

DECEMBER 2015



The name is Cash, just Cash

Demystifying the “spectre” of record high corporate cash

J.P.Morgan

1. \$2.1 trillion and counting

Cash, cash, cash. Not a day goes by without investors, policy makers and the media highlighting the staggering cash piles on U.S. balance sheets. The numbers are indeed enormous; non-financial firms in the S&P 500, in aggregate, hold \$2.1 trillion of “cash.” To put \$2.1 trillion in perspective, it is higher than the annual GDP of all but eight countries. The confluence of a sluggish growth environment, memories of the great financial crisis, repatriation tax considerations and readily available access to capital markets has collectively driven this rise in corporate cash liquidity.

This staggering cash pile has led to a number of conventional assertions about corporate cash balances, only some of which we can confirm (but in many cases, with important nuances), and others which we can definitively refute. An important takeaway of our analysis is that there is not one but many different stories on cash. A few popular claims about corporate cash *...and our perspectives*:

1. Offshore cash growth alone has driven the cash build-up for U.S. firms *...in fact, both onshore and offshore cash have driven the build-up*
2. Large cash balances are a U.S. phenomenon because of the worldwide taxation of U.S. domiciled firms *...despite not having worldwide taxation, cash balances are also at high levels in other developed markets*
3. Large cash balances are mostly explained by trapped cash *...but firms with higher business risk also have larger cash holdings as protection against downside shocks*
4. Cash has increased uniformly *...growth rates of corporate cash vary significantly by sector*
5. Cash has ramped up at the expense of corporate investments *...firms with faster growing cash balances have not spent less on CapEx or R&D*
6. The Return on Invested Capital (ROIC) has been sustained at high levels *...but when we include cash, ROICs are declining*
7. Debt levels are up to compensate for trapped cash *...yes, but market value-based leverage ratios have been flat, or even decreasing*
8. Cash is cash in a bank account or a money market fund *...increasingly large firms are investing part of their cash liquidity in high quality bonds*
9. Firms earn virtually nothing on their “cash” *...because of their expanded investment choices, firms have been able to generate above cash returns on cash investments*
10. The cash build-up is a pervasive issue across all corporations *...in aggregate, cash balances are really an acute consideration only for the largest firms in specific industries*

What is the value of cash? A key topic of debate today is “why worry about record high cash balances, especially if having cash is a high class problem?” To the extent cash on corporate balance sheets is valued at face value, having more of it increases the value of the firm dollar for dollar. The issue, however, is that excess cash on a corporate balance sheet is often perceived to be valued at a discount to face value. If investors seek cash at face value, then they can hold it in a bank or money market account. To some extent, the cash discount is unavoidable due to the tax friction of returning cash (corporate repatriation tax and personal dividend and capital gains taxes). Another part of the discount comes from the fear that excess cash could be allocated to poor investments.

EXECUTIVE TAKEAWAY

With S&P 500 non-financials carrying \$2.1 trillion of cash today, investors, boards, and management teams are increasingly debating the appropriate amount of liquidity. They face a delicate balance. On the one hand, cash provides the ultimate downside protection. On the other hand, firms do not want to have a “lazy” balance sheet that lowers shareholder returns and increases the likelihood of (activist) shareholder pressure.

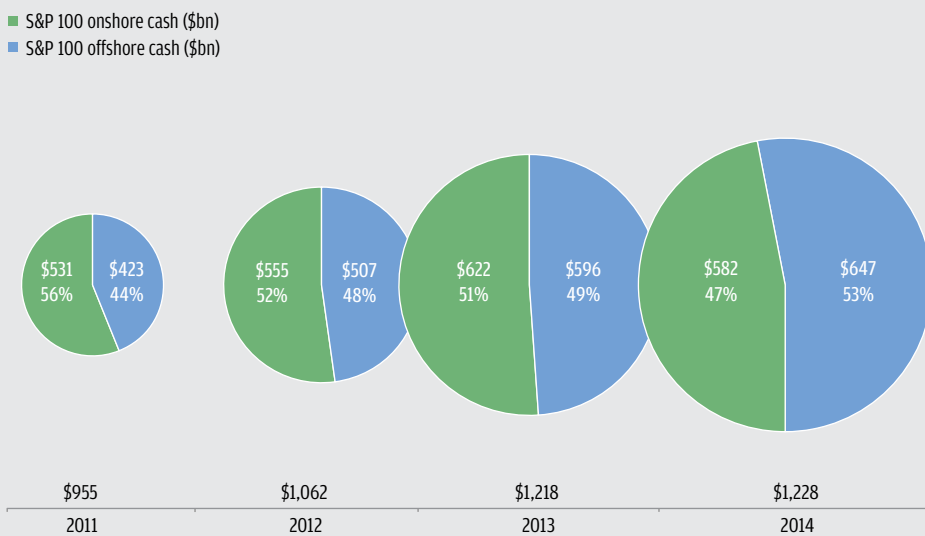
2. Ten facts to demystify the “spectre” of record high corporate cash balances

2.1 Onshore cash has increased, just not as rapidly as offshore cash

The combination of relatively higher overseas growth and the (tax) costs of repatriating offshore cash has propelled the offshore cash build-up at many U.S. firms. While offshore cash grew at 15% annually over the last three years for S&P 100 firms, onshore cash also grew for these firms, albeit at a slower pace of 3% annually (from \$531 billion in 2011 to \$582 billion in 2014, Figure 1). Due to its faster growth rate, offshore cash grew from 44% to 53% of total cash. Until as recently as 2013, onshore cash still comprised over 50% of total cash holdings. Going forward, the recent trend of sluggish global growth may tilt the balance back towards onshore cash. This reversal may be tempered, however, by drops in the domestic cash balances of natural resources firms, whose cash accounts have been mostly depleted as they continue to struggle with a major commodity down cycle.

Figure 1

Both onshore and offshore cash balances have grown, but offshore has grown faster



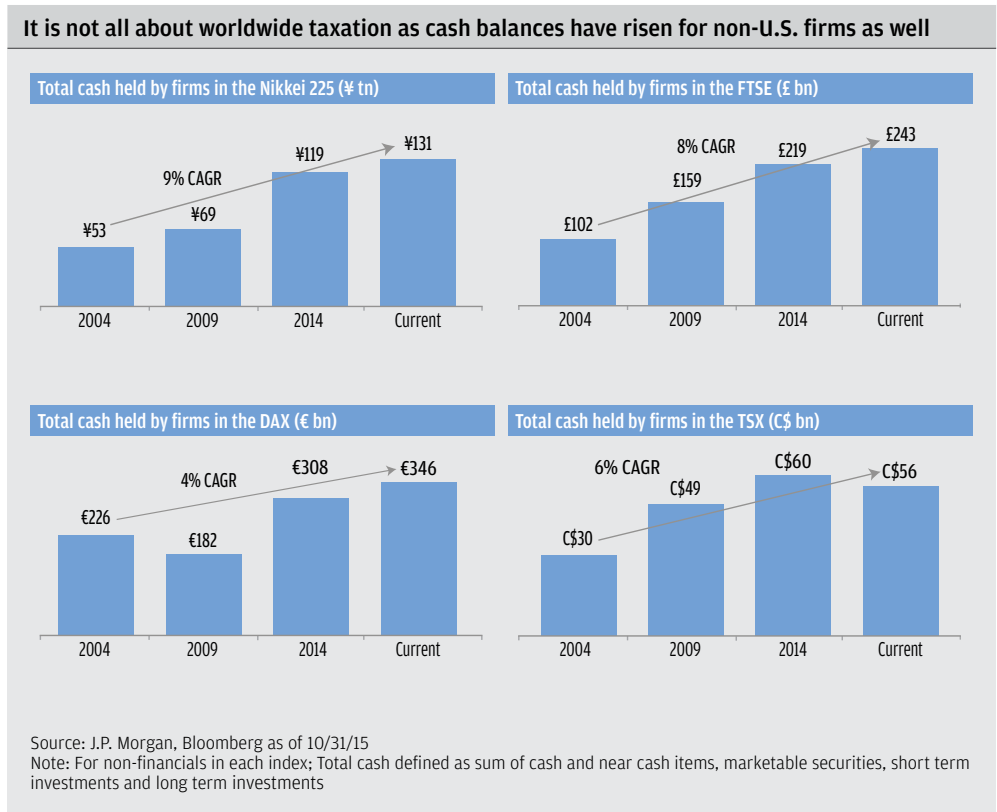
Source: J.P. Morgan, Bloomberg, company filings

Note: Shows onshore and offshore cash balances for S&P 100 non-financials

2.2 Cash has risen for non-U.S. firms too, despite their lack of worldwide taxation

Many point to the U.S. tax system as a primary culprit of the growth in cash balances. Intriguingly, cash has also accumulated at firms domiciled outside the U.S., despite such firms not being subject to worldwide taxation and repatriation costs. This trend does not appear to be related to firms in one particular geographic location. Over the last 10 years, cash balances have risen for firms around the globe (Figure 2). In some countries, such as Japan and Germany, the growth was more recent (post-crisis), while in others, such as the U.K. and Canada, the increase has occurred gradually over the last decade. Cash holdings have understandably declined over the past year in commodity-oriented economies, but overall they continue to grow worldwide.

Figure 2

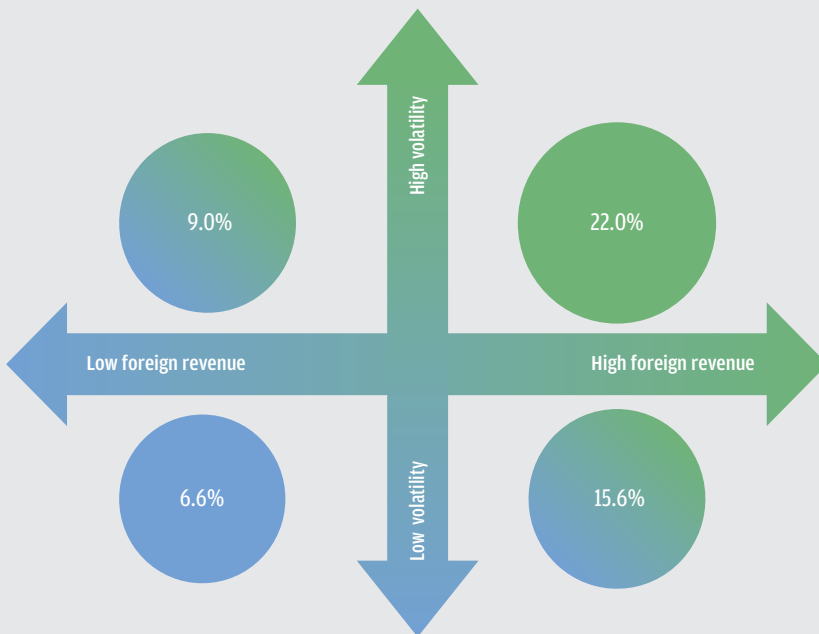


2.3 Firms with higher business risk hold more cash to protect against adverse shocks

A key reason for the cash build-up for U.S. firms in recent years has been the tax cost of repatriating foreign cash. As a result, firms with above median foreign revenue tend to hold approximately 2 to 3 times the cash of firms with below median offshore sales (Figure 3). Higher levels of cash may also be driven by increased management conservatism arising from the global financial crisis. Firms have always held cash for precautionary reasons, i.e., to protect against downside scenarios. For both low and high offshore revenue firms, we observe that firms with higher business risk (measured by stock volatility) maintain cash holdings about 50% higher than their lower risk counterparts.

Figure 3

Firms with higher volatility and foreign revenue tend to have higher cash to sales ratios



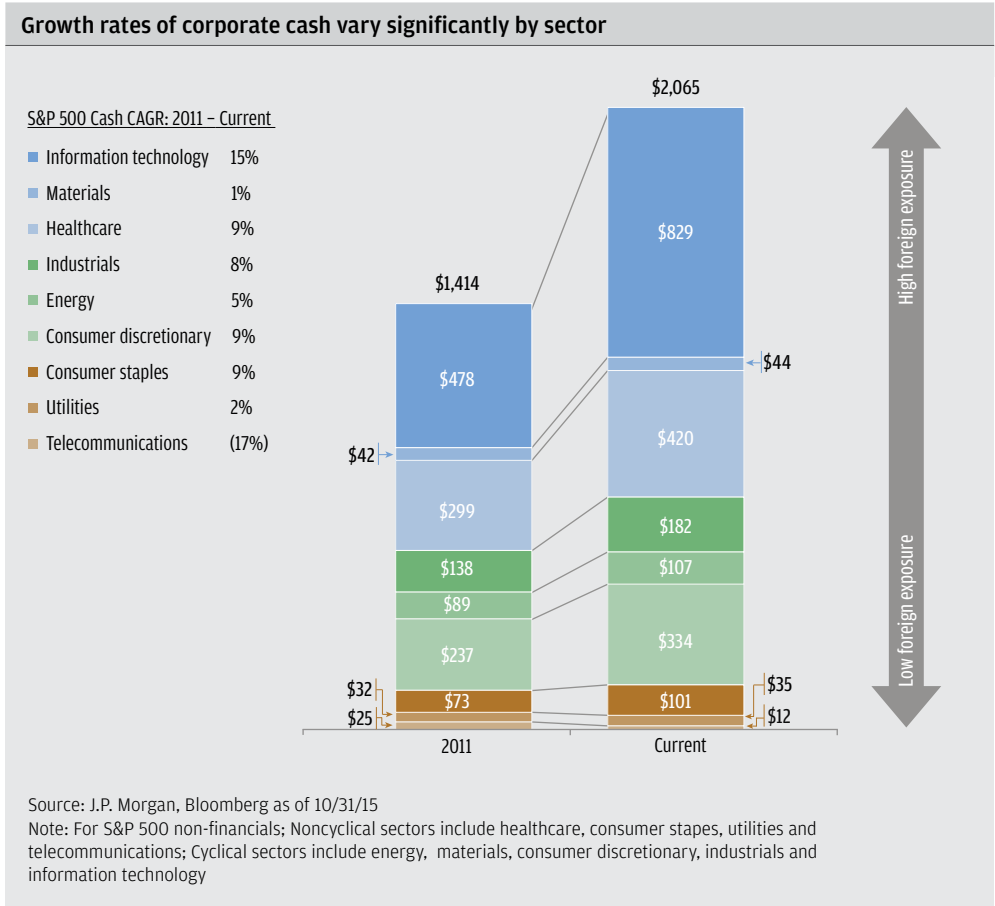
Source: J.P. Morgan, Bloomberg, FactSet as of 10/31/2015

Note: S&P 500 non-financial firms separated into four categories based on their ranking with respect to the medians for 30-day stock price volatility and percentage of foreign revenues

2.4 Cash may have increased, but it is a secular movement for only some industries

In aggregate, corporate cash balances have steadily ticked up in recent years. This increase has not, however, been a secular trend across all industries (Figure 4). Even among firms in sectors with significant overseas exposure, the growth in cash balances has been relatively muted in commodity-oriented industries such as materials and energy. Some primarily domestic industries, such as telecommunications and utilities, have also had no secular increases in their cash balances, with some companies in these industries even experiencing declines in their cash levels. Interestingly, both consumer staples and consumer discretionary firms have experienced high growth in cash balances, despite differing in the cyclicity of their businesses.

Figure 4

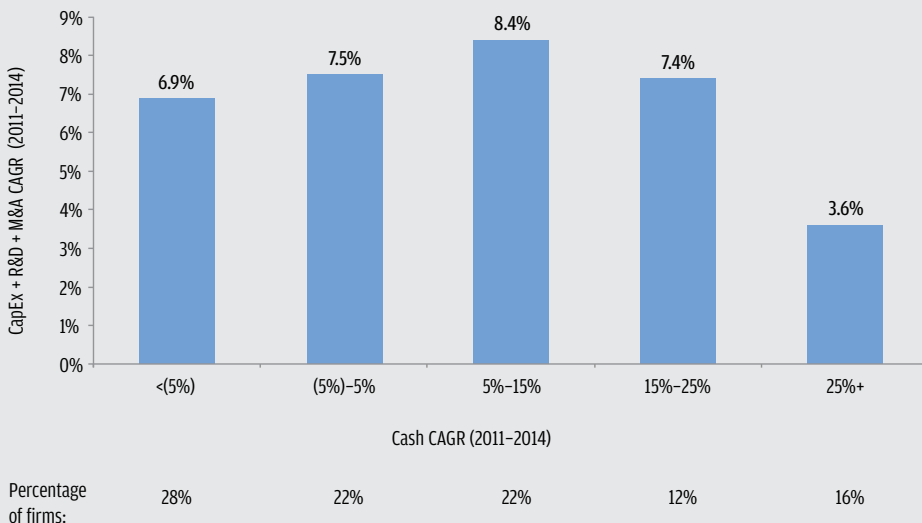


2.5 Cash has ramped up, but not at the detriment of corporate investments

Political and economic commentators often suggest that the buildup in cash has resulted in declining corporate investments. The data paints a more nuanced picture. First, for the majority of firms, combined capital expenditures, R&D, and M&A spending grew at a healthy 7-8% between 2011 and 2014 (Figure 5). Second, one of the lowest investment growth profiles was for firms that experienced cash balance declines, which supports the contention that these firms do not have sufficient internal cash flow generation to finance their growth. Third, it is only for firms where cash grew at over 25% annually in recent years (approximately a sixth of firms in the sample) that the growth in investment is lower than the other quintiles displayed below. For these firms, the cash buildup is likely due to the combination of strong free cash flow generation and the lack of attractive investment opportunities rather than due to firms cutting back on investments.

Figure 5

The growth in cash balances does not appear to have led to reduced CapEx or R&D



Source: J.P. Morgan, Bloomberg

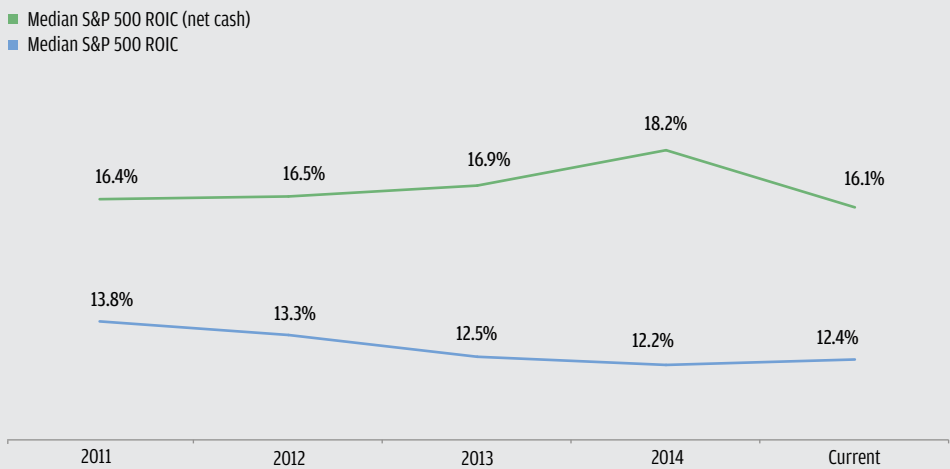
Note: For S&P 500 non-financials that reported cash, capital expenditure, research and development, and mergers and acquisitions expense in 2011 and 2014

2.6 Declining Return on Invested Capital, unless one strips out cash

A common measure to evaluate firm performance and capital efficiency is Return on Invested Capital (ROIC). The basic formula is typically defined as the net operating income after tax divided by the book value of invested capital. There are, however, many different definitions about how to adjust the numerator as well as about what to include in invested capital. With rising cash balances earning almost nothing, many firms have started to subtract cash from their invested capital denominator. The resulting lower invested capital leads to a 200-400bps improvement in the ROIC result (Figure 6). What is the correct approach? To measure the performance of the firms' productive assets like plants, stores, etc., it may be correct to exclude excess cash. To measure the performance of the entire firm, however, it is appropriate to leave invested capital as is. After all, cash is an asset, though one that is not earning much today. If firms hold significant extra cash on the balance sheet and this does not proportionately lower their cost of capital, their performance and valuation will suffer. As Figure 6 shows, the results differ significantly with or without cash. In recent years, ROIC appears to have generally decreased when cash is not taken out of the capital base but increased when cash is subtracted from invested capital.

Figure 6

Net of cash ROICs have remained around 16 percent, traditional ROICs have deteriorated



Source: J.P. Morgan, Bloomberg, FactSet as of 10/31/15

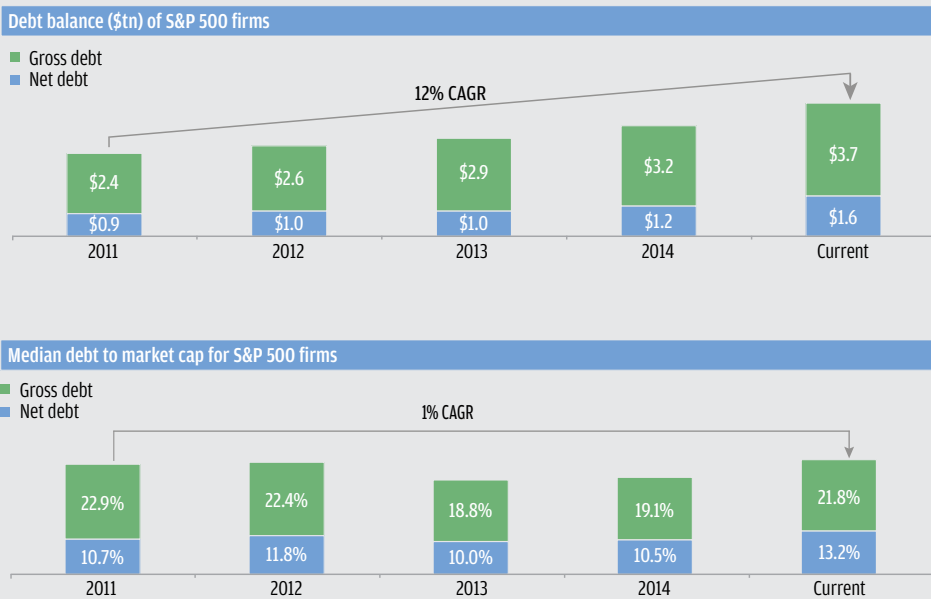
Note: For S&P 500 non-financials; ROIC calculated as NOPAT (operating profit less taxes) divided by the average cap (debt plus book equity) over the current year and previous year; ROIC (net cash) calculated the same as ROIC with cash netted out of the denominator

2.7 Debt has increased in line with cash growth, but not leverage ratios

The cash outlays of U.S. firms (particularly shareholder distributions) largely remain onshore. Increasingly, however, these firms generate cash flow offshore and elect to keep this cash offshore. This phenomenon creates a mismatch between the locations of cash generation and cash usage. As a result, in recent years, many global U.S. firms have raised debt domestically to accommodate this onshore cash flow deficit and satisfy their cash needs at home. Gross debt balances have therefore grown in line with overall cash growth (Figure 7, upper panel). It is important to note that this growth in debt levels does not necessarily mean that firms are more precariously positioned financially. Today's gross and net market leverage levels are comparable to their levels from five years ago (Figure 7, lower panel).

Figure 7

Higher debt levels to finance the deficit in domestic cash flow vs. uses



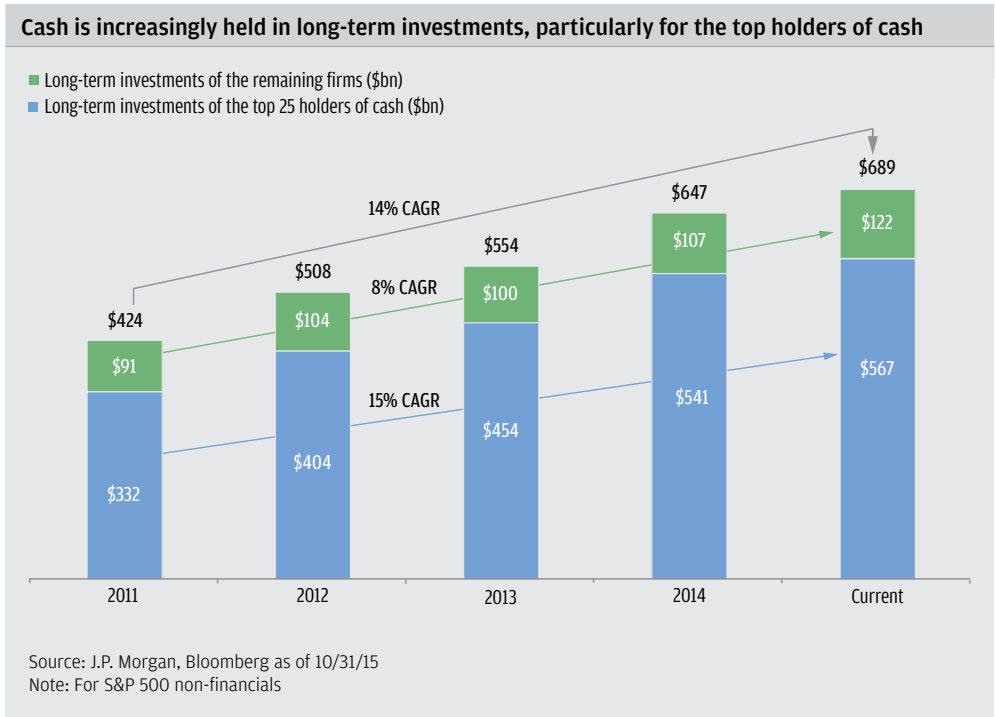
Source: J.P. Morgan, Bloomberg as of 10/31/15

Note: For S&P 500 non-financials; Gross debt defined as balance sheet debt including both short and long term issuances; Net debt calculated as gross debt less total cash; Ratios taken as respective debt balance divided by total market cap of S&P 500 non-financials

2.8 Cash is not just what is in the bank account

While the majority of corporate cash is still in bank deposits or money market accounts, prolonged low interest rates, surging, and quasi-permanent offshore cash balances and recent Basel III regulations have made these options less attractive for firms. As a result, firms are increasingly turning to long-term investments to augment the returns on their “cash” holdings. Such investments include not just longer maturity Treasuries but also high quality corporate debt. In recent years, corporate long-term investments have grown steadily at nearly 14%, much higher than the overall growth rate in cash (Figure 8). This growth has also been concentrated in firms with the largest cash balances. The growth rate in long-term investments is 15% for the top 25 holders of cash versus 8% for the rest. Even for firms without significant cash balances, the increasing presence of high-cash-balance firms as buyers of bonds in the investment grade debt capital markets is noteworthy as a source of market liquidity.

Figure 8

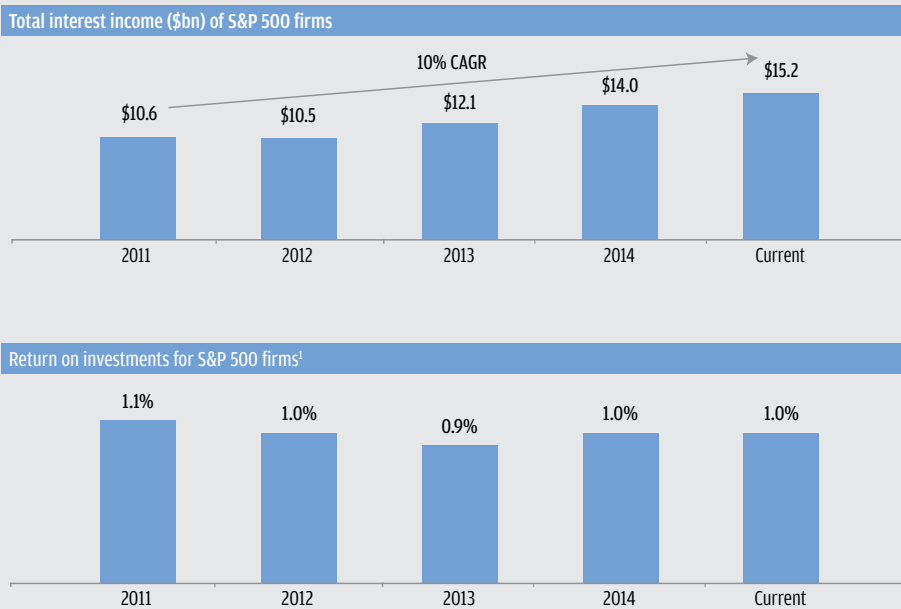


2.9 Firms obtained material returns on “cash” investments in this low rate environment

As firms have ramped up long-term investments, their interest income has increased. Interestingly, despite the prolonged low rate environment, we estimate that firms have been able to find investment opportunities yielding around 1% (Figure 9). This compares quite favorably to LIBOR levels of 20-30 basis points that firms receive on traditional cash holdings. These return levels pale in comparison to the potential returns from growth investments or share repurchases, which explains the constant investor focus on the allocation of excess cash.

Figure 9

Interest income meaningfully above traditional cash returns



Source: J.P. Morgan, Bloomberg as of 10/31/15

Note: For S&P 500 non-financials

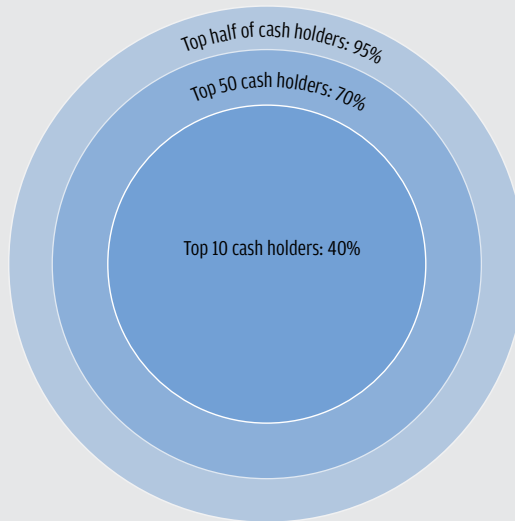
¹Assumes return on cash, marketable securities and short-term securities of 0%

2.10 The cash build-up is an acute consideration only for some firms

While cash balances have grown for firms across the spectrum, it is not a particularly severe issue for all firms. As Figure 10 shows, the **top 10 holders of cash in the S&P 500 hold 40% of all cash** held by non-financial firms in the index. The **top 50 holders hold 70% of the total cash**. This concentration among just a few firms suggests that despite the sluggish growth environment, most firms have been adept at finding suitable investment opportunities. Or, alternately, that many firms have capitalized on investor sentiment to return capital to shareholders and that trapped cash issues were not major for them. Overall, a majority of firms, albeit often smaller ones, have avoided excessively building up their cash reserves.

Figure 10

The top 10 cash holders hold about 40% of total cash on U.S. balance sheet



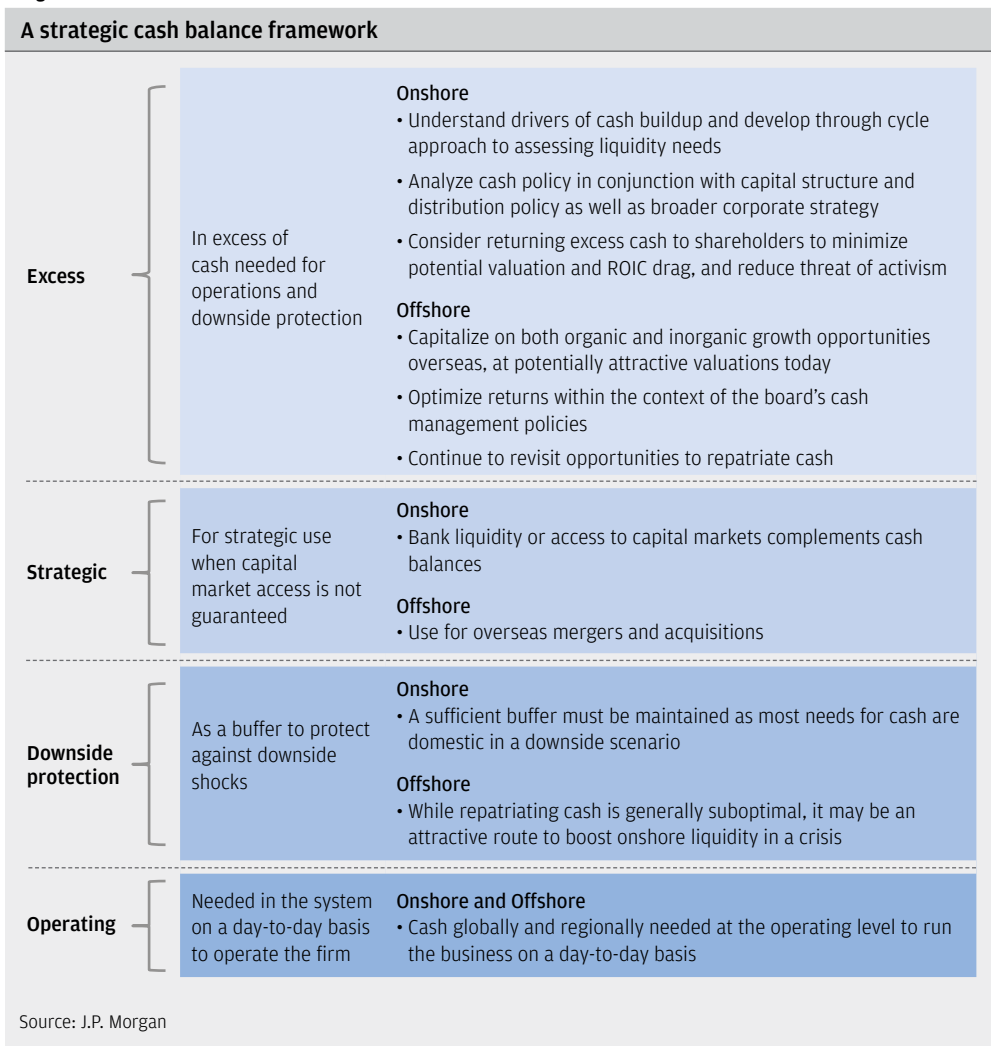
Source: J.P. Morgan, Bloomberg as of 10/31/15
Note: For S&P 500 non-financials

3. Developing and executing a strategic cash and liquidity policy

Generally speaking, the rise in cash balances is a challenge for firms, albeit a high class one, since cash build-up is often due to strong cash flow generation and business performance. The temptation exists to hold significant cash for downside protection and dry powder or to minimize the tax impact of repatriation. Firms must balance this desire with investor expectations for growth and capital return. As a result, boards and senior decision makers should continue to re-examine their capital allocation policies.

To ensure shareholder value maximization, firms must develop a plan that is tailored to their geographic distribution of cash, their expected outlays and forecast for the sector. This plan should also take into account the availability and reliability of bank liquidity. Figure 11 provides a strategic framework for evaluating various cash needs. Apart from rigorously evaluating their liquidity needs, firms also increasingly debate how much of this plan should be communicated to investors. While transparency may have some immediate benefits, it may also disclose competitive information or constrain the firm in the future.

Figure 11



EXECUTIVE TAKEAWAY

Firms can capitalize on rising cash balances and create lasting value by adopting a well-crafted capital allocation policy. It is important for firms to develop a plan that is appropriate not only in today's environment but also through economic cycles. Boards should take into account to what extent and how clearly their cash/liquidity policy should be communicated to investors and how much of the offshore cash build-up would be affected by a change in tax policy regarding repatriations. This approach is especially relevant with a paradigm shift in interest rates (and the broader macroeconomic environment) potentially just around the corner.

J.P. Morgan

J.P.Morgan