

Q-Series®

Global Equity Strategy

Where Will \$1Tn Per Year in Corporate Cash Go? A Post-Crisis Corporate Balance Sheet Tale

Equity Strategy

Global

Consensus probably underestimating potential tidal-wave balance sheet effect

Since the financial crisis, CFOs of non-financial corporates have been de-leveraging balance sheets through an unprecedented accumulation of earnings and a relatively conservative approach towards debt issuance and cash outlay activities such as capex, M&A, buybacks and dividend pay-outs. Since 2009, while total global non-financial corporate debt has increased, leverage (defined here as net debt to equity) has declined consistently to historical lows around the globe.

Corporate leverage history repeating itself, with different specifics this time

Many academic studies have shown that, historically, non-financial corporate CFOs have not pursued theoretically optimal capital structures for their companies. Instead of tax policies, bankruptcy cost or cost-of-debt (as per theory), the most relevant empirical drivers for corporate leverage seem to be competing debt issuance by government entities, capacity utilization and economic outlook. However, despite history repeating itself from a key driver perspective, the outcome this time is unprecedented in its specifics. For instance, there has never been such a level of consistency across sectors and geographies as in the current case. In addition, the global low-rate environment has pushed CFOs to extend corporate debt term so far out, that corporates are now net providers of short-term funding to the market. We make available to the reader an interactive model in which one can explore different regional, sector and size cuts for leverage calculations, including different leverage metrics, analyzing more than 20 years of data on over 5,200 global companies. [One can access the interactive model here.](#)

Given sheer scale of this effect (\$1tn+), significant pricing disruption expected

Just to keep the current low leverage levels, corporates globally would have to dispose more than \$1tn in after-tax earnings per year. Any actual re-leveraging would require even higher levels of earnings outlays, with historical precedents leading up to another \$1tn. Investors would be wise to focus on the following potential consequences: 1) market premiums for an expected increased level of share buybacks and dividend pay-outs; 2) re-assessment of benchmark WACC calculations and market multiples, as long-term leverage ratio expectations get reset; 3) even higher future premiums on corporates with a disciplined approach towards value-accretive M&A and capex expenditure; 4) a decline in corporate credit spreads if low-leverage capital structures become the new norm; and 5) unused corporate funding or cash attracting a significant level of activism, either by the private entities/aggressive shareholders looking for cash disbursement or governments looking to tax large pools of cash.

Our top picks best positioned against these trends from a pricing perspective

Re-pricing of impacted securities should take place over the medium term, based on expected corporate actions. Regions will go through this process at different paces, with non-financial corporates exposed to the US and UK leading the way, then corporates exposed to continental Europe and Japan following suit. However, despite some uncertainties, one can still probabilistically select the securities more likely to benefit under this scenario. In the US, our top five picks for companies likely to remain focused on returning capital to shareholders are UBS Key Calls Ford and Rockwell Automation, Gilead Sciences, Delta Air Lines and Microsoft. In Europe, we like BMW, Ryanair, Nokia, BIC Group and Signet Group. In Japan, we like HOYA, Kuraray, FUJIFILM, Konica Minolta & J. Front Retailing.

Julian Emanuel

Strategist

julian.emanuel@ubs.com

+1-212-713-3845

Niall MacLeod

Strategist

niall.macleod@ubs.com

+852-2971 6186

Nick Nelson

Strategist

nick.nelson@ubs.com

+44-20-756 81960

Jerry McGuire

Strategist

jerry.mcguire@ubs.com

+1-212-713-2235

Joao Toniato

Strategist

joao.toniato@ubs.com

+44-20-756 74657

Omar Elangbawy

Associate Strategist

omar.elangbawy@ubs.com

+1-212-713 3303

Contents

Executive Summary.....	3
Historical Trends in Corporate Balance Sheets	9
Empirical Drivers of CFO Corporate Leverage Decisions.....	17
Global Outlook for Corporate Leverage.....	23
Regional Views and Investment Ideas.....	30
US: Ahead of the Pack but Early Innings.....	31
Europe: High Potential to Re-Gear.....	41
Asia ex-Japan: Re-Leveraging Looks Remote.....	55
Appendix I: Health-Care Re-Leveraging	63
Appendix II: Global Corporate Leverage Scenarios	65
Appendix III: Emerging Market Proxies.....	67
Appendix IV: Company Dividend Yields vs. Corporate Bond Yields.....	69

UBS's Q-Series® products reflect our effort to aggressively anticipate and answer key investment questions, to help drive better investment recommendations. Q-Series® is a trademark of UBS AG.

Julian Emanuel

Strategist
julian.emanuel@ubs.com
+1-212-713-3845

Niall MacLeod

Strategist
niall.macleod@ubs.com
+852-2971 6186

Nick Nelson

Strategist
nick.nelson@ubs.com
+44-20-756 81960

Jerry McGuire

Strategist
jerry.mcguire@ubs.com
+1-212-713-2235

Joao Toniato

Strategist
joao.toniato@ubs.com
+44-20-756 74657

Omar Elangbawy

Associate Strategist
omar.elangbawy@ubs.com
+1-212-713 3303

Matthew Mish, CFA

Strategist
matthew.mish@ubs.com
+1-203-719 1242

Stephen Caprio

Associate Strategist
stephen.caprio@ubs.com
+1-203-719 6032

Executive Summary

The current picture of global non-financial corporate balance sheets is truly unprecedented. Any look through the history of corporate capital structure points to CFOs regularly not seeking a theoretically optimal point for leverage. However, this time, not only are leverage levels (defined as net debt to equity) away from any theoretical optimal and at historical lows, but many other dimensions have become unsustainable for the long term.

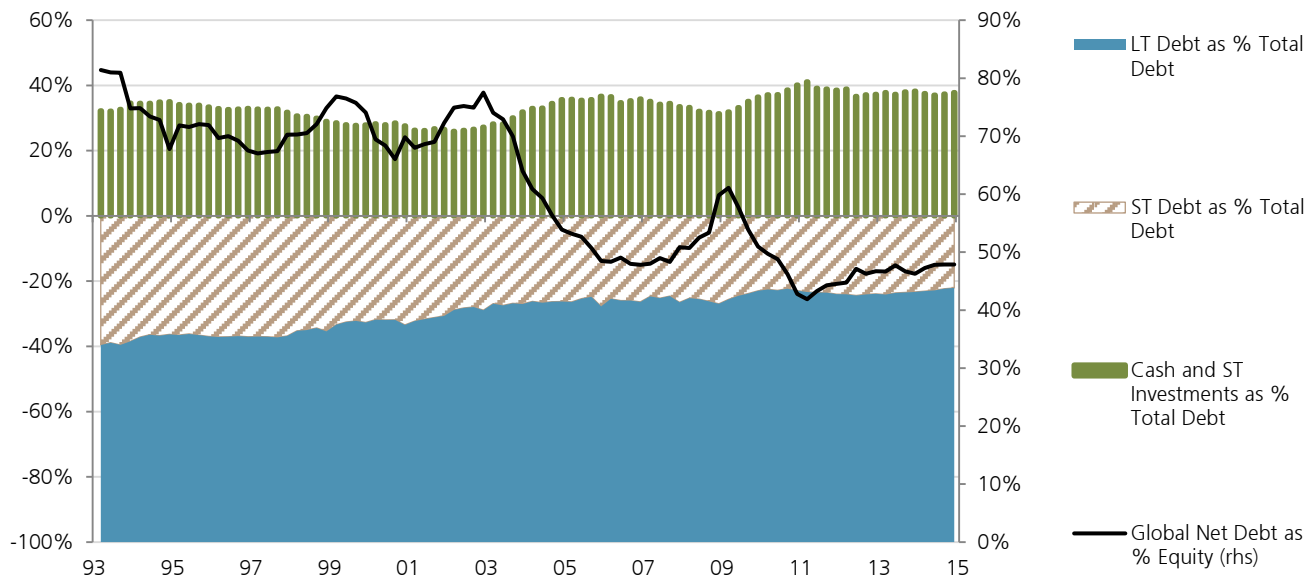
Recent History of Corporate Leverage

We looked in detail at the evolution of global, non-financial, *listed* corporate balance sheets since 1993, considering changes in the *level* of net debt to equity and the *mix* of long- and short-term debt and cash and equivalents over that time. We did so at the global aggregate level and for market sub-segments, including regions, countries, sectors and market capitalization buckets. We have two high-level conclusions:

(1) Companies have de-levered substantially over the last two decades.

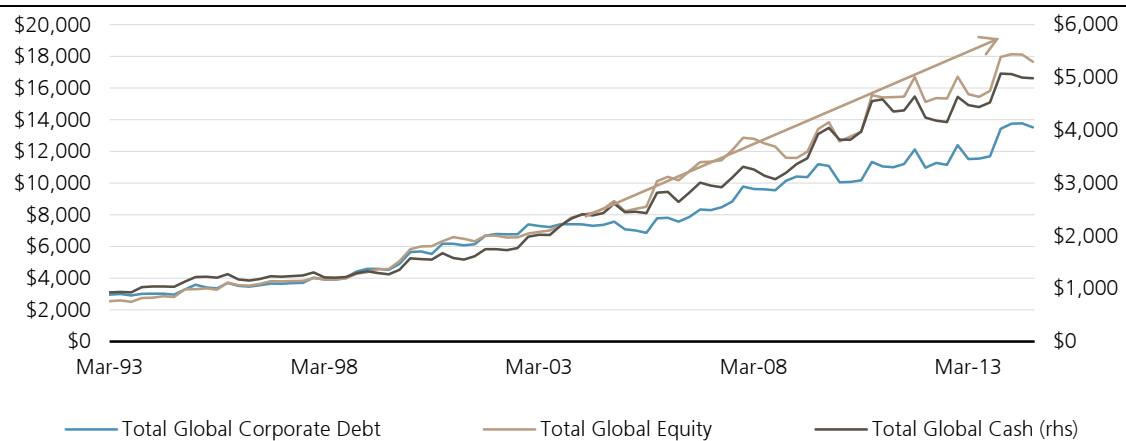
The aggregate net-debt-to-equity ratio in our global sample has fallen from 81% to 48% today. Recently, re-leveraging has started to emerge, but only slightly, as leverage has moved from 42% to 48% since 2011. Generally, higher equity through earnings retention and cash accumulation have been the main drivers of this trend.

Figure 1: Global listed corporates' aggregated short- & long-term debt funding and cash holdings



Source: Worldscope, UBS Quantitative Research

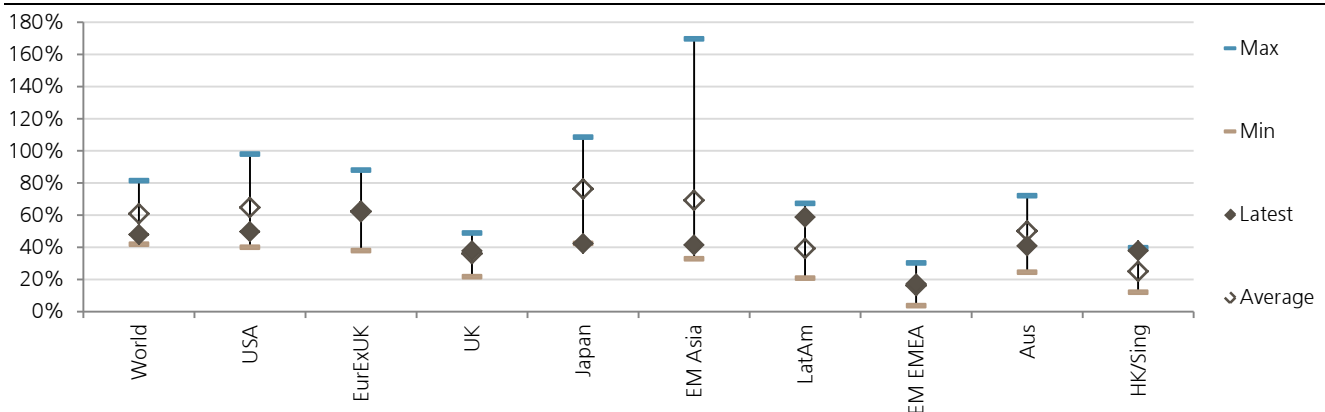
Figure 2: Earnings growth drives de-leveraging (\$tn)



Note: "Global equity" refers to the book value of equity on corporate balance sheets.
Source: UBS

(2) The trend has been consistent across almost all sectors, company sizes and geographies, as net debt-to-equity ratios for the regional aggregates have all converged at the 40-60% range, with most at or near their 20-year lows (Figure 3). The exceptions are LatAm and Hong Kong & Singapore. In those cases, corporate leverage is close to the top of 20-year ranges, but still not high relative to other regions. Figure 4 shows the state of balance sheets across market cap groupings, with similar consistency across mega and large caps. For detail on global sectors, please see Figure 10.

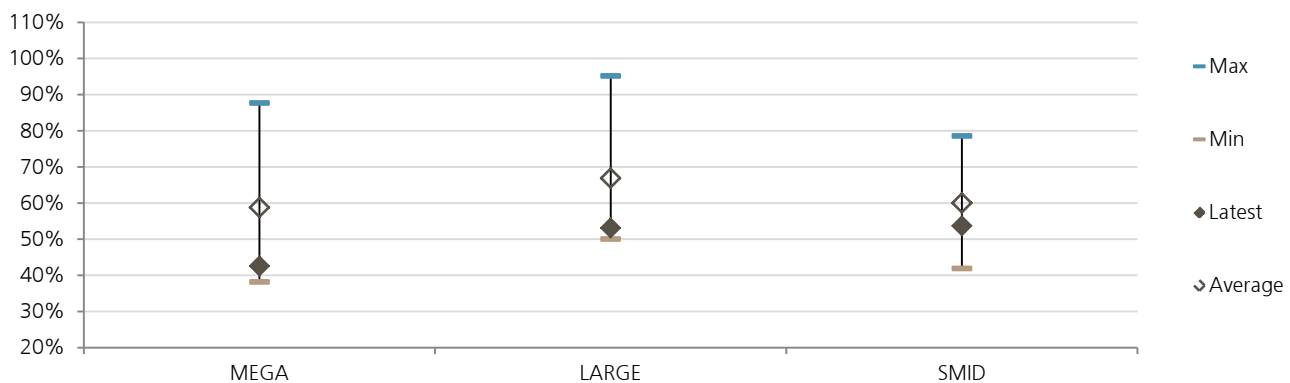
Figure 3: Regions: Net debt-to-equity current levels vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

We make available to the reader an interactive model in which one can explore different regional, sector and size cuts for leverage calculations, including different leverage metrics, analysing more than 20 years of data on over 5,200 global companies. [One can access the interactive model here.](#)

Figure 4: Global market cap groups: Net debt-to-equity current levels vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)s

Leverage Outlook

To further explore recent leverage trends, we investigated what has historically driven non-financial corporate CFO policies and **found that key drivers of leverage policy include economic conditions, asset returns and credit availability.**

- (1) **We show that corporations expand their leverage when their confidence in economic conditions is high**, which, in turn, is heavily influenced by real GDP growth and high levels of capacity utilization.
- (2) **We also show that rising asset returns have an impact on corporate leveraging decisions**, as they reduce perceived leverage and the returns are likely correlated with returns on business investment.
- (3) Finally, consistent with academic literature¹, **we show that higher net government and household debt issuance drives lower corporate leverage**, as the amount of loanable funds for corporate funding is reduced by competing government and household borrowing.

While all of our drivers are significant, we find that for recent history, our demand indicators (GDP & capacity utilization) are the primary drivers of corporate leverage, explaining near 70% of the variation in corporate leveraging over time (both in equal shares). The remaining explanatory power is evenly split between the availability of credit and asset price impacts.

Given our framework and how we see these drivers playing out, **we expect regional differences in leverage to re-emerge:**

- (1) **In the US, we expect leverage to increase further**, as demand growth and capacity utilization have been slowly improving. Dividends and share buybacks will remain a focal point, given ongoing search for yield from investors. M&A activity will also continue apace, as management teams have already exhausted many available levers to reduce costs and drive earnings.

¹ *A Century of Capital Structure: The Leveraging of Corporate America*, by John R. Graham, Mark T. Leary, Michael R. Roberts.

- (2) The double-dip recession and sovereign debt crisis in **Europe seem to have steered investors away from leveraged stocks**, as Europeans perceive risks of deflation and recession differently than their US counterparts. However, if Europe does not fall into another recession, a move toward a more efficient balance sheet will entail more dividends/buybacks to satisfy yield-hungry investors and a pick-up in M&A/capex that largely follows in US footsteps.
- (3) **In the UK, we see a good chance of a modest re-leveraging.** Demand growth has been relatively strong in the UK, with capacity utilization above its long-run average, although subpar returns by the FTSE could be a drag.
- (4) Leverage in Asia ex-Japan is below global average, with aggregate net debt/equity standing at 41% for the region. While leverage has been rising gradually, up 10 percentage points in the last 10 years, **we doubt corporate leverage will rise much more, as aggregate levels of economy-wide debt are high and rates could start rising.**
- (5) Today, Japanese corporate leverage is close to but slightly below global averages of 47%. In Japan, high public debt burdens will compete with strong micro incentives to leverage up corporate balance sheets. We do expect re-leveraging to occur primarily in the on-shore, non-manufacturing companies, as opposed to manufacturing exporters, although we highlight re-gearing via dividends/buybacks in several exporters. **As the results of our proprietary UBS Evidence Lab survey suggest, we do not expect leverage to increase in Japan until inflation picks up significantly.**

The Market Opportunity

Regardless of how large the regional differences will be, in aggregate, **CFOs will face a \$1tn dilemma. For global leverage levels to rise away from current lows, up to \$1tn of after-tax earnings would have to be incrementally spent or distributed every year, on top of what has been done in recent years.**

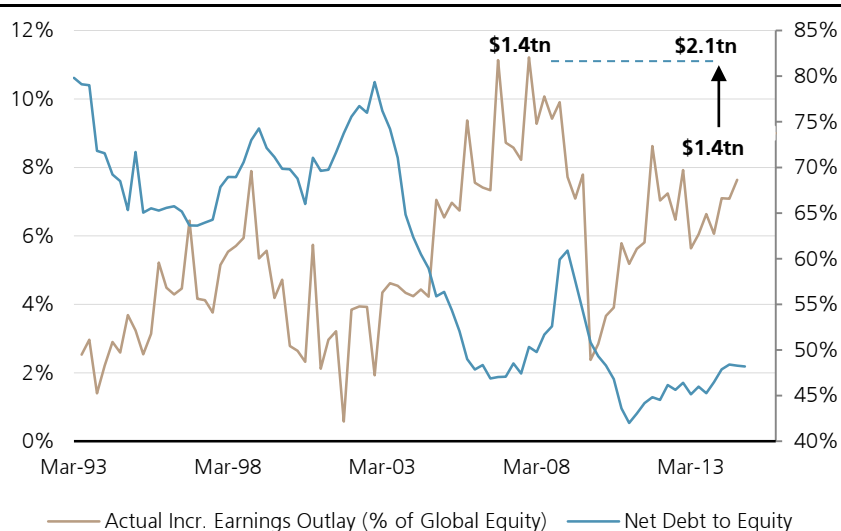
Long-term views for corporate leverage have implications across many areas of capital markets, including the appetite for M&A and capex investments, resetting of WACC and credit rating calculations, and intensity of buybacks and dividend pay-outs. All these factors influence earnings growth prospects and valuation multiples.

One could simplify the potential corporate path into two: **sustained lower leverage** and **rising leverage**. We believe the securities pricing implications for these two paths are:

- (1) **If low levels of leverage remain constant for the long term, securities should be re-priced upwards from current levels, considering a lower WACC and lower probability of default.** If M&A and capex remain constant at 2014 levels, \$1tn+ should flow to shareholder-friendly dividend payments and buybacks.
- (2) **In a re-leveraging scenario, a split will take place: companies with shareholder-friendly corporate actions will obtain a higher premium for aggressive buybacks and dividend, with disciplined M&A and capex; while companies with a less disciplined approach will get hit with valuation discounts.** Given historical outlay benchmarks, if companies

begin to re-leverage, total annual disposal could reach almost \$2tn through M&A, capex, dividends and buybacks in the medium term.

Figure 5a: Re-leveraging may drive record earnings outlays



Source: UBS

One can position a portfolio by increasing exposure to companies that are well positioned from a pricing perspective against these paths. We define this as re-leveraging in a shareholder-friendly way, such as increasing their leverage (in terms of net debt/equity) in a shareholder-friendly manner to accelerate returns to shareholders via share buybacks or increased (or special) dividends (Figure 5).

In the US, our top 5 picks for companies likely to remain focused on returning capital to shareholders include UBS Key Calls Ford and Rockwell Automation, as well as Gilead Sciences, Delta Airlines and Microsoft. In addition to a favorable outlook by our sector analysts, these names have the potential to increase their leverage (either through return of cash or issuance of debt) to return capital to shareholders via increased share repurchases or dividends. In the case of Rockwell and Microsoft, we've recently seen debt issuances that should provide the respective management teams with increased flexibility and potential to make additional share buybacks.

Our European top 5 picks on this theme are BMW, Ryanair, Nokia, BIC Group and Signet Group. These companies are currently less geared and expected to generate more cash than their respective sector peers. In addition, our analysts highlight that these names have the potential to increase returns to shareholders via dividends or share buybacks with a limited risk of major acquisitions.

In Japan, we believe HOYA, Kuraray, FUJIFILM, Konica Minolta and J. Front Retailing are most likely to re-lever in a shareholder-friendly way. These companies have corporate bonds but are lowly leveraged (net debt/equity < 50%) and our analysts think they are likely to re-gear positively for shareholders.

Figure 5b: Top global equities likely to benefit from shareholder-friendly buybacks & dividends

Region	Name	Sector	UBS Rating	Market Cap (US\$ mn)	Cash Balance (US\$ mn)	Div Yield	Net Debt to Equity
US	Ford	Cons. Disc	Buy	63,612	36,568	3.1%	-35%
US	Rockwell Automation	Industrials	Buy	15,987	1,820	2.6%	-22%
US	Gilead Sciences	Health Care	Buy	156,433	11,726	0.0%	35%
US	Delta Airlines	Industrials	Buy	37,286	3,305	0.7%	73%
US	Microsoft	Info. Tech	Buy	357,029	85,709	2.7%	-70%
EU	BMW	Auto Manufacturers	Neutral	79,615	18,221	2.3%	-41%
EU	Ryanair	Airlines	Buy	16,299	4,490	0%	-5%
EU	Nokia	Communication Tech	Neutral	30,228	12,362	1.97%	-56%
EU	BIC Group	HH Products, Non-Durable	Neutral	6,977	444	2.18%	-14%
EU	Signet Group	Retailers, Specialty	Neutral	10,066	248	0.61%	-15%
JP	HOYA	Tech Hardware	Buy	16,186	2,752	1.7%	-49%
JP	Kuraray	Materials	Buy	4,347	913	2.5%	-12%
JP	FUJIFILM	Tech Hardware	Neutral	15,713	5,342	1.7%	-12%
JP	Konica Minolta	Tech Hardware	Neutral	5,455	1,582	1.9%	2%
JP	J. Front Retailing	Retailing	Buy	3,372	303	1.1%	48%

Source: UBS, Thomson Reuters, Bloomberg, FactSet

Historical Trends in Corporate Balance Sheets

Starting at a high level, Figure 6 shows **three global trends** in corporate capital structure:

Jerry McGuire

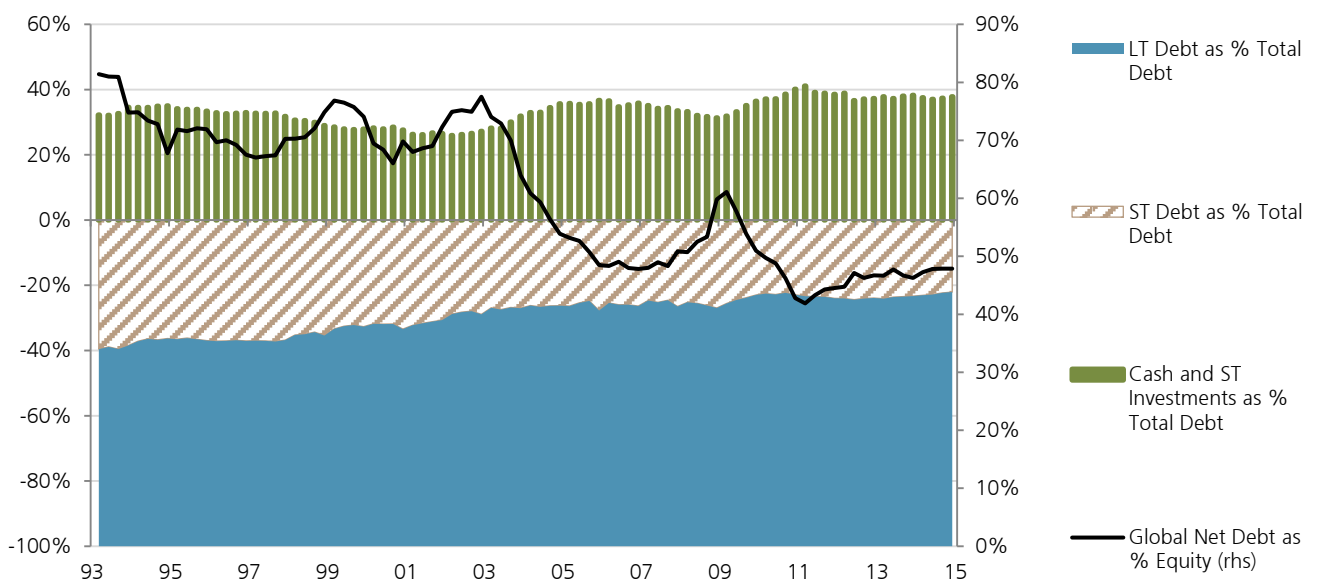
Strategist

jerry.mcguire@ubs.com

+1-212-713-2235

- (1) **Listed corporates have de-levered substantially over the last two decades but re-leveraging is starting to emerge.** The aggregate net-debt-to-equity ratio has fallen from 81% in the early '90s to about 48% today. However, it would appear that the nadir in net borrowing came around 2011; since then, leverage has moved from 42% to 48%.
- (2) **Simultaneously, listed corporates have been steadily terming out their debt, a trend that remains in place.** In the early '90s, corporate debt funding was about 60% long-term (more than one year to maturity) vs. 40% short-term. Today, that balance has shifted to almost 80%/20%. All market segments have decreased reliance on short-term funding.
- (3) **Listed corporates have gone from being net borrowers to net lenders in short-term money markets.** A function of strong cash accumulation and the de-leveraging and terming-out dynamics mentioned above, this threshold was first crossed in 2004. Listed corporates remain clear net sources of short-term funding today – please see Figure 14, Figure 15, and Figure 16 for more detail.

Figure 6: Global listed corporates' aggregated short- & long-term debt funding and cash holdings



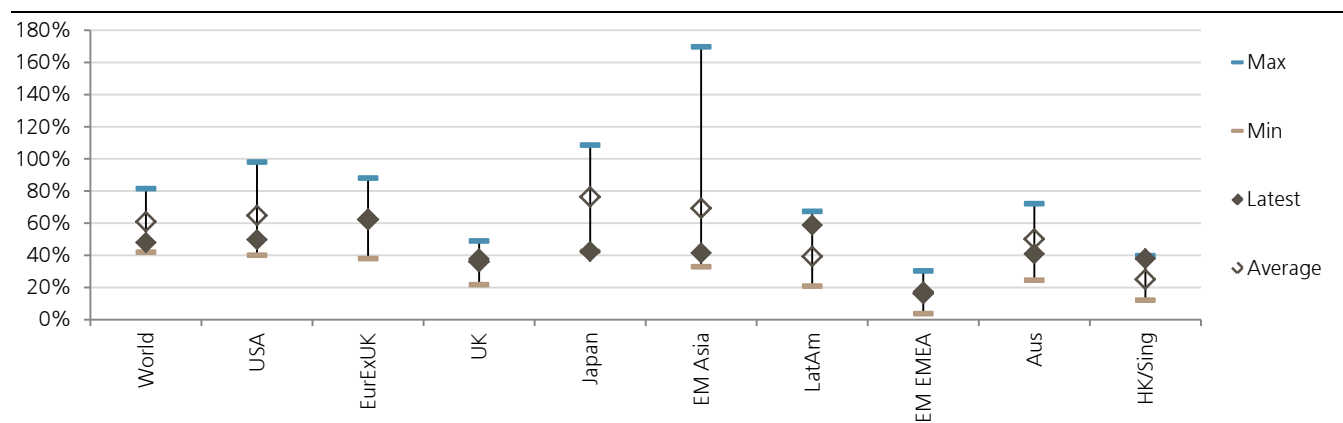
Source: Worldscope, UBS Quantitative Research

The Details of Recent De-Leveraging: Broad Uniformity and Convergence

Global aggregates clearly do not capture important variations amongst market sub-segments. We looked for interesting exceptions to the global rules and found one quite interesting case – the Health Care sector – which we discuss in Appendix I. First, however, we highlight several instances of uniform (and converging) trends across market segments:

- (1) In virtually all regions, publically listed non-financial corporates have de-levered over the last two decades, leaving net-debt-to-equity levels near, or in some cases at, their 20-year lows in most regions, as shown in Figure 7. The exceptions would include Europe, where cash accumulation has not been as strong in the post-crisis period as it has been in the US, LatAm, and the Asian money centers of Hong Kong and Singapore, where leverage has risen to the top of extremely low 20-year ranges. For them, higher than average leverage is most likely a function of simultaneous exposure to highly accommodative, post-crisis US monetary policy *and* high nominal growth economies in the region.**

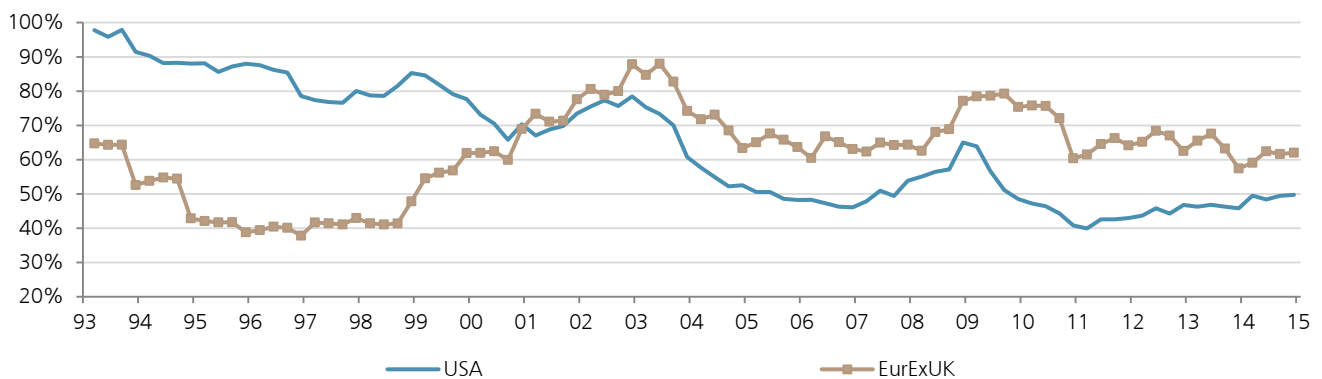
Figure 7: Regions: Net debt-to-equity current levels vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

A strong convergence trend in the regional data has accompanied de-leveraging: Focusing on the current levels depicted in Figure 7, with the sole exception of EM EMEA, net-debt-to-equity ratios for the regional aggregates have all converged on the 40-60% range, following two decades of widely differing levels. We can see these convergence trends in a different light in the historical time series depicted below.

Figure 8: Net-debt-to-equity ratios, US and Continental Europe

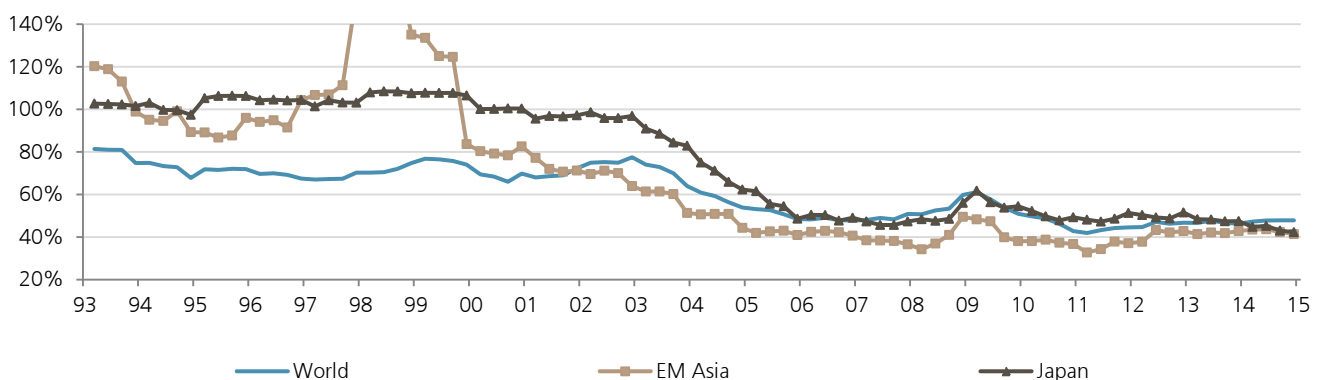


Source: Worldscope, UBS Quantitative Research (latest data points are for Q4 2014)

First, we see that in the US and Europe (Figure 8), convergence has come as European corporates have shed excess leverage taken on during and after the TMT bubble, and as US corporates, more recently, began re-levering as their post-financial crisis recovery gained steam. Rolling crises, a double-dip recession, and persistent dis-inflation in the post-crisis period have precluded broad re-leveraging from taking hold as firmly in Europe.

In Asia (Figure 9), we see Japanese and EM Asian debt levels falling toward global averages, following the peak of the Japanese asset bubble and (later) the EM financial crisis of the late '90s. Since the mid-2000s, Asian listed corporates have carried leverage levels broadly in line with global averages.

Figure 9: Asia de-levers (net debt-to-equity in Japan and EM Asia vs. global average)



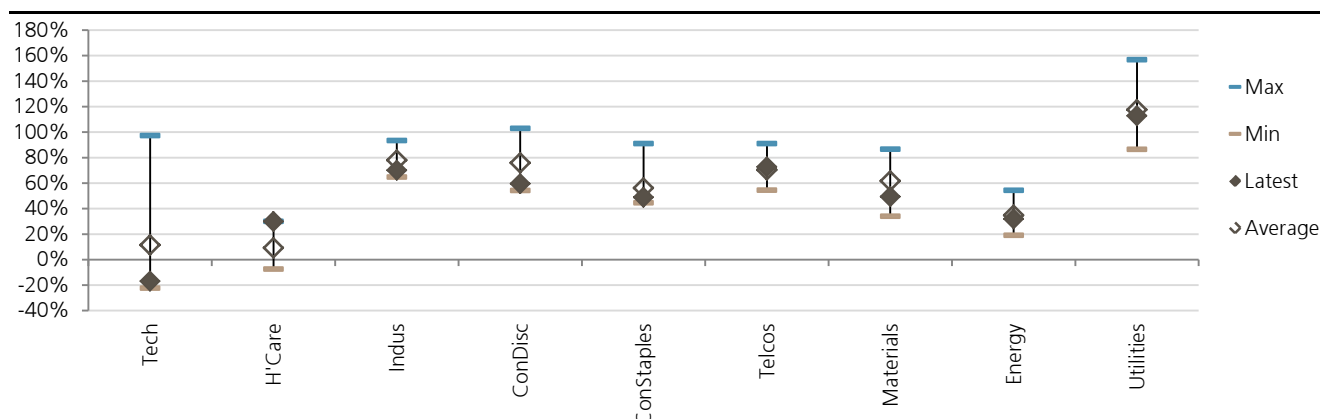
Source: Worldscope, UBS Quantitative Research (latest data points are for Q4 2014)

While the convergence of leverage ratios across regions could be explained by a sequence of crises forcing excesses out of each market, it also seems logical to posit that a global convergence trend would have been supported by the emergence of ever-more-global credit markets and financial institutions, as well as ever-more-global corporate borrowers (ie, multi-nationals) over the last 20 years.

(2) De-leveraging has taken place across global sectors, with one exception. With the exception of Health Care (further discussed in Appendix I), each global sector is currently operating at leverage levels much lower than average. Tech is the most extreme example: having a growing pile of net cash

on balance sheet, it has understandably attracted pressure from activists to lever up through capital returns.

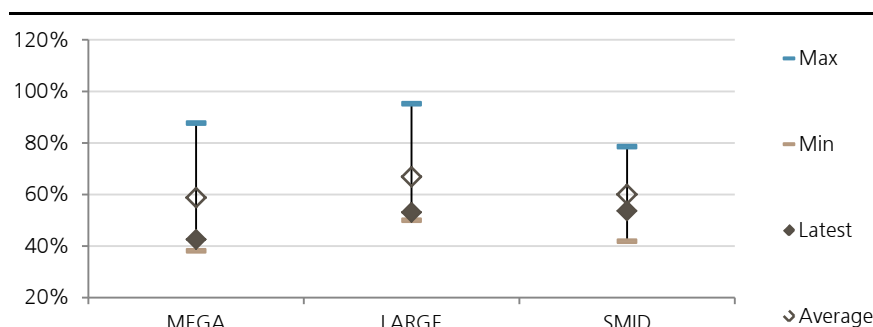
Figure 10: Global sectors: Net debt-to-equity current levels vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

(3) The de-leveraging trend of the last two decades is evident across global market-cap group aggregates as well, where leverage levels sit in that same relatively tight range of around 40-60% net-debt-to-equity, as shown in Figure 11. The trend of convergence we see in the regional data is present in market-cap group comparisons, albeit not as pronounced.

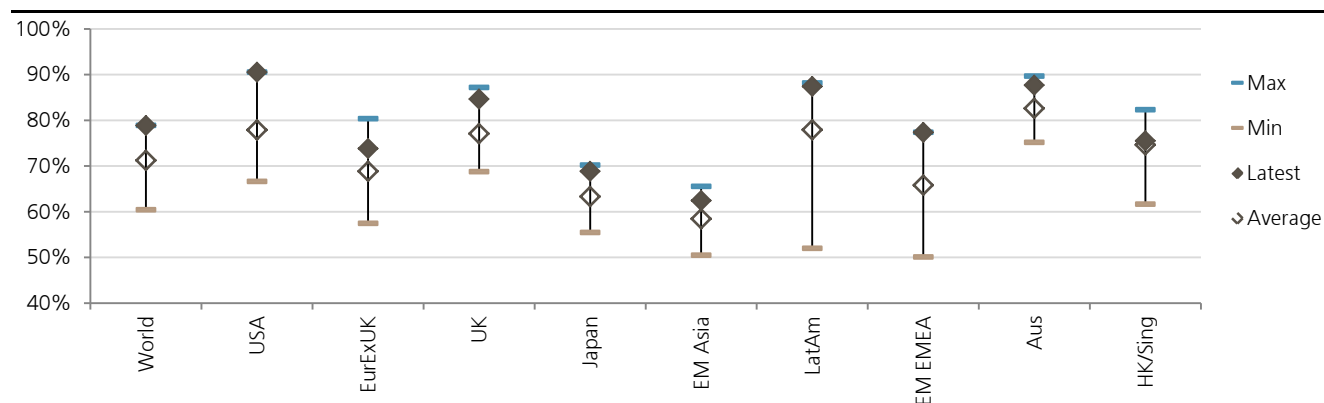
Figure 11: Global market cap groups: Net debt-to-equity current levels vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4 2014)

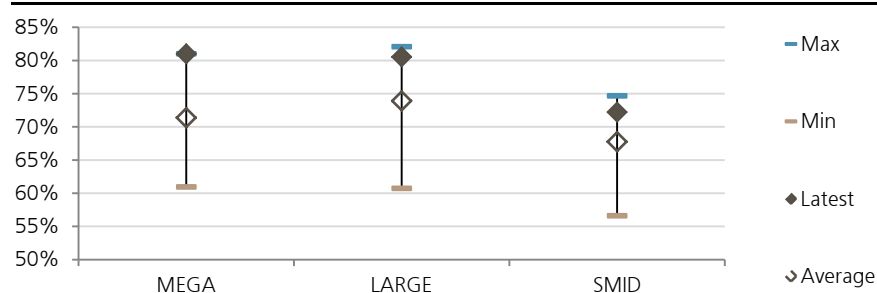
(4) Listed non-financial corporates have been terming out their debt over the last two decades: As shown in Figure 12, each region's corporates have reduced reliance on short-term borrowing by terming out debt, so that globally, scarcely more than 20% of non-financial corporate debt is shorter than 1 year, down from almost 40% in 1993. This outcome is also evident across market-cap groupings and sectors, as shown in Figure 13 and Figure 14, respectively.

Figure 12: Regions: Long-term debt as % of total debt vs. historical ranges (since 1993)



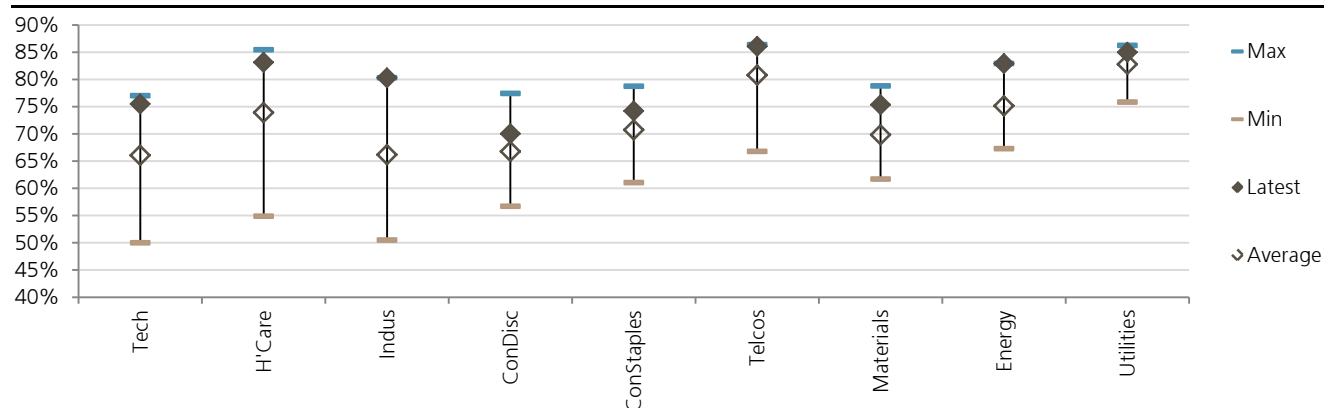
Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

Figure 13: Global market cap groups: LT debt as % total debt vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

Figure 14: Global sectors: LT debt as a % total debt vs. historical ranges (since 1993)

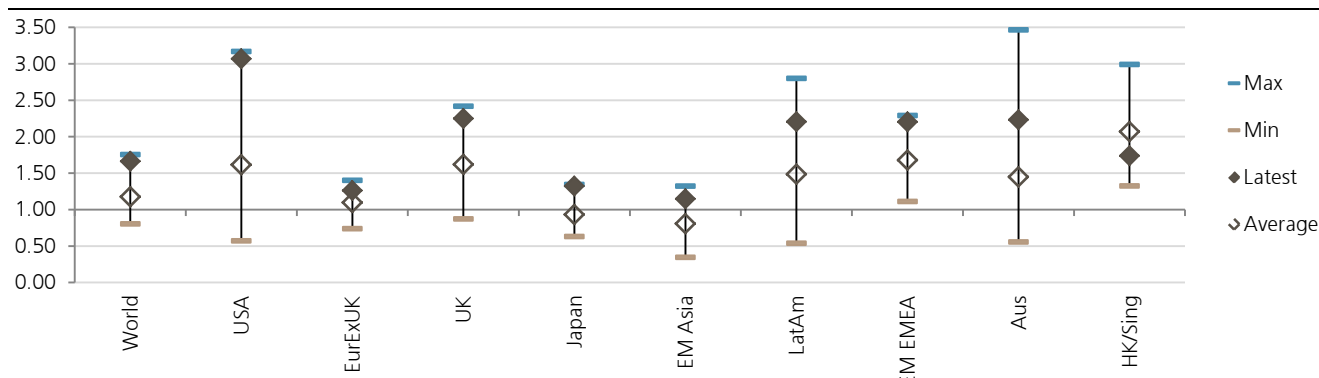


Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

(5) Listed non-financial corporates, in aggregate, currently lend more capital in short-term money markets than they borrow from them.

Combined with broad de-leveraging (itself associated with but not reducible to cash accumulation), the terming out of debt funding has allowed listed corporates to move into the role of sources, rather than consumers, of short-term financing. This is true across regions, as shown in Figure 15, which shows the ratio of corporates' cash and liquid assets to short-term borrowings, by region. Clearly, the US is having a major impact on global aggregates. Nonetheless, each region shows a ratio above 1x, indicating net provision of capital to money markets.

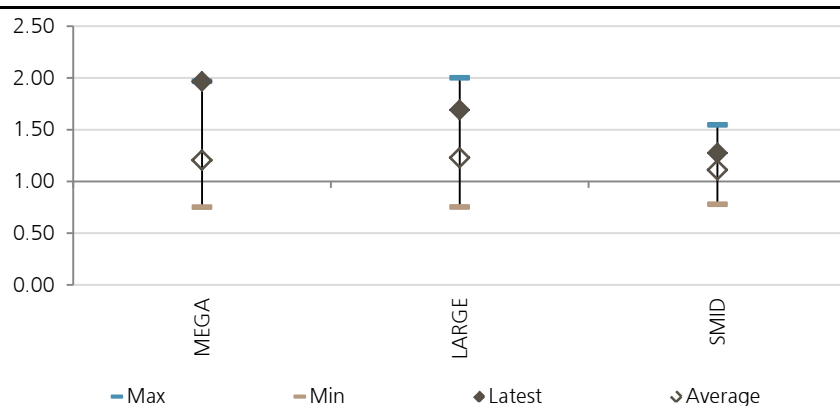
Figure 15: Regions: Ratio of cash & ST investments to ST debt vs. historical ranges (since 1993)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

This characterization is also true for market capitalization groupings, as shown in Figure 16, and again in Figure 17, where we show that each global sector is also (currently and in aggregate) carrying cash balances 1.25-2x larger than their stocks of outstanding short-term debt.

Figure 16: Global market cap groups: Ratio of cash & ST investments to ST debt, vs. historical ranges (since 1993)

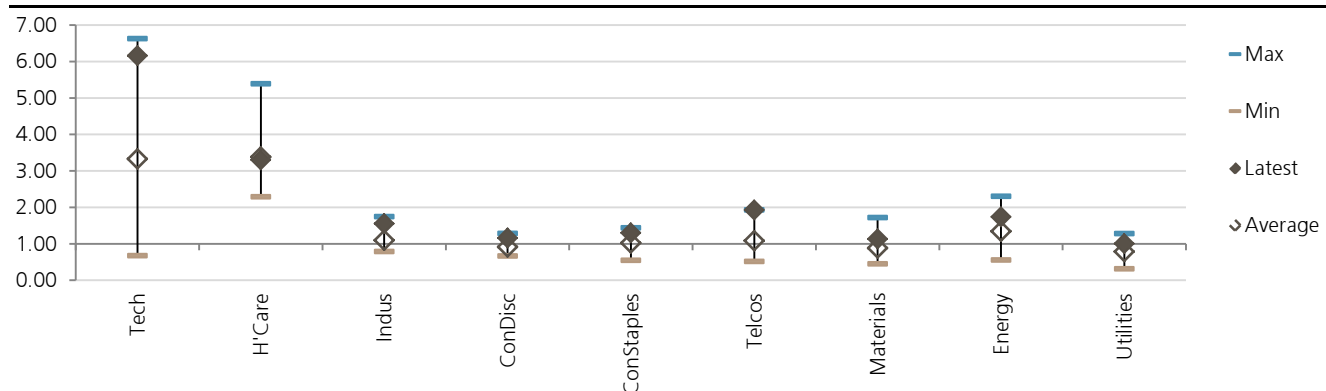


Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

Surely the hangovers from the Japanese asset bubble and deflationary spiral, the Asian financial crisis, the Russian default, the TMT bubble and the global financial crisis have all, globally and in their respective regions, fuelled corporates' aversion to reliance on short-term funding, or put differently, their "liquidity preference". If those crises have provided motivation to de-lever, hoard cash and term-out, low long-term rates and broadly strong corporate profit margins have provided corporates with the ability to do so.

Figure 17 illustrates the importance of cash holdings in the Tech and Health Care sectors in creating this aggregate surplus of cash on the global corporate balance sheet. However, with the exception of Utilities, each sector is still "holding its own" in terms of cash holdings exceeding ST debt.

Figure 17: Global sectors: Ratio of cash & ST investments to ST debt vs. historical ranges (since 1993)

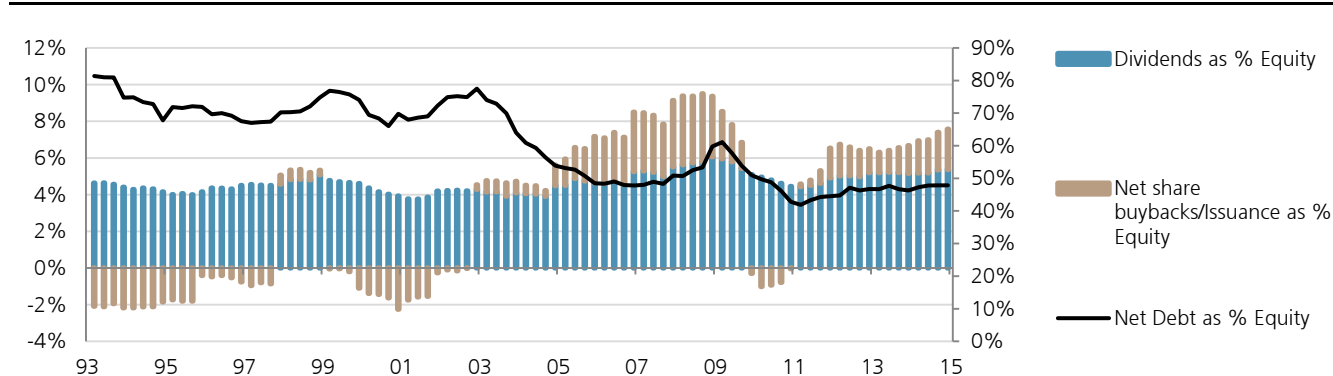


Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

Global Trends in Use of Cash by Listed Corporates

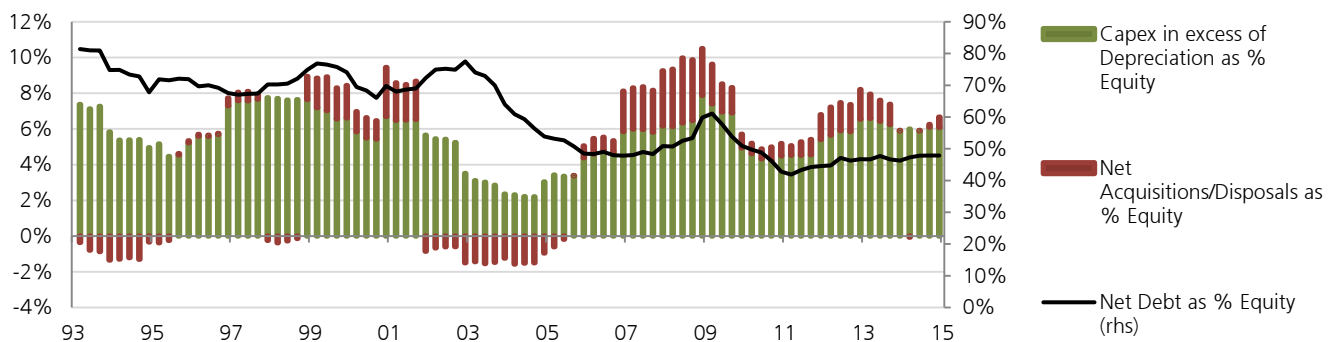
Changes in cash deployment trends are central to understanding changes in net leverage trends (for further detail, see Appendix I). In Figure 18 and Figure 19, we illustrate how global listed corporates have been using their cash flow.

Figure 18: Global dividends & net buybacks as % shareholder equity



Source: UBS

Figure 19: Global growth capex & net acquisitions/(disposals), as % shareholder equity



Source: UBS

- (1) Intuitive links between cyclical dynamics in cash deployment and leverage:** Increases in leverage during the last two decades (particularly in the 1997-99 and 2006-09 periods) began with increasingly aggressive cash deployment trends: Note the sharp increases in capex and net acquisitions, and cash returns to shareholders (dividends and buybacks) in 2006-09, coinciding with the stabilization and subsequent rise in leverage. By contrast, the TMT and financial crisis "hangover" periods saw heavy de-leveraging and were characterized by predictable reductions in capex (especially post 2000) and dividends and buybacks (especially post 2009). We also saw cyclically-sensible, active balance sheet rebuilding in the form of net disposals of assets (post 2000) and net issuance of equity (post 2000 and 2009).
- (2) Two decades of cumulative de-leveraging and declines in interest costs have left more cash flow available to equity investors:** These trends, combined with broadly higher operating margins post-crisis, have allowed the corporate sector (at the global aggregative level) to maintain relatively high levels of growth in equity-friendly cash deployment, especially buybacks, since roughly mid-2011.
- (3) De-leveraging no more:** While it has not yet led to a sharp re-leveraging globally (nor in any large region), more equity-focused cash deployment has certainly arrested the de-leveraging trend of the early post-crisis period. We've seen a tentative but unmistakable rise in global net-debt-to-equity levels, as dividends and buybacks have run consistently in a range of 6-7% of equity, helping stem the growth of balance sheet cash holdings. Growth capex and acquisitions combined have remained at similar levels but look relatively moderate compared to the highs of the last two decades.

We make available to the reader an interactive model in which one can explore different regional, sector and size cuts for leverage calculations, including different leverage metrics, analysing more than 20 years of data on over 5,200 global companies. [One can access the interactive model here.](#)

Empirical Drivers of CFO Corporate Leverage Decisions

To start, the key takeaways of our findings, using the US as a model, include:

- (1) The academic literature about corporate leverage is often lacking in practice.** Corporate CFOs are inherently backward-looking when setting corporate financing decisions, relying on past extrapolations of economic activity, even when current market pricing suggests that future investment returns may be lower.
- (2) Lagged demand is most important for corporate leverage and the level of demand is at least as important as changes in demand.** Corporate CFOs respond to increases in real GDP and above-trend levels of capacity utilization. Increases in RGDP with above-trend capacity utilization are most powerful for unlocking re-leveraging.
- (3) Crowding out effects and risky asset returns play a smaller but important supporting role.** We find evidence that government issuance is negatively related to corporate leverage and that past asset market returns are positive related to corporate leverage.

Our proxy for US corporate leverage throughout this section of the piece is US non-financial corporate business liabilities (from the US flow of funds) divided by US non-financial corporate profits (from US national accounts). This is one of the broadest measures of non-financial corporate leverage available and provides us a lengthy track record (back to the 1950s), both of which aid us in drawing conclusions.

Corporate Leverage Theory

The theoretical view underlying corporate finance posits that the optimal firm capital structure (ie, the ideal firm net-debt-to-equity ratio) should balance the tax-deductible benefits associated with issuing more debt against the increased probability of bankruptcy. This is known as the trade-off theory of capital structure. However, through our research, we find that this theory is often lacking. As discussed in academic articles², corporate leverage has little relationship with corporate tax rates over time.

We also find that CFOs generally do a poor job of estimating the expected likelihood of bankruptcy. Figure 20 shows the YoY change in US non-financial corporate leverage versus recession dates. Before nearly every recession, leverage increases as CFOs price overly optimistic projections of the economy into their investment decision-making process. CFOs would not be incurring as much debt in this stage of the cycle, consistently throughout history, if they were estimating bankruptcy probabilities appropriately.

Stephen Caprio

Associate Strategist
stephen.caprio@ubs.com
+1-203-719 6032

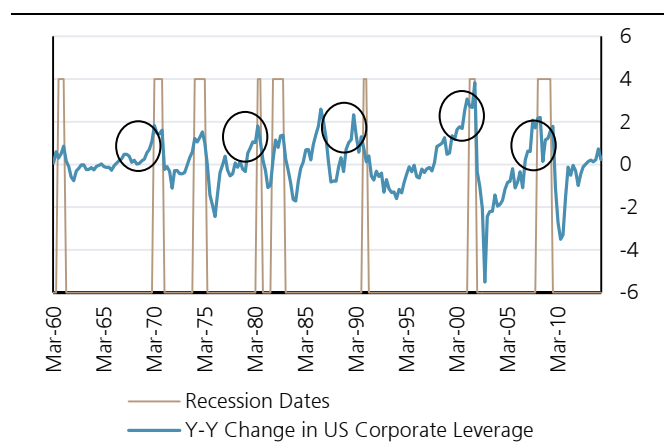
Matthew Mish, CFA

Strategist
matthew.mish@ubs.com
+1-203-719 1242

² See "A Century of Capital Structure: The Leveraging of Corporate America", Graham, Leary, Roberts (2012)

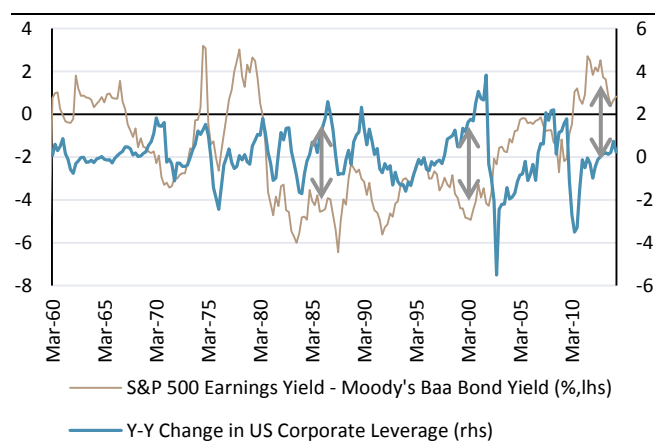
Finally, one would expect that as interest rates rise and future expected asset returns fall, CFOs would become more cautious. As recent academic literature has shown³, and as Figure 21 demonstrates, this is not the case. Figure 21 shows US non-financial corporate leverage vs. the S&P 500 earnings yield – Moody's BAA bond yield. The earnings yield minus bond yield is a rough proxy for the expected return on investment minus certain financing costs. In several periods (the early 1970s, mid-1980s and late 1990s), corporate leverage accelerated even as investment opportunities grew less attractive. The post-2008 period has seen the opposite anomaly; corporations have re-levered less than expected, given the historically low level of financing costs relative to asset prices.

Figure 20: Corporates are leveraging their balance sheets just before recessions



Source: UBS, Bloomberg

Figure 21: Corporates are leveraging their balance sheets when future expected returns are lower



Source: UBS, Bloomberg, Moody's

Bottom line: our hypothesis is that other factors are at play and we detail these drivers below.

Empirical Drivers of Corporate Leverage: Demand

We posit that corporations generally expand their leverage when their confidence in economic conditions is high, which, in turn, is heavily influenced by prior strong economic activity. Simply put, a business will not expand its operations unless it is confident in sustained underlying revenue for its products. But how is this confidence achieved? We believe that both *changes* and *levels* in demand play a major role.

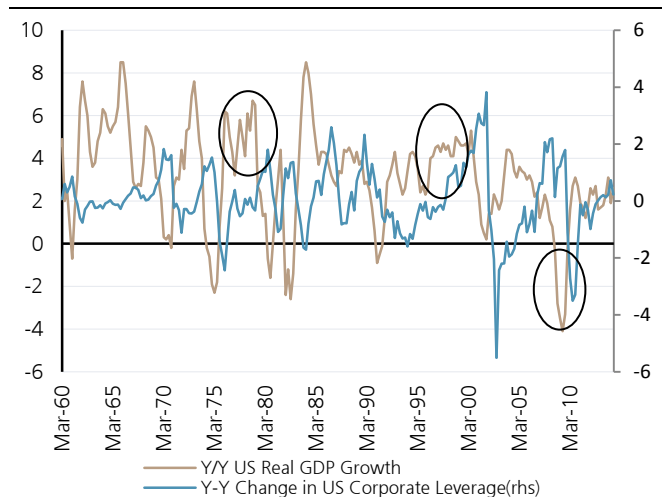
For changes in demand, we use YoY real GDP growth. This clearly impacts corporate credit decisions, both from increasing actual sales to increasing perceived confidence in future sales. Figure 22 shows this dynamic at work. As expected, real GDP growth appears to lead corporate leveraging.

While GDP growth is important, the overall level of economic output is an important driver of leverage, and it either magnifies or shrinks the impact of GDP growth alone. We use capacity utilization as a proxy for this concept, which we believe impacts financing decisions through two channels. First, if overall business capacity is tight, corporations must make long-term investments in property, plant and equipment to meet increases in demand. Second, there is a psychological element at play. A strong increase in demand in the context of tight business

³ "The behavior of aggregate corporate investment", Kothari, Lewellen, Warner (2013)

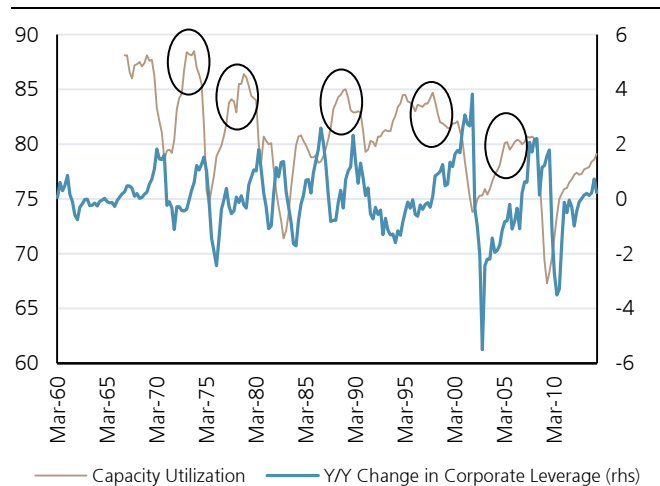
capacity and/or low unemployment (a proxy for labor market capacity) is likely to engender more confidence in future economic conditions than a bounce in GDP (even a strong one) off depressed levels. Figure 23 shows this relationship over time. High levels of capacity utilization lead future changes in corporate leverage.

Figure 22: Increases in demand lead corporate leveraging...



Source: UBS, Bloomberg

Figure 23: ... while high levels of demand magnify the impact



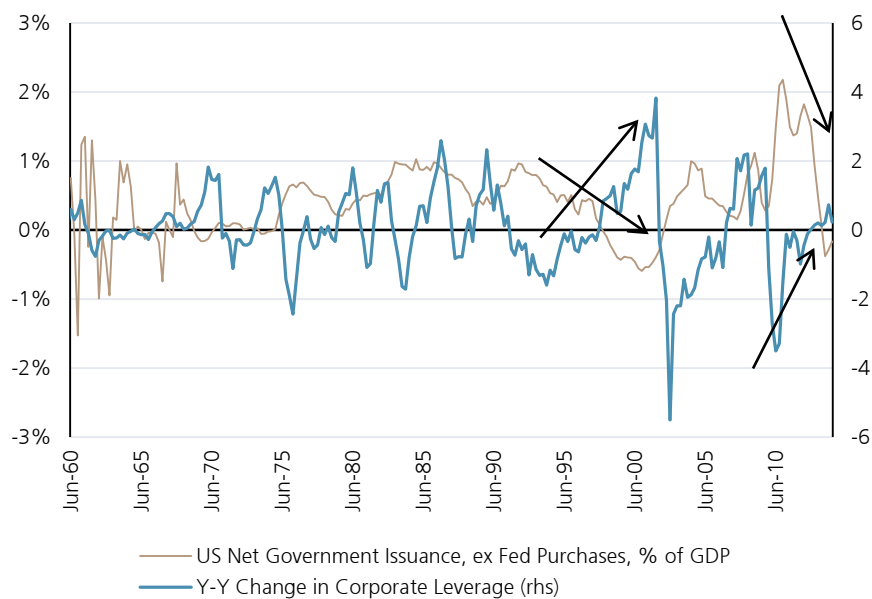
Source: UBS, Bloomberg

Empirical Drivers of Corporate Leverage: Supply

On the supply side, academic literature⁴ suggests net government issuance crowds out corporate issuance, as lenders rebalance their portfolios to relatively higher yielding government bonds. Thus, higher net government issuance should be expected to reduce corporate leverage (all else equal), as there is a decrease in the amount of loanable funds to the private sector. Figure 24 shows the historical relationship in the US. For government supply, we use US net government issuance, ex-Fed purchases, as a percentage of GDP. We exclude Fed purchases because we need to capture the fact that the Fed's QE program effectively reduced the amount of investable Treasury supply for investors, pushing yield-seeking lenders out into corporate credit (ie, the portfolio rebalancing channel). We find a negative relationship between government issuance and changes in corporate leverage.

⁴ "A Century of Capital Structure: The Leveraging of Corporate America", Graham, Leary, Roberts (2012)

Figure 24: Government net issuance crowds out corporate leveraging



Source: UBS, Bloomberg

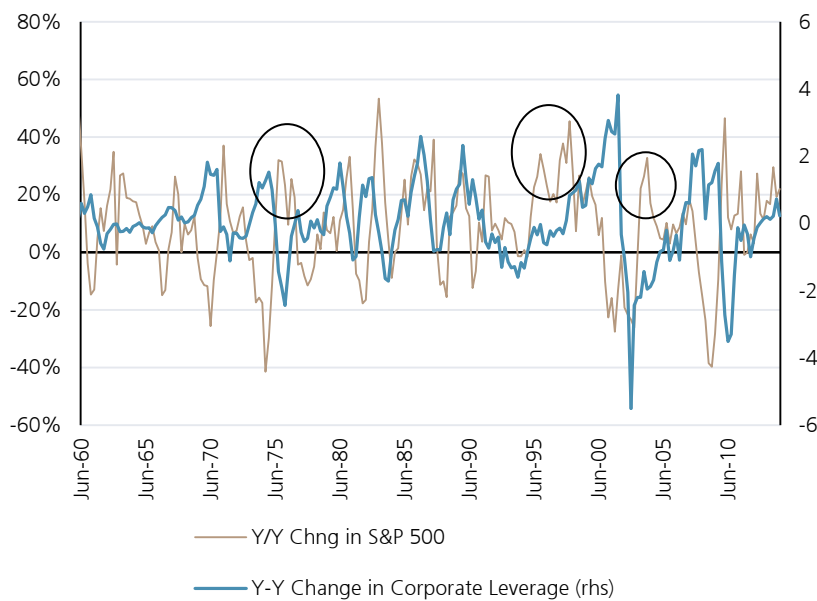
Empirical Drivers of Corporate Leverage: Asset Returns

Apart from the real economy and crowding out effects, we believe asset returns may have an impact on corporate leveraging decisions. This works in at least two ways: 1) Rising asset prices flow through to corporate balance sheets by reducing perceived leverage and creating an incentive for lenders to provide more debt to firms. 2) Past asset returns are likely correlated with past returns on business investment. We use YoY changes in the S&P 500 as a proxy for asset returns. Figure 25 shows S&P 500 returns lead changes in corporate leverage. This is similar to a recently published academic article that finds the same relationship⁵.

While an argument can be made that rising asset prices cause de-levering through higher retained earnings and a larger incentive for corporates to issue equity at increased prices, there are competing forces in the opposite direction. The pecking order theory of corporate finance states that raising equity is typically a last resort (as opposed to using internal cash or issuing debt), as this sends a negative signal that a firm is currently overvalued. In addition, rising equity prices should incentivize more risk-taking from CFOs (ie, greater use of debt financing), as discussed above.

⁵ "The behavior of aggregate corporate investment", Kothari, Lewellen, Warner (2013)

Figure 25: Increases in risky asset prices could boost corporate leveraging



Source: UBS, Bloomberg

Putting It Together: Forecasting Corporate Leverage

Given our drivers, we set out to test how well these variables forecast US non-financial corporate leveraging decisions together. We build a regression that attempts to explain the one year-ahead YoY changes in US corporate leverage, on a quarterly basis, using the aforementioned variables (detailed again in Figure 26), from 1967 until the present. We explicitly try to forecast *changes* in US non-financial corporate leverage to account for trends in the underlying time series. To deal with increases in leverage unrelated to corporate investment decisions (ie, large temporary drops in business profits), we use dummy variables to control for recessionary periods (as defined by NBER) and better isolate the drivers of actual CFO investment decision-making.

The results can be seen in Figures 26-28. The aggregate model produces an R-squared of 53% when forecasting YoY changes (Figure 27). When converting our forecast YoY changes in corporate leverage to what that implied for leverage levels, we can see that our drivers did a fair job of predicting the leverage level one year ahead (Figure 28). While the model isn't perfect, it has notably predicted re-leveraging in the 1970s, the late 1990s, the 2005-07 period, as well as the deleveraging post-crisis. It did miss corporate leveraging in the mid-80s to early 90s, as well as during the tail end of the last two recessions. With that said, this is partly due to declines in corporate profits and mismatches between corporate "profit recession" dates and NBER recession dates.

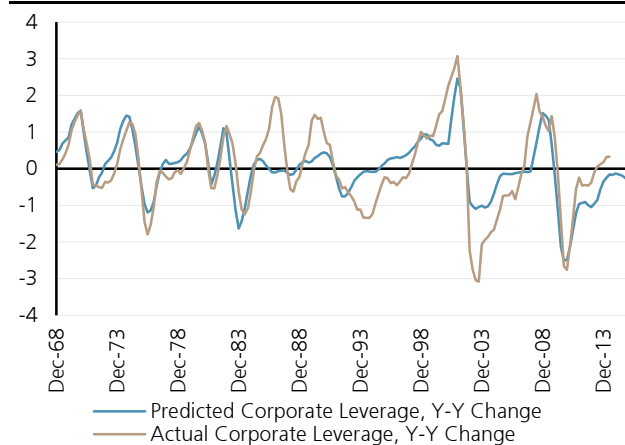
Figure 26: Drivers of corporate leverage: Model statistics

Regressor (excluding monthly seasonal factors)	Description	Coefficients	T-Stat
Real GDP, Y/Y, lagged 1 year	Level of US Real GDP	0.31%	3.56
Capacity Utilization, lagged 1 year	Level of Capacity Utilization	0.33%	3.25
S&P 500 Y/Y return, lagged 1 year	Level of S&P 500	0.19%	2.59
Net Treasury Issuance, ex Fed purchases, % of GDP	Level of net Treasury Issuance as % of GDP	-0.18%	(2.12)

* These coefficients are based on normalized data i.e. for each variable data series, we normalize the data by subtracting the average and dividing the difference by the standard deviation over the sample period.

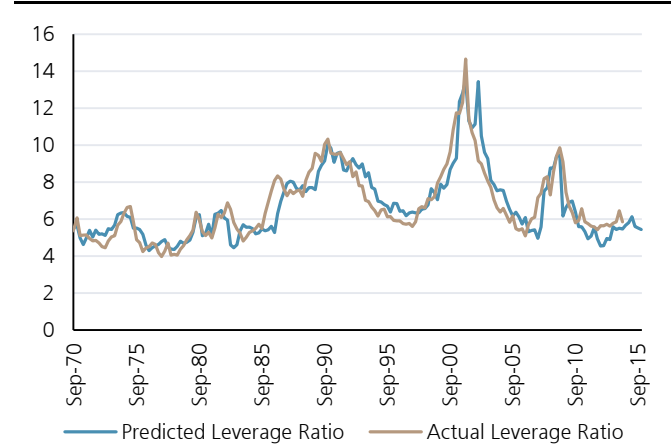
Source: UBS, Haver, Bloomberg

Figure 27: Modelled corporate leverage vs. actual corporate leverage (YoY change)



Source: UBS

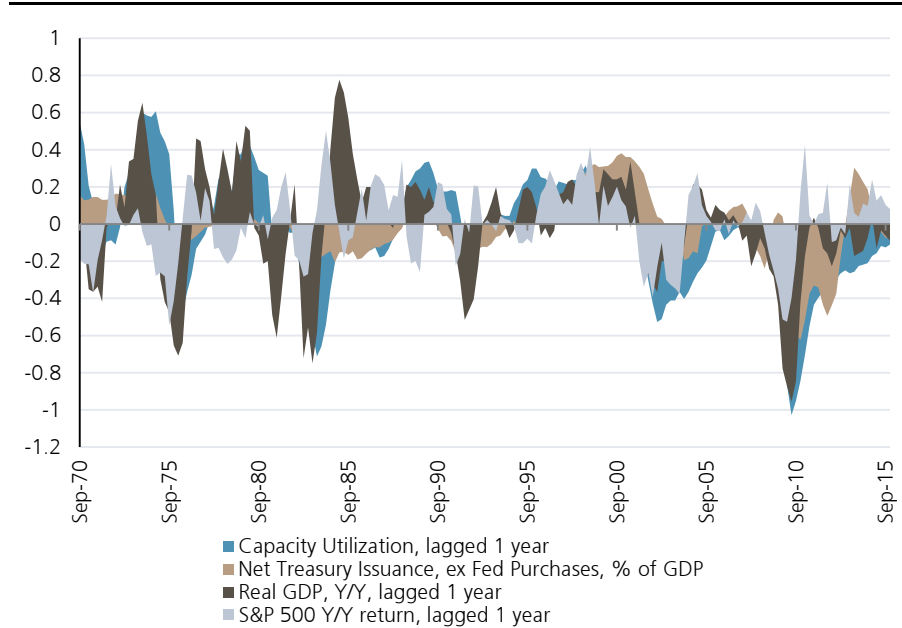
Figure 28: Modelled corporate leverage vs. actual corporate leverage (Levels)



Source: UBS

Figure 29 provides a view of which variables matter most. While all of our drivers are significant, we find that our demand indicators (RGDP and capacity utilization) are the primary drivers of corporate leverage, explaining near 70% of the variation in corporate leveraging over time (both in equal shares). The remaining explanatory power is evenly split between crowding out effects and asset price impacts.

Figure 29: Factor decomposition of modelled YoY changes in corporate leverage



Source: UBS

Global Outlook for Corporate Leverage

Aggregate Story

In aggregate, if leverage were to remain constant globally, a combination of the following factors would have to take place:

- (1) Debt levels would have to increase proportionately to the increase in equity due to accumulated earnings; and/or
- (2) Earnings outlays, either capex, M&A, dividends or share buybacks, would have to increase to compensate for a less aggressive debt issuance

These are both important concepts. While debt levels have increased since 1993, the rise in equity has far outpaced debt growth, leaving firms less leveraged. The increase in equity has occurred due to robust earnings, driven by a shift higher in profit margins, but also due to conservative earnings outlays. If corporates continue their recent re-leveraging trend, a large amount of additional earnings outlays can hit the market, likely in the form of shareholder-friendly dividends/buybacks. One rough calculation for gauging the dollar potential of this is:

$2014 \text{ After-Tax Earnings} - 2014 \text{ Net Capex} - 2014 \text{ Net M\&A} \approx 2015 \text{ earnings outlay (dividend/buyback) to maintain constant leverage}$

We estimate this to be \$1tn in 2015. However, this likely *understates* the outlay needed to maintain leverage levels for two reasons. First, capex and M&A activity can be funded out of equity issuance, which decreases leverage. Second, if corporates re-leverage, we estimate this could increase additional earnings outlays (which last year struck at \$1.4tn) to a number closer to \$2tn.

In Figure 30 and Figure 31, we show the historical trend across these factors. One can see that path (2) in Figure 31 implies additional scope for outlays next year if corporates continue re-levering. The current \$1.4tn outlay is 8% of total equity. If total incremental earnings outlays climb to 11% of equity (2007 levels), then an additional \$0.7tn of earnings outlays are available on top of 2014 numbers.

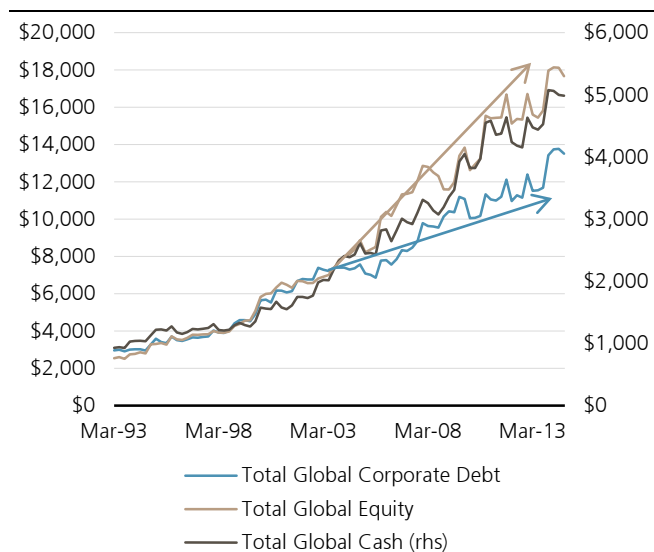
Stephen Caprio

Associate Strategist
stephen.caprio@ubs.com
+1-203-719 6032

Matthew Mish, CFA

Strategist
matthew.mish@ubs.com
+1-203-719 1242

Figure 30: Earnings growth drives de-leveraging (\$tn)



Source: UBS

Figure 31: Re-leveraging may drive record earnings outlays



Source: UBS

Regional Differences

Assessing the regional differences on leverage requires assessing secular views in addition to the cyclical drivers defined above, to see where the above dynamic of increased debt or earnings outlays are more likely to take place.

We believe elevated total economy-wide debt levels may hinder future corporate leverage. Leverage cycles generally take off when a combination of monetary easing and defaults reduce corporate debt loads from the prior re-leveraging. But if monetary policy is reaching its effective limits, then a prolonged period of de-leveraging (via lower peaks and larger troughs) could await. Indeed, a recent report by the IIF⁶ found that government and household debt begins detracting from growth when levels exceed 85% of GDP, while corporate debt itself begins detracting at 90% of GDP.

We have touched on the former issue of public sector crowding out, while new research has found that even household debt has crowded out corporate investment, in the case of the US housing bubble⁷. Simply put, total economy-wide debt levels in most developed economies today are large enough that they risk meaningfully detracting from future demand. According to our framework, that is the most important determinant of future corporate leverage. Figure 32 and Figure 33 show which countries may be most at risk from this dynamic. Notably, the debt figures in the tables are in *gross* terms, which may overstate the risk in some countries due to offsetting savings in cash and other liquid assets.

In the developed world, we find that Japan, peripheral Europe (Portugal, Spain) and even parts of core Europe (Netherlands, France) face headwinds from high public and corporate debt burdens. In contrast, corporate re-leveraging potential is less affected by this predicament in Germany, Australia and the US.

⁶ "The Real Effects of Debt", Cecchetti, Mohanty, Zampolli (2011)

⁷ "Dark side of housing-price appreciation, Chakraborty, Goldstein, MackKinlay (2013)

In EM, there is more scope for re-leveraging, given lower absolute debt levels, but the potential is not the same across regions. Much of Asia (China, Korea, Malaysia) has reasonably high private debt burdens that may hinder future corporate leverage. Meanwhile, Russia, Mexico, South Africa and India all have low debt burdens that we believe should not interfere with corporate leveraging.

Figure 32: Developed world country debt levels (2013, ranked from highest to lowest total gross debt)*

	Gov't Debt	HH Debt	Corp Debt
Japan	2.41	0.8	1.58
Portugal	1.46	1.02	1.6
Spain	1.1	0.79	1.68
Belgium	1.21	0.68	1.67
Netherlands	0.89	1.35	1.24
France	1.14	0.69	1.62
Great Britain	1.04	1.1	1.22
Sweden	0.56	0.87	1.86
Italy	1.43	0.56	1.28
Canada	1.17	1.02	1.06
Greece	1.87	0.57	0.8
Norway	0.51	1.07	1.61
Denmark	0.7	1.32	1.16
Finland	0.73	0.74	1.45
Hong Kong	0.07	0.63	1.98
United States	1.06	0.81	0.76
Australia	0.51	1.16	0.86
Austria	0.93	0.56	1.02
Singapore	1.04	0.60	0.78
Germany	0.83	0.57	0.91

* Leverage levels come from the "The Real Effects of Debt Publications" c2009 and are extended forward using the changes in the latest OECD estimates. Figures are shaded red when Gov't & HH Debt to GDP > 85% & NonFinCorp Debt to GDP > 90%.

Source: UBS, "The Real Effects of Debt"(2011), OECD, National sources

Figure 33: Emerging world country debt levels (2013, ranked from highest to lowest total gross debt)*

Country	Gov't Debt	HH Debt	Non-Fin Corp Loans
China	0.39	0.23	1.52
South Korea	0.34	0.50	1.03
Malaysia	0.58	0.70	0.46
Brazil*	0.66	0.72	--
India	0.62	0.09	0.52
South Africa	0.45	0.40	0.32
Mexico	0.46	0.07	0.12
Russia	0.14	0.15	0.32

* Brazil Private Credit Debt (HH + NonFin Corp) is 72% of GDP, Figures are shaded red when Gov't & HH Debt to GDP > 85% & NonFinCorp Debt to GDP > 90%.

Source: UBS, CEIC, Haver, BIS, IFS

We present a schematic in Figure 34 to help guide us through this section and explain our forecast for *changes* in corporate leverage. Notably, since demand is a bigger factor, being on the right side of the grid below is most important for driving increases in corporate leverage, although being in the top right is ideal.

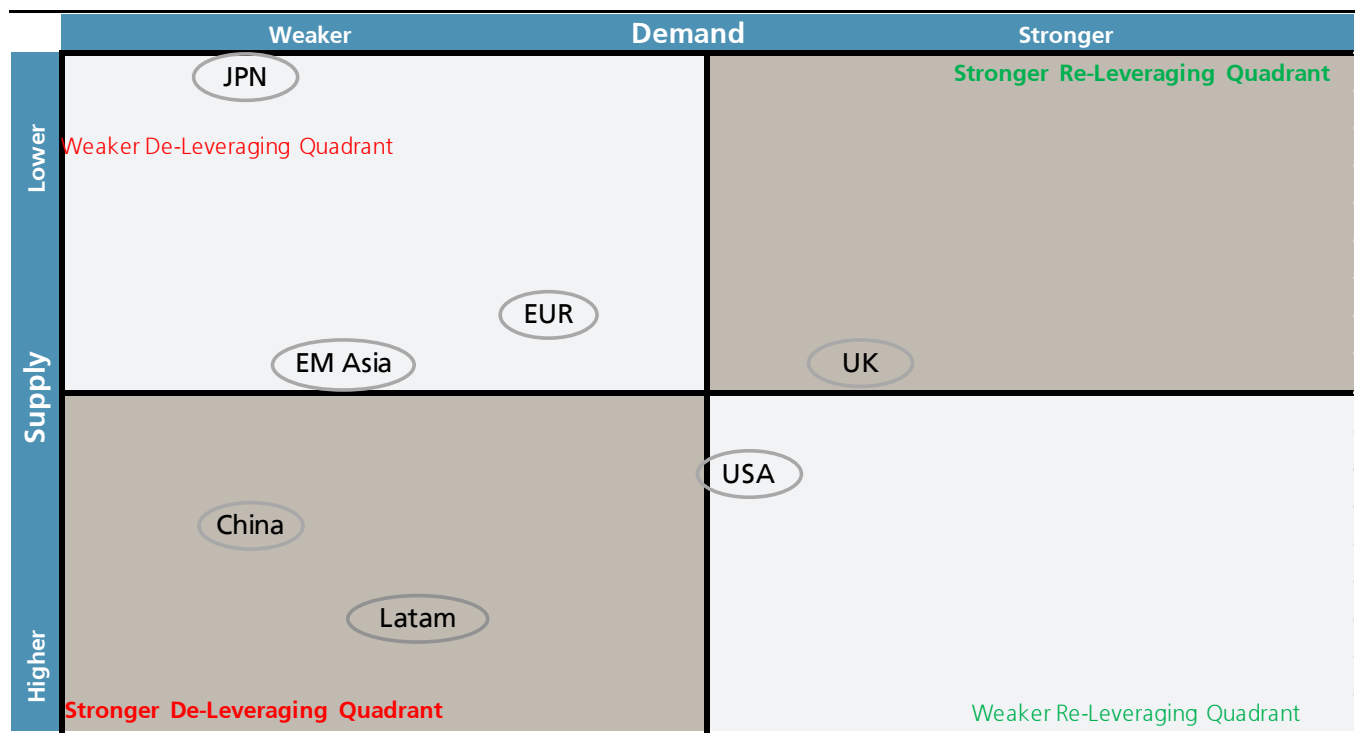
Figure 34: Our framework for forecasting changes in corporate leverage

		Weaker	Demand	Stronger
Supply	Lower	Weaker De-Leveraging Quadrant <u>Conditions:</u> ♦ Weak Real GDP Growth ♦ Low Levels of Capacity Utilization ♦ Subpar Asset Returns ♦ Low Fiscal Deficits/Fiscal Surplus/Central Bank QE		Stronger Re-Leveraging Quadrant <u>Conditions:</u> ♦ Strong Real GDP Growth ♦ High Levels of Capacity Utilization ♦ Robust Asset Returns ♦ Low Fiscal Deficits/Fiscal Surplus/Central Bank QE
	Higher	<u>Conditions:</u> ♦ Weak Real GDP Growth ♦ Low Levels of Capacity Utilization ♦ Subpar Asset Returns ♦ Large Fiscal Deficits/End of QE/Central Bank Bond Sales Stronger De-Leveraging Quadrant		<u>Conditions:</u> ♦ Strong Real GDP Growth ♦ High Levels of Capacity Utilization ♦ Robust Asset Returns ♦ Large Fiscal Deficits/End of QE/Central Bank Bond Sales Weaker Re-Leveraging Quadrant

Source: UBS

To summarize, Figure 35 is our base case using the schematic outlined above. Again, the Figure 35 represents what we think will occur with the changes in corporate leverage, not the level. With that said, a persistent stay in one of the quadrants (such as JPN in the top left) can lead to long-run de-leveraging trends. Figure 32 and Figure 33 (total economy-wide debt levels) provide a sense of which regions may face a "gravitational" pull to the left side of this grid.

Figure 35: Our base case for changes in corporate leverage



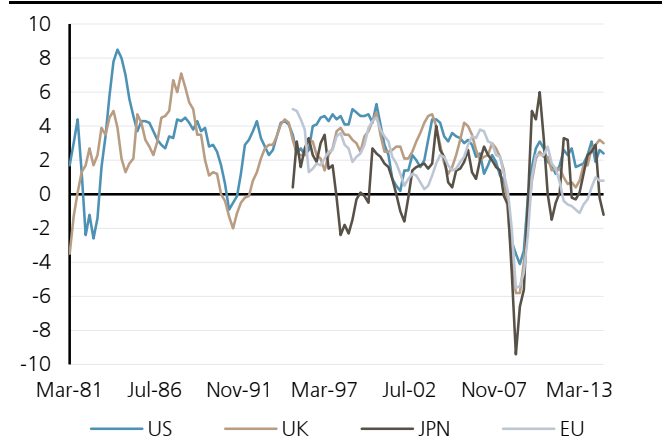
Source: UBS

Given our framework, what do we expect for corporate leverage in the near term (one to two years)? In the US, we expect leverage to increase a bit further, given that demand growth and capacity utilization will slowly improve through 2015. Recent S&P 500 returns have been strong, while fiscal deficits will stay low and the Fed's balance sheet will remain large.

In the UK, we see a good chance of a modest re-leveraging. Demand growth has been relatively strong in the UK (~3%), with capacity utilization above its long-run average, although subpar returns by the FTSE may be a drag.

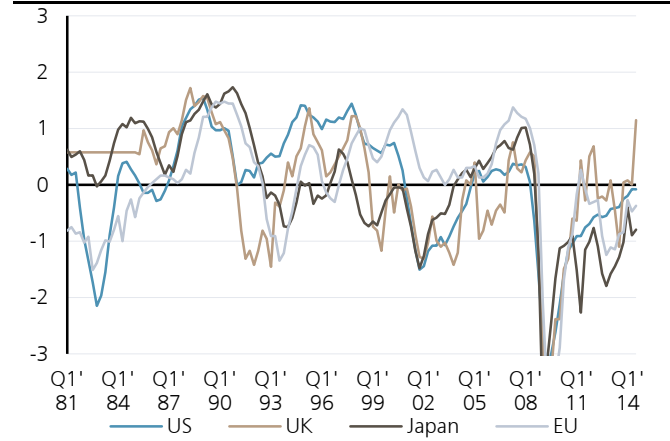
For Europe and Japan, the de-leveraging cycle may continue, but both are headed in the right direction. Overall GDP growth is anemic in both regions and, importantly, the level of demand is a headwind, particularly in Japan, where levels are very weak relative to history. However, central bank QE would act as an offset in both regions. Overall, Europe appears better poised to end its recent de-leveraging trend.

Figure 36: Developed world real GDP YoY



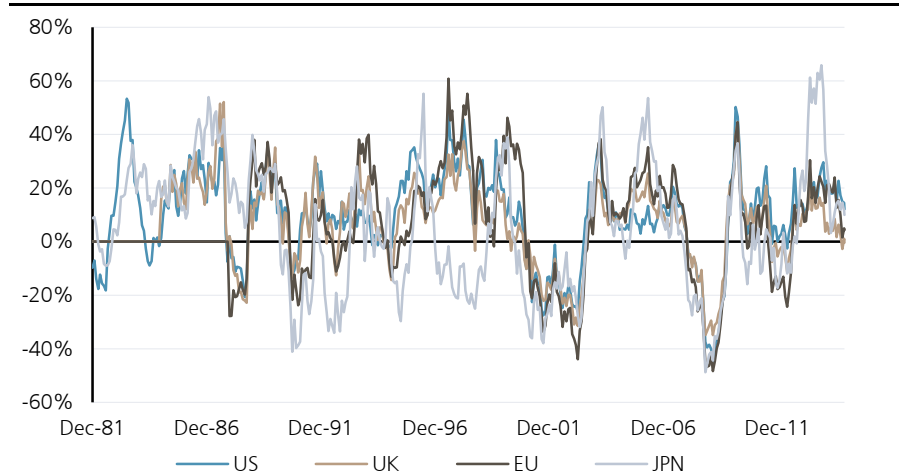
Source: UBS, Bloomberg

Figure 37: Developed World Capacity Utilization, Z-score



Source: UBS, Haver

Figure 38: Developed world: YoY change in equity prices



Source: UBS, Bloomberg

For emerging markets, while our data is admittedly spotty, the prospect of corporate leveraging looks very poor. Growth rates in all regions are quite weak relative to long-run averages, particularly in Latin America, while fiscal deficits in Latin America and China are likely to be above long-run averages next year⁸.

EM Asia and Chinese levels of activity may actually be weaker, despite stronger growth rates (Figure 39-Figure 40). This indicates to us an issue of overcapacity. This is nowhere as stark as it is in China. While a reliable data source does not exist for Chinese capacity utilization (this is not included in Figure 40, for example), the IMF has estimated large Chinese overcapacity in the past⁹ and currently estimates that China's capacity utilization may barely reach 70% across sectors, with significant oversupply in specific sectors (mining, steel, cement & glass)¹⁰. This is a serious risk to future corporate leverage in Asia, as capacity needs may already be more than sufficient to meet demand. In a hard-landing scenario, meaningful de-leveraging risks are present.

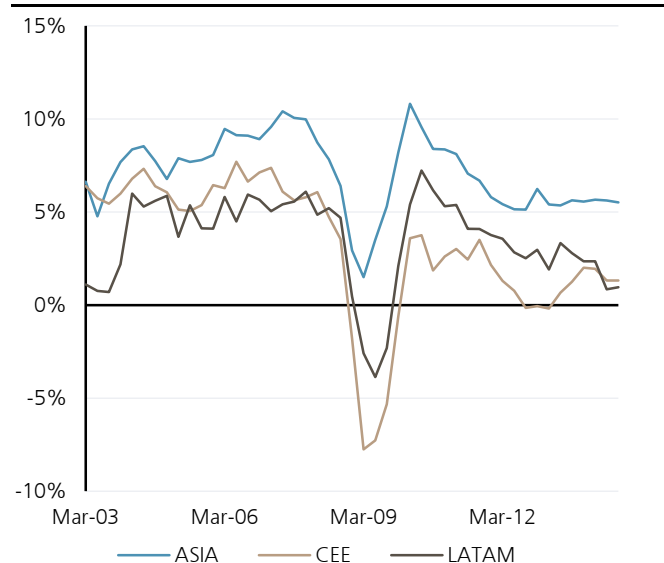
⁸ Source: IFS, Bloomberg(China)

⁹ "People's Republic of China; 2012 Article IV Consultation, IMF Country Report, July 2012

¹⁰ "People's Republic of China; 2014 Article IV Consultation, IMF Country Report, July 2014

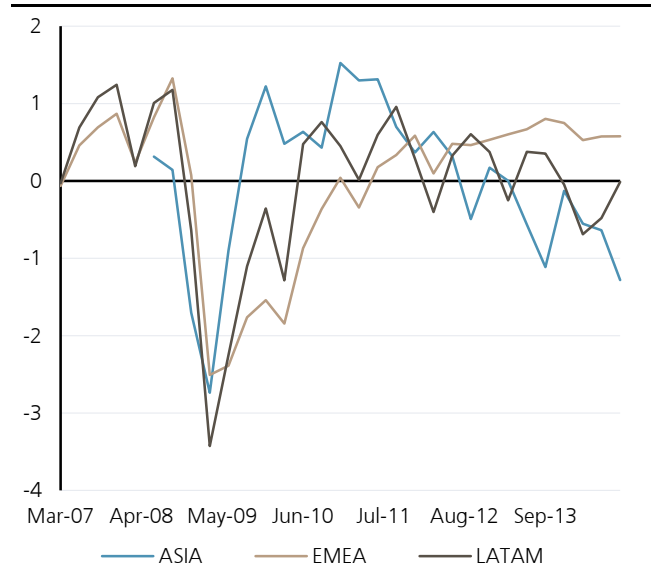
Finally, local EM equity market returns have been weak YoY, which will exert further downward pressure on corporate leverage.

Figure 39: Emerging market real GDP YoY*



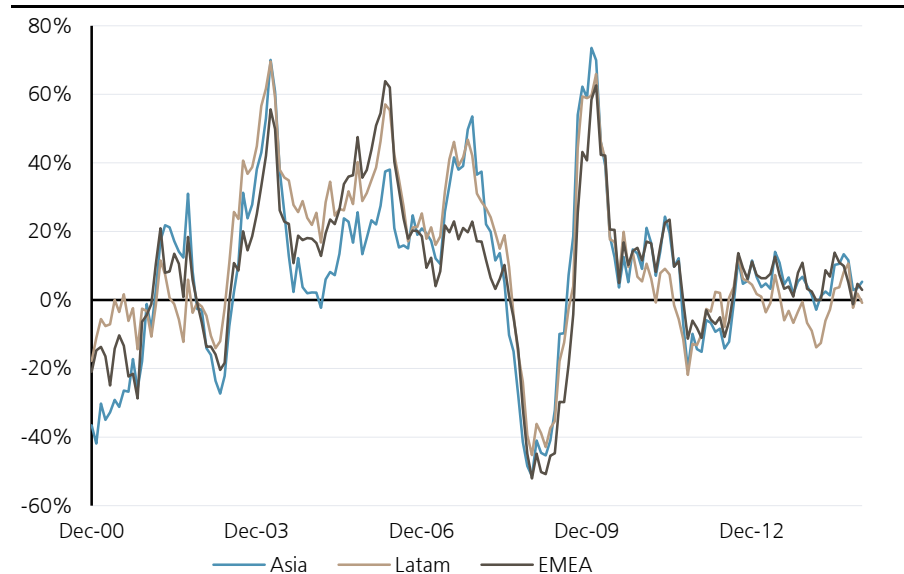
* Region Capacity Utilization measures are weighted by NGDP. See Appendix III for details.
Source: UBS, Bloomberg

Figure 40: Emerging market capacity utilization, Z-score*



* Region Capacity Utilization measures are weighted by NGDP. See Appendix III for details.
Source: UBS, Haver

Figure 41: Emerging market YoY change in equity prices*



Source: UBS, Bloomberg, *MSCI EM Asia, EM Latin America & EM EMEA Indices used.

We provide the reader with some potential scenarios for how this could play out in Appendix II.

Regional Views and Investment Ideas

US: Ahead of the Pack but Early Innings

Where Are We Now?

Since the financial crisis, the US has led the rest of the developed world in the pace with which corporates have re-levered. Nonetheless, the current aggregate leverage level (as measured by net debt to equity) of 51.7% remains below the average seen over the previous bull market (55.7%) despite increasing from a low of 39.3% in early 2011.

Potentially lower expected returns for US corporates – given current elevated margins near all-time highs and expectations for increasing wage pressures and rising rates – should drive further re-gearing in the US corporate sector.

Julian Emanuel

Strategist

julian.emanuel@ubs.com

+1-212-713-3845

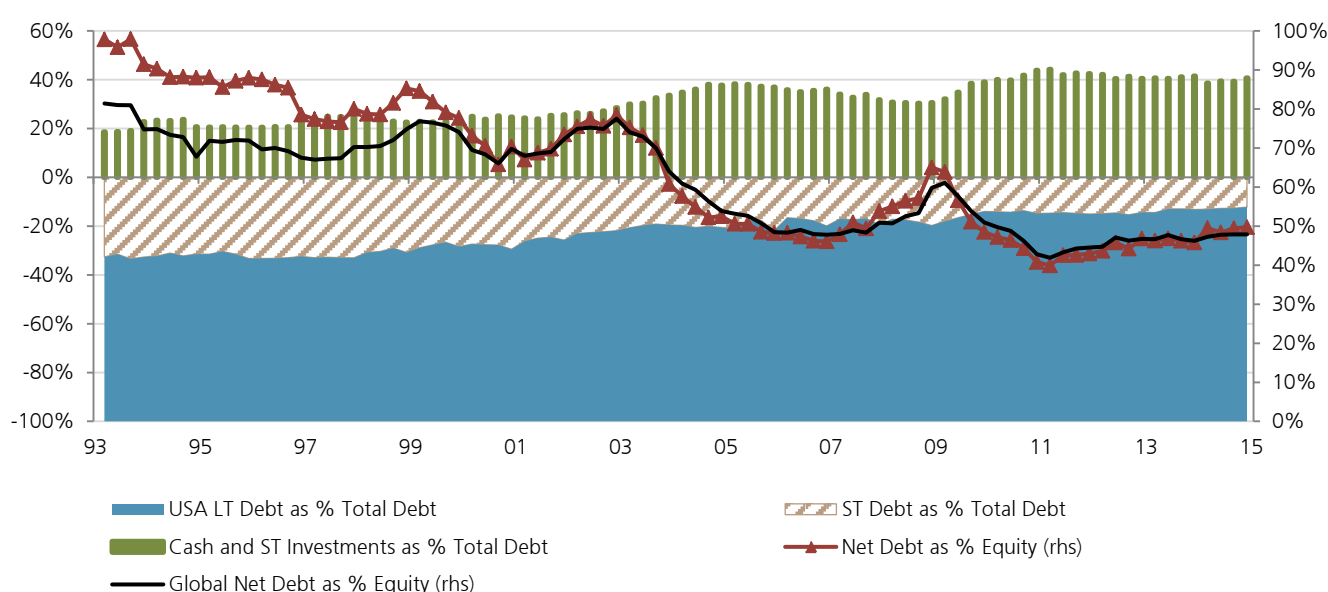
Omar Elangbawy

Associate Strategist

omar.elangbawy@ubs.com

+1-212-713 3303

Figure 42: US – Net debt to equity and composition of net debt

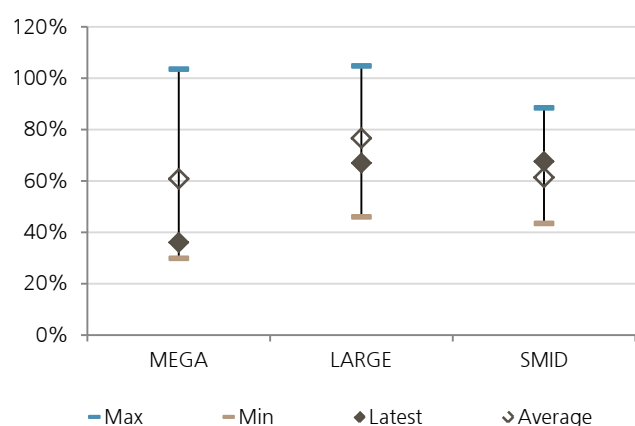


Source: Worldscope, UBS Quantitative Research

Which companies have been at the forefront of the trend towards greater leverage? We take a closer look at differences across sectors below but Figure 43 shows that small and mid-caps, and, to a lesser extent, large caps, have been ahead of the curve relative to US mega cap companies. SMIDs de-levered the least to begin with, although leverage did rise in 2011-13 but stopped rising around 2013 (HY energy sector likely played a role here, while bearing in mind that the data captures only listed names). The difference in leverage between large and mega caps is likely a result of the high cash balances – specifically offshore cash – that many US mega cap corporations have been hesitant to repatriate.

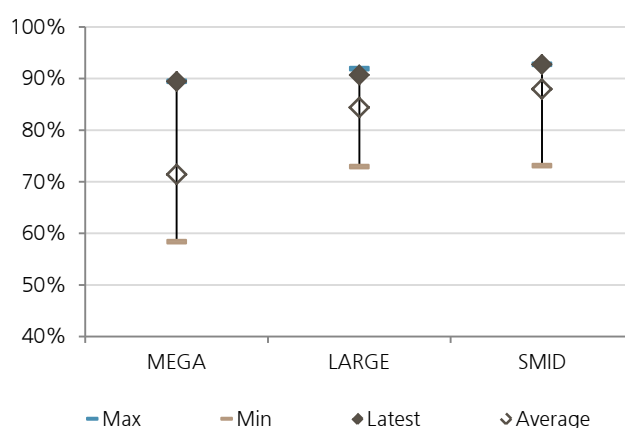
Despite the differences in overall leverage employed, all three segments have one thing in common – they've all used the availability of cheap, long-term financing to "term out," extending debt maturities out into the future and locking in lower rates (Figure 44). Most recently, we've seen the phenomenon play out with Apple's (ticker: AAPL) latest bond sale raising approximately \$6.5bn (it's third such sale in as many years), with maturities ranging from five to 30 years, and Microsoft's (ticker: MSFT) bond issue of over \$10bn.

Figure 43: Net debt-to-equity, current vs. historical



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014; historical average calculated since 1993)

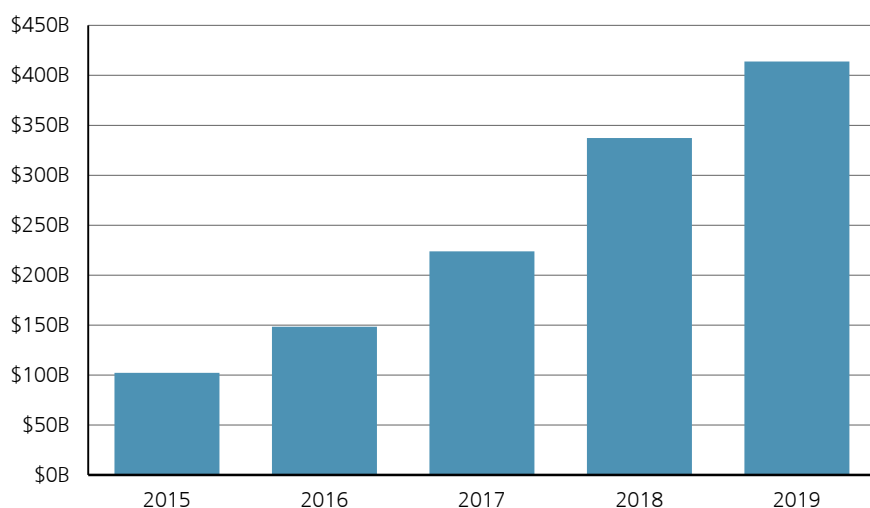
Figure 44: LT debt as % total debt; current vs. historical



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014; historical average calculated since 1993)

Despite the benefit of locking in a lower rate, the move towards long-term debt could create some risks – namely the demand for large amounts of capital to be refinanced at a time in which capital markets are unable to provide supply.

Figure 45: Total spec grade (non-financials) debt maturity profile

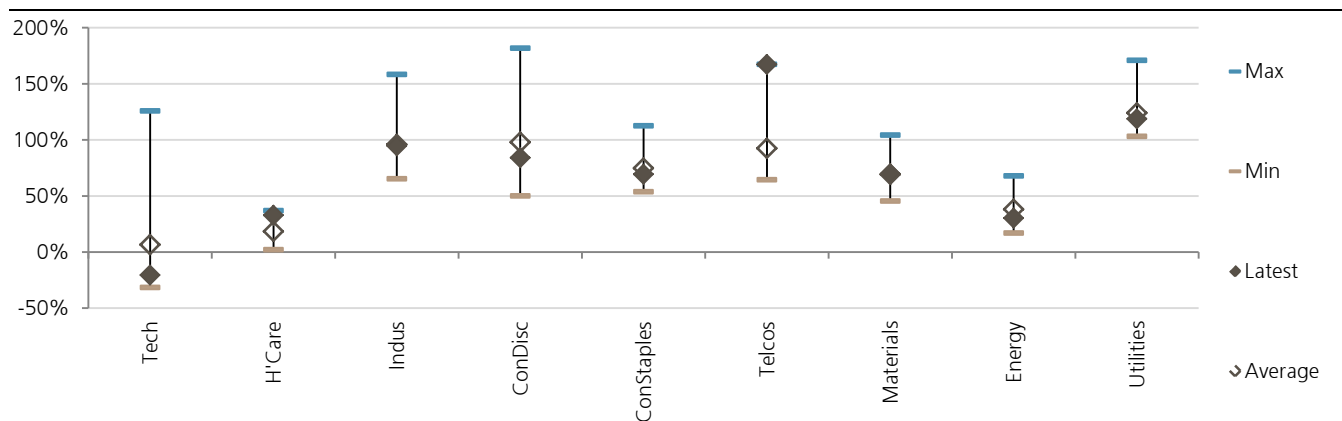


Note: Data are ex financials.
Source: S&P LCD, UBS

Sector-Level View

While broader trends are mostly intact across market cap segments, we see clear differences at the sector level. We believe this is likely a result of: 1) varying sector-specific characteristics/drivers at play; and 2) different starting points (in terms of leverage) for each sector.

Figure 46: Net debt to equity by US sector – current vs. historical ranges

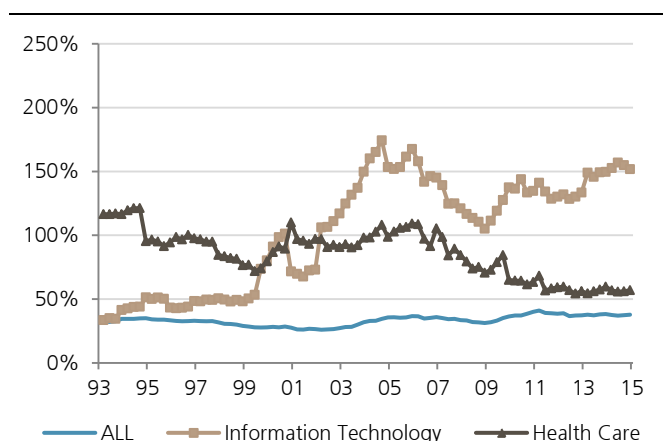


Source: Worldscope, UBS Quantitative Research

Unsurprisingly, Utilities and Telecom are the most highly levered sectors, and still rising, given the need for capital investment and the focus on capital return to shareholders.

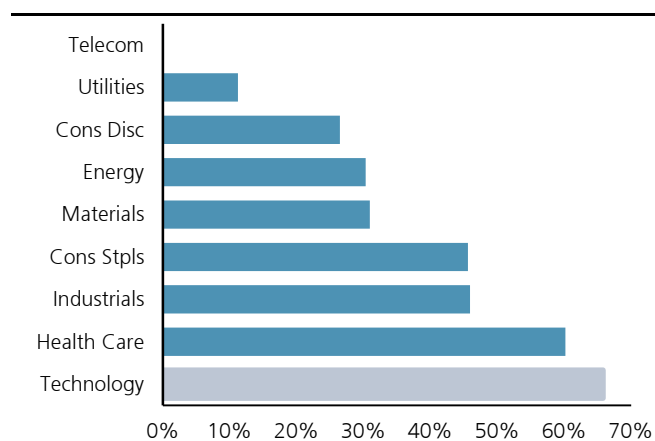
On the other hand, Tech, Health Care and Energy are among the least levered sectors, largely as a result of higher than average cash balances. In the case of Health Care, the re-leveraging trend began during the previous bull market, as companies focused on increasing scale (M&A) and returning their high cash balances to shareholders via buybacks and dividends. Similarly, the Tech sector has seen the pace of cash accumulation intensify at the fastest pace (Figure 47) since the dot-com era; although a large proportion remains offshore (Figure 48).

Figure 47: Cash as % of total debt (ie, cash-rich sectors)



Source: Worldscope, UBS Quantitative Research

Figure 48: Percentage of offshore cash by sector (S&P 500)



Note: Estimates as of FY 2013.

Source: FactSet, company 10K filings, UBS

In terms of capitalizing on the availability of debt, all sectors have effectively "termed out" by issuing long-term debt. The only exception to the rule has been consumer staples, likely due to the sector's lower (ie, defensive) growth profile and higher degree of leverage to begin with.

More Leverage on the Way?

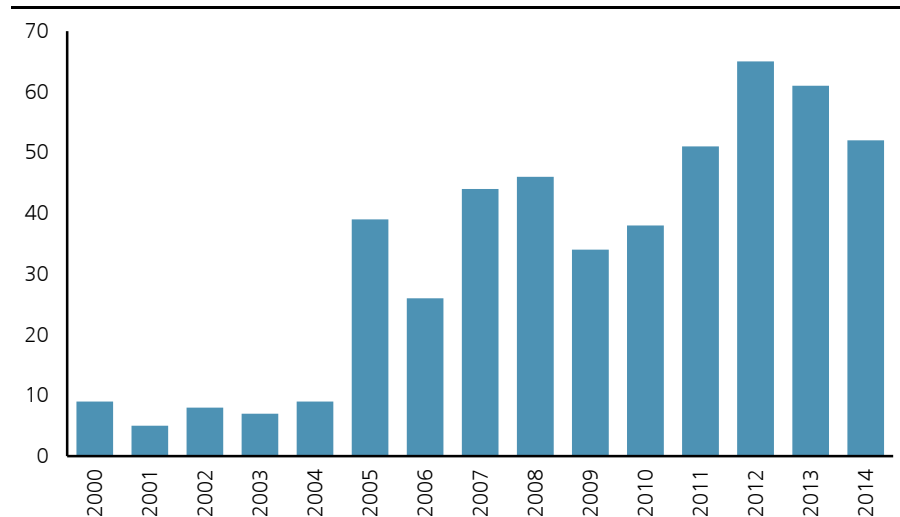
Although the pace at which companies are re-gearing could slow, we believe the key drivers remain in place for the re-leveraging trend to continue. In line with the model introduced in the prior section, the combination of continued demand growth (ie, the ongoing US economic recovery), improving levels of capacity utilization, low investable Treasury supply due to QE, reduced fiscal deficits and our expectation for further equity market gains (US Equity Strategy's 2015 YE S&P 500 price target is 2,225) should contribute to the use of further corporate leverage. In the US, these fundamental drivers are further augmented by rising confidence (consumer and business) and the expectation for higher rates once the Fed begins hiking.

So Why Are Companies Likely to Continue Re-Gearing?

With the key drivers for more leverage in place, the story in the US becomes less about improvement in capital efficiency for US corporates and more about generating a return to shareholders, through organic or acquisitive growth, or via direct returns of capital.

If the availability of debt and increased confidence weren't enough, the large cash balances and typically sub-optimal capital structures tend to attract agents of change – in this case, we are referring to activist investors.

Figure 49: Total (#) S&P 500 companies with activist involvement



Source: FactSet, UBS

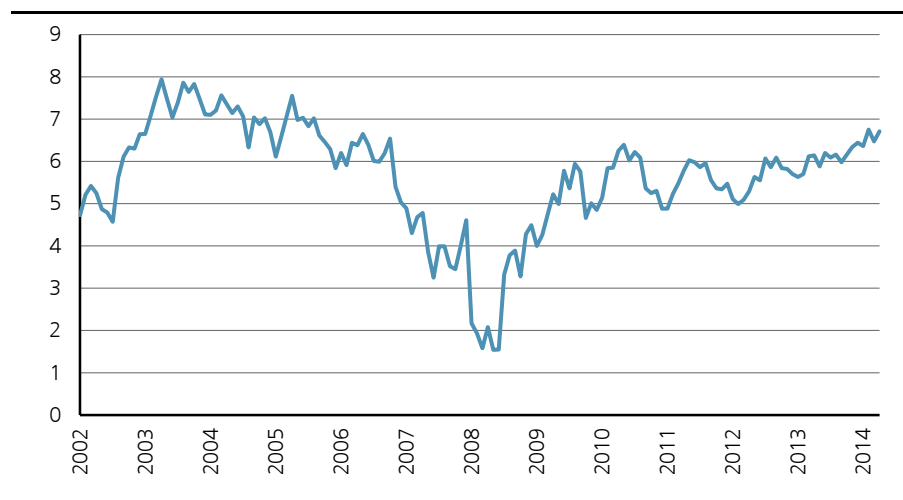
In the sections below, we discuss what we believe are three of the primary motivations for corporate use of excess cash or additional leverage.

US Path to Higher Leverage

(1) More M&A

The key drivers of further deal volume we identified last year (see [More M&A on the Way](#), 6 April and [More Money, More M&A](#), July 9) remain just as viable as we look to 2015: 1) large cash reserves; 2) low funding costs; 3) available leverage; and 4) improving business confidence measures.

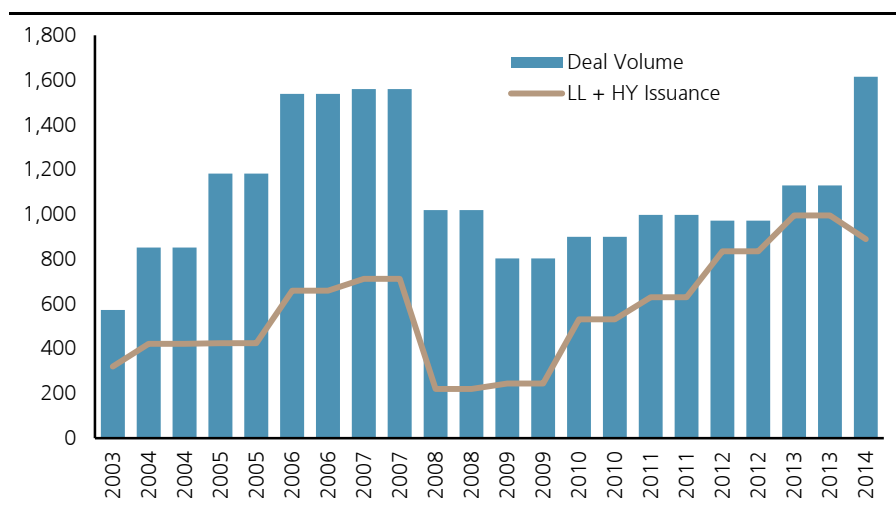
Figure 50: Rising CEO confidence



Source: Bloomberg, UBS

Combining these drivers with management teams that have already exhausted many of the available levers to reduce costs and drive earnings, it seems reasonable to expect that M&A activity will continue apace. And if earnings are to be the primary driver behind equity market returns, then we see an increase in M&A as a logical avenue for management teams to explore, given the potential to exploit available synergies in an increasingly competitive operating environment. Furthermore, we expect management teams to capitalize on pockets of accompanying higher market volatility to acquire value-accretive businesses. All else equal, the value of cash rises in a higher volatility, higher interest rate environment.

Figure 51: M&A volume and leverage clearly tied (\$bn)



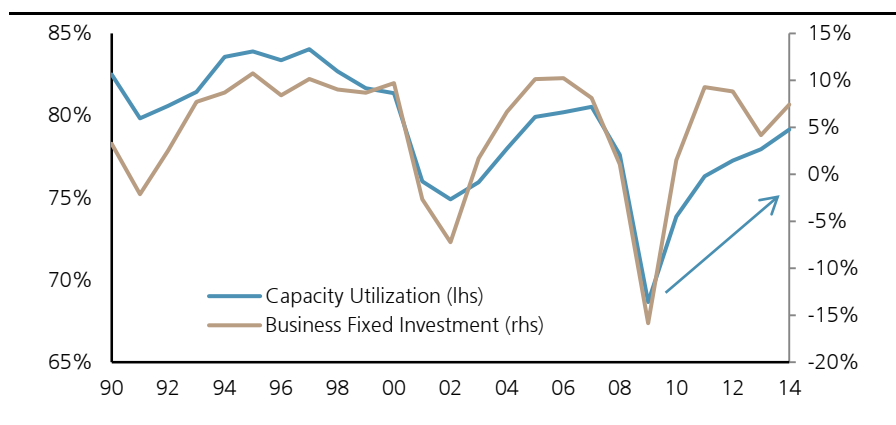
Source: Dealogic, UBS

We see the strength of the US dollar as something that will continue to drive and perhaps accelerate the trend toward cross-border M&A. Clearly, US companies with large overseas cash balances – who seldom have perfect currency hedges in place, as the stream of recent "FX impacted" earnings commentary reinforces – will be additionally incentivized to deploy those cash balances. In addition, we also expect international companies to be selective acquirers of US assets as a means of portfolio diversification away from slower growth markets and geographies. While M&A and the trend toward re-leveraging in general is dependent on strong sentiment and confidence, we are encouraged by the asset market's vote of approval for the ECB's QE plan, a vote registered via higher share prices and a diminution of FX market volatility. The prospect of better growth internationally stimulated by liquidity provision will likely further embolden US managers to re-lever through M&A.

(2) Capital expenditures

While capex has been slowly increasing in the US over the past two years, the environment for further investment remains favorable and we expect companies to increasingly focus on internal investments. The combination of favorable lending conditions, rising capacity utilization (above 80) and healthy corporate balance sheets provides a supportive backdrop for further investment.

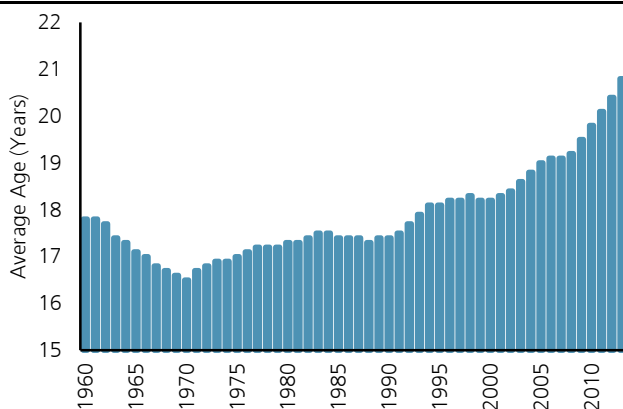
Figure 52: Improving capacity utilization is a good sign



Source: BEA/Haver, UBS

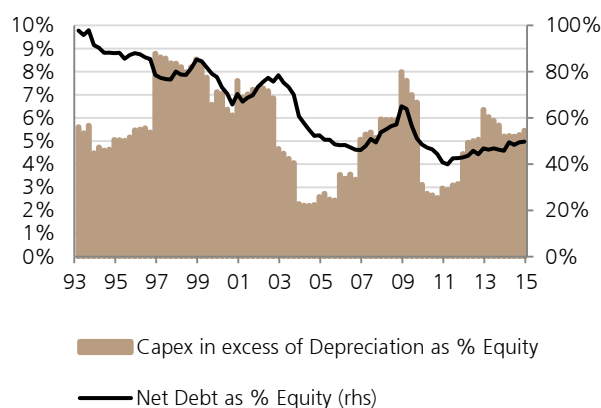
Despite the selloff in oil prices and the likely decline in capex for companies in the Energy sector, we still expect capex levels to rise over time. At some point, the realities of the replacement cycle begin to impact spending decisions and can be viewed as a data point likely to presage a capex pick-up. Especially in the US, where corporate managers have been allocating capital to buy back their own stock in a low interest rate environment, they've let the age of their capital stock rise commensurately (Figure 53), arguably hindering capital productivity growth. On the other hand, although our estimate for growth capex (ie, capex in excess of depreciation) has been rising, it has not yet risen to peak levels seen in the prior two bull markets.

Figure 53: Average age of US capital stock



Source: BEA/Haver, UBS

Figure 54: US growth capex

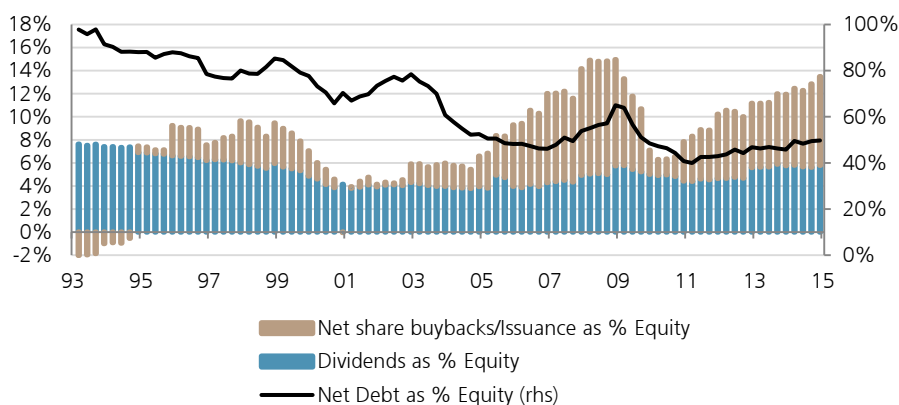


Source: Worldscope, UBS Quantitative Research

(3) Dividends & buybacks

In Despite our view for increased capex and the recent strength in overall M&A activity, dividends and share buybacks have been, and are likely to remain, a focal point for corporate boards, especially given the ongoing search for yield from investors. While dividends have returned to levels expected at this stage in the cycle, share buybacks have clearly provided the majority of growth in total yield (as a % of equity), yet they remain below peak levels just prior to the financial crisis.

Figure 55: US dividends & net buybacks (as % of shareholder equity)



Source: Worldscope, UBS Quantitative Research

Since the start of the year, we've seen S&P 500 companies announce share repurchase programs in excess of \$50bn, some of which account for in excess of 10% of the current company's market cap. Since the start of 2013, over 300 companies have announced plans to buy back their own stock. The combination of healthy cash balances, low overall debt levels and continued investor activism should continue to support overall buyback activity.

Figure 56: Recent share buyback announcements (>5% of market cap, S&P 500)

Name	Announcement Date	Stock Buyback Amount (\$mil)	% of Market Cap
Starwood Hotels & Resorts Worl	02/10/2015	750	5.5%
Molson Coors Brewing Co	02/10/2015	1,000	7.2%
Martin Marietta Materials Inc	02/10/2015	2,039	23.1%
Hasbro Inc	02/09/2015	500	6.5%
FLIR Systems Inc	02/06/2015	510	10.9%
Dr Pepper Snapple Group Inc	02/05/2015	1,000	6.6%
Symantec Corp	02/05/2015	1,000	5.8%
Allstate Corp/The	02/04/2015	3,000	10.2%
Western Digital Corp	02/03/2015	2,000	8.3%
Gilead Sciences Inc	02/03/2015	15,000	10.1%
Intuitive Surgical Inc	02/02/2015	1,000	5.5%
Legg Mason Inc	01/30/2015	1,000	15.4%
VeriSign Inc	01/30/2015	453	6.2%
Chubb Corp/The	01/29/2015	1,300	5.5%
TE Connectivity Ltd	01/28/2015	3,000	10.6%
F5 Networks Inc	01/21/2015	750	9.2%
SanDisk Corp	01/21/2015	2,500	14.4%
Adobe Systems Inc	01/14/2015	2,000	5.5%
Delphi Automotive PLC	01/13/2015	1,500	6.6%
Cintas Corp	01/13/2015	500	5.3%
Dover Corp	01/09/2015	1,045	8.8%

Source: Bloomberg, UBS

Companies Poised to Increase Leverage

Given the favorable state of corporate balance sheets broadly, we sought to identify which companies could conceivably increase their leverage (in terms of net debt/equity) in a shareholder-friendly manner to accelerate returns to shareholders via share buybacks or increased (or special) dividends similar to recent announcements from Pilgrim's Pride (PPC) and Costco Wholesale (COST).

To answer this question, we initially screened for S&P 500 (ex. financials) companies covered by UBS in the bottom 50% in terms of leverage (net debt/equity) and that did not already return a substantial majority of FCFO to shareholders (<75%), on average, over the past five years. We then added a qualitative overlay with information from our analysts. The results (Figure 57 and Figure 58) represent companies we believe have the capacity/potential to increase their leverage ratios while increasing the amount of capital returned to shareholders.

Figure 57: Companies with capacity to potentially add leverage and return capital to shareholders

Company	Ticker	Sector	Analyst	UBS Rating	Share Price	Market Cap (\$m)	Cash Balances (\$m)	Current Dividend Yield	Net Debt/Equity
Humana Inc	HUM	Health Care	A.J. Rice	Neutral	\$154.86	23,745	9,533	0.7%	-55.7%
Cigna Corp	CI	Health Care	A.J. Rice	Buy	\$115.48	30,105	3,210	0.0%	17.9%
Cisco Systems Inc	CSCO	Information Technology	Amitabh Passi	Buy	\$29.31	149,803	52,074	2.6%	-55.0%
Corning Inc	GLW	Information Technology	Amitabh Passi	Neutral	\$24.60	31,288	6,068	2.1%	-13.0%
Juniper Networks Inc	JNPR	Information Technology	Amitabh Passi	Buy	\$23.93	10,317	1,972	0.4%	-12.7%
Red Hat Inc	RHT	Information Technology	Brent Thill	Buy	\$68.60	12,561	1,487	0.0%	-95.9%
Autodesk Inc	ADSK	Information Technology	Brent Thill	Buy	\$61.13	13,808	2,544	0.0%	-79.5%
Microsoft Corp	MSFT	Information Technology	Brent Thill	Buy	\$43.58	357,029	85,709	2.7%	-70.2%
Symantec Corp	SYMC	Information Technology	Brent Thill	Neutral	\$26.00	17,708	4,084	2.3%	-34.3%
Adobe Systems Inc	ADBE	Information Technology	Brent Thill	Buy	\$77.13	38,390	3,739	0.0%	-32.8%
Oracle Corp	ORCL	Information Technology	Brent Thill	Buy	\$43.84	191,859	38,819	1.1%	-30.9%
Teradata Corp	TDC	Information Technology	Brent Thill	Neutral	\$45.08	6,868	834	0.0%	-21.4%
Intuit Inc	INTU	Information Technology	Brent Thill	Buy	\$90.09	25,689	1,914	0.9%	-46.0%
Mosaic Co	MOS	Materials	Brian MacArthur, CFA	Buy	\$52.01	19,028	2,375	1.9%	13.6%
CF Industries Holdings Inc	CF	Materials	Brian MacArthur, CFA	Neutral	\$298.71	14,856	1,997	1.7%	56.8%
Agrium Inc	AGU	Materials	Brian MacArthur, CFA	Buy	\$108.14	15,447	801	2.8%	45.4%
Potash Corp of Saskatchewan	POT	Materials	Brian MacArthur, CFA	Buy	\$37.10	30,665	215	3.8%	45.8%
General Motors Co	GM	Consumer Discretionary	Colin Langan, CFA	Buy	\$37.24	60,002	28,176	3.2%	0.5%
Ford Motor Co	F	Consumer Discretionary	Colin Langan, CFA	Buy	\$16.11	63,612	36,568	3.1%	-35.3%
BorgWarner Inc	BWA	Consumer Discretionary	Colin Langan, CFA	Neutral	\$60.56	13,609	798	0.9%	14.7%
Southwest Airlines Co	LUV	Industrials	Darryl Genovesi	Buy	\$42.59	29,010	2,988	0.5%	-4.4%
Delta Air Lines Inc	DAL	Industrials	Darryl Genovesi	Buy	\$44.76	37,286	3,305	0.7%	73.4%
Alaska Air Group Inc	ALK	Industrials	Darryl Genovesi	Buy	\$62.23	8,222	1,217	1.2%	-19.5%
Electronic Arts Inc	EA	Information Technology	Eric Sheridan	Neutral	\$56.76	17,576	2,365	0.0%	-73.7%
Activision Blizzard Inc	ATVI	Information Technology	Eric Sheridan	Buy	\$23.49	16,876	4,858	0.9%	-7.4%
Expedia Inc	EXPE	Consumer Discretionary	Eric Sheridan	Buy	\$88.69	11,229	1,758	0.7%	-0.5%
El du Pont de Nemours & Co	DD	Materials	John Roberts	Neutral	\$76.43	68,802	7,034	2.4%	27.4%

Source: Bloomberg, FactSet, UBS (data as of 2/17/15)

Figure 58: Companies with capacity to potentially add leverage and return capital to shareholders (continued)

Company	Ticker	Sector	Analyst	UBS Rating	Share Price	Market Cap (\$m)	Cash Balances (\$m)	Current Dividend Yield	Net Debt/Equity
Gilead Sciences Inc	GILD	Health Care	Matthew Roden, PhD	Buy	\$103.84	156,433	11,726	0.0%	35.2%
Vertex Pharmaceuticals Inc	VRTX	Health Care	Matthew Roden, PhD	Buy	\$113.40	27,199	1,387	0.0%	-95.7%
Ross Stores Inc	ROST	Consumer Discretionary	Roxanne Meyer, CFA	Neutral	\$96.85	20,248	435	0.8%	-14.2%
Gap Inc	GPS	Consumer Discretionary	Roxanne Meyer, CFA	Buy	\$40.91	17,328	1,510	2.1%	-3.8%
TJX Cos Inc	TJX	Consumer Discretionary	Roxanne Meyer, CFA	Buy	\$68.59	47,433	2,444	1.0%	-27.7%
Rockwell Automation Inc	ROK	Industrials	Shannon O'Callaghan	Buy	\$117.82	15,897	1,820	2.6%	-22.2%
QUALCOMM Inc	QCOM	Information Technology	Stephen Chin	Neutral	\$70.80	116,129	32,022	2.3%	-81.8%
Fluor Corp	FLR	Industrials	Steven Fisher, CFA	Buy	\$57.57	8,615	2,745	1.4%	-57.2%
Cummins Inc	CMI	Industrials	Steven Fisher, CFA	Buy	\$138.98	25,203	2,394	2.0%	-8.9%
Quanta Services Inc	PWR	Industrials	Steven Fisher, CFA	Buy	\$28.68	6,108	489	0.0%	-11.5%
Chicago Bridge & Iron Co	CBI	Industrials	Steven Fisher, CFA	Buy	\$40.79	4,548	421	0.6%	56.6%
PACCAR Inc	PCAR	Industrials	Steven Fisher, CFA	Buy	\$64.46	22,797	2,937	2.9%	97.5%
NetApp Inc	NTAP	Information Technology	Steven Milunovich, CFA	Neutral	\$37.79	11,818	5,003	1.7%	-105.8%
EMC Corp	EMC	Information Technology	Steven Milunovich, CFA	Buy	\$28.30	57,283	8,321	1.6%	-12.0%

Source: Bloomberg, FactSet, UBS (Note: Data as of 2/17/15.)

Europe: High Potential to Re-Gear

Could this be the End of De-leveraging Cycle?

European Net Debt / Equity is close to a 15 year low. Imbalances between corporate credit and equity have been seen in Europe for years now but since the ECB began its QE programme these have reached very stretched positions. In recent weeks companies such as Nestle and Shell saw their bonds trade in negative yield territory. Examples of stocks that pay regular, sustainable dividends and offer dividend yields greater than their corresponding bond yields are now common in the European market. This all suggests the de-leveraging cycle has reached an extreme point in Europe.

This presents great opportunities for equities as investors continue to search for yield. Companies that are in a position to re-gear and return cash to shareholders should benefit in this scenario.

In addition, as the ECB has finally pulled the trigger on QE, the euro is flipping from a 7% headwind to earnings in Q1 2014 to a c.9% *tailwind* in Q1 2015 (Please see our 20 Jan 2015 report, Euro at Parity? – Reviewing our Scenario Analysis:). Lower yields on credit allied to a tailwind for corporate earnings might give companies the push they need to re-gear.

Nick Nelson

Strategist

nick.nelson@ubs.com

+44-20-756 81960

Joao Toniato

Strategist

joao.toniato@ubs.com

+44-20-756 74657

Karen Olney, CFA

Strategist

karen.olney@ubs.com

+44-20-7568 8944

Andras Nagy, CFA

Associate Strategist

Andras-a.nagy@ubs.com

+44-20-7568 3577

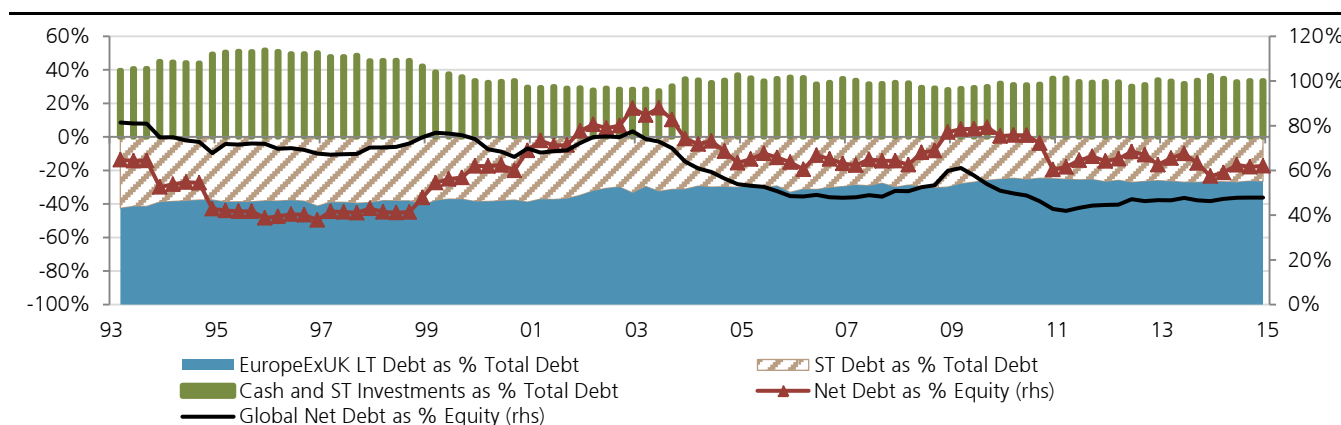
Imbalances between corporate credit and equity suggest many companies could re-gear

How Much Can Market Re-Gear?

European Net Debt / Equity has fallen from 79% in 2009 to 62% in Q4 2014. Additionally, companies have termed out their debt: long term debt as a percentage of total debt has risen from 70% to 74% over the last 6 years. Our European Credit Strategy team point out that year to date over 50% of European corporate bond issuance has been in maturities of 10 years or over – the highest percentage in over 10 years.

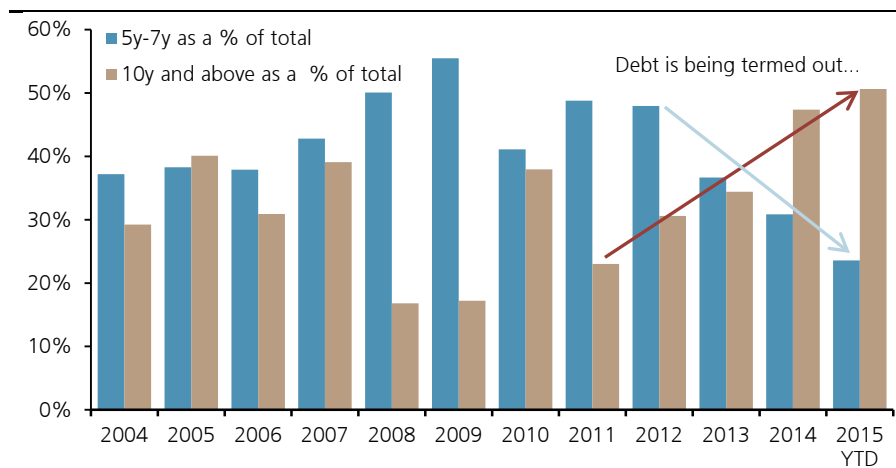
We believe the opportunity lies in identifying those that could do so in a shareholder friendly way (see our stock screens – Figures 83-84)

Figure 59: Europe ex. UK



Source: Worldscope, UBS Quantitative Research

Figure 60: Euro IG non-financial corporate bond issuance by maturity



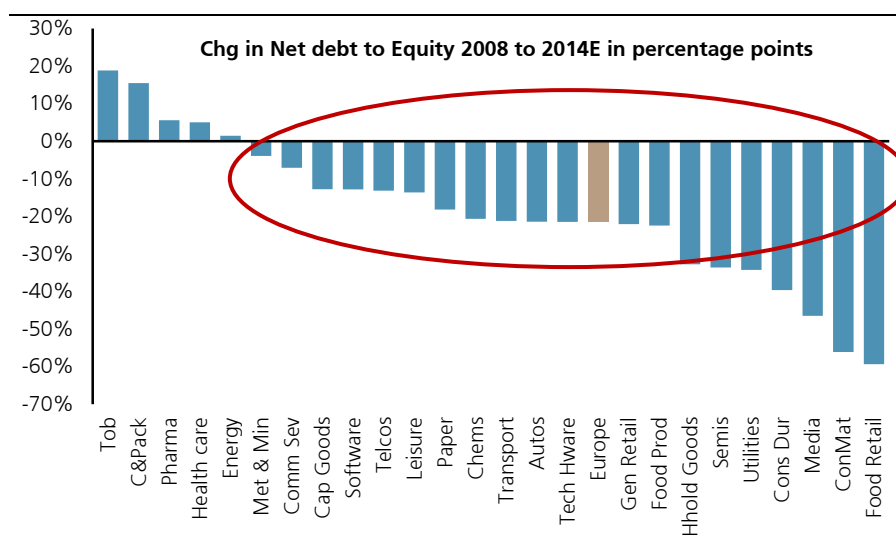
Source: UBS European Credit Strategy Team

Over half of the corporate bonds issued in 2015 YTD have been in maturities of 10 years or more

What Has Changed at Sector Level?

Although the market leverage has fallen noticeably since the recent peak – it has clearly not been uniform across the sectors. Indeed, gearing for Tobacco, Packaging, Pharma and Health Care has actually risen.

Figure 61: European sectors: Change in net debt/equity 2008-14E (ppt)

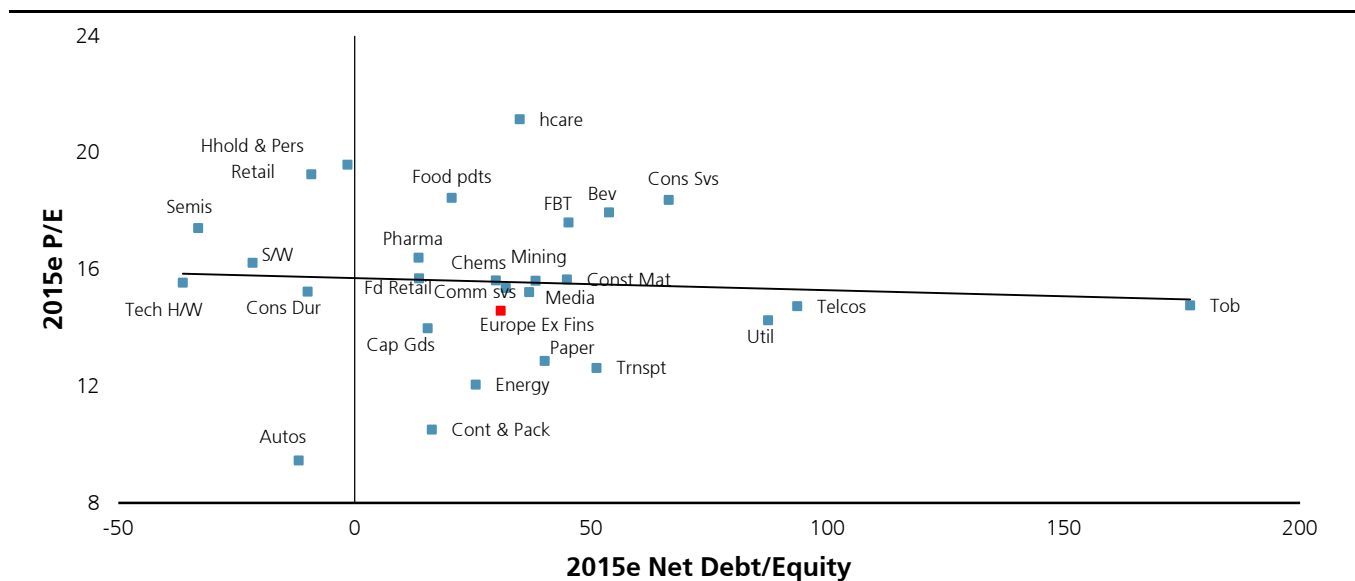


Source: Datastream, UBS European Equity Strategy

Not all sectors have de-levered: Tobacco, Packaging, Pharma & Health Care, in fact, have levered up since 2008

On the simple scatter chart of valuations (P/E) vs leverage (Net Debt/Equity) it is not clear there is a strong correlation: higher leverage, at least on a current "snapshot" does not seem to penalize sectors across different industries.

Figure 62: Leverage vs. valuations: Net debt/equity vs. P/E

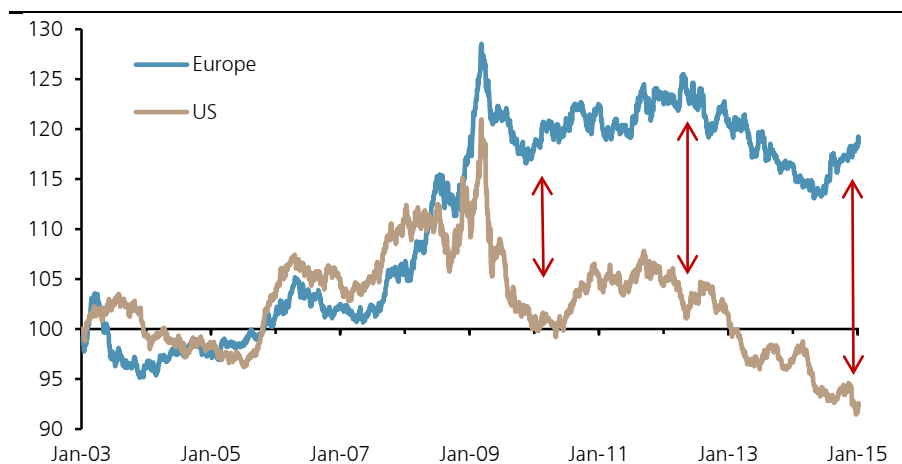


Source: UBS European Equity Strategy

Where Europe Differs

During the crisis period a stark difference in investor behaviour towards leverage surfaced between the US and Europe. While the recovery in the US appears to have given investors relatively more confidence to embrace leveraged companies, the double dip recession and sovereign debt crisis in Europe seems to have steered investors away from leveraged stocks. This leverage aversion in Europe and the lack of such aversion in the US can be seen in the performance of the least and most leveraged stocks in each sector across the two markets.

Figure 63: EUR vs. US performance: Low-/high-gearing stocks



Low leverage stocks in Europe have sustained strong outperformance since the beginning of the crisis; this was not the case in the US

Note: Performance measured based on the bottom third over top third net debt/equity. The universes are the 1000 largest companies in US and the 500 largest in Europe.

Source: UBS Global Quant team, UBS European Equity Strategy

Between 2007 and early 2009 low leveraged stocks outperformed both in the US and in Europe. From 2009, however, the least geared stocks showed sustained outperformance over those most geared in Europe. This suggests investors were actively avoiding companies that carried high leverage. In the US, on the other hand, no such effect was felt and the outperformance of companies with low leverage reversed.

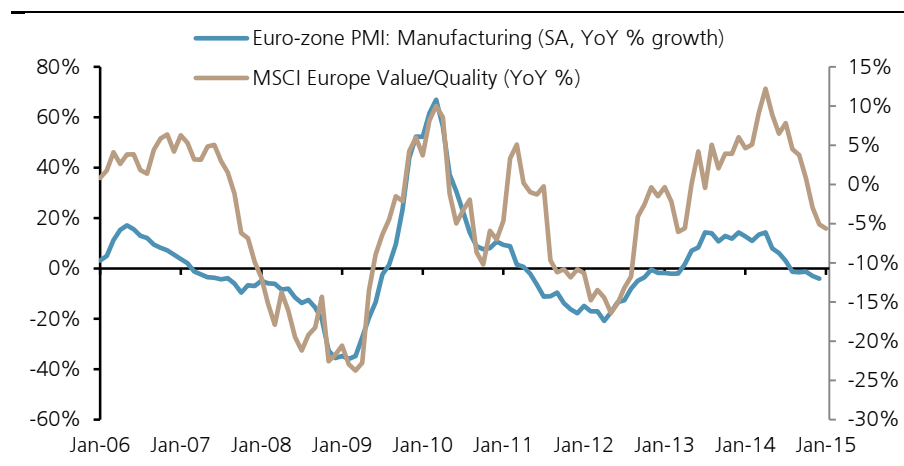
Renew Focus on "Quality" or Time to Move Forward and Gear Up?

The question that arises from the analysis above is: can this demand for low leverage in Europe be sustained or is it time for companies to gear up and investors to welcome relatively more leveraged stocks?

While the short run might be bumpy given political concerns around Greece, Spain and even the UK, we believe in the medium to long run relatively more leveraged stocks will be seen more positively by the market. Looking at the performance of the cheapest stocks in Europe relative to those "higher quality" stocks with low leverage and high returns, we can see how economic conditions appears to be one of the key drivers of the relative performance of these groups. Hence a more robust European recovery could be a key catalyst for companies to start taking on more leverage.

Economic lead indicators have started to turn and Eurozone GDP is surprising on the upside; this is positive for more geared stocks

Figure 64: A rise in PMIs could signal a market more friendly towards leverage



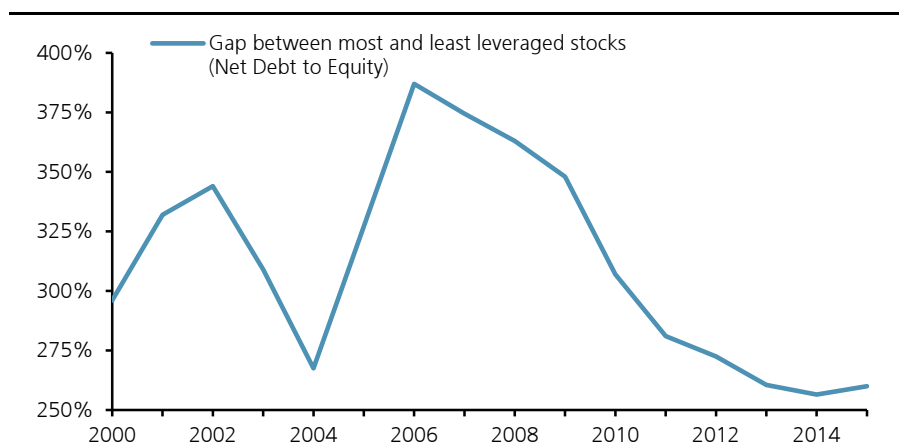
Source: Markit, MSCI, UBS European Equity Strategy

This sort of rotation towards more risky sections of the market is already becoming clear in European Cyclical and Defensives (see Q4 Earnings: Cyclical Beat, Sector Rotation starts 19 February 2015).

Rotation towards riskier areas of the market has already begun

In addition, the gap between the highly leveraged stocks and those least leveraged has shrunk significantly as companies de-levered during the crisis. This gap is now at its lowest levels since 2000 showing there is relatively little variation in leverage levels across the market. This suggests the potential for sections of the stock market to re-gear.

Figure 65: High-low leverage difference at the lowest level since 2000



Note: The "low leverage" group is the lowest net debt/equity decile of stocks in the Stoxx 600. "High leverage" is the highest decile in the Stoxx 600 ex-financials.
Source: DataStream, UBS European Equity Strategy

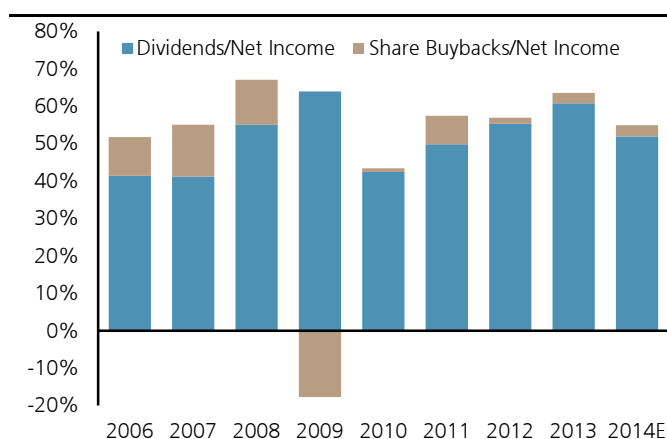
If Corporates Gear Up, How Should Cash Be Returned to Shareholders?

Another stark difference between European and US corporates is the choice of method to return cash to shareholders. As our US strategists point out, growth in total yield in US stocks has been primarily driven by share buybacks. In Europe, however, buybacks are much less common and account for only a small portion of how companies return cash to shareholders. That is not to say buybacks are irrelevant, however, they are increasing in size and gaining importance in Europe.

Buybacks are gaining importance in Europe

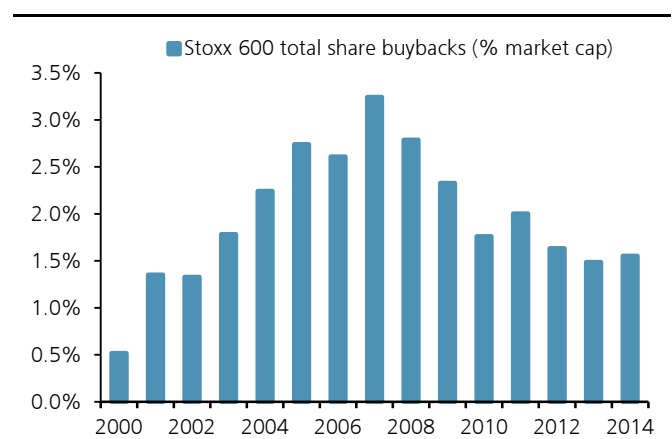
This is not necessarily a good thing

Figure 66: Most of the cash returned is via dividends...



Source: UBS European Equity Strategy

Figure 67: ... but buybacks are growing in importance



Source: DataStream, UBS European Equity Strategy

Part of the reason for the smaller occurrence of buybacks in Europe is legislation. While in the US no legal limits are imposed on buybacks, most European countries do impose such limits requiring shareholders to pre-approve buybacks and limiting price and quantity of shares repurchased.

In addition, there are some important considerations when deciding which the preferred method is for shareholders. On one hand, tax issues might make buybacks seem more appealing – in some jurisdictions the tax on the capital gains associated with buybacks are lower than the tax rate on dividend payments and buybacks give investors flexibility on when to pay the tax since the tax charge is only paid when the decision to sell the shares is made.

On the other hand, managers are often incentivised to engage in buybacks at any price, since EPS grows and return measures remain stable independent of the buyback price. However, buybacks essentially represent an investment of the company's cash surplus on its own shares and as such can be value destroying for shareholders if the current share price is above intrinsic value. Much academic research¹¹ in fact points to buybacks often reducing shareholder value.

5 Five Reasons Companies Could Re-Gear

(1) Move to a more efficient balance sheet

The current balance sheet structure of European corporates looks extremely peculiar to us. If we assume that Europe is not falling into its 3rd recession in 5 years then the current capital structure looks suboptimal.

For the first time in this crisis, the dividend yield across all credit ratings (from AA to BB-) is higher than the equivalent credit yield. From a simple cash flow perspective, right now Equity is far more expensive to service than debt.

We take a constant bottom-up sample of 100 European companies and bracket them by credit ratings. We then compare the average corporate bond yield with the average dividend yield in each credit "bucket". We can also track this over time and Figures 68 and 69 below show just how much this relationship has changed since 2013.

With the launch of full-blown Sovereign bond QE by the ECB, government bond yields and corporate yields are being driven down even lower. Our Credit Strategy team think European IG yields could fall to below 1%.

For more details please see our report on the impact of QE on European assets:
ECB: a convincing start to QE, January 22.

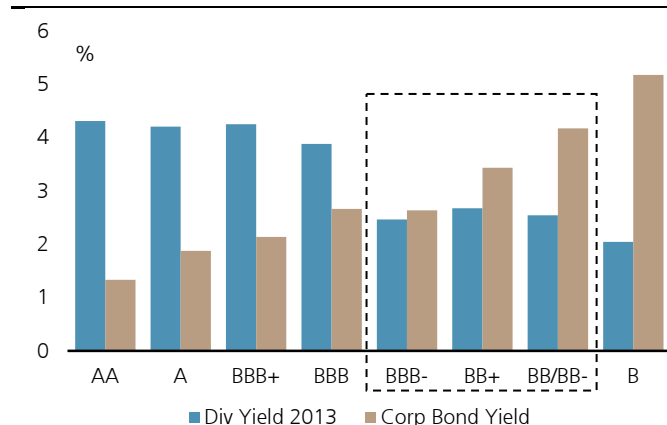
Investors should balance tax considerations, management incentives and share prices when deciding whether buybacks or dividends are preferred

Assuming Europe is not falling into its third recession, the current capital structure looks suboptimal

Average dividend yields are now higher than bond yields even for BB/BB- rated companies

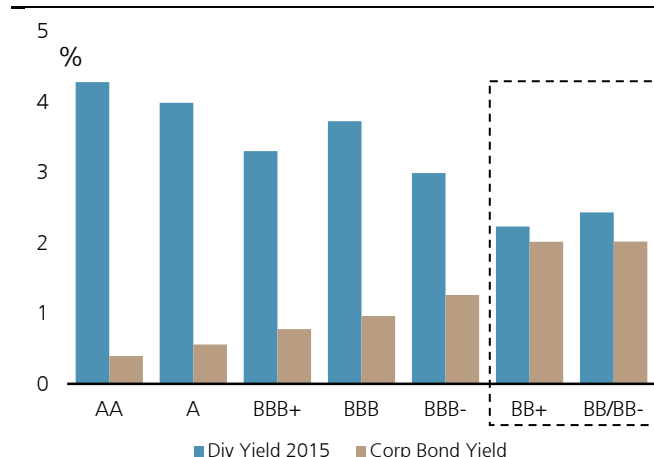
¹¹ See Keswani, A., Yang, J. and Young, S. (2007), Do Share Buybacks Provide Price Support? Evidence From Mandatory Non-Trading Periods. Journal of Business Finance & Accounting. And Kahle, K (2002), When a buyback isn't a buyback: open market repurchases and employee options. Journal of Financial Economics.

Figure 68: BACK IN AUGUST 2013 – corporate bond yields vs. dividend yields by credit rating...



Source: Datastream, Bloomberg, UBS European Equity Strategy

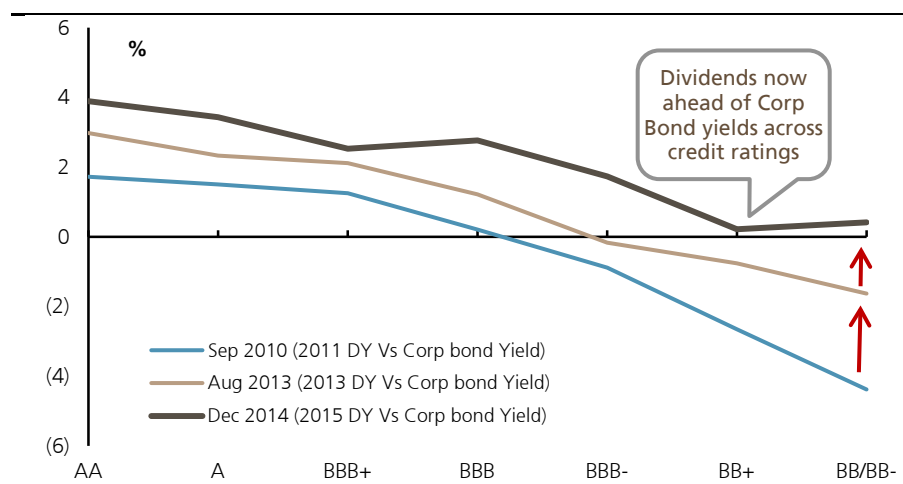
Figure 69: ...TO NOW DECEMBER 2014 – corporate bond yields vs. dividend yields by credit rating



Source: Datastream, Bloomberg, UBS European Equity Strategy

The biggest shift over time has been in the sub-investment grade area. Back in 2010 the premium for a BB/BB- rate companies' corporate bond yield over the dividend yield was 440bps. Now it is marginally negative.

Figure 70: Percentage point spread of dividend yield OVER corporate bond yield by credit rating



Source: Datastream, Bloomberg, UBS European Equity Strategy

(2) Dividends/buybacks – investors seeking cash return

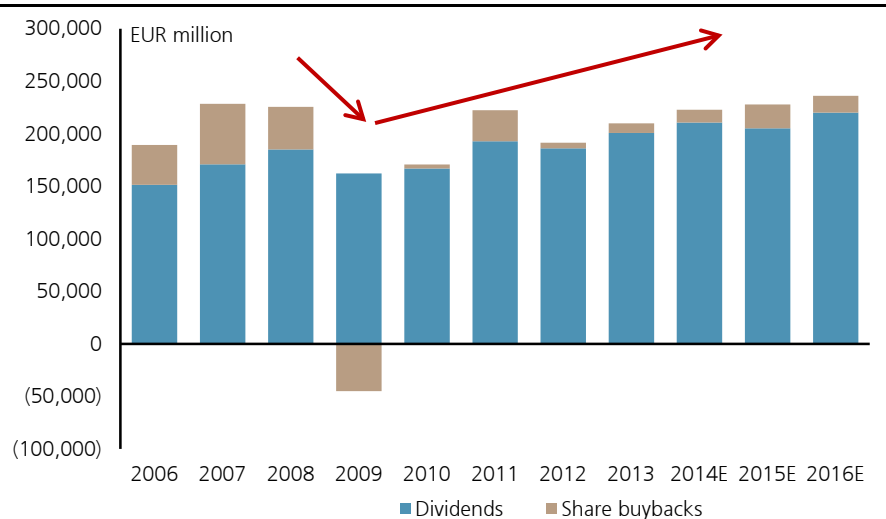
Dividends as a style have performed extremely well. Whilst we believe we are now later on in this theme there are still opportunities – perhaps now more amongst the cyclical stocks rather than defensives (*for more details please see our recent report on dividends: Post QE: Safe-Cyclicals to fill the Yield Gap, 22 January*).

Dividends and buybacks net of issuance have almost doubled since 2009 when cash return by European companies was €117bn compared to €223bn now.

High dividend yield stocks have performed well, although usually within defensives

We see more opportunities out there in the cyclical sectors now

Figure 71: European dividends paid (€m per annum) and share buybacks net of issuance

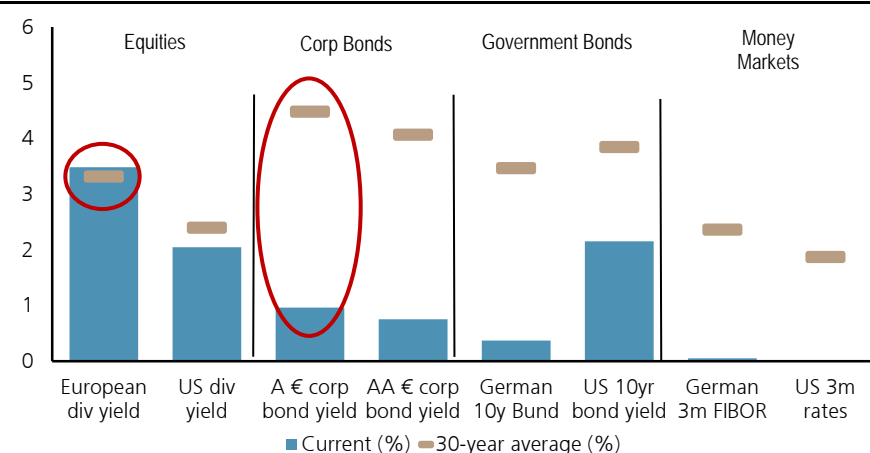


European dividends and buybacks are expected to continue rising

Source: UBS European Equity Strategy

And in this world of historically low yields across fixed income, cash and many other asset classes, equities are proving to be an oasis in the desert.

Figure 72: DY across different asset classes vs. 30-year average



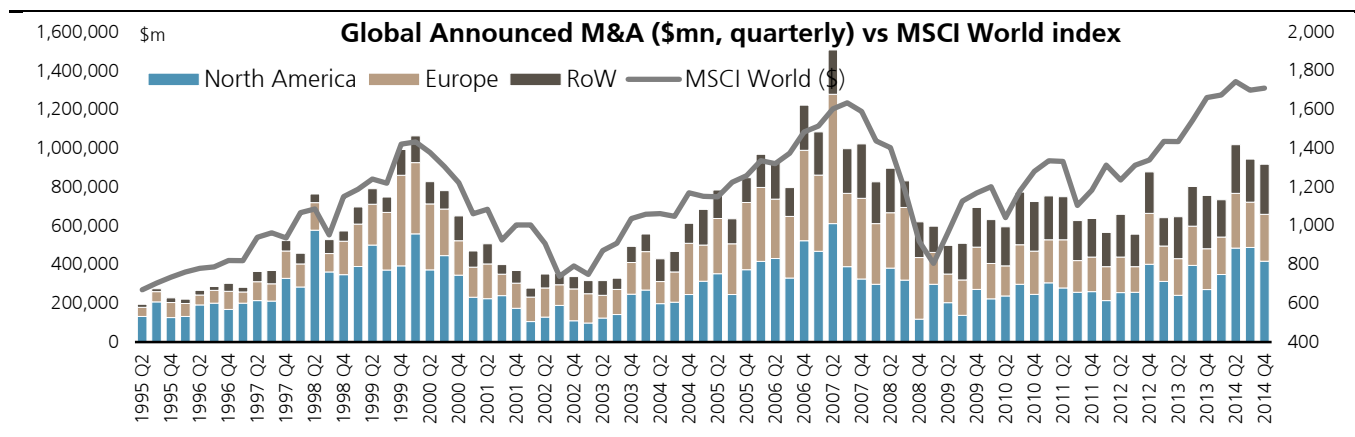
European equities are offering yields above their historical averages – not many asset classes can claim that today

Source: Thomson DataStream, UBS European Equity Strategy

(3) M&A to pick up... following US lead

We suspect that M&A is likely to accelerate in 2015. Global M&A, led by the US has picked up already – but this has been less pronounced in Europe.

Figure 73: Announced M&A deals as % of market cap and MSCI World index



Source: Dealogic, UBS European Equity Strategy

(4) European capex to pick up from 23-year lows

European capex is depressed: the ratio of capex/sales is close to 23 year lows. We expect that from here this picks up – even if simply due to necessity of replacement capex.

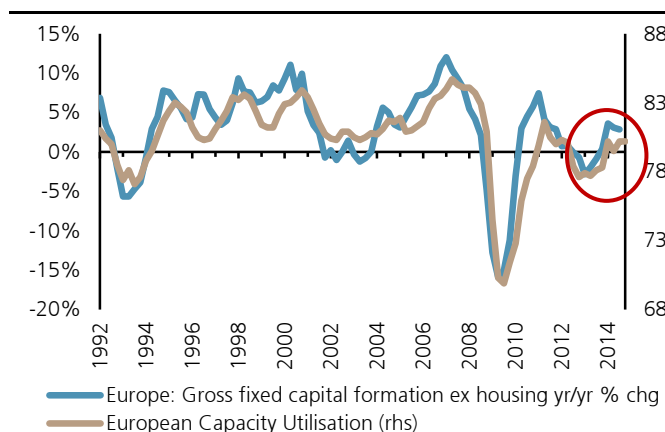
European capex is starting to pick up and capacity utilisation no longer offers a buffer

Already we have seen a broad US capex recovery. This has yet to occur in Europe, but the macro data point to gradual closing of the output gap and this should lead to capex (Figure 74).

What about oil capex reductions? Our Oil team in Europe see cuts to capex of c.15% in 2015. Oil & gas capex makes up 27% of total European capex – so this would mean a c.4% cut overall. Given the super-depressed starting point of overall capex for the market, we think this is likely to be outweighed by other sectors investing.

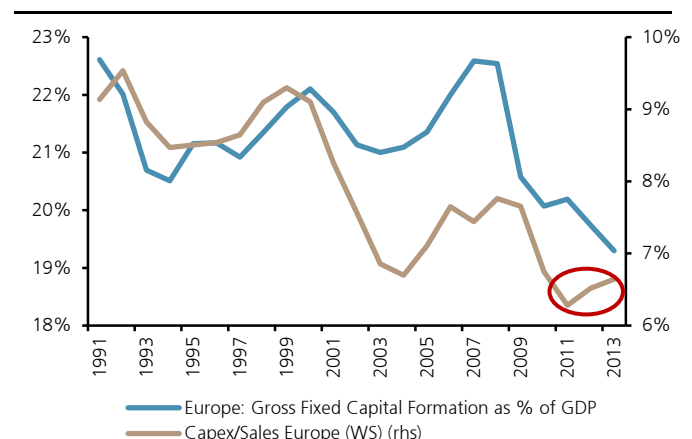
For more details, please see our 4 December 2014 Q-Series® report "Oil Spill: What is the Impact of Lower Oil Prices on Non-Oil Value Chains?".

Figure 74: Eurozone capacity utilisation and capex YoY



Source: Haver, UBS European Equity Strategy

Figure 75: Capex/sales and capex/GDP



Source: Haver, UBS European Equity Strategy

(5) Cost of capital impact

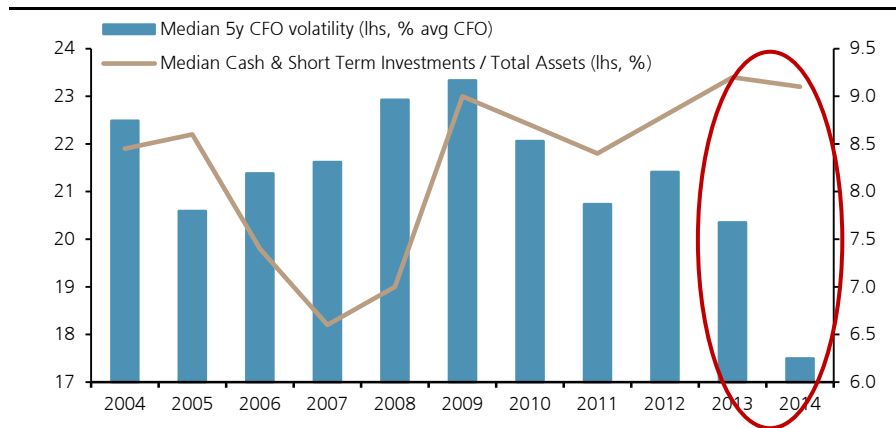
Looking at it under a traditional financial theory framework, it would be easy to label movements in European balance sheets over the past years as an example of the market behaving irrationally. After all, hoarding large piles of cash in a period of low interest rates does not sound like the most efficient capital structure. However, traditional asset pricing models such as the CAPM ignore the probability of default and common equity valuation approaches such as WACC/DCF account for neither legal form nor duration of debt. Hence, two of the main pillars of equity analysis are of little usefulness in periods of high uncertainty.

Uncertainty, which is arguably the key reason why corporates repositioned their balance sheets the way they did. Through the turbulent period in which European corporates operated over the past few years, a cash-heavy balance sheet might be what is needed. But this could be about to change; volatility in cash flow from operations has reduced significantly, reducing the incentive to hoard cash.

Theory tells us a cash-heavy balance sheet in periods of low interest rates is inefficient...

... but in very uncertain conditions, accumulating cash might be what is needed

Figure 76: Lower cash flow volatility could give corporates confidence to spend



Note: Universe used for tests is the Stoxx 600 ex-Financials; 2014 data based on companies with 2014 annual data available at data vendor at time of publishing.
Source: DataStream, UBS European Equity Strategy

At least in cash flow, this uncertainty appears to be no longer present

In the figure above we can see how in the run up to the crisis as market sentiment was bullish, European companies ran down their cash reserves. As the crisis hit markets, volatility in cash flows increased markedly incentivising corporates to accumulate cash. We can see both cash balances and cash flow volatility peaked in 2009 and showed signs of receding between 2009 and 2011. Since then, however, cash flow volatility has come down significantly but companies remained sceptical and kept cash balances high.

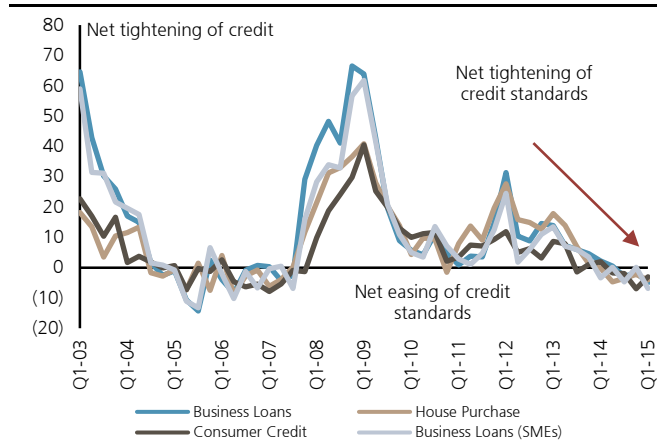
Risks: Why Wouldn't European Companies Re-Gear?

(1) Access to credit

Coming out of a credit crunch it is tempting to suggest that there is insufficient access to credit. But credit availability is improving – the ECB Bank Lending Survey shows easing of credit standards for Business loans to large companies and SMEs for the first time in 7 years. And it is not just supply, we are also seeing demand break into positive territory for the first time since before the Eurozone debt crisis.

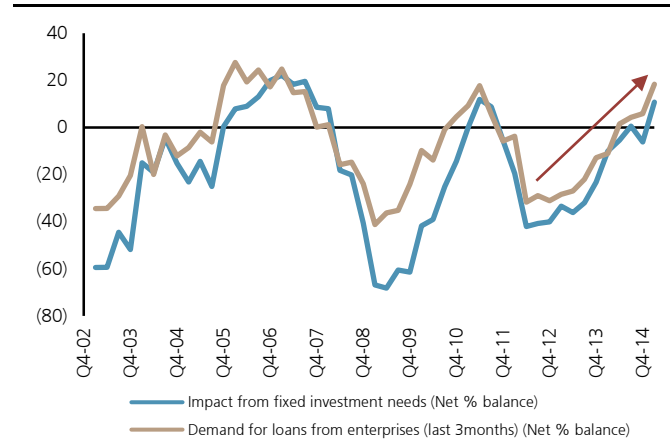
Credit availability is improving significantly

Figure 77: ECB bank Lending survey: Credit standards to corporates being eased



Source: Haver, UBS European Equity Strategy

Figure 78: ECB bank lending survey: Demand for credit – even for investment – improving

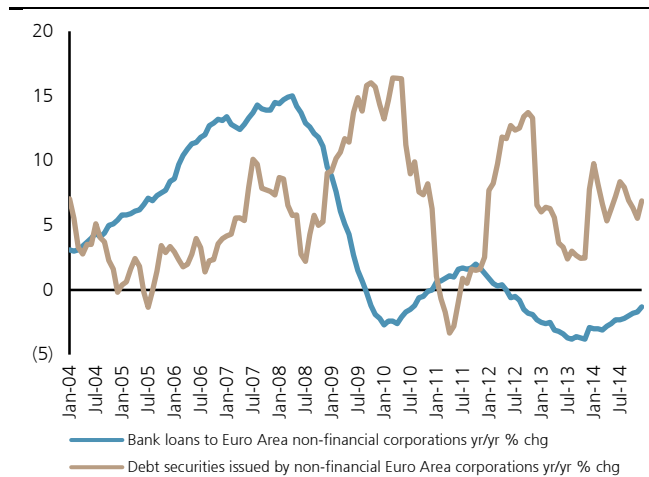


Source: Haver, UBS European Equity Strategy

Additionally, the medium through which corporate access borrowing is changing: bank lending to corporates in the Eurozone is still negative year on year, but corporate debt issuance has been growing at high single-digit / low double-digit growth rates for some time. But these are shifts in the tectonic plates – still c.80% of outstanding corporate debt is with the banks.

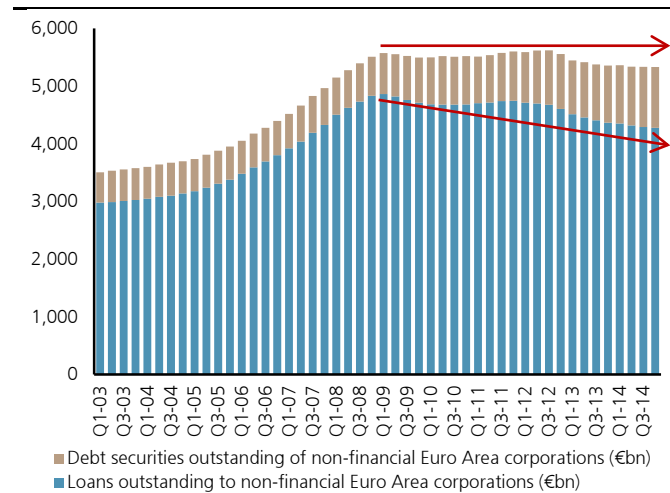
Debt issuance is increasing while bank lending is decreasing

Figure 79: Debt issuance is replacing Bank lending in Eurozone...



Source: Haver, ECB, UBS European Equity Strategy

Figure 80: ... but bank lending still makes up c.80% of total loans



Source: Haver, ECB, UBS European Equity Strategy

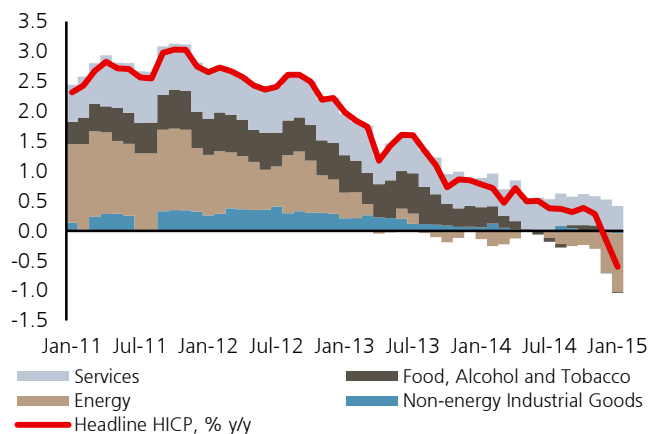
(2) Risk of deflation

One macro environment where it certainly would not be the correct strategy to re-gear the balance sheet would be deflation: the nominal value of debt stays constant, but it rises in real terms at the same time as revenues and profits face downward pressure.

Given the starting point of inflation at 0.6% in the Eurozone and the collapse in expected inflation, we understand why this makes European companies nervous. However, as the ECB started large scale Sovereign bond QE in Q1 2015 we see inflation numbers rising, albeit slowly, through 2015. Our economists expect inflation to turn positive in Q3 and more robust in Q4 (see *Falling Eurozone inflation vindicates ECB action*, 30 January).

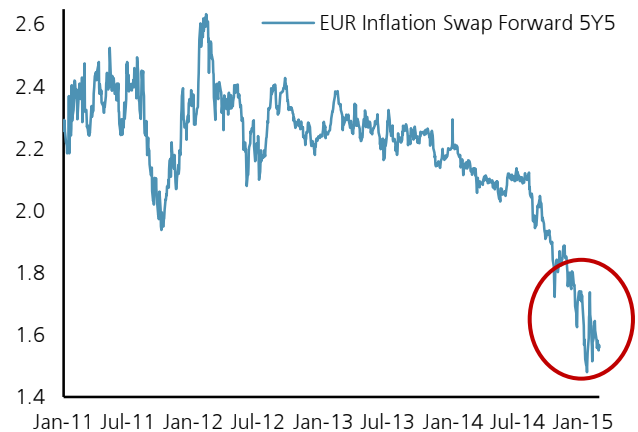
On the back of QE, our economists expect inflation numbers to rise in H2 2015

Figure 81: Eurozone inflation



Source: Haver, UBS European Economics Team

Figure 82: Euro 5yr, 5yr forward inflation swap



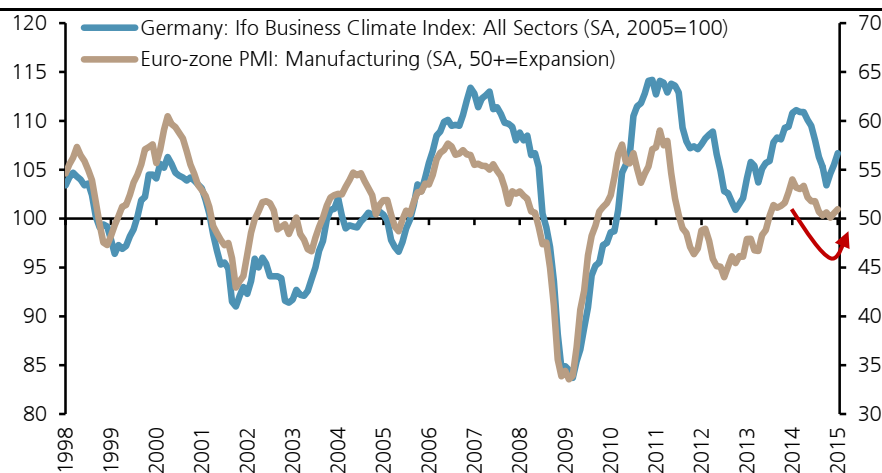
Source: Bloomberg, UBS European Equity Strategy

(3) Risk of recession

If Europe was to fall back into recession in 2015, that would mark the 3rd in 5 years – quite a depressing landmark by any measure. But the most recent data has shown lead indicators have started to turn and Eurozone GDP is growing at a faster pace than expected (see Eurozone: upside risk to GDP growth, 13 February).

A third recession in five years would be a grim picture but lead indicators are turning and GDP starting to surprise on the upside

Figure 83: Economic leading indicators are turning more positive



Source: Haver, UBS European Equity Strategy

In addition, looking further ahead into the year we see several factors that will support growth: the weaker Euro (we forecast EUR/USD 1.15 by end year), the lower oil price (each \$10bbl off the oil price boosts Eurozone GDP by c.0.2% – if held for a year), further Central Bank action and no fiscal drag for the first time in 6 years. Whilst this might not point to a booming economy (our economists forecast 1.2% GDP growth for 2015), it would mean an acceleration in growth from this year and no recession.

Stock Screens: Who Can Re-Leverage?

As we mentioned, examples of stocks that pay regular, sustainable dividends and offer dividend yields greater than their corresponding bond yields are now not hard to find in the European market. This presents great opportunities for equities. With that in mind we screen the market for stocks that return cash to shareholders at higher rates than the company's bond and that could use low interest rates available to re-gear and increase cash returns further (through dividends, buybacks, etc).

Screen 1 – Dividend Yield Higher Than Bond Yield

Below we highlight the top 15 European companies which have the highest spreads between their Dividend Yield and Bond Yield and are also in the bottom half of the stocks by leverage with Net Debt / Equity < 50%. Given the current precipitous fall in the oil price we have removed Oil companies¹².

Figure 84: Stock Screen: Dividend yield higher than bond yield

Name	Dividend yield - Corp bond yield	Market cap (€bn)	UBS rating	Price	P/E 2015E	DY pay-out ratio	Div yield 2015E	EPS CAGR 2014-2016E	Equity 1-year vol (daily)	Maturity	Ratings	Amount outstanding	Yield	Mod dur	Bond 1-year vol (daily)
Telenor	5.0	27.0	Buy	154.4	14.6	82.5	5.6	24%	21%	6/27/2022	A3 / A	EUR 500m	0.67	6.6	3%
Lufthansa	4.6	6.4	Buy	13.885	5.6	30.1	5.4	91%	33%	9/12/2019	Ba1 / BBB-	EUR 500m	0.85	4.4	2%
Vodafone Group	4.4	81.9	Buy	228.4	42.6	198.7	5.1	n/a	23%	9/11/2020	Baa1 / A-	EUR 1750m	0.63	5.1	2%
Bouygues	3.7	11.0	Neutral	34.89	42.0	192.6	4.6	n/a	29%	2/9/2022	Baa1 / BBB	EUR 800m	0.85	6.2	3%
Iberdrola	3.7	36.4	Buy	5.93	16.0	72.8	4.6	6%	15%	1/31/2022	Baa1 / BBB	EUR 500m	0.87	6.3	3%
DSM	3.6	8.3	Neutral	47.935	17.8	66.8	3.8	10%	21%	10/17/2017	A3 / A	EUR 750m	0.18	2.5	1%
BASF SE	3.5	75.7	Neutral	82.4	13.7	49.8	3.6	12%	22%	1/22/2019	A1 / A+	EUR 750m	0.15	3.6	1%
Abertis	3.3	15.8	Neutral	17.535	18.1	75.0	4.1	17%	20%	10/27/2021	Baa3 / NR	EUR 1500m	0.89	5.8	3%
E.ON	3.2	25.4	Neutral	13.305	18.5	69.5	3.8	-7%	24%	5/7/2020	A3 / *- / A- / *-	EUR 1400m	0.54	4.5	2%
Siemens	3.2	82.1	Buy	97.48	13.3	46.2	3.5	7%	21%	3/10/2020	A1 / A+	EUR 1000m	0.27	4.8	2%
Nestlé	3.0	212.8	Neutral	72	21.3	66.5	3.1	2%	16%	7/19/2019	Aa2 / #N/A N/A	EUR 500m	0.11	4.3	2%
Pearson	3.0	15.2	Neutral	1398	17.4	65.8	3.8	15%	20%	5/19/2021	Baa1 / BBB+	EUR 500m	0.80	5.8	2%
Sanofi	3.0	116.5	Neutral	87.84	15.6	54.0	3.5	4%	23%	3/10/2022	A1 / AA	EUR 1000m	0.52	6.5	3%
BT Group	2.6	46.7	Neutral	436.9	14.2	41.9	3.2	4%	19%	6/10/2019	Baa2 / BBB	EUR 1000m	0.52	4.2	1%
BMW	2.6	70.0	Neutral	109.038	11.7	35.5	3.0	6%	23%	9/4/2020	A2 / A+	EUR 750m	0.43	5.2	2%

Source: Thomson Datastream, UBS European Equity Strategy

¹² However, we also include the entire universe of corporate bond yields and dividend yields in the appendix.

Screen 2: Low leverage, high cash flow growth and momentum

Below we highlight European companies which have gearing (Net Debt to Equity) below their sector median, as well as the highest expected cash flow generation in their sector according to our analysts (2y CAGR operating free cash flow) and also have price momentum above their sector. From the stocks that have matched the above criteria we highlight the ones where our analysts believe re-gearing might be on the cards and include their view on whether this re-gearing might be done in a "shareholder friendly fashion". Again, given the fall in the oil price we have also removed Oil companies from this screen.

Figure 85: Stock screen – Low leverage, high cash flow growth and momentum

Name	Sector	Mkt Cap (EURm)	Gearing	Oper. free cash flow 2Y CAGR	Sector Relative P momentum	Analyst	Analyst rating	Analyst commentary
Taylor Wimpey	Home Construction	5,882	-0.24	52.7%	12.7	Gregor Kuglitsch	Buy	Company already committed large dividends and we expect accelerated pay-outs.
Daimler AG	Automobile Manufacturers	89,949	-30.93	40.1%	3.2	Phillippe Houchois	Neutral	Daimler appears to have structurally increased cash conversion and is committed to a fairly generous pay-out ratio by OEM standards at 35-40%. The group also contributed €2.5bn to its various pension obligations in late 2014. We believe the group will continue that policy while the risk of large acquisitions is low.
Persimmon	Home Construction	6,401	-9.98	39.2%	22.5	Gregor Kuglitsch	Buy	Company already committed large dividends and we expect accelerated pay-outs.
Ryanair	Airlines	14,338	-4.59	35.3%	43.6	Jarrold Castle	Buy	Ryanair will pay a special dividend (c€0.5bn) in February but should be able to generate sufficient cash to think about another special dividend with a 12-month view.
Ericsson	Communications Technology	359,796	-33.04	27.7%	13.2	Gareth Jenkins	Neutral	The company is likely to continue its dividend policy.
Schibsted ASA	Publishing	6,336	14.33	27.6%	26.4	Alastair Reid	Neutral	Company could gear up but the headroom might be used for acquisitions.
Signet Group	Retailers, Specialty	8,855	-15.26	22.3%	77.7	Andrew Hughes	Neutral	Rapid pay-down of debt taken on with the Zale acquisition, plus healthy debt metrics could see a resumption of share buybacks in the current year.
EasyJet	Airlines	7,054	-19.43	19.6%	3.3	Jarrold Castle	Buy	EasyJet increased its ordinary pay-out ratio from one-third to 40% of income. Post the summer season, we could see further cash returns.
Nokia	Communications Technology	26,590	-55.95	15.9%	17.6	Gareth Jenkins	Neutral	We believe it will continue to buy back stock, as it is generating significantly more cash than needed.
Autoliv Inc	Auto Parts	10,314	2.09	15.2%	15.3	David Lesne Chervine Golbaz	Sell	We think ALV's LT leverage target is unlikely to be reached only with current share repurchase. Reaching its LT leverage target of 1x (net debt/EBITDA) would require a cash outflow of \$1.2bn+.
Coloplast A/S	Advanced Medical Devices	107,457	-20.67	12.0%	20.3	Ian Douglas-Pennant	Neutral	Coloplast has a policy of returning 100% of FCF to shareholders via dividends.
BIC Group	Household Products, Non-Durable	6,137	-13.88	11.8%	25.0	Denis Moreau	Neutral	Announced it could pay a special dividend based on 2015 earnings. Had net cash €320m at year-end 2014; cash pile likely to grow to €370m at YE 2015E, which means a potential cash distribution of €2.0-2.5 per share (on top of the ordinary dividend).
Dixons Carphone PLC	Retailers, Specialty	5,083	-0.04	10.8%	59.2	Andrew Hughes	Buy	Cash flow should improve strongly following the merger and the capture of synergy benefits. M&A seems less likely currently, so main use of cash may be via raising dividends from a relatively low level.
BMW	Automobile Manufacturers	70,034	-41.32	10.7%	2.2	Phillippe Houchois	Neutral	We see low risk of acquisitions at BMW and the possibility of a more generous dividend payment, possibly as a special, to celebrate the company's 100 th Anniversary in 2015 (paid '16).
GEA Group	Industrial, Diversified	8,332	14.81	7.4%	4.2	Sven Weier	Sell	GEA will redeploy cash in M&A but it will only do bolt-on. Therefore, likely to be net cash for the next years to come.

Source: UBS European Equity Strategy

Asia ex-Japan: Re-Leveraging Looks Remote

Leverage in Asia ex Japan is below global averages. However having troughed in 2008, leverage has been rising gradually, up six percentage points in the last six years. Nevertheless, leverage remains well below the very high levels heading into the Asian Financial Crisis in 1997. Aggregate net debt/equity stands at 41% for the region.

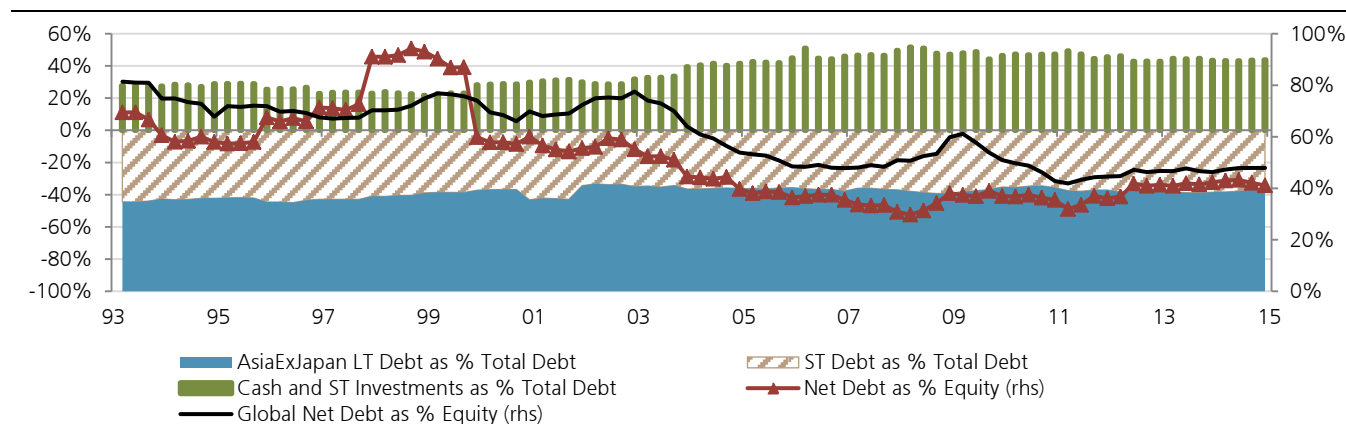
Niall MacLeod

Strategist

niall.macleod@ubs.com

+852-2971 6186

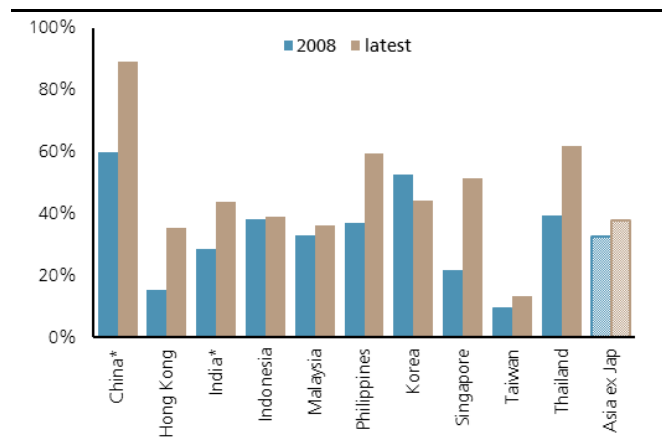
Figure 86: Asia ex Japan – Net debt to equity and composition of net debt



Source: Worldscope, UBS Quantitative Research

Country-wise corporate net debt/equity has risen in all countries since 2008, with the notable exception of Korea (Figure 87). China, Singapore, The Philippines, Hong Kong and Thailand have seen the largest rises in leverage while Korea decreased its gearing, but at 44%, Korean gearing is still higher than regional and global levels.

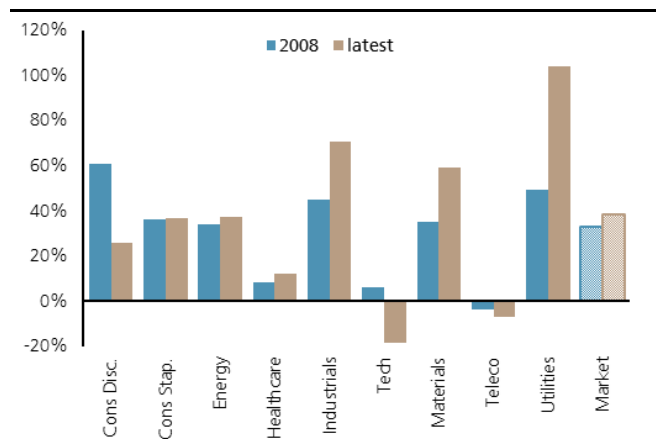
Figure 87: Country changes in net debt/equity 2008 – now



* China and India are calculated on a different methodology (ie, from a constant sample, as opposed to the others, which are a sample re-created from Dow Jones World index constituents at each point in time).

Source: Worldscope, UBS Quantitative Research

Figure 88: Sector changes in net debt/equity 2008 – now



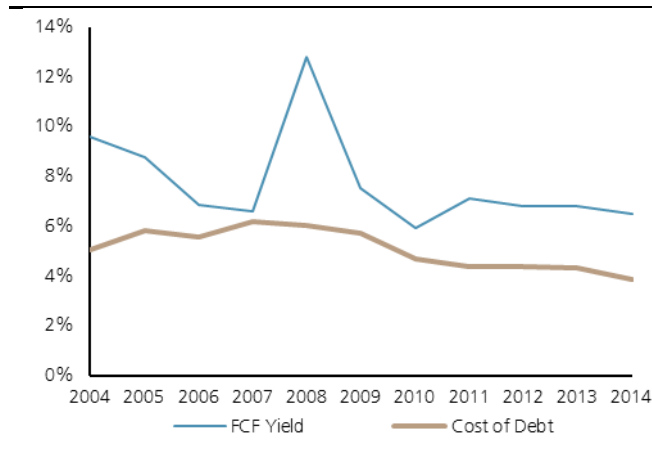
Source: Worldscope, UBS Quantitative Research

At the sector level, Materials, Industrials and Utilities have led the re-leveraging while Consumer Discretionary and Tech have been de-leveraging (Figure 88). Materials and Industrials which, being more China-centric, were less affected by the global financial crisis as Chinese growth remained strong. Thinking about this from our fundamental

drivers, which highlights the importance of growth and capacity utilisation in determining future leverage, this might explain why these sectors have leveraged up since 2008 given strong Chinese demand. The de-leveraging of Tech is notable – much of this is accounted for by the build-up of cash at Samsung Electronics.

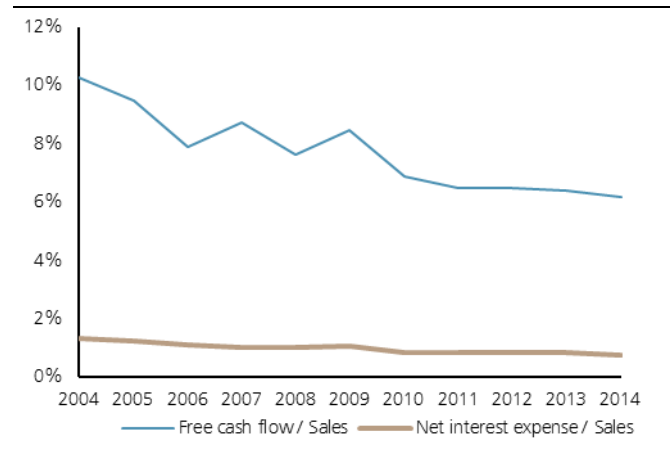
Looking ahead, what are the prospects of further gearing up from here? Studying the return on cash flow versus cost of debt, Asian companies are generating higher yield on their cash than the cost of debt (Figure 89). The chart shows the free cash flow yield (as a percentage of market cap) versus the cost of debt. Figure 90 shows free cash flow versus interest expense.

Figure 89: Free cash flow yield vs. cost of debt



Source: UBS Wire data for constant sample (where FCF is defined as post-tax EBITDA less maintenance capex, less net working capital)

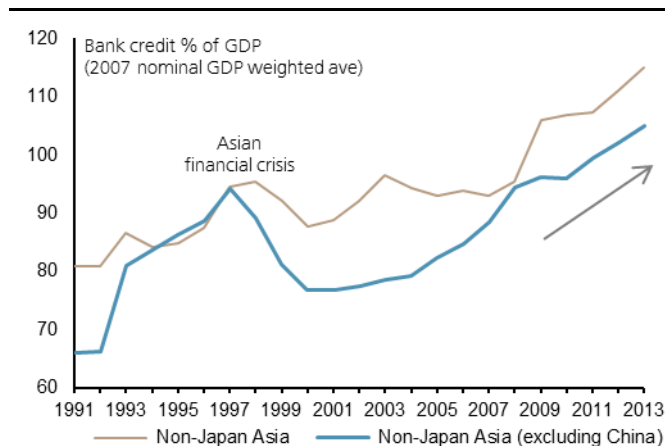
Figure 90: Free cash flow vs. net interest expense



Source: UBS Wire data for constant sample (where FCF is defined as post-tax EBITDA less maintenance capex, less net working capital)

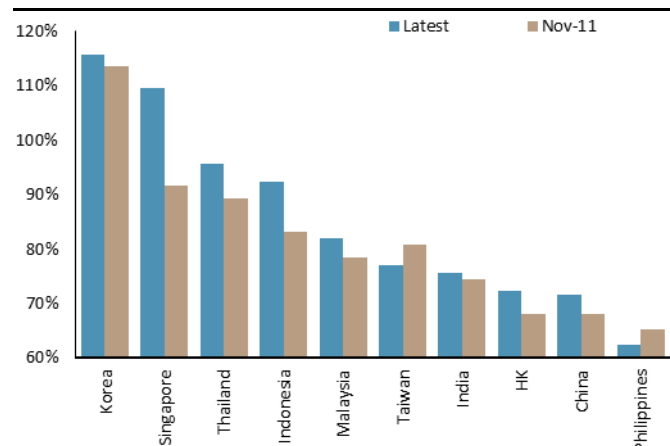
Theoretically, these charts suggest companies could/should take on more debt. However, we are not convinced this will happen. The reason is Asia is deep into a broad credit cycle (referred to at UBS in Asia as Debttopia). As our prior analysis showed, economy-wide debt levels matter. This region has leveraged up a great deal, as Figure 91 and Figure 92 show. Moreover, we think much of the region could face higher rates this year as and when the Fed starts to lift the Target Rate.

Figure 91: Non-financial credit as % of debt



Source: CEIC, UBS Asia Banks team

Figure 92: Loan-to-deposit ratios for Asian banks



Source: CEIC, UBS Asia Banks * Latest as of Nov-14.

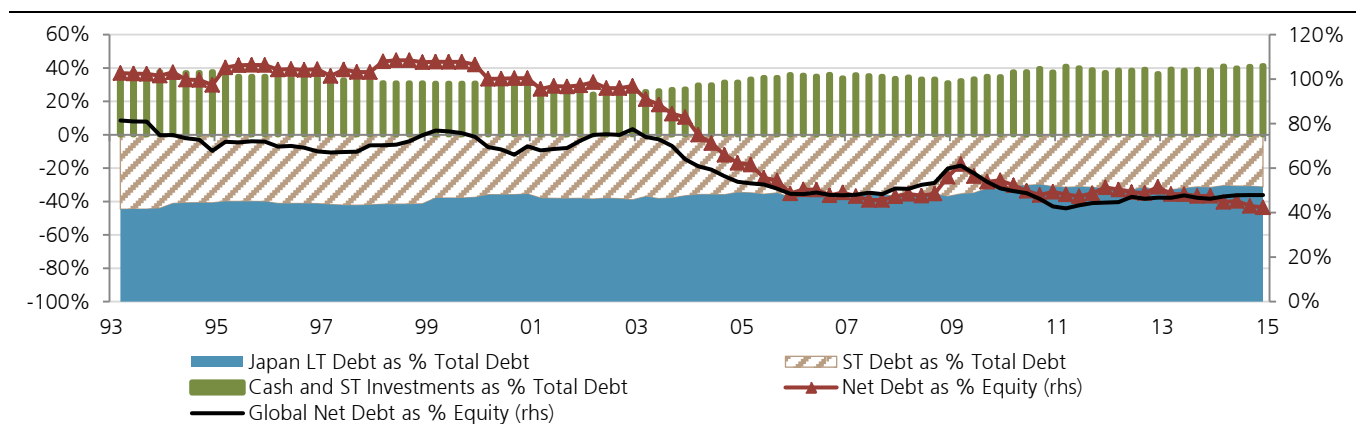
We doubt corporate leverage will rise much given aggregate levels of economy wide debt are high, and rates might start rising too. As such we wouldn't make the case that Asia ex Japan corporates are on the edge of a large re-leveraging,

despite the prima-facie case of attractive financing options given cost of funds compared to free cash flow levels and yields.

Japan: Re-Leveraging Hinges on Inflation

Corporates in Japan were highly leveraged, at the tail end of the bubble. Leverage exceeded 100% of equity. When the bubble burst, companies began to try and clean up their balance sheets. However it can often be hard to cut gearing in the early stages of an economy wide de-leveraging, given weak aggregate demand. As a result it was only into global economic pick-up post 2003 that leverage really started to drop. Net debt to equity troughed in early 2007, climbed to a local peak amidst the global financial crisis, and has been gradually declining since. Today, Japanese leverage is modestly below global averages of 47%, with high cash retention of 41% and a debt composition skewed towards longer-dated debt.

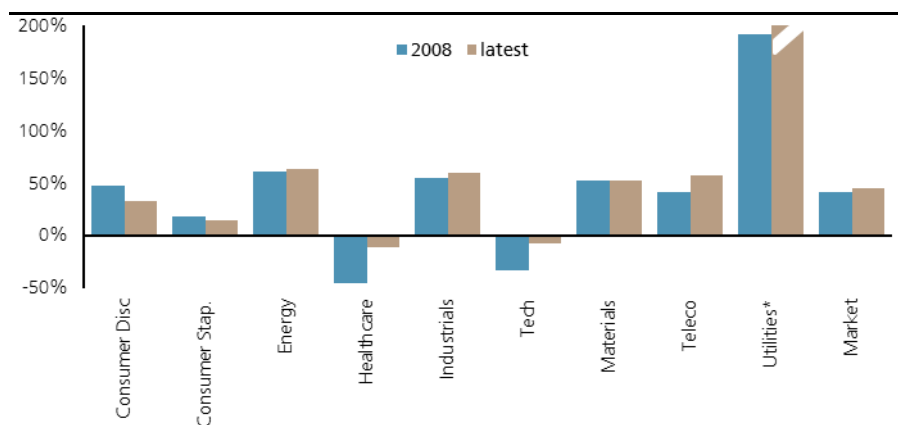
Figure 93: Japan – Net debt to equity & composition of net debt



Source: Worldscope, UBS Quantitative Research

By sector, there is some variation – re-leveraging in Tech, Health Care and Utilities, while Consumer Discretionary and Consumer Staples have seen some de-leveraging. The apparent re-leveraging in Utilities is a factor of large losses at TEPCO affecting equity levels, rather than due to an increase in net debt.

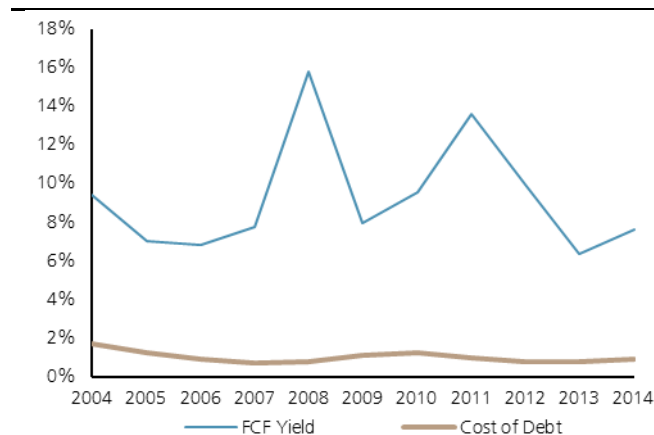
Figure 94: Sector net debt/equity 2008 and now



* Net debt to equity ratio for Utilities is 290%.
Source: Worldscope, UBS Quantitative Research

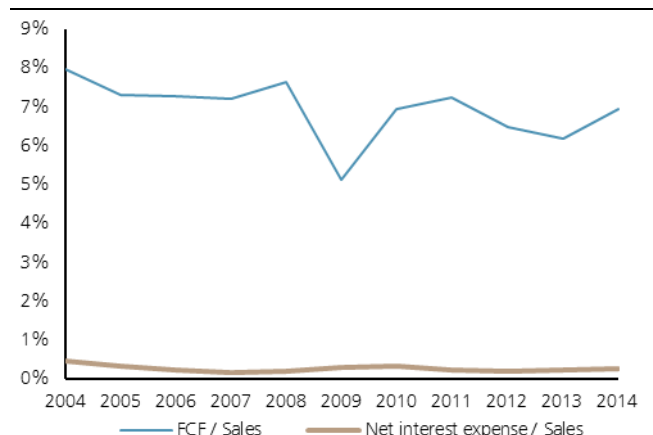
Given that leverage is lower compared to history, how likely are Japanese companies to re-leverage in the near future? Again using the same framework as we did for Asia ex Japan, there appears to be a solid yield relative case for leveraging up. Free cash flow yields are very high versus borrowing rates (Figure 95). At the same time, actual free cash flow is high compared to net interest expense (Figure 96).

Figure 95: Free cash flow yield vs. cost of debt



Source: UBS Wire data for constant sample (where FCF is defined as post-tax EBITDA less maintenance capex, less net working capital)

Figure 96: Free cash flow vs. net interest expense



Source: UBS Wire data for constant sample (where FCF is defined as post-tax EBITDA less maintenance capex, less net working capital)

One can argue that economy-wide debt levels in Japan are certainly high, largely a product of its public debt (see Figure 32, "Developed World Country Debt Levels"), that is a headwind to any re-leveraging in Japan. However, Japan's corporate leverage has come down to global levels, the spread between FCF yield and cost of debt remains large. These two factors might cancel each other out (high public debt versus strong micro incentives to leverage up corporate balance sheets).

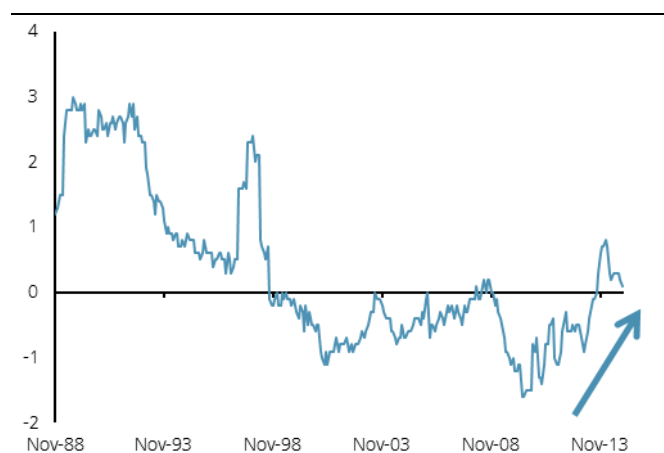
However in Japan's case, there is another factor that is very important – Deflation.

From Deflation to Inflation, De-leveraging to Re-leveraging?

Japan's persistent deflation has been an additional factor in de-leveraging and potential impediment to re-leveraging. In very simplistic terms, deflation pushes up the real cost of debt. As such there is limited incentive to take on additional debt given the deflationary backdrop, while there has been a strong incentive to hold cash, the real value of which goes up in deflation. As Figure 93 shows, this is exactly what Japanese corporates have been doing. But could this be about to change?

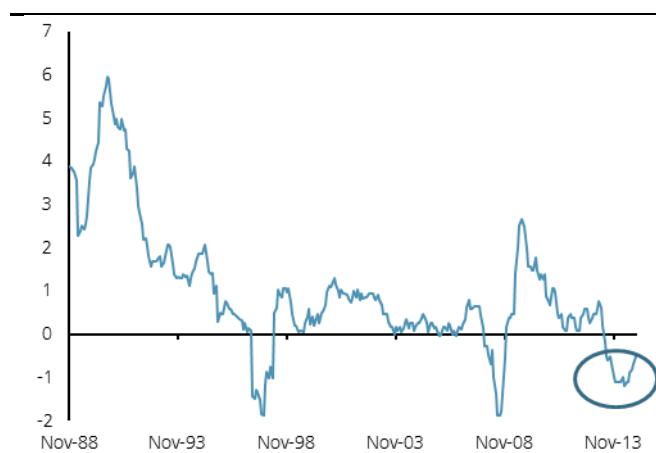
If the Bank of Japan succeeds in generating consistent 2% inflation as per its goals, this might shift the behaviour of corporates in Japan away from hoarding cash and cutting debt, to re-leveraging and cutting cash holdings.

Figure 97: Japan CPI (ex. food and energy) adjusted for Apr-14 consumption tax hike



Source: Bloomberg

Figure 98: Real interest rate



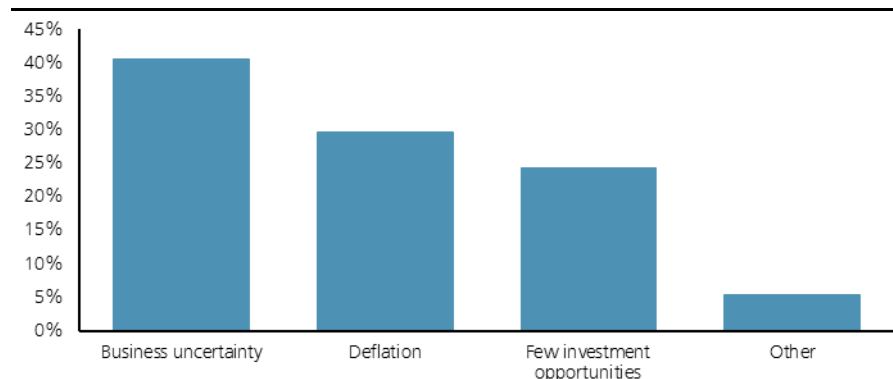
Source: Bloomberg

That is what should happen theoretically. But in the real world is this what we will see? To answer this, we used UBS' proprietary research group – UBS Evidence Lab – to survey senior finance executives at 100 companies in Japan regarding their expectations for inflation and how that would impact their corporate finance decisions. Companies with less than 25B yen in revenue were excluded. The survey was conducted from November 21-27 using an Internet methodology. Conclusions based on the total sample have a sampling margin of error of +/-3.6-8.2 percentage points (depending on the response distribution) at a 90% confidence level.

The results of the survey show that deflation was one of the key reasons for de-leveraging in the last 10 years. Moreover, approximately 40% of companies surveyed said that they would be likely to cut cash and take on more debt if the BoJ succeeded in generating persistent inflation.

Of the companies that responded that leverage had decreased in the last 10 years, the primary reason was 'business uncertainty' followed by 'deflation' (Figure 99).

Figure 99: Principal reason for de-leveraging over last 10 years



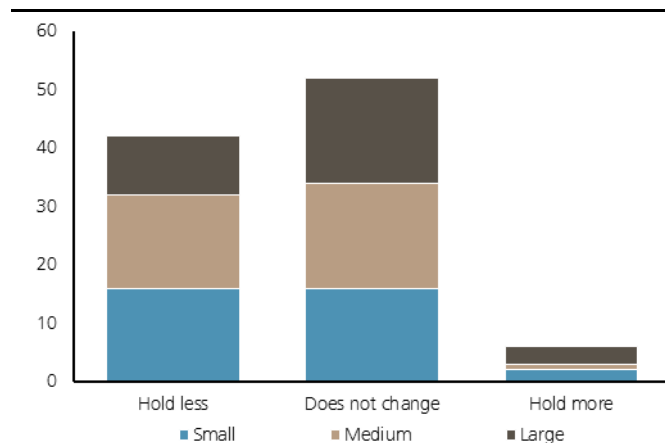
Source: UBS Evidence Lab

The Bank of Japan has committed to a 2% inflation rate by 2016. Our survey revealed that 53% expected 1.0-1.9% in the next five years, while 23% and 24% expected below and above this respectively. In a scenario where reflation takes hold

UBS Evidence Lab provides our research analysts with rigorous primary research. The team conducts representative surveys of key sector decision-makers, mines the Internet, systematically collects observable data, and pulls information from other innovative sources. They apply a variety of advanced analytic techniques to derive insights from the data collected. This valuable resource supplies UBS analysts with differentiated information to support their forecasts and recommendations—in turn enhancing our ability to serve the needs of our clients.

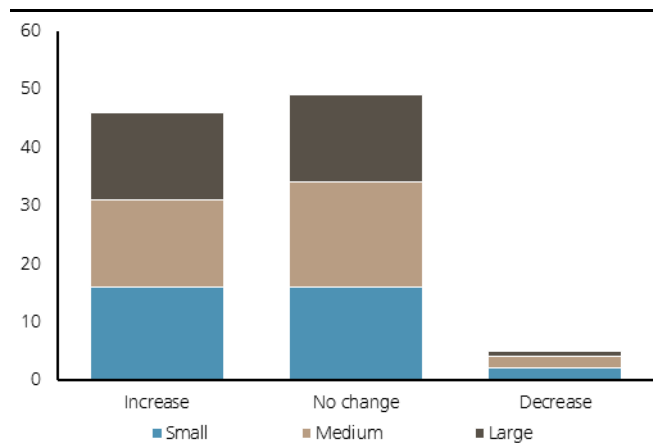
in Japan, 42% of respondents said they would hold less cash while 46% said it will encourage them to increase the amount of leverage (Figure 100 and Figure 101).

Figure 100: If BoJ successfully brings about positive inflation expectations, would this encourage you to hold less cash?



Source: UBS Evidence Lab (where revenue Y25bn<small<Y99bn, Y100bn<medium<Y999bn, Y1tr<large)

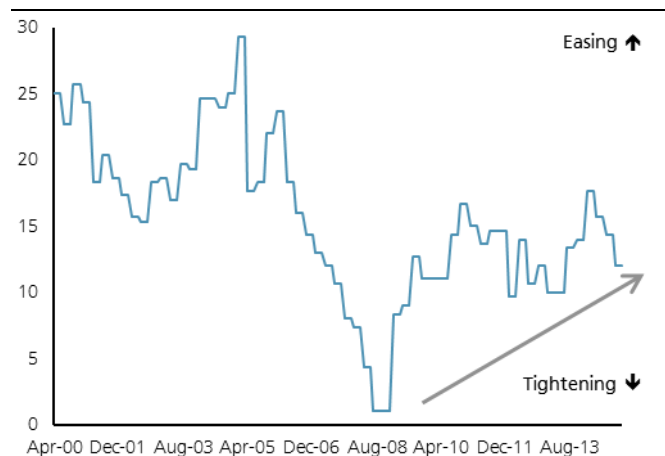
Figure 101: In an inflationary environment, would you increase the amount of leverage on your balance sheet?



Source: UBS Evidence Lab (where revenue Y25bn<small<Y99bn, Y100bn<medium<Y999bn, Y1tr<large)

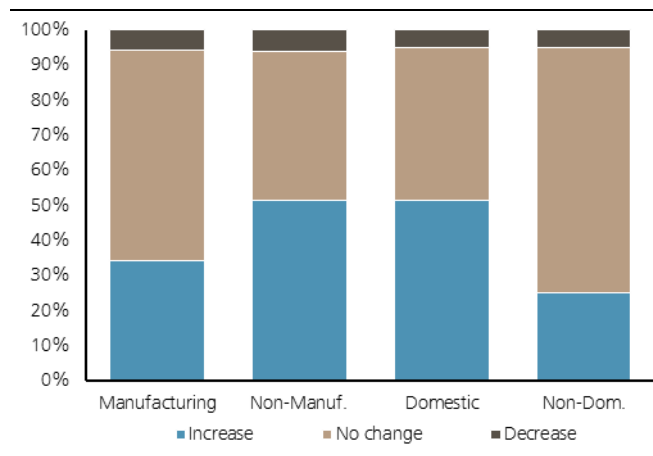
The lowered cash retention and higher gearing could get the credit cycle going, especially when conditions for lending by banks have been easing (Figure 102). Interestingly, Non-Manufacturing companies were more likely to raise leverage compared to Manufacturing (52% vs. 34%) and those with domestic sales were more likely to gear up compared to those generating revenue overseas (51% vs. 25%). Given that reflation in Japan is more likely to affect on-shore companies, which tend to be more Service-oriented in nature, this would make sense (Figure 103).

Figure 102: Lending policies – Credit standards for approving loan applications



Source: Bank of Japan

Figure 103: In an inflationary environment, would you increase the amount of leverage on your balance sheet?



Source: UBS Evidence Lab

In sum, from having surveyed 100 Japanese companies, we can say deflation was one of the main reasons for de-leveraging in the past 10 years. What we would expect in theory in an environment of reflation, seems to hold in reality too as a significant number of companies responded that they would hold less cash and increase the amount of leverage. While fundamental driver model forecasts Japan being unlikely to re-leverage due to an absence of weak demand, the wildcard –

reflation – is in Japan's favour. Undeniably, Japan does have large levels of debt in the context of the broader general economy that could be a headwind to re-leveraging. However, corporate leverage is down at global averages and the spread on FCF and cost of debt remains wide. Interest rates are likely to remain low in the ongoing easy monetary policy. We would be more expectant of re-leveraging in the on-shore, non-manufacturing companies as opposed to Manufacturing exporters.

We highlight five Japanese companies in the UBS universe which have corporate bonds but are lowly leveraged (Net debt/Equity < 50%) and where our analysts thinks the company is likely to re-gear in a shareholder friendly way. We define this as proactively managing the balance sheet such as lowering cash, taking more debt, and having a history of shareholder returns e.g. buybacks and dividend payments.

Of the five names, J. Front Retailing is the only one that is Non-Manufacturing and Domestic, which are the characteristics of companies more likely to re-gear as observed by the Evidence Lab survey. Nozomi Moriya notes the management has announced a long term ROE target of 8% in order to meet the demand of the equity market. Since 2012, the company has been increasing dividend alongside its earnings recovery. J. Front Retailing particularly stands out in comparison to its peers as generally speaking Japanese retailers tend to focus on profitability to improve competitiveness rather than capital returns.

While the following are Manufacturing companies, nonetheless our analysts are optimistic about the chances of balance sheet management and shareholder friendly policies judging by the history of these lowly leveraged companies.

Kuraray, a speciality chemical firm, announced their medium-term plan in December of last year, which our analyst Takaaki Muramatsu rated as "strong" and leaving a "good impression". Kuraray has focused on acquisitions over the past three years, but now is in a position to balance growth investment and shareholder returns, citing a dividend pay-out ratio of more than 35% and the cancellation of more than 20m treasury stocks in FY15.

HOYA currently sits on net cash of nearly Y300bn and is expected to generate annual free cash flow of around Y100bn. Management has targeted effective M&A activity as a use for this cash, especially in order to grow its life care business which will be their next key phase. Alongside their aggressive M&A stance, they also have a history of shareholder friendly returns.

FUJIFILM Holdings has Y600bn in cash, and over Y100bn free cash flow generated per year. Our analyst Katsura Ryosuke believes the company is likely to proactively manage their balance sheet in accordance with their new medium term plan ('Vision 2016' ending in Mar-17). The company has committed Y400-500bn for strategic M&A's and over Y200bn for dividends/share buybacks, finding a balance between midterm growth and shareholder returns. Accordingly, the company announced an increase in dividend and share buybacks along with its Q3 results last month (see our 28 January note, *Making good on pledge should be valued*).

Konica Minolta is comparably lowly leveraged at 2% and cash close to 30% of market cap. It has a history of shareholder friendly buybacks and dividends, and Ryosuke Katsura believes that it will proactively manage its balance sheet in the future. Management plans to accelerate its M&A particularly in the SI field, in order to boost its revenue growth above the industry average.

Figure 104: List of Japanese companies with low leverage and potential to re-gear in a shareholder-friendly way

Company	Market cap (US\$ mn)	Subsector	Rating	Price	up / downside	P/B 2015E	Div Yield 2015E	EPS CAGR 14-16E	Leverage (ND/Eq)	Cash as % MC	FCFY (actual)	DY (actual)	Maturity	Bond Rating (JCR)	Outstandi ng (mn jpy)	Yield	Non- manu	Domestic
HOYA	16,186	Tech Hardware	Buy	4,500	13%	3.09	1.7%	25%	-49%	17%	3.5%	1.7%	9/20/2017	AA	35,000	0.11	✖	✖
Kuraray	4,347	Materials	Buy	1,460	16%	1.06	2.5%	23%	-12%	21%	4.9%	2.5%	12/9/2021	AA-	10,000	0.27	✖	✖
FUJIFILM Holdings	15,713	Tech Hardware	Neutral	3,836	3%	0.86	1.7%	18%	-12%	34%	1.3%	1.3%	12/2/2022	N/A	40,000	0.31	✖	✖
Konica Minolta Inc	5,455	Tech Hardware	Neutral	1,274	-3%	1.27	1.9%	3%	2%	29%	6.5%	1.4%	11/30/2018	A+	20,000	0.19	✖	✖
J. Front Retailing	3,372	Retailing	Buy	1,504	12%	1.02	1.1%	-15%	48%	9%	0.9%	1.4%	11/16/2017	A	12,000	0.25	✓	✓

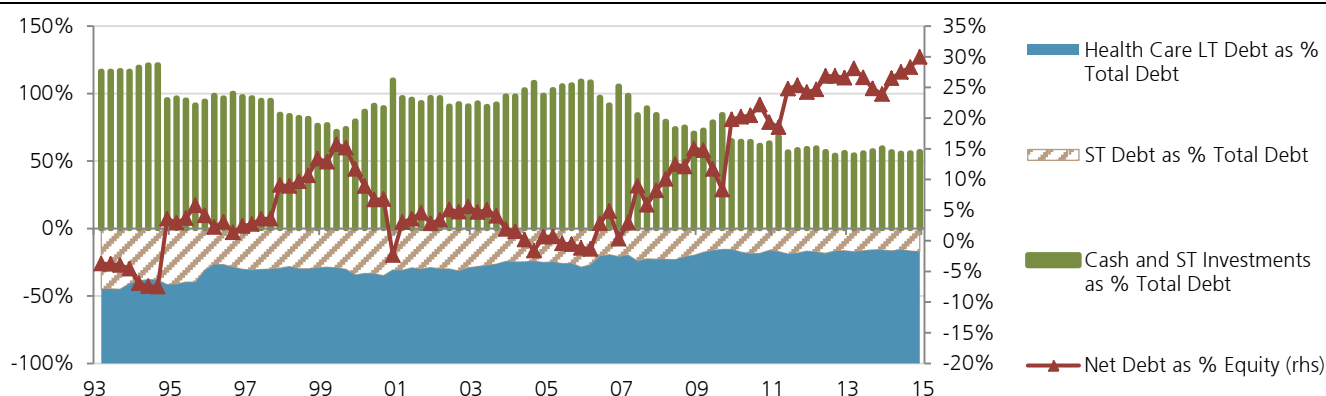
Source: UBS

Appendix I: Health Care Re-Leveraging

In the Global Health Care sector, we see an interesting exception to the broad global themes of de-leveraging and cash accumulation. That a sector rather than a region has emerged as a source of differentiation in our data shouldn't come as a complete surprise: sectors are, by definition, fundamentally different from each other in the nature of their economic activities. The degree to which Health Care is distinct, however, is notable, and we'd argue that aggressive cash returns have been a key element of attractive total returns in the sector, for reasons discussed below.

Figure 105 shows that global Health Care leverage currently sits at the very top of its two-decade range. It provides the only example of a major global market segment (region or sector) in which listed corporate leverage has risen substantially over this period, and it is a fairly extreme contrast to the global trend. Indeed, uniquely among sectors, Health Care has been levering up and running its cash balances down, in both cases toward global averages. Thus while its path has been unique, the sector's leverage metrics and balance sheet composition are converging toward global averages.

Figure 105: Global Health Care – Levering up while running cash balances down

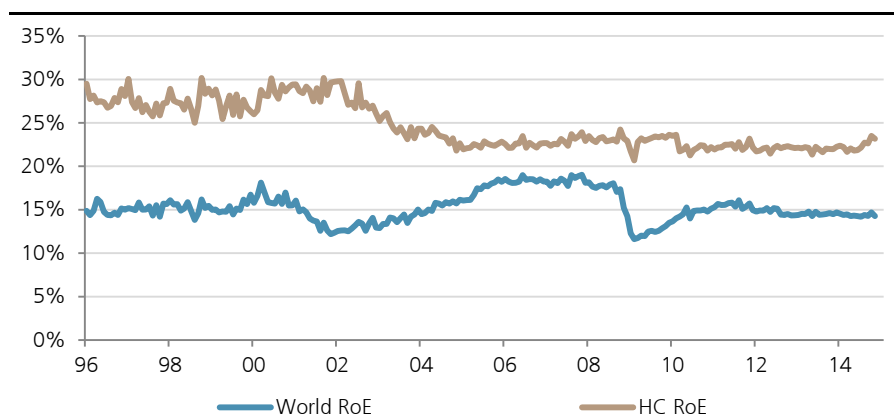


Source: Worldscope, UBS Quantitative Research (latest data points are for Q3-2014)

The motivation for Health Care executives to re-lever is fairly apparent when one looks at the sector's sharp decline in returns on equity in the early-00's (following multiple years of decelerating new drug approvals). Figure 106 tells the story fairly well:

In the early 2000s, Health Care CFOs would've been under acute pressure to stabilize returns on equity, which is exactly when we see leverage stabilizing and then rising (Figure 105). Years of high RoE left cash balances well-above global averages at that point, alongside maturing revenue streams and high free cash production; the path to higher leverage ratios was fairly well-lit. (It's hard not to see parallels to more recent calls for increased leverage on Tech sector balance sheets.)

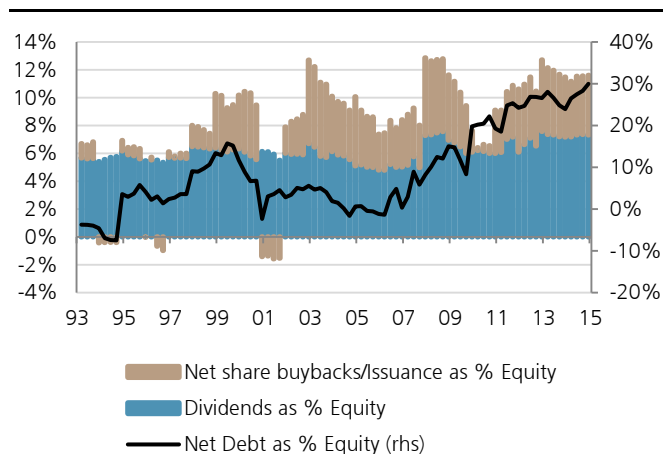
Figure 106: Return on equity (ROE): Global average and Health Care



Source: Datastream, IBES, MSCI, UBS

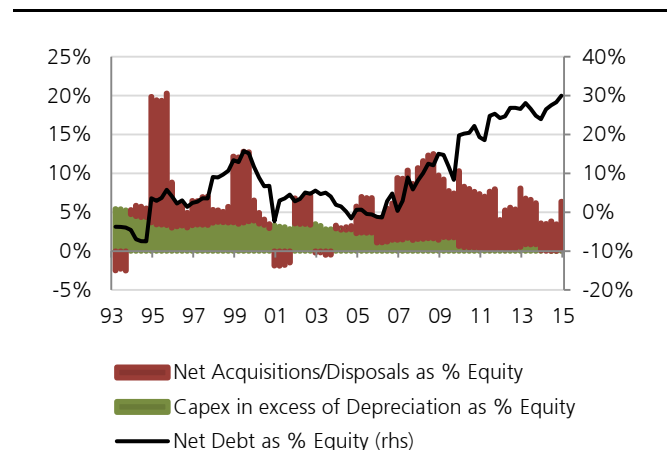
It is instructive to observe how cash deployment trends evolved during this period, alongside rising leverage levels. We illustrate these data series in Figure 107 and Figure 108, which depict cash returns (dividends & buybacks) and cash employment (growth capex & net acquisitions), as a % of balance sheet equity.

Figure 107: Health Care cash returns (% equity)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

Figure 108: Health Care cash employment (% equity)



Source: Worldscope, UBS Quantitative Research (latest data points are for Q4-2014)

We'd make two observations regarding the use of cash trends depicted above for the Health Care sector. First, sustained M&A activity (industry consolidation) has accompanied global health care's rising leverage. Net acquisitions have exceeded 10% of the sector's aggregate equity on several occasions over the two last decades, and they've remained close to or above 5% of equity since the crisis.

Perhaps more importantly, combined dividend and buyback has exceeded 10% of equity during three different multi-year periods since 2000 (prior to that time, cash returns tended to be well below 10% of equity). This trend brought the sector's cash returns into line with its well-above average RoE. *While RoE is showing little sign of turning down in the Tech sector, we can still see a trend toward greater cash returns that is somewhat reminiscent of the Health Care experience of the early '00s.*

Appendix II: Global Corporate Leverage Scenarios

Scenario Analysis

While Figure 35 provides our base case, a wide range of outcomes could swing the pendulum. In Figure 109, we list three potential scenarios for next year and the major changes in corporate leverage that would result. We are most bearish on EM across regions, given slowing growth rates and overcapacity issues (particularly in China), and view de-leveraging as the most likely outcome. We would expect EM to potentially re-lever only with very easy monetary policy from the Federal Reserve. Europe and Japan could continue de-levering, although at a reduced pace, as growth improves slightly and ECB QE is implemented. The US and UK are likely to see re-leveraging next year. Even if the Federal Reserve increases rates to 1.25-1.5% by the end of 2015, we believe it would be in the context of a growing economy, and we wouldn't expect it to alter the general trend of re-leveraging in these countries.

Scenarios

Scenario 1: EM Crisis



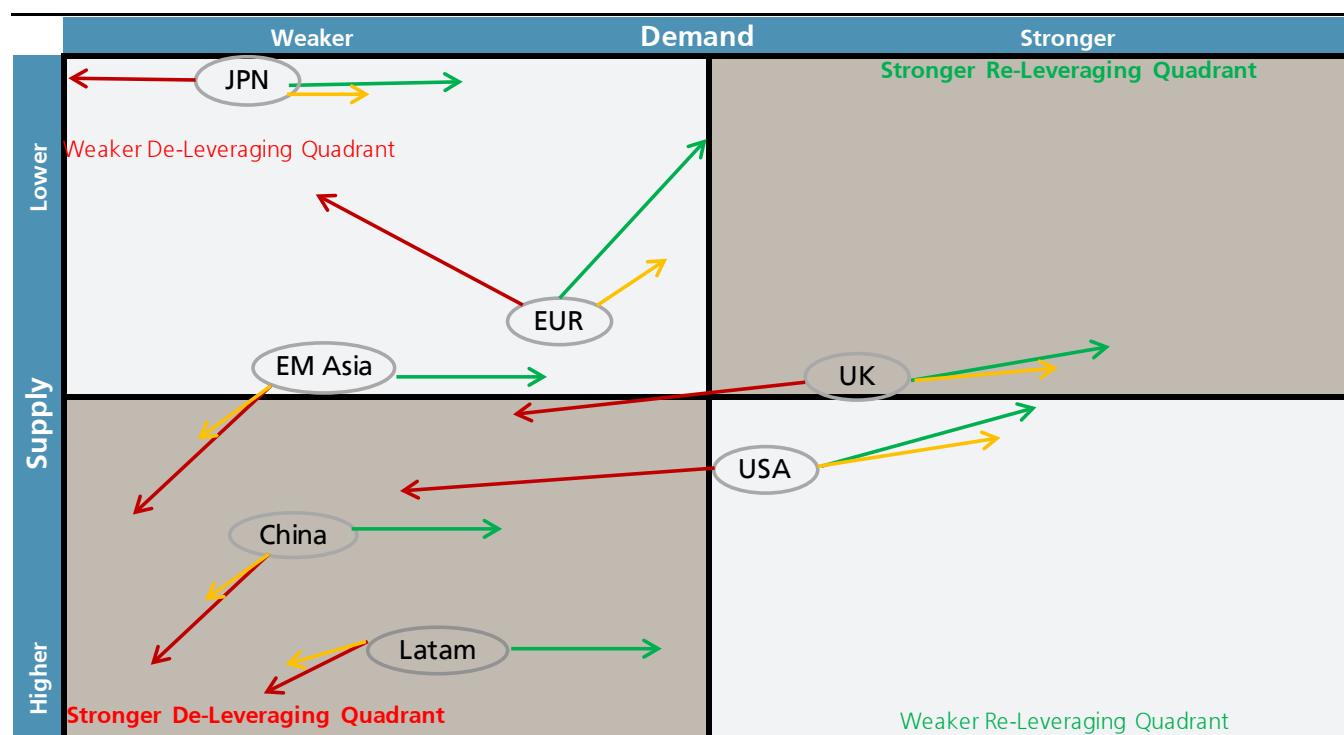
Scenario 2: Fed raises rates to 1.25% to 1.5% by YE 2015



Scenario 3: ECB/BOJ QE, Fed easy through 2015



Figure 109: Scenario analysis: Potential changes in corporate leverage



Source: UBS

CFO Outlook

Now that we have presented our view for corporate leverage, we thought it would be useful to show the 12-month outlook of company CFOs themselves around the world. We source our data in Figures 110-112 below from the quarterly Duke University/CFO Global Business Outlook survey¹³. In general, we find broad agreement between CFO expectations and our framework for most regions. The US CFO outlook appears consistent with a modest trend toward re-leveraging, as earnings expectations are strong and CFO optimism is increasing about the US economy, though admittedly, US capital spending projections are down from prior surveys. Europe & Japan are weak relative to other regions as economic optimism is deteriorating and overall earnings projections (Japan) and capital spending projections are weak (Europe). This is not surprising given depressed levels of demand in these regions. Latin American CFOs are also pessimistic about capital spending next year and economic optimism is low. The largest difference with our framework is Asia & China. CFOs in these regions continue to forecast robust revenue and earnings growth, along with strong capital spending plans. However, the level of exuberance in China has fallen from that of prior surveys.

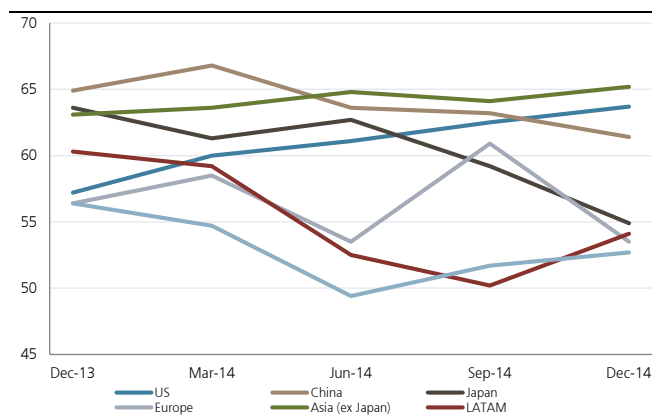
Figure 110: Q4 2014 Duke/CFO Outlook Survey results by region

	US	China	Japan	Europe	Asia ex Japan	Latam	Africa
Revenue Growth	6%	11%	4%	6%	11%	9%	8%
Earnings Growth*	9%	6%	1%	8%	8%	11%	9%
Capital Spending	6%	6%	7%	4%	9%	2%	3%
Dividends*	3%	5%	11%	5%	5%	8%	19%
Cash on Balance Sheet*	-3%	3%	-6%	2%	9%	-2%	-5%

* Indicates public firms only. All other numbers are for all survey respondents (including private). The reported averages are weighted by revenue or number of employees, so that large firms are weighted more heavily.

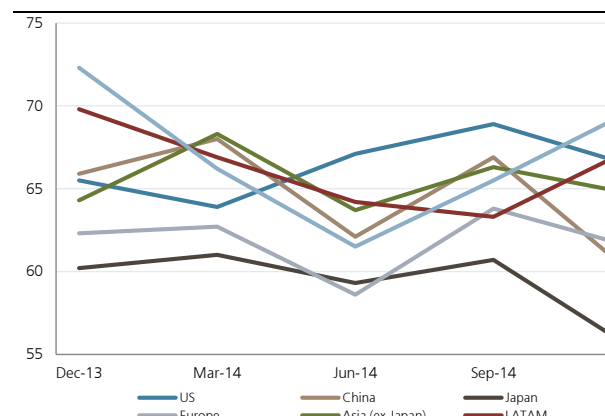
Source: UBS, Duke's Fuqua School of Business/CFO Magazine Business Outlook, Q4 2014

Figure 111: Q4 2014 Duke/CFO Outlook Survey: Economy optimism level (0 to 100)



Source: UBS, Duke's Fuqua School of Business/CFO Magazine Business Outlook, Q4 2014

Figure 112: Q4 2014 Duke/CFO Outlook Survey: Own company optimism level (0 to 100)



Source: UBS, Duke's Fuqua School of Business/CFO Magazine Business Outlook, Q4 2014

¹³ Each quarter, the Duke University Fuqua School of Business and CFO Publishing conduct a survey among finance executives around the world to gauge their views on the states of their economies and their businesses. For the fourth quarter of 2014, we collected responses from 517 CFOs and other executives at US companies; 159 executives from a range of European countries; 159 from Latin America, concentrated in Brazil, Chile, and Peru; 170 from Asia, including 40 Chinese firms and 39 in Japan; and 54 from Africa (primarily South Africa).

Appendix III: Emerging Market Proxies

Figure 113: Asia RGDP Index

	Weight
China	41.34%
Korea	14.59%
India	14.43%
Taiwan	6.56%
Indonesia	5.27%
Hong Kong	3.28%
Thailand	3.25%
Malaysia	2.53%
Singapore	2.21%
Pakistan	2.02%
Philippines	1.82%
Bangladesh	1.13%
Vietnam	0.98%
Sri Lanka	0.43%
Cambodia	0.12%
Laos	0.05%

Source: UBS, Bloomberg

Figure 114: CEE RGDP Index

	Weight
Russia	27.87%
Turkey	17.61%
Greece	17.51%
Poland	11.09%
Czech Republic	4.55%
Hungary	4.03%
Romania	3.61%
Ukraine	3.14%
Kazakhstan	2.08%
Slovak Republic	1.75%
Croatia	1.42%
Slovenia	1.28%
Bulgaria	0.99%
Serbia	0.96%
Lithuania	0.94%
Latvia	0.59%
Estonia	0.51%
Mongolia	0.08%

Source: UBS, Bloomberg

Figure 115: LatAm RGDP Index

	Weight
Brazil	36.26%
Mexico	31.57%
Argentina	7.47%
Venezuela	5.93%
Colombia	5.05%
Chile	4.89%
Peru	3.27%
Ecuador	1.53%
Dominican Republic	1.20%
Costa Rica	0.82%
El Salvador	0.70%
Uruguay	0.69%
Panama	0.64%

Source: UBS, Bloomberg

Figure 116: Asia Capacity Utilization Index

	Weight
India	35.70%
Korea	26.66%
Indonesia	17.78%
Thailand	7.92%
Malaysia	6.39%
Philippines	5.55%

Source: UBS, Haver

Figure 117: EMEA Capacity Utilization Index

	Weight
Russia	63.79%
Turkey	25.04%
South Africa	11.17%

Source: UBS, Haver

Figure 118: LATAM Capacity Utilization Index

	Weight
Brazil	57.83%
Mexico	32.45%
Colombia	9.73%

Source: UBS, Haver

Appendix IV: Company Dividend Yields vs. Corporate Bond Yields

Figure 119: Company dividend yields vs. corporate bond yields

Name	Market cap (€bn)	UBS rating	Price	P/E 2015E	Div Yield 2015E	Dividend Pay-out ratio	EPS CAGR 2013-2015E	Bond issuer	Bond maturity	Credit rating (Moody's / S&P)	Amount outstanding	Bond yield to maturity	Bond duration
AA Ratings													
Nestlé	212.8	Neutral	72.0	21.3	3.1	66.5	2%	NESTLE FINANCE INTL LTD	7/19/2019	Aa2 / #N/A N/A	EUR 500m	0.11	4.3
Royal Dutch Shell	184.2	Buy	2109	20.1	5.8	116.3	-16%	SHELL INTERNATIONAL FIN	3/24/2021	Aa1 / AA	EUR 1000m	0.52	5.7
Sanofi	116.5	Neutral	87.84	15.6	3.5	54.0	4%	SANOFI	3/10/2022	A1 / AA	EUR 1000m	0.52	6.5
Roche	204.6	Neutral	255.6	18.8	3.3	61.9	0%	ROCHE HLDGS INC	3/4/2021	A1 / AA	EUR 1750m	0.40	5.1
TOTAL	105.2	Neutral	45.98	18.5	5.3	98.1	-17%	TOTAL CAPITAL CANADA LTD	7/9/2020	Aa1 / AA-	EUR 750m	0.43	5.1
A Ratings													
BASF SE	75.7	Neutral	82.4	13.7	3.6	49.8	12%	BASF SE	1/22/2019	A1 / A+	EUR 750m	0.15	3.6
GlaxoSmithKline	101.7	Buy	1526.5	17.5	5.2	91.5	3%	GLAXOSMITHKLINE CAPITAL	12/13/2017	A2 / A+	EUR 1250m	0.11	2.7
LVMH	78.6	Buy	160.8	20.7	2.2	45.0	12%	LVMH MOET HENNESSY LOUIS	11/4/2019	#N/A N/A / A+	EUR 600m	0.21	4.6
Unilever NV	108.1	Neutral	37.385	21.1	3.1	65.5	8%	UNILEVER NV	8/5/2020	A1 / A+	EUR 750m	0.31	5.2
Siemens	82.1	Buy	97.48	13.3	3.5	46.2	7%	SIEMENS FINANCIERINGSMAT	3/10/2020	A1 / A+	EUR 1000m	0.27	4.8
Linde	32.7	Neutral	176.3	20.4	1.9	38.3	5%	LINDE AG	9/17/2020	A2 / A+	EUR 1000m	0.30	5.3
Air Liquide	39.8	Sell	115.5	22.3	2.3	50.3	6%	AIR LIQUIDE FINANCE	10/15/2021	#N/A N/A / A+	EUR 500m	0.49	6.2
BMW	70.0	Neutral	109.038	11.7	3.0	35.5	6%	BMW FINANCE NV	9/4/2020	A2 / A+	EUR 750m	0.43	5.2
EDF	44.0	Neutral	23.63	10.4	5.3	55.1	-9%	ELECTRICITE DE FRANCE SA	1/18/2022	Aa3 / A+	EUR 2000m	0.61	6.2
DSM	8.3	Neutral	47.935	17.8	3.8	66.8	10%	KONINKLIJKE DSM NV	10/17/2017	A3 / A	EUR 750m	0.18	2.5
Belgacom	11.3	Neutral	35.195	20.2	4.3	85.9	-1%	BELGACOM SA	2/7/2018	A1 / A	EUR 500m	0.25	2.8
Airbus Group	40.6	Buy	51.99	15.6	2.4	38.1	7%	AIRBUS GROUP FINANCE BV	9/25/2018	A2 / A	EUR 500m	0.19	3.3
BP	110.0	Neutral	445.7	20.2	5.8	117.6	-14%	BP CAPITAL MARKETS PLC	2/17/2021	A2 / A	EUR 600m	0.72	5.6
Eni	58.6	Neutral	16.25	61.8	6.9	425.8	n/a	ENI SPA	11/22/2021	A3 / A / *-	EUR 800m	0.82	6.2
Telenor	27.0	Buy	154.4	14.6	5.6	82.5	24%	TELENOR ASA	6/27/2022	A3 / A	EUR 500m	0.67	6.6
GDF Suez	45.1	Neutral	18.68	16.2	5.4	86.8	4%	GDF SUEZ	7/20/2022	A1 / A	EUR 661.327m	0.53	6.7
Unibail-Rodamco	25.9	Buy	258.85	24.9	3.7	92.8	2%	UNIBAIL-RODAMCO SE	10/17/2022	#N/A N/A / A	EUR 750m	0.74	7.2
Rolls-Royce	24.6	Buy	962	15.6	2.6	40.2	5%	ROLLS-ROYCE PLC	6/18/2021	A3 / A	EUR 750m	0.64	5.9
Daimler	89.9	Neutral	84.08	12.1	3.0	36.0	16%	DAIMLER AG	6/25/2021	A3 / A-	EUR 750m	0.59	5.9
Bayer	102.8	Buy	124.322	17.7	2.1	37.0	15%	BAYER AG	1/25/2021	A3 / A-	EUR 750m	0.42	5.4
Danone	34.6	Neutral	59.15	20.8	2.6	53.4	12%	DANONE SA	6/28/2023	Baa1 / A-	EUR 500m	0.86	7.5

Figure 120: Company dividend yields vs. corporate bond yields (continued)

Name	Market cap (€bn)	UBS rating	Price	P/E 2015	Div yield 2015E	Dividend Pay-out ratio	EPS CAGR 2013- 2015E	Bond issuer	Bond maturity	Credit rating (Moody's / S&P)	Amount outstanding	Bond yield to maturity	Bond duration
TeliaSonera	23.7	Sell	52.3	13.5	5.9	80.0	2%	TELIASONERA AB	11/16/2021	A3 / A-	EUR 850m	0.72	5.9
Experian Group	16.1	Neutral	1192	18.5	2.2	41.3	4%	EXPERIAN FINANCE PLC	2/4/2020	Baa1 / A-	EUR 500m	0.73	4.5
Vodafone Group	81.9	Buy	228.4	42.6	5.1	198.7	n/a	VODAFONE GROUP PLC	9/11/2020	Baa1 / A-	EUR 1750m	0.63	5.1
E.ON	25.4	Neutral	13.305	18.5	3.8	69.5	-7%	E.ON INTL FINANCE BV	5/7/2020	A3 /*- / A- /*-	EUR 1400m	0.54	4.5
BAT UK	94.3	Buy	3660.5	17.3	4.1	70.7	4%	BAT NETHERLANDS FINANCE	1/19/2023	A3 / A-	EUR 750m	0.79	7.3
Diageo	64.2	Neutral	1884	18.8	3.0	59.4	3%	DIAGEO FINANCE PLC	9/23/2024	A3 / A-	EUR 500m	0.88	8.6
SABMiller	77.0	Neutral	3585	22.3	2.1	44.7	1%	SABMILLER HOLDINGS INC	1/20/2020	Baa1 / A-	EUR 1000m	0.48	4.7
Vinci	29.2	Buy	52.68	14.9	3.4	50.1	5%	AUTOROUTES DU SUD DE LA	1/18/2023	Baa1 / A-	EUR 700m	0.91	7.2
Legrand	12.8	Neutral	48.155	22.1	2.3	50.6	4%	LEGRAND SA	4/19/2022	#N/A N/A / A-	EUR 400m	0.67	6.3
Centrica	18.0	Neutral	257.1	13.6	6.8	93.1	-12%	CENTRICA PLC	9/19/2018	A3 / A-	GBP 400m	1.55	3.2
TeliaSonera	23.7	Sell	52.3	13.5	5.9	80.0	2%	TELIASONERA AB	11/16/2021	A3 / A-	EUR 850m	0.72	5.9
BBB Rating													
Orange	42.0	Neutral	15.86	16.3	3.8	61.7	1%	ORANGE SA	1/23/2019	Baa1 / BBB+	EUR 750m	0.38	3.7
Solvay	10.5	Neutral	124.6	16.5	2.1	35.2	8%	SOLVAY SA	6/27/2018	Baa2 / BBB+	EUR 500m	0.25	3.1
National Grid	44.3	Neutral	891.1	16.0	5.0	80.4	1%	NATIONAL GRID PLC	3/10/2020	Baa1 / BBB+	EUR 500m	0.44	4.5
Pearson	15.2	Neutral	1398	17.4	3.8	65.8	15%	PEARSON FUNDING FIVE PLC	5/19/2021	Baa1 / BBB+	EUR 500m	0.80	5.8
RWE	14.4	Neutral	23.48	12.7	4.3	54.1	-15%	RWE FINANCE BV	1/31/2019	Baa1 / BBB+	EUR 1000m	0.39	3.6
Akzo Nobel	16.1	Sell	65.59	18.5	2.4	45.0	14%	AKZO NOBEL NV	12/17/2018	Baa1 / BBB+	EUR 800m	0.40	3.6
Wolters Kluwer	8.3	Buy	28.09	15.4	2.7	41.3	12%	WOLTERS KLUWER NV	4/10/2018	Baa1 / BBB+	EUR 750m	0.34	2.8
Deutsche Telekom	69.4	Buy	15.6	21.0	3.8	80.9	15%	DEUTSCHE TELEKOM INT FIN	7/13/2022	Baa1 / BBB+	EUR 1250m	0.67	6.4
Verbund	5.6	Buy	15.99	30.5	1.9	57.1	42%	VERBUND AG	6/22/2020	Baa1 / BBB+	EUR 200m	0.75	4.7
Carrefour	20.4	Not Rated	29.6	n/a	n/a	n/a	n/a	CARREFOUR SA	5/22/2019	NR / BBB+	EUR 1000m	0.36	4.1
BAE SYSTEMS	22.8	Buy	525.5	12.7	4.0	50.7	8%	BAE SYSTEMS PLC	10/11/2021	Baa2 / BBB+	USD 500m	2.87	5.6
Exor	9.7	Neutral	39.36	n/a	1.0	n/a	n/a	EXOR SPA	10/16/2019	#N/A N/A / BBB+	EUR 150m	1.10	4.2
Severn Trent	6.5	Neutral	2033	25.4	4.0	91.3	-5%	SEVERN TRENT WATER UTIL	1/22/2018	A3 / BBB+	GBP 400m	1.49	2.7

Source: UBS estimates, Bloomberg

Figure 121: Company dividend yields vs. corporate bond yields (continued)

Name	Market cap (€bn)	UBS rating	Price	P/E 2015E	Div yield 2015E	Dividend Pay-out ratio	EPS CAGR 2013- 2015E	Bond issuer	Bond maturity	Credit rating (Moody's / S&P)	Amount outstanding	Bond yield to maturity	Bond duration
Anglo American	21.3	Neutral	1223	13.2	4.5	59.6	-7%	ANGLO AMERICAN CAPITAL	4/29/2021	Baa2 / BBB	EUR 750m	1.38	5.6
Bouygues	11.0	Neutral	34.89	42.0	4.6	192.6	n/a	BOUYGUES SA	2/9/2022	Baa1 / BBB	EUR 800m	0.85	6.2
Veolia Environment	9.1	Neutral	16.52	20.7	4.2	87.6	45%	VEOLIA ENVIRONNEMENT SA	5/24/2022	Baa1 / BBB	EUR 850.07m	0.81	6.1
Enel	37.1	Buy	3.95	12.8	3.8	48.6	-2%	ENEL FINANCE INTL NV	9/14/2022	Baa2 / BBB	EUR 2500m	0.98	6.5
Holcim	21.9	Neutral	72.45	20.6	1.6	33.3	3%	HOLCIM US FINANCE SARL &	9/7/2020	Baa2 / BBB	EUR 500m	0.71	5.1
Volvo B	20.9	Sell	98.55	17.2	3.0	52.2	24%	VOLVO TREASURY AB	11/26/2019	Baa2 / BBB	EUR 600m	0.67	4.5
Enagas	6.4	Neutral	26.945	16.3	4.9	79.7	3%	ENAGAS FINANCIACIONES SA	10/5/2017	#N/A N/A / BBB	EUR 467.7m	0.17	2.5
Morrison (Wm.)	5.9	Not Rated	187.1	n/a	n/a	n/a	n/a	MORRISON(WM)SUPERMARKETS	6/19/2020	Baa2 / #N/A N/A	EUR 700m	1.52	4.9
Imperial Tobacco	39.9	Buy	3087	15.4	4.6	70.3	2%	IMPERIAL TOBACCO FINANCE	2/26/2021	Baa3 / BBB	EUR 1000m	0.88	5.3
BT Group	46.7	Neutral	436.9	14.2	3.2	41.9	4%	BRITISH TELECOM PLC	6/10/2019	Baa2 / BBB	EUR 1000m	0.52	4.2
WPP	27.4	Buy	1506	16.2	2.7	44.2	12%	WPP FINANCE 2013	11/20/2023	Baa2 / BBB	EUR 750m	0.95	7.8
Hammerson	6.5	Buy	672.5	25.0	3.3	81.5	7%	HAMMERSON PLC	7/1/2022	Baa1 / #N/A N/A	EUR 500m	0.97	6.8
Iberdrola	36.4	Buy	5.93	16.0	4.6	72.8	6%	IBERDROLA INTL BV	1/31/2022	Baa1 / BBB	EUR 500m	0.87	6.3
ASML	40.0	Neutral	92.23	22.1	0.9	19.1	45%	ASML HOLDING NV	6/13/2017	Baa1 / #N/A N/A	EUR 238.153m	0.32	2.1
Glencore	51.0	Neutral	283.55	15.1	4.1	62.5	10%	GLENCORE FINANCE EUROPE	1/18/2022	Baa2 / BBB	EUR 700m	1.31	6.3
Telefonica	60.3	Neutral	13.27	14.2	5.7	80.4	2%	TELEFONICA EMISIONES SAU	3/26/2021	Baa2 / BBB	EUR 1000m	0.73	5.4
Gas Natural Fenosa	20.3	Sell	20.515	14.1	4.4	62.1	-5%	GAS NATURAL CAPITAL	11/2/2021	Baa2 / BBB	EUR 750m	0.85	5.8
Coca-Cola Hellenic	5.5	Neutral	1125	18.3	2.2	40.9	7%	COCA-COLA HBC FINANCE BV	6/18/2020	Baa1 / BBB	EUR 800m	0.96	4.7
Next	15.5	Neutral	7370	16.5	2.2	34.8	10%	NEXT PLC	10/26/2021	Baa2 / BBB	GBP 325m	2.44	5.7
Renault	23.0	Buy	84.36	8.2	2.8	23.4	37%	RCI BANQUE SA	9/30/2019	Baa3 / BBB	EUR 600m	0.53	4.5
Tesco	26.1	Not Rated	239.95	n/a	n/a	n/a	n/a	TESCO CORP TREASURY SERV	11/12/2020	Ba1 / BB+	EUR 500m	1.89	5.1
Alstom	8.8	Buy	28.68	59.1	0.7	54.3	n/a	ALSTOM SA	3/18/2020	Baa3 / BBB-	EUR 750m	0.76	4.5
Lanxess AG	4.1	Buy	44.95	18.8	1.1	20.9	41%	LANXESS FINANCE BV	11/21/2022	Baa3 / BBB-	EUR 500m	1.16	7.0
Abertis	15.8	Neutral	17.535	18.1	4.1	75.0	17%	HOLDING D'INFRASTRUCTURE	10/27/2021	Baa3 / NR	EUR 1500m	0.89	5.8
KPN	12.9	Buy	3.038	24.9	3.3	81.8	54%	KONINKLIJKE KPN NV	3/1/2022	Baa3 / BBB-	EUR 614.9m	0.88	6.0
Pernod	27.6	Buy	103.9	18.2	1.8	32.4	13%	PERNOD-RICARD SA	6/22/2020	Baa3 / BBB-	EUR 850m	0.66	5.0

Source: UBS estimates, Bloomberg

Figure 122: Company dividend yields vs. corporate bond yields (continued)

Name	Market cap (€bn)	UBS rating	Price	P/E 2015E	Div yield 2015E	Dividend Pay-out ratio	EPS CAGR 2013- 2015E	Bond issuer	Bond maturity	Credit rating (Moody's / S&P)	Amount outstanding	Bond yield to maturity	Bond duration
Metro AG	10.2	Not Rated	31	n/a	n/a	n/a	n/a	METRO AG	10/28/2021	Baa3 / BBB-	EUR 500m	1.00	6.3
Casino	9.2	Not Rated	81.49	n/a	n/a	n/a	n/a	CASINO GUICHARD PERRACHO	5/26/2021	#N/A N/A / BBB-	EUR 850m	0.95	5.4
Repsol	22.9	Neutral	16.95	19.0	6.2	117.9	-1%	REPSOL INTL FINANCE	5/28/2020	Baa2 / BBB-	EUR 1200m	0.95	4.9
Wendel	5.2	Neutral	106.85	n/a	1.9	n/a	n/a	WENDEL SA	4/20/2018	#N/A N/A / BBB-	EUR 500m	0.70	2.8
Marks & Spencer	10.9	Buy	497.3	14.4	3.9	56.2	4%	MARKS & SPENCER PLC	12/2/2019	Baa3 / BBB-	GBP 400m	2.42	4.2
Lufthansa	6.4	Buy	13.885	5.6	5.4	30.1	91%	DEUTSCHE LUFTHANSA AG	9/12/2019	Ba1 / BBB-	EUR 500m	0.85	4.4
ITV	12.3	Buy	233.4	16.3	2.2	35.0	6%	ITV PLC	1/5/2017	Baa3 / BBB-	GBP 160.613m	1.88	1.8
GKN	8.4	Neutral	380.2	13.3	2.4	31.7	4%	GKN HOLDINGS PLC	10/28/2019	Baa3 / BBB-	GBP 350m	2.37	4.1
BB and below rating													
Fresenius SE	25.8	Neutral	47.775	19.3	1.1	21.9	18%	FRESENIUS FINANCE BV	7/15/2020	Ba1 / BB+	EUR 500m	1.04	5.0
Finmeccanica	6.0	Neutral	10.3	11.4	1.7	19.7	8%	FINMECCANICA SPA	12/12/2018	Ba1 / BB+	EUR 500m	1.28	3.5
ArcelorMittal	17.3	Buy	9.677	12.4	2.7	33.9	84%	ARCELORMITTAL	7/6/2020	Ba1 / BB	EUR 600m	2.41	4.8
Lafarge	18.9	Neutral	65.95	29.9	1.5	45.3	61%	LAFARGE SA	9/30/2020	Ba1 / *+ / BB+	EUR 750m	1.01	5.0
EDP	11.9	Buy	3.25	12.3	5.7	69.8	4%	EDP FINANCE BV	1/18/2022	Baa3 / BB+	EUR 1000m	1.35	6.3
Portugal Telecom	0.6	Neutral	0.731	n/a	0.0	n/a	n/a	PORTUGAL TELECOM INT FIN	5/8/2020	Ba2 / BB+	EUR 1000m	4.50	4.4
Telecom Italia	18.6	Sell	1.024	13.9	0.0	n/a	4%	TELECOM ITALIA SPA	5/25/2018	Ba1 / BB+	EUR 750m	1.35	3.0
UPM	8.8	Sell	16.63	14.1	4.2	59.3	-4%	UPM-KYMMENE OYJ	1/30/2018	Ba1 / BB+	USD 250m	2.19	2.7
ThyssenKrupp	13.0	Sell	23	22.2	0.5	10.6	59%	THYSSENKRUPP AG	8/27/2018	Ba1 / BB	EUR 1600m	1.50	3.2
HeidelbergCement	13.3	Neutral	70.73	15.8	1.9	30.0	20%	HEIDELBERGCEMENT FIN LUX	10/21/2021	Ba1 / #N/A N/A	EUR 500m	1.17	6.0
Nokia	26.0	Neutral	7.125	18.9	2.9	54.8	14%	NOKIA OYJ	2/4/2019	Ba2 / BB	EUR 500m	1.21	3.6
Ladbroke's	1.5	Buy	121.1	14.1	7.0	99.1	-4%	LADBROKES GROUP FIN PLC	3/5/2017	Ba2 / BB	GBP 225m	2.86	1.8
PSA	11.1	Neutral	14.23	15.9	0.0	n/a	180%	PEUGEOT SA	1/18/2019	Ba3 / B+	EUR 600m	1.24	3.5
Fiat Chrysler	16.4	Buy	13.35	12.0	0.0	n/a	#NUM!	FIAT CHRYSLER FINANCE EU	7/15/2022	B2 / BB-	EUR 1350m	2.77	6.1

Source: UBS estimates, Bloomberg

Statement of Risk

Investing in global equities poses currency, country, industry, and company-specific risks. Valuations can be impacted by company-specific factors, investor risk appetite, as well as changes in the macroeconomic landscape and financial market stability.

Required Disclosures

This report has been prepared by UBS Securities LLC, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

For information on the ways in which UBS manages conflicts and maintains independence of its research product; historical performance information; and certain additional disclosures concerning UBS research recommendations, please visit www.ubs.com/disclosures. The figures contained in performance charts refer to the past; past performance is not a reliable indicator of future results. Additional information will be made available upon request. UBS Securities Co. Limited is licensed to conduct securities investment consultancy businesses by the China Securities Regulatory Commission.

Analyst Certification: Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner, including with respect to UBS, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

UBS Investment Research: Global Equity Rating Definitions

12-Month Rating	Definition	Coverage ¹	IB Services ²
Buy	FSR is > 6% above the MRA.	47%	37%
Neutral	FSR is between -6% and 6% of the MRA.	42%	32%
Sell	FSR is > 6% below the MRA.	11%	21%
Short-Term Rating	Definition	Coverage ³	IB Services ⁴
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 31 December 2014.

1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3:Percentage of companies under coverage globally within the Short-Term rating category. 4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

KEY DEFINITIONS: **Forecast Stock Return (FSR)** is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

EXCEPTIONS AND SPECIAL CASES: **UK and European Investment Fund ratings and definitions are:** **Buy:** Positive on factors such as structure, management, performance record, discount; **Neutral:** Neutral on factors such as structure, management, performance record, discount; **Sell:** Negative on factors such as structure, management, performance record, discount. **Core Banding Exceptions (CBE):** Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Company Disclosures table in the relevant research piece.

Research analysts contributing to this report who are employed by any non-US affiliate of UBS Securities LLC are not registered/qualified as research analysts with the NASD and NYSE and therefore are not subject to the restrictions contained in the NASD and NYSE rules on communications with a subject company, public appearances, and trading securities held by a research analyst account. The name of each affiliate and analyst employed by that affiliate contributing to this report, if any, follows.

UBS Securities LLC: Julian Emanuel; Jerry McGuire; Omar Elangbawy; Matthew Mish, CFA; Stephen Caprio. **UBS AG Hong Kong Branch:** Niall MacLeod. **UBS Limited:** Nick Nelson; Joao Toniato.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
BIC Group	BICP.PA	Neutral	N/A	€134.35	23 Feb 2015
BMW ^{2, 4}	BMWG.F	Neutral	N/A	€111.72	23 Feb 2015
Delta Air Lines ^{4, 5, 6a, 6c, 7, 16}	DAL.N	Buy	N/A	US\$47.44	20 Feb 2015
Ford Motor Co. ^{6c, 7, 16, 18a}	F.N	Buy	N/A	US\$16.40	20 Feb 2015
FUJIFILM Holdings	4901.T	Neutral	N/A	¥4,048.0	23 Feb 2015
Gilead Sciences ^{16, 18b}	GILD.O	Buy	N/A	US\$102.61	20 Feb 2015
HOYA	7741.T	Buy	N/A	¥4,843.5	23 Feb 2015
J. Front Retailing	3086.T	Buy	N/A	¥1,629	23 Feb 2015
Konica Minolta Inc	4902.T	Neutral	N/A	¥1,263	23 Feb 2015
Kuraray	3405.T	Buy	N/A	¥1,511	23 Feb 2015
Microsoft Corp. ^{4, 5, 6a, 6b, 6c, 7, 16}	MSFT.O	Buy	N/A	US\$43.86	20 Feb 2015
Nokia ^{5, 16}	NOK1V.HE	Neutral	N/A	€7.08	23 Feb 2015
Rockwell Automation Inc. ^{13, 16}	ROK.N	Buy	N/A	US\$118.20	20 Feb 2015
Ryanair ¹⁶	RYA.I	Buy	N/A	€10.05	23 Feb 2015
Signet Group ¹⁶	SIG.L	Neutral	N/A	7,779p	23 Feb 2015

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

- 2. UBS AG, its affiliates or subsidiaries has acted as manager/co-manager in the underwriting or placement of securities of this company/entity or one of its affiliates within the past 12 months.
- 4. Within the past 12 months, UBS AG, its affiliates or subsidiaries has received compensation for investment banking services from this company/entity.
- 5. UBS AG, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from this company/entity within the next three months.
- 6a. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and investment banking services are being, or have been, provided.
- 6b. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and non-investment banking securities-related services are being, or have been, provided.
- 6c. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and non-securities services are being, or have been, provided.
- 7. Within the past 12 months, UBS Securities LLC has received compensation for products and services other than investment banking services from this company/entity.
- 13. UBS AG, its affiliates or subsidiaries beneficially owned 1% or more of a class of this company's common equity securities as of last month's end (or the prior month's end if this report is dated less than 10 days after the most recent month's end).
- 16. UBS Securities LLC makes a market in the securities and/or ADRs of this company.
- 18a. A U.S.-based global equity strategist, a member of his team, or one of their household members has a long common stock position in Ford Motor Co.
- 18b. A U.S.-based global equity strategist, a member of his team, or one of their household members has a long common stock position in Gilead Sciences Inc.

For a complete set of disclosure statements associated with the companies discussed in this report, including information on valuation and risk, please contact UBS Securities LLC, 1285 Avenue of Americas, New York, NY 10019, USA, Attention: Publishing Administration.

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

Additional Prices: Taylor Wimpey, 145p (23 Feb 2015); Daimler AG, €84.97 (23 Feb 2015); Persimmon, 1,710p (23 Feb 2015); Ericsson, SKr108.50 (23 Feb 2015); Schibsted ASA, NKr461.30 (23 Feb 2015); easyJet, 1,798p (23 Feb 2015); Autoliv Inc, US\$113.09 (23 Feb 2015); Coloplast A/S, DKr521.00 (23 Feb 2015); Dixons Carphone PLC, 444p (23 Feb 2015); GEA Group, €43.27 (23 Feb 2015); Source: UBS. All prices as of local market close.

Global Disclaimer

This document has been prepared by UBS Securities LLC, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject UBS to any registration or licensing requirement within such jurisdiction. It is published solely for information purposes; it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy. No representation or warranty, either expressed or implied, is provided in relation to the accuracy, completeness or reliability of the information contained in this document ('the Information'), except with respect to Information concerning UBS. The Information is not intended to be a complete statement or summary of the securities, markets or developments referred to in the document. UBS does not undertake to update or keep current the Information. Any opinions expressed in this document may change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS. Any statements contained in this report attributed to a third party represent UBS's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party.

Nothing in this document constitutes a representation that any investment strategy or recommendation is suitable or appropriate to an investor's individual circumstances or otherwise constitutes a personal recommendation. Investments involve risks, and investors should exercise prudence and their own judgement in making their investment decisions. The financial instruments described in the document may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures are not suitable for all investors, and trading in these instruments is considered risky. Mortgage and asset-backed securities may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates or other market conditions. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument referred to in the document. For investment advice, trade execution or other enquiries, clients should contact their local sales representative.

The value of any investment or income may go down as well as up, and investors may not get back the full (or any) amount invested. Past performance is not necessarily a guide to future performance. Neither UBS nor any of its directors, employees or agents accepts any liability for any loss (including investment loss) or damage arising out of the use of all or any of the Information.

Any prices stated in this document are for information purposes only and do not represent valuations for individual securities or other financial instruments. There is no representation that any transaction can or could have been effected at those prices, and any prices do not necessarily reflect UBS's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by UBS or any other source may yield substantially different results.

This document and the Information are produced by UBS as part of its research function and are provided to you solely for general background information. UBS has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. In no circumstances may this document or any of the Information be used for any of the following purposes:

- (i) valuation or accounting purposes;
- (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or
- (iii) to measure the performance of any financial instrument.

By receiving this document and the Information you will be deemed to represent and warrant to UBS that you will not use this document or any of the Information for any of the above purposes or otherwise rely upon this document or any of the Information.

Research will initiate, update and cease coverage solely at the discretion of UBS Investment Bank Research Management. The analysis contained in this document is based on numerous assumptions. Different assumptions could result in materially different results. The analyst(s) responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting market information. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS into other areas, units, groups or affiliates of UBS. The compensation of the analyst who prepared this document is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues; however, compensation may relate to the revenues of UBS Investment Bank as a whole, of which investment banking, sales and trading are a part.

For financial instruments admitted to trading on an EU regulated market: UBS AG, its affiliates or subsidiaries (excluding UBS Securities LLC) acts as a market maker or liquidity provider (in accordance with the interpretation of these terms in the UK) in the financial instruments of the issuer save that where the activity of liquidity provider is carried out in accordance with the definition given to it by the laws and regulations of any other EU jurisdictions, such information is separately disclosed in this document. For financial instruments admitted to trading on a non-EU regulated market: UBS may act as a market maker save that where this activity is carried out in the US in accordance with the definition given to it by the relevant laws and regulations, such activity will be specifically disclosed in this document. UBS may have issued a warrant the value of which is based on one or more of the financial instruments referred to in the document. UBS and its affiliates and employees may have long or short positions, trade as principal and buy and sell in instruments or derivatives identified herein; such transactions or positions may be inconsistent with the opinions expressed in this document.

United Kingdom and the rest of Europe: Except as otherwise specified herein, this material is distributed by UBS Limited to persons who are eligible counterparties or professional clients. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. **France:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities France S.A. UBS Securities France S.A. is regulated by the ACPR (Autorité de Contrôle Prudentiel et de Résolution) and the Autorité des Marchés Financiers (AMF). Where an analyst of UBS Securities France S.A. has contributed to this document, the document is also deemed to have been prepared by UBS Securities France S.A. **Germany:** Prepared by UBS Limited and distributed by UBS Limited and UBS Deutschland AG. UBS Deutschland AG is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). **Spain:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities España SV, SA. UBS Securities España SV, SA is regulated by the Comisión Nacional del Mercado de Valores (CNMV). **Turkey:** Distributed by UBS Limited. No information in this document is provided for the purpose of offering, marketing and sale by any means of any capital market instruments and services in the Republic of Turkey. Therefore, this document may not be considered as an offer made or to be made to residents of the Republic of Turkey. UBS AG is not licensed by the Turkish Capital Market Board under the provisions of the Capital Market Law (Law No. 6362). Accordingly, neither this document nor any other offering material related to the instruments/services may be utilized in connection with providing any capital market services to persons within the Republic of Turkey without the prior approval of the Capital Market Board. However, according to article 15 (d) (ii) of the Decree No. 32, there is no restriction on the purchase or sale of the securities abroad by residents of the Republic of Turkey. **Poland:** Distributed by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce regulated by the Polish Financial Supervision Authority. Where an analyst of UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce has contributed to this document, the document is also deemed to have been prepared by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce. **Russia:** Prepared and distributed by UBS Bank (OOO). **Switzerland:** Distributed by UBS AG to persons who are institutional investors only. UBS AG is regulated by the Swiss Financial Market Supervisory Authority (FINMA). **Italy:** Prepared by UBS Limited and distributed by UBS Limited and UBS Italia Sim S.p.A. UBS Italia Sim S.p.A. is regulated by the Bank of Italy and by the Commissione Nazionale per le Società e la Borsa (CONSOB). Where an analyst of UBS Italia Sim S.p.A. has contributed to this document, the document is also deemed to have been prepared by UBS Italia Sim S.p.A. **South Africa:** Distributed by UBS South Africa (Pty) Limited (Registration No. 1995/011140/07), an authorised user of the JSE and an authorised Financial Services Provider (FSP 7328). **Israel:** This material is distributed by UBS Limited. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. UBS Securities Israel Ltd is a licensed Investment Marketer that is supervised by the Israel Securities Authority (ISA). UBS Limited and its affiliates incorporated outside Israel are not licensed under the Israeli Advisory Law. UBS Limited is not covered by insurance as required from a licensee under the Israeli Advisory Law. UBS may engage among others in issuance of Financial Assets or in distribution of Financial Assets of other issuers for fees or other benefits. UBS Limited and its affiliates may prefer various Financial Assets to which they have or may have Affiliation (as such term is defined under the Israeli Advisory Law). Nothing in this Material should be considered as investment advice under the Israeli Advisory Law. This Material is being issued only to and/or is directed only at persons who are Eligible Clients within the meaning of the Israeli Advisory Law, and this material must not be relied on or acted upon by any other persons. **Saudi Arabia:** This document has been issued by UBS AG (and/or any of its subsidiaries, branches or affiliates), a public company limited by shares, incorporated in Switzerland with its registered offices at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH-8001 Zurich. This publication has been approved by UBS Saudi Arabia (a subsidiary of UBS AG), a Saudi closed joint stock company incorporated in the Kingdom of Saudi Arabia under commercial register number 1010257812 having its registered office at Tatweer Towers, P.O. Box 75724, Riyadh 11588, Kingdom of Saudi Arabia. UBS Saudi Arabia is authorized and regulated by the Capital Market Authority to conduct securities business under license number 08113-37. **Dubai:** The information distributed by UBS AG Dubai Branch is intended for Professional Clients only and is not for further distribution within the United Arab Emirates. **United States:** Distributed to US persons by either UBS Securities LLC or by UBS Financial Services Inc., subsidiaries of UBS AG; or by a group, subsidiary or affiliate of UBS AG that is not registered as a US broker-dealer (a 'non-US affiliate') to major US institutional investors only. UBS Securities LLC or UBS Financial Services Inc. accepts responsibility for the content of a document prepared by another non-US affiliate when distributed to US persons by UBS Securities LLC or UBS Financial Services Inc. All transactions by a US person in the securities mentioned in this document must be effected through UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate. **Canada:** Distributed by UBS Securities Canada Inc., a registered investment dealer in Canada and a Member-Canadian Investor Protection Fund, or by another affiliate of UBS AG that is registered to conduct business in Canada or is otherwise exempt from registration. **Brazil:** Except as otherwise specified herein, this material is prepared by UBS Brasil CCTVM S.A. to persons who are eligible investors residing in Brazil, which are considered to be: (i) financial institutions, (ii) insurance firms and investment capital companies, (iii) supplementary pension entities, (iv) entities that hold financial investments higher than R\$300,000.00 and that confirm the status of qualified investors in written, (v) investment funds, (vi) securities portfolio managers and securities consultants duly authorized by Comissão de Valores Mobiliários (CVM), regarding their own investments, and (vii) social security systems created by the Federal Government, States, and Municipalities. **Hong Kong:** Distributed by UBS Securities Asia Limited and/or UBS AG, Hong Kong Branch. **Singapore:** Distributed by UBS Securities Pte. Ltd. [MCI (P) 016/09/2014 and Co. Reg. No.: 198500648C] or UBS AG, Singapore Branch. Please contact UBS Securities Pte. Ltd., an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110); or UBS AG, Singapore Branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or document. The recipients of this document represent and warrant that they are accredited and institutional investors as defined in the Securities and Futures Act (Cap. 289). **Japan:** Distributed by UBS Securities Japan Co., Ltd. to professional investors (except as otherwise permitted). Where this document has been prepared by UBS Securities Japan Co., Ltd., UBS Securities Japan Co., Ltd. is the author, publisher and distributor of the document. Distributed by UBS AG, Tokyo Branch to Professional Investors (except as otherwise permitted) in relation to foreign exchange and other banking businesses when relevant. **Australia:** Clients of UBS AG: Distributed by UBS AG (Holder of Australian Financial Services License No. 231087). Clients of UBS Securities Australia Ltd: Distributed by UBS Securities Australia Ltd (Holder of Australian Financial Services License No. 231098). Clients of UBS Wealth Management Australia Ltd: Distributed by UBS Wealth Management Australia Ltd (Holder of Australian Financial Services Licence No. 231127). This Document contains general information and/or general advice only and does not constitute personal financial product advice. As such, the Information in this document has been prepared without taking into account any investor's objectives, financial situation or needs, and investors should, before acting on the Information, consider the appropriateness of the Information, having regard to their objectives, financial situation and needs. If the Information contained in this document relates to the acquisition, or potential acquisition of a particular financial product by a 'Retail' client as defined by section 761G of the Corporations Act 2001 where a Product Disclosure Statement would be required, the retail client should obtain and consider the Product Disclosure Statement relating to the product before making any decision about whether to acquire the product. The UBS Securities Australia Limited Financial Services Guide is available at: www.ubs.com/ecs-research-fsg. **New Zealand:** Distributed by UBS New Zealand Ltd. The information and recommendations in this publication are provided for general information purposes only. To the extent that any such information or recommendations constitute financial advice, they do not take into account any person's particular financial situation or goals. We recommend that recipients seek advice specific to their circumstances from their financial advisor. **Korea:** Distributed in Korea by UBS Securities Pte. Ltd., Seoul Branch. This document may have been edited or contributed to from time to time by affiliates of UBS Securities Pte. Ltd., Seoul Branch. **Malaysia:** This material is authorized to be distributed in Malaysia by UBS Securities Malaysia Sdn. Bhd (Capital Markets Services License No.: CMSL/A0063/2007). This material is intended for professional/institutional clients only and not for distribution to any retail clients. **India:** Prepared by UBS Securities India Private Ltd. (Corporate Identity Number U67120MH1996PTC097299) 2/F, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000 SEBI Registration Numbers: NSE (Capital Market Segment): INB230951431, NSE (F&O Segment) INF230951431, BSE (Capital Market Segment) INB010951437.

The disclosures contained in research documents produced by UBS Limited shall be governed by and construed in accordance with English law.

UBS specifically prohibits the redistribution of this document in whole or in part without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect. Images may depict objects or elements that are protected by third party copyright, trademarks and other intellectual property rights. © UBS 2015. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

