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Initial Public Offerings:
A Synthesis of the Literature and Directions for Future Research

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Initial Public Offerings: 
A Synthesis of the Literature and Directions for Future Research

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ABSTRACT

The purpose of this monograph is to provide an overview of the IPO literature since 2000. The fewer numbers of companies going public in recent years has raised many questions regarding the IPO process, in both academic and regulatory circles. As we all strive to understand these changes in the market, it is especially important to understand the dynamics underlying the IPO process. If the process of going public is too costly or the IPO mechanism is plagued by too many conflicts of interest among the various intermediaries, then private companies may rationally choose other methods of raising capital. In a related vein, it is imperative that new regulations not be based on research focusing solely on large,
more mature firms. Newly public firms have unique characteristics, and an increased understanding of such issues will contribute positively to well-functioning public markets and further growth of the entrepreneurial sector.

We also provide a detailed guide to researchers on how to obtain a research-quality sample of IPOs, from standard data sources. Related to this, we tabulate important corrections to these standard data sources.
Transitioning from private to public status is a watershed event in the life of any firm. For most firms and managers, the process of conducting an IPO is something they will only go through once. As such, there exists much uncertainty over the process, starting with the decision of whether to go public and including issues such as when to go public, who to select as advisors, how to price the offering and how to structure the governance of the newly public firm. A broad set of academic literature has studied all of these issues, and the purpose of this monograph is to review the existing evidence and also to suggest areas in which our understanding is less complete and which would benefit from further research.

We begin with a discussion of why firms go public. While the most obvious factor would seem to be the raising of capital, this is far from the only determinant and many studies conclude that it is not the most important determinant. A continuing debate in the literature concerns whether firms go public primarily to raise money for future investment or for other reasons such as market timing, *i.e.*, because they expect the market to value them higher than their ‘true’ value. We review the evidence on both sides of this debate and also discuss the myriad of other factors that potentially play at least some role in managers’ decisions to take their firms public: capital structure re-adjustment, providing
liquidity for the owners, facilitating M&A, advantages of having a publicly observable stock price, compensation, and the credibility that comes with having multiple parties scrutinize the firm (e.g., analysts, institutional investors, etc.).

Given the broad array of factors that motivate companies to go public, it is perhaps not surprising that the types of firms going public varies widely. In the interests of providing the reader with an informed overview of this market, we highlight a number of important stylized facts concerning the IPO market in Section 3. One of the many fascinating things about this market concerns the ways it has varied over time, and for this reason we disaggregate many of these stylized facts by time. Capital markets in the U.S. change and evolve at a relatively rapid pace, and consistent with this we observe strong differences in the types of companies choosing to go public and also in the ways in which they structure their offerings. It will perhaps be informative to consider jointly some of these time trends as a way to better understand the changes in our markets, including for example the lower frequency of IPOs over the past 15 years.

More than most corporate events, IPOs present a number of “puzzles”. For example, it is well known that IPOs are on average underpriced, with average first day returns of approximately 15% - but the reasons for such large one-day returns continue to be debated. Beyond this one-day return, the returns associated with IPOs over longer time intervals are more complex. Do IPOs underperform over the long-term, measured as the three or five years following the offering? The answer is yes if we compare them to a broad market index, but the answer is no if we compare them to firms of similar size and book-to-market.

The story becomes even more complex when we consider the strong time-series fluctuations within each of these pricing patterns. We know that many companies go public during some periods but relatively few in others. Over many decades, this variation was explained largely by fluctuations in companies’ demands for capital and by changing investor sentiment that influenced the price at which a company could sell itself. However, neither of these factors is sufficient to explain the dramatic fall in the number of IPOs since 2000. Finally, the type of company going public in “hot” versus “cold” markets is different and there is
Introduction

some evidence that companies going public during hot markets perform worse, but measurement issues can make definitive conclusions difficult.

These fluctuations in performance highlight the extent of uncertainty surrounding these companies. In fact, 37% of IPO firms delist within the first five years after the IPO, with 14% being due to poor performance and 23% because they are acquired. In addition, many companies that start the process to go public do not complete the process: 20% of IPOs are withdrawn, and of those that are withdrawn relatively few ever successfully complete an IPO.

Given this high uncertainty combined with the fact that most companies only ever conduct an IPO one time, intermediaries have the potential to play a particularly important role. The number of intermediaries involved in the months surrounding many firms’ IPOs is large: venture capitalists, underwriter banks, lawyers, analysts, institutional investors, regulators, etc. While the effects of some of these intermediaries has received considerable attention, the influence of other parties, e.g., regulators, is less understood. We both overview the current state of knowledge regarding the roles of these various entities, and comment on what we perceive to be gaps in our understanding.

Finally, an area of growing research concerns the governance of newly public firms. While multiple forces in the markets (e.g., exchange listing requirements, pension fund recommendations, proxy advisory service company recommendations) have been pushing firms toward a common set of governance standards, there are reasons to believe that the governance demands of newly public firms are unique and very different from those of their more mature counterparts. Because the vast majority of corporate governance research is based on similar samples of mostly mature firms such as the S&P1500, the aforementioned recommendations are largely based on these more mature firms. We argue that these conclusions are frequently not appropriate for younger and smaller firms. We review the still nascent literature in this area, and encourage further research along this dimension.

Perhaps the issue that has garnered the most attention in recent years with respect to IPOs is the decreased number of them. Why are fewer companies choosing to raise public equity on US markets? While new companies are being founded on a regular basis, these small
private companies are with increasing frequency being acquired by large, already public companies. As a result, a smaller number of companies are controlling an increasing percentage of entrepreneurial activity. From an antitrust perspective, this raises obvious concerns. A lack of sufficient competition has the potential to put a downward bias on future innovative activity. We hope that a more complete understanding of many dynamics surrounding IPOs, as overviewed in this monograph, will help guide researchers in efforts to better address these issues. To the extent that companies are increasingly concluding that the costs issuing public equity for the first time exceed the benefits, it is clear that we need a better understanding of these costs and benefits and the ways they have changed over time.

The literature on going public is rich and vast. Given the depth and breadth of the literature we made a decision to concentrate this review mainly on research published in the 21st century and with a particular focus on U.S. markets. And even within this prism we were not able to both cover all grounds and keep this review within a manageable length, while delving into some of the topics more deeply. To facilitate discussion and analysis of the most important facets of the IPO process, we also decided to replicate some of the main empirical results concerning IPOs ourselves using the most comprehensive coverage in terms of the length of the sample period and the cross section of firms included. This enables us to see how some of the empirical regularities have changed over time and how others are more immune to the time period one examines.

The rest of this review is structured as follows. We start in Section 2 by reviewing the reasons that firms go public. Having established firms’ basic motivations for public listing, Section 3 provides an empirical overview of the key aspects of the IPO process, over the past 45 years, 1972 – 2016. Section 4 provides a detailed discussion of the institutional details surrounding the IPO process, which are key to understanding this market. Section 5 reviews the rich literature, on the pricing of IPOs, and the role the underwriter in the process. Section 6 discusses the role of intermediaries throughout the IPO process. Sections 7 and 8 review the literature and evidence on post-IPO returns and cycles in the IPO market, respectively. Finally, Section 9 discusses the burgeoning literature on the governance of newly public firms, and Section 10 concludes.
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