106.9	94.4	95.7	104.8
30-Sep-13	2.3%	-0.3%	-0.2%	0.5%	0.5%	105.3	106.6	94.2	96.2	105.3
31-Oct-13	1.6%	1.3%	2.4%	0.7%	2.3%	107.0	107.9	96.4	96.9	107.7
30-Nov-13	1.5%	0.5%	3.7%	0.1%	1.6%	108.5	108.5	100.0	97.0	109.5
31-Dec-13	-0.7%	1.0%	0.5%	-0.7%	-0.2%	107.8	109.5	100.5	96.4	109.2
31-Jan-14	-2.0%	-1.3%	0.7%	-2.6%	0.1%	105.7	108.1	101.2	93.8	109.3
28-Feb-14	-0.2%	0.0%	2.7%	0.3%	1.5%	105.5	108.1	103.9	94.1	110.9
31-Mar-14	4.4%	-0.8%	-2.8%	2.5%	0.8%	110.2	107.3	101.0	96.5	111.8
30-Apr-14	1.3%	-0.4%	-1.2%	0.1%	1.0%	111.7	106.8	99.8	96.7	113.0
31-May-14	2.4%	0.4%	0.6%	0.6%	3.4%	114.4	107.3	100.4	97.2	116.8
30-Jun-14	-1.0%	3.3%	3.9%	1.4%	4.4%	113.2	110.8	104.4	98.6	121.9

Stock Universe : MSCI GEM ; stock # : 835 ; Normalisation mode : Country Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

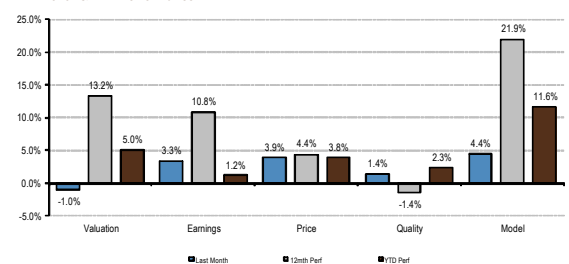
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI GEM

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC	Family	Name	Jun-2014 L/S	12mth Avg	IC
Composite Forward Earnings Momentum	5.0%	5.3%	0.3%	2.5%	1.6%	3.7%	9%	Value	Historical P/Sales Ratio	-1.7%	0.6%	-6%
Forward Earnings Momentum (3Mth Change)	4.6%	5.0%	0.4%	0.8%	1.0%	3.7%	9%	Value	Cash Flow Yield Mean of FY1 and FY2	-1.7%	0.5%	-10%
12 Mth Price Momentum	3.7%	5.4%	1.6%	4.6%	0.1%	1.9%	7%	Value	Historical P/Book Value Ratio	-1.4%	0.2%	-7%
12M Price Mom, vol adjusted	3.6%	5.2%	1.6%	2.4%	-0.8%	1.5%	17%	Value	Historical Dividend Yield	0.0%	0.4%	-2%
Forward Earnings Momentum / Co-Eff Of Variation	3.6%	5.0%	1.5%	10.9%	4.7%	5.8%	14%	Value	Historical Earnings Yield	0.3%	0.8%	-2%
12mth Change In ROE	3.1%	4.7%	1.6%	3.7%	4.3%	2.5%	9%	Value	1 year forward forecast PE	0.6%	0.8%	0%
Price Acceleration 6M	2.7%	3.6%	0.9%	-3.9%	-1.4%	-1.4%	10%	Value	Forecast PE Relative To Sector	0.9%	0.5%	2%
ROA (FY1)	2.6%	4.1%	1.5%	1.9%	-0.9%	-1.6%	12%	Value	Historical P/Cash Earnings Ratio	0.9%	0.8%	-3%
6 Mth Price Momentum	2.5%	4.1%	1.6%	3.4%	1.5%	4.4%	3%	Value	Forecast PE Relative To History	2.0%	1.0%	3%
Forward Earnings Momentum (1Mth Change)	2.3%	3.8%	1.5%	14.9%	5.4%	5.7%	6%	Sentiment	3 Mth Change in Consensus Recommendation	1.2%	1.1%	-3%
Net Revisions to FY2	2.2%	4.3%	2.0%	4.5%	-3.2%	2.0%	12%	Sentiment	1 Mth Change in Consensus Recommendation	1.2%	0.4%	-6%
Consensus Recommendation	2.0%	3.9%	1.9%	14.6%	7.0%	3.3%	-8%	Sentiment	Consensus Recommendation	2.0%	1.2%	-8%
Forecast PE Relative To History	2.0%	3.1%	1.2%	11.9%	11.6%	8.1%	3%	Risk	MSCI Beta vs Local Country Index	0.4%	0.4%	4%
Net Revisions to FY1	1.5%	4.3%	2.8%	14.1%	6.3%	4.7%	8%	Quality	Composite Co-Efficient of Variation	-0.9%	0.0%	0%
Historical Return On Equity	1.4%	3.1%	1.7%	0.0%	0.4%	0.2%	0%	Quality	Number of Consensus Estimates (FY1)	0.6%	-0.1%	8%
1 Mth Change in Consensus Recommendation	1.2%	3.3%	2.0%	5.5%	2.1%	1.1%	-6%	Quality	Historical Return On Equity	1.4%	0.0%	0%
3 Mth Change in Consensus Recommendation	1.2%	3.0%	1.8%	13.3%	3.9%	3.4%	-3%	Quality	ROA (FY1)	2.6%	0.2%	12%
Percent Off 52 Week High	1.0%	2.9%	1.9%	-2.0%	-2.2%	2.7%	6%	Quality	12mth Change In ROE	3.1%	0.3%	9%
Historical P/Cash Earnings Ratio	0.9%	2.8%	1.8%	9.9%	4.1%	5.2%	-3%	Price	60 Day Volatility	-1.0%	-0.4%	2%
Forecast PE Relative To Sector	0.9%	3.0%	2.1%	6.0%	4.8%	3.1%	2%	Price	3 Mth Price Momentum	-0.4%	-0.6%	5%
5 years Historical Earnings Growth	0.7%	2.7%	2.0%	-0.3%	5.9%	2.0%	2%	Price	RSI 10 day	-0.3%	-0.3%	-2%
Number of Consensus Estimates (FY1)	0.6%	3.4%	2.8%	-1.6%	0.0%	1.1%	8%	Price	1 Mth Price Momentum	0.3%	0.0%	4%
1 year forward forecast PE	0.6%	2.4%	1.9%	9.4%	4.1%	4.3%	0%	Price	Price Acceleration 3M	0.3%	-0.6%	3%
MSCI Beta vs Local Country Index	0.4%	3.2%	2.8%	5.2%	3.7%	2.6%	4%	Price	RSI 30 day	0.4%	0.2%	4%
RSI 30 day	0.4%	2.6%	2.1%	1.9%	-1.6%	1.9%	4%	Price	Percent Off 52 Week High	1.0%	-0.1%	6%
Price Acceleration 3M	0.3%	3.3%	3.0%	-7.3%	-6.0%	-1.0%	3%	Price	6 Mth Price Momentum	2.5%	0.3%	3%
1 Mth Price Momentum	0.3%	3.0%	2.6%	-0.2%	-5.8%	-0.4%	4%	Price	Price Acceleration 6M	2.7%	-0.3%	10%
Historical Earnings Yield	0.3%	2.5%	2.2%	9.7%	4.3%	3.3%	-2%	Price	12M Price Mom, vol adjusted	3.6%	0.3%	17%
Historical Dividend Yield	0.0%	3.0%	2.9%	4.8%	4.3%	4.7%	-2%	Price	12 Mth Price Momentum	3.7%	0.4%	7%
RSI 10 day	-0.3%	2.1%	2.5%	-4.2%	-0.3%	0.0%	-2%	Earnings	Forecast Earnings Growth FY1 to FY2	-0.7%	0.3%	-6%
3 Mth Price Momentum	-0.4%	2.6%	2.9%	-8.3%	-9.8%	1.4%	5%	Earnings	5 years Historical Earnings Growth	0.7%	0.0%	2%
Forecast Earnings Growth FY1 to FY2	-0.7%	2.5%	3.2%	3.3%	-1.3%	0.7%	-6%	Earnings	Net Revisions to FY1	1.5%	1.1%	8%
Composite Co-Efficient of Variation	-0.9%	1.8%	2.7%	0.0%	-3.1%	-2.4%	0%	Earnings	Net Revisions to FY2	2.2%	0.4%	12%
60 Day Volatility	-1.0%	2.2%	3.2%	-5.1%	-5.6%	0.5%	2%	Earnings	Forward Earnings Momentum (1Mth Change)	2.3%	1.2%	6%
Historical P/Book Value Ratio	-1.4%	2.0%	3.4%	2.4%	1.9%	0.6%	-7%	Earnings	Forward Earnings Momentum / Co-Eff Of Variation	3.6%	0.9%	14%
Cash Flow Yield Mean of FY1 and FY2	-1.7%	1.2%	2.9%	6.5%	3.4%	-0.5%	-10%	Earnings	Forward Earnings Momentum (3Mth Change)	4.6%	0.1%	9%
Historical P/Sales Ratio	-1.7%	1.6%	3.3%	6.8%	-0.5%	-0.4%	-6%	Earnings	Composite Forward Earnings Momentum	5.0%	0.2%	9%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI EM ex Asia

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	3.2%	3.4%	5.2%	2.6%	6.0%
IC	15.4%	13.3%	17.7%	7.4%	24.5%
12mth Perf	18.5%	25.7%	10.5%	5.4%	39.3%
YTD Perf	2.9%	7.1%	5.4%	4.1%	13.9%

Last Month Performance

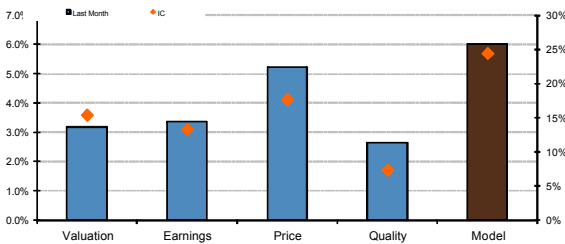
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	0.3%	0.5%	0.5%	-0.2%	0.6%	100.3	100.5	100.5	99.8	100.6
3-Jun-14	0.6%	0.8%	0.1%	0.0%	0.4%	100.9	101.3	100.6	99.8	101.0
4-Jun-14	0.0%	0.4%	0.6%	0.6%	0.7%	100.9	101.8	101.2	100.3	101.7
5-Jun-14	-0.3%	0.8%	0.3%	1.0%	0.7%	100.7	102.7	101.5	101.4	102.4
6-Jun-14	1.1%	-0.7%	0.7%	0.9%	0.4%	101.8	101.9	102.2	102.3	102.8
9-Jun-14	0.7%	0.1%	0.2%	-0.1%	0.6%	102.5	102.0	102.5	102.2	103.4
10-Jun-14	0.1%	-0.4%	-0.4%	0.2%	-0.1%	102.7	101.6	102.1	102.5	103.3
11-Jun-14	0.6%	0.7%	1.1%	0.2%	1.4%	103.3	102.4	103.1	102.6	104.8
12-Jun-14	0.3%	-0.4%	-0.4%	-0.1%	-0.2%	103.5	101.9	102.7	102.6	104.6
13-Jun-14	0.2%	0.0%	0.6%	0.3%	0.0%	103.7	101.9	103.3	102.9	104.6
16-Jun-14	-0.1%	-0.6%	1.3%	0.1%	0.2%	103.7	101.3	104.7	103.0	104.8
17-Jun-14	-0.2%	-0.7%	0.2%	-0.2%	-0.4%	103.4	100.6	104.9	102.8	104.4
18-Jun-14	-0.1%	-0.3%	1.0%	0.1%	0.1%	103.3	100.3	105.9	102.9	104.5
19-Jun-14	-0.1%	0.2%	-0.6%	0.2%	0.0%	103.2	100.5	105.3	103.1	104.5
20-Jun-14	-0.5%	0.9%	-0.7%	0.0%	0.0%	102.7	101.4	104.6	103.1	104.5
23-Jun-14	0.0%	0.1%	-1.0%	-1.3%	-0.5%	102.7	101.6	103.5	101.7	104.0
24-Jun-14	0.2%	0.6%	0.1%	-0.1%	0.7%	102.9	102.2	103.6	101.7	104.7
25-Jun-14	0.0%	0.3%	0.5%	0.9%	0.7%	102.9	102.6	104.1	102.6	105.5
26-Jun-14	0.0%	0.4%	0.3%	-0.2%	-0.1%	102.9	103.0	104.4	102.3	105.4
27-Jun-14	0.0%	0.3%	0.3%	-0.1%	0.3%	102.9	103.3	104.7	102.2	105.7
30-Jun-14	0.2%	0.1%	0.5%	0.5%	0.3%	103.2	103.4	105.2	102.6	106.0

Last 12 Month Performance

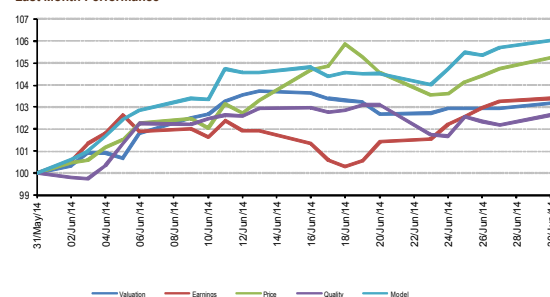
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	2.1%	4.6%	1.1%	-1.6%	2.8%	102.1	104.6	101.1	98.4	102.8
31-Aug-13	10.0%	4.7%	-4.3%	-5.0%	7.1%	112.3	109.5	96.7	93.5	110.0
30-Sep-13	4.6%	0.1%	-0.2%	4.4%	2.9%	117.5	109.6	96.5	97.6	113.3
31-Oct-13	-0.4%	4.1%	0.8%	0.6%	5.1%	117.0	114.1	97.2	98.2	119.1
30-Nov-13	-1.2%	1.5%	7.2%	2.4%	0.8%	115.7	115.9	104.2	100.6	120.0
31-Dec-13	-0.5%	1.3%	0.6%	0.7%	1.9%	115.1	117.4	104.8	101.3	122.3
31-Jan-14	-0.9%	0.6%	-2.4%	-8.5%	-1.7%	114.1	118.1	102.4	92.7	120.2
28-Feb-14	-3.5%	0.4%	-2.2%	0.0%	0.4%	110.0	118.6	100.2	92.7	120.7
31-Mar-14	3.6%	-0.6%	0.1%	5.7%	2.1%	114.0	117.9	100.3	98.0	123.2
30-Apr-14	0.7%	2.8%	0.7%	0.0%	3.4%	114.7	121.2	101.0	98.1	127.3
31-May-14	0.1%	0.3%	3.9%	4.7%	3.2%	114.8	121.6	105.0	102.7	131.4
30-Jun-14	3.2%	3.4%	5.2%	2.6%	6.0%	118.5	125.7	110.5	105.4	139.3

Stock Universe : EM Ex ASIA ; stock # : 300 ; Normalisation mode : Country Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

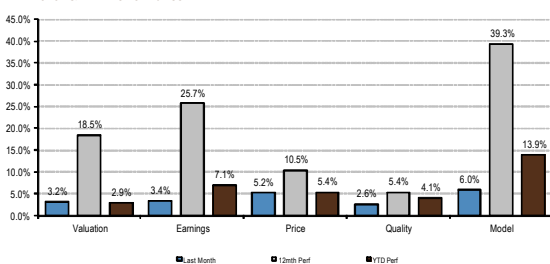
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI EM ex Asia

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC
ROA (FY1)	6.3%	5.0%	-1.3%	-1.0%	-1.6%	-0.6%	18%
1 year forward forecast PE	4.8%	5.2%	0.4%	16.0%	3.1%	3.4%	19%
Forward Earnings Momentum / Co-Eff Of Variation	4.2%	5.1%	0.9%	6.7%	-0.7%	1.3%	19%
12 Mth Price Momentum	4.1%	5.5%	1.4%	13.1%	3.8%	9.6%	14%
Composite Forward Earnings Momentum	3.4%	4.2%	0.8%	3.4%	-7.5%	-0.7%	23%
Forecast PE Relative To Sector	3.1%	3.5%	0.4%	11.9%	5.0%	2.8%	20%
Forward Earnings Momentum (1Mth Change)	3.1%	3.2%	0.1%	17.5%	-0.8%	5.2%	7%
Consensus Recommendation	2.9%	3.6%	0.7%	17.6%	5.2%	6.2%	-16%
1 Mth Change in Consensus Recommendation	2.6%	3.8%	1.2%	9.5%	6.5%	1.5%	-8%
Forecast PE Relative To History	2.4%	4.5%	2.0%	-1.4%	9.0%	6.0%	20%
12M Price Mom, vol adjusted	2.3%	4.5%	2.2%	18.6%	4.1%	8.6%	14%
Forward Earnings Momentum (3Mth Change)	2.3%	3.5%	1.3%	0.1%	-8.0%	-1.9%	23%
Historical Dividend Yield	1.9%	5.0%	3.1%	11.5%	4.7%	4.5%	7%
Net Revisions to FY1	1.7%	3.4%	1.7%	22.8%	10.7%	5.9%	4%
12mth Change In ROE	1.2%	3.3%	2.1%	2.2%	0.7%	-0.1%	5%
Historical Return On Equity	1.0%	3.6%	2.7%	6.0%	1.3%	3.1%	10%
6 Mth Price Momentum	0.9%	3.5%	2.7%	7.5%	-4.5%	3.4%	0%
Historical P/Cash Earnings Ratio	0.8%	2.8%	1.9%	22.2%	3.6%	-1.0%	-5%
Price Acceleration 6M	0.7%	2.0%	1.3%	-4.7%	-10.9%	-7.8%	-6%
Historical Earnings Yield	0.7%	3.5%	2.8%	15.2%	7.9%	4.0%	3%
Percent Off 52 Week High	0.4%	3.0%	2.6%	8.1%	1.1%	9.2%	-1%
Net Revisions to FY2	0.3%	2.6%	2.3%	9.0%	-3.8%	1.8%	5%
Historical P/Book Value Ratio	0.3%	2.6%	2.3%	8.0%	1.6%	-4.3%	-2%
RSI 10 day	0.1%	2.5%	2.4%	-14.8%	-4.0%	-1.0%	-10%
5 years Historical Earnings Growth	0.0%	2.0%	2.0%	-11.7%	4.5%	3.8%	4%
RSI 30 day	-0.3%	2.6%	2.9%	-5.3%	-7.6%	1.6%	-4%
MSCI Beta vs Local Country Index	-0.5%	2.7%	3.1%	-0.4%	-4.7%	-3.0%	-20%
1 Mth Price Momentum	-0.6%	2.3%	2.9%	-3.6%	-8.4%	-1.2%	-6%
60 Day Volatility	-0.6%	3.1%	3.7%	12.3%	6.3%	7.8%	11%
Cash Flow Yield Mean of FY1 and FY2	-0.6%	1.9%	2.5%	11.1%	2.5%	-3.6%	-17%
Number of Consensus Estimates (FY1)	-0.6%	2.2%	2.8%	4.8%	-0.2%	-0.3%	-18%
3 Mth Price Momentum	-0.8%	1.8%	2.6%	-9.4%	-13.6%	0.0%	-5%
3 Mth Change in Consensus Recommendation	-1.0%	0.8%	1.8%	11.5%	-1.0%	-0.5%	-1%
Composite Co-Efficient of Variation	-1.2%	1.2%	2.4%	-8.0%	-8.1%	-7.4%	-3%
Price Acceleration 3M	-1.5%	1.6%	3.1%	-9.7%	-14.6%	-7.7%	-12%
Forecast Earnings Growth FY1 to FY2	-2.6%	1.4%	4.0%	3.9%	-5.1%	1.5%	-7%
Historical P/Sales Ratio	-5.1%	-0.6%	4.4%	4.3%	-6.2%	-5.0%	-20%

Family	Name	Jun-2014 L/S	12mth Avg	IC
Value	Historical P/Sales Ratio	-5.1%	0.4%	-20%
Value	Cash Flow Yield Mean of FY1 and FY2	-0.6%	1.0%	-17%
Value	Historical P/Book Value Ratio	0.3%	0.7%	-2%
Value	Historical Earnings Yield	0.7%	1.2%	3%
Value	Historical P/Cash Earnings Ratio	0.8%	1.7%	-5%
Value	Historical Dividend Yield	1.9%	0.9%	7%
Value	Forecast PE Relative To History	2.4%	-0.1%	20%
Value	Forecast PE Relative To Sector	3.1%	1.0%	20%
Value	1 year forward forecast PE	4.8%	1.3%	19%
Sentiment	3 Mth Change in Consensus Recommendation	-1.0%	0.9%	-1%
Sentiment	1 Mth Change in Consensus Recommendation	2.6%	0.8%	-8%
Sentiment	Consensus Recommendation	2.9%	1.4%	-16%
Risk	MSCI Beta vs Local Country Index	-0.5%	0.0%	-20%
Quality	Composite Co-Efficient of Variation	-1.2%	-0.6%	-3%
Quality	Number of Consensus Estimates (FY1)	-0.6%	0.4%	-18%
Quality	Historical Return On Equity	1.0%	0.5%	10%
Quality	12mth Change In ROE	1.2%	0.2%	5%
Quality	ROA (FY1)	6.3%	0.0%	18%
Price	Price Acceleration 3M	-1.5%	-0.8%	-12%
Price	3 Mth Price Momentum	-0.8%	-0.7%	-5%
Price	60 Day Volatility	-0.6%	1.0%	11%
Price	1 Mth Price Momentum	-0.6%	-0.3%	-6%
Price	RSI 30 day	-0.3%	-0.4%	-4%
Price	RSI 10 day	0.1%	-1.3%	-10%
Price	Percent Off 52 Week High	0.4%	0.7%	-1%
Price	Price Acceleration 6M	0.7%	-0.4%	-6%
Price	6 Mth Price Momentum	0.9%	0.7%	0%
Price	12M Price Mom, vol adjusted	2.3%	1.5%	14%
Price	12 Mth Price Momentum	4.1%	1.1%	14%
Earnings	Forecast Earnings Growth FY1 to FY2	-2.6%	0.4%	-7%
Earnings	5 years Historical Earnings Growth	0.0%	-1.0%	4%
Earnings	Net Revisions to FY2	0.3%	0.8%	5%
Earnings	Net Revisions to FY1	1.7%	1.7%	4%
Earnings	Forward Earnings Momentum (3Mth Change)	2.3%	0.1%	23%
Earnings	Forward Earnings Momentum (1Mth Change)	3.1%	1.4%	7%
Earnings	Composite Forward Earnings Momentum	3.4%	0.3%	23%
Earnings	Forward Earnings Momentum / Co-Eff Of Variation	4.2%	0.6%	19%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI Global Developed

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	0.0%	0.9%	-0.1%	-1.5%	-0.5%
IC	-5.1%	11.2%	-4.6%	-10.1%	-1.6%
12mth Perf	10.2%	3.9%	4.9%	-4.4%	5.0%
YTD Perf	0.6%	2.8%	-3.5%	-3.5%	-0.7%

Last Month Performance

Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	0.1%	0.3%	0.3%	0.0%	0.4%	100.1	100.3	100.3	100.0	100.4
3-Jun-14	0.1%	0.4%	0.0%	0.0%	0.3%	100.2	100.6	100.3	100.1	100.8
4-Jun-14	0.2%	0.2%	0.2%	0.1%	0.2%	100.4	100.8	100.5	100.2	100.9
5-Jun-14	0.2%	0.2%	0.2%	-0.3%	-0.1%	100.6	101.0	100.6	99.9	100.9
6-Jun-14	0.2%	-0.2%	0.2%	0.1%	0.2%	100.8	100.8	100.9	100.0	101.0
9-Jun-14	0.3%	-0.5%	-0.4%	0.0%	-0.3%	101.1	100.3	100.4	100.0	100.7
10-Jun-14	0.1%	0.3%	0.0%	-0.1%	0.1%	101.1	100.6	100.5	99.9	100.8
11-Jun-14	0.0%	0.1%	-0.1%	-0.1%	-0.2%	101.1	100.7	100.3	99.9	100.5
12-Jun-14	-0.1%	0.0%	-0.3%	-0.1%	-0.2%	101.1	100.7	100.0	99.7	100.3
13-Jun-14	0.2%	-0.1%	-0.3%	-0.6%	-0.3%	101.3	100.6	99.8	99.1	100.1
16-Jun-14	-0.1%	0.0%	-0.2%	0.2%	-0.2%	101.2	100.6	99.5	99.3	99.9
17-Jun-14	-0.1%	-0.2%	0.3%	-0.1%	-0.1%	101.0	100.4	99.8	99.2	99.7
18-Jun-14	0.1%	0.5%	0.4%	-0.1%	0.4%	101.1	100.8	100.2	99.1	100.1
19-Jun-14	0.0%	0.3%	-0.2%	-0.3%	0.0%	101.1	101.1	100.1	98.8	100.2
20-Jun-14	-0.4%	0.2%	0.1%	0.0%	-0.1%	100.7	101.3	100.2	98.8	100.1
23-Jun-14	0.3%	-0.3%	-0.2%	0.0%	-0.1%	101.0	101.0	100.1	98.8	100.0
24-Jun-14	-0.3%	-0.1%	-0.2%	0.0%	-0.2%	100.7	100.9	99.8	98.8	99.8
25-Jun-14	-0.1%	0.2%	0.3%	-0.2%	0.0%	100.6	101.1	100.1	98.5	99.8
26-Jun-14	-0.3%	0.0%	0.3%	-0.1%	0.0%	100.3	101.1	100.4	98.5	99.9
27-Jun-14	-0.1%	-0.2%	0.0%	0.2%	0.0%	100.2	100.9	100.3	98.6	99.8
30-Jun-14	-0.2%	-0.1%	-0.4%	-0.2%	-0.3%	100.0	100.9	99.9	98.5	99.5

Last 12 Month Performance

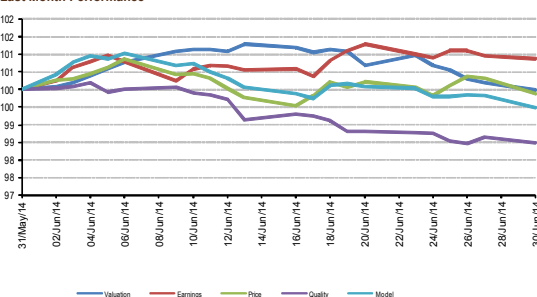
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	1.7%	-0.4%	0.7%	0.5%	1.8%	101.7	99.6	100.7	100.5	101.8
31-Aug-13	0.9%	-1.1%	-2.1%	-1.5%	-1.6%	102.7	98.6	98.6	99.1	100.2
30-Sep-13	1.9%	0.1%	4.4%	-0.2%	2.0%	104.6	98.7	102.9	98.8	102.2
31-Oct-13	1.6%	1.4%	1.4%	0.3%	1.0%	106.3	100.0	104.3	99.2	103.2
30-Nov-13	2.8%	-0.3%	3.2%	-1.1%	2.1%	109.2	99.7	107.7	98.1	105.4
31-Dec-13	0.2%	1.4%	1.0%	0.9%	0.4%	109.5	101.1	108.7	99.0	105.8
31-Jan-14	-1.4%	1.0%	-1.9%	-3.4%	-0.7%	107.9	102.1	106.6	95.6	105.0
28-Feb-14	0.4%	0.8%	0.7%	-0.9%	-0.5%	108.3	102.9	107.3	94.7	104.5
31-Mar-14	2.1%	0.1%	-0.8%	1.7%	1.8%	110.6	103.1	106.5	96.3	106.4
30-Apr-14	0.5%	0.0%	-2.9%	0.1%	-0.9%	111.2	103.1	103.4	96.4	105.4
31-May-14	-0.9%	-0.1%	1.6%	0.7%	0.1%	110.2	103.0	105.0	97.0	105.6
30-Jun-14	0.0%	0.9%	-0.1%	-1.5%	-0.5%	110.2	103.9	104.9	95.6	105.0

Stock Universe : MSCI GDM ; stock # : 1611 ; Normalisation mode : Sector Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

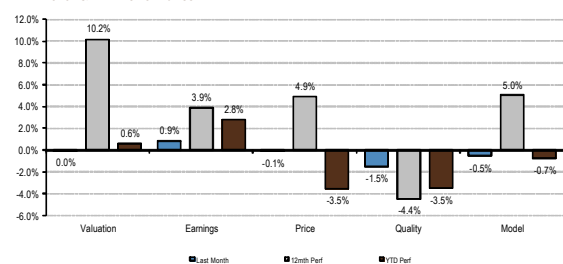
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary – MSCI Global Developed

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC
Forward Earnings Momentum / Co-Eff Of Variation	2.5%	3.2%	0.7%	3.1%	2.3%	1.3%	9%
Net Revisions to FY2	2.1%	3.0%	1.0%	2.9%	3.9%	2.2%	12%
Net Revisions to FY1	1.7%	3.1%	1.4%	2.2%	2.6%	2.2%	11%
Historical Dividend Yield	1.5%	2.6%	1.0%	4.6%	6.6%	4.8%	-9%
Forward Earnings Momentum (1Mth Change)	1.3%	2.4%	1.1%	0.9%	3.2%	1.6%	0%
Composite Co-Efficient of Variation	1.2%	2.8%	1.5%	6.1%	2.2%	0.3%	2%
Composite Forward Earnings Momentum	1.0%	2.7%	1.7%	2.6%	2.9%	1.1%	2%
Forward Earnings Momentum (3Mth Change)	1.0%	2.8%	1.8%	1.6%	1.6%	0.2%	2%
Price Acceleration 3M	0.8%	2.4%	1.6%	0.5%	-0.5%	0.2%	-2%
12mth Change In ROE	0.7%	2.5%	1.8%	-2.1%	-1.4%	0.7%	-1%
Price Acceleration 6M	0.6%	2.6%	1.9%	-0.3%	-0.8%	-0.7%	-2%
Consensus Recommendation	0.6%	2.5%	1.9%	3.7%	-0.3%	2.2%	-6%
MSCI Beta vs Local Country Index	0.5%	2.4%	2.0%	7.7%	-1.0%	-1.4%	7%
Historical P/Book Value Ratio	0.4%	2.5%	2.0%	8.8%	3.9%	0.8%	7%
6 Mth Price Momentum	0.4%	1.9%	1.6%	-1.5%	-2.7%	-2.7%	-2%
3 Mth Change in Consensus Recommendation	0.3%	1.9%	1.6%	3.3%	1.6%	0.3%	-1%
1 year forward forecast PE	0.3%	2.5%	2.3%	4.9%	-0.9%	0.9%	-1%
1 Mth Change in Consensus Recommendation	0.2%	2.0%	1.8%	1.0%	1.2%	0.1%	0%
1 Mth Price Momentum	0.2%	2.0%	1.8%	-8.9%	-4.9%	-2.6%	1%
5 years Historical Earnings Growth	0.2%	2.5%	2.3%	-5.0%	-3.2%	-2.1%	8%
RSI 30 day	0.1%	2.1%	1.9%	-4.0%	-3.9%	-2.0%	-4%
Percent Off 52 Week High	0.1%	2.5%	2.3%	-4.0%	-3.6%	-1.1%	-11%
Forecast PE Relative To History	0.0%	1.7%	1.7%	6.3%	5.6%	4.6%	0%
Forecast Earnings Growth FY1 to FY2	-0.2%	2.2%	2.4%	2.0%	-3.0%	-1.8%	-3%
12 Mth Price Momentum	-0.3%	2.4%	2.6%	1.0%	-6.0%	-3.3%	-3%
12M Price Mom, vol adjusted	-0.4%	1.9%	2.3%	0.0%	-5.1%	-2.1%	-4%
Forecast PE Relative To Sector	-0.4%	2.2%	2.5%	4.9%	-2.3%	-0.4%	-4%
3 Mth Price Momentum	-0.5%	2.3%	2.8%	-7.5%	-6.7%	-4.0%	-5%
Number of Consensus Estimates (FY1)	-0.5%	1.9%	2.4%	-3.4%	-4.6%	-1.9%	-14%
60 Day Volatility	-0.6%	1.3%	1.8%	-4.9%	0.8%	2.5%	-1%
Historical Earnings Yield	-0.6%	2.0%	2.5%	-0.6%	-1.5%	1.4%	-4%
Historical Return On Equity	-0.7%	2.0%	2.7%	-4.6%	-4.2%	-0.8%	-1%
RSI 10 day	-0.8%	1.6%	2.4%	-8.1%	-5.5%	-2.9%	-2%
Cash Flow Yield Mean of FY1 and FY2	-1.4%	2.0%	3.4%	8.4%	2.9%	0.5%	4%
Historical P/Cash Earnings Ratio	-1.5%	2.2%	3.8%	7.0%	3.5%	1.4%	1%
ROA (FY1)	-1.6%	1.5%	3.1%	-5.3%	-2.7%	-1.2%	-10%
Historical P/Sales Ratio	-1.9%	1.2%	3.0%	10.5%	-0.8%	-1.0%	0%

Family	Name	Jun-2014 L/S	12mth Avg	IC
Value	Historical P/Sales Ratio	-1.9%	0.9%	0%
Value	Historical P/Cash Earnings Ratio	-1.5%	0.6%	1%
Value	Cash Flow Yield Mean of FY1 and FY2	-1.4%	0.7%	4%
Value	Historical Earnings Yield	-0.6%	0.0%	-4%
Value	Forecast PE Relative To Sector	-0.4%	0.4%	-4%
Value	Forecast PE Relative To History	0.0%	0.5%	0%
Value	1 year forward forecast PE	0.3%	0.4%	-1%
Value	Historical P/Book Value Ratio	0.4%	0.7%	7%
Value	Historical Dividend Yield	1.5%	0.4%	-9%
Sentiment	1 Mth Change in Consensus Recommendation	0.2%	0.1%	0%
Sentiment	3 Mth Change in Consensus Recommendation	0.3%	0.3%	-1%
Sentiment	Consensus Recommendation	0.6%	0.3%	-6%
Risk	MSCI Beta vs Local Country Index	0.5%	0.6%	7%
Quality	ROA (FY1)	-1.6%	-0.4%	-10%
Quality	Historical Return On Equity	-0.7%	-0.4%	-1%
Quality	Number of Consensus Estimates (FY1)	-0.5%	-0.3%	-14%
Quality	12mth Change In ROE	0.7%	-0.2%	-1%
Quality	Composite Co-Efficient of Variation	1.2%	0.5%	2%
Price	RSI 10 day	-0.8%	-0.7%	-2%
Price	60 Day Volatility	-0.6%	-0.4%	-1%
Price	3 Mth Price Momentum	-0.5%	-0.6%	-5%
Price	12M Price Mom, vol adjusted	-0.4%	0.0%	-4%
Price	12 Mth Price Momentum	-0.3%	0.1%	-3%
Price	Percent Off 52 Week High	0.1%	-0.3%	-11%
Price	RSI 30 day	0.1%	-0.3%	-4%
Price	1 Mth Price Momentum	0.2%	-0.8%	1%
Price	6 Mth Price Momentum	0.4%	-0.1%	-2%
Price	Price Acceleration 6M	0.6%	0.0%	-2%
Price	Price Acceleration 3M	0.8%	0.0%	-2%
Earnings	Forecast Earnings Growth FY1 to FY2	-0.2%	0.2%	-3%
Earnings	5 years Historical Earnings Growth	0.2%	-0.4%	8%
Earnings	Forward Earnings Momentum (3Mth Change)	1.0%	0.1%	2%
Earnings	Composite Forward Earnings Momentum	1.0%	0.2%	2%
Earnings	Forward Earnings Momentum (1Mth Change)	1.3%	0.1%	0%
Earnings	Net Revisions to FY1	1.7%	0.2%	11%
Earnings	Net Revisions to FY2	2.1%	0.2%	12%
Earnings	Forward Earnings Momentum / Co-Eff Of Variation	2.5%	0.3%	9%

Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Family Summary – MSCI All World

Summary and Information Co-Efficients (IC)

	Valuation	Earnings	Price	Quality	Model
Last Month	-0.7%	1.3%	0.9%	-0.8%	0.9%
IC	-2.0%	11.9%	2.8%	-4.7%	4.8%
12mth Perf	10.1%	4.9%	3.2%	-2.6%	10.8%
YTD Perf	1.0%	1.2%	-2.8%	-1.4%	1.7%

Last Month Performance

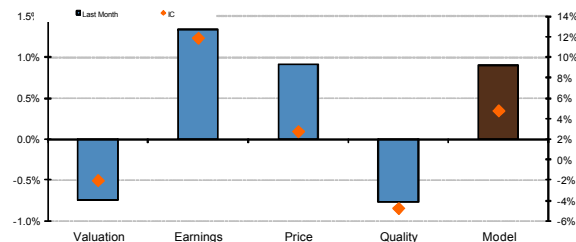
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
31-May-14						100.0	100.0	100.0	100.0	100.0
2-Jun-14	0.1%	0.3%	0.3%	0.0%	0.4%	100.1	100.3	100.3	100.0	100.4
3-Jun-14	0.0%	0.4%	0.2%	0.1%	0.2%	100.1	100.7	100.5	100.1	100.6
4-Jun-14	0.0%	0.1%	0.2%	0.1%	0.3%	100.2	100.8	100.7	100.2	100.8
5-Jun-14	0.2%	0.3%	0.2%	-0.1%	0.3%	100.4	101.1	100.9	100.1	101.1
6-Jun-14	0.4%	0.0%	0.1%	0.0%	0.3%	100.8	101.1	101.0	100.1	101.4
9-Jun-14	0.3%	-0.5%	-0.4%	0.0%	-0.2%	101.1	100.6	100.5	100.1	101.2
10-Jun-14	-0.1%	0.2%	-0.2%	-0.2%	0.1%	101.0	100.8	100.3	99.9	101.3
11-Jun-14	-0.2%	0.2%	0.3%	0.1%	0.2%	100.8	101.0	100.6	99.9	101.5
12-Jun-14	0.1%	-0.1%	-0.3%	-0.3%	-0.1%	100.9	100.9	100.3	99.7	101.4
13-Jun-14	0.0%	-0.3%	-0.1%	-0.2%	-0.4%	100.9	100.6	100.2	99.5	101.0
16-Jun-14	-0.1%	0.0%	-0.2%	0.2%	-0.1%	100.8	100.6	100.0	99.6	100.9
17-Jun-14	-0.1%	-0.1%	0.0%	-0.2%	-0.1%	100.7	100.5	100.0	99.4	100.8
18-Jun-14	-0.1%	0.3%	0.5%	-0.1%	0.2%	100.7	100.9	100.6	99.3	101.0
19-Jun-14	-0.2%	0.3%	0.0%	-0.2%	0.0%	100.5	101.1	100.5	99.1	101.0
20-Jun-14	-0.4%	0.2%	0.0%	0.0%	-0.1%	100.1	101.3	100.5	99.1	100.9
23-Jun-14	0.2%	-0.2%	-0.3%	-0.1%	-0.1%	100.2	101.2	100.2	98.9	100.8
24-Jun-14	-0.3%	0.0%	-0.1%	0.0%	-0.1%	99.9	101.2	100.1	99.0	100.7
25-Jun-14	-0.1%	0.2%	0.5%	0.2%	0.2%	99.9	101.4	100.6	99.2	100.9
26-Jun-14	-0.4%	0.1%	0.3%	0.1%	0.1%	99.5	101.5	101.0	99.3	101.1
27-Jun-14	-0.1%	-0.2%	0.0%	0.1%	-0.1%	99.4	101.3	101.0	99.4	101.0
30-Jun-14	-0.2%	0.1%	-0.1%	-0.2%	-0.1%	99.3	101.3	100.9	99.2	100.9

Last 12 Month Performance

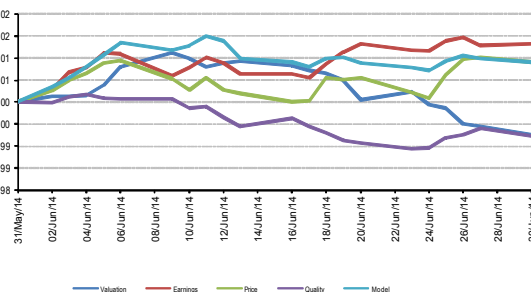
Date	Price					Index				
	Valuation	Earnings	Price	Quality	Model	Valuation	Earnings	Price	Quality	Model
30-Jun-13						100.0	100.0	100.0	100.0	100.0
31-Jul-13	1.1%	0.5%	1.7%	0.7%	2.4%	101.1	100.5	101.7	100.7	102.4
31-Aug-13	3.1%	0.2%	-4.6%	-2.6%	-0.2%	104.3	100.7	97.1	98.0	102.3
30-Sep-13	1.1%	0.6%	3.1%	-0.2%	1.3%	105.4	101.3	100.1	97.9	103.6
31-Oct-13	1.2%	1.0%	1.8%	0.7%	1.5%	106.7	102.3	101.9	98.5	105.1
30-Nov-13	2.7%	0.2%	3.2%	-0.1%	2.9%	109.5	102.5	105.2	98.4	108.2
31-Dec-13	-0.4%	1.2%	0.8%	0.4%	0.7%	109.1	103.7	106.1	98.8	109.0
31-Jan-14	-1.8%	0.5%	-0.2%	-2.3%	-0.3%	107.1	104.2	105.8	96.5	108.7
28-Feb-14	-0.1%	-0.1%	1.0%	-0.4%	0.3%	107.0	104.1	106.9	96.2	109.0
31-Mar-14	2.7%	-0.3%	-2.3%	2.1%	0.7%	109.9	103.8	104.5	98.2	109.7
30-Apr-14	0.5%	-0.6%	-3.5%	-0.6%	-1.1%	110.5	103.1	100.8	97.6	108.5
31-May-14	0.4%	0.4%	1.4%	0.5%	1.2%	111.0	103.5	102.2	98.1	109.8
30-Jun-14	-0.7%	1.3%	0.9%	-0.8%	0.9%	110.1	104.9	103.2	97.4	110.8

Stock Universe : MSCI WORLD ; stock # : 2446 ; Normalization mode : Country Neutral
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

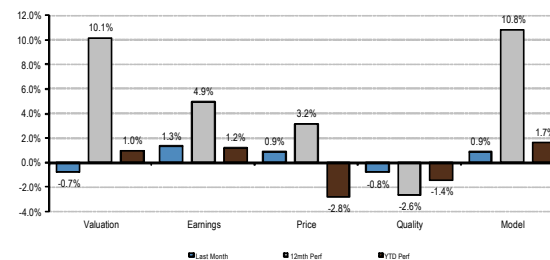
Last Month Performance



Last Month Performance



12 Month & YTD Performance



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

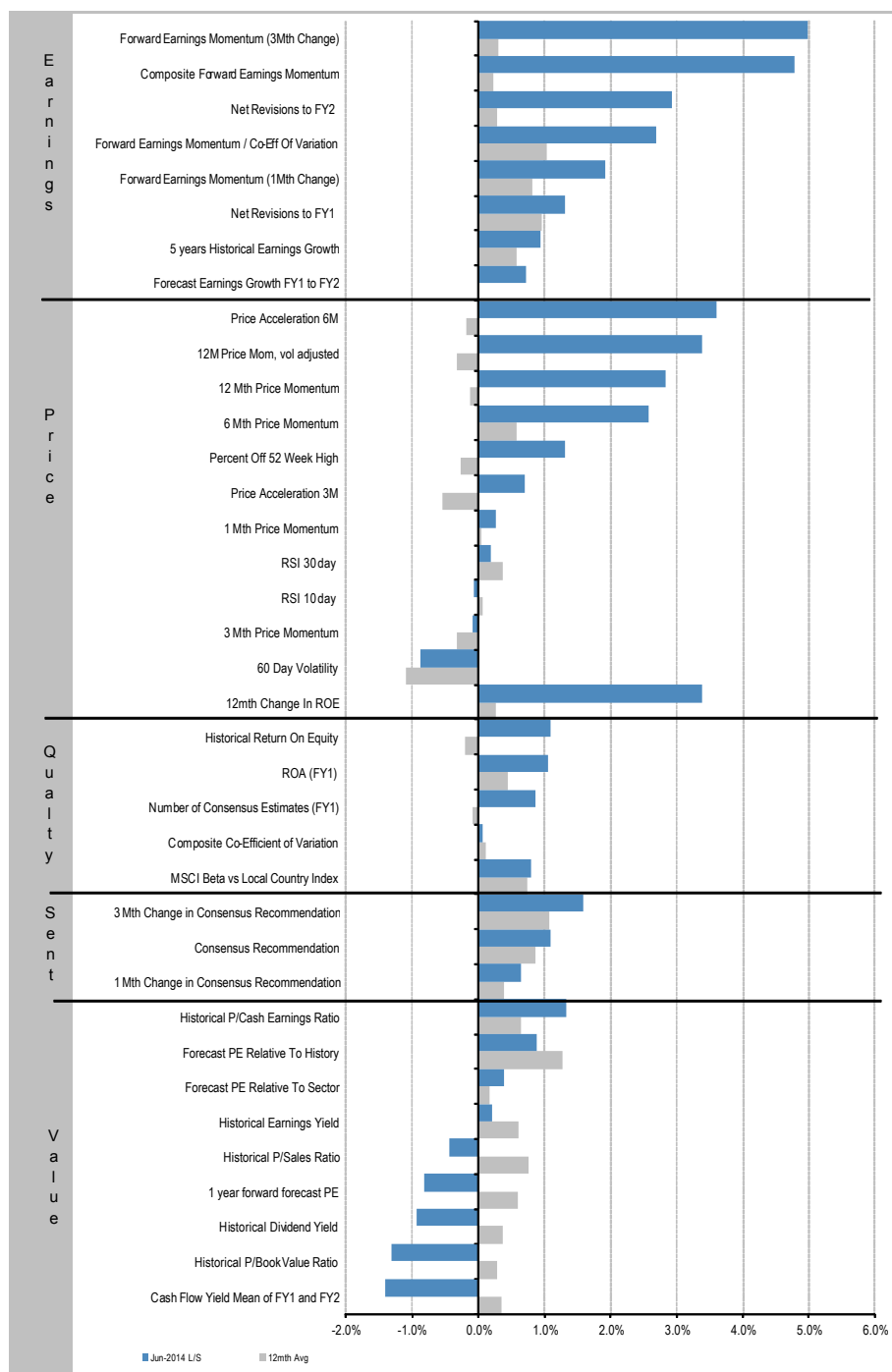
Factor Summary – MSCI All World

Factor Summary and Information Co-Efficients (IC) Sorted by Monthly L/S return (LHS) and by Factor Family (RHS)

Name	Jun-2014 L/S	Jun-2014 Long	Jun-2014 Short	12 Month L/S	Year To Date L/S	Qtr To Date L/S	IC	Family	Name	Jun-2014 L/S	12mth Avg	IC
Forward Earnings Momentum (3Mth Change)	2.3%	3.4%	1.1%	-0.2%	0.9%	1.7%	5%	Value	Historical P/Sales Ratio	-1.8%	0.4%	-2%
Forward Earnings Momentum / Co-Eff Of Variation	2.2%	3.6%	1.4%	4.7%	2.7%	2.3%	10%	Value	Cash Flow Yield Mean of FY1 and FY2	-0.4%	0.5%	-2%
Composite Forward Earnings Momentum	2.1%	3.3%	1.2%	-0.1%	0.6%	1.4%	5%	Value	Historical Earnings Yield	-0.3%	0.3%	-2%
Net Revisions to FY2	1.9%	3.1%	1.2%	3.1%	1.2%	2.1%	12%	Value	Historical P/Cash Earnings Ratio	-0.3%	0.7%	-1%
Net Revisions to FY1	1.5%	3.3%	1.8%	6.7%	3.9%	2.6%	9%	Value	Historical P/Book Value Ratio	-0.2%	0.5%	2%
Forward Earnings Momentum (1Mth Change)	1.5%	2.8%	1.4%	5.2%	2.6%	2.5%	1%	Value	Historical Dividend Yield	-0.2%	0.0%	-5%
6 Mth Price Momentum	1.5%	3.1%	1.6%	1.0%	-2.1%	-0.1%	1%	Value	Forecast PE Relative To Sector	0.0%	0.5%	-2%
12 Mth Price Momentum	1.3%	3.8%	2.4%	0.4%	-5.3%	-2.3%	2%	Value	1 year forward forecast PE	0.0%	0.8%	1%
Price Acceleration 6M	1.1%	2.8%	1.7%	-2.2%	-1.7%	-1.5%	2%	Value	Forecast PE Relative To History	0.1%	0.6%	0%
12mth Change In ROE	0.9%	2.9%	1.9%	0.1%	0.3%	1.0%	0%	Sentiment	1 Mth Change in Consensus Recommendation	0.1%	0.2%	-2%
12M Price Mom, vol adjusted	0.9%	3.4%	2.5%	-1.8%	-6.4%	-1.9%	2%	Sentiment	3 Mth Change in Consensus Recommendation	0.4%	0.5%	-2%
Consensus Recommendation	0.8%	2.8%	2.0%	9.2%	1.2%	1.1%	-7%	Sentiment	Consensus Recommendation	0.8%	0.7%	-7%
5 years Historical Earnings Growth	0.7%	2.2%	1.5%	0.3%	0.4%	-0.4%	5%	Risk	MSCI Beta vs Local Country Index	0.7%	0.7%	5%
MSCI Beta vs Local Country Index	0.7%	2.8%	2.1%	8.6%	-1.0%	0.3%	5%	Quality	Number of Consensus Estimates (FY1)	-0.1%	-0.2%	-5%
Historical Return On Equity	0.5%	2.4%	1.9%	-2.4%	-2.3%	-0.6%	-1%	Quality	ROA (FY1)	0.2%	0.0%	-1%
Composite Co-Efficient of Variation	0.4%	2.3%	1.8%	3.0%	-0.2%	-0.8%	2%	Quality	Composite Co-Efficient of Variation	0.4%	0.3%	2%
3 Mth Change in Consensus Recommendation	0.4%	2.0%	1.6%	6.1%	0.8%	1.5%	-2%	Quality	Historical Return On Equity	0.5%	-0.2%	-1%
Price Acceleration 3M	0.3%	2.4%	2.1%	-4.9%	-3.4%	-1.2%	0%	Quality	12mth Change In ROE	0.9%	0.0%	0%
1 Mth Price Momentum	0.3%	2.3%	2.0%	-6.0%	-5.2%	-2.2%	3%	Price	60 Day Volatility	-1.2%	-0.3%	0%
ROA (FY1)	0.2%	2.3%	2.1%	0.4%	-0.4%	-0.2%	-1%	Price	3 Mth Price Momentum	-1.0%	-0.8%	1%
RSI 30 day	0.1%	2.3%	2.1%	-0.1%	-1.8%	-0.5%	-2%	Price	RSI 10 day	-0.3%	-0.3%	-4%
1 Mth Change in Consensus Recommendation	0.1%	1.9%	1.8%	2.0%	0.3%	-0.6%	-2%	Price	Percent Off 52 Week High	-0.1%	-0.6%	-6%
Forecast PE Relative To History	0.1%	2.0%	1.9%	7.4%	6.9%	4.4%	0%	Price	RSI 30 day	0.1%	0.0%	-2%
1 year forward forecast PE	0.0%	1.9%	1.9%	9.2%	0.0%	0.9%	1%	Price	1 Mth Price Momentum	0.3%	-0.5%	3%
Forecast PE Relative To Sector	0.0%	2.3%	2.3%	6.1%	-0.4%	0.0%	-2%	Price	Price Acceleration 3M	0.3%	-0.4%	0%
Percent Off 52 Week High	-0.1%	2.5%	2.6%	-6.7%	-6.8%	-1.4%	-6%	Price	12M Price Mom, vol adjusted	0.9%	-0.1%	2%
Number of Consensus Estimates (FY1)	-0.1%	2.5%	2.6%	-2.4%	-4.2%	-1.9%	-5%	Price	Price Acceleration 6M	1.1%	-0.2%	2%
Historical Dividend Yield	-0.2%	2.7%	2.9%	-0.1%	4.5%	3.7%	-5%	Price	12 Mth Price Momentum	1.3%	0.1%	2%
Historical P/Book Value Ratio	-0.2%	2.1%	2.3%	5.4%	4.4%	1.2%	2%	Price	6 Mth Price Momentum	1.5%	0.1%	1%
RSI 10 day	-0.3%	2.1%	2.4%	-3.2%	-1.2%	0.4%	-4%	Earnings	Forecast Earnings Growth FY1 to FY2	-0.7%	0.1%	-4%
Historical P/Cash Earnings Ratio	-0.3%	2.6%	2.9%	8.5%	5.8%	3.7%	-1%	Earnings	5 years Historical Earnings Growth	0.7%	0.0%	5%
Historical Earnings Yield	-0.3%	2.1%	2.4%	3.8%	0.0%	1.9%	-2%	Earnings	Forward Earnings Momentum (1Mth Change)	1.5%	0.4%	1%
Cash Flow Yield Mean of FY1 and FY2	-0.4%	2.2%	2.6%	6.0%	5.4%	2.3%	-2%	Earnings	Net Revisions to FY1	1.5%	0.5%	9%
Forecast Earnings Growth FY1 to FY2	-0.7%	2.6%	3.3%	1.4%	-2.7%	-1.8%	-4%	Earnings	Net Revisions to FY2	1.9%	0.3%	12%
3 Mth Price Momentum	-1.0%	2.4%	3.3%	-9.6%	-9.8%	-3.1%	1%	Earnings	Composite Forward Earnings Momentum	2.1%	0.0%	5%
60 Day Volatility	-1.2%	1.4%	2.7%	-4.1%	-0.5%	2.0%	0%	Earnings	Forward Earnings Momentum / Co-Eff Of Variation	2.2%	0.4%	10%
Historical P/Sales Ratio	-1.8%	1.4%	3.2%	4.7%	-0.8%	-0.6%	-2%	Earnings	Forward Earnings Momentum (3Mth Change)	2.3%	0.0%	5%

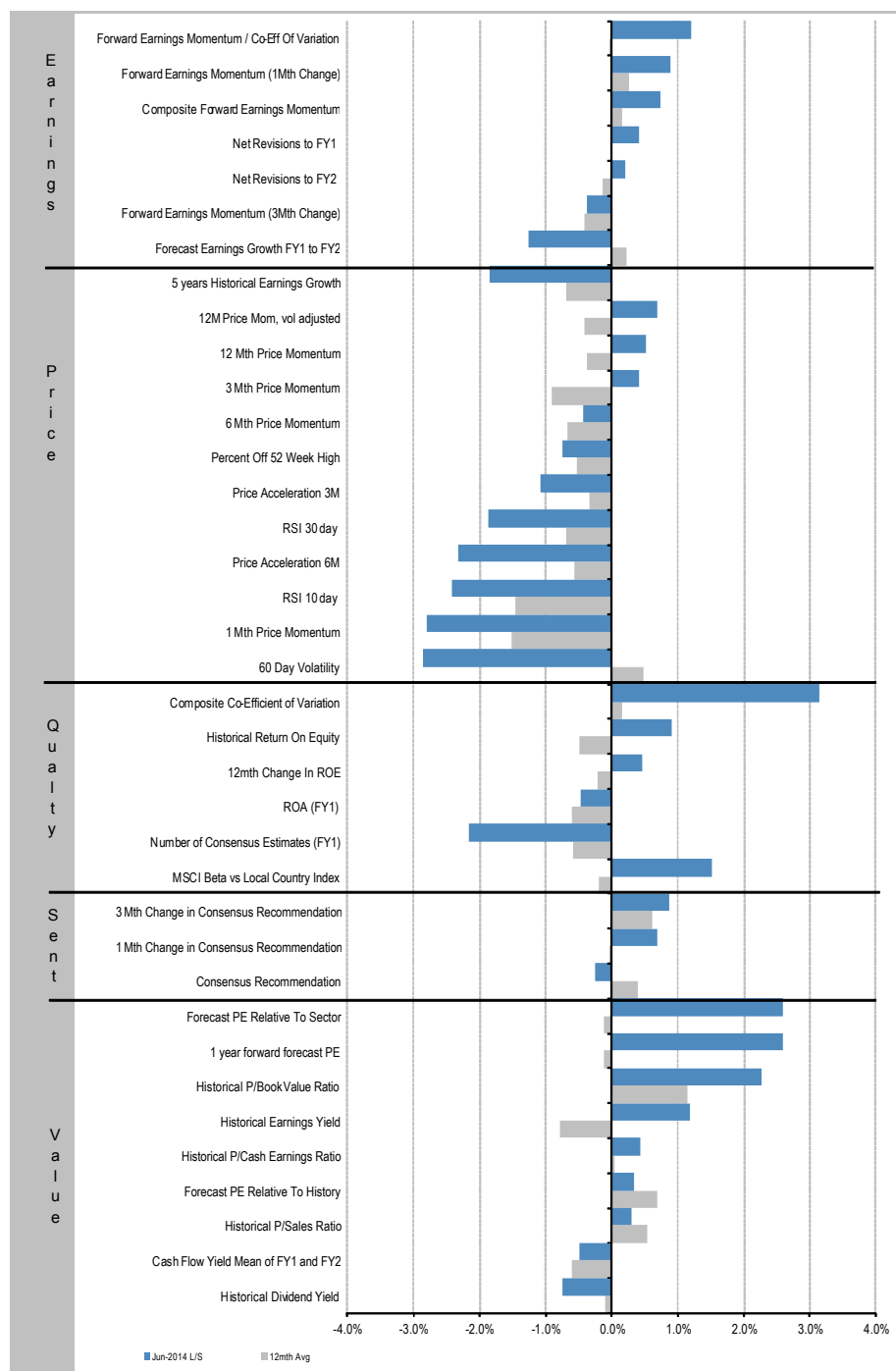
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI Asia ex Japan



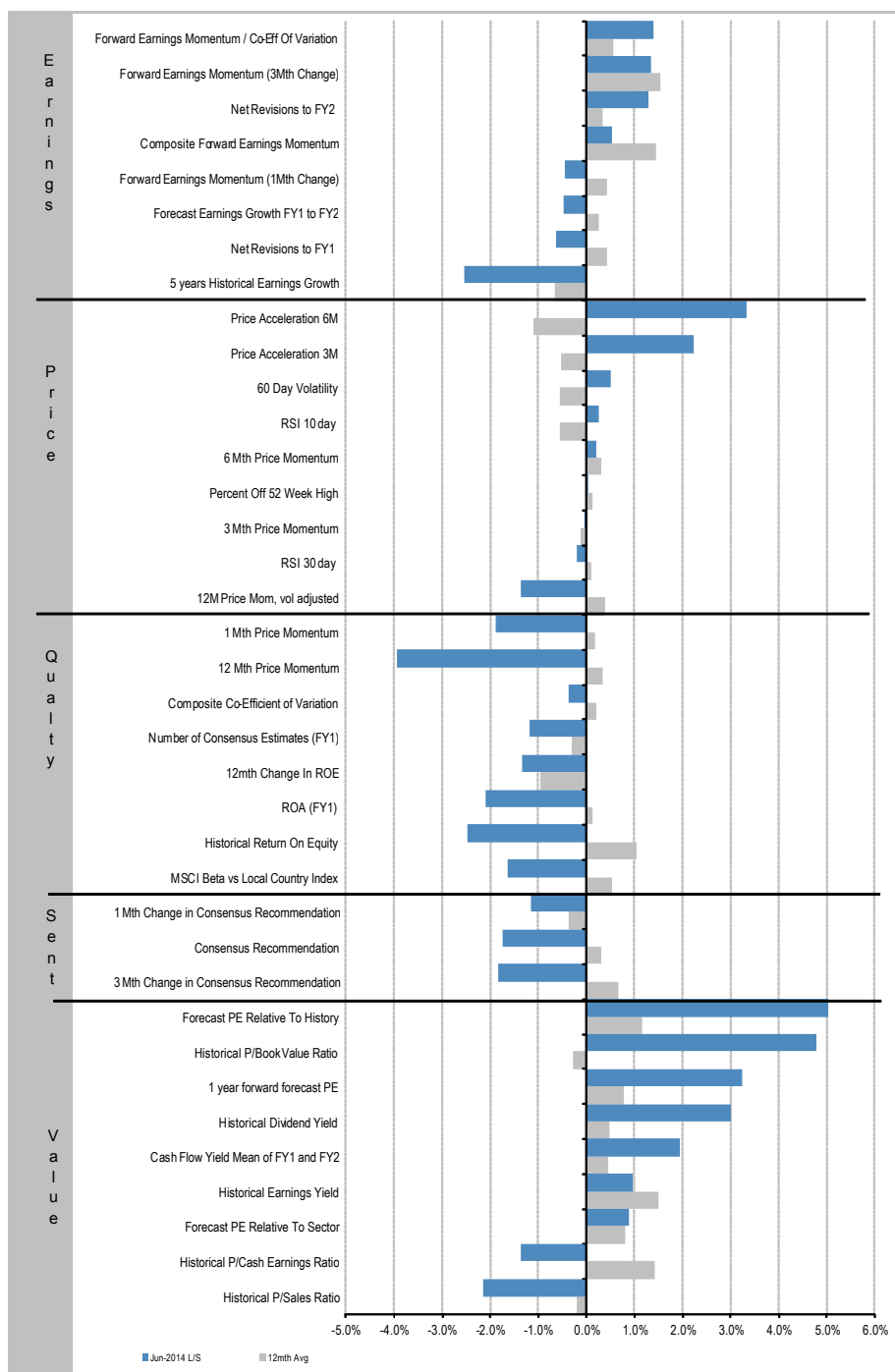
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – Japan



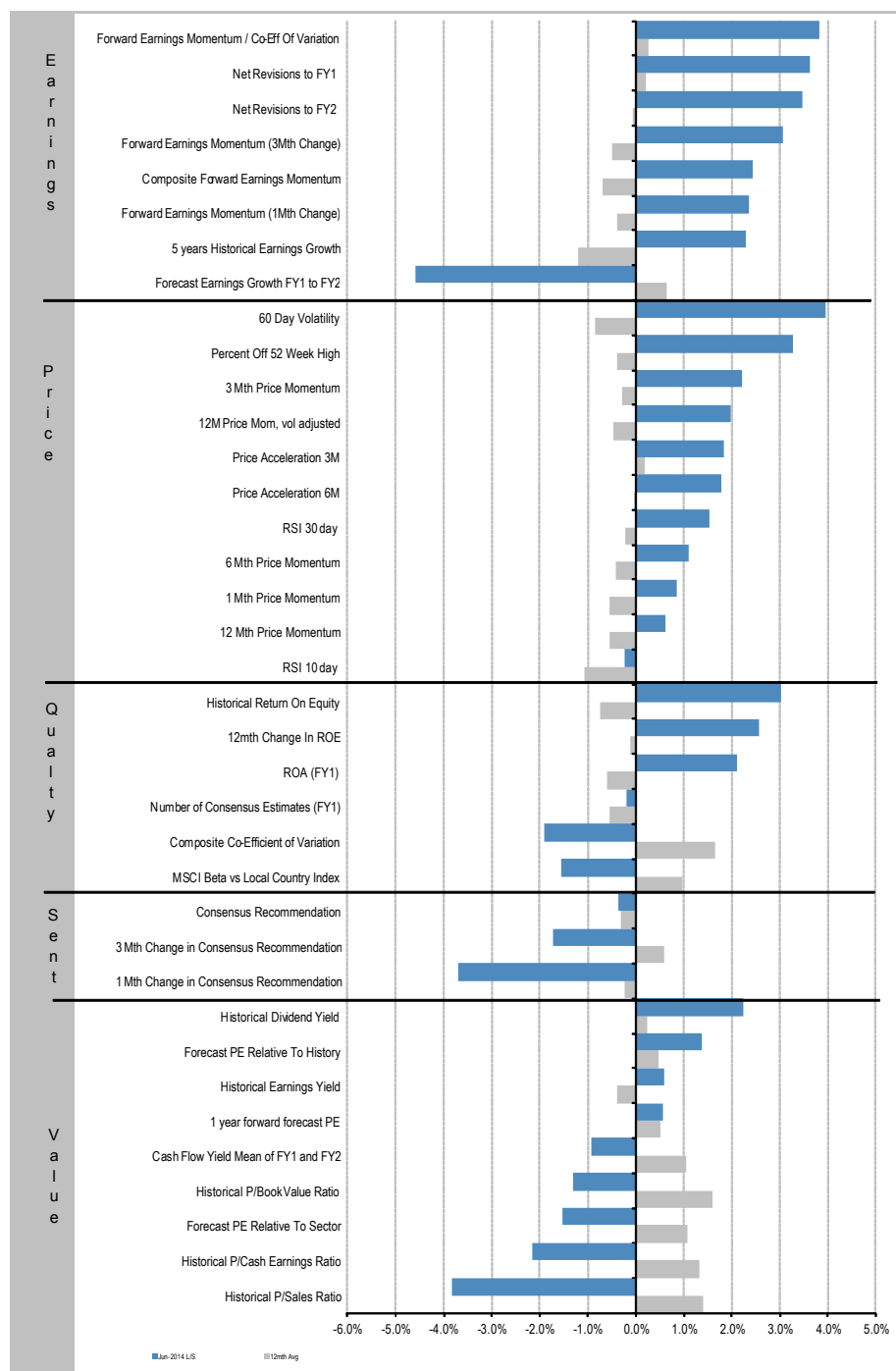
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI Australia



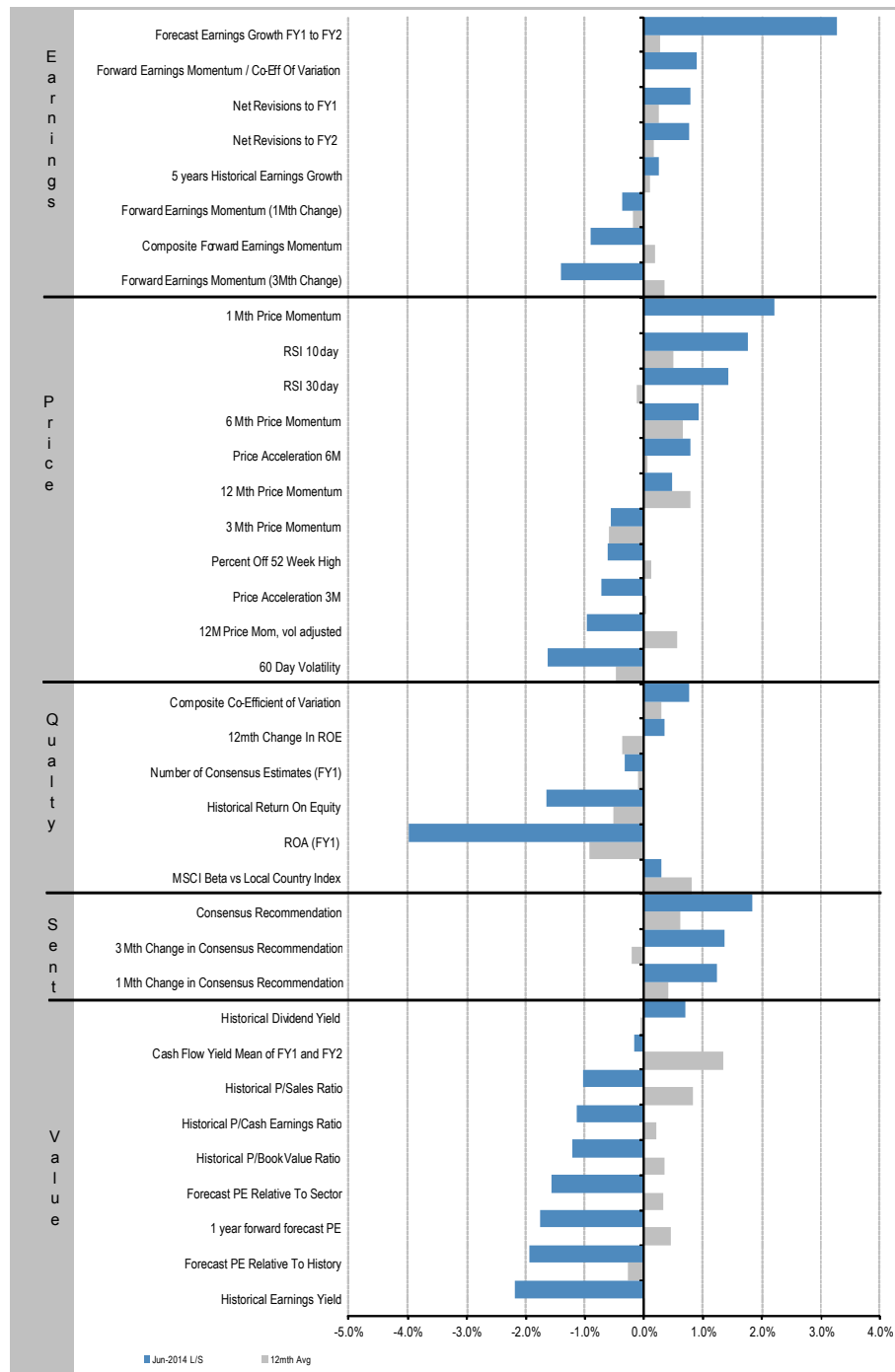
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI Europe



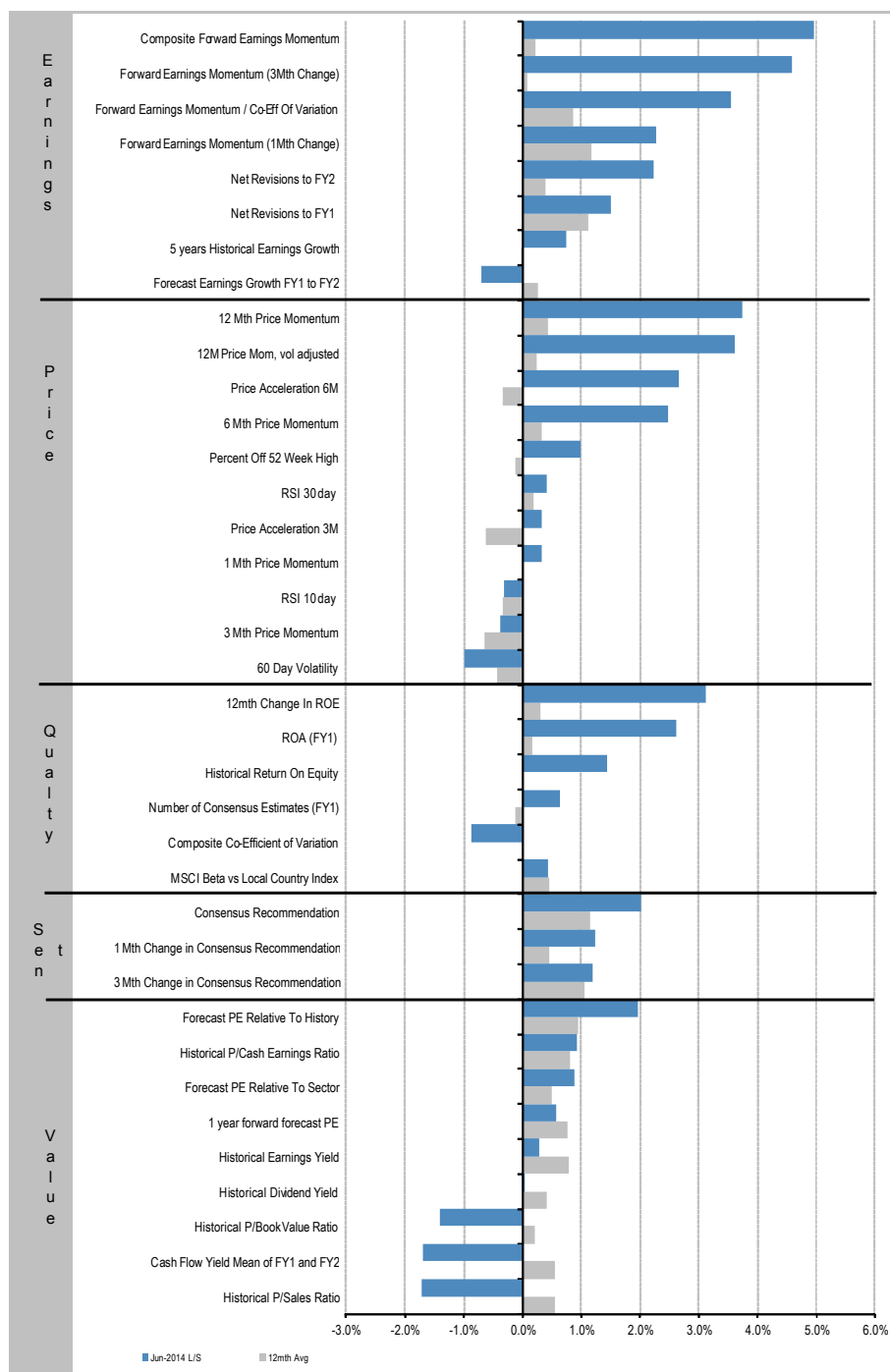
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI US



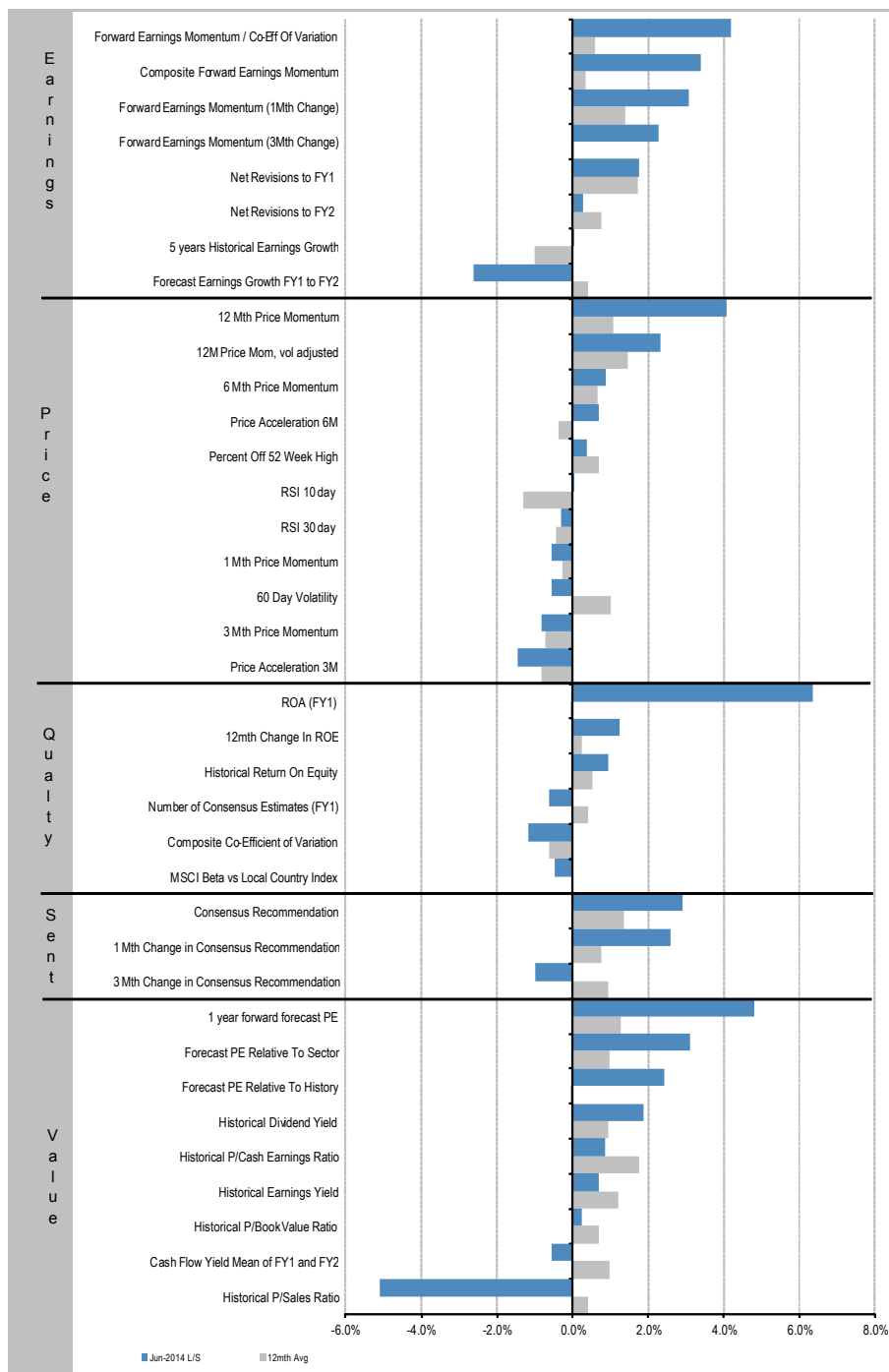
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI GEM



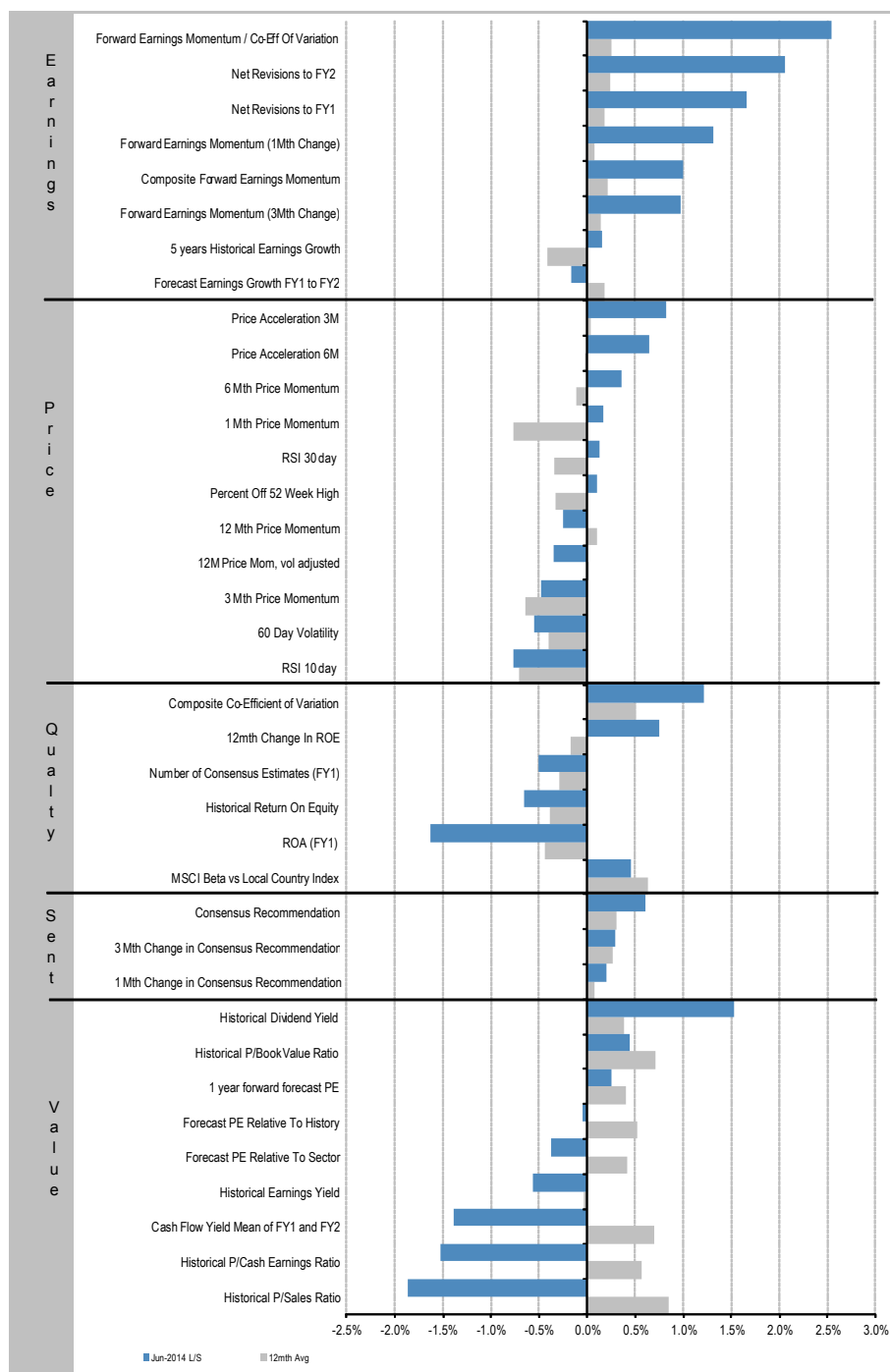
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI EM ex Asia



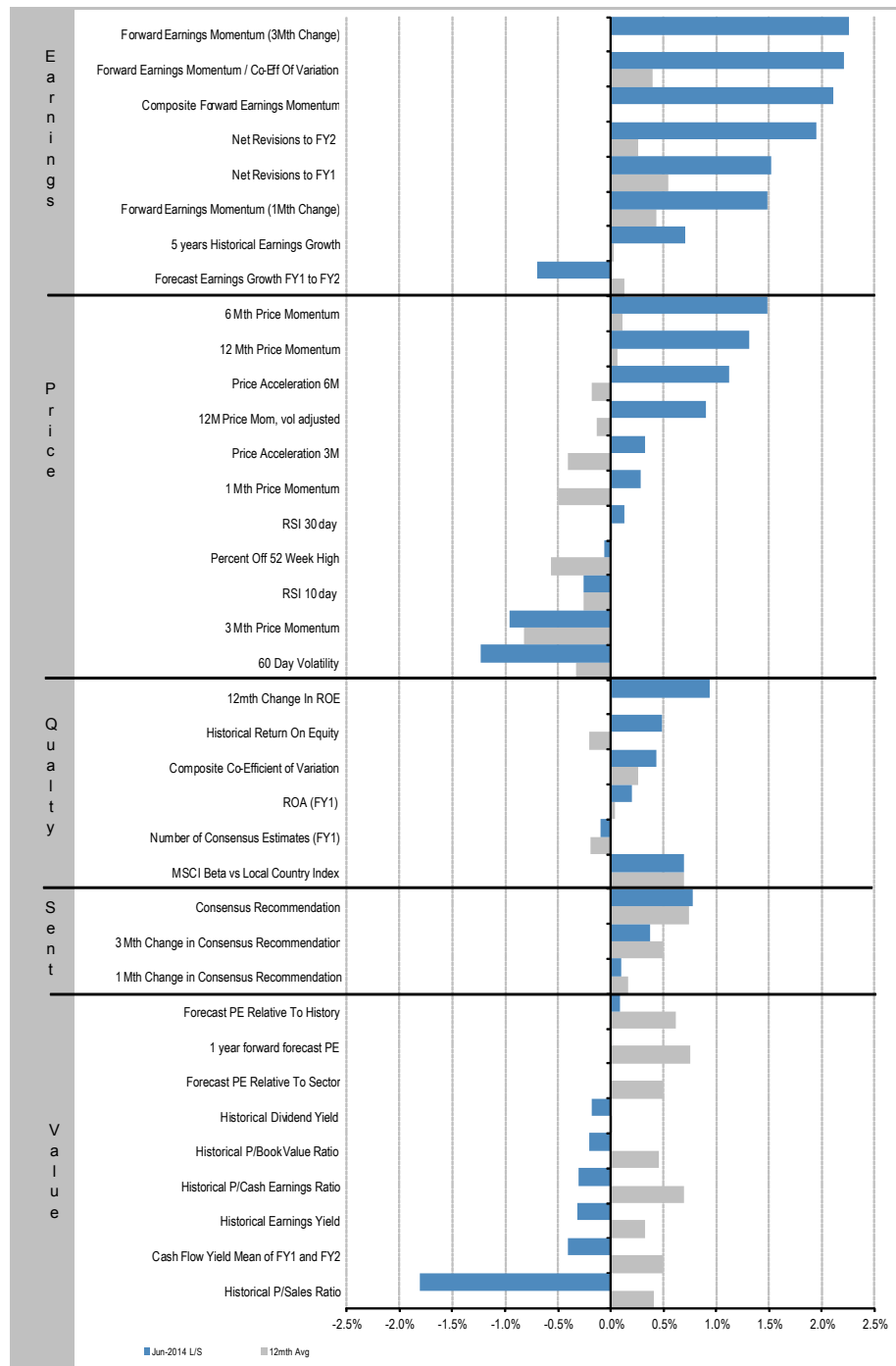
Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI Global Developed



Source: MSCI, Factset, Reuters, J.P. Morgan Calcs

Factor Summary Chart – MSCI All world



Information Coefficient Matrix – Valuation

Information co-Efficient Matrix

	ALL	Energy	Materials	Indust	Disc	Staples	Health Care	Fin	IT	Telcos	Utilities
ALL WORLD	-4%	-8%	-3%	-2%	2%	-8%	-6%	-12%	-4%	-6%	13%
REGIONS											
Asia Ex Jp	-3%	40%	-16%	8%	10%	-20%	12%	-7%	2%	-29%	-1%
Japan	10%	-24%	25%	15%	5%	26%	-24%	22%	0%	42%	5%
Australia	17%	55%	18%	26%	-21%	19%	55%	-30%			23%
Europe	-23%	2%	-7%	-24%	-3%	-20%	-16%	-35%	-20%	-21%	-23%
US	-2%	-13%	-7%	-27%	0%	-26%	-10%	30%	-1%	16%	23%
GEM	-2%	30%	-6%	4%	3%	-7%	18%	-13%	0%	-18%	13%
EM Ex Asia	9%	16%	7%	-4%	-11%	29%	71%	-8%		14%	41%
GDM	-7%	-14%	-2%	-9%	-1%	-8%	-12%	-11%	-11%	10%	6%
ASIA											
Developed											
Australia	17%	55%	18%	26%	-21%	19%	55%	-30%			23%
New Zealand	-53%										
Hong Kong	21%			4%	48%			31%			11%
Japan	10%	-24%	25%	15%	5%	26%	-24%	22%	0%	42%	5%
Singapore	39%			53%	42%	56%		15%			
Emerging											
China	13%	23%	-10%	17%	-2%	27%	18%	30%	8%	28%	25%
India	-6%	57%	-23%	-31%	-13%	-44%	95%	3%	19%	45%	-6%
Indonesia	-1%	11%	-21%	-55%	-1%	-10%	63%	-2%	-51%	-37%	-4%
Indonesia	-11%	30%			-33%	-25%		50%		-90%	
Korea	0%	84%	-31%	37%	18%	-32%		-51%	6%	11%	
Malaysia	-12%	93%			-37%	-63%	-57%	68%		-18%	-38%
Philippines	34%			-14%				45%			
Taiwan	-20%		-48%	13%	22%			-73%	-6%	-100%	
Thailand	-28%	60%	-98%		31%			59%			
EMEA											
Developed											
Austria	-19%							-34%			
Belgium	-22%					-27%		-89%			
Denmark	-56%			-98%			-38%				
Finland	-85%			-96%							
France	-35%		-89%	-18%	-21%	58%		-68%	-70%	55%	13%
Germany	-44%		0%	-78%	-16%	97%	-59%	-72%	97%		
Greece	45%				7%			73%			
Ireland	14%										
Israel	-38%							-80%			
Italy	-30%	-49%		32%	-99%			52%			100%
Netherlands	27%			-17%		57%		8%			
Norway	30%	18%									
Portugal	-96%										
Spain	-33%			-56%				10%			70%
Sweden	-10%			-46%	-55%			-60%		-91%	
Switzerland	-29%		-75%	-28%		-45%	-16%	-57%			
United Kingdom	-11%	-25%	8%	7%	26%	-68%	16%	-28%		-40%	-68%
Emerging											
Czech Republic	-30%										
Egypt	99%										
Hungary	-100%										
Morocco											
Poland	9%	-54%	-5%					-30%			-44%
Russia	33%	-7%						45%		69%	
South Africa	10%		-18%		-24%	52%	39%	7%			
Turkey	-14%			-70%	-93%	-7%		-14%			
AMERICAS											
Developed											
Canada	-8%	-1%	-34%	-7%	46%	13%		46%	-100%	-36%	-2%
United States	-2%	-13%	-7%	-27%	0%	-26%	-10%	30%	-1%	16%	23%
Emerging											
Brazil	13%	55%	1%	43%	-20%	26%		-19%		-71%	34%
Chile	20%					23%		-40%			73%
Colombia	-9%		7%					-40%			
Mexico	32%		-71%	65%		7%		-36%			
Peru	91%										

Source: JPMorgan

Information Coefficient Matrix – Earnings

Information co-Efficient Matrix

	ALL	Energy	Materials	Indust	Disc	Staples	Health Care	Fin	IT	Telcos	Utilities
ALL WORLD	12%	21%	21%	8%	11%	18%	-5%	12%	4%	2%	10%
REGIONS											
Asia Ex Jp	14%	-7%	21%	31%	-1%	19%	23%	15%	-7%	19%	36%
Japan	10%	29%	7%	10%	14%	-13%	15%	-14%	26%	-46%	25%
Australia	-5%	-17%	-35%	-33%	-31%	-51%	-86%	28%			92%
Europe	1%	26%	29%	-16%	11%	9%	15%	0%	-2%	-17%	6%
US	5%	7%	-3%	1%	12%	16%	-18%	16%	1%	-24%	-19%
GEM	14%	4%	19%	21%	9%	20%	2%	15%	-6%	17%	18%
EM Ex Asia	13%	22%	18%	-16%	20%	22%	-53%	8%		23%	-3%
GDM	11%	23%	23%	6%	12%	18%	-5%	10%	8%	-14%	8%
ASIA											
Developed											
Australia	-5%	-17%	-35%	-33%	-31%	-51%	-86%	28%			92%
New Zealand	-54%										
Hong Kong	-13%			23%	-29%			-19%			46%
Japan	10%	29%	7%	10%	14%	-13%	15%	-14%	26%	-46%	25%
Singapore	24%			52%	-82%	65%		-4%			
Emerging											
China	3%	10%	-2%	11%	-3%	4%	4%	-9%	-4%	-12%	13%
India	29%	-29%	31%	33%	34%	-32%	21%	14%	-11%	-26%	71%
Indonesia	6%	-9%	-13%	57%	-75%	42%	33%	18%	-50%	-98%	-8%
Korea	3%	-84%		32%	78%			24%		-26%	
Malaysia	21%	69%	29%	38%	-13%	11%		-19%	58%	88%	
Philippines	31%	89%		-20%	-58%	19%		62%		80%	71%
Taiwan	-12%			-46%				38%			
Thailand	8%		52%	50%	-19%			29%	-17%	-90%	
EMEA											
Developed											
Austria	-29%							59%			
Belgium	30%					29%		34%			
Denmark	-50%			-77%			-29%				
Finland	-20%			76%							
France	-7%		64%	-9%	-7%	22%		5%	68%	-34%	33%
Germany	-21%		-31%	-79%	3%	-59%	-67%	63%	-66%		
Greece	-3%				92%			-72%			
Ireland	-82%										
Israel	6%							100%			
Italy	11%	-90%		24%	13%			5%			30%
Netherlands	-4%			-24%		-75%		-80%			
Norway	-1%	-64%									
Portugal	-28%										
Spain	-7%			-73%				18%			-40%
Sweden	-55%			-6%	-18%			-96%		-87%	
Switzerland	30%		76%	25%		7%	61%	-1%			
United Kingdom	18%	97%	66%	-5%	22%	44%	46%	-4%		41%	64%
Emerging											
Czech Republic	-91%										
Egypt	-44%										
Hungary	30%										
Morocco											
Poland	4%	-62%	-92%					8%			58%
Russia	19%	32%						-36%		78%	
South Africa	31%		24%		1%	-14%	-64%	57%			
Turkey	-36%			4%	-99%	-4%		-14%			
AMERICAS											
Developed											
Canada	16%	38%	44%	19%	65%	39%		-25%	-98%	39%	-57%
United States	5%	7%	-3%	1%	12%	16%	-18%	16%	1%	-24%	-19%
Emerging											
Brazil	35%	84%	58%	74%	23%	42%		11%		99%	27%
Chile	52%					30%		60%			34%
Colombia	-29%		-77%					-6%			
Mexico	-18%		28%	-45%		1%		7%			
Peru	-64%										

Source: JPMorgan

Information Coefficient Matrix – Price

Information co-Efficient Matrix

	ALL	Energy	Materials	Indust	Disc	Staples	Health Care	Fin	IT	Telcos	Utilities
ALL WORLD	3%	24%	0%	-1%	8%	18%	3%	-10%	3%	-17%	-2%
REGIONS											
Asia Ex Jp	17%	4%	14%	34%	15%	11%	-2%	-1%	12%	-41%	35%
Japan	12%	89%	43%	-5%	17%	25%	-12%	-14%	38%	-21%	4%
Australia	-22%	-80%	-27%	-2%	-75%	-50%	-73%	13%			-92%
Europe	-2%	-18%	-13%	9%	14%	37%	54%	-22%	-42%	4%	-12%
US	6%	21%	-15%	-23%	22%	-1%	-14%	23%	5%	33%	-12%
GEM	18%	8%	22%	28%	25%	14%	9%	7%	14%	-24%	6%
EM Ex Asia	20%	13%	28%	1%	41%	32%	51%	15%		1%	-35%
GDM	-4%	24%	-15%	-10%	3%	18%	2%	-24%	-4%	1%	-10%
ASIA											
Developed											
Australia	-22%	-80%	-27%	-2%	-75%	-50%	-73%	13%			-92%
New Zealand	87%										
Hong Kong	2%			-23%	-1%			-1%			-71%
Japan	12%	89%	43%	-5%	17%	25%	-12%	-14%	38%	-21%	4%
Singapore	63%			61%	98%	95%		2%			
Emerging											
China	5%	7%	23%	11%	2%	-10%	-18%	-2%	-8%	-28%	17%
India	16%	21%	22%	43%	15%	-31%	-24%	-33%	-36%	-59%	45%
Indonesia	22%	25%	-35%	-40%	0%	-56%	41%	43%	-75%	95%	52%
Korea	40%	-34%			53%	73%		54%		92%	
Malaysia	14%	34%	-12%	32%	9%	31%		-30%	36%	93%	
Philippines	20%	-85%		66%	90%	-20%		-25%		77%	46%
Taiwan	-17%			-50%				78%			
Thailand	24%		74%	80%	65%	-100%		25%	3%	-53%	
EMEA											
Developed											
Austria	14%							34%			
Belgium	11%					95%		-54%			
Denmark	-57%			-100%			75%				
Finland	3%			-46%							
France	-21%		23%	21%	21%	65%		-84%	-56%	64%	-69%
Germany	5%		27%	22%	24%	12%	-37%	37%	-74%		
Greece	63%				7%			-34%			
Ireland	-68%										
Israel	30%							-72%			
Italy	-7%	98%		87%	-94%			36%			88%
Netherlands	-22%			-57%		55%		-25%			
Norway	-36%	-26%									
Portugal	-58%										
Spain	-18%			-36%				-1%			-42%
Sweden	4%			64%	-53%			20%		-49%	
Switzerland	43%		69%	63%	11%	44%	87%	-1%			
United Kingdom	21%	-5%	-35%	-49%	22%	53%	76%	38%		-14%	46%
Emerging											
Czech Republic	6%										
Egypt	-66%										
Hungary	91%										
Morocco											
Poland	-17%	-100%	-4%					-44%			18%
Russia	20%	-4%	54%					5%		64%	
South Africa	37%		-25%		77%	31%	94%	50%			
Turkey	39%			22%	87%	85%		15%			
AMERICAS											
Developed											
Canada	-25%	40%	-9%	-38%	28%	-21%		16%	-97%	-84%	26%
United States	6%	21%	-15%	-23%	22%	-1%	-14%	23%	5%	33%	-12%
Emerging											
Brazil	21%	-96%	45%	60%	30%	47%		7%		93%	-45%
Chile	64%		-28%			86%		91%			98%
Colombia	64%		42%					-71%			
Mexico	8%		-10%	-44%		-48%		47%			
Peru	-99%										

Source: JPMorgan

Information Coefficient Matrix – Quality

Information co-Efficient Matrix

	ALL	Energy	Materials	Indust	Disc	Staples	Health Care	Fin	IT	Telcos	Utilities
ALL WORLD	-5%	5%	-15%	-4%	-7%	3%	-24%	23%	-21%	-6%	7%
REGIONS											
Asia Ex Jp	1%	29%	9%	27%	-2%	2%	-19%	0%	5%	-36%	8%
Japan	-9%	87%	4%	-18%	-5%	9%	-8%	-4%	-30%	-19%	36%
Australia	-11%	29%	5%	8%	-53%	-66%	-51%	-47%			100%
Europe	17%	-22%	-3%	-2%	15%	16%	14%	47%	43%	-27%	6%
US	-16%	15%	-51%	-8%	-10%	4%	-41%	19%	-41%	30%	14%
GEM	5%	17%	9%	27%	0%	6%	-24%	14%	6%	-14%	14%
EM Ex Asia	10%	-8%	6%	30%	-20%	14%	-32%	31%		48%	24%
GDM	-11%	0%	-28%	-16%	-10%	-3%	-23%	30%	-31%	8%	5%
ASIA											
Developed											
Australia	-11%	29%	5%	8%	-53%	-66%	-51%	-47%			100%
New Zealand	-26%										
Hong Kong	-28%			19%	-39%			-32%			95%
Japan	-9%	87%	4%	-18%	-5%	9%	-8%	-4%	-30%	-19%	36%
Singapore	9%			16%	88%	83%		8%			
Emerging											
China	1%	13%	2%	15%	-20%	-4%	-14%	-18%	15%	-12%	26%
India	6%	74%	-36%	6%	-5%	-19%	-21%	18%	48%	-44%	42%
Indonesia	8%	-37%	56%	61%	96%	84%	-48%	-10%	4%	-100%	15%
Indonesia	51%	17%			53%	22%		46%		66%	
Korea	3%	-43%	60%	19%	-28%	-37%		-28%	-21%	37%	
Malaysia	30%	5%			65%			-6%		89%	27%
Philippines	3%			-16%				62%			
Taiwan	9%		85%	74%	10%			-41%	3%	-97%	
Thailand	-43%	99%	-52%		-65%			53%			
EMEA											
Developed											
Austria	29%							13%			
Belgium	-18%					17%		-91%			
Denmark	54%						99%				
Finland	37%			64%							
France	24%		52%	3%	-10%	-8%		16%	90%	6%	-90%
Germany	4%		25%	24%	35%	-81%	-45%	62%	-94%		
Greece	56%				-82%			80%			
Ireland	100%										
Israel	64%							-24%			
Italy	6%	51%		-87%	91%			71%			7%
Netherlands	4%			-49%		-16%		-2%			
Norway	-8%	3%									
Portugal	76%										
Spain	17%			-5%				0%			-2%
Sweden	3%			68%	91%			36%		-79%	
Switzerland	22%		68%	51%		-48%	3%	59%			
United Kingdom	0%	-41%	-76%	27%	17%	53%	-44%	43%			-64%
Emerging											
Czech Republic	60%										
Egypt	24%										
Hungary	-69%										
Morocco											
Poland	-8%	91%	60%					30%			99%
Russia	-47%							38%		-67%	
South Africa	4%		-29%		-20%	-9%	27%	57%			
Turkey	16%			21%	55%	72%		-53%			
AMERICAS											
Developed											
Canada	-44%	-14%	-17%	-18%	-38%	-20%		-20%	-99%	-1%	20%
United States	-16%	15%	-51%	-8%	-10%	4%	-41%	19%	-41%	30%	14%
Emerging											
Brazil	5%	-99%	-32%	-11%	-73%	-46%		15%		89%	13%
Chile	25%					88%		4%			18%
Colombia	-11%							-73%			
Mexico	2%		-22%	-33%		61%		-59%			
Peru	-96%										

Source: JPMorgan

Information Coefficient Matrix – Model

Information co-Efficient Matrix

	ALL	Energy	Materials	Indust	Disc	Staples	Health Care	Fin	IT	Telcos	Utilities
ALL WORLD	4%	18%	4%	2%	7%	17%	-10%	0%	-7%	-11%	17%
REGIONS											
Asia Ex Jp	13%	31%	9%	43%	10%	7%	14%	2%	2%	-38%	41%
Japan	14%	69%	38%	13%	16%	16%	-2%	6%	14%	-1%	35%
Australia	-8%	5%	-16%	10%	-60%	-58%	-79%	-5%			64%
Europe	-6%	0%	8%	-19%	15%	18%	36%	-20%	-8%	-25%	-13%
US	-1%	6%	-32%	-24%	9%	5%	-26%	39%	-11%	24%	-5%
GEM	16%	30%	19%	33%	16%	17%	7%	4%	3%	-18%	30%
EM Ex Asia	23%	27%	27%	1%	16%	42%	-2%	14%		51%	25%
GDM	-3%	11%	-6%	-9%	3%	15%	-12%	-2%	-14%	1%	6%
ASIA											
Developed											
Australia	-8%	5%	-16%	10%	-60%	-58%	-79%	-5%			64%
New Zealand	-47%										
Hong Kong	-2%			22%	-9%			7%			50%
Japan	14%	69%	38%	13%	16%	16%	-2%	6%	14%	-1%	35%
Singapore	47%			67%	18%	91%		8%			
Emerging											
China	18%	51%	-5%	7%	18%	-58%	30%	0%	-8%	28%	82%
India	14%	8%	-20%	-8%	-19%	57%	65%	11%	-71%	-96%	31%
Indonesia	32%	-57%			49%	64%		60%		48%	
Korea	12%	76%	23%	62%	-12%	-2%		-54%	40%	33%	
Malaysia	32%	97%		6%	-37%	51%		55%		94%	72%
Philippines	5%			-39%				66%			
Taiwan	11%		74%	78%	17%			-38%	-9%	-98%	
Thailand	-34%	72%	-73%		65%			62%			
EMEA											
Developed											
Austria	-13%							5%			
Belgium	6%					46%		-81%			
Denmark	-51%			-90%			12%				
Finland	-19%			73%							
France	-26%		37%	-4%	-14%	51%		-73%	24%		2%
Germany	-32%		7%	-83%	12%	-8%	-87%	71%	-84%		
Greece	84%				61%			85%			
Ireland	-28%										
Israel	20%							99%			
Italy	-30%	-63%		38%	-98%			9%			94%
Netherlands	2%			-62%		-64%		-33%			
Norway	-7%	-39%									
Portugal	-37%										
Spain	-30%			-63%				15%			-32%
Sweden	-36%			15%	-51%			-76%		-99%	
Switzerland	27%		74%	34%		-17%	98%	-18%			
United Kingdom	12%	23%	-9%	-8%	32%	44%	75%	14%		1%	15%
Emerging											
Czech Republic	-95%										
Egypt	32%										
Hungary	5%										
Morocco											
Poland	-6%	-67%	3%					-55%			30%
Russia	38%	2%						63%		77%	
South Africa	33%		-12%		25%	18%	33%	54%			
Turkey	-4%			-22%	-100%	45%		-25%			
AMERICAS											
Developed											
Canada	-20%	24%	-11%	-3%	54%	4%		8%	-100%	-77%	-31%
United States	-1%	6%	-32%	-24%	9%	5%	-26%	39%	-11%	24%	-5%
Emerging											
Brazil	35%	39%	49%	78%	8%	32%		-2%		100%	16%
Chile	71%					73%		43%			85%
Colombia	-3%		4%					-82%			
Mexico	13%		-38%	18%		36%		-15%			
Peru	-74%										

Source: JPMorgan

Factor Definitions

VALUATION FACTORS	
Historical Book/Market Ratio	This factor ranks stocks based on month end market cap and most recent published 12 month trailing Historical Book Value. Source: MSCI
Historical P/Cash Earnings Ratio	Stocks are ranked by their P/Cash Earnings Ratio. The difference between earnings and cash earnings is that depreciation on fixed assets is added to earnings to arrive at cash earnings. Cash earnings also include amortization when it is not separately reported on the accounts. Source: MSCI
Cash Flow Yield	Forecast Cash Flow for both FY1 and FY2 is combined and then stocks are ranked such that those stocks with the highest Cash Flow yield are allocated to quintile 1. Source: Thomson
Historical Earnings Yield	Stocks are ranked by their P/Historical Earnings Ratio. Those stocks with the lowest ratio are allocated to quintile 1 and those with the highest to quintile 5. Historical earnings are updated quarterly, semi annually or annually depending on the country. Source: MSCI
1 year forward PE	A pro-rata of consensus analyst FY1 and FY2 forecasts is used to create a 12 month forward earnings estimate number. Stocks are ranked such that those with the lowest ratio are allocated to quintile 1 and those with the highest to quintile 5. Source: Thomson
1 year forward PE Relative To History	Stocks are ranked by their current forecast P/E ratio relative to their historical 3 year average P/E 1 year forward forecast PE Relative To History. Those stocks that are 'cheapest' relative to their history are allocated to quintile 1 and those that are most expensive to quintile 5. Source: Thomson
1 year forward PE Relative To Sector	Stocks are ranked based on their own forecast P/E relative to the P/E of their sector. This alleviates the inherent sector bias from the factor with those stocks that are cheapest relative to their sector being allocated to quintile 1 and those which are most expensive to quintile 5. Source: Thomson
Historical P/Sales Ratio	Stocks are ranked by their P/Historical Sales Ratio such that those stocks generating the largest amount of sales per share are allocated to quintile 1. Source: MSCI
Historical Dividend Yield	Stocks are ranked by their current 12mth trailing divided yield such that the biggest dividend payers are allocated to quintile 1 and the smallest dividend payers to quintile 5. Source: MSCI
SENTIMENT FACTORS	
Recommendation	The consensus recommendations for all stocks are ranked from strong buy to strong sell. Those stocks with the best recommendations are allocated to quintile 1 and those with the worst recommendation to quintile 5. Previous work by JPMQuant suggests that this factor is more potent in developing markets and tends to be a poor performer in developed markets such as Australia the US and Japan. Source: Thomson.
1 Mth Change in Recom	Stocks are ranked by their change in consensus recommendation over the last month. Those with the biggest improvement are allocated to quintile 1 (regardless of whether they have moved from Strong Sell to Sell or Buy to Strong Buy etc) and those with the biggest decline are allocated to quintile 5. Change in recommendation appears to be more useful than absolute level in many of the developed markets analysed but suffers from significantly larger turnover. Source: Thomson
3 Mth Change in Recom	Stocks are ranked by their change in consensus recommendation over the last 3 months. Those with the biggest improvement are allocated to quintile 1 (regardless of whether they have moved from Strong Sell to Sell or Buy to Strong Buy etc) and those with the biggest decline are allocated to quintile 5. Change in recommendation appears to be more useful than absolute level in many of the developed markets analysed but suffers from significantly larger turnover. Source: Thomson

PRICE FACTORS	
12 Mth Price Momentum	The 12 Mth Price Momentum factor is calculated by ranking stocks by their total return over the previous 12 months. Momentum is a powerful factor observable in many markets. Source: MSCI
Volatility Adjusted Price Momentum	12 month price momentum divided by the volatility of monthly returns over the prior 12 months. This factor looks to reward stocks delivering consistent momentum. Source: MSCI
1 Mth Price Momentum	The 1 Mth Price Momentum factor is calculated by ranking stocks by their total return over the previous month. It is often employed 'in reverse' on account of the reversion that is observable in many markets and sectors. (Last months winners become this months losers and vice-versa.) Source: MSCI
3 Mth Price Momentum	The 3 Mth Price Momentum factor is calculated by ranking stocks by their total return over the previous 3 months. Momentum is a powerful factor observable in many markets. Source: MSCI
6 Mth Price Momentum	The 6 Mth Price Momentum factor is calculated by ranking stocks by their total return over the previous 6 months. Momentum is a powerful factor observable in many markets. Source: MSCI
Percent Off 52 Week High	This factor ranks stocks by their Percent Off 52 Week High descending such that those stocks at or close to their highs are allocated to quintile 1 and those stocks furthest from their highs are allocated to quintile 5. This factor has a strong correlation with momentum. Source: ExShare
6 Mth Price Acceleration	To calculate the 6 Mth Price Acceleration we perform a regression on a year of daily prices to calculate the gradient of the trend (adjusted for volatility). We do the same thing "as of" 6 months ago and look at the change in the gradient to provide us with a measure of price acceleration. Stocks are ranked such that those stocks that have accelerated the most are awarded the highest scores. Source: ExShare
3 Mth Price Acceleration	To calculate the 3 Mth Price Acceleration we perform a regression on a year of daily prices to calculate the gradient of the trend (adjusted for volatility). We do the same thing "as of" 3 months ago and look at the change in the gradient to provide us with a measure of price acceleration. Stocks are ranked such that those stocks that have accelerated the most are awarded the highest scores. Source: ExShare
10 Day Relative Strength	A popular traders tool the Relative Strength Indicator is used to highlight stocks as overbought or oversold. Generally an RSI of 80 or higher indicates an overbought stock and an RSI of sub 20 indicates an oversold stock. We calculate the RSI over both 2 weeks (10 trading days) and also over one month. Source: ExShare
30 Day Relative Strength	As above but based on a 30 day window
60 Day Volatility	We rank stocks according to their 60 days Volatility. The most volatile stocks are added to the long portfolio. Source: Thomson
EARNINGS FACTORS	
Risk-Adjusted Earnings Momentum	To adjust for any risk associated with a stock's earnings revisions the earnings revision number is normalized by the coefficient of variation. This serves to penalise stocks with high earnings risk and reward stocks with high earnings certainty. This is arguably a cleaner measurement of earnings revisions. Source: Thomson
Forecast Earnings Growth	Using consensus forecasts for FY1 and FY2 we calculate the forecast growth and we then use this to rank our universe. Analysts are notoriously over optimistic with growth forecasts and this is reflected in the poor performance of this factor in most test universes. Source: Thomson
Earnings Momentum (1Mth Change)	This factor ranks stocks by their 1 month forward earnings momentum. For each stock we calculate the change in FY1 earnings over the last month and the change in FY2 earnings over the last month. We calculate the one month revision number by taking the average of the change in FY1 and FY2. Source: Thomson

Earnings Momentum (3Mth Change)	This factor ranks stocks by their 3 month forward earnings momentum. For each stock we calculate the change in FY1 earnings over the last 3 months and the change in FY2 earnings over the last 3 months. We calculate the 3 month revision number by taking the average of the change in FY1 and FY2. Source: Thomson
Earnings Momentum	This factor ranks stocks by their composite forward earnings momentum (1Mth + 3 Mth). For each stock we calculate the change in FY1 earnings over the last month and the last 3 months and the change in FY2 earnings over the last month and the last 3 months. We calculate both a 3 month revision number and a one month revision number by taking the average of the change in FY1 and FY2 and then finally we calculate a composite value as the average of the 1 month and 3 month values. Source: Thomson
5 yrs Historical Earnings Growth	Companies are ranked by their average annualised EPS growth over the past 5 years. Those companies with the highest average growth are allocated to quintile 1 and those with the lowest average growth are allocated to quintile 5. Source: Thomson
Net Revisions to FY1	A broad brush approach to earnings revisions that is arguably more suited to markets with questionable data quality. We calculate a FY1 Net Revision by looking at all analyst revisions in the last 4 weeks and calculating the number of upward revisions less the number of downward revisions expressed as a percentage of the total number of revisions made. Source: Thomson
Net Revisions to FY2	A broad brush approach to earnings revisions that is arguably more suited to markets with questionable data quality. We calculate a FY2 Net Revision by looking at all analyst revisions in the last 4 weeks and calculating the number of upward revisions less the number of downward revisions expressed as a percentage of the total number of revisions made. Source: Thomson
QUALITY FACTORS	
Earnings Risk (also known as EPS Co-Eff of Variation)	We rank stocks by the average of FY1 and FY2 Coefficient of Variation. We use coefficient of variation as a proxy for earnings risk with those stocks with the largest spread in earnings being considered most 'risky'. We find that the stocks with the smaller coefficient of variation (and hence the most earnings certainty) tend to outperform their riskier peers. Source: Thomson
Coverage	We rank stocks by Number of Consensus Estimates (FY1) which we use to indicate the number of covering analysts. Quintile 1 is formed from the most readily covered stocks and Quintile 5 is formed from the least covered stocks. This factor is often regarded as a proxy for information uncertainty rather than an Alpha or Risk Factor and previous research by JPMQuant in the Australian market supports this thesis. Source: Thomson
Historical Return On Equity	Stocks are ranked on their historical return on equity (ROE) with those stocks with the largest ROE being allocated to quintile 1 and those with the poorest ROE being allocated to quintile 5. To eliminate any forward looking bias, the ROE figure is only updated on the date that the numbers became available to the market. Source: MSCI
ROE Growth	To calculate the change In ROE we look compare a stocks ROE with it's ROE 12 months prior at each point in time. Those stocks that have seen the biggest increase in ROE are allocated to quintile 1 and those that have seen the biggest decline in ROE are allocated to quintile 5. Source: MSCI
Return On Assets	Stocks are ranked on their return on Assets (ROA) with those stocks with the largest ROA being allocated to quintile 1 and those with the poorest ROA being allocated to quintile 5. Source: MSCI
RISK FACTORS	
MSCI BETA	Beta for the stock relative to its local benchmark index.

COMPOSITE FAMILY FACTORS	
Earnings & Sentiment	Combines three flavours of momentum measure. Risk adjusted 3 mth EPS momentum, FY2 Net revisions and Recommendation one month change are all normalised and combined equally to form the composite.
Valuation	PE + PE relative to sector + forecast Growth
Price	Equally combines a normalised 12 month price momentum factor (75%) with a 1 month price reversion factor (25%).
Quality	Combines ROE and Earnings Risk (inverted such that stocks with tightest forecasts are rewarded with a higher score)
Composite Q-Score Model	A multi factor combination of Valuation, Earnings& Sentiment, Quality and Price composite factors.

The JPM Q-Score - A Composite Approach

The JPM Q-Score model is designed to act as a ‘catch all’ generic quant model suitable for use in many markets is. The factors used in our Q-Score have been selected as they are ten of the most popular quant factors ‘in general use’. That said they are popular for a reason having been widely researched by many practitioners (ourselves included) and historically have been found to be some of the strongest and most consistent ‘alpha generators’ in the quant analysts’ stock selection armoury.

Figure 2: The Quant Return Drivers – Ranking process

Valuations: P/E Vs Market (12mth fwd EPS)	Compares stock P/E to country P/E. The cheapest stock (lowest P/E) allocated a score of 100%. The most expensive stock is allocated a score of 0%. (Loss makers are scored below high P/E stocks)
Valuations: P/E Vs Sector (12mth fwd EPS)	Compares stock P/E to country sector P/E. The cheapest stock (lowest P/E) allocated a score of 100%. The most expensive stock is allocated a score of 0%. (Loss makers are scored below high P/E stocks)
Valuations: EPS Growth (forecast)	Ranks stocks based on their forecast growth from EPS mean FY1 to EPS mean FY2. The stock with the highest forecast growth receives 100% whilst the stock with the lowest forecast growth is allocated a score of 0%.
Momentum: 12 Month Price Momentum	Ranks stocks based on their total return over the last year. The stock with the highest total return receives 100% whilst the stock with the lowest total return is allocated a score of 0%.
Momentum: 1 Month Price Reversion	Ranks stocks based on their total return over the last month. The stock with the LOWEST total return receives 100% whilst the stock with the HIGHEST total return is allocated a score of 0%.
Quality: Return On Equity (forecast)	Ranks stocks based on their Earnings Risk which is proxied by examining the spread in analyst EPS forecasts (aka the co-efficient of variation). the stocks with the LOWEST spread receives a score of 100% whilst the stock with the highest spread and hence the most earnings risk is allocated score of 0%.
Quality: Earnings Risk (Variation in Consensus)	Ranks stocks based on their Return on Equity. The stock with the highest return on equity receives a score of 100% whilst the stock with the lowest return on equity is allocated a score of 0%.
Earnings&Sentiment: Earnings Momentum 3mth	Ranks stocks based on their Earnings Momentum. Earnings momentum is calculated as the average of the change in FY1 and FY2 mean EPS measured over 3 months and adjusted for risk by dividing by the spread in analyst forecasts. The stock with the highest risk adjusted earnings momentum receives a score of 100% whilst the stock with the lowest risk adjusted earnings momentum is allocated a score of 0%.
Earnings&Sentiment: Change in Recomm	Recommendations are mapped onto a scale from 1 (best) to 5 (worst). The change in the mean recommendation over the last 4 weeks is then used to rank the stocks. The stock with the biggest recommendation upgrade is allocated a score of 100% whilst the most downgraded stock is allocated a score of 0%.
Earnings&Sentiment: Net Revisions FY2 EPS	Ranks stocks based on the net analyst revisions to FY2 EPS over the last 4 weeks. Net revisions is calculated as (upgrades-downgrades)/(Upgrades+Downgrades). The stock with the highest net revision ratio receives 100% whilst the stock with the lowest net revision ratio is allocated a score of 0%.

Source: J.P. Morgan Quant

What are we capturing with these factors?

These ten factors can broadly be divided into four key categories (or factor families) to which we believe a portion of the stocks subsequent return can be attributed.

There is extensive literature available on each of these categories and we have ourselves explored many of these effects over the last ten or so years. Clearly this is not the correct forum for going into great detail and instead a (very!) brief summary follows:

VALUATION

Many quant researchers have explored the ‘Value Anomaly’ and it is widely recognised that low PE stocks outperform high PE stocks over the long term. Similar

analysis has shown consistent results using P/Sales, P/Dividend and P/Book ratios. Our studies have also shown that Earnings Growth can complement straight Value factors in many markets.

MOMENTUM

Momentum theory for stock prices suggests that companies that do well in one (long term) investment period will continue to do well in the subsequent investment horizon. Over short time frames (<1 month) studies have also highlighted the tendency of stocks to overreact leading to short term reversion. We have widely observed these phenomena in our own testing.

EARNINGS & SENTIMENT

We believe that the market is not efficient at incorporating new information and a window of opportunity exists to exploit recent analyst revisions in earnings and recommendations. Similarly analyst behavioural biases lead to subsequent changes suggesting an exploitable serial correlation in earnings upgrades/downgrades.

QUALITY

Whilst arguably less readily observable than some other factors (especially in more emerging markets), it is generally accepted that it is desirable to tilt portfolios towards highly profitable and good quality businesses. Similarly over the long term the market also appears to reward 'earnings certainty' and penalise those stocks that carry a large degree of earnings risk.

Generating the Q-Score

Given we have now quantified each stock's exposure to what we believe are four of the key drivers of return the next step is to combine these scores into an overall metric that can be considered indicative of the stock's expected return. We call this the Q-Score and we use a standard quantitative approach to combining the individual factor scores. This involves normalizing our data and establishing the factor premiums (or weights) that we are going to allocate to each of the drivers. We have a number of techniques that we use to help us establish the factor premiums though we would urge 'budding quant analysts' not to fall into the trap of thinking that this is by any means an exact science!

In the case of our Q-Score we are not trying to build a quant process per se and are instead looking to provide the market with a general indication of likely outperformance on a per stock basis. For that reason we have kept things relatively simple. We have used the same factor premiums across all markets and have not tailored the Q-Score to any particular investment style. Rather we have looked to provide a 'Generic Alpha score' that can be used across a global spectrum.

In the table below we show the factor premiums that have been applied to the ten input factors to generate the overall Q-Score. Note that due to limits in data availability we have applied some additional rules to our process. In particular no Q-Score is allocated to a company that does not have an exposure to our key factor families of Value and Earnings. A stock may be missing either a Quality exposure or a Momentum exposure (but not missing both!) and still be allocated a Q-Score. When considering the individual drivers a minimum of 50% of the drivers must be available for a family score to be calculated with some factors being mandatory members of the family. The mandatory items are shown in the table as **bold**.

Figure 3: Converting the Quant Return Drivers into the Q-Score

<p>VALUATION [30%]</p> <p>COMPONENT FACTORS P/E Vs Market (12mth fwd EPS) [34%] P/E Vs Country Sector (12mth fwd EPS) [33%] EPS Growth (FY1 mean to FY2 mean) [33%]</p>	<p>EARNINGS & SENTIMENT [30%]</p> <p>COMPONENT FACTORS Earnings Momentum 3mth (Risk Adj.) [34%] 1Mth change in consensus recomms [33%] Net Revisions to mean FY2 EPS [33%]</p>
<p>MOMENTUM [20%]</p> <p>COMPONENT FACTORS 12Mth Price Momentum [75%] 1Mth Price Reversion [25%]</p>	<p>QUALITY [20%]</p> <p>COMPONENT FACTORS ROE (average of FY1 & FY2 forecast) [50%] Earnings Risk (Variation in forecast EPS) [50%]</p>

Source: J.P.Morgan Quant

The J.P. Morgan Q-Score composite quant factor is generally the starting point we use in most of our research and the benchmark that we look to ‘beat’ through the introduction of new ideas.

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IB clients*	55%	49%	34%
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IB clients*	75%	66%	54%

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