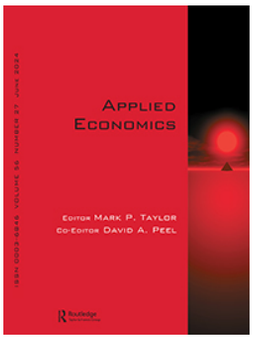

Applied Economics

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/raec20

Acquisition experience and the winner's curse in corporate acquisitions

Marta Arroyabe & Katrin Hussinger

To cite this article: Marta Arroyabe & Katrin Hussinger (2024) Acquisition experience and the winner's curse in corporate acquisitions, Applied Economics, 56:27, 3247-3261, DOI: 10.1080/00036846.2023.2206108

To link to this article: https://doi.org/10.1080/00036846.2023.2206108

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 02 May 2023.

Submit your article to this journal

Article views: 1959

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=raec20

APPLIED ECONOMICS
2024, VOL. 56, NO. 27, 3247–3261
https://doi.org/10.1080/00036846.2023.2206108

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Acquisition experience and the winner's curse in corporate acquisitions

Marta Arroyabe[a,b] and Katrin Hussinger[b,c,d]

[a]Essex Business School, University of Essex, Southend-On-Sea, UK; [b]Department of Economics and Management, University of Luxembourg, Esch-sur-Alzette, Luxembourg; [c]Department of Management, Strategy and Innovation, K.U. Leuven, Leuven, Belgium; [d]Centre for European Economic Research (ZEW), Mannheim, Germany

ABSTRACT

The winner's curse describes the behavioural phenomenon that the winner of a bidding contest pays a price that is too high. This paper shows that experiential learning cannot prevent a winner's curse on the market of corporate control as acquiring firms with acquisition experience still pay a higher price for the target in a bidding contest. Acquisition experience, however, is related to a superior post-acquisition performance of the winning firm after acquisitions associated with a bidding contest.

KEYWORDS

Firm acquisitions; winner's curse; bidding contest; acquisition experience; experiential learning

JEL CLASSIFICATION

G34; G14; D80

I. Introduction

The winner's curse describes the behavioural phenomenon that the winner of a bidding contest pays a price that is too high for the object at stake (Thaler 1988). Following the seminal article on the winner's curse at the market for corporate control (Varaiya and Ferris 1987), corporate acquisitions became a textbook example for a winner's curse where an acquiring firm overpays for the target firm (Roll 1986; Thaler 1988; Barberis and Thaler 2003; Hietala, Kaplan, and Robinson 2003; Baker, Ruback, and Wurgler 2007; Malmendier, Moretti, and Peters 2018; De Bondt, Cousin, and Roll 2018). In the presence of competition for the target firm, acquiring firms tend to fail to adapt their bidding strategy (Roll 1986; Varaiya 1988; Boone and Mulherin 2008; Brander and Egan 2017), the management becomes overconfident in their own ability to create value from the acquisition (Thaler 1988; Roll 1986; Hietala, Kaplan, and Robinson 2003; Malmendier and Tate 2008) and more aggressive bidding occurs because each firm wants to maintain the chance of winning (Kagel and Levin 1986; Hong and Shum 2002). The result is a winning bid, which is higher due to the mere presence of competition and overestimates the value of the target firm (Thaler 1988; Varaiya and Ferris 1987; Varaiya 1988; Malmendier, Moretti, and Peters 2018; De Bondt, Cousin, and Roll 2018).

A question that remains is whether experiential learning can help avoiding a winner's curse in the market for corporate control. It is not obvious that learning from past acquisition occurs (Barkema and Schijven 2008a). Firm acquisitions are complex, multi-stage processes that include various different tasks from the selection and evaluation of the target firm, to the due diligence process, the negotiation of the deal, and the potential integration of two firms. The complexity of a firm acquisition obscures the causal link between an action and its outcome so that learning becomes difficult (Zollo and Winter 2002; Heimeriks, Schijven, and Gates 2012; Castellaneta and Conti 2017).

Prior literature focuses largely on the relationship between acquisition experience and post-acquisition performance and finds mixed results (see Barkema and Schijven 2008a, for a survey) with some studies documenting a positive learning effect (e.g. Fowler and Schmidt 1989; Bruton, Oviatt, and White 1994; Barkema, Bell, and Pennings 1996; Nadolska and Barkema 2014; Cuypers, Cuypers, and Martin 2017; Schweizer et al. 2022). This evidence suggests that experiential learning may help avoiding a winner's curse. In this paper, we argue that a winner's curse is mitigated by acquisition experience *only if*, in the presence of

CONTACT Marta Arroyabe mf17255@essex.ac.uk Essex Business School, University of Essex, Elmer Approach, Southend-On-Sea SS1 1LW, UK; Katrin Hussinger katrin.hussinger@uni.lu Department of Economics and Management, University of Luxembourg, 6 Rue Richard Coudenhove-Kalergi, Esch-sur-Alzette 1359, Luxembourg

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

acquisition experience, (1) the acquisition price paid for a contested acquisition is lower and (2) the post-acquisition performance decline is smaller. Both conditions are important because a higher acquisition price alone can be rational when it reflects higher expected synergy effects (Adegbesan 2009; Laamanen 2007) and experience may help identifying a target that is worth a high acquisition price (Castellaneta and Conti 2017). In a similar vein, post-acquisition performance below expectations may have explanations unrelated to a winner's curse, such as an insufficiently planned and poorly executed post-acquisition integration (Chatterjee et al. 1992; Datta 1991; Haspeslagh and Jemison 1991; Larsson and Finkelstein 1999; Arroyabe, Hussinger, and Hagedoorn 2020).

To assess whether the winner of a contest pays too much and whether acquisition experience can lead to a lower price, we compare contested firm acquisitions to those that had only one interested buyer. For the investigation of the post-acquisition performance and potential learning effects from prior acquisitions, we employ a novel identification strategy proposed by Malmendier, Moretti, and Peters (2018) where the winners of contested acquisitions are compared to the losers of those contests. Our empirical analysis is based on a large sample including all contested U.S. acquisitions of publicly listed firms in the period 1980–2020 as identified by SDC Platinum (Refinitiv).

Our results suggest that corporate acquisitions involving competition for the target firm are associated with a higher takeover price (e.g. Hietala, Kaplan, and Robinson 2003; Malmendier, Moretti, and Peters 2018; De Bondt, Cousin, and Roll 2018). We further find that no evidence for experiential learning mitigating the winner's curse: acquiring firms with acquisition experience still pay a higher price for the acquisition target than they would pay for a comparable target that is not associated with a bidding contest.

Using different measures for the post-acquisition performance, we do not find robust evidence for the post-acquisition performance of the winners of a bidding contest to be lower than that of the losers. We, however, find robust evidence for a superior post-acquisition performance of firms with acquisition experience. In summary, we find partial evidence for experiential learning to mitigate a winner's curse in the market for corporate control because experienced winners of bidding contests at the market for corporate control outperform winners without prior acquisition experience and losers of the competition.

This study contributes to the scarce empirical literature on the winner's curse on the market for corporate control (Roll 1986; Varaiya and Ferris 1987; Varaiya 1988; Schwert 1996; Sirower 1997; Hietala, Kaplan, and Robinson 2003; Boone and Mulherin 2008; Brander and Egan 2017; Malmendier, Moretti, and Peters 2018; De Bondt, Cousin, and Roll 2018). While prior studies on experiential learning focus mainly on post-acquisition performance (Barkema and Schijven 2008a; King et al. 2021; King et al. 2004; Datta, Pinches, and Narayanan 1992; Trichterborn, Zu Knyphausen-Aufseß, and Schweizer 2016; Schweizer et al. 2022), we focus on the effect of experiential learning on the acquisition price *and* post-acquisition performance. This approach provides more complete evidence on the likely existence of a winner's curse at the market for corporate control.

We also contribute to the empirical M&A literature by employing a novel approach to investigate the post-acquisition performance, which compares the winners of a bidding contest to the losers of the same acquisition contest (Malmendier, Moretti, and Peters 2018). Lastly, our analysis is based on a large sample of contested firm acquisitions (Malmendier, Moretti, and Peters 2018).

II. Theory & hypotheses

The winner's curse

A winner's curse at the market for corporate control is a likely phenomenon in the presence of competition for a target firm. Acquiring firms tend to fail to adapt their bidding strategy to the presence of competing bidders (Roll 1986; Varaiya and Ferris 1987; Varaiya 1988; Boone and Mulherin 2008; Brander and Egan 2017; Malmendier, Moretti, and Peters 2018; De Bondt, Cousin, and Roll 2018), the management becomes overconfident in their own ability to create value from the acquisition (Thaler 1988; Roll 1986;

Sirower 1997; Hietala, Kaplan, and Robinson 2003; Malmendier and Tate 2015) and their bidding behaviour becomes more aggressive so that they maintain the chance of winning the bidding contest (Kagel and Levin 1986; Hong and Shum 2002). The result is a winning bid that overestimates the value of the target firm. The value of the winning bid is expected to increase with the number of bidders (Varaiya and Ferris 1987; Varaiya 1988).

At the market for corporate control, assessing the value of the object at stake is difficult because a firm is composed of a bundle of resources and assets from which value can potentially be created (Bruton, Oviatt, and White 1994; Cording, Christmann, and King 2008; Castellaneta and Conti 2017). In addition, expected synergies between the assets and capabilities of acquiring and target firms enter the value assessment. Superior expected synergies can, in fact, justify a rationally chosen higher price by the acquiring firm (Adegbesan 2009; Conner 1991; Lippman and Rumelt 2003; Laamanen 2007) because the winning firm may expect to create a higher value from the acquisition than its competitors. This is why, next to a too high acquisition price, a second condition for a winner's curse is required which states that the post-acquisition performance of the acquiring firm after a bidding contest is lower. This condition makes sure that the higher price is not justified because of higher synergies to be realized.

Acquisition experience

In the context of corporate acquisitions, experiential learning is described as the ability to employ acquisition experience for value creation through a new firm acquisition (Barkema and Schijven 2008a). Firms learn from past firm acquisitions and become familiar with several parts of the multi-process of an acquisition including the selection, evaluation of the target, but also the due diligence process, the negotiation of the deal and the integration of two combined firms to achieve potential synergy. Some studies have indicated that experienced acquirers that develop acquisition capabilities are more successful in their post-acquisition performance (Fowler and Schmidt 1989; Nadolska and Barkema 2014; Cuypers, Cuypers, and Martin 2017; Schweizer et al. 2022). Learning from past acquisitions cannot be taken for granted though. The complexity and multi-staged nature of the acquisition process obscures the causal link between an action and its outcome, which renders learning difficult (Zollo and Winter 2002; Heimeriks, Schijven, and Gates 2012; Castellaneta and Conti 2017; Barkema and Schijven 2008a).

Nevertheless, learning from past acquisitions can occur when cumulative acquisition experience is transferred into routines that help managing subsequent acquisitions (Chao 2018; Halebian and Finkelstein 1999; Kim and Finkelstein 2009). Routines are standard operating procedures that develop as a result of learning from repetition and that facilitate the implementation of reoccurring tasks (Cyert and March 1963). Routines serve as organizational memory (Nelson and Winter 1982) and establish the building blocks of organizational capabilities (Dosi, Nelson, and Winter 2000; Winter 2003) and dynamic capabilities (Eisenhardt and Martin 2000). As such, routines are a source of superior organizational performance. In the context of firm acquisitions, cumulative acquisition experience has been shown to be an important source of organizational learning with the potential to support the different stages of an acquisition process (Barkema and Schijven 2008a; Levitt and March 1988; Chao 2018; Welch et al. 2020).

Prior literature that focuses on experiential learning distinguishes broadly between two stages of the acquisition process (Barkema and Schijven 2008b; Puranam, Powell, and Singh 2006; Castellaneta and Conti 2017). The first stage is the selection stage, which includes the various steps from target selection up to the value assessment of the target (Puranam, Powell, and Singh 2006; Castellaneta and Conti 2017; Wu and Reuer 2021). The second stage is the restructuring stage, where the acquiring firm seeks to generate value from the acquisition (Barkema and Schijven 2008b; Heimeriks, Schijven, and Gates 2012; Castellaneta and Conti 2017).

Regarding the post-acquisition stage, it has been shown that firms can simply 'learn by doing' (Lubatkin 1987; Bruton, Oviatt, and White 1994; Halebian and Finkelstein 1999; Hayward 2002). Tacit routines evolve by repeating similar tasks without explicit knowledge articulation or codification. Learning from past

experience is further improved when tacit routines are codified after the causal links for post-acquisition integration success are understood (Zollo and Singh 2004; Heimeriks, Schijven, and Gates 2012). For a following acquisition, the results of such an analysis can provide guidance for action through a well-managed organizational memory. While the mechanisms of 'learning by doing' and 'learning through codification of tacit routines' are the same at the selection stage, some authors argue that the codification of tacit knowledge is easier in this first stage because the tasks are less complex and more similar for different acquisitions than those of the post-acquisition integration stage and because the time distance between action and outcome is shorter (Castellaneta and Conti 2017).[1]

Empirical evidence that distinguishes the selection and integration stage supports experiential learning at both stages (Puranam, Powell, and Singh 2006; Barkema and Schijven 2008b; Heimeriks, Schijven, and Gates 2012; Castellaneta and Conti 2017). These arguments and evidence lead us to argue that experiential learning can help mitigating a winner's curse as tacit and codified routines developed through past acquisition experience can facilitate the value assessment of the target firm in the selection stage and also foster value creation in the post-acquisition phase.

Hypothesis 1: *The price increase due to competition for the target firm is smaller when the acquiring firm has acquisition experience.*

Hypothesis 2: *Following a firm acquisition associated with a bidding contest, the post-acquisition performance of an acquiring firm is greater due to acquisition experience.*

III. Data, variables and descriptive statistics

Data

Our data is retrieved from SDC Platinum (Refinitiv) and includes all contested and non-contested U.S. acquisitions of publicly listed firms in the time period 1980–2020. After having used several filters,[2] our final dataset includes a total of 4,646 acquisitions, 303 contested deals and a total of 4,343 non-contested deals. We retrieve firm characteristics for all firms involved in the acquisitions and acquisition contests from Compustat.

Two samples are created. The first one is a cross-sectional sample consisting of 4,646 observations, which allows to relate the price paid for the target firm to the target and acquiring firms' characteristics and the presence of a bidding contest. This sample allows to test H1. The second sample, used to test H2, is a firm-level panel dataset for the 336 firms (both winners and losers) involved in contested deals following Malmendier, Moretti, and Peters (2018). This sample contains financial information of the firms for a maximum of 9 years before and after the acquisition. The panel is unbalanced because information is not available for all firm-years and consists of 5,149 observations.

Variables

Table 1 shows a summary of the dependent and independent variables used in our analyses. Two different dependent variables are used. To test H1, the price paid for the acquisition target is used as a dependent variable (Grimpe and Hussinger 2014). The post-acquisition performance of the acquiring firm (H2) is measured as Tobin's Q normalized by year and Standard Industry Classification (SIC3) industry, i.e. the market value of the acquiror over its book value (Laamanen 2007). We chose Tobin's Q as the main measure for firm performance because it is a forward-looking measure that incorporates the expectations about future profits. To show the robustness of our results for the post-acquisition performance analysis, we further employ the sales-to-assets ratio and the return on assets (ROA) as dependent variables. Both variables are normalized by year and SIC3 industry.

For testing H1, the main independent variables are a binary variable that captures whether the acquisition was associated with a bidding

[1]Learning can also be achieved by engagement in alliances prior to the acquisition (Zollo and Winter 2002; Chang and Tsai 2013).
[2]Our dataset excludes deals that are not completed or withdrawn. We also exclude firms that are not publicly listed U.S. firms. We also exclude firms that enter as white knights (Malmendier, Moretti, and Peters 2018).

Table 1. Description of variables.

Variable label	Variable definition	Variable type	Source
Dependent Variables			
Acquisition Price	Logarithm of the value of the deal in millions of USD	Continuous	SDC Platinum
Tobin's Q	Acquiring firms' Tobin's Q in year *t* over the SIC-3 industry Tobin's Q in year *t*. The Tobin's Q the market value of the acquiror over its book value (in millions of USD).	Continuous	Compustat
Sales/Assets	Acquiring firms' sales-to-assets ratio in year *t* over the SIC-3 industry Sales-to-Assets ratio in year *t*. Sales and assets are in millions of USD.	Continuous	Compustat
ROA	Acquiring firms' return on assets (ROA) in year *t* over the SIC-3 industry ROA in year *t*. ROA is the net income over book value of total assets.	Continuous	Compustat
Independent Variables			
Bidding contest	Equal to one if the acquisition is flagged as a contested deal	Binary	SDC Platinum
Number of competing bidders	Number of firms (regardless of the public status) involved in a contested deal bid	Continuous	SDC Platinum
Acquisition experience (contested M&As)	Equal to one if firm has previous experience in M&As and belongs to the contested M&As subsample	Binary	SDC Platinum
Acquisition experience (contested M&As)	Equal to one if firm has previous experience in M&As and belongs to the contested non-M&As subsample	Binary	SDC Platinum
Log(Target Assets)	Logarithm of the target's assets (in millions of USD)	Continuous	Compustat
Target Debt/Assets	Target's debt (in millions of USD) over target's assets (in millions of USD)	Continuous	Compustat
Target Cash/Assets	Target's cash (in millions of USD) over target's assets (in millions of USD)	Continuous	Compustat
Target R&D/Assets	Target's R&D expenditures (in millions of USD) over target's assets (in millions of USD). Note that for those observations for which the value was missing, this has been replaced by zero.	Continuous	Compustat
Target missing R&D	Equal to one if target's R&D expenditure information was missing	Binary	Compustat
Target & acq. conduct R&D	Equal to one if both target and acquiring firm have a positive value for the R&D expenditures	Binary	Compustat
Same industry	Equal to one if both target and acquiring firm belong to the same SIC-2 industry group	Binary	Compustat
Log(Acq. Assets)	Logarithm of the acquiror's assets (in millions of USD)	Continuous	Compustat
Acq. Debt/Assets	Acquiror's debt (in millions of USD) over acquiror's assets (in millions of USD)	Continuous	Compustat
Acq. Cash/Assets	Acquiror's cash (in millions of USD) over acquiror's assets (in millions of USD)	Continuous	Compustat
Acq. R&D/Assets	Acquiror's R&D expenditures (in millions of USD) over acquiror's assets (in millions of USD). Note that for those observations for which the value was missing, this has been replaced by zero.	Continuous	Compustat
Acq. missing R&D	Equal to one if acquiror's R&D expenditure information was missing	Binary	Compustat
Post Acq	Equal to one after the acquisition year	Binary	SDC Platinum
Winner	Equal to one if the firm won the bidding contest	Binary	SDC Platinum
Exp.	Equal to one if firm has previous M&A experience	Binary	SDC Platinum
Winner*Post Acq*Exp.	The interaction term of the variables Post Acq, Winner and Post Acq.	Binary	SDC Platinum

contest, a binary variable that indicates whether the acquiror was involved in an acquisition prior to the focal acquisition for contested acquisitions and a binary variable that indicates whether the acquirer has experience for the non-contested acquisition subsample. We also employ the number of competing bidders to show robustness for the results of H1 (Varaiya and Ferris 1987).

For testing H2, our main variables of interest are a set of binary variables that indicate the post-acquisition period, whether the focal firm was the winner of the deal and whether the firm was involved in an acquisition prior to the focal deal. To test H2, we include the interaction of the post-acquisition period, winner and prior experience binary variables.

The control variables used to test the hypotheses related to the price paid for the target (H1) and the acquirer post-acquisition performance (H2) are largely the same. For both, target and acquiror, total assets are used to measure firm size. The natural logarithm is employed to account for the skewness of the variable. Debt and cash are used to measure the financial fitness of both firms (Slusky and Caves 1991). Those variables are divided by total assets to avoid a high correlation with firm size. R&D investment (divided by total assets) of the target and acquiror is employed (Chan, Lakonishok, and Sougiannis 2001). For those firms for which the R&D investment is missing, we replace the value by zero and create a dummy variable, which we also include in the regression. Access to a target firm's innovative assets can be a motivation to acquire the firm, and their value is reflected in the deal value (Grimpe and Hussinger 2014). Further, for testing H1, two binary variables are used to capture the market and technological relatedness between target and acquiring firms (Cassiman et al. 2005). The first one captures whether the both firms belong to the same Standard Industry Classification (SIC2) industry sector. The second

variable captures potential technology synergies by capturing whether both firms invest in R&D. Lastly, year and industry dummies are used to control for a possible general time trend and industry conditions.

Descriptive statistics

Table 2 shows the descriptive statistics for the deal price sample (H1) for the full sample as well as for acquisitions with and without a bidding contest separately. It appears that, as expected, acquisitions associated with a bidding contest show a higher acquisition price. Target firms involved in bidding contests are larger and less involved in R&D than others. They are more likely to be affiliated with the same industry sector than their acquirers than others. Acquiring firms involved in bidding contests have both a higher debt to assets and a higher cash-to-asset ratio. These differences may be related to the acquisition that takes place in the same year for which the mean values are reported. In terms of firm size and R&D, they are comparable.

Table 3 shows the descriptive statistics for the firm panel used to investigate H2. When distinguishing winners and losers of acquisition contests, we see that they are very comparable in terms of the mean values for the variables presented. Some of the small differences are significant.

IV. Empirical results

Results for H1

Table 4 shows the results for the deal price regressions that test H1. The first specification only includes the binary variables, which indicate that the firm acquisition was associated with a bidding contest. The second specification adds target firm characteristics and specification (3) the characteristics of the acquiring firm. The last specification adds the binary variables indicating whether the acquiring firm has acquisition experience in a contested or non-contested deal.

The results show that the price paid for an acquisition target is higher when there is competition for the target firm. The presence of a bidding contest increases the price paid for the target firm by a minimum of 69% (exp(0.523) = 169) (specification (4)).

The results presented in Table 4 do not provide support for H1, which states that the price paid in a bidding competition is smaller when the acquiror has acquisition experience. Interestingly, experience matters in non-contested deals. Here, the price paid for the acquisition target is significantly lower if the acquiring firm has acquisition experience.

Table 5 shows the robustness of the results when the number of competing bidders is used instead of the binary variable indicating a bidding contest. Results are similar to the main results presented

Table 2. Descriptive statistics: acquisition price data set.

	Total sample		Bidding contest		No bidding contest		
Variable	*Mean*	*Std. Dev.*	*Mean*	*Std. Dev.*	*Mean*	*Std. Dev.*	*t-test*
Acquisition Price	1550.688	6161.299	3381.141	10188.890	1422.982	5756.737	***
Log(acquisition price)	5.206	2.174	6.293	1.934	5.130	2.169	***
Bidding contest	0.065	0.247					
Number of competing bidders	0.109	0.446					
Target Assets	2461.103	15872.500	5687.286	45600.010	2236.020	11140.640	***
Log(Target Assets)	5.668	1.988	6.279	2.011	5.626	1.980	***
Target Debt/Assets	0.175	0.214	0.199	0.189	0.173	0.215	*
Target Cash/Assets	0.267	4.914	0.088	0.210	0.280	5.082	
Target R&D/Assets	0.056	0.145	0.037	0.085	0.057	0.149	**
Target missing R&D	0.532	0.499	0.502	0.501	0.534	0.499	
Target & acq. conduct R&D	0.387	0.487	0.439	0.497	0.383	0.486	*
Same industry	0.665	0.472	0.736	0.442	0.660	0.474	***
Acq. assets	18782.730	67687.560	23283.740	107669.800	18468.710	63980.460	
Log(Acq. Assets)	7.941	2.095	7.815	2.094	7.950	2.095	
Acq. Debt/Assets	0.206	0.191	0.266	0.231	0.202	0.187	***
Acq. Cash/Assets	0.094	0.770	0.204	2.043	0.087	0.586	**
Acq. R&D/Assets	0.031	0.081	0.026	0.085	0.031	0.081	
Acq. missing R&D	0.526	0.499	0.472	0.500	0.530	0.499	*
Acq. experience (contested M&As)	0.327	0.178					
Acq. experience (non-contested M&As)	0.495	0.500					

Table 3. Descriptive statistics: post-acquisition performance data set.

	Total sample		Winner sample		Loser sample		
Variable	*Mean*	*Std. Dev.*	*Mean*	*Std. Dev.*	*Mean*	*Std. Dev.*	*t-test*
Tobin's Q	0.733	0.528	0.719	0.553	0.771	0.446	***
Sales/Assets	0.913	0.531	0.908	0.551	0.956	0.502	***
ROA	0.301	1.905	0.715	13.364	−0.819	43.144	*
Winner*Post Acq	0.388	0.487	0.388	0.487			
Winner*Post Acq*Exp.	0.227	0.419	0.227	0.419			
Log(Acq. Assets)	7.797	2.231	7.848	2.238	7.654	2.208	***
Acq. Debt/Assets	0.226	0.202	0.236	0.200	0.198	0.204	***
Acq. Cash/Assets	0.133	1.606	0.114	1.010	0.185	2.640	
Acq. R&D/Assets	0.027	0.067	0.028	0.071	0.026	0.054	
Acq. missing R&D	0.453	0.498	0.424	0.494	0.534	0.499	***

in Table 4. This suggests that the presence of competing bids matter, rather than the number of competing bidders.

Results for H2

Table 6 shows the results from fixed effects regressions that control for firm-specific effects for the acquiring firm's post-acquisition performance, testing H2. The first specification shows a lean specification, which only includes a dummy indicating the post-acquisition period and the variable that takes the value one for the post-acquisition period when the focal firm won a bidding contest. The second specification adds an interaction term between the post-acquisition, winner and experience variables. This interaction term (*Winner*Post Acquisition*Experience*) takes the value one in the post-acquisition period when the focal firm has experience and is the winner of the contested deal. Note that the variables *Winner* and

Table 4. Acquisition price regressions I.

	(1)	(2)	(3)	(4)
Bidding contest	1.163***	0.588***	0.615***	0.523***
	(0.128)	(0.078)	(0.077)	(0.107)
Acq. experience (contested M&As)				−0.142
				(0.144)
Acq. experience (non-contested M&As)				−0.312***
				(0.044)
Log(Target Assets)		0.860***	0.754***	0.751***
		(0.012)	(0.014)	(0.014)
Target Debt/Assets		−0.517***	−0.407***	−0.416***
		(0.101)	(0.100)	(0.100)
Target Cash/Assets		0.018***	0.016***	0.016***
		(0.004)	(0.004)	(0.004)
Target R&D/Assets		0.144	−0.189	−0.181
		(0.157)	(0.158)	(0.157)
Target missing R&D		−0.168***	0.001	0.016
		(0.055)	(0.075)	(0.079)
Target & acq. conduct R&D			0.201**	0.281***
			(0.080)	(0.105)
Same industry			0.366***	0.349***
			(0.044)	(0.044)
Log(Acq. Assets)			0.165***	0.205***
			(0.012)	(0.013)
Acq. Debt/Assets			−0.180	−0.182
			(0.121)	(0.121)
Acq. Cash/Assets			−0.010	−0.000
			(0.025)	(0.025)
Acq. R&D/Assets			0.822***	0.818***
			(0.276)	(0.275)
Constant	5.130***	−0.293	−1.096*	−1.487**
	(0.033)	(0.616)	(0.604)	(0.607)
Observations	4646	4646	4646	4646
Log likelihood	−10157.914	−7636.188	−7509.357	−7482.738
Prob>chi2	0.000	0.000	0.000	0.000

Standard errors in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.
All regressions contain year and industry dummies. If R&D over assets is included, the regressions also include a dummy variable that equals one if information for R&D was missing.

Post-Acquisition are not included in the fixed effects regressions because they are time-invariant. Specifications (3) and (4) add the acquiring firm control variables.

The results support H2 by consistently showing that the post-acquisition performance decline of the acquirer is smaller when the acquiring firm of a bidding contest has acquisition experience. The post-acquisition performance decline, as measured with the Tobin's Q, is about 21% lower when the acquiring firm is a winner and has previous acquisition experience (specification (4)).

Our results are graphically displayed in Figures 1-3 where we show event study graphs of the relative performance of winners and losers. Figure 1 shows that winners outperform losers of a bidding contest in the period immediately after the acquisition. When distinguishing between winners with and without acquisition experience, it appears that it is the experienced winners that outperform the losers of a bidding contest (Figures 2 and 3).

We check for the robustness of our results by employing alternative dependent variables. The interaction term *Winner*Post Acquisition *Experience* is positive and significant as well when the performance is measured with the ratio of sales to assets normalized by the industry average (Table 7) and ROA normalized by the industry average (Table 8).

V. Discussion

This paper shows that experiential learning cannot avoid increased prices paid for a target in a bidding contest. Acquisition experience is, however, associated with a superior post-acquisition performance as compared to winners of bidding contests without acquisition experience and as compared to losers of bidding competitions.

The fact that even experienced firms pay acquisition prices that are too high in the presence of competition is in line with lab experiments (Thaler 1988). Lab experiments show that learning through

Table 5. Acquisition price regressions II.

	(1)	(2)	(3)	(4)
Number of competing bidders	0.629***	0.300***	0.309***	0.230***
	(0.071)	(0.043)	(0.042)	(0.056)
Acq. experience (contested M&As)				−0.032
				(0.139)
Acq. experience (non-contested M&As)				−0.322***
				(0.044)
Log(Target Assets)		0.860***	0.755***	0.752***
		(0.012)	(0.014)	(0.014)
Target Debt/Assets		−0.519***	−0.412***	−0.420***
		(0.101)	(0.100)	(0.100)
Target Cash/Assets		0.018***	0.016***	0.016***
		(0.004)	(0.004)	(0.004)
Target R&D/Assets		0.132	−0.200	−0.189
		(0.157)	(0.158)	(0.158)
Target missing R&D		−0.168***	0.003	0.017
		(0.055)	(0.075)	(0.079)
Target & acq. conduct R&D			0.205**	0.283***
			(0.080)	(0.105)
Same industry			0.367***	0.350***
			(0.044)	(0.044)
Log(Acq. Assets)			0.164***	0.205***
			(0.012)	(0.013)
Acq. Debt/Assets			−0.169	−0.172
			(0.121)	(0.121)
Acq. Cash/Assets			−0.006	0.002
			(0.025)	(0.025)
Acq. R&D/Assets			0.814***	0.810***
			(0.276)	(0.275)
Constant	5.137***	−0.301	−1.107*	−1.497**
	(0.033)	(0.616)	(0.605)	(0.608)
Observations	4646	4646	4646	4646
Log likelihood	−10159.740	−7640.342	−7514.903	−7486.522
Prob>chi2	0.000	0.000	0.000	0.000

Standard errors in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.
All regressions contain year and industry dummies. If R&D over assets is included, the regressions also include a dummy variable that equals one if information for R&D was missing.

Table 6. Fixed effects regressions for post-acquisition performance (Tobin's Q).

	(1)	(2)	(3)	(4)
Post Acq	−0.069**	−0.067**	−0.052*	−0.051*
	(0.029)	(0.029)	(0.028)	(0.028)
Winner*Post Acq	−0.035	−0.094***	0.018	−0.018
	(0.027)	(0.032)	(0.026)	(0.031)
Winner*Post Acq*Exp.		0.095***		0.058**
		(0.028)		(0.027)
Log(Acq. Assets)			−0.146***	−0.145***
			(0.010)	(0.010)
Acq. Debt/Assets			0.045	0.050
			(0.041)	(0.041)
Acq. Cash/Assets			0.054***	0.053***
			(0.005)	(0.005)
Acq. R&D/Assets			1.021***	1.025***
			(0.152)	(0.152)
Constant	0.841***	0.840***	1.429***	1.422***
	(0.148)	(0.148)	(0.152)	(0.152)
Observations	5149	5149	5149	5149
Log likelihood	−2382.145	−2376.029	−2130.280	−2127.817
Prob>chi2	0.000	0.000	0.000	0.000

Standard errors in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.
All regressions contain year dummies. If R&D over assets is included, the regressions also include a dummy variable that equals one if information for R&D was missing.

experience happens rarely and slowly in the market for corporate control (Thaler 1988). Empirical studies argue that the complexity and multi-staged nature of the acquisition process render learning difficult because the causal link between an action and its outcome is obscured (Zollo and Winter 2002; Heimeriks, Schijven, and Gates 2012; Castellaneta and Conti 2017; Barkema and Schijven 2008a). Acquisition experience further has been shown to lead to less sensitivity towards negative information during the due diligence process, which may reflect a higher confidence in the original valuation (Puranam, Powell, and Singh 2006). Such a mechanism may explain that the winner's of a bidding contest do not adjust their bid when there is competition for the target firm.

This study makes several contributions to the literature. First, the study contributes to the scarce empirical evidence on a winner's curse at the market for corporate control (Varaiya and Ferris 1987; Roll 1986; Varaiya 1988; Sirower 1997; Hietala, Kaplan, and Robinson 2003; Boone and Mulherin 2008; Brander and Egan 2017; Malmendier, Moretti, and Peters 2018; De Bondt, Cousin, and Roll 2018). As it is not straightforward to empirically identify a winner's curse because the true

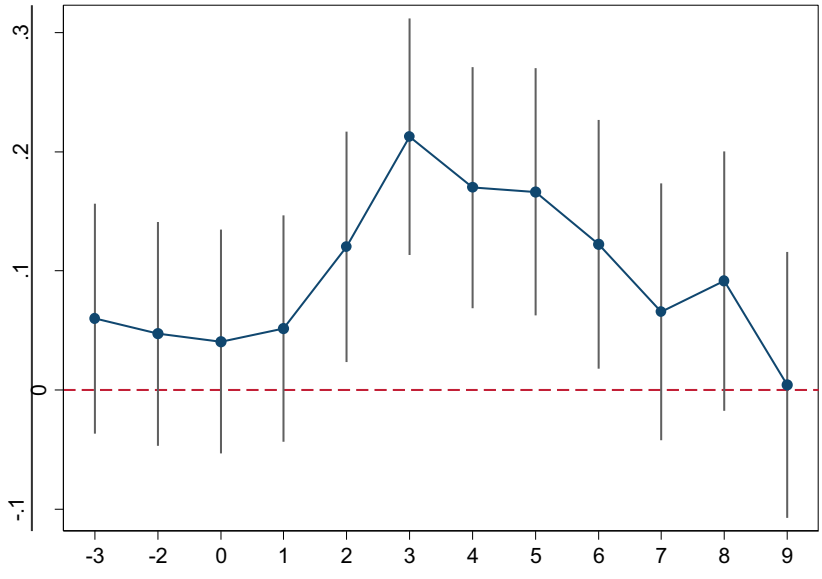

Figure 1. Post-acquisition performance (Tobin's q): winners versus losers.

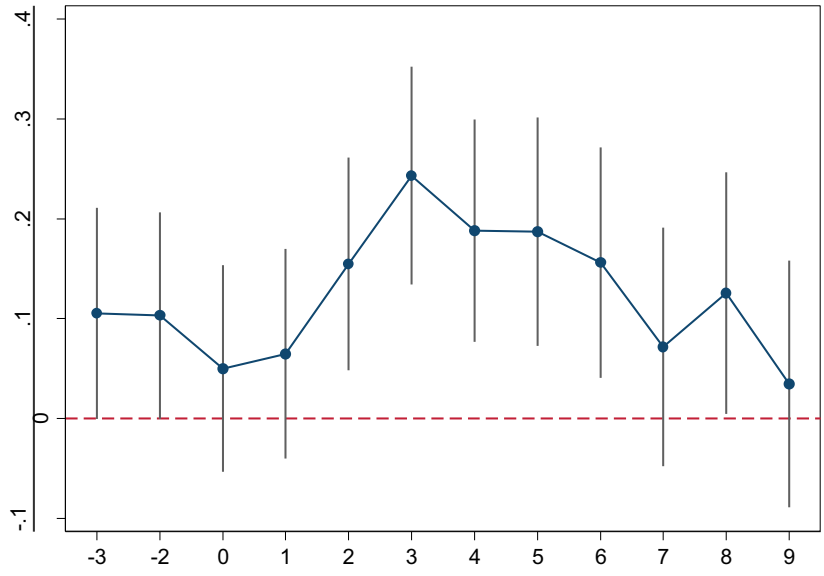

Figure 2. Post-acquisition performance (Tobin's q): winners with experience versus losers.

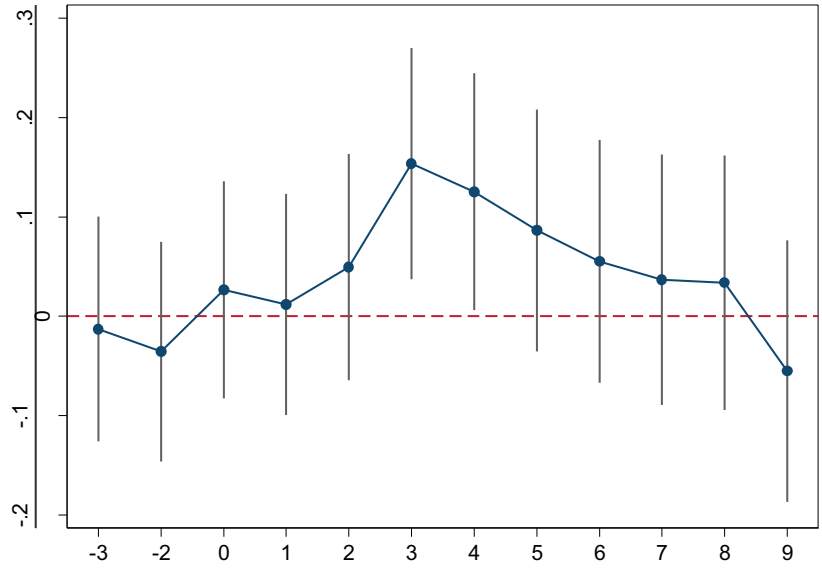

Figure 3. Post-acquisition performance (Tobin's q): winners without experience versus losers.

value of the acquisition target is unknown, this paper suggests to investigate the likelihood of the presence of a winner's curse along two dimensions: the acquisition price and the post-acquisition performance of the acquiring firm. Both dimensions should be considered because a higher acquisition price alone can speak for higher expected and potentially also realized synergy effects between the acquiring and the target firm (Adegbesan 2009; Laamanen 2007) and because the post-acquisition performance may be affected by an insufficiently planned and poorly executed post-acquisition integration (Chatterjee et al. 1992; Datta 1991; Haspeslagh and Jemison 1991; Larsson and Finkelstein 1999; Arroyabe, Hussinger, and Hagedoorn 2020).

Second, this study contributes to the literature on experiential learning in the market for corporate control (Barkema and Schijven 2008a; Trichterborn, Zu Knyphausen-Aufseß, and Schweizer 2016; Schweizer et al. 2022). While lab experiments mimicking firm's price decisions in auctions for corporate acquisitions show that learning based on experience happens

Table 7. Fixed effects regressions for post-acquisition performance (sales/assets).

	(1)	(2)	(3)	(4)
Post Acq	−0.159***	−0.157***	−0.119***	−0.118***
	(0.026)	(0.026)	(0.025)	(0.025)
Winner*Post Acq	0.055**	−0.023	0.098***	0.039
	(0.024)	(0.028)	(0.023)	(0.027)
Winner*Post Acq*Exp.		0.129***		0.096***
		(0.025)		(0.024)
Log(Acq. Assets)			−0.138***	−0.136***
			(0.009)	(0.009)
Acq. Debt/Assets			−0.248***	−0.238***
			(0.043)	(0.043)
Acq. Cash/Assets			−0.022***	−0.023***
			(0.008)	(0.008)
Acq. R&D/Assets			0.976***	0.988***
			(0.124)	(0.124)
Constant	1.064***	1.061***	1.694***	1.682***
	(0.130)	(0.130)	(0.133)	(0.133)
Observations	5059	5059	5059	5059
Log likelihood	−1666.740	−1652.021	−1441.129	−1432.439
Prob>chi2	0.000	0.000	0.000	0.000

Standard errors in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.
All regressions contain year dummies. If R&D over assets is included, the regressions also include a dummy variable that equals one if information for R&D was missing.

Table 8. Fixed effects regressions for post-acquisition performance (ROA).

	(1)	(2)	(3)	(4)
Post Acq	−0.000	0.004	0.003	0.006
	(0.134)	(0.134)	(0.134)	(0.134)
Winner*Post Acq	0.061	−0.082	0.072	−0.076
	(0.121)	(0.144)	(0.122)	(0.145)
Winner*Post Acq*Exp.		0.237*		0.240*
		(0.128)		(0.128)
Log(Acq. Assets)			−0.025	−0.020
			(0.046)	(0.046)
Acq. Debt/Assets			0.058	0.083
			(0.233)	(0.233)
Acq. Cash/Assets			−0.022	−0.025
			(0.043)	(0.043)
Acq. R&D/Assets			1.056	1.086
			(0.665)	(0.665)
Constant	−0.112	−0.117	−0.147	−0.177
	(0.668)	(0.668)	(0.715)	(0.715)
Observations	5059	5059	5059	5059
Log likelihood	−9942.079	−9940.208	−9939.675	−9937.781
Prob>chi2	0.000	0.000	0.000	0.000

Standard errors in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.
All regressions contain year dummies. If R&D over assets is included, the regressions also include a dummy variable that equals one if information for R&D was missing.

rarely and slowly (Thaler 1988), empirical evidence is somewhat more optimistic about learning effects for value creation through corporate acquisitions (Barkema and Schijven 2008a). Nevertheless, only a few studies report positive experiential learning effects for post-acquisition performance (e.g. Fowler and Schmidt 1989; Bruton, Oviatt, and White 1994; Barkema and Drogendijk 2007; Nadolska and Barkema 2014; Cuypers, Cuypers, and Martin 2017; Schweizer et al. 2022), while most studies suggest the absence of learning through experience (e.g. Lubatkin 1982; Zollo and Leshchinskii 2004). Conflicting empirical results from acquisition experience on different measures of acquisition performance are confirmed in meta-analyses (King et al. 2021).

Lastly, while early studies use small sample of contested acquisitions due to a lack of available data (e.g. Varaiya 1988; Boone and Mulherin 2008; Hayward 2002), we contribute to recent empirical evidence that exploits the availability of larger datasets of contested M&As (e.g. Betton, Eckbo, and Thorburn 2008; Malmendier, Moretti,

and Peters 2018) and exploit a novel identification strategy that compares the winners and the losers of acquisition contests (Malmendier, Moretti, and Peters 2018).

A caveat of our analysis is that our sample is based on publicly listed firms and U.S. acquisitions only, while we know that acquisition premia are higher in more efficient markets (Tampakoudis, Subeniotis, and Dalakiouridou 2011). This suggests a need for research investigating whether the observed effects hold for private firms and also for other markets. For example, Europe has fewer hostile acquisitions that may invite competitive bids, and researchers have questioned whether U.S. acquisition research findings hold in Europe (Moschieri and Campa 2009).

VI. Implications

Our results suggest that experiential learning does not help against a too high acquisition price paid by a winning firm. This raises the question whether experience, rather than creating an experiential advantage for the acquiring firm, may lead to overconfidence when it comes to the bidding competition. Drawing from past experience, a manager may be convinced to be able to outsmart the competition (Puranam, Powell, and Singh 2006). Following this line of thought, our results can be seen as a warning for managers emphasizing that experience does not protect against overconfidence in bidding contests at the market for corporate control.

Regarding the post-acquisition performance, our results suggest that when it comes to the potentially more complex and more specific tasks of post-acquisition integration (Castellaneta and Conti 2017), the management of the acquiring firm seems to act more carefully so that gains from experiential learning can be realized. These results support prior research that advocates purposeful codification of the post-acquisition processes to realize the maximum gains from prior acquisitions through experiential learning (Zollo and Singh 2004; Heimeriks, Schijven, and Gates 2012).

VII. Conclusion

This paper shows that acquisition experience does not help avoiding to overpay for firm acquisitions. The post-acquisition performance of experienced winners of bidding contests at the market for corporate control is superior though. Taken together, these results provide partial evidence for experiential learning to help avoiding a winner's curse at the market for corporate control.

Acknowledgments

For helpful comments, we would like to thank David King.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Marta Arroyabe http://orcid.org/0000-0003-3223-0268

References

Adegbesan, J. A. 2009. "On the Origins of Competitive Advantage: Strategic Factor Markets and Heterogeneous Resource Complementarity." *Academy of Management Review* 34 (3): 463–475. doi:10.5465/amr.2009.40632465.

Arroyabe, M., K. Hussinger, and J. Hagedoorn. 2020. "Hiring New Key Inventors to Improve firms' Post-M&A Inventive Output." *R&D Management* 50 (4): 494–509. doi:10.1111/radm.12400.

Baker, M., R. Ruback, and J. Wurgler. 2007. "Behavioral corporate finance: A survey." In *The Handbook of Corporate Finance: Empirical Corporate Finance*, edited by E. Eckbo, 145–186. New York: Elsevier/North Holland. doi:10.1016/B978-0-444-53265-7.50018-4.

Barberis, N., and R. Thaler. 2003. "A Survey of Behavioral Finance." *Handbook of the Economics of Finance* 1: 1053–1128. doi:10.1016/S1574-0102(03)01027-6.

Barkema, H. G., J. H. Bell, and J. M. Pennings. 1996. "Foreign entry, cultural barriers, and learning." *Strategic Management Journal* 17 (2): 151–166.

Barkema, H. G., and R. Drogendijk. 2007. "Internationalising in Small, Incremental or Larger Steps?" *Journal of International Business Studies* 38 (7): 1132–1148. doi:10.1057/palgrave.jibs.8400315.

Barkema, H. G., and M. Schijven. 2008a. "How Do Firms Learn to Make Acquisitions? A Review of Past Research and an Agenda for the Future." *Journal of Management* 34 (3): 594–634. doi:10.1177/0149206308316968.

Barkema, H. G., and M. Schijven. 2008b. "Toward Unlocking the Full Potential of Acquisitions: The Role of Organizational Restructuring." *Academy of Management Journal* 51 (4): 696–722. doi:10.5465/AMJ.2008.33665204.

Betton, S., B. E. Eckbo, and K. Thorburn. 2008. "Corporate Takeovers." In *Handbook of Corporate Finance: Empirical Corporate Finance*, edited by B.E. Eckbo, Vol. 2. Amsterdam: North Holland/Elsevier.

Boone, A. L., and H. Mulherin. 2008. "Do Auctions Induce a Winner's Curse? New Evidence from the Corporate Takeover Market." *Journal of Financial Economics* 89 (1): 1–19. doi:10.1016/j.jfineco.2007.08.003.

Brander, J. A., and E. J. Egan. 2017. "The Winner's Curse in Acquisitions of Privately-Held Firms." *The Quarterly Review of Economics and Finance* 65 (C): 249–262. doi:10.1016/j.qref.2017.01.010.

Bruton, G. D., B. M. Oviatt, and M. A. White. 1994. "Performance of Acquisitions of Distressed Firms." *Academy of Management Journal* 37 (4): 972–989. doi:10.2307/256607.

Cassiman, B., M. G. Colombo, P. Garrone, and R. Veugelers. 2005. "The Impact of M&A on the R&D Process. An Empirical Analysis of the Role of Technological- and Market-Relatedness." *Research Policy* 34 (2): 195–220. doi:10.1016/j.respol.2005.01.002.

Castellaneta, F., and R. Conti. 2017. "How Does Acquisition Experience Create Value? Evidence from a Regulatory Change Affecting the Information Environment." *European Management Journal* 35 (1): 60–68. doi:10.1016/j.emj.2016.07.002.

Chang, S. C., and M. T. Tsai. 2013. "The Effect of Prior Alliance Experience on Acquisition Performance." *Applied Economics* 45 (6): 765–773. doi:10.1080/00036846.2011.613767.

Chan, L. K. C., J. Lakonishok, and T. Sougiannis. 2001. "The Stock Market Valuation of Research and Development Expenditures." *The Journal of Finance* 56 (6): 2431–2456. doi:10.1111/0022-1082.00411.

Chao, Y. -C. 2018. "Organizational Learning and Acquirer Performance: How Do Serial Acquirers from Acquisition Experience." *Asia Pacific Management Review* 23 (3): 161–168. doi:10.1016/j.apmrv.2017.07.001.

Chatterjee, S., M. H. Lubatkin, D. M. Schweiger, and Y. Weber. 1992. "Cultural Differences and Shareholder Value in Related Mergers: Linking Equity and Human Capital." *Strategic Management Journal* 13 (5): 319–334. doi:10.1002/smj.4250130502.

Conner, K. R. 1991. "A Historical Comparison of Resource based Theory and Five Schools of Thought Within Industrial Organization Economics. Do We Have a New Theory of the Firm?" *Journal of Management* 17 (1): 121–154. doi:10.1177/014920639101700109.

Cording, M., P. Christmann, and D. D. R. King. 2008. "Reducing Causal a Ambiguity in Acquisition Integration: Intermediate Goals as Mediators of Integration Decisions and Acquisition Performance." *Academy of Management Journal* 51 (4): 744–767. doi:10.5465/AMJ.2008.33665279.

Cuypers, I. R., Y. Cuypers, and X. Martin. 2017. "When the Target May Know Better: Effects of Experience and Information Asymmetries on Value from Mergers and Acquisitions." *Strategic Management Journal* 38 (3): 609–625. doi:10.1002/smj.2502.

Cyert, R. M., and J. C. March. 1963. *A Behavioural Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Datta, D. K. 1991. "Organizational Fit and Acquisition Performance: Effects of Post-Acquisition Integration." *Strategic Management Journal* 12 (4): 281–297. doi:10.1002/smj.4250120404.

Datta, D. K., G. E. Pinches, and V. Narayanan. 1992. "Factors Influencing Wealth Creation from Mergers and Acquisitions: A Meta-analysis." *Strategic Management Journal* 13 (1): 67–84. doi:10.1002/smj.4250130106.

De Bondt, E., J. -G. Cousin, and R. Roll. 2018. "Empirical Evidence of Overbidding in M&A Contests." *The Journal of Financial and Quantitative Analysis* 53 (4): 1547–1579. doi:10.1017/S0022109018000273.

Dosi, G., R. R. Nelson, and S. G. Winter. 2000. "Introduction: The Nature and Dynamics of Organizational Capabilities." In *The Nature and Dynamics of Organizational Capabilities*, edited by G. Dosi, R. R. Nelson, and S. G. Winter, 1–22. London, England: Oxford University Press.

Eisenhardt, K. M., and J. A. Martin. 2000. "Dynamic Capabilities: What are They?" *Strategic Management Journal* 21: 1105–1121. doi:10.1002/1097-0266(200010/11)21:10/11<1105:AID-SMJ133>3.0.CO;2-E.

Fowler, K. L., and D. R. Schmidt. 1989. "Determinants of Tender Offer Post-Acquisition Financial Performance." *Strategic Management Journal* 10 (4): 339–350. doi:10.1002/smj.4250100404.

Grimpe, C., and K. Hussinger. 2014. "Resource Complementarity and Value Capture in Firm Acquisitions: The Role of Intellectual Property Rights." *Strategic Management Journal* 35 (12): 1762–1780. doi:10.1002/smj.2181.

Halebian, J., and S. Finkelstein. 1999. "The Influence of Organizational Acquisition Experience on Acquisition Performance a Behavioral Learning Perspective." *Administrative Science Quarterly* 44 (1): 29–56. doi:10.2307/2667030.

Haspeslagh, P. C., and D. B. Jemison. 1991. *Managing Acquisitions: Creating Value Through Corporate Renewal*. New York: Free Press.

Hayward, M. L. A. 2002. "When Do Firms Learn from Their Acquisition Experience? Evidence from 1990–1995." *Strategic Management Journal* 23 (1): 21–39. doi:10.1002/smj.207.

Heimeriks, K. H., M. Schijven, and S. Gates. 2012. "Manifestations of Higher-Order Routines: The Underlying Mechanisms of Deliberate Learning in the Context of Post-Acquisition Integration." *Academy of Management Journal* 55 (3): 703–726. doi:10.5465/amj.2009.0572.

Hietala, P., S. N. Kaplan, and D. T. Robinson. 2003. "What is the Price of Hubris? Using Takeover Battles to Infer Overpayments and Synergies." *Financial Management* 32 (3): 5–31. doi:10.2307/3666381.

Hong, H., and M. Shum. 2002. "Increasing Competition and the Winner's Curse: Evidence From. Procurement." *The Review of Economic Studies* 69 (4): 871–898. doi:10.1111/1467-937X.00229.

Kagel, J., and D. Levin. 1986. "The Winner's Curse and Public Information in Common Value Auctions." *The American Economic Review* 76: 894–920.

Kim, J. -Y., and S. Finkelstein. 2009. "The Effects of Strategic and Market Complementarity on Acquisition Performance: Evidence from the U.S. Commercial Banking Industry, 1989-2001." *Strategic Management Journal* 39 (6): 617–646. doi:10.1002/smj.754.

King, D. R., D. R. Dalton, C. M. Daily, and J. G. Covin. 2004. "Meta-analyses of post-acquisition performance: Indications of unidentified moderators." *Strategic Management Journal* 25 (2): 187–200.

King, D. R., G. Wang, M. Samimi, and A. F. Cortes. 2021. "A Meta-analytic Integration of Acquisition Performance Prediction." *Journal of Management Studies* 58 (5): 1198–1236. doi:10.1111/joms.12636.

Laamanen, T. 2007. "On the Role of Acquisition Premium in Acquisition Research." *Strategic Management Journal* 28 (13): 1359–1369. doi:10.1002/smj.639.

Larsson, R., and S. Finkelstein. 1999. "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization." *Organization Science* 10 (1): 1–26. doi:10.1287/orsc.10.1.1.

Levitt, B., and J. G. March. 1988. "Organizational Learning." *Annual Review of Sociology* 14 (1): 319–338. doi:10.1146/annurev.so.14.080188.001535.

Lippman, S. A., and R. P. Rumelt. 2003. "A Bargaining Perspective on Resource Advantage." *Strategic Management Journal* 24 (11): 1069–1086. doi:10.1002/smj.345.

Lubatkin, M. H. 1982. *Market model analysis of diversification strategies and administrative experience on the performance of merging firms*, doctoral dissertation, University of Tennessee.

Lubatkin, M. H. 1987. "Merger Strategies and Stockholder Value." *Strategic Management Journal* 8 (1): 39–53. doi:10.1002/smj.4250080105.

Malmendier, U., E. Moretti, and F. S. Peters. 2018. "Winning by Losing: Evidence on the Long-Run Effects of Mergers." *The Review of Financial Studies* 31 (8): 3212–3264. doi:10.1093/rfs/hhy009.

Malmendier, U., and G. Tate. 2008. "Who makes acquisitions? CEO overconfidence and the market's reaction☆." *Journal of Financial Economics* 89 (1): 20–43. doi:10.1016/j.jfineco.2007.07.002.

Malmendier, U., and G. Tate. 2015. "Behavioral CEOs: The Role of Managerial Overconfidence." *Journal of Economic Perspectives* 29 (4): 37–60. doi:10.1257/jep.29.4.37.

Moschieri, C., and J. Campa. 2009. "The European M&A Industry: A Market in the Process of Construction." *Academy of Management Perspectives* 23 (4): 71–87. doi:10.5465/AMP.2009.45590141.

Nadolska, A., and H. G. Barkema. 2014. "Good Learners: How Top Management Teams Affect the Success and Frequency of Acquisitions." *Strategic Management Journal* 35 (10): 1483–1507. doi:10.1002/smj.2172.

Nelson, R. R., and S. G. Winter. 1982. *An Evolutionary Theory of Economic Change*. Cambridge, MA: Belknap Press.

Puranam, P., B. C. Powell, and H. Singh. 2006. "Due Diligence Failure as a Signal Detection Problem." *Strategic Organization* 4 (4): 319–348. doi:10.1177/1476127006069426.

Roll, R. 1986. "The Hubris Hypothesis of Corporate Takeovers." *The Journal of Business* 59 (2): 197–216. doi:10.1086/296325.

Schweizer, L., L. Wang, E. Koscher, and B. Michaelis. 2022. "Experiential learning, M&A performance, and post-acquisition integration strategy: A meta-analysis." *Long Range Planning* 55 (6): 102212. doi:10.1016/j.lrp.2022.102212.

Schwert, W. 1996. "Markup Pricing in Mergers and Acquisitions." *Journal of Financial Economics* 41 (2): 153–192. doi:10.1016/0304-405X(95)00865-C.

Sirower, M. L. 1997. *The Synergy Trap: How Companies Lose the Acquisition Game*. New York, NY: Simon and Schuster.

Slusky, A. R., and R. E. Caves. 1991. "Synergy, Agency, and the Determinants of Premia Paid in Mergers." *The Journal of Industrial Economics* 34 (3): 277–296. doi:10.2307/2098520.

Tampakoudis, I., D. Subeniotis, and E. Dalakiouridou. 2011. "Investigating the Critical Parameters to Determine the Revenue of Mergers and Acquisitions to Target-Companies in Europe." *International Journal Revenue Management* 5 (1): 42–62.

Thaler, R. 1988. "Anomalies: The Winner's Curse." *Journal of Economic Perspectives* 2 (1): 191–202. doi:10.1257/jep.2.1.191.

Trichterborn, A., D. Zu Knyphausen-Aufseß, and L. Schweizer. 2016. "How to improve acquisition performance: The role of a dedicated M&A function, M&A learning process, and M&A capability." *Strategic Management Journal* 37 (4): 763–773. doi:10.1002/smj.2364.

Varaiya, N. P. 1988. "The 'Winner's curse' Hypothesis and Corporate Takeovers." *Managerial and Decision Economics* 9 (3): 209–219. doi:10.1002/mde.4090090306.

Varaiya, N., and K. Ferris. 1987. "Overpaying in Corporate Takeovers: The Winner's Curse." *Financial Analysts Journal* 43 (3): 64–70. doi:10.2469/faj.v43.n3.64.

Welch, X., S. Pavićević, T. Keil, and T. Laamanen. 2020. "The Pre-Deal Phase of Mergers and Acquisitions: A Review and Research Agenda." *Journal of Management* 46 (6): 843–878. doi:10.1177/0149206319886908.

Winter, S. G. 2003. "Understanding Dynamic Capabilities." *Strategic Management Journal* 24 (10): 991–995. doi:10.1002/smj.318.

Wu, C. -W., and J. J. Reuer. 2021. "Acquirer's Reception of Signals in M&A Markets: Effects of Acquirer Experience on Target Selection." *Journal of Management Studies* 58 (5): 1237–1266. doi:10.1111/joms.12637.

Zollo, M., and D. Leshchinskii. 2004. *Can Firms Learn to Acquire? Do Markets Notice?* (Working Paper 99-82-SM). Fontainebleau, France: INSEAD.

Zollo, M., and H. Singh. 2004. "Deliberate Learning in Corporate Acquisitions: Postacquisition Strategies and Integration Capability in US Bank Mergers." *Strategic Management Journal* 25 (13): 1233–1256. doi:10.1002/smj.426.

Zollo, M., and S. S. G. Winter. 2002. "Deliberate Learning and the Evolution of Dynamic Capabilities." *Organization Science* 13 (3): 339–351. doi:10.1287/orsc.13.3.339.2780.