



**S&P
CAPITAL IQ**

McGRAW HILL FINANCIAL

Equity Market Pulse

Quantamental Research

- *SPOTLIGHT: Global Earnings Growth Expectations for 2016 by Sector*
- *Global Growth Estimates*
- *Global Valuation Analysis*
- *Global Operating Analysis*
- *Risk and Return by Region*
- *Investment Strategy Performance*

Q4 2015

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Introduction

Equity Market Pulse provides professional investors with insights into global equity market fundamentals and performance at a glance. Spanning developed and emerging markets, it provides perspective on growth, valuations, operating efficiency and investment strategy. Our global analysis is broken into five themes:

Growth: Bottom-up analyst growth estimates by region using S&P Capital IQ consensus estimates.

Valuation: Analysis of earnings, sales, and cash flow-based valuations metrics.

Operating Performance: Trends in return on equity (ROE) and its components.

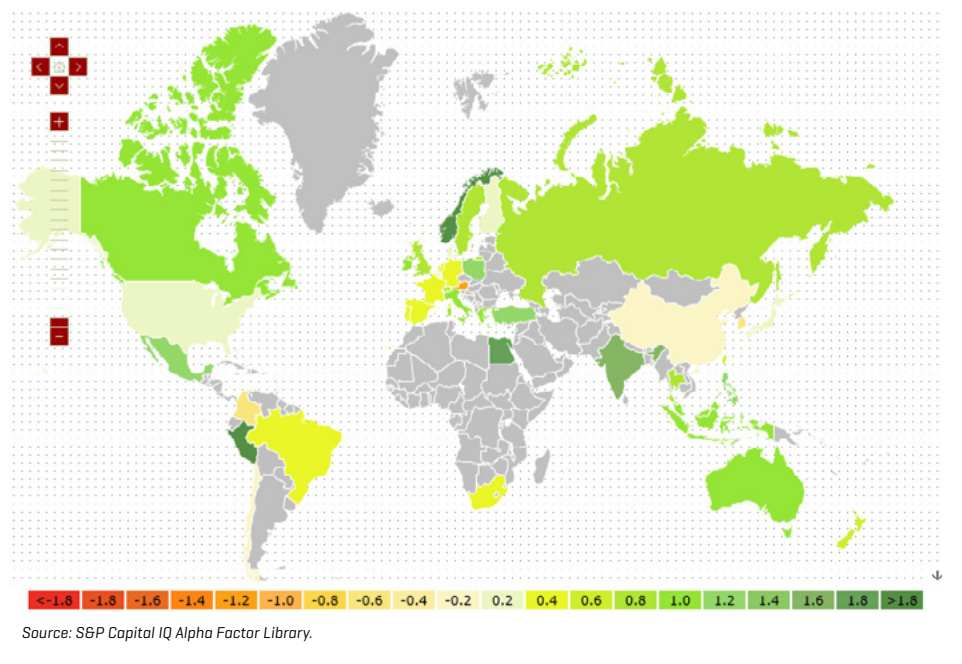
Risk/Return: Tracks the dynamics of equity market returns and volatility.

Strategy Returns: Tracks the performance of eight common global investment strategies.

Executive Summary

- Despite recent downward revisions, analysts continue to project strong EPS and revenue growth globally for 2016.
- **Analyst-estimated 2016 global growth is broad, with significant EPS growth projected for all nine regions and nine of ten economic sectors (see Spotlight on next page).**
- Average estimated 2016 EPS growth across our nine regions is 10.8% and average estimated revenue growth is 6.3%.
- **Japan, developed Europe, and the U.S. continue to lead on a variety of metrics, including EPS growth, estimate revisions, profitability, and valuation (ex U.S.).**
- Although valuations have marched higher since the summer of 2011, they have moderated recently amid robust 2016 earnings estimates and stagnating global stock markets.
- Developed Europe (ex UK) and Japan are the only regions with rising 12-month market returns, and volatility is rising in eight of nine regions.
- A review of eight common global investment strategies shows that risk-based investment styles (high volatility and small cap) continue to underperform, while return on equity remains the top performing strategy globally.

Return on Equity
Excess Returns of Top 20% of Stocks over Past 12 Months by Country



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SPOTLIGHT

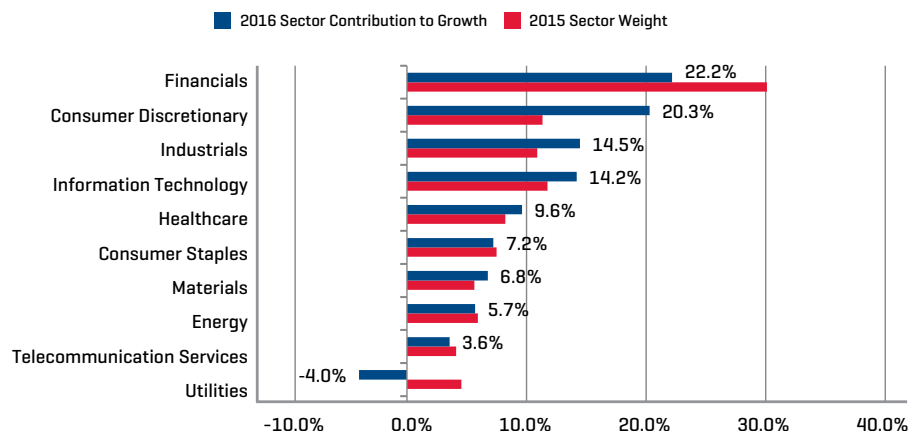
How Broad-Based is Expected 2016 EPS Growth?

Based on bottom-up analyst EPS estimates across nine regions¹, global EPS growth in USD is estimated to be 9.4% in 2016, versus -3.7% estimated for 2015. [2015 growth estimates in USD are negatively impacted globally by a rising dollar and falling energy and materials prices during the year.]

The chart below shows the estimated percentage contribution by global sector to 2016 growth [blue bars], along with the current percentage weighting of each sector [red bars]. Contribution is defined as the percentage of global EPS growth [i.e., 9.4%] accounted for by each sector. For example, the industrials sector accounts for 14.5% of total global EPS growth for 2016. Contribution percentages sum to 100%.

The chart demonstrates broad-based improvement estimated by analysts for 2016, with strength expected in financials, consumer discretionary, industrials, technology, and healthcare. Also, analysts expect energy and materials companies to add incrementally to growth in 2016, rather than to subtract significantly from growth as they have so far in 2015.

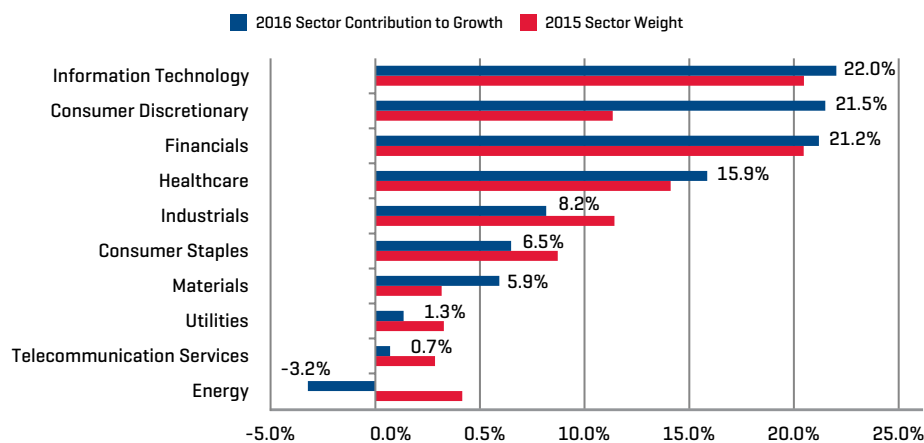
Global Contribution to Total Estimated 2016 EPS Growth by Sector [USD]



Source: S&P Capital IQ Estimates and S&P Quantamental Research. Data as of 11/30/2015.

Likewise, S&P 1500 estimated EPS growth for 2016 [8.4%] is driven by anticipated strength in a variety of sectors, including technology, consumer discretionary, financials, health care, and materials. Analysts estimate a modest negative contribution by U.S. energy companies continuing into 2016.

S&P 1500 Contribution to Estimated 2016 EPS Growth by Sector [USD]



Source: S&P Capital IQ Estimates and S&P Quantamental Research. Data as of 11/30/2015.

¹ The nine regions used in this paper are the U.S., Canada, Latin America, the UK, developed Europe [ex UK], emerging Europe, Japan, developed Asia [ex Japan], and emerging Europe.

Global Growth Estimates—EPS and Sales Growth

Earnings Growth Forecasts (As Of Nov. 30, 2015)

Americas	CY 2014A[%]	CY 2015E[%]	CY 2016E[%]
S&P 1500 Index [USD]	6.2%	-2.4%	8.5%
S&P/TSX Composite Index [CAD]	12.5%	-14.4%	18.6%
S&P Latin America BMI [BRL]	-10.9%	8.2%	21.0%
Europe	CY 2014A	CY 2015E	CY 2016E
S&P United Kingdom BMI [GBP]	3.1%	-12.8%	7.1%
S&P Europe ex UK BMI [EUR]	7.1%	9.1%	10.7%
S&P Europe Emerging BMI [EUR]	-31.8%	11.0%	3.8%
Asia	CY 2014A	CY 2015E	CY 2016E
S&P Japan BMI [JPY]	7.1%	17.5%	10.4%
S&P Asia Pacific Ex-Japan BMI [USD]	0.4%	-5.4%	6.4%
S&P Asia Pacific Emerging BMI [CNY]	3.9%	3.4%	10.4%

Revenue Growth Forecasts

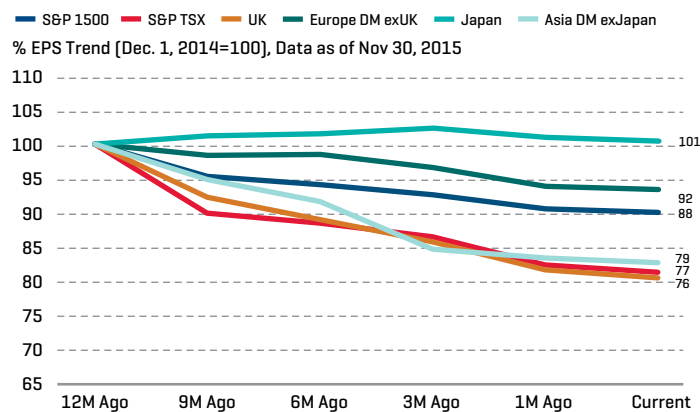
Americas	CY 2014A[%]	CY 2015E[%]	CY 2016E[%]
S&P 1500 Index [USD]	4.0%	-2.8%	4.6%
S&P/TSX Composite Index [CAD]	19.3%	-2.8%	7.5%
S&P Latin America BMI [BRL]	9.0%	19.0%	9.7%
Europe	CY 2014A	CY 2015E	CY 2016E
S&P United Kingdom BMI [GBP]	0.1%	-11.2%	4.6%
S&P Europe ex UK BMI [EUR]	0.7%	4.0%	3.0%
S&P Europe Emerging BMI [EUR]	-6.7%	-3.8%	8.4%
Asia	CY 2014A	CY 2015E	CY 2016E
S&P Japan BMI [JPY]	1.1	2.4	3.4
S&P Asia Pacific Ex-Japan BMI [USD]	[3.0]	[7.7]	5.9
S&P Asia Pacific Emerging BMI [CNY]	6.3	[0.7]	9.8

Source: S&P Capital IQ Estimates and S&P Quantamental Research. Green highlighted cells represent forecast areas of strength discussed in text; red highlighted cells represent forecast areas of weakness discussed in text.

- Excluding the energy sector, 2015 EPS growth is estimated at a global average of 5.5% [7.9% if materials companies are also excluded]. Including energy, that average drops to 1.6%.
- Although EPS estimates for 2016 have been revised down significantly in recent months, they still represent significant growth relative to 2015, at an average of 10.8% across regions.
- Likewise, sales growth estimates for 2016 average 6.3%, vs. being essentially flat for 2015.

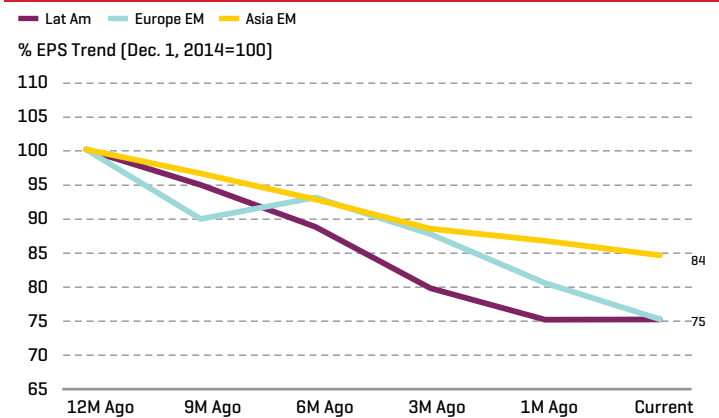
Global Growth Estimates—EPS Estimate Revisions (As Of November 30, 2015)

CY 16 EPS Trend—Developed Markets



Source: S&P Capital IQ Estimates and S&P Quantamental Research. Chart shows calendar year 2016 estimates from December 1, 2014 through November 30, 2015.

CY 15 EPS Trend—Emerging Markets



- Japanese EPS estimates for 2016 have held steady over the past 12 months, and 2015 estimates for Japan [not shown] have been revised sharply upward. With 10% projected growth for the region in 2016, positive revision trends serve as a confirmation that analysts have continued confidence in their outlook.
- Two other regions with 2016 revision strength are developed Europe [ex UK] and the U.S. Over the past six months 2016 EPS estimates have declined by 6% in developed Europe and 5% in the U.S. [S&P 1500], vs. an 8% global average decline.
- Latin American [Latam] estimates are also holding up well, reflecting strength in Mexico, which has seen 2016 estimates in pesos decline by just 3% over the past 12 months. Positively influencing Latam estimates is also a sharp decline in the Brazilian real, which has propped up results for export sectors, especially where export goods are sold in U.S. dollars [e.g., oil].

Global Valuations Analysis

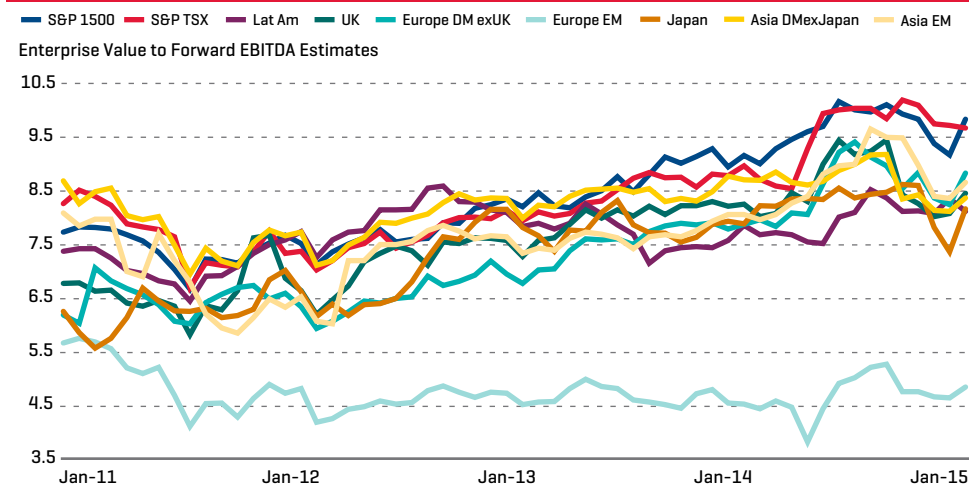
Regional Market Metrics [As Of November 30, 2015]

Americas	S&P 1500	S&P TSX	Latin America
CY 2015 P/E	17.9	17.7	15.2
CY 2016 P/E	16.5	14.9	12.6
Proj LT Growth Rate (Median)	11.2%	8.8%	12.4%
CY 2015 P/E to Growth Ratio	1.6	2.0	1.2
CY 2015 EV/EBITDA	10.7	10.4	8.3
CY 2015 Free Cash Flow Yield	4.5%	1.9%	0.7%
Europe	United Kingdom	Europe DM exUK	Europe EM
CY 2015 P/E	16.5	17.5	9.5
CY 2016 P/E	15.4	15.8	5.4
Proj LT Growth Rate (Median)	8.8%	12.1%	12.3%
CY 2015 P/E to Growth Ratio	1.9	1.4	0.8
CY 2015 EV/EBITDA	9.2	9.5	4.3
CY 2015 Free Cash Flow Yield	4.0%	3.9%	6.9%
Asia	Japan	Asia DM exJapan	Asia EM
CY 2015 P/E	16.2	10.2	12.7
CY 2016 P/E	14.7	9.4	11.6
Proj LT Growth Rate (Median)	9.5%	10.0%	15.6%
CY 2015 P/E to Growth Ratio	1.7	1.0	0.8
CY 2015 EV/EBITDA	8.8	9.4	9.1
CY 2015 Free Cash Flow Yield	3.8%	3.4%	2.1%

Source: S&P Capital IQ Quantamental Research. Green highlighted cells represent forecast areas of strength discussed in text; red highlighted cells represent forecast areas of weakness discussed in text.

- With estimated growth of 8.5% in 2016, the S&P 1500 P/E ratio has dropped from 17.9X on 2015 earnings to 16.5X on 2016 earnings. The U.S. has the highest cash flow yield, at 4.5%, of any developed region.
- Japan's valuation multiples remain among the lowest of developed regions, despite strong forecast EPS growth. Its 2016 P/E of 14.7X, is second-lowest only to commodity-driven developed Asia, and its 2015 enterprise value to EBITDA ratio of 8.8X is the lowest of any developed region.
- Developed Europe ex-UK and the UK also have attractive valuation multiples, with 2016 PE's of 15.8 and 15.4, respectively, and cash flow yields of about 4.0%.
- Although Latin America may look attractive on a P/E basis, cash flow yields are low for the region.

Regional Market Valuation, January 2011 - November 2015



Source: S&P Capital IQ Quantamental Research. Data as of November 30, 2015.

- A global uptrend in valuation multiples remains in effect, using EV to EBITDA² as a proxy for global valuation trends.
- Although EV to EBITDA-based valuations have become richer since 2011, they have moderated recently due to a stagnant stock market and rising projected earnings for 2016.

²Enterprise value to EBITDA ratios exclude banks.

Global Operating Performance—Return on Equity Analysis

Dupont Analysis: Return On Equity = Net Profit Margin * Asset Turnover * Leverage [Excludes Banks]

Americas		S&P 1500 (USD)		S&P TSX (CAD)		Latin America (BRL)	
		2015E	2016E	2015E	2016E	2015E	2016E
Return on Equity	[Profit/Equity]	15.0%	14.8%	8.2%	9.9%	8.5%	10.7%
Net Profit Margin	[Profit/Sales]	9.0%	9.4%	6.3%	7.4%	5.2%	6.3%
Turnover	[Sales/Assets]	0.52	0.53	0.36	0.35	0.51	0.53
Leverage	[Assets/Equity]	3.2	3.0	3.6	3.8	3.2	3.2
Europe		United Kingdom (GBP)		Europe DM ex UK (EUR)		Europe EM (EUR)	
		2015E	2016E	2015E	2016E	2015E	2016E
Return on Equity	[Profit/Equity]	12.0%	12.5%	11.6%	12.0%	16.0%	14.5%
Net Profit Margin	[Profit/Sales]	6.8%	7.0%	6.1%	6.8%	12.4%	11.3%
Turnover	[Sales/Assets]	0.32	0.31	0.35	0.36	0.63	0.63
Leverage	[Assets/Equity]	5.5	5.8	5.3	5.1	2.0	2.0
Asia		Japan (JPY)		Asia DM ex Japan (USD)		Asia EM (CNY)	
		2015E	2016E	2015E	2016E	2015E	2016E
Return on Equity	[Profit/Equity]	8.8%	9.2%	11.4%	11.5%	11.2%	11.7%
Net Profit Margin	[Profit/Sales]	4.5%	4.8%	10.1%	10.3%	7.2%	7.5%
Turnover	[Sales/Assets]	0.64	0.64	0.45	0.46	0.46	0.46
Leverage	[Assets/Equity]	3.1	3.0	2.5	2.4	3.4	3.4

Source: S&P Capital IQ Quantamental Research. Data as of November 30, 2015. Green highlights represent significant forecast increases in ROE or profit margins.

For consistency with other charts/tables in this publication, we use analyst estimates to construct the DuPont analysis. Values for 2015 and 2016 are based on analyst-adjusted [normalized] estimates. "Forward" common equity is estimated by adding estimated earnings to prior-year equity and subtracting estimated dividends, while total assets are estimated by applying estimated revenue growth rates to prior-year assets.

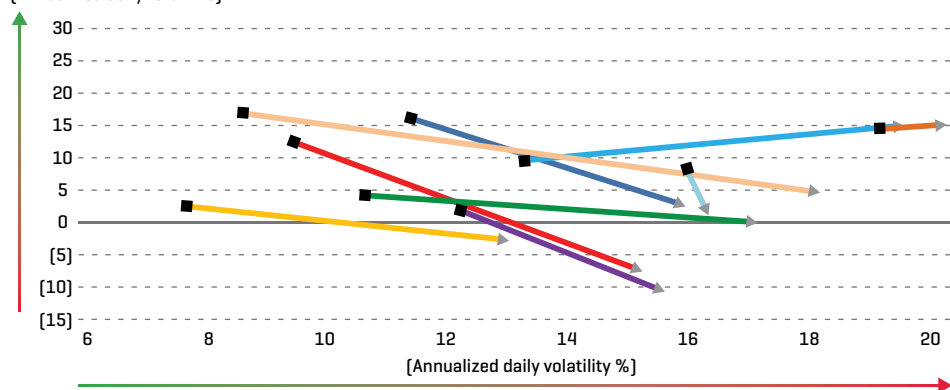
- After generally flat to declining return on equity (ROE) and profit margins globally for 2015, ROE and profit margins are estimated to rise in most regions in 2016.
- **Japan and developed Europe (ex UK) remain the two standout regions, with significant increases in both estimated profit margins and ROE in 2015 and 2016.**
- Although the U.S. shows a slight estimated decline in ROE for 2016, it still has by far the highest ROE of any developed market.

Risk & Return in Regional Equity Markets

Annualized Daily Volatility & Return (Through November, 2015)

■ S&P 500 ■ S&P TSX ■ Lat Am ■ UK ■ Europe DM ex UK ■ Europe EM ■ Japan ■ Asia DMexJapan ■ Asia EM
▲ Last 12 Months ■ Previous 12 Months

(Annualized daily return %)



Source: S&P Capital IQ Quantamental Research. Indices are unmanaged, statistical composites and their returns do not include payment of any sales, charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results.

- **Developed Europe (ex UK) and Japan are the only regions with rising 12-month market returns.** All other regions of the world continue to have an unfavorable combination of declining 12-month equity market returns and rising volatility.
- **Since the June issue, global returns and volatility have reversed course, with returns now down and volatility up.** Increased volatility was driven by June-August returns (and particularly August), when volatility surged across regions. Generally, increased volatility is associated with higher risk.
- Developed Europe saw returns rise to 15% for the trailing 12 months (from 10% for the prior TTM), and returns for Japan stayed near 15% for both periods.

HOW TO READ THE CHART: Each point on the chart represents a combination of annualized total returns [left scale] and annualized price volatility [bottom scale]. The lines show the change in return/volatility between the 12 months ended November 2014 and the 12 months ended November 2015. The arrow heads on the lines show the direction of travel chronologically.

Global Investment Strategy Performance

Equal-Weighted Excess Monthly Returns of Top 20% of Stocks (December 1, 2014 to November 30, 2015)

Representative Factor:	Return on Equity	12M minus 1M Return	Net Profit Margin	Trailing 1Y EPS Growth	Forward E/P	Forecast EPS Revisions	Market Cap	12M Return Volatility
Style	Capital Efficiency	Price Momentum	Earnings Quality	Growth	Valuation	Analyst Expectations	Small Size	High Volatility
S&P 1500	[0.0%]	0.2%	0.3%	[0.0%]	[0.3%]	0.0%	0.1%	[1.2%]
S&P TSX	1.3%	0.5%	0.9%	[0.1%]	[0.3%]	[0.9%]	0.0%	[1.9%]
Latin America	0.3%	0.8%	[1.4%]	0.5%	0.8%	[0.4%]	[1.4%]	[1.9%]
United Kingdom	0.7%	0.4%	0.7%	0.3%	0.5%	[0.0%]	0.4%	[0.6%]
Europe Developed exUK	0.7%	0.8%	[0.1%]	0.4%	0.3%	0.1%	[0.5%]	[1.2%]
Europe Emerging	1.1%	0.3%	1.8%	1.2%	[0.8%]	0.7%	[0.1%]	0.4%
Japan	0.1%	[0.4%]	0.1%	[0.4%]	0.0%	[0.0%]	[0.7%]	[0.8%]
Asia Developed exJapan	0.0%	0.3%	[0.7%]	[0.0%]	0.0%	[0.3%]	0.0%	[0.3%]
Asia Emerging	0.4%	[0.5%]	0.5%	[0.3%]	[0.1%]	0.4%	[0.6%]	[0.9%]
# Regions Outperforming	8 of 9	7 of 9	6 of 9	4 of 9	5 of 9	4 of 9	4 of 9	1 of 9

← OUTPERFORMING STRATEGIES → UNDERPERFORMING STRATEGIES

Source: S&P Capital IQ Quantamental Research. Indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Green highlights indicate areas of particular strength; red highlights indicate areas of particular weakness.

- **ROE has been the strongest of eight “style-based” factors over the past 12-months.** ROE has worked particularly well in commodity-related countries, such as Canada, Russia, and Australia [see heat map on page two]. However, ROE also generated positive excess returns in Europe.
- **Analysis of the eight “style-based” alpha factors clearly shows a continued shift away from risky assets over the past 12-months.** Risk related factors including small size [small cap performance] and high volatility have performed worst among our eight strategies.
- **Underperformance of risk-related factors was particularly pronounced in emerging and commodity-related markets [e.g., Canada],** reflecting a capital flight from these regions. Among large countries, Brazil had the worst performance for small cap stocks, with 2.6% average monthly underperformance over the past 12 months.

The Alpha Factor Library

An advanced, one-of-a-kind library of more than 500 stock selection signals for use in constructing investment screens, models, and candidate lists across 40,000 securities in 90 developed and emerging countries. Drill down into industry-specific signals and trends and quickly incorporate ideas into your fundamental and quantitative portfolio construction processes.

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S&P Capital IQ Estimates

Detailed and consensus global estimates data from more than 670 contributors across 19,000 active companies and 100 countries. Robust coverage includes more than 55 data points including per share items, statement items, industry-specific estimates, guidance, and commodity estimates.

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About S&P Capital IQ® Equity Market Pulse

The content of the Equity Market Pulse is driven by S&P Capital IQ’s fundamental data and analytics including S&P Capital IQ Estimates, Global Point-In-Time Fundamentals, and the Alpha Factor Library.

For more information about these and other data sets and analytical tools, please contact:

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Our Recent Research

SEPTEMBER 2015

[Equity Market Pulse – Quarterly Equity Market Insights Issue 5](#)

JUNE 2015

[Equity Market Pulse – Quarterly Equity Market Insights Issue 4](#)

MARCH 2015

[Equity Market Pulse – Quarterly Equity Market Insights Issue 3](#)

NOVEMBER 2014

[Equity Market Pulse – Quarterly Equity Market Insights Issue 2](#)

NOVEMBER 2015

[Late to File: The Costs of Delayed 10-Q and 10-K Company Filings](#)

In this report we examine the relationship between late filings (form 12b-25s) and subsequent market returns, as well as whether late filings signal deeper fundamental problems within the company.

OCTOBER 2015

[Global Country Allocation Strategies: Country Selection Based on Fundamental, Macro and Sentiment Indicators](#)

We investigate the efficacy of fundamental, macroeconomic and sentiment-based strategies for country selection across global equity markets. Using point-in-time fundamental and macroeconomic data, we constructed signals at the country level, grouped into five themes: valuation, quality, sentiment, volatility and macro.

SEPTEMBER 2015

[Research Brief: Building Smart Beta Portfolios](#)

Why is smart beta important? We believe that smart beta is continuing to gain momentum among a variety of constituencies, including ETF providers, asset managers and asset owners.

SEPTEMBER 2015

[Research Brief: Airline Industry Factors](#)

This brief examines S&P Capital IQ's industry-specific factors for the global airline industry. The seven airline industry factors contained in S&P Capital IQ's Alpha Factor Library address airline profitability in terms of growth, capacity utilization, and operating efficiency and consist of industry-specific financial ratios widely used by financial analysts.

AUGUST 2015

[Point-In-Time vs. Lagged Fundamentals – This time i\[t'\]s different?](#)

The common starting point for alpha discovery and risk analysis is the backtesting of historical company financials using a research database. Whether internally constructed or licensed, research databases can be distinguished by two primary formats – Point in Time and Non-Point in Time. This paper focuses on the major practical differences between Point in Time (PIT) and Non-Point in Time (Non PIT) data for both backtesting and historical research. PIT data is defined by its ability to answer two questions: When was the information known? and What information was known at the time?.

AUGUST 2015

[Introducing S&P Capital IQ Stock Selection Model for the Japanese Market](#)

S&P Capital IQ® provides professional investors with high quality data, stock selection models (signals), and value-added research, helping its clients achieve superior results. Since the launch S&P Capital IQ's four U.S. stock selection models ["[US Stock Selection Models Introduction](#)"] in January 2011, we released a suite of global stock selection models targeting both developed ["[Introducing S&P Capital IQ Global Stock Selection Models for Developed Markets](#)"] and emerging markets ["[Obtaining an Edge in Emerging Markets](#)"]. In this report, we introduce a stock selection model for the Japanese equity market that completes our global model offering.

JULY 2015

[Research Brief: Liquidity Fragility](#)

In this brief, we examine liquidity in arguably one of the most liquid equity markets in the world: The Standard & Poor's 500 (S&P 500). Whereas the overall index is highly liquid, not all issues within the index are equally liquid. We examine where in the S&P 500 liquidity exists and where it is constrained.

MAY 2015

[Investing in a World with Increasing Investor Activism](#)

Investor activism has gained mainstream acceptance as activists with larger-than-life personas have waged a string of successful campaigns. Activist hedge funds' assets under management (AUM) have swelled to \$120 billion, an increase of \$30 billion in 2014 alone. It was among the best performing hedge fund strategies in 2014 as well as over the last three- and five-year periods. In this report, we explore an investment strategy that looks to ride the momentum surrounding the announcement of investor activism. We further explore what, if any, changes to targeted companies activists are able to influence.

APRIL 2015

[Drilling for Alpha in the Oil and Gas Industry – Insights from Industry Specific Data & Company Financials](#)

During the recent slide in oil prices, clients frequently asked us which strategies have historically been effective in selecting stocks in declining energy markets. This report answers this question, along with its corollary: which strategies work in rising energy markets? We also explore the value of oil & gas reserve data used by fundamental analysts/investors, but not used in a majority of systematic investment strategies. The analysis in this report should help both fundamental and quantitatively-oriented investors determine how to best use industry-specific metrics when selecting securities from a pool of global oil & gas companies.

FEBRUARY 2015

[U.S. Stock Selection Model Performance Review](#)

Since the launch of the four S&P Capital IQ™ U.S. stock selection models in January 2011, the performance of all four models [Growth Benchmark Model, Value Benchmark Model, Quality Model, and Price Momentum Model] has been positive and 2014 was no exception. Our models' key differentiators - distinct formulation for large cap and small cap stocks, special treatment for the financial sector, sector neutrality to target stock specific alpha, and factor diversity - enabled the models to outperform across various market environments.

In this report, we review the underlying drivers of each model's performance over the 12 months ended December 31, 2014, document performance from January 2011 when the models went live, and provide full model performance history from January 1987.

JANUARY 2015

[Global Pension Plans: Are Fully Funded Plans a Relic of the Past?](#)

Despite global stock and bond market improvement, pension underfunding remains a significant problem for both retirees and investors. While U.S. companies are the best funded of the three developed regions we examine, only 38% of S&P 500 companies with pension obligations have a funding status [pension assets to liabilities] of 90% or better. We see trends that may keep pressure on global pension funding: the continued fall in interest rates in 2014, which will likely result in lower discount rates and corresponding higher pension obligations; a global decrease in employer contributions to pension plans over the past five years; and the potential for decreased investing returns following a six-year global equities bull market.

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