# IMPLICATIONS OF INVESTMENT BANKS' REPUTATION AND SPECIALISATION ON INITIAL PUBLIC OFFERINGS AND CORPORATE TAKEOVERS

**JEAN LIONEL BESSALA**

**SCHOOL OF BUSINESS AND LAW**

**UNIVERSITY OF SALFORD, SALFORD, U.K.**

**2021**

# Table of Contents

# List of Tables

# Acknowledgements

This work would not have been possible without the help and support of several people who have trusted me and encouraged me throughout my journey.

First and foremost, I would like to thank my supervisors, Dr Rasol Eskandari and Prof Hassan Yazdifar, for their invaluable support, guidance, encouragement, understanding, patience, dedication, and cooperation. I cannot express how grateful I am to Hassan and Rasol, who went above and beyond to help me become a better researcher and a better educator. Throughout the very challenging times I went through, they showed great wisdom and found the words to push me to get through these difficult times.

I also want to show my gratitude to my examiners, Dr Tony Syme and Dr Ernest Ezeani, for their valuable remarks, suggestions and recommendations. Their support contributed significantly to the completion and submission of the research thesis.

In addition, I would like to show my appreciation to my family and friends, especially my late father, who is the reason why I decided to take on this journey to get my PhD. He was an inspiration and supported me both financially and emotionally until he passed away. Further, thanks are addressed to my mum, my aunt Marguerite, and my dear friends Fidelis and Merline, who all contributed significantly towards my completing this journey.

My thanks also go to all the Salford Business School staff for giving me constructive feedback and suggestions on my PhD projects at different stages of my PhD study. Finally, I would like to thank all the administrative staff of the PGR-Support office of the Salford Business School.

# Author’s declaration

I declare that the thesis has been composed by myself and that the work is entirely my own, except where explicitly stated otherwise in the text. No part of this thesis has been submitted for any other degree or professional qualification in another university or institution. Other sources of data or information used in the study have been well acknowledged and referenced.

# Abbreviations

| | |
|---|---|
| 2SLS: | Two-Stage Least Square |
| ADR: | American Depository Receipt |
| AIM: | Alternative Investment Market |
| BHAR: | Buy-and-Hold Abnormal Return |
| BICS: | Bloomberg Industry Classification Standard |
| CAAR: | Cumulative Average Abnormal Return |
| CAR: | Cumulative Abnormal return |
| CDI: | Crest Depository Interest |
| CTAR: | Calendar Abnormal Return |
| EPS: | Earning Per Share |
| FE.: | Fixed Effects |
| GBP: | British Pound Sterling |
| GFC: | Global Financial Crisis |
| IPO: | Initial Public Offering |
| LSE: | London Stock Exchange |
| M&A: | Mergers and Acquisitions |
| Nomads: | Nominated Advisers |
| OLS: | Ordinary Least Square |
| PE: | Private Equity |
| RCA: | Relative Comparative Advantage |
| REIT: | Real Estate Investment Trust |
| ROA: | Return on Assets |
| ROE: | Return on Equity |
| VC.: | Venture Capital |

# Abstract

This research thesis examines the implications of investment bank reputation and specialisation on the outcomes of mergers and acquisitions (M&A) and initial public offering (IPO) settings. With regards to M&A settings, we study the impact of top-tier and boutique investment banks acting as financial advisors on the acquirer's announcement returns and the deal's time to resolution. Regarding IPO settings, we evaluate the impact of investment banks' reputation and specialisation when acting as IPO lead managers on IPO underpricing, investor attention, and waiting periods.

Using a sample of 3654 acquisitions announced between 2000 and 2015 in the U.K., and after controlling for endogeneity, we find that neither the reputation nor the specialisation of financial advisors' matter significantly to bidder's shareholder's wealth in UK private acquisitions. Acquirers find boutique advisors witness a marginal decrease in shareholders' wealth of about 2.6%. Top-tier cannot deliver positive returns to bidding firms. However, the reputation of the acquirer' advisors' matters to the deal time to resolution. The evidence provides support to the "diligent advisor" hypothesis, as top-tier advisors are found to take a longer period to complete public acquisitions. Contrary to their counterparts, we find that boutique advisors do not influence the deal time to resolution.

Based on a sample of 1535 IPOs conducted between 1995 and 2015 in the U.K., and after controlling for endogeneity, we find that boutique lead managers have a positive but marginal impact on underpricing for IPOs listed on the Alternative Investment Market (AIM). On the other hand, top-tier underwriters are not able to influence the underpricing incurred by issuing firms. Neither boutique nor top-tier lead managers are found to influence investor attention as measured by the average share turnover ratio in the one-year period following the IPO.

Moreover, we find that top-tier lead managers take more time to take a firm public compared to their counterparts, especially in AIM IPOs. We also evidence that boutique lead managers are able to influence the length of the waiting periods as they take a shorter period to take IPO firms public.

# Chapter 1: Introduction

## *1.1. Research background*

Investment banks' activities have significantly evolved over the years. The various activities investment banks are involved in are categorised into traditional investment banking, trading and brokerage, and asset management and securities services (Morrison & Wilhelm, 2007). Although private equity is not perceived as investment banking per se, traditional investment banks continue to be highly involved in these activities (Iannotta, 2010). Despite their continuous participation in different financial market segments, traditional banking activities, including mergers, acquisitions, divestitures, equity, and debt offerings, appear to remain their "bread and butter". In these activities, they provide a wide range of services and fulfil several roles as they act as financial advisors, underwriters[1], brokers, and financial analysts, and provide fairness opinions. Their importance is not only displayed by the various roles they fulfil and the different tasks they perform in these activities, especially in traditional investment banking activities.

In M&As, they suggest partners, evaluate offers, gather, analyse, and distribute information on the parties involved in the deal. Moreover, they assist their clients throughout the deal process (Iannotta, 2010). In IPOs, they perform various tasks and are very active throughout the IPO process's main phases (i.e., preparation, approaching the market and going public) of the IPO process. Their importance and their impact on clients' wealth have been underlined by prior research. Iannotta (2010) states that "empirical evidence suggests that investments play a

[1] Throughout this research thesis, the term underwriter and lead managers are used interchangeably.

relevant role in designing, structuring, and executing M&As, as their experience, reputation and relationships with clients significantly affect the wealth of the shareholders involved in the transactions".

Their significance to these activities is also perceivable from an economic point, given the substantial amounts of money generated from these transactions. For instance, worldwide M&A activity in 2020 amounted to $3.5 trillion, with deal volumes being down about 6% for the year, with about two-thirds of deals being completed since the start of July, all this amid the Covid-19 pandemic (Balezou et al., 2020). Global equity capital markets during the first half of 2020 raised $447 billion, which represents the highest amount since 2015 and a year-on-year increase of 41%, with IPO activity contributing substantially to these figures (Toole, 2020). Moreover, global IPO activity dropped by 21% in the first half of 2020 compared to the previous year. Despite the slow IPO activity due to the Covid-19 pandemic, companies raised $7.4 billion on the UK market in 2020, which is substantially more significant than the $6.9 billion of 2019 (Hodgson, 2020). These activities are essential not only because of the great values involved, but also because they represent a substantial fraction of investment banks' income from a financial point of view. For instance, in the first half of 2020, worldwide completed M&A advisory fees totalled $13.3 billion, which represented a 15% decrease year over year and the lowest figures since the first half of 2014 (Damyanova, 2020). In the same year, investment banks collected almost US$32.5 billion in fees from equity capital markets transactions, with total fees collected in IPOs worldwide amounting to about $14 billion (Financial Times, 2021).

As traditional investment banking activities continue to grow worldwide, the industry has seen the entrance of several players who compete for a "piece of the pie" that was once reserved to a small number of banks. Although several players participate in these activities, it appears that

a relatively small group of these banks dominate the investment banking industry. Commonly referred to as "bulge brackets[2]" or "top-tier", these firms have continuously grasped a large bulge of M&A fees. For example, in 2016, top-tier, bulge bracket firms' collective share of M&A fees remained at 48%, as in 2015 (Toole, 2016). "Bulge brackets", which include banks such as JP Morgan, and Goldman Sachs & Co, are regularly ranked among the top 10 investment banks in the debt capital market and in the global equity market, according to the league tables of underwriters published by Thomson Reuters (Segar, 2016; Sheng, 2016). These top-tier banks are generally full-services banks that provide a wide range of services including merchant banking, prime brokerage, and advisory services (Liaw, 2011b).

In this lucrative market, top-tier banks face increasing competition from a relatively small group of banks commonly described as "niche", "boutique", or "specialists". Unlike full-services banks, boutique investment banks tend to specialise in specific industries and provide a limited range of services; they focus on small companies and are not subject to the same competing interests as their counterparts (Liaw, 2011b). For example, Sandler O'Neil is a partnership that specialises in providing financial services to financial institutions and insurance companies. Lazard specialises in advisory services in M&A and Asset Management. Greenhill, another boutique investment bank, specialises in Advisory Services in M&As and Financial Restructuring as well as Special Committee Advisory. With a small number of exceptions, boutique investment banks typically do not have the same notoriety and exposure as top-tier investment banks. Therefore, they must fight for deals in industries or activities in which they specialise, as suggested by their rankings in investment banks league tables.

[2] Throughout this study, the terms "bulge brackets", "top-tier" , "prestigious" and "reputable" are used interchangeably.

As mentioned previously, bulge brackets continuously rank in the top half of investment bank league tables. Their presence in the first part of these tables is indicative of their reputation and suggests they have intrinsic qualities. They can take advantage of economic rents associated with having a high reputation as they charge premium fees for their services (Walter et al., 2005). However, their perceived quality does not necessarily translate to better performance for their corporate clients in both IPOs and M&As, as some suggest that investment banks' reputation is not related to clients' performance in M&A (Rau, 2000), and IPO (Logue et al., 2002). On the other hand, boutique investment banks, which are less popular, receive fewer fees compared to their full-services counterparts and are not perceived to provide high-quality services. Still, their expertise in specific industries and services suggests that they have intrinsic qualities that translate into favourable outcomes for their clients (Chang et al., 2016a; Graham et al., 2017; Song et al., 2013).

### *1.1.1. Problem statement*

Over the years, researchers have paid substantial attention to the participation of investment banks in M&A and IPO deals, with a particular interest in the tasks they perform and their impact on the outcomes of these transactions. Early studies examined the factors affecting investment bankers' pricing decisions in IPOs (Logue, 1973), and the significant role investment banks play in providing fairness opinions in the market of corporate control (Giuffra, 1986). Subsequent research in M&A delved into the attributes of investment banks acting as financial advisors, including their quality and reputation. These studies examine the impact of these attributes on the performance of targets or acquiring firms (Golubov et al., 2012; Ismail, 2010; Servaes & Zenner, 1996; Walter et al., 2008). They document that targets with highly reputable financial advisors gain more than those using less reputable banks. The findings on the side of acquiring firms are more contrasting, given the mixed evidence on the

added value of prestigious financial advisors for acquirer shareholder wealth. For instance, a strand of the literature provides evidence that prestigious investment banks add value to acquirer shareholders' wealth (Golubov et al., 2012). However, some studies show that acquirers with less prestigious banks gain value (Ismail, 2010; Walter et al., 2008).

The contrasting picture is further highlighted by studies providing evidence that the reputation of investment banks does not matter to shareholders' wealth (Rau, 2000). The mixed results underline the challenge for practitioners and academics to determine the tangible and intangible benefits for acquiring firms to employ top-tier investment banks. Furthermore, they highlight the need to examine more avenues to establish the added value of highly reputable banks. Considering the mixed findings on the value of investment banks' reputation, various studies have explored other attributes of investment banks that may enable them to influence M&A outcomes, including acquirers' performance. Three papers have examined their ability to affect deals' outcomes using their industry specialisation and M&A expertise. They find that specialist banks can obtain lower deal premiums (Song et al., 2013) and greater acquirer shareholder wealth (Chang et al., 2016a; Graham et al., 2017). The findings highlight the added value of boutique banks to corporate clients, but the literature has not substantially explored this avenue. A more substantial body of work on the topic could shed light on the intangible value of boutique banks, therefore identifying the benefits for corporate clients.

Similarly, the IPO literature has substantially analysed the added value of investment banks to the IPO settings, including issuing firm survivals (Espenlaub et al., 2012), IPO allocation (Ljungqvist & Wilhelm, 2002) and waiting periods (Colaco et al., 2018). A particular interest has been in IPO underpricing, with some focusing on the role of an investment bank's reputation in explaining IPO underpricing (Chambers & Dimson, 2009; Coakley et al., 2009; Unlu et al., 2004). They formulate various hypotheses, including the signalling theory, as well as the "certification hypothesis", which suggests a negative relationship between investment

banks' reputation and IPO underpricing (Carter et al., 1998; Chambers & Dimson, 2009). Conversely, hypotheses such as "spinning", and "local oligopoly" explain the positive relationship between investment banks' reputation and underpricing (Coakley et al., 2009; Liu & Ritter, 2010, 2011; Unlu et al., 2004). Taken together, these hypotheses reveal the lack of clarity on the added value of top-tier investment banks to issuing firms in terms of leaving money on the table during the IPO process. This lack of clarity on the added value of top-tier investment banks could extend to other settings such as waiting periods, firm value post-IPO or investor attention. In addition to their reputation, researchers looked at other attributes or characteristics of investment banks that enable them to influence IPO outcomes. The role of the underwriter's network (Bajo et al., 2016; Chuluun, 2015) and underwriter marking-making ability (Boeh & Dunbar, 2016) are among the avenues that have been studied. However, the value of investment banks' industry specialisation and deal expertise has not been explored substantially, despite evidence from other fields showing the value of industry specialisation and deal expertise to corporate clients (Carson, 2009; Cressy et al., 2007; Graham et al., 2017).

A review of the relevant literature highlights the lack of clarity on the added value of top-tier investment banks to IPO and M&A settings and suggests that researchers should re-examine the benefits of hiring a top-tier investment bank. It further suggests that more attention should be paid to the value of boutique banks and how corporate clients benefit from their specialisation. Particular attention should be paid to UK transactions, considering the substantial gap in the body of knowledge regarding the added value of prestigious and boutique investment banks in the UK market, especially in M&As. Related studies covering the added value of an investment bank on shareholder wealth have mainly focused their attention on US transactions (Chemmanur & Krishnan, 2019; Ertugrul & Krishnan, 2014; Francis et al., 2014b, 2014a; Graham et al., 2017; Ismail, 2010; Song et al., 2013; Walter et al., 2008). Studies addressing the performance of UK companies in M&A explore the impact of various factors,

including the impact of shareholder voting (Tokbolat et al., 2019), serial acquirers (Antoniou et al., 2007), overconfident managers (Doukas & Petmezas, 2007) and even the target location (Conn et al., 2005). However, related studies do not address the role or impact of investment banks' reputation or specialisation. The focus on the UK market is relevant despite existing evidence that findings from US studies can be generalised to the U.K. The generalisation of US evidence to the UK market has been emphasised given the similarities between the two markets, as they both have well-developed economies and capital markets with shareholder-oriented corporate governance environments. However, structural differences exist between these markets, including differences in legislation, regulatory systems and pricing mechanisms. Factors such as the type of consideration, the form and the attitude towards the deal, and investor protection laws that are known to affect M&A performance also show differences between the U.K. and U.S.

The contrasting results observable in the body of knowledge raise several questions. Does hiring a prestigious investment bank matter to the clients' wealth in UK M&A? Do boutique banks with deal and industry specialisation add value to UK acquirers? Is the specialisation of a boutique bank a determinant of the performance of an IPO firm? All these being equal, should corporate clients favour industry and specialisation over reputation and perceived quality when selecting an underwriter in UK IPOs? Obtaining finite answers to these questions is ambitious, considering that generalised conclusions do not always account for the specificities of the samples used and the structural differences between countries. A more appropriate demarche will be to examine some of these issues focusing on a particular market, from which conclusions relevant to that specific market could be drawn.

Inspired and motivated by the mixed findings within the existing literature, we address some of these interrogations and reassess the importance of investment bankers and the effect of their reputation and specialisation in the activities in which they are involved. We conduct this

exercise by examining the implications of investment banks' reputation and specialisation on their performance in M&A and IPOs, focusing on the UK market. As mentioned previously, these transactions are among the important ones in which investment banks are involved, and the UK market presents some specificities which distinguish it from other markets.

## *1.2. Research aim and objectives*

In the previous section, we presented the problem statement (which derives from a review of the literature) underlying this research thesis. From this review, several interrogations are raised. These interrogations underpin the fundamental aim and objectives of our research project. This thesis aims to empirically evaluate the impact of investment banks' reputation and specialisations on M&A and IPO settings in UK markets. The achievement of this aim requires the completion of the relevant objectives: (a) The first objective is to explore the determinants of the choice of boutique and top-tier advisors by acquirers in M&A. (b) The second objective is to determine the factors affecting the selection of boutique and top-tier lead managers in IPOs. Selecting an investment bank based on its reputation or its specialisation subsequently is likely to be influenced by several factors depending on the type of corporate event, which need to be identified. (c) The third objective we intend to achieve is to assess the empirical relationships between our constructs of the advisor's reputation and specialisation, and the identified M&A outcomes. (d) We also intend to examine the relationships between the reputation and specialisation of a lead manager, and our measures of IPO underpricing. So far, the literature on these relationships documents mixed findings.

## *1.3. Motivation*

The motivation underpinning this research thesis comes from several factors, including contrasting findings, new research questions, and specificities of the methodologies used in prior studies. The first and perhaps foremost factor that inspired this research is the limited focus the existing literature has on the UK market. The fact is that preliminary related studies on M&As and IPOs, for the most part, focus on evidence from the US market. It is fair to say that, due to its great size and its dynamism, and perhaps the availability of a significant amount of data, the US economy has presented the attributes that have made it more attractive for research. On the other hand, the UK market is relatively smaller in size in terms of deal volumes, the amounts raised, and the number of participants compared with the US market, not to mention the availability of data on UK companies.

The UK environment presents some structural specificities which differentiate it from other markets. With regards to M&A activity in the U.K., the operation of this market is governed by the "Takeover Code". The Takeover Code sets out the rules and directives that companies must follow and abide by to operate activities of mergers and acquisitions effectively and compliantly in the U.K. and overseas territories. For instance, the Takeover Code has a stricter approach in terms of defensive actions against hostile takeovers than the US system, where there is no mandatory bids rule and where several defensive measures are enabled (Jackson & Miyajima, 2007). In fact, elements such as the nature of the bid, the type of consideration, and even the deal value are all subjected to specific rules and regulations. The specificities of the UK market suggest that the implications of investment banks' reputation on M&A may present some significant differences compared to what can be observed when focusing on the US market.

Another fundamental factor motivating this project comes from the contrasting findings that characterised the literature in IPOs and M&A, especially regarding the impact that investment banks' reputation has on these corporate activities' outcomes. Starting with M&A research, various studies fail to provide evidence of the effect that investment banks acting as financial advisors with top-tier status (indicative of their high level of reputation) have a positive or any influence at all on deal outcomes. One strand of the literature provides evidence suggesting that top-tier financial advisors influence M&A deal outcomes. The contrasting results are even observed within this strand of the literature. Some argue that advisors' prestige positively impacts bidders' announcement returns; others provide evidence of the contrary. In the same vein, contrasting findings characterised related studies on IPO outcomes, especially on the underpricing phenomenon. Various theories have been developed to explain the underpricing phenomenon and the role that the underwriter's reputation plays in explaining this phenomenon. These studies do not provide a clear picture of whether prestigious underwriters positively or negatively affect IPO settings, especially underpricing. However, recent studies indicate that there has been a shift in the relationship between underwriter reputation and IPO underpricing. Recent studies suggest that prestigious underwriters went from having a negative impact on underpricing in the 1990s to a positive impact in recent years (Loughran & Ritter, 2004). The contrasting findings indicate that more can be done regarding understanding the impact of underwriter reputational capital on IPO settings.

Another motivating factor of the research lies in the limited attention paid by prior studies to investment banks' characteristics from the perspective of their specialisation. Investment banks' skills and quality have mainly been measured in terms of their reputation but not necessarily in terms of their specialisation in certain transactions and their expertise in specific industries. Being a specialist in providing tailored services and having expertise in specific industries should develop valuable skills that could benefit corporate clients. Supporting

evidence of the added value of industry specialists is provided in M&A literature, but little is found concerning IPO deals. In fact, little is known about the implications of the specialisation of lead managers on UK IPO outcomes, especially on the underpricing phenomenon. The limited interest in industry and deal specialists in IPO activities is difficult to understand. In a country such as the U.K., industry expertise is an asset for investment banks operating as Nominated Advisers (Nomads) or Nominated Brokers on the AIM.

Aside from the factors mentioned above, another essential element contributing to our research lies in numerous aspects of the research methodology and research methods. For instance, there is no consensus on the appropriate measures of M&A performance, although most studies use targets and bidder's abnormal returns as a proxy. The computation of these returns is also subject to debate, considering various models can be used. There is no consensus on the appropriate measure of an investment bank's reputation in the same vein. Although the literature indicates that measuring investment bank market share is an effective method, there is evidence, in the context of IPOs, which suggests that commonly used measures of underwriter's reputation are not appropriate for European IPOs (Migliorati & Vismara, 2014). In substance, this research project is conducted based on a combination of several factors. Each suggests that researchers could do more to explain the implications of an investment bank's reputation and specialisation on the outcomes of UK M&A and IPO transactions.

## *1.4. Research contributions*

This research project's foundations lie on theoretical and empirical evidence provided by previous related studies. That said, this thesis, in our sense, still brings forward some notable contributions to the existing body of knowledge.

First, this study contributes to enriching the body of knowledge on the crucial role that investment banks, through their features and attributes, play in influencing deal outcomes in M&As and IPOs transactions in the context of the UK market. This contribution is quite significant, considering that notable related academic works have focused primarily on the US market, especially in terms of M&A studies. Our study also contributes to the body of knowledge by shedding light on the factors that determine and influence the selection of prestigious advisors and specialised financial advisors in UK acquisitions. Identifying such factors could not have value only for future research but also for firms looking to participate in acquisitions activities. Such firms could choose advisors based on the factors identified. The study also contributes to the literature as we explore the value-added of investment banks' (acting as financial advisors) to bidders' shareholder wealth in the context of UK acquisitions. Specifically, the study explores a different perspective of financial advisors' intrinsic quality, based on activity specialisation instead of the commonly used construct of advisors' quality measured by their reputation. Although the concept of "boutique" advisors is not recent and is not a trend, to our knowledge, this study is one of the few that have attempted to explore the implications of advisors' specialisation on M&A outcomes with evidence from the UK market.

Another notable contribution associated with our research is examining both reputation and specialisation, which compares the respective impact of top-tier advisors and boutique advisors on acquisitions outcomes. This examination should be quite informative and useful to academics and practitioners, who can evaluate and select advisors not necessarily based only on their perceived reputation status but also on the potential added value of specialisation. Our study's contributions are not limited to the literature on M&A activities only but also to the body of knowledge on IPO transactions. For instance, it contributes to the body of knowledge on the impact of the lead managers on IPO outcomes. First, it contributes to the body of knowledge in examining the role that the lead manager's attributes play in explaining the

underpricing phenomenon in the UK market. It examines the value-added of lead managers' IPO market specialisation and the perceived quality of issuing firms regarding money left on the table during the IPO process. Secondly, it contributes to the academic literature by examining the role that greater visibility represented by financial analysts' coverage post IPO plays in explaining issuing incentives to accept greater underpricing. Moreover, our study enriches the literature by shedding light on the factors that determine how long it takes a firm to go public on the AIM and the Main Market. Finally, our study contributes to the body of knowledge by highlighting how the effects of the reputation and specialisation of the lead managers on IPO settings depends on the exchange the IPO firm selected to be listed on.

## *1.5. Main findings*

As our research project examines the effects of the reputation and the specialisation of an investment bank on M&A and IPO settings, we derive the following findings:

Contrary to recent studies, we find that top-tier investment banks acting as financial advisors are not able to deliver positive abnormal returns to acquiring firms in public acquisitions. We further find no evidence that top-tier banks enhance acquiring firms' shareholder wealth in private and concentric deals. However, we find evidence that to preserve their reputational capital, top-tier financial advisors take longer than other advisors to conduct public acquisitions efficiently and diligently. On the other hand, boutique financial advisors who specialise in M&A transactions are not able to enhance bidder shareholders' wealth in public or private acquisitions. They are associated with a marginal decrease in bidders' wealth of 2.6% in acquisitions conducted within the same industry. In addition, despite their expertise and deal specialisation, boutique advisors do not influence the length of time it takes for an M&A deal to be completed.

Regarding IPO settings, top-tier investment banks acting as lead managers are associated with IPOs with greater underpricing. However, this underpricing is not explained by their reputation status, which indicates that unobserved characteristics of top-tier lead managers influence issuing firms' willingness to leave money on the table. Moreover, we find that top-tier lead managers do not add substantial value to their corporate clients in terms of investors' attention. They cannot generate greater visibility in terms of the number of financial analysts covering the IPO firm stock following the IPOs and share turnover ratio. Contrary to our prediction, boutique lead managers are associated with a marginal increase in IPO underpricing, particularly in offerings listed on the AIM market. Additionally, they are not able to generate greater visibility for their IPO clients like their top-tier counterparts. That said, issuers with boutique lead managers backed by venture capital or private equity firms witnessed more significant share turnover in the Main Market. In the same vein, issuers who are in the technology sector and advised by boutique lead managers witness more significant share turnover in the one-year post IPO. Furthermore, we find that top-tier lead managers are associated with longer waiting periods than other lead managers. Their positive impact on the waiting period suggests that to preserve their reputation capital, they take more time than their counterparts to take IPO firms public appropriately and diligently. Despite their expertise in specific industries and their specialisation in IPO transactions, boutique underwriters only have a marginal influence on the length of time it takes for an IPO firm to go public. This influence is only witnessed in AIM offerings, where they are associated with shorter waiting periods.

## *1.6. Thesis structure*

The structure of the thesis can be broken down as follows: Chapter 1 is the introductory chapter, which presents a general introduction with the research background, the aim and objectives, as well as the motivation behind this thesis. This chapter also depicts the research contributions

and the main findings. Chapter 2 covers the literature review on investment banks and M&A outcomes and presents the hypothesis developed concerning the impact of financial advisors on M&A outcomes. Chapter 3 explores the existing literature on the roles of investment banks in IPO settings with a focus on investment banks features and characteristics. The chapter further covers the hypothesis development specific to the implication of the choice of lead managers and IPO settings. Chapter 4 provides a detailed description of the methodology, which includes the description of the data sample as well as the measurement of variables used in the empirical analysis. The chapter also provides a comprehensive presentation of the empirical model. Chapter 5 presents the results of empirical analysis of the implications of the choice of financial advisors on M&A settings, with a discussion of the results. Chapter 6 offers the results of our empirical analysis of investment banks' effects on IPO settings, as well as a discussion of these results. In chapter 7, we present the conclusion of the research thesis, which covers the key findings, the limitations of this thesis and some suggestions regarding avenues future research could explore.

# Chapter 2: Investment Banks and M&A Outcomes

## *2.1. Introduction*

Irrespective of their size and their industries, companies must make critical strategic decisions throughout their life. One of the most important is whether to engage in corporate actions as M&As. This decision can be motivated by numerous factors, including managers' self-serving objectives, value creation synergies, or even strategic purposes such as increasing the company market power (Iannotta, 2010). Motivations aside, M&A transactions have grown in importance over the years to the point that an entire market was developed around them, as illustrated by the substantial increase in the number of deals announced and completed over the years. The market of M&A transactions has grown over the years, going from about 5,300 announced deals worldwide in 1987 to more than 50,000 announced deals in 2017 (Imaa, 2018). These transactions consistently generate large sums of money, which illustrates the significance of this market. 2018 was one of the most significant years for the M&A activity as transactions volumes reached $4.1 trillion, making 2018 the third-highest year ever in terms of M&A volumes (J.P. Morgan, 2019). These transactions are essential for the main players (i.e., the buyer and the target) as well as third parties, especially investment banks. In these transactions, investment banks play an essential role in terms of the diverse functions and services they provide. Empirical and theoretical evidence highlight their importance given their impact on M&A outcomes (Chemmanur & Krishnan, 2019; Chuang, 2016; Song et al., 2013) or their certification role (Andres et al., 2014; Francis et al., 2014b). Beyond the fundamental influence in these transactions, investment banks also get significant economic benefits from these deals in terms of the advisory fees collected from their involvement in these deals. For instance, M&A advisory fees for the first three quarters of 2019 amounted to almost US$ 21

billion, which represents a 9% decrease compared to the first three quarters of 2018 (Financial Times, 2019). The competition for advisory fees sees many players from full-service banks who provide a variety of banking services to small "boutique" banks who are specialised in providing advisory services in the market of corporate control and specific industries. The constant growth of this market has been accompanied by the emergence of boutique advisors. Over the years, they have grown in numbers, in public exposure and importance as they have become major players in this market. During the year 2018, twenty of the top fifty M&A fee earners worldwide were boutique advisors, which is double the number it was in 2000 (REFINITIV, 2019). Despite the intense competition from boutique advisors, the bulk of these fees goes to a small group called "bulk brackets", often referred to as top-tier financial advisors in academic literature. In 2018, bulge brackets collected about $23 billion out of the $32 billion of M&A advisory fees collected by all financial advisors (Financial Times, 2019). In addition, prior evidence indicates that top-tier advisors receive higher fees than other investment banks (Golubov et al., 2012; Walter et al., 2008).

The academic literature has long studied the importance of investment banks in M&A regarding their overall involvement and specific aspects such as their impact on M&A outcomes, particularly the effect on shareholders' wealth of bidding and target firms. One perspective through which researchers have analysed investment banks is through their quality, captured by their reputation, to examine the impact of advisors' reputation on clients' wealth. Researchers theorised that investment banks have intrinsic qualities that enable them to affect clients' wealth. The literature widely reports that prestigious investment banks influence target firms' returns. However, their effect on the shareholder's wealth of bidding firms is still not well understood. The literature on the impact of investment banks' reputation on bidder's returns can be at best described as mixed, given the contrasting hypotheses and findings provided by prior studies. Few studies provide strong evidence of the effect of financial

advisors' reputation on bidder returns (Chemmanur & Krishnan, 2019; Chuang, 2016; Golubov et al., 2012), whereas a strand of the literature fails to find evidence of their impact on bidders' shareholder wealth (Rau, 2000; Servaes & Zenner, 1996). Some later even argue that investment banks do not have specific characteristics that can influence clients' wealth. Despite the mixed results, researchers have continued to explore whether investment banks have features or attributes which enable them to influence not just bidders' returns but other deal outcomes. A number of these papers provide theoretical and empirical evidence that investment banks, through their specialisation, have skills that enable them to affect M&A deal outcomes for acquiring firms (Graham et al., 2017; Song et al., 2013).

Although one would argue that the academic literature has substantially examined the role and impact of investment banks acting as financial advisors on M&A deal outcomes, it appears most of the evidence provided in the literature is primarily based on US data. Though some could make the case that findings of studies based on US data could be generalised, one could argue that the US market in general and its M&A market specifically is unique and very different to the M&A market of other countries, especially in the U.K. The academic literature provides minimal evidence of the impact of a financial advisor's reputation or specialisation on M&A outcomes. Studies on M&A outcomes, especially acquirers' performance based on UK evidence, have examined other determinants, including directors' effects (Dahya et al., 2016; Doukas & Petmezas, 2007; Renneboog & Zhao, 2014), and shareholders' mandatory voting (Becht et al., 2016). The contradictory findings in terms of the impact of financial advisors' reputation on bidders' wealth and the limited studies from the UK market raise some fundamental questions for acquiring firms regarding the choice of financial advisors. One would speculate whether financial advisors have intrinsic qualities or abilities that can benefit acquiring firms. Do top-tier banks have superior skills which translate to more significant shareholders' wealth for acquiring firms? Can boutique advisors, through their expertise and

specialisation, influence deal outcomes? Between reputation and specialisation, which attribute should acquirers look for in an investment bank?

This study does not pretend to solve the existing issues highlighted in the literature, especially regarding the contrasting results of prior studies. Instead, we attempt to answer some of the questions raised previously, focusing on the UK market. The UK M&A market is quite unique concerning the specific characteristics which differentiate it from other markets. For instance, while the U.S. has an overlapping system of state and federal laws and regulations that control bids for corporate controls, the U.K. has a self-regulatory, standards-based system (Rosenzweig, 2007). In addition, the U.K. has a stricter approach to defensive actions against hostile takeovers compared to the U.S., which does not have mandatory bid rules and enables various defensive actions (Jackson & Miyajima, 2007). Moreover, the UK listing rules, which apply to public companies, require shareholder voting for some large acquisitions, whereas shareholder voting is not mandatory in the U.S. (Becht et al., 2016). Features such as the nature of the bid, the type of consideration, and the deal value are all subjected to specific rules and regulations under the UK regime. In contrast, such laws and regulations are limited or non-existent under the US regime.

Using a sample of UK acquisitions announced between January 2000 and December 2015, this study sets out to investigate financial advisors' impact on M&A outcomes. Specifically, the research focuses on the implications of financial advisors' reputation and M&A specialisation on bidders' shareholder wealth and deals' time to resolution. We focus on the bidders' wealth, given that the mixed findings are mainly observed in the literature on acquirer performance. Additionally, the relatively small sample of public acquisitions combined with limited data on public targets prevent us from assessing the impact of an advisor's reputation and specialisation on target returns and the impact on bidder and target combined.

Although prior studies have examined the impact of financial advisors on shareholders' wealth, our study presents some singularities which distinguish it from those studies. Related studies typically focus either on advisors' reputation or their specialisation without observing them together. Studies on advisors' specialisation generally use the advisor's market share (which proxies for reputation) as a controlling variable. Unlike such studies, we simultaneously examine the added value of a financial advisor's reputation and M&A specialisation. We also consider the added value of teams of advisors which include reputable and specialist investment banks. Therefore, our study differs from the work of Golubov et al. (2012) and others who mainly focus on the impact of the reputation of the financial advisors on several M&A outcomes. It also departs from the work of Song et al. (2013), whose study is centred on the effect of advisors' deal specialisation on M&A outcomes but does not examine their impact on acquirer returns. Furthermore, our study contrasts with the work of Graham et al. (2017), who investigate the effects of an advisor's industry specialisation on acquirer returns. In contrast to their work, we assess specialisation at the M&A level and not at the industry level.

The remainder of this chapter is organised as follows: A review of prior work on M&A activities is presented in section 2. Section 3 explores related works on the reputation of investment banks and their specialisation. In section 4, we review the related literature on the implications of financial advisors' reputation and specialisation on deal outcomes. Section 5 presents the hypotheses we formulate on the choice of financial advisors and their implication on deal outcomes. Section 6 offers a summary of the chapter.

## *2.2. M&A background*

The academic literature for many years has paid attention to the market of corporate control. Early studies have examined mergers and acquisitions activity from various perspectives,

including the objectives behind M&As (Lewellen, 1971; Walter & Barney, 1990) and the impact of mergers on market competition (Manne, 1965; Stigler, 1950). Prior studies also examined the impact of organisational culture on the merger process (Buono et al., 1985) and the profitability of M&A activity (Eckbo, 1983; Malatesta, 1983; Mandelker, 1974). Although academics paid considerable attention to the market of corporate control going back to the 1960s, it appears prior studies on M&As did not focus their attention on investment banks until the 1980s and 1990s. Giuffra (1986) examined investment bankers' participation in corporate control transactions, precisely the importance of the fairness opinions that investment banks provide to their clients. In the same vein, Bowers and Miller (1990) highlight the vital role that investment bankers play concerning wealth creation in acquisition transactions. They stated that: "the choice of investment banker influences shareholders' wealth by suggesting acquisition partners on the one hand and evaluating the acquisition premiums on the other hand". Additionally, Servaes and Zenner (1996) suggested that "financial advisors play an important role in reducing information asymmetry and transaction costs and suggest various deals, bidder, and target characteristics, to explain the choice of using, or not an investment bank in acquisitions". These studies brought into light questions on the main factors or elements determining an investment bank's selection. As they provide evidence of the crucial role of investment banks in M&As, Bowers and Miller (1990) state that "because corporate managers no longer select an individual investment banker to perform all underwriting and consulting functions permanently, choosing an investment banker for a given event becomes a more critical decision". Therefore, considering how important this choice is, several researchers have paid attention to the determinants of the choice of investment banks in M&A transactions. Among these determinants are the existence of previous banking relationships (Francis et al., 2014a) and a firm's reputation (Bowers & Miller, 1990).

### *2.2.1. Studies on the profitability of M&A transactions*

A great area of interest in M&A literature has been the profitability of corporate takeovers, which has been examined from several perspectives, from the methods for measuring profitability to the winners and losers of these deals. Studies focusing on the latter typically examine the value creation or destruction for the bidder and the target firms during and after M&A transactions. Surveys of studies reveal that existing evidence largely suggests that in the short term, target firms win on average, while acquiring firms are the losers in corporate takeovers (Renneboog & Vansteenkiste, 2019). Bruner (2002) indicates that these activities are significantly more profitable for target firms, which generally capture the more significant part of the returns while acquiring firms take little to nothing. He argues that "the mass of research suggests that target shareholders earn sizable positive market- returns, that bidders (with interesting exceptions) earn zero adjusted returns, and that bidders and targets combined earn positive adjusted returns". In the same vein, Renneboog and Vansteenkiste (2019) suggest that acquiring firms typically do not perform well in these activities compared to non-acquiring firms and indicate that the underperformance witnessed by bidding firms is notably more significant in the acquisitions of public targets. (Martynova and Renneboog (2008) suggest that target firms notice a substantial increase in cumulative average abnormal returns (CAAR) at and around the deal announcement. However, shareholders of bidding firms witness insignificant CAARs prior to and at the announcement of a takeover. Prior evidence also indicates that bidding firms' shareholders lose when buying a public firm but gain when acquiring a private or subsidiary, with the returns increasing with the target's size and when the bidders offer stocks (Fuller et al., 2002). Studies focusing on the UK market generally suggest that acquirers lose in terms of announcement returns comparatively to the counterparts from Continental Europe (CE) (Martynova & Renneboog, 2008). That said, recent studies suggest

that acquiring firms witness some positive returns for bidders in public acquisitions (Golubov et al., 2012).

Studies focused on the long-term performance of M&A deals provide mixed findings, in which some studies argue that bidders win in the long run, while target firms lose (Renneboog & Vansteenkiste, 2019). The contrasting findings which are highlighted in the literature are explained by the flaws attached to measures of long-term performance measures. In their research, Powell and Stark (2005) find an improvement in the UK operating performance when using a regression-based methodology. They highlight that their results on post-takeover performance are sensitive to the benchmark adopted for evaluating post-takeover performance. In the same vein, Gugler et al. (2003) who focus on profitability measures and sales of merging and non-merging firms, find that mergers, on average, do result in significant increases in profits but reduce the sales of the merging firm. Based on the review of prior studies, Bruner (2002) suggests a post-merger decline in merged firms' operating returns, while some find insignificant changes in profitability, and a few present a positive increase. Although these long-term studies enrich the body of knowledge, the fundamental flaws associated with studies on long-term stock returns or long-term operating performance cast doubt on their results' significance. Asides from identifying the winners and losers of M&A deals, the academic literature also looks at the various methods used by researchers to assess the wealth generated and how the use of methods can influence the evidence obtained.

#### *2.2.1.1. Profitability based on event study*

The predominant method used by researchers has been event studies (Martynova & Renneboog, 2011). The event study method evaluates the impact that the corporate transaction had on the value of a firm over a specific window period (Mackinlay, 1997). The aim of analysing the stock prices over this window is to detect any “excess” or “abnormal” return,

which is commonly understood as the difference between the actual returns of the stock and the normal return, which is the return that would have been expected if the event did not happen (Cable & Holland, 1999). The excess returns, computed through regression or non-regression methods, geometrically or arithmetically, are typically aggregated to obtain several measures. Cumulative abnormal returns (CAR), Cumulative Average Abnormal Returns (CAAR), and buy-and-hold abnormal returns (BHAR) are among these measures. The choice of which aggregate to use is at the discretion of the researcher and depends on the event window, whether the event in question is observed over a short or long-term period, as implied by Fama (1998). Several studies used CARs for their short-term event studies (Golubov et al., 2012; Servaes & Zenner, 1996; Walter et al., 2008), while Barber and Lyon (1997); Ritter (1991) use BHARs for their long-term event studies. An important aspect of computing abnormal returns is the choice of a benchmark model for capturing normal or expected returns. The Mean Adjusted Returns Model (MAR), Market Adjusted Returns or Index Model (IM), Capital Asset Pricing Model (CAPM), Matched/Control Portfolio benchmark, and Market Model (MM) are all valid benchmarks (Strong, 1992).

#### *2.2.1.2. Profitability based on accounting-based methods*

These methods are typically used when examining the long-term impact of a takeover and consist of a comparison of accounting measures before and after the corporate event. The accounting measures include net income, net sales, the number of employees, earning per share (EPS), leverage, firm liquidity and profit margins, which are used to examine the operating performance post-event. Although these methods are not as common as the event study method, several studies have used these methods to assess the performance of corporate acquisitions and mergers of UK companies (Chatterjee, 2000; Dickerson et al., 1997; Gregory, 2005; Powell & Stark, 2005). Using the rate of returns of assets as a measure of performance, (Dickerson et

al., 1997) find that acquiring firms do not benefit from corporate acquisitions. Powell and Stark (2005) examine the operating performance of acquiring companies using market value and book value techniques and find that there is no substantial improvement in the post-operating performance of UK acquirers. More recently, Malikov et al., (2020) use the return on sales as a proxy of performance in their examination of the impact of corporate governance on the post-operating performance of UK mergers. They find a negative relationship between workforce reductions and post-acquisition operating performance. Overall, studies focusing on the long-term operating performance of UK acquirers largely suggest that acquiring firms do not win in the long run. It is worth acknowledging that critics of long-run studies advise taking such results with caution, suggesting that they suffer from measurement errors and statistical problems, and that results on long-run performance have to be taken with prudence.

### *2.2.2. The roles of investment banks in M&A*

The importance of investment banks in the market of corporate control has been studied over the years, going back to the 1980s with studies such as Giuffra (1986), who examines the importance of fairness-opinion rendered by investment banks in helping decision-makers. In the same path, various studies underline how valuable the fairness opinion provided by financial advisors is for M&A targets (Cain & Denis, 2013) as well as for acquiring firms (Kisgen et al., 2009; Mura et al., 2011). Other than the certification role of financial advisors, the academic literature suggests that they play a valuable role in reducing costs during corporate takeovers. Servaes and Zenner (1996) demonstrate that financial advisors play an essential role in reducing transaction costs and alleviating information asymmetry costs between target and acquiring firms. Furthermore, they play a significant role in reducing agency costs as they provide certification regarding an acquisition's value. Together, these

studies shed light on one of the primary functions of investment banks in market control: the provision and processing of information (Allen et al., 2004).

The critical functions that investment banks serve in these deals have likely motivated researchers to examine their compensation in terms of M&A fees, their drivers, and their effect on the M&A process (Hunter & Jagtiani, 2003; McLaughlin, 1992; Walter et al., 2008). For instance, McLaughlin (1992) suggests that different fees have different payoff functions, which can influence tender offers outcomes. Among other things, M&A fees are a significant factor in mitigating conflicts of interests between financial advisors and target firms (McLaughlin, 1996), and investment bankers can also use them to signal differences in their abilities (McLaughlin, 1992). With regards to the latter, many indicate that investment bankers' reputation and quality is an essential factor in the level of M&A advisory fees (Golubov et al., 2012; Hunter & Jagtiani, 2003; Rau, 2000). The analysis of the roles of investment banks and the fees collected in M&A further highlight the importance of investment banks to the market of corporate control. That said, many studies went further and explored the impact of investment banks and M&A fees on M&A outcomes with a particular focus on shareholders' wealth. This is highlighted by Iannotta (2010), who indicates that prior studies on investment bankers' roles mainly analyse the choice of a financial advisor and its implication on shareholders' wealth, and the determinants of advisory fees and the effect on shareholders' wealth.

Studies focusing on investment banks' choice and their implications on shareholders' wealth suggest various theories on how investment banks can influence shareholders' wealth. In their work of 1990, Bowers and Miller argue that investment bankers affect shareholders' wealth in two ways. First, the suggestion of acquisition partners to bidding or target firms' board by investment bankers contributes to more significant economies of scale and scope and financial synergies. Second, they provide a valuation of acquisition premiums to bidding and targets,

which is crucial for their decision making. Investment banks' ability to influence firms' value creation/destruction during M&As has also been linked to their quality as proxied by their reputation. Several studies have theorised and examined whether prestigious investment banks with superior quality can influence shareholder wealth and advisory fees (Bowers & Miller, 1990; Golubov et al., 2012; Hunter & Jagtiani, 2003; Walter et al., 2008).

## *2.3. Studies on investment banks' reputation and specialisation*

The literature is not scarce on studies that analyse the implication of financial advisors' reputation on advisory fees and the bidder and target shareholders' wealth. Prior studies generally acknowledge that investment banks can gain more significant fees due to their reputation, indicating that their services come at a premium (Chemmanur & Fulghieri, 1994). In the context of M&A, several studies provide strong evidence of a relationship between financial advisors' reputation and advisory fees (Golubov et al., 2012; Guo et al., 2018; Hunter & Jagtiani, 2003; Rau, 2000). As these studies widely suggest that top-tier advisors receive higher M&A fees compared to less prestigious advisors, the literature provides contrasting evidence on the impact of an advisor's reputation on bidder and target shareholders' wealth. Some studies provide evidence that prestigious advisors can enhance shareholder wealth (Bowers & Miller, 1990; Golubov et al., 2012; Guo et al., 2018; Kale et al., 2003). Bowers and Miller (1990) find that the wealth (measured by the total abnormal dollar return or holding period return) of firms advised by first-tier investment bankers is more significant than when firms employ other investment bankers.

Similarly, Kale et al. (2003) argue that the absolute wealth gain and the share of total takeover wealth accruing to the bidder increase as the reputation of the bidder's advisor increases

relative to that of the target. In the same vein, Golubov et al. (2012) provide evidence that the reputation of an investment bank influences the bidder's returns as they find top-tier advisors are associated with higher bidder returns in public acquisitions. They suggest that "the improvement in bidder returns comes from the ability of top-tier bankers to identify mergers with higher synergies, consistent with the better merger hypothesis and to get a larger share of synergies to accrue to the bidder, in line with the skilled negotiation hypothesis". In the same path, Guo et al. (2018) find that top-tier investment banks are associated with an improvement of the performance of constrained acquirers as measured by their CAR (-2, +2). These studies argue that prestigious banks have superior skills, unlike other advisors, which enable them to influence bidders' returns.

Contrary to studies suggesting that top-tier advisors can increase shareholders' wealth, several studies fail to find evidence to support this hypothesis (Hunter & Jagtiani, 2003; Walter et al., 2008). Michel et al. (1991) find that deals advised by a less prestigious advisor (Drexel Burnham Lambert) perform better than deals advised by other advisors in terms of bidders' CAR. Similarly, McLaughlin (1992) finds that bidders with lower-reputation bankers experience better returns than bidders with highly reputable bankers. He further suggests that high-reputation bankers might be associated with more difficult transactions, requiring higher premiums and lower bidding firms' benefits. Subsequent research finds that acquirers advised by top-tier advisors witness a decrease in their realised synergistic gains (Hunter & Jagtiani, 2003). Some suggest that the superiority of top-tier advisors is not demonstrated since high-quality advisors are not able to generate abnormal returns to their clients (Walter et al., 2008). Ismail (2010) found that acquirers advised by prestigious banks lose more value in the same vein, while those advised by lower-tier advisors witnessed significant merger gains. Some studies suggest a decrease in shareholder wealth when top-tier advisors advise them as they argue that the investment bank's reputation is not related to value creation/destruction (Rau,

2000; Rau & Rodgers, 2002; Servaes & Zenner, 1996). Servaes and Zenner (1996) indicate that investment bank quality does not affect clients' wealth, as they find no relationship between top-tier or second-tier advisors and clients' abnormal returns. In addition, Rau (2000) finds no relationship between investment banks' market share (which indicates their prestige) and the performance of acquirers advised by the bank in the past. Rau and Rodgers (2002) argue that shareholders' wealth is not related to investment banks' reputation, as they find no link between acquirer announcement returns and top-tier banks. Despite the mixed results, the literature documents evidence that investment banks have specific skills which can influence clients' stock returns. Bao and Edmans (2011) find evidence supporting that investment banks have fixed effects that matter to M&A returns. They argue that prior research fails to find a positive relationship between reputation and market share, which does not mean some banks do not have superior skills or quality. Furthermore, they stress that "certain banks have the ability in identifying acquisitions or negotiating terms, or trustworthiness in turning down bad deals". More recently, Chemmanur and Krishnan (2019) provide evidence that investment bankers' experience matters to acquisitions outcomes beyond the added value of the institutional strengths and experience of investment banks employing them. They find that experienced bankers are associated with higher acquisition returns and post-acquisition operating performance, particularly for acquirers in complex and more opaque industries.

While most studies have primarily analysed the value-added of financial advisors in M&A, focusing on the impact of advisors' reputation or market share on shareholders' wealth, some papers took a different approach. Some researchers hypothesise that financial advisors develop some abilities and qualities through their specialisation in M&A deals and their specialisation in the target industry (Graham et al., 2017; Song et al., 2013). Song et al. (2013) examine the impact of boutique advisors on M&A settings and find that M&A specialists attain more favourable deal outcomes. Graham et al. (2017) analyse the value-added of advisors specialised

in the target industry and find that compared to non-industry specialists, advisors specialising in the target industry help acquirers garner higher announcement returns. They argue that most of the value creation comes from small-to-medium financial advisors rather than large, top-tier investment banks. More recently, Loyeung (2019) finds that boutique advisors can enhance the abnormal returns of target firm shareholders and are associated with an improvement of bidding firm post-acquisition performance.

Overall, the literature highlights that investment banks play an essential role in the success of the M&A process and in terms of value creation for bidder and target firms. However, financial advisors' ability to influence shareholders' wealth cannot be attributed to their reputation, which denotes their quality, but perhaps to their expertise arising from their deal and industry specialisation. The contrasting findings which characterised studies on the effects of financial advisors' reputation on shareholders' wealth have not been entirely examined in the literature. That said, a review of relevant studies suggests that the use of different measures of shareholder wealth and the use of various proxies of advisors' reputation may explain contrasting findings.

## *2.4. Implications of financial advisors' reputation and specialisation on deal outcomes.*

### *2.4.1. Deal completion*

Financial advisors' performance has been examined from the perspective of shareholder wealth gain and deal completion rates and deal time to resolution, with contrasted findings documented in the literature. For instance, Rau and Rodgers (2002) find that top-tier financial advisors are associated with higher completion rates than advisors with a lower reputation. They suggest that the findings are more consistent with the hypothesis that top-tier banks are

mainly hired to ensure the deal is completed. Similar studies also find empirical evidence of a positive relationship between bidder advisors' reputation and the deal probability of success (Hunter & Jagtiani, 2003; Kale et al., 2003). Golubov et al. (2012) find a positive relationship between top-tier advisors and deal completion. Although weak, their evidence supports the hypothesis that top-tier advisors have more effective skills to complete the deals they advised. Contrary to the studies mentioned above, some studies find that top-tier advisors' superiority is not reflected in higher completion rates than lower-tier advisors (Rau, 2000; Walter et al., 2008).

### *2.4.2. Deal time to resolution*

Researchers have examined the implications of an advisor's reputation and specialisation on deal time to resolution. Most studies suggest a relationship between an advisor's reputation and deal time to completion, with the prestigious bank being able to complete deals faster than lower-tier advisors. Hunter and Jagtiani (2003) suggest that first-tier advisors can conduct deals more quickly than advisors from lower tiers. In the same vein, Walter et al. (2008) find that first-tier and second-tier advisors can complete deals in significantly less time than third-tier financial advisors. The hypothesis, which posits that first-tier advisors complete deals faster than other advisors, relies on the assumption that high-quality investment banks have skills and experience and are deeply involved in the negotiation process. This hypothesis has been formulated as the "skilled advisor" hypothesis (Golubov et al., 2012). The "skilled advisor" hypothesis opposes the "diligent advisor" hypothesis, which suggests that top-tier advisors are associated with large and complex deals. Therefore, to preserve their reputation, they should take sufficient time to advise their clients with diligence. They provide evidence supporting the "skilled advisor" as they find that top-tier advisors complete deals faster than other advisors.

More recently, Chuang (2016) finds that bidders hiring tier-3 advisors take more time to complete deals. They find that tier-1 advisors matter to deal time to resolution only in the context of cross-border deals. Studies that look at the impact of specialist advisors on deal time resolution and deal success are relatively scarce. Song et al. (2013) find that boutique advisors spend more time than other advisors to complete deals. They suggest that, as boutique advisors are involved in complex transactions, they will spend more time on due diligence, structuring the transaction, valuing the target, and negotiating the deal. The literature generally provides contrasting evidence regarding the role of financial advisors' specific characteristics in explaining deal outcomes. Specifically, the existing literature presents mixed findings on the effect(s) of financial advisors' reputation and level of specialisation on shareholders' wealth, deal success and deal time to completion.

## *2.5. Hypothesis development*

In this section, we laid out the hypotheses we formulated on the choice of financial advisors and the implications for acquisitions outcomes.

### *2.5.1. Financial advisors' selection in M&A deals*

Top-tier financial advisors are investment banks that possess inherent characteristics which differentiate them from other investment banks, including boutique advisors. They are large firms that generally provide a wide range of services (i.e., full-service investment banks) and typically command significant M&A advisory fees (Walter et al., 2008). They are typically associated with larger firms with high book-to-market ratios and idiosyncratic volatility but lower preannouncement stock-price run-ups (Golubov et al., 2012). However, they also tend

to be involved in transactions where the target's idiosyncratic return volatility is high (Officer et al., 2005) or in deals where the target and the acquirer are of similar size (Servaes & Zenner, 1996). The complexity of M&A deals is also expressed in terms of diversifying, hostile or tender offers (Golubov et al., 2012), the public status of the target company (Fuller et al., 2002), or the deal size (Alexandridis et al., 2013). Moreover, top-tier advisors value their reputation capital and could be reluctant to participate in risky deals with can impact their status. Given their status and their perceived superior quality, top-tier advisors are likely to be selected in high-value deals by mature and established acquiring firms with high book-to-market ratios and low price-runup (H1).

Unlike their top-tier counterparts, boutique advisors are typically characterised as small investment banks specialised in the provision of corporate advisory services including M&A transactions, with expertise in specific industries. Distinct from bulge brackets, their independence makes them less prone to conflicts of interest (Kolasinski & Kothari, 2008). In addition, while the services of bulge brackets typically come at a premium, boutique advisors usually charge lower fees (Song et al., 2013). They often market themselves as advisors tailoring services to small and medium-size corporate clients. Still, their expertise in specific industries and M&A deals makes them more likely to be hired by firms facing complex transactions including diversifying deals (Loyeung, 2019; Song et al., 2013). Given these traits, we argue that in the UK boutique advisors are likely to be involved in deals of relatively small values originated by less established firms of small size and high idiosyncratic return volatility. In the spirit of Song et al (2013), we formulate this hypothesis as the "scale hypothesis" (H2).

### *2.5.2. Financial advisors and acquirers' abnormal returns*

The literature suggests that investment banks acting as financial advisors are instrumental in M&A deals. They can influence shareholders' wealth by suggesting acquisition partners and providing a valuation of acquisition premiums (Bowers & Miller, 1990). A firm reputation is known to indicate its quality (Shapiro, 1983), and top-tier advisors are deemed to have superior skills compared to their less reputable counterparts. They have superior skills in evaluating target firms, identifying profitable deals, and negotiating better terms for their clients, as highlighted by Kale et al. (2003). Their "top-tier" status also gives them visibility and bargaining power, which should enable them to negotiate advantageous terms. However, they are also known to be predominantly involved in public acquisitions, which are high profile with regards to the media coverage associated with public targets. These deals are known to be complex, considering factors such as the great level of disclosure requirements and the approval from regulatory authorities involved and shareholders, as mentioned by Golubov et al. (2012). Moreover, these deals are characterised by the increased difficulty of capturing gains due to the greater bargaining power of targets compared to that of unlisted firms (Fuller et al., 2002). Thus, we hypothesise that top-tier advisors' superior skills should help them capture gains for bidding firms. Therefore, they will have a positive impact on the bidder's shareholder wealth. Besides, despite the great bargaining of public targets and the more significant efforts required due to these deals' complexity, top-tier advisors should be able to enhance the bidder's shareholder wealth in public acquisitions. We referred to this hypothesis as the "superior skills" hypothesis (H3).

Boutique advisors are niche investment banks who are specialised in M&A deals and in specific industries. They are independent firms that are less subject to conflict of interests, unlike full-service banks, which are more prone to conflicts of interests (Kolasinski & Kothari, 2008). They should have expertise in identifying suitable deal partners and providing a fair

valuation of deal premiums. Their expertise gained from the repeated involvement in advising companies, combined with their specialisation in M&A transactions and several industries, should help them identify profitable deals. However, their relatively small size and limited visibility suggest they do not have significant bargaining power, especially in public acquisitions, which present various challenges that may hinder their ability to negotiate advantageous terms. Thus, we posit that in public acquisitions, boutique advisors will not be able to capture positive returns for their clients. We expect a negative relationship between the specialisation of boutique advisors and bidders' returns in public deals. We formulate this hypothesis as the "lower bargaining power" hypothesis (H4a). On the other hand, we expect boutique advisors, through their expertise and specialisation, to have a positive impact on bidding returns in acquisitions of unlisted targets (i.e., private and subsidiary) who do not have great market power (H4b). We referred to this hypothesis as the "specialists' skills hypothesis".

### *2.5.3. Financial advisors and deal time to resolution*

Financial advisors are deeply involved in assisting firms in every step of the M&A process (Liaw, 2011b). Their involvement suggests that they have a significant influence on the deal duration. Top-tier advisors, with their superior skills and abilities and their great bargaining powers, should be able to complete deals faster than other advisors. The hypothesis is formulated as the "skilled advisor" hypothesis (H5a). However, top-tier advisors have a reputation to preserve, which may serve as an incentive to advise an acquirer diligently and carefully. In addition, the public acquisitions in which they are mostly involved are complex and subjected to great scrutiny, as underlined by Golubov et al. (2012). Therefore, top-tier advisors are likely to take more time than their counterparts to complete deals for acquiring firms. In the spirit of Golubov et al. (2012), we referred to this hypothesis as the "diligent

advisor" (H5b). A positive impact of top-tier advisors on deal time to resolution will provide evidence to the *diligent advisor* hypothesis, where a negative sign to the relationship is consistent with the *skilled advisor* hypothesis. Boutique advisors have experience in advising acquiring firms throughout the M&A process as they are repeated players, through which they have developed various skills. Their experience and industry expertise should enable them to complete deals faster than other advisors. Still, they are typically involved in complex deals (Song et al., 2013) and deals characterised by a high level of information asymmetry between acquirers and targets (Loyeung, 2019). Thus, we posit that boutique advisors will take a substantial amount of time to complete the acquisition meticulously and efficiently. We referred to this hypothesis as the "diligent specialists" (H6).

## *2.6. Summary*

Throughout this chapter, we elaborated on the theoretical and empirical background underpinning our analysis of the implications of investment reputation and specialisation on M&A outcomes. Among other things, we highlighted the work of prior studies in terms of identifying that bidding firms are losers in the short-term compared to targets. We also highlighted how the literature fails to provide consistent findings on the impact of the reputation of an advisor on M&A settings. Inspired by prior studies, we formulated six hypotheses describing the theoretical factors influencing the selection of financial advisors in M&A deals based on their reputation and specialisation, and how this selection impacts M&A outcomes for acquiring firms. Hypothesis H1 relates to factors influencing the selection of top-tier advisors, whereas hypothesis H2 relates to considerations affecting the choice of boutique advisors. Hypotheses H3 and H4 relate respectively to the impact of top-tier and boutique advisors on acquirer returns. Hypotheses H5 and H6 relate to the relationships between top-tier

and boutique advisors on deal announcement time respectively. Taken together, the formulated hypotheses constitute the foundation of our empirical study of the implications of the choice of financial advisors on M&A outcomes.

# Chapter 3: Investment Banks and IPO settings

## *3.1. Introduction*

It is well established that investment banks are instrumental to IPOs as they assist issuing firms by gathering information, certifying, distributing, and selling the issue, and are involved in post-issue activities (Cliff & Denis, 2004). The competition for IPO underwriting sees large full-services banks such as J.P. Morgan or Barclays go against smaller specialist boutique firms such as Cenkos securities. While these full-service banks provide diversified financial services, boutique firms are more specialised in corporate transactions, notably IPOs, with industry expertise and market knowledge, who generally target small and mid-cap companies. These specialist investment banks have gained some notoriety throughout the years and have continuously increased their market share (Song et al., 2013). Despite the increasing number of small niche investment banks, bulge brackets often referred to as top-tier continuously get the bulk of underwriting activities as they are continuously on top of investment banks' league tables (Ruvic, 2016). Their rankings, which denote their reputation, are often used as an indicator of their quality. Theoretical and empirical evidence suggest that their services come at a premium (Chemmanur & Fulghieri, 1994; Fang, 2005). Issuers who pay for their services should benefit from their quality services and witness a positive IPO performance. However, IPO firms using prestigious underwriters do not always witness the expected performance in terms of initial day returns, as documented in the existing literature. For instance, several studies provide evidence that investment banks' reputation is significantly related to IPO underpricing (Beatty & Ritter, 1986; Carter et al., 1998; Carter & Manaster, 1990). However, some studies fail to provide evidence to support this hypothesis (Hoberg, 2007; Logue, 1973; Logue et al., 2002). Studies that provide evidence of this relationship do not agree on the sign

of this relationship, with some arguing about a negative relationship, while others suggest a positive relationship. Although the choice of prestigious underwriters and its implication on underpricing has been studied substantially, the same cannot be said regarding specialised boutique investment banks. In fact, the existing literature is limited regarding the choice of boutique underwriters and its implications on underpricing. This is surprising, considering that studies in different fields such as M&A have examined the role of boutique advisors specialised in M&A (Song et al., 2013) and industry specialists' advisors in M&A (Graham et al., 2017).

Inspired by the contrasting findings on the effect of underwriter reputation on underpricing, combined with the limited knowledge on the effect of underwriters' specialisation on IPO performance, this paper sets to revisit the choice of lead manager and examine the implications of this choice on initial-day returns. Specifically, we examine the impact of the reputation and the specialisation of lead managers on IPO settings, including underpricing and investor attention. Our study differs from prior studies that focus mainly on the role of underwriter reputation in explaining underpricing (Liu & Ritter, 2010, 2011; Loughran & Ritter, 2004). Our study also departs from Espenlaub et al. (2012), who looked at the role of nominated advisors (NomAds) and examined the impact of NomAds' reputation on IPO survival. Nominated advisers can be accounting firms, corporate finance firms, and stockbrokers that meet specific criteria. They differ from boutique investment banks, given that only an investment bank can be classified as a boutique, in addition to other criteria. Moreover, Espenlaub et al. (2012) look at performance from the perspective of IPO survival while analysing performance based on underpricing. Our study, in some respects, is similar to the work of Song et al. (2013), who examine the differential impact of boutique and full-service advisors on M&A outcomes. In our study, we analyse the impact of boutique and top-tier lead managers on initial-day returns.

Using a sample of UK IPO transactions taking place between January 1995 and December 2015, this research sets out to examine the choice of lead managers and its impact on IPO settings. The study particularly examines the choice of the lead managers in IPO and the impact of this choice on IPO settings. This study has several notable contributions. First, it enriches the existing body of knowledge on the role of lead managers' attributes in explaining the underpricing phenomenon in the UK market. It does so by providing new evidence that in the UK market, non-price dimensions of top-tier lead managers, notably all-star analyst coverage, which are bundled with underwriting, do not explain the greater underpricing witnessed by issuing firms. The underpricing witnessed by IPO firms may be explained by top-tier managers' ability to generate greater investor attention post-IPO. Secondly, it demonstrates, ceteris paribus, deal specialisation, and the industry expertise of the lead manager has value to issuing firms, who are willing to accept greater underpricing in exchange for industry expertise and other non-price dimensions of boutique banks. However, the added value of these non-price dimensions does not result in greater investor attention post IPO or even shorter waiting periods.

The remainder of this chapter is organised as follows: In section 2, we provide a review of the relevant literature on the underpricing phenomenon, while section 3 presents related works focusing on the role of investment banks' reputation and attributes in explaining underpricing. Section 4 presents the formulated hypotheses explaining the expected effects of lead-manager reputation and specialisation on IPO settings. Section 5 lays out the summary of chapter 3.

## *3.2. Background on IPO underpricing*

Academics have examined IPO activities over the years from several perspectives, but one particular focus of research from prior studies has been on IPO underpricing. The literature

widely documents that IPOs are generally underpriced (positive initial day returns), as underlined by Iannotta (2010), and prior studies suggest reasonings to provide a better understanding of the underpricing phenomenon. Several theories have been developed that attempt to explain the IPO underpricing phenomenon that has been observed over the years. Some argue that issuing firms purposely underprice their IPOs to provide a signal to investors about their firm's fair value and their positive prospects (Allen & Faulhaber, 1989; Grinblatt & Hwang, 1989). Others suggest that underpricing serves as an incentive for informed investors to share their information on the firm (Benveniste et al., 1996). Some authors argue that firms are underpriced to certify oversubscription and to allocate shares rationally (Brennan & Franks, 1997). Others suggest that issuing firms strategically underprice their IPOs to increase their wealth as they sell their shares at lockup expiration (Aggarwal et al., 2002). Furthermore, Cliff and Denis (2004) suggest that issuers underprice to compensate for post-IPO analysts' coverage. Theories developed by academics to explain the underpricing of IPOs are classified under theories that are based on asymmetric information, those based on asymmetric information and theories based on other theories (Ritter & Welch, 2002). Most theories of underpricing, as stated by Widarjo et al. (2017), are related to the asymmetric information between the issuer and potential investors. Through the various functions they perform in IPOs, investment banks help reduce information asymmetry (Andres et al., 2014). In fact, they gather and diffuse information; they certify the quality of the issue; they price and distribute the issue (Logue et al., 2002). Investment banks are also involved in post-issuance activities, such as price stabilization and research coverage (Cliff & Denis, 2004). Their various roles highlight their importance in the IPO process, and various studies have examined the influence that investment banks have on underpricing (Beatty & Ritter, 1986; Chambers & Dimson, 2009; Fernando et al., 2015; Hoberg, 2007; Krigman & Jeffus, 2016; Ritter, 1991; Schenone et al., 2004).

## *3.3. Studies on investment banks' reputation and IPO initial-day return*

As mentioned above, prior studies highlight the importance of investment banks in the IPO process and explain underpricing considering their significant involvement throughout the IPO process and even after the issuer has gone public. For instance, prior research suggests that the aftermarket activities they provide to issuing firms influence underpricing as firms underprice their issues to compensate investment banks (Lewellen, 2006; Meoli et al., 2015; Ruud, 1993). Through the aftermarket price support and stabilization (Ruud, 1993), through pricing and share allocation (Logue et al., 2002), as well as post-IPO analyst coverage (Cliff & Denis, 2004), investment banks can influence IPO underpricing.

Drawing on the impact of underwriters on underpricing, researchers have looked at underwriter characteristics and attributes and examined whether underwriters have specific characteristics and skills which enable them to influence IPO settings with a focus on underpricing. Such studies have mainly focused on the underwriter's reputation and assessed the impact of the underwriter's reputation on underpricing. Various theories on an underwriter's reputation have been developed and tested, and the evidence presented so far depicts a contrasted picture. Several studies provide evidence of the impact of investment banks' reputation on underpricing, whereas some studies present evidence of the contrary. Besides, even within the strand of the literature arguing the impact of underwriters' reputation on underpricing, there are contrasting findings considering that some find evidence of a positive impact of reputation, while others suggest a negative effect. Many have theorised and found evidence that prestigious underwriters have a negative impact on underpricing through the certification function of reputation (Beatty & Ritter, 1986; Carter et al., 1998; Carter & Manaster, 1990; Rock, 1986).

The certification hypothesis posits that issuers' incentive is to maximise IPO proceeds and to preserve their reputation capital; prestigious underwriters certify the quality of the offerings and help issuers maximise IPO proceeds, which should result in lower underpricing. On the other hand, several studies provide opposing evidence and indicate a positive relationship (Beatty & Welch, 1996; Cliff & Denis, 2004; Liu & Ritter, 2011; Loughran & Ritter, 2004). They explain this positive impact as the shift in issuer incentive from maximising IPO proceeds to non-price dimensions including spinning (Liu & Ritter, 2010; Loughran & Ritter, 2002, 2004) and analyst coverage bundled with underwriting (Liu & Ritter, 2011). Prior studies present strong evidence that analysts' post-IPO research coverage from top-tier investment banks positively impacts underpricing (Beatty & Welch, 1996; Cliff & Denis, 2004; Liu & Ritter, 2011; Loughran & Ritter, 2004). An essential aspect of this assumption arises from the fact that these prestigious banks can enforce greater underpricing because of their market power. However, market power can be gained through reputation or "top-tier" status and non-price dimensions. These non-price dimensions are underwriter quality, industry expertise, analyst coverage from influential analysts, aftermarket price support, side payments to executives, and commercial bank loan tie-ins (Liu & Ritter, 2011).

The market power attributed to top-tier banks not only comes from the "top-tier" status but also from their market share, which tends to be greater in an IPO underwriting market characterised by great concentration, as in the U.S (Abrahamson et al., 2011). However, the European IPO underwriting market is characterised by the dominance of local underwriters or domestic champions (Abrahamson et al., 2011). These underwriters, who often operate on a segmented market such as the AIM, are younger, smaller, lack commercial ties and are more specialised in IPOs than their main market counterparts. The dominance of these underwriters, who are often Nomads on a segmented market, has led researchers to evaluate the applicability of existing reputation measures to the European market (Migliorati & Vismara, 2014). In their

work of 2014, Migliorati and Vismara provide a new measure of underwriter reputation for European underwriters (in which Nomads take most of the top ranks), which they found to have a stronger effect on underpricing compared to existing measures of underwriter reputation. Besides, consistent with the certification hypothesis highlighted by earlier studies, they find their high-reputation underwriters associated with less underpricing. Their findings cast doubt upon the theories of "analyst lust" and "economic spinning" in explaining underpricing. At least they question the applicability of these theories to IPOs in the European market. They also suggest that while reputation has frequently been measured by academics, they may not provide a clear picture regarding the differential impact of underwriters on underpricing. Instead, examining the differential impact on underpricing between top-tier and specialist boutique underwriters will provide the missing piece to the puzzle.

The majority, if not all, of the studies mentioned above that examine underwriters' reputation and underpricing focus mainly on offerings with a firm commitment between issuer and underwriter and almost always ignore best-efforts offerings despite their specific characteristics, which make them unique for researchers. Best-efforts are typically more underpriced than other types of offerings (Habib & Ljungqvist, 2001; Lowry & Schwert, 2002). Issuers of best-efforts offers are generally smaller in sales and book value (Ritter, 1987). They are usually used by small young companies, many of which are start-ups, that are rarely backed by venture capital. Besides, best-effort offerings are more costly than firm-commitment offerings (Chua, 1995). The difference between the types of offerings also comes from what investment banks do and do not do in each type of offerings. In best-efforts IPOs, investment banks do not take part in pre-selling activities (Benveniste & Spindt, 1989). They provide little to no certification (Booth & Smith, 1986). Also, investment bankers do not provide insurance for issue proceeds against uncertainty regarding the demand for the shares in best-efforts issues; they only commit to doing their best in marketing the issue (Mandelker & Raviv, 1977). The

characteristics of best-efforts offerings suggest that researchers who investigate the impact of investment banks' reputation on underpricing should undoubtedly look at best-efforts offerings.

## *3.4. Hypothesis development*

### *3.4.1. Choice of lead managers in IPOs*

The choice of a lead manager is among the most critical decisions that an issuing firm has to make when going public, and they have to consider various factors to make this decision. The success of the issue is significantly related to the lead manager's ability to meet the expectations of the issuer. The literature documents that these factors include the choice of the auditor (Titman & Trueman, 1986) the reputation of the underwriter (Fernando et al., 2005; Krigman et al., 2001) and prior banking relationship (Ljungqvist, Marston, et al., 2006; Schenone et al., 2004). The ability to provide ancillary services as non-price dimensions, including liquidity support, analyst coverage and industry expertise (Liu & Ritter, 2011; Loughran & Ritter, 2004), may also influence the choice of an underwriter.

Top-tier lead managers are investment banks that possess inherent characteristics which differentiate them from other investment banks. They typically commend greater underwriting fees and offer ancillary services which are specific to the offering (Meoli et al., 2015). Issuers choosing a prestigious lead manager are willing to incur premium fees in return for significant benefits. Such benefits include higher offer value (Fernando et al., 2015), aftermarket price support, side payments to executives and commercial bank loan tie-ins (Liu & Ritter, 2011). Considering that the services of prestigious underwriters come at a premium, it is likely that only issuers with certain characteristics could incur these costs to hire their services. For instance, mature, established firms which are backed by private equity or venture capitalists

are likely to select top-tier lead managers. The size of the offer is also likely to influence the choice of the underwriter given that the greater the value of the IPOs, the greater effort would be put in by the lead manager to ensure the success of the offering. Factors such as the type of offering (primary vs secondary), the presence of a prestigious legal advisor, and the provision of ancillary services will also affect the selection of a top-tier lead manager (H7).

Boutique investment banks are generally small firms with limited visibility and charge lower fees in comparison to their top-tier counterparts (Song et al., 2013). They are typically specialised in the provision of corporate advisory services, including IPOs, and possess a great deal of industry expertise. Their independence makes them less prone to conflicts of interests (Kolasinski & Kothari, 2008) which suggests that they work with the best interests of their clients at heart. Their traits would suggest that their clientele will be largely composed of young and small firms offering small and risky issues. In addition, issuers electing to hire boutique underwriters will likely consider factors such as the type of offerings, the number of uses of proceeds and the existence of lock-up agreements, which often indicate how risky the offer is. These factors, including the age of the issuer as well as the size of the offerings, will be expected to influence the selection of a boutique underwriter (H8).

### *3.4.2. Lead manager reputation and specialisation, and IPO underpricing*

Investment banks are instrumental to IPOs as they support and help issuers before, during and after the IPO process (Logue et al., 2002). Their reputation conveys their quality and signals the confidence of the managers about the quality of the issues (Brau & Fawcett, 2006). The reputation of an underwriter also denotes the non-price dimensions that are important to issuers, including the service quality, the distribution channel and analyst coverage (Liu & Ritter,

2011). Given the value of reputation to prestigious lead managers and their importance for issuers and investors, combined with the involvement of lead managers in the pricing of IPO, the reputation of IPO lead managers should be significantly related to IPO underpricing. The literature documents that the issuer incentive in an IPO is to maximise the proceeds (Iannotta, 2010) and firms often underprice their IPO for strategic reasons including to compensate investors for the risk of investing (Brigham, 2016). To preserve their reputation capital, prestigious underwriters certify the quality of the offerings and help issuers maximise IPO proceeds, which should result in lower underpricing. In line with prior studies, we refer to this as the "*certification hypothesis*" (H9a) (Beatty & Ritter, 1986; Carter et al., 1998; Carter & Manaster, 1990; Rock, 1986). On other hand, the literature suggests issuers' incentive is not always to maximise IPO proceeds (Loughran & Ritter, 2002). Some issuers care less about IPO proceeds and give more consideration to non-price dimensions associated with prestigious lead managers such as analyst coverage, quality services, and great distribution channels, as well as an influence within the investing community (Liu & Ritter, 2011). Issuers who focus on non-price dimensions are willing to leave money on the table in return for the non-price dimensions. We posit that prestigious lead managers who have great market power can enforce greater underpricing against issuers whose incentive is on non-price dimensions and not proceeds' maximisation. We referred to their hypothesis as the "analyst lust" (H9b) in the same vein as (Liu & Ritter, 2011). A positive sign to the relationship between top-tier lead managers with reputational capital and IPO underpricing will give support to the *certification hypothesis*, whereas a negative sign to the relationship will be consistent with the *analyst lust* hypothesis.

Unlike top-tier underwriters, boutique underwriters are specialist independent small investment banks who are specialised in IPO, with significant expertise in certain industries and in specific markets. They are mainly associated with young small and medium firms with limited notoriety and visibility. They are often involved with issuers looking to list on the AIM, with many

holding a Nomad's status. Like their top-tier counterparts, boutique firms provide the additional services sought by IPO firms, such as aftermarket research, analyst coverage or market-making. Given these traits, they are often involved in speculative offerings. In these offerings, boutique lead managers face a dilemma concerning the pricing of the IPO, since leaving money on the table will leave a bad taste to issuers looking to maximise the IPO proceeds. Still, investors need to be compensated for the risk of investing against superior information. Though issuers care about maximising IPO proceeds, they also care about the deal success and long-term viability and the additional services of specialist underwriters. Issuers may be willing to compromise on IPO proceeds in return for industry expertise, market knowledge, and the Nomad status bundled with underwriting services of specialist boutiques. Concurrently, underwriters will underprice IPOs to reward investors for the risks associated with speculative offerings. Therefore, we expect a positive relationship between underwriter specialisation and IPO underpricing (H10a). Conversely, boutique investment banks may have incentives to avoid underpricing to build up their reputation as quality underwriters who use their M&A and industry specialisation to maximise IPO proceeds. Therefore, boutique lead managers should be associated with a decrease in IPO underpricing (H10b).

### *3.4.3. Lead manager reputation and specialisation, and investor attention post-IPO*

Prior literature suggests that lead managers are involved in every step of the IPO process and are often involved in post-market activities, including price support and stabilization (Iannotta, 2010). The provision of after-market services, including analyst research coverage, is among the various non-price dimensions that IPO firms seek from lead underwriters (Liu & Ritter, 2011). Issuers have come to expect lead managers to complete IPOs and then participate in

post-IPO activities. These post-IPO activities include the ability to generate interest from investors. IPO firms may elect to leave a substantial amount of money on the table when going public and expect to recover part of the loss in the secondary market by getting investor attention, which presents some benefits. For instance, receiving investors bring visibility, which is important for a listed company as investors tend to buy stocks from a company they know or are familiar with (Barber & Odean, 2008; Keloharju et al., 2012). In addition, getting investor attention can enhance stock liquidity, which has several advantages, including lower default risk (Brogaard et al., 2017; Nadarajah et al., 2020). Top-tier lead managers have significant exposure and access to a large pool of potential investors before, during and after the IPO process. Their top-tier status enables them to get investors to pay attention to the IPOs they manage, resulting in their participation in these IPOs. Their capacity to generate interest from investors in the primary markets should extend to the secondary market. As a result, top-tier lead managers' IPO should be associated with greater investor attention (H11a). Boutique lead managers do not have the same exposure as their top-tier counterparts. Contrary to top-tier lead managers, they do not have access to extensive networks of potential investors. Still, they are repeated players in IPO deals with expertise in specific industries, which enables them to have access to investors who often look to invest in specific industries. In the UK market, they tend to be heavily involved in the AIM, where shares are usually offered to strategic investors who look for a long-term commitment with the firm, they invest in. Their involvement with IPO firms listed on the AIM means they are engaged in a long-term relationship. The listing authorities require issuers to select a Nomad who will hold this position throughout the firm's life on the AIM market. This long-term commitment provides further provide incentives for boutique lead managers to generate investor attention in the aftermarket. Therefore, we posit that boutique lead managers should have a positive and significant impact on investor attention, especially for IPO firms listing on the AIM (H11b).

### *3.4.4. Lead manager reputation and specialisation, and IPO waiting periods*

The waiting period is typically defined as the period between an IPO registration date and the date of the issue, representing the date at which the company officially becomes listed on the stock exchange. This period, which is often perceived as a measurement of risk (Colaco et al., 2018), tends to vary significantly from one IPO to another. During this period, the lead manager(s) must perform various tasks, including gathering information and engaging with potential investors. The length of this period should be influenced by various factors, including investment banks' ability to use their skills, and putting in efforts to complete the IPO process as soon as they can. Lead managers with their top-tier status are deemed to be highly skilled and typically have enough resources, which should enable them to complete the process faster than their less-skilled counterparts. However, they are also associated with large and complex IPOs, which are associated with strict regulatory requirements issuing firms must meet, and potential legal liabilities investment banks may face. These factors constrain them to take enough time to diligently conduct the IPO process. Therefore, we posit that top-tier lead managers should be associated with IPOs with longer waiting periods (H12a). Boutique lead managers who are specialised in IPOs activity have skills and attributes which enable them to affect IPO waiting periods. Their repeated involvement in IPOs would suggest that they have developed the expertise and knowledge of industries that enable them to effectively complete IPO deals relatively faster than their less specialised counterparts. Besides, they are involved mainly in AIM offerings where the listing requirements are less strict and where many IPOs are conducted through placings (Clifford Chance LLP, 2018). Therefore, we posit boutique lead managers to be associated with IPOs with shorter waiting periods (H12b).

## *3.5. Summary*

In this chapter, we expounded on the background literature supporting our assessment of the implications of investment banks' reputation and specialisation on IPO settings. Among other things, we draw attention to prior studies exploring various aspects of underpricing, including the determinants of this phenomenon. We also underscored the mixed findings from prior works on the influence of the reputation of an investment bank on IPO underpricing. Inspired by prior studies, we developed several hypotheses formulated around the implications of the choice of lead managers on underpricing, investor attention and waiting periods. Hypotheses H7 and H8 relate to the determinants of the choice of top-tier and boutique lead managers in UK IPOs. Propositions H9 and H10 respectively theorise the relationships between top-tier and boutique lead managers, and IPO underpricing. Hypotheses H11a and H11b theorise the impact of the choice of the lead managers on investor attention, whereas H12a and H12b relate to the impact of top-tier and boutique lead managers on IPO waiting periods.

# Chapter 4: Methodology

## *4.1. Introduction*

In this chapter, we present a description of the methodology adopted to analyse the implications of investment banks' reputation and specialisation on M&A and IPO performance. In section 2, we explain the steps taken in the sample selection and a breakdown of the related data. In section 3, we define the variables of interest as well as the relevant independent variables used for our analysis. A justification of their inclusion in our analysis is also offered. In sections 4 and 5, we describe the empirical model and the economic procedures respectively underpinning our analysis. Section 6 provides a summary of the chapter.

## *4.2. Data sample and measurement of variables*

### *4.2.1. Data sample*

#### *4.2.1.1. Sample of acquisitions*

We collect a sample of acquisition deals from the Bloomberg Mergers and Acquisitions database. We select transactions announced between 01st January 2000 and 31st December 2015. The sample includes successful and unsuccessful transactions, where the bidders are UK public companies, and targets are UK public, private, and subsidiary companies. Our primary interest lies in transactions involving a change of ownership and control. Therefore, we only select deals for which the bidder owns less than 10% of the target before the deal and seeks a final stake of more than 50%. This criterion has been widely used by relevant studies (Faccio et al., 2006; Golubov et al., 2012; Graham et al., 2017). In the same vein as relevant studies, we remove transactions with a deal value lower than £1 million to reduce the effect of outliers

on our results, resulting in a sample of 4,164 deals. Golubov et al. (2012) and Graham et al. (2017) filter their respective samples of deals with a transaction value lower than $1 million. We exclude transactions with multiple acquirers, and we require bidding firms' stock data to be available from Thomson Reuters DataStream Professional, which reduces the original sample to 3,909 transactions. Consistent with prior studies, we exclude from the sample liquidations, restructurings, leveraged buyouts, reverse takeovers, privatisations, bankruptcy acquisitions, and going-private transactions, which provides a sample of 3,699 acquisitions. Furthermore, we filter the sample of deals for which the acquirer industry is not identified and exclude deals where the bidder is not listed on the London Stock Exchange (LSE), yielding a final sample of 3,654 acquisitions. Out of these transactions, the name of the financial advisor(s) advising the bidding firm is provided in 1,914 transactions, which leaves us with 1,740 acquisitions where there was no financial advisor reported as advising the bidder. The data on stocks' performance is retrieved from Thomson Reuters DataStream Professional, whereas accounting data are obtained from both DataStream and Worldscope databases.

The sample period spans over three decades and encompasses several cyclical waves which characterise M&A activity (Goergen & Renneboog, 2004; Martynova & Renneboog, 2008, 2011). Major economic and financial events such as the Dotcom bubble of the 1990s and the Global Financial Crisis (GFC) of 2008 also took place over this period. To observe the influence of these events on M&A waves, we report a breakdown of our sample of acquisitions, which shows the annual M&A activity between 2000 and 2015 in Figure 1. We also observe the involvement of financial advisors with acquiring firms in the U.K. over this period, as reported in Figure 2. During the year 2000, the market was at a near peak with close to 400 deals announced, which may be explained by the peak of the dot-com bubble. From 2001 to 2003, there was a gradual decrease in M&A activity, which can be attributed to the burst of the

bubble. The subsequent years were marked by a decline in economic activity worldwide, which eventually resulted in the slowing down of the M&A activity.

#### *4.2.1.2. Sample of IPOs*

Regarding the second objective of this study, which is to examine the effect of investment banks on IPO settings, the sample of offerings is collected from the Bloomberg Equity Offerings database. Our initial sample consists of UK IPOs announced between 01 January 1995 and 31 December 2015, for which the initial public offering security type is common stock. We derive a sample of 2,629 IPOs. In common with related studies, we filter the sample of unit offerings, closed-end funds, real estate investment trusts (REITs), American deposit receipts (ADRs), private equity funds, receipts, and crest depository interests (CDIs), which provides a sample of 2210 deals. We exclude deals with an offer size lower than 1 million GBP and deals with an offer price lower than 1 GBP, which results in a sample of 1,845 deals. Additionally, we exclude IPOs for which the issuer ISIN identifier is not available, yielding a sample of 1,837 offerings. We then select deals for which the "Offer to 1st Close" is available, which results in a sample of 1,704 IPOs. Moreover, we exclude IPOs with an effective date outside our sample period, which gives us a sample of 1,699 IPOs. Finally, we filter our sample of re-introductions and only retain the original IPOs, and filter the sample of dual listings and only select the IPO on the LSE, which provides us with a final sample of 1,535 offerings.

## *4.3. Measurement of variables*

### *4.3.1. Measure of financial advisor's reputation*

As mentioned earlier, an advisor's reputation, which indicates its quality, can influence shareholders' wealth. However, reputation at its core is an abstract construct. Researchers and

practitioners do not agree on a standard proxy of reputation. Different measures have been suggested in various studies, with some using a proxy of reputation based on an investment bank position in the tombstone advertisements (Bowers & Miller, 1990; McLaughlin, 1992). Some studies ranked advisors based on a modified market share during the sample period (Rau, 2000; Walter et al., 2008). For instance, Rau (2000) uses an average yearly ranking to create a measure of average market share, while Walter et al. (2008) suggest a dynamic measurement with a three-year rolling window to derive a market share. Moreover, researchers have ranked advisors based on a classification of two tiers (Golubov et al., 2012; Guo et al., 2018) and three tiers (Chuang, 2016; Hunter & Jagtiani, 2003; Ismail, 2010; Walter et al., 2008). Despite the substantial differences in the existing measures, it appears that researchers have commonly relied on league tables, as highlighted by Walter et al. (2008). They state that "one of the most commonly cited measures to assess the reputation of an M&A adviser is league table rankings". We download data on financial advisors involved in any M&A deals announced between 01 January 2000 and 31 December 2015 in the U.K. Their involvement includes both successful and unsuccessful deals. We obtain data on market shares, the number of deals advised and the total deal value. We compute the market share, the number of deals advised and total deal value of financial advisors over three-year rolling periods covering the sample period. A significant difference from prior studies is that we associate a top-tier status with the provision of full services including commercial banking. Therefore, we apply this criterion to our ranking of top-tier financial advisors and require a top-tier bank to provide commercial or retail banking. Based on this criterion and the data available, we compute ranking tables of the top 20 financial advisors over three-year rolling windows covering the sample period. To illustrate our ranking system, we prepare Table 1 which presents a list of the top-tier advisors for the window period 2000-2002.

**Table 1**

**Ranking of top-tier and non-top-tier financial advisors**

This table lists the top-20 financial advisors we identified as top-tier banks that have been involved in any M&A transactions in the U.K. over January 2000 to December 2002 retrieved from Bloomberg Mergers and Acquisitions database. Using a binary ranking system, we rank advisors based on the total value of the deals in which they were involved. Full credit is given to each eligible advisor. The first 10 advisors, represent the top-tier financial advisors, with a market share of at least 10% and a total deal value of at least £500 billion.

| Rank | Advisor | Market Share (%) | Total Deal Value (million GBP) | Average Value (million GBP) | Deal Count |
|---|---|---|---|---|---|
| | | **Top-tier (1-10)** | | | |
| 1 | JP Morgan | 30.48 | 242,986.17 | 991.78 | 245 |
| 2 | Goldman Sachs | 25.14 | 200,407.11 | 1,553.54 | 129 |
| 3 | Credit Suisse | 24.17 | 192,708.79 | 930.96 | 207 |
| 4 | Morgan Stanley | 23.37 | 186,277.55 | 1,619.8 | 115 |
| 5 | UBS | 22.24 | 177,261.12 | 1,074.31 | 165 |
| 6 | Citi | 16.64 | 132,629.3 | 878.34 | 151 |
| 7 | Rothschild & Co | 16.12 | 128,486.49 | 813.21 | 158 |
| 8 | Bank of America Merrill Lynch | 15.75 | 125,514.86 | 936.68 | 134 |
| 9 | Commerzbank | 15.15 | 120,763.26 | 887.97 | 136 |
| 10 | RBS | 12.18 | 97,084.42 | 776.68 | 125 |
| | | **Non-top-tier (11-20)** | | | |
| 11 | Lazard Ltd | 12.1288 | 96,680.69 | 773.45 | 125 |
| 12 | Deutsche Bank | 7.611 | 60,668.07 | 473.97 | 128 |
| 13 | HSBC | 6.1962 | 49,390.72 | 465.95 | 106 |
| 14 | Lehman Brothers | 4.6734 | 37,252.03 | 582.06 | 64 |
| 15 | BNP Paribas | 2.3884 | 19,038.64 | 906.6 | 21 |
| 16 | ING Groep | 2.2918 | 18,268.63 | 294.66 | 62 |
| 17 | Greenhill & Co | 2.2007 | 17,542.25 | 1,031.9 | 17 |
| 18 | KPMG Corp Finance | 1.6301 | 12,994.14 | 47.25 | 275 |
| 19 | PwC | 1.3701 | 10,921.63 | 64.63 | 169 |
| 20 | Stifel | 1.271 | 10,131.39 | 5,065.69 | 2 |

The binary ranking system is inspired by the work of Fang (2005) and related studies (Golubov et al., 2012). Economically, the investment banking industry is characterised by a two-tiered structure, where firms are either part of the "bulge bracket" or they are not. Econometrically, a binary classification avoids the drawbacks of a continuous measure. Like Walter et al. (2008), we used a three-year rolling window to measure the reputation status of an advisor. The choice of a rolling window for measuring advisor reputation is more appropriate than using the full sample period given that an agent reputation is not static over time and the involvement of an advisor in M&A activity might not be constant over several years. Additionally, a small number of advisors in our sample were the subject of a takeover or stopped trading at some stage of the sample period. Using this categorisation, we construct the indicator variable *Top_tier_adv*, which takes the value of 1 if the financial advisor(s) for the acquiring firm is defined as a top-tier bank, 0 otherwise.

### *4.3.2. Measure of financial advisor's specialisation*

A fundamental aspect of our research relates to the identification of an adequate measure of an advisor's deal specialisation, which proves to be a challenging task considering the absence of a widely recognised measure of M&A advisors' specialisation. Researchers and practitioners have commonly equated an advisor's specialization with the "boutique" status considering that boutique firms typically specialise in specific segments of investment banking and certain industries. However, to this date, no database provides a full list of boutique investment banks or a standard classification of boutique firms. Practitioners and academics propose different lists of boutique investment banks, but most of these lists fundamentally account for US firms and do not substantially consider European investment banks. A challenge with determining the boutique status relates to the definition of the term "boutique", as highlighted by

Alexandridis, Antypas and Lee (2021). For instance, traditional boutique firms such as Evercore and Greenhill who used to focus primarily on the provision of corporate advisory now offer auxiliary services such as asset management, equity underwriting and research (Financial Times, 2013). In addition, while they have traditionally served small and middle-market firms, nowadays boutique investment banks offer services to clients with an international reach. Therefore, the criteria or characteristics used to define boutique banks have substantially changed over time. The literature is relatively limited in studies suggesting a standard metric of deal specialisation. That said, Song et al. (2013) developed an approach to identify boutique advisors based on sources provided by news accounts and the Dow Jones Factiva database. Their classification, which was implemented manually, differentiated boutique and full-service advisors.

In line with Song et al. (2013), we develop and implement a manual classification of boutique advisors. As mentioned previously, boutique investment banks typically specialise in segments including mergers, acquisitions, financial institutions, and Silicon Valley business (Liaw, 2011a). Unlike their bulge bracket counterparts, they position themselves as being free from conflicts of interests as they do not have trading and financing arms (Reuters, 2016; Shayndi, 2015). The provision of financing is considered one of the fundamental differences between boutique and full-services banks. Our approach to classifying boutique investment banks is as follows: we first examine the advisor's business description using the company accounts from Companies House and its primary business lines from FAME, Bloomberg databases and the company website. If an advisor's primary focus is on the provision of corporate finance or corporate advisory services, including in M&A, but it does not have a financing arm, we consider it to be a boutique advisor. Firms with corporate advisory as their core business that provide additional services such as research, execution, and equity underwriting but do not provide financing or commercial loans are considered boutique banks.

**Table 2**

**List of boutique financial advisors**

This table presents a list of the financial advisors we classify as boutique based on the classification system described in section 4.3.2. The list comprises all financial advisors present in our sample of M&A transactions in the U.K. from January 2000 to December 2015 retrieved from the Bloomberg Mergers and Acquisitions database. For firms that went through a merger or an acquisition, credit is given to the original entity. For example, Code securities Ltd was acquired by Nomura International Plc in December 2005 and became a wholly-owned subsidiary of Nomura Europe Holdings plc under the name Nomura Code Securities Limited. Under our classification criteria, Code Securities Ltd and Nomura Code Securities Ltd are considered two distinct investment banks.

| Adviser | Number of deals Involved | Adviser | Number of deals Involved |
|---|---|---|---|
| Acorn Capital Partners Ltd | 1 | John East & Partners Ltd | 9 |
| Alfred Henry Corporate Finance Ltd | 1 | Kinmont Ltd | 1 |
| Allenby Capital Ltd | 4 | Kroll Corporate Finance Ltd | 1 |
| Altium Capital | 36 | Lazard Ltd | 22 |
| Amethyst Corporate Finance plc | 6 | Lexicon Partners | 5 |
| Anvil Partners | 1 | Livingstone Guarantee LLP | 2 |
| ARM Corporate Finance Ltd | 5 | Marshall Securities Ltd | 3 |
| Arma Partners LLP | 1 | Mcqueen Ltd | 4 |
| Asgard Partners Ltd | 1 | MediaFund Ltd | 1 |
| Beaumont Cornish Ltd | 12 | Moelis & Company LLC | 1 |
| Bridgewell Corporate Finance | 15 | Nabarro Wells & Co. Ltd | 13 |
| British Linen Advisers | 3 | Noble Grossart Ltd | 6 |
| Broadview International LLC | 1 | Noble Group | 30 |
| Buckingham Corporate Finance Ltd | 2 | Pakenham Partners | 1 |
| Cairn Financial Advisers LLP | 3 | PC Hansen & Co | 1 |
| Canaccord Adams Ltd | 2 | Perella Weinberg Partners | 2 |
| Carlton Corporate Finance Ltd | 1 | Quayle Munro Ltd | 1 |
| Catalyst Corporate Finance LLP | 1 | Regent Associates Ltd | 2 |
| Chatsford Corporate Finance Ltd | 1 | Results International Group LLP | 2 |
| Citigate Sard Verbinnen | 1 | Rickitt Mitchell & Partners Ltd | 9 |
| Clairfield International | 1 | Robey Warshaw LLP | 1 |
| Code Securities Ltd | 1 | Sapient Corporate Finance | 1 |
| Corporate Synergy plc | 25 | Sentio Partners LLP | 2 |
| Daniel Stewart & Co plc | 37 | Seymour Pierce Ellis | 1 |
| DC Advisory Partners | 6 | Shore Capital Group | 25 |
| Donaldson Lufkin & Jenrette | 2 | Spark Advisory Partners Ltd | 3 |
| Dow Schofield Watts LLP | 2 | St Helen's Capital plc | 5 |
| EPL Advisory LLP | 1 | Strand Hanson Ltd | 3 |
| Evolution Securities Ltd | 27 | Strand Partners Ltd | 18 |
| Fenchurch Advisory Partners Ltd | 3 | Strata Technology Partners LLP | 3 |
| Fox-Davies Capital Ltd | 1 | Torch Partners Ltd | 1 |
| Fox-Pitt Kelton NV | 1 | Tricorn Partners LLP | 1 |
| Gleacher Shacklock LLP | 5 | Trillium Partners LLP | 1 |
| Greenhill & Co. Inc | 7 | Vollman Brothers | 1 |
| Hawkpoint Partners Ltd | 16 | Watersheds Ltd | 3 |
| HerAx Partners LLP | 1 | Westhouse Securities LLP | 8 |
| Hines Associates Ltd | 1 | Winghaven Partners Ltd | 1 |
| Houlihan Lokey Inc | 1 | Zeus Capital Ltd | 20 |

We include corporate advisory firms that offer ancillary services because various notable boutique houses such as Evercore, Lazard and Greenhill provide asset management, research, and equity underwriting. Besides, most notable boutique investment banks focusing on corporate finance services, including M&As, often have expertise activities equity offerings.

In the same vein with Alexandridis, Antypas and Lee (2021), we cross-check our classification by searching whether an advisor is explicitly described as "boutique", "niche" or "M&A specialist" through several sources including Blomberg's private company information, Eikon Thomson Reuters, Dow Jones Factiva, company websites, and news media in the year leading to the deal announcements. This process allows us to validate our classification of boutique investment banks as we derive a total of 76 unique boutique advisors for the acquiring firm in the sample, which are presented in Table 2. Throughout the sample period, we account for the change in the advisor's boutique status, given that an advisor core business may change and considering that several advisors were acquired or merged with other firms during the sample period. Using this classification, we construct the variable *Boutique_adv,* which takes the value of 1 if the financial advisor(s) of the M&A deal is classified as "boutique", 0 if otherwise.

### *4.3.3. Measure of abnormal returns*

Abnormal or excess returns are measured as the difference between the actual return realised from the occurrence of an event and the return that would have been expected if the event did not occur (Cable & Holland, 1999). The choice of event window appears to be subjective, and no specific window seems to be more popular than any other. Related studies computing abnormal returns over the short-term have used several event windows ranging from 1 to more than 11 days (Martynova & Renneboog, 2011; Renneboog & Vansteenkiste, 2019). We measure CARs and observe them over a 5-days event CAR (-2, +2). The choice of this

relatively short event window is influenced by the fact that the use of a longer period could be misleading given that the returns may encompass the effect of other economic or macro factors. In the spirit of prior studies, we use the CAPM model as a benchmark to compute expected returns. The formula for cumulative returns is as follow:

$CAR = \sum AR$ , where $AR_{i,t} = RR_{i,t} - E(R)_{i,t}$ (1)

where $RR_{i,t}$ is the realized return for the stock i on day t, while $E(R)_{i,t}$ is the expected return of the market i on day t. The expected returns are determined based on the CAPM model and we use FTSE ALL SHARE as the market index.

### *4.3.4. Deal time to resolution*

Deal time to resolution represents the length of time between the date a deal is announced and the date the deal is either completed or terminated. For this research, the deal announcement date and the date of deal completion or termination are provided from Bloomberg Mergers and Acquisitions database. For this study, we construct the variable *Time_to_resolution*, which is a proxy for deal time to resolution and represents the difference in the number of calendar days between the date a deal was announced and the date the deal was completed or terminated.

### *4.3.5. Measure of lead manager reputation*

To measure the reputation of lead managers, we follow the same approach as our measure of the reputation for financial advisors based on league tables. We download data on lead managers involved in UK IPO deals which took place between 01 January 1995 and 31 December 2015. We obtain data on the amount credited, market share, fees, number of deals advised and the total deal value.

**Table 3**

**Ranking of top-tier and non-top tier lead managers**

This table presents the top 20 underwriters that have been involved in IPOs, which took place between January 1995 to December 2015 in the U.K., retrieved from the Bloomberg IPO database. Using a binary system, we rank underwriters based on the amount they are credited for the deals they were involved in. The first 10 (top-tier) investment banks have a market share of at least 2.5% and a credit of over 5 billion GBP.

| *Rank* | *Lead manager* | *Credit (GBP) billion* | *Market Share (%)* | *Deal Count* | *Fees (GBP) million* | *Value (GBP) million* |
|---|---|---|---|---|---|---|
| | | ***Top-tier*** | | | | |
| 1 | Bank of America Merrill Lynch | 20.96 | 12.6 | 116 | 47.72 | 522.73 |
| 2 | JP Morgan | 13.79 | 8.29 | 172 | 34.46 | 408.07 |
| 3 | Goldman Sachs | 12.43 | 7.47 | 76 | 24.09 | 287.60 |
| 4 | UBS | 10.57 | 6.36 | 112 | 13.50 | 160.09 |
| 5 | Credit Suisse | 10.07 | 6.05 | 93 | 23.20 | 258.93 |
| 6 | Citi | 10.01 | 6.02 | 91 | 45.97 | 509.48 |
| 7 | Commerzbank | 7.78 | 4.68 | 51 | 0.13 | 1.27 |
| 8 | Barclays | 6.83 | 4.11 | 51 | 14.67 | 169.30 |
| 9 | Morgan Stanley | 6.29 | 3.78 | 73 | 43.99 | 521.13 |
| 10 | Deutsche Bank | 5.03 | 3.02 | 76 | 15.11 | 175.21 |
| | | ***Non-top-tier*** | | | | |
| 11 | Investec | 4.18 | 2.51 | 275 | | |
| 12 | Canaccord Genuity | 3.68 | 2.21 | 208 | 1.74 | 19.29 |
| 13 | Numis | 3.41 | 2.05 | 150 | 4.41 | 131.92 |
| 14 | Cenkos Securities | 3.18 | 1.91 | 174 | | |
| 15 | NatWest Markets | 3.03 | 1.82 | 73 | 1.80 | 26.50 |
| 16 | HSBC | 2.95 | 1.78 | 79 | 8.46 | 110.27 |
| 17 | JO Hambro Magan & Co | 2.73 | 1.64 | 4 | | |
| 18 | Societe Generale | 2.09 | 1.26 | 29 | 0.29 | 2.83 |
| 19 | Jefferies | 2.06 | 1.24 | 49 | 18.72 | 189.53 |
| 20 | Daiwa Securities | 1.89 | 1.13 | 7 | | |

We compute league table rankings of the top 20 lead underwriters for three-year rolling periods over the sample period based on the amount credited and the market share. In these rankings, lead managers are categorised into top-tier and non-top-tier groups as illustrated in Table 3.

This binary ranking system for lead managers has been implemented in previous studies (Aggarwal et al., 2002; Fang, 2005; Jegadeesh & Kim, 2010; Kim et al., 2010). Our ranking of investment bank reputation differs from the commonly used ranking of Carter and Manaster. However, their ranking is mostly tailored to the US market and does not account for about 67.5% of European IPOs (Migliorati & Vismara, 2014). We intended to use a ranking based on the value of money raised similarly to Migliorati and Vismara (2014). However, due to some investment banks' missing data, we use ranking based on each bank's amount credited.

Considering that the reputation is not static and that some underwriters were acquired or stopped trading during the sample period, we use a three-year rolling window to observe the reputation of financial advisors. From this classification of top-tier financial advisors, we construct the indicator variable, *Top_tier_lead*, which takes the value of 1 if the lead manager(s) of the IPO is a top-tier lead manager and 0 otherwise.

### *4.3.6. Measure of lead manager specialisation*

To measure the specialisation of IPO lead managers, we follow a similar approach as for measuring the specialisation of M&A financial advisors. Given the absence of a widely recognised database that provides a list of boutique investment banks, we manually develop our classification. One of the essential differences between boutique and bulge bracket firms is the provision of commercial loans and financing. We use this as a deciding factor when implementing our classification process. We first examine the advisor's business description using the company accounts from Companies House and its primary business lines from

FAME, Bloomberg databases and the company website. If a lead manager's primary focus is on the provision of corporate advisory services including equity underwriting, but it does not have a financing arm, we consider it to be a boutique underwriter. Firms with corporate advisory as their core business that provide equity underwriting and additional services such as brokerage, research, execution, and trading, but do not provide financing or commercial loans, are considered boutique banks. Notable boutique houses such as Evercore, Lazard and Greenhill have equity underwriting as their core line of business and provide asset management, research, and trading. Besides, most notable boutique investment banks focusing on corporate finance services, including M&As, often have expertise in activities like equity offerings.

In the same vein with Alexandridis, Antypas and Lee (2021), we cross-check our classification by searching whether an underwriter is explicitly described as "boutique", "niche" or "IPO specialist" through several sources, including Blomberg's private company information, Eikon Thomson Reuters, Dow Jones Factiva, company websites, and news media at in the year leading to the deal announcements. Through this process, we can validate our list of boutique underwriters, and we derive a total of 74 unique boutique lead managers, which are listed in Table 4. Throughout the sample period, we account for the change in the underwriter boutique status given that a firm core business may change and considering that several firms were acquired or merged with other firms during the sample period. Based on this classification, we construct the indicator variable, *Boutique_lead,* which takes the value of 1 if the lead manager(s) of the IPO is a top-tier lead manager and 0 otherwise.

**Table 4**
**List of boutique lead managers**

This table presents a list of the lead managers we defined as *boutique* based on the classification system described in Section 4.3.5. The list comprises all lead managers present in our sample of IPO deals on the London Stock Exchange from January 1995 to December 2015 retrieved from the Bloomberg Equity Offerings database. For firms that went through a merger or an acquisition, credit is given to the original entity or the acquired subsidiary. For example, Code securities Ltd was acquired by Nomura International Plc in December 2005 and became a wholly-owned subsidiary of Nomura Europe Holdings plc under the name Nomura Code Securities Limited. Under our classification criteria, Code Securities Ltd and Nomura Code Securities Ltd are considered two distinct investment banks.

| Lead Manager | Number of deals Involved | Adviser | Number of deals Involved |
|---|---|---|---|
| Adam & Partners Ltd | 1 | Jefferies Group | 12 |
| Altium Capital Ltd | 8 | JO Hambro Magan & Co | 2 |
| Ambrian Partners Ltd | 4 | Keefe Bruyette & Woods Inc | 1 |
| Arbuthnot Securities Ltd | 17 | Keith Bayley Rogers & Co Ltd | 8 |
| Arden Partners Plc | 10 | Lazard Ltd | 3 |
| ARM Corporate Finance Ltd | 2 | Liberum Capital Ltd | 10 |
| Baring brothers international Ltd | 5 | Marshall Securities Ltd | 4 |
| Beaumont Cornish Ltd | 7 | Nabarro Wells & Co Ltd | 7 |
| Beeson Gregory Group | 31 | Noble Grossart Ltd | 1 |
| Blue Oar Securities plc | 4 | Noble Group | 14 |
| Bridgewell Corporate Finance Ltd | 13 | Nplus1 Singer Advisory LLP | 6 |
| Cenkos Securities PLC | 28 | Numis Corporation PLC | 48 |
| City Financial Associates Ltd | 7 | Oakley Capital Ltd | 1 |
| Close Brothers Group PLC | 3 | Ocean Equities Ltd | 2 |
| Code Securities | 4 | Oriel Securities Ltd | 13 |
| Collins Stewart PLC | 26 | Panmure Gordon & Co PLC | 23 |
| Collins Stewart Tullett plc | 33 | Peel Hunt & Co | 23 |
| Corporate Synergy PLC | 11 | Peel Hunt LLP | 8 |
| Daniel Stewart & Co PLC | 16 | Piper Jaffray Inc | 1 |
| Dawnay Day Group | 2 | Rea Brothers Group | 2 |
| Dexion Capital Plc | 2 | Robert W Baird & Company Inc. | 6 |
| Dowgate Capital PLC | 3 | Seymour Pierce Ellis Ltd | 7 |
| Durlacher Ltd | 12 | Seymour Pierce Group PLC | 35 |
| Ellis & Partners | 11 | Shore Capital Group Ltd | 11 |
| English Trust Group | 3 | Smith & Williamson Group | 6 |
| Evolution Securities Ltd | 26 | Soundview Technology Goup Inc | 1 |
| Fairfax IS PLC | 4 | SP Angel & Co Ltd | 4 |
| FinnCap Ltd | 7 | Strand Hanson Ltd | 1 |
| First Columbus LLP | 1 | Teather & Greenwood Holdings plc | 61 |
| GMP Securities Ltd | 1 | Westhouse Securities LLP | 6 |
| Granville Baird | 4 | Westhouse Securities Ltd | 4 |
| Hannam & Partners LLP | 4 | Westwind Partners Inc | 1 |
| Hanson Westhouse LLP | 2 | WG Partners | 1 |
| Hawkpoint Partners Ltd | 1 | Whitman Howard Ltd | 2 |
| Hoodless Brennan & Partners PLC | 8 | XCAP Securities Ltd | 2 |
| Hoodless Brennan PLC | 6 | Zeus Capital Ltd | 19 |

### *4.3.7. Measure of underpricing*

IPO underpricing, often referred to as initial returns, represents the difference between the closing price on the first day of trading and the offer price, divided by the offer price. The formula for IPO underpricing is as follows:

$$IR = (CP - OP)/OP \quad (2)$$

In line with most of the existing literature, *IR* represents initial return, *OP* is the offer price, and *CP* is the first available closing price after flotation. For our analysis, we derived the IPO firms' initial returns using *Offer to 1st Close* from the Bloomberg Equity database.

### *4.3.8. Measure of investor attention*

The academic literature suggests a couple of measures for investor attention on a stock or an IPO firm, including the pre-IPO media coverage (Bajo et al., 2016). In addition, researchers also proxy investors' attention using share turnover and the number of analysts covering stocks (Chemmanur & Yan, 2019). Moreover, Barber and Odean (2008) suggest the stock abnormal trading volume, stock previous one-day return or whether the firm appeared in the news as proxies for investor attention.

#### *4.3.8.1. Number of analysts covering the IPO firm*

In the spirit of Chemmanur and Yan (2019), we use the number of analysts covering the IPO firm following the IPO as a proxy of investors' attention. We construct the variable *NumAn,* which represents the number of financial analysts following the stock at the end of the fiscal year following the IPO from the Institutional Brokers' Estimate System (I/B/E/S).

#### *4.3.8.2. Share turnover ratio*

The second proxy of investor attention we use for our study is the share turnover ratio. We construct the variable *Share_turnover_ratio,* which represents the share turnover ratio and is measured using the natural logarithm of the average monthly shares traded as a percentage of total shares outstanding over the one-year period after the IPO.

### *4.3.9. Measure of waiting periods*

In addition to IPO underpricing and investor attention, our study explores the impact of the choice of the lead manager on the IPO waiting periods. The waiting period, represented by the count variable *Waiting_period,* is measured as the number of days spent in registration from the date of the initial prospectus to the final offering of new shares to public investors, as reported by Refinitiv (Number of days in Registration). Our approach to measuring the waiting period is similar to the waiting period defined by Colaco et al. (2018).

### *4.3.10. Controlling variables*

To analyse the implications of investment banks' reputation and specialisation on M&A and IPO performance, we developed various hypotheses. We test these hypotheses using the dependent variables described above and several independent variables which are suggested by the literature. These variables are grouped into four categories: Advisor characteristic variables, deal characteristic variables, issuer-specific variables, and issue-specific variables.

#### *4.3.10.1. Advisor characteristic variables*

These variables relate to the acquiring firm's specific characteristics and are suggested by prior studies to influence the choice of financial advisors or M&A outcomes, especially acquirer returns (Golubov et al., 2015). For instance, prior work suggests that an acquirer's size is a determinant of acquirer returns (Moeller et al., 2004). Empirical literature proposes various proxies for firm size. including market value or book value of assets. In the spirit of related studies, we include *Acquirer_asset.* (which represents the book value of the acquirer's assets) in our analysis as a proxy for the acquirer's size. The literature suggests that a firm's potential growth can influence stock performance. Market-to-book, which is a proxy for growth, has also been included as a controlling variable in similar studies (Chemmanur & Krishnan, 2019). The variable *Market_to_book* represents the ratio of the market value of the bidder's assets to the book value of these assets. In addition, the literature suggests that a firm's sigma is a factor of the bidder's announcement return (Golubov et al., 2012, 2015). We, therefore, include bidder's *Sigma* as an independent, which is the standard deviation of the acquiring daily returns before the M&A. Moreover, Maloney et al. (1993) indicate that the bidder's financial leverage is a determinant of the choice of advisors and abnormal returns. We control for the bidder's leverage and include the variable *Leverage,* measured as the ratio of total debt to the total value of common equity value, as an independent variable. Another advisor-specific characteristic suggested by the literature is the bidder's run-up (Rosen, 2006). In the spirit of Golubov et al. (2012), we construct the independent variable *Run_up,* which is measured as the market-adjusted buy-and-hold return of the bidding firm's stock over the period beginning 170 and ending 6 days prior to the deal announcement. We also include bidder's *Beta* and *Tobins_Q* as independent variables in our analysis. The choice of Tobin's Q as an independent variable is inspired by the empirical literature, which shows the impact of a firm's Tobin's q on abnormal returns (Lang et al., 1989; Servaes, 1991) We consider *Beta* as a controlling variable, given the

impact that market conditions or factors such as beta have on abnormal returns as expressed by Strong (1992). The definition of each of our variables on advisor characteristics, as well as the sources for the data used to construct these variables, is presented in Appendix A.

#### *4.3.10.2. M&A deal characteristics*

Prior studies widely suggest that deal-specific characteristics influence not only the choice of financial advisors in corporate takeovers but also the wealth gains for acquiring firms. The deal value and its relative size have been shown to influence M&A outcomes, especially shareholders' wealth (Alexandridis et al., 2013; Gupta & Misra, 2007). Therefore, we construct and include the variables *Deal_value* and *Relative_size*. *Deal_value* is measured as the value of a transaction in £ million. *Relative_size* is measured as the value of the transaction in £ million divided by the bidder's market capitalization prior to the deal. Moreover, the literature indicates that the target legal status, as well as the industry relatedness between targets and the acquirers, are known to influence the choice of investment bank and bidder's excess returns (Renneboog & Vansteenkiste, 2019). We control for these factors and create the dummy variables *Public_deal, Private_deal, Subsidiary_deal and Concentric_deal* as independent variables. Furthermore, the literature shows that the type of consideration offered, and the bid type, is known to influence M&A performance (Loughran & Vijh, 1997). Therefore, we include the indicators *Cash_deal, Includingstock_deal, Tender_offer and Friendly_deal* as independent variables. Advisor and M&A deal variables are further defined in Appendix A.

### *4.3.10.3. IPO firm-specific variables*

To test our hypotheses relating to the relationship between the choice of lead managers and IPO performance, we include several controlling variables which are known to influence IPO performance or the choice of lead managers. We include the variable *Company_age*, which represents the issuing firm age and is measured as the number of years from the firm's founding date to the time of the offering. When the founding date is not available, then the incorporation date is used. Issuer's age is a known determinant of IPO underpricing and has been included in prior studies on IPO underpricing (Bajo et al., 2016; Brav & Gompers, 1997; Carter et al., 1998; Chuluun, 2015; Habib & Ljungqvist, 2001). Additionally, we control for the issuer's assets and construct the variable *Issuer_assets*, which is the issuing firm's total assets reported 30 days after the IPO issue date. The issuer's total assets have been included in related studies (Loughran & Ritter, 2004; Lowry & Schwert, 2002). Moreover, the literature points out that whether an IPO is backed by venture capitalists has an impact on IPO outcomes (Brav & Gompers, 1997; Loughran & Ritter, 2004). The variable *PE&VC_backed* is an indicator variable that takes the value of 1 if the IPO firm is backed by venture capitalists or private equity firms. The complete definition of these variables is presented in Appendix A.

### *4.3.10.4. Issue-specific variables*

Related studies widely suggest that the size of the offer which represents the amount of money raised by the issuing firm is a factor in the choice of lead managers and the determinants of IPO underpricing (Brav & Gompers, 1997; Carter et al., 1998; Gregory et al., 2010; Krigman et al., 2001). In this spirit, we construct the variable *Offer_size*, which is defined as the total value of the offer in £ million. Butler et al. (2014) suggest that studies on IPO underpricing should control for robust determinants of IPO underpricing, including share overhang. In

examining IPO settings, related studies commonly control for whether the issue is a primary or secondary offering. In the same vein, we include a dummy variable *Pure_primar*y, which takes the value of 1 if only primary shares are offered in the issue, and 0 otherwise. We include another proxy of share overhang, *Ln(1+Scd_shrs/Shrs_ofrd)*, which is the number of secondary shares divided by the total number of shares offered. The inclusion of this variable is inspired by Moran and Pandes (2019). The industry in which the IPO firm operates has only been of interest for researchers on IPO settings. Researchers commonly control for internet issuers or issuers operating in the technology industry (Aggarwal et al., 2002; Loughran & Ritter, 2004). Therefore, we include *Technology_sector* as a controlling variable which takes the value of 1 if the issuing firm's industry sector from the Bloomberg Industry Classification System (BICS) is characterised as "Technology", and 0 if otherwise. Prior studies present strong evidence that analysts' post-IPO research coverage from top-tier investment banks positively impacts underpricing (Beatty & Welch, 1996; Cliff & Denis, 2004; Liu & Ritter, 2011; Loughran & Ritter, 2004). Thus, we include the variable AllStar_coverage in our analysis as a control variable. The dummy variable takes the value of 1 if a research analyst from a top-tier (top-10) investment bank provides research for the IPO firm within the 12 months following the IPO.

The literature further suggests that the use of lock-up options (Aggarwal et al., 2002; Ahmad & Jelic, 2014; Brav & Gompers, 2003; Hoque, 2014), as well as the use of a prestigious legal advisor (Moran & Pandes, 2019), influences IPO settings. In addition, existing literature suggests that the intended uses of proceeds influence IPO outcomes (Leone et al., 2007; Silva & Bilinski, 2015; Wyatt et al., 2014). Therefore, we control for these factors and include the variables *Lockup_options*, *Numberof_Useofproceeds*, *General_corporate_purpose* and *Prestigious_legal_adviser* in our analysis. *Lockup_options* is an indicator variable taking the value of 1 if there is a lockup agreement associated with the offering, and 0 otherwise. *Numberof_Useofproceeds* represents the number of the disclosed primary uses of IPO

proceeds. *Prestigious_legal_adviser* is a dummy variable that takes the value of 1 if the IPO firm hired at least one top-10 legal advisor based on the ranking of legal advisors in equity offerings from Bloomberg covering the sample period 1995-2015, and 0 otherwise. We also include the variable *NomAd_Broker,* which is a dummy variable which equals 1 if the lead manager is also the nominated advisor to the issuing company and 0 otherwise. The inclusion of this variable is motivated by the assumption that on the AIM, issuing firms will consider the ability of a lead underwriter to also act as a nominated adviser. Having a single investment that can perform these functions could reduce the costs (e.g., underwriters' fees, information leakage) associated with the use of another investment bank.

The literature widely acknowledges that market conditions around the time of an IPO can also have a significant impact on the performance of the issuing firm (Derrien, 2005; Ljungqvist, Nanda, et al., 2006). We include *Prior_30day_sector_rtn, Prior_30day_SD_of_sector_rtn, FTSEALL30daysreturns,* and *FTSEALL30daysreturnsSD,* which all account for market conditions prior to the IPO. In the spirit of Cliff and Denis (2004), we also account for the variable *Prior_month_average_underpricing*. This variable represents the average underpricing of all IPOs in the market in the 30 days prior to the IPO date. In Appendix A, we list all the variables and provide a detailed description and the data source for each variable.

## *4.4. Empirical model*

### *4.4.1. Determinants of the choice of financial advisors in M&A*

Empirical and anecdotal evidence suggests that various factors can influence the selection of an agent in any particular transaction. Francis et al. (2014a) suggest that the existence of a prior banking relationship between a firm and a bank can influence its selection in future deals. The industry expertise of an advisor and the experience of an investment bank in advising the target

in the past are important factors in the choice of financial advisors (Chang et al., 2016a, 2016b). In addition, the complexity of a deal regarding significant information asymmetry is a deciding factor in hiring a financial advisor (Servaes & Zenner, 1996). The reputation of an advisor is also a factor acquirers consider when looking to hire a financial advisor in M&A (Golubov et al., 2012). Golubov et al. (2012) also suggest that bidders of great size, high Tobin's Q and low preannouncement runup are likely to hire advisors with high reputation. Moreover, the specialisation and the industry expertise can also influence the choice of a financial advisor (Loyeung, 2019; Song et al., 2013).

We test hypotheses H1 and H2 by running several logit regressions to examine the determinants of the choice of top-tier and boutique advisors. In the first test set of regressions, the dependent variable is *Top_tier_adv,* which we regress against various bidder-and-deal-specific characteristics. The independent variables include *Acquirer_asset* (which proxies for acquirer size), *Deal_value, Concentric_deal, Run_up, Leverage, Tobins_Q, Market_to_book, Sigma, Tobins_Q, Hostile_deal* and *Includingstock_deal*. We include the bidder's *Beta* and *Sigma.* The regressions include fixed effects (FE) for year and industry sectors, which are identified by the BICS. In the second set of regressions, which test hypothesis H2, we regress the indicator variable *Boutique_adv* against the same set of independent variables used in the first regressions, and control for year and industry fixed effects.

### *4.4.2. Instrumental Variable Analysis: Abnormal returns*

The literature indicates that bidder returns in M&A can be influenced by various factors, including the reputation of financial advisors (Goergen & Renneboog, 2004; Martynova & Renneboog, 2011; Renneboog & Vansteenkiste, 2019). The industry and M&A expertise of a financial advisor can also influence M&A outcomes (Graham et al., 2017; Loyeung, 2019;

Song et al., 2013). We theorised that through their specialisation and reputation, top-tier and boutique advisors have intrinsic skills which enable them to influence shareholders' gains and deal time to resolution. To test hypotheses H3 and H4, we could use an OLS regression analysis where the dependent variable, *CAR (-2, + 2)* is regressed against the variables of interests *Top_tier_adv* and *Boutique_adv*, controlling for various bidder and deal characteristics suggested in section 4.3.10.

A simple OLS regression analysis would be appropriate if we assume that the matching between a financial advisor and an acquiring firm is made randomly. However, empirical and anecdotal suggest that the matching between an investment bank and a firm in an M&A deal may not be random. Prestigious investment banks may purposely decide to only accept certain deals based on the value of advisory fees they could generate, given that their services come at a premium. They may also elect to only secure deals with clients of certain prestige and visibility, which could make them attractive in the eyes of corporate clients with similar stature. The existence of a prior relationship with the potential clients, as shown by Drucker and Puri (2005), may also affect the firm's decision to select a financial advisor in corporate takeovers. Given that top-tier advisors provide a variety of services to a large number of prestigious clients, it is likely that such clients look for the services of such advisors based on prior relationships. Conversely, a bidding firm may want to select a top-tier advisor for their high-quality services but may not be able to afford the premium fees they command and therefore hire a boutique advisor as last resort. An acquirer could also seek the services of a boutique advisor for its skills in identifying profitable deals in the industries covered by the advisor and its independence. However, the skills and ability of specialist advisors enable them to choose deals with value creation and avoid value-destroying deals (Graham et al., 2017). Moreover, anecdotal evidence indicates that boutique advisors typically market themselves as a provider

of corporate advisory services who cater to small-medium firms and therefore may reject deals from mature, established quality firms.

Considering these factors, testing our hypotheses on the relationships between the choice of financial advisors and acquirer's abnormal returns with a simple OLS regression without accounting for unobservable factors may yield unreliable estimates. An adequate solution to deal with endogeneity concerns is to use instrumental variables (Baum, 2006). Implementing a two-stage least square (2SLS) regression approach may be appropriate as the approach has been widely employed in related research (e.g., Chemmanur & Krishnan, 2019; Graham et al., 2017). We consider a model with the following form:

$$y_j = \alpha_0 + \gamma investment\ bank_j + X_j\beta + \varepsilon_j \quad (3)$$

$$investment\ bank_j = \beta_0 + Z_j\delta + X_j\beta + \mu_j \quad (4)$$

Equation (3) is the structural equation, where $y_j$ represents an acquisition outcome proxied by acquirer abnormal return; $investment\ bank_j$, is the variable of interest, which indicates whether or not an acquirer employs a reputable advisor or a specialist boutique advisor; $X_j$ denotes a vector of exogenous variables that capture several advisor-, deal- and acquirer-specific characteristics; and $\varepsilon_j$ is the error term. Equation (4) represents the reduced form equation for the endogenous regressor, $investment\ bank_j$. $Z_j$ denotes a set of exogenous instruments, which we present below; $\beta_0$ is the intercept; and $\mu_j$ is the disturbance term.

The 2SLS procedure alleviates the endogeneity concerns, including the matching between the acquirer and financial advisors. The first stage of the 2SLS approach controls the endogenous matching between financial advisors and acquiring firms. Therefore, the dependent variable in the first set of regressions for the first stage is *Top_tier_adv*, while in the second set of the first-stage regressions the dependent is *Boutique_adv*. For the second stage of the 2SLS approach,

the dependent variable is *CAR (-2, +2)*, which is regressed against the variables of interests *Top_tier_adv* and *Boutique_adv* respectively. In each set of regressions, we control for various suggested determinants of the choice of financial advisors and shareholder returns, which we explained in Section 4.3.10. To implement the 2SLS approach, the literature suggests the identification of instrumental variable(s) that are correlated to the endogenous regressor $investment\ bank_j$ but not related to the dependent variable $y_j$. The appropriate instrument(s) should influence the choice of financial advisor but not relate to M&A settings. Identifying such variables is quite challenging considering that we have two potential endogenous variables, *Top_tier_adv* and *Boutique_adv*. Existing theories provide avenues to construct valid instruments, which may affect the choice of a financial advisor but that are not related to the M&A outcome. The choice of the instrument is inspired by theory suggesting that the existence of a prior relationship between economic agents influences the selection of the agent in future deals. A firm with an existing or prior relationship with a bank is likely to seek the services of the bank in the future (Francis et al., 2014a). Firms that have used the services of high-quality investment banks in the past will be more inclined to employ a prestigious bank for future deals (Fang, 2005; Golubov et al., 2012).

In addition, existing theories suggest that social interaction influences a firm's behaviour vis-a-vis their peers. With regards to selecting a financial advisor, firms that operate within the same industry value the perception of their peers on the expertise of the financial advisors through information sharing (Engelberg et al., 2011, 2018). The value given to such expertise is likely to be a factor in the choice of an advisor for acquirers that are part of the same peer groups (Graham et al., 2017), but also for firms that share the same networks or markets with access to similar information. Firms looking for financial advisors will likely consider their perceived prestige or the industry expertise. Specifically, firms seeking quality and range in

services that are associated with top-tier banks are likely to choose advisors with capabilities in several industries, including those in which the target and the acquirer operate.

In the spirit of Fang (2005), we construct relationship-based variables intended to capture the influence of prior relationship with a prestigious or boutique bank over the acquirer's choice of a financial advisor for our measures of reputation and specialisation, *Top_tier_adv and Boutique_adv*. The relationship-based based instruments we computed are *Scope* and *Experienced_niche_adv*. The first variable measures the extent to which the acquiring firm employed the services of a prestigious bank for different capital markets activities (i.e., equity offerings, M&As, bonds, loans) in the five years prior to the deal. We download data on equity issues, M&As, bond issues and loan issues from Bloomberg Terminal database. The variable takes the value of one, two, three and four respectively if within the 5 years prior to the deal announcement, the acquiring firm used the services of a top-tier bank for at least one, two, three and four types of activities. For example, if an acquiring firm used the services of a top-tier bank in M&A and equity offerings, the variable *Scope* would take the value of 2. The instrument takes the value of zero if within the 5 years prior to the deal announcement, the acquirer did not use a top-tier investment bank for any of these activities.

The second variable, *Experienced_niche_adv*, measures the extent to which an acquiring firm used the services of a boutique investment bank in the 3 years leading to the deal announcement. Acquiring firms that choose a niche bank in the past should be inclined to select a financial advisor with such expertise for future corporate finance activities. We compute the variable *Experienced_niche_adv* by collecting data on M&A and equity offerings from Bloomberg Terminal database. The variable takes the value of one if the acquiring firm hired a boutique investment bank as a financial advisor in at least two M&A transactions within the 3 years before the deal announcement. It takes the value of two if in the 3 years prior to the deal announcement, the bidder used a boutique bank in at least two M&A deals and one equity

offering. The variable takes the value of zero if, during the 3 years preceding the deal announcement, the acquiring firm did not select a boutique bank as a financial advisor in at least two M&A deals and at least for one equity offering. We set the minimum number of M&A deals at two for the instrumental variable because selecting a boutique bank can be a matter of convenience for a bidder (e.g., lower fees, or perhaps for the simple purpose of completing the deal). A boutique advisor's repeated involvement with the acquiring firm suggests that the firm recognised its expertise in conducting M&A deals and will select the financial advisor based on its specialisation.

Similar to Graham et al. (2017), we construct industry expertise-based variables designed to capture the influence of perceived industry capabilities over the choice of a financial advisor. Our industry expertise-based measures are *Industry_reach* and *Acq_Industry_specialist*. The first instrument, *Industry_reach,* measures the acquirer's advisor's ability to provide capable services (i.e., capability) in several industries, including those in which the target and the acquirer operate. The second instrument, *Acq_Industry_specialist*, captures an advisor's industry specialisation in the acquirer industry. We measure an advisor's capability using the relative comparative index (RCA)[3] developed by Balassa (1965). The index has been used in prior studies to proxy for a firm's industry specialisation (Cressy et al., 2007; Graham et al., 2017). A simple interpretation of this index suggests that if a bank's RCA value in an industry is greater than one, then the advisor is considered to be an industry specialist. In this study, the index measures a bank's market share in a specific industry relative to its size in the overall M&A market in the 3 years before the deal announcement. Therefore, *Industry_reach* takes the value of one if the advisor of the acquirer has an RCA greater than one in the target, and the acquirer industries, 0 otherwise. Given the flaws associated with RCA as a proxy of industry

[3] A more detailed presentation of the computation and interpretation of the RCA is presented by Graham et al. (2017), who measure advisor industry specialisation using an alternative RCA (ARCA).

specialisation highlighted by Graham et al. (2017), we believe the index is better suited as a proxy for industry capability rather than industry specialisation. Industry specialisation is better captured by the alternative relative comparative index (ARCA)[4] developed by Hoen et al. (2006). The second industry-based variable, *Acq_Industry_specialist*, captures the advisor focus on M&A activities as well as its specialisation in the acquirer industry. *Acq_Industry_specialist* is a dummy variable that takes the value of 1 if the core businesses of the acquirer's advisor include corporate advisory services, and the advisor is an industry specialist in the acquirer industry; 0 otherwise. We assess the advisor core businesses using FAME, the company accounts and the company website. We measure specialisation using the ARCA index, which considers a bank as an industry specialist if the ARCA of the bank in a specific industry is greater than one. The rationale behind the choice of this instrument is that an acquirer looking for expert services from boutique firms is likely going to consider the advisor focus on advisory services and its industry expertise in the industries in which the company operates.

Although theoretical and empirical evidence suggests that the choice of financial advisors may be determined endogenously, it is critical to test for it. Econometric literature suggests several tests for endogeneity (Baum, 2006). This includes Durbin (1954), Hausman (1978), and Wu (1973). We test for endogeneity using the Wu-Hausman tests, for which statistics are presented in the results of the empirical analysis. The choice of the instruments for the 2SLS approach is inspired by social and economic theories. Still, we need to ensure the validity and exogeneity of the instruments. This could be accomplished using versions of the Sargan or Basmann tests (Baum, 2006). Prior studies have used the Hansen-J test, which is a version of the Sargan test, to test for the exogeneity of instruments (Fletcher & Lehrer, 2011; Graham et al., 2017;

[4] A more detailed presentation of the computation and interpretation of the ARCA is presented by Hoen et al. (2006).

Hochberg & Lindsey, 2010). Sargan tests the joint null hypothesis that (1) the instruments are valid (i.e., uncorrelated with the error term), and (2) the model is correctly specified (i.e., the instruments are correctly excluded from the estimated equation). We perform tests for overidentifying restrictions and report Sargan and Basmann's statistics in the empirical analysis. In addition, the instrumental variables used are further explained in Appendix A.

### *4.4.3. Determinants of deal's time to resolution*

We developed hypotheses H5 and H6, which respectively posit the impact of top-tier and boutique financial advisors on a deal's time to resolution. The *skilled advisor, diligent advisor* and *diligent specialist* hypotheses underpinned H5 and H6. We could test these hypotheses through a simple OLS regression analysis in line with prior studies (Golubov et al., 2012; Walter et al., 2008). However, *Time_to_resolution* is a count data variable, and the use of OLS analysis with count data may not be appropriate. Negative binomial regression analysis may be more appropriate as it allows for over-dispersion (i.e., conditional variance being significantly higher than the conditional mean). In the spirit of Colaco et al. (2018), we analyse the determinants of deal time to resolution using negative binomial regression analysis. The dependent variable, *Time_to_resolution,* is regressed against *Top_tier_adv* and *Boutique_adv* respectively. In these regressions, we control for various bidder and deal-specific characteristics suggested by prior research (Golubov et al., 2012; Hunter & Jagtiani, 2003; Walter et al., 2008). Factors such as the deal value, the industry relatedness between the target and the acquirer, and the form of consideration have been suggested to influence the deal process and ultimately the time to completion. Therefore, the set of control variables includes *Deal_value, Acquirer_asset, Sigma, Concentric Includingstock_deal* and *Tender_offer*.

### *4.4.4. Determinants of the choice of lead managers in IPOs*

Various studies have explored factors that may influence the choice of an investment bank in future deals in general and in IPO deals specifically. For instance, Fang (2005) demonstrates that the existence of a prior banking relationship between a firm and a bank can influence its selection in future underwriting deals. In the same vein, the literature suggests that prior relationships significantly increase the likelihood of a bank selection for future transactions (Francis et al., 2014a). The reputation of an underwriter is also an important factor that issuing firms consider when looking for an underwriter (Fernando et al., 2015; Liu & Ritter, 2011). We developed hypotheses H7 and H8 to determine which of the issuer, deal-specific and market characteristics affect the choice of top-tier and boutique financial advisors. In the same vein as Song et al. (2013), we run several multinomial (multi-logit) regressions to examine the determinants of the choice of lead managers in IPO. Specifically, the choice of top-tier and lead managers is examined.

### *4.4.5. Instrumental Variable Analysis: IPO outcomes*

Hypotheses H9 and H10, presented earlier, theorise the impact of the lead manager's reputation and specialisation on IPO outcomes. We could test these hypotheses using a cross-sectional data OLS analysis. However, a simple OLS regression analysis could produce biased results, considering the endogeneity concerns relating to the variables of interests *Top_tier_lead* and *Boutique_lead*. As mentioned previously, anecdotal and empirical evidence suggests that the matching between an underwriter and an issuer is not exogenous. Testing our hypotheses with a 2SLS regression analysis should alleviate the endogeneity concerns. We implement a 2SLS approach similar to the method described in Section 4.4.2, with the first stage of the 2SLS approach controlling the endogenous matching between lead underwriters and issuing firms;

the second-stage regressions model the IPO outcome. The dependent variable in the first set of regressions for the first stage of the 2SLS approach is *Top_tier_lead,* while in the second set of the first stage regressions, it is *Boutique_lead*. For the second stage of the 2SLS approach, the dependent variable is regressed against the variables of interests *Top_tier_adv* and *Boutique_adv* respectively. In each set of regressions, we control for various suggested determinants of the choice of lead underwriters and IPO settings, which we explained in Section 4.3.10. The choice of the instruments is motivated by theories on banking relationships (Fang, 2005; Francis et al., 2014a) and peers' value on the choice of an investment bank (Engelberg et al., 2011, 2018). Therefore, we develop the instruments *Scope_lead* and *UW_foreignParent*. Scope_lead is a dummy variable similar to the instrument *Scope* defined in Section 4.4.2. The variable *Scope_lead* measures the extent to which the issuing firm used the service of a prestigious underwriter, for banking services, M&A, equity, and debt offerings in the five-year period prior to the IPO. *Scope_lead* takes the value of 1, 2, 3 and 4 if the issuer used the services of a prestigious for at least one, two, three or four of these transactions. It takes the value of 0 if the issuers did not use a top-tier bank for any of these activities. The instrument *UW_foreignParent* is a variable that proxies for the underwriter extended network through the parent company. An underwriter with a parent company which is a financial institution incorporated in a different country would have access to a larger pool of investors through the parent company networks. Through its network, an underwriter can extract and disseminate information from potential investors (Bajo et al., 2016). An issuing firm looking to hire a prestigious bank will likely consider the underwriter access (direct and extended) to investors when making the decision. We consider a foreign parent company to the underwriter to provide indirect access to potential investors. Although existing literature suggests that an underwriter's peer networks affect IPO settings, we do not believe that the underwriter's connection to a foreign parent will provide the same benefits to the issuing company as the

underwriter's own network. Therefore, we have no reason to believe that having a foreign parent company will directly influence IPO outcomes. We construct *UW_foreignParent*, which is a dummy variable taking the value of 1 if the immediate parent company of the underwriter is a financial institution incorporated in a country different than the country in which the underwriter is incorporated, and 0 otherwise. We hand collect data on the company's immediate parent from Eikon REFINITIV, OSIRIS and Orbis BankFocus.

With regards to the potentially endogenous regressor *Boutique_lead*, we develop the instruments *Expert_boutique_leadmanager* and *Junior_UW*. *Expert_boutique_leadmanager* is a dummy variable computed following the same approach as *Experienced_Boutique_adv*. The variable *Expert_boutique_leadmanager* captures the extent to which an issuer used the service of a boutique investment bank in the past. To construct this variable, we collect data on M&As issues from Bloomberg Terminal database. The variable takes the value of 1 if, within 3 years prior to the IPO, the issuing firm used the services of a boutique investment bank for at least two M&A transactions, and 0 otherwise. We only focus on M&A transactions considering that boutique firms are typically specialised in corporate advisory only and do not retail banking services. Boutique investment banks are niche institutions that do not provide such a wide range of services as their top-tier counterparts. They typically provide advisory services in M&As and IPOs with expertise in specific industries. An issuer who elects to hire the services of a boutique bank for an M&A will likely make their decision based either on the bank's expertise in the industry it operates and its specialisation in corporate actions or only for a matter of convenience (i.e., low fees, regulatory requirements). A firm will choose to select a boutique bank for more than one deal over a short period of time mainly for its expertise and quality or the tailored services boutique investment banks provide to their customers. Therefore, if an IPO firm has used the services of a boutique bank for more than one M&A transaction in the past, it is likely that the issuing firm will consider selecting the boutique firm

for future IPOs and M&As given its specialisation in these activities. The variable *Junior_UW* is a dummy variable that captures the relative maturity and establishment of the lead managers. Anecdotal evidence shows that boutique firms are relatively less mature and established compared to prestigious underwriters. Firms like Barclays, HSBC, Goldman Sachs or even Deutsche Bank's origins could be traced back to the 19$^{th}$ century. Boutique firms for the most part are relatively young and less established, with major players such as Cenkos, Zeus Capital or Durlacher being founded between the late 1980s and early 2000s. Their relative youth contributes to their independence and their focus on specific services. An IPO firm looking for a specialised advisor may consider the relative maturity of the investment banks when making this decision and seek an underwriter who is relatively young and less established. We believe the relative maturity of the underwriter to affect the choice of a boutique bank; we have no reason to consider that this factor will influence IPO settings. The variable *Junior_UW* takes the value of 1 if the lead manager is considered to be a "Junior underwriter", and 0 otherwise. To distinguish junior underwriters, we hand collect data on the lead manager to obtain the date the firm was founded or incorporated from Company House, Eikon REFINITIV, Orbis Bank Focus, and Osiris. We then compute the age of the underwriter at the date of the IPO. We use the median age of the underwriter to distinguish junior and mature underwriters. The underwriter is categorised as a "Junior underwriter" if its age is lower than the median age of the underwriters in our sample. As anecdotal and empirical evidence motivates the choice of the instruments, it is critical to ensure its validity and exogeneity, which we assess using the F-statistics and the Sargan test. The instruments used are further explained in Appendix A.

#### *4.4.5.1.1. 2SLS: Underpricing*

Using a 2SLS analysis, we test hypotheses H9 and H10. In the first sets of regressions, the 2SLS procedure controls for the endogenous nature of the matching between lead managers and issuers, with the dependent variables being *Top_tier_lead* and *Boutique_lead* respectively. The controlling variables in these regressions are derived from our analysis of the determinants of the choice of lead managers explained in section 4.4.3. In the second set of regressions, the dependent variable is underpricing as proxied by *Offer_to_1st_close*, and the variables of interests are *Top_tier_lead* and *Boutique_lead* which are instrumented. The controlling variables are suggested by the literature as determinants of IPO underpricing. These variables include *Company_age*, *Offer_size*, *Lockup_options*, *AllStar_coverage* and *Pure_primary_dummy*.

#### *4.4.5.1.2. 2SLS: Investor attention*

We test hypotheses H11a and H11a with the 2SLS procedure, where the dependent variables of the 2nd stage regressions are respectively *NumAn* and *Share_turnover_ratio*. We regress these variables against the variables of interest *Top_tier_lead* and *Boutique_lead*, which are instrumented, controlling for issuer-and-deal specific and market characteristics. The control variables include *Technology_sector_dummy*, *Multiple_leadmanagers*, *Reciprocal_offer_price* and *Total_asset*. We also control for year and industry fixed effects.

#### *4.4.5.2. Impact of the choice of lead managers on waiting periods*

We test hypothesis H12a and H12b, which looks at the relationship between the choice of lead manager and the length of time it takes an issuing firm to go public. Existing literature suggests a negative binomial regression in the spirit of Colaco et al. (2018). The negative binomial regression allows for over-dispersion (i.e., conditional variance being significantly higher than the conditional mean) and its appropriate model when dealing with count data such as the number of days spent in registration. Our dependant variable in the regressions is *Waiting_period*, which we regress against *Top_tier_lead* and *Boutique_lead*. In all regressions, we control for several variables that are suggested by the existing literature. We use robust standard errors to deal with heteroscedasticity concerns.

## *4.5. Summary*

In this chapter, we elaborated on the key aspects of the methodology adopted for this study to test the hypothesis previously cited. Among other things, we explained the steps used concerning the sample selection. We described the variables to be used in the analysis, including their computation and the source of data used. The dependent variables, principally composed of M&A and IPO outcomes, include: (i) acquirer's abnormal returns (ii) deal's time to resolution (iii) IPO underpricing (iv) number of financial analysts (v) share turnover ratio and (vi) waiting period. The variables of interest are *Top_tier_adv*, *Boutique_adv*, *Top_tier_lead* and *Boutique_lead*. The control variables are grouped under advisor characteristics, M&A deal characteristics, issuer-specific, and issue-specific characteristics. To test the hypotheses previously developed, we indicate that we will implement a combination

of logit, 2SLS and negative binomial regressions. We further indicate the tests we conduct to assess the exogeneity, and strength of the instruments used in the 2SLS approach.

# Chapter 5: Determinants of advisor's selection: Results and discussion

## *5.1. Introduction*

In this chapter, we present and discuss the results of the empirical analysis we conducted in relation to the hypothesis developed in chapters 2 and 3 on the implications of investment bank reputation and specialisation on M&A and IPO outcomes. We also report a summary of the descriptive statistics for the set of variables used for our analysis.

## *5.2. Summary Statistics*

In this section, we present a summary of the descriptive statistics for the variables used throughout the study from acquirer-and-deal specific characteristics. We report the statistics for the full sample (1) of 3,654 acquisitions as well the statistics for the samples of top-tier (2), boutique (3), non-top-tier (4), advisor-used (5) and in-house (6) transactions. The descriptive statistics presented are the number of observations (N), the mean, the median (p50), the standard deviation (sd), and the skewness. Table 5 reports the summary statistics for the full sample, where Panel A depicts the statistics for variables based on acquirer specific characteristics, and Panel B lays out the statistics for variables based and deal-specific characteristics. The descriptive statistics for the samples of top-tier (2), boutique (3) and non-top-tier (4) are presented in Panel C and Panel D of Table 6. Table 7 lays out the descriptive statistics for the sample of transactions advised by a financial advisor (advisor-used) and for the subsample of deals without a financial advisor (In-house). Panel E and F, respectively,

show acquirer and deal-specific descriptive statistics for the two groups. All variables used in the study are explained in Appendix A.

**Table 5**

**Descriptive statistics for the sample of UK M&A**

The table presents the statistics for a sample of U.K. public, private, and subsidiary acquisitions announced over the period 01 January 2000 to 31 December 2015. The sample is derived from the Bloomberg Mergers and Acquisitions database. Panel A and Panel B display the count (N), the mean, the median (p50), the standard deviation (sd) and the skewness for acquirer and deal-specific characteristics for the full sample. Stock data are retrieved from Thomson Reuters DataStream Professional database, while accounting data are obtained from DataStream and Worldscope databases. All variables are explained in Appendix A.

**Panel A: Acquirer Characteristics**

| | Full sample (1) | | | | |
|---|---|---|---|---|---|
| | N | mean | p50 | sd | skewness |
| Acquirer_asset (adjusted for inflation) | 3654 | 7360.684 | 109.1318 | 73696.95 | 16 |
| Market-to-Book | 3644 | 67.402 | 1.860 | 3872.921 | 60.340 |
| Sigma | 3452 | 2.383 | 1.841 | 3.259 | 28.562 |
| Run_up | 3413 | 0.102 | 0.034 | 0.519 | 10.691 |
| Leverage | 3532 | 30.551 | 25.120 | 121.799 | 27.278 |
| Free_cash_flow | 3517 | 148.853 | 5.350 | 1114.949 | 13.616 |
| Beta | 3587 | 0.823 | 0.72 | 1.339 | -1.945 |
| Tobins_Q | 3448 | 2.978 | 1.050 | 43.179 | 37.971 |
| **Panel B: Deal Characteristics** | | | | | |
| Deal_value (adjusted for inflation) | 3654 | 91.836 | 6.16 | 996.302 | 31.4 |
| Relative_size | 3522 | 0.655 | 0.07 | 13.153 | 37.058 |
| Public_deal | 3654 | 0.100 | 0 | 0.300 | 2.664 |
| Private_deal | 3654 | 0.892 | 1 | 0.311 | -2.520 |
| Subsidiary_deal | 3654 | 0.008 | 0 | 0.090 | 10.900 |
| Cash_deal | 3654 | 0.524 | 1 | 0.499 | -0.096 |
| Includstock_deal | 3654 | 0.430 | 0 | 0.495 | 0.284 |
| Concentric_deal | 3654 | 0.652 | 1 | 0.476 | -0.639 |
| Tenderoffer_deal | 3654 | 0.051 | 0 | 0.219 | 4.099 |
| Friendly_deal | 3654 | 0.850 | 1 | 0.357 | -1.961 |
| Time_to_resolution | 3654 | 29.086 | 0 | 84.925 | 14.313 |
| CAR (-2, +2) | 3619 | -0.102 | -0.103 | 0.404 | -19.793 |

The descriptive statistics for the full sample are presented in Table 5. Panel A indicates that the mean (median) *Acquirer_asset* of acquiring firms in our sample of acquisitions is £7,360.68 (£109.626) million. The mean (median) *Market-to-book* of bidding firms is 67.4 (1.86). Rau & Vermaelen (1998) present evidence indicating that acquirer market-to-book is negatively related to abnormal returns. Besides, Panel A, Table 5 indicates that the mean (median) of bidder's *Sigma* for the overall sample is 2.38 (1.84). Prior research suggests a negative relationship between acquirer sigma and announcement returns in stock acquisitions (Moeller et al., 2007). Moreover, it appears from Table 5 that the *Run_up* for bidding firms on average is 0.1 while the median is 0.03. Martynova and Renneboog (2008) argue that there is no significant relationship between price run-up and bidder returns. However, Rosen (2006) indicates that a bidder with a high stock run-up witnesses lower CAAR. Bidding firms in our sample have an average *Leverage* of 30.55 and an average acquirer's *Tobins_Q* of 2.98. Servaes (1991) provides evidence that indicates that bidders with higher Tobin's q witness greater announcement returns. Table 5 also shows that the average bidder's stock *Beta* is 0.822, while the median is 0.72. These values suggest a strong relationship between the market return and the stock return.

Panel B of Table 5 indicates that the average deal value for our sample of acquisitions is £91.84 million. Additionally, it appears most of the acquisitions in our sample are acquisitions of private targets, considering that the mean *Public_deal* is 0.1 and the mean *Private_deal* has a mean of 0.1 and 0.89, respectively. Regarding the consideration offered, 52% of the acquisitions consist of only cash, while 43% of the acquisitions have a consideration that includes stocks. Moreover, most acquisitions are made between bidders and targets operating in the same industry, as 60% of our sample are concentric acquisitions. Panel B's statistics also indicate that about 5% of the acquisition are considered tender offers while 85% of the acquisitions are friendly deals. This reveals that only about 15% of our sample includes hostile

deals. Besides, the table also indicates that the average deal's Time_to_resolution is 90 days. Furthermore, we can observe that the average *CAR (-2, +2)* for bidders is -0.102 while the median is -0.103. These values are generally in line with prior studies' findings, suggesting that bidder announcement returns are negative or not significantly different from zero.

Table 6 shows the statistics for the group of deals advised by top-tier, boutique, and non-top-tier advisors, depicting some substantial differences across these groups. Panel C indicates that bidders using tier-one advisors appears to be greater in size than firms that employ boutique and non-top-tier advisors' services. The mean (median) bidder's *Acquirer_asset* is 23,853 million (£1280 million) for acquirers advised by top-tier banks, while the boutique group has a mean(median) of £ 2923 million (£39 million) and the non-top-tier group has a mean (median) of £6794 million (£68.47 million). These figures show that acquirers with top-tier advisors are on average 8 times larger than acquiring firms using boutique advisors. Besides, the mean (median) bidder's *Market-to-book ratio* for boutique deals is 321.833 (1.75) and 3.81(1.5) for top-tier acquisitions. This suggests that stocks of acquiring firms with boutique advisors generally trade cheaply compared to the value of their assets comparatively to their counterparts' stocks with top-tier advisors. It appears that firms advised by top-tier advisors have relatively smaller average *Sigma* in comparison to their counterparts advised by other advisors. This indicates that the stocks of firms advised by top-tier banks are less volatile than the stock of firms advised by other advisors. Furthermore, Panel C indicates that firms using the services of boutique advisors have smaller leverage than firms using a top-tier advisor, considering that the mean (median) *Leverage* for the top-tier subsample is 37.68(36.7) and 27.82(21.58) for the boutique subsample.

**Table 6**
**Descriptive statistics for the samples of top-tier, boutique, and non-top-tier advisors**

The table presents the descriptive statistics for a sample of UK public, private, and subsidiary acquisitions announced over the period 01 January 2000 to 31 December 2015. The sample is derived from the Bloomberg Mergers and Acquisitions database. Panel C and D display the count (N), the mean, median (p50), the standard deviation (sd), and the skewness for acquirer and deal-specific characteristics for the subsamples of top-tier (2) boutique (3) and non-top-tier (4) advisors. Stock data are retrieved from Thomson Reuters DataStream Professional database, while accounting data are obtained from both DataStream and Worldscope databases. All variables are defined in Appendix A.

Panel A: Acquirer Characteristics

| | Top-tier (2) | | | | | Boutique (3) | | | | | Non-top-tier (4) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | mean | p50 | Sd | skewness | N | mean | p50 | sd | skewness | N | mean | p50 | sd | skewness |
| Acquirer_asset (adjusted) | 252 | 23852.55 | 1279.83 | 77549.82 | 4.46 | 738 | 2923.28 | 38.81 | 26554.9 | 12.19 | 965 | 6793.96 | 68.47 | 78043.2 | 15.34 |
| Market-to-Book | 248 | 3.807 | 1.505 | 16.113 | 13.405 | 734 | 321.833 | 1.750 | 8629.35 | 27.037 | 964 | 3.157 | 1.625 | 15.265 | 5.105 |
| Sigma | 247 | 2.061 | 1.740 | 1.217 | 2.324 | 690 | 2.687 | 2.078 | 2.454 | 5.936 | 887 | 2.502 | 1.86 | 5..213 | 25.198 |
| Run_up | 245 | 0.043 | 0.025 | 0.237 | 4.590 | 679 | 0.120 | 0.041 | 0.555 | 7.927 | 876 | 0.122 | 0.049 | 0.546 | 10.182 |
| Leverage | 247 | 37.682 | 36.700 | 29.037 | 0.106 | 699 | 27.823 | 21.580 | 55.243 | 3.874 | 931 | 25.58 | 22.48 | 29.192 | -2.333 |
| Free_cash_flow | 246 | 394.496 | 49.250 | 1451.290 | 5.112 | 690 | 25.053 | 1.022 | 372.210 | -1.532 | 917 | 148.07 | 1.974 | 1406.203 | 13.238 |
| Beta | 252 | 1.04 | 0.925 | 0.838 | 3.874 | 721 | 0.775 | 0.66 | 1.726 | -1.435 | 943 | 0.744 | 0.66 | 1.359 | -0.048 |
| Tobins_Q | 242 | 1.471 | 0.962 | 1.846 | 3.872 | 676 | 6.083 | 1.024 | 83.886 | 21.251 | 895 | 3.669 | 1.063 | 42..996 | 28.535 |
| Panel B: Deal Characteristics | | | | | | | | | | | | | | | |
| Deal_value (adjusted) | 252 | 1002.98 | 148.718 | 3639.887 | 8.6 | 738 | 15.988 | 5.16 | 38.305 | 7.176 | 965 | 278.077 | 9.216 | 1923.31 | 16.5 |
| Relative_size | 246 | 1.457 | 0.169 | 16.033 | 15.313 | 702 | 1.088 | 0.163 | 18.503 | 26.337 | 939 | 0.418 | 0.114 | 1.909 | 13.613 |
| Public_deal | 252 | 0.532 | 1 | 0.500 | -0.127 | 738 | 0.165 | 0 | 0.372 | 1.802 | 965 | 0.132 | 0 | 0.338 | 2.179 |
| Private_deal | 252 | 0.452 | 0 | 0.499 | 0.191 | 738 | 0.831 | 1 | 0.375 | -1.763 | 965 | 0.86 | 1 | 0.347 | -2.076 |
| Subsidiary_deal | 252 | 0.016 | 0 | 0.125 | 7.747 | 738 | 0.004 | 0 | 0.064 | 15.589 | 965 | 0.008 | 0 | 0.091 | 10.846 |
| Cash_deal | 252 | 0.540 | 1 | 0.499 | -0.159 | 738 | 0.430 | 0 | 0.495 | 0.285 | 965 | 0.468 | 0 | 0.499 | 0.127 |
| Includstock_deal | 252 | 0.429 | 0 | 0.496 | 0.289 | 738 | 0.543 | 1 | 0.498 | -0.174 | 965 | 0.495 | 0 | 0.5 | 0.019 |
| Concentric_deal | 252 | 0.722 | 1 | 0.449 | -0.992 | 738 | 0.659 | 1 | 0.475 | -0.669 | 965 | 0.649 | 1 | 0.478 | -0.623 |
| Tenderoffer_deal | 252 | 0.238 | 0 | 0.427 | 1.230 | 738 | 0.069 | 0 | 0.254 | 3.398 | 965 | 0.081 | 0 | 0.273 | 3.076 |
| Friendly_deal | 252 | 0.742 | 1 | 0.438 | -1.107 | 738 | 0.901 | 1 | 0.217 | -2.687 | 965 | 0.852 | 1 | 0.355 | -1.98 |
| Time_to_resolution | 252 | 70.25 | 65.5 | 67.362 | 2.016 | 738 | 34.484 | 7 | 79.07 | 5.48 | 965 | 43.98 | 22 | 77.73 | 4.515 |
| CAR (-2, +2) | 252 | -0.055 | -0.047 | 0.141 | 0.290 | 726 | -0.116 | -0.111 | 0.370 | -13.446 | 955 | -0.121 | -0.115 | 0.663 | -15.528 |

The mean(median) *Beta* for the top-tier group is 1.04(0.925) and 0.77(0.66) for the boutique group. It suggests that the stocks of bidders using top-tier advisors are more volatile relative to the market than the stock of bidders with boutique advisors. Besides, firms associated with a top-tier advisor have an average acquirer *Tobins_Q* of 1.47 (0.96), while firms using boutique advisors have an average acquirer *Tobins_Q* of 6.08. Apart from providing this statistic for bidder-specific characteristics, Table 6 also provides statistics for deal-specific characteristics presented in Panel D. We can see that top-tier advisors are involved in deals of greater value than deals involving boutique banks. The mean (median) *Deal_value* for deals with top-tier advisors is £1003 million (149 million), while deals advised by their boutique counterparts have a mean (median) of £15.99 million (£5.16 million). Additionally, Panel D's statistics indicate that firms advised by top-tier advisors mainly acquire public targets, as the mean *Public_deal* for the top-tier group is 0.53, and the mean *Private_deal* for deals advised by top-tier investment banks is 0.45. On the other hand, specialised boutique advisors are primarily involved in private acquisitions, considering that the mean *Public_deal* is 0.16 while the mean *Private_deal* is 0.83 for deals advised by boutique advisors.

Regarding the type of consideration offered, 54% of the deals advised by top-tier advisors have a consideration made of cash only, as shown by the mean *Cash_deal*. In comparison, 43% have a consideration that includes some stocks as indicated by their mean's *Includstock_deal*. On the other hand, 43% of the deals involving boutique advisors have a consideration of pure cash and 54% of the deals they advised offer some stock as part of the consideration. About 50% of deals involving non-top-tier advisors have a consideration that includes stocks, while 47% of the deals they advised have cash only as consideration. Moreover, 74% of the deals advised by top-tier advisors are concentric deals, while 90% of deals advised by boutique advisors are concentric deals. Moreover, 24% of deals in which top-tier advisors are involved are tenders offers, whereas only 7% of transactions involving boutique advisors are tender offers.

There are some substantial differences in the announcement's abnormal returns between firms associated with top-tier and boutique advisors. However, the announcement returns differ less between firms advised by boutique advisors and firms advised by non-top-tier advisors. For instance, the mean (median) bidder's *CAR (-2, +2)* for top-tier advisors is -0.055 (-0.047) and is -0.116 (-0.111) for bidders advised by boutique advisors, whereas it is -0.121 (-0.115) for bidders advised by non-top-tier advisors. These figures suggest bidders with top-tier advisors face slightly smaller losses than their counterparts using other advisors' services. There are no significant differences in bidder's announcement abnormal returns when advised by boutique or top-tier advisers. The bidders advised by either group witness negative or insignificant announcement abnormal returns. These figures generally contrast with those of prior studies such as Rau & Rodgers (2002), who suggest that acquirer CAR tends to be lower when a top-tier advisor is employed than when a less prestigious bank is used.

Although our analysis's primary focus is on deals where the acquiring firm has a financial advisor, it is also relevant to look at the possible differences between acquisitions where a financial advisor is used, and deals conducted without an advisor. The statistics for both groups of acquisitions are presented in Panel E and Panel F of Table 7. Panel E indicates that bidders who conduct acquisitions without an advisor are relatively greater in size than their counterparts that use a financial advisor, based on mean (median) *Acquirer_asset* for both groups. The mean (median) *Acquirer_asset* for the in-house group is £8012 million (£186 million), while the statistic for the advisor-using group is £6,769 million (£66 million). Panel E also shows that the average bidder's *Sigma* for companies with a financial advisor is 2.5, while companies with no financial advisors have an average *Sigma* of 2.23. This indicates that the stock of a company without a financial advisor is less volatile than the stocks of their counterparts that use a financial advisor.

**Table 7**
**Descriptive statistics for the samples of in-house and advisor used M&As**

The table presents the descriptive statistics for a sample of UK public, private, and subsidiary acquisitions announced over the period 01 January 2000 to 31 December 2015. The sample is derived from the Bloomberg Mergers and Acquisitions database. Panel C and D display the count (N), the mean, median (p50), the standard deviation (sd), and the skewness for acquirer and deal-specific characteristics for the subsamples of advisor-used (5) and in-house (6) deals. Stock data are retrieved from Thomson Reuters DataStream Professional database, while accounting data are obtained from both DataStream and Worldscope databases. All variables are defined in Appendix A.

| Panel C: Acquirer Characteristics | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Advisor Used (5) | | | | | In-house (6) | | | | |
| | N | mean | p50 | Sd | skewness | N | mean | p50 | sd | skewness |
| Acquirer_asset (adjusted for inflation) | 1914 | 6768.98 | 65.59 | 62691.69 | 16.2 | 1740 | 8011.56 | 186.31 | 84170.8 | 15.19 |
| Market-to-Book | 1908 | 125.851 | 1.66 | 5352.272 | 43.646 | 1736 | 3.162 | 1.990 | 7.386 | 12.225 |
| Sigma | 1784 | 2.524 | 1.933 | 4.004 | 28.157 | 1668 | 2.233 | 1.767 | 2.190 | 10.366 |
| Run_up | 1760 | 0.111 | 0.042 | 0.525 | 9.428 | 1653 | 0.092 | 0.027 | 0.513 | 12.132 |
| Leverage | 1837 | 27.477 | 23.5 | 41.012 | 3.170 | 1695 | 33.883 | 26.810 | 170.523 | 20.620 |
| Free_cash_flow | 1814 | 131.803 | 2.065 | 1142.422 | 14.063 | 1703 | 167.015 | 11.950 | 1084.96 | 13.047 |
| Beta | 1876 | 0.789 | 0.68 | 1.473 | -0.844 | 1721 | 0.857 | 0.75 | 1.175 | -4.154 |
| Tobins_Q | 1775 | 4.343 | 1.04 | 60.099 | 27.298 | 1673 | 1.530 | 1.057 | 2.742 | 15.183 |
| Panel D: Deal Characteristics | | | | | | | | | | |
| Deal_value (adjusted for inflation) | 1914 | 162 | 8.33 | 1371.98 | 22.807 | 1740 | 14.654 | 5.01 | 55.571 | 16.809 |
| Relative_size | 1848 | 0.811 | 0.138 | 12.886 | 33.591 | 1674 | 0.482 | 0.032 | 13.444 | 40.400 |
| Public_deal | 1915 | 0.186 | 0 | 0.389 | 1.615 | 1739 | 0.006 | 0 | 0.076 | 13.073 |
| Private_deal | 1915 | 0.806 | 1 | 0.395 | -1.550 | 1739 | 0.986 | 1 | 0.119 | -8.159 |
| Subsidiary_deal | 1915 | 0.008 | 0 | 0.088 | 11.166 | 1739 | 0.009 | 0 | 0.092 | 10.627 |
| Cash_deal | 1915 | 0.463 | 0 | 0.499 | 0.150 | 1739 | 0.592 | 1 | 0.492 | -0.373 |
| Includstock_deal | 1915 | 0.505 | 1 | 0.500 | -0.020 | 1739 | 0.347 | 0 | 0.476 | 0.644 |
| Concentric_deal | 1915 | 0.661 | 1 | 0.474 | -0.678 | 1739 | 0.643 | 1 | 0.479 | -0.596 |
| Tenderoffer_deal | 1915 | 0.094 | 0 | 0.292 | 2.783 | 1739 | 0.003 | 0 | 0.054 | 18.569 |
| Friendly_deal | 1915 | 0.858 | 1 | 0.349 | -2.051 | 1739 | 0.841 | 1 | 0.366 | -1.868 |
| Time_to_resolution | 1914 | 0.094 | 0 | 0.292 | 2.782 | 1740 | 18.332 | 0 | 97.946 | 18.095 |
| CAR (-2, +2) | 1893 | -0.112 | -0.108 | 0.526 | -17.491 | 1726 | -0.092 | -0.097 | 0.198 | 7.325 |

Moreover, the mean (median) *Run_up* for the deals advised by a financial advisor equals 0.11(0.04), while the figure for the in-house group is 0.09(0.03). The figures for bidder's *Run_up* and *Sigma* suggest that bidders that do not use a financial advisor are generally less risky than their counterparts that choose to use a financial advisor. Panel F, Table 7 reveals that bidders without a financial advisor make acquisitions that are significantly smaller in value than deals in which financial advisors are involved. The average (median) *Deal_value* for the sample of advisor used deals is £162million (£8.33million), while the value for in-house deals is £14.65million (£5.01 million).

Transactions in which bidders do not use a financial advisor are mainly private acquisitions, as the means for the variables *Public_deal* and *Private_deal* are respectively 0.01 and 0.99 for the in-house group. Besides, the statistics in Panel F suggest that on average, 59% of deals conducted without a financial advisor are deals where the consideration is made of cash only, while 35% of deals with no financial advisors are deals where a percentage of stock is offered. On the other hand, 46% of deals involving a financial advisor are cash deals, while 50% of the deals they undertake have consideration that includes some stocks. Regarding the announcement returns, there are marginal differences between the two groups of deals based on the mean (median) bidder's CARs. The average bidder's CAR (-2, +2) for deals without a financial advisor is -0.09%, and -0.11% for deals with a financial advisor's involvement. One could say that the shareholder's wealth of bidders who undertake a transaction without an advisor decreases less than bidders using a financial advisor.

## 5.3. Empirical Analysis

### 5.3.1. Determinants of advisor's selection

In this section, we perform several empirical tests to determine whether bidder, target and deal-specific characteristics affect the choice of top-tier versus boutique advisors. Using multivariate regression, we test hypothesis H1 relating to tier-one advisors and the skill and *scale* hypotheses, which relate to the choice of boutique advisors.

#### 5.3.1.1. Determinants of the choice of top-tier advisors

The results of the logit regression analysis presented in Table 8 indicate that, as expected, the acquirer size is a strong determinant of the choice of top-tier advisors in corporate acquisitions. The coefficients of the variable *Ln(Acquirer_asset)* are positive and significant (at the 5% level) across all samples, suggesting that the size of the bidder as measured by the book value of its assets increases the probability that the firm will select a top-tier bank as financial advisor. Similarly, the variable *Ln(Deal_value)* has positive and significant coefficients at the 5% level across all samples. The positive sign indicates that the greater the value of the transactions, the greater the likelihood of the bidder to use a top-tier financial advisor. Additionally, it appears the relative size of the target is not a significant factor in the choice of top-tier advisors in UK acquisitions as the coefficient of *Relative_size* is not statistically significant at any conventional level across the various samples. Besides, Table 8 further shows that bidder specific characteristics do not influence top-tier advisors' choice in public acquisitions as the coefficients of the control variables are not significant for the subsample of public acquisitions.

**Table 8**

**Determinants of the choice of top-tier advisors**

The table reports the results of the logit regression analysis of the choice of a prestigious investment bank as a financial advisor in an M&A deal. The analysis is conducted for the full sample and the subsamples of public, private, divergent, and concentric deals. The dependent variable is *Top_tier_adv*, which is equal to 1 when a top-10 investment bank was selected as the financial advisor of the acquiring firms, 0 otherwise. The independent variables are based on bidder and deal-specific characteristics. All regressions control for acquirer industry fixed effects and year fixed effects. Acquirer industry is based on Bloomberg Industry Classification. All continuous variables are winsorized at the 5% and 95% levels. All variables used are explained in Appendix A. The regression coefficients are presented, and the z-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively

| | Full sample | Public | Private | Concentric |
|---|---|---|---|---|
| Ln(Acquirer_asset) | 0.54*** | 0.702*** | 0.37** | 0.535*** |
| | (5.83) | (4.3) | (2.9) | (4.68) |
| Ln(Deal_value) | 0.888*** | 0.654** | 0.965*** | 0.955*** |
| | (7.2) | (2.67) | (5.88) | (6.27) |
| Concentric_deal | 0.053 | 0.11 | -0.0025 | |
| | (0.25) | (0.29) | (-0.00) | |
| Run_up | -1.3** | -0.155 | -1.69** | -1.57** |
| | (2.76) | (-0.187) | (-2.83) | (-2.64) |
| Leverage | -0.008 | -0.001 | -0.011 | -0.005 |
| | (1.57) | (-0.162) | (-1.69) | (-0.91) |
| Relative_size | 0.12 | 0.011 | -0.127 | -0.154 |
| | (0.26) | (0.02) | (-0.18) | (-0.28) |
| Market_to_book | 0.004 | 0.0611 | -0.0293 | -0.0271 |
| | (0.09) | (0.77) | (-0.5) | (-0.45) |
| Sigma | -0.0702 | -0.0891 | -0.09 | -0.08 |
| | (0.7) | (-0.55) | (-0.7) | (-0.61) |
| Tobins_Q | 0.2* | 0.23 | 0.16 | 0.14 |
| | (1.97) | (1.13) | (1.31) | (1.07) |
| Beta_1month | 0.21 | 0.32 | 0.18 | -0.005 |
| | (1.22) | (1.06) | (0.88) | (-0.03) |
| Cash_deal | -0.09 | -0.16 | -0.12 | 0.35 |
| | (0.16) | (-0.14) | (-0.2) | (0.44) |
| Includstock_deal | 0.06 | 0.0132 | -0.141 | 0.795 |
| | (0.1) | (0.01) | (-0.24) | (1.02) |
| Hostile_deal | -0.283 | -0.255 | -0.002 | -0.01 |
| | (1.21) | (-0.49) | (-0.01) | (-0.03) |
| Intercept | -7.25*** | -7.94*** | -6.01*** | -7.68*** |
| | (8.52) | (-4.79) | (-6) | (-6.77) |
| Industry FE | YES | YES | YES | YES |
| Year FE | YES | YES | YES | YES |
| Number of observations | 1,627 | 313 | 1,303 | 1,100 |
| Wald chi2 | 335.75 | 89.01 | 202.99 | 230.42 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 |
| Pseudo R2 | 0.4294 | 0.3680 | 0.3672 | 0.4545 |

The results also indicate that few acquirer characteristics are related to the choice of prestigious financial advisors across the other types of acquisitions. For instance, the coefficients of the bidder's *Run_up* are negative for all samples but significant at the 5% level across all samples except for the subsample of public deals. The negative sign indicates that the lower the bidder's run-up is, the greater the probability of the bidder selecting a top-tier investment bank as a financial advisor in most acquisitions except in public acquisitions. Moreover, the bidder's Tobin's q appears to affect the choice of top-tier advisors' choice in UK acquisitions. However, the significance of the coefficient of Tobins_Q for the full sample indicates that the impact is marginal. Moreover, the bidder's leverage does not appear to affect top-tier advisors' choice in all acquisitions except in the acquisitions of private targets as the coefficient of *Leverage* is only significant (at the 10% level) in private deals. However, the value and the significance of its coefficient indicate the impact is marginal. Regarding the consideration offered, the results of Table 8 show that the type of consideration offered does not factor in the choice of top-tier advisors except when the consideration includes stock in divergent acquisitions. The coefficient of *Includstock_deal* is only significant for acquisition in which the acquiring firm and the target operate in different industries. The deal attitude does not appear to affect the bidder's probability of choosing a top-tier advisor except in divergent deals as the coefficient of *Hostile_deal* is only significant for the subsample of divergent transactions. As we controlled for year and industry fixed effects, it appears the choice of top-tier advisors is not influenced by year and industry fixed effects for almost all samples. *Year_FE* is only significant for private acquisitions. The pseudo R2 is above 0.35 across the various samples, indicating that our model explains more than 35% of top-tier financial advisors' selection by bidding firms in UK acquisitions.

### *5.3.1.2. Determinants of the choice of boutique advisors*

Table 9 presents the results of the logit regression analysis of the choice of boutique advisors. The results indicate that the bidding firm's size, as measured by its assets, is related to boutique advisors' selection. The coefficients of the variable *Ln(Acquirer_asset)* are all negative and significant across all samples, suggesting that the assets of the acquirer reduce the probability of the selection of boutique advisors in the UK acquisitions. The size of the deal also appears to be a significant determinant of boutique advisors' choice as the coefficients of *Ln(Deal_value)* are all negative and significant for the full sample and public acquisitions.

This indicates that for transactions in which the bidder and target operate in the same industry, the deals' value does not affect specialised advisors' selection. The size of the deal also appears to be a significant determinant of boutique advisors' choice as the coefficients of *Ln(Deal_value)* are all negative and significant for the full sample and the sample of public acquisitions. This indicates that for transactions in which the bidder and target operate in the same industry, the deals' value does not affect specialised advisors' selection. Table 9 shows that the target's relative size is not a factor of the choice of boutique advisors except for deals where the bidder and target operate in different industries. The variable *Relative_size* presents high coefficients that are positive but not significant at any conventional level. In addition, the table results also provide evidence that various bidder's characteristics influence the choice of boutique advisors across different types of acquisitions. For instance, bidder's *Sigma* appears to be related to *Boutique_adv* for the full sample and the sample of private acquisitions. This indicates the bidder's stock volatility increases the likelihood of selecting a specialised advisor in private acquisitions.

## Table 9

## Determinants of the choice of boutique advisors

This table reports the results of the logit regression analysis of the choice of a specialised boutique investment bank as a financial advisor in an M&A deal. The analysis is conducted for the full sample, as well as the subsamples of public, private, divergent, and concentric deals. The dependent variable is *Boutique_adv,* which is equal to 1 when a boutique investment bank was selected as the financial advisor of the acquiring firms, 0 otherwise. The independent variables are based on bidder and deal-specific characteristics. All regressions control for acquirer industry fixed effects and year fixed effects. Acquirer industry is based on Bloomberg Industry Classification. All continuous variables are winsorized at the 5% and 95% levels. All variables used are explained in Appendix A. The regression coefficients are presented, and the z-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively

| | Full sample | Public | Private | Concentric |
|---|---|---|---|---|
| Ln(Acquirer_asset) | -0.289*** | -0.414** | -0.229*** | -0.359*** |
| | (4.81) | (-2.78) | (-3.32) | (-4.77) |
| Ln(Deal_value) | -0.165* | -0.529* | -0.147 | -0.06 |
| | (2.31) | (-2.23) | (-1.85) | (-0.69) |
| Concentric_deal | 0.09 | 0.484 | 0.059 | |
| | (0.71) | (1.33) | (0.45) | |
| Run_up | -0.048 | 0.739 | -0.166 | -0.163 |
| | (0.18) | (0.9) | (-0.57) | -0.491 |
| Leverage | 0.002 | 0.01 | 0.001 | 0.002 |
| | (0.62) | (1.11) | (0.4) | (0.51) |
| Relative_size | 0.464 | 0.53 | 0.6 | 0.18 |
| | (1.53) | (0.76) | (1.63) | (0.49) |
| Market-to-book | 0.01 | -0.038 | 0.015 | 0.028 |
| | (0.31) | (-0.5) | (0.49) | (0.86) |
| Sigma | 0.116* | 0.119 | 0.13* | 0.118 |
| | (2.39) | (0.77) | (2.45) | (1.94) |
| Tobins'_Q | -0.154*** | -0.298 | -0.151* | -0.197** |
| | (2.74) | (-1.78) | (-2.48) | (-2.67) |
| Beta_1month | 0.09 | -0.478 | 0.167 | 0.07 |
| | (1.01) | (-1.68) | (1.7) | (0.63) |
| Cash_deal | -0.03 | 10.4*** | -0.0484 | -0.216 |
| | (0.07) | (8.52) | (-0.14) | (-0.56) |
| Includstock_deal | -0.015 | 10.8*** | -0.05 | -0.324 |
| | (0.05) | (9.29) | (-0.15) | (-0.86) |
| Hostile_deal | -0.245 | 0.386 | -0.343 | -0.277 |
| | (1.29) | (0.68) | (-1.7) | (-1.23) |
| Intercept | -0.477 | -8.44*** | -0.916 | -0.198 |
| | (-1.05) | (-5.24) | (-1.86) | (0.38) |
| Industry FE | YES | YES | YES | YES |
| Year FE | YES | YES | YES | YES |
| Number of observations | 1,627 | 313 | 1,303 | 1,100 |
| Wald chi2 | 222.53 | 226 | 157 | 142 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 |
| Pseudo R2 | 0.1248 | 0.2657 | 0.1036 | 0.1164 |

The acquirer's Tobin's q appears to be negatively related to the choice of a boutique financial advisor in UK acquisitions except for the acquisitions of public targets. It appears the type of consideration offered is a significant factor in the choice of boutique advisors in public acquisitions. Regarding the consideration offered, the results in Table 9 suggest that the selection of a specialist advisor is influenced by the type of consideration offered in UK acquisitions but only in the acquisition of public targets. For instance, the coefficients of the variables *Cash_deal* and *Includstock_deal* are positive and significant (at the 1% level) only for the subsample of public acquisitions. The attitude towards the deal does not appear to influence the choice of boutique banks, considering that the coefficient of *Hostile_deal is* not significant at any conventional level. Overall, the table indicates that boutique advisors' involvement in public acquisitions is mainly influenced by the size of the bidding firm, the size of the deal and the type of consideration.

### *5.3.2. 2SLS Results*

#### *5.3.2.1. Bidder announcement returns*

In this section, we present the results of the 2SLS analysis of the impact of financial advisors' reputation and deal specialisation on bidder announcement returns. Specifically, we do not report the first estimation results in this technique and only report the 2nd estimate results. The dependent variable is *CAR (-2, +2)* and our main variables of interest are *Top_tier_adv* and *Boutique_adv*. We control for bidders and deal-specific characteristics that are known to affect bidder's returns. We also control for the acquirer, year, and industry fixed effects. All continuous variables are winsorized at the 5% level and 95% level to eliminate the effects of outliers. Robust standard errors to deal with heteroscedasticity concerns are used. The regressions are conducted over the full sample (1) and the subsamples of public (2), private (3),

and concentric (4) acquisitions. In the spirit of Masulis et al. (2007), four mutually exclusive categories have been created, which includes *Public&Includingstock_deal, Public&Cash_deal, Private&Includingstock_deal and Private&Cash_deal*. These categories should help capture the inferred interactions of target listing status and the type of consideration effects in the full sample analysis. Table 10 reports the results of the 2nd step of the 2SLS analysis. The results for the first stage of the 2SLS regressions reported in Table B1 of Appendix B indicate that our instrumental variables are significant at the 1% level across all specifications. The instruments for *Top_tier_adv*, namely *Scope* and *Industry_reach*, have positive and significant coefficients for the full samples and all subsamples. This indicates that an acquirer is certainly more inclined to hire a top-tier financial advisor when the firm has used the service of a prestigious bank in the past, and when the financial advisor's expertise covers several industries including those of the target and the acquirer. The instruments for *Boutique_adv,* namely *Experienced_niche_adv* and *Acq_Industry_specialist,* have coefficients that are significant across all samples. The coefficient of *Experienced_niche_adv* is positive for all specifications, suggesting that an acquirer is more likely to hire the services of a boutique advisor if the firm has a history of using the services of niche banks. The coefficient of the instrument *Acq_Industry_specialist* is significant and negative for all specifications, which suggests that an acquirer is more likely to choose an advisor who is not a specialist in the acquirer industry. We tested the strength of these instruments and find that there are valid instruments as the F-statistics derived from the first stage regressions are above the threshold of 10%. In addition, the statistics for the Sargan tests reported in Table 10 suggest that the sets of instruments used do not violate the over-identifying restriction. The p-value of the Sargan tests is greater than 0.05 for the full sample and all three subsamples.

The results for the full sample of Table 3 indicate that *Top_tier_adv* has a positive coefficient but is not significant at any conventional level. *Boutique_adv* shows a coefficient of -0.016,

which is not significant. These results suggest that the reputation or the specialisation of a financial advisor does not influence the returns of the acquirer. The results for the full sample further indicate that acquirer returns are marginally influenced by the value of the target when the advisor is a top-tier bank as *Deal_value* in column (1) has a coefficient that is positive and significant at the 10% level. The coefficient in column (2) is also positive and significant (at the 5% level), indicating that the target value is a strong factor in acquirer returns when advised by a boutique bank. When observing the instrumented variables in the various subsamples we note that the coefficient of *Top_tier_adv* is positive for the 3 subsamples but is not statistically significant. Columns (4), (6) and (8) show that the coefficient of *Boutique_adv* is negative and not significant, except for the subsample of concentric deals where its coefficient is marginally significant (at the 10% level). The value of the coefficient indicates that boutique advisors are associated with a decrease in bidders' wealth. These results significantly contrast with the propositions of hypotheses H3 and H4 and suggest that neither reputation nor the specialisation of financial advisors significantly matters to acquirer returns.

Although our analysis's focus lies on a financial advisor's reputation and specialisation, the results in Table 10 allow us to assess the impact of various deal and bidder specific characteristics on announcement returns. The size of the bidding firms appears to be a strong determinant of bidders' returns, as the coefficient of *Ln(Acquirer_asset)* is positive and significant (at the 1% level) across all specifications. In addition, bidder's *Sigma* shows a coefficient that is positive and significant across all samples and all specifications, indicating that the more volatile the stock of the bidder is, the greater are the bidder's abnormal announcement returns.

**Table 10**

**Second stage estimations of the 2SLS regression analysis of acquirer CAR (-2, +2)**

This table reports the results of the second estimation of 2SLS regression of acquirer CAR for the full sample, as well as the public, private and concentric deal subsamples. The main variables of interest are *Top_tier_adv* and *Boutique_adv*. The first variable is equal to 1 if the acquirer advisor is classified as a top-tier advisor, and 0 otherwise. The second variable *Boutique_adv* equals 1 if the acquirer advisor is defined as a boutique advisor; 0 if otherwise. We instrument *Top_tier_adv* by the extent to which the acquirer used the service of a prestigious bank in the past (*Scope*), and the extent to which the acquirer advisor has a relative comparative advantage in the target and the acquirer industry (*Industry_reach*). We instrument *Boutique_adv* by the extent to which the acquirer used the services of a specialist boutique in the past (*Experienced_niche_adv*), and the perceived industry expertise in the acquirer industry. For each specification, the first column presents the 2nd stage regression results with *CAR (-2, +2)* as the dependent variable, and the variable of interest is *Top_tier_adv*. In the second column, the results of the 2nd stage regression are presented with *CAR (-2, +2)* as the dependent variable, and the variable of interest is *Boutique_adv*. All variables used in the analysis are defined in Appendix A. The t-statistics reported in parentheses are adjusted for heteroskedasticity. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | Full sample | | Public | | Private | | Concentric | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Top_tier_adv (Instrumented) | 0.028 | | 0.037 | | 0.022 | | 0.023 | |
| | (0.9) | | (1.02) | | (0.44) | | (0.6) | |
| Boutique_adv (Instrumented) | | -0.016 | | -0.039 | | -0.011 | | -0.026* |
| | | (1.66) | | (-1.38) | | (-1.1) | | |
| Ln(Acquirer_asset) | 0.015*** | 0.016*** | 0.027*** | 0.029*** | 0.012*** | 0.012*** | 0.021*** | 0.02*** |
| | (4.68) | (5.63) | (3.51) | .35) | (3.38) | (3.72) | (4.93) | (5.59) |
| Ln(Deal_value) | 0.008* | 0.01** | -0.008 | -0.009 | 0.012* | 0.013*** | 0.003 | 0.004 |
| | (2.09) | (2.84) | (-0.88) | (-1) | (2.23) | (3.44) | (0.7) | (1.09) |
| Market_to_book | 0.001 | 0.001 | 0.004 | 0.004 | 0.001 | 0.001 | -0.001 | -0.001 |
| | (0.8) | (0.82) | (1.69) | (1.63) | (0.4) | (0.41) | (-0.63) | (-0.59) |
| Relative_size | -0.034* | -0.031 | -0.02 | -0.015 | -0.032 | -0.031 | -0.025 | -0.023 |
| | (1.99) | (-1.84) | (-0.65) | (-0.53) | (-1.48) | (-1.41) | (-1.23) | (-1.12) |
| Sigma | 0.027*** | 0.028*** | 0.033*** | 0.034*** | 0.025*** | 0.025*** | 0.029*** | 0.03*** |
| | (9.66) | (9.79) | (5.69) | (5.79) | (7.92) | (7.93) | (8.33) | (8.47) |
| Run_up | 0.033* | 0.03* | -0.053 | -0.05 | 0.052** | 0.049** | 0.043* | 0.04* |
| | (2.18) | (2.01) | (-1.36) | (-1.3) | (3.13) | (3.06) | (2.46) | (2.29) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Tobins_Q | 0.000 | 0.000 | 0.008 | 0.008 | -0.001 | -0.001 | 0.002 | 0.001 |
| | (0.02) | (0.03) | (1.24) | (1.18) | (-0.25) | (-0.3) | (0.45) | (0.3) |
| Leverage | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 |
| | (1.6) | (-1.61) | (-0.33) | (-0.12) | (-1.73) | (-1.8) | (-1.25) | (-1.21) |
| Concentric_deal | 0.004 | 0.005 | 0.002 | 0.003 | 0.006 | 0.006 | | |
| | (0.74) | (0.83) | (0.17) | (0.26) | (0.88) | (0.94) | | |
| Tender_offer | -0.002 | -0.004 | -0.000 | -0.002 | -0.016 | -0.018 | -0.000 | -0.003 |
| | (0.185) | (-0.33) | (-0.00) | (-0.19) | (-0.62) | (-0.68) | (-0.00) | (-0.26) |
| Public&Includingstock_deal | -0.01 | -0.007 | 0.122 | 0.13 | | | -0.004 | -0.002 |
| | (0.54) | (-0.39) | (0.96) | (1.09) | | | (-0.21) | (-0.09) |
| Public&Cash_deal | 0.025 | 0.028 | 0.144 | 0.143 | | | 0.028 | 0.031 |
| | (1.32) | (1.51) | (1.13) | (1.24) | | | (1.23) | (1.44) |
| Private&Includingstock_deal | 0.036* | 0.036* | | | 0.045** | 0.044** | 0.046* | 0.045* |
| | (2.32) | (2.27) | | | (2.79) | (2.74) | (2.56) | (2.48) |
| Private&Cash_deal | 0.035* | 0.034* | | | 0.048** | 0.047** | 0.04* | 0.038* |
| | (2.3) | (2.21) | | | (3.02) | (2.98) | (2.31) | (2.2) |
| Intercept | -0.334*** | -0.336*** | -0.53*** | -0.525*** | -0.323*** | -0.323*** | -0.359*** | -0.354*** |
| | (13.9) | (-14.8) | (-3.89) | (-4.21) | (-12.4) | (-12.9) | (-12.2) | (-13) |
| Industry FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Year FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1627 | 1627 | 313 | 313 | 1303 | 1303 | 1100 | 1100 |
| R-squared | 0.2207 | 0.2180 | 0.3773 | 0.3760 | 0.1957 | 0.1950 | 0.2387 | 0.2313 |
| Wu-Hausman | 0.003 | 0.4129 | 0.0035 | 0.0000 | 0.0322 | 0.6531 | 0.1109 | 2.3577 |
| p-value (Wu-Hausman) | 0.956 | 0.5206 | 0.9526 | 0.9929 | 0.8575 | 0.4192 | 0.7370 | 0.1250 |
| Sargan Chi2 | 0.8296 | 0.4335 | 1.1164 | 1.6789 | 0.1492 | 0.2057 | 0.0337 | 0.2615 |
| p-value (Sargan) | 0.3624 | 0.5103 | 0.2907 | 0.1951 | 0.6993 | 0.6502 | 0.8543 | 0.6091 |

Additionally, the stock's run-up of the bidding firm appears to be a strong determinant of acquirer returns in private deals as the coefficient of *Run_up* is statistically significant (5% level). However, the coefficient of *Run_up* is positive and marginally significant (at the 10% level) for the full sample and the subsample of concentric acquisitions, indicating the positive but marginal impact of acquiring firm stock's run-up. Regarding deal-specific characteristics, the results of Table 10 indicate that the legal status of the target and the form of consideration offered influence acquirer shareholder wealth in private acquisitions. The coefficient of *Private&Includingstock_deal* is positive across all specifications but only significant (at the conventional level of 5%) for the subsample of private acquisitions. In the same vein, the coefficient of *Private&Cash_deal* is positive across all specifications but only significant (at the 5% level) for the subsample of private deals. The value of the coefficient in columns (5) and (6) suggests that acquiring firms witness abnormal returns of about 5% when the target is a private company, and the consideration is purely cash.

#### *5.3.2.2. Deal time to resolution*

In this section, we explore the results of the examination of the determinants of deal time to resolution conducted over the sample of public deals and the subsample of public completed acquisitions. Due to the limited number of withdrawn acquisitions of public targets, we do not conduct our analysis for the subsample of terminated bids. The results of the regressions conducted are presented in Table 11. Columns (1) and (3), Table 11 indicate that the coefficient of *Top_tier_adv* is positive but not significant at any conventional level for all public deals but is significant at the 10% level for the subsample of public completed deals. The positive sign of the coefficient could provide support to the diligent advisor hypothesis, suggesting that top-tier advisors would take more time to complete public acquisitions.

**Table 11**

**Determinants of M&A deal's time to resolution**

This table presents the results of negative binomial regressions that examine the determinants of deal time to resolution. The dependent variable is *Time_to_resolution*, which represents the number of calendar days from the date a deal is announced to the date the deal is completed or terminated. The variable of interest in the regressions is respectively *Top_tier_adv* and *Boutique_adv*. We control for various deal and acquirer specific characteristics as well as industry and year fixed effects. The regressions are conducted for all public bids acquisitions as well as completed public acquisitions. The coefficients of the regressions are presented, and z-statistics are reported in brackets. ***, **, and * indicate the significance at the 1%, 5% and 10% levels, respectively.

| | All Public | | Completed Public | |
|---|---|---|---|---|
| | **(1)** | **(2)** | **(1)** | **(2)** |
| Top_tier_adv | 0.1 | | 0.13* | |
| | (1.8) | | (2.6) | |
| Boutique_adv | | -0.035 | | -0.032 |
| | | (0.59) | | (-0.61) |
| Ln(Acquirer_asset) | 0.022 | 0.032 | 0.021 | 0.035* |
| | (1.1) | (1.6) | (1.1) | (2) |
| Ln(Deal_value) | 0.023 | 0.028 | 0.024 | 0.032 |
| | (0.75) | (0.92) | (0.91) | (1.2) |
| Concentric_deal | 0.14** | 0.14** | 0.12** | 0.12** |
| | (2.8) | (2.8) | (2.9) | (2.9) |
| Relative_size | -0.094 | -0.09 | 0.08 | 0.085 |
| | (1) | (-0.95) | (0.94) | (0.99) |
| Sigma | 0.032 | 0.033 | 0.03 | 0.03 |
| | (1.5) | (1.5) | (1.6) | (1.6) |
| Tender_offer | 0.061 | 0.061 | 0.055 | 0.054 |
| | (1.3) | (1.3) | (1.4) | (1.3) |
| Run_up | -0.038 | -0.03 | -0.019 | -0.006 |
| | (0.31) | (-0.24) | (-0.18) | (-0.1) |
| Includstock_deal | 0.035 | 0.043 | 0.02 | 0.028 |
| | (0.69) | (0.83) | (0.45) | (0.62) |
| Intercept | 4*** | 3.9*** | 3.9*** | 3.9*** |
| | (27) | (26) | (31) | (30) |
| Industry_FE | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES |
| Number of observations | 322 | 322 | 286 | 286 |
| Log likelihood | -1546.6 | -1548 | -1331.3 | -1334.3 |
| Prob > Chi2 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

However, the marginal significance (at the 10% level) for public completed acquisitions suggests that top-tier advisors have a marginal impact on deal time to resolution. Columns (2) and (4), Table 11, indicate that the coefficient of *Boutique_adv* is negative and not statistically significant (at any conventional level). The results contrast with our expectation of hypothesis H6, referred to as the diligent specialist hypothesis. This suggests that the specialisation of financial advisors does not affect the time needed to complete a public acquisition. The results of Table 11 further indicate that acquirer characteristics, except for concentric deals, have little to no impact on deal time to resolution. Except for *Ln(Acquirer_asset)* and *Concentric_deal*, the coefficients of the controlling variables are not statistically significant. The variable Concentric_deal has a coefficient that is positive and significant (at the 5% level) across all specifications, indicating that acquisitions of target operating within the same industry with the acquirer take more time to be completed. The results of Table 11 generally indicate that the deal time to completion of public acquisitions is not influenced by the reputation or the specialisation of financial advisors. The number of calendar days to complete a public deal is mainly influenced by the industry relatedness between the target and the acquirer, as well as unobserved factors.

## *5.4. Robustness checks*

### *5.4.1. Top-tier classification based on market share*

The results obtained from our analysis of the impact of advisors' reputation on bidders' CARs are based on a top-10 classification of top-tier financial advisors based on their respective market share. A top-10 cut-off for top-tier investment banks has been substantially used in prior research. Although the choice of this cut-off is inspired by theoretical evidence and anecdotal practice, a top-10 cut off to some extent is still arbitrary and subjective. Therefore, there is a

potential concern regarding this cut-off's appropriateness, which can ultimately affect our results' reliability. To test the reliability of the results, we use two alternative cut-offs for the top-tier classification, namely a top-8 and a top-5 cut-off. The use of a top-8 ranking of top-tier banks has been used by related research such as Golubov et al. (2012), while others used a top-5 ranking. We re-run our analysis of bidders' CARs using these two different cut-offs. In other words, we regress bidders' *CARs (-2, +2)* against two alternatives of the *Top_tier_adv* dummy (i.e., *Top_8* and *Top_5*), controlling for various bidder and deal-specific characteristics. The results in Table C1 of Appendix C are generally qualitatively consistent with the initial findings.

### *5.4.2. Announcement returns*

Throughout the study, we measured the bidder announcement return over a 5-day window. The choice of a 5-day window as the event window has been used by prior studies (Chemmanur & Krishnan, 2012; Guo et al., 2018; Masulis & Simsir, 2018). However, the choice of the window tends to vary from one study to another. Researchers typically analyse abnormal returns over various sample periods to assess the reliability of their results. In that spirit, we re-run our regression analysis of bidders' CARs with the abnormal returns estimated over two different event windows: a 3-day window (-1, +1) and an 11-day window (-5, +5). The results of the second stage of the 2SLS regressions reported in Table C2 and C3 of Appendix C are largely consistent with the original findings on the impact of top-tier and boutique advisors on bidder's CARs across all samples.

### *5.4.3. Top-tier classification based on number of deals advised*

Top-tier investment banks are generally highly ranked in league tables based on their market share over a period. However, Migliorati and Vismara (2014) suggest that the existing measures of an underwriter's reputation mostly based on market share are tailored to the US market and not adapted to the European market. They suggest the use of ranking based on the number of deals involved and the amount of capital raised. Although their findings are primarily relevant to measuring the underwriter's reputation, the structural differences in the M&A market of the U.S. and the U.K. might make the use of market share as a proxy for reputation inappropriate. As a result, we re-run our analysis using three alternatives of *Top_tier_adv* based on three cut-offs (i.e., top-10, top-8, and top-5) based on the number of deals the financial advisor is involved in. We create the variables *Top_10dc, Top_8dc* and *Top_5dc,* which we insert as the variables of interest in the regression's analysis of bidders' CARs. The unreported results of these regressions are generally consistent with the original findings.

## *5.5. Summary*

In line with earlier studies but not consistent with recent research, this study finds little evidence that the reputation of financial advisors matters to bidders. These findings hold after controlling for the endogenous matching of bidder and advisor and after running several robustness tests. The evidence does not support our "superior skills advisor" hypothesis, which posits that top-tier advisors' superior skills should help them capture greater gains for acquirer firms even in public acquisitions, despite the great bargaining of public targets and the significant efforts required due to the complexity of these deals. In the same vein, our study fails to find evidence of the "specialists' skills hypothesis", suggesting that the degree of

specialisation of financial advisors does not influence bidder's wealth during the acquisitions of public or private targets. However, it is associated with a decrease in bidder's wealth in the same industry acquisitions. This indicates that boutique advisors have the market expertise which helps them identify suitable targets, but they do not possess the intrinsic skills to help acquirers capture positive gains. The returns of acquiring firms are mainly explained by acquirer characteristics and the type of consideration offered.

Concerning the impact of advisors' reputation on deal time to resolution, we find marginal evidence that the reputation of financial advisors influenced the deal time to completion of public acquisitions. The evidence supports the *diligent hypothesis*, suggesting that top-tier advisors, to preserve their reputation capital, will take more time than their less reputable and specialised counterparts to conduct the acquisition process efficiently and diligently. However, we do not find any evidence which could indicate that boutique investment banks, with their expertise from their focus in M&A transactions, are able to influence deal time to resolution.

Overall, the study provides little evidence of the added value of prestigious financial advisors on deal outcomes in the context of M&A deals, especially in public acquisitions in the U.K. The study also brings forward evidence that despite their M&A and industry specialisation, boutique advisors do not possess the skills to enable acquiring firms to make substantial gains from the acquisition process or to take less time to complete these deals.

# Chapter 6: Investment Banks' Effects on IPO Settings: Results and Discussion

## *6.1. Introduction*

In this chapter, we present and discuss the results of the empirical analysis we conducted in relation to the hypothesis developed in chapter 3 on the implications of investment bank reputation and specialisation on M&A IPO outcomes. We also report a summary of the descriptive statistics for the set of variables used for our analysis.

## *6.2. Summary statistics*

Table 12 reports the descriptive statistics for the whole sample of IPOs, where issue, firm, market, and industry characteristics are presented. The count (N), mean, median, standard deviation (sd) and the skewness are also presented. Table 13 presents the summary statistics for the subsamples of IPOs managed by top-tier and non-top-tier lead managers. Table 14 depicts the descriptive statistics for the samples of IPOs managed by boutique and non-boutique lead managers. Table 15 reports the descriptive statistics for the samples of offerings listed on the AIM and the Main Market.

Table 12 reports that the mean initial returns measured by *Offer_to_1st_Close* for the full sample are 21.5%, while the median is 9%. The skewness of the full sample is 17.92, which suggest IPO firms' underpricing is relatively skewed. The statistics for initial returns, as measured by *Offer_to_week1*, are similar to the statistics of *Offer_to_1$^{st}$_Close.* For instance, the mean (median) of *Offer_to_week1* is 23.68% (9.5%), whereas the skewness is 14.97.

**Table 12**

**Descriptive statistics for the sample of UK IPOs**

The table presents the descriptive statistics for a sample of IPOs issued between 01 January 1995 and 31 December 2015. The sample is derived from the Bloomberg IPO database. Issue, firms, industry, and market characteristics are available. The following descriptive statistics are provided: the number of observations (N), the median (p50), the interquartile range (90-10) (p90), the standard deviation (Sd) and the skewness. All variables are explained in Appendix A.

| | Full sample | | | | |
|---|---|---|---|---|---|
| | N | Mean | p50 | sd | skewness |
| Offer_to_1st_Close | 1535 | 21.519 | 9.167 | 96.651 | 17.922 |
| Offer_to_week1 | 1499 | 23.683 | 9.516 | 94.979 | 14.969 |
| NumAn | 1167 | 1.130 | 0 | 2.427 | 3.506 |
| AllStar_coverage | 1535 | 0.087 | 0 | 0.282 | 2.924 |
| Share_turnover_ratio | 1129 | 0.086 | 0.030 | 0.827 | 23.445 |
| Waiting_period | 1535 | 26.136 | 14 | 87.847 | 15.777 |
| Offer_size (adjusted for inflation in £mil) | 1535 | 71.422 | 10.429 | 246.89 | 9.937 |
| Offer_price (GBp) | 1535 | 196.799 | 100 | 2607.928 | 36.880 |
| Company_age | 1535 | 7.4 | 1.6 | 18.64 | 6.69 |
| Total_asset (adjusted for inflation in £ mil) | 1535 | 334.77 | 9.44 | 3943.55 | 28.06 |
| PE&VC_backed_dummy | 1535 | 0.079 | 0 | 0.271 | 3.109 |
| Pure_primary_ dummy | 1535 | 0.603 | 1 | 0.489 | -0.422 |
| Prior_30day_sector_rtn | 1480 | 0.023 | 0.042 | 0.340 | -0.267 |
| Prior_30day_SD_of_sector_rtn | 1480 | 1.217 | 0.966 | 0.802 | 2.267 |
| FTSEALL30daysreturns | 1535 | 0.353 | 0.490 | 2.072 | -0.348 |
| FTSEALL30daysreturnsSD | 1535 | 1.368 | 1.215 | 0.706 | 1.676 |
| Prior_month_average_underpricing | 1535 | 74.829 | 15.577 | 430.825 | 16.041 |
| Lockup_options | 1535 | 0.428 | 0 | 0.495 | 0.291 |
| Technology_sector_dummy | 1535 | 0.113 | 0 | 0.316 | 2.449 |
| Main_Market_dummy | 1535 | 0.31 | 0 | 0.462 | 0.82 |
| Numberof_usesofProceeds | 1535 | 0.941 | 1 | 1.046 | 1.016 |
| Prestigious_legal_adviser | 1535 | 0.097 | 0 | 0.296 | 2.722 |

The statistics in Table 12 also show that the average *Waiting_period* for the full sample of IPOs is 26 days, whereas the median is 14 days. The average *Offer_size* for the full sample period is £71.4 million, while the median is £10 million. The standard deviation and the skewness of the *Offer_size* suggest that the values of IPO proceeds in our sample tend to deviate from the mean and indicate a relative level of skewness. Additionally, the average age of the issuing firms in our sample is 7.4 years. while the median age for the issuer is less than 1.6 years, indicating that half of the issuing firms are significantly young and less established. Moreover, Table 12 indicates that about 8% of the issuers in the sample are backed by a venture capitalist or a private equity firm. Over 10% of the IPO firms in our sample are in the technology sector. Several studies provide evidence that IPO firms in the technology industry are typically associated with greater underpricing.

Table 13 and Table 14 indicate that there are significant differences between the groups of IPOs managed by top-tier and non-top-tier banks and between boutique and non-boutique banks. For instance, Table 13 demonstrates that the mean (median) *Offer_to_1$^{st}$_Close* for top-tier banks is 8.8% (5.8%), while for non-top-tier the figure is 23.2% (9.5%). Additionally, the mean (median) *Offer_to_week1* for top-tier banks is 10.1% (5.8%), whereas it is 25.5% (10%) for IPOs managed by non-top-tier banks. This indicates that the large level of underpricing of the full sample comes mainly from deals managed by non-top-tier banks. The same statistics for boutique underwriters presented in Table 14 demonstrate that the mean (median) of *Offer_to_1$^{st}$_Close* and *Offer_to_week1* are 25.5% (10%) and 26.6% (9.7%), respectively. The statistics for the three subsamples indicate that deals managed by top-tier banks are less underpriced than deals from other lead managers. This is consistent with studies that argue that top-tier banks are associated with less underpricing than other underwriters (Carter et al., 1998; Carter & Manaster, 1990). The average *Offer_size* of deals managed by top-tier banks (£353.16 million) is significantly higher than the median of deals managed by non-top-tier (£34.47

million) and by boutique banks (£31.5 million). Michaely & Shaw (1994) provide evidence of a positive and significant relationship between IPO size and underpricing. Besides, the mean (median) *Company_age* for top-tier is 17(6), which is greater than the mean (median) of the boutique group, which is 5.8 (1.5) and 7.4 (1.6) for deals managed by non-top-tier investment banks. This suggests that many issuers in our sample are very young companies that are managed by either non-top-tier or boutique banks. Loughran & Ritter (2004) indicate that there is a negative relationship between IPO first-day returns and issuing firms' age. The mean of *PE&VC_backed_dummy* in Table 13 indicates that less than 37% of the IPOs managed by top-tier banks are PE or VC backed, whereas only 4% of IPOs managed by non-top-tier underwriters are PE or VC backed. The same statistic in Table 14 for IPOs managed by boutique banks is 0.05, indicating that a PE or VC backs only 5% of the deals they managed. Overall, the statistics indicate that top-tier lead managers are mostly associated with large, mature, and less risky firms and large issues that are backed by private equity or venture capital firms. Conversely, boutique and non-top-tier banks mostly advise smaller, young, relatively risky firms that issue small offerings, which are not backed by private equity firms or venture capitalists.

The statistics presented so far highlight the difference in offerings, issuers, issue, and market characteristics for issues managed by different IPO lead managers. However, our sample includes issues that are listed on various markets, including the Main Market and the AIM market, which have specific characteristics. The descriptive statistics for the samples of AIM and Main Market offerings are presented in Table 15. The table indicates that IPOs listed on the AIM are, on average, nearly 3 times more underpriced than the IPOs listed on the Main Market.

**Table 13**

**Descriptive statistics for the samples of top-tier and non-top-tier lead managers**

The table presents the descriptive statistics for a sample of IPOs issued between 01 January 1995 and 31 December 2015. The sample is derived from the Bloomberg IPO database. Issue, firms, industry, and market characteristics are available. The following descriptive statistics are provided: the number of observations (N), the median (p50), the standard deviation (sd) and the skewness. The statistics are reported for the sample of IPOs managed by non-top-tier and the sample of IPOs managed by top-tier lead managers. All variables are explained in Appendix A.

| | Non-top-tier | | | | | Top-tier | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | p50 | sd | skewness | N | Mean | p50 | sd | skewness |
| Offer_to_1st_Close | 1357 | 23.183 | 9.6591 | 102.425 | 16.986 | 178 | 8.834 | 5.806 | 20.135 | 3.171 |
| Offer_to_week1 | 1322 | 25.501 | 10 | 100.719 | 14.180 | 177 | 10.102 | 5.814 | 20.745 | 3.437 |
| NumAn | 1010 | 0.600 | 0 | 1.465 | 5.831 | 157 | 4.541 | 4 | 4.077 | 1.022 |
| AllStar_coverage | 1357 | 0.014 | 0 | 0.118 | 8.273 | 178 | 0.646 | 1 | 0.480 | -0.611 |
| Share_turnover_ratio | 982 | 0.087 | 0.027 | 0.886 | 21.888 | 147 | 0.079 | 0.06 | 0.065 | 1.553 |
| Waiting_period | 1357 | 19.997 | 13 | 67.723 | 24.886 | 178 | 72.933 | 26 | 171.035 | 5.994 |
| Offer_size (adjusted for inflation in £mil) | 1357 | 34.47 | 8.24 | 180.75 | 20.31 | 178 | 353.16 | 226.87 | 433.21 | 2.767 |
| Offer_price (GBp) | 1357 | 172.125 | 88 | 2714.047 | 36.712 | 178 | 384.901 | 225 | 1572.520 | 12.776 |
| Company_age | 1357 | 6.13 | 1.29 | 15.59 | 7.62 | 178 | 17.05 | 6.12 | 32.33 | 3.87 |
| Total_asset (adjusted for inflation in £ mil) | 1357 | 100.65 | 6.93 | 1306.98 | 21.18 | 178 | 2119.63 | 295.44 | 10865.99 | 10.88 |
| PE&VC_backed_dummy | 1357 | 0.041 | 0 | 0.199 | 4.613 | 178 | 0.371 | 0 | 0.484 | 0.535 |
| Pure_primary_ dummy | 1357 | 0.635 | 1 | 0.482 | -0.562 | 178 | 0.360 | 0 | 0.481 | 0.585 |
| Prior_30day_sector_rtn | 1309 | 0.026 | 0.043 | 0.338 | -0.011 | 171 | -0.001 | 0.028 | 0.352 | -1.999 |
| Prior_30day_SD_of_sector_rtn | 1309 | 1.217 | 0.974 | 0.799 | 2.195 | 171 | 1.212 | 0.950 | 0.827 | 2.768 |
| FTSEALL30daysreturns | 1357 | 0.357 | 0.479 | 2.071 | -0.338 | 178 | 0.326 | 0.525 | 2.083 | -0.426 |
| FTSEALL30daysreturnsSD | 1357 | 1.361 | 1.209 | 0.713 | 1.756 | 178 | 1.418 | 1.240 | 0.650 | 0.905 |
| Prior_month_average_underpricing | 1357 | 71.138 | 15.738 | 387.071 | 16.932 | 178 | 102.965 | 11.856 | 678.175 | 11.468 |
| Lockup_options | 1357 | 0.395 | 0 | 0.489 | 0.430 | 178 | 0.680 | 1 | 0.468 | -0.771 |
| Technology_sector_dummy | 1357 | 0.111 | 0 | 0.315 | 2.472 | 178 | 0.93 | 1 | 0.25 | -3.45 |
| Main Market_dummy | 1357 | 0.23 | 0 | 0.42 | 1.3 | 178 | 0.174 | 0 | 0.380 | 1.718 |
| Numberof_usesofProceeds | 1357 | 0.875 | 1 | 1.008 | 1.072 | 178 | 1.444 | 1 | 1.188 | 0.569 |
| Prestigious_legal_adviser | 1357 | 0.043 | 0 | 0.204 | 4.477 | 178 | 0.506 | 1 | 0.501 | -0.022 |

**Table 14**

**Descriptive statistics for the samples of non-boutique and boutique lead managers**

The table presents the descriptive statistics for a sample of IPOs issued between 01 January 1995 and 31 December 2015. The sample is derived from the Bloomberg IPO database. Issue, firms, industry, and market characteristics are available. The following descriptive statistics are provided: the number of observations (N), the median (p50), the standard deviation (sd) and the skewness. The statistics are reported for the sample of IPOs managed by non-boutique and the sample of IPOs managed by boutique lead managers. All variables are explained in Appendix A.

| | Non-boutique | | | | | Boutique | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | p50 | sd | skewness | N | Mean | p50 | sd | skewness |
| Offer_to_1st_Close | 1020 | 19.529 | 9.0000 | 69.178 | 9.273 | 515 | 25.461 | 10.000 | 135.530 | 16.900 |
| Offer_to_week1 | 992 | 22.195 | 9.44425 | 93.467 | 17.306 | 507 | 26.594 | 9.722 | 97.898 | 10.976 |
| NumAn | 780 | 1.387 | 0 | 2.813 | 3.017 | 387 | 0.612 | 0 | 1.196 | 3.539 |
| AllStar_coverage | 1020 | 0.116 | 0 | 0.320 | 2.403 | 515 | 0.031 | 0 | 0.174 | 5.406 |
| Share_turnover_ratio | 738 | 0.057 | 0.033 | 0.142 | 15.937 | 391 | 0.141 | 0.03 | 1.391 | 14.108 |
| Waiting_period | 1020 | 26.623 | 14 | 80.779 | 11.859 | 515 | 25.171 | 14 | 100.466 | 19.280 |
| Offer_size (adjusted for inflation in £mil) | 1020 | 91.58 | 12.85 | 291.32 | 8.66 | 515 | 31.49 | 7.22 | 106.12 | 11.04 |
| Offer_price (GBp) | 1020 | 251.114 | 105 | 3197.596 | 30.074 | 515 | 89.223 | 69 | 101.747 | 4.796 |
| Company_age | 1020 | 8.2 | 1.65 | 20.82 | 6.01 | 515 | 5.81 | 1.46 | 13.2 | 9.02 |
| Total_asset (adjusted for inflation in £ mil) | 1020 | 477.8 | 10.86 | 4829.02 | 22.92 | 515 | 51.5 | 7.24 | 247.09 | 11.57 |
| PE&VC_backed_dummy | 1020 | 0.092 | 0 | 0.289 | 2.820 | 515 | 0.054 | 0 | 0.227 | 3.931 |
| Pure_primary_ dummy | 1020 | 0.586 | 1 | 0.493 | -0.350 | 515 | 0.637 | 1 | 0.481 | -0.569 |
| Prior_30day_sector_rtn | 987 | 0.021 | 0.044 | 0.366 | -0.120 | 493 | 0.025 | 0.041 | 0.280 | -0.875 |
| Prior_30day_SD_of_sector_rtn | 987 | 1.243 | 0.977 | 0.845 | 2.279 | 493 | 1.165 | 0.948 | 0.707 | 2.068 |
| FTSEALL30daysreturns | 1020 | 0.358 | 0.497 | 2.076 | -0.327 | 515 | 0.344 | 0.462 | 2.065 | -0.391 |
| FTSEALL30daysreturnsSD | 1020 | 1.374 | 1.223 | 0.697 | 1.672 | 515 | 1.355 | 1.168 | 0.724 | 1.685 |
| Prior_month_average_underpricing | 1020 | 89.495 | 15.738 | 517.528 | 13.787 | 515 | 45.781 | 14.215 | 147.273 | 5.834 |
| Lockup_options | 1020 | 0.397 | 0 | 0.490 | 0.421 | 515 | 0.489 | 0 | 0.500 | 0.043 |
| Technology_sector_dummy | 1020 | 0.123 | 0 | 0.328 | 2.302 | 515 | 0.093 | 0 | 0.291 | 2.799 |
| Main Market_dummy | 1020 | 0.39 | 0 | 0.49 | 0.46 | 515 | 0.15 | 0 | 0.36 | 1.92 |
| Numberof_usesofProceeds | 1020 | 0.888 | 1 | 1.028 | 1.081 | 515 | 1.047 | 1 | 1.074 | 0.898 |
| Prestigious_legal_adviser | 1020 | 0.118 | 0 | 0.322 | 2.373 | 515 | 0.056 | 0 | 0.231 | 3.849 |

**Table 15**

**Descriptive statistics for IPOs listed on the AIM and the Main Market**

The table presents the descriptive statistics for a sample of IPOs issued between 01 January 1995 and 31 December 2015. The sample is derived from the Bloomberg IPO database. Issue, firms, industry, and market characteristics are available. The following descriptive statistics are provided: the number of observations (N), the median (p50), the standard deviation (sd) and the skewness. The statistics are reported for the sample of IPOs listed on the AIM and the sample of IPOs listed on the Main Market. All variables are explained in Appendix A.

| | AIM | | | | | Main market | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | p50 | sd | skewness | N | Mean | p50 | sd | skewness |
| Offer_to_1st_Close | 1045 | 26.618 | 10.0000 | 114.888 | 15.531 | 475 | 11.333 | 7.143 | 30.482 | 3.194 |
| Offer_to_week1 | 1025 | 28.723 | 10.5469 | 112.188 | 13.094 | 463 | 13.338 | 7.571 | 33.781 | 6.016 |
| NumAn | 767 | 0.379 | 0 | 0.777 | 4.038 | 395 | 2.603 | 1 | 3.602 | 1.877 |
| AllStar_coverage | 1045 | 0.015 | 0 | 0.123 | 7.895 | 475 | 0.248 | 0 | 0.433 | 1.164 |
| Share_turnover_ratio | 795 | 0.094 | 0.024 | 0.984 | 19.728 | 330 | 0.069 | 0.05 | 0.075 | 4.413 |
| Waiting_period | 1045 | 21.594 | 14 | 77.396 | 21.881 | 475 | 35.423 | 14 | 107.761 | 9.697 |
| Offer_size (adjusted for inflation in £mil) | 1045 | 16.05 | 6.18 | 34.32 | 7.71 | 475 | 195.41 | 57.36 | 415.16 | 5.85 |
| Offer_price (GBp) | 1045 | 175.567 | 65 | 3091.986 | 32.248 | 475 | 247.836 | 170 | 974.494 | 20.430 |
| Company_age | 1045 | 5.78 | 0.98 | 16.3 | 8.12 | 475 | 11.105 | 4.13 | 22.77 | 5.08 |
| Total_asset (adjusted for inflation in £ mil) | 1045 | 26.78 | 6.15 | 129.07 | 17.64 | 475 | 1022.91 | 42.43 | 7043.11 | 15.66 |
| PE&VC_backed_dummy | 1045 | 0.032 | 0 | 0.175 | 5.357 | 475 | 0.187 | 0 | 0.391 | 1.602 |
| Pure_primary_ dummy | 1045 | 0.640 | 1 | 0.480 | -0.584 | 475 | 0.537 | 1 | 0.499 | -0.148 |
| Prior_30day_sector_rtn | 1012 | 0.026 | 0.043 | 0.338 | -0.110 | 457 | 0.018 | 0.039 | 0.345 | -0.596 |
| Prior_30day_SD_of_sector_rtn | 1012 | 1.236 | 1.003 | 0.779 | 2.262 | 457 | 1.167 | 0.910 | 0.848 | 2.336 |
| FTSEALL30daysreturns | 1045 | 0.299 | 0.464 | 2.095 | -0.440 | 475 | 0.465 | 0.515 | 1.995 | -0.184 |
| FTSEALL30daysreturnsSD | 1045 | 1.367 | 1.210 | 0.718 | 1.802 | 475 | 1.353 | 1.204 | 0.672 | 1.400 |
| Prior_month_average_underpricing | 1045 | 58.436 | 15.738 | 196.822 | 6.466 | 475 | 112.704 | 13.635 | 716.397 | 10.856 |
| Lockup_options | 1045 | 0.479 | 0 | 0.500 | 0.082 | 475 | 0.328 | 0 | 0.470 | 0.731 |
| Technology_sector_dummy | 1045 | 0.102 | 0 | 0.303 | 2.623 | 475 | 0.137 | 0 | 0.344 | 2.113 |
| Main Market_dummy | 1045 | 0 | 0 | 0 | ---- | 475 | 1 | 1 | 0 | ---- |
| Numberof_usesofProceeds | 1045 | 0.966 | 1 | 1.004 | 0.909 | 475 | 0.905 | 0 | 1.141 | 1.168 |
| Prestigious_legal_adviser | 1045 | 0.044 | 0 | 0.205 | 4.446 | 475 | 0.217 | 0 | 0.413 | 1.374 |

For IPOs listed on the AIM, the mean(median) *Offer_to_1st_Close* and *Offer_to_week1* is 26.6% (10%) and 28.72% (10.5%) respectively. On the other hand, IPOs listed on the Main Market show a mean (median) *Offer_to_1st_Close* and *Offer_to_week1* of 11.33% (7%) and 13.3% (7.6%). Besides, Table 15 indicates that the median *Offer_size* for issues listed on Main Market (£57 million) is significantly greater than of IPO listed on the AIM (£6 million). Additionally, close to 20% of IPOs on the Main Market are PE or VC backed, whereas just 3% of IPOs listed on the AIM are VC or PE backed. Looking at the statistics for *Company_age*, we can see that the median *Company_age* for AIM issuing firms is about 1 year, whereas the same statistics for Main Market offerings is 4 years. Overall, these statistics of Table 15 indicate that there are significant differences between issuers who choose to be listed on the Main Market and the AIM market.

## *6.3. Empirical Results*

### *6.3.1. Determinants of the choice of lead managers*

In this section, we perform a multi-logit regression analysis to determine whether issuer and deal-specific and market characteristics affect the choice of top-tier versus boutique lead managers. The results of the regressions are respectively presented in Table 16 and Table 17.

#### *6.3.1.1. Choice of top-tier lead manager*

We examine the factors that determine the choice of lead managers based on their reputation using a logit regression analysis. The dependant variable is *Top_tier_lead*, which proxies for lead managers' reputation and takes the value of 1 for IPOs managed by top-10 investment banks, 0 otherwise. The logit regression analysis is conducted for the full sample, the subsamples of Main Market and AIM listings over three different sample periods.

**Table 16**
**Determinants of the choice of top-tier lead managers**

The table presents the results of the multi-logit regression analysis, which examine the determinants of the choice of top-tier and non-top-tier lead managers for a sample of UK IPOs announced over the period January 1995 to December 2015. The dependent variable is *Top_tier_lead*, which takes the value one if the issuing firm used a top-tier investment bank as a manager and zero otherwise. We control for various issuer and issue-specific characteristics. The logit analysis is conducted over the full sample as well as the subsamples of Main Market and AIM listings. These regressions are conducted over the sample period as well as the periods 1995-2000 and 2001-2015. The coefficients of the regressions and the z-statistics are reported. ***, ** and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

| | 1995-2015 | | | 1995-2000 | | | 2001-2015 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Full sample** | **Main Market** | **AIM** | **Full sample** | **Main Market** | **AIM** | **Full sample** | **Main Market** | **AIM** |
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** | **(9)** |
| Ln(Company_age) | 0.177* | 0.255** | -0.221 | 0.376** | 0.4** | -3.19* | 0.115 | 0.192 | -0.233 |
| | (2.45) | (2.89) | (-1.24) | (2.74) | (2.68) | (-2.41) | (1.07) | (1.36) | (-1.15) |
| Ln(Offer_size) | 1.56*** | 1.09*** | 2.09*** | 1.02*** | 0.874*** | 3.71* | 2.37*** | 2.32*** | 2.48*** |
| | (10.7) | (6.65) | (4.73) | (6.64) | (5.34) | (2.87) | (8.78) | (4.55) | (3.87) |
| PE&VC_backed_dummy | 1.15*** | 1.12*** | 0.189 | 1.99*** | 1.89** | | 0.593 | 0.329 | 0.025 |
| | (3.99) | (3.02) | (0.17) | (3.64) | (3.28) | | (1.43) | (0.53) | (0.02) |
| Prestigious_legal_adviser | 1.48*** | 2.1*** | -0.577 | 1.33 | 1.22 | | 1.78*** | 2.99*** | -0.291 |
| | (5.3) | (5.64) | (-0.46) | (1.62) | (1.49) | | (4.64) | (5.18) | (-0.23) |
| Pure_primary_dummy | -0.081 | 0.635 | -1.16 | 1.13* | 1.25* | | -0.826** | 0.466 | -1.86 |
| | (0.29) | (1.63) | (-1.28) | (2.35) | (2.35) | | (-2) | (0.72) | (-1.88) |
| Lockup_options | 1.06*** | 1.44*** | 1.41 | 1.72* | 1.58* | | 1.33** | 1.43* | 1.68 |
| | (3.69) | (4) | (1.47) | (2.45) | (2.15) | | (2.84) | (2.37) | (1.26) |
| General_corporate_purpose | 0.704* | 0.344 | 1.91* | 0.54 | 0.462 | | 1.35** | 0.409 | 2.74** |
| | (2.46) | (0.85) | (2.28) | (0.83) | (0.62) | | (3.26) | (0.74) | (2.63) |
| Prior_30day_of_sector_rtrn | -0.225 | -0.407 | 0.651 | -0.752 | -0.559 | -1.1 | 0.422 | 0.13 | 1.42 |
| | (0.68) | (-1.01) | (0.58) | (-1.58) | (-1.09) | (-1.48) | (0.63) | (0.15) | (1.11) |
| Prior_30day_SD_of_sector_rtrn | 0.379* | 0.48* | -0.607 | -0.171 | -0.199 | 0.788 | 0.605 | 1.69* | -0.008 |
| | (2.26) | (2.48) | (-1.3) | (-0.63) | (-0.68) | (1.42) | (1.6) | (2.45) | (-0.01) |
| Intercept | -9.28*** | -7.75*** | -11*** | -11.3*** | -11.5*** | -22.6** | -12.3*** | -12.4*** | -13.4*** |
| | (11.3) | (-8.14) | (-3.56) | -5.57 | (-5.61) | (-2.81) | (-8.71) | (-4.12) | (-3.67) |
| Industry_FE | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1480 | 457 | 1012 | 506 | 250 | 100 | 974 | 207 | 759 |
| Wald chi2 | 267 | 186 | 39.7 | 92.7 | 68.9 | 15.1 | 144 | 54.1 | 34.8 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.019 | 0.000 | 0.000 | 0.000 |
| PseudoR2 | 0.6297 | 0.5547 | 0.3928 | 0.4678 | 0.3948 | 0.466 | 0.7521 | 0.6785 | 0.4468 |

This includes the whole sample period (1995-2015) as well as the periods 1995-2000 and 2001-2015, for which the results are presented in Table 16.

The results of Table 16 indicate that the variable *Ln(Offer_size)* is a positive and highly significant coefficient across all samples, except for the sample of AIM listings (6), where the coefficient is marginally significant (at the 10% level). This suggests that the size of the offering is a strong determinant of the choice of top-tier underwriters notwithstanding the listing exchange. The positive sign indicates that the greater the size of an offering is, the greater is the likelihood of a top-tier investment bank being selected as the lead manager. In addition, the results of the regressions show that some issuer-specific characteristics have an impact on the choice of top-tier underwriters. Columns (2), (4) and (5) Table 16 show that *Ln(Company_age)* presents a positive coefficient that is significant (at the 5% level). The coefficient of the variable is negative in columns (3), (6) and (9) but only significant in column (6), indicating that the choice of top-tier underwriters in AIM listings before and during the dot-com bubble was negatively related to the age of the issuer. In addition, the results show that top-tier underwriters are more likely to be hired in Main Market listings when the issuing firm is backed by private equity or a venture capital firm, as the variable *PE&VC_backed_dummy* is positive and significant for columns (2) and (5). Interestingly, *PE&VC_backed_dummy* is not significant at any conventional level across all samples for the period 2001-2015. This suggests that there has been a shift in issuers' value of private equity and venture capital firms as a determinant of the choice of top-tier lead managers in UK IPOs.

Moreover, the results show that the use of prestigious legal advisors by the issuer strongly influenced the decision to select a top-tier bank as the lead manager in Main Market offerings in the years following the dot-com bubble. The variable *Prestigious_legal_adviser* is positive and highly significant for the sample of Main Market offerings during the period 2001-2015. The results reported in columns (5) and (8), Table 16 suggest that the existence of a lock-up

agreement between the underwriters and the insiders of the issuing company has a marginal influence on the choice of top-tier underwriters. The coefficient of *Lockup_options* is only significant (at the 10% level) for Main Market offerings for the periods 1995-2000 and 2001-2015. The results of Table 16 further show that the market conditions prior to the IPO do not influence the choice of prestigious underwriters.

#### *6.3.1.2. Choice of boutique lead manager*

We studied the factors influencing the choice of boutique lead managers. In our analysis, the dependent variable is *Boutique_lead,* which takes the value of 1 if the IPO was managed by a boutique investment bank and 0 otherwise. The logit regression analysis is conducted for the full sample, the subsamples of Main Market and AIM listings for the whole sample period (1995-2015) as well as the periods 1995-2000 and 2001-2015, for which the results are reported in Table 17.

The results presented in Table 17 largely indicate that most of the regressors in our analysis are not good predictors of the choice of boutique lead managers. The variables *Ln(Company_age)*, *Pure_primary_dummy* and *LnUsesOfProceeds* are not statistically significant across all samples and the sample periods. The results reported in columns (2), (5) and (8) Table 17 indicate that the variable *Ln(Offer_size)* is negative and significant for the samples of Main Market listings. This suggests that the greater the size of the offering, the lower the likelihood for the issuer to select a boutique lead manager. Interestingly, the coefficient of *Ln(Offer_size)* is not statistically significant for the samples of AIM offerings, indicating that issuing firms do not consider the size of the offer when deciding to select a boutique underwriter. Furthermore, the results of Table 17 indicate that the variable *NomAd_Broker* is positive and significant (at the 1% level) for all AIM samples.

## Table 17
## Determinants of the choice of boutique lead managers

The table presents the results of the logit regression analysis, which examine the determinants of the choice of boutique and non-boutique lead managers for a sample of UK IPOs announced over the period January 1995 to December 2015. The dependent variable is *Boutique_lead*, which takes the value one if the issuing firm used a boutique investment bank as the lead manager and zero otherwise. We control for various issuer and issue-specific characteristics. The logit analysis is conducted over the full sample as well as the subsamples of Main market and AIM listings. These regressions are conducted over the sample period as well as the periods 1995-2000 and 2001-2015. The coefficients of the regressions and the z-statistics are reported. ***, ** and * denote statistical significance at 1%, 5%, and 10% levels, respectively.

| | 1995-2015 | | | 1995-2000 | | | 2001-2015 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Full sample** | **Main Market** | **AIM** | **Full sample** | **Main Market** | **AIM** | **Full sample** | **Main Market** | **AIM** |
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** | **(9)** |
| Ln(Company_age) | -0.005 | -0.023 | 0.012 | -0.022 | -0.029 | -0.037 | 0.003 | 0.049 | 0.015 |
| | (0.18) | (-0.42) | (0.29) | -(0.37) | (-0.34) | (-0.43) | (0.08) | (0.55) | (0.33) |
| Ln(Offer_size) | -0.183*** | -0.354*** | -0.007 | -0.161* | -0.385** | 0.076 | -0.246*** | -0.381* | -0.06 |
| | (4.73) | (-3.41) | (-0.1) | (-2.41) | (-3.04) | (0.56) | (-4.7) | (-2.23) | (-0.82) |
| Pure_primary_dummy | -0.007 | 0.038 | -0.159 | -0.107 | -0.058 | -0.213 | -0.135 | -0.174 | -0.237 |
| | (0.06) | (0.15) | (-1.04) | (-0.45) | (-0.17) | (-0.63) | (-0.84) | (-0.4) | (-1.27) |
| LnUsesOfProceeds | 0.075 | 0.469 | -0.046 | 0.24 | 0.89 | -0.228 | 0.113 | 0.455 | 0.087 |
| | (0.57) | (1.57) | (-0.31) | (0.93) | (1.94) | (-0.69) | (0.7) | (0.92) | (0.5) |
| Lockup_options | -0.303* | -1.02*** | -0.024 | -1.06* | -1.19 | -0.603 | -0.07 | -0.626 | 0.078 |
| | (2.48) | (-3.68) | -(0.17) | (-2.26) | (-1.78) | (-0.82) | (-0.47) | (-1.62) | (0.46) |
| NomAd_Broker | 1.04*** | 0.3 | 0.787*** | 1.12*** | | 1.09** | 1.18*** | 0.819 | 0.794*** |
| | (8.35) | (0.54) | (5.01) | (3.81) | | (3.22) | (7.62) | (1.13) | (4) |
| Prior_30day_of_sector_rtrn | 0.129 | -0.071 | 0.243 | -0.032 | -0.098 | 0.075 | 0.273 | 0.003 | 0.363 |
| | (0.75) | (-0.24) | (1.16) | (-0.14) | (-0.28) | (0.23) | (0.98) | (0) | (1.2) |
| Prior_30day_SD_of_sector_rtrn | -0.068 | -0.148 | -0.036 | 0.072 | -0.058 | 0.075 | -0.124 | -0.846* | -0.061 |
| | (0.88) | (-1.07) | (-0.38) | (0.62) | (-0.31) | (0.47) | (-0.94) | (-2) | (-0.41) |
| Intercept | -0.778** | -0.381 | -0.931** | 0.741 | 0.846 | 0.689 | -1.59*** | -2.45 | -1.33* |
| | (3.09) | (-0.8) | (-2.88) | (0.9) | (0.75) | (0.52) | (-3.49) | (-1.93) | (-2.46) |
| Industry_FE | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1480 | 457 | 1012 | 506 | 249 | 253 | 974 | 207 | 759 |
| Wald chi2 | 176 | 39.5 | 71 | 33.2 | 17.3 | 15.8 | 114 | 40 | 36 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.044 | 0.104 | 0.000 | 0.000 | 0.000 |
| PseudoR2 | 0.0985 | 0.0968 | 0.0561 | 0.0551 | 0.0699 | 0.0494 | 0.1009 | 0.1942 | 0.0409 |

The significance and the value of the coefficient of the variable denote that for AIM offerings, the issuer is more likely to hire a boutique underwriter if the underwriter can also act as the nominated advisor for the issuer. Considering that the relationship between an IPO firm and a NomAd is typically a long-term relationship, one could argue that issuers strongly consider the potential benefit of a long-term relationship when selecting a boutique underwriter. The overall results of Table 17 demonstrate that neither the characteristics of the issuer nor the specificities of the offer influence the choice of boutique lead managers in AIM offerings. This raises questions regarding whether issuing firms only consider the underwriter's intrinsic characteristics when selecting specialised lead managers on the AIM market.

### *6.3.2. 2SLS-based results*

In this section, we present the results of the 2SLS analysis of the impact of lead managers' reputation and deal specialisation on IPO settings. Specifically, we report the results of the second stage of the 2SLS approach, depicting the relationships between the instrumented variables *Top_tier_lead* and *Boutique_lead*, and the dependent variables. In all the tables of results, we do not report the results of the first stage of the 2SLS approach for brevity. The unreported results for the first stage of the 2SLS regressions indicate that the selected instrumental variables are significant across all specifications, showing a strong relationship with the instrumental variables. The F-statistics derived from the first stage regressions are above the threshold of 10% for all regressions specifications except for the sample of AIM offerings. This could be partly explained by the small number of AIM IPOs managed by top-tier banks, as presented in Table 13**.** We also report the statistics for the tests conducted for the endogeneity of the variables of interest, and validity of the chosen instruments. Therefore, the statistics for the Wu-Hausman as well as the Sargan tests are reported.

### *6.3.2.1. Impact of lead manager reputation and specialisation on underpricing*

The results of the second stage of the 2SLS regressions analysis of the impact of lead managers' reputation and deal specialisation on IPO underpricing are reported in Table 18. The dependent variable in the analysis is *Offer_to_1st_Close*, which is a proxy for underpricing, and our main variables of interest are *Top_tier_lead* and *Boutique_lead.* We control for several issuers and deal-specific characteristics that are known to affect underpricing. We also control for the year and industry fixed effects. The t-statistics are adjusted for robust standard errors. The regressions are conducted over the full sample as well as Main Market and AIM subsamples.

The unreported results for the first stage of the 2SLS regressions show that our instrumental variables are significant (at the 1% level) across all specifications. The instruments for *Top_tier_lead*, namely *Scope_lead* and *UW_foreignParent*, have positive and significant coefficients for the full sample and all subsamples. This indicates that an IPO firm is more likely to hire a top-tier lead manager when the firm has used the service of a prestigious bank in the past, and when the immediate parent of the lead manager is a foreign company. The instruments for *Boutique_lead*, namely *Experienced_boutique_lead* and *Junior_UW*, have coefficients that are significant across all samples. The variable *Experienced_boutique_lead* is positive for all specifications, suggesting that an IPO firm is more inclined to hire the services of a specialised underwriter if the firm has a history of using the services of niche banks. The coefficient of the instrument *Junior_UW* is significant and negative for all specifications, which suggest that an issuer is more likely to choose a relatively young underwriter as compared to a more established underwriter.

## Table 18

## Second stage estimations of the 2SLS regression analysis of IPO underpricing (Offer to 1st close)

This table reports the results of the second estimation of 2SLS regressions of IPO underpricing for the full sample, as well as the Main Market and AIM subsamples. The main variables of interest are *Top_tier_lead* and *Boutique_lead*. *Top_tier_lead* equals 1 if the lead manager is classified as a top-tier advisor and 0 otherwise. The second variable *Boutique_lead* equals 1 if the lead manager is defined as a boutique investment bank; 0 if otherwise. We instrument *Top_tier_lead* by the extent to which the IPO firm used the service of a prestigious bank in the past (*Scope_lead*), and the geographic localisation of the parent company of the underwriter vis-a-vis the issuing firm (*UW_foreignParent*). We instrument *Boutique_lead* by the extent to which the IPO firm used the services of a specialist boutique in the past (*Experienced_boutique_lead*) and the relative maturity of the lead manager (*Junior_UW*). For each specification, the first column presents the 2nd stage regression results with *Offer_to_1st_Close* as the dependent variable, and the variable of interest is *Top_tier_lead*. In the second column, the results of the 2nd stage regression are presented with *Offer_to_1st_Close* as the dependent variable, and the variable of interest is *Boutique_lead*. All variables used in the analysis are defined in Appendix A. The t-statistics reported in parentheses are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | **Full sample** | | **Main Market** | | **AIM** | |
|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Top_tier_lead (Instrumented) | 16.1 | | -9.85 | | 39.9 | |
| | (0.3) | | (-0.59) | | (0.11) | |
| Boutique_lead (Instrumented) | | 12.2 | | -4.05 | | 19.9* |
| | | (1.6) | | (-1.44) | | (1.98) |
| AllStar_coverage | 12.5 | | 11.5 | | 34.6 | |
| | (0.44) | | (1.53) | | 0.516 | |
| Ln(Offer_size) | -9.6*** | -7.7** | -3.05 | -3.82* | -13.1** | -11.4** |
| | (3.51) | -3.14 | -1.3 | (-2.38) | (-2.65) | (-3.68) |
| Ln(Company_age) | -5.49*** | -5.33*** | -0.178 | -0.205 | -6.97*** | -7.15*** |
| | (4.68) | (-4.34) | (-0.2) | (-0.29) | (-3.83) | (-4.6) |
| Ln(Waiting_period) | -0.726 | 0.156 | 0.864 | 0.84 | -2.62 | -1.83 |
| | (0.33) | (0.08) | (0.86) | (0.85) | (-0.71) | (-0.53) |
| PE&VC_backed_dummy | 16 | 18.8 | 3.15 | 2.6 | 30.8 | 29.8 |
| | (0.75) | (1.04) | (0.98) | (0.92) | (0.89) | (0.88) |
| Pure_primary_dummy | -23.3** | -24* | 0.015 | -0.83 | -33.9* | -34.8* |
| | (2.62) | (-2.45) | (0) | (-0.14) | (-2.65) | (-2.49) |
| Ln(1+Scd_shrs/Shrs_ofrd) | -76* | -75.8 | 1.34 | 2.29 | -142* | -150* |
| | (2.19) | (-1.92) | (0.08) | (0.13) | (-2.54) | (-2.23) |
| Prestigious_legal_adviser | 0.629 | 9.3* | 1.99 | 1.07 | 11.2 | 10.8 |
| | (0.07) | (2.21) | (0.5) | (0.34) | (1.48) | (1.48) |

| | | | | | | |
|---|---|---|---|---|---|---|
| General_corporate_purpose | 1.29 | 1.24 | 2.1 | 1.98 | -2.57 | -2.18 |
| | (0.24) | (0.21) | (0.82) | (0.8) | (-0.41) | (-0.29) |
| Lockup_options | -9.83* | -6.6 | -6.55 | -6.54* | -8.98 | -7.54 |
| | (2.39) | (-1.82) | (-1.61) | (-2.04) | (-1.67) | (-1.54) |
| Prior_month_IPO_underpricing | 0.009 | 0.009 | -0.001 | -0.002 | 0.06* | 0.061* |
| | (1.21) | (1.3) | (-1.13) | -(1.82) | (2.3) | (2.52) |
| NomAd_Broker | | -9.77 | | -11.6 | | -11.6 |
| | | (1.42) | | (-1.31) | | (-1.12) |
| Prior_30day_of_sector_rtrn | 32.3*** | 32.2** | 20.7* | 21.6* | 33.2* | 32.9** |
| | (3.33) | (3.18) | (2.2) | (2.24) | (2.44) | (2.66) |
| Prior_30day_SD_of_sector_rtrn | -1.38 | -0.969 | 7.14 | 6.91 | -6.73 | -6.42 |
| | (0.4) | (-0.26) | (1.93) | (1.95) | (-1.25) | (-1.31) |
| FTSEALL30daysreturns | -1.19 | -1.25 | -0.109 | -0.134 | -0.53 | -0.64 |
| | (0.64) | (-0.66) | (-0.14) | (-0.17) | (-0.19) | (-0.26) |
| FTSEALL30daysreturns | 7.59 | 7.45* | 1.4 | 1.1 | 12.4* | 11.3* |
| | (1.93) | (1.96) | (0.612) | (0.48) | (2.29) | (2.22) |
| Intercept | 62.1 | 55 | 14.2 | 17.9 | 76.2 | 70.4 |
| | (3.88) | (3.22) | (1.18) | (1.9) | (3.28) | (2.9) |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1469 | 1469 | 456 | 456 | 1002 | 1002 |
| R-squared | 0.0625 | 0.0632 | 0.1066 | 0.1301 | 0.0828 | 0.0863 |
| Wu-Hausman | 0.0214 | 0.8945 | 2.30893 | 11.719 | 0.0118 | 1.99056 |
| p-value (Wu-Hausman) | 0.8827 | 0.3444 | 0.1294 | 0.0007 | 0.9137 | 0.1586 |
| Sargan Chi2 | 2.1407 | 0.007 | 1.12281 | 0.0235 | 1.5026 | 0.056524 |
| p-value (Sargan) | 0.1434 | 0.9345 | 0.2893 | 0.8782 | 0.2203 | 0.8121 |

We tested the strength of these instruments and find that there are valid instruments as the F-statistics derived from the first stage regressions are above the threshold of 10%, except for the sample of AIM offerings managed with top-tier as the dependent variable. The statistics for the Sargan tests reported in Table 18 indicate that the sets of instruments used do not violate the over-identifying restriction in all the subsamples as the p-value for the Sargan tests is greater than 0.05.

Columns (1), (3) and (5) Table 18 indicate that the instrumented variable *Top_tier_lead* is positive for the full sample and the sample of AIM offerings but negative for Main Market listings. However, the variable is not statistically significant across all three samples.

These results suggest that top-tier lead managers do not influence the underpricing of IPOs, which contrasts with our expectations for hypotheses H9a and H9b**.** The hypotheses generally posit that the reputation of the lead manager should significantly impact the level of underpricing witnessed by the IPO firm. Columns (2) and (6) show that the instrumented *Boutique_lead* is positive for the full sample and the AIM sample but only significant (at the 10% level) for AIM offerings. This is consistent with hypothesis H10a, which posits that issuers care more about non-price dimensions, which are often associated with the services of specialised underwriters and are willing to forgo IPO proceeds in exchange for these non-price dimensions.

The 2SLS regression analysis of IPO underpricing also allows us to examine the impact of issuer, deal and market conditions on underpricing. For instance, the variable *Ln(Offer_size)* is negative across all specifications and highly significant (at the 5% level) for the full sample and the subsample of AIM IPOs, indicating that the greater the size of the IPO, the lower is the level of underpricing. In addition, the results in Table 18 indicate that the age of the IPO firm is negatively related to the underpricing as the coefficient of *Ln(Company_age)* is negative in

all three samples and significant (at the 1% level) for the full and AIM samples. The reaming results reported in Table 18 indicate a marginal impact of the regressors on IPO underpricing.

### *6.3.2.2. Impact of lead manager reputation and specialisation on investor attention*

#### *6.3.2.2.1. Impact on the number of analysts*

Table 19 reports the results of the tests we conducted with regards to the strength of the instruments used in the 2SLS. The statistics for the Sargan tests reported in Table 19 indicate that the sets of instruments used do not violate the over-identifying restriction in all the subsamples as the p-value from the Sargan tests is greater than 0.05.

Columns (1), (3) and (5) Table 19 show that the instrumented variable *Top_tier_lead* is not significant across all samples. These results do not support hypothesis H11a and indicate that the reputation of the lead managers does not influence the investor attention post-IPO as measured by the number of research analysts covering the IPO firm in the 12 months following the IPO. Inversely, columns (2) suggest that *Boutique_lead* is negative and significant (at the 1% level) for the full sample, denoting that specialised lead managers are not able to generate research coverage post-IPO for the issuing firm. The results of Table 19 also indicate that issuers of large offerings and with a higher book value of assets are followed by a greater number of financial analysts irrespective of the reputation and specialisation and of the market it is listed on. The variables *Ln(Offer_size)* and *Ln(Total_asset)* are positive and significant across all specifications for the full and Main Market samples. Moreover, the results show that offerings managed by syndicates are followed by a greater number of analysts but mainly for Main market offerings, given that the estimates *Multiple_leadmanagers* are positive and significant for the full sample and the sample of Main Market IPOs.

**Table 19**

**Second stage estimations of the 2SLS regression analysis of the number of financial analysts covering the IPO firm**

This table reports the results of the second estimation of 2SLS regressions of IPO, the number of research analysts covering the IPO firm post-IPO, for the full sample, as well as the Main Market and AIM subsamples. The main variables of interest are *Top_tier_lead* and *Boutique_lead*. The first is equal to 1 if the lead manager is classified as a top-tier advisor and 0 otherwise. The second variable *Boutique_lead* equals 1 if the lead manager is defined as a boutique investment bank; 0 if otherwise. We instrument *Top_tier_lead* by the extent to which the IPO firm used the service of a prestigious bank in the past (*Scope_lead*), and the geographic localisation of the parent company of the underwriter vis-a-vis the issuing firm. (*UW_foreignParent*). We instrument *Boutique_lead* by the extent to which the IPO firm used the services of a specialist boutique in the past (*Experienced_boutique_lead*), and the relative maturity of the lead manager (*Junior_UW*). For each specification, the first column presents the 2nd stage regression results with *NumAn* as the dependent variable, and the variable of interest is *Top_tier_lead*. In the second column, the results of the 2nd stage regression are presented with *NumAn* as the dependent variable, and the variable of interest is *Boutique_lead*. All variables used in the analysis are defined in Appendix A. The t-statistics reported in parentheses are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | **Full sample** | | **Main Market** | | **AIM** | |
|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Top_tier_lead (Instrumented) | 1.04 | | -1.65 | | 2.84 | |
| | (1.07) | | (-1.72) | | (1.13) | |
| Boutique_lead (Instrumented) | | -0.335*** | | -0.278 | | 0.042 |
| | | (3.53) | | (-1.04) | | (0.84) |
| Ln(Offer_size) | 0.464*** | 0.525*** | 1.28*** | 1.1*** | 0.06 | 0.113* |
| | (4.63) | (8.28) | (6.33) | (6.67) | (0.72) | (2.29) |
| Ln(Company_age) | 0.021 | 0.024 | 0.161 | 0.134 | 0.019 | 0.008 |
| | (0.63) | (0.72) | (1.91) | (1.66) | (0.93) | (0.5) |
| PE&VC_backed_dummy | 0.032 | 0.131 | 0.074 | -0.16 | 0.198 | 0.207 |
| | (0.14) | (0.66) | (0.19) | (-0.45) | (1.42) | (1.67) |
| Pure_primary_dummy | 0.026 | 0.016 | 0.204 | 0.171 | -0.046 | -0.062 |
| | (0.26) | (0.16) | (0.7) | (0.6) | (-0.82) | (-1.2) |
| Technology_sector_dummy | 0.109 | 0.179 | 0.005 | -0.32 | 0.277* | 0.215* |
| | (0.57) | (0.94) | (0.01) | (-0.64) | (2.39) | (2.16) |
| Underpricing (Offer_to_1st_Close) | 0.001 | 0.001 | 0.005 | 0.004 | 0.000 | 0.000 |
| | (0.81) | (1.04) | (0.62) | (0.48) | (0.74) | (1.04) |
| Reciprocal_offer_price | 0.687* | 0.793* | 1.22 | 0.579 | -0.24* | -0.201 |
| | (2.1) | (2.36) | (1.03) | (0.45) | (-2.11) | (-1.9) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Ln(Total_asset) | 0.27*** | 0.29*** | 0.341*** | 0.321** | 0.05 | 0.053 |
| | (4.21) | (4.74) | (3.53) | (3.22) | (1.38) | (1.89) |
| Multiple_leadmanagers | 0.974* | 1.23*** | 1.91** | 1.06* | -0.01 | 0.021 |
| | (2.09) | (4.06) | (3.04) | (2.25) | (-0.05) | (0.12) |
| Intercept | -0.977*** | -0.975*** | -3.54*** | -3.1*** | -0.391* | -0.505*** |
| | (4.36) | (-4.9) | (-5.31) | (-5.22) | (-2.18) | (-4.02) |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1167 | 1167 | 395 | 395 | 767 | 767 |
| R-squared | 0.4692 | 0.457 | 0.4565 | 0.485 | 0.009 | 0.1761 |
| Wu-Hausman | 0.06115 | 0.9443 | 2.81054 | 1.455918 | 2.1482 | 0.346527 |
| p-value (Wu-Hausman) | 0.8035 | 0.3314 | 0.0945 | 0.2278 | 0.1432 | 0.5561 |
| Sargan Chi2 | 4.9815 | 9.0737 | 1.3536 | 0.53391 | 0.62251 | 0.715354 |
| p-value (Sargan) | 0.0256 | 0.0026 | 0.2446 | 0.465 | 0.4301 | 0.3977 |

Additionally, the company age and the level of underpricing do not appear to affect the number of analysts following the stocks. The estimates of *Ln(Company_age)* and *Underpricing(offer to first close)* are not significant at any conventional across all samples.

#### *6.3.2.2.2. Impact on share turnover ratio*

The statistics for the Sargan tests reported in Table 20 indicate that the sets of instruments used do not violate the over-identifying restriction in all the subsamples as the p-value from the Sargan tests is greater than 0.05.

Columns (1), (3) and (5) Table 20 show that the instrumented variable *Top_tier_lead* is negative and not significant across all samples. These results do not support hypothesis H11a and suggest that the reputation of the lead manager does not influence the investor attention post-IPO as measured by the issuer's share turnover ratio in the 12 months following the IPO. In the same vein, columns (2), (4) and (6) indicate that *Boutique_lead* is positive across all samples but not statistically significant (at the conventional levels), denoting that specialised lead managers are not able to generate a greater share turnover ratio. The results of Table 20 also indicate that the size of the offerings is a significant factor of share turnover ratio as the variable *Ln(Offer_size)* is positive and highly significant (at the 5% level) across all specifications. Moreover, the results show that offerings from firms backed by venture capitalists or private equity firms witness a greater share turnover ratio on the Main Market. The variable *PE&VC_backed_dummy* is positive and significant for the full and Main Market samples. In addition, columns (3) and (4) indicate that the variable Technology_sector_dummy is positive and significant for all specifications of the sample of Main Market offerings. This suggests that IPO firms in the technology sector witness a greater share turnover ratio post-IPO when listing on the Main Market.

**Table 20**

**Second stage estimations of the 2SLS regression analysis of share turnover ratio (Share_turnover_ratio)**

This table reports the results of the second estimation of 2SLS regressions of IPO the number of research analysts covering the IPO firm post-IPO, for the full sample, as well as the Main Market and AIM subsamples. The main variables of interest are *Top_tier_lead* and *Boutique_lead*. *Top_tier_lead* equals 1 if the lead manager is classified as a top-tier advisor and 0 otherwise. The second variable *Boutique_lead* equals 1 if the lead manager is defined as a boutique investment bank; 0 if otherwise. We instrument *Top_tier_lead* by the extent to which the IPO firm used the service of a prestigious bank in the past (*Scope_lead*), and the geographic localisation of the parent company of the underwriter vis-a-vis the issuing firm. (*UW_foreignParent*). We instrument *Boutique_lead* by the extent to which the IPO firm used the services of a specialist boutique in the past (*Experienced_boutique_lead*), and the relative maturity of the lead manager (*Junior_UW*). For each specification, the first column presents the 2nd stage regression results with *Share_turnover_ratio* as the dependent variable, and the variable of interest is *Top_tier_lead*. In the second column, the results of the 2nd stage regression are presented with *Share_turnover_ratio* as the dependent variable, and the variable of interest is *Boutique_lead*. All variables used in the analysis are defined in Appendix A. The t-statistics reported in parentheses are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | **Full sample** | | **Main Market** | | **AIM** | |
|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Top_tier_lead (Instrumented) | -0.396 | | -0.461 | | -2.02 | |
| | (-0.58) | | (-0.9) | | (-0.66) | |
| Boutique_lead (Instrumented) | | 0.06 | | 0.053 | | 0.149 |
| | | (0.72) | | (0.28) | | (1.6) |
| Ln(Offer_size) | 0.273*** | 0.246*** | 0.298*** | 0.244*** | 0.231** | 0.19*** |
| | (4.4) | (7.32) | (3.69) | (4.02) | (2.93) | (4.2) |
| Ln(Company_age) | -0.022 | -0.023 | -0.015 | -0.023 | -0.026 | -0.024 |
| | (1.12) | (-1.17) | (-0.55) | (1.66) | (0.93) | (0.5) |
| PE&VC_backed_dummy | 0.311** | 0.263** | 0.328* | 0.26** | 0.19 | 0.173 |
| | (2.62) | (3.29) | (2.45) | (2.77) | (1.36) | (1.32) |
| Technology_sector_dummy | 0.266 | 0.243 | 0.968** | 0.873** | -0.134 | -0.0972 |
| | (0.26) | (0.24) | (1) | (0.87) | (-0.13) | (1.32) |
| Underpricing (Offer_to_1st_Close) | 0.001 | 0.001 | 0.003* | 0.003 | 0.001 | 0.001 |
| | (1.27) | (1.28) | (2.11) | (1.93) | (1.36) | (1.3) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Reciprocal_offer_price | 1.33** | 1.28** | 3.38*** | 2.97** | 1.15* | 1.1* |
| | (2.87) | (2.91) | (3.36) | (2.85) | (2.54) | (2.53) |
| Ln(Total_asset) | 0.0218 | 0.0144 | 0.0387 | 0.0385 | -0.0289 | -0.036 |
| | (0.77) | (0.55) | (1.19) | (1.14) | (-0.7) | (-0.92) |
| Prior_month_IPO_underpricing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | (-0.2) | (-0.39) | (-0.2) | (-0.97) | (-0.02) | (0.16) |
| Multiple_leadmanagers | 0.236 | 0.121 | 0.317 | 0.133 | -0.13 | -0.112 |
| | (0.9) | (1.19) | (1.18) | (1.09) | (-0.78) | (-0.66) |
| Intercept | -0.0507*** | -0.05*** | -0.049*** | -0.049*** | -0.035*** | -0.038*** |
| | (-24.8) | (-26) | (-18.2) | (-13.1) | (-16.9) | (-19) |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1076 | 1076 | 313 | 313 | 763 | 763 |
| R-squared | 0.1491 | 0.1598 | 0.2766 | 0.2761 | 0.0208 | 0.0570 |
| Wu-Hausman | 0.627957 | 0.30452 | 0.27277 | 0 | 0.418675 | 0.032912 |
| p-value (Wu-Hausman) | 0.4283 | 0.8615 | 0.6019 | 0.9924 | 0.5178 | 0.856 |
| Sargan Chi2 | 0.09162 | 2.3414 | 3.21837 | 2.722 | 0.0995 | 1.44907 |
| p-value (Sargan) | 0.7621 | 0.126 | 0.0728 | 0.099 | 0.7524 | 0.2287 |

### *6.3.2.3. Impact of lead manager reputation and specialisation on waiting periods*

In this section, we report the results of the negative binomial regression analysis of IPO waiting periods. We conduct the regression analysis for the full sample and the subsamples of Main Market and AIM offerings, for which the results are presented in Table 21.

The results reported in columns (1), (3) and (5) Table 21 indicate that the variable *Top_tier_lead* is positive for all samples but only significant (at the 1% level) for the full sample and the sample of AIM offerings. The results for the AIM offerings indicate a positive relationship between the reputation of lead managers' reputation and IPO waiting periods. These results are consistent with hypothesis H12a, which stipulates that top-tier lead managers who want to preserve their top-tier status and avoid any potential legal liabilities will take a more extended period of time to take IPO firms public diligently and appropriately. On the other hand, the variable *Boutique_lead* is negative across all samples but only significant (at the 10% level) for the full sample. The significance of the variable for the full sample suggests that the specialisation of an investment bank marginally influences the waiting period of IPOs. This would give some support to hypothesis H12b, which generally posits that boutique lead managers should be associated with shorter waiting periods. However, the significance of the variable rather suggests a marginal impact of underwriter reputation on waiting periods.

The results in Table 21 further show that deal-specific characteristics also influence the waiting period of IPOs. Columns (1), (3) and (5) indicate that Ln(Offer_size) is positive for all three samples but highly significant (at the 1% level) for Main Market offerings managed by a top-tier investment bank, suggesting that the greater size of the offerings, the greater is the waiting period.

**Table 21**
**Impact of lead managers' reputation and specialisation on IPO waiting period**

This table presents the results of the negative binomial regression analysis of the *Waiting_period*, which is defined as the number of days spent in registration from the date of the initial prospectus to the final offering of new shares to public investors, as reported by Refinitiv (Number of days in Registration). The regressions examine the impact of underwriter reputation and specialisation on waiting period, controlling for various market, issuer and issue-specific characteristics. The regressions are conducted over four specifications over the full sample, and the samples of IPOs listed on the AIM and the Main Market. For the first specification, *Top_tier_lead* is the main variable of interest in the analysis. In the second specification, *Boutique_lead* is the variable of interest. The regression coefficients are presented, and z-statistics reported in parentheses are based on robust standard errors. All regressions control for year and industry fixed effects whose coefficients are presented. ∗∗∗ ∗∗ and ∗ denote significance at 1%, 5% and 10% levels, respectively. All variables are explained in Appendix A.

| | Full sample | | Main Market | | AIM | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Top_tier_lead | 0.956*** | | 0.356 | | 1.65*** | |
| | (6.9) | | (1.9) | | (5.1) | |
| Boutique_lead | | -0.155* | | -0.091 | | -0.044 |
| | | (2.4) | | -(0.65) | | (-0.64) |
| Ln(Offer_size) | 0.052* | 0.126*** | 0.337*** | 0.375 | -0.056 | 0.002 |
| | (2.2) | (5.7) | (6.3) | (7.6) | (-1.7) | (0.06) |
| Ln(Company_age) | -0.022 | -0.024 | 0.009 | 0.014 | -0.018 | -0.028 |
| | (1.2) | (-1.3) | (0.27) | (0.39) | (-0.89) | (-1.3) |
| PE&VC_backed_dummy | 0.045 | 0.113 | 0.152 | 0.199 | 0.054 | -0.013 |
| | (0.47) | (1.2) | (0.93) | (1.2) | (0.45) | (-0.11) |
| Pure_primary_dummy | -0.307*** | -0.329*** | 0.071 | 0.061 | -0.419*** | -0.418*** |
| | (4) | (-4.3) | (0.41) | (0.35) | (-4.9) | (-4.8) |
| Ln(1+Scd_shrs/Shrs_ofrd) | -1.58*** | -1.28** | -0.603 | -0.662 | -2.21*** | -1.25* |
| | (3.6) | (-2.9) | (-0.75) | (-0.83) | (-4) | (-2.3) |
| LnUsesOfProceeds | 0.112 | 0.112 | 0.414** | 0.432** | 0.093 | 0.098 |
| | (1.8) | (1.8) | (3) | (3.1) | (1.4) | (1.4) |
| Technology_sector_dummy | -0.216 | -0.14 | 0.556* | 0.634** | -0.452*** | -0.482*** |
| | (1.8) | (-1.2) | (2.4) | (2.7) | (-3.4) | (-3.5) |
| Multiple_leadmanagers | 0.089 | 0.468** | -0.114 | -0.035 | -2.17* | -0.693 |
| | (0.48) | (2.8) | (-0.49) | (-0.16) | (-2) | (-0.65) |
| Prestigious_legal_adviser | -0.053 | 0.038 | 0.042 | 0.063 | -0.065 | -0.149 |
| | (0.42) | (0.3) | (0.21) | (0.31) | (-0.41) | (-0.93) |
| Lockup_options | 0.353*** | 0.432*** | 0.394* | 0.452** | 0.336*** | 0.39*** |
| | (5.4) | (6.6) | (2.4) | (2.7) | (5) | (5.7) |
| Prior_month_IPO_underpricing | 0.000** | 0.000** | 0.000** | 0.000** | 0.000 | 0.000 |
| | (3.1) | (2.8) | (3.6) | (3.5) | (0.5) | (0.14) |
| Intercept | 1.96*** | 1.95*** | 1.03*** | 0.986*** | 1.76*** | 1.72*** |
| | (16) | (16) | (3.5) | (3.3) | (13) | (12) |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1524 | 1524 | 474 | 474 | 1035 | 1035 |
| chi2 | 424 | 377 | 240 | 237 | 199 | 161 |
| Log likelihood | -6228.438 | -6252 | -1933.75 | -1935.38 | -4136.91 | -4156.01 |
| Prob > Chi2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

. In addition, columns (1), (2), (5) and (6) show that *Pure_primary_dummy* is negative and highly significant for the full sample as well as the sample of AIM listings, which indicate IPOs, where only primary shares are offered, take significantly less time to be completed. Furthermore, the results in Table 21 indicate that LnUsesOfProceeds is positive across all specifications but only significant (5% level) for the sample of Main Market listings. This suggests that there is a significant and positive relationship between the number of disclosed uses of IPO proceeds and the waiting period. Moreover, it appears that IPOs from companies in the technology sector take more time to be completed when listing on the Main Market but less time when listing on the AIM. Columns (3) and (4) indicate that the variable *Technology_sector dummy* is positive and significant (at the 10% level) for Main Market IPOs, whereas columns (5) and (6) indicate that the variable is negative and highly significant (1% level) for AIM offerings. The reported results in Table 21 also indicate that the variable *Lockup_options* is positive and highly significant across all specifications except for column (3). These results largely suggest that IPOs where there is a lockup option agreement between the underwriters and the insider of the IPO firms usually significantly increase the length of the waiting period.

## *6.4. Robustness tests*

### *6.4.1. Initial returns*

In another effort to test the reliability of our results, we rerun our linear regression analysis using two alternative windows for initial-day returns (Offer to week 1, Offer to month 1). We measure Offer to week 1 as the percentage change between the offer price and the closing price on the first month following the IPO. The results reported respectively in Tables C4 and C5 of Appendix C, do not change our initial findings.

### *6.4.2. Top-tier lead managers classification*

The results we obtained from our analysis of the impact of top-tier banks on IPO settings, especially underpricing and investors' attention, are based on a top-10 classification of top-tier underwriters based on the amount they are credited for the deals in which they were involved. To test the reliability of the results, we run our analysis of the impact of top-tier lead managers on IPO underpricing and investors' attention using a top-5 and a top-8 cut-off of top-tier underwriters, respectively. In other words, we regress our measures of investor attention and initial returns against the two alternative versions of the top-tier dummy, controlling for various bidder and deal-specific characteristics. The unreported results of these tests are qualitatively consistent with the findings obtained above.

### *6.4.3. Negative binomial regression analysis of the number of financial analysts*

Our initial analysis of the impact of the lead manager's reputation and specialisation on the number of financial analysts covering the stock at the end of the fiscal year following the IPO was conducted using a 2SLS regression analysis, for which the results were presented in Table 10. A strand of the literature suggests that OLS regression can produce unreliable results for analysis where the dependent variable could be considered as count data. Therefore, to test our results' reliability, we run the analysis using negative binomial regressions. The unreported results of this analysis are qualitatively consistent with our original findings.

## *6.5. Summary*

Throughout this chapter, we presented the results of our analysis of the impact of top-tier and boutique lead managers on IPO settings conducted using 2SLS regressions and negative binomial regressions. The results from our analysis indicate that top-tier lead managers are not able to influence underpricing witnessed by their corporate clients. In the same line, we find that boutique lead managers are not able to significantly influence underpricing except for offerings listed on the AIM, where they are associated with a marginal decrease of IPO underpricing. The results indicate that underpricing incurred by IPO firms is mainly explained by deal characteristics, specifically the size of the offer and the age of the issuing company.

In addition, we find that neither top-tier nor boutique lead managers can significantly influence investor attention post-IPO. For instance, our results indicate that top-tier and boutique lead managers are not associated with an increase in the number of research analysts following the IPO firm in the 12 months following the offering date. Similarly, neither boutique nor top-tier underwriters are associated with an increase of issuer share turnover ratio in the year following the IPOs.

Concerning the impact of the reputation and specialisation of lead managers on the waiting period of IPOs, we find top-tier lead managers have a significant influence on waiting periods, especially in AIM offerings, where they are associated with an increase in waiting periods. In addition, the boutique underwriters can affect waiting periods as they are associated with a decrease in the waiting periods for the full sample of IPOs. However, their impact is somewhat marginal. The results of the negative binomial regressions analysis of waiting periods indicate that the size of the offer, the percentage of secondary shares and the use of lockup options significantly influence the waiting periods in the Main Market as well as the AIM

# Chapter 7: Conclusion

## *7.1. Introduction*

This research thesis was structured around an essay that investigated two related research topics: (1) Impact of lead managers' reputation and specialisation on M&A outcomes, (2) Impact of lead manager's reputation and specialisation on IPO settings. The research thesis also presents a substantial review of the literature on M&A and IPO settings, with an emphasis on the role that investment banks' characteristics play in explaining the performance of bidding firms in M&A and issuing firms in IPO transactions.

## *7.2. Summary of key findings*

We examined the impact of the reputation and specialisation of financial advisors on M&A outcomes using a sample of UK M&A announced between 2000 and 2015. We find that top-tier advisors are not able to enhance bidders' wealth in public, private or concentric acquisitions. We also find that they take substantially more time to complete public acquisitions than other advisors. Besides, we find that bidders using boutique advisors witnessed a marginal decrease in shareholders' wealth of about 2.6% when acquiring targets operating in a different industry. This decrease is marginally explained by the specialisation of boutique advisors and indicates they do not possess the intrinsic skills which would enable them to capture positive returns for acquiring firms. However, their deal specialisation does not enable them to influence the deal time to resolution. The findings suggest that top-tier financial advisors have inherent features, but these features are not reflected in the performance of acquiring firms. Overall, the findings suggest that ceteris paribus, top-tier investment

advisors have some value to bidders, whereas boutique financial advisors add little to no value to bidding firms.

We also examined the impact of investment banks acting as IPO lead managers on IPO settings. Specifically, we study the impact of the reputation and specialisation of the lead manager on IPO underpricing, investor attention and the waiting period. Using a sample of UK IPOs between 1995-2015, we find that top-tier lead managers' reputation does not influence IPO initial returns. In contrast, boutique underwriters are associated with greater underpricing, which is marginally explained by their specialisation. The latter findings provide some support to the hypotheses that boutique lead managers substantially underprice their IPOs to compensate investors for investing in risky offerings. We also find that neither top-tier nor boutique lead managers are able to generate investor attention in the form of the number of financial analysts covering the stock of the IPO firm following the IPO. The evidence suggests that prestigious top-tier and specialist boutique lead managers do not influence the attention investors give to issuing firms post-IPO. Moreover, we find that top-tier banks take more time to take the firm public than their other counterparts, whereas boutique investment banks have a marginal influence on the IPO waiting period. The findings suggest that, while top-tier lead managers have attributes that benefit issuing firms, issuers with boutique banks do not benefit from their expertise and deal specialisation during IPOs.

Taken together, the findings indicate that in the UK context and despite the higher fees they typically charge, clients of top-tier banks benefit significantly from their quality, skills, and abilities. However, it appears firms that seek the services of specialist investment banks do not enjoy any substantial benefits other than their ability to complete the deal process. One could argue, ceteris paribus, when facing the choice of an investment bank in M&A and IPOs, that firms should not “fall” for specialist boutique investment banks and should instead pursue top-tier banks and their intrinsic qualities.

## *7.3. Limitations and suggestions for future research*

As we underlined that this research thesis has notable contributions, we also recognise some limitations associated with this research project. For instance, in chapter 5, we evaluate the added value of the financial advisors in M&A, focusing on the bidder's returns and deal time to resolution. We acknowledge that the added value could be studied from several perspectives, notably acquisition premium, advisory fees or even synergy gains, considering that prior studies have examined advisor performance from these perspectives. The research project did not explore the added value of financial advisors from these perspectives due to limited data from the available databases. Data on the deal's premiums, advisory fees or synergies are limited for UK acquisitions. This could be explained by the absence of disclosure requirements with regards to specific information such as advisory fees. This hurdle does not allow us to investigate further the added value of boutique and top-tier advisors to bidding firms. Future research could re-examine the added value of boutique and top-tier advisors, focusing on the perspectives not explored in these studies using available and hand-collected data. For example, it will be interesting to investigate the impact of financial advisors' reputation and specialisation on investor attention. Investor attention has been used as a measure of performance in similar studies on IPOs and could be observed in the context of M&As. Besides, existing studies have not paid attention to the role the acquirer's exchange has in influencing the bidder's performance. Given the specificities of the Main Market and the AIM, one could examine the bidder's and target's differential performance in each market. Moreover, one could focus on public M&A deals and examine same-exchange acquisitions and acquisitions where bidder and target are listed on different exchanges.

Chapter 6 explored the impact of the reputation and specialisation of the lead manager on IPO settings, including underpricing and investor attention. We find that boutique lead managers

add little to no value to IPO firms. An analysis of more IPO settings could have provided evidence of the added value of boutique lead managers. For instance, it could be interesting to evaluate the lead manager's ability to generate interest from investors during the pricing process in terms of the level of subscription. Additionally, researchers may find it relevant to study the added value of IPO lead managers in IPOs, focusing on offerings made through placing. Placings tend to be cheaper and easier to conduct compared to other types of offerings. Placements are quite popular in UK markets, especially on the AIM, and do not require significant efforts from the lead managers.

Future studies could further examine the added value of the reputation and the specialisation of an investment bank in the context of follow-on offerings, with a particular focus on follow-ons from firms listed on the AIM. These firms typically have the same Nomad (who often acts as the broker) for all corporate actions throughout the firm's life on the exchange. Besides, future studies could further examine the concept of boutique lead managers and develop alternative measures of lead managers' specialisation. Future research could follow a similar approach to Graham et al. (2017) and determine lead manager industry specialisation using the RCA or the ARCA index in the IPO market. Researchers' ability to further investigate the implications of the reputation and specialisation of investment banks on the outcomes of UK M&As IPOs and other corporate actions would mainly depend on data availability. Accessing valuable UK data is a significant hurdle for researchers, who often have to hand collect a large amount of data to conduct studies with significant contributions.

# Appendices

## Appendix A: Variable definitions

### *M&A*

***Dependent variables and financial advisor variables***

| Variables | Definition |
|---|---|
| Completed deals | Equals to 1 if the acquisition was completed, and 0 otherwise. |
| Time_to_resolution | Number of calendar days between the announcement date and effective date (Completion or withdrawal) as reported by Bloomberg M&A Worldwide. |
| Top_tier_adv | Equals 1 for transactions advised by one of the top-10 financial advisors according to the value of deals advised by each bank during the sample period (2000 to 2015), and 0 otherwise. |
| Boutique_adv | Equals 1 if the acquirer is advised by a financial advisor defined as "boutique" based on its specialisation in the overall M&A market, and 0 otherwise. |
| Scope | Equals 1 if the acquirer used the service of a top-tier (top-10) bank for either banking services, M&A, equity, or debt offerings in the five-year period prior to the deal announcement. Equals 2 if the acquirer used the service of a top-tier (top-10) advisor for at least two of these activities in the five-year period prior to the deal announcement. It takes the value of 3 if the acquiring firm used a top-tier bank for three types of services, and 4 if the bidder used the services of a top-tier bank for all four types of activities. It takes the value of 0 if the acquiring firm did not use the |

| | |
|---|---|
| | services of a top-tier bank in the five-year period prior to the deal being announced. Data are collected from Bloomberg terminal. |
| Industry_reach | Equals 1 the if the advisor of the acquirer has an RCA index greater than one in the target, and the acquirer industries, 0 otherwise. RCA is calculated over a three-year period prior to the deal announcement. RCA is computed based on M&A data derived from Bloomberg Terminal. |
| Acq_Industry_specialist | Equals 1 if the core businesses of the acquirer's advisor include corporate advisory services, and the advisor is an industry specialist in the acquirer industry based on the ARCA index; 0 otherwise. We assess the advisor core businesses using FAME, the company accounts and the company website. |
| Experienced_niche_adv | Equals 1 if the acquiring firm hired a boutique investment bank as a financial advisor in at least two M&A transactions within the 3 years before the deal announcement. Equals 2 if in the 3 years prior to the deal announcement, the bidder used a boutique bank in at least two M&A deals and one equity offering. The variable takes the value of 0 if, during the 3 years preceding the deal announcement, the acquiring firm did not select a boutique bank as a financial advisor in at least two M&A deals and at least for one equity offering. |
| CAR (-2, + 2) | Bidding firm's cumulative abnormal return of in the 5-day event window (-2, +2) where 0 is the announcement day. The returns are calculated using the CAPM market model for which the parameters are estimated over the period starting 175 days and ending 41 days prior to the announcement. |

## *Acquirer's specific variables*

| | |
|---|---|
| Ln(Acquirer_asset) | Bidder's book value of assets in £ million, adjusted for inflation as reported at the fiscal year-end prior to the deal announcement date from DataStream. |
| Market-to-book | Bidder's market-to-book ratio as reported 4weeks prior to the announcement of the acquisition from DataStream |
| Leverage | Total debt, divided by the total value of common equity value at the fiscal year-end prior to the acquisition announcement from DataStream. |
| Sigma | Standard deviation of market-adjusted daily returns of the acquiring firm's stock from DataStream over the period beginning 205 and 6 days before the deal announcement. |
| Run_up | Market-adjusted buy-and-hold return of the bidding firm's stock over the period beginning 170 and ending 6 days prior to the deal announcement. |
| Beta | Bidder's stock's volatility in relation to the volatility of the market from DataStream as reported 4 weeks prior to the announcement of the acquisition. |
| Tobins_Q | Bidder's market value of assets divided by the book value of assets for the fiscal year prior to the acquisitions from DataStream. The market value of assets is equal to book value of assets plus the market value of common stock minus book value of common stock minus balance sheet deferred taxes. |

## *Deal specific variables*

| | |
|---|---|
| Ln(Deal_value) | Natural logarithm of the value of the transaction adjusted for inflation in £ million. Value of transactions is from Bloomberg M&A worldwide database |

| | |
|---|---|
| Public_deal | Equals 1 for acquisitions where the target status is “Public”; and 0 otherwise. |
| Private_deal | Equals 1 for acquisitions where the target status is “Private”; and 0 otherwise. |
| Subsidiary_deal | Equals 1 one for acquisitions where the target status is “Subsidiary”, 0 otherwise. |
| Relative_size | Value of the transaction from Bloomberg M&A Worldwide, divided by the bidder’s market capitalization 4 weeks prior to the announcement from DataStream |
| Friendly_deal | Equals 1 where the nature of the bid is defined as “Friendly” by Bloomberg M&A Worldwide; and 0 otherwise |
| Tenderoffer_deal | Equals 1 for transactions where the deal attribute is defined as “Tender offer”, zero otherwise |
| Concentric_deal | Equals 1 for deals where the bidder and the target operate in the same industry sector, and 0 otherwise. Industry sectors are defined by the Bloomberg Industry Classification Standard (BICS). |
| Cash_deal | Equals to 1 if the consideration offered by the acquirer, was solely cash; and 0 otherwise |
| Includstock_deal | Equals to 1 if the consideration offered by the acquirer deals includes stocks, zero otherwise |

## *IPO*

### *Dependant and underwriter variables*

| | |
|---|---|
| Offer_to_1st_Close | The percentage change between the IPO offer price and the first-trading day closing price from Bloomberg database |
| Offer_to_week1 | The percentage change between the IPO offer price and the closing price on the seventh trading day from Bloomberg database. |
| Top_tier_lead | Equals 1 for transactions managed by one of the top-10 lead managers according to their market share and the amount credited for the deals managed by each bank over a three-year rolling window during the sample period (1990 to 2015), zero otherwise. Market share and the amount credited are derived from Bloomberg database. |
| Boutique_lead | Equals 1 for transactions for which the lead manager is a boutique investment bank, zero otherwise. |
| Scope_lead | Equals 1 if the issuing firm used the service of a top-tier (top-10) underwriter for either banking services, M&A, equity, or debt offerings in the five-year period prior to the IPO. Equals 2 if the issuing firm used the service of a top-tier (top-10) underwriter for at least two of these activities in the five-year period prior to the IPO. It takes the value of 3 if the IPO firm used a top-tier bank for three types of services, and 4 if the issuer used the services of a top-tier bank for all four types of activities. It takes the value of 0 if the IPO firm did not use the services of a top-tier bank in the five-year period prior to the IPO. Data are collected from Bloomberg terminal. |

| | |
|---|---|
| UW_foreignParent | Equals 1 if the immediate parent company of the underwriter is a financial institution incorporated in a country different than the country in which the underwriter is incorporated, and 0 otherwise. We hand collect data on the company's immediate parent from Eikon REFINITIV, OSIRIS and Orbis BankFocus. |
| Expert_boutique_leadmanager | Equals 1 if, within 3 years prior to the IPO, the issuing firm used the services of a boutique investment bank for at least two M&A transactions, and 0 otherwise. Data are collected from Bloomberg terminal. |
| Junior_UW | Equals 1 if the lead manager is considered to be a "Junior underwriter", and 0 otherwise. We define underwriters as junior if their age (based on date founded or incorporation date) is lower than the median underwriter age. We hand collect data on the lead manager to obtain the date the firm was founded or incorporated from Company House, Eikon REFINITIV, Orbis Bank Focus, and Osiris. |
| AllStar_coverage | Equals 1 if the issuing firm stock is covered by a research analyst from one of the top-tier (top 10) investment banks, within 12 months of the IPO listing date. Data on analysts coverage is obtained from Institutional Brokers' Estimate System (I/B/E/S). |
| Ln(Share_turnover_ratio) | The natural logarithm of the average monthly shares traded as a percentage of total shares outstanding over the one-year period after the IPO from Thomson Reuters DataStream. |
| NumAn | Number of financial analysts following the stock at the end of the fiscal year following the issue as reported by Institutional Brokers' Estimate System (I/B/E/S). |

| | |
|---|---|
| Ln(Waiting_period) | The natural logarithm of Waiting_period, where Waiting_period is the number of calendar days from filing date to issue effective date (Number of Days in registration) from Refinitiv Eikon. |

## *Issue-issuers specific variables*

| | |
|---|---|
| Ln(Offer_size) | The natural logarithm of Offer_size, where Offer_size represents the total value of the offer in million GBP calculated as the product of the offer price by the number of shares offered from Bloomberg and adjusted for inflation. |
| Ln(Company_age) | The natural logarithm of 1 plus Company_age, where Company_age is the number of years from the firm's founding date to the time of the offering. When the founding date is not available, then the incorporation date is used. |
| Ln(Total_asset) | The natural logarithm of Total_asset, where Total_asset is the issuer's book value of total assets as last reported prior to the IPO issue date and adjusted for inflation. The data are derived from Bloomberg and the company accounts from the company house. |
| PE&VC_backed_dummy | Equals 1 for transactions where at least one shareholder of the issuing firm is a venture capital firm or a private equity firm, 0 otherwise. |
| Pure_primary dummy | Equals 1 for transactions where only primary shares are offered (no secondary shares), 0 otherwise. |
| Ln(1+Scd_shrs/Shrs_ofrd) | The natural logarithm of 1 plus Scd_shrs/Shrs_ofrd, where Scd_shrs/Shrs_ofrd is the number of secondary shares divided by the total number of shares offered. |

| | |
|---|---|
| Technology_sector_dummy | Equals 1 for transactions where the issuing firm's industry sector from the Bloomberg Industry Classification System (BICS) is defined as "Technology", 0 otherwise. |
| Lockup_options | Equals 1 for transactions where there is a lock-up agreement associated with the offerings, 0 otherwise |
| Numersof_Usesproceeds | Number of primary uses of IPO proceeds. |
| Prestigious_legal_adviser | Equals 1 for transactions where the issuer used one of the top-10 legal advisors according to their market share and the amount credited for the deals managed by each bank during the sample period (1990 to 2015), zero otherwise. |
| General_corporate_purpose | Equals 1 if one of the primaries uses of proceeds disclosed in the IPO prospectus prior to the IPO is "general corporate purpose", 0 otherwise. |
| NomAd_Broker | Equals 1 if the lead manager acting as a nominated broker for the IPO is also acting in the capacity of nominated advisor to the issuing firm, 0 otherwise |

## *Market and Industry-specific variables*

| | |
|---|---|
| Prior_month_average_underpricing | Average IPO first trading day return in the month prior to the IPO issue date. |
| Prior_30day_industry_rtrn | $\frac{1}{30}\sum_{i=t-31}^{t-1}$ ICB Industry return$_{I,j}$ where t, is the IPO issue date and j is one of 10 industries. We assign each IPO to one of the 10 Industries using the Industry Classification Benchmark (ICB), then match industry return using both the issue date and the industry. |
| Prior_30day_SD_of industry_rtrn | Standard deviation of the prior 30-day industry daily returns from Thomson Reuters DataStream. |

| | |
|---|---|
| Prior_30day_sector_rtrn | $\frac{1}{30}\sum_{i=t-31}^{t-1}$ ICB sector $\text{return}_{I,j}$, where t is the IPO issue date, and j is one of 41 sectors. We assign each IPO to one of the 41 sectors using Industry Classification Benchmark (ICB) and then match industry sector return using both the issue date and the sector. |
| Prior_30day_SD_of_sector_rtrn | Standard deviation of the prior 30-day industry sector daily returns from Thomson Reuters DataStream |
| Prior_30_day_SD_of_FTSE_All_Share_rtn | Standard deviation of prior 30 days of FTSE All-Share return, where prior 30 day FTSE All-Share return is computed as follow: $\frac{1}{30}\sum_{i=t-31}^{t-1}$ FTSE All − Share composite $\text{return}_i$, where t is the IPO issue date. |

# Appendix B: First stage estimations of the 2SLS regression analysis

**Table B1**
**First stage estimations of the 2SLS regression analysis of acquirer CAR (-2, +2)**

This table reports the results of the first estimation of 2SLS regression of acquirer CAR for the full sample, as well as the public, private and concentric deal subsamples. The dependent variable for each set of the first stage regression is respectively *Top_tier_adv* and *Boutique_adv*. *Top_tier_adv* is a dummy variable which equals 1 if the acquirer advisor is classified as a top-tier advisor, and 0 otherwise. The variable *Boutique_adv* equals 1 if the acquirer advisor is defined as a boutique advisor; 0 if otherwise. We instrument *Top_tier_adv* by the extent to which the acquirer used the service of a prestigious bank in the past (*Scope*), and the extent to which the acquirer advisor has a relative comparative advantage in the target and the acquirer industry (*Industry_reach*). We instrument *Boutique_adv* by the extent to which the acquirer used the services of a specialist boutique in the past (*Experienced_niche_adv*), and the perceived industry expertise in the acquirer industry (*Acq_Industry_specialist*). For each specification, the first column presents the first stage regression results with *Top_tier_adv* as the dependent variable; and the variable of interest is *Scope* and *Industry_reach*. In the second column, the results of the first stage regressions are presented with *Boutique_adv* as the dependent variable; and the variable of interest is *Experienced_niche_adv* and *Acq_Industry_specialist*. All variables used in the analysis are defined in Appendix A. The unreported t-statistics are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | Full sample | | Public | | Private | | Concentric | |
|---|---|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** |
| Scope (Instrument | 0.067*** | | 0.12*** | | 0.043*** | | 0.061*** | |
| Industry_reach (Instrument) | 0.08*** | | 0.13*** | | 0.083*** | | 0.096*** | |
| Experienced_niche_adv (Instrument) | | 0.5*** | | 0.45*** | | 0.5*** | | 0.5*** |
| Acq_Industry_specialist (Instrument) | | 0.35*** | | 0.36*** | | 0.31*** | | 0.33*** |
| Ln(Acquirer_asset) | 0.052*** | -0.046*** | 0.1** | -0.057*** | 0.029*** | -0.037*** | 0.056*** | -0.053*** |
| Ln(Deal_value) | 0.05*** | -0.0079 | 0.056 | -0.036 | 0.055*** | -0.0097 | 0.048*** | -0.000 |
| Market_to_book | 0.000 | -0.0028 | 0.0082 | -0.01 | -0.000 | -0.000 | -0.0022 | -0.000 |
| Relative_size | 0.049 | 0.061 | 0.001 | 0.000 | 0.015 | 0.12 | 0.058 | 0.03 |
| Sigma | 0.0062 | 0.021* | -0.011 | 0.021 | 0.0062 | 0.021* | 0.000 | 0.02* |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Run_up | -0.084** | -0.044 | -0.012 | 0.019 | -0.086** | -0.049 | -0.079* | -0.07 |
| Tobins_Q | 0.018** | -0.013 | 0.044 | -0.025 | 0.0099 | -0.013 | 0.019* | -0.023* |
| Leverage | -0.000 | 0.000 | -0.000 | 0.0011 | -0.000 | 0.000 | -0.000 | 0.000 |
| Concentric_deal | -0.0017 | 0.000 | -0.043 | 0.03 | 0.000 | -0.0058 | | |
| Tender_offer | -0.04 | -0.062 | -0.0062 | -0.077 | -0.1 | -0.039 | -0.11* | -0.064 |
| Public&Includingstock_deal | 0.047 | 0.063 | 0.21 | 0.064 | | | 0.1 | 0.045 |
| Public&Cash_deal | 0.1 | 0.037 | 0.17 | 0.034 | | | 0.15* | 0.027 |
| Private&Includingstock_deal | -0.019 | -0.028 | | | -0.025 | -0.022 | 0.029 | -0.054 |
| Private&Cash_deal | -0.042 | 0.0085 | | | -0.018 | 0.011 | -0.015 | -0.0079 |
| Intercept | -0.28*** | 0.31*** | -0.76* | 0.53** | -0.16** | 0.25** | -0.33*** | 0.38*** |
| | 4.9 | 4.7 | -2 | 2.9 | -2.6 | 3.4 | -4.8 | 4.6 |
| Industry FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1627 | 1627 | 313 | 313 | 1303 | 1303 | 1100 | 1100 |
| F-statistic | 38.15 | 141.21 | 35.42 | 22.28 | 11.69 | 120.87 | 32.27 | 99.56 |
| Prob > F | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| R-squared | 0.3966 | 0.4706 | 0.4868 | 0.4572 | 0.2693 | 0.4706 | 0.4187 | 0.4647 |

**Table B2**
**First stage estimations of the 2SLS regression analysis of IPO underpricing (Offer to 1st close)**

This table reports the results of the first estimation of 2SLS regressions of IPO underpricing for the full sample, as well as the Main-market and AIM subsamples. The dependent variable for each set of the first stage regression is *Top_tier_lead* and *Boutique_lead* respectively. The first equals 1 if the lead manager is classified as a top-tier lead manager, and 0 otherwise. The second variable *Boutique_lead* equals to 1 if the lead manager is defined as a boutique investment bank; 0 if otherwise. For the 2SLS approach, we instrument *Top_tier_lead* by the extent to which the IPO firm used the service of a prestigious bank in the past (*Scope_lead*), and the geographic localisation of the parent company of the underwriter vis a vis of the issuing firm. (*UW_foreignParent*). We instrument *Boutique_lead* by the extent to which the IPO firm used the services of a specialist boutique in the past (*Experienced_boutique_lead*), and the relative maturity of the lead manager (*Junior_UW*). For each specification, the first column presents the first stage regression results with *Top_tier_lead*. As the dependent variable, and the variables of interest are *Scope_lead* and *UW_foreignParent*. In the second column, the results of the first stage regressions are presented with *Boutique_lead* as the dependent variable; and the variables of interest are *Experienced_boutique_lead* and *Junior_UW*. All variables used in the analysis are defined in Appendix B. The unreported t-statistics reported are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | **Full sample** | | **Main-market** | | **AIM** | |
|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Scope_lead | 0.04** | | 0.058* | | -0.004 | |
| UW_foreignParent | 0.17*** | | 0.231*** | | 0.023* | |
| Experienced_boutique_lead | | 0.9*** | | 0.938*** | | 0.874*** |
| Junior_UW | | 0.073*** | | 0.051* | | 0.09*** |
| AllStar_coverage | 0.512*** | | 0.382*** | | 0.172 | |
| Ln(Offer_size) | 0.044*** | -0.011*** | 0.053*** | -0.0104 | 0.014** | -0.014** |
| Ln(Company_age) | 0.002 | -0.005 | 0.009 | -0.0077 | -0.001 | -0.004 |
| Ln(Waiting_period) | 0.013** | -0.003 | 0.014 | -0.0031 | 0.003 | -0.003 |
| PE&VC_backed_dummy | 0.057** | -0.001 | 0.086* | 0.0028 | -0.002 | 0.004 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Pure_primary_dummy | 0.035** | -0.011 | 0.126*** | 0.0107 | 0.005 | -0.03 |
| Ln(1+Scd_shrs/Shrs_ofrd) | 0.072 | -0.033 | 0.109 | 0.0369 | 0.043 | -0.068 |
| Prestigious_legal_adviser | 0.142*** | 0.002 | 0.186*** | 0.0026 | -0.009 | 0.021 |
| General_corporate_purpose | 0.014 | 0.002 | 0.026 | 0.0173 | 0.008 | -0.005 |
| Lockup_options | 0.024* | -0.015 | 0.118** | -0.0039 | 0.002 | -0.013 |
| Prior_month_IPO_underpricing | 0.000 | -0.000 | 0.000 | -0.000 | -0.001* | -0.000 |
| NomAd_Broker | | 0.004 | | -0.03* | | 0.000 |
| Prior_30day_of_sector_rtrn | -0.023 | 0.01 | -0.083 | -0.002 | -0.008 | 0.018 |
| Prior_30day_SD_of_sector_rtrn | 0.009 | -0.007 | 0.023 | -0.0141* | -0.002 | -0.003 |
| FTSEALL30daysreturns | 0.001 | 0.000 | 0.011 | -0.001 | -0.002 | 0.001 |
| FTSEALL30daysretur~D | 0.001 | -0.001 | 0.021 | -0.003 | -0.004 | 0.002 |
| Intercept | -0.029 | 0.054* | -0.078 | 0.093* | 0.002 | 0.001 |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1469 | 1469 | 456 | 456 | 1002 | 1002 |
| F-statistic | 115.92 | 5271.67 | 149.48 | 4252.93 | 6.4 | 1026.59 |
| Prob > F | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.087 | 0.0000 |
| R-squared | 0.6441 | 0.8965 | 0.6877 | 0.9236 | 0.1021 | 0.8728 |

# Appendix C: Robustness tests

- **ALTERNATIVE MEASURES OF TOP CLASSIFICATION (TOP_TIER_ADV) [ Top_8 ; Top_5]**

**Table C1**
**Second stage estimations of the 2SLS regression analysis of acquirer CAR (-2, +2)**

This table reports the results of the second estimation of 2SLS regression of acquirer CAR for the full sample, as well as the public, private and concentric deal subsamples. In the first set of regressions of the 2nd stage, the variable of interest is *Top_8* and while *Top_5* is the variable of interest in the second set of regressions of the 2nd stage of the 2SLS analysis. *Top_8* is a dummy variable which equals to 1 if the acquirer advisor is classified as a top-8 advisor, and 0 otherwise. *Top_5* is a dummy variable which equals to 1 if the acquirer advisor is classified as a top-5 advisor, and 0 otherwise. Both variables are instrumented by the extent to which the acquirer used the service of a prestigious bank in the past (*Scope*), and the extent to which the acquirer advisor has a relative comparative advantage in the target and the acquirer industry (*Industry_reach*). For each specification, the first column presents the 2nd stage regression results with *CAR (-2,+2)* as the dependent variable; and the variable of interest is *Top_8*. In the second column, the results of the 2nd stage regression are presented with *CAR (-2, +2)* as the dependent variable; and the variable of interest is *Top_5*. All variables used in the analysis are defined in Appendix A. The unreported t-statistics are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | Full sample | | Public | | Private | | Concentric | |
|---|---|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** |
| Top_8 (Instrumented) | 0.033 | | 0.044 | | 0.024 | | 0.023 | |
| Top_5 (Instrumented) | | 0.064 | | 0.073 | | 0.05 | | 0.052 |
| Ln(Acquirer_asset) | 0.015*** | .015*** | 0.027*** | 0.027*** | 0.012*** | 0.012** | 0.021*** | 0.02*** |
| Ln(Deal_value) | 0.001* | 0.000 | -0.000 | -0.000 | 0.012* | 0.011* | 0.000 | 0.000 |
| Market_to_book | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | -0.000 | -0.000 |
| Relative_size | -0.034* | -0.034* | -0.021 | -0.001 | -0.032 | -0.034 | -0.025 | -0.023 |
| Sigma | 0.027*** | 0.027*** | .033*** | 0.032*** | 0.025*** | 0.024*** | 0.029*** | 0.028*** |
| Run_up | 0.033* | 0.033* | -0.051 | -0.046 | 0.052** | 0.051** | 0.043* | 0.043* |
| Tobins_Q | 0.000 | 0.000 | 0.000 | 0.000 | -0.000 | -0.000 | 0.001 | 0.002 |
| Leverage | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 |
| Concentric_deal | 0.004 | 0.004 | -0.001 | 0.001 | 0.006 | 0.006 | | |
| Tender_offer | -0.002 | -0.002 | -0.000 | 0.001 | -0.015 | -0.016 | -0.000 | 0.002 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Public&Includingstock_deal | -0.01 | -0.015 | 0.12 | 0.13 | | | -0.005 | -0.001 |
| Public&Cash_deal | 0.026 | 0.026 | 0.15 | 0.16 | | | 0.027 | 0.026 |
| Private&Includingstock_deal | 0.036* | 0.034* | | | 0.044** | 0.043** | 0.045* | 0.043* |
| Private&Cash_deal | 0.034* | 0.034* | | | 0.047** | 0.047** | 0.039* | 0.038* |
| Intercept | -0.33*** | -0.33*** | -0.53*** | -0.54*** | -0.32*** | -0.32*** | -0.36*** | -0.35*** |
| Industry_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1627 | 1627 | 313 | 313 | 1303 | 1303 | 1100 | 1100 |
| Wu-Hausman | 0.104 | 0.204 | 0.4938 | 0.57023 | 0.0237 | 0.0363 | 0.0388 | 0.1532 |
| p-value (Wu-Hausman) | 0.7467 | 0.6518 | 0.4828 | 0.4508 | 0.8777 | 0.84889 | 0.8439 | 0.9015 |
| Sargan Chi2 | 0.731 | 0.6347 | 0.7585 | 0.3743 | 0.1646 | 0.1799 | 0.0476 | 0.0298 |
| p-value (Sargan) | 0.3924 | 0.4256 | 0.3838 | 0.5407 | 0.6849 | 0.6714 | 0.8273 | 0.8629 |

- **CHAPTER 5: ALTERNATIVE MEASURES OF ABNORMAL RETURNS [CAR (-5, +5) ; CAR (-1, +1)]**

**Table C2**
**Second stage estimations of the 2SLS regression analysis of acquirer CAR (-5, + 5)**

This table reports the results of the second estimation of 2SLS regression of acquirer CAR for the full sample, as well as the public, private and concentric deal subsamples. The main variables of interest are *Top_tier_adv* and *Boutique_adv*. The first variable is equal to 1 if the acquirer advisor is classified as a top-tier advisor, and 0 otherwise. The second variable *Boutique_adv* equals 1 if the acquirer advisor is defined as a boutique advisor; 0 if otherwise. We instrument *Top_tier_adv* by the extent to which the acquirer used the service of a prestigious bank in the past (*Scope*), and the extent to which the acquirer advisor has a relative comparative advantage in the target and the acquirer industry (*Industry_reach*). We instrument *Boutique_adv* by the extent to which the acquirer used the services of a specialist boutique in the past (*Experienced_niche_adv*), and the perceived industry expertise in the acquirer industry (*Acq_Industry_specialist*). For each specification, the first column presents the 2nd stage regression results with *CAR (-5,+5)* as the dependent variable; and the variable of interest is *Top_tier_adv*. In the second column, the results of the 2nd stage regression are presented with *CAR (-5, +5)* as the dependent variable; and the variable of interest is *Boutique_adv*. All variables used in the analysis are defined in Appendix A. The unreported t-statistics are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | Full sample | | Public | | Private | | Concentric | |
|---|---|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** |
| Top_tier_adv (Instrumented) | 0.045 | | 0.1 | | -0.013 | | 0.056 | 0.045 |
| Boutique_adv (Instrumented) | | -0.039* | | -0.058 | | -0.033 | | -0.048* |
| Ln(Acquirer_asset) | 0.038*** | 0.039*** | 0.042** | 0.051*** | 0.035*** | 0.033*** | 0.044*** | 0.045*** |
| Ln(Deal_value) | 0.014 | 0.015* | 0.002 | 0.005 | 0.02* | 0.018** | 0.006 | 0.009 |
| Market_to_book | -0.000 | 0.005 | 0.004 | 0.004 | -0.000 | -0.000 | -0.003 | -0.003 |
| Relative_size | -0.089** | -0.084** | -0.093 | -0.087 | -0.076* | -0.072 | -0.081* | -0.076* |
| Sigma | 0.056*** | 0.057*** | 0.083*** | 0.084*** | 0.049*** | 0.05*** | 0.056*** | 0.057*** |
| Run_up | 0.055* | 0.049 | -0.13 | -0.12 | 0.086** | 0.087** | 0.086** | 0.078* |
| Tobins_Q | 0.006 | 0.006 | 0.008 | 0.01 | -0.007 | -0.006 | 0.007 | 0.006 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Leverage | -0.000 | -0.000 | -0.000 | -0.000 | -0.001* | -0.001* | -0.000 | -0.000 |
| Concentric_deal | 0.008 | 0.0099 | 0.001 | 0.002 | 0.011 | 0.011 | | |
| Tender_offer | 0.004 | 0.004 | 0.001 | -0.003 | -0.001 | -0.001 | -0.007 | -0.003 |
| Public&Includingstock_deal | 0.03 | 0.034 | 0.23 | 0.24 | | | 0.033 | 0.039 |
| Public&Cash_deal | 0.054 | 0.059 | 0.24 | 0.24 | | | 0.057 | 0.065 |
| Private&Includingstock_deal | 0.063* | 0.062* | | | 0.081** | 0.081** | 0.076* | 0.075* |
| Private&Cash_deal | 0.062* | 0.059* | | | 0.086** | 0.086** | 0.067* | 0.064* |
| Intercept | -0.75*** | -0.74*** | -1*** | -1.1*** | -0.74*** | -0.72*** | -0.76*** | -0.76*** |
| Industry_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1627 | 1627 | 3.13 | 313 | 1303 | 1303 | 1100 | 1100 |
| Wu-Hausman | 0.0016 | 1.1489 | 0.4382 | 0.0049 | 0.1451 | 1.5037 | 0.0000 | 3.2271 |
| p-value (Wu-Hausman) | 0.9678 | 0.2839 | 0.5085 | 0.9440 | 0.7033 | 0.2203 | 0.9936 | 0.0727 |
| Sargan Chi2 | 0.589 | 0.7678 | 2.0354 | 0.854 | 0.0096 | 0.0019 | 0.0392 | 0.2268 |
| p-value (Sargan) | 0.4428 | 0.3809 | 0.1537 | 0.3554 | 0.9217 | 0.9653 | 0.8430 | 0.6339 |

**Table C3**
**Second stage estimations of 2SLS analysis of acquirer CAR (-1, +1)**

This table reports the results of the second estimation of 2SLS regression of acquirer CAR for the full sample, as well as the public, private and concentric deal subsamples. The main variables of interest are *Top_tier_adv* and *Boutique_adv*. The first variable is equal to 1 if the acquirer advisor is classified as a top-tier advisor, and 0 otherwise. The second variable *Boutique_adv* equals 1 if the acquirer advisor is defined as a boutique advisor; 0 if otherwise. We instrument *Top_tier_adv* by the extent to which the acquirer used the service of a prestigious bank in the past (*Scope*), and the extent to which the acquirer advisor has a relative comparative advantage in the target and the acquirer industry (*Industry_reach*). We instrument *Boutique_adv* by the extent to which the acquirer used the services of a specialist boutique in the past (*Experienced_niche_adv*), and the perceived industry expertise in the acquirer industry (*Acq_Industry_specialist*). For each specification, the first column presents the 2nd stage regression results with *CAR (-1,+1)* as the dependent variable; and the variable of interest is *Top_tier_adv*. In the second column, the results of the 2nd stage regression are presented with *CAR (-1, +1)* as the dependent variable; and the variable of interest is *Boutique_adv*. All variables used in the analysis are defined in Appendix A. The unreported t-statistics are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | Full sample | | Public | | Private | | Concentric | |
|---|---|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** |
| Top_tier_adv (Instrumented) | 0.021 | | 0.019 | | 0.028 | | 0.016 | |
| Boutique_adv (Instrumented) | | -0.009 | | -0.009 | | -0.008 | | -0.014* |
| Ln(Acquirer_asset) | 0.008*** | 0.008*** | 0.011* | 0.013** | 0.006** | 0.007*** | 0.009*** | 0.009*** |
| Ln(Deal_value) | 0.003 | 0.004* | -0.006 | -0.005 | 0.004 | 0.006** | 0.002 | 0.002 |
| Market_to_book | 0.001 | 0.001 | 0.004** | 0.004** | 0.001 | 0.001 | 0.006 | 0.001 |
| Relative_size | -0.014 | -0.012 | -0.005 | -0.004 | -0.015 | -0.014 | -0.013 | -0.012 |
| Sigma | 0.011*** | 0.011*** | 0.012*** | 0.012*** | 0.01*** | 0.011*** | 0.011*** | 0.011*** |
| Run_up | 0.018* | 0.016 | -0.039 | -0.038 | -.031*** | 0.028** | 0.024* | 0.021* |
| Tobins_Q | -0.001 | -0.001 | 0.000 | 0.001 | -0.001 | -0.001 | 0.003 | 0.000 |
| Leverage | -0.000 | -0.000 | -0.000 | -0.000 | -0000 | -0.001 | -0.000 | -0.000 |
| Concentric_deal | -0.001 | 0.001 | -0.007 | -0.007 | 0.003 | 0.003 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Tender_offer | 0.012* | 0.011 | 0.01 | 0.01 | 0.001 | -0.001 | 0.009 | 0.007 |
| Public&Includingstock_deal | 0.002 | 0.004 | 0.098 | 0.099 | | | 0.002 | 0.004 |
| Public&Cash_deal | 0.007 | 0.009 | 0.098 | 0.098 | | | 0.011 | 0.014 |
| Private&Includingstock_deal | 0.021* | 0.021* | | | 0.022* | 0.021* | 0.025* | 0.025* |
| Private&Cash_deal | 0.022* | 0.021* | | | -.024* | 0.023* | 0.024* | 0.023* |
| Intercept | -0.15*** | -0.16*** | -0.26** | -0.26*** | -0.15*** | -0.15*** | -0.16*** | -0.16*** |
| Industry_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES | YES | YES |
| Number of observations | 1627 | 1627 | 3.13 | 313 | 1303 | 1303 | 1100 | 1100 |
| Wu-Hausman | 0.1618 | 0.0013 | 0.2574 | 0.4756 | 0.7619 | 0.1702 | 0.0000 | 1.7774 |
| p-value (Wu-Hausman) | 0.6876 | 0.9707 | 0.6123 | 0.4910 | 0.3829 | 0.6800 | 0.9824 | 0.1827 |
| Sargan Chi2 | 0.0599 | 0.3125 | 0.5698 | 0.5049 | 0.1047 | 0.1255 | 0.4012 | 0.0000 |
| p-value (Sargan) | 0.8066 | 0.5761 | 0.4503 | 0.4774 | 0.7462 | 0.7232 | 0.5265 | 0.999 |

- **CHAPTER 6: ALTERNATIVE MEASURES OF UNDEPRICING [ Offer to week 1; Offer to month 1]**

**Table C4**
**Second stage estimations of the 2SLS analysis of IPO underpricing (Offer_to_week 1)**

This table reports the results of the second estimation of 2SLS regressions of IPO underpricing for the full sample, as well as the Main-market and AIM subsamples. The main variables of interest are *Top_tier_lead* and *Boutique_lead*. The first equals 1 if the lead manager is classified as a top-tier advisor, and 0 otherwise. The second variable *Boutique_lead* equals to 1 if the lead manager is defined as a boutique investment bank; 0 if otherwise. We instrument *Top_tier_lead* by the extent to which the IPO firm used the service of a prestigious bank in the past (*Scope_lead*), and the geographic localisation of the parent company of the underwriter vis a vis of the issuing firm. (*UW_foreignParent*). We instrument *Boutique_lead* by the extent to which the IPO firm used the services of a specialist boutique in the past (*Experienced_boutique_lead*), and the relative maturity of the lead manager (*Junior_UW*). For each specification, the first column presents the 2nd stage regression results with *Offer_to_week1* as the dependent variable; and the variable of interest is *Top_tier_lead*. In the second column, the results of the 2nd stage regression are presented with *Offer_to_week1* as the dependent variable; and the variable of interest is *Boutique_lead*. All variables used in the analysis are defined in Appendix A. The unreported t-statistics are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | **Full sample** | | **Main-market** | | **AIM** | |
|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Top_tier_lead (Instrumented) | 27.1 | | 7.88 | | -27.5 | |
| Boutique_lead (Instrumented) | | 13.4 | | -4.42 | | 23* |
| AllStar_coverage | 10.2 | | 3.41 | | 51.3 | |
| Ln(Offer_size) | -10.3*** | -7.51*** | -3.96 | -3.29 | -12.8** | -12.1*** |
| Ln(Company_age) | -5.88*** | -5.65*** | -1.41 | -1.18 | -7.2*** | -7.28*** |
| Ln(Waiting_period) | -3.8 | -2.75 | -0.243 | -0.0102 | -7.69 | -7.18 |
| PE&VC_backed_dummy | 7.44 | 11.3 | -0.683 | 0.506 | 17.2 | 15.7 |
| Pure_primary_dummy | -27.4* | -28* | -9.41 | -9.14 | -36.5* | -37.5* |
| Ln(1+Scd_shrs/Shrs_ofrd) | -79.1* | -78.4* | -16.6 | -15.9 | -13.2* | -146* |
| Prestigious_legal_adviser | 0.917 | 12.5* | 0.428 | 3.07 | 12.4 | 12.2 |
| General_corporate_purpose | 0.352 | 0.444 | 1.03 | 1.41 | -2.22 | -2.4 |
| Lockup_options | -9.61* | -5.96 | -10.9* | -9.43* | -6.95 | -6.01 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Prior_month_IPO_underpricing | 0.007 | 0.008 | -0.002 | -0.002 | 0.051* | 0.053* |
| NomAd_Broker | | -9.66 | | -2.4 | | -9.27 |
| Prior_30day_of_sector_rtrn | 38.8*** | 38.5* | 22.6** | 22.1** | 43.8** | 42.6** |
| Prior_30day_SD_of_sector_rtrn | 1.69 | 2.13 | 7.66* | 7.87* | -3.73 | -3.4 |
| FTSEALL30daysreturns | -0.513 | -0.574 | -0.47 | -0.404 | 0.391 | 0.378 |
| FTSEALL30daysretur~D | 5.31 | 5.22 | -1.11 | -1.03 | 10.5* | 9.92** |
| Intercept | 72.8*** | 63.7** | 31.2 | 30.3* | 85.2** | 80.2** |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1436 | 1436 | 447 | 447 | 982 | 982 |
| R-squared | 0.076 | 0.077 | 0.122 | 0.111 | 0.098 | 0.101 |
| Wu-Hausman | 0.1143 | 0.757 | 0.01167 | 22.092 | 0.0065 | 2.724 |
| p-value (Wu-Hausman) | 0.7353 | 0.3844 | 0.914 | 0.000 | 0.9356 | 0.0991 |
| Sargan Chi2 | 1.43318 | 0.00344 | 0.1157 | 0.2818 | 0.8994 | 0.1994 |
| p-value (Sargan) | 0.2313 | 0.9532 | 0.7337 | 0.9393 | 0.3429 | 0.6552 |

**Table C5**
**Second stage estimations of the 2SLS analysis of IPO underpricing (Offer to month 1)**

This table reports the results of the second estimation of 2SLS regressions of IPO underpricing for the full sample, as well as the Main-market and AIM subsamples. The main variables of interest are *Top_tier_lead* and *Boutique_lead*. The first equals 1 if the lead manager is classified as a top-tier advisor, and 0 otherwise. The second variable *Boutique_lead* equals to 1 if the lead manager is defined as a boutique investment bank; 0 if otherwise. We instrument *Top_tier_lead* by the extent to which the IPO firm used the service of a prestigious bank in the past (*Scope_lead*), and the geographic localisation of the parent company of the underwriter vis a vis of the issuing firm. (*UW_foreignParent*). We instrument *Boutique_lead* by the extent to which the IPO firm used the services of a specialist boutique in the past (*Experienced_boutique_lead*), and the relative maturity of the lead manager (*Junior_UW*). For each specification, the first column presents the 2nd stage regression results with *Offer_to_month1* as the dependent variable; and the variable of interest is *Top_tier_lead*. In the second column, the results of the 2nd stage regression are presented with *Offer_to_month1* as the dependent variable; and the variable of interest is *Boutique_lead*. All variables used in the analysis are defined in Appendix A. The unreported t-statistics are adjusted for robust standard errors. All regressions control for year and industry fixed effects. *** ** and * denote significance at 1%, 5% and 10% levels.

| | **Full sample** | | **Main-market** | | **AIM** | |
|---|---|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Top_tier_lead (Instrumented) | 42.7 | | 3.21 | | 63.2 | |
| Boutique_lead (Instrumented) | | 9.07 | | -3.91 | | 16.6* |
| AllStar_coverage | 0.687 | | 1.17 | | 37.3 | |
| Ln(Offer_size) | -9.92*** | -6.31*** | -2.42 | -2.31 | -13.1** | -11.3*** |
| Ln(Company_age) | -6.1*** | -5.8*** | -0.801 | -0.718 | -7.64*** | -7.88*** |
| Ln(Waiting_period) | -4.42 | -3.25 | 0.171 | 0.268 | -9.18* | -8.44* |
| PE&VC_backed_dummy | 3.43 | 8.5 | -0.914 | -0.613 | 11 | 10.1 |
| Pure_primary_dummy | -20.3* | -20.3* | -4.48 | -4.42 | -28.5* | -28.5* |
| Ln(1+Scd_shrs/Shrs_ofrd) | -42.6 | -39.2 | 5.6 | 5.81 | -88.3 | -93.7 |
| Prestigious_legal_adviser | -3.59 | 10 | 1.52 | 2.2 | 8.66 | 8.09 |
| General_corporate_purpose | -1.09 | -0.697 | -0.276 | 0.11 | -4.52 | -3.82 |
| Lockup_options | -9.33** | -6.23 | -11* | -10.8** | -6.71 | -6.35 |
| Prior_month_IPO_underpricing | | -5.67 | | -1 | | -2.88 |
| NomAd_Broker | 0.0054 | 0.0063 | -0.0013 | -0.0014 | .0426* | .0426* |
| Prior_30day_of_sector_rtrn | 32.2** | 31.9** | 15.8* | 15.6 | 37.1** | 37.6** |

| | | | | | | |
|---|---|---|---|---|---|---|
| Prior_30day_SD_of_sector_rtrn | 1.87 | 2.42 | 10.3** | 10.4** | -4.14 | -4.12 |
| FTSEALL30daysreturns | -0.457 | -0.498 | -0.218 | -0.192 | 0.311 | 0.125 |
| FTSEALL30daysretur~D | 1.57 | 1.58 | -3.34 | -3.4 | 6.81 | 6.14 |
| Intercept | 68.3*** | 58.5*** | 21.6 | 22.4 | 82.9*** | 77.1*** |
| Industry_FE | YES | YES | YES | YES | YES | YES |
| Year_FE | YES | YES | YES | YES | YES | YES |
| Number of observations | 1458 | 1458 | 452 | 452 | 999 | 999 |
| R-squared | 0.0681 | 0.0700 | 0.0938 | 0.0872 | 0.0962 | 0.10 |
| Wu-Hausman | 0.3776 | 0.227 | 0.1384 | 18.3623 | 0.0424 | 1.9112 |
| p-value (Wu-Hausman) | 0.5390 | 0.6335 | 0.710 | 0.000 | 0.8370 | 0.1668 |
| Sargan Chi2 | 1.869 | 0.0037 | 0.34 | 0.0774 | 1.3848 | 0.2655 |
| p-value (Sargan) | 0.1716 | 0.9518 | 0.56 | 0.7809 | 0.2393 | 0.6064 |

# References


Abrahamson, M., Jenkinson, T., & Jones, H. (2011). Why Don't U.S. Issuers Demand European Fees for IPOs? *Journal of Finance*, *66*(6), 2055–2082. https://doi.org/10.1111/j.1540-6261.2011.01699.x

Aggarwal, R. K., Krigman, L., & Womack, K. L. (2002). Strategic IPO underpricing, information momentum, and lockup expiration selling. *Journal of Financial Economics*, *66*, 105–137.

Ahmad, W., & Jelic, R. (2014). Lockup Agreements and Survival of UK IPOs. *Journal of Business Finance & Accounting*, *41*(5–6), 717–742. https://doi.org/10.1111/jbfa.12068

Alexandridis, G., Fuller, K. P., Terhaar, L., & Travlos, N. G. (2013). Deal size, acquisition premia and shareholder gains. *Journal of Corporate Finance*, *20*(1). https://doi.org/10.1016/j.jcorpfin.2012.10.006

Allen, F., & Faulhaber, G. R. (1989). Signalling by underpricing in the IPO market. *Journal of Financial Economics*, *23*(2), 303–323. https://doi.org/10.1016/0304-405X(89)90060-3

Allen, L., Jagtiani, J., Peristiani, S., & Saunders, A. (2004). The Role of Bank Advisors in Mergers and Acquisitions. *Journal of Money, Credit and Banking*, *36*(2), 197–224.

Andres, C., Betzer, A., & Limbach, P. (2014). Underwriter reputation and the quality of certification: Evidence from high-yield bonds. *Journal of Banking and Finance*, *40*(1), 97–115. https://doi.org/10.1016/j.jbankfin.2013.11.029

Antoniou, A., Petmezas, D., & Zhao, H. (2007). Bidder gains and losses of firms involved in many acquisitions. *Journal of Business Finance and Accounting*, *34*(7–8), 1221–1244. https://doi.org/10.1111/j.1468-5957.2007.02012.x

Bajo, E., Chemmanur, T. J., Simonyan, K., & Tehranian, H. (2016). Underwriter networks, investor attention, and initial public offerings. *Journal of Financial Economics*, *122*(2), 376–408. https://doi.org/10.1016/j.jfineco.2015.12.001

Balassa, B. (1965). Trade Liberalisation and "Revealed" Comparative Advantage. *The Manchester School*, *33*(2), 99–123. https://doi.org/10.1111/j.1467-9957.1965.tb00050.x

Balezou, M., Tse, C., & Porter, K. (2020, December 24). *M&A Deals Come Roaring Back as Executives Plot Post-Covid Future - Bloomberg*. https://www.bloomberg.com/news/articles/2020-12-24/m-a-deals-come-roaring-back-as-executives-plot-post-covid-future

Bao, J., & Edmans, A. (2011). Do investment banks matter for M&A returns? *Review of Financial Studies*, *24*(7), 2286–2315. https://doi.org/10.1093/rfs/hhr014

Barber, B. M., & Odean, T. (2008). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies*, *21*(2), 785–818. https://doi.org/10.1093/rfs/hhm079

Basmann, R. L. (1960). On Finite Sample Distributions of Generalized Classical Linear Identifiability Test Statistics. *Journal of the American Statistical Association*, *55*(292), 650–659.

Baum, C. F. (2006). *An Introduction to Modern Econometrics Using Stata*. Stata Press.

Beatty, . P., & Ritter, J. R. (1986). Investment banking, reputation, and the underpricing of initial public offerings. *Journal of Financial Economics*, *15*(1–2), 213–232. https://doi.org/10.1016/0304-405X(86)90055-3

Beatty, R. P., & Welch, I. V. O. (1996). Issuer expenses and legal liability in initial public offerings. *Journal of Law & Economics*, *39*(2), 545–602. https://www.sciencedirect.com/handbook/handbooks-in-operations-research-and-management-science/vol/9

Becht, M., Polo, A., & Rossi, S. (2016). Does mandatory shareholder voting prevent bad acquisitions? *Review of Financial Studies*, *29*(11), 3035–3067. https://doi.org/10.1093/rfs/hhw045

Benveniste, L. M., Busaba, W. Y., & Wilhelm, W. J. (1996). Price stabilization as a bonding mechanism in new equity issues. *Journal of Financial Economics*, *42*(2), 223–255. https://doi.org/10.1016/0304-405X(96)00880-X

Benveniste, L. M., & Spindt, P. A. (1989). How investment bankers determine the offer price and allocation of new issues. *Journal of Financial Economics*, *24*, 343–361.

Boeh, K. K., & Dunbar, C. (2016). Underwriter deal pipeline and the pricing of IPOs. *Journal of Financial Economics*, *120*(2), 383–399. https://doi.org/10.1016/j.jfineco.2015.08.018

Booth, J. R., & Smith, R. L. (1986). Capital raising, underwriting and the certification hypothesis. *Journal of Financial Economics*, *15*, 261–281. https://doi.org/10.1016/0304-405X(86)90057-7

Bowers, H. M., & Miller, R. E. (1990). Choice of Investment Banker and Shareholders' Wealth of Firms Involved in Acquisitions. *Financial Management*, *19*(4), 34–44.

Brau, J. C., & Fawcett, S. (2006). Initial public offerings: An analysis of theory and practice. *Journal of Finance*, *61*(1), 399–436. https://doi.org/10.1111/j.1540-6261.2006.00840.x

Brav, A., & Gompers, P. A. (1997). Myth or Reality? The long-run underperformance of initial public offerings: Evidence from venture and nonventure capital-backed companies. *Journal of Finance*, *52*(5), 1791–1821. https://doi.org/10.2307/2329465

Brav, A., & Gompers, P. A. (2003). The Role of Lockups in Initial Public Offerings. *The Review of Financial Studies* (Vol. 16, Issue 1).

Brigham, E. (2016). Public and Private Financing: Initial Offerings and Seasoned Offerings. In *Financial Management EMEA Adaption* (1st ed., pp. 431–454). Cengage Textbooks.

Brogaard, J., Li, D., & Xia, Y. (2017). Stock liquidity and default risk R. *Journal of Financial Economics*, *124*, 486–502. https://doi.org/10.1016/j.jfineco.2017.03.003

Bruner, R. F. (2002). Does M&A pay? A survey of evidence for the decision-maker. In *Journal of Applied Finance*. https://doi.org/10.2469/dig.v33.n1.1205

Buono, A. F., Bowditch, J. L., & Lewis, J. W. (1985). When Cultures Collide: The Anatomy of a Merger. In *Human Relations* (Vol. 38, Issue 5, pp. 477–500). https://doi.org/10.1177/001872678503800506

Butler, A. W., Keefe, M. O. C., & Kieschnick, R. (2014). Robust determinants of IPO underpricing and their implications for IPO research. *Journal of Corporate Finance*, *27*, 367–383. https://doi.org/10.1016/j.jcorpfin.2014.06.002

Cable, J., & Holland, K. (1999). Modelling normal returns in event studies: a model-selection approach and pilot study. *The European Journal of Finance*, *5*(4), 331–341. https://doi.org/10.1080/135184799336993

Cain, M. D., & Denis, D. J. (2013). Information Production by Investment Banks: Evidence from Fairness Opinions. *Source: The Journal of Law & Economics*, *56*(1), 245–280. https://doi.org/10.1086/666877

Carson, E. (2009). Industry Specialization by Global Audit Firm Networks. *The Accounting Review*, *84*(2), 355–382.

Carter, R. B., Dark, F. H., & Singh, A. K. (1998). Underwriter Reputation, Initial Returns, and the Long-Run Performance of IPO Stocks. *The Journal of Finance*, *53*(1), 285–311. http://www.jstor.org/stable/117442%0Ahttp://about.jstor.org/terms

Carter, R., & Manaster, S. (1990). Initial Public Offerings and Underwriter reputation. *The Journal of Finance*, *45*(4), 1045–1067. http://www.jstor.org/stable/2328714

Chambers, D., & Dimson, E. (2009). IPO Underpricing over the Very Long Run. *Journal of Finance*, *64*(3), 1407–1443. https://doi.org/10.1111/j.1540-6261.2009.01468.x

Chang, X., Shekhar, C., Tam, L. H. K., & Yao, J. (2016a). Industry Expertise, Information Leakage and the Choice of M&A Advisors. *Journal of Business Finance and Accounting*, *43*(1–2). https://doi.org/10.1111/jbfa.12165

Chang, X., Shekhar, C., Tam, L. H. K., & Yao, J. (2016b). The information role of advisors in mergers and acquisitions: Evidence from acquirers hiring targets' ex-advisors R. *Journal of Banking and Finance*, *70*, 247–264. https://doi.org/10.1016/j.jbankfin.2016.05.006

Chatterjee, R. A. (2000). The financial performance of companies acquiring very large takeover targets. *Applied Financial Economics*, *10*(2), 185–191. https://doi.org/10.1080/096031000331824

Chemmanur, T. J., & Krishnan, K. (2012). Heterogeneous beliefs, IPO valuation, and the economic role of the underwriter in IPOs. *Financial Management*, *41*(4), 769–811. https://doi.org/10.1111/j.1755-053X.2012.01201.x

Chemmanur, T. J., & Krishnan, K. (2019). Is It the Investment Bank or the Investment Banker? A Study of the Role of Investment Banker Human Capital in Acquisitions. *Journal of Financial and Quantitative Analysis*, *54*(2), 587–627. https://doi.org/10.1017/S002210901800073X

Chemmanur, T. J., & Yan, A. (2019). Advertising, Attention, and Stock Returns. *Quarterly Journal of Finance*, *9*(3), 1950009. https://doi.org/10.1142/S2010139219500095

Chemmanur, T. J., & Fulghieri, P. (1994). Investment Bank Reputation, Information Production, and Financial Intermediation. *The Journal of Finance*, *49*(1), 57–79.

Chua, L. (1995). A Reexamination of the Costs of Firm Commitment and Best Efforts IPOs. *The Financial Review*, *30*(2), 337–365. https://doi.org/10.1111/j.1540-6288.1995.tb00836.x

Chuang, K. S. (2016). The role of investment banks on the impact of firm performance in mergers and acquisitions: evidence from the Asia-Pacific market. *Review of Quantitative Finance and Accounting*, *48*(3), 677–699. https://doi.org/10.1007/s11156-016-0564-2

Chuluun, T. (2015). The role of underwriter peer networks in IPOs. *Journal of Banking and Finance*, *51*, 62–78. https://doi.org/10.1016/j.jbankfin.2014.11.001

Cliff, M. T., & Denis, D. J. (2004). Do Initial Public Offering Firms Purchase Analyst Coverage with Underpricing? *Journal of Finance*, *59*(6), 2871–2901. https://doi.org/10.1111/j.1540-6261.2004.00719.x

Clifford Chance LLP. (2018, September). *Initial Public Offers: A guide to the UK listing regime*. 136. https://financialmarketstoolkit.cliffordchance.com/en/financial-markets-resources/resources-by-type/guides/a-guide-to-the-uk-listing-regime.html

Coakley, J., Hadass, L., & Wood, A. (2009). UK IPO underpricing and venture capitalists. *The European Journal of Finance*, *15*(4), 421–435. https://doi.org/10.1080/13518470802560915

Colaco, H. M. J., de Cesari, A., & Hegde, S. P. (2018). The waiting period of initial public offerings. *The European Journal of Finance*, *24*(5), 363–390. https://doi.org/10.1080/1351847X.2017.1307770

Conn, R. L., Cosh, A., Guest, P. M., & Hughes, A. (2005). The impact on UK acquirers of domestic, cross-border, public and private acquisitions. *Journal of Business Finance and Accounting*, *32*(5–6), 815–870. https://doi.org/10.1111/j.0306-686X.2005.00615.x

Cressy, R., Munari, F., & Malipiero, A. (2007). Playing to their strengths? Evidence that specialization in the private equity industry confers competitive advantage. *Journal of Corporate Finance*, *13*, 647–669. https://doi.org/10.1016/j.jcorpfin.2007.04.007

Dahya, J., Golubov, A., Petmezas, D., & Travlos, N. G. (2016). Governance mandates, outside directors, and acquirer performance. *Journal of Corporate Finance*, *59*, 218–238. https://doi.org/10.1016/j.jcorpfin.2016.11.005

Damyanova, V. (2020, July 8). *Global investment bank fees reach highest H1 in 21 years – Refinitiv | S&P Global Market Intelligence*. S&P Global Market Intelligence. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/global-investment-bank-fees-reach-highest-h1-in-21-years-8211-refinitiv-59353164

Derrien, F. (2005). IPO Pricing in "Hot" Market Conditions: Who Leaves Money on the Table? *The Journal of Finance*, *60*(1), 487–521. https://doi.org/10.1111/J.1540-6261.2005.00736.X

Dickerson, A. P., Gibson, H. D., & Tsakalotos, E. (1997). The impact of acquisitions on company performance: evidence from a large panel of UK firms. *Oxford Economic Papers*, *49*(3), 344–362. https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=00307653&v=2.1&it=r&id=GALE%7CA19847295&sid=googleScholar&linkaccess=fulltext

Doukas, J. A., & Petmezas, D. (2007). Acquisitions, overconfident managers and self-attribution bias. *European Financial Management*, *13*(3), 531–577. https://doi.org/10.1111/j.1468-036X.2007.00371.x

Drucker, S., & Puri, M. (2005). On the Benefits of Concurrent Lending and Underwriting. *The Journal of Finance, 60*(6), 2763–2799. https://doi.org/10.1111/j.1540-6261.2005.00816.x

Durbin, J. (1954). Errors in Variables. *Review of the International Statistical Institute*, *22*(3), 23–32.

Eckbo, B. E. (1983). Horizontal mergers, collusion, and stockholder wealth. *Journal of Financial Economics*, *11*(1–4), 241–273. https://doi.org/10.1016/0304-405X(83)90013-2

Engelberg, J., Gao, P., & Parsons, C. A. (2011). *Friends with money*. https://doi.org/10.1016/j.jfineco.2011.08.003

Engelberg, J., Ozoguz, A., & Wang, S. (2018). Know Thy Neighbor: Industry Clusters, Information Spillovers, and Market Efficiency. *Journal of Financial and Quantitative Analysis*, *53*(5), 1937–1961. https://doi.org/10.1017/S0022109018000261

Ertugrul, M., & Krishnan, K. (2014). Investment Banks in Dual Roles: Acquirer M&A Advisors As Underwriters. *Journal of Financial Research*, *37*(2), 159–189. https://doi.org/10.1111/jfir.12033

Espenlaub, S., Khurshed, A., & Mohamed, A. (2012). IPO survival in a reputational market. *Journal of Business Finance and Accounting*, *39*(3–4), 427–463. https://doi.org/10.1111/j.1468-5957.2012.02280.x

Faccio, M., McConnell, J. J., & Stolin, D. (2006). Returns to Acquirers of Listed and Unlisted Targets. *Journal of Financial and Quantitative Analysis*, *41*(01), 197. https://doi.org/10.1017/S0022109000002477

Fang, L. H. (2005). Investment bank reputation and the price and quality of underwriting services. *Journal of Finance*, *60*(6), 2729–2761. https://doi.org/10.1111/j.1540-6261.2005.00815.x

Fernando, C. S., Gatchev, V. A., May, A. D., & Megginson, W. L. (2015). Prestige without purpose? Reputation, differentiation, and pricing in U.S. equity underwriting. *Journal of Corporate Finance*, *32*, 41–63. https://doi.org/10.1016/j.jcorpfin.2015.04.002

Fernando, C. S., Gatchev, V. A., & Spindt, P. A. (2005). Wanna Dance? How Firms and Underwriters Choose Each Other. *Journal of Finance*, *60*(5), 1–33. https://doi.org/10.1111/j.1540-6261.2005.00804.x

Financial Times. (2013, April 24). *Evercore / Greenhill: sibling rivalry*.

Financial Times. (2019). *League Tables – Investment Banking Review – FT.com*. League Tables. https://markets.ft.com/data/league-tables/tables-and-trends/mergers-and-acquisitions

Financial Times. (2021). *League Tables – Investment Banking Review – FT.com*. https://markets.ft.com/data/league-tables/tables-and-trends/Equity

Fletcher, J. M., & Lehrer, S. F. (2011). Genetic lotteries within families. *Journal of Health Economics*, *30*, 647–659. https://doi.org/10.1016/j.jhealeco.2011.04.005

Francis, B. B., Hasan, I., & Sun, X. (2014a). Does relationship matter? The choice of financial advisors. *Journal of Economics and Business*, *73*, 22–47. https://doi.org/10.1016/j.jeconbus.2013.12.002

Francis, B. B., Hasan, I., & Sun, X. (2014b). The certification role of financial advisors in cross-border M&As. *International Review of Financial Analysis*, *32*, 143–158. https://doi.org/10.1016/j.irfa.2014.01.003

Fuller, K., Netter, J., & Stegemoller, M. (2002). What Do Returns to Acquiring Firms Tell Us? Evidence from Firms That Make Many Acquisitions. *The Journal of Finance*, *57*(4), 1763–1793. https://doi.org/10.1111/1540-6261.00477

Giuffra, R. J. J. (1986). Investment Bankers' Fairness Opinions in Corporate Control Transactions. *Yale Law Journal*, *96*(1), 119.

Goergen, M., & Renneboog, L. (2004). Shareholder Wealth Effects of European Domestic and Cross-border Takeover Bids. *European Financial Management*, *10*(1), 9–45. https://doi.org/10.1111/j.1468-036X.2004.00239.x

Golubov, A., Petmezas, D., & Travlos, N. G. (2012). When it pays to pay your investment banker: New evidence on the role of financial advisors in M&As. *Journal of Finance*, *67*(1), 271–312. https://doi.org/10.1111/j.1540-6261.2011.01712.x

Golubov, A., Yawson, A., & Zhang, H. (2015). Extraordinary acquirers. *Journal of Financial Economics*, *116*(2), 314–330. https://doi.org/10.1016/j.jfineco.2015.02.005

Graham, M., Walter, T. S., Yawson, A., & Zhang, H. (2017). The value-added role of industry specialist advisors in M&As. *Journal of Banking and Finance*, *81*, 81–104. https://doi.org/10.1016/j.jbankfin.2017.04.010

Gregory, A. (2005). The long run abnormal performance of UK acquirers and the free cash flow hypothesis. *Journal of Business Finance and Accounting*, *32*(5–6), 777–814. https://doi.org/10.1111/j.0306-686X.2005.00614.x

Gregory, A., Guermat, C., & Al-Shawawreh, F. (2010). UK IPOs: Long run returns, behavioural timing and pseudo timing. *Journal of Business Finance and Accounting*, *37*(5–6), 612–647. https://doi.org/10.1111/j.1468-5957.2010.02182.x

Grinblatt, M., & Hwang, C. Y. (1989). American Finance Association Signalling and the Pricing of New Issues. *Source: The Journal of Finance*, *44*(2), 393–420.

Gugler, K., Mueller, D. C., Burcin Yurtoglu, B., & Zulehner, C. (2003). The effects of mergers: an international comparison. *International Journal of Industrial Organization*, *21*, 625–653. https://doi.org/10.1016/S0167-7187(02)00107-8

Guo, J., Li, Y., Wang, C., & Xing, X. (2018). The role of investment bankers in M&As: New evidence on Acquirers' financial conditions. *Journal of Banking and Finance*. https://doi.org/10.1016/j.jbankfin.2018.02.004

Gupta, A., & Misra, L. (2007). Deal Size, Bid Premium, and Gains in Bank Mergers: The Impact of Managerial Motivations. *The Financial Review*, *42*(3), 373–400. https://doi.org/10.1111/j.1540-6288.2007.00176.x

Habib, M. A., & Ljungqvist, A. P. (2001). Underpricing and entrepreneurial wealth losses in IPOs: Theory and evidence. *Review of Financial Studies*, *14*(2), 433–458. https://doi.org/10.1093/rfs/14.2.433

Hausman, J. A. (1978). *Specification Tests in Econometrics*. *46*(6), 1251–1271.

Hoberg, G. (2007). The Underwriter Persistence Phenomenon. *Journal of Finance*, *62*(3), 1169–1206. https://doi.org/10.1111/j.1540-6261.2007.01233.x

Hochberg, Y. v, & Lindsey, L. (2010). *Incentives, Targeting, and Firm Performance: An Analysis of Non-executive Stock Options*. *23*(11), 4148–4186. https://www.jstor.org/stable/40961310?seq=1&cid=pdf-

Hodgson, C. (2020). *UK heads for busy year of IPOs after 2020 bounceback*. Financial Times.

Hoen, A. R., & Oosterhaven, J. (2006). On the measurement of comparative advantage. *Annals of Regional Science*, *40*(3), 677–691. https://doi.org/10.1007/s00168-006-0076-4

Hoque, H. (2014). Role of asymmetric information and moral hazard on IPO underpricing and lockup. *Int. Fin. Markets, Inst. and Money*, *30*, 81–105. https://doi.org/10.1016/j.intfin.2014.02.001

Hunter, W. C., & Jagtiani, J. (2003). An analysis of advisor choice, fees, and effort in mergers and acquisitions. *Review of Financial Economics*, *12*(1), 65–81. https://doi.org/10.1016/S1058-3300(03)00007-7

Iannotta, G. (2010). Investment Banking: A Guide to Underwriting Services. In *Bank- und Kapitalmarktrecht*. Springer. https://doi.org/10.1007/978-3-540-93765-4

IMAA. (2018). *M&A Statistics.* https://imaa-institute.org/mergers-and-acquisitions-statistics/

Ismail, A. (2010). Are good financial advisors really good? The performance of investment banks in the M&A market. *Review of Quantitative Finance and Accounting*, *35*(4), 411–429. https://doi.org/10.1007/s11156-009-0155-6

Jackson, G., & Miyajima, H. (2007). Varieties of Capitalism, Varieties of Markets: Mergers and Acquisitions in Japan, Germany, France, the UK and USA. *Social Science Research Network Working Paper Series*, 1–55. https://doi.org/10.2139/ssrn.1012210

Jegadeesh, N., & Kim, W. (2010). Do analysts herd? An analysis of recommendations and market reactions. *Review of Financial Studies*, *23*(2), 901–937. https://doi.org/10.1093/rfs/hhp093

J.P. Morgan. (2019). *2019 Global M&A Outlook: Unlocking value in a dynamic market*.

Kale, J. R., Kini, O., & Ryan, H. E. (2003). Financial Advisors and Shareholder Wealth Gains in Corporate Takeovers. *The Journal of Financial and Quantitative Analysis*, *38*(3), 475–501. http://www.jstor.org/stable/4126728

Keloharju, M., Knüpfer, S., & Linnainmaa, J. (2012). Do investors buy what they know? Product market choices and investment decisions. *Review of Financial Studies*, *25*(10), 2921–2958. https://doi.org/10.1093/rfs/hhs090

Kim, D., Palia, D., & Saunders, A. (2010). Are Initial Returns and Underwriting Spreads in Equity Issues Complements or Substitutes? *Financial Management*, *39*(4), 1403–1423. https://doi.org/10.1111/j.1755-053X.2010.01117.x

Kisgen, D. J., Qian, J. Q., & Song, W. (2009). Are fairness opinions fair? The case of mergers and acquisitions. *Journal of Financial Economics*, *91*(2), 179–207. https://doi.org/10.1016/j.jfineco.2008.03.001

Kolasinski, A. C., & Kothari, S. P. (2008). Investment Banking and Analyst Objectivity: Evidence from Analysts Affiliated with Mergers and Acquisitions Advisors. *The Journal of Financial and Quantitative Analysis*, *43*(4), 817–842.

Krigman, L., & Jeffus, W. (2016). IPO pricing as a function of your investment banks' past mistakes: The case of Facebook. *Journal of Corporate Finance*, *38*, 335–344. https://doi.org/10.1016/j.jcorpfin.2016.02.003

Krigman, L., Shaw, W. H., & Womack, K. L. (2001). Why do firms switch underwriters? *Journal of Financial Economics*, *60*(2–3), 245–284. https://doi.org/10.1016/S0304-405X(01)00045-9

Lang, L. H. P., Stulz, R. M., & Walkling, R. A. (1989). Managerial performance, Tobin's Q, and the gains from successful tender offers. *Journal of Financial Economics*, *24*(1), 137–154.

Leone, A. J., Rock, S., & Willenborg, M. (2007). Disclosure of intended use of proceeds and underpricing in initial public offerings. *Journal of Accounting Research*, *45*(1), 111–153. https://doi.org/10.1111/j.1475-679X.2007.00229.x

Lewellen, K. (2006). Risk, reputation, and IPO price support. *Journal of Finance*, *61*(2), 613–653. https://doi.org/10.1111/j.1540-6261.2006.00850.x

Lewellen, W. G. (1971). A Pure Financial Rationale for the Conglomerate Merger. *The Journal of Finance*, *26*(2), 521–537.

Liaw, K. T. (2011). *The Business of Investment Banking: A Comprehensive Overview* (3rd ed.). John Wiley & Sons, Incorporated. http://ebookcentral.proquest.com/lib/salford/detail.action?docID=697695.

Liu, X., & Ritter, J. R. (2010). The Economic Consequences of IPO Spinning. *The Review of Financial Studies*, *23*(5), 2024–2059.

Liu, X., & Ritter, J. R. (2011). Local underwriter oligopolies and IPO underpricing. *Journal of Financial Economics*, *102*(3), 579–601. https://doi.org/10.1016/j.jfineco.2011.01.009

Ljungqvist, A., Marston, F., & Wilhelm, W. J. (2006). Competing for Securities Underwriting Mandates: Banking Relationships and Analyst Recommendations. *The Journal of Finance*, *61*(1), 301–340. https://doi.org/10.1111/j.1540-6261.2006.00837.x

Ljungqvist, A., Nanda, V., & Singh, R. (2006). Hot Markets, Investor Sentiment, and IPO Pricing. *The Journal of Business*, *79*(4), 1667–1702. https://doi.org/10.1086/503644

Ljungqvist, A. P., & Wilhelm, W. J. (2002). IPO Allocations: Discriminatory or Discretionary? In *Journal of Financial Economics* (Vol. 65).

Logue, D. E. (1973). On the pricing of unseasoned equity issues. *Journal of Financial and Quantitative Analysis*, *8*(1), 1965–1969.

Logue, D. E., Rogalski, R. J., Seward, J. K., & Foster-Johnson, L. (2002). What Is Special about the Roles of Underwriter Reputation and Market Activities in Initial Public Offerings? *The Journal of Business*, *75*(2), 213–243. https://doi.org/10.1086/338702

Loughran, T., & Ritter, J. R. (2002). Why Don't Issuers Get Upset about Leaving Money on the Table in IPOs? *The Review of Financial Studies*, *15*(2), 413–443.

Loughran, T., & Ritter, J. R. (2004). Why Has IPO Underpricing Changed Over Time? *Financial Management*, *33*(3). https://doi.org/10.2139/ssrn.331780

Loughran, T., & Vijh, A. M. (1997). Do long-term shareholders benefit from corporate acquisitions? *The Journal of Finance*, *52*(5), 1765–1790.

Lowry, M., & Schwert, G. W. (2002). IPO market cycles: Bubbles or sequential learning? *Journal of Finance*, *57*(3), 1171–1200. https://doi.org/10.1111/1540-6261.00458

Loyeung, A. (2019). The role of boutique financial advisors in mergers and acquisitions. *Australian Journal of Management*, *44*(2), 212–247. https://doi.org/10.1177/0312896218792970

Mackinlay, G. A. (1997). Event Studies in Economics and Finance Event Studies in Economics and Finance. *Journal of Economic Literature*, *35*(1), 13–39.

Malatesta, P. H. (1983). The wealth effect of merger activity and the objective functions of merging firms. *Journal of Financial Economics*, *11*(1–4), 155–181.

Malikov, K., Demirbag, M., Kuvandikov, A., & Manson, S. (2020). *Workforce reductions and post-merger operating performance: The role of corporate governance*. https://doi.org/10.1016/j.jbusres.2020.08.042

Maloney, M. T., Mccormick, R. E., & Mitchell, M. L. (1993). Managerial Decision Making and Capital Structure. *The Journal of Business*, *66*(2), 189–217. http://www.jstor.org/stable/2353310

Mandelker, G. (1974). Risk and return: the case of merging firms. *Journal of Financial Economics*, *1*(4), 303–335.

Mandelker, G., & Raviv, A. (1977). Investment Banking: An Economic Analysis of Optimal Underwriting Contracts. *The Journal of Finance*, *32*(3), 683–694.

Manne, H. G. (1965). Mergers and the Market for Corporate Control. *Journal of Political Economy*, *73*(2), 110–120. https://doi.org/10.1086/259000

Martynova, M., & Renneboog, L. (2008). A century of corporate takeovers: What have we learned and where do we stand? *Journal of Banking and Finance*, *32*(10), 2148–2177. https://doi.org/10.1016/j.jbankfin.2007.12.038

Martynova, M., & Renneboog, L. (2011). The Performance of the European Market for Corporate Control: Evidence from the Fifth Takeover Wave. *European Financial Management*, *17*(2), 208–259. https://doi.org/10.1111/j.1468-036X.2009.00497.x

Masulis, R. W., & Simsir, S. A. (2018). Deal Initiation in Mergers and Acquisitions. *Journal of Financial and Quantitative Analysis*, *53*(6), 2389–2430. https://doi.org/10.1017/S0022109018000509

Masulis, R. W., Wang, C., & Xie, F. (2007). Corporate Governance and Acquirer Returns. *The Journal of Finance*, *62*(4), 1851–1889. http://www.jstor.org/stable/4622319

McLaughlin, R. M. (1992). Does the form of compensation matter? Investment banker fee contracts in tender offers. *Journal of Financial Economics*, *32*, 223–260.

McLaughlin, R. M. (1996). Adverse contract incentives and investment banker reputation: Target firm tender offer fees. *The Journal of Financial Research*, *XIX*(1), 135–156.

Meoli, M., Signori, A., & Vismara, S. (2015). Are IPO underwriters paid for the services they provide? *International Journal of Managerial Finance*, *11*(4). https://doi.org/10.1108/IJMF-05-2014-0073

Michaely, R., & Shaw, W. H. (1994). The Pricing of Initial Public Offerings: Tests of Adverse-Selection and Signalling Theories. *The Review of Financial Studies*, *7*(2), 279–319.

Michel, A., Shaked, I., & Lee, Y.-T. (1991). An Evaluation of Investment Banker Acquisition Advice: The Shareholders' Perspective. *Financial Management*, *20*(2), 40–49. https://doi.org/10.2307/3665728

Migliorati, K., & Vismara, S. (2014). Ranking underwriters of European IPOs. *European Financial Management*, *20*(5), 891–925. https://doi.org/10.1111/eufm.12049

Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, *73*(2), 201–228. https://doi.org/10.1016/j.jfineco.2003.07.002

Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2007). How Do Diversity of Opinion and Information Asymmetry Affect Acquirer Returns? *The Review of Financial Studies*, *20*(6), 2047–2078. http://www.jstor.org/stable/4494828

Moran, P., & Pandes, J. A. (2019). Elite law firms in the IPO market R. *Journal of Banking and Finance*, *107*, 105612. https://doi.org/10.1016/j.jbankfin.2019.105612

Morrison, A. D., & Wilhelm, W. J. (2007). Investment Banking: Past, Present, and Future. *Journal of Applied Corporate Finance*, *19*(1), 8–20. https://doi.org/10.1111/j.1745-6622.2007.00124.x

Mura, P. la, Rapp, M. S., Schwetzler, B., & Wilms, A. (2011). The certification hypothesis of fairness opinions for acquiring firms. *International Review of Law and Economics*, *31*, 240–248. https://doi.org/10.1016/j.irle.2011.07.004

Nadarajah, S., Duong, H. N., Ali, S., Liu, B., & Huang, A. (2020). Stock liquidity and default risk around the world. *Journal of Financial Markets*. https://doi.org/10.1016/j.finmar.2020.100597

Officer, M. S., Poulsen, A. B., Stegemoller, M., Boone, A., Deangelo, H., Faccio, M., James, C., Mikkelson, W., Moeller, S., Mulherin, H., & Schlingemann, F. (2005). Acquirer returns in acquisitions of privately held targets. In *Review of Finance, Forthcoming*.

Powell, R. G., & Stark, A. W. (2005). *Do takeovers create "real" gains? Some UK evidence*.

Rau, P. R. (2000). Investment bank market share, contingent fee payments, and the performance of acquiring firms. *Journal of Financial Economics*, *56*(2), 293–324. https://doi.org/10.1016/S0304-405X(00)00042-8

Rau, P. R., & Rodgers, K. J. (2002). Do Bidders Hire Top-Tier Investment Banks to Certify Value? *SSRN Electronic Journal.* Published. https://doi.org/10.2139/ssrn.298172Rau, P. R., & Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms. *Journal of Financial Economics*, *49*(2), 223–253. https://doi.org/10.1016/S0304-405X(98)00023-3

REFINITIV. (2019). *Boutique M&A Fees*.

Renneboog, L., & Vansteenkiste, C. (2019). Failure and success in mergers and acquisitions. *Journal of Corporate Finance*, *58*, 650–699. https://doi.org/10.1016/j.jcorpfin.2019.07.010

Renneboog, L., & Zhao, Y. (2014). Director networks and takeovers. *Journal of Corporate Finance*, *28*, 218–234. https://doi.org/10.1016/j.jcorpfin.2013.11.012

Reuters. (2016). Ex-Goldman banker Gordon Dyal beefs up M & A boutique. *Reuters News*, *July*.

Ritter, J. R. (1987). The costs of going public. *Journal of Financial Economics*, *19*, 269–281.

Ritter, J. R. (1991). The Long-Run Performance of initial Public Offerings. *The Journal of Finance*, *46*(1), 3–27. https://doi.org/10.1111/j.1540-6261.1991.tb03743.x

Ritter, J. R., & Welch, I. (2002). A Review of IPO Activity, Pricing, and Allocations. *The Journal of Finance*, *LVII*(4), 1795–1828.

Rock, K. (1986). Why new issues are underpriced. *Journal of Financial Economics*, *15*(1–2), 187–212. https://doi.org/10.1016/0304-405X(86)90054-1

Rosen, R. J. (2006). Merger Momentum and Investor Sentiment: The Stock Market Reaction to Merger Announcements. *Source: The Journal of Business*, *79*(2), 987–1017. https://doi.org/10.1086/499146

Rosenzweig, B. E. (2007). Private versus Public regulation: A Comparative Analysis of British and American Takeover Controls. *Hofstra Law Review*, *7*(2), 243–258. https://doi.org/10.3366/ajicl.2011.0005

Ruud, J. S. (1993). Underwriter price support and the IPO underpricing puzzle. *Journal of Financial Economics*, *34*(2), 135–151. https://doi.org/10.1016/0304-405X(93)90015-4

Sargan, J. D. (1958). The Estimation of Economic Relationships using Instrumental Variables. *Econometrica*, *26*(3), 393. https://doi.org/10.2307/1907619

Schenone, C., Berk, J., Boot, A., Claessens, S., Gerardi, D., Krigman, L., Langhor, P., Leland, H., Levine, R., Mehran, H., Michaely, R., Mikkelson, W., Mosser, P., Perotti, E., Pulvino, T., Rubinstein, M., Sapienza, P., & Wilcox, J. (2004). The Effect of Banking Relationships on the Firm's IPO Underpricing. *Journal of Finance*, *59*(6), 2903–2958. https://doi.org/10.1111/j.1540-6261.2004.00720.x

Segar, M. (2016). Debt Capital Markets Review Full Year 2016. In *Debt Capital Markets Review*. http://dmi.thomsonreuters.com

Servaes, H. (1991). Tobin's Q and the Gains from Takeovers. *The Journal of Finance*, *LXVI*(1), 409–419.

Servaes, H., & Zenner, M. (1996). The Role of Investment Banks in Acquisitions. *The Review of Financial Studies*, *9*(3), 787–815. http://www.jstor.org/stable/2962311

Shapiro, C. (1983). Premiums for High Quality Products As Returns to Reputations. *The Quarterly Journal of Economics*, *98*(4), 659–680.

Shayndi, R. (2015, August 13). Centerview seals second role on European Nomad deal; Boutique investment bank acts on its second deal involving the owners of European frozen foods business. *WSJ MoneyBeat*.

Sheng, L. (2016). Global Equity Capital Markets Review - Managing Underwriters - Full Year 2016. In *Global Equity Capital Markets Review*. http://dmi.thomsonreuters.com/Content/Files/4Q2014_Global_Equity_Capital_Markets_Review.pdf

Silva, A., & Bilinski, P. (2015). Intended Use of Proceeds, Underwriter Quality and the Long-run Performance of SEOs in the UK. *Journal of Business Finance & Accounting*, *42*(9), 306–686. https://doi.org/10.1111/jbfa.12171

Song, W., Wei, J. D., & Zhou, L. (2013). The value of "boutique" financial advisors in mergers and acquisitions. *Journal of Corporate Finance*, *20*, 94–114. https://doi.org/10.1016/j.jcorpfin.2012.12.003

Stigler, G. J. (1950). Monopoly and Oligopoly by Merger. *The American Economic Review*, *40*(2), 23–34.

Strong, N. (1992). Modelling Abnormal Returns: a Review Article. *Journal of Business Finance & Accounting*, *19*(4), 533–553. https://doi.org/10.1111/j.1468-5957.1992.tb00643.x

Titman, S., & Trueman, B. (1986). Information quality and the value of new issues. *Journal of Accounting and Economics*, *8*, 159–172.

Tokbolat, Y., Thompson, S., & Le, H. (2019). Shareholder voting in mergers and acquisitions: evidence from the UK Shareholder voting in mergers and acquisitions: evidence from the UK. *The European Journal of Finance*, *25*(9), 815–834. https://doi.org/10.1080/1351847X.2018.1552602

Toole, M. (2016). *Deal Making 2016: Surprises left in store*. https://financial.thomsonreuters.com/content/dam/openweb/documents/pdf/financial/deal-making-2016.pdf

Toole, M. (2020, July 16). *Global capital markets smash records | Refinitiv Perspectives*. https://www.refinitiv.com/perspectives/market-insights/global-capital-markets-smash-records/

Unlu, E., Ferris, S. P., Noronha, G., & Noronhaz, G. (2004). IPO underpricing over time: evidence from the UK. *Applied Economics Letters*, *11*(1), 5–9. https://doi.org/10.1080/1350485042000187426

Walter, G. A., & Barney, J. B. (1990). Management Objectives in Mergers and Acquisitions. *Management Journal*, *11*(1), 79–86.

Walter, T. S., Yawson, A., & Yeung, C. P. W. (2008). The role of investment banks in M&A transactions: Fees and services. *Pacific Basin Finance Journal*, *16*(4), 341–369. https://doi.org/10.1016/j.pacfin.2007.08.002

Walter, T., Yawson, A., Yeung, C. P. W., & Walter, T. S. (2005). *Does a Quality Premium Exist in M&A Advisory Fees?*

Widarjo, W., Rahmawati, B., & Widagdo, A. K. (2017). Underwriter reputation, intellectual capital disclosure, and underpricing. *International Journal of Business and Society*, *18*(2), 227–244.

Wu, D.-M. (1973). *Alternative Tests of Independence between Stochastic Regressors and Disturbances*. *41*(4), 733–750. https://www.jstor.org/stable/1914093?seq=1&cid=pdf-

Wyatt, A., Clarkson, P., Curtis, A., Demers, E., Emanuel, D., Frantz, P., Lo, K., Matolcsy, Z., Matsumoto, D., Percy, M., Rajgopal, S., Shevlin, T., Wells, P., Willenborg, M., & Cahan, S. (2014). Is there useful information in the “use of proceeds” disclosures in IPO prospectuses? *Accounting and Finance*, *54*, 625–667. https://doi.org/10.1111/acfi.12013

Yaghoubi, R., Yaghoubi, M., Locke, S., & Gibb, J. (2016). Mergers and acquisitions: a review. Part 1. *Studies in Economics and Finance*, *33*(1), 147–188. https://doi.org/10.1108/SEF-03-2015-0078