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The Rise of Accelerated Seasoned Equity Underwritings

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According to the annual league table summaries compiled by *Investment Dealers' Digest*, the worldwide issuance of securities jumped from $580 billion in 1990 to over $7.6 trillion in 2006. And the range of activities performed by global investment and universal banks has expanded in equally dramatic fashion. But as capital markets have grown in size, scope, and sophistication, there has also been a remarkable convergence of some capital-raising practices. In particular, recent studies show that U.S.-style "bookbuilding" has become the dominant method of executing initial public offerings in all major world markets,[1] and that such practices appear to be spreading to other types of debt and equity sales.[2] Further evidence of such global convergence in banking practices has been provided by studies showing that IPO auctions have failed and been supplanted by bookbuilding in every major world market where companies can choose between auctions and other offering techniques.[3]

But far from being assured, the predominance of bookbuilding over auctions in IPOs has come as a surprise to many financial economists, and largely for two reasons. First, and most appealing, is the apparent simplicity and transparency of the auction process; just put the securities out for bid and award them to the highest bidders. On top of the presumed efficiencies from this process (in relation to the intensive marketing and canvassing of investors that go into a conventional bookbuild), there is also the well-documented tendency for bookbuilt offerings to produce deeper IPO "underpricing," which represents a major cost of an equity issue to the issuing company's shareholders.[4]

There are a number of theoretical explanations for bookbuilding's triumph over auctions in the IPO market. The most compelling, in our view, focus on the role of bookbuilding in strengthening investors' incentives to acquire or provide information. In a perfectly competitive, "unmanaged" process of the kind represented by auctions, investors have minimal incentives to acquire information and participate in the price discovery process by bidding aggressively, thereby revealing their own "reservation" prices. With insufficient information about either the companies going public or investor demand for their shares, the IPO process can break down in the sense that only low-quality issuers (or so-called "lemons") will choose to go public. This may well have happened in the many non-U.S. economies that initially adopted and then abandoned IPO auctions. In the bookbuilding process, by contrast, reputable underwriters (whose reputations have been built through repeated dealings with issuers and investors) provide a subset of investors with clear incentives to produce information (both about the issuer and their own reservation prices) by limiting the investor pool to institutional investors and conditioning share allocations not only on the price and amounts of the bids, but on other considerations such as investors' participation in past transactions and record as longer-term holders. The primary (if not exclusive) focus on institutional investors is justified as a way of economizing on the marketing and canvassing efforts that are required to "build the demand curve" for the new security.[5]

According to these explanations, then, the relative merits of auctions versus bookbuilding depend primarily on the cost and availability of information about issuers and investor demand. In cases where investors have inexpensive access to such information, open IPO auctions are likely to be optimal. But when information gathering and price discovery are costly, which is likely to be the case in most IPOs (where

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1. See Ljunqvist, Jenkinson, and Wilhelm (2003). Full citations of all articles are provided in the References section at the end of this article.
2. Eckbo, Masulis, and Norli (2007).
3. Jagannathan and Sherman (2005) and Kutsuna and Smith (2004).
4. See Ljungqvist, Jenkinson, and Wilhelm (2003).
5. For the argument that auctions lead investors to produce or gather too little information about issuers, see Yung (2005). For the argument that bookbuilding helps primarily in building the demand curve by eliciting from investors their reservation prices, see Benveniste and Spindt (1989).

the demand curve must be built from scratch), bookbuilding dominates.

But what does the theory imply about the best method for conducting seasoned equity offerings by publicly traded companies? Unlike the case of an IPO, the information required to value shares in a seasoned equity offering (SEO) is much less costly to obtain because investors can readily observe the market price of existing shares. And thus the time and expense of bookbuilding may well be unnecessary when companies sell equity after their initial IPOs.

In this paper, we document for the first time a convergence of underwriting methods in the much larger global market for SEOs.[6] In contrast to what researchers have discovered in the IPO market, we find that underwriting methods that either completely avoid or dramatically shorten the bookbuilding process are rapidly gaining ground in the SEO underwriting business. Seasoned common stock sales executed through accelerated underwritings have recently increased global market share and now account for over half the value of U.S. SEOs and over two-thirds of European SEOs.

Two of the three forms of accelerated underwriting—block trades (BTs) and bought deals (BDs)—involve the very rapid sale of large blocks of shares, at auction-determined market prices, directly to an investment bank by the issuing companies or selling shareholders, with little need or capacity for information production with respect to pricing or demand. The winning bank is then responsible for reselling the shares to institutional investors. The third and most popular type of accelerated underwritings, which are called "accelerated book-built offerings" (or ABOs), are executed much more rapidly than conventional "book-builds," but are similar to traditional underwritings in that banks are responsible for the order book, price stabilization, and transparency of the allocation.

Accelerated transactions (henceforth "ATs") differ qualitatively from the established underwriting methods for SEOs, which have traditionally been marketed in much the same way as IPOs. Seasoned common stock issues must generally follow similar regulatory processes, though many countries have streamlined filing and disclosure requirements. Besides their larger average size, SEOs differ from IPOs, as already noted, in having observable market values when the offerings are priced, which obviously makes pricing much easier. While details differ across countries and over time, the basic features of traditional SEO underwriting practices have remained constant. A company wishing to raise capital by selling newly issued shares—or a shareholder wishing to sell existing shares—negotiates underwriting terms directly with one or more investment banks, which then form a syndicate of banks to distribute shares to investors. In the case of "primary," or capital-raising, offers, managers accompany underwriters on road shows, during which the underwriters assess institutional investor demand and determine an offer price by building an order book. Thus, in traditional underwritten offerings, the investment banks gradually assess investor demand and use the information received to generate an offer price. The banks make a "firm commitment" to underwrite the shares only at the conclusion of this process.

In accelerated underwritings, banks do not generate this information before bidding for the shares, and their principal economic function is to resell the stock very rapidly. In both block trades and bought deals, the underwriting bank purchases shares directly from the firm or shareholder, and then becomes unconditionally responsible for reselling the shares with no recourse to the original seller. In an ABO, the lead-manager must quickly assess market demand before committing to an offer price, but there is no time to conduct true due diligence. ABO issuers choose the lead underwriter based on the "backstop clause" (which includes the minimum price guaranteed the issuer), the underwriting spread, and other profit-sharing agreements. The winning bank then solicits bids from top-tier institutional investors to ensure a more accurate price for the issue, and underwriters often engage in price stabilization, at least in the case of the larger ABOs. All three kinds of accelerated deals thus rely heavily on investment banks' capital base and risk tolerance.

In the rest of this paper, we document and offer explanations for the dramatic rise of accelerated SEOs since 1991. We also attempt to determine the extent to which this evolution has been driven by value-maximizing behavior by all parties—investors, firms, and bankers. The main alternative to this hypothesis is that accelerated deals have been pushed on reluctant corporate issuers by increasingly powerful investment banks with the aim of increasing banking revenues and market share.[7] More specifically, we investigate whether banks have benefited at the expense of issuers and their investors by examining the costs, pricing, and market impact of accelerated versus traditional SEO deals.

At the time of this writing, there was no well-established nomenclature or taxonomy for the different kinds of accelerated SEOs.[8] Throughout this paper, we identify ATs as SEOs with the following four characteristics: (1) initiation by issuers or sellers; (2) rapid completion; (3) absence of a road show, pre-issue publication of a detailed prospectus, or

6. Although relatively few companies raise capital through a seasoned equity offering in any given year, SEOs usually raise much more total annual financing than do IPOs, primarily because seasoned offerings are much larger. For example, in 2004-2005 global SEO dollar volume was nearly double IPO volume, and global SEO issuance volume in 2006 ($317.2 billion) was still one-fourth larger than 2006's near record IPO volume of $256.4 billion. Fama and French (2005) show that only about 40% of large (30% of small) U.S. public companies execute an SEO as frequently as once per decade, and only about 11% of large (and 8% of small) public companies launch an SEO in any given year.

7. This argument is similar to the "analyst lust hypothesis" posited by Loughran and Ritter (2004) to explain the sharp rise in IPO underpricing during the late 1990s.

8. To our knowledge, the study described in the pages that follow is the first extensive study of accelerated equity underwritings, and the first to examine the global rise of accelerated deals.

anything other than minimal registration with regulatory authorities and exchanges; and (4) primary if not exclusive marketing to institutional investors. In such an AT, the seller typically announces its intent and solicits bids from investment banks. The winning bidder then either buys the block for its own account and takes responsibility for placing the shares (as in a BT or BD), or rapidly assembles a small underwriting syndicate and places the deal within 48 hours (as in an ABO).

The study described in the pages that follow is, to our knowledge, the first extensive study of accelerated equity underwritings, and the first to examine the global rise of accelerated deals. We show that accelerated deals have become popular with issuers for several reasons, most notably because they are faster and cheaper than marketed deals and hence expose issuers to less price risk. And, when viewed together with our discovery that ATs and traditional SEOs have comparable announcement effects and market-impact costs, these findings suggest clear gains to issuers, while providing little evidence of investment banks' profiting *at the expense of* issuers. Nevertheless, to the extent the deals require banks to have larger capital bases and risk tolerances, the emergence of ATs may have helped the largest banks consolidate their grip on global equity underwriting. The rise of ATs has also led to the further institutionalization of capital market trading and investment holdings, and thus the decline of retail investors, in SEOs.

Our study also contributes a number of important findings to the academic investment banking literature. In what we believe is the first truly global event study analysis of the market impact of SEO announcements, our study is among the first to show that SEOs consisting partly or entirely of "secondary" sales by existing investors produce significantly more negative announcement period abnormal returns than primary, capital-raising offers. We also present a unique analysis of the size of SEO investment banking syndicates showing that accelerated deals yield much smaller, more capital intensive, and presumably riskier underwriting syndicates. ATs generate comparable revenues over much shorter transaction periods and effectively enable banks to "buy" market share and league table rankings.

The Evolution of Accelerated Underwritings

Accelerated underwriting practices (BTs, BDs, and ABOs) developed independently in three separate national markets during the 1980s and early 1990s, but did not begin to evolve into a truly standardized global offering method until the late 1990s.

The Forerunners of AT: Block Trades and Bought Deals

Block trades, which appeared initially in the U.S., include underwritten offerings by the companies themselves (primary offers) and by large shareholders (secondary offers).[9] All U.S. primary share sales and all secondary sales executed by existing shareholders with a control relationship to the firm (officers, directors, and controlling corporate owners) must be registered with the U.S. Securities and Exchange Commission. The block trades in our sample, which are drawn from the Securities Data Corporation (SDC) *New Issues Database*, occur only after the adoption of shelf registration (Rule 415) by the U.S. Securities and Exchange Commission in 1982. This regulatory change allowed companies to "shelf register" new equity, and then to sell shares as market conditions allowed over the next two years. The first major block trade involving shelf-registered shares was Houston Industries' $85 million primary share offering, which was underwritten by Goldman Sachs in April 1982.[10]

The block trade underwriting procedure that developed during the mid-1980s is still used today, and it works as follows:[11] The issuing firm (or selling shareholder) announces the amount of stock it wishes to sell and invites banks to bid for these shares, which they do at a discount to the current market price. The bank offering the lowest discount wins the right to buy the shares, which are then resold on the open market, ideally at a profit and within 24 hours. Market risk is transferred unconditionally from issuers to underwriters.

Rapid execution and near complete transfer of price risk are the two main reasons block trades have proven so popular with issuers. And it did not take long for well-capitalized banks to recognize that such trades presented the opportunity to "buy" underwriting market share through quick, albeit risky trades.[12] The banks also realized they could retain *all* of the underwriting profits in block trades rather than sharing

9. Our use of the term "block trade" is thus different from the popular usage of the term, which refers to the sale in packages of 10,000 or more shares on one of the major U.S. stock exchanges. These are never primary offerings, but are instead transactions executed principally in upstairs markets by block trade specialists, who often break the offers into many smaller portions for further sale. We exclude these "upstairs market" trades from our analysis. They are far smaller than the BTs we study, involve different buyers and sellers, and are portfolio-rebalancing rather than corporate financing events.

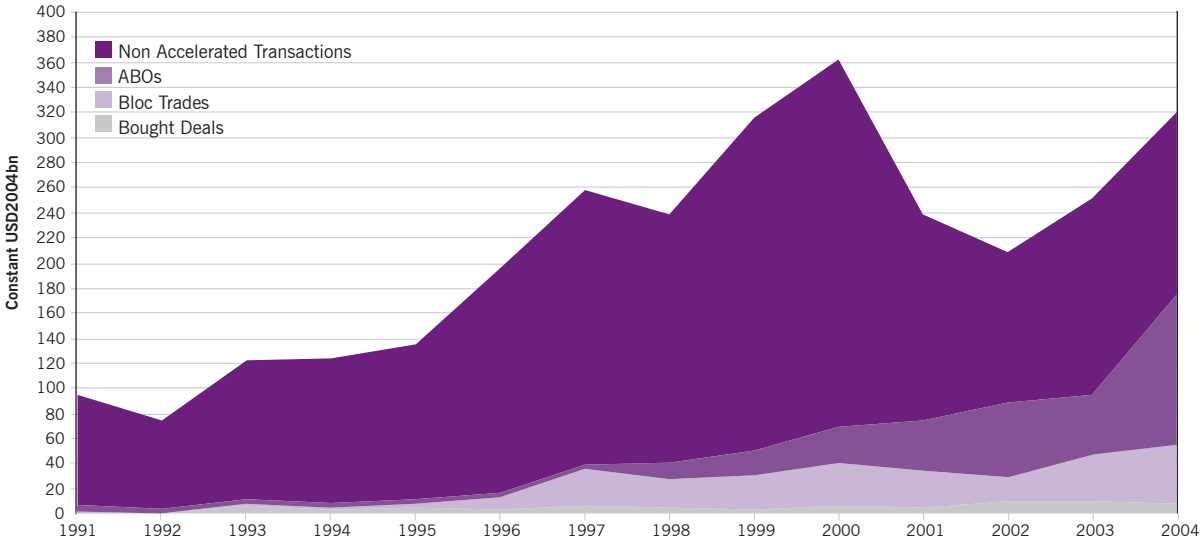
The capital-raising primary block trades examined in our study are similar to the offerings examined in most U.S. seasoned equity offering studies—from Bhagat and Frost (1986) and Asquith and Mullins (1986) to Altinkiliç and Hansen (2003) and Heron and Lie (2004)—while the secondary block trades are most similar to the registered secondary distributions studied by Mikkelson and Partch (1986).

10. Our sample period begins in 1991 because we found major inconsistencies in the ways that SDC, LexisNexis, and other sources identified block trades prior to 1991, and because comprehensive SDC coverage of non-U.S. issues starts in 1991.

11. Descriptions of U.S. block trade procedures, and their historical evolution, are presented in Hahn (2000), Tunick (2003), and Santini (2004).

12. Accelerated underwritings are inherently risky for investment banks because ATs involve bidding for large blocks, priced at very small discounts, with no time to conduct due diligence. The banks must purchase these shares directly from issuers, who may have private information about the firm's prospects. Examples of accelerated deals that resulted in underwriter losses are provided in Hahn (2002), Barber and Skorecki (2003), and Chung (2006). Perhaps the worst such loss resulted during the Italian government's $2.5 billion ABO of a 6.6% stake in ENEL in November 2003, which Morgan Stanley purchased at market price (no discount) after winning a bidding contest with six other banks. ENEL shares fell sharply upon announcement of the ABO, leaving Morgan Stanley with a reported loss of almost $7 million (Tunick (2003).

Figure 1 **Global Seasoned Equity Offerings, Total Deal Value by Type (1991-2004)**
This chart shows the evolution of global seasoned equity offerings for the 1991-2004 period. The series refer to the total deal value (in constant US$2004 billions) raised by accelerated (mixed and pure) bookbuilt offerings (ABO), block trades, bought deals and all other types of non accelerated transactions.



Source: Securities Data Corporation, *Global New Issues Database*

them with syndicate members.

The second major accelerated underwriting innovation occurred in 1983, when the Ontario Securities Commission (OSC) adopted its prompt offering qualification system, which allowed listed Canadian firms to file a short-form prospectus and sell seasoned equity very rapidly.[13] This spurred development of the "bought deal," which has essentially the same features as the U.S. block trade, but is available only to Canadian issuers, banks, and investors. In such BDs, issuers announce their intent to sell either existing or newly issued shares, and banks either negotiate directly with the issuer or bid for the shares on offer. The winning bank then files the required OSC short-form prospectus and takes title to the shares, with the entire sale typically being completed overnight. The subsequent resale of shares by the underwriter to final investors takes, on average, another 20 days. Such deals are called "bought" because of the lack of a "market out" clause in the underwriting agreement, meaning that the bank assumes unconditional price risk. The bought deal quickly became the standard method for Canadian SEOs, and has remained essentially unchanged ever since.

Accelerated underwritings spread to Europe during the late 1980s, and slowly around the world thereafter. The first major British deal occurred soon after the London Stock Exchange changed its rules to allow companies greater latitude in executing "placings"—that is, sales of new shares to public investors. Up to this point, most U.K. equity offerings were effectively required to take the form of rights offerings to the existing shareholders. In August 1986, Guinness PLC sold its entire 18.8 million share holding in British Petroleum for about £108 million in a block trade priced at a mere 3% discount to BP's market price. The success of this and other early block trades caused accelerated underwritings to spread throughout Europe, slowly at first, then very rapidly during the late 1990s.[14]

The Rise of Accelerated Bookbuilds

The third major accelerated underwriting innovation occurred in February 1991, when Canada's Reichmann family divested their 9.5% stake in Britain's Allied-Lyons PLC in a $900 million secondary offering that was classified as a bought deal at the time. Years later, this offering became known as the first accelerated bookbuilt offering (ABO).[15] ABOs, as already noted, differ from BTs and BDs in that the banks do not immediately purchase stock at a fixed price, but instead submit bids for the right to underwrite the sale over a short

13. See Critchley and Gittins (1990).

14. In popular usage, the terms "bought deal" and "block trade" have always been used interchangeably, though SDC seems to adhere to the strict definition of BD as an offering that uses a short-form prospectus and selling techniques comparable to the option offered by the Ontario Securities Commission. For this reason, over 90% of all bought deals are Canadian issues.

15. Though the first use of that term in any news article covered by LexisNexis did not occur until July 1997 (Warn 1997).

period—usually 48 hours or less. Banks submit competing bids that differ in terms of the backstop price guaranteed, underwriting spread, and placement capabilities. The winning bank is then responsible for rapidly building an order book and setting a final offer price. In essence, the issuer continues to share price risk with the underwriting bank, allowing it to execute larger share placements than with BTs or BDs because the underwriters do not assume as much unconditional price risk.

Although there were numerous accelerated underwritings in North America, Europe, and elsewhere during the early and late 1990s, traditional fully marketed offerings dominated during this period. This was partly because, outside of North America, share issue privatizations (SIPs) were the largest and most important types of share issues. These naturally tend to be marketed deals because a key purpose of governments launching SIPs is to sell shares as widely as possible to the voting public.[16] In fact, until the global stock market "break" in March 2000, it looked as if accelerated underwritings would remain fairly minor niche transactions. It has only been since March 2000 that accelerated deals, especially ABOs, have become preeminent (as can be seen in Figure 1).

Our Study: Data and Sample Selection

For our base sample, we selected all seasoned equity offerings that are listed on the Securities Data Corporation's New Issues Database, were launched between January 1, 1991 and December 31, 2004, and met the following criteria: (1) offerings of shares of common stock by publicly listed companies; (2) underwritten offerings that were made in exchange for cash; and (3) issues that were not payments for takeovers. Although SDC covers U.S. seasoned offerings from 1970 on, we started our study with the year 1991 when SDC began providing reliable coverage of European and Asian transactions. The first selection criterion excludes IPOs, while the underwriting requirement excludes best efforts deals, private equity placements, and issues for which no offering type was provided. The cash payment criterion excludes non-cash issues, and the third criterion screens out tender-related issues.

Our purpose in so doing was to create a truly global sample of underwritten seasoned equity offerings—one that includes purely primary issues, secondary sales by existing stockholders, and mixed (that is, primary *and* secondary) offerings, and share issue privatization (SIP) sales by governments as well as private-sector share offers. Unlike most published SEO studies, we included offerings from all industries—financial firms and regulated utilities, as well as industrial companies—and offers on public as well as private (purely institutional) markets.

In all of our analyses, we studied both the full sample and country or regional subsamples. Following the example of a 2003 study (by Ljunqvist, Jenkinson, and Wilhelm), we classified all offerings into one of three country or regional groups: the United States, Europe, and the rest of the world (ROW). Europe was defined in broad geographic terms to include the transition economies of central Europe (including Russia) and Turkey, though over 90% of the 8,546 SEOs in this group involved companies headquartered in Switzerland, Norway, or members of the European Union (during the period 1991-2003). The ROW group, by definition, included offerings from a large and heterogeneous set of countries; but over 60% of these offerings come from just four countries: Australia, Canada, Hong Kong, and Japan. Our final sample consisted of 31,242 offerings from almost 100 countries that raised over $2.9 trillion (in 2004 dollars). As reported in Table 1, there were 8,270 U.S. offerings (raising $955 billion), 8546 European SEOs (raising $1.09 trillion), and 14,426 offerings of shares in companies headquartered in the rest of the world (raising $881 billion).

We classified the offerings based on the description provided by SDC, and then grouped them into two main categories—accelerated and non-accelerated underwritings. The first category includes any offer in which accelerated bookbuilt (ABO), block trade (BT), or bought deal (BD) was cited as an offering method anywhere in the SDC designation. SDC's offering classification method poses a challenge in that the database frequently gives multiple designations to a single tranche.[17] For instance, many issues are classified as "block trade/negotiated sale," "accelerated bookbuilt/firm commitment," "bought deal/open offer," or similar combinations. We classified all tranches with one of these terms included as an accelerated transaction (AT), and called them *mixed ATs*.[18] We labeled as *pure ATs* all tranches that list ABO, BT, or BD exclusively as the offering technique. Our sample ended up with 5,110 accelerated underwritings, raising a total of $647 billion, including 824 ATs (worth $147 billion) involving shares of U.S. companies, 2445 European ATs (worth $351 billion), and 5,133 ATs (worth $148 billion) from the rest of the world.

The non-accelerated category included offerings using all other techniques. Although we will compare ATs to this entire

16. As discussed in Jones, Megginson, Nash and Netter (1999). The first major SIPs executed as accelerated underwritings were Britain's £500 million sale of its remaining British Petroleum holdings in December 1995 and France's $619 million divestment of a 4% stake in Total in March 1996. Although both sales were labeled bought deals in contemporaneous news reports, they were classified as block trades by SDC.

17. Another challenge we face is that there are a very large number of multi-tranche offers. These become much more common over time (most of the post-2000 deals have multiple tranches), and these tend to be the largest overall issues. Because our principal focus is on individual offerings, we examine each tranche separately using SDC's variable "amount raised in this market" as the offer amount rather than "amount raised, sum of all markets." This classification poses no problems in comparing issue characteristics (such as size, underwiter spread, percent primary shares, etc) between accelerated and traditional marketed deals, but it does complicate interpreting event study results—since every tranche of a share offering is announced simultaneously.

18. In the vast majority of cases, the AT designation is listed first (block trade/negotiated sale), rather than second (negotiated sale/block trade), which also supports designating all deals involving any of our three techniques as an accelerated transaction.

Table 1 **Underwritten Seasoned Equity Offerings, Classified by Offering Technique, 1991-2004**

This table classifies underwritten seasoned equity offerings (SEOs), executed between January 1, 1991 and December 31, 2004, by offering technique, as described in the Securities Data Corporation New Issue Database. Data are presented for global SEOs, as well as offerings by issuers from the United States, Europe, and the rest of the world. The first row presents the number of offers, followed by the total value (in US$ millions) of all such offers, and their average size (in US$ millions).

Offering Classification	Global	United States	Europe	Rest of world
Total	31,242 $2,926,204 ($93.7)	8270 $955,274 ($115.5)	8,546 $1,089,482 ($127.5)	14,426 $881,447 ($61.1)
I. Accelerated Transactions	5,110 $647,598 ($126.7)	824 $147,633 ($179.2)	2,445 $351,529 ($143.8)	1,841 $148,436 ($80.6)
Pure accelerated book-built offerings (ABO)	1,754 $237,605 ($135.5)	69 $8,062 ($116.8)	1,598 $220,797 ($138.2)	87 $8,746 ($100.5)
Mixed accelerated book-built offerings (ABO)	596 $73,119 ($122.7)	250 $46,583 ($186.3)	32 $2,650 ($82.8)	314 $23,886 ($76.1)
Pure block trades (BT)	51,197 $184,411 ($154.1)	238 $37,901 ($159.2)	790 $124,891 ($158.1)	169 $21,619 ($127.9)
Mixed block trades (BT)	542 $80,744 ($149.0)	251 $54,193 ($215.9)	12 $1,452 ($121.0)	279 $25,099 ($90.0)
Pure bought deals (BD)	997 $67,524 ($67.7)	16 $894 ($55.9)	13 $1,739 ($133.8)	968 $64,891 ($67.0)
Mixed bought deals (BD)	24 $4,195 ($174.8)	0 0 0	0 0 0	24 $4,195 ($174.8)
II. Firm Commitment Underwritings	11,010 $1,092,587 ($99.2)	6,207 $733,704 ($118.2)	328 $36,375 ($110.9)	4,475 $322,509 ($72.1)
Firm commitment offers (FC)	3,602 $200,892 ($55.8)	53 $3,830 ($72.3)	201 $6,932 ($34.5)	3,348 $190,130 ($56.8)
Firm commitment/Negotiated sales (FC/NS)	6,600 $833,727 ($126.3)	6,153 $729,873 ($118.6)	119 $29,321 ($246.4)	328 $74,533 ($227.2)
Firm commitment/Placements	747 $38,390 ($81.0)	0 0 0	0 0 0	747 $38,390 ($81.0)
Other firm commitment offers	60 $19,578 ($326.3)	1 $0.4 ($0.4)	8 $122 ($15)	51 $19,456 ($381.5)
III. General Cash Offerings	1,121 $81,649 ($72.8)	2 $56 ($28)	877 $53,744 ($61.3)	242 $27,849 ($115.1)
Offer for sale	265 $51,218 ($193.3)	0 0 0	125 $36,518 ($292.1)	140 $14,700 ($105.0)
Offer for subscription	158 $16,198 ($102.5)	1 $38 ($18)	95 $3,251 ($34.2)	62 $12,909 ($208.2)
Open offer	305 $5,482 ($18.0)	1 $18 ($18)	271 $5,236 ($19.3)	33 $228 ($6.9)
Other offers	393 $8,751 ($22.3)	0 0 0	386 $8,739 ($22.7)	7 $12 ($1.7)
IV. Placements and Allotments	7,205 $562,375 ($78.1)	868 $48,542 ($55.9)	2,651 $293,037 ($110.5)	3,686 $220,796 ($59.9)
Placements	6,154 $469,701 ($76.3)	868 $48,542 ($55.9)	2,647 $292,838 ($110.6)	2,639 $128,321 ($48.6)

Table 1 **continued**

Offering Classification	Global	United States	Europe	Rest of world
Other placements	99 $5,223 ($52.8)	0 0 0	4 $199 ($49.8)	95 $5,024 ($52.9)
Third party allotments	952 $87,451 ($91.9)	0 0 0	0 0 0	952 $87,451 ($91.9)
V. Rights Offerings	6,604 $524,602 ($79.4)	364 $24,966 ($68.6)	2,114 $335,840 ($158.9)	4,126 $163,796 ($39.7)
Rights	4,936 $460,832 ($93.4)	40 $3,872 ($96.8)	2,089 $328,094 ($157.1)	2,807 $128,866 ($45.9)
Firm commitment/Rights	1,301 $31,920 ($24.5)	0 0 0	2 $106 ($53.0)	1,301 $31,814 ($24.5)
Negotiated sale/rights	352 $31,312 ($89.0)	324 $21,094 ($65.1)	11 $7,106 ($646.0)	17 $3,112 ($183.1)
Other rights	13 $538 ($41.4)	0 0 0	12 $534 ($44.5)	1 $4 ($4)

group, Table 1 also breaks the non-AT category down further into four classifications based on the offering type designations in SDC. Firm commitment underwritings included offers designated as "firm commitment," "firm commitment/negotiated sale," "firm commitment/placement," and other offerings including the firm commitment designation. The subcategory, "general cash offerings," included issues with the SDC designations of "offer for sale," "offer for subscription," "open offers" and other sales classified as "offers." The third non-AT category, "placements and allotments," included offerings designated as "placements," "third party allotments" (virtually all of which are Japanese) and other sales with "placements" in the offering designation.

The three types of non-AT offering methods described above—firm commitment, general cash offers, and placements and allotments—are similar in economic terms insofar as each involves an underwritten, public offering of shares principally to investors who are not currently holders of the issuing company's shares. The final non-AT underwriting method, rights offerings, differs from all others in being targeted exclusively at the firm's existing shareholders. This grouping included any offer with "rights" listed as one of the offering methods. "Rights," "firm commitment/rights," "negotiated sale/rights," and rights offers with other names were all included in this category. Since we chose to include only underwritten offers, we removed uninsured rights issues (which are more common outside the U.S.) from our sample and kept only the insured, or "standby," rights offers.[19]

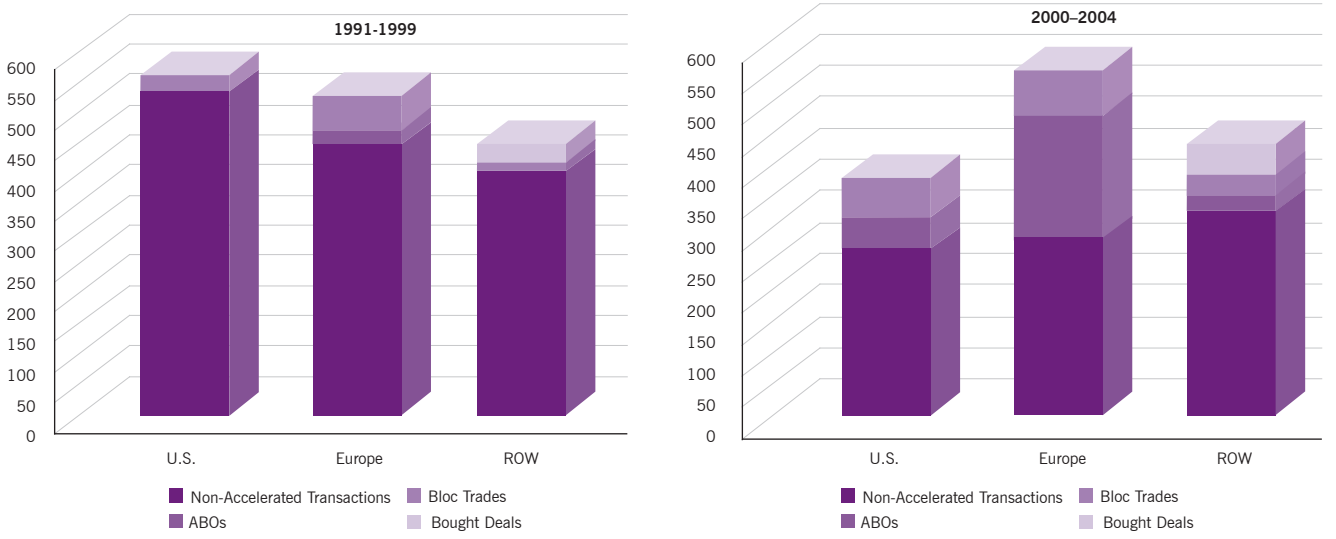
The Rise of Accelerated Seasoned Equity Offering Underwritings

Figure 2 shows the evolution of SEO underwriting methods from 1991 through 2004 for each of the three country/regional sub-samples. Table 2 presents the number and value of SEOs executed globally, broken down by offering type between those using traditional, fully marketed underwritings (non-ATs) and those employing some form of accelerated underwriting (Total ATs). Table 2 also presents this data separately for the three individual accelerated underwriting methods: accelerated bookbuilt offerings (ABOs), block trades (BTs), and bought deals (BDs).

Four key patterns emerge from the data. First, accelerated underwritings have been gaining market share steadily since the late 1990s, and very dramatically since 2000. ATs represented only 4% of all SEOs during 1991-94, and this fraction grew modestly over the next four years to 15.9%. As seasoned equity issuance surged to a record $363 billion during 2000, accelerated deals continued gaining incremental market share, but their phenomenal growth began only after the equity market crashed in March 2000. And although

19. As described in Eckbo, Masulis, and Norli (2005). International seasoned equity offer studies that examine rights offers include Bigelli (1998, Italy), Bøhren, Eckbo, and Michalsen (1997, Norway), Cronqvist and Nilsson (2005, Sweden), Eckbo and Norli (2005, Norway), Gajewski and Ginglinger (2002, France), Loderer and Zimmerman (1988, Switzerland), Slovin, Sushka, and Lai (2000, United Kingdom), and Wu and Wang (2005, Kong Kong). Most of these studies document non-negative market reactions to announcements of all types of rights issues—and significantly more positive reactions to uninsured rights offer announcements than insured rights. Despite this, most of these studies document that underwritten offers are gaining market share versus non-underwritten offers generally, and specifically that insured rights are being chosen over uninsured rights wherever regulations allow issuers a choice of offering methods. For an explanation why, see the article by Espen Eckbo, "Equity Issues and the Disappearing Rights Phenomenon," that immediately follows ours in this issue (*Journal of Applied Corporate Finance,* Vol. 20 No. 3, (Summer 2008).

Figure 2 **Global Seasoned Equity Offerings, Deal Value by Region and Type (1991-1999 and 2000-2004)**
These charts show the regional distribution of seasoned equity offerings for the 1991-1999 and 2000-2004 subperiods. The histograms refer to the total deal value (in constant US$2004 billions) raised by accelerated (mixed and pure) bookbuilt offerings (ABO), block trades, bought deals and all other types of non accelerated transactions.



Source: Securities Data Corporation, *Global New Issues Database*

the total value of SEOs worldwide dropped by over 40% between 2000 and 2002, the absolute value of ATs continued to increase during that period. By 2004, accelerated issues accounted for over 38% of the number of underwritten SEOs, and over 53% of total value.[20]

Second, until recently, the use of accelerated underwriting techniques was largely region-specific. Most conspicuously, over 90% of bought deals have been Canadian, whereas two-thirds of ABOs have involved shares of European issuers. The first block trades were in the United States, and until 2004 the vast majority of U.S. accelerated underwritings were block trades. Similarly, all the early ABOs were European (principally British), though this method has been gaining global market share rapidly since 2000. This regional pattern suggests that differences in regulation play a major role in the structuring of accelerated underwritings, with Canadian ATs routinely structured as bought deals, American transactions as block trades, and European deals taking the form of ABOs.

Third, accelerated underwritings have been larger, on average, than traditional marketed SEOs in all regions. For example, U.S. ABOs have been half again as large, on average, as traditional SEOs ($186.5 million versus $115.5 million), and the average size of ROW block trades ($105.6 million) has been 73% larger than the average ROW marketed offering ($61.1 million). Share issue privatizations (SIPs), which have been larger on average than private sector offerings, have been the one major exception to the general rule that accelerated underwritings are larger than marketed deals.[21]

Finally, ABOs have shown by far the most dramatic growth of the three accelerated offering methods. From two each in 1991 and 1992, and none in 1993, ABOs surpassed block trades for the first time in 2001—and by 2004 they accounted for over two-thirds of all proceeds raised through accelerated underwritings. ABOs are gaining market share from block trades and bought deals because of two key advantages: speed of execution and sharing of market risk. In BTs and BDs, as we saw earlier, banks purchase shares directly from the issuing firm or selling shareholder, usually after winning an auction, and then sell the shares on to institutional clients as rapidly as possible. In an ABO, the issuing firm or shareholder awards the winning bank a mandate to arrange very quickly (in 48 hours or less) an underwriting

20. The importance of accelerated underwritings was underscored when the *Investment Dealers' Digest* included a separate listing for "Global Block Trades and Accelerated Bookbuilds" for the first time in its January 9, 2006 annual summary of investment banking league tables. This shows there were 624 accelerated underwritings that raised $161.2 billion in 2005 (out of $288 billion in total seasoned offerings), versus 847 ATs worth $167.5 billion in 2004 (out of $275 billion total SEOs). The mid-year 2006 league tables, published in *IDD* on July 10, 2006, show that global block trades and accelerated bookbuilds accounted for $70.4 billion of the $158.3 billion raised around the world through SEOs during the first half of 2006. We also perform a quick test of whether ATs have retained a high market share of global SEOs after 2004 by drawing the population of seasoned equity offerings that meet our selection screens and categorizing their underwriting mechanism Though the explosive growth in AT market share appears to have ceased, these offerings still account for 43% of the value of global underwritten SEOs from January 2005 through June 2007, and are employed for over half of European seasoned offerings.

21. But this is what the empirical findings of Jones, et al. (1999) and Bortolotti, et al. (2005) would lead us to expect for political reasons.

Table 2 **Summary Statistics, Global Seasoned Equity Offerings, 1991-2004**

This table shows the number and value of all underwritten and all accelerated underwritten seasoned equity offerings (SEOs), executed between January 1, 1991 and December 31, 2004, around the world by year and by accelerated underwriting technique, as described in the Securities Data Corporation New Issue Database.

Year	Global SEOs		Total ATs (pure and mixed)		All ABOs (pure and mixed)		All Block Trades (pure and mixed)		All Bought Deals (pure and mixed)	
	# Issues	US$ mn (constant)	# Issues	US$ mn (constant)	# Issues	US$ mn (constant)	# Issues	US$ mn (constant)	# Issues	US$ mn (constant)
1991	1,099	91,904	10	2,509	2	1,022	6	1,319	2	168
1992	1,283	71,745	9	730	2	48	5	443	2	238
1993	1,564	120,306	68	7,847	0	0	14	1,669	54	6,178
1994	1,603	121,957	55	4,880	1	52	8	780	46	4,048
1995	1,540	132,171	71	8,052	5	203	25	2,798	41	5,050
1996	2,209	193,921	106	13,160	6	408	48	9,160	50	3,549
1997	2,386	256,888	250	35,374	8	296	166	28,583	76	6,495
1998	2,140	237,946	257	37,710	72	9,850	110	22,276	73	5,554
1999	2,491	316,549	313	46,215	81	15,272	163	28,073	69	2,870
2000	2,869	363,295	365	66,532	101	26,553	184	33,970	80	6,009
2001	3,012	238,636	618	71,969	249	37,638	257	29,952	112	4,379
2002	2,836	208,754	697	86,593	387	55,381	155	20,032	146	9,846
2003	2,987	251,418	1,047	92,950	644	45,911	258	37,101	141	9,188
2004	3,223	320,714	1,244	173,078	784	116,952	326	47,513	128	8,086
Total	31,242	2,926,204	5,110	647,598	2,342	309,587	1,725	263,668	1,020	71,658

syndicate to market the issue, thus allowing some price-risk sharing between issuer and underwriter. This presumably allows the issue to be placed at a higher net price or allows for larger offerings at a given price.

Our analysis of non-U.S. markets reveals wide variability in the number and average size of SEOs, as well as in the market penetration of accelerated underwriting techniques. Whereas bought deals accounted for over half of Canadian SEOs between 1991 and 2004 (and over 95% of Canadian accelerated underwritings are BDs), and ABOs alone accounted for more than one-fourth of British and Dutch SEO values during this period, accelerated underwritings have been much less important in other developed markets, especially Asia. Accelerated underwritings account for only 15% of Australian SEOs, and less than 10% in Hong Kong, Japan and South Korea. Nevertheless, in all these countries, accelerated deals have been gaining market share rapidly since 2000, and such issues are almost always larger than traditional underwritten offers.[22]

How Do Accelerated Underwritings Differ from Traditional Underwritings?

In this section and the next, we attempt to examine whether ATs are value-increasing innovations that minimize issuance costs or value-neutral (or even value- reducing) products designed mainly to transfer wealth to underwriters. We begin by presenting, in Table 3, mean and median values of key underwriting variables for the full SEO sample, for non-accelerated deals, and for both pure and mixed accelerated deals. The table also shows comparisons between accelerated and traditional underwritings along dimensions such as time to completion, issue size, the fraction of primary shares in the offer, and the underwriting discount, both for the entire 1991-2004 period and for the recent, post-crash 2001-2004 period.

Although Table 3 groups all accelerated methods together, we also computed similar data for each of the three different types of accelerated deals. Tables 4-6 present the same information and univariate tests as summarized in Table 3, but

22. The only country where accelerated underwritings are not significantly larger, on average, than non-accelerated deals is Canada. However, the median BD offer size of $37.3 million is half again larger than the median $23.2 million non-AT offer size, so a few very large traditional underwritings (mostly privatizations) are skewing the non-AT mean offering size upwards.

Table 3 **Univariate Comparisons between Accelerated Transactions (AT) and Traditional (Non-AT) Underwritings, Global Seasoned Equity Offerings, 1991-2004**

This table shows the mean, the median values of the main variables of interest for the global seasoned equity offerings, non-accelerated transactions, pure and mixed accelerated transactions (AT) and their difference in means between non accelerated and pure AT, and non accelerated and mixed AT. The t-statistics are reported in brackets. [a] indicates significance at the 1%, [b] at the 5% level, respectively

Measure		Global SEOs	Non-AT	Pure AT	Mixed AT	Difference of Means	
						Non-AT minus Pure	Non-AT minus Mixed
Time from launch date to issue date (days)	Means *Medians* Obs.	26.37 12.00 (26,015)	28.98 15.00 (21,798)	10.18 1.00 (3,179)	21.07 0.00 (1,038)	**18.79**[a] (21.24)	**7.91**[a] (5.02)
Issue proceeds (constant 2004US$ millions)	Means *Medians* Obs.	94.56 26.39 (30,945)	88.16 23.25 (25,847)	124.08 42.39 (3,952)	137.19 55.93 (1,146)	**-35.93**[a] (-7.21)	**-49.03**[a] (-5.53)
Relative Issue Size (%)	Means *Medians* Obs.	11.71 7.00 (13,632)	12.68 7.00 (11,029)	8.35 5.00 (1,806)	5.90 4.00 (797)	**4.33**[a] (11.16)	**6.78**[a] (12.00)
Pre-offering market capitalization of issuing firm (constant 2004US$ millions)	Means *Medians* Obs.	8,907 383 (14,073)	6,863 287 (11,443)	15,656 788 (1,829)	22,696 1,057 (801)	**-8,793**[a] (-2.92)	**-15,834**[a] (-3.25)
Fraction of primary shares in total offering (%)	Means *Medians* Obs.	73.25 100.00 (31,066)	77.10 100.00 (25,993)	54.04 100.00 (3,926)	51.62 100.00 (1,147)	**23.06**[a] (32.75)	**25.49**[a] (21.03)
Underwriting syndicate structure: number of all managers	Means *Medians* Obs.	3.06 2.00 (31,222)	3.18 2.00 (26,113)	2.52 1.00 (3,958)	2.13 1.00 (1,151)	**0.66**[a] (9.92)	**1.05**[a] (8.71)
Underwriting spread (%)	Means *Medians* Obs.	4.58 4.22 (17,152)	4.79 4.45 (13,738)	3.59 3.23 (2,531)	4.21 3.91 (883)	**1.20**[a] (3.62)	**0.58**[a] (2.12)
Underpricing: Price change from offer to first-day closing price (%)	Means *Medians* Obs.	4.48 4.12 (17,152)	4.86 4.46 (13,738)	2.97 2.71 (2,531)	2.98 2.74 (883)	**1.89**[a] (3.95)	**1.88**[a] (4.88)

for the subsamples of seasoned offers from the U.S., Europe, and the rest of the world (ROW).

Time Required to Complete Underwritten Aeasoned Offerings

Several key findings emerge from analysis of these tables. First, accelerated underwritings, as one would expect, occur much more rapidly than other SEOs. On average, 10.2 days elapse between launch and issuance for the 3,179 pure accelerated deals, as compared to 29.0 days for traditional underwritings, with mixed deals falling in the middle. The differences in *median* time to completion between ATs and non-AT deals are even more striking. Whereas the median non-AT deal takes 15 days to progress from announcement to issuance, the median completion time for pure ATs is one day—and *mixed ATs are typically completed the same day they are launched* (that is, elapsed time = 0 days)![23]

A fascinating pattern emerges when comparing the mean and median elapsed-time values for the years 2001-2004 (not reported in the table) to those reported in Table 3 for the full 1991-2004 study period. The average elapsed time between launch and issuance drops significantly for all SEO categories, but the declines in the *median* elapsed times for *all* SEOs and non-AT deals are truly phenomenal. Whereas the average elapsed times fall by roughly one-third for all SEOs (from 26.4 to 16.8 days) and for the non-AT sub-sample (from 29.0 to 19.8 days), the median elapsed times fall from 12 days to *one day* for all SEOs, and from 15 days to *four* days for non-ATs. The average elapsed times for pure and mixed accelerated deals

23. All of the mean and median comparisons between ATs and non-ATs are highly significant, both economically and statistically. Interestingly, this is the first academic study we are aware of that has documented the time required to launch seasoned offers around the world.

Table 4 **Univariate Comparisons between Accelerated Transactions (AT) and Traditional (Non-AT) Underwritings, U.S. Seasoned Equity Offerings, 1991-2004**

This table shows the mean, the median values of the main variables of interest for the U.S. seasoned equity offerings, non-accelerated transactions, pure and mixed accelerated transactions (AT) and their difference in means between non accelerated and pure AT, and non accelerated and mixed AT. The t-statistics are reported in brackets. [a] indicates significance at the 1%, [b] at the 5% level – respectively.

Measure		Non-AT average	Pure AT average	Mixed AT average	Difference of Means	
					Non-AT minus Pure	Non-AT minus Mixed
Time from launch date to issue date (days)	Means *Medians* Obs.	48.67 31.00 (7,165)	9.82 0.00 (300)	46.43 5.00 (423)	**38.84**[a] (11.17)	**2.24**[a] (0.73)
Issue proceeds (constant 2004US$ millions)	Means *Medians* Obs.	108.51 58.86 (7,443)	145.16 70.46 (328)	201.65 101.80 (496)	**-36.65**[a] (-3.51)	**-93.14**[a] (-10.33)
Relative Issue Size (%)	Means *Medians* Obs.	10.50 7.00 (2,719)	6.50 5.00 (167)	7.67 6.00 (267)	**4.00**[a] (4.46)	**2.83**[a] (3.99)
Pre-offering market capitalization of issuing firm (constant 2004US$ millions)	Means *Medians* Obs.	5,248 931 (2,736)	8,170 1,984 (168)	10,339 1,511 (267)	-2,922 (-1.36)	**-5,090**[b] (2.56)
Fraction of primary shares in total offering (%)	Means *Medians* Obs.	76.34 100.00 (7,419)	62.31 100.00 (328)	74.81 100.00 (496)	**14.03**[a] (6.73)	1.53 (0.89)
Underwriting syndicate structure: number of all managers	Means *Medians* Obs.	4.75 3.00 (7,446)	1.98 1.00 (328)	2.89 1.00 (496)	**2.77**[a] (9.68)	**1.85**[a] (7.87)
Underwriting spread (%)	Means *Medians* Obs.	2.53 2.32 (6,363)	3.10 2.82 (243)	3.15 2.91 (461)	-0.57 (-1.45)	**-0.62**[b] (-1.81)
Underpricing: Price change from offer to first-day closing price (%)	Means *Medians* Obs.	2.54 2.30 (6,363)	1.76 1.60 (243)	2.06 1.92 (461)	**0.78**[b] (1.89)	**0.48**[b] **(1.69)**

also fall (to 7.4 and 14.4 days, respectively), but the median values are little changed—simply because they are so low to begin with: The median elapsed time for pure ATs drops from one to zero days, and remains at zero days (launch = issuance date) for mixed ATs. While we cannot state conclusively that the rise of ATs *caused* this remarkable reduction in mean and (especially) median time required to execute non-accelerated underwritings, the evidence suggests, that from 2001 onward, corporate issuers and shareholders selling stock through traditional underwritings sped up their underwriting procedures *in response to* the success of accelerated underwritings.

Comparing the speed of execution for the three accelerated methods (results not reported), we find that pure ABOs and pure BTs were sold much more rapidly (5.3 and 6.9 days, on average) than either pure bought deals (19.3 days) or all non-AT offers. Once again, median elapsed times were much lower than means—the typical pure and mixed block trades and ABOs all complete their offerings on the days they are announced (launch = issuance date), both during the full 1991-2004 study period and the more recent 2001-2004 period. The sole outliers were bought deals. The average elapsed time between offer announcement and completion was 19.3 days for the 993 pure bought deals, which was significantly lower than the 29 day average for non-ATs, but the pure BD median value is longer for the full study period (20 versus 15 days) and remains at 20 days during 2001-2004, when the non-AT median elapsed time drops to four days. Because 936 of the bought deals involve shares of Canadian companies, this long (and fixed) placement period is entirely attributable to Canadian regulations. Even here, though, ATs were placed more rapidly than the alternative, with Canadian BDs taking significantly less time to complete than traditionally underwritten Canadian SEOs.

Tables 4 and 5 show that the same pattern holds in the U.S. and Europe, especially if one focuses on medians rather than means. The median elapsed time for U.S. and European pure ATs was zero days for both periods, while the median elapsed time for U.S. mixed ATs was five days for the full

Table 5 **Univariate Comparisons between Accelerated Transactions (AT) and Traditional (non-AT) Underwritings, European Seasoned Equity Offerings, 1991-2004**

This table shows the mean, the median values of the main variables of interest for the European seasoned equity offerings, non-accelerated transactions, pure and mixed accelerated transactions (AT) and their difference in means between non accelerated and pure AT, and non accelerated and mixed AT. The t-statistics are reported in brackets. [a] indicates significance at the 1%, [b] at the 5% level, respectively.

Measure		Non-AT average	Pure AT average	Mixed AT average	Difference of Means	
					Non-AT minus Pure	Non-AT minus Mixed
Time from launch date to issue date (days)	Means	15.92	5.12	46.43	**10.80**[a]	**-30.51**[b]
	Medians	6.00	0.00	36.00	(11.56)	(-2.34)
	Obs.	(3,515)	(1,661)	(7)		
Issue proceeds (constant 2004US$ millions)	Means	122.04	144.67	108.65	**-22.64**[b]	13.39
	Medians	19.92	39.87	62.01	(-2.29)	(0.18)
	Obs.	(6,047)	(2,402)	(37)		
Relative Issue Size (%)	Means	13.56	8.43	10.40	**5.13**[a]	3.16
	Medians	7.00	4.00	10.00	(8.35)	(0.84)
	Obs.	(2,036)	(976)	(20)		
Pre-offering market capitalization of issuing firm (constant 2004US$ millions)	Means	2,707	21,874	4,991	**-19,167**[a]	-2,284
	Medians	110.47	769.68	257.52	(-4.16)	(-0.49)
	Obs.	(2,145)	(993)	(20)		
Fraction of primary shares in total offering (%)	Means	68.05	38.69	56.20	**29.36**[a]	11.84
	Medians	100.00	0.00	10.00	(25.96)	(1.56)
	Obs.	(6,004)	(2,379)	(37)		
Underwriting syndicate structure: number of all managers	Means	2.58	1.53	2.00	**1.05**[a]	0.58
	Medians	1.00	1.00	1.00	(14.09)	(0.99)
	Obs.	(6,101)	(2,407)	(38)		
Underwriting spread (%)	Means	7.07	3.46	3.30	**3.61**[a]	**3.77**[a]
	Medians	6.45	3.12	2.94	(4.44)	(4.62)
	Obs.	(3,160)	(2,119)	(35)		
Underpricing: Price change from offer to first-day closing price (%)	Means	7.32	2.97	2.45	**4.34**[a]	**4.86**[a]
	Medians	6.55	2.67	2.22	(4.98)	(5.36)
	Obs.	(3,160)	(2,119)	(35)		

sample period and two days during 2001-2004. In comparison, the median U.S. non-accelerated underwriting required a surprisingly long 31 days to complete during 1991-2004, and this dropped to 22 days during 2001-2004. In contrast, over the full study period, European non-ATs were arranged in a median six days, which was significantly longer than for European ATs, but fell to the same zero days as for ATs during 2001-2004.

Assessing issue execution times in the ROW sample detailed in Table 6 is once again complicated by the importance of the 936 Canadian bought deals in the sample of 1,218 pure ATs, which had a median 19-day elapsed time between launch and issuance for the full sample period. Elapsed time fell slightly to 18 days during 2001-2004. The 11,118 ROW non-accelerated offers had a median elapsed time of three days during 1991-2004 (which was significantly longer than the zero day median for the 608 mixed ATs), but this fell to a median of zero days for 2001-2004. In other words, the execution time for all categories of seasoned offerings has been falling, and in most cases falling dramatically.

Offer Size and Issuing Firm Market Capitalization

The second through fourth rows of Tables 3-6 provide data on SEO offer size (in 2004 U.S. dollars), relative issue size, and the pre-offering market capitalization of the firm selling new shares (in a primary offer) or the firm whose shares are being sold (in a secondary offering). The average size of a global SEO during 1991-2004 was $94.6 million (with a median of $26.4 million) and executed by a company with an average total market capitalization of $8.9 billion (the median was $383 million). The issue size represented an average of 11.7% (median 7.0%) of the issuer's pre-offer capitalization.[24]

24. We are unaware of an existing global SEO study to which we can compare these mean and median values, though as we will show the country/regional samples are comparable in size to what has been reported elsewhere.

Table 6 **Univariate Comparisons between Accelerated Transactions (AT) and Traditional (Non-AT) Underwritings, Rest of the World Seasoned Equity Offerings, 1991-2004**

This table shows the mean, the median values of the main variables of interest for the seasoned equity offerings from the rest of the world outside western Europe and the United States, non-accelerated transactions, pure and mixed accelerated transactions (AT) and their difference in means between non-accelerated and pure AT, and non-accelerated and mixed AT. The t-statistics are reported in brackets. [a] indicates significance at the 1%, [b] at the 5% level, respectively.

Measure		Non-AT average	Pure AT average	Mixed AT average	Difference of Means	
					Non-AT minus Pure	Non-AT minus Mixed
Time from launch date to issue date (days)	Means	20.42	17.18	3.13	**3.24**[a]	**17.29**[a]
	Medians	3.00	19.00	0.00	(2.75)	(10.41)
	Obs.	(11,118)	(1,218)	(608)		
Issue proceeds (constant 2004US$ millions)	Means	59.32	77.95	86.75	**-18.63**[b]	**-27.43**[a]
	Medians	10.46	39.36	23.81	(-2.52)	(-2.61)
	Obs.	(12,357)	(1,222)	(613)		
Relative Issue Size (%)	Means	13.37	8.70	4.79	**4.64**[a]	**8.55** [a]
	Medians	7.00	7.00	2.00	(6.93)	(11.24)
	Obs.	(6,274)	(663)	(510)		
Pre-offering market capitalization of issuing firm (constant 2004US$ millions)	Means	8,894	8,295	29,804	599	**-20,910**[a]
	Medians	192.61	655.04	918.27	(0.11)	(-2.62)
	Obs.	(6,562)	(668)	(514)		
Fraction of primary shares in total offering (%)	Means	81.88	81.78	32.60	0.10	**49.28**[a]
	Medians	100.00	100.00	0.00	(0.08)	(31.37)
	Obs.	(12,570)	(1,219)	(614)		
Underwriting syndicate structure: number of all managers	Means	2.54	4.62	1.51	**-2.08**[a]	**1.03**[a]
	Medians	1.00	4.00	1.00	(-21.75)	(7.91)
	Obs.	(12,566)	(1,223)	(617)		
Underwriting spread (%)	Means	6.48	5.99	5.54	0.49	**0.94**[b]
	Medians	5.77	5.55	5.08	(1.55)	(1.72)
	Obs.	(4,215)	(169)	(387)		
Underpricing: Price change from offer to first-day closing price (%)	Means	6.51	4.63	4.13	**1.88**[a]	**2.38**[a]
	Medians	6.02	4.21	3.78	(2.22)	(2.77)
	Obs.	(4,215)	(169)	(387)		

For the full sample and for the country/regional sub-samples, accelerated offerings were always significantly larger than traditional marketed deals, and were executed by (or involved the shares of) larger, more valuable companies. At the same time, ATs have been smaller relative to the issuers' existing total capitalizations. Comparing the absolute and relative sizes of accelerated and non-accelerated offers and offering firms reveals that global non-AT offerings raised an average of $88.2 million (median of $23.3 million). They were executed by or with the shares of companies with an average (median) market value of $6.86 billion ($287 million), and the offering was equal to a mean 12.7% (7.0%) of the firm's pre-offer market capitalization. Pure accelerated offerings were executed by companies with an average market value of $15.6 billion ($788 million), and raised an average of $116.6 million ($34.3 million), with an average relative issue size of 8.4% (5.0%). The mixed ATs were even larger in absolute terms, though smaller in relative terms. With the exception of BDs, similar patterns emerge when we examined the individual accelerated techniques.

What is the explanation for the growing use of ATs by *larger* companies. As a general rule, larger companies face less of an information asymmetry problem than smaller firms, and so lend themselves more readily to such a streamlined offering process.

But having said that, for all categories of offers other than U.S. issues, the average and median offer size has *declined* substantially over time. The mean (median) offer size for the world's 30,945 SEOs with available data was $85.2 million ($15.6 million) during 2001-2004, as compared to $94.6 million ($26.4 million) for the full sample period. The same pattern was evident for global pure and mixed ATs, global non-ATs, all three individual accelerated transaction samples, and for all categories of European and ROW seasoned offerings. Only in the U.S.—where almost all categories of SEOs had larger mean and median offer sizes than comparable

issuers in other countries—did we find mixed evidence of changing issue sizes during 2001-2004 as compared to 1991-2004. The mean and median size of U.S. non-AT offers has increased over time, as has the size of the median pure AT offer.[25] The mean and median offer size of all other U.S. seasoned offering categories declined during 2001-2004.

There is no obvious explanation for this generalized, worldwide decline in offer size. This may reflect increasing efficiency of global capital markets, allowing ever smaller firms to issue stock and larger firms to issue in steadily smaller amounts—or it may simply reflect the eagerness of exchanges to welcome seasoned offers to offset the shrinking IPO volume after the 2000 market crash.

Primary, Secondary, and Mixed Offer Fractions

Although few empirical studies examine the relative fraction of primary and secondary shares in SEOs, the handful that do show that primary shares account for between two-thirds and three-fourths of the typical SEO over time.[26] Our own supplemental (unreported) analyses show that, with one exception (bought deals), accelerated offerings always had a smaller fraction of primary shares than traditional SEOs. Whereas primary shares accounted for 73% of all global SEOs, and for an even larger fraction (77.1%) of the world's traditionally underwritten deals, primary shares represented only 54.4% of global mixed ATs and 51.6% of pure ATs. This means that roughly half of all shares in accelerated underwritings have been divestments of existing shareholdings by institutional or (usually) corporate insiders. Accelerated deals have also involved much lower fractions of primary shares in all the country/regional markets, with the most dramatic gap occurring in Europe.[27]

Comparison of the primary versus secondary share mix of individual accelerated underwriting methods also reveals sharp differences. Whereas primary shares represented 77.1% of the world's non-AT offerings, these shares accounted for only 58.1% of the global ABOs and a mere 24.1% of global block trades in our study. On the other hand, primary shares represented the bulk (93.2%) of the 1,019 global bought deals, again reflecting the disproportionate influence of 936 Canadian BDs. Clearly, Canadian corporations have become very fond of raising new equity through bought deals.

Number of Underwriters

The last offer characteristic we examined is the number of investment banks involved in the syndicate.[28] As can be seen in Tables 3-6, accelerated underwriting syndicates involve fewer investment banks than do syndicates for traditional SEOs. The average syndicate size for pure accelerated deals was 2.52 banks (and 2.13 banks for mixed deals), as compared to 3.18 banks for traditional SEOs. Pure ABOs have had especially small average syndicate sizes (1.75 banks), as have both pure and mixed block trades (averages of 1.17 and 1.09 banks, respectively). We also found that only 34.2% of accelerated transactions had more than one bank in the underwriting syndicate, as compared to 45.8% of non-accelerated deals.

Both the smaller number of banks and the lower frequency of multiple-bank syndicates in ATs are even more remarkable because accelerated offers typically raise half again as much as do traditional offers, and in half the time. This may be because far less information-gathering and marketing by underwriting banks is required for accelerated deals.[29] Additionally, accelerated deals involve aspects of both competitive and negotiated underwriting contracts; banks must compete for underwriting mandates, but this competition is organized very quickly for issuing firms or selling shareholders.[30] Accelerated deals are also similar to private placements in that shares are sold exclusively to institutional (non-retail) investors, but differ in that ATs involve underwritten offerings of fully tradable, listed shares.

Are Accelerated Underwritings Less Costly for Issuers?

Having documented how accelerated underwritings differ from traditional underwritings in terms of offering and place-

25. Not surprisingly, these mean and median SEO offer sizes are comparable to those presented in other recent U.S. empirical studies. The average (median) constant dollar offer size of the 1,114 SEOs from 1975-2001 studied by Burch, Nanda, and Warther (2005) is $104.8 million ($61.3 million), while Butler, Grullon, and Weston's (2005) 2,387 SEOs from 1993-2000 have a $130 million average ($74 million median) offer size.

26. Most empirical studies screen out pure secondary offers, either by deliberate choice (to examine only shares issued by firms) or because the study has an inherent objective of examining capital-raising choices (as in studies of rights offerings or shelf registrations). Studies of U.S. seasoned offerings that include pure secondary offers include Asquith and Mullins (1986), Hess and Bhagat (1986), Krigman, Shaw, and Womack (2001), Smart and Zutter (2002), Altinkiliç and Hansen (2003), and Heron and Lie (2004). We are unaware of any non-U.S. seasoned offer studies emphasizing the relative fractions of primary and secondary shares, though Huyghebaert and van Hull (2006) make this choice the motivating feature of their study of Belgian IPOs.

27. This comparison suggests that the rise of ATs has affected European corporate finance, because access to accelerated underwritings has allowed European corporate and institutional investors to aggressively unwind cross-shareholdings. Recent European secondary sales of inter-corporate holdings, executed using accelerated methods, are discussed in Bickerton (2002, Netherlands), Brown-Humes (2001, Sweden), Daniel (2001, France), Hall (2002, Switzerland), Jenkins (2001, Britain), Levitt (2003, Spain), Lucas (2004, European banks), and Major (2000, Germany).

28. To our knowledge, no other academic study has considered this variable.

29. Benveniste and Spindt (1989) explain how investment bankers provide investors with an incentive to reveal their demand for a firm's shares. This information revelation model is recently tested in Cornelli and Goldreich (2001, 2003), Aggarwal, Prabhala and Puri (2002) and Jenkinson and Jones (2004), with mixed results. Both Cornelli and Goldreich studies, and the Aggarwal, et al. study, support the idea that bookbuilding is informative and that informative bidders are rewarded with better share allocations, while Jenkinson and Jones find little evidence that bids are informative or that large bidders are rewarded with preferential share allocations. Finally, Sherman and Titman (2003) model the tradeoff a lead underwriter faces when increasing the size of the underwriting syndicate. They find that increasing the size of the syndicate by inviting in more investors increases pricing accuracy—by incorporating more information—but at the cost of greater underpricing.

30. Bhagat (1986), Bhagat and Frost (1986), and Hansen and Khanna (1994) examine the choice between competitive and negotiated offerings and find lower costs in negotiated deals. However, competitive offers may only appear to be less costly because the types of firms that use them are different from the types of firms that use negotiated offers. Logue and Tiniç (1999) examine multiple offers by the same firm, AT&T, and find no cost differences in the two offer types. Fernando, Gatchev and Spindt (2005) develop and empirically verify a model demonstrating how issuing firms and IB underwriters associate by mutual choice. Though it seems obvious that firms and IBs should choose each other, previous theoretical models had in fact posited a unidirectional choice.

ments characteristics we now examine whether accelerated deals are more or less costly than marketed deals for issuing companies and selling shareholders. To make a direct cost comparison between AT and non-AT deals, it helps to define the components of issuing cost for a firm or shareholder selling stock to public investors. As discussed in a number of studies, empirical research has identified three separate valuation effects relating to the typical seasoned equity offering, most of which are negative (that is, costs).[31] The three effects are (1) the typically negative announcement-period market impact, calculated as the abnormal return experienced by holders of the firm's stock following announcement of an SEO; (2) the underwriting spread—also called the offer price "discount"—calculated as the percentage difference between the stock's offering price and the previous trading day's closing price; and (3) the offering-day return, or underpricing, defined as the percentage change in value experienced by investors who purchase shares at the offer price and hold until the close of trading on the offer day.

The research has been remarkably consistent in showing that the announcement of an SEO typically causes a U.S. company's stock price to fall, generally by 2-3% on average.[32] At the same time, however, studies of offerings outside the U.S. generally show positive (or, at worst, insignificantly negative) announcement-period abnormal returns.[33] The many studies of underwriting spreads suggest that spreads for U.S. seasoned offerings have been in the range of 4.4 to 5.5%,[34] but falling over time.[35] Such spreads have also been smaller for shelf-registered than for traditionally underwritten offerings,[36] and smaller for highly liquid firms than for firms with thinly traded stocks.[37] Among the findings of the handful of studies examining spreads on non-U.S. seasoned offerings, spreads for non-U.S. IPOs have been shown to average less than half those of American IPOs[38]—though the average spreads for British placings (6.1%) have been higher than U.S. spreads, and considerably higher than the spreads for U.K. insured (4.6%) and uninsured rights (0.4%) offerings.[39]

As this last comparison suggest, the principal source of variability in spreads on SEOs revolves around whether the issue is a rights offering to current shareholders or a cash offering to new investors. Rights offerings in countries other than the U.S. generally have spreads of 20% or more,[40] whereas offering discounts on comparable public offerings are in the 3-5% range. U.S. studies (which typically do not examine rights offerings) generally find discounts of 1.5-3.5%, which have been increasing over time.[41]

Finally, on the question of issue underpricing, one early study of U.S. seasoned offers using a sample of firm commitments of utility and industrial firms over the 1963-1991 period found average underpricing very close to zero.[42] But several more recent studies have documented an increase in SEO underpricing during the 1990s, with average first-day returns to investors who purchase shares at the offer price ranging from 2.6-2.9%—an increase that can and has been attributed to the growing share of more risky Nasdaq issuers.[43] To our knowledge, no single study provides systematic evidence on SEO underpricing in European issues or in the rest of the world.

One major challenge in estimating these issuance costs is that measuring an SEO's announcement effect, as well as the underwriting spread and underpricing associated with the offer, requires definitive announcement and issue dates. One recent study reported an error rate of roughly 50% in the SDC database's identification of SEO issue dates.[44] When conducting our own tests of market impact and underpricing costs, we followed the procedure of that study, we identified the actual offer dates by searching Datastream for a significant volume spike near the SDC issue date. Specifically, we tracked volume over an 11-day window centered

31. Eckbo, Masulis, and Norli (2007) and Altinkiliç and Hansen (2003).

32. The following U.S. studies all show average announcement period cumulative abnormal returns of between -2.0% and -2.7%: Hess and Bhagat (1986), Asquith and Mullins (1986), Slovin and Sushka (1990), Bayless and Chaplinsky (1996), Chaplinsky and Ramchand (2000), Altinkiliç and Hansen (2003), and Heron and Lie (2004). Mikkelson and Partch (1986) find much more negative announcement period CARs, -3.56%, but their study only examines 80 SEOs, mostly from the 1970s. Schipper and Smith (1986) document the intriguing findings that equity carve-out announcements are associated with significantly positive (+1.8%) abnormal returns for parent-firm stocks, but announcements that parent companies are themselves issuing stock yield significantly negative returns (-3.5%). Finally, Bayless and Chaplinsky (1996) show that the market impact of SEO announcements is significantly less negative (-2.0% versus -3.3%) during hot issuance periods than during periods when fewer SEOs are executed.

33. Non-U.S. studies documenting significantly positive announcement period CARs for SEO announcements include Wu and Wang (2005, Hong Kong), Bigelli (1998, Italy), Cooney, Kato, and Schallheim (2003, Japan), Kang and Stulz (1996, Japan), Eckbo and Norli (2005, Norway), and Cronqvist and Nilsson (2005, Sweden). Slovin, Sushka, and Lai (2000) find that placings (general cash offers) are associated with significantly positive (+3.31%) announcement period CARs, whereas rights offering announcements yield roughly symmetrical, significantly negative (-3.09%) returns. Finally, Gajewski and Ginglinger (2002, France) document insignificantly negative announcement period CARs for public offers, but significantly negative CARs for both types of rights offers examined. These and other international studies are summarized in Eckbo, Masulis, and Norli (2007).

34. Lee, Lochhead, Ritter, and Zhao (1996), Altinkiliç and Hansen (2000), Saunders, Palia, and Kim (2003), Mola and Loughran (2004), Butler, Grullon, and Weston (2005), and Burch, Nanda, and Warther (2005).

35. Saunders, Palia, and Kim (2003).

36. Butler, Nanda, and Warther (2005).

37. Butler, Grullon, and Weston (2005).

38. Ljunqvist, Jenkinson, and Wilhelm (2003).

39. Slovin, Sushka, and Lai (2000).

40. See, for U.K. issues, Slovin, Sushka, and Lai (2000); for France, see Gajewski and Ginglinger (2002); for Hong Kong, see Wu and Wang (2005); and for Italy, see Bigelli.

41. Altinkiliç and Hansen (2003), Corwin (2003), and Mola and Loughran (2004).

42. Eckbo and Masulis (1992).

43. Altinkiliç and Hansen (2003) and Saunders, Palia, and Kim (2003), Corwin (2003), and Autore (2005). For completeness, we also note that several researchers (Kang and Stulz (1996, Japan), Loderer, Sheehan, and Kadlec (1991, United States), Meidan (2005, United States)) examine offer period returns, defined as the return to investors from the close of trading the day before an SEO through the close of trading on the offer day, and generally find small though significantly negative CARs of about -1.0 to -2.0%. However, it is not clear that these returns really represent a true cost to the issuing firm or selling shareholder, at least not a cost distinct from that already captured by discounts and underpricing. We calculate offer day returns for all of our samples but do not report them since they are usually quite small. These are available upon request.

44. Altinkilic and Hansen (2003).

Table 7 **Regression Analysis of Underwriting Spread and Underpricing**

This table reports the estimated coefficients of OLS regressions of underwriting spreads and underpricing. Underwriting spread is given by the percentage difference between the stock's offering price to the public and the previous trading day's closing price. Underpricing is the percentage change in value experienced by investors who purchase shares at the offer price and hold these until the close of trading on the offer day. AT is a dummy variable for any accelerated transaction (pure and mixed combined). Pure AT is a dummy variable for an pure accelerated transaction. Mixed AT is a variable for a pure accelerated transaction. ABO, BT, and BD are dummy variables for accelerated bookbuilt offers, block trades, and bought deals respectively. U.S. and Europe are dummy variables for issues originated in the United States, or in Europe, respectively. The % Primary is the fraction of the offering representing primary (newly-created) shares. Offer size is the natural log of gross offer proceeds, in $U.S. million. [a] indicates significance at the 1%, [b] at the 5% level, respectively. Standard errors are reported in parentheses.

	Dependent variables					
	Underwriting spread			**Underpricing**		
Intercept	0.0684 [a]	0.0676 [a]	0.0672 [a]	0.0700 [a]	0.0693 [a]	0.0691 [a]
	(0.0027)	(0.0027)	(0.0026)	(0.0028)	(0.0028)	(0.0027)
AT	-0.0176 [a]			-0.0252 [a]		
	(0.0023)			(0.0023)		
Pure AT		-0.0253 [a]			-0.0316 [a]	
		(0.0027)			(0.0028)	
Mixed AT		-0.0019	-0.0012		-0.0122 [a]	-0.0139 [a]
		(0.0038)	(0.0036)		(0.0039)	(0.0045)
ABO			-0.0279 [a]			-0.0299 [a]
			(0.0045)			(0.0035)
BT			-0.0185 [a]			-0.0166 [a]
			(0.0069)			(0.0071)
BD			-0.0155 [a]			-0.0142 [a]
			(0.0071)			(0.0069)
U.S.	-0.0370 [a]	-0.0367 [a]	-0.0360 [a]	-0.0352 [a]	-0.0350 [a]	-0.0349 [a]
	(0.0021)	(0.0021)	(0.0020)	(0.0022)	(0.0022)	(0.0021)
Europe	-0.0017	0.0023	0.0009	0.0025	0.0058 [a]	0.0038
	(0.0023)	(0.0024)	(0.0024)	(0.0023)	(0.0025)	(0.0024)
% Primary	0.0000	0.0000	0.0000	0.0001 [a]	0.0001 [a]	0.0001 [a]
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Offer size	-0.0014 [a]	-0.0014a [a]	-0.0013 [a]	-0.0029 [a]	-0.0029 [a]	-0.0028 [a]
	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)
Adj R^2	0.03	0.03	0.03	0.03	0.04	0.03
N	17,071	17,071	17,071	17,071	17,071	17,071

on the SDC issue date, and identified the issue date as the day on which trading volume is several times larger than surrounding days.[45]

Underwriter Spreads for Accelerated Versus Traditional Offerings

As reported in Table 3, global accelerated offerings have had lower gross spreads than traditional SEOs. Whereas underwriting spreads for traditional SEOs averaged 4.79% of the offering price for our entire sample, spreads on pure ATs were 3.59%, and mixed AT spreads averaged 4.21%. This reduction in spreads is especially evident in Europe, where spreads on accelerated deals were about half those on marketed deals (3.46% for pure and 3.30% for mixed ATs versus 7.07% for non-ATs). And in the rest of the world, spreads were significantly lower for mixed ATs (5.54% versus 6.48% for non-ATs). But in the U.S., by contrast, AT spreads were significantly higher than non-AT spreads (3.10% for pure and 3.15% for mixed ATs versus 2.53% for non-ATs).

But before we can interpret these numbers, it's important to try to control for potentially important differences in factors that could be contributing to these spreads. For example, to the extent ATs are substantially larger than non-AT underwritings, one would expect the spread, holding all other things equal, to be significantly lower on ATs because of the high fixed costs and resulting economies of scale in securities underwriting. And to examine whether AT offerings have significantly lower spreads after accounting for other important factors, including issue size, we ran several OLS regressions.

These results of our regression analysis, which are summarized in Table 7, suggest that, even after controlling for other characteristics that affect the gross spread, accelerated transactions have the effect of reducing spreads. As expected, larger offerings are associated with smaller spreads. When taking account of just the greater size of U.S. offerings, U.S. SEOs have spreads that, *ceteris paribus*, are about 370 basis points lower than ROW offerings, while European offer spreads are about 20 basis points lower than ROW offerings. But most important, our analysis suggests that accelerated transactions significantly reduce spreads; *pure accelerated transaction spreads are, on average, 253 basis points lower than non-accelerated deals*.

In some ways even more intriguing, spreads on ABOs are (economically as well as significantly) lower than spreads on the other two types of accelerated underwritings. Since the seller shares some price risk with underwriting banks while the ABO is being arranged—in contrast to BTs and BDs, which are pure auctions—this result suggests that the risk-sharing in ABOs has the effect of reducing direct underwriting costs. And this may go a long way in explaining why ABOs have been steadily gaining SEO underwriting market share in recent years.

Underpricing of Accelerated Versus Traditional Offerings

Our data also suggest that ATs enable issuers to reap substantial savings in one of the main indirect flotation costs, namely underpricing. For the entire sample, we found average underpricing of slightly less than 3% for ATs, but 4.8% for non-AT transactions. In short, accelerated deals leave less money on the table than other types of SEOs.

As shown in Table 3, compared with non-ATs, average underpricing is quite similar in the case of mixed or pure ATs, though with some interesting regional differences. As can be seen in Tables 4-6, average underpricing in the U.S. is markedly lower than in any other region of the world, especially in the case of non-AT offers. The U.S. also has the smallest difference in underpricing (78 basis points) between ATs and non-ATs. In Europe, by contrast, ATs look particularly appealing when compared to fully marketed offerings, boasting underpricing advantages of 4.3 percentage points for pure ATs and 4.3 points for mixed ATs.

What explains less underpricing in ATs? At least part of the explanation is differences in the kinds of companies that choose the AT method for their offerings. For example, we know that AT issuers tend to be larger and presumably have more liquid shares. And to the extent transactions by larger issuers are associated with less underpricing, the differences we see in our univariate comparisons cannot be attributed to the offering method per se.

The regression findings reported in Table 7 are consistent with the descriptive analysis, providing more evidence that ATs are significantly less underpriced than conventional SEOs. (The same result holds when pure and mixed ATs are estimated separately, with an economically larger effect attributed to pure deals.) U.S. markets stand out as having the least underpricing, especially when contrasted with Europe and Canada. And, as our regression analysis suggests, one likely explanation is the larger size of U.S. deals compared to that of their overseas counterparts. Like a number of previous studies,

45. In most cases, this method produced a single candidate issue date; but when we found multiple candidate dates, we first tried to match the SDC issue date and then searched other sources to identify the true issue date. Furthermore, since there is no systematic drift in the closing prices of offering firms during a three-day window around the offering, misidentification of the true issue date should not bias our analysis of discounts and underpricing. SDC identifies a "launch date" for each SEO that typically precedes the issue date. In an attempt to identify clean SEO announcement dates, we compared SDC launch dates to announcement dates found by searching LexisNexis for a random subsample of approximately 5,000 SEO announcements. For each of the randomly selected transactions drawn from the full sample, we searched for SEO announcements on LexisNexis over a two-month window centered on the SDC launch date. We found definitive offer date information for 1924 transactions. In the U.S., the dates we verified on LexisNexis almost always fell within one or two days of the SDC launch date, so a relatively narrow announcement date window of -1,+1 around the launch date captures the true announcement effect of the deal in most cases. For SEOs conducted outside the U.S., the correspondence between LexisNexis announcement dates (when we could find them) and SDC launch dates was much lower. This suggests that researchers conducting event study analysis of SEO announcement dates drawn from SDC may report abnormal returns biased toward zero. In our event study analysis, we report abnormal returns only for those transactions for which we have searched LexisNexis to obtain announcement dates. We also calculate announcement period abnormal returns using several different event windows.

Table 8 **Cumulative Abnormal Returns around the Verified Announcement Date for Global, U.S., European, and Rest-Of-World (ROW) Seasoned Equity Offerings, 1991-2004**

This table presents cumulative abnormal returns around announcement dates of seasoned equity offerings around the world and in various regional sub-samples, using announcement dates that have been verified as the earliest mentions of seasoned equity offers through a manual search of LexisNexis. Abnormal returns were generated using market-model expected returns. [a] indicates significance at the 1%, [b] at the 5% level, respectively.

Sample or sub-sample	Number of observations	CAR (-1, +1), mean %	CAR (-1, +1), median %
Panel A: All seasoned equity offerings	1,924	**-1.17**[a]	-1.46
All accelerated (AT) SEOs	326	**-1.22**[a]	-1.33
All non-accelerated (non-AT) SEOs	1,598	**-1.16**[a]	-1.49
Difference (AT-non AT)		-0.06	
All pure secondary SEOs	381	**-2.23**[a]	-2.08
All mixed primary/secondary SEOs	307	**-3.06**[a]	-2.61
All pure primary SEOs	1,236	-0.38	-1.07
Difference (pure primary-pure secondary)		**1.85**[a]	
Panel B: U.S. seasoned equity offerings	875	**-2.89**[a]	-2.28
U.S. accelerated (AT) SEOs	97	-1.34	-1.95
U.S. non-accelerated (non-AT) SEOs	778	**-3.08**[a]	-2.30
Difference (AT-non AT)		-1.75	
U.S. pure secondary SEOs	133	**-3.23**[a]	-3.36
U.S. mixed primary/secondary SEOs	266	**-3.51**[a]	-2.87
U.S. pure primary SEOs	476	**-2.45**[a]	-1.81
Difference (pure primary-pure secondary)		0.77	
Panel C: European seasoned equity offerings	307	-0.23	-0.15
European accelerated (AT) SEOs	107	-0.79	-1.03
European non-accelerated (non-AT) SEOs	200	+0.06	-0.04
Difference (AT-non AT)		-0.85	
European pure secondary SEOs	128	**-1.27**[a]	-0.85
European mixed primary/secondary SEOs	15	-1.49	-0.66
European pure primary SEOs	164	0.69	0.05
Difference (pure primary-pure secondary)		1.97	
Panel D: Rest-of-world (ROW) seasoned equity offerings	742	+0.47	-0.87
ROW accelerated (AT) SEOs	122	**-1.51**[a]	-1.25
ROW non-accelerated (non-AT) SEOs	620	+0.86	-0.78
Difference (AT-non AT)		**-2.36**[a]	
ROW pure secondary SEOs	120	**-2.15**[a]	-2.14
ROW mixed primary/secondary SEOs	26	+0.63	+1.36
ROW pure primary SEOs	596	+0.99	-0.68
Difference (pure primary-pure secondary)		**-3.13**[a]	

Table 9 **Regression Analysis of Cumulative Abnormal Returns around SEO Announcement Dates**

This table reports the estimated coefficients from a regression in which the dependent variable is the cumulative abnormal return surround the SEO announcement date (-1, +1) using the market model to estimate abnormal returns. The sample includes 1,924 announcement dates verified on LexisNexis. Offer size is the natural log of gross offer proceeds. Pure AT and Mixed AT are dummy variables equal to one for pure or mixed accelerated offers respectively. ABO, BT, and BD are dummy variables for accelerated bookbuilt offers, block trades, and bought deals respectively. % primary is the fraction of the offer presenting primary shares. U.S. and Europe are dummy variables equal to one for deals offered in the U.S. or Europe respectively. a indicates significance at the 1%, b at the 5% level, respectively.

	Coefficient	t-stat	Coefficient	t-stat
Intercept	-0.007	-0.84	-0.005	-0.72
Gross proceeds	-0.000	-0.08	-0.000	-0.07
Pure AT	-0.014	-1.21		
Mixed AT	0.011	0.69	0.009	0.59
ABO			-0.16	-1.31
BT			-0.009	-1.11
BD			-0.007	-0.89
% primary	0.016[a]	2.07	0.015[a]	2.21
US	-0.030[a]	-3.83	-0.029[a]	-3.65
Europe	0.001	0.13	0.002	0.18
Adjusted R^2	0.011		0.015	

our analysis shows that larger deals tend to have significantly less underpricing—a finding that likely reflects the importance of scale economies in achieving accurate pricing of SEOs.[46]

But somewhat surprisingly, our regression analysis also suggests that primary or capital-raising offerings are particularly costly for issuers in the sense that underpricing increases significantly with the proportion of primary shares in the offering. This may reflect a difference in the motives of insiders selling their own shares compared to those raising capital for the firm—for example, the greater reluctance of insiders to underprice their own shares—or a difference in the kinds of companies that need to raise primary capital (conceivably less mature, riskier, growth companies). At the same time, we find that ABOs are significantly less underpriced than other types of ATs, a finding that is broadly consistent with the view that bookbuilding tends to provide a more accurate pricing of the issue.

Market-impact Costs

But for already listed public companies, the largest indirect cost of raising outside equity is likely to come from the typically negative market reaction to announcements of SEOs, and any resulting dilution of value.[47] For a randomly selected subsample of SEOs (consisting of 326 accelerated and 1598 non-accelerated deals) for which we verified announcement dates using LexisNexis, we computed cumulative abnormal stock returns (CARs) over the three-day period from one trading day before to one trading day after the SEO announcement date (-1, +1).[48] As reported in Table 8, the overall average CAR for the global sample of 1924 seasoned equity offering announcements was a significant -1.17%, while the median was -1.46%. The 326 accelerated deals had an average announcement period CAR of -1.22% (and a median of -1.33%) as compared to -1.16% (and a median of -1.49%) for the 1598 non-AT offerings. While both of these average

46. We cannot rule out the possibility that underpricing differences between AT and non-AT transactions could be driven by firm characteristics that we are unable to control for in our regressions, such as risk.

47. More specifically, in those cases where the reaction is sufficiently negative—that is, significantly more negative than the firm's outlook would appear to justify—SEOs effectively dilute the claims of existing shareholders by selling undervalued equity.

48. We computed abnormal returns using the market model, which defines expected return as a function of the stock's beta and the reference market's return. We also test the robustness of our results by measuring abnormal returns over windows of (-2,+2) and (-3,+3), and by calculating market-adjusted returns rather than relying on the market model. None of these alternatives changes our results systematically.

CARs are significantly negative, the small percentage point differences between the AT and non-AT deals were not.

But when we tested the market response to subsamples based on whether the offering involved existing (secondary) or newly-issued (primary) shares, we obtained very different (and highly significant) results. The average -2.23% (median -2.08%) CAR for the 381 pure secondary offerings was 1.85 percentage points more negative than the -0.38% (-1.07%) average CAR for the 1,236 pure primary offers (a difference that is significant at the 1% level). The 307 mixed primary and secondary offers also received a more negative reaction (-3.06% mean, -2.61% median) than the primary share offerings. This suggests that global investors view announcements that current shareholders are selling stock to be much worse news than announcements that the firm itself is selling new equity capital. In effect, it is interpreted as a signal that insiders think the firm is overvalued.[49]

The average CAR for the U.S. sample of 875 SEO announcements was -2.89%, while the median was -2.28%.[50] And the 97 accelerated deals had an average announcement period CAR of -1.34% (and a median of -1.95% both insignificantly different from zero), whereas the 778 non-AT offerings have a (highly significantly) negative average CAR of -3.08% (with a median of -2.30%).[51] Secondary, mixed, and pure primary offerings all had significantly negative average CARs (of -3.23%, -3.51%, and -2.45%, respectively), with a 0.78 percentage point difference between pure secondary and pure primary offerings.

By contrast, the average CAR for the European sample of 307 SEO announcements was -0.23%, which is not significantly different from zero, while the median was -0.15%. The 107 accelerated deals in Europe had an average announcement period CAR of -0.79% (median of -1.03%) versus +0.06% (-0.04%) for the 200 non-AT offerings.[52] The secondary offering announcements had significantly negative announcement period returns (-1.27% mean, -0.85% median), while the CARs for mixed and pure primary offerings were -1.49% and +0.69%, respectively (neither of which was significantly different from zero; moreover, the 1.97 percentage point difference between pure primary and pure secondary offering CARs, though large, was insignificant).

Finally, the average CAR for the rest-of-world sample of 742 SEO announcements was +0.47% (not significantly different from zero), and the median was -0.87%. The 122 accelerated deals had a significantly negative average announcement period CAR of -1.51% (median of -1.25%) as compared to +0.86% (-0.78%) for the 620 non-AT offerings (and the 2.36 percentage point difference between AT and non-AT deals is statistically significant). The 120 pure secondary offering announcements had a much more negative announcement period CAR (-2.15% mean, -2.14% median) than did the 596 primary offers (+0.99% mean, -0.68% median), (and this 3.13 percentage points difference is significant at the 1% level).

We also performed a cross-sectional analysis of the announcement CARs. The first regression model used dummy variables to distinguish the effects of pure and mixed AT deals versus non-AT transactions. The second specification replaced the pure AT dummy with dummies for each of the different types of accelerated transactions: accelerated bookbuilt offers, block trades, and bought deals. As summarized in Table 9, the results of our analysis suggest that AT offerings have announcement effects that are comparable to those of non-AT deals. The announcement effects were significantly more negative for U.S. deals, and for deals with a higher fraction of secondary shares.

In sum, the results of our event study indicate that announcements of accelerated offerings have market impacts (and price-impact costs) that are generally similar to those of announcements of traditional SEOs. At the same time, the CARs for ATs were insignificantly higher than those for non-ATs in the U.S., insignificantly lower in Europe, and significantly lower in ROW. Most dramatically, secondary share offerings have a far more negative market impact than primary, capital-raising offers of newly created shares, both in the full sample, and particularly in the ROW subsample.

But perhaps most important, the findings our regression analysis (reported in Tables 7-9) can be interpreted as follows: When compared to traditional seasoned offerings, accelerated transactions have reduced underwriting spreads by about 175 basis points and underpricing by about 250 basis points (with no material effect on market-impact costs). And while the extent of these savings varies among issuers in the U.S., Europe, and elsewhere, ATs appear to have brought about significant reductions in the costs associated with selling seasoned equity in all parts of the world.

Summary and Conclusions

Seasoned common stock sales executed through three kinds of accelerated underwritings—block trades, bought deals, and accelerated book-built offerings—have raised over $850 billion since 1998, and now account for roughly half of U.S. seasoned equity offerings (SEOs) and two-thirds of European SEOs. In the study described in this paper, we examined the offering terms and announcement-period market effects of over 30,000 SEOs executed around the world during the

49. Since we are unaware of any existing multi-national SEO announcement period event studies, the findings detailed above are unique contributions to the empirical literature.

50 These findings that are reassuringly consistent with the many studies that have reported CARs of between -2% and -3%.

51. Though substantial, this 1.75 percentage point difference between AT and non-AT deals was not statistically significant.

52. The 0.85 percentage point difference between AT and non-AT deals is insignificant at normal significance levels.

period 1991-2004—issues that raised almost $3 trillion for issuing companies (in primary offers) and selling shareholders (in secondary offers).

The evidence produced by our study suggests that accelerated deals have become popular with issuers for several reasons, most notably because they are faster and cheaper than marketed deals, expose issuers to less price risk during the short underwriting period, and have market-impact costs that are no larger than those that accompany traditional SEOs.

Ours is the first truly global event study analysis of the market impact of SEO announcements, as well as one of the first to show that pure secondary and mixed primary and secondary SEOs have significantly more negative announcement effects than capital-raising, primary offers. We also present a unique analysis of the size of SEO investment banking syndicates—analysis that illustrates that accelerated deals yield much smaller, more capital-intensive, and presumably riskier underwriting syndicates, but ones that generate comparable revenues over much shorter transactions periods and allow banks to effectively "buy" market share and league table rankings.

Taken together, our findings highlight three major trends that are shaping global investment banking. First, the fact that accelerated deals are marketed almost exclusively to institutional investors, and that these underwriting methods are gaining market share, suggests the declining importance of retail investors to equity markets everywhere. Second, the rise of accelerated deals both promotes and reflects increasing concentration in the investment banking industry, since only the largest banks have the capital base and risk tolerance required to buy large share blocks outright and assume all or almost all of the price risk of later resale. Finally, increasing use of accelerated underwritings for seasoned equity offerings points to the commoditization of financial transactions with relatively low asymmetric information. Since ATs can be employed for shares of only large and well-known companies, these offerings are executed very quickly and cheaply—in much the same way plain vanilla corporate bonds are sold—and with minimal need for the placement and marketing services that investment banks use for IPOs and other non-transparent security offerings.

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