The Future of the New Issues Market

Jay R. Ritter
Cordell Professor of finance
University of Florida
jay.ritter@cba.ufl.edu
http://bear.cba.ufl.edu/ritter
352.846.2837

Published as pp. 293-308 of Brookings-Wharton *Papers on Financial Services* 2002.

Comments from Tim Loughran, Sandip Sukhtankar, and participants in the fifth annual Brookings-Wharton Papers on Financial Services conference are gratefully acknowledged.

The Future of the New Issues Market

Every MBA program that I have taught in has some Asian students, and in some Asian societies, such as Korea, it is common for a student to give a gift to a teacher at the end of the year. Some Korean students continue this practice when they are students in the U.S., and over the years I have received a number of gifts from students. Most of these gifts fall into the category of trinkets and knick-knacks, and I would guess that the average value of these gifts has been about twenty dollars. I typically accept these gifts when offered, and sometimes I even remember the student's name. I don't think that many people would consider my acceptance of these gifts after the end of a semester as unethical behavior.

I haven't been faced with the decision, but what would I do if I was offered a gift of a work of art, a gift worth $200? And what if I could sell this gift (I would wait until after the student graduated and left town, of course), and pocket the $200? Would accepting this gift be unethical? Would it change my behavior? What if the work of art was worth $10,000, but the Korean student let me know in advance of the final exam that he or she only gave gifts to professors in classes where an 'A' was received? Would this affect my decisions on what grade to give this student, especially if it turned out the student was right on the borderline between an A and a B when I was making up the grade distribution? What if the student didn't tell me this in advance, but I had learned from experience that I would receive much more valuable gifts from Korean students if they received high grades?

Would it be OK for me to accept significant gifts from students who received high grades if other professors were doing so? In other words, if it was "standard industry practice?"

Because this article is about the new issues market, I will not discuss further the ethical problems associated with professors who give high grades to students and receive gifts in return. This article will focus mainly on the initial public offerings (IPOs) of equity securities. I will focus on equity IPOs mainly because this is where almost all of the controversy lies. In particular, there are controversies associated with underwriters who allocate hot IPOs to hedge funds and receive commission business in return. After presenting some statistics concerning IPOs and discussing controversies, the article ends with some policy recommendations.

The Allocation of IPOs

Economists use the term "rents" to refer to compensation in excess of normal competitive levels. In the 1980s, when the average first-day return on IPOs with an offer price of $5.00 per share or higher was 7%, rent-seeking behavior by buyers was minimal, because there were few rents to collect. The mean amount of money left on the table was $1.6 million, and the median (not shown) was only $0.2 million.

In 1990-1998, when the average amount of money left on the table increased to $8 million, rent-seeking became more common. Many investors, both individuals and institutions, began to seek out IPOs. Frequently the goal was not to be a buy-and-hold investor, but instead to make a quick profit by buying at the offer price and selling at a higher price a short time later. During 1999-2000, which I will call the internet bubble years, things got completely out of hand, with an average of $78 million being left on the table. In 2001, the average amount left on the table reverted to $37 million (see Figure 1 and Table 1).

IPOs with an offer price below $5.00 per share, unit offers, REITs, closed-end funds, banks and S&Ls, ADRs, and IPOs not listed on CRSP have been excluded. Data are from Thomson Financial Securities Data, with supplements from Dealogic and corrections by the author. The first-day return is defined as the percentage change from the offer price to the closing price. Money on the table is defined as the first-day price change (offer price to close) times the number of shares issued (global offering amount, excluding overallotment options). From January 1980 to January 2001, the price level (CPI) increased by 125%. The amount of money left on the table in 1980 can be converted into dollars of 2001 purchasing power by multiplying by 2.25.

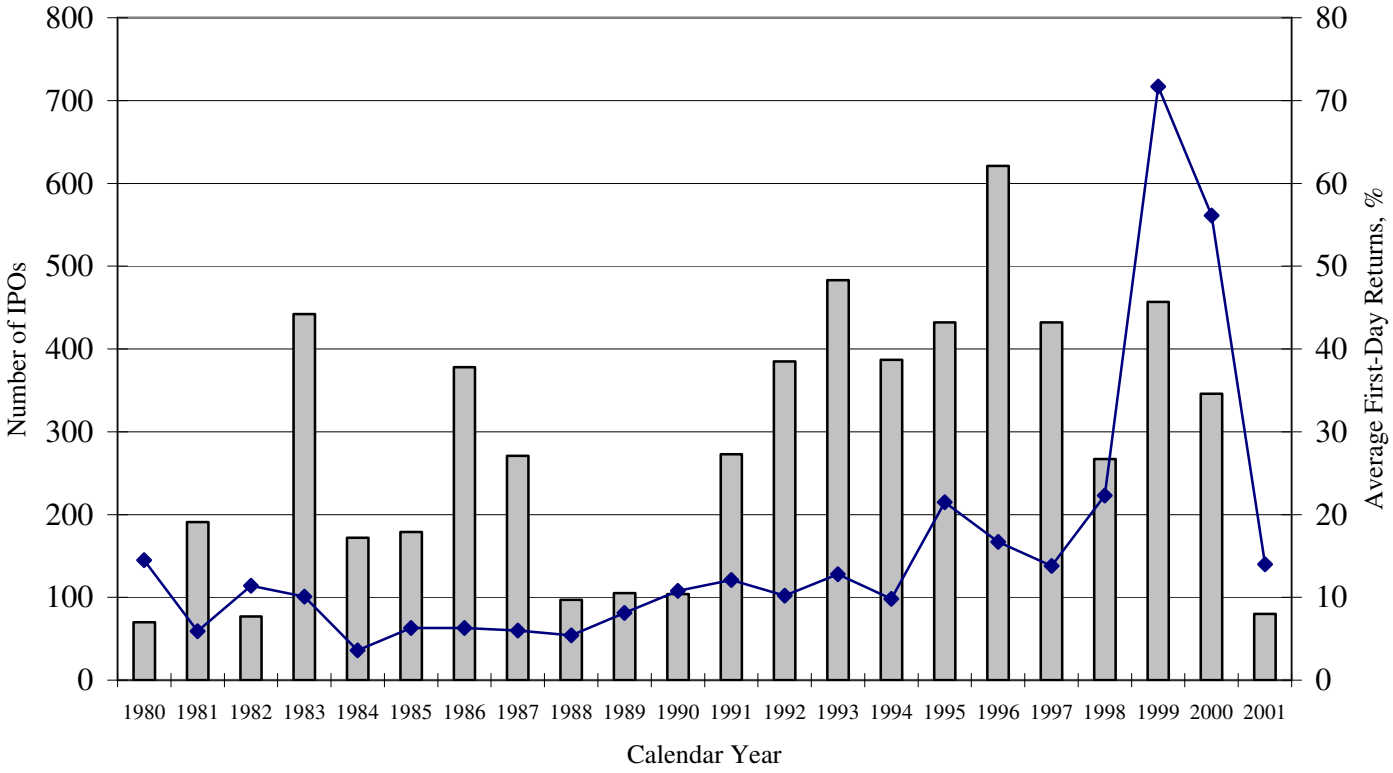

Figure 1: The annual number of IPOs (bar chart) and the equally weighted average first-day percentage return (diamonds) on IPOs for 6,249 CRSP-listed IPOs from 1980-2001 with an offer price of at least $5.00, 1980-2001. Source: Ritter and Welch (2002).

Table 1

The Number of IPOs, the Mean First-day Return, and the Amount of Money Left on the Table, 1980-2001

Year	Number of IPOs	Mean first-day return	Money on the table, millions			
			Nominal		2001 purchasing power	
			Mean	Aggregate	Mean	Aggregate
1980	70	14.5%	$2.6	$181	$5.8	$408
1981	191	5.9%	$0.7	$132	$1.4	$264
1982	77	11.4%	$1.7	$133	$3.2	$245
1983	442	10.1%	$1.9	$832	$3.3	$1,479
1984	172	3.6%	$0.3	$50	$0.5	$86
1985	179	6.3%	$1.2	$215	$2.0	$354
1986	378	6.3%	$1.7	$649	$2.7	$1,030
1987	271	6.0%	$2.4	$649	$3.8	$1,019
1988	97	5.4%	$1.3	$124	$1.9	$186
1989	105	8.1%	$2.2	$233	$3.2	$336
1990	104	10.8%	$3.2	$330	$4.4	$454
1991	273	12.1%	$5.1	$1,379	$6.5	$1,788
1992	385	10.2%	$4.4	$1,708	$5.6	$2,148
1993	483	12.8%	$6.6	$3,203	$8.1	$3,915
1994	387	9.8%	$3.6	$1,386	$4.3	$1,650
1995	432	21.5%	$10.1	$4,342	$11.7	$5,033
1996	621	16.7%	$10.5	$6,533	$11.9	$7,383
1997	432	13.9%	$9.9	$4,267	$10.8	$4,668
1998	267	22.3%	$18.6	$4,977	$20.0	$5,352
1999	457	71.7%	$78.0	$35,627	$83.0	$37,943
2000	346	56.1%	$77.4	$26,772	$80.0	$27,682
2001	80	14.0%	$37.2	$2,973	$37.2	$2,973
1980-1989	1,982	7.4%	$1.6	$3,198	$2.7	$5,409
1990-1998	3,384	14.8%	$8.3	$28,125	$9.6	$32,390
1999-2000	803	65.0%	$77.7	$62,398	$81.7	$65,625
2001	80	14.0%	$37.2	$2,973	$37.2	$2,973
Total	6,249	18.8%	$15.5	$96,694	$17.0	$106,397

Source: Ritter and Welch (2002).

Financial economists find the willingness of issuing firms to leave so much money on the table perplexing. In Table 2, I present a numerical example demonstrating how underpricing lowers the wealth of pre-issue shareholders. In this example, the firm raises $78 million either by selling 7.8 million shares at $10.00 per share (strategy 1) or by selling 6.0 million shares at $13.00 per share (strategy 2). With the first strategy, $15.6 million is left on the table. Dividing the $15.6 million left on the table by the 15.6 million pre-issue shares outstanding is exactly $1.00 per share. In other words, there is a direct relation between the money left on the table and the dilution per share caused by selling a larger number of shares to raise the same proceeds.

Table 2

The Effect of Underpricing on the Wealth and Ownership of Pre-issue Shareholders

Assumptions:

Pre-issue shares outstanding:	15.6 million shares
Gross proceeds of IPO:	$78 million
Post-issue market cap:	$280.8 million
# of shares sold by pre-issue shareholders:	zero

	Strategy 1	**Strategy 2**
Offer price and number of shares offered:	7.8 m shares at $10.00	6.0 m shares at $13.00
Post-issue shares outstanding:	23.4 million	21.6 million
Market price per share:	$12.00	$13.00
Money left on the table:	$15.6 million	zero
Post-issue wealth of pre-issue shareholders:	$187.2 million	$202.8 million
% of firm owned by pre-issue shareholders:	66.7%	72.2%

During the internet bubble, warnings about the valuations of TMT (technology, media, and telecommunications) companies were far from unheard of. The founders of *Red Herring*, Anthony Perkins and Michael Perkins, co-authored a book published in 1999 called *The Internet Bubble*. Those seeking to justify the valuations talked about growth options and the increased rate of technological change. But, as emphasized in Warren Buffet's famous November 22, 1999 *Fortune* magazine article and Jeremy Siegel's March 14, 2000 *Wall Street Journal* article, technological change historically has benefited consumers, not the owners of capital.

During the internet bubble, many stories were repeated about why severe underpricing was in the best interests of issuing firms. Many issuers believed these stories. DuCharme, Rajgopal, and Sefcik (2001) provide a list, including:

1) It is important to give a good runup to institutional investors. This creates goodwill so that later on, if there is a disappointing earnings announcement or something, they will stay with you. I am unaware of any empirical evidence supporting this assertion

2) The IPO is a marketing event rather than a capital raising event. This only makes sense if the market will still be receptive when it is time to do a follow-on offer because the firm is running out of cash.[1] And, more obviously, underpricing is an extremely expensive way of advertising. The December 1999 IPO of VA Linux left over $1 billion on the table. The company could have bought every advertisement on every televised college and professional football game in 2000 with the money that it left on the table.

Many investment bankers repeated these stories. One investment banker said "My main job is to con issuing firms into believing that underpricing is in their interest." Not all investment bankers were as cynical, however. After all, the best con men are those that believe the con.

Yet another argument for why many internet IPOs were severely underpriced is that underwriters weren't willing to put high valuations on some young companies because they thought that the market was willing to overpay. This temporary exuberance would eventually vanish, and the price would then fall from what the market was willing to bid the price up to. To avoid the possible embarrassment and lawsuits that might follow if the offer was priced to take full advantage of this temporary exuberance, underwriters set a lower offer price. Loughran and Ritter (2002) call this the leaning against the wind theory. When one looks at the valuations placed on TMT companies in late 1999 and early 2000, one cannot help but have sympathy for this line of reasoning.

What undercuts this argument for severe underpricing is the bullish forecasts of the underwriters' analysts as soon as the quiet period ended. If an underwriter recommends $36 a share for the offer price when the stock is likely to start trading at over $80, why does the underwriter's analyst then give a buy recommendation 25 days later when the stock is at $90? Let me give one example: On July 28, 2000, an internet infrastructure company called Corvis went public at $36. At its offer price, Corvis was valued at $10 billion. What made this noteworthy is that Corvis was a young company that had never booked a dollar of revenue. At the end of the first day of trading, it closed at over $84 per share with a market cap of $28 billion. When the quiet period ended 25 days later, the share price was at $90, and the market cap was $30 billion. So what recommendations did the underwriters' analysts give? Did they say that it was an exciting start-up company with a great future, but that a $30 billion valuation could only be justified by exceedingly optimistic assumptions? No. Instead, the lead underwriter, Credit Suisse First Boston, put out a "strong buy" recommendation. The other five co-managers all put out "buy" recommendations.[2] In January 2002, the company had a market cap of $1 billion.

I think that an underappreciated reason for the severe underpricing of internet IPOs is issuer stupidity and thought contagion. Once severe underpricing became commonplace, other issuers accepted it as normal. The issuer stupidity story has corroborating evidence: Most of the

---

[1] Practitioners often talk about the equity-raising window being shut. One interpretation of this is that when valuations decline, high-quality firms do not attempt to issue equity, and a classic lemons problem results. Investors, aware that high-quality firms are not attempting to raise public equity capital, rationally are not willing to buy at a lower offer price. As a result, firms are unable to sell equity at any price.

[2] Information on the underwriter recommendations comes from the website of briefing.com.

insiders in TMT companies held on to most of their shares until after the bubble completely burst. They did a miserable job of selling their personal shares near the peak. There is a story in the dog that didn't bark: I have read few stories in the financial press about the founders of defunct internet companies who pocketed hundreds of millions by selling almost all of their shares near the peak of the bubble.

Underwriters, as intermediaries, need to balance the interests of the sell side (issuers) and the buy side (investors). Investment bankers advise the issuer on pricing the issue, both at the time of issuing a preliminary prospectus that includes a file price range, and at the pricing meeting where the final offer price is set. If underwriters receive compensation from both the issuer (the gross spread, or underwriting discount, which is typically 7% of the proceeds for moderate-size IPOs) and investors (through quid pro quos in return for leaving money on the table), the underwriter has an incentive to recommend a lower offer price than if the compensation was merely the gross spread. Just like a professor would be more inclined to give an "A" grade to a student who offered a $10,000 gift in return.

So it is easy to understand why underwriters would like to leave money on the table. But why are issuers willing to put up with it?

In a 2002 *Review of Financial Studies* article, Tim Loughran and I develop an explanation based upon prospect theory, a model of behavior that was developed by two cognitive psychologists, Daniel Kahneman and the late Amos Tversky, in a 1979 *Econometrica* article. Prospect theory, unlike von Neumann-Morgenstern expected utility theory, is not a normative theory about how people should behave. Instead, it is descriptive model of how people do behave. It assumes that people focus on changes in wealth, rather than the level of wealth. Furthermore, it allows for mental accounting, such as whether people calculate a gain or loss on two related events by calculating the total gain, or calculating two separate gains. If two good things happen, people will want to treat them separately. This is why, for example, parents give multiple presents to their children in separate boxes, rather than putting them in the same box.

If a gain and a loss occur, a person will feel good about one and bad about the other. But if instead of segregating the two events, the person integrates them and focuses on just the net gain or loss, the person may feel better. If the net gain is positive, then focusing on the net gain means that just one good thing occurred, and happiness results. If there is a net loss, feeling bad once is worse than segregating the two events and feeling good once and bad once. So if the net gain is positive, the person will integrate the two events. If a net loss results, the person may want to segregate the two events.

In the Table 2 example, pre-issue shareholders own 15.6 million shares. Let's assume that at the start of the process of going public, the file price range was set at $7.00-9.00 per share, with a midpoint of $8.00. Using this midpoint gives an expected wealth of $124.8 million for the pre-issue shareholders. In the context of IPOs, Tim Loughran and I argue that issuers calculate wealth gains and losses relative to this valuation. If, at the end of the first day of trading, the price is at $12.00 per share, their 15.6 million shares are worth $187.2 million, and they have gained $62.4 million in a short period of time. They are happy. If the IPO was priced at $10.00, and 7.8 million shares were sold by the company, $15.6 million was left on the table. If the IPO had been priced at $13.00 and only 6.0 million shares were sold to raise the same amount of proceeds, the wealth gain could have been $78 million. This is because with fewer shares outstanding, the market price would be $13.00 rather than $12.00.

Issuers have a choice. In the scenario with a $10.00 offer price, they could feel good about the $78 million that they should have gained, and bad about the $15.6 million that was left on the table. Or they could integrate the two numbers and focus on the net gain of $62.4 million, and feel happy. In fact, issuers almost always focus on the net gain if the price jumps up, and do not complain about leaving money on the table.

But what if the original file price range had been $12.00-14.00, and the pre-issuer shareholders had anchored on an expected wealth of $13.00 times 15.6 million shares, or $202.8 million? Then, if the offer price was set at $10.00 and $15.6 million was left on the table, they would not be so complacent. Here, there is no net gain to focus on. If they had anchored on a midpoint of $13.00 per share and the underwriter recommended an offer price of only $10.00, they would have not been happy. Alternatively stated, they would have bargained hard for a higher offer price. In contrast, if they had anchored on a midpoint of $8.00 per share and the underwriter then recommended a $10.00 offer price, they would not bargain hard for a higher offer price.

In our *RFS* article, we argue that underwriters take advantage of the difference in issuer psychology in these different scenarios. If there is strong demand for the IPO, the underwriter takes advantage of the lack of bargaining effort by the issuer and leaves a lot of money on the table. If there is weak demand, very little money is left on the table. In practice, this is exactly the empirical pattern that is observed. Most IPOs leave very little money on the table. But a minority of IPOs, where there is strong demand during the bookbuilding period, leave a lot of money on the table. In a follow-up article, Tim Loughran and I document that during the internet bubble period, the frequency of the strong demand scenarios was much more common during the internet bubble period than in previous years. Underwriters took advantage of these fortuitous circumstances to severely underprice many IPOs.

Even before the internet bubble developed, the allocation of IPOs was sometimes unsavory. In their pitches to issuers, underwriters frequently discuss their distribution strategy. They invariably talk about the institutional investors who are likely buy-and-hold investors that they will approach. For example, a healthcare company going public has as a natural buy-side clientele mutual funds that already hold other healthcare companies. But I am unaware of underwriters telling issuers that many of the shares will be allocated to hedge funds that generate a lot of commission business, or to venture capitalists or executives of firms that might be in a position to direct a future issuer to the investment banking firm. The *Wall Street Journal* (Siconolfi, 1997) called attention to the practice of "spinning," where hot IPO shares are given to the accounts of the general partners of venture capital firms and executives of companies to influence their decisions about what underwriter to choose. Frank Quattrone, first at Morgan Stanley, then at Deutsche Banc, and then at Credit Suisse First Boston, is alleged to have been the master at spinning. So-called "Friends of Frank" accounts are alleged to have been set up for those in a position of influence.[3] These are controversial because they appear to be in violation of the legal Doctrine of Corporate Opportunity. That is, an employee of a venture capital firm or corporation is getting side-payments only because of their power to decide how corporate resources are used. After the *WSJ* publicized the practice in 1997, the U. S. Securities and Exchange Commission (SEC) launched an investigation. The SEC took no action after the practice decreased for a while. But as soon as the heat was off, the practice apparently became even more egregious during 1999-2000 than it had been prior to then.

[3] See Peter Elkind and Mark Gimein, "The Trouble With Frank," *Fortune*, September 3, 2001.

The unsavory practices that became prevalent in 1999 and 2000 in the allocation of IPOs had many consequences. Let me name one. Institutional investors have several choices over how a trade is executed. One option is to place an order with the trading desk at a traditional broker-dealer. Another option is to place an order with an Electronic Communication Network (ECN) or a crossing network. During the bubble period, ECNs and crossing networks were put at a competitive disadvantage. If an institutional investor had a choice of paying 3 cents a share to trade with a crossing network or 5 cents per share to trade with an investment banking firm that had IPO shares to allocate, many institutional investors rationally decided to pay the higher commission rate. Crossing networks were directly harmed by their inability to reward clients by allocating hot IPOs in return for trading business.

Where Have the NASD and SEC Been?

SEC regulations require that the prospectus disclose underwriter compensation. As of the beginning of 2002, underwriter compensation that has been reported has been restricted to the direct compensation (the gross spread, plus a nonaccountable expense allowance or warrants to purchase stock that are sometimes present for smaller IPOs). Underwriters readily acknowledge, however, that in the 1990s IPOs were being allocated to investors partly, and sometimes mainly, on the basis of past and future commission business on other trades. The extent of the profits from this commission business depend upon the amount of money that is being left on the table.

As an example, Credit Suisse First Boston (CSFB) is alleged to have received from some investors commission business equal to half or more of the profits generated on certain hot IPOs, such as the December 9, 1999 IPO of VA Linux.[4] The VA Linux IPO involved 5.06 million shares including the overallotment option, and was priced at $30 per share, with a 7% gross spread equal to $2.10 per share. For an investor who was allocated shares at $30, and who then sold at the closing market price of $239.25, the capital gains would have amounted to $209.25 per share. If the investor then traded shares to generate commissions equal to half of this profit, the total underwriter compensation was $2.10 plus $104.625, or $106.725 per share. (Note that this is not all profit for CSFB, since there are costs involved in both doing the IPO and trading shares.) The prospectus does not mention anything about the revenue from the commission business. The National Association of Securities Dealers (NASD) has regulations regarding "fair" compensation for underwriting IPOs.[5] While there are no explicit limits, in general compensation exceeding 10% of the gross proceeds would have been viewed with suspicion.

Underwriter compensation includes both direct and indirect compensation. By indirect compensation, I mean the revenue generated by rent-seeking buy-side clients. But to date, neither the NASD nor the SEC have required the disclosure of indirect compensation. I think that if issuers saw this explicitly, they would be less complacent about leaving a lot of money on the table. There is much evidence that people don't view opportunity costs as equivalent to direct costs. If part of the money left on the table was relabeled as a direct cost, behavior would change. I don't think that the government should necessarily dictate how IPOs are allocated, just as I don't think that analysts should be forced to issue a "sell" every time they issue a "buy."

[4] See Susan Pulliam and Randall Smith "Linux Deal is Focus of IPO-Commission Probe" December 12, 2000 *Wall Street Journal*, and SEC News Release 2002-14 (January 22, 2002).

[5] See NASD Notice to Members 98-88.

Regulation FD is model regulation, in my mind. It is aimed at creating a level playing field, rather than giving an informational advantage to certain parties. Regulations are meaningless, however, if there are no penalties for violating them.

One tool at the disposal of underwriters to affect the allocation and trading of IPOs is the use of "penalty bids." If it chooses to do so, the bookrunner on a securities offering can revoke the selling concession received by other syndicate members if securities are flipped shortly after an offering occurs.[6] Penalty bids have been a subject of controversy. Penalty bids provide an incentive for brokers to allocate shares to buy-and-hold investors. But once shares are allocated, if an investor wants to sell the shares, the broker has an incentive to dissuade the investor from selling, because the selling concession will be lost. Sometimes the investor is aware of this incentive, and sometimes the investor is not. Once again, I think that what is mainly needed is better disclosure.

Why isn't the deterrent effect of SEC sanctions greater at eliminating certain practices? Partly, the process takes so long. But mainly, in many cases the penalties are minimal.[7] In reality, the threat of private sector class action lawsuits and their monetary settlements is greater.

Investment banking firms may wind up paying out hundreds of millions or even billions in settling some of the regulatory body actions and private-sector lawsuits that have been filed following the excesses of the internet bubble period. The shareholders who own the stock of the investment bankers are suffering as a result. But the parties that pocketed their bonus checks are not being asked to pay anything back. Because the penalties look like they will be just a fraction of the ill-gotten gains, the deterrence effect is minimal.

E-commerce

Why has the use of the internet for distributing IPOs tailed off? Or, more accurately, why hasn't it taken off? There are clearly efficiencies created by using the internet to distribute IPO shares, and to find out the demand. WRHambrecht & Co. started, in March 1999, to conduct auctions for pricing and allocating IPOs. To date, only six issuers have chosen to use WRHambrecht's auctions. In the late 1990s, another investment banking firm, Wit Capital, was founded. Wit Capital planned to use the internet to distribute IPOs to individual investors. As of this writing, Wit Capital and its successors have not been the lead underwriter on a single IPO. A third financial intermediary founded in the late 1990s aimed to use the internet to finance venture capital investments. In 2001, OffRoad Capital severely retrenched, as has much of the venture capital industry. To summarize, all three of these financial intermediaries have struggled.

I am at somewhat of a loss to explain why auctions for selling IPOs have not been more popular, not only in the U.S., but world wide. It is not a surprise to me that internet distribution

[6] The commission of a new issue, known as the gross spread, is paid entirely by the seller. The gross spread is split into a management fee, an underwriting fee, and a selling concession. Typically, the selling concession will be about 60% of the gross spread. See Chen and Ritter (2000, Table V), for a description of the allocation of the spread among syndicate members.

[7] One exception is the penalty imposed on Salomon after the firm violated limits on the quantity of T-bonds that it bid on. Jegadeesh (1993) estimates that the profits were on the order of 4 basis points per bond. The $120 million fine was high in comparison.

of IPOs to retail investors has not become popular. Underwriters treat access to IPOs as the reward for being a profitable customer. Low cost distribution is not even on the agenda.

The revolution in communications technology has certainly had an enormous impact on what information is available. On websites such as www.theflyonthewall.com, for a modest monthly fee, anyone can get updates several times per day on how the order book is being filled for issues in the bookbuilding period. Analyst earnings forecasts are readily available, and once the quiet period ends, analyst recommendations are there, too. Once trading starts, on www.island.com, one can see Island's limit order book on any stock. Underwriters can track who flipped shares with the Depository Trust Corporation tracking system. Webcasts of roadshows are available to qualified investors. Documents filed with the SEC can be pulled up on EDGAR by anyone.

Analysts and New Issues

In the last year, analysts have been pilloried in the court of public opinion. Why are there sell-side analysts in the first place? In the fixed income market, rating agencies such as Moody's are independent of the intermediaries who sell bonds. Why is the equity market different?

One line of thought is as follows: The vertical integration of the investment banking industry is because there are information spillovers. The bookrunner on an equity issue of a Nasdaq-traded stock knows who the shares are placed with, and this gives an informational advantage over other market makers. If there is an order imbalance, the bookrunner knows who to call. Furthermore, inventory adjustments can be made through exercising or not exercising the overallotment option. Thus, in early trading, the bookrunner has an advantage as a market maker, and once this is established, this dominant position tends to persist. If an investment banking firm is making a market, they have an incentive to boost trading volume, and so it would be natural to have an analyst tout the stock.

A second line of thought explaining why the equity market is dominated by sell-side analysts is as follows. Prior to the end of fixed commissions in 1975, one way that investment banking firms competed for trading business was to offer research coverage to buy-side clients. After fixed commissions ended, equity analysts had to generate revenue in some other way. In 1975-1979, there was relatively little M&A and new equity issue business, so there was not a lot of pressure on analysts to give positive recommendations as a way to compete for this business. But in the 1980s, as these sources of revenue became more important, sell-side analysts could generate revenue through these activities. Thus, investment banking firms could offer research coverage at lower cost to buy-side clients than could independent research firms. In the 1990s, M&A fees came down, but equity issuance went up. IPOs became especially lucrative due to the money that was left on the table and the commission business that this generated as buy-side investors competed to receive favorable IPO allocations. Research coverage for a firm after an IPO was provided partly to show other prospective issuers that the underwriter would not just collect the gross spread from the IPO and then ignore the issuer.

Why, though, would investors pay attention to the sell-side analyst recommendations if they are so biased? The conventional wisdom is that the sell-side analysts were given preferential access to information by companies in return. As a simple example, whether a chief financial officer returns a phone call or not depends upon who is making the call. Regulation FD is leveling the playing field on this.

Policy Recommendations and the Future of the New Issues Market

Predicting the future is always hazardous. What makes market structure forecasts especially dangerous is that transitions are rarely smooth. Instead, there is a tendency to jump from one equilibrium to another. But I will make some conjectures about the future of the new issues market:

Bookbuilding, with underwriters having total discretion over the allocation of shares, looks like it will continue to be the predominant mechanism to sell IPOs, barring regulatory action. The pricing and distribution of shares using the internet will probably continue to be a minor background item.

I anticipate that there will be controversies involving the practices of investment bankers as long as underwriters have discretion over which clients are allocated shares. As long as issuers choose investment bankers with objectives other than getting the highest offer price in mind, IPOs will be underpriced. As a result, underwriters will have hot IPOs to hand out to their most profitable customers. How can some of the resulting unsavory practices be controlled?

If underwriters were required by the SEC to disclose all compensation from securities issues, including the revenue from commission business offered by rent-seeking buy-side clients, I believe that issuing firms would not be as complacent about leaving money on the table. I strongly urge regulators to start requiring that total compensation, including both direct and indirect compensation, be disclosed.

A second disclosure requirement that I would like to see would cover who shares are allocated to. This would involve the listing of every institutional investor and how many shares that they receive. When it comes to the disclosure of individual investor allocations, there are tradeoffs with privacy issues. Perhaps the rule should be that allocations to individuals must be listed by name only if IPO shares are sold at a profit within nine months of the IPO, or if the IPO jumped by more than 10% on the first day of trading. Thus, buy-and-hold investors would not have their names disclosed unless they were allocated shares on a hot issue.

A third regulatory change that I would like to see would be the banning of "Friends of Frank" accounts. I think that a sound public policy case can be made for the proposition that underwriters should not be permitted to allocate hot IPOs to the personal accounts of individuals who, through their position as a company executive or a general partner in a venture capital, are in a position to influence choices on what investment banking firm to hire for corporate transactions. I don't think that an executive should be prohibited from having a personal brokerage account at CSFB just because the person's firm has done a deal with CSFB. But I think that there ought to be a prohibition on this personal account receiving preferential allocations of hot IPOs.

One can argue that the new issues market in the U.S. is not perfect, but there is a danger in forcing changes through regulation. People argue that the U.S. IPO market has been incredibly successful at financing new companies, spurring the development of new technology and improving standards of living. This argument states that the success of the U.S. high tech industry is partly attributable to the well-developed venture capital market, and the venture capital market would not exist in its current state without a viable exit strategy via IPOs. Anything that harms part of the chain for creating and financing young companies may have wide-ranging consequences.

I have a lot of sympathy for this argument. But it should be noted that in the late 1980s, there was another bit of received wisdom that has not stood the test of time. The story in the late

1980s was that the success of the Japanese economy was entertwined with the keiretsu form of organization. The interlocking relations between the Japanese main banks and their client firms and suppliers, people argued, allowed management to focus on the long run, without having to worry about meeting quarterly earnings targets. People did not emphasize the disadvantages of the lack of accountability to shareholders, nor did they emphasize how much the booming Japanese economy was built on a wealth effect from inflated equity and real estate prices.

With the benefit of hindsight, one might argue that the Japanese economy in the 1980s was successful not because of keiretsus, but in spite of them. So one must be careful about saying that the U.S. IPO market has been successful at financing young companies, and therefore no change is called for. In general, the main change that I would like to see is for the SEC to start enforcing some of the regulations that currently exist regarding disclosure. My prediction is that if issuers saw how much underwriters were benefiting from the money left on the table, the issuers would be more aggressive in bargaining over the offer price. In cold IPO markets, this might not make much difference, but in hot markets, I think that it would result in less issuer complacency about leaving money on the table. And if underwriters were not able to reward corporate officials and venture capitalists by allocating them hot IPOs in personal brokerage accounts, these individuals might choose to hire underwriters with a reputation for leaving less money on the table.

References

Buffet, Warren, and Carol Loomis. 1999. "Mr. Buffet on the Stock Market." November 22, 1999 *Fortune* 140 (10), pp. 212-220.

Chen, Hsuan-Chi and Jay R. Ritter. 2000. "The Seven Percent Solution." *Journal of Finance* 55 (3): 1105-1131.

DuCharme, Larry L., Shivaram Rajgopal, and Stephan E. Sefcik. 2001. "Why Was Internet IPO Underpricing So Severe?" unpublished University of Washington working paper.

Elkind, Peter, and Mark Gimein. 2001. "The Trouble With Frank." *Fortune* September 3, 2001.

Jegadeesh, N. 1993. "Treasury Auction Bids and the Salomon Squeeze." *Journal of Finance* 48 (4): 1403-1419.

Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica* 47, 263-291.

Loughran, Tim, and Jay R. Ritter. 2002. " Why Don't Issuers Get Upset About Leaving Money on the Table in IPOs?" *Review of Financial Studies* 15 (2): 413-443.

Loughran, Tim, and Jay R. Ritter. 2001. "Why has IPO Underpricing Changed Over Time?" unpublished University of Florida working paper.

Mayers, David. 1998. "Why Firms Issue Convertible Bonds: The Matching of Financial and Real Investment Options." *Journal of Financial Economics* 47 (1): 83-102.

Perkins, Anthony B., and Michael C. Perkins. 1999. *The Internet Bubble.* Dunmore, PA: HarperBusiness.

Pulliam, Susan, and Randall Smith. 2000. "Linux deal is focus of IPO-commission probe." December 12, 2000 *Wall Street Journal*, p. C1

Pulliam, Susan, and Randall Smith. 2001. "CSFB official set quota for repayment of IPO profits in form of commissions." August 10, 2001 *Wall Street Journal*, p. C1.

Ritter, Jay R., and Ivo Welch. 2002. "A Review of IPO Activity, Pricing, and Allocations." *Journal of Finance* 57 (4): 1795-1828.

Siconolfi, Michael. 1997. "Underwriters set aside IPO stock for officials of potential customers." November 12, 1997 *Wall Street Journal*, p. A1.

Siegel, Jeremy. March 14, 2000 "Big Cap Tech Stocks Are a Sucker Bet." *Wall Street Journal*.