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Mergers and Acquisitions: Do They Create or Destroy Value?

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The Controversy

Mergers and acquisitions (M&A) are the single most transformative activity that a firm can undertake. Successful mergers can transform a company by creating substantial synergies, where the whole exceeds the sum of its parts. On the other hand, a misguided acquisition can waste billions of shareholders' money. Daimler Benz-Chrysler, Sprint-Nextel, Quaker Oats-Snapple, AOL-Time Warner are just a few in a long list of mergers that destroyed value for shareholders.

But the theme of this lecture series is how business decisions affect society, not just shareholders. And the impact on wider society is why M&A is particularly controversial. Even if a merger is "successful" in terms of creating shareholder value, this may be at the expense of stakeholders. In August 2009, Kraft offered 745p per share to buy Cadbury. Cadbury strongly resisted, arguing that this offer undervalued the company. In January 2010, Kraft upped its price to 840p plus a 10p special dividend. The Cadbury board recommended this offer to shareholders, but this may be because they knew the writing was on the wall – 31% of Cadbury's shares were owned by allegedly "short-term" shareholders, who had bought the stock recently, and may have only been interested in making a quick buck. This number was only 5% in August 2009.

Cadbury shareholders indeed were big winners, with the sale price representing a 50% premium to Cadbury's price in August 2009. But workers apparently suffered major losses. Kraft had pledged not to shut down Cadbury's factory in Somerdale, near Bristol, but reversed its decision a week later, leading to 400 job losses. An additional overtone was that Cadbury was an iconic British brand. It founded by John Cadbury in 1824, receiving a royal warrant to be the cocoa and chocolate manufacturer to Queen Victoria in 1854. It was then passed to his sons, who upheld the Quaker values on which Cadbury was founded – in particular, prioritising the welfare of its employees. Kraft was a US giant and, in the eyes of many newspapers, an epitome of American capitalism. The Cadbury acquisition was seen as an example of the hollowing out of the UK economy, selling historic British assets to greedy foreign capitalists. It led to changes to the UK Takeover Code in 2011 to increase the power of targets relative to bidders. There are calls for even further reform, such as a national interest test for takeovers, and a proposal to disenfranchise (remove the voting rights of) short-term shareholders in an M&A situation.

The Other Side of the Story

In this lecture series, we've stressed two points. First, there are two sides to almost every story, but some commentators have incentives to present only one, to make a more influential story or argument. Second, a single story may not be representative of what happens in general.

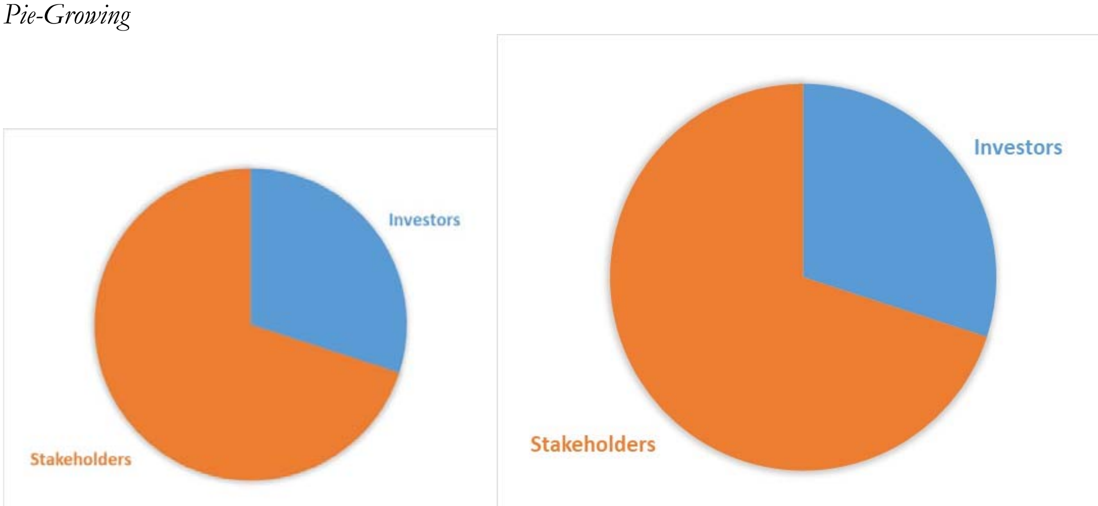
Let's start with the first point. We should not ignore the substantial gains to Cadbury's shareholders, which include mutual funds and pension funds saving on behalf of citizens. Even casting shareholders aside, it is not clear that the Cadbury takeover was detrimental for society. The Somerdale closure may have actually not been an *error of commission* (a bad action) – Cadbury had actually announced the closure of the Somerdale plant in 2007, so it may have occurred without the takeover.[1] Moreover, as stressed in Lecture 1 (Purposeful Business: The Evidence and the Implementation), a responsible business avoids *errors of omission* (failing to take good actions). Mondelez (which spun out of Kraft and took Cadbury with it) avoided such errors by making substantial improvements to Cadbury's iconic Bournville site.[2] Bournville's headcount had halved from 2,000 to 1,000 between 2007 and 2009, and its operating costs were three times as high as Mondelez's comparable German plants. Mondelez turned this around with a £75 million modernisation, installing brand new production equipment, and set up a £18 million global research operation inside Bournville – so that any Cadbury product, sold anywhere in the world, starts life inside Bournville. Not only did this modernisation safeguard the long-term viability of Bournville, but also its gains were shared with workers. A pay deal, struck shortly after the modernisation was completed, was praised by the Unite union as having "set the benchmark within the food, drink, and agriculture industries for other employers to follow."

The Evidence: Effect on Shareholders

Even if the Cadbury takeover was eventually positive for society, this is only one example. What happens in general? A study of all takeovers of US targets between 1980-2005 finds that target shareholders gain significantly from takeovers.[3] The stock price of targets rises by 7% in the runup to a takeover and 15% upon announcement. Bidders gain marginally, with increases of 0.5% and 0.7%, respectively. The total gain, taking into account the fact that bidders are much larger than targets, are 7% and 11%. Thus, on average, shareholders unambiguously gain.

However, we are concerned with the effect not only on shareholders, but also wider society. The critical question, therefore, is whether shareholders' gain comes from synergies, which grow the pie, or instead from redistribution from other stakeholders, which splits the pie differently.

Pie-Growing



Pie-Splitting

[1] Kraft claimed that its U-turn was because it subsequently received new information which showed that the continued operation of Somerdale was unsustainable.
[2] "After Sticky Start, Cadbury Flourishes Under Mondelez Ownership." *Financial Times*, October 14, 2017.
[3] Betton, Sandra, B. Espen Eckbo, and Karin S. Thorburn (2008): "Corporate Takeovers." In B. Espen Eckbo, ed., *Handbook of Empirical Corporate Finance*, Vol. 2. Elsevier/North-Holland.

The Evidence: Effect on Society

There are many ways in which takeovers may be pie-splitting. They may reduce the slice enjoyed by:

- *Customers*, by reducing competition. If so, the stock prices of industry competitors should rise, as they too would benefit from lower competition. Instead, they are either unchanged or even fall due to the merged firm becoming more efficient. In addition, the stock prices of corporate customers rise, suggesting that they share in the synergies through better products or lower prices. As the researchers conclude, "Taken together, the customer and rival results are strongly inconsistent with the monopolistic collusion hypothesis."[4]
- *Suppliers*, through greater purchasing power. The evidence shows that non-retained suppliers lose, but retained suppliers gain. This suggests that takeovers make a company's procurement more efficient, switching to the best suppliers. A separate study finds that the efficiency gains from mergers are passed onto suppliers (and also customers).[5]
- *Employees*, through being fired. However, wages and employment rise.[6] This is consistent with takeovers improving efficiency and safeguarding firm viability; the efficiency gains are passed onto workers.
- *Taxpayers*, through tax-reducing mergers. However, tax plays a minor or zero role in the majority of mergers.[7] Tax revenues may increase if companies become more profitable through synergies.
- *Bondholders*, by making the firm more risky. The evidence on the effect on the bidder's bonds is mixed – studies either find a small positive, neutral, or small negative effect. The effect on the target's bonds is positive, as the target is now part of a larger company
- *Target shareholders*. Perhaps we are too quick in interpreting the 7% (runup) and 15% (announcement) gains as evidence that target shareholders benefit. It may be that the target was deeply undervalued before the merger, which is why the acquirer was willing to buy it. However, when mergers are abandoned, the target returns to its original price – inconsistent with the argument that it was previously undervalued, as the bid would have alerted the market to any undervaluation.[8] Moreover, most acquisitions are of firms and in industries with little R&D, contradicting the concern that they are of firms conducting significant R&D that the market fails to value.[9]

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[4] Fee, C. Edward and Shawn Thomas (2004): "Sources of Gains in Horizontal Mergers: Evidence from Customers, Supplier, and Rival Firms." *Journal of Financial Economics*, 74, 423–460.
[5] Bernile, Gennaro and Evgeny Lyandres (2019): "The Effects of Horizontal Merger Operating Efficiencies on Rivals, Customers, and Suppliers." *Review of Finance* 23, 117-160.
[6] Brown, Charles and James L. Medoff (1988): "The Impact of Firm Acquisitions on Labor." In Alan J. Auerbach, ed, *Corporate Takeovers: Causes and Consequences*. University of Chicago Press.
[7] Auerbach, Alan J. and David Reishus (1987): "Taxes and the Merger Decision." In John Coffee and Louis Lowenstein, eds, *Takeovers and Contests for Corporate Control.* Oxford University Press.
[8] Bradley, Michael, Amand Desai, and E. Han Kim (1983): "The Rationale Behind Interfirm Tender Offers: Informatino or Synergy?" *Journal of Financial Economics* 11, 183-206.
[9] Hall, Bronwyn H. (1988): "The Effect of Takeover Activity on Corporate Research and Development." In Alan J. Auerbach, ed, *Corporate Takeovers: Causes and Consequences*. University of Chicago Press.

Thus, the evidence is not consistent with shareholder gains from takeovers arising from pie-splitting. However, the gains and losses from takeovers are not limited to takeovers that actually occur, but extend to the effects of takeover threat. Companies with low market valuations are more likely to be taken over[10], so perhaps firms are pressured into taking short-termist actions to inflate their valuations and avoid becoming a target?

Researchers have examined the effect of changes in U.S. state laws which restrict takeovers. A seminal study found that, rather than giving CEOs freedom to innovate, takeover restrictions allow managers to enjoy the "quiet life" and coast. Fewer new plants are created and fewer old plants are shut down; productivity and profitability fall.[11] A separate analysis explicitly investigated innovation and found that it falls – suggesting that takeover threats spur innovation, as companies innovate to avoid being taken over.[12] This is an important point – some CEOs lobby for the UK government to strengthen takeover defences, and Unilever's aborted move to the Netherlands was believed to be motivated by their stronger takeover defences. But the best takeover defence is good performance. Further research found that an active takeover market encourages R&D through another channel – small firms innovate, motivated by the prospect of being able to sell to a large firm if their innovation is successful.[13]

Value-Destructive Mergers

Although the evidence suggests that acquirers gain modestly from takeovers, this is only an average result and there is huge variation from deal to deal. 49% of deals have negative announcement returns. Sometimes the value destroyed can be substantial, such as in the examples given at the start. A study found that, over just four years (1998-2001), US acquirers lost $240 billion through M&A.[14] This was due to a small number of deals by some very large acquirers (a given percentage loss translates into a large dollar loss when applied to a large firm) – without them, acquirers would have gained overall. Thus, some mergers are indeed bad for society – but not because they benefit investors at the expense of stakeholders, but because they shrink the pie for everyone.

Pie-Shrinking

[10] Edmans, Alex, Itay Goldstein, and Wei Jiang (2012): "The Real Effects of Financial Markets: The Impact of Prices on Takeovers." *Journal of Finance* 67, 933-971.
[11] Bertrand, Marianne and Sendhil Mullainathan (2003): "Enjoying the Quiet Life? Corporate Governance and Managerial Preferences." *Journal of Political Economy* 111, 1043–1075.
[12] Atanassov, Julian (2013): "Do Hostile Takeovers Stifle Innovation? Evidence from Antitakeover Legislation and Corporate Patenting." *Journal of Finance* 68, 1097–1131.
[13] Phillips, Gordon and Alexei Zhdanov (2013): "R&D and the Incentives from Merger and Acquisition Activity." *Review of Financial Studies* 26, 34–78.
[14] Moeller, Sara B., Frederik P. Schlingemann, René M. Stulz (2005): "Wealth Destruction on a Massive Scale? A Study of Acquiring-Firm Returns in the Recent Merger Wave." *Journal of Finance* 60, 757–782.

So why might CEOs undertake bad deals? One reason may be that they do so intentionally, because they are pursuing their own interest rather than value maximisation. Some CEOs were paid directly for completing a deal: Vodafone's Chris Gent was paid £10 million for buying Mannesmann, and Chase's William Harrison received $20 million for acquiring JP Morgan in a deal which took only three weeks to negotiate. This is an extremely bad practice, as the payments were independent of performance – made without waiting to see whether the deals ended up creating value. As discussed in Lecture 5 (Does Finance Benefit Society?), CEO pay is strongly correlated with firm size, and so CEOs can boost their pay by growing the firm through acquisitions. CEOs of larger firms also receive significantly more prestige and status – the CEO of the industry leader is more likely to keynote at industry conferences. Consistent with self-interested motives, the returns to acquirers are lower when the CEO has a smaller stake in the firm[15] (contradicting the recommendations in Lecture 2, Executive Pay: What's Right, What's Wrong, and What's Fixable), and governance is weaker through acquirers themselves being insulated from takeovers[16] (contradicting the recommendations in Lecture 3, Reforming Corporate Governance).

A second reason may be that CEOs undertake bad deals unintentionally. CEOs genuinely believe that an acquisition will create value, but are overconfident about their ability to realise synergies or manage the integration. A highly-influential paper showed that CEO overconfidence is significantly negatively related to acquirer gains from mergers.[17] Unlike intentionally bad mergers, increasing CEO incentives and removing takeover defences will not deter such takeovers, as acquirers believe they are creating value. Instead, shareholder engagement and diversity of thinking in the boardroom should address any CEO blind spots.

Investment Banks' Conflicts of Interest

A third factor is the role of M&A advisors. CEOs typically lack expertise in M&A, since they make such decisions rarely. As a result, they seek advice from investment banks. However, investment banks' fee structure is strange. Aside from a small retainer, banks are only paid upon announcing an M&A deal. Lecture 2 argued that CEOs should be given incentives for success. However, for CEOs, success is reasonably easy to define (increasing the long-run stock price). In M&A, the fee structure equates "success" with "announcing a deal", even though 49% of deals have negative announcement returns.

Thus, there is huge potential for conflicts of interest. If a client asks a bank to execute a deal that the bank believes to be bad, it may undertake it anyway to earn the fee. Not only may this lead banks to (receptively) accept value-destructive mandates, but they may (actively) pitch value-destructive mandates. Of course, one potential mitigant is reputation. Does this mechanism actually work? One of my own studies found the following[18]:

1. *Investment Banks Matter*. The difference in the average returns to deals advised by banks in the 75th vs 25th percentile is 1.26%. This is significant – given the mean bidder size of $10 billion, it translates into $126 million. Thus, choosing the right investment bank is important.
2. *Past Performance Has No Effect On Future Market Share*. A bank's recent performance (how much shareholder value it created in its recent deals) had no effect on its future market share. So, reputational incentives seem to be almost absent – there is no loss in future business from doing a bad deal.
3. *But Past Market Share Significantly Affects Future Market Share*. If clients don't choose banks based on their past performance, what do they choose them based upon? Past market share. Indeed, this is consistent with practices in the investment banking industry, where market share league tables are widely publicized by both the media and the banks themselves in pitchbooks. These league tables are extremely important. In my prior career in investment banking, if I ran the data and my employer came in at #2, my boss would ask me to re-run it excluding deals below $10 million, changing the time period etc. – i.e. massaging the

[15] Morck, Randall, Andrei Shleifer, and Robert W. Vishny (1990): "Do Managerial Objectives Drive Bad Acquisitions?" *Journal of Finance* 45, 31-48.
[16] Masulis, Ronald W., Cong Wang, and Fei Xie (2007): "Corporate Governance and Acquirer Returns." *Journal of Finance* 62, 1851-1889.
[17] Malmendier, Ulrike and Geoffrey Tate (2008): "Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction." *Journal of Financial Economics* 89, 20-43.
[18] Bao, Jack and Alex Edmans (2011): "Do Investment Banks Matter For M&A Returns?." *Review of Financial Studies* 24, 2286-2315.

data to try to get us to be #1. Banks' incentives to do value-destructive deals are thus substantial. First, they receive a large fee today. Second, they boost their league table position, helping them generate fees in the future. Third, there is no downside: doing a bad deal today does not reduce the chance that they win mandates in the future.

4. *Past Performance Significantly Predicts Future Performance*. That clients ignore past performance when awarding mandates need not be inefficient. It could be that past performance doesn't predict future performance (just like it doesn't for mutual funds), so it's right for clients to ignore it. But performance is highly persistent. The top 20% of banks (based on 2-year performance) outperforms the bottom 20% by 0.94% over the next two years.
5. *But Past Market Share Significantly Negatively Predicts Future Performance*. In contrast, market share is significantly negatively related to future performance – perhaps because high-market-share banks are those that indiscriminately accept all mandates, regardless of whether they create or destroy value. Overall, in their selection decisions, clients are ignoring the information (past performance) that they should be using, and using the information (past market share) that they should be ignoring.

The M&A industry seems to have been using market share as a measure of reputation, without ever asking whether market share is actually related to performance – and result (5) above suggests that it is negatively related. Perhaps one might argue that market share shows experience – just like a potential defense lawyer in a murder trial would list the past murder trials that she's worked on. However, she will likely highlight her past acquittals – listing past clients that got convicted is unlikely to give a new client comfort. Yet, investment banking league tables indiscriminately include all past transactions, ignoring whether they were value-creating (an acquittal) or a value-destroying (a conviction). Indeed, in almost no other industry is market share a sign of quality – McDonald's sells more food than a Michelin-star restaurant but is not regarded as higher-quality, and retail websites list customer ratings rather than the number of customers who have bought a product.

The results suggest that we should introduce league tables based on past performance. This would make banks think twice before accepting a mandate they believe to be bad. Moreover, this suggestion is consistent with other practices in the investment banking industry. For IPO underwriting (when banks take companies public), there are league tables for the average performance of the stock after the IPO. However, a high post-IPO return may not actually be good for the client – it could be that the bank sold the shares too cheaply. It seems strange that there are league tables for client stock returns in one banking service (IPO underwriting) where high stock returns may not be beneficial, but no league tables for client stock returns in another banking service (M&A advisory) where high stock returns do benefit clients.

A Need for Further Regulation?

Even though the average M&A deal creates value, we've acknowledged that a significant number do not. We've discussed several solutions that are general (greater CEO incentives, superior governance, shareholder engagement, and greater diversity of thinking in the boardroom) rather than specific to M&A – such solutions should also prevent poor investment decisions. Publicising league tables of investment bank performance, rather than market share, is one M&A-specific remedy. What about the two proposals mentioned at the start?

One is to disenfranchise short-term investors. In Lecture 4, The Stewardship Role of Investors, I explained how the criticism of "short-term" investors is conceptually flawed, because the holding period (how long an investor has held her shares for) is fundamentally different from her orientation (whether she bases her buy/hold/sell decisions on long-term or short-term information). Even if we ignore this point and focus on the holding period, the claim that short-term investors vote through deals, that long-term investors would not have, makes no sense. The only way that short-term investors were able to increase their stake from 5% to 31% in Cadbury was because supposedly long-term investors had sold out to them. They will have sold out at a price far less than 840p+10p (else new investors wouldn't have been able to profit). If they were willing to sell at less than 850p, they would have certainly accepted Kraft's bid of 850p.

Moreover, this proposal has been made without examining the evidence. Activist arbitrageurs (hedge funds who buy shares in takeover situations and try to influence the takeover process) actually *reduce* the likelihood that a takeover occurs.[19] In particular, they deter deals where target shareholders are offered a small premium, but the target CEO wishes to accept the premium because he will receive a large golden parachute if the takeover goes through. Rather than banning new investors from voting, a superior solution would be to prevent short-sellers from voting with borrowed stock. If they have a short position, they wish the company to make a bad decision, and so should not be allowed to vote on the deal. In fact, this proposal applies to votes in all situations, not just M&A.

The second is a national interest test. Again, this proposal has been made without examining the evidence. Certainly, there are acquirers who do pie-shrinking deals, but domestic acquirers may do so just as much as foreign acquirers. There is no evidence that takeovers by foreign acquirers have a more negative effect on society than those by domestic acquirers. Indeed, they may import superior production techniques, as in the case of Mondelez – and just as evidence shows that foreign investors import superior governance[20] and corporate social responsibility[21], and improve long-term investment in tangible, intangible, and human capital[22]. The national interest should be to promote great companies, which the discipline provided by the takeover market helps. Tariffs are similarly argued to be in the national interest as they protect domestic industries, but instead they remove discipline and lead to these industries becoming lame ducks.

Thank you to everyone who has attended part or all of my 2018/9 lecture series on "How Business Can Better Serve Society." These issues are covered in more detail in my forthcoming book, "Grow the Pie: Creating Profit for Investors and Value for Society", which will be published by Cambridge University Press in early 2020.

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[19] Jiang, Wei, Tao Li and Danqing Mei (2019): "Influencing Control: Jawboning in Risk Arbitrage." *Journal of Finance*, forthcoming.
[20] Aggarwal, Reena, Isil Erel, Miguel Ferreira, and Pedro Matos (2011): "Does Governance Travel around the World? Evidence from Institutional Investors." *Journal of Financial Economics* 100, 154–181.
[21] Dyck, Alexander, Karl V. Lins, Lukas Roth, and Hannes F. Wagner (2019): "Do Institutional Investors Drive Corporate Social Responsibility? International Evidence." *Journal of Financial Economics*, forthcoming.
[22] Bena, Jan, Miguel A. Ferreira, Pedro Matos, and Pedro Pires (2017): "Are Foreign Investors Locusts? The Long-Term Effects of Foreign Institutional Ownership." *Journal of Financial Economics* 126, 122-146.