Let's Keep this Private: The Growing Weight of Evidence Behind Improving M&A Returns
M&A Research Centre – MARC

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MARC – Mergers & Acquisitions Research Centre

MARC is the Mergers and Acquisitions Research Centre at Cass Business School, City University London – the first research centre at a major business school to pursue focussed leading-edge research into the global mergers and acquisitions industry.

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Corporations, regulators, professional services firms, exchanges and universities use MARC for swift access to research and practical ideas. From deal origination to closing, from financing to integration, from the hottest emerging markets to the board rooms of the biggest corporations, MARC researches the wide spectrum of mergers, acquisitions and corporate restructurings.
Overview

It's different this time'... is certainly a phrase that’s been used for subjects ranging from the 2000 equity market valuations to the prospects of England at the football World Cup. But unlike in mathematical proof or scientific experimentation, finance theories are not fixed in their validity. That validity can have a time limit.

And in that light, historically viewed as being negative for the acquiring company, M&A acquisitions are now seen as being more positive by many who use more recent data, despite there being those who stick fast to the earlier, albeit out-dated, research. But is this actually the case?

First, what could be the explanation for improving returns being observed for acquirers in M&A?

1. Maybe corporates are learning and executing better (not the focus of this report but we touch on a couple of potential explanations at the end)?
2. A mix effect. Corporates are doing the ‘right’ sort of deals
3. Has analysis improved to pick up the value creation?

We set out to investigate the premise and the possible reasons for the change, with a particular emphasis on success rates of acquisitions of unlisted companies (referred to here as Private deals) versus those of listed companies (referred to as Public deals) and the changes in success observed before and after the bubble of 2000. The basis of our report is a meta-analysis of 86 studies in the field.

The latter two explanations above are clearly valid in our view of the literature. The connection between the two explanations is Private deals -- and that is the focus of this report. We have found an increase in the prevalence of Private deals, from 66% of acquisitions by listed firms in the period 1984-1999 (inclusive) to 78% in the period 2000-2015.

Combine that fact with more analysis of private deal making and the dramatic (positive) results for Private deals that are shown in this report and in our opinion you are a long way to an explanation.

Private deals don’t have to be small as they can be transformational. In what is now branded one of the top 15 tech acquisitions of all time, Google bought private company Applied Semantics for $102 million in April 2003. Within 2 years it represented 15% of Google’s revenues.

And if not operationally transformational, such can be large enough to make a big difference to the balance sheet. In 2005 Google bought unlisted Skype for $2.6bn. It was sold for $8.5bn in 2011.

Figure 1: Number of studies by outcome (totals on RHS) (Source: Cass Business School)
Background (the journey so far)

The conventional wisdom that M&A destroys value for the acquiring company is probably a consequence of two things: the first conclusions of academic research and the high visibility of certain value destructive mega-mergers (AOL/Time Warner for example).

The early findings

With regards to the success of the acquiring firm, it was generally undisputed that a majority of merger activity in the 1980’s and 90’s fell short of expectations, being unable to materialise synergistic opportunities. A study conducted by Booz-Allen & Hamilton in 2001, concluded that irrespective of the measuring approach (stock price, revenue or return on equity) a majority of deals did not meet expectations. Further, many empirical studies, examining value creation for acquiring firm shareholders, found that M&A deals often led to firm value destruction (Buckley & Ghauri 2002; Brunner 2004; Habeck et al 2000; Agrawal & Jaffe 1992; among many others).

Notably, academic research on bidders for Public targets generally reported insignificant or negative abnormal returns to the acquirers. Graham et al. in 2002 extracted a sample of 356 acquisitions of public targets from 1980 to 1995, and found that on average, bidders suffer a negative abnormal return of -0.78%, significant at the 1% level. Andrade et al. in 2001 examined the acquisitions of public targets in the 1980’s (1,226 acquisitions) and 1990’s (1,864 acquisitions), and found a statistically insignificant return for the bidders.

Looking specifically at the UK, Sudarsanam and Mahate (2003) and Cosh, Guest and Hughes (2006) have found significantly negative returns to bidders, ranging across both studies from -9% to -22%. The former focused on UK transactions from 1983 to 1995 whereas the latter considered data from 1985 to 1996. Baker and Limmack (2002) in their 60-month study confirmed the value-destructive impact of UK acquisitions on the bidder's share price. According to their study, 5-year abnormal returns range between -26% and -31%. To sum up, the vast majority of studies of long horizon abnormal returns reported negative and significant results with only a few showing break-even or positive results.

Importantly, except as noted above, all of these studies looked at public deals only, often because it was easiest to calculate returns as the data was readily available.

The significance of Private Deals (the acquisition of unlisted equity)

Chang (1998) was the first scholar to stratify the acquirer's abnormal return based on the ownership type of the target firm. His starting point was the idea that a stock acquisition of a public target represents a public offering of equity, whereas a stock acquisition of a private target represents a private placement of equity. Since secondary equity offerings are associated with a negative signal as described in Smith (1986) whilst private placements are viewed favourably, as seen in Baker & Wruck (1989), there was a reason to believe that a similar reaction exists for stock acquisitions of Public and Private firms. Indeed, using a sample of 154 Public and 150 Private target acquisitions financed with stocks, the research found that acquisitions of Public firms had an

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1 Adolph, G. Booz-Allen and Hamilton, 2001
2 Buckley, P. and Ghauri, P. International mergers and acquisitions, 2002
3 Bruner, R. Applied mergers and acquisitions, 2004
4 Habeck, M., Kroger, F. and Tram, M. After the merger, 2000
5 Agrawal, A., Jaffe, J. and Mandelker, G. The Journal of Finance, 1993
9 Cosh, A., Guest, P. and Hughes, A. J Bus Fin & Acc, 2006
10 Baker, R.D. and Limmack, R.J. Univ. of Stirling, 2002

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average short term abnormal loss of -2.46%, compared to an abnormal gain of 2.64% for Private targets. Conversely, the paper found that cash financed acquisitions yield insignificant excess returns regardless of the target type.

Eight years later, Draper and Paudyal\(^\text{14}\) (2006) highlighted that 80% of mergers involve private targets, and yet these mergers receive minimal attention in academic literature. Similarly, Tsai \(^\text{15}\) (2008) noted that the majority of research on M&As conclude that acquirers suffer from a negative stock market reaction, but they typically confine their samples to listed targets. Using a sample between 1993 and 1999, Tsai finds that the abnormal returns to acquirers of unlisted targets using cash payments are positive and significant.

**A new world?**

With the turn of the new millennium, numerous factors had altered the M&A landscape, facilitating successful mergers that have, thus far, passed the test of time (one such example is the creation of Verizon before 2000 from the merger first of Bell Atlantic with NYNEX and then with GTE). Internet developments and the technological boom have eased and improved various aspects of the M&A deal process (pre and post integration communication, due diligence, research, etc.). Regulatory changes brought in by the Sarbanes-Oxley Act of 2002 fostered a zero-tolerance environment, increasing accountability and transparency in the performance of due diligence and the execution of mergers. Interestingly, the same consulting firm mentioned earlier (Booz and Company\(^\text{16}\)) had re-assessed M&A success levels, concluding that in the intervening years (2001-2006), success levels had significantly improved. Further, a joint study conducted by Cass Business School and Towers Perrin examined that whilst previously acquirer shareholder performance was negative relative to the market, performance of acquirers in deals in the sixth merger wave (2003-2006) was positive compared to the market\(^\text{17}\).

The same conclusion was further supported by McKinsey\(^\text{18}\), attesting that the that recent M&A boom (2003-2006) appeared to create: “proportionally more value for the shareholders of acquiring companies”. Recent empirical studies have further confirmed that on average, M&A activity does create value for the acquiring shareholder (Netter, Stegemoller & Wintocki, 2011\(^\text{19}\)).

And returning to the UK, Skovbjerg in 2015\(^\text{20}\) for example, finds positive and significant returns to European buyer shareholders, including the UK, in both the short and long-term. The final sample that was analysed in this research included 1637 EU deals between 1997 and 2010.

So we are at a point where the value of M&A is being reassessed and rather than being dismissed as value destructive, more thought is being given to the question of what has changed and what are the success factors.

\(^\text{14}\) Draper, P. and Paudyal, K. European Financial Management, 2006

\(^\text{15}\) Tsai, C. Journal of Accounting, Finance & Management Strategy, 2008

\(^\text{16}\) Adolph, G. Booz and Company, 2007

\(^\text{17}\) This study performed by Cass Business School and Towers Perrin examined 218 international deals completed in 1988, 1998 & 2004. Using company performance both 6 months prior and after deal closing, the average M&A deal performance vs. market was: 1980’s at -6.40%, 1990’s at -2.5% and 2004/5 at +8.8% (Moeller & Brady, 2007); (Business Wire, 2006)


\(^\text{19}\) Netter, J., Stegemoller, M. and Wintocki, M. Managerial Finance, 2011

\(^\text{20}\) Skovbjerg, N.M. Aarhus University, 2015
How do you measure M&A success?

Analysing whether an M&A transaction is successful is difficult. From a purist perspective it should be about value creation for the shareholders of the acquiring company. But over what time period? Do we assume that the market has judged the deal correctly? How can we tell what part of a share price move is due to the deal, especially for serial acquirers? Do we trust accounting measures? Are other stakeholders important if we are thinking about the long-term business franchise? Should we look at the operational execution? As outsiders, can we really look at the operational execution? It’s hard.

Zollo and Meier in 2008 identified 12 different approaches to measure the success of M&A deals. These are:

1. Integration Process Performance
2. Overall Acquisition Performance
3. Employee Retention
4. Customer Retention
5. Accounting Performance
6. Long-term Financial Performance
7. Short-term Financial Performance
8. Acquisition Survival
9. Innovation Performance
10. Knowledge Transfer
11. Systems Conversion
12. Variation in Market Share

Of course, the most important factor may really be to identify what the board of directors planned for the acquisition when deciding to execute the deal, but even if there’s a press release that outlines the deal drivers, were these really the ones that the directors had discussed internally?

The authors of the aforementioned paper point out that the most commonly used analytical practices to determine success include event studies in both the short and long-term, accounting-based measures, subjective assessments from managers', industry experts' assessments and divestment-based measures. The first two methods largely dominate the total number of studies.

**Event studies**

Event studies calculate the abnormal stock price effect following the unanticipated announcement of M&A deals. Short-term studies are designed to reflect how the market perceives information about the announcement. Long-term studies are in turn designed to provide an ex-post picture about value created through the transaction when all synergies have been realized. Both studies are based on share price performance relative to an expected movement, whether it be defined by a capital asset pricing model (CAPM), the acquirer’s competitors who are not making acquisitions (that is, the return of a stock’s sector index often adjusted for size and geography) or some other basis.

Whether short-term event studies are meaningful measures of M&A success is determined by your view of the efficiency of the stock market. Market efficiency refers to the assumption that all relevant information available is quickly incorporated in market prices that ought to reflect the discounted sum of the expected cash flows delivered by particular stock. In this case the share price move upon the deal announcement is taken as representing the value destruction or value creation of the deal. Two of the obvious weaknesses of such a standpoint are the influence of merger arbitrage funds (buying the target stock, selling the acquirer regardless of the merits or otherwise of the transaction) and whether the future of what may be a complex transaction can really be established in just a few days post-merger. There is also a danger that the deal may not have been evaluated on its own merits but on the success or failure of the previous deals by the company, the market

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assuming that if a company got the last deal right it is more likely to do so the next time.

Long-term event studies are potentially even more flawed given the large number of impacts on a share price likely to be seen in a longer time window that are unrelated to the particular M&A deal. Not only that, but there may be multiple acquisitions, making isolation of each deal’s impact all but impossible.

Performance studies

Another major class of studies of “success of M&A” is represented by performance studies that look at changes in accounting measures of the acquiring company, normally comparing them with industry-wide averages to have a counter-factual of how the company might have performed had it not carried out the transaction. Similar to long-term event studies, they are applied to obtain an ex-post picture of the effect of M&A transactions on the fundamentals of bidding corporations rather than a short-term public view on the future profitability of the bidder following deal notification.

There is no consensus between academics and practitioners regarding what accounting measures to use in the performance-based studies. Different papers have looked at a variety of metrics, including profitability measured by return on assets (ROA) and return on equity (ROE), cash flow performance measures (Healy, Palepu and Ruback, 1992\textsuperscript{22}), innovation indicators (Bertrand, 2009\textsuperscript{23}), sales growth and others.

\textsuperscript{22}Healy, P., Palepu, K. and Ruback, R. Journal of Financial Economics, 1992
\textsuperscript{23}Bertrand, O. Research Policy, 2009
Our analysis

M&A activity can be segmented in a variety of ways, such as type of target, size, form of payment and so on. This report primarily considers the research conducted on acquisitions involving a publicly-listed target, compared to acquisitions involving an unlisted target. Historically, the empirical findings show a distinct difference in the performance of these two categories (Chang 1998). This report’s other major “cut” is between pre-2000 and post-2000 acquisitions.

Research limitations

Krishnakumar 24 (2012) reviewed existing literature on M&A to identify and assess the methodologies used to measure deal success. One of the findings is that different methodologies lead to contradictory conclusions. Hence, to compare like-for-like in the pre- and post-2000 periods (and for public versus private targets), the same success measure must be used. And in this light we choose short-term event studies as our methodology.

One of the main criticisms of the short-term event study methodology (as mentioned above) is that it assumes market efficiency, as it is based on the hypothesis that the stock market reaction to the announcement of a deal is a reliable measure of the expected outcome to the bidder. This assumption is particularly problematic in emerging economies with weak capital markets (again Krishnakumar, 2012). However, this shortcoming has no impact on our research, as we have restricted the study to developed markets. As currently in M&A there is a predominance of acquirers being based in developed economies with strong capital markets, we do not see this rule as having a significant impact on overall conclusions.

Hence, for the purposes of this research, using short-term abnormal returns (versus a CAPM based counterfactual) despite its shortcomings is, we believe, the most suitable measure of success. Additionally, given the significance we ascribe to Private acquisitions, which by their nature and size usually have lower levels of disclosure, attempting to study changes in accounting performance measures would be less feasible.

Methodology

This report is based on meta-analysis of academic papers that used short-term event study methods to investigate the success of M&A pre- and post-2000 and with a specific emphasis on finding the difference in performance of Public versus Private acquisitions. Here we detail the criteria used when deciding which academic papers we included in our findings.

1. The research has been published, to ensure that only credible material is used.

2. The sample used should fall in this study’s time frame, which is from 1980 to 2015.

3. The acquirer must be based in a developed market, such as the US or the UK, given the known differences in the performance of M&A between developed and emerging markets and the difficulty in legitimately applying the CAPM hypothesis to the latter. Moreover, mergers in emerging markets constituted a small percentage of the global takeover markets in the pre-2000 period, leading the majority of scholars to focus on developed markets.

4. The definition of success is short-term shareholder return. Abnormal returns estimated using CAPM is a widely used measure of return, and using a short window is preferred because it eliminates the impact of other events.

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(Andrade et al. 2001\textsuperscript{25}). Typically, this measure of return is estimated using an event study methodology, following Brown and Warner \textsuperscript{26}(1985).

5. The sample is not limited to a single industry, to avoid a restrictive sample.

Our findings – investigation count

We reviewed 86 studies with the breakdown shown in the Appendix.

The table below shows the number of studies and whether the outcome was statistically significant positive performance, no significant result or significant negative performance.

The simplest finding is from the last columns which show the shift from pre-2000, when the studies were split very evenly between positive return, insignificant return and negative return, and post 2000 where no studies showed a significant negative return and the vast majority of studies showed a positive return.

Moving from there to the left we find the general studies over the period (those with no Private/Public demarcation) had 19 papers finding positive abnormal returns for an acquisition and no papers finding a statistically significant negative return.

Looking at the more granular data we find not a single paper showing a statistically significant negative return for Private acquisitions, whereas we still see a preponderance of negative returns for Public acquisitions.

Our findings – investigation returns

The charts below show the mean of the average abnormal returns found in the academic studies. ‘0%’ indicates an insignificant result.

Here we see a clear quantification of not just the superiority of the Private deals but even an improvement seen in those deals’ performance over the pre 2000 period. Taking this analysis and combining it with the increasing prevalence of Private deals here is one clear explanation, and support for, the improving success of M&A. In addition, it supports the viewpoint that those ‘early’ negative views of M&A success were distorted by the fact that the analysis was primarily being conducted in the Public sphere.

Figure 2: Mean of the average observed abnormal returns pre 2000 (Source: Cass Business School)

Figure 3: Mean of the average observed abnormal returns post 2000 (Source: Cass Business School)


Beyond the Private/Public split and conclusions

Apart from the above explanations, other theories have been suggested to explain an apparent improvement in M&A returns, and we briefly discuss them in this section, while also concluding on our final position. Clearly the likely explanation is a mixture of all those issues discussed above.

Potential explanations

One of the first observers to note the improvement in acquirer success, Boschetti (Towers Perrin, 2006) attributed the new found M&A success to changes in corporate behaviour including: better deal governance, deal selection and focus on integration. Broadly, these observations can be divided into five categories as discussed by later researchers.

i) Increased shareholder activism (Papadakis, 2007)

It is important to acknowledge that whilst there is data to support the viewpoint that institutional activism benefits the target company, there are no empirical studies conducted as yet that would allow us to evaluate the success of an M&A deal for the acquiring firm subjected to shareholder activism. This is due to the fact that most research examining institutional activism assesses activist campaigns as a whole and does not focus on M&A-related campaigns in isolation. However, an interesting study conducted by Ferreira, Massa and Matos in 2009 assesses the role of foreign shareholders in the context of cross-border acquisitions. The researchers find a positive relationship between foreign institutional ownership and growing cross-border activity and conclude that foreign institutional ownership increases the probability that the cross-border M&A deal is successful.

ii) Shift from diversification-related to strategic/consolidation-oriented deals (Adolph, 2007)

The diversification-based conglomerate mergers of the 1960s and early 1970s were not based on obvious synergies or an ability to change market structure to the benefit of the corporate. Given that shareholders can themselves diversify through owning shares in different companies without having to pay acquisition premiums or the inherent and significant deal costs, it is hard to see how those conglomerate company shareholders benefitted, unlike management who benefited from running a larger company or whose diversification made the company more resilient through the business cycle, useful when you are the CEO, or indeed any employee.

In contrast today’s deals are in large part either based on consolidating a market to benefit from cost synergies (or, where allowed, a change in industry structure) or on gaining access to new high growth technological or geographical avenues. Or a deal like the merger of Anheuser-Busch InBev and SABMiller in 2016, which hits both points.

iii) Lower target premium payments coupled with greater share of cash deals (Dobbs, Goedhart & Suonio, 2006)

If we look at our findings above, we find that even the usually negatively-received Public deals can have a positive market response if carried out with cash rather than stock. If more deals are being carried out with cash, then it follows that there should be an improvement in deal returns overall. Lower premiums simply

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28 Boschetti, A. Business Wire, 2006
31 Adolph, G. Booz and Company, 2007
mean a greater share of a deal’s benefits for the acquirers’ shareholders and clearly a greater likelihood of deal success as defined for the acquiring company.

iv) Improved management of the M&A process (Boschetti in Business Wire as above, 2006)

This is logical if we believe that we learn from past mistakes. From our research it seems that management are starting to see the benefits of multiple (Private mainly) bolt-on acquisitions rather than Public mega-mergers. Given that this is likely based on previous experience it is not a stretch to assume that management are also learning from mistakes in deal execution, supported by the greater availability of deal case studies, among other things. Despite the rise in volume of mega-deals in the past several years, grabbing a disproportionate number of inches of journalistic coverage, these deals do remain small in number.

v) Improvements in corporate governance

Developments in corporate governance mechanisms, such as the introduction of CEO stock-based compensation (Hall & Liebman, 199833). Additionally and more recently, there is increased board monitoring and the passing of the Sarbanes-Oxley Act of 2002 would all likely limit the propensity of CEO’s to carry out the kind of mega-mergers where their own interests would diverge from those of their shareholders.

Conclusions

We see a number of reasons why M&A is becoming more successful, which gives credibility to the increasing volume of evidence that this improvement is actually the case. This report focused on the importance of Private targets to the success likelihood of acquirers as it is arguably the clearest success factor. It is also suggestive that M&A ‘was never as bad as we thought’ and that the early negative analytical results may have been at least partly due to a question of scope in those early studies. For companies, the message is clear: Private bolt-ons and not mega mergers are the way to go. For equity analysts and investors, the message is also clear: track those bolt-ons, and maybe rethink your gut reaction to an M&A announcement.

Appendix

The table below presents the number of observations collected. Undefined refers to situations where the payment method was not specified in the research. The last row is for research carried out without a Public/Private split.

Figure 4: Investigations included by type of transaction and deal currency (Source: Cass Business School)

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<th>Pre-2000</th>
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<td>5</td>
<td>35</td>
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<tr>
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<tr>
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<td>3</td>
<td>5</td>
</tr>
<tr>
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<td>1</td>
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<td>6</td>
<td>7</td>
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<td>21</td>
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Figure 5: Number of studies by outcome (totals on RHS) (Source: Cass Business School)

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<td>0</td>
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<td>19</td>
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<td>1</td>
<td>2</td>
<td>18</td>
<td>3</td>
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### Notes on Authors

<table>
<thead>
<tr>
<th>Ahmed Ahmed</th>
<th>Daniel King</th>
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<tr>
<td>Ahmed Ahmed has recently completed an MSc in Corporate Finance at Cass Business School.</td>
<td>Daniel King, is a freelance financial analyst who has spent more than 20 years in the capital markets, mainly as an Equity research analyst. He is qualified as a chartered accountant.</td>
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Scott Moeller, Director of MARC and Professor in the Practice of Finance. His research and teaching focuses on the full range of mergers and acquisitions activities.

Contact: cassmarc@city.ac.uk
Cass Business School
In 2002, City University's Business School was renamed Sir John Cass Business School following a generous donation towards the development of its new building in Bunhill Row. The School's name is usually abbreviated to Cass Business School.

Sir John Cass's Foundation
Sir John Cass's Foundation has supported education in London since the 18th century and takes its name from its founder, Sir John Cass, who established a school in Aldgate in 1710. Born in the City of London in 1661, Sir John served as an MP for the City and was knighted in 1713.