CREDIT SUISSE

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Corporate Insights

The upside of negative rates: Opportunities for financing and growth

Introduction

Under Alan Greenspan, and then Ben Bernanke, and now Janet Yellen, the Federal Open Market Committee meetings determine the direction of monetary policy in the United States. The Committee's meeting statements and minutes, speeches and press conferences by its Chair and members are read like tea leaves. Whether the Federal Reserve will pursue a policy of being dovish or hawkish, lowering or raising the Fed's policy rates, has implications for asset prices, and market sentiment about growth, inflation and the overall health of the economy.

Central bank-watching is not limited just to the US Fed, but extends to the Bank of England, European Central Bank (ECB), Swiss National Bank, the Bank of Japan, People's Bank of China and beyond. Obsessive policy rate watchers endeavor to discern whether rates may rise or fall in the near-term and extrapolate what that may mean for the longer term.

In fact, the persistent long-term trend over the past 40 plus years is toward lower and lower rates. In most developed markets, policy interest rates have approached the Zero Lower Bound, beyond which policy makers historically have not dared to go. Yet in some developed markets, policy makers have begun to breach that limit, imposing negative rates on their respective markets.

This paper, the third in our ongoing **Credit Suisse Corporate Insights** series, examines the implications of ultra-low[1] and negative interest rate policy for our clients' financing choices and, as important, their strategic choices. It highlights the nuances of these decisions in an ultra-low or negative rate environment, and how companies can use this knowledge to increase shareholder value. But, first, let's get some context about interest rates and their trends.

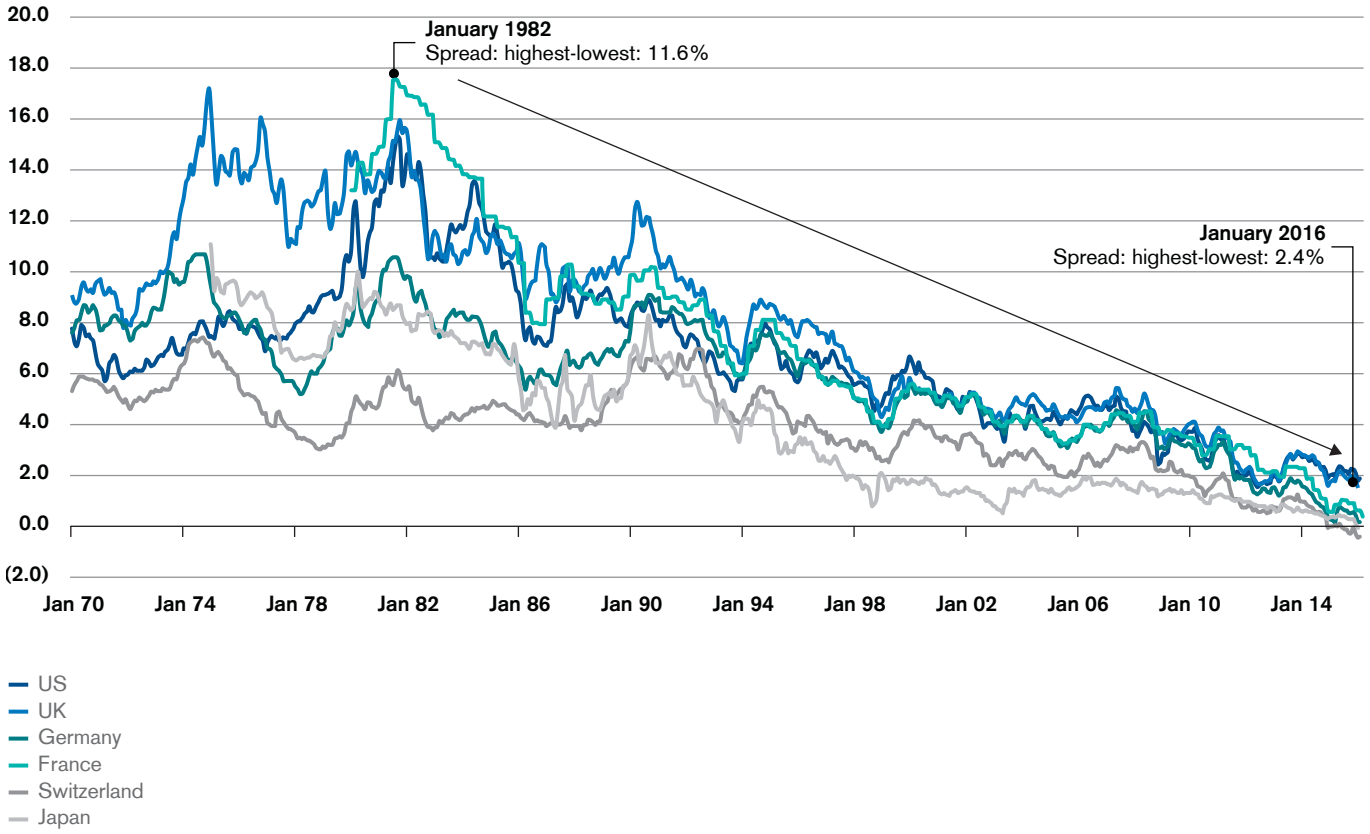
A primer on interest rates

Central banks use interest rates as a monetary policy mechanism to regulate their respective economies. Simplistically, interest rates are the current price of money and – by establishing policy rates at certain levels – central banks can seek to stimulate growth or restrain an economy that is expanding too quickly. So, how do today's lower levels of interest rates impact investment, inflation and growth?

There are three main transmission channels by which lower interest rates achieve their policy objectives.[2] First, the *spending channel* is stimulated when savers earn an exceptionally low (or even negative) return on their cash savings held in banks. Such low returns reduce the incentive to save and – as a consequence – encourage investing. This spending channel should ultimately generate higher economic production and modest inflation. Next, the *exchange rate channel* relies upon the idea that lower interest rates will generally lead to currency depreciation since capital should flow outward toward markets with higher yields. Currency depreciation serves to make a country's domestic goods relatively cheaper, leading to an increase in its exports, thereby driving economic growth and inflation. Third and finally, the *asset valuation channel* comes into play as market interest rates serve to lower discount rates on securities, driving down investment hurdle rates; with cheaper financing, companies can be expected to increase investment, which should stimulate economic growth while at the same time driving up asset prices.

As Exhibit 1 shows, 10-year government bond yields in many developed markets around the world exhibit 40-year trends toward zero or below and are now at all-time lows.[3] Furthermore, even if we go back to the early 1950's, yields on US government bonds today are still at all-time lows. Not only have these rates gotten increasingly lower, they have also converged, implying that monetary policy is converging within an increasingly global economy.

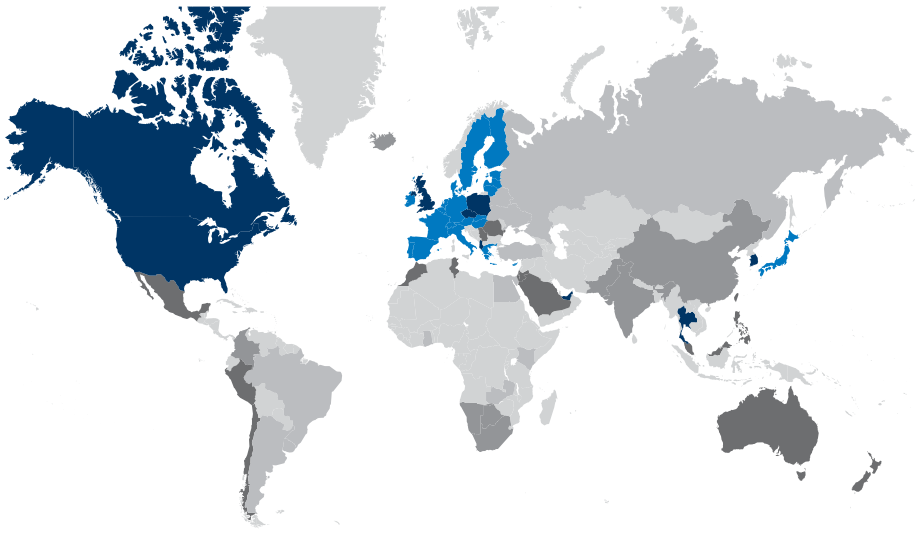
Exhibit 1: Nominal yields on 10-year government bonds over time[4]

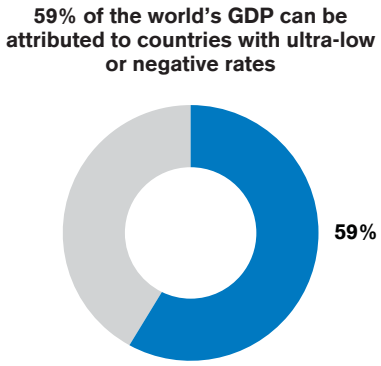


Some may wonder why this long-term, downward trend in rates matters, when it appears that the US is now in a policy rate-*hiking* mode, having increased rates in December 2015 with market expectations for further rate increases. Nevertheless, even in a hiking cycle, the US economy will likely remain in a state of low rates.[5] Furthermore, this downward trend in interest rates matters because not only does it appear pervasive and ongoing, but it also affects an outsize portion of the global economy.

How pervasive are these ultra-low and even negative rates? By our estimation, nearly 60% of global GDP is generated in economies where policy rates are currently either ultra-low or negative (Exhibit 2). These low rates impact economic, financing and investment decisions made by our clients around the world, and won't likely reverse quickly or soon, as growth and inflation expectations remain low in many major economies.

Exhibit 2: Ultra-low and negative rates around the globe[6]





In June 2014, the ECB made history by becoming the largest banking system in the world to implement a negative policy rate, attempting to stimulate its economy as it recovered from the financial and debt crises of previous years. Over the next six months, the central banks of Sweden, Denmark, and Switzerland followed suit, citing currency concerns. These economies were joined by Japan as recently as January 2016. Ultra-low rates of 1.5% or less, coupled with negative rates in some markets, are indeed a trend to be reckoned with.

Negative rates have certainly had an impact on market rates; the 3M LIBOR-equivalent rate in each banking system with negative rates is now below zero, and even 10-year bonds in Japan, Switzerland, and most recently, Germany have negative yields as well. Below zero money market rates are significant, as at no time in recent history have long-term nominal yields been negative for an extended period of time.

How do negative policy rates affect markets in practice?[7] When bonds trade at negative yields, investors are essentially paying to hold the bond. Germany and Switzerland have already issued bonds yielding negative returns to investors. These bonds do not have negative coupon payments, but instead are issued at a premium to par value.

In the corporate debt market, some bonds have started to trade at sub-zero yields; in Switzerland, Coca-Cola, Danaher and Eli Lilly have issued bonds at negative yields. One of the more widely-publicized examples of a corporate bond trading with a negative yield is Nestlé's four-year Euro-denominated bond, which first traded at a negative yield in February 2015. Other companies, such as Sanofi and Unilever, have taken advantage of low financing costs and issued debt with yields very close to zero. Despite the low yields, it appears that investors retain an appetite for purchasing negative-yielding corporate bonds, a dynamic that is only expected to intensify as the ECB embarks on the Corporate Sector Purchase Program (CSPP) and buys Eurozone non-financial corporate bonds.

It is hard to escape the commentary in the press about this environment. For example, while the desired intention is to stimulate growth and increase inflation, ultra-low and negative interest rate policies may have unintended consequences. Ultra-low rates may be viewed as a signal that policy-makers are running out of alternatives to stimulate the economy. Financial institutions also face negative consequences, such as profit erosion[8] and increased difficulty in meeting their return on equity targets. What happens if negative rates get passed on to households? For example, with banks charging them interest for their cash savings, consumers might be incentivized to spend even less and save even more. Households might also have incentives to remove cash from the system altogether by placing it in vaults or purchasing gift cards.

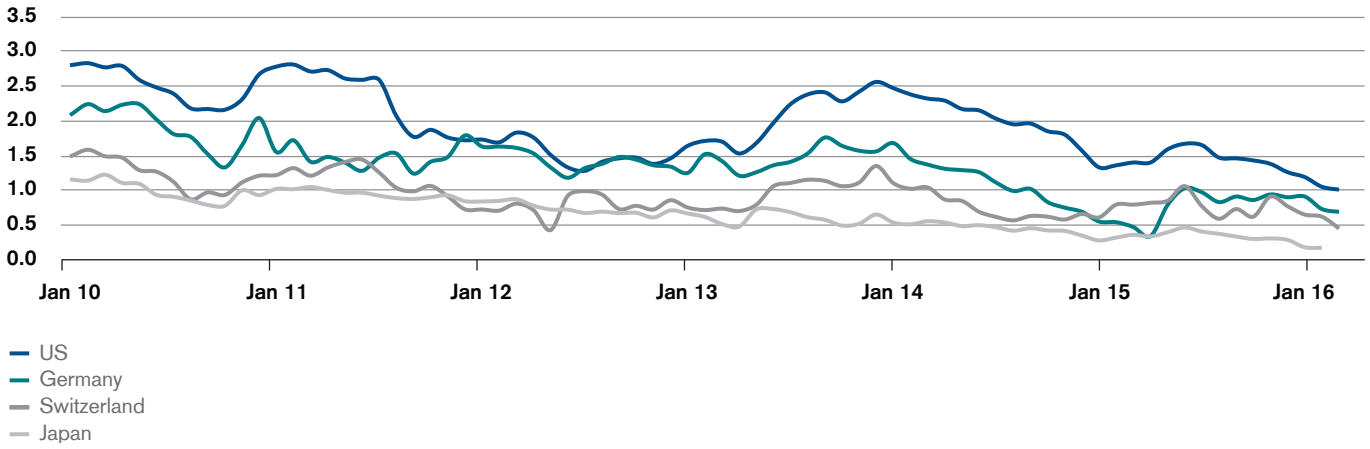
All in all, it might be too early to tell yet whether this monetary policy will have its desired effect beyond financial markets. In addition, the fact that most financial institutions have not fully passed on negative rates to companies and households makes it harder to evaluate how effective the policies will be. For example, in the Eurozone and Japan, two of the largest banking systems with negative rates, inflation remains below target and investment has not picked up significantly. Transmission through the exchange rate channel has been stronger, as currencies in negative rate zones have generally depreciated.

Despite the possible negative consequences that might be triggered by having negative rates in the economy, we believe that there is an upside to this ultra-low, or even negative, interest rate environment. As we will argue below, such environment offers companies the opportunity to use extremely favorable financing costs to finance investment and growth.

Implications for corporate financing

Having pervasive ultra-low and negative rates creates a significant financing opportunity for companies, as they have access to cheap debt capital. Not only have 10-year government yields for all major economies fallen significantly in the last years, but their spreads versus 2-year government yields have also shrunk. This flattening of the yield curve – where the cost of both short-term and longer-term debt financing fall, and the spread between them narrows – is characteristic of post-crisis monetary policy.

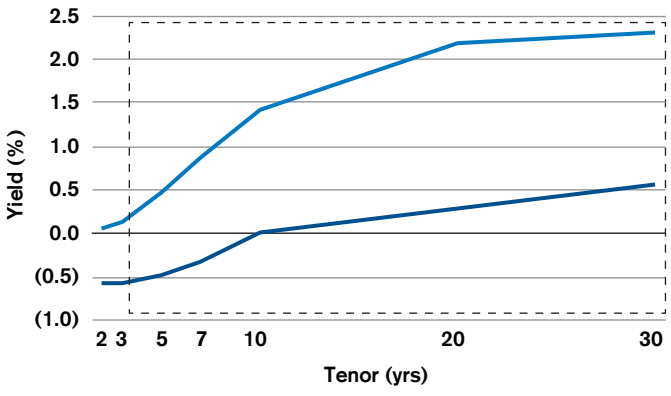
Exhibit 3: Spreads between 10- and 2-year government yields have fallen across the board[9]



This pattern has intensified in the jurisdictions with negative interest rate policy. For example, before the introduction of negative rates, the spread between 10- and 2-year German government bond yields was north of 130 basis points; it is currently below 70 basis points. The yield curve for Japanese government bonds has also flattened and the effect is even more dramatic towards the longer end of the curve.

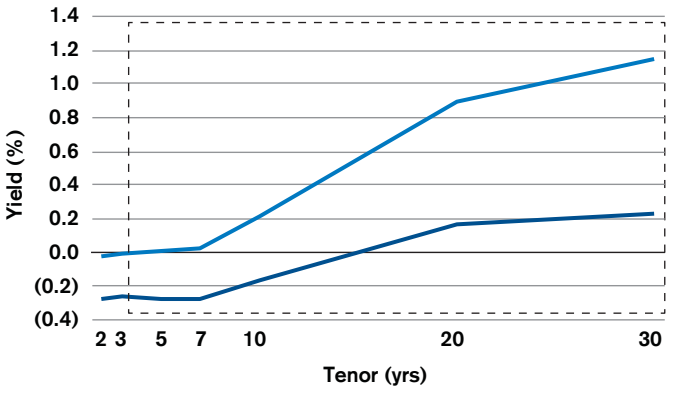
Exhibit 4: Flattening of yield curves[10]

Germany yield curve, pre/post negative rates



Germany Gov't Curve – Today
Germany Gov't Curve – Pre-negative rates

Japan yield curve, pre/post negative rates

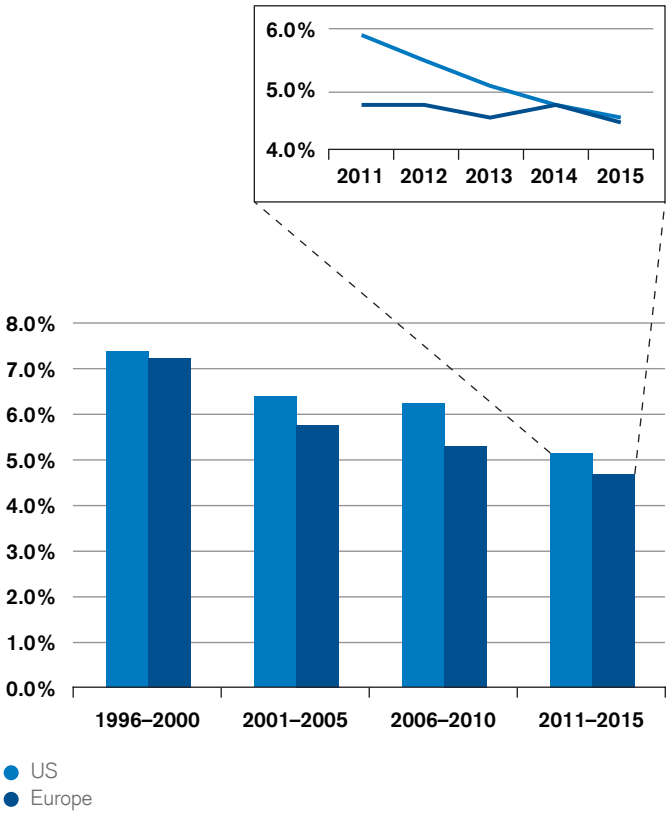


Japan Gov't Curve – Today
Japan Gov't Curve – Pre-negative rates

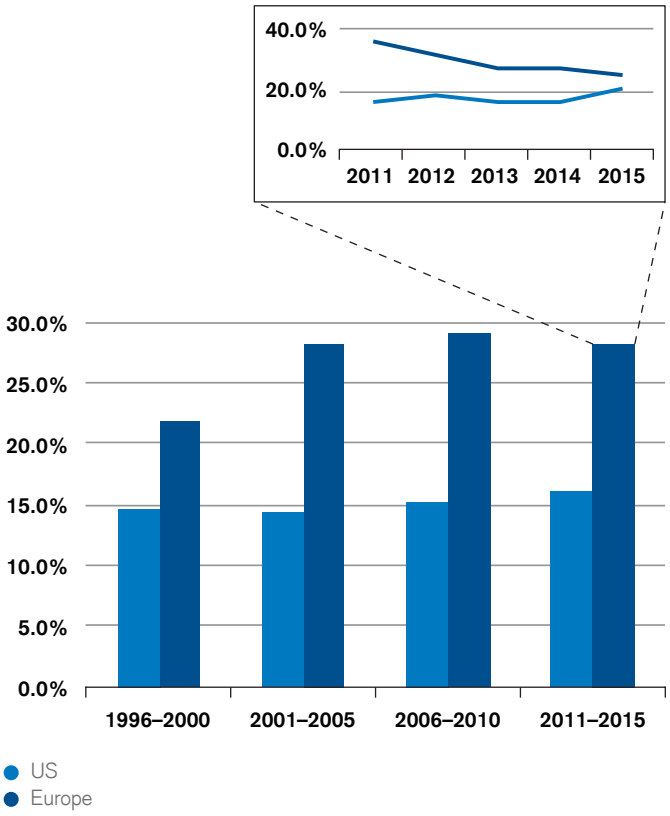
The declining cost of debt and the flattening of the yield curves have – not surprisingly – translated into lower overall cost of debt for many companies, as evidenced by the drop in the ratio of interest expense to debt over the last 20 years. However, in the last five years, the effective cost of debt for European companies has remained flat, contrasting sharply with the US experience, as Exhibit 5 shows. This situation has led to an increase in leverage levels by US companies and an opposite behavior by their European counterparts. A possible explanation for this is the fact that US companies rely more on capital markets than bank financing. Bond debt via debt capital markets makes up approximately 24% of US companies' total liabilities, compared to just 10% of that for European companies.[11]

Exhibit 5: Leverage appetite by corporates in the US and Europe[12]

Interest expense/debt, average over time

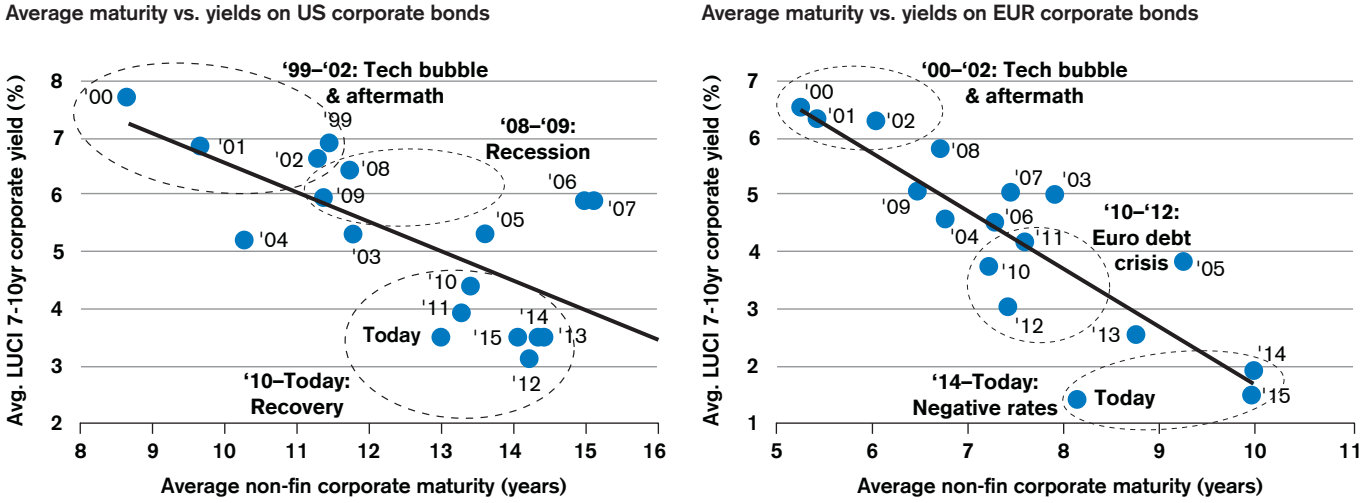


Debt/enterprise value, average over time



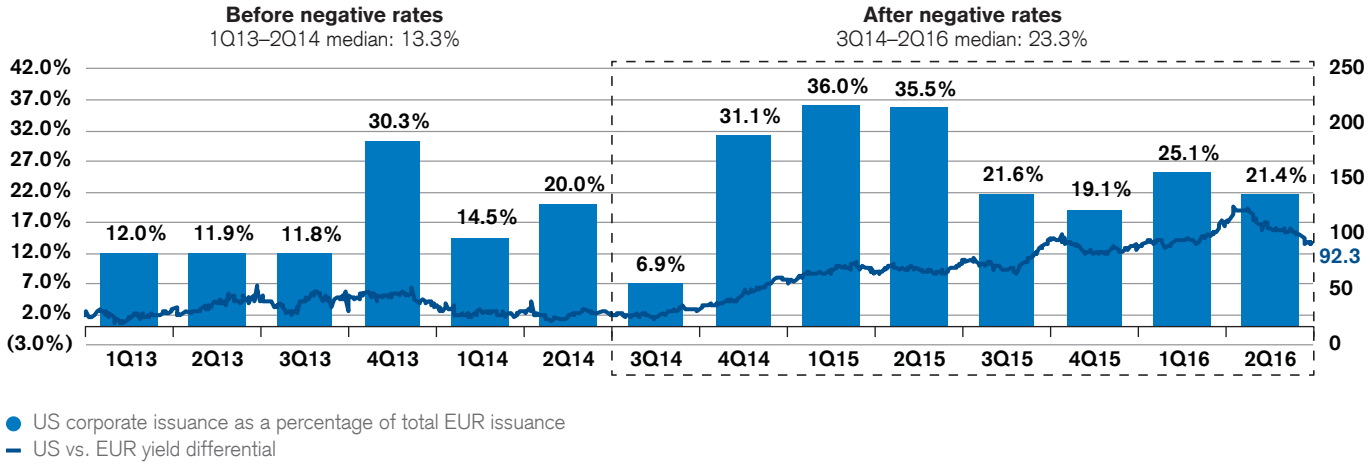
Setting aside how accurate predictor yield curves are under the current loose monetary policy environment, the flattening of yield curves raises the question if corporates have taken advantage of such low financing costs. For the most part, the answer is yes. Corporates both in the US and Europe have benefited by locking in longer maturities at lower rates as yields on bonds have trended down, as depicted in Exhibit 6. Additionally, not only have corporates benefited from a maturity extension of their debt, but also from a healthy appetite in the markets for it, despite the low yields.

Exhibit 6: Corporate bond maturities have extended as yields come down[13]



As yields in the Eurozone have come down and experienced a more pronounced flattening compared to the US, cross-border issuance has increased. Since the introduction of negative rates in Europe, the spread in yields of USD-denominated and EUR-denominated debt has increased meaningfully as shown in Exhibit 7, leading to an increase in the share of US companies' issuance of the total EUR investment grade bond market. US issuers have started to turn to the EUR market for funding diversification and cost competitiveness.

Exhibit 7: Cross-border issuance activity has increased[14]



We encourage our clients to closely examine the financing opportunities that ultra-low and negative rates create; the opportunity to lock-in low financing costs is one that should not be overlooked. But how does the ultra-low and negative rate environment affect strategic decisions within corporates?

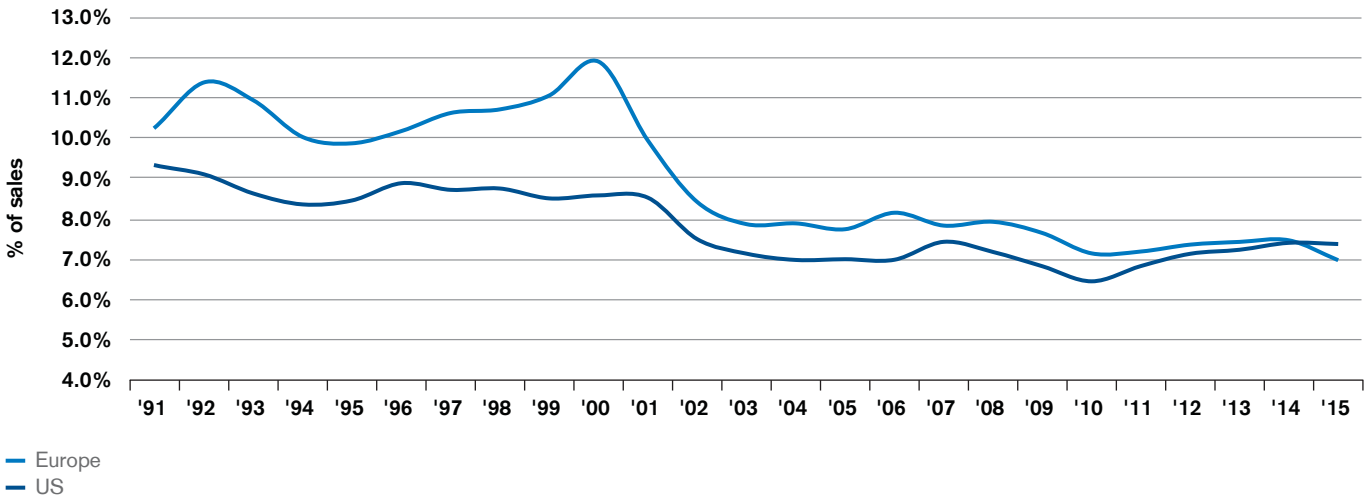
Strategic implications for corporates

As we described previously, one of the fundamental objectives of ultra-low and negative rate policies is the idea that investment will respond positively to falling interest rates in the economy. This is because the theory states that there are/should be higher yield investment opportunities in the market than can be earned by leaving cash in the bank.

The evidence, however, suggests that theory and what happens in the "real world" are quite different. We looked at trends in capex and Research and Development (R&D) expenditures to see if investment in the economy has responded positively to the ultra-low rate environment we see across the globe. Exhibit 8 shows that the ratio of capex plus R&D expense to sales has declined significantly since the early 1990's. In addition, changes in the capex plus R&D expense to sales ratio seem to have virtually no correlation with changes in the 10-year government bond yield, both for US and European companies.[15] In fact, survey data supports this notion that investment is relatively insensitive to changes in interest rates. In one recent survey where European managers were asked how low interest rates have affected their investment decisions, 84% responded it had no impact.[16]

Exhibit 8: Investment shows a long-term declining trend, despite falling interest rates[17]

Aggregate (capex + R&D expense)/sales for companies in US and Europe



What explains the relatively low sensitivity of capital investing to changes in interest rates? It's probably a combination of factors driven by fundamental characteristics of today's economy.[18] First, services and capital-light industries – where arguably debt capital plays a less important role in financing investment projects – account for a larger part of today's economy. Second, over the last 10 to 15 years, we have seen an excessive accumulation of cash that currently sits on corporate balance sheets. In a previous paper[19], we showed how both cash balances and cash as a share of total assets are at or near all-time highs, which has enabled some companies to finance part of their investment with cash reserves, reducing their dependence on the capital markets.

Finally, it is widely suspected but hard to quantify that internal, corporate hurdle rates have not moved much – if at all – in response to declining interest rates. This notion – that hurdle rates may be sticky and unresponsive to macro conditions – is particularly interesting, as we suspect it is a culprit in some of the dearth of capital growth we have highlighted. Corporates have control and discretion over the hurdle rates they set so it is surprising that they have not been reset.

We examine three possible explanations for our suspicion that hurdle rates are not adjusting to falling interest rates. First, decreases in the cost of debt might not have translated in reductions in the weighted average cost of capital (WACC). Second, high uncertainty about future financing conditions might have impacted risk-adjusted hurdle rates unfavorably. Third, it's possible that management teams are reluctant to accept low return projects in fear of facing Return on Invested Capital (ROIC) dilution. Let's deal with each possible explanation in turn.

First, drops in the risk-free rate should generally result in lower WACC; to test this, we looked at the market-implied real cost of capital for the US and Europe. Our analysis indicates that the cost of capital has indeed fallen in the last decade.[20] We suspect that while WACC has fallen, hurdle rates have not, indicating there is not a strong correlation between the former and the latter. This suggests that uncertainty about future financing conditions or fear of ROIC dilution play a bigger role in the way hurdle rates are assessed and interpreted by management teams.

A second factor is uncertainty about future financing conditions playing a role in the capital budgeting process (what would happen if these historically low nominal yields increased significantly in the near term?). In some cases, setting hurdle rates well in excess of WACC can be a reasonable way to account for this uncertainty. Financing uncertainty can be mitigated, however, by taking advantage of the current capital markets conditions, which offers corporates the possibility of locking in low financing rates for the long-term, largely mitigating the risk of a rate increase over the lifetime of investment projects. Companies that use this to their benefit may lock a once-in-a-generation cost of capital.

A third and final factor contributing to the stickiness in hurdle rates is the fear companies may have of ROIC dilution, which might come from accepting lower-return – yet still-positive Net Present Value (NPV) – projects. By using needlessly high hurdle rates, management teams may be able to keep ROIC high, but they will be passing on any number of value-enhancing opportunities. Moreover, the use of inflated hurdle rates can lead to ROIC dilution eventually, as unnecessarily high hurdle rates discourage investment and ultimately, the firm's ability to grow and generate cash flows will erode. In addition, it is important to acknowledge that profitability targets should be established on the *spread* of the project's returns and its cost of capital. This is important because in an ultra-low rate environment, dilution of gross ROIC is not necessarily accompanied by a dilution of the profitability spread.

So what are the implications of having artificially high hurdle rates when making capital budgeting decisions? In some cases, management teams are leaving money on the table and passing on positive NPV projects that would otherwise increase the company's value.[21] Over time, this can lead to lack of growth opportunities in the company's portfolio, discounted valuation relative to peers or even risk of takeover or activism. Furthermore, management teams might inadvertently distort the capital budgeting process; by waiting for unnecessarily high-return opportunities that might never come, corporates face the risk of implementing suboptimal capital allocation strategies, parking excessive cash or over-returning capital to shareholders.

Conclusion

When evaluating the debt markets in developed economies of the world over the last several decades, we see very clear trends in falling policy rates. These falling rates reflect macro-economic conditions that pre-date the financial crisis and persist in its wake. Government responses have focused primarily on fiscal austerity coupled with loose monetary policy. This situation has led inevitably to lower and lower policy rates and – in some countries – to policy rates falling below 0%.

These trends are long-term and may be the "new normal." So what are corporates to do? The existence of generationally-low interest rates coupled with flat yield curves in many markets present unique financing opportunities to corporates. These are opportunities for them to lock in attractive rates for long periods of time. In such an environment, and recognizing that growth remains an important factor in driving shareholder wealth, we recommend that our clients do revisit their hurdle rate and investment decisions and be less concerned about imminent rate rises altering their calculus of project economics. Thus, corporates can use this financing environment to potentially re-ignite growth.

Is the current global interest rate environment a referendum on future growth? Are ultra-low and negative rates a call of despair, or an opportunity to get ahead of potential growth? We would argue that now is the time to lock in cheap financing to fund investment and growth in the future, on the back of once-in-a-generation cost of capital.

End notes

1 We define ultra-low rates as rates below 1.5%, which is the 25th percentile of positive policy rates. Policy rate data sourced from World Bank.
2 Note that raising interest rates should theoretically have the opposite effect on these three transmission channels.
3 Similarly, 10-year real yields on government bonds for this group of countries have been trending downwards since the 1980's.
4 Source: FactSet. Exhibit represents nominal yields on 10-year government bonds for respective countries.
5 It is particularly true that low rates will remain low for longer maturities, where growth and inflation expectations exude relatively more influence than near-term monetary policy.
6 Source: FactSet and World Bank's 2014 global GDP data. Ultra-low rate countries include Canada, UK, US, Hong Kong, South Korea, Taiwan, Thailand, Albania, Czech, Norway, Poland, Bahrain, Israel and UAE. Negative rate countries include the Eurozone, Japan, Denmark, Hungary, Sweden and Switzerland.
7 The implementation of negative policy rates has worked differently in each banking system. Negative rates are generally applicable to deposits being held at the central bank by financial institutions.
8 Profit erosion can occur through net interest margin (NIM) compression, as well as documentation and operational challenges in facilitating negative rates. This can carry further consequences, for example, as banks face pressure on their margins, they may end up charging higher spreads (leading to a reduction in the supply of credit) or taking excessive risk in search of higher return opportunities.
9 Source: FactSet. Spread is the difference between 10- and 2-year nominal government bond yields. Note that similar patterns have occurred before 2010 even in higher rate environments.
10 Source: Bloomberg. For German government bonds, "pre-negative" and "today" curves are as of June 4, 2014 and June 14, 2016 respectively. For Japanese government bonds, "pre-negative" and "today" curves are as of January 27 2016 and June 14 2016 respectively.
11 Source is the Fed for US data and the European Commission for Europe data.
12 Source: FactSet, Credit Suisse HOLT database. US universe includes 1,822 companies, excluding financials and utilities. European universe includes 815 companies, excluding financials and utilities. Interest expense/debt is calculated as interest expense/average book value of total gross debt. Debt/EV is calculated as book value of total gross debt/enterprise value.
13 Source: Dealogic. LUCI and LEI are proprietary indices of Credit Suisse. LUCI is an index which tracks only the liquid, tradable portion of the U.S. corporate bond market. The index contains only investment grade (BBB or better) issues with an intermediate term focus (average duration of 10 years). LEI is an index which tracks only the liquid, tradable portion of the European corporate bond market. Average non-financial corporate maturity is the average maturity of bonds issued by non-financial companies from 1999 to present.
14 Source: Dealogic. US vs EUR yield differential is the delta between LUCI index and LEI index; see endnote 13 for descriptions of the indices.
15 We ran regressions of the change in the capex + R&D to sales ratio on the change in 10-year government bond yields for companies in US and Europe. Results show there is an insignificant correlation between the variables.
16 Source: Intrum Justitia European Payment Report 2016.
17 Source: FactSet and Credit Suisse HOLT global database. US universe in 2015 includes 1,671 companies and the European universe includes 777; excludes financials, energy and utilities. The aggregate (capex + R&D expense)/sales is calculated as (total capex + total R&D)/total sales.
18 In addition to the factors mentioned in the paper, excess capacity has been cited as a potential explanation for the low sensitivity of investment to interest rates. The excess capacity argument states that asset growth is outpacing overall sales growth; whether or not this is true depends on the time period observed. We have observed that in the years following the financial crisis, growth in productive assets has moved in tandem to sales.
19 Credit Suisse Corporate Insights, The Capital Deployment Challenge (Q4 2015).
20 We use a market-implied discount rate from the Credit Suisse HOLT framework, which is inflation-adjusted, forward-looking and based on market sentiment at each point in time. HOLT derives discount rates by equating market value of companies within a country to the net present value of their forecasted free cash flows. For the US and Europe, discount rates have declined in relative terms by 16% and 21% respectively, since 2011, and are both currently close to their 10th percentile over the last 15 years. Similar patterns are observed across other markets such as Switzerland, Japan and UK.
21 This point is supported in the Credit Suisse's HOLT market commentary "Money on the Table: How Should Corporate Boards and Executives Assess Idiosyncratic Risk?" (Matthews, Holland). The authors found in discussions with corporate managers that many use hurdle rates well above the market-implied cost of capital, forgoing profits that would be achieved with lower hurdle rates.

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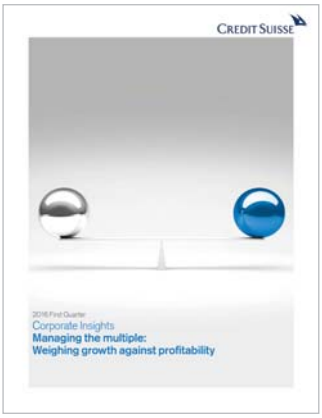

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