Research Brief: Global Pension Plans

Are Fully Funded Plans a Relic of the Past?

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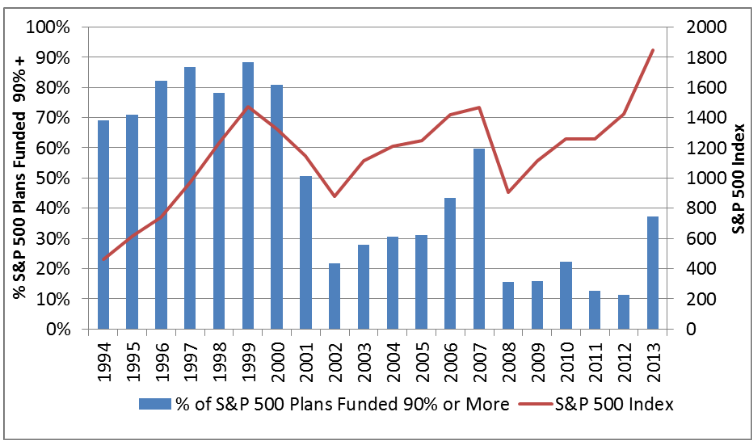
With strong equity and bond market performances over the past few years, one might assume that pension shortfalls have declined sharply. Since our last research brief (September 2013), funding statuses have indeed improved in the U.S. and Asia, though not in Europe (Exhibit 1). However, while the S&P 500 Index has been making higher highs (Exhibit 2, red line), the number of S&P 500 plans with a funding status of 90% or higher has been in a sharp decline (blue bars).

Exhibit 1: Global Pension Funding Status

	Funding Status (as of)		
	Dec. 2008	**Dec. 2013**	**Dec. 2014**
S&P 500	95%	77%	86%
S&P BMI Europe Developed Markets	87%	81%	79%
S&P BMI Asia Developed Markets	83%	68%	81%

Source: S&P Capital IQ Xpressfeed Database

Exhibit 2: Annual Percentage of S&P 500 Pension Plans with Assets to Liabilities Greater Than or Equal To 90% vs. S&P 500 Index 1994 - 2013



Source: S&P Capital IQ Xpressfeed Database

Disclosure: 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.

In this brief we leverage S&P Capital IQ's extensive collection of pension data to examine:

- Companies with the strongest and weakest pension funding status globally.
- Global trends in pension funding and accounting.
- Companies with the most aggressive versus conservative pension accounting assumptions.
- Underfunded plans with the least and most three-year improvement in funding.

Under ERISA guidelines, U.S. pension plans must be fully funded.[1] Many U.S. plans fall far short of this standard, and internationally funding is worse. Low pension funding can translate into decreased corporate earnings and cash flows, thus affecting both retirees and investors. As an example, Verizon Communications, which is highlighted in Exhibit 3, with a funding status of just 74%, recently reported a $2.2 billion fourth-quarter 2014 loss, on $4.2 billion of pension expense.[2]

Companies with the Best and Worst Funding Status

With most of the developed world experiencing significant underfunding, which pension plans are the best and the worst funded? Exhibits 3 and 4 highlight the best and worst funding statuses of firms with benefit obligations of at least $5 billion U.S. dollars. Funding status is the ratio of pension plan assets to pension benefit obligation (P.B.O.) liabilities. In the U.S., Delta Air Lines takes the worst funded spot. In 2008, Delta merged with Northwest – both companies had severely underfunded pension plans. Globally, financial institutions are among the best funded, although their pension liabilities are generally lower than those of industrial companies as a percentage of market capitalization. JP Morgan Chase continues to have the best funded plan in the U.S.

Exhibit 3: U.S. Companies with Extreme Funding Statuses

S&P 500 Index, as of December 2014

Company Name	Sector	Funding Status	Market Cap (mm$)	S&P Credit Rating	Plan Assets ($mm)	P.B.O. Liabilities ($mm)	Fund Gap to Mkt Cap
DELTA AIR LINES INC	Industrials	**47%**	39,311	BB	8,937	19,060	26%
PROCTER & GAMBLE CO	Consumer Staples	**65%**	243,380	AA-	11,098	17,053	2%
EXXON MOBIL CORP	Energy	**68%**	384,156	AAA	30,473	44,661	4%
BAXTER INTERNATIONAL INC	Healthcare	**74%**	38,724	A-	4,000	5,425	4%
VERIZON COMMUNICATIONS INC	Telecommunication	**74%**	191,676	BBB+	17,111	23,032	3%
MERCK & CO	Healthcare	**109%**	175,642	AA	17,435	16,055	NA
DOMINION RESOURCES INC	Utilities	**109%**	44,652	A-	6,113	5,625	NA
PRUDENTIAL FINANCIAL INC	Financials	**111%**	39,154	A	12,069	10,886	NA
BANK OF AMERICA CORP	Financials	**118%**	178,149	A-	23,453	19,795	NA
JPMORGAN CHASE & CO	Financials	**126%**	220,787	A	17,886	14,209	NA

Source: S&P Capital IQ Xpressfeed Database, S&P Ratings

Exhibit 4: Global Companies with Extreme Funding Statuses

BMI Developed Markets Index Excluding U.S., as of December 2014

Company Name	Country	Sector	Funding Status	Market Cap (mm$)	S&P Credit Rating	Plan Assets ($mm)	P.B.O. Liabl ($mm)	Fund Gap to Mkt Cap
EAST JAPAN RAILWAY CO	Japan	Industrials	**1%**	29,284	AA-	71	6,331	21%
BBVA	Spain	Financials	**16%**	54,432	BBB	1,449	8,990	14%
DEUTSCHE TELEKOM	Germany	Telecomm Srvcs	**22%**	68,297	BBB+	2,717	12,346	14%
THYSSENKRUPP AG	Germany	Materials	**25%**	13,772	BB	2,909	11,870	65%
VOLKSWAGEN AG	Germany	Consumer Discrt	**27%**	99,433	A	10,976	40,841	30%
CREDIT SUISSE GROUP	Switzerland	Financials	**110%**	37,624	A-	20,122	18,322	NA
PRUDENTIAL PLC	United Kingdom	Financials	**110%**	56,716	A+	11,503	10,433	NA
ALCATEL-LUCENT	France	Information Tech	**112%**	9,348	B	34,990	31,352	NA
MITSUBISHI UFJ FINANCIAL GRP	Japan	Financials	**118%**	73,634	A	23,044	19,549	NA
MIZUHO FINANCIAL GROUP INC	Japan	Financials	**128%**	41,900	A	16,381	12,816	NA

Source: S&P Capital IQ Xpressfeed Database, S&P Ratings

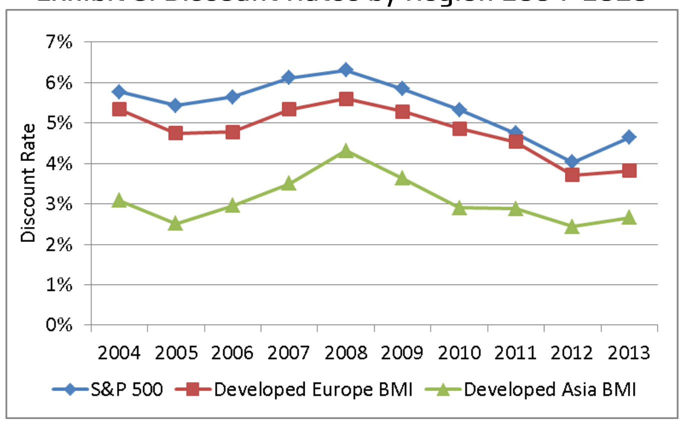
[1] ERISA: the Employee Retirement Income Security Act of 1974.

[2] Verizon uses a "mark-to-market" accounting approach where pension gains or losses in excess of a corridor are fully recognized each year.

Global Trends in Pension Funding and Accounting

Discount rates have been in decline with interest rates since 2008 (Exhibit 5), but ticked up in 2013. With downward pressure on interest rates globally in 2014, one might expect 2014 discount rates[3] to decline, pushing up the present value of pension benefit obligations and potentially increasing funding gaps. Discount rates are actuarial assumptions, usually based on high-grade corporate bond yields, used to discount a company's pension obligation back to present value. Higher discount rates result in lower pension benefit obligation (P.B.O.) values, and vice versa.

Exhibit 5: Discount Rates by Region 2004-2013



Source: S&P Capital IQ Xpressfeed Database
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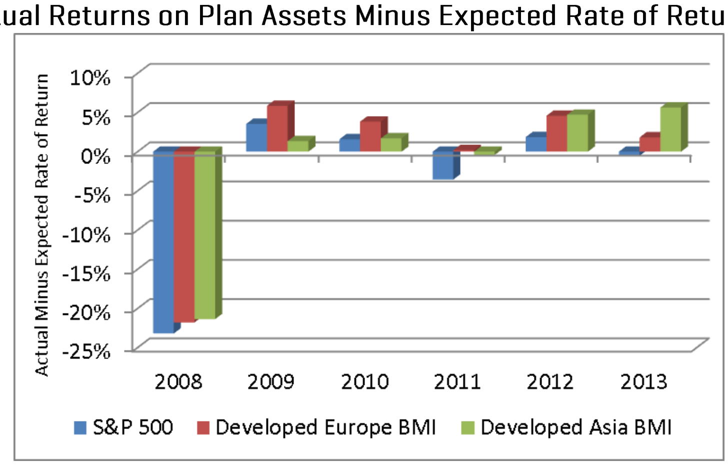
Investment returns improved substantially since 2008, when global pension plans posted actual annual returns of negative 16%, on average. Exhibit 6 shows the difference between actual and expected returns since 2008. In general, pension plans have been earning more than their expected long-term rate of return over the past five years, which is good for funding status.

Exhibit 6: Actual Returns on Plan Assets Minus Expected Rate of Return 2004-2013



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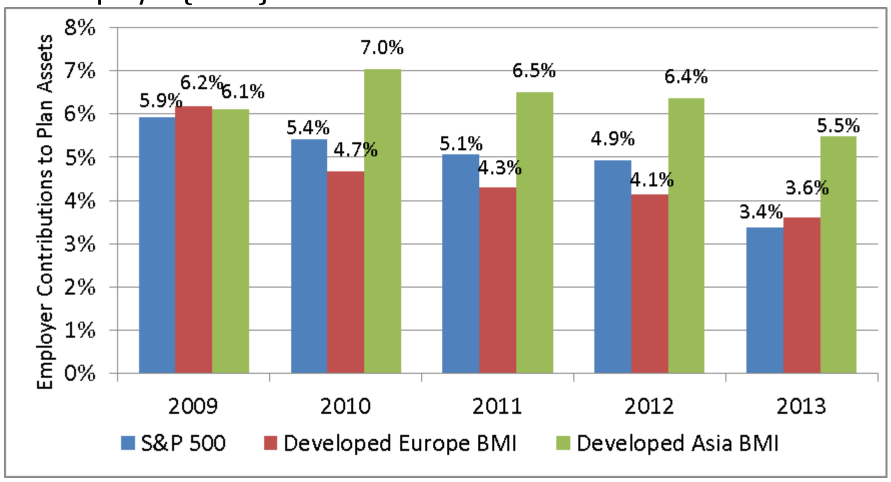
[3] Discount rates for 2014, along with their effects on pension benefit obligations at year end, will be reported as companies report 2014 annual results.

While investment returns have been doing well, employer (cash) contributions to pension funds have been declining across regions, relative to plan assets (Exhibit 7). For example, the average contribution for S&P 500 firms fell from 5.9% of assets in 2008 to 3.4% in 2013. This decline in contributions comes at a time when corporations have significant amounts of cash on hand, but are choosing not to fund pension plans.

Exhibit 7: Employer (Cash) Contributions as a Percent of Plan Assets 2009-2013



Source: S&P Capital IQ Xpressfeed Database
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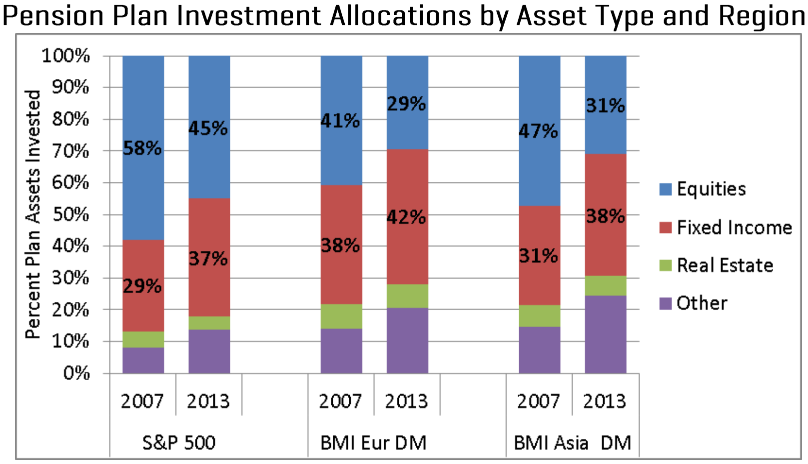
Global pension plans have sought to de-risk their investment portfolios, by moving away from equities and towards bonds following the market downturn in 2008. For example, European pension plans had 41% of plan assets invested in equities and 38% in bonds in 2008 (Exhibit 8). By 2013, these numbers had reversed to 29% of assets in equities and 42% in bonds. Both the bond and equity markets have performed well in recent years. With interest rates at multi-decade lows, this bias toward bonds will not serve plans well in the event of rising interest rates.

Exhibit 8: Pension Plan Investment Allocations by Asset Type and Region '07 vs. '13



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Companies with Aggressive/Conservative Accounting Assumptions

Pension accounting involves a large number of assumptions, primarily based on actuarial estimates. In this section we look at three key assumptions: the discount rate, the expected long-term rate of return, and the expected rate of future compensation (salary) increase. All three of these metrics can be used to reduce or exaggerate pension obligations and/or pension expense.

Exhibits 9 and 10 show companies with the highest/lowest combined actuarial rates for the U.S. and internationally.[4] Exhibit 9 subtracts the assumed rate of compensation increase from the sum of the discount rate and expected rate of return, since a higher rate of expected salary increase is more conservative than a lower expected rate, while Exhibit 10 omits that rate due to lack of data.

Note the difference in S&P credit ratings for U.S. companies with very high versus very low actuarial assumptions, with "aggressive accounting" companies having significant lower ratings than more conservative companies.

Exhibit 9. S&P 500 Companies with Highest/Lowest Actuarial Rates

S&P 500 Index, as of December 2014

Company Name	Sector	Funding Status	Plan Assets ($mm)	P.B.O Liabilities ($mm)	S&P Credit Rating	A Discount Rate	B Expected LT RoR	C Rate of Comp Incr	A + B - C
AES CORP	Utilities	78%	4,546	5,808	BB-	7.8%	9.2%	5.2%	11.8%
KROGER CO	Consumer Staples	83%	3,135	3,772	BBB	5.0%	8.5%	2.8%	10.7%
FRONTIER COMMUNICATIONS	Telecomm Services	73%	1,217	1,669	BB-	4.9%	8.0%	2.5%	10.4%
ONEOK INC	Energy	91%	1,113	1,221	BB+	5.3%	8.3%	3.5%	10.1%
XEROX CORP	Information Technology	82%	8,665	10,557	BBB	4.5%	6.9%	1.4%	10.1%
INGERSOLL-RAND PLC	Industrials	83%	2,779	3,333	BBB	4.5%	5.1%	4.0%	5.6%
STANLEY BLACK & DECKER INC	Industrials	75%	2,129	2,834	A	4.3%	6.1%	4.6%	5.8%
CORNING INC	Information Technology	88%	2,896	3,300	A-	4.4%	4.9%	3.7%	5.6%
PARKER-HANNIFIN CORP	Industrials	74%	3,499	4,749	A	4.1%	4.5%	3.6%	5.1%
METLIFE INC	Financials	86%	8,024	9,335	A-	3.5%	4.2%	2.5%	5.2%

Source: S&P Capital IQ Xpressfeed Database, S&P Ratings

Exhibit 10. International Companies with Highest Lowest Actuarial Rates

BMI Developed Markets Excluding U.S., as of December 2014

Company Name	Country	Sector	Funding Status	Plan Assets ($mm)	P.B.O Liabilities ($mm)	S&P Credit Rating	A Discount Rate	B Expected LT RoR	A + B
SOMPO JAPAN NIPPONKOA	Japan	Financials	48%	89,806	185,380	NR	6.9%	12.3%	19.2%
BBVA	Spain	Financials	16%	1,052	6,528	BBB	6.5%	9.5%	16.0%
ENDESA SA	Spain	Utilities	52%	1,171	2,234	BBB	7.9%	7.9%	15.8%
EDP ENERGIAS DE PORTUGAL SA	Portugal	Utilities	58%	1,250	2,172	BB+	7.5%	7.5%	15.0%
ANGLO AMERICAN PLC	United Kingdom	Materials	94%	5,315	5,674	BBB	6.6%	6.6%	13.2%
MARUBENI CORP	Japan	Industrials	77%	223,650	292,351	BBB	1.3%	1.3%	2.6%
ODAKYU ELECTRIC RAILWAY CO	Japan	Industrials	78%	72,434	92,388	NR	1.6%	1.0%	2.6%
T&D HLDGS INC	Japan	Financials	63%	89,415	141,071	NR	1.6%	0.7%	2.3%
SHIMIZU CORP	Japan	Industrials	61%	96,353	158,941	NR	1.0%	1.2%	2.2%
CHUBU ELECTRIC POWER CO INC	Japan	Utilities	69%	396,079	577,375	NR	1.4%	0.5%	1.9%

Source: S&P Capital IQ Xpressfeed Database, S&P Ratings

[4] Exhibits 10 and 11 include companies with market caps greater than $5 billion U.S. dollars and P.B.O.s greater than 10% of market capitalization.

Underfunded Plans with Least/Greatest Three-Year Improvement

Exhibits 11 and 12 show companies with the best and worst 3-year improvement in funding status.[5] For those in the "least improved" category (top of each table), we require that pension funding as of Dec 2014 is less than 85%. For the "most improved" (bottom), we require pension funding as of Dec 2011 be less than 85%.

Exhibit 11: U.S. Companies with Least/Greatest Three-Year Funding Improvement

S&P 500 Index, as of December 2014

Company Name	Sector	Funding Status (as of) Dec-11	Dec-14	Percent Change	S&P Credit Rating	Three-Year Averages: P.B.O. Growth	Return on Plan Assets	Empl Contrib to Assets
VERIZON COMMUNICATIONS	Telecomm Services	88%	74%	**-14%**	BBB+	-25%	6.0%	5.0%
FRONTIER COMMUNICATIONS	Telecomm Services	78%	73%	**-6%**	BB-	-7%	4.4%	4.9%
AT&T INC	Telecomm Services	88%	84%	**-5%**	A-	1%	0.9%	5.0%
PARKER-HANNIFIN CORP	Industrials	78%	74%	**-5%**	A	5%	6.0%	4.1%
BAXTER INTERNATIONAL INC	Healthcare	78%	74%	**-5%**	A-	10%	3.7%	4.1%
ALLSTATE CORP	Financials	84%	106%	**22%**	A-	-9%	8.5%	5.0%
PUBLIC SERVICE ENTRP GRP	Utilities	82%	106%	**25%**	BBB+	5%	7.2%	5.0%
AGL RESOURCES INC	Utilities	65%	94%	**30%**	BBB+	-1%	7.5%	5.0%
HARLEY-DAVIDSON INC	Consumer Discretionary	80%	112%	**33%**	A-	9%	15.8%	5.1%
XYLEM INC	Industrials	33%	67%	**34%**	BBB	16%	12.6%	4.5%

Source: S&P Capital IQ Xpressfeed Database, S&P Ratings

Exhibit 13: Global Companies with Least/Greatest Three-Year Funding Improvement

BMI Developed Markets Excluding U.S., as of December 2014

Company Name	Country	Sector	Funding Status Dec-12	Dec-14	Percent Change	S&P Credit Rating	Three Year Averages: P.B.O Growth	Return on Plan Assets	Empl Contrib to Assets
GROUPE BRUXELLES LAMBERT	Belgium	Financials	112%	82%	**-31%**	NR	10.6%	19.5%	13.4%
KONINKLIJKE DSM NV	Netherlands	Materials	98%	73%	**-25%**	A	19.1%	5.0%	4.0%
GKN PLC	United Kingdom	Consumer Discrt	82%	67%	**-15%**	NR	6.8%	7.6%	2.4%
CIE GEN DES ETABLIS MICHELIN	France	Consumer Discrt	78%	64%	**-14%**	BBB+	-5.0%	7.4%	3.4%
NATIONAL BANK OF GREECE	Greece	Financials	25%	11%	**-14%**	CCC+	26.7%	-5.3%	41.5%
SWISS LIFE HOLDING	Switzerland	Financials	12%	50%	**38%**	BBB	2.0%	8.3%	91.1%
T&D HLDGS INC	Japan	Financials	16%	63%	**47%**	NR	-2.5%	NA	NA
NOMURA RESEARCH INSTITUTE	Japan	Information Tech	65%	117%	**52%**	NR	26.6%	NA	NA
FIAT CHRYSLER AUTOMOBILES	United Kingdom	Consumer Discrt	22%	79%	**56%**	BB-	-7.5%	34.4%	23.7%
DEUTSCHE POSTBANK AG	Germany	Financials	29%	95%	**66%**	NR	8.0%	4.8%	95.9%

Source: S&P Capital IQ Xpressfeed Database, S&P Ratings

[5] Exhibits 12 and 13 include companies with market caps greater than $5 billion U.S. dollars and P.B.O.s greater than 10% of market capitalization.

Conclusion

While pension funding status improved over the last year, global pension plans continue to be significantly under-funded (at an average of about 82% funded). In the U.S., fully-funded pension plans seem to be a relic of the past, with just 38% of S&P 500 pension plans funded at 90% or better as of current data. Despite significant underfunding and improved corporate profits, funding of pension plans by corporate sponsors is declining. Rising interest rates may provide a short term "lift" to funding rates, as corporations raise pension benefit obligation (P.B.O.) discount rates. However, with a global bull market already several years old, a bear market could further set back funding status, and result in significant income statement and cash flow repercussions for the worst-funded firms.

S&P Capital IQ's Xpressfeed

All research was performed with S&P Capital IQ's point in time (P.I.T.) database[6], delivered through Xpressfeed. Xpressfeed contains P.I.T. data for approximately 40,000 companies globally, as of December 2014, with history beginning in 2004. S&P Capital IQ's Compustat database also provides U.S. P.I.T. data back to 1987. The pension and OPEB data in the S&P Capital IQ global database is fairly extensive, with nearly 140 pension and OPEB items, for domestic, international, and total pension plans, covering about 4,000 companies globally.

[6] Point in time data contains as originally reported data stamped as of the date of entry into the database. P.I.T. data is the preferred choice for historical data analysis and backtesting, where the analyst seeks to use original (non-restated) data and eliminate look-ahead bias.

Our Recent Research

January 2015: [Profitability: Growth-Like Strategy, Value-Like Returns Profiting from Companies with Large Economic Moats]

Value-based strategies have been the favorite weapons in many investors' arsenals, historically yielding large returns and consistently outperforming. Most value investors focus on the price side of the equation – i.e., buying assets that are priced below their intrinsic values. Yet, there's another dimension to the value equation that has been complementary to value and just as critical in generating excess returns. Enter profitability. Profitability has historically worked as an investment strategy because instead of focusing on the cheapness of an asset it focuses on the productiveness of an asset - i.e., its ability to generate earnings for the investor. Our results from January 1996 to August 2014 show:The S&P 500® continues to be the preeminent regional performer in terms of both financial results and price appreciation Risk and Return: Tracks the dynamics of equity market returns and volatility.

- **Profitability-based strategies have historically produced excess returns on par with those generated by value-based strategies** and have historically produced higher excess returns than those generated by quality and price momentum strategies.
- Profitability-based strategies **have historically produced excess returns even after controlling for quality-, value- and price momentum-based strategies.**
- Profitability-based strategies **have historically consistently produced excess returns across different regions, time periods, and market capitalization categories.**
- **Highly profitable firms have historically consistently shown above average growth** with two-year top- and bottom-line growth rates that are 10% and 31% higher, respectively, than those for least profitable firms.
- **Profitability measures that are cleaner (i.e. higher up in the income statement such as gross profit) have historically shown higher excess returns and lower volatility** than measures that are lower in the income statement (e.g., net profit).
- **Gross profitability ratio has historically been 2.07x, 2.22x and 3.12x times more persistent than quality, value and momentum, respectively, after 5 years.**

November 2014: [Equity Market Pulse – Quarterly Equity Market Insights Issue 2]

Driven by S&P Capital IQ's™ proprietary data and analytics, **Equity Market Pulse** provides professional investors with insights into global equity market fundamentals and performance at a glance. Spanning developed and emerging markets in the Americas, Europe, and Asia, it provides perspective on valuations, operating efficiency, and investment strategy effectiveness.

- The **S&P 500® continues to be the preeminent regional performer** in terms of both financial results and price appreciation Risk and Return: Tracks the dynamics of equity market returns and volatility.
- **Investor preference for developed markets continues**, as developed markets show rising P/E multiples versus the emerging markets on much stronger financial performance.
- **Emerging markets appear cheap** on a valuation-to-projected-growth basis, with forward P/E to earnings growth (PEG) ratios of less than half those of the developed market average.

October 2014: [Lenders Lead, Owners Follow - The Relationship between Credit Indicators and Equity Returns]

This paper demonstrates a strong link exists between credit events and equity returns, suggesting a potential investment strategy. Whereas previous academic work focused on ratings changes within the U.S., this analysis takes a global perspective and includes the post-financial crisis period. Shareholders should note that even in a benign credit environment Standard & Poor's Ratings Services ("S&P Ratings Services") downgraded 68 U.S. speculative grade companies in the second quarter of 2014, and forecasts the rate of speculative grade defaults to increase next year to 2.2% from 1.6% in 2014. Year to date, there have been 303 instances where credit default swap spreads have widened by more than 50 basis points.

August 2014: Equity Market Pulse – Quarterly Equity Market Insights Issue 1

Equity Market Pulse provides professional investors with insights into global equity market fundamentals and performance at a glance. Spanning developed and emerging markets in the Americas, Europe, and Asia, it provides perspective on valuations, operating efficiency, and investment strategy effectiveness. 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. The analysis is broken into four themes:

- Valuation: Analysis of valuation multiples coupled with consensus outlook for earnings and revenue growth.
- Operating Performance: Trends in operating performance with return on equity deconstructed into: net profit margins, asset turnover, and leverage
- Risk and Return: Tracks the dynamics of equity market returns and volatility.

July 2014: Factor Insight: Reducing the Downside of a Trend Following Strategy

In this report, we review an approach that reduces the downside risk of a trend following strategy. This new signal first separates a stock's return into its systematic and stock-specific components, and then picks stocks solely on the latter. We compare the performance of this new signal (alpha momentum) to a typical trend following strategy (total momentum) and report the following:

- Globally, alpha momentum produces higher risk-adjusted returns in five developed market countries and a global universe. In the Russell 3000, alpha momentum's annualized long-short information ratio is twice that of total momentum (Jan 1988 – April 2014).

May 2014: Introducing S&P Capital IQ's Fundamental China A-Share Equity Risk Model

Factor risk models play an important role in equity portfolio management. Portfolio managers depend upon factor risk models to obtain portfolio risk prediction and risk attribution against a group of largely orthogonal factors each with meaningful econometric explanations. S&P Capital IQ is dedicated to providing a broad set of high-quality models and products to the global asset management community. Since 2010, we have released a series of single country risk models as well as global and regional equity risk models. We are now releasing single country risk model covering China A-Shares equities,

April 2014: Riding the Coattails of Activist Investors Yields Short and Long Term Outperformance

On August 13, 2013, Apple's stock price rose 4.75% on high volume after Carl Icahn, a renowned activist investor, tweeted that his firm had accumulated a large position in the company. In the ensuing 6 months, the stock rose an additional 9.33% as Icahn demanded that the company add another $50 billion to its existing stock buyback plan. Icahn backed off from this demand on February 10, 2014, but not before Apple's stock price had risen to $528.99 from $461.88 where it was before he embarked on the campaign. By then, the company had already aggressively repurchased its stock, including $14 billion in a two-week stretch. As high-profiled campaigns have occurred with greater frequency and resulted in more successes, the AUM for investor activist funds has tripled to $95 billion in 2013, 3 times the amount in 2008.

March 2014: [Insights from Academic Literature: Corporate Character, Trading Insights, & New Data Sources]
As part of our research process, we make a concerted effort to stay abreast of interesting white papers. Academic research papers are a rich source for new ideas and fine tuning of areas for future work. Often they provide a launch pad for debate and exploration for our team. Our readers agree, as we regularly receive positive feedback on our academic research highlights.

In this piece we have assembled a number of interesting articles that we believe will be of broad interest to our clients, and all investment professionals – Corporate Character, Trading Insights & New Data Sources. For each article we provide a link to the article, the abstract, and a brief discussion of the article highlights and how it will be useful to fellow practitioners. It is our hope that these papers help you generate differentiated thinking, and to better serve your clients.

February 2014: [Obtaining an Edge in Emerging Markets]
Following the introduction of our global stock selection models for developed markets (DM) in August 2013, we launch our stock selection model for emerging markets (EM) and report the following:

- The Model generated a top quintile average monthly excess return of 0.90% within the S&P BMI Emerging Market Index (Jan 2002 – Sept 2013).
- The Model's performance is robust across regions and sectors.
- We do not observe performance degradation within mid to large cap stocks.
- Model's top quintile average monthly excess return is identical in growth and value environments (0.80%), and positive in periods of elevated volatility (0.53%).
- A simulated portfolio generated an annualized excess return of 10.5% after accounting for transactions costs.

February 2014: [U.S Stock Selection Model Performance Review]
The performance of S&P Capital IQ's four U.S. stock selection models since their launch in January 2011 has been strong, and 2013 was no exception. Key differentiators, such as distinct formulations for large and small cap stocks, bank-specific factors, sector-neutrality to target stock-specific alpha, and the combination of sub-components representing different investment themes have enabled the models to outperform across disparate market environment

January 2014: [Buying Outperformance: Do share repurchase announcements lead to higher returns?]
We examine the returns surrounding buyback announcements to test whether, and when, buyback programs signal subsequent outperformance and shareholder value. We find:

- Buyback announcements precede excess returns in the US. Stocks on average outperformed the equally weighted Russell 3000 by 0.60% over one month, and by 1.38% over one year periods following buyback announcements.

- Outperformance is greatest among small caps or larger magnitude buybacks as a % of shares outstanding.
- Reported insider trading and buyback announcement signals are complementary.
- In Europe, some post-buyback outperformance over 12 months, but no significant excess return after one month.

October 2013: Informative Insider Trading - The Hidden Profits in Corporate Insider Filings
In this report, we investigate the impact of the public disclosure of insider trading on equity prices, using both an event study framework and a portfolio formation approach. Leveraging S&P Capital IQ's Ownership database, we explore several practical methods of identifying "informative" insider trades, and how to construct a portfolio of stocks using recent "informed" insider transactions. We document the following results:

- Consistent with existing literature, insider trades are predictive of future stock returns.
- Outside investors can earn economically significant excess returns by trading on "informative" insider trading signals.
- Mimicking the net purchase actions of CEOs yielded an excess return of 1.27% over the next one week.
- A trading strategy based on the three characteristics: opportunistic, intensive and directional change, yielded 0.36% weekly excess returns after transaction costs.

September 2013: Beggar Thy Neighbor – Research Brief: Exploring Pension Plans
Pension underfunding is a worldwide problem. There has been an unending wave of news stories about cities and states across the United States suffering from defined benefit pension funding shortfalls, but these issues extend far beyond the public sector and beyond the United States as well.
In this brief we leverage S&P Capital IQ datasets to examine:

- Companies with the strongest and weakest pension funding status globally.
- Companies with the most optimistic return and discount rate assumptions globally.
- The relationship between projected and realized pension portfolio returns.
- The historical global trends in funding status, portfolio returns, and discount rates.

August 2013: Introducing S&P Capital IQ Global Stock Selection Models for Developed Markets: The Foundations of Outperformance
In this report, we explore the efficacy of different stock selection strategies globally and use this information to develop a suite of robust global stock selection models targeting Canada and the developed markets of Europe and Asia Pacific. Our global models were developed using S&P Capital IQ's industry leading Global Point-in-Time data, as well as the Alpha Factor Library, our web-based global factor research platform. We find that each of our Global Stock Selection Models for Developed Markets yield significant long-short spread returns and information coefficients at the 1% level. This performance is also robust providing similar statistical significance after controlling for Market Cap and Beta exposures.

July 2013: Inspirational Papers on Innovative Topics: Asset Allocation, Insider Trading & Event Studies
Inspiration drives innovation. The writings of Plutarch inspired Shakespeare, Galapagos finches inspired Darwin, and the German Autobahn inspired Eisenhower, but what inspires investment

researchers to develop the next innovations for investors? When we get a new investment idea, we seek out literature on that topic to inspire us to bring the idea to fruition. This literature can help to further develop our own thoughts, polish up and expand on our priors, and avoid the pitfalls experienced by earlier researchers. Inspiration from academia enhances our ability to provide innovative solutions for our clients.

June 2013: Supply Chain Interactions Part 2: Companies – Connected Company Returns Examined as Event Signals

June 2013: Behind the Asset Growth Anomaly – Over-promising but Under-delivering

April 2013: Complicated Firms Made Easy - Using Industry Pure-Plays to Forecast Conglomerate Returns.

March 2013: Risk Models That Work When You Need Them - Short Term Risk Model Enhancements

March 2013: Follow the Smart Money - Riding the Coattails of Activist Investors

February 2013: Stock Selection Model Performance Review: Assessing the Drivers of Performance in 2012

January 2013: Research Brief: Exploiting the January Effect Examining Variations in Trend Following Strategies

December 2012: Do CEO and CFO Departures Matter? - The Signal Content of CEO and CFO Turnover

November 2012: 11 Industries, 70 Alpha Signals -The Value of Industry-Specific Metrics

October 2012: Introducing S&P Capital IQ's Fundamental Canada Equity Risk Models

September 2012: Factor Insight: Earnings Announcement Return – Is A Return Based Surprise Superior to an Earnings Based Surprise?

August 2012: Supply Chain Interactions Part 1: Industries Profiting from Lead-Lag Industry Relationships

July 2012: Releasing S&P Capital IQ's Regional and Updated Global & US Equity Risk Models

June 2012: Riding Industry Momentum – Enhancing the Residual Reversal Factor

May 2012: The Oil & Gas Industry - Drilling for Alpha Using Global Point-in-Time Industry Data

May 2012: Case Study: S&P Capital IQ – The Platform for Investment Decisions

March 2012: Exploring Alpha from the Securities Lending Market – New Alpha Stemming from Improved Data

January 2012: S&P Capital IQ Stock Selection Model Review – Understanding the Drivers of Performance in 2011

January 2012: Intelligent Estimates – A Superior Model of Earnings Surprise

December 2011: Factor Insight – Residual Reversal

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October 2011: The Banking Industry

September 2011: Methods in Dynamic Weighting

September 2011: Research Brief: Return Correlation and Dispersion

July 2011: Research Brief - A Topical Digest of Investment Strategy Insights

June 2011: A Retail Industry Strategy: Does Industry Specific Data tell a different story?

May 2011: Introducing S&P Capital IQ's Global Fundamental Equity Risk Models

May 2011: Topical Papers That Caught Our Interest

April 2011: Can Dividend Policy Changes Yield Alpha?

April 2011: CQA Spring 2011 Conference Notes

March 2011: How Much Alpha is in Preliminary Data?

February 2011: Industry Insights – Biotechnology: FDA Approval Catalyst Strategy

January 2011: US Stock Selection Models Introduction

January 2011: Variations on Minimum Variance

January 2011: Interesting and Influential Papers We Read in 2010

November 2010: Is your Bank Under Stress? Introducing our Dynamic Bank Model

October 2010: Getting the Most from Point-in-Time Data

October 2010: Another Brick in the Wall: The Historic Failure of Price Momentum

July 2010: Introducing S&P Capital IQ's Fundamental US Equity Risk Model