Testimony Concerning
"Examining the IPO Process: Is It Working for Ordinary Investors?"

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Introduction

Chairman Reed, Ranking Member Crapo, and members of the Subcommittee, I want to thank you for inviting me to testify. Funding young, innovative companies is crucial for economic growth, and I am honored to have been asked to participate in this exploration of the initial public offering (IPO) process.

The role of investors, and how the IPO process differs from the secondary market process

The central point to remember about the IPO process is that IPOs are difficult to price. The recent performance of Facebook's stock reminds us that the aftermarket price path of an IPO stock is not pre-determined or easily predicted. Recent problems tempt us to try something new, but we should first look at the evidence of what has and hasn't worked in various countries, since there has been much experimentation with IPO methods in the last three decades.

Currently in our system, institutional investor feedback plays an important role in the price-setting process, as evidenced by the price revision that occurs after the road show. The issuer and its underwriter estimate the offer price by setting the initial price range, but then the shares are marketed to investors, feedback is gathered, and the final price is set, a final price that is often substantially different from the initial estimate. Only about one-third of US IPOs end up being priced within their initial price range.

In research with Dr. Sheridan Titman of the University of Texas at Austin, we modeled the process by which the underwriter forms a group of regular investors to participate in this process, showing that control of the pricing and allocation process allows the underwriter to induce investors to pay attention, evaluate the offering and provide feedback[1]. Essentially, the average first day return or 'pop' of an IPO, which academics call underpricing, allows the underwriter to buy the time and attention of institutional investors, inducing them to attend the road show and listen to the pitch. By underpricing IPOs on average, the underwriter cannot guarantee that investors will like every offering, but it can at least induce them to show up and consider each offering. Without this process, firms risk being overlooked by the market and thus failing to attract a following.

Thus the US IPO method, known as book building, allows the underwriter to coordinate offerings and reward regular investors that contribute to the process. Institutional investors have the expertise and resources to evaluate IPO shares, are more likely to participate regularly in IPOs, and are more likely to be continued followers of the shares in the secondary market, thus providing future liquidity. Ordinary individual investors, as a group, may not be equipped to play the same role as institutional investors, and any regulatory changes that are made to allow greater retail investor participation should take these differences into account.

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[1] Sherman, Ann and Sheridan Titman, 2002, "Building the IPO Order Book: Underpricing and Participation Limits With Costly Information", *Journal of Financial Economics* 65, 3-29. Earlier work on developing the conditions needed to induce investors to accurately report their feedback is in: Benveniste, Lawrence and Paul Spindt, 1989, How Investment Bankers Determine the Offer Price and Allocation of New Issues, *Journal of Financial Economics* 24, 343-361.

How ordinary investors participate in IPOs in other countries

In research with Dr. Ravi Jagannathan and Dr. Andrei Jirnyi, both of Northwestern University, we documented the IPO methods used in countries around the world.[2] In the early 1990s, the US book building method was rare outside North America. By the end of the 1990s it was common around the world, having proved more popular than other methods. However, what most countries have adopted is not 'pure' book building but a hybrid, or combination, of book building with a separate tranche for ordinary investors. This separate tranche allows all ordinary investors an equal chance of getting shares, but without disrupting the central IPO process.

Thus, of all the countries around the world with relatively active IPO markets, the US is one of the few that does not have an open, transparent way to allow ordinary investors to participate. It is important to note that there are two ways to allow such participation: by allowing ordinary investors to also help set the offer price, or by restricting them to only ordering shares. The second approach – allowing ordinary investors to buy shares but not to set the price – is now common around the world. The first approach – giving all investors an equal voice in the price-setting process, usually through an auction – has been tried in at least two dozen countries, and has led to major problems.

Including ordinary investors in the price-setting process on an equal basis has led to dramatic swings: in some cases, large numbers of investors have flooded into the IPOs, many bidding high prices to be first in line for shares and thus driving the offer price up to unsustainable levels; in other cases, participation has been unexpectedly low. In some countries, such methods performed adequately for a time, until finally enough investors got excited and

[2] Jagannathan, Ravi, Andrei Jirnyi and Ann Sherman, 2011, "Why Don't Issuers Choose IPO Auctions? The Complexity of Indirect Mechanisms" Unpublished working paper, available on the Social Science Research Network at http://ssrn.com/abstract=1330691.

poured into an offering, pushing the price up to the point that the stock later crashed on the aftermarket. Such crashes then led investors to stay away from later IPOs, leading to undersubscribed offerings.

In secondary market trading, there is at least the possibility that sophisticated investors might be able to take advantage of any mispricing and, in the process, help to eliminate that mispricing. With IPOs, on the other hand, our research shows that even sophisticated investors are harmed by the uncertainty created by waves of unpredictable retail investors, and ultimately the issuers have been harmed and discouraged by the risks of such methods. Our research shows that when issuers have gained experience with both methods and then are given a choice between a method that allows ordinary investors to participate in price-setting, and a method that allows the same investors to participate in allocations but not in price-setting, issuers have consistently chosen a method that puts the offer price in the hands of professionals.

On the other hand, many IPOs in the US have been successfully marketed primarily to retail investors. The key is that the book building method gives the underwriter discretion over which investors can participate, and how much influence they can have over the price, even when the shares are targeted mainly at retail investors. Issuers and underwriters currently are allowed to choose which offerings to market to retail rather than institutional investors, since institutional investors do not want to get involved in smaller offerings, while retail investors can more readily understand the business model of, say, Netflix or Krispy Kreme than that of a biotech company.

My concern is over methods that force the underwriter to give equal weight to all orders, rather than allowing underwriters the kind of discretion they currently have in terms of who can participate. Therefore I am not advocating that all retail investors should be forced out of the pricing-setting process, only that, as now, we do not take away the discretion of the underwriter in terms of pricing the offering or allocating shares in the book building tranche. Issuers should still be allowed to place smaller offerings with retail investors in a flexible manner, even if the US chooses to require a certain proportion of shares in larger offerings to be placed with ordinary investors in a more open, transparent but rigid way that guarantees all retail investors a chance to receive shares.

The method that has been successful in other countries is to give all retail investors the opportunity to place orders in a separate retail tranche where those investors are guaranteed an equal chance at getting shares, at the same price paid by other investors in the offering.[3] The orders are similar to non-competitive bids in Treasury auctions, in that investors are not forced to specify a price. The proportion of shares to be sold in the retail tranche is announced in advance, so that there are no last-minute surprises. If demand is greater than supply, the shares are allocated through balloting (basically, a lottery). If demand is less than supply, the shares may be re-allocated to the other tranche. The subscription ratio (total shares ordered relative to shares available) for the retail tranche is announced after the close of the subscription period but before the beginning of trading. Thus, everything is transparent.

I do not have strong feelings either way on whether lawmakers should require that the US IPO process be opened up to ordinary investors. The concept of "fairness" is highly subjective – one could argue that it is unfair to exclude ordinary investors from the process, or that it is unfair to force issuers to include investors that are not contributing to the process. The contribution that I hope to make today is to suggest the best way for the US to guarantee a role for ordinary

[3] In some countries, the issuer/underwriter is allowed to discriminate based on order size. In other words, the probability of getting shares in an oversubscribed offering may depend on the size of one's order, but all orders of the same size have the same probability of getting shares.

investors in IPOs, if and when we decide to do so. If lawmakers choose to use regulation to open up the IPO process to ordinary investors, my recommendations would be:

1. Give retail investors a separate tranche and do not force them to name a price (i.e. place a bid) in order to participate.

2. Have issuers announce in advance what proportion of shares will be allocated through this separate tranche, and require that issuers re-file if they want to go too far from the expected allocations (as is done now regarding pricing outside the current price range); However, as in most countries, they should be able to shift shares from one tranche to another if one tranche is undersubscribed.

3. Make any participation requirements flexible, or waive them completely, for smaller offerings, which are often already marketed primarily to retail investors.

Retail investors, private equity and 'crowdfunding'

The problems that have occurred when allowing ordinary investors to actively participate in pricing IPOs have implications regarding the role such investors should play in even earlier financing rounds for private companies. Private equity markets, including the IPO market, differ from secondary markets in that investors face far more uncertainty with far less available information. Even in secondary market trading, finance academics caution that most ordinary investors would be better off buying shares in mutual funds, rather than trying to pick stocks on their own. With private equity markets, small investors face much greater challenges. Venture capitalists currently play a major role in not only providing needed funds but also screening and monitoring early stage companies, and providing advice and guidance to them. Most ordinary investors are not equipped to play this role and, moreover, it would not be cost-efficient for them to attempt it. Spreading funding decisions over many small investors does not make economic sense if there is a fixed evaluation cost for each investor, particularly if those investors are relatively inexperienced and thus face higher due diligence costs. Small investors putting up just a few hundred or even a few thousand dollars each do not have the experience or the resources or the personal presence needed to screen, monitor and guide young startups.

Moreover, while 'crowdfunding' sounds new and exciting and egalitarian, there's every reason to expect that such a process will result in even worse pricing of early stage private equity than of IPO shares. One example of the problems with allowing ordinary investors to participate in early stage funding is the fact that Facebook's shares were auctioned at an unrealistically high price shortly before its IPO, possibly inducing the underwriters to set an excessive offer price. Granted, there were many factors in the Facebook IPO debacle, and this hearing is not about just that one offering, but it is relevant for today's hearing to remember that, in March and April of 2012, Facebook shares were sold on SharesPost and SecondMarket through auctions that allowed the price to be set by investors. The auction price set by investors was between $42 and $44 per share, whereas even an offer price of $38 per share proved to be unsustainable. By the end of May, the shares were trading at around $28, 36% below their earlier auction price.

Given the many problems that have resulted from allowing small retail investors to participate in pricing IPOs, it's even less likely that such investors will be able to consistently price early stage private equity rounds without difficulties that will eventually drive those investors out of the market entirely. Thus, if we want to allow ordinary investors to participate in early stage funding, the best approach would be for them to participate through something similar to a mutual fund, where professional venture capitalists make the funding decisions and provide the extensive due diligence and monitoring needed for early stage investments.

Improving the flow of information to investors

A unique feature of US IPOs, relative to those in other countries, is the quiet period. This is based on the admirable goal of a level playing field, giving all investors access to the same information. However, there appear to be two areas in which investor access is not the same: road shows, and forecasts by the analysts connected to the lead underwriters.

During road shows, the issuer is not allowed to reveal new, hard information that is not in the Prospectus. Why, then, does anyone attend? Investors attend road shows largely to observe the managers, and in particular to see how they handle various questions. Although the managers are prepped in advance and have rehearsed their answers, investors still apparently find value in watching them on their feet, dealing with tough questions. Facebook's management learned this recently when, on the first day of its road show, it drastically shortened the Q&A time to instead show a video. Investors protested, and the video was dropped by the next morning. Professionals apparently value the chance to observe management in action, and ordinary retail investors might benefit from this same opportunity.

Thus, my first recommendation is to require the issuer to record and post actual road show presentations, in particular the question and answer portions, for at least two of the presentations, one early in the process and one later. Many issuers already prepare online road shows, but my recommendation is for posting actual presentations, chosen in advance and with relatively large (expected) numbers of investors, not staged videos made specifically to be posted, and not presentations cherry-picked by the issuer and underwriter later, after having filmed multiple presentations. Although this would not allow ordinary investors to see every single road show presentation by the issuer, it would give them at least as much information as the average institutional investor that attends only one particular road show meeting.

Regarding analyst forecasts, the current policy, as I understand it, is to allow analysts connected to the lead underwriters to communicate with institutional but not retail investors. There is a reasonable basis for this restriction, because these communications involve expectations of the future, not hard information regarding the company's past, and forecasts can be manipulated. Relative to institutional investors, ordinary investors may not be as aware of the speculative nature of such forecasts, perhaps making them vulnerable to overly-optimistic predictions. Thus, the rationale for the current restriction is understandable, but it creates at least the appearance that institutional investors are being favored. Lawmakers should consider allowing such forecasts to be available either to everyone, or to no one.

Conclusion

Much of the growth of the US economy, and of technological progress around the world, is due to the US regulatory environment regarding funding of companies, a regulatory regime that has focused on providing investors with information and allowing them to make their own decisions. Many countries take a more paternalistic approach, putting more power in the hands of bureaucrats and less information in the hands of investors. I taught at a university in Hong Kong for six years in the 1990s and saw countries in Asia copying the outcomes of US financial markets, rather than adopting the process and regulatory philosophy. I would like to see the US continue and strengthen its tradition of relying on markets and giving investors the ability to make their own informed choices. Thus, further steps to level the playing field for ordinary investors in terms of information are steps in the right direction.

However, we should also recognize the differences in expertise and resources between institutional and individual investors. Lawmakers should not force issuers to give access to ordinary investors in a way that disrupts the IPO pricing process, thus adding more risk for everyone involved. If IPO issuers are required to set aside shares for ordinary investors, it should be through a separate tranche that does not directly affect the offer price, but simply allows them to participate.

Thank you for the opportunity to testify before this Subcommittee.