

## Value impact of M&As and the listing status of target firms A survey of new evidence

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### บทคัดย่อ

บทสรุปที่ว่า การควบรวมกิจการ (acquisitions) โดยปกติแล้วทำลายความมั่งคั่งของผู้ถือหุ้นในบริษัทผู้ซื้อนั้นถูกตั้งมาจากการพบเห็นการควบรวมที่บริษัทผู้ขายได้รับการจดทะเบียนในตลาดหลักทรัพย์ ในช่วงการประกาศเสนอการควบรวมนั้นอย่างดีที่สุดผู้ถือหุ้นในบริษัทผู้ซื้อจะเสมอตัว (break-even) และบ่อยครั้งที่สูญเสียความมั่งคั่ง แต่ทว่าประมาณร้อยละ 80 ของการควบรวมกิจการในตลาดซื้อขาย อำนาจในการควบคุม

กิจการที่มีความตื่นตัวมากที่สุดในโลกนั้น บริษัทผู้ขายไม่ได้จดทะเบียนในตลาดหลักทรัพย์ ในการวิเคราะห์การควบรวมกิจการของบริษัทผู้ขายที่ไม่ได้จดทะเบียนในตลาดหลักทรัพย์นั้น งานวิจัยในระยะหลังๆ พบอย่างสม่ำเสมอว่า บริษัทผู้ซื้อได้กำไรเหนือระดับปกติอย่างมาก และอย่างมีนัยสำคัญทางสถิติ ซึ่งตรงกันข้ามกับผลกระทบต่อมูลค่าจากการควบรวมกิจการของบริษัทที่ได้รับการจดทะเบียนในตลาดหลักทรัพย์ หลักฐานงานวิจัยพวกใหม่ที่สอดคล้องกันนี้ แม้ว่าจะเพิ่งเกิดใหม่ก็เป็นการเรียกถามความน่าเชื่อถือขององค์ความรู้เดิมที่มีเกี่ยวกับการตัดสินใจทำการควบรวมกิจการ และชี้ถึงความจำเป็นในการหาคำอธิบายอื่นๆ สำหรับผลกระทบต่อมูลค่าจากการทำการควบรวมกิจการ อย่างไรก็ตาม หลักฐานงานวิจัยเกี่ยวกับผลกระทบต่อความมั่งคั่งขั้นท้ายสุดจากการควบรวมกิจการของบริษัทที่ไม่ได้จดทะเบียนในตลาดหลักทรัพย์นั้นมีเพียงเบาบางและห่างไกลจากการนำมาเป็นข้อสรุปได้ การเรียนรู้เกี่ยวกับการควบรวมกิจการของบริษัทผู้ขายที่ไม่ได้จดทะเบียนในตลาดหลักทรัพย์นั้นอย่างต้องดำเนินต่อไปอีกมาก

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## Abstract

The much celebrated conclusion that acquisitions typically destroy shareholders' wealth was drawn from the experiences of acquisitions of targets that are listed on a stock exchange: acquirer shareholders typically breakeven at best, and often earn significant value losses, on bid announcement. However, around 80% of the M & A population in the world's most active markets for corporate control involve targets that are unlisted companies. When analyzing acquisitions of unlisted targets, the recent studies persistently find that the acquirers earn a large

and significant announcement-period abnormal return, which is in sharp contrast with the value impact of listed-target acquisitions. This body of new and consistent evidence, though emerging, calls into question the generalizability of the traditional wisdom on the decision to acquire corporate control and requires alternative explanations for the value impact of M & As. Yet, evidence on the ultimate wealth effects of acquisitions of unlisted targets is still sparse and far from conclusive. Much remains to be learned about deals involving an unlisted target.



## 1. Background and introduction

The literature on corporate takeovers, or mergers and acquisitions (M&As) is voluminous. One extensively researched issue in this area of corporate finance is the effects of M&As on the wealth of acquirer shareholders. M&As usually involve large capital outlays committed by the acquiring firm<sup>1</sup>. Although it is generally the acquiring firm that makes the necessary capital requirements, the literature has documented extensive evidence that acquirers typically breakeven at best, and very often make significant value losses, on bid announcement. This empirical pattern is robust in both markets in which corporate control is actively traded, i.e., the U.S. and U.K. markets. From the perspective of acquirer shareholders, the decision to acquire control in another firm is therefore at best a zero-NPV project. This empirical documentation has also become widely accepted as a stylized fact among both researchers and practitioners (for example, Harding and Rovit, 2004; Dobbs et al., 2007). In spite of a lack of benefits to acquirer shareholders, M&As remain a major corporate event, thereby questioning whether the reported evidence represents the true picture of the value impact of M&As. It is crucial to note, however, that such a conclusion has been drawn from transactions that involve only publicly listed targets, i.e., target firms that are listed on a stock exchange.

That is, almost all of the earlier M&A studies use a sample consisting only of deals involving listed targets.

It is only recently that the M&A literature has seen the emergence of a small number of empirical studies that explore the value impact of unlisted-target acquisitions on acquirer shareholders. The highly likely reason for a slow start of research in this area is that the necessary data were simply not available. The popular electronic database that also records deals involving unlisted targets, i.e., the Securities Data Company (SDC) database, appears to have become accessible to academic researchers only in the second half of the 1990s. The arrival of this database has enabled researchers to begin exploring this previously uncharted territory of M&A activities.

The recent studies of takeovers of unlisted targets are of particular import to both theorists and practitioners. The vast majority (around 80 percent) of the M&A population in the U.S. and U.K., the world's most active markets for corporate control, involve targets that are unlisted companies (see, for example, Moeller et al., 2004, for U.S.; Draper and Paudyal, 2006, for U.K.). As a result, whether or not the experiences based on the transactions involving listed targets can be generalized to the M&A population has been a challenging empirical issue. To the extent that the

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<sup>1</sup> Of course, it is not uncommon for target firms to also invest their corporate resources in M & As. In these deals, the target shareholders typically receive the acquirer's common equity (instead of cash) as the payment, thereby agreeing to invest their wealth in the merged firm at least in the short run.

value impact on acquirers significantly differ between deals involving listed targets and deals involving unlisted targets, our existing understanding of the general value impact of corporate acquisitions may be called into question.

While several insightful reviews have been conducted on the value impact of M&As on acquirer shareholders, these reviews discuss only the findings based on samples of acquisitions of listed targets. Jensen and Ruback (1983) review six merger and seven tender offer studies in the U.S. market. Jarrell et al. (1988) discuss the U.S. evidence during 1980s, which was characterized by hostile transactions. Agrawal and Jaffe (2000) review the evidence on acquirer long-term abnormal return after the acquisition. More recently, Bruner (2002) provides a comprehensive review of studies that examine announcement-period and long-term post-acquisition performance.

Given the importance of takeovers of unlisted targets to our understanding of M&A activities (one of the most, if not the most, prominent corporate decisions), a critical survey of the recent literature on M&As is called for. Specifically, my objective is to survey the recent contributions to the M&A literature with respect to takeovers of unlisted companies and their value implications on acquirer shareholders. Hence, my survey differs from the prior works in that it focuses on the wealth effects

of unlisted-target acquisitions and their implications on the current state of our understanding of M&A activities. Relative to the existing reviews, my work also provides an overview on the value impact of acquisitions of listed targets, and accordingly, adds to the existing literature in that it reviews the recent studies of listed-target acquisitions not covered by the previous surveys.

To provide an early view of the survey results, the evidence consistently documented by the recent studies is in sharp contrast with the conclusion based on the experiences of deals involving only listed targets. Following from my objective, gaps in our existing knowledge and hence areas for fruitful future research should come into view.

As the M&A literature is vast and diverse, it is essential to note that my attempt is by no means to exhaustively review the entire academic literature. Such an exhaustive review would make the task unmanageable and the resulting discussion intractable. My survey focuses specifically on the value implication of the listing status of target firms and belongs to the class of work that reviews empirical evidence on the wealth effects of M&A activities on shareholders in the firms involved. Indeed, surveying evidence or theoretical arguments on the value implications of the medium of exchange would also necessitate a separate review<sup>2</sup>.

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<sup>2</sup> To meaningfully survey the studies of the medium of exchange would necessarily encompass the literature on behavioral finance. Interested readers are referred to, among numerous others, the following studies: for theoretical studies, Hansen (1987), Fishman (1989), Eckbo et al. (1990), Shleifer and Vishny (2003), Rhodes-Kropf and Viswanathan (2004); for empirical studies, Travlos (1987), Chang (1998), Faccio and Masulis (2005), Ang and Cheng (2006), Draper and Paudyal (2006), Officer et al. (2009), and Ekkayokkaya et al. (2009b).

My survey continues in what follows: the evidence on gains to acquirers of listed targets is overviewed in the next section. In section 3, a critical survey of the studies that analyze the wealth effects of takeovers of unlisted targets is conducted. Also discussed in this section are the theoretical attempts that have been made to rationalize the value impact of unlisted-target deals. Section 4 then concludes my survey, and raises some further questions and fruitful future research on takeovers of unlisted targets.

## 2. The value impact of acquisitions of listed targets – an overview

This section provides a brief overview of the existing evidence on gains from acquisitions of listed targets. These include the announcement-period (i.e., short-term) as well as the long-term post-acquisition performance of the acquiring firms.

The traditional M&A literature appeared to be settled on the conclusion that acquirers generally breakeven at best, and often make significant losses, during the announcement period (see, for a review, Jensen and Ruback, 1983; Jarrell et al., 1988; Bruner 2002). As the existing reviews report, this non-

positive (if not negative) value impact is persistently observed in both the U.S. and U.K. markets. Indeed, this pattern of value impact is also observed in Europe (see, for example, Campa and Hernando, 2004; Martynova and Renneboog, 2008), and the banking industry (which is typically more regulated than other industries) appears to be no exception (see, Ekkayokkaya et al., 2009a). Strongly supporting evidence has also been documented in the more recent studies, which employ a sample of acquisitions completed during the more recent periods, i.e., the 1990s and after (for example, Moeller et al., 2004, 2005; Masulis et al., 2007, for U.S.; Draper and Paudyal, 2006, for U.K.; Faccio et al., 2006, for E.U.). Accordingly, the strong tendency of acquisitions of listed targets to destroy the wealth of acquirer shareholders persists through time.

Thus, a clear message to both academic researchers and practitioners from the experiences of acquisitions of listed targets is that a corporate acquisition is at best a zero-NPV, and likely to be a negative-NPV, project for acquirer shareholders<sup>3</sup>. Put differently, investors holding a portfolio of acquiring firms cannot expect to earn any abnormal

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<sup>3</sup> The extant empirical studies to date are practically unanimous on the wealth effects of M&As on shareholders in listed targets: they typically earn positive and significant announcement-period abnormal return ranging from around 15% to over 30% (for example, Jensen and Ruback, 1983; Jarrell et al., 1988; Bruner 2002; Gaspar et al., 2005; Moeller, 2005; Dong et al., 2006, for U.S.; Franks and Harris, 1989; Draper and Paudyal, 1999; Sudarsanam et al. 2002; Henry, 2005; Hodgkinson and Partington, 2008, for U.K.; Goergen and Renneboog, 2004, for Europe). This is not surprising as one main stylized fact in the M&A literature is that acquirers pay a substantial premium, typically in the range of 30% to over 50%, on the target's pre-acquisition market value. Thus, M&As in general do create substantial wealth for target shareholders.

return on their investment. As acquirer shareholders are on average unable to extract an abnormal profit, one clear implication is that the market for corporate control over listed assets is competitive.

To investigate the ultimate wealth effects of M&As, several studies have also extended the conventional event-study analysis to include the post-acquisition period (life after takeover) of up to five years following the deal completion. As Malatesta (1983) reports, U.S. acquirers suffer long-term losses during the first year of acquisition. Rau and Vermaelen (1998) find that U.S. acquirers suffer significant losses during the three-year post-acquisition period. Though using different return benchmarks, studies by Agrawal et al. (1992) and Loughran and Vijh (1997) report significant long-term losses to U.S. acquirers up to five years following the acquisition. Strikingly similar evidence has also been extensively documented for U.K. acquirers (see, for example, Gregory, 1997; Higson and Elliot; 1998; Sudarsanam and Mahate, 2003;

Conn et al., 2005; Antoniou et al., 2007). For Canadian acquirers, Eckbo and Thorburn (2000) report insignificant performance within the first year of acquisition. Over the three-year post-acquisition window, however, Andre et al. (2004) find that Canadian acquirers suffer losses that are statistically and economically significant. The only exceptions appear to be the U.S. findings of Franks et al. (1991) and Moeller et al. (2004), which show that acquirers breakeven during the three-year period following acquisition. Although the long-term performance studies employ different performance benchmarks, the documented evidence on balance points toward significantly negative long-term stock price performance of listed-target acquirers<sup>4</sup>. At the very least, these acquirers never gain during the post-acquisition period regardless of the sample periods.

Overall, the experiences of takeovers of listed targets suggest that acquirer shareholders often suffer losses from corporate acquisitions. Accordingly, it

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<sup>4</sup> Evidence of significant long-term abnormal return can be interpreted as rejection of the joint hypothesis that the market rationally reacts to new information and that the adopted expected return model correctly describes the underlying return generating process. As a result, one central issue in tests of long-term abnormal return is the adequacy of the adopted return benchmark. This issue is, however, largely unsettled and not specific only to studies of the wealth effects of M&As. A meaningful discussion on it would involve a review of different literature. Readers interested in tests of long-term abnormal return are referred to Barber and Lyon (1997a, 1997b), Cowan and Sergeant (2001), Fama (1998), Loughran and Ritter (2000), Lyon et al. (1999), Mitchell and Stafford (2000) and the references therein. For detailed applications of such tests, see for example Boehme and Sorescu (2002) and Hertz et al. (2002). For short event windows, on the other hand, it is well documented that the choice of the expected return model does not affect the quality of the abnormal return measurement (for example, Brown and Warner, 1980; Kothari and Warner, 2005). For studies of acquisitions, the findings of Draper and Paudyal (1999, 2006) provide convincing evidence that the choice of return benchmark does not affect the precision of the estimates of announcement-period abnormal returns to acquirers.

would not be unreasonable for one to cast doubt on the wisdom of M&A activities. This view also seems to be held among sophisticated practitioners. As a prominent U.K. fund manager expresses, for instance: *“Perhaps offer documents should commence with a preamble reciting the facts about the impact of takeovers on bidding company’s shareholder value, noting that the bidder’s directors and advisers are fully aware of this evidence but indicating that, notwithstanding this, they propose to invite their shareholders to support a significant acquisition”* (“Spiking the Takeover Guns”, Financial Times, 30 September 2002). The much celebrated argument put forward to explain acquirer losses, both around the bid announcement and in the long run after acquisition, is that corporate acquisitions are the manifestation of managerialism or agency conflicts in the acquirer rather than shareholder wealth maximization (for example Firth, 1980; Jensen, 1988; Malatesta, 1983; Shleifer and Vishny, 1988). The evidence of losses is also consistent with Roll’s (1986) argument that acquirers end up paying too much for their target because of their hubris, i.e., overconfidence in extracting profits from the transaction<sup>5</sup>.

### 3. The value impact of acquisitions of unlisted targets – the new evidence

Acquisitions of unlisted targets have been the major component of the world’s M&A activities.

For the U.S. market, the sample in Moeller et al. (2004) reveals 9,381 and 2,642 acquisitions of unlisted and listed targets, respectively, completed during 1980 and 2001. Similarly, the sample in Draper and Paudyal (2006) shows that 7,499 deals involving an unlisted target were completed in the U.K. during 1981 and 2001 whereas only 1,098 deals involved a listed target. The dominance of unlisted-target acquisitions is also observed in the continental European markets. The sample employed by Faccio et al. (2006) shows that, during 1996 and 2001, non-U.K. European firms acquire 1,294 unlisted targets, but only 385 listed targets. Despite such prevalence of acquisitions of unlisted targets, only recently has evidence on the wealth effects of unlisted-target acquisitions on acquirer shareholders been documented in a systematic fashion. Evidence on the announcement-period gains is first discussed and followed by a survey on the recent, though sparse at best, findings on the long-term post-acquisition performance. To date, there appear to be only five studies that provide some analysis of the long-term performance of unlisted-target acquirers.

#### 3.1 Evidence from tests of announcement-period abnormal return

The study by Hansen and Lott (1996) appears to be the first study that examines the value impact of takeovers of unlisted targets. Based on a sample of 101 U.S. takeovers of privately held targets,

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<sup>5</sup> For a sample of 394 large U.S. acquirers, Malmendier and Tate (2008) provide evidence in support of this hubris hypothesis.

their findings show that acquirers make a significant announcement-period gain of 1.2%. On the other hand, their comparison sample shows that listed-target acquirers suffer a significant announcement-period loss of -1.0%, consistent with the typical studies of listed-target takeovers. Although Chang (1998) analyzes 281 U.S. private-target acquisitions and documents supporting evidence, this study reports the announcement-period gains only by subsamples of private-target acquirers. Cash acquirers of private targets earn an insignificant 0.1 percent for acquirers. When paying in shares, however, the acquirers earn a significant announcement-period gain of 2.6%.

In comparison to most of the subsequent studies reviewed below, these two pioneering investigations employ notably small samples which are manually collected. Nevertheless, the data used in these two studies serve to highlight investors' perception of the wealth effects of the acquisitions of unlisted targets, which is in stark contrast with the well documented negative value impact of listed-target acquisitions. Table 1 provides a summary of these two and other studies of acquisitions of unlisted targets.

For a much larger sample of 3,308 U.S. takeovers of private targets, Ang and Kohers (2001) find that acquirers make significant announcement-period gains ranging between 1.3% to 2.0% across different payment methods. Among other things, these large-sample findings suggest that the overall value impact of unlisted-target acquisitions is positive regardless of the medium of exchange. Based on

the average market capitalization of their sample unlisted-target acquirers ranging between USD 519 and 1,032 million and the average deal value ranging between USD 32.1 and 55.1 million, these announcement-period gains are equivalent to abnormal return on investment between 18.8% and 42.5%. For their comprehensive sample of 9,381 U.S. deals involving unlisted targets announced during 1980 – 2001, Moeller et al. (2004) report similar findings. In addition to distinguishing by the target's listing status, Moeller et al. (2004) also divide their sample into acquirers of independent private targets and acquirers of unlisted targets that are a subsidiary of a listed parent. An average acquirer earns 1.5% upon bid announcement when its target is an independent private firm, and 2.0% when its target is a subsidiary of a listed parent. Although the study by Masulis et al. (2007) is not set out to analyze the listing effect, its data shows that acquirers make a significant gain whether their target is an independent private firm (0.8%) or a subsidiary company (1.4%). Based on a U.S. sample of frequent acquirers (i.e., acquirers that make five or more acquisitions within a three-year period), Fuller et al. (2002) also find that the acquirers in 2,679 deals involving unlisted targets make a significant announcement-period gain of comparable magnitude regardless of whether the target is an independent private firm or a subsidiary of a listed parent.

The findings of the above large-sample studies tell us that the results from the earlier small-sample studies, i.e., Hansen and Lott (1996) and Chang



**Table 1 Summary of evidence on announcement-period abnormal return to unlisted-target acquirers**

Authors	Acquirer nation	Target domicile	Unlisted targets in final sample		Sample period	Window	Average abnormal return to acquirers (%)		Difference between (1) and (2)
			Number	Percent			to <i>unlisted</i> -target acquirers (%) (1)	to <i>listed</i> -target acquirers (%) (2)	
Hansen and Lott (1996)	U.S.	Domestic	101	40.08	1985-1991	(0,+1)	1.15**	-0.98**	Sig.
Chang (1998)	U.S.	Domestic	281	52.43	1981-1992	(-1, 0)	0.09 to 2.64***	-0.02 to -2.46***	Sig.
Ang and Kohers (2001)	U.S.	Domestic	3,308	67.21	1984-1996	(0,+1)	1.32 to 1.99***	-1.26 to 0.06	NA
Fuller et al. (2002)	U.S.	Domestic	2,679	85.45	1990-2000	(-2,+2)	2.08 to 2.75***	-1.00**	NA
Moeller et al. (2004)	U.S.	Domestic	9,381	78.03	1980-2001	(-1,+1)	1.50 to 2.00***	-1.02***	NA
Masulis et al. (2007)	U.S.	Domestic	2,235	67.06	1990-2003	(-2,+2)	0.76 to 1.37***	-1.48***	NA
Conn et al. (2005)	U.K.	Various	3,637	83.72	1984-1998	(-1,+1)	0.86***	-0.82***	NA
Draper and Paudyal (2006)	U.K.	Domestic	7,499	87.23	1981-2001	(-1,+1)	0.85**	-0.40**	Sig.
Antoniou et al. (2007)	U.K.	Various	1,256	89.65	1987-2004	(-2,+2)	1.31 to 1.59***	-0.62	NA
Ekkayokkaya et al. (2009b)	U.K.	Domestic	4,473	85.12	1990-2007	(-1,+1)	1.42**	-0.05	Sig.
Faccio et al. (2006)	European	Various	3,694	83.40	1996-2001	(-2,+2)	1.48***	-0.38	Sig.
Ekkayokkaya et al. (2009a)†	E.U.	Various	551	57.22	1990-2004	(-1,+1)	0.25*	-0.26	NA

† The sample acquirers are in the banking industry only. "Sig." indicates the difference being significant at the 10% level. "NA" indicates "not available". \*\*\*, \*\*, and \* denote significance at the 1%, 5% and 10% levels, respectively.

(1998), hold even in larger samples. The evidence also shows that acquirers' gains from announcing bids for unlisted targets persist regardless of whether the unlisted target is an independent entity or a subsidiary company. In other words, the organizational form or nature of corporate affiliation of unlisted targets does not affect the acquirers' gains in an important way. What appears to matter is the listing status of the target, i.e., listed vs. unlisted: in stark contrast to the case of acquisitions of listed targets, acquirers make a significant announcement-period gain from acquiring an unlisted target. The message from the findings of Fuller et al. (2002) is that bids for unlisted targets are welcome by investors even when the acquirer is a serial acquirer. This inference is interesting as a serial acquirer is likely to be motivated managerial self-interest. Specifically, it contradicts the view that acquisitions serve as an effective means for managers to increase their firm size and hence to extract more private benefits from their corporate empire (see, for example, Aggarwal and Samwick, 2003).

Several studies have also shown that the superior announcement-period gains to acquirers of unlisted targets also exist in non-U.S. markets. For the 7,499 takeovers of unlisted U.K. firms, Draper and Paudyal (2006) report a significant acquirer announcement-period gain of 0.9%. Based on the average acquirer market capitalization of \$528 million and deal value of \$23.8 million, this gain translates into abnormal return on investment of around 18.9%, broadly in line with the U.S.

evidence. In the study by Ekkayokkaya et al. (2009b), the U.K. acquirers in a sample of 4,473 domestic takeovers of unlisted firms make a significant announcement-period gain of 1.4%. This significant gain, both statistically and economically, continues even when their sample is partitioned into independent private targets (1.6%) and subsidiary targets (1.2%). Similar to the U.S. results, the sample acquirers of listed targets in these two U.K. studies suffer announcement-period losses, though of varying magnitudes. The evidence documented in these two large-sample U.K. studies therefore provides strong support for the U.S. findings and confirms the superiority of acquisitions of unlisted targets in generating shareholder value.

Antoniou et al. (2007) re-examine the gains to frequent acquirers using the U.K. data, and find that frequent acquirers of unlisted targets make a significant announcement-period gain of comparable magnitude irrespective of whether the target is a standalone private target (1.6%) or a subsidiary of a listed parent (1.3%). Their results support the U.S. findings reported by Fuller et al. (2002) and thus confirm the view that investors welcome bids for unlisted targets even though the acquirer is a serial acquirer, a characteristic consistent with the existence of the agency conflicts in the acquirer.

For a sample of 3,637 takeovers of domestic and foreign unlisted targets made by U.K. acquirers, Conn et al. (2005) report a significant announcement-period acquirer gain of 0.9%. Even when their sample unlisted targets are divided by domicile (domestic vs. foreign targets), the gains

to unlisted-target acquirers remain significant. Regardless of target domicile, Conn et al. (2005) also observe announcement-period losses to acquirers of listed targets in their comparison sample. These findings therefore provide large-sample evidence that acquirers of unlisted targets continue to make superior gains even in cross-border acquisitions.

Since the world's main markets for corporate control do appear to be the most active markets by far with other markets being substantially less active, an empirical issue arises as to whether the listing effect is simply a symptom of the sample-specific problem common in a number of empirical studies. Specifically, the listing effect may not at all exist in the non-U.S. and non-U.K. markets. Examining a comprehensive sample of takeovers of unlisted targets made by acquirers in 17 European countries (including the U.K.), Faccio et al. (2006) find that the acquirers earn a significant announcement-period gain of 1.5%. This significant gain persists regardless of whether the target is an independent unlisted target (1.5%) or subsidiary unlisted target (1.4%). On the other hand, the listed-target acquirers in their comparison sample suffer an insignificant loss of 0.4%, which is also significantly lower than the average gains to both types of the unlisted-target acquirers. With France being the only exception, such differences in acquirer gain are also generally observable in the non-U.K. European markets. As a result, the superior gain from unlisted-target acquisitions is unlikely to be the phenomenon specific only to the U.S. and U.K. markets. The listing effect also does exist in the continental

European markets. Faccio et al. (2006) also report that the unlisted-target acquirers in their sample enjoy superior gains in both domestic and cross-border acquisitions, lending support to the U.K. findings of Conn et al. (2005) that the superior gains to unlisted-target acquirers do prevail regardless of whether or not the merging firms operate in the same country.

Ekkayokkaya et al. (2009a) analyze the wealth effects of acquisitions made by firms in the E.U. banking industry. In their sample of 551 acquisitions of unlisted banking targets, acquirers earn a significant gain of 0.25%. The listed-acquirers of banking targets in their comparison sample make an insignificant loss of 0.26%. So far, Ekkayokkaya et al (2009a) appears to be the only large-sample study that analyzes acquisitions of unlisted banking targets. Their findings suggest that the superior value impact of acquiring an unlisted target also appears to be the case in the banking industry, at least within the E.U. member states.

To summarize, the recent literature has documented strong and robust evidence that acquirers make a significant announcement-period gain when targets are unlisted companies. Again, this is in sharp contrast with the experiences of takeovers of listed targets. This evidence of significant gain suggests that acquisitions of unlisted targets, unlike listed-target acquisitions, are on average a positive-NPV project for acquirer shareholders. In other words, acquirer shareholders are on average able to extract an abnormal profit

when the target is an unlisted firm<sup>6</sup>. To this extent, it can be inferred that the market for corporate control over unlisted assets may well be less than fully competitive. This view is also shared by Officer (2007) who reports an acquisition discount of 15% to 30% on unlisted targets relative to comparable listed targets and argues that such a discount is caused by a lack of liquidity for unlisted equity or assets. Owners of unlisted firms cannot readily trade their equity. Such a lack of liquidity can in turn equip the buyer (i.e., acquirer) with greater bargaining power over the owners of an unlisted target. The ex ante effects of a lack of liquidity of unlisted equity and the resulting greater bargaining power of the acquirer together are to push down the price of an unlisted target, which turns out as an acquisition discount representing an abnormal gain to the acquirer. Nevertheless, such a discount could also be a reflection of investors' overoptimism when faced with limited information about growth prospects, quality and hence true value of unlisted targets' assets (Ekkayokkaya et al., 2009b). To this extent, one may expect to observe long-term post-acquisition underperformance of unlisted-target acquirers.

Another plausible explanation for acquirer gain in acquisitions of unlisted targets may lie in the acquisition process itself. When the target is not listed on a stock exchange, the acquirer can generally delay the public announcement of its bid, or its intention to acquire the target, even until the deal becomes unconditional. That is, a regulatory code governing M&A activities generally does not require firms making acquisition of an unlisted target to announce their acquisition attempt as early as at the time of bidding<sup>7</sup>. Indeed, unlisted-target acquirers are also commonly permitted to choose much of the content of their public bid announcement. These options to select the timing and content of a public bid announcement held by these acquirers allow them to avoid competition from uninvited guests (i.e., other bidders competing for the same target), which would otherwise result from full disclosure at the time of bidding. As the emergence of competing bids would in all probability drive up the target's price, the ability to avoid such bids suggests that the possibility of overpayment for an unlisted target is slim – at least much lower than that associated with listed targets.

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<sup>6</sup> One of the commonly cited reasons for takeovers is that managers of undervalued firms announce a takeover bid to draw investors' attention in order to get their firm revalued. However, Draper and Paudyal (2008) report that the superiority of the gains from unlisted-target acquisitions over the gains from listed-target acquisitions remains intact even after controlling for the revaluation effect.

<sup>7</sup> However, the acquiring firm is still generally required to disclose in its annual report the details of its acquisition of an unlisted target, if the deal gets completed.

When a target is listed on a stock exchange, on the other hand, the acquirer is required to make a formal and detailed public announcement of its bid. Such a public announcement may well generate interest among and attract competition from other bidders, driving up the price of a listed target with the end result being an overpayment for the target and the winner's curse suffered by the acquirer/bidder that eventually wins the bid. Here, one counterargument could be that, given continuous bidding, any overpayment by the winning bidder should be only trivial. As Hirshleifer (1995) correctly points out, however, because bidding in takeover contests generally occurs in a few large jumps rather than in many small increments as in a costless English auction assumed in a number of bidding models, even one further bid (being the winning bid) can, and usually does, lead to a sizeable overpayment for the target.

One popular explanation for the announcement-period loss to acquirers of listed targets is that they are motivated by managerialism in the acquirer, e.g., empire building, rather than shareholder wealth maximization. The persistent evidence of significant announcement-period gains to unlisted-target acquirers implies that, among other things, these acquirers are unlikely to be driven by managerial objectives (see also, Draper and Paudyal, 2006). The typically smaller size of unlisted firms (than listed firms) also suggests that the greatly celebrated empire building objective is unlikely to be the motive behind the decision to opt for unlisted targets. Managers in pursuit of building their corporate empire would be better off acquiring a

listed target than an unlisted target. A listed firm is usually considerably larger and more prestigious than an unlisted firm. Managers' personal utility can therefore be achieved much more effectively ex ante through acquisition of listed targets than acquisition of unlisted targets.

### **3.2 Evidence from tests of long-term post-acquisition abnormal return**

In consideration of the announcement-period gains to acquirers of unlisted targets persistently documented in the recent studies, an important empirical issue arises as to whether or not these gains are reversed during life after takeover. In other words, do these short-term gains represent the ultimate wealth effect of unlisted-target acquisitions? While the effect of the level of competition in the market for corporate control should be reflected immediately at the time of bid announcement, the consequences of the true bid quality can show up much later during the post-acquisition period especially considering that unlisted-target acquirers hold the options to select the timing of and what to disclose in their public bid announcement.

Since the value creation/destruction of an acquisition materializes mostly during the post-acquisition period (see Sudarsanam and Mahate, 2003), which is by far the most complicated stage of an acquisition attempt (see Copeland et al., 1996, p. 452-456), considerable uncertainty remains for every market participant, including the acquirer managers themselves, until long after the deal completion. From the practitioners' standpoint, as

Limmack (2003, p. 349) notes, “the reason that many acquisitions under-performed is that managers fail to adhere to predetermined plans”. Alternatively, the acquirer managers’ underlying empire-building objective may come into investors’ view only after the deal completion especially if the managers hide their true motive and exaggerate the anticipated acquisition profitability at the bid announcement. The timing and disclosure options held by unlisted-target acquirers suggest that these possibilities become much more likely when the target is an unlisted firm. To this extent, one may expect to see reversal of the announcement-period gain earned by unlisted-target acquirers. Thus, further insights into the value impact of unlisted-target acquisitions can be obtained by reviewing evidence on how acquirers of unlisted targets fare during life after takeover. Table 2 provides a summary of studies that report long-term post-acquisition performance of unlisted-target acquirers.

To date, there are only very few studies that provide evidence on the post-acquisition performance of unlisted-target acquisitions. Yet, tests of long-term post-acquisition abnormal return are not the

main part of the empirical analysis in most of these studies<sup>8</sup>. Ang and Kohers (2001) report that acquirers of unlisted targets in their U.S. sample earn an insignificant long-term abnormal return of 0.1% per month during the three-year post-acquisition period. Ang and Kohers (2001) estimate long-term post-acquisition performance using the calendar-time Fama-French three factor model. Applying the four-factor model—the Fama-French three factors plus the momentum factor as adopted in Carhart (1997)—in calendar time, Moeller et al. (2004) report similar evidence. Regardless of the corporate affiliation of an unlisted target, the acquirers on average earn abnormal return that is insignificant both statistically and economically.

One clear interpretation of the findings of Ang and Kohers (2001) and Moeller et al. (2004) is that the short-term (i.e., announcement-period) gains to acquirers of unlisted targets are not reversed in the long run during life after takeover. Secondly, the post-acquisition performance of unlisted-target acquirers does not appear to be sensitive to the model specification, i.e., with vs. without the momentum factor incorporated<sup>9</sup>. In addition, both

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<sup>8</sup> One plausible reason is that a test of abnormal return suffers from the joint-hypothesis problem, which becomes much more severe as the test horizon expands (see also footnote 4). Moreover, the risk and return characteristics of a given firm do change across time, and especially, following major restructuring due to an acquisition. As a result, it is conceivable that the commonly adopted methodologies may not completely capture acquirers’ risk-return characteristics over a long horizon. This problem is referred to by Fama (1998) as the bad model problem.

<sup>9</sup> It should be noted that both Ang and Kohers (2001) and Moeller et al. (2004) employ only an asset-pricing model in their tests of long-term abnormal return, and not a characteristic-based return benchmark such as control firms or portfolios. As mentioned earlier, nevertheless, the return generating process appropriate for tests of long-term abnormal return still remains largely an unsettled issue in empirical corporate finance.

**Table 2 Summary of evidence on long-term post-acquisition abnormal return to unlisted-target acquirers**

Authors	Acquirer nation	Target domicile	Unlisted targets in final sample		Sample period	Window	Average monthly abnormal return		Difference between (1) and (2)
			Number	Percent			to <i>unlisted</i> -target acquirers (%) (1)	to <i>listed</i> -target acquirers (%) (2)	
Ang and Kohers (2001)	U.S.	Domestic	3,308	67.21	1984-1996	3-year	0.08	NA	NA
Moeller et al. (2004)	U.S.	Domestic	9,381	78.03	1980-2001	3-year	0.00 to 0.03	0.04	NA
Conn et al. (2005)	U.K.	Various	3,637	83.72	1984-1998	3-year	-0.14	-0.42**	NA
Antonioni et al. (2007)	U.K.	Various	1,256	89.65	1987-2004	3-year	-0.36 to -0.39*	-0.55***	NA
Ekkayokkaya et al. (2009b)	U.K.	Domestic	4,473	85.12	1990-2007	5-year	-0.46**	-0.31**	Insig.

“Insig.” indicates the difference being insignificant at the 10% level. “NA” indicates “not available”. \*\*\*, \*\*, and \* denote significance at the 1%, 5% and 10% levels, respectively.

studies test long-term abnormal return in calendar time. Unlike the event-time set up, the calendar-time approach eliminates the cross-correlation among abnormal returns commonly observed in a portfolio of event firms. The effect of the cross-correlation, if any, is to inflate the test statistics and hence cause the null of zero abnormal return to be rejected too often. Hence, the calendar-time approach offers much greater statistical reliability than the event-time approach. Not surprisingly, the evidence on long-term performance documented in the recent corporate finance literature is based on calendar-time estimation. This is also the case for the recent studies reporting evidence on the long-term post-acquisition performance.

In line with the two U.S. studies above, Conn et al. (2005) find that the U.K. acquirers of unlisted targets in their sample suffer only an insignificant long-term loss of 0.1% per month during the three-year post-acquisition period. This insignificant performance is also observed when their sample unlisted-target acquirers are separated into acquirers of domestic targets and acquirers of foreign targets. These findings provide the U.K. evidence that announcement-period gains to unlisted-target acquirers are sustained during the post-acquisition period and that this non-reversal prevails in both domestic and cross-border deals. On the other hand, their sample acquirers of listed targets significantly underperform over the same event window regardless of the target's domicile. At variance with Ang and Kohers (2001) and Moeller et al. (2004), Conn et al. (2005) use as a return benchmark the

return to a non-acquiring control firm matched on size and book-to-market equity ratio. Hence, their findings provide prima facie indication that the non-reversal of short-term gains documented in the two U.S. studies is unlikely to be sensitive to the choice of the return-generating process. In addition to the calendar-time approach, Conn et al. (2005) also measure post-acquisition performance in event time and find very similar results.

To the contrary, Ekkayokkaya et al. (2009b) report a significant loss of almost 0.5% per month over the five-year post-acquisition period for their sample U.K. acquirers of unlisted targets. Their findings also reveal that a significant post-acquisition loss of similar magnitude is also observed in the one-, two-, three- and four-year windows, indicating that most part of the loss starts as early as during the first year of deal completion. For a U.K. sample of frequent acquirers, Antoniou et al. (2007) find that unlisted-target acquirers suffer a significant loss in the three years following acquisition. This significant loss persists regardless of whether the unlisted target is an independent private firm (0.39% per month) or a subsidiary of a listed parent (0.36% per month). Similar to the earlier studies of listed-target acquisitions, these two studies report significant losses to acquirers of listed targets included in their data. The evidence reported by these two U.K. studies therefore suggest the short-term gains to unlisted-target acquirers are not sustained in the long run and are reversed into large losses during life after takeover. That is, the short-term gains do not represent the ultimate wealth



effect. Although the two studies also measure post-acquisition performance in calendar time as with Conn et al. (2005), they adopt different return benchmarks. Antoniou et al. (2007) use a control portfolio (matched on size and book-to-market equity ratio) as the return-generating process whereas Ekkayokkaya et al. (2009b) adopt the Fama-French three-factor model. As a result, the U.K. evidence remains mixed and the choice of methodology may well contribute to the inconclusiveness of the available evidence from this market.

Though sparse, the U.S. evidence on post-acquisition performance of unlisted-target acquirers appears consistent: the acquirers break-even during the post-acquisition period. On the other hand, the U.K. studies report mixed evidence. When viewing together the evidence reported in the U.S. and U.K. studies, it is still difficult, if not impossible, to draw even a tentative conclusion on life after takeover for acquirers of unlisted targets. If one is to take the view that the announcement-period gains to unlisted-target acquirers are sustained in the long run following acquisition, it will then follow that acquisitions of unlisted targets are consistent with shareholder wealth maximization and have the ultimate value impact that differs from that of acquisitions of listed targets. If one is to generalize the findings of Ekkayokkaya et al. (2009b) and Antoniou et al. (2007), then takeovers of unlisted targets ultimately destroy the wealth of acquirer shareholders. In this case, the ultimate value impact of unlisted-target acquisitions is no different from that of listed-target acquisitions, except that the

impact of the former shows up later during the post-acquisition period. Ekkayokkaya et al. (2009b) argue that such a delayed reaction is fundamentally caused by limited and biased information at the bid announcement about the true quality of unlisted targets and/or the acquirer's underlying motive.

#### 4. Conclusions and areas for future research

To conclude, the evidence documented in the recent, though relatively few, studies consistently shows that the market perception of bid announcement differs considerably between bids for unlisted targets and bids for targets listed on a stock exchange. Specifically, the market reacts positively to bid announcement when targets are unlisted companies. When targets are listed firms, on the other hand, the market reaction tends to be negative, or at least, never positive. Since the world's M&A population is by and large represented by deals involving unlisted targets, the more generalizable conclusion on the wealth effects of corporate acquisitions thus appears to be that the market expects these transactions to be positive-NPV projects for acquirer shareholders, who are the typical investors.

Unlike the evidence on short-term (i.e., announcement-period) gains, the evidence on long-term post-acquisition performance is still thin and mixed. Evidence documented by the few recent studies is conflicting. It is therefore difficult to draw even a tentative conclusion on life after takeover for acquirers of unlisted targets. If one is to test the

null of short-term gains being representative of the ultimate wealth effect, then the empirical evidence the literature presently has got to offer, on balance, cannot reject it. In other words, it is still difficult for one to categorically infer from the extant evidence that the ultimate wealth effect on acquirer shareholders is similar between acquisitions of unlisted and listed targets.

Several competing explanations for the consistently documented difference in the value impact between unlisted- and listed-target acquisitions are plausible and remain to be further explored. It will be insightful to investigate acquirers' success in negotiating for the principal terms and conditions, such as the medium of exchange, and how such success correlates with the difference in value impact. Investigating the value implication of the option to choose the timing of bid announcement should also shed further light on the evidence of announcement-period gains to acquirers of unlisted targets. Comparative studies on the relation between the ownership structure of acquirers

and gains from different types of acquisitions should also yield additional insights into the role of managerial objectives on the value impact differential. In this regard, studying acquisitions involving firms in the emerging and/or Asia-Pacific countries should yield fruitful future research since, as noted by La Porta et al. (1998), firms in these economies tend to have high ownership concentration. Given their inherently competitive and dynamic nature, moreover, investigating unlisted-target acquisitions in the banking as well as insurance industries should also lead to productive works. Across various sampling situations, analysis of long-term post-acquisition performance also remains fruitful for future research.

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