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M&A in Uncertain Times: Is There Still Value in Growing?*

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Preface

by Massimo Della Ragione
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Mergers and acquisitions represent an integral part of a company's corporate life and growth strategy. Through M&A, companies can access new areas of activity, expand their operations in attractive products and geographies, extract synergies and divest non-strategic businesses, all contributing to value creation for the benefit of all stakeholders. M&A is a permanent part of the corporate landscape and approximately 15% of the cash generated in the past 10 years by S&P 500 companies was used for external growth. Additionally, M&A volumes have totalled 6.5% of global market capitalisation on average over the past 30 years.

However, deal making has always been cyclical and, despite this long-term growth trend, global M&A volumes in 2012 have almost halved vs. the 2007 peak. This is due in part to a weak macro environment negatively impacting CEO's confidence and risk appetite, as well as to increased scrutiny by shareholders and regulatory bodies on announced transactions. Nonetheless, there are positive signs, and the current environment has highlighted a number of factors which have the potential to act as catalysts for increased M&A activity. Cost of capital for example is at historically low levels, and corporate cash balances are at record highs, driven by low interest rates and the limited use of excess cash for external growth.

We have seen a gradual slow down of these macroeconomic headwinds and companies appear poised to take advantage of attractive valuation levels and limited opportunities for organic growth. Finally, there has been an unprecedented amount of capital raised by activist shareholders, leading to increased shareholder participation and dialogue with company executives, often a driver of renewed activity in this space.

However, despite their importance and relevance in understanding M&A trends, the convergence of these positive factors alone is not sufficient to prove if there is value in doing M&A in these uncertain times. The thought-provoking analysis conducted by Stefano Gatti and Carlo Chiarella shows that external growth can represent a successful and value-accreting strategic move during periods of high volatility, in particular for those who, building on a strong and stable core business and ample financial capacity, have been disciplined in completing transactions with a clear strategic rationale.

A limited number of active buyers on the marketplace means that, provided that high standards of deal execution and due diligence are met, together with the ability to develop a repeatable acquisition model, and careful planning of merger integration, buyers have the opportunity to acquire businesses during turbulent times at favourable terms without compromising the company's financial stability, thus showing that deals undertaken in periods of high volatility deliver on average, a higher return.

We have seen this demonstrated with favourable stock market reactions to recent M&A transactions. Contrary to conventional wisdom (and historical reality), we have seen the share price of acquirors increasing in the wake of announcing large M&A in recent transactions. This highlights the strong support of equity investors to well conceived and smartly executed M&A as a strategy to complement corporate activity.

Goldman Sachs is delighted to co-host this important workshop with Bocconi University, aimed at bringing together corporates and investors and sharing the experience of top managers and consultants in the field of Mergers and Acquisitions.

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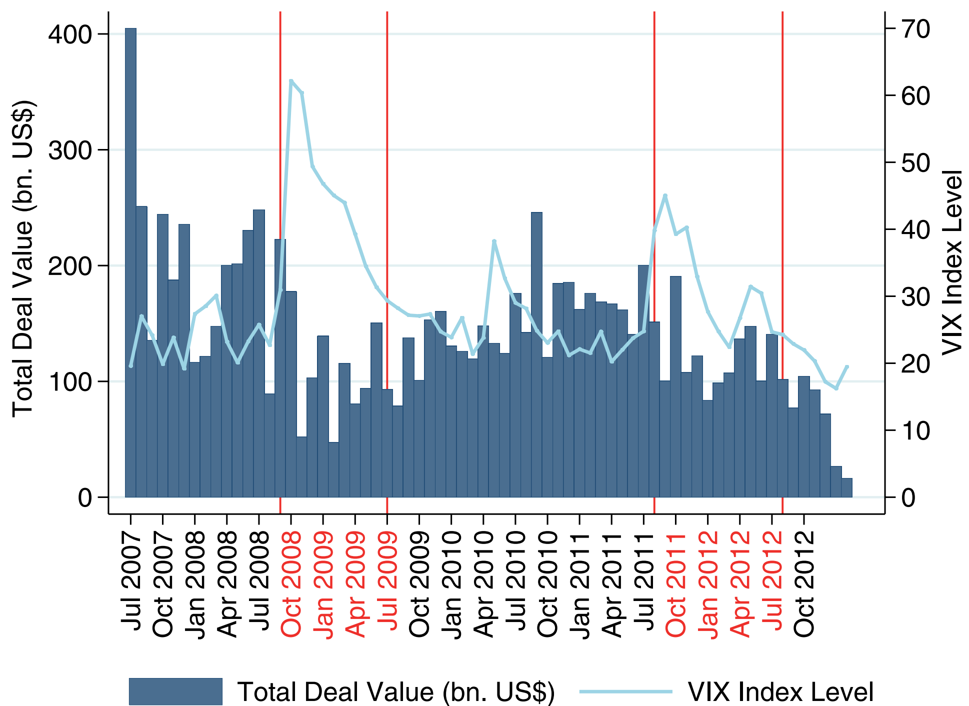
Introduction

It is common wisdom to consider time periods characterized by high levels of uncertainty and high market volatility as the least favorable for Mergers and Acquisitions. Top management is less confident about the future development of the business and more cautious about investing money in external growth for fear of an unpredictable change in market trends once the deal has been closed.

A recent survey by Hogan Lovell,[1] carried out on a large group of top managers worldwide, indicates that 9 in 10 companies identify economic uncertainty as a key barrier to investment; 62% also cite increased political uncertainty as an important issue, particularly for Eurozone countries. A lower level of confidence about the possibility to use M&A as an external growth strategy leads to the natural consequence of focusing more on organic growth or on restructuring the firm. Indeed, 88% of the firms in the Hogan Lovell survey predict organic growth in spite of three successive quarters of economic contraction. Organic growth is probably perceived as a less risky strategy than M&A, because the top management is in a better position to control the growth process if investments are made internally.

Figure 1 reports the value of completed M&A deals worldwide between July 2007 and February 2013. The chart also shows the values of the VIX index and identifies the periods characterized by high levels of uncertainty (i.e. conventionally those where the VIX index is higher than the 30% threshold).

FIGURE 1
Value of worldwide completed M&A deals (bn US$)
July 2007-February 2013

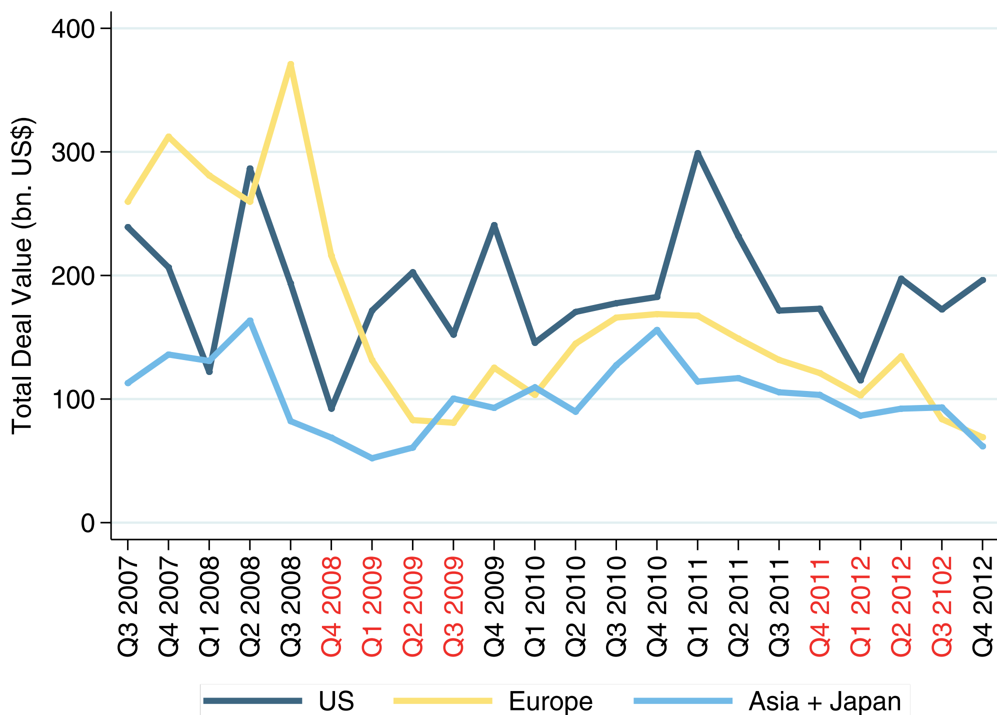


Source: Thomson Reuters

[1] Hogan Lovell (2012), Evolution, Profiting from Uncertainty, FT Insight, December.

It is easy to notice the inverse relation between the volume of completed deals and the level of VIX. Data looked at confirms the accepted wisdom that: higher economic uncertainty is not the ideal environment in which to consummate an M&A transaction.

While the first period of severe turmoil (October 2008 – July 2009) originated in the US and was unleashed by the demise of Lehman Brothers, the second (October 2011 – July 2012) was mainly driven by the Eurozone sovereign debt crisis. Indeed, the different causes of turmoil can be perceived more clearly by disentangling the global volume of completed M&A deals by region (see *Figure 2*).

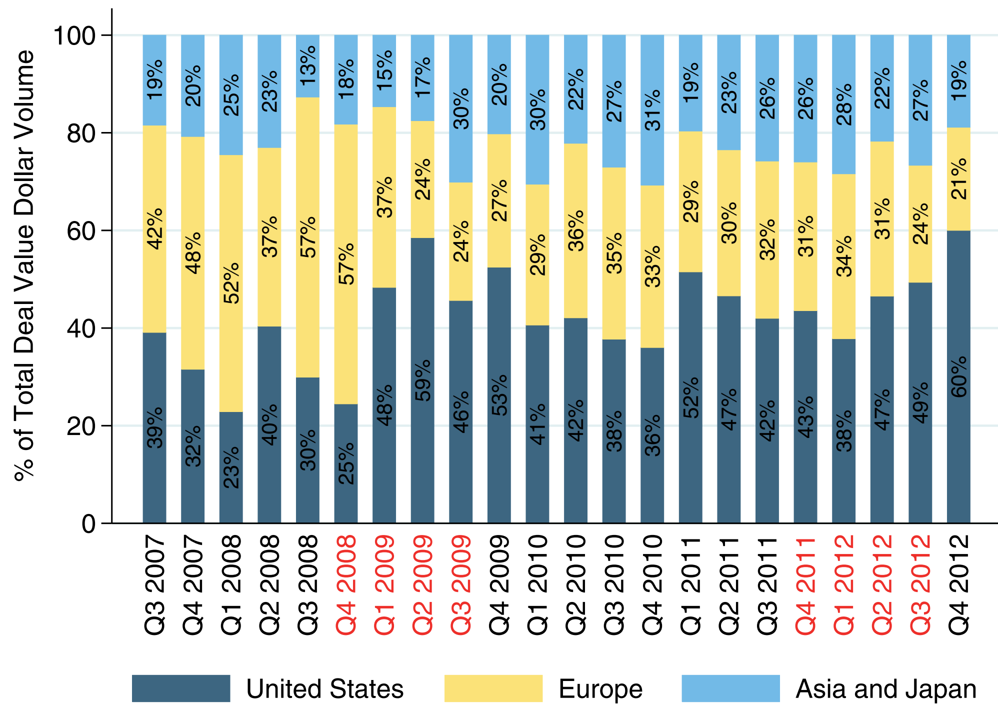


Source: Thomson Reuters

FIGURE 2
Value of completed M&A deals (bn US$) Q3 2007-Q4 2012

In *Figure 2*, we have allocated each deal based on the nationality of the bidder company. The chart shows a sizeable drop in the volume of completed deals in all the three continents in the first turmoil period Q4 2008-Q2 2009. However, while the US, Asia and Japan seem to reabsorb the shock quite rapidly, Europe is lagging behind. In fact, at the end of the period, the continent shows a far lower level of completed deals compared to the volumes during Q3 2007. Although in Q3 2007, Europe accounted for a remarkable 42% of the total volume of completed deals, this percentage dropped by half at the end of 2012. Conversely, the US has consistently rebounded after the lowest peak (23%) of Q1 2008 (see *Figure 3*).

FIGURE 3
Percentage breakdown by region Q3 2007-Q4 2012



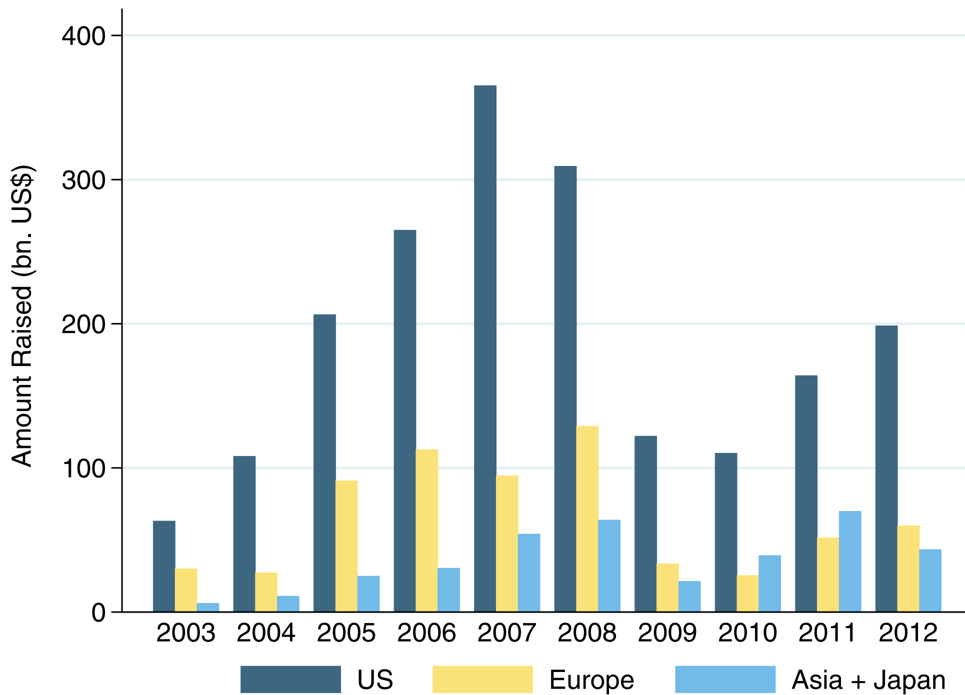
Source: Thomson Reuters

The reasons for different performances in the M&A markets in the US and Asia compared to Europe are manifold. However, three aspects seem very clear:

1. The cost of funding is at record lows and is benefiting from expansive monetary policy by the Federal Reserve.
2. Lower cost of funding helps the Private Equity market rebound. Fundraising volumes in the US and Asia/Japan have returned to 2005 levels after bottoming out in 2009-2010, while Europe is showing a slower recovery (see *Figure 4*). On the other hand, Private Equity vehicles have lengthened the holding period in response to more difficult markets for divestitures and lower exit valuation multiples.[2]
3. Lower cost of funding and the higher propensity of Private Equity vehicles to exit via trade sales are also pushing the best industrial buyers (those who emerged from the first turmoil of 2008-2009 with lower leverage and sound business models) to pursue an international growth strategy. These buyers are in search of good bargains in markets that are recovering at a slower pace. The Hogan Lovell Survey indicates that one-third of the interviewed companies in Asia and the US say they sense rising pressure from activist shareholders to invest their cash piles.

[2] Citi (2013), 2013 Corporate Finance Priorities, Citi GPS Global Perspectives & Solutions, January.

FIGURE 4
Private equity fundraising by region 2003-2012 (bn US$)



Source: Thomson Reuters

Incidentally, lower leveraged buyers can also exploit higher debt, given the favorable level of interest rates, without running the risk of a negative impact on ratings.[3]

Compared to the US and Asia, the European situation shows lower levels of confidence and a consequently depressing effect on the M&A market.

The apparent contradiction is that company fundamentals look good. After the collapse of Lehman Brothers, the best European corporations have massively de-levered their balance sheets, accumulating considerable levels of cash. At the end of 2012, Société Générale Cross Asset Research estimated that European Corporations are sitting on about 1 trillion euros in cash and short-term investments corresponding to slightly more than 9% of their total assets.[4] The ratio between financial debt and total assets has dropped from a 70% peak in 2008 to a well-balanced 50% at the end of 2012.

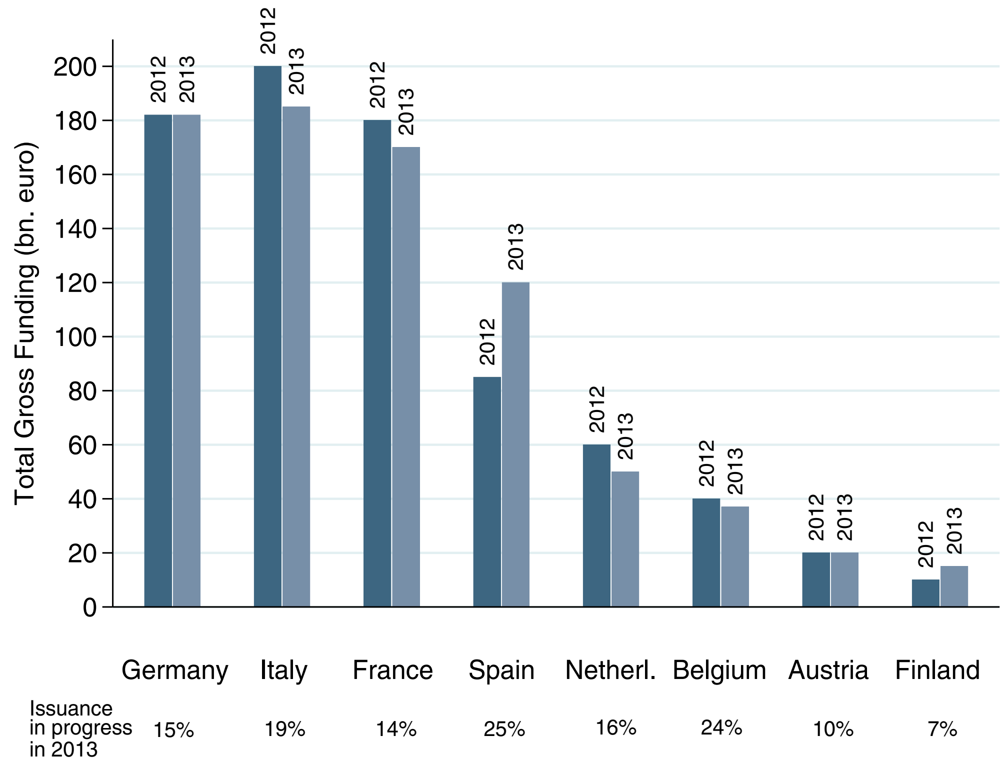
However, today corporations are forced to keep cash on hand for precautionary reasons rather than using it for capital expenditures over the next few years.[5] This is a reaction to bad macroeconomic performance in Europe coupled with an urgent need for cash due to the wall of corporate and sovereign refinancing and fear of future liquidity constraints.

[3] Standard and Poor's (2013), Another Active Year for M&A in U.S. Consumer Packaged Foods, Beverages, And Durables, RatingsDirect, February.

[4] Société Générale Cross Asset Research (2013), Outlook 2013 European Credit – Still Occupying the Sweet Spot, January.

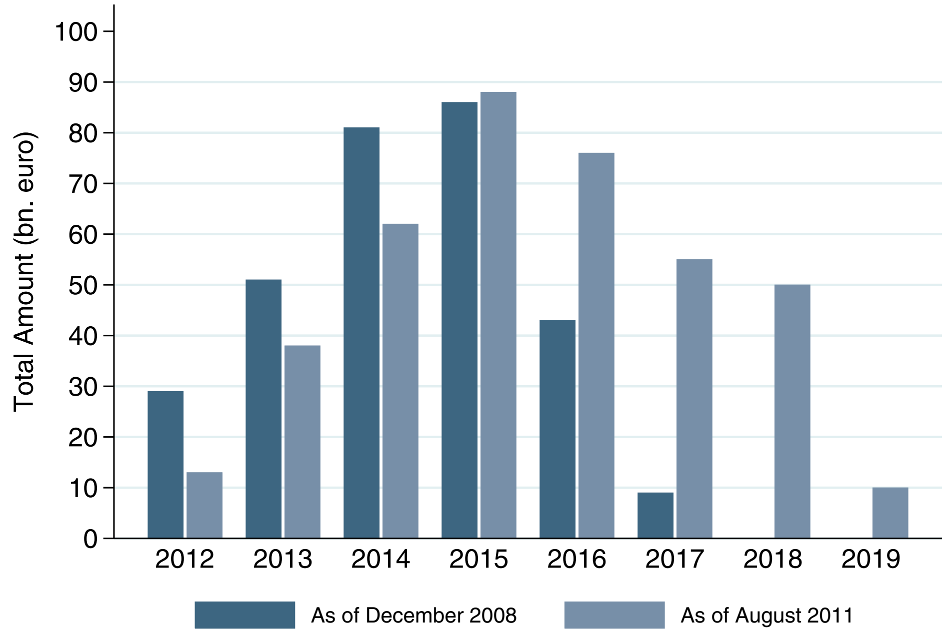
[5] Standard & Poor's (2013), Cash, Caution, And Capex - Why a Trillion Euro Cash Pile Is Unlikely to Drive a European Capex Boom, Ratings Direct, February.

FIGURE 5
Gross funding in some Eurozone countries in 2012-2013 (bn euro)



Source: SG Global Research

FIGURE 6
Scheduled European debt maturities by year for sub-investment grade issuers (bn euro) 2012-2019



Source: Probitas Partners

Société Générale Global Research estimates about 530bn euro refinancing of public debt for Germany, Italy and France alone in 2013 (see *Figure 5*).[6]

On the corporate side, Probitas Partners indicates a wall of refinancing for sub-investment grade issuers of about 220bn euro with a strong concentration in the 2014-2016 period (see *Figure 6*).[7]

It comes as no surprise, then, that the 2012 Debtwire Europe survey reported that a vast majority of respondents (65%) indicated that the key driver behind primary market activity in 2012 had to be refinancing. Less than one-third of respondents pointed to M&A, LBOs or growth activity. In 2013, the same survey reports that restructuring will be the key driver according to 43% of respondents. Interestingly, LBOs and M&A are cited by 53% of respondents. We interpret these results as a signal of growing awareness that external growth can be a successful strategic move even in turbulent times (provided that certain conditions are met). In the following section we try to understand why.[8]

[6] Société Générale Global Research (2013), Q&A for Eurozone Investors After the Italian Elections, March.

[7] Probitas Partners (2012), Private Equity Deskbook.

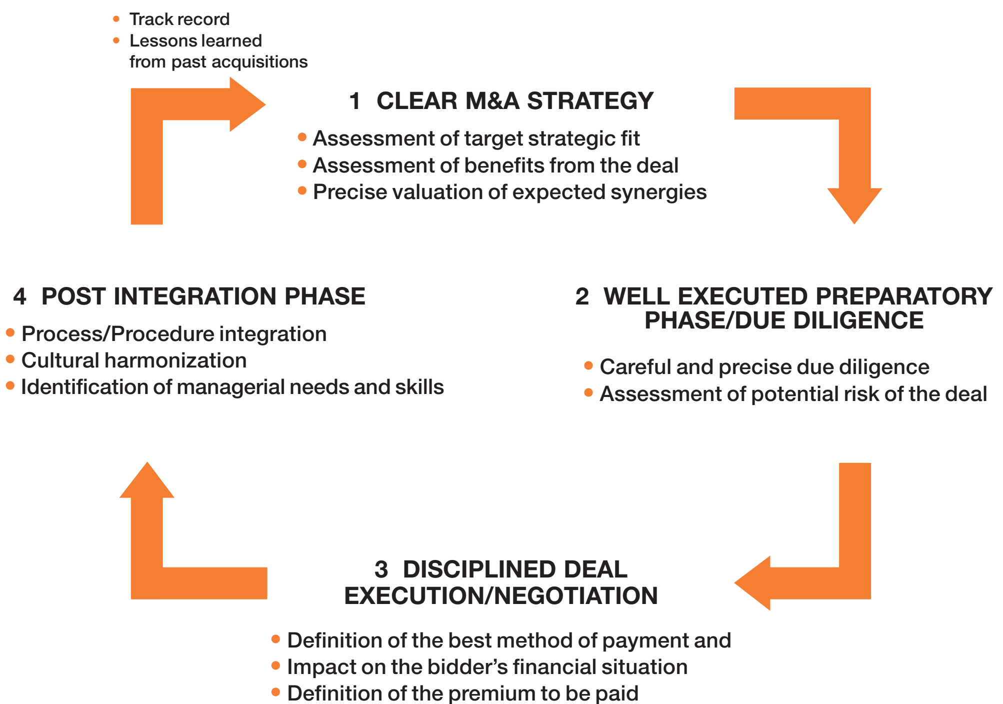
[8] DebtWire Europe (2013), European Distressed Debt Market Outlook.

Value Creation Through M&A: How does value creation change in uncertain periods?

Firms engage in M&A for a number of reasons that have been studied and documented in existing empirical literature. External growth, consolidation of market share, vertical integration, diversification of risk, but also less rational motivations like imitative behavior, empire building or managerial hubris have been cited as the most frequent reasons behind the conclusion of a deal.

While the underlying motivations typically mark the success or failure of the deal, undoubtedly the available evidence of successful cases indicates that a well-prepared acquisition strategy, together with a disciplined execution and post integration phase enhance the probability of generating value for shareholders. In addition, if the bidder is able to replicate the acquisition strategy in a consecutive sequence of deals, the probability of extracting value is even higher (*Figure 7*).[9]

FIGURE 7
The M&A process and key variables for successful transactions



[9] Harding, D.; Shankar, S. and Richard Jackson (2013), The Renaissance in Mergers and Acquisitions: The surprising lessons of the 2000s, Bain and Co. Internal Report.

Academic literature has identified different ways to judge whether a deal creates or destroys value. Suggested methodologies include the analysis of accounting measures of profitability and the soundness of cash flow generation. In addition, scholars examine the short-term effects on the price of the bidder and target stock when the deal is announced, or the long-term over- or underperformance of the stocks of the companies involved in the deal compared to a market index.

However, from a managerial point of view, the true measure of a successful M&A deal is the ability of the bidder to pay a lower premium than the expected synergies that can be captured from the transaction. In this case, market reaction to the deal announcement is very likely to be positive and, in the long run, the stock performance should be better than the one of the stock market index.[10]

Provided that the difference between synergies and the premium is positive, the risk for the bidder in obtaining the expected positive difference is the second element that determines the definitive success of the deal. This risk is determined, in the first instance, by the ability of the bidder to master the acquisition process (in terms of timing[11] and the preparatory phase, due diligence, negotiation and the post closing integration phase) and by two deal-specific variables:

1 the selected method of payment;
2 the relative size of the target compared to the size of the bidder.

The method of payment (cash, bidder's stock or a combination of the two) is crucial since it can send contrasting signals to the market. Empirical evidence unanimously recognizes that the announcement of a stock deal is systematically accompanied by negative abnormal returns for the bidder company on the announcement day, due to the overvaluation signal conveyed to the market.[12] On the other hand, a cash payment is frequently appreciated by the market on the implicit assumption that only very sound bidders have the financial strength to afford it. Moreover, only very confident managers will use cash in the deal in order to capture all the benefits of a positive difference between expected synergies and the premium paid to the target shareholders. Indeed, when a bidder pays cash, the only shareholders who will gain from the difference between synergies and premiums are the bidder's.

The relative size is the second factor that determines the risk of the deal. It is intuitive that the larger the size, given a certain percentage premium paid by the bidder on the target's stand-alone value, the bigger the bet the bidder's management is making in case the expected synergies do not emerge in the post integration phase.

[10] Mauboussin, M.J. (2010), Surge in the Urge to Merge: M&A Trends and Analysis, Journal of Applied Corporate Finance, vol.22, n.2.

[11] McNamara, G.; Haleblian, J. and Bernadine Johnson Dykes, (2008), The Performance Implications of Participating in an Acquisition Wave, Academy of Management Journal, Vol. 51, No. 1.

[12] Bruner, R.F. (2002). Does M&A Pay? A Survey of Evidence for the Decision Maker, Journal of Applied Finance, vol. 12, n.1.

Notwithstanding the fact that available literature has extensively analyzed risk and return for M&A deals, much less is known about how return and risk change in turbulent times. No doubt that when market conditions become less predictable, even the most successful bidders face greater difficulties in extracting value from deals:

1. First, past experience in successful deals is not always replicable in new transactions, given the changed, more uncertain context compared with the past. Past success or a consistent track record on past acquisitions does not necessarily lead to future success.
2. Second, in turbulent times, it is more difficult for a buyer to assess the fair value of the target, the expected value of the synergies and consequently to set a rational level of premium. All this is due to increased uncertainty about the future expected value of the target's cash flows and performance.
3. Third, a changed, less defined business environment can make it more difficult for the buyer to carry out post integration steps as originally planned.

If these factors seem to de-incentivize buyers from carrying out acquisitions in highly volatile periods, there are also good reasons to assert the contrary. In fact, crisis and volatility also create opportunities.[13]

The first reason is that in periods of higher uncertainty and volatility, only the best buyers can afford to pursue external growth strategies:

1. Best buyers can use cash if they want to do so because they are financially sound, and have low leverage and cash resources or unexploited credit lines readily available for acquisitions.
2. Best buyers are also in the best position to choose to pay in stock, because they can more easily convince sellers to accept a more opaque method of payment and save liquid resources for further expansion.[14]

The second reason that explains better opportunities is that best buyers wield higher bargaining power toward the sellers, and are able to extract more value and conclude the deal more rapidly and at relatively low prices. This theory is confirmed by the Hogan Lovell survey, where three out of five surveyed companies saw an opportunity to acquire a business during favorable conditions.

Third, best buyers can choose among sellers. They can shop around more easily and have the time and resources to select the best target on sale.

Table 1 summarizes the reasons that explain why there may be good motivations to think that better deals for buyers are consummated in periods of higher volatility.

[13] Citi (2012), 20123 Corporate Finance Priorities, Citi GPS Global Perspectives & Solutions, January.

[14] Chiarella, C. and Gatti, S. (2012), How Much to Pay, and How, for Opacity? Negotiating Premiums and Method of Payment in M&A, Working Paper, Università Bocconi, December.

TABLE 1
Opportunities and threats for M&A deals in uncertain times

Key process steps	Threats	Opportunities
1 Clear M&A Strategy	Past track record of success is not necessarily the key to success for future deals More difficult to estimate expected synergies	Bargaining power shifts to the bidders Increased opportunities to select among the best fitting sellers
2 Well-executed preparatory phase and due diligence	More difficult to assess risk (higher opacity)	Selected target likely to be a less risky investment
3 Disciplined execution of the deal/negotiation	Less freedom to impose the preferred method of payment More difficult to set a fair premium for the deal	Best buyers can use cash when needed (less financially constrained) Best buyers can more easily convince sellers to accept stock payments if sellers are carefully selected (see point 1)
4 Post integration phase	More difficult to proceed as originally intended if general market conditions change unexpectedly	Easier if the target has been carefully vetted in the previous phases

Volatility, Market Performance and M&A Deals in Europe Between 2001 and 2012: Some surprising lessons from turbulent market environments

The European market for M&A offers an interesting setting to observe the key trends in deal making in tough times. In this section, we provide an empirical analysis that covers 1,248 completed transactions. These transactions involve bidders and targets that are both based in Europe and listed on stock exchanges. The time period we analyze is from January 2001 to December 2012. We collect data on individual deal characteristics from Thomson One Banker for all completed M&A transactions with disclosed deal value by and for public firms, excluding equity carve-outs, self-tenders, exchange offers and open market-repurchases. Firm financials are retrieved from Thomson Datastream.

Deal value across all observations in our sample is on average $1bn and ranges from as little as $10mn to as much as $60bn. In more than half of our observations (638) the acquirer secures in the transaction a controlling stake in the target, which in most cases corresponds to full ownership (406), occasionally building on a pre-existing foothold (146). Residual observations are transactions for the acquisition of minority (314) and remaining stakes (296), respectively. The period we consider comprises three distinct intervals of significant turmoil: from July 2002 to March 2003 with the plunge of stock markets due to the Tech Bubble bursting; from September 2008 to July 2009 as a result of the credit crisis that followed the end of the housing boom in the U.S.; and Lehman's collapse and between August 2011 and 2012 as the crisis hit European sovereign debt. To capture varying market conditions we track the dynamics of volatility with the historical series of the Euro STOXX 50 Volatility Index (VSTOXX) which reflects market expectations of future volatility derived from real-time option prices for European stocks. From this perspective, we are able to differentiate transactions concluded in quiet times (948) from those in periods of high volatility (300), namely when the VSTOXX Index lies respectively below or above the 75th percentile of its historical distribution (i.e. above 30%). A closer inspection of the two subsamples reveals that the relative frequency of transactions for controlling, remaining and minority stakes is equivalent across groups; summary statistics on deal value are also comparable.

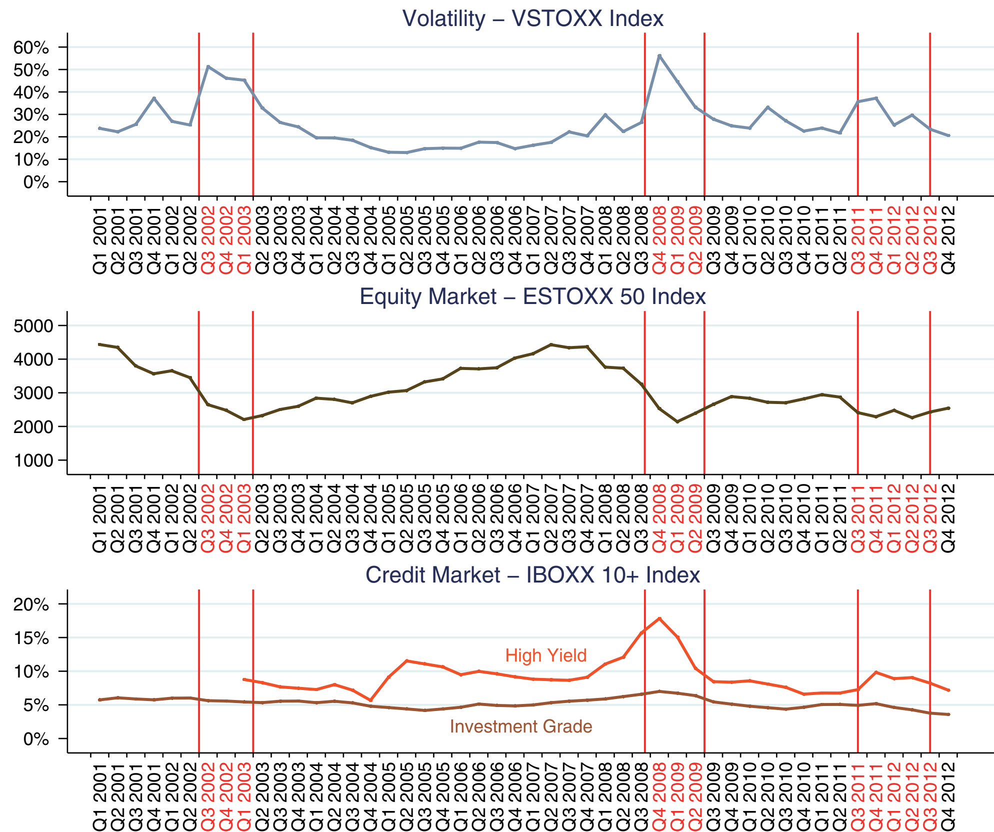
FIGURE 8
Volatility, number of deals and value of completed deals in Europe 2001-2012

Source: Thomson Reuters

As the first step in our analysis, we explore the link between volatility and M&A activity. In particular, *Figure 8* illustrates for each quarter in our sample period the aggregate volume of M&A transactions and the corresponding average level of the volatility index (VSTOXX). The three periods of market turmoil discussed above are marked with red labels and reference lines.

Peaks in the VSTOXX Index clearly capture the different periods of market turmoil. Consistent with the perception that the pursuit of M&A in volatile markets is risky, we observe a significant drop in deal volumes both in terms of overall transaction count and value. We assert that this effect is linked more to the challenging conditions for deal financing rather than to the lack of lucrative opportunities. In support of this argument *Figure 9* shows how changes in volatility reflect on markets for equity and corporate debt. The quarterly dynamics of the stock market are tracked by the level of the Euro STOXX 50 Index (ESTOXX). Instead, corporate bond markets for investment grade and high yield issues are captured respectively by the estimated percentage annual yield of the IBOXX Euro Corporates 10+ Index and the IBOXX Euro High Yield 10+ Index.

FIGURE 9
Volatility, European equity market performance and credit conditions in Europe 2001-2012



Source: Thomson Reuters

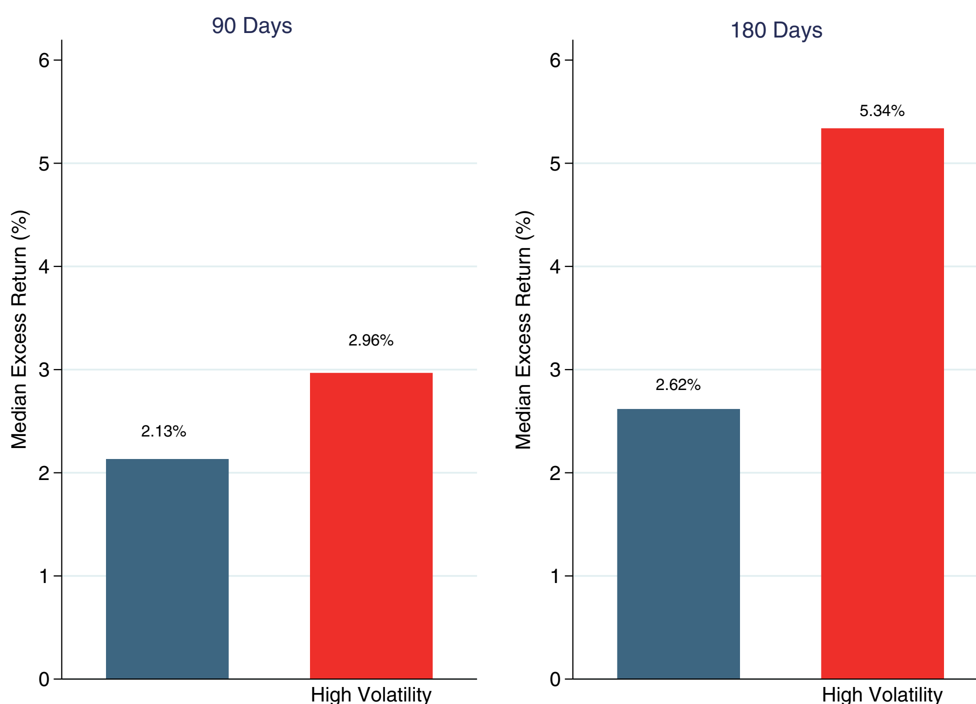
In periods of market turmoil, we note a drop in stock valutations, while the yields on long-term corporate bonds rose, especially for sub-investment grade rating classes.[15] Higher uncertainty might then curb firms' appetite for external growth, with the conditions for deal financing becoming less favorable. Consistent with our assertion in the previous section, that in periods of high volatility we expect to observe only transactions with a stronger rationale and more sound acquirers still going through.

Indeed, for firms that embark on M&A activity during periods of high volatility regardless, we saw remarkable opportunities and some important distinctive tendencies. *Figure 10* compares how much value is provided to shareholders, in excess of the stock market index (i.e. ESTOXX 50), by transactions completed both in quiet times and during periods of market turmoil.

We observe that deals undertaken in periods of high volatility deliver a higher median excess return, and the differential increases over the time horizon.[16] This trend is confirmed if we confine our analysis to the sub-sample of only the transactions for the acquisition of a controlling stake in the target firm.

[15] A possible explanation for the lower sensitivity of the yield on investment grade bonds to expectations on volatility is that the VSTOXX index indicates that volatility is expected to be high in the near future. Moreover, volatility is not expected to stay high for long but to eventually revert to the mean. Short-term volatility is unlikely to affect significantly the long-term probability of default of more creditworthy firms, while for sub-investment grade firms this volatility is indeed relevant and drives shifts in yields.

[16] The difference is statistically significant at 10% level based on the Rank Sum non-parametric test of hypothesis.



Source: Thomson Reuters

FIGURE 10
Acquirer post-announcement stock performance

Still the question remains: Where does this value come from?

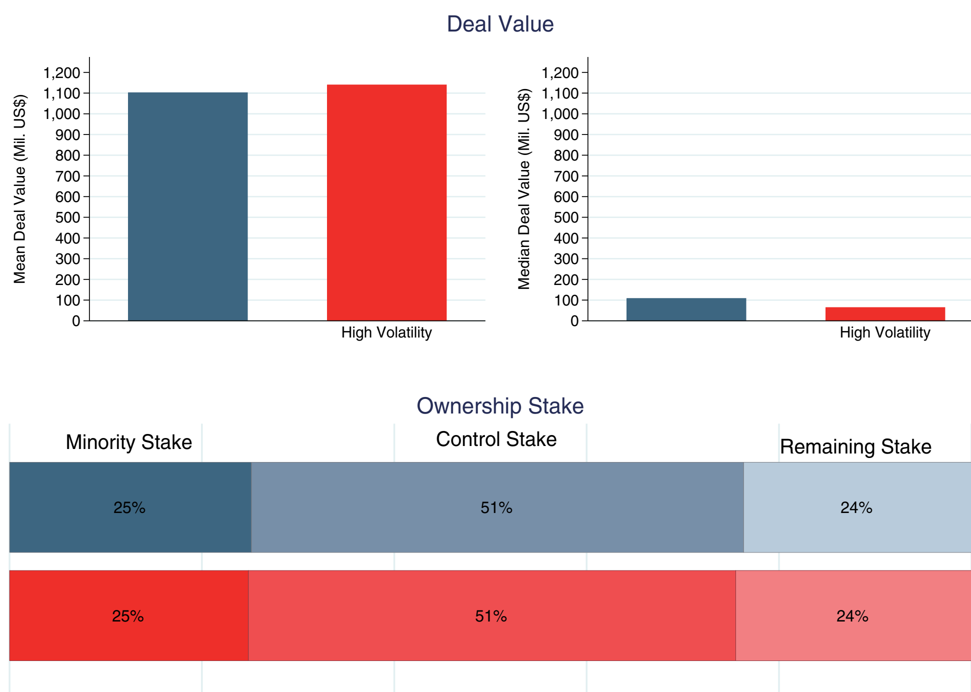
We have three potential explanations for value creation. We argue that the differential in value created for shareholders may be determined by the extent to which these three complementary explanations interact to shape transactions in tough times.

i) Different post-acquisition performance reflects systematic differences in deals originated in different environments. This explanation is consistent, for example, with the argument that in tough times only more prudent transactions with a stronger strategic fit are concluded.
ii) Return differentials are driven by specific characteristics of those companies comfortable with making an acquisition during volatile times, and of their chosen targets. This argument indicates that in any case (also in turbulent times) relatively rich and high performing firms embark on M&A and possibly select better targets.
iii) Better performance is the result of better deal execution. This third explanation, for example, points to a shift in bargaining power in times of high volatility, allowing bidders to negotiate more advantageous terms.

Let's start from our first explanation and focus on how the transactions that originate in volatile times differ from those in other periods. *Figure 11* aggregates deals

with respect to the market conditions in which they occur and compares deal size across groups. Mean and median sizes of transactions in periods of high volatility are equivalent to those in more tranquil times. Similarly, other deal attributes, such as the average percentage of ownership of the target that is acquired does not vary with increased volatility. The relative frequency of minority, majority and remaining stake acquisitions also remains unchanged, as well as the percentage of footholds.

FIGURE 11
Deal characteristics conditional on market conditions: deal size and ownership stake



Source: Thomson Reuters

On further inspection of deal characteristics, *Figure 12* shows the relative frequency of transaction attitudes in different periods and their corresponding fraction of aggregate deal value. Most of the deals are friendly both in volatile and tranquil times. Only very few transactions in our sample are hostile. Their aggregate deal value however is indeed relevant when volatility is mild, but it decreases dramatically when volatility turns severe. *Figure 12* also reports the geographic scope of the transactions in the sample. While the relative frequency of domestic and cross-border transactions does not change with volatility, the relevance of cross-border transactions in terms of aggregate deal value decreases significantly in volatile times. This trend is consistent with data from the Hogan Lovell survey according to which 56% of respondent companies forecast acquisitions in their domestic markets. This result is in line with the argument that rising uncertainty can trigger protectionist barriers from foreign countries. *Figure 12* also shows the relative frequency and the aggregate value of deals aimed at business diversification or specialization in periods of high volatility; as is apparent, these figures are equivalent for the most part to those in more tranquil times. No clear trend is observable as far as the strategic scope of the transaction. Again, our evidence is consistent with data from the Hogan Lovell survey according to which only about one-third of respondent companies consider the riskier idea of moving into new business sectors.

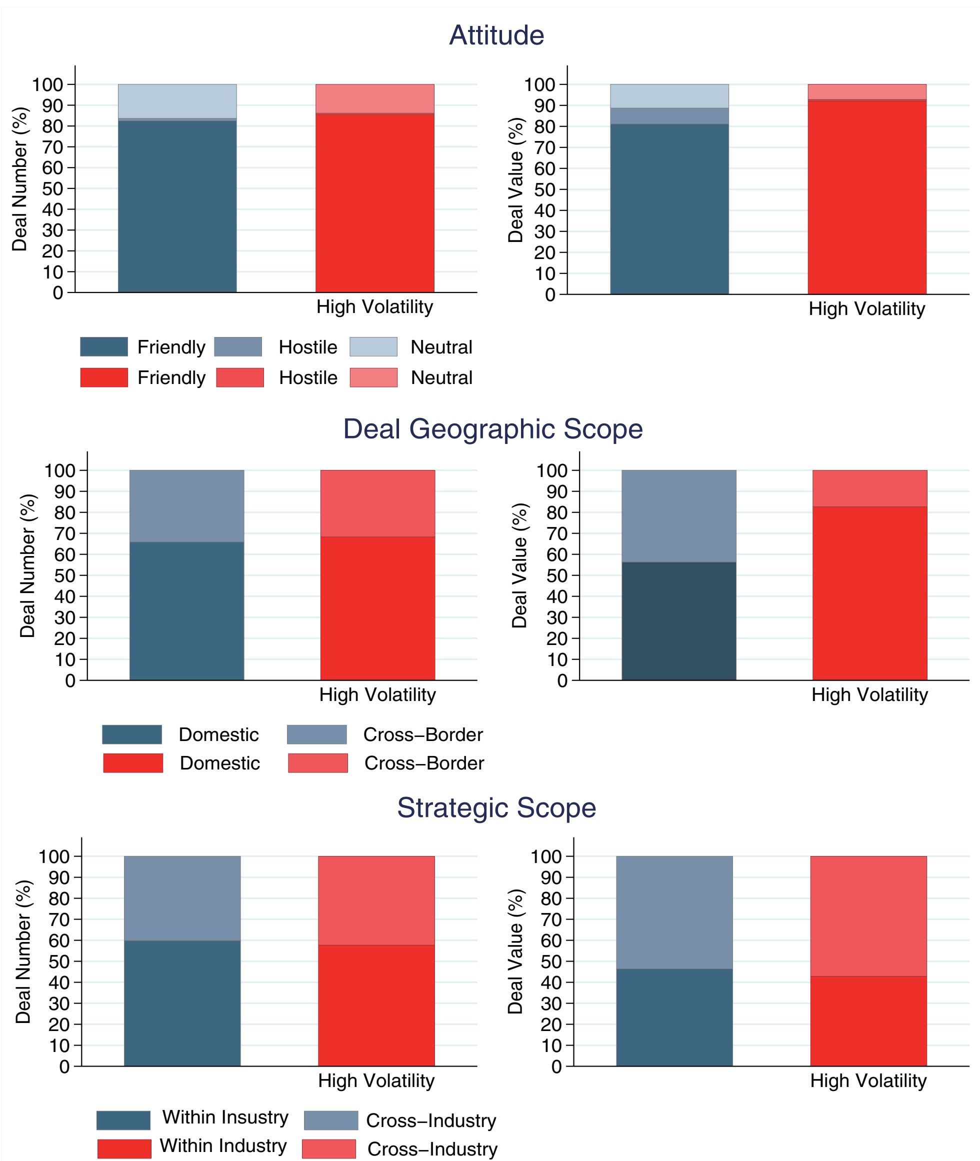


FIGURE 12
Attitude toward the deal; geographic scope of the deal; strategic scope of the deal

Source: Thomson Reuters

Overall, the higher median excess return in times of high volatility does not seem to be explained by systematic differences in deal characteristics.

We now turn to our second explanation and try to verify if during volatile times acquirers or their selected targets are different in high-versus-low volatility periods. We collected data on individual firm financials from Thomson Datastream for all acquirers and targets in our sample, and did the same for a controlled set of firms that matched acquirers and targets on the basis of industry and size, but that did not engage in any M&A activity. *Table 2* provides some summary statistics for targets and acquirers to highlight specific characteristics of firms involved in M&A conditional on volatility.

TABLE 2
Firm characteristics conditional on M&A activity and market conditions

Panel a. Acquirers

	Inactive Control Group		Active Acquirers	
	All (Mean)	**High Volatility (Mean)**	**All (Mean)**	**High Volatility (Mean)**
Total Assets ($ th.)	4,899,334.00	5,252,737.00	4,949,835.00	5,233,446.00
Growth	0.11	0.10	0.13	0.13
Sales ($ th.)	2,616,459.00	2,788,685.00	2,662,378.00	2,843,775.00
Growth	0.11	0.12	0.13	0.14
Price/Earnings	17.91	19.09	18.27	17.98
EV/EBITDA	9.80	10.23	10.92	11.34
M-To-B Value of Equity	2.09	2.13	2.09	2.04
EPS	1.25	1.30	1.43	1.37
ROE	0.10	0.10	0.11	0.11
Cash ($ th.)	251,850.90	281,380.20	247,066.10	237,680.10
Free Cash Flow ($ th.)	420,948.60	427,949.00	418,274.40	431,006.00
Leverage	0.25	0.26	0.24	0.24
Interest Coverage	10.55	8.75	9.99	8.25
Asset Intangibility	0.67	0.68	0.65	0.66

Panel b. Targets

	Inactive Control Group		Active Targets	
	All (Mean)	**High Volatility (Mean)**	**All (Mean)**	**High Volatility (Mean)**
Total Assets ($ th.)	2,922,157.00	3,112,246.00	2,988,759.00	3,155,718.00
Growth	0.10	0.14	0.08	0.10
Sales ($ th.)	1,662,310.00	1,805,841.00	1,726,818.00	1,852,457.00
Growth	0.11	0.17	0.09	0.12
Price/Earnings	19.08	17.30	19.78	18.45
EV/EBITDA	9.54	9.99	9.08	9.20
M-To-B Value of Equity	1.98	1.88	2.02	1.98
EPS	1.08	1.15	1.13	1.34
ROE	0.10	0.09	0.09	0.10
Cash ($ th.)	145,523.30	171,220.90	179,366.20	214,241.60
Free Cash Flow ($ th.)	242,351.00	304,936.00	245,327.80	261,503.00
Leverage	0.25	0.24	0.24	0.25
Interest Coverage	11.96	9.13	8.87	9.47
Asset Intangibility	0.61	0.66	0.63	0.66

Source: Thomson Reuters

Again, on average, deals executed in times of turmoil do not seem to differ considerably from other deals along any dimension which can explain the excess value delivered by transactions in volatile times. On average, regardless of market conditions, acquirers in our sample differ significantly from matched inactive firms with respect to their growth rate, their EV/EBITDA valuation multiple, and their EPS. In particular, statistical tests of the null hypothesis of equality of means across groups suggests that, with respect to their inactive comparables, acquirers are characterized by a faster growth rate of assets, higher earnings per share and a more gen-

erous EV/EBITDA valuation multiple. Still, we do not find any significant difference among acquirers based on different market conditions. Targets in our sample differ on average from matched inactive firms with respect to their growth rate and their profitability. Statistical tests of equality of means across groups suggest that, with respect to their inactive comparables, targets are characterized by a significantly slower growth rate of assets but higher earnings per share. When we compare targets conditional on market conditions, we find that those selected in tough times are growing at a significantly faster rate and gain significantly higher earnings per share. Overall, these slight differences do not seem to justify the higher value created in transactions in tough times.

Finally, we turn to our third possible explanation, i.e. value is created in volatile times thanks to better deal execution. In *Figure 13* we analyze the method of payment while in *Figure 14* we compare the premium paid with respect the target's share price one week prior to the announcement, and transaction multiples for deals in quiet and volatile times.

While the relative frequency of different methods of payments seems unaffected by the environment in which the transaction is originated, the aggregate deal value of cash transactions drops significantly in periods of turmoil. There are two mechanisms at work here. In general, while cash payment is relatively more frequent, it potentially accounts for a lower share of aggregate deal value. This is consistent with the fact that deals of greater materiality are more often settled in stock. Moreover, market turmoil magnifies this effect, as we observe that when volatility

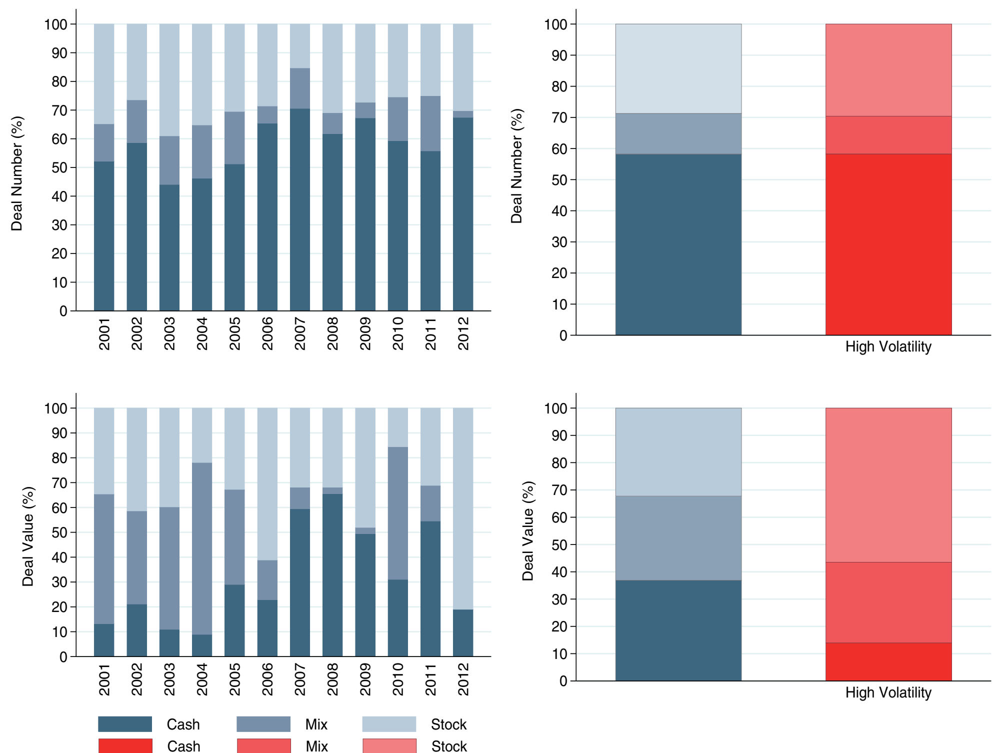


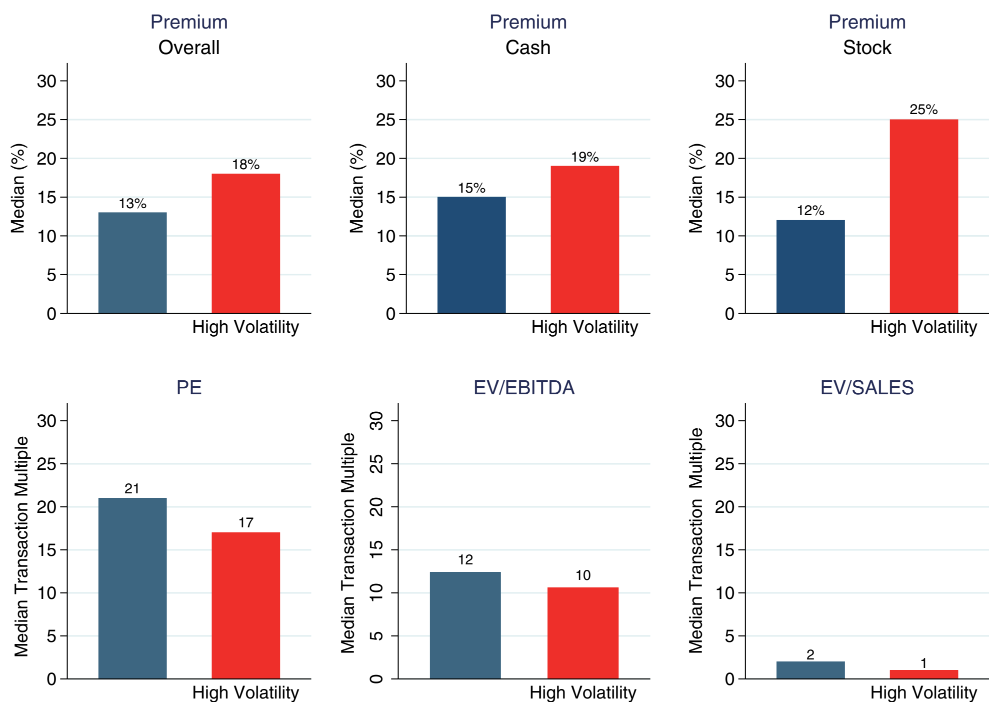
FIGURE 13
Deal execution/negotiation: the method of payment

Source: Thomson Reuters

is high the fraction of the total deal volume paid in cash drops, while the frequency is unaffected. We interpret this evidence arguing that rising uncertainty makes stock payments more attractive thanks to the benefits of risk-sharing from contingent pricing. This argument is stronger when deals are material, then we consistently saw only relatively smaller transactions being settled in cash during volatile times. An additional explanation could be that in periods of market turmoil, as shown in *Figure 9*, raising large amounts of debt capital to finance cash acquisitions through debt is less attractive. Another possibility is that in this uncertain environment acquirers prudently prefer to hoard cash. *Figure 9* also shows that equity values are lower when volatility is high. Still, we expect stock valuations that are conditional upon market volatility not to prevent acquirers from using stock as payment, as target shares may be even more undervalued. Or alterntively transactions in volatile times may be driven by a stronger synergic rationale.

For a given valuation of a target, the choice of payment method and the bid premium are closely related. Academic research has documented that the bid premium is on average significantly higher in transactions settled in cash. This can be attributed to the fact that the acquirer would reap all the synergies from the deal, and because of the unfavorable tax treatment of target shareholders' capital gains. *Figure 14* compares bid premiums conditional on different methods of payment and market conditions.

FIGURE 14
Deal execution/negotiation: target valuation and the bid premium



Source: Thomson Reuters

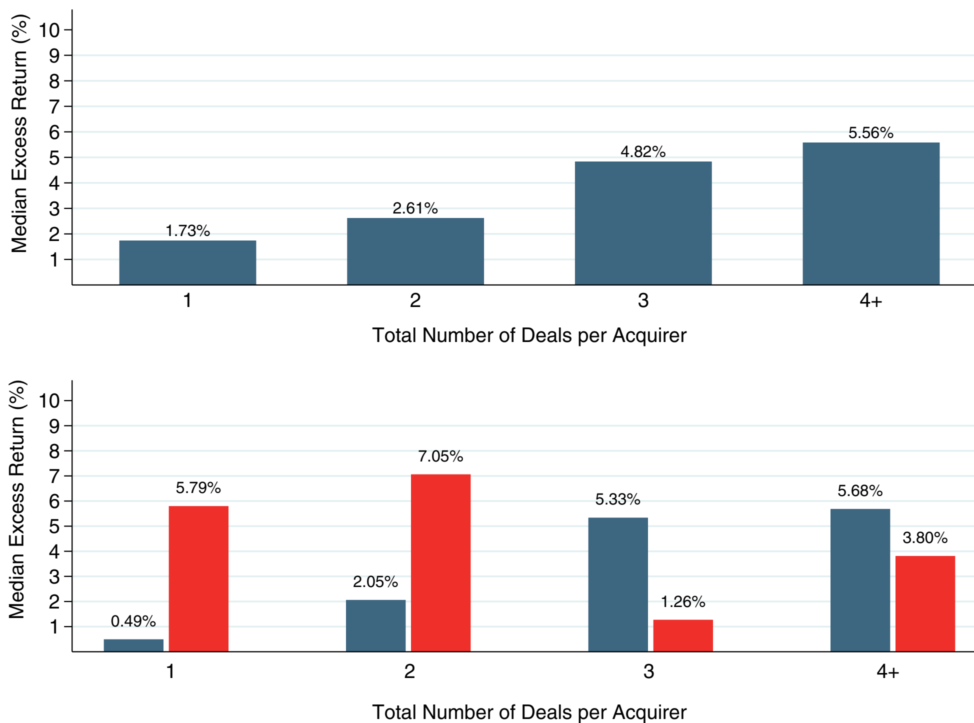
We observe consistently higher premiums paid in periods of market turmoil, regardless of the method of payment. However, while in relatively quiet times the prominence of premiums paid in cash over stock holds true, with market turmoil the order is inverted: the average premium paid in stock transactions is higher than that paid in cash transactions. When uncertainty is high, the benefits of risk-shar-

ing from contingent pricing make stock payments more attractive for acquirers who, because of less obvious synergies, may offer higher premiums to induce target shareholders to accept the transaction.

Figure 14 also reports average transaction multiples conditional on market conditions. We find that on average in periods of high volatility, even paying a higher premium, acquirers are able to successfully complete the transaction at a comparably attractive valuation. Results are comparable across alternative transaction multiples, namely PE, EV/EBITDA and EV/SALES. This trend reflects the promising opportunities that arise in volatile times and the increased bargaining power of acquirers, which potentially translates into better execution and higher overall performance. Diligent negotiations might then partly explain the excess value created by transactions executed during tough times.

If better execution is a driver of value for transactions in volatile times, the next step is to expect repetitive acquirers to deliver on average better acquisitions, especially in periods of turmoil. *Figure 15* shows value to shareholders in deals classified by intensity of acquirer activity.

FIGURE 15
Best practices from replication: value creation conditional on market conditions



Source: Thomson Reuters

Consistent with the notion that execution is crucial, we observe overall that deals undertaken by repetitive acquirers deliver increasing median excess return. Past success or a consistent track record of past acquisitions leads to better performances. Still, focusing on transactions in volatile times, more experienced acquirers do not seem to have a constant relative advantage. This evidence is consistent with the notion that past success might be hard to replicate in transactions in a different and more uncertain context.

Looking Ahead

Our analysis has shown that external growth can be a successful strategic move even in tough times, provided that certain conditions are met. In this spirit, the current climb in equity prices and the favorable borrowing conditions for deal closing can indeed represent two important drivers of future deal flow. Managers looking for external growth and investment bankers acting as financial advisors can look at M&A with cautious optimism, in spite of the fact that uncertainty still characterizes negotiations on price and value.

In this context, and as documented in previous sections, pragmatism in deal negotiation and execution is crucial. Strategically defining the bid premium and the method of payment, are key success factors for gaining the confidence necessary to close a transaction. In particular, contingent payment methods might well be the right device to bridge information asymmetry between buyer and seller. From the perspective of the acquirer, uncertainty predominantly reflects overpayment risk associated with overvaluation of the target. According to academic research[17] on negotiating premiums and methods of payment conditional on acquirer and target opacity, when deal materiality is high, stock payment is preferred for the acquisition of opaque targets. However, in times of market turmoil uncertainty associated with synergies increases even more. In this case, event-driven contingent payments, such as contingent value rights, warranties and earnouts,[18] are best suited to address synergic uncertainty. On the other hand, for the target, uncertainty is related to assessing the value of the bid when stock is offered. Uncertainty on the realization of synergies makes it harder to detect bidder stock valuation, exposing targets to the risk of realizing ex-post a lower value from the transaction. Also in this case option-like instruments could become key success factors to overcome a target's reluctance to close a deal in tough times.

Looking forward, how long is this window of opportunity going to last? Can we expect financing conditions to remain as favorable as they are now? Aside from the lively ongoing debate regarding the next shifts in monetary policy, the discussion is intensifying on whether and how the implementation of the new restrictions imposed under Basel III would affect M&A activity by tightening credit or hampering economic recovery.

[17] Chiarella, C. and Gatti, S. (2012), How Much to Pay, and How, for Opacity? Negotiating Premiums and Method of Payment in M&A, Working Paper, Università Bocconi, December.

[18] Battauz A., Gatti, S., Prencipe A. and Luca Viarengo (2012), Earnouts: The real value of disagreement in mergers and acquisitions, Università Bocconi, Working Paper.

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It is common wisdom to consider time periods characterized by high levels of uncertainty and high market volatility as the least favorable for Mergers and Acquisitions. Top management is less confident about the future development of the business and more cautious about investing money in external growth for fear of an unpredictable change in market trends once the deal has been closed.

If these factors seem to de-incentivize buyers from carrying out acquisitions in highly volatile periods, there are also good reasons to assert the contrary. In fact, crisis and volatility also create opportunities.

In this second issue of the CAREFIN Bocconi position papers, we analyze the European M&A market between January 2001 and December 2012. We find that deals undertaken in periods of high volatility deliver a higher median excess return, and the differential increases over the time horizon. We investigate the reasons of this superior performance and attribute the results to a better deal execution. During high volatility periods, we observe a shift in bargaining power that allows bidders to negotiate more advantageous terms.