Deleveraging, Investing and Optimizing Capital Structure*

by Stefano Gatti and Carlo Chiarella
CAREFIN, Università Bocconi,
with a foreword by Massimo Della Ragione,
Goldman Sachs International
The recent global financial crisis created one of the most challenging business environments of the last hundred years, and resulted in a severe shortage of credit for corporates globally. Write downs and tighter regulation on capital ratios have required banks to recapitalize by hundreds of billions of dollars.

The world of corporate credit had to react to these changes in the lending landscape, whereby banks have substantially reduced their leverage ratios and credit exposures; CFOs have faced the complex task of sourcing financing and keeping liquidity at prudent levels, while trying to maximize access to capital markets to counterbalance the shortage of bank financing.

Today, while warning of the possible consequences of unjustified and hurried optimism, the general consensus amongst the economic community is that the worst of the crisis is over - as signalled by macro indicators such as GDP growth and increased consumption levels. Credit spreads are at all-time lows (10-year US Treasury recently yielding less than 2.5%, breaking any historical record) and the general sentiment is positive, as witnessed by the renewed attention to the "peripheral" European countries by many investors, driving large inflows of capital (year-to-date, more than Euro 80 billion have been invested in peripheral equities from outside Europe).

After several years of belt-tightening and savings on costs and investments, corporates find themselves with high levels of available liquidity (reaching 11% of the total enterprise value of all listed companies worldwide at the end of 2013), requiring renewed investment decisions and balance sheet optimization strategies.

The breadth and level of possible tailoring of funding instruments available to companies to optimize their capital structure has never been higher, from straight equity to subordinated debt, from hybrid instruments to equity-linked solutions and project bonds; navigating the variety of possible instruments and impacts on a company’s short and long-term strategy can be at times complex and requires difficult decisions.

In light of shifts in economic conditions and sentiment, this thought-provoking analysis conducted by Stefano Gatti and Carlo Chiarella represents a timely and useful reference framework to interpret and measure the impact of different financing strategies, from return of capital to shareholders to M&A, to the use of different funding instruments.

For the third consecutive year, Goldman Sachs is delighted to co-host with Bocconi University this important workshop, bringing together corporates and investors and enabling the sharing of experiences of top managers, rating agencies and portfolio managers in the field of corporate credit.
Contributing Authors

Stefano Gatti is Program Director of the Bachelor of International Economics and Finance at Università Bocconi, Milan, where he has also served as Director of the International Teachers Program. His main area of research is corporate finance and investment banking. He has written numerous articles in these areas including publications in reputable academic journals like Financial Management, The Journal of Money, Credit and Banking, The Journal of Banking and Finance, The Journal of Applied Corporate Finance and the European Journal of Operational Research. Professor Gatti has published a variety of texts on banking and finance and has acted as a consultant to several financial and non-financial institutions, as well as for the Italian Ministry of the Economy, the Financial Stability Board and the OECD/Group of the G20. He is financial advisor of the Pension Fund for Health Care Professions and is member of the Board of Directors and board of auditors of Italian industrial and financial corporations.

Carlo Chiarella is Assistant Professor of Finance at CUNEF (Colegio Universitario de Estudios Financieros), Madrid. He holds a Ph.D. in Finance from Università Bocconi, where he collaborates with CAREFIN Center of Applied Research in Finance, and has been a Visiting Scholar at NYU Stern School of Business. His main area of research is corporate finance. His empirical work focuses on the link between information asymmetries and corporate financing and investment, in particular in the context of capital markets and mergers and acquisitions.
Contents

• Introduction

• It’s time for corporate cash spending in Europe and the U.S.

• Economic uncertainty, cost of debt and cost of equity: the drivers of corporate financing and investment policies

• Balance sheet restructuring in Europe: some empirical evidence

• How to re-optimize a firm’s capital structure and its investment policy: the impacts and interdependencies of different corporate actions

• Looking forward
Introduction

As a result of the crisis, in the past few years companies in Europe and around the world have significantly strengthened their capital structure by deleveraging, executing cost and capital expenditure saving programs, increasing their equity base and maintaining a prudent and conservative strategy. The result has been the accumulation of large cash piles for precautionary purposes.

Today, a number of macroeconomic factors act as catalysts for a revision of the financing and investment decisions of European and global firms. The economy is slowly recovering; credit spreads are still at historical lows; company balance sheets have been restructured and cash balances are at record highs. In addition, an abundance of inflows are coming into Europe and, in particular, to the “periphery”, including Italy, driven by macro headwinds losing power and increasing stock market valuations. Finally, the breadth and tailoring of available financing products and investors’ specialization has never been higher.

In this environment, scant growth in earnings and pressures from investors, who are now more demanding in terms of the optimal use of the accumulated cash piles, are solid motivations for firms to reorganize and optimize their capital structure as well as their investment policy. Indeed, for the first time in over two and a half years, survey data by Fitch Ratings show that senior fixed income investors both in Europe and the U.S. expect companies to put their cash to use for a combination of debt repayment, capital investments and shareholders remuneration rather than for maintaining cash reserves. At the same time, a BofA Merrill Lynch survey of fund managers worldwide shows near record support for capital spending and mild support for returning cash to shareholders. The proportion of respondents who worry that companies are underinvesting has hit an all-time high (68%), as well as the spread between the proportion demanding more capital expenditures (58%) and those wanting cash distributions (25%).

Still, companies face a number of challenging dilemmas:

- the need to optimize capital structure and invest for growth against the necessity to maintain an adequate cushion of liquidity to face future downturns and eventual scarcity of funding;
- the choice between a variety of financing instruments providing for different needs in terms of size, tenor, credit impact, accounting impact, shareholders’ dilution; liquidity; and
- the use of cash for M&As versus cash disbursement to shareholders via dividend payments or share buybacks.

---

1 For European data see: Fitch Ratings (2014), European senior fixed-income investor survey, Credit Market Research, April. For U.S. data see: Fitch Ratings (2014), Calmer macro environment fails to move the needle on investor attachment to low interest rates, Credit Market Research, April.

In this paper we propose a reference framework to interpret corporate financing and investment policies in light of shifts in the economic environment and changes in the conditions of debt and equity capital markets. More precisely, for all the constituent firms of the STOXX Europe 600 ex-financials Index we investigate the catalysts of the change in their investment and financing policies and the channels through which these firms have reshaped their policies in the period between 2004 and 2013.

First, at the aggregate level, we draw a link between the lately observed trends, namely deleveraging, disintermediation and the accumulation of cash piles, with shifts in external factors, such as the cost of equity, the cost of debt, their differential and market confidence.

Next, we assess at the firm level the impact of different corporate actions on capital structure and on cash saving or spending decisions, overall and across different sub-periods linked to the financial crisis. More specifically, we focus on bond issues, on the financing side, and on acquisitions and share buybacks as potential uses of cash, given their relatively more exceptional and discretionary nature. By looking at them in isolation, in fact, we then try to answer the following key questions: What is their impact? What are their interdependences? What drives the choice of how to spend cash and when?

The remainder of the paper is structured as follows: in the next section we provide an overview of recent developments in cash accessibility at European and U.S. firms and pressures to spend it. Then, in the following section we present a stylized reference framework to define our hypotheses on the effects of shifts in external factors, such as the cost of equity, the cost of debt, their differential and economic uncertainty on a firm’s financing and investment policy. Next, we offer empirical evidence on the links between these drivers and deleveraging, disintermediation and the accumulation of cash piles. Finally, we assess the impact of alternative initiatives to re-optimize a firm’s balance sheet and we conclude by looking ahead to forthcoming financing and investment outlooks, given extant market conditions.
It’s time for corporate cash spending in Europe and the U.S.

In response to the financial crisis, both European and U.S. companies have accumulated substantial cash reserves on their balance sheets. In aggregate terms, at the end of 2013, European non-financial firms held nearly €500 bn. while the same figure for US non-financial companies amounted to approximately $1.4 tn. Figure 1 tracks aggregate cash holdings for non-financial constituents of the STOXX Europe 600 Index and the S&P 500 Index respectively.


Source: Bloomberg

Companies are currently at absolute record high levels of cash holdings, but while cash hoarding might have been the best course of action amid post-crisis turmoil, there may be merits now in spending it by investing in growth or by paying it back to shareholders to be invested more productively elsewhere. Optimization is no longer about stabilizing capital structure; now it encompasses the most efficient capital allocation. Accordingly, increasing pressures to re-optimize capital allocation come from emboldened activist shareholders, whose assets under management reached $93 bn. in 2013, 42% higher than the year before ($65 bn.) and almost triple the 2008 level. Indeed, a survey by Ernst & Young (EY) among approximately 1,600 senior executives worldwide reveals that for more than 90% of the respondents, shareholder pressure is setting their top priorities and corporate spending is one of the most frequently raised issues. In fact, Figure 2 shows that dividend payments, share buybacks and acquisitions are among the most frequent targets of shareholder activism.

\[\text{Ernst and Young (2014), Capital Confidence Barometer: 10th edition, Global Research, April}\]
In principle, this emboldened shareholder activism together with the incipient recovery of earnings and the unrelenting caution about investing for growth should jointly push companies to distribute cash back to their shareholders rather than to spend on investment. Nonetheless, as credit conditions stabilize and credit availability is at its highest, companies covered by EY’s survey indicate a growing desire to take on more leverage and increase investment for both organic and external growth. Indeed, Figure 3 reports aggregate volumes of investment grade (IG) and high yield (HY) corporate bond issuance in Europe and the U.S.

**Figure 2**
Growing pressures from shareholder activism

**Goal of shareholder activism**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost reduction</td>
<td>47%</td>
</tr>
<tr>
<td>Dividend payment</td>
<td>26%</td>
</tr>
<tr>
<td>Share buybacks</td>
<td>24%</td>
</tr>
<tr>
<td>Divestment</td>
<td>22%</td>
</tr>
<tr>
<td>Portfolio analysis</td>
<td>20%</td>
</tr>
<tr>
<td>Acquisition</td>
<td>12%</td>
</tr>
<tr>
<td>Spinoff/IPO</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Ernst & Young, FTI Consulting and Hedge Fund Research

**Figure 3**
Corporate bond issuance in Europe (€ bn.) and the U.S. ($ bn.) in the period 2007-2013

Source: Fitch Ratings Credit Market Research, April 2014; Société Générale Cross Asset Reserach; May 2014.
Indeed, the most recent period is one of exceptional support for bond issues by investors forced down the credit curve by historically low government bond yields and the accommodative monetary policy adopted by central banks. The U.S. debt capital market, which is more developed than the European one, has fully recovered to its pre-crisis level of investment grade corporate bond issuance. In addition there has been a significant surge in high yield bond issuance. Even more striking developments have marked the European market. New European corporate bond issuance by non-financial firms has been above €300 bn. both in 2012 and 2013, almost twice as high as the levels recorded in the past. In addition, the market has become accessible to a broader spectrum of companies. There were over 100 debut issuers in 2013 and the share of high yield bond issues has grown from less than 2% of total new issuance in 2008 to approximately 35% in 2013. As shown in Figure 4, this coincided with a period in which the spread between investment grade and high yield cost of funding has progressively narrowed. Investment grade corporate bond yield has reached an all-time record low, while the average funding cost has progressively dropped from approximately 8% in 2008 to less than 6% in 2013.

As shown in Figure 4, this coincided with a period in which the spread between investment grade and high yield cost of funding has progressively narrowed. Investment grade corporate bond yield has reached an all-time record low, while the average funding cost has progressively dropped from approximately 8% in 2008 to less than 6% in 2013.

Today’s abundance of cash on firms’ balance sheets and the ample accessibility to cash on debt capital markets would suggest impending corporate spending and capital structure re-optimization, as demanded by shareholders. In light of this, in the next section we propose a reference framework to capture the implications of alternative courses of corporate spending on firms’ balance sheets.

A company’s balance sheet is the result of its financing and investment behavior. Our reference framework for the analysis that follows is shown in Figure 5. In this simplified context, the left-hand side of the balance sheet includes the uses of funds, cash holdings kept for liquidity needs or precautionary purposes and investments in net working capital and fixed assets made by the company (tangible and intangible). The right-hand side of the stylized balance sheet accounts instead for the different sources of funds for the company, broken down into equity and alternative types of financial debt – e.g. bank loans and corporate bonds. Equity can build up from external investors who acquire a stake in the business, as well as from a company’s internal funds such as retained earnings accumulated after dividends have been paid to shareholders.

A company is operating efficiently if the profit on its uses of funds (i.e. on the asset side) is at least equal to the cost of its sources of funds (i.e. the liabilities side).

On the asset side, firms need to find the right balance between the necessity to maintain an adequate cushion of liquidity, to cover ordinary operations and to face future downturns or scarcity of funding, and the need to invest for growth. Large cash holdings, in fact, provide protection but generate low returns which depress overall profitability, as measured in terms of Return on Assets (ROA).

On the liabilities side, instead, firms need to find the right balance between alternative sources of funds in order to optimize the capital structure and minimize its cost of financing, captured by the Weighted Average Cost of Capital (WACC) that is a function of the cost of debt (kd), the level of the tax rate (t), the cost of equity (ke) and the relative weights of debt and equity.
Our reference framework makes it clear how the investment and financing policies of a firm are closely linked with contingent external factors, such as uncertainty on the state of the economy and conditions in debt and equity capital markets. Indeed, firms repeatedly face a dual problem:

1. First, is the extant investment policy and capital structure optimal, given the existing economic conditions? For example, large cash piles and low leverage are optimal in bad times but represent for shareholders excess conservatism and an inefficient capital structure when economic conditions are good.

2. So, if general market conditions change, then the second problem is how to re-optimize a firm’s capital structure and its investment policy.

Custom corporate responses to varying economic conditions are summarized in Figure 6. In conservative periods, firms tend to focus on the reorganization of liabilities by deleveraging and optimizing the sources of financing (e.g. by means of disintermediation when the conditions in debt capital markets are favorable and firms disproportionately rely upon bank loans, as they do in Europe). On the asset side, firms compress investments and cash distributions to build up precautionary liquidity reserves.

In expansionary periods instead firms try to boost returns on assets and returns on equity by putting excess cash to use and by targeting a more leveraged capital structure.
But then under extant favorable conditions, firms will be faced with an additional dilemma: how can the accumulated cash be best put to work?

Two basic options are available.

The first option is to return cash to shareholders via dividends or share buybacks, as outlined in Figure 7. This reduces the cash balance on the asset side and equity on the liability side. Using cash to repurchase shares has a given effect with no uncertainty: it enhances ROA and, if debt doesn’t change, there is a reallocation of the weights of debt and equity in the capital structure whose effect on WACC depends on the differential between the cost of equity and the cost of debt.

The second option is to use cash for increased investments (e.g. either for organic growth, by means of Capex, or for M&As), as outlined in Figure 8. While this strategy is also aimed at increasing the return on assets by putting cash to work, its effect is less certain than with share buybacks. Who knows if the investment/acquisition will be successful? How long will it take before it becomes profitable? Nonetheless, the impact of this second option on the liability side of the balance sheet and on WACC can be substantial. More precisely, if the investment/acquisition is entirely self-financed, firm capital structure is unaffected. On the contrary, if incremental debt or equity is issued in addition to the used cash, there is a reallocation of the weights of debt and equity in the capital structure, whose effect on WACC depends, again, on the differential between the cost of equity and the cost of debt.
Our intuition is that two external drivers, taken together, determine whether or not companies are willing to put cash to use rather than to preserve it for precautionary reasons: the cost of equity and debt and in particular their differential (i.e. the risk premium of equities relative to bonds) and economic uncertainty. Therefore, these conditions potentially explain in what circumstances and in which ways companies reshape the structure of their balance sheets. Our explanation is that all these factors have, in principle, a direct impact on the financing behavior of companies, which should actively target a capital structure that minimizes the cost of financing. However, these variables also shape the investment policy as they affect the choice of whether to spend or save cash, and eventually determine the conditions by which using cash for investments is more attractive than returning it to shareholders, and vice versa.

Accordingly, we expect share buybacks to be most beneficial when the economic outlook is still uncertain, yields on corporate borrowing are low (i.e. cost of debt is low) and share prices are low (i.e. cost of equity is high). As confidence grows, however we expect the pressure to use cash to turn progressively towards organic growth and M&As, and especially if the spread between the cost of equity and debt is large. Indeed, looking in particular at M&As, when the cost of equity is high valuations are more attractive from the perspective of an acquirer but, if the deal is not entirely self-financed, issuing incremental equity is more costly too. Low cost of debt then provides cheap financing to fill the funding gap and support the realization of M&A deals. But a necessary condition is that economic uncertainty is low, since companies would otherwise avoid building up incremental leverage.
Balance sheet restructuring in Europe: some empirical evidence

Since 2004 many changes in the state of the economy and capital market conditions have successively put different pressures on European firms to reorganize their operations. These changes have also determined several shifts in the relative attractiveness and impact of alternative investment and financing policies. These varying conditions give us the opportunity to analyze how economic uncertainty, the cost of equity, the cost of debt and their differential have shaped the evolution of corporate balance sheets in Europe.

Figure 9 (see page 14) shows the dynamics of these variables since 2004. Economic uncertainty is captured by means of the Euro STOXX 50 Volatility Index (VSTOXX) which reflects market expectations of future volatility derived from real-time option prices for European stocks. The cost of equity is proxied by the inverse of the Price/Earnings ratio of the STOXX Europe 600 ex-financials Index, while the cost of debt is proxied by the after-tax yield to maturity of respectively the iBOOX Euro Corporate Bond Index, for investment grade issuers, and the iBOOX Euro High Yield Index, for sub-investment grade issuers.

The period in question allows us to consider varying market conditions, as it alternates phases of economic growth with periods of crisis or recession (i.e. those when real GDP growth is negative, which are delimited in Figure 9 by gray shaded areas). In addition, an initial period of widespread market confidence, which goes on until the end of 2007, is followed by a more turbulent period thereafter, with multiple intervals of high uncertainty (i.e. those conventionally identified as periods when the level of the VSTOXX index is higher than the 30% threshold, which are bordered in Figure 9 by yellow dotted lines). Accordingly, the sample period also presents several shifts in the conditions of capital markets. Before year 2004 the differential between the cost of equity and the cost of debt was less than 100 b.p., on average. Since then, however, it has widened substantially. Indeed, at the beginning of 2006, following a sharp rise in the cost of equity alongside a reduction in the cost of debt, the gap was five times larger than it was two years before. Then, the cost of debt started to rise, smoothly for investment grade issuers and at a stronger pace for high yield issuers. The differential with respect to the cost of equity, which was rising moderately, remained stable until the fall of 2008 for investment grade issuers while it progressively narrowed for high yield issuers.

\* In our calculations we assumed a 35% tax rate, independent of firm nationality.
FIGURE 9
The drivers of a changed financing and investment policy in Europe (2004-2013):
Economic growth (GDP), uncertainty (VSTOXX), cost of debt (kd), cost of equity (ke) and their differential (Dk).

Source: Eurostat, Bloomberg, Markit iBOXX Euro Corporate Bond Index, Markit iBOOX Euro High Yield Index, STOXX Europe 600 ex-financials Index and Euro STOXX 50 Volatility Index.
It was when the stock market collapsed, following Lehman Brothers’ filing for bankruptcy, that the gap between the cost of equity and the cost debt for investment grade issuers peaked due to an abrupt upsurge in the former. In the meantime, the same differential narrowed and even turned negative for high yield issuers as lack of confidence made their cost of debt rise steeply. The following year saw a large, swift drop in the cost of equity, as the stock market bounced back despite the bad economic outlook. The differential with the cost of debt of investment grade issuers dropped significantly. Only during 2010 and 2011, as the cost of equity was on the rise while cost of debt continued to decline, the spread between the cost of equity and debt progressively rebounded towards pre-crisis levels.

Finally, capital market conditions in the recent past have been particularly favorable. Since the resolution of the concerns about the European sovereign debt crisis in the summer of 2012, the cost of debt has reached record low levels thanks to renewed confidence and expansionary monetary policy. At the same time, since 2012 companies have enjoyed a continued period of growth in stock market valuations and a corresponding fall in the cost of equity, which tightened the gap with respect to the cost of debt.

Given all these changes in the state of the economy and capital market conditions the first empirical question we want to shed light on in our analysis is: To what extent have these shifts successively put different pressures on European firms to re-optimize their balance sheets?

**Financing and investing policies of European companies between 2004 and 2013**

To draw a link between the reshaping of companies’ balance sheets and shifts in the state of the economy and capital market conditions, we form a sample of 437 European publicly-listed non-financial firms. In particular, our sample includes all the most recent constituents of the STOXX Europe 600 ex-financials Index with financial data available on Bureau van Dijk - Orbis database. For these companies, we collect annual balance sheet data for the period 2004-2013. The total sample size is 4,370 firm-year observations.

The sample is populated by large listed companies and is representative of a broad set of European countries and sectors, as shown in Figure 10 and Figure 11. According to the summary statistics reported in Table 1, sample firms are on average large, solid and profitable. They operate with moderate leverage (measured as the ratio of financial debt over total assets) and retain a substantial part of their total assets in the form cash holdings.
### TABLE 1

<table>
<thead>
<tr>
<th>Sample summary statistics</th>
<th>mean</th>
<th>median</th>
<th>st.dev.</th>
<th>min.</th>
<th>max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets (€ bn.)</td>
<td>16,478</td>
<td>4,891</td>
<td>28,884</td>
<td>0.122</td>
<td>199,393</td>
</tr>
<tr>
<td>Market Cap. (€ bn.)</td>
<td>11,784</td>
<td>4,609</td>
<td>19,030</td>
<td>0.231</td>
<td>103,112</td>
</tr>
<tr>
<td>Cash (€ bn.)</td>
<td>1,053</td>
<td>0.332</td>
<td>0.917</td>
<td>0.001</td>
<td>11,967</td>
</tr>
<tr>
<td>Cash (% of Total Assets)</td>
<td>8.73%</td>
<td>6.13%</td>
<td>8.21%</td>
<td>0.00%</td>
<td>47.34%</td>
</tr>
<tr>
<td>Capex (€ bn.)</td>
<td>0.947</td>
<td>0.246</td>
<td>0.781</td>
<td>0.131</td>
<td>14,927</td>
</tr>
<tr>
<td>Capex (% of Total Assets)</td>
<td>6.76%</td>
<td>5.49%</td>
<td>8.72%</td>
<td>0.00%</td>
<td>45.14%</td>
</tr>
<tr>
<td>Leverage</td>
<td>19.97%</td>
<td>17.92%</td>
<td>12.01%</td>
<td>0%</td>
<td>74.97%</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>6.21%</td>
<td>5.48%</td>
<td>7.13%</td>
<td>-17.29%</td>
<td>46.79%</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>16.97%</td>
<td>15.62%</td>
<td>10.38%</td>
<td>-82.02%</td>
<td>259.56%</td>
</tr>
<tr>
<td>Dividend Payout Ratio</td>
<td>49.48%</td>
<td>44.11%</td>
<td>23.80%</td>
<td>-82.02%</td>
<td>97.15%</td>
</tr>
<tr>
<td>Interest Cover Ratio</td>
<td>8.49%</td>
<td>5.38%</td>
<td>5.92%</td>
<td>1.15%</td>
<td>16.33%</td>
</tr>
<tr>
<td>Liquidity Ratio</td>
<td>1.01%</td>
<td>0.94%</td>
<td>0.36%</td>
<td>0.18%</td>
<td>3.24%</td>
</tr>
</tbody>
</table>

Source: Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.

![FIGURE 10 Sample breakdown by country](image1)

- Great Britain: 30.83%
- France: 7.53%
- Germany: 5.48%
- Switzerland: 18.62%
- Sweden: 13.33%
- Netherlands: 15.07%
- Spain: 12.78%
- Finland: 8.05%
- Italy: 7.36%
- Norway: 6.40%
- Denmark: 5.98%
- Belgium: 5.29%
- Others <1%

Source: Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.

![FIGURE 11 Sample breakdown by sector](image2)

- Machinery, Equipment, Furniture, Recycling: 18.62%
- Other Services: 13.79%
- Chemicals, Rubber, Plastics, Non-metallic Products: 13.33%
- Post, Telecommunications: 13.33%
- Wholesale, Retail: 13.33%
- Food, Beverages, Tobacco: 13.33%
- Agriculture, Mining, Natural Resources: 13.33%
- Gas, Water, Electricity: 13.33%
- Metals and Metal Products: 13.33%
- Construction: 13.33%
- Transport: 13.33%
- Others <3%

Source: Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.
We start our analysis by exploring how varying market conditions affect:

- the tradeoff between the necessity to maintain an adequate cushion of liquidity and the need to invest for growth, on the asset side; and
- the optimal balance between alternative sources of funds, on the liabilities side.

By looking at Figure 12, which tracks mean cash holdings (as a fraction of total assets) and leverage (i.e. financial debt over total assets) since 2004, it is easy to see two distinct trends that reveal how the financial crisis has marked a shift in the financing and investment policies of European companies. Approaching the crisis amid widespread confidence, year after year, European companies had been progressively reducing their cash holdings and increasingly relied on debt financing. On the assets side, as the level of the VSTOXX was reliably low, holding unproductive cash piles was unattractive. On the liabilities side, as the spread between the cost of equity and debt was on the rise, firms became keen to increment leverage as debt was relatively more convenient. At that time, the outbreak of the crisis was largely unanticipated and its severity as well as its prolonged duration were very much underestimated. Henceforth, since 2008, under the pressure of transformed economic conditions, companies have inverted their previous trends by building up precautionary non-profitable liquidity cushions, on the asset side, and by deleveraging their capital structure on the liabilities side.

In particular, since the outbreak of the financial crisis, firms have increased the share of cash on their balance sheet by on average of one-third, and reduced their leverage by approximately one-tenth as well.

Source: Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.
These observed shifts in the financing and investment policies of firms were not determined by the lack of investment opportunities but represent instead a response to the transformed economic environment. Indeed, Figure 13 shows how the same trends are confirmed if we consider different subsamples of firms formed on the basis of their average annual growth of total assets in the pre-crisis period, to proxy for different investment opportunities across firms. Along with the surge of widespread uncertainty, as the VSTOXX index became more volatile and its level exceeded the 30% threshold on several occasions, firms started to save cash and deleverage in order to face the downturn and funding shortages.

However, by looking in more detail at the liabilities side of the balance sheet not only do we find evidence of a clear post-crisis shift in firms’ financing policy, but we also observe a significant reorganization of sources of funds. In this respect, Figure 14 tracks the evolution of the relative contribution to total liabilities of respectively bank loans, corporate bonds and retained earnings. Two main trends are observable. First, post crisis deleveraging is mainly attributable to the repayment of bank debt and to an increased retention of earnings, accumulated after the distribution of dividends to shareholders. In addition, regarding the reorganization of financial liabilities, Figure 14 clearly shows a rising tendency towards the disintermediation of corporate funding, as companies were progressively replacing bank loans with corporate bonds.6

---

6 Disintermediation of corporate funding reflects the contraction in bank lending, which has accompanied banks’ efforts to recapitalize and to progressively comply with revised Basel III capital and liquidity regulatory requirements, as well as the unprecedented conditions in corporate debt capital markets. In particular, according to an investigation by Fitch Ratings on corporate funding in Europe, the drop in bank lending led to bond issues accounting for a near 40% of total new corporate debt issuance in 2013, up from as low as 20% in 2007. See Fitch Ratings (2014), Corporate Funding Disintermediation 2Q14, Credit Market Research, EMEA April.
The reorganization of liabilities is tightly inter-linked to the build-up of cash reserves, across the balance sheet. Figure 15 attempts to disentangle the absolute growth in cash holdings across two alternative channels: financial debt (which includes both bank loans and bonds) and retained earnings. In particular, the figure compares the growth of cash balances with the growth of alternative potential sources of cash, measured in absolute terms, from the beginning of year 2008 to the end of 2010, and from the beginning of year 2011 to the end of 2013.

During the height of the recession, from 2008 to 2010, cash balances grew by about 1.27 times the corresponding change in bank loans and bonds. This is consistent with the view that precautionary cash piles were built up in this first phase mainly through delayed investments, aggressive cost cuts and lower payouts. Indeed, according to Spearman’s test of correlations, which captures the implicit ranking of observations at firm level, growth in cash holdings from 2008 to 2010 is positively associated with growth in retained earnings (at the 1% significance level) and only weakly associated with growth in debt (at the 10% significance level). Nonetheless, comparative growth trends apparently indicate that more recent cash accumulation could be attributed instead to the particularly favorable market conditions (offering access to cheap debt) and only marginally to the modestly improving global economy. In fact, between 2011 and 2013 debt level grew by about 3.5 times the increase in cash balances. In addition, according to Spearman’s test of correlations, growth in cash is more reliably associated with growth in debt (at the 5% significance level) while it is unrelated to retained earnings.
Moving across the balance sheet, the necessity to build precautionary cash reserves has inevitably determined a shift also in the investment behavior of European companies, and more in general in their use of cash. Figure 16 tracks the aggregate volume of cash spent by companies in our sample, either investing for growth or returning capital to shareholders. After a prolonged period of rising cash spending, in 2009, in response to the transformed economic conditions, companies sharply reduced their capital expenditures for organic growth by delaying investments, shelving their acquisition projects, and downscaling their payout plans. This course of action helped them build the precautionary liquidity cushions they needed to face the crisis, but, since then, their spending has not yet fully recovered to its pre-crisis level despite the improved economic outlook.

Source: Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.

FIGURE 15
The alternative sources of post-crisis growth in cash holdings: absolute changes in financial debt and retained earnings in different post-crisis periods.

FIGURE 16
Investment and distribution policies (2004-2013): Capex (to purchase or upgrade fixed assets other than those associated with acquisitions) and M&A vs. dividends and share buybacks. (Volumes, € bn.)

Source: Thomson Reuters and Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.
By looking in more detail at the evolution of investment and payout policies in the pre- and post-crisis period, we find that there is apparently a link between corporate cash spending and the differential between the cost of equity and debt. In this respect, Figure 17 tracks trends in corporate cash spending, showing respectively how much of it is related to investment, by means of Capex or M&As, and the proportion associated to payouts to shareholders, via dividends or share buybacks. More precisely, we find that in the pre-crisis period, when the differential between the cost of equity and debt was high, payouts to shareholders progressively gained importance relative to investments for growth. In the wake of the financial crisis, however, companies significantly reduced both investments and payouts to shareholders, especially M&As and share buybacks. Indeed, we find that their individual contribution to respectively overall investments and payouts drops significantly post-2008. In addition, as the differential in the cost of equity and debt temporarily narrowed, spending cuts apparently affected the payouts to shareholders more than investments in relative terms. Hereafter, uncertainty about the economic outlook has inhibited growth in investment, especially with respect to M&As. Payouts to shareholders have instead progressively risen to the detriment of investments, mainly as a result of increased dividend distributions, but also driven by a slow recovery of share buybacks, as the differential between the cost of equity and debt resumed its pre-crisis level.

Among the alternative investment and payout channels, M&As on one side and share buybacks on the other seem to be the most exposed to shifts in extant economic conditions. Figure 18 provides a closer look at the links between volumes of M&As and share buybacks with our proxy of economic uncertainty and the spread between the cost of equity and debt.

Source: Thomson Reuters and Orbis - Bureau van Dijk. All constituent firms of the STOXX Europe 600 ex-financials Index are considered.
The willingness (or unwillingness) to put cash to use rather than to preserve it for precautionary reasons is a shared driver of both M&As and stock buybacks. Overall, periods of more uncertain economic outlook are associated with depressed activity on both sides. While share buybacks are seen as defensive actions and M&As are considered expansionary actions, and as such alternative uses of cash, both the former and the latter are functions of the solidity of corporate balance sheets, the strength of cash flows and the availability of credit.

However, M&A trends are relatively more sensitive to any shift in market confidence, because the effect of an acquisition on a firm’s performance is less predictable than with share buybacks. The result is that, in relative terms, economic uncertainty de-incentivizes M&As more than it discourages share buybacks, and vice versa. More precisely, economic uncertainty is less detrimental to stock buybacks as it works against long-term investment, whose effect is uncertain, and in favor of actions with more predictable impact, to optimally rebalance a firm’s capital structure and sources of financing, and to boost share prices and returns to shareholders as well.

Looking at deal volumes (as a percentage of total market capitalization) in the pre-2008 sub-period, when the barometer of confidence was high (i.e. when the VIX index was low), Figure 18 reports that M&A activity was substantially more intense than share buybacks. In addition, in the first part of the sub-period, both share buybacks and M&As advance amid confidence and growth in the differential
between the cost of equity and debt. However, when in 2008 uncertainty becomes substantial and companies turn more prudent, trends in M&As and share buybacks diverge. While M&A activity slows down, share buybacks grow sharply, supported by a record high spread between the cost of equity and debt. In principle, in fact, a large spread between the cost of equity relative to bonds pushes managers to appease shareholders’ appetite for returns by repurchasing shares. Indeed, the equity risk premium relative to bonds is directly linked to the magnitude of the beneficial impact of a share buyback program on WACC. So, to the extent such a program determines a reallocation of the weights of alternative sources of funds and a drop in the cost of equity, it is more attractive for corporations to purchase their equity when the spread between the cost of equity and the cost of debt is larger.

In the post-crisis period the need to preserve cash prevails and pre-crisis differences narrow substantially as corporate spending is cut and deal volumes of both share buybacks and M&As are subdued. However, as uncertainty slowly fades away M&A volume sluggishly rises, while the volume of share buybacks progresses in line with the relative cost of equity and debt: advancing when the gap between the cost of equity and debt widens (such as in 2010 and 2011) and dropping when it narrows (such as in 2012 and 2013).
How to re-optimize a firm’s capital structure and its investment policy: the impacts and interdependencies of different corporate actions

Having explored the most recent developments in the financing and investment behavior of European companies, our analysis now aims to isolate the specific impact of alternative courses of action that managers can take to reshape their balance sheets.

We focus in particular on a firm’s potential responses to the present need to optimize capital structure and invest for growth as the pressures to deleverage and maintain precautionary liquidity are progressively vanishing. More specifically, with regard to reorganizing sources of financing, the focus is on bond issues. Despite the variety of financing instruments currently available, we consider bond issues the most attractive source of funding given the extant bond market conditions. With respect to the uses of cash, instead the focus is on share buybacks and M&As, which are of a more exceptional and discretionary nature as compared to dividends and capital expenditures.

Given our objective, we collect data on bond issues, share buybacks and M&As by our sample firms in the period between 2004 and 2013 from Reuters’ Thomson One Banker database. Out of 437 firms in the sample:

- 236 issued at least one bond for a total amount of 1534 issues (of which only 8.2% were high yield) or €1.19 tn.;
- 86 embarked on at least one M&A transaction for a total volume of 132 deals (of which 60% were cash deals) and an aggregate value of €335 bn.; and
- 43 undertook at least one share buyback program for a total of 67 plans and an aggregate value of €67 bn.

Each of these firms, whether involved in either a bond issuance, an acquisition or a share buyback, is considered as actively reshaping its balance sheet. Accordingly, every year, to each one of these firms we matched an inactive control firm with the closest market capitalization among those operating in the same sector and located in the same country. Table 2 summarizes differences between active and control firms measured at the end of the year preceding a bond issue, an acquisition or a share buyback plan respectively. Active firms differ significantly from their corresponding control firms only in a few dimensions. Bond issuers are on average larger, more leveraged and less profitable than their control firms. Acquirers and firms involved in share buybacks are instead on average relatively more profitable than their control firms, but less inclined to make capital expenditures or dividend distributions.
To isolate the specific impact of each alternative action that managers can take to reshape the balance sheet, we took the variation in a few select financial indicators across companies actively involved in some form of reorganization and compared this change to their inactive control counterparts. A significant “difference in differences” would then be interpreted as evidence of the link between bond issues, acquisitions and share buybacks respectively and the observed variations in the financials of active companies. In addition, this methodology allows us to quantify the economic impact of each action and how it is affected by changes in the state of the economy and conditions of capital markets. To this end, we conduct our analysis for the whole sample as well as across separate sub-periods linked to the financial-crisis. In this way, pre-crisis effects, up to the end of year 2007, are compared to those of different post-crisis phases, namely between 2008 and 2010 (when the crisis was most severe) and between 2011 and 2013.

### The impact of bond issues to rebalance the sources and uses of funds

The first comparison involves bond issuers, whom we consider representative of companies more actively restructuring their capital structure and optimizing their sources of funds, and their corresponding control firms. Figure 19 shows the differential impact of a bond issuance on average cash holdings (as a fraction of total assets), bank loans (as a share of total liabilities) and leverage. Overall, companies that issue bonds report a larger drop in bank loans and a slower fall in leverage than corresponding inactive firms, while the proceeds from bond issuance apparently impact the accumulation of cash holdings only marginally. In particular, Figure 19 shows that the contribution of bank loans to total liabilities drops on average by 5% points more for bond issuers than for corresponding inactive firms. This substantially increases in the latter period, between 2010 and 2013, when credit market conditions were exceptionally supportive for disintermediation. Pre-crisis growth in leverage is approximately 2% stronger for bond issuers while in contrast post-crisis decline in leverage is lower. In addition, only in the most recent years growth in cash holdings (as a share of total assets) were approximately 1.5% points higher for firms issuing bonds rather than for their inactive counterparts.

---

To isolate the specific impact of each alternative action that managers can take to reshape the balance sheet, we took the variation in a few select financial indicators across companies actively involved in some form of reorganization and compared this change to their inactive control counterparts. A significant “difference in differences” would then be interpreted as evidence of the link between bond issues, acquisitions and share buybacks respectively and the observed variations in the financials of active companies. In addition, this methodology allows us to quantify the economic impact of each action and how it is affected by changes in the state of the economy and conditions of capital markets. To this end, we conduct our analysis for the whole sample as well as across separate sub-periods linked to the financial-crisis. In this way, pre-crisis effects, up to the end of year 2007, are compared to those of different post-crisis phases, namely between 2008 and 2010 (when the crisis was most severe) and between 2011 and 2013.

### The impact of bond issues to rebalance the sources and uses of funds

The first comparison involves bond issuers, whom we consider representative of companies more actively restructuring their capital structure and optimizing their sources of funds, and their corresponding control firms. Figure 19 shows the differential impact of a bond issuance on average cash holdings (as a fraction of total assets), bank loans (as a share of total liabilities) and leverage. Overall, companies that issue bonds report a larger drop in bank loans and a slower fall in leverage than corresponding inactive firms, while the proceeds from bond issuance apparently impact the accumulation of cash holdings only marginally. In particular, Figure 19 shows that the contribution of bank loans to total liabilities drops on average by 5% points more for bond issuers than for corresponding inactive firms. This substantially increases in the latter period, between 2010 and 2013, when credit market conditions were exceptionally supportive for disintermediation. Pre-crisis growth in leverage is approximately 2% stronger for bond issuers while in contrast post-crisis decline in leverage is lower. In addition, only in the most recent years growth in cash holdings (as a share of total assets) were approximately 1.5% points higher for firms issuing bonds rather than for their inactive counterparts.
We have two possible explanations for this latter evidence:

- The first is that since the cost of debt has hit record lows, it has become less costly for issuers to allocate a part of the proceeds for the build-up of precautionary liquidity cushions.
- The second is that it may indicate that some of the recent bond issues are to be attributed to firms with upcoming debt maturities who have refinanced their obligations to lock in favorable market conditions.

We now turn to the analysis of the inter-linkages across the balance sheet between sources and uses of cash. Companies use bond issues to restructure their liabilities and minimize the costs of financing, but the funds raised on the markets can also be used to finance investment and in some circumstances to remunerate shareholders. Figure 20 shows the differential impact of a bond issuance on investment, in terms of capital expenditures (as a fraction of total assets) and the likelihood of a firm to embark on an acquisition in the year of the issue or the following year. Indeed, bond issuers report on average relatively larger growth in spending than their corresponding control firms for investments in organic growth and are more likely to initiate an M&A.

However, Figure 20 indicates that the impact of a bond issue on capital expenditures and M&A activity can vary significantly across sub-periods, depending on the extant economic conditions. In fact, in the pre-crisis period a bond issuance proved to be an expansionary action which was accompanied by a significant boost in capital investment. But during the toughest phase of the recession, between 2008 and 2010, similar action primarily represented a response to the need to refinance debt and optimize capital structure, given the transformed operating environment. In such a period of subdued capital expenditure plans, with companies more focused on reducing debt and conserving cash, bond issuers cut capital expenditure on average only by only one percentage point less than their corresponding inactive
firms, while in the pre-crisis period they were expanding investment by on average 4 percentage points more. Only in the last period between 2011 and 2013 did bond issues start to provide new impetus for growth in capital expenses. Analogously, the figure shows that bond issuers were approximately 4.5% more likely on average than their inactive counterparts to complete an acquisition in the same year of the issue or the following year. However, this differential narrows in the post-financial crisis period when uncertainty hinders overall M&A activity and the proceeds of bond issues are destined for more conservative uses.

Finally, Figure 21 reports the impact of a bond issuance on payouts to shareholders, in terms of dividends (as a percentage of market capitalization) and the likelihood of a firm embarking on a share repurchase program in the year of the issue or the following year. Only in the last period between 2011 and 2013 did bond issues start to provide new impetus and more flexibility for the remuneration of shareholders via dividend payments. In addition, the figure shows that bond issuers are approximately 2% more likely than corresponding inactive firms to start a share buyback program in the same year of the issue or the following year. However, since the financial crisis, the willingness of companies to repurchase shares backed by a bond issue is apparently declining. A reasonable explanation could well be that, other conditions being equal, using debt for share buybacks entails a more significant reallocation of the relative weights of debt and equity and results in a more leveraged capital structure than using cash. This outcome is indeed less attractive when economic conditions recommend prudence, as has been the case in the post-2008 period.
Summing up, in the last few years bond issues have been playing a key role in providing firms with the flexibility to accommodate refinancing, deleveraging and disintermediation pressures. Now these instruments appear to be a valid way to finance growth and spur firms’ investments, as was the case in the pre-crisis period. In fact, unparalleled demand for yield by investors in bond markets and improved investment opportunities provide access to funding for a broader spectrum of companies with a renovated appetite for growth and a stronger disposition to invest.

Rebalancing uses of cash: are M&A and stock buybacks substitutes?
The above analysis of the past trends in alternative uses of cash seems to indicate that M&As and share buybacks are not mutually exclusive courses of action. However, they affect a firm’s balance sheet and profitability in very different ways. For a direct comparison of alternative corporate spending options, we now look at them in isolation to grasp their specific impacts and to assess how these vary under different market conditions.

We focus first on M&As. *Figure 22* captures the average impact of an acquisition on a company’s cash holdings (as a share of total assets) and leverage, by comparing acquirers and a sample of inactive control firms. In the analysis we generally consider both stock and cash deals, but to highlight the specificity of cash deals we provide in parallel specific evidence for a subsample compiled according to the method of payment. Overall, acquisitions are apparently only slightly more cash-consuming and not significantly accretive of leverage. Indeed, acquirers...
report on average a negative adjustment in cash holdings compared to their control counterparts. This effect, however, is significant only in the period preceding the crisis, when the differential is larger than 2 percentage points. In general, in fact, M&As are mostly financed by the issue of incremental debt in cash deals, or new equity in stock deals. Consistently, looking in more detail at the subsample of cash deals, we show how acquisitions are indeed accretive of leverage, by approximately 3 percentage points on average. In addition, there is an alternative explanation why the fewer transactions that occur post-crisis apparently have a less detrimental impact on companies’ cash holdings. In the last few years, since 2011, in response to increased uncertainty, firms have been more frequently using stock as the method of payment.

Figure 23 gauges the impact of an acquisition on a company’s profitability, in term of its return on assets (ROA) and its return on equity (ROE) in the subsequent period. In line with academic research on gains and losses from M&As,7 in the year in which the acquisition is completed and the following year, acquirers underperform with respect to inactive control firms. This is even more apparent if the deal was realized in the post-crisis period, when the economic outlook was more uncertain. Overall, acquirers revise their performance on average worse than the control firms they are paired with by approximately 2.5 percentage points with respect to return on assets, and by approximately 4 percentage points in terms of return on equity. Analogous evidence is observable in the subsample of cash deals. In either case, synergies take time to materialize and substantiate the rationale behind the transaction.

Source: Thomson Reuters and Orbis - Bureau van Dijk.

Figure 22
Rebalancing uses of cash with M&As: the impact of M&As on cash holdings (% of total assets) and leverage. Overall (left) and for the subsample of cash deals (right).

---

Finally, Figure 24 reports the impact of an acquisition on the soundness of a firm’s balance sheet, in terms of the Interest Cover Ratio (ICR) and the Liquidity Ratio (LIQR). Overall, and across all sub-periods, acquisitions are shown to be detrimental for debt sustainability while liquidity is apparently unaffected. The ICR of acquiring firms negatively spreads apart from that of their corresponding control firms by 2 percentage points on average. Consistent with this evidence, according to a Fitch Ratings credit market survey, a majority of worldwide fixed income investors, indicate that renewed M&A activity currently represents a source of risk for corporate debt holders, as the possible detrimental impact on ratings from additional debt can cause spreads to widen even for investment grade acquirers.\(^8\)

\(^8\) Fitch Ratings (2014), Calmer macro environment fails to move the needle on investor attachment to low interest rates, Credit Market Research, April 2014.
For a direct comparison of the alternative uses of cash, we now turn to the analysis of the impact of share buybacks on the same financial dimensions as above.

The impact of a share buyback program on a company’s balance sheet is more predictable, as it carries given effects with no uncertainty: share repurchases imply the distribution of cash and the reallocation of the relative weights of debt and equity in the capital structure of the firm. *Figure 25* summarizes the impact of a share buyback program on a company’s cash holdings (as a share of total assets) and leverage, by comparing buyback firms and a sample of inactive control firms. Consistently, firms that are involved in share buybacks comparatively report shrinking cash holdings and growing leverage. Overall, firms that buy back their shares report on average a negative adjustment in cash holdings compared to their corresponding control firms, equal to approximately 2 percentage points, and a commensurate growth in leverage. However, the relative magnitude of these two effects depends on the extent to which firms issue debt to repurchase their own shares. Accordingly, *Figure 25* shows how from pre- to post-crisis, the impact of share buybacks on cash holdings has progressively decreased, while the impact on leverage has grown as firms have resorted more notably to bond issues to repurchase shares, while keeping cash on balance.

![Figure 25](image)

*FIGURE 25*  
Rebalancing uses of cash with share buybacks: the impact of a stock repurchase on cash holdings (as a share of total assets) and leverage.

In terms of profitability, companies involved in buybacks over-perform with respect to their inactive control counterparts in the year the buyback is announced and the following year. *Figure 26* shows how in the pre-crisis period, for example, firms that repurchased their shares corrected their performance on average better than their control counterparts by approximately 2 percentage points with respect to both return on assets and return on equity. This effect, however, depends decisively on the differential between the cost of equity and debt and how the share buyback plan is financed. In line with this caveat, in fact, in the post-crisis period the benefits of share buybacks respectively dropped in terms of ROA and risen for ROE relative to the pre-crisis period, as firms financed their plans by using relatively less cash and more leverage. In addition, in the latest period when the differential in the cost of equity and debt were narrowing, the benefits of share repurchases were less significant.
Finally, on the basis of Figure 27, share repurchase programs do not seem to have any significant impact on either the Interest Cover Ratio or the Liquidity Ratio. For neither one nor the other is any significant difference reported across companies that are involved in a share buyback program and their corresponding control firms.
What is optimal for shareholders and when?

Our analysis so far has shown that the alternative actions that managers can take to put their cash to use are not mutually exclusive. What has also emerged is how different the impact of these actions can be, especially under varying economic conditions. Hence, in order to shed light on what the optimal use of cash is from the perspective of shareholders in different periods, Figure 28 reports the average abnormal announcement return associated with share buybacks and M&As respectively, overall and in different sub-periods.

In line with academic research on the subject, the market looks more favorably on buybacks rather than acquisitions.\(^9\) In fact, the abnormal return at the announcement is positive for buybacks and negative for acquisitions. On average, acquirers report a negative 0.32% abnormal announcement return, while firms announcing a buyback program earn a positive 1.38% abnormal return. In general, this reflects the fact that shareholders are better off if excess cash is returned to them through share buybacks which boost stock valuations and appease their appetite for returns. However, the latest period (between 2011 and 2013) saw favorable market conditions, restored confidence, and the necessity to revive scant growth in earnings. These factors concurred to make capital investment and acquisitions also relatively more attractive in the perspective of shareholders, whose mounting priority was the need to put inefficient cash to work. In addition, share buybacks have lost some of their previous appeal lately because better investment opportunities have emerged and the differential between the cost of equity and debt has shrunk.

In light of the considerations above, M&As and investments within Europe have been picking up the pace in the first semester of 2014.

The renewed drive coincides with a period of exceptionally favorable conditions in the European corporate bond market. Five years after their disappearance in 2008, covenant light financing opportunities (i.e. contracts that carry just one maintenance covenant) are again abundant. According to S&P Capital IQ data, approximately €8 bn. of European covenant light bonds were issued in 2013, and the same trend has been confirmed in the first quarter of 2014. Moreover, the development of the corporate hybrid bond market, which in Europe recently doubled in size with €27 bn. worth of new issues coming to the market, is also supporting this renewed activity. The rationale is that these instruments are very attractive for acquirers who want to preserve the strength of their balance sheet. In fact, while they carry a higher yield with respect to senior unsecured debt, to which they are subordinated, corporate hybrid bonds obtain partial equity credit by rating agencies. Thus they can serve as instruments for raising funds for acquisitions or investment without overly pressuring existing credit ratings. In particular, according to the estimates of corporate hybrid analysts at Société Générale, approximately 30% of hybrid issuance in the last 6 months of 2013 is related to M&A activity.10

Looking ahead, according to Fitch Ratings survey data,11 investors worldwide are confident that fundamental credit conditions in the markets for leveraged loans and corporate bonds, both high yield and investment grade, will not deteriorate. Only a few respondents indicate an increase in the interest rate as a risk factor, while the majority expresses concerns over a possible stock market decline instead. Corporate leverage is expected to increase modestly and the issuance of speculative and investment grade securities should remain strong. These expectations are in line with the view supporting a sustained deal flow both for M&As, as long as yields remain low, and for share buybacks, if the relative cost of debt and equity widens again with a slowdown in stock valuations.

Still, a potential reason for concern over forthcoming investment flows may be the materialization of a refinancing cliff in the near future, when all the issues that have fueled the reshape of corporate balance sheets since the financial crisis will mature and will need to be refinanced in a comparably less favorable environment. Indeed, according to study on European refinancing by Standard & Poor’s,12 approximately €1.3 tn. of debt instruments issued by European non-financial European firms are expected to mature by year-end 2018, by more than €200 bn. per year and with a peak of €300 bn. in 2014.

11 Fitch Ratings (2014), Calmer macro environment fails to move the needle on investor attachment to low interest rates, Credit Market Research, April.
12 Standard & Poor’s (2013), European refinancing study, Global Fixed Income Research, June.
As a result of the crisis, in the past few years companies in Europe and worldwide have significantly strengthened their capital structure by deleveraging, executing cost and capital expenditure saving programs, increasing their equity base and maintaining a prudent and conservative strategy. The result has been the accumulation of large cash piles for precautionary purposes.

Today, as the economy is slowly recovering and macro headwinds are losing power, scant growth in earnings and pressures from investors, who are now more demanding in terms of the optimal use of the accumulated cash piles, are solid motivations for firms to reorganize and optimize their capital structure as well as their investment policy.

In this third issue of the CAREFIN Bocconi position papers, we propose a reference framework to interpret corporate financing and investment policies in light of shifts in the economic environment and changes in the conditions of debt and equity capital markets. More precisely, by looking at the period between 2004 and 2013 we study for all the constituent firms of the STOXX Europe 600 ex-financials Index, how economic uncertainty, the cost of equity, the cost of debt and their differential affect the balance between:

- the need to invest for growth and the necessity to maintain an adequate cushion of precautionary liquidity;
- alternative financing instruments;
- the use of cash for M&A and the use of cash for disbursement to shareholders via dividend payments or share buybacks.