VENTURE EXchangES AND SMALL-CAP COMPANIES

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SECURITIES, INSURANCE, AND INVESTMENT
OF THE
COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE
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FIRST SESSION
ON
EXAMINING HOW VENTURE EXCHANGES CAN AID CAPITAL FORMATION AND SECONDARY TRADING FOR SMALLER BUSINESSES AND COMPANIES
MARCH 10, 2015

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# CONTENTS

**TUESDAY, MARCH 10, 2015**

| Opening statement of Chairman Crapo | 1 |
| Opening statements, comments, or prepared statements of: | |
| Senator Mark R. Warner | 2 |

## WITNESSES

<table>
<thead>
<tr>
<th>Witness</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stephen Luparello, Director, Division of Trading and Markets, Securities and Exchange Commission</td>
<td>4</td>
</tr>
<tr>
<td>Prepared statement</td>
<td>20</td>
</tr>
<tr>
<td>Responses to written questions of:</td>
<td></td>
</tr>
<tr>
<td>Senator Warner</td>
<td>92</td>
</tr>
<tr>
<td>Senator Vitter</td>
<td>94</td>
</tr>
<tr>
<td>Thomas W. Farley, President, New York Stock Exchange Group</td>
<td>5</td>
</tr>
<tr>
<td>Prepared statement</td>
<td>27</td>
</tr>
<tr>
<td>Scott Kupor, Managing Partner, Andreessen and Horowitz</td>
<td>6</td>
</tr>
<tr>
<td>Prepared statement</td>
<td>29</td>
</tr>
<tr>
<td>Nelson Griggs, Executive Vice President, Listing Services, Nasdaq OMX Group</td>
<td>8</td>
</tr>
<tr>
<td>Prepared statement</td>
<td>89</td>
</tr>
</tbody>
</table>

## ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

<table>
<thead>
<tr>
<th>Material</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared statement of William Beatty, President, North American Securities Administrators Association, Inc.</td>
<td>96</td>
</tr>
<tr>
<td>Responses to written questions of Senator Crapo from Kate Mitchell, Co-Founder &amp; Partner, Scale Venture Partners</td>
<td>103</td>
</tr>
</tbody>
</table>
VENTURE EXCHANGES AND SMALL-CAP COMPANIES

TUESDAY, MARCH 10, 2015

U.S. SENATE,
SUBCOMMITTEE ON SECURITIES, INSURANCE, AND INVESTMENT,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Subcommittee met at 10:02 a.m., in room SD–538, Dirksen Senate Office Building, Hon. Mike Crapo, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF SENATOR MIKE CRAPO

Senator Crapo. Good morning. This hearing will come to order. This is the first hearing of this Subcommittee in this Congress, and I want to welcome our Ranking Member, Senator Warner, and all of the other Members of the Committee.

There are a lot of productive opportunities for good reform and good progress to be made in the jurisdiction of this Committee, and we look forward to a productive Congress.

Today’s hearing will provide insights into the challenges of trading stocks of small companies and whether a venture exchange can aid capital formation and secondary trading for smaller companies. The U.S. capital markets have been and continue to be a vibrant ecosystem fueling economic growth. These markets provide financing and needed resources to a wide array of businesses from the smallest startups to the largest international companies. Smaller public companies, however, have had difficulty sustaining strong secondary market liquidity and trading.

In 2013, the SEC Advisory Committee on Small and Emerging Companies stated, “The Committee believes that current U.S. equity markets often fail to offer a satisfactory trading venue for the securities of small and emerging companies because they fail to provide sufficient liquidity for such securities and because the listing requirements are too onerous for such companies.”

SEC Chair Mary Jo White wrote, in a letter dated December 23, 2014, “The market structure for stocks of smaller companies is one of the areas that demands attention. I have previously emphasized that we should no longer assume that our market structure should be one size fits all.”

Her letter also references a 2014 SEC small-cap paper that finds that all metrics of market quality are significantly inferior for smaller capitalization companies compared to mid-sized companies. I agree with SEC Chair White’s assessment. While these metrics
of market quality can be expected to be less favorable for smaller companies as compared to larger companies, the extent of the disparity documented in the small-cap paper highlights the need to consider steps that might lead to improvements for smaller companies that at least narrow the gap.

I look forward to hearing from our witnesses today whether a venture exchange can help narrow the gap and their insights into the following questions:

How can a venture exchange aid capital formation and secondary trading for smaller companies?

What are the key characteristics that will make venture exchanges meaningful and positive for small companies and investors?

What are the regulatory or legislative steps that are needed to attract liquidity providers and market makers to stocks that trade less frequently?

What are the tradeoffs that need to be weighed to promote investment in smaller public companies?

I look forward to hearing from our witnesses on these and the other issues they want to present to us, and at this time I will turn to our Ranking Member, Senator Warner.

STATEMENT OF SENATOR MARK R. WARNER

Senator WARNER. Well, thank you, Mr. Chairman, and I look forward to working with you closely as we have on so many other projects over the years, and I think you’ll find this Subcommittee, as we all know, has an enormously important jurisdiction, and I think we are going to be a good team. I appreciate you holding this hearing. This is a subject that is near and dear to my heart since I have spent longer as a venture capitalist than I have as an elected official. And how we can get access to capital and grow small companies, startup companies, is critically important.

I think oftentimes we talk as elected officials about the growth of America’s economy as so often dependent upon small businesses. It is, although in reality, where most of the net growth of jobs has come over the last 30 years has come from startups. It has not come from traditional small businesses.

As a matter of fact, from 1977 through 2010, according to research done by the Kauffman Foundation, approximately 3 million new jobs each year, net new jobs, have come from startups. That, depending on your numbers, is somewhere between 60 and 80 percent of all net new jobs created in the economy over the last 30 years.

Now, 400,000, on average, startups, actually only about 15 of those get to $1 billion market cap, so the notion of how can we help some of those companies along the way move on that path is terribly important.

This is an area, though, where we have—over the last few years, there are a lot of things Congress has not done, but this is an area where we have made some progress, and bipartisan action on the JOBS Act a few years back made important changes in terms of tweaks, smaller companies in terms of being able to keep certain information confidential as they do their filing, it really helps in
that process before you go on a road show to be able to submit that
data on a confidential basis.

Last year, I chaired a hearing on high frequency trading, and one
of the things that came out of that hearing was, as we looked at
small-cap companies, looking at—proposing a tick size project, I
know some of you have got some views on that. I would like to see
that, you know, where we widen the spreads a little bit on these
smaller companies to protect these companies from predatory ac-
tions on some of the frontrunners that are taking place from the
HFTs.

Now, the SEC has supported that initiative. I am anxious to
hear, though, why it continues to get delayed, and moving forward
on the tick size project I think is terribly important.

I also think we want to make sure—and I think the Chairman
raised the appropriate questions. What are the tradeoffs as well in
terms of investor protections? If these smaller companies are not
going to have the market following, are not going to have the mar-
tket analysis, are not going to have the research, are we really sure
that the tradeoffs are valid?

One of the two other things that I believe also are important that
the SEC continues to move on is another aspect of the JOBS Act
was modification to the Reg A filings. That has enormous oppor-
tunity and potential. I would love to hear some comments there.
And as I mentioned to the witnesses before we came into the room,
you know, I am intrigued by the idea of a venture exchange. I do
wonder whether the goal is more about capital raising or liquidity.
Sometimes for management, as somebody who was a venture capi-
talist, I do worry sometimes about management being able to exit
the company before it gets to its level of stability. And one of the
things I am also hopeful that people will make a comment on and
my hope is that the SEC will finalize our activities on crowdfund-
ing. I still believe that has enormous opportunity, and
how crowdfunding platforms might intersect with a potential ven-
ture exchange.

So, Mr. Chairman, I look forward to this hearing. I think it is
one that brings great opportunities, and I am going to have a lot
of questions for the witnesses. Thank you.

Senator CRAPO. Thank you, Senator Warner.

Our witnesses today are: Mr. Stephen Luparello, Director of Divi-
sion of Trading and Markets at the U.S. Securities and Exchange
Commission; Mr. Thomas Farley, who is the President of the New
York Stock Exchange Group, NYSE Group; Mr. Scott Kupor, Man-
aging Partner and COO of Andreessen Horowitz; and Mr. Nelson
Griggs, the Executive Vice President of listing services at Nasdaq
OMX Group.

Gentlemen, we welcome you. I think you have all been advised
we like you to keep your initial presentation to 5 minutes so that
we have time and opportunity to engage with you in questions and
answers. And we will proceed in the order that I just described. We
will start with you, Mr. Luparello.
STATEMENT OF STEPHEN LUPARELLO, DIRECTOR, DIVISION OF TRADING AND MARKETS, SECURITIES AND EXCHANGE COMMISSION

Mr. Luparello, Chairman Crapo, Ranking Member Warner, and Members of the Subcommittee, thank you for inviting me to testify on behalf of the U.S. Securities and Exchange Commission regarding exchanges focused on the listing and trading of stocks of smaller companies. Given the importance of smaller companies to the strength of our economy, the SEC welcomes the opportunity to discuss approaches that address the market structure needs of such companies.

The SEC is considering innovative approaches that appropriately balance the needs of smaller companies for efficient secondary markets and the interests of and protections for their investors. Venture exchanges potentially could achieve such a balance by providing a transparent and regulated environment that offers both enhanced liquidity and strong investor protections. As such, venture exchanges could strengthen the capital formation for smaller companies; they could also expand the ability of all investors to participate through well-regulated platforms in the growth opportunities for such companies.

Venture exchanges might include exchanges that operate nationally as well as local or regional markets that focus on companies from a particular geographic area. Their listings could include both smaller companies that do not qualify under the listing standards for the larger securities exchanges and smaller companies that do qualify under such standards but seek a market structure specifically geared to smaller-cap issuers.

A good place to start when considering market structure for smaller companies is to recognize that the market for the trading of small companies is different from the market for larger companies. My written testimony provides tables with data that show some of these differences. Among other things, the tables indicate that liquidity and market quality metrics decline rapidly as company size decreases. The data serve to highlight the issue of whether the current U.S. market structure optimally promotes capital formation for smaller companies and the interests of their investors.

Of course, the SEC has been focused on small company issues for some time. Among other things, the SEC approved a venture exchange in 2011, the BX Venture Market. That market was designed for companies that did not qualify under the listing standards of the larger stock exchanges. Importantly, it also included targeted measures designed to address investor protection concerns. Although approved in 2011, the BX Venture Market has not been launched. My understanding is that concerns around ensuring adequate liquidity in BX-listed issues and attracting liquidity providers at least in part have caused that decision.

Potentially new venture exchanges might wish to explore various types of initiatives to address the difficulties in promoting liquidity to the extent possible in smaller company stocks. These might include mechanisms to centralize liquidity across price and size as well as measures to attract dedicated liquidity providers to the exchange.
A key element that likely would be critical to the success of these types of efforts to maximize liquidity is the protection for the liquidity pool of a venture exchange. In this regard, two Exchange Act provisions provide standards for the SEC. They relate to off-exchange trading and listed securities and trading by other exchanges pursuant to unlisted trading privileges. Both impose substantial tests for the Commission before it can adopt or approve measures designed to protect the liquidity pool of a venture exchange.

To sum up, competition in the equities markets can assume many forms across different stages in the listing and trading process. A key policy question is whether the current U.S. market structure for smaller companies enables competition in ways that ultimately redound most to the benefit of smaller companies and their investors. The potential benefits and costs of various forms of competition in the secondary market for smaller companies is an issue that warrants close consideration by Congress, the SEC, and the public.

Thank you again for inviting me to discuss an issue of such importance to the U.S. equities markets and the economy. I look forward to answering your questions.

Senator CRAPO. Thank you very much.

Mr. Farley.

STATEMENT OF THOMAS W. FARLEY, PRESIDENT, NEW YORK STOCK EXCHANGE GROUP

Mr. Farley. Chairman Crapo, Ranking Member Warner, and Members of the Subcommittee, we at the New York Stock Exchange appreciate your interest in capital raising for small-cap companies. My name is Tom Farley, as you know, and I am President of the New York Stock Exchange Group. I have been in the business of running CFTC- and SEC-regulated exchanges for most of my career.

The New York Stock Exchange Group includes the iconic New York Stock Exchange as well as two additional equities exchanges, two options exchanges, and a bond trading platform. Across these venues we list and trade cash equities, equity options, exchange-traded products, and debt securities which are accessible to all investors through their broker-dealer. Of our listing exchanges, NYSE MKT has traditionally been the listing venue for smaller public companies. Over the years there have been several efforts in the United States to address the needs of smaller companies seeking access to capital through both exchange and nonexchange solutions. In fact, NYSE recently announced a midday auction for less liquid securities that we intend to launch later this summer if approved by the Securities and Exchange Commission.

As many of you know, the data around smaller companies accessing the public markets for capital is discouraging when compared to the data of the late 1990s. Companies are spending more time as private companies in part due to increased regulatory hurdles to becoming and being a public company and, once public, a lack of liquidity in the trading of shares of smaller public companies. As a listing exchange, we have witnessed the negative impact on liquidity in shares of smaller public companies as the incentives for
market makers to participate in these securities have diminished over time. As a result, venture capital is locked up in companies for longer periods of time, which in turn decreases the availability of venture capital for new companies.

NYSE believes that the idea of venture exchanges is worth Congress’ attention and may be of value to smaller companies seeking capital and their venture capital investors seeking a liquidity event that will free up money for new investment. While we believe many of the concerns raised about venture exchanges can be addressed through education, we also recognize that companies available for trading on venture exchanges will have a higher rate of failure and could potentially shed a dark cloud over the rest of the U.S. public markets. Consequently, we believe it will be important that companies listing on venture exchanges have an appropriate level of financial disclosure and that, in addition to the added oversight a venture exchange listed security would receive from the exchange’s Self-Regulatory Organization, venture exchanges, broker-dealers, and investment advisors should also differentiate a venture exchange-traded security from one listed on a national securities exchange.

NYSE believes that the U.S. capital markets are one of the best avenues available for companies of all sizes to access growth capital. We are protective of the confidence investors have in the U.S. capital markets but believe that, if designed appropriately, venture exchanges may give small companies access to capital not currently available to them and investors the ability to invest in smaller companies with greater regulatory scrutiny than is currently available in the over-the-counter market for unlisted securities.

Thank you.

Senator Crapo. Thank you, Mr. Farley.

Mr. Kupor.

STATEMENT OF SCOTT KUPOR, MANAGING PARTNER, ANDREESSEN AND HOROWITZ

Mr. Kupor. Chairman Crapo, Ranking Member Warner, Members of the Subcommittee, thank you very much for the opportunity to speak with the Committee regarding capital formation and the topic of venture exchanges.

It has been well documented by various commentators that the number of IPOs in the United States has fallen significantly since 1997, and while in large part due to the passage of the JOBS Act by this institution we have seen a more robust IPO environment in 2013 and 2014, the volume and characteristics of those IPOs remain very different.

In particular, small-cap IPOs have remained below 25 percent of all IPO volume for nearly 15 years. In contrast, in the period from 1991 to 1997, as many as one-half to two-thirds of IPOs were for small-caps.

In the IT sector, which is the area in which we invest, the industry produced just north of 2,400 venture-backed IPOs from 1980 to 2000. In contrast, in the period from 2001 to 2014, there were a total of approximately only 500 IPOs. Relatedly, the time to IPO has significantly elongated over the same time period—6–1/2 years

So why should we care about this? Well, in addition to the strong nexus between IPOs and job and economic growth, we are at risk of creating a two-tiered capital market structure, one in which the majority of the appreciation accrues to those institutions and wealthy individuals who can invest in the private markets, and a second for the vast majority of individual Americans who comprise the retail investor base.

In the current state of affairs, the private markets will continue to develop their own solutions to enable private companies to stay private longer. In fact, today we see hedge funds, sovereign wealth funds, family offices, large technology-focused buyout firms, and mutual funds filling in the void in the late-stage private market. If we want to address these trends, we must address the underlying issues that are impacting companies’ decisions to stay private longer. Those are both economic issues as well as what does the post-trading environment look like once they go public.

With respect to the economic costs of listing, while there are always more ways to streamline the economic costs of becoming and remaining a public company, the JOBS Act has done a very good job of lessening the burden for emerging growth companies. When we talk with our portfolio companies, there is far less of an impediment to going public today on the basis of the regulatory costs associated with that.

But the most significant remaining deterrent to companies going public is the after-market environment in which they will have to function as public companies. More specifically, the after-market environment is directly correlated to the market cap and ultimately the liquidity of the company post-IPO. If a company’s market cap is large enough, it can attract research support and market-making resources from the sell side investment banks and, hence, liquidity. In contrast, for small-cap companies, the economics simply do not work to attract these resources, and as a result, liquidity and institutional support remain low. And, therefore, many issuers simply choose to postpone an IPO until they are big enough to attain a market cap sufficient to engender adequate liquidity. This explains, I believe, the substantial decrease in the sub-$50 million IPO market.

Among the reasons for low liquidity is the move to decimalization and is why we have advocated for the tick six pilot program that is currently pending before the SEC. But given the above, how would venture exchanges impact capital formation? With respect to the economic costs, a successful venture exchange would need to employ a regulatory framework that at a minimum incorporated the JOBS Act regulatory requirements. However, if the goal were to enable a significant proportion of sub-$50 million IPOs, we would probably need an even more scaled down framework, probably similar to the Reg A Plus regulations that are pending before the SEC.

Turning to the post-IPO trading environment, at a minimum a venture exchange would need the flexibility to set appropriate tick sizes to foster trading liquidity at fewer price increments. As a result, I strongly believe that any decision to explore venture ex-
changes should not obviate the need to ensure that the pending tick size pilot program is implemented and with sufficient time and detail to garner real empirical results.

There are also a number of open questions and concerns that I believe we would need to address.

First, adverse selection in the form of companies that elect to list on the venture exchange. The most attractive companies that can raise private capital through other means, as some are doing today, may simply continue to do so and, thus, only those who run a weaker position may choose to list on the venture exchange.

Second, there is a real risk that separating out the venture exchange from the existing national market structure may create, in fact, less liquidity for small caps. That is, institutional investors may simply wait for venture exchange companies to graduate to the national market exchanges instead of investing in them as venture exchange issuers.

In summary, I would offer the Committee the following observations: Fostering more IPOs, in particular more small-cap IPOs, is important to job creation and to the long-term competitiveness and fairness of the U.S. securities markets. In the absence of structural capital market changes, good companies will continue to tap private sources of capital and delay going public. Independent of whether a venture exchange is the right solution, we must solve the core liquidity challenges that exist in today's small-cap market. Thus, proceeding with a robust tick size pilot program I believe is a first crucial step toward investigating the proposed venture exchange.

Thank you for your time, and I look forward to the Committee's feedback.

Senator CRAPO. Thank you, Mr. Kupor.

Mr. Griggs.

STATEMENT OF NELSON GRIGGS, EXECUTIVE VICE PRESIDENT, LISTING SERVICES, NASDAQ OMX GROUP

Mr. GRIGGS. Thank you, Chairman Crapo, Ranking Member Warner, and Members of the Subcommittee for the opportunity to testify on venture exchanges.

With our first initial public offering in 1971, Nasdaq created the modern IPO, and we have become the destination of choice for emerging, high-growth companies. Nasdaq brought to capital markets a new view that companies could go public earlier by recognizing that most companies need capital and investors want access to ownership when companies are at earlier stages of their growth cycle.

However, changes to the regulatory landscape over the years have reduced Nasdaq’s and our partners’ abilities to facilitate stable, reliable, and cost-effective capital formation for many emerging companies. The one-size-fits-all approach of our regulatory structure has had a negative consequence for small companies. While the JOBS Act did ease several burdens on companies, the extent of that relief has not reached all small venture companies.

The continued aversion of small companies to the public markets has created a sense that there is a need for a new type of a separate venture exchange. From Nasdaq’s point of view, this notion is
somewhat misplaced. What we believe is needed is within the small-cap listing tiers of existing exchanges are simple reforms to make the market structure more attractive again for growth companies. Nasdaq’s approach to helping venture companies has two paths:

First, change certain trading rules and both listing and governance requirements within then small-company market tier to encourage and facilitate the ability for growth companies to raise capital on the public markets and thrive.

Second, further leverage the JOBS Act from which Nasdaq has built and is operating a growth platform today for companies wishing to stay private—the Nasdaq Private Market.

To reinvigorate the capital formation benefiting small companies, we suggest the following changes:

Exempt certain growth companies from the tick price provision of Regulation NMS and delegate the authority to define the tick sizes to the listing exchange. The tick size is a surprisingly important—and extremely sensitive—variable in trading quality. Too wide and trading costs become burdensome to investors; and too small and volatility increases and liquidity is limited.

Modify the definition of a “penny stock” in Rule 3a51–1. In 2004, the SEC essentially froze exchange listing standards by defining any security not meeting those requirements to be a penny stock. This has inhibited innovation in listing requirements over the last decade.

Next, adopt limited regulations to prevent aggressive short selling of smaller companies, which lack the resources to combat manipulative short selling and are consequently more vulnerable. We recommend disclosures of short positions in smaller companies similar to the same disclosures of long positions, providing companies and investors with more transparency.

For growth companies, provide issuers a choice to suspend unlisted trading privileges. Affording certain growth company issuers with input into their market structure through this option to suspend unlisted trading privileges in their stock would refocus competition among orders in that stock by placing them all on a single platform.

Next, permit market maker support programs. Currently, Nasdaq allows ETF issuers to establish a fund to subsidize market makers who enhance liquidity in those shares. We believe that such programs would help support growth companies, and these programs have successfully enhanced liquidity and market quality for investors in Europe for several decades.

Last, for the private markets, our suggestions are—or last for the public markets, I apologize, eliminate certain requirements for shareholder approval for smaller companies. The SEC has made strides to reduce the time necessary for public companies to register and sell securities by allowing shelf registrations. However, the requirements imposed by Nasdaq on listed companies for obtaining shareholder approval of certain financing transactions have not followed suit. We are currently examining these requirements and hope that any proposal we present to the SEC to address this will be met with an understanding that rules applied to the world’s
largest companies may not be appropriate to apply equally to emerging growth companies.

Concluding with private market recommendations, several provisions in the JOBS Act allow companies to remain private longer, and many are doing so. In light of the growing demand for liquidity in these companies' shares, especially by their early investors and employees, we created the Nasdaq Private Market. The Nasdaq Private Market is a company-controlled platform that leverages technology solutions to serve the unique needs of private companies within the framework of securities laws. We are seeking an important adjustment to that framework. The JOBS Act and prior laws make it very clear that companies can sell shares to accredited investors without registering the transaction. In theory, this category of investor does not need the protections that registration requirements afford, due to their net worth, income, and sophistication. However, the subsequent sale of shares from an existing shareholder to another accredited investor does not enjoy the same legal status, despite the fact that the policy rationale for an exemption is similar to that for issuer transactions. Consequently, companies and investors are shouldering unnecessary legal and regulatory costs.

Thank you again for inviting Nasdaq to testify on this important issue, and we look forward to your questions.

Senator CRAPO. Thank you very much, Mr. Griggs, and I appreciate the testimony of all of you.

Let me start out by just asking one general question. I assume that all of you, from your testimony—it indicates that all of you agree that the existing one-size-fits-all system in our markets needs to be revised and strengthened. Is there anybody who disagrees with that? I just want to, with that question, create the emphasis that we need to move and engage on these issues, both Congress and the SEC.

Second—and I will start with you, Mr. Luparello—with regard to the SEC, you indicated in your testimony that there are a number of potential initiatives that a venture exchange might explore to promote liquidity, and some of those you mentioned were to limit all trading to particular times of the day through particular mechanisms; to attract dedicated liquidity providers with a package of obligations for making a market in listed companies, balanced by benefits for providing high liquidity; and then, finally, to explore different minimum tick sizes, which has been brought up by a number of the other witnesses.

Could you just briefly—and I do mean try to do it succinctly—describe the benefits you see from those actions?

Mr. LUPARELLO. I will start with the tick pilot, which has been mentioned by my fellow panelists as well. The Commission has demonstrated a desire to explore whether widening out the tick size for certain securities under $2 billion in market cap may actually improve liquidity. That is why we have been—we asked the exchanges and FINRA to create a pilot plan, which they have filed with us and we are currently considering and should act on very soon. That I think is the first way to look at whether there is additional liquidity that can be brought to currently listed issuers.
I think on the question of whether we can attract issuers who are not in the public markets now, the idea is that we have heard from a variety of market participants around either exclusivity or concentrations of liquidity. I think we will always be open to considering—obviously we want to balance them at the same time against both investor protection and market efficiency concerns, but we tend to think, properly structured, these things can potentially work and bring liquidity where liquidity has not existed before, and do so in a way—especially if there is a minimization of investor confusion, in a way that is consistent with investor protection.

Senator CRAPO. Let me interrupt there and just ask the rest of the panel, do you all agree that focusing on the tick size is one of the areas that we could successfully achieve some significant progress?

Mr. FARLEY. Yes. Senator, if I could just——

Senator CRAPO. Yes, Mr. Farley, you want to——

Mr. FARLEY. If I could just make one remark about that, I absolutely agree, and we worked diligently with the SEC and others in the industry to help construct a reasonable tick pilot proposal. I just want to highlight one nuance. There are over 50 trading venues of consequence in this country, and only a dozen of those are actually fully regulated exchanges. And one thing to keep in mind is that securities trade on all of those venues; whereas, the tick pilot you could imagine—or changing tick sizes at the exchanges will only impact, roughly 20 percent of the market. And so it is important to keep in mind, as we think about tick sizes, that there is a whole other market out there that is not the fully regulated exchanges. In order to really get the full range of benefits that I heard from my colleagues here on the panel from revising tick pilots for smaller companies, you really have to do that on a market-wide basis.

Senator CRAPO. Thank you.

Anybody else want to comment on that?

Mr. GRIGGS. No, we agree with the comment.

Senator CRAPO. All right. Thank you.

Mr. Farley, let me come back to you. The NYSE, I believe, has already indicated a strong interest in venture exchanges or the need for them, but I would like you to clarify that. And I guess my question would be: If venture exchanges were made a viable option, would the NYSE be interested in creating a platform?

Mr. FARLEY. Sure. The short answer, if I can go back to a question you asked 3 or 4 minutes ago, do we believe the kind of one-size-fits-all makes sense and we need to kind of think differently about different companies, I absolutely agree with that, and I just want to highlight that. The midday auction that was referenced in the written testimony but that I did not mention today in the interest of time, that we are implementing, we are actually only implementing for our less liquid securities. And so that is an anecdote that demonstrates we absolutely agree. And it is also an anecdote that demonstrates that we are committed to bringing additional capital formation to less liquid securities, also lesser capitalized companies, which gets to your direct question about the venture exchange. We are indeed interested. Whether or not it comes in the
form of a venture exchange or modifying our existing listing venues to accommodate these smaller companies and create a more constructive environment for capital formation for those securities, we are indifferent for the most part. But we are—presuming that Congress and the SEC and our colleagues in the industry put in place a system along the lines that we have described in our testimony and, quite frankly, that some of my colleagues on the panel here have described, we indeed would, the New York Stock Exchange, support it and look to create a business based on that.

Senator CRAPO. All right. Thank you. My 5 minutes has expired. We will have a couple of rounds, but, Senator Warner, do you want to go ahead?

Senator WARNER. Yes, thank you, Mr. Chairman. And let me just—I want to be convinced, but I have got a couple questions. And, Mr. Chairman, I have also got a statement here from Mr. William Beatty, who is the President of the North American Securities Administrators Association for the record.

Senator CRAPO. Without objection.

Senator WARNER. First of all, Mr. Luparello, one of the things I would hope, as we think about these new platforms, I would just strongly urge you—as I have urged your commissioners—that we would have a lot more knowledge if we could actually get the tick size project out, if we could finish the Reg A Plus regulations, and we are now approaching 4 years on the JOBS Act, and we still do not have final crowdfunding rules. These are all tools to help small-cap companies. Do you want to make a comment, or do you want to go ahead and make a commitment for the record about when all those projects will be finalized?

Mr. LUPARELLO. I can, on the record, too, I can quote the Chair, who has said on a number of occasions that finishing the crowdfunding rules and Reg A Plus are among her highest priorities for this year.

Senator WARNER. But that was also, I think, a comment she made last year, too.

Mr. LUPARELLO. On the tick size pilot, which is in my division, we noticed the pilot plan in December—I am sorry, November. We received a significant number of comments through the comment period, which closed toward the end of the year. Our statutory deadline for acting is early May, and we have every intention of hitting that deadline.

Senator WARNER. Good. I think it is very important because it is kind of like you could actually question whether a venture exchange might undermine the tick size pilot, so, you know, I think getting that data would be very helpful.

Mr. LUPARELLO. We absolutely agree.

Senator WARNER. One of the other things I would simply ask, and maybe some of you have got the data, and I have to say I was part of this effort so I am guilty as well in the late 1990s of having a whole series of companies, dot-com companies in particular, that had huge valuations that very quickly went to zero. So while I think it is great that we can get small-cap companies onto exchanges, I would like to get some record of particularly the number of those late 1990s companies that went public that were still in existence 3 or 4 years later, if we could get that for the record.
I guess one of the questions I have got for everyone is that—you know, I saw Arthur Levitt’s comments about venture exchanges saying, you know, a solution in search of a problem. Do you all want to comment? We know that Nasdaq has got the ability to start a new exchange in 2011. I know the American Stock Exchange had a plan; I think it was called the Emerging Company Marketplace in 1992. It never went forward. The Canadian Stock Exchange has got a venture-type exchange. The Brits have got one. You know, do we have any success records that we can point to? Are the British the most successful so far? Mr. Griggs, do you know—we talked earlier in the outer room. You might want to share some of your comments about——

Mr. GRIGGS. Sure.

Senator WARNER.——why you have not taken advantage of the opportunity that you got granted in 2011.

Mr. GRIGGS. Yeah, thank you for the question. Our belief is that through smart regulation a smaller-cap venture market can work, but the best way to do that is through addressing the challenges that the current small companies face that are already public, and letting that take hold and then spill over to new companies potentially looking to go public.

The challenges of starting a brand-new listing venue or exchange due to the necessity of having connectivity, data feeds, et cetera, and the limited economics that are involved in it make a brand-new platform extremely challenging. So I think when you look at it, our view would not be to open the flood gates and have an exchange that lists every OTC company that is on the market on this exchange, but first and foremost fix some of the issues we have talked about through the tick pilot, through potentially suspending the UTP privileges as well as the market maker program, and create a more sound small-company market for existing companies first.

Senator WARNER. Would anybody else care to make a comment or comment about some of the other smaller exchanges around the country or around the world?

Mr. FARLEY. I would only add to my colleague’s comments that the other thing to look at are the minimum listing standards and whether or not it would be worthwhile to revise those minimum listing standards to allow companies that are, in effect, smaller to also be able to list on those exchanges.

Mr. LUPARELLO. I am probably the only one here old enough to remember the AMEX EMC, and its failure was in part because of the quality of the issuers that were brought forward. And I think what we have seen in conversations now, including the issues around the BX market, there was a much greater focus on that element of investor protection of issuer scrutiny. I think anything we do in this space has to have that as a very important component. That plus, you know, making sure we are doing everything we can to prevent investor confusion are clearly things that need to happen for a venture exchange to be successful.

Senator WARNER. Because it seemed to me, Mr. Chairman, just the Canadian experiment seems to be such small-cap that it is almost a bit sketchy—a technical term. You know, whereas, the Brit-
ish exchange seems to have a little more parameters. But I will come back on the next round.

Senator CRAPO. Thank you, Senator Warner, and thanks for those answers to those questions from the witnesses.

A number of you indicated that the regulatory environment needed to be addressed, particularly the JOBS Act, and if I understood you correctly, those of you who raised the JOBS Act were making the point that it needs to—its provisions need to be strengthened and, in fact, perhaps even adjusted to deal with this issue of the smaller companies on a venture exchange.

Would any of you like to elaborate on how we should deal with the regulatory environment in general and, in particular, how we should deal with the JOBS Act? Mr. Griggs?

Mr. GRIGGS. Sure. I think as stated by my fellow panelists, the most attractive provision today in the JOBS Act is the confidential filing, and we do feel that could be expanded to other types of offerings. In particular, PIPEs and other forms of secondary transactions would be valuable to the smaller-cap companies is one area.

I think we do look at—the JOBS Act did also have provisions that certainly allow for companies to stay private longer, and I think the Committee should not overlook the fact that some of the challenges in the private—in the venture space today can be solved in the private market as well. So we make a recommendation of clarifying the definition of accredited investors in our statement, as well as looking at how the transaction between accredited investors are officially recognized or approved are important. So that would be our view as two examples that should be looked at in the next version of the JOBS Act.

Senator CRAPO. Mr. Kupor, do you want to add to that?

Mr. KUPOR. Yeah, I would agree with that. But I would also say I think in terms of the regulatory framework around which companies are going public, I think the JOBS Act has actually done a very good job there. So I think, you know, having reduced the filing requirements, you know, things like the confidential filings, test-the-waters provisions I think has been very effective. So I see that as less of an issue of companies making the decision to go public than certainly it was prior to the JOBS Act. But I would agree that certainly we could strengthen some of those provisions particularly as it relates to the private markets as well.

Senator CRAPO. Mr. Farley or Mr. Luparello, do you want to weigh in on this?

Mr. FARLEY. I agree with the comments of my colleagues. I would just note that I have been more focused on and we have been more focused on at the New York Stock Exchange with respect to the regulatory provision, not extension of the JOBS Act per se, although I do indeed agree, but some more of the items that have already been discussed: number one, more discretion around tick sizes for these smaller companies, but, number two—and if I can kind of step back and give you a little bit of context, going back 20 years ago, the New York Stock Exchange for a New York Stock Exchange-listed company traded 100 percent of the volume of those stocks or thereabouts. And then there was something called UTP that came into the market, which enabled and required that those stocks be traded on multiple venues, which by and large was a very
healthy construct for the market. And when you think about it for a stock like, say, Bank of America, it has no really deleterious impact on the liquidity of Bank of America stock, because it is so liquid all day long, with a continuous bid-offer, even though it was spread across many venues, but it was a one-size-fits-all model that was put upon the market. And so for these smaller companies, some of which trade only multiple times a day, maybe once a day—some trade many times a day, but they are still relatively illiquid. They, too, have this UTP obligation, and it would require, as I understand it, an act of Congress in order to provide discretion, whether the company's discretion or the exchange’s discretion or even the SEC's discretion, to look at those small companies and say, well, wait a minute, do we really want to fragment liquidity for a small company like this? Or do we want to bring it back together? There may be some resistance in general toward doing that because people may say, well, wait a minute, is this the exchanges looking to just bring more business and establish some sort of, say, monopoly or duopoly? But this is a very, very small part of what we do in terms of revenue, in terms of volume. This is more about what can we do to help the little guy. And I think those kind of changes coupled with some of the things my colleagues said could be quite helpful.

Senator CRAPO. Thank you.

Mr. Luparello, do you have anything to add?

Mr. LUPARELLO. I would just point out on the issue of whether there needs to be a legislative fix on the unlisted trading privileges issue, that is something the staff at the Commission has studied for a while, and is in the process of formulating a position. There is certainly a way that you could read the statute that is very restrictive, and that, in fact, may be the conclusion, but that is not a conclusion we have reached yet. So it seems incumbent upon us to make a determination that we do not have the authority before we come and ask for the authority.

Senator CRAPO. Well, thank you. It seems to me what I take from the collective testimony here is that there is some very profitable potential for congressional changes that would either improve or strengthen the JOBS Act or focus on getting the right level of discretion for the tick size or for other decisions about this matter. And it would be very helpful if you would help us to summarize where Congress needs to act to help improve the potential for these markets.

Senator Warner?

Senator WARNER. Thank you, Mr. Chairman. I want to follow up on Mr. Farley's comments.

I would agree as well that if we were going to go down this path, you need to concentrate these trades on a single exchange so that there is enough volume and focus to have a market maker and hopefully to generate the research.

You know, I am—and with apologies if—in my prior life, I would be sitting on your side of the table. But, you know, could a cynic say that a venture exchange is just a quicker way for VCs to get out of their investments or, to management, to get liquid earlier on? Obviously, we have got lots of examples of when VCs leave or management teams leave, early stage companies do not do as well.
How do we guarantee the lockups and some of the protections that—especially if you were suddenly bringing in less informed investors and the public?

Mr. KUPOR. Yeah, I think, Senator, it is a very fair point. One thing I would point out is, number one, this is happening today in the private markets in the absence of a venture exchange. So there is a liquidity market that has been created initially for employees, and so, you know, obviously Nasdaq Private Market has been a part of this, and so I am sure Mr. Griggs can——

Senator WARNER. But that is generally with accredited investors, isn't it?

Mr. KUPOR. It is, yes, right. But I think what we are seeing is there is certainly a lot of—to your question about whether this is kind of venture capitalists or management looking for liquidity, there are alternative avenues for them to achieve liquidity, albeit to your point to accredited investors.

I also agree with your general point, which is I think the only way that this venture exchange works and we do not have a repeat, obviously, of some of the companies that, you know, you mentioned from the early 1990s—or late 1990s, excuse me, is we would have to have, you know, a regulatory regime that would actually ensure that there is, you know, a more structured way for people to actually exit these markets. So I agree with you that if this were perceived as people trying to kind of, you know, run for the gates on the liquidity side, I do not think it works. I do not think the market maker is going to be there to support it. You know, the interesting—the opposite is also true, which is in the absence of these changes, I think the venture capitalists are actually quite fine, even if we do not make these changes. So from an economic perspective, it just means they will hold their stocks longer. It may mean that they have to change their limited partner structures in order to enable longer hold periods. But it probably means also, you know, very significant appreciation still accrues to them in that respect.

So I think this is more about making sure that we can kind of find an appropriate time for the public investors to also be able to participate in some of that appreciation.

Mr. GRIGGS. I will just add to that. I think those are great points that Scott made. If you look at what is happening in the private markets and how long companies are staying private, it is not just the founder or the CEO looking for liquidity. It is also the employees who have been there for 7, 8, 9 years. It is the early investors who have been in the portfolio or a company for a very long period of time, and giving them access to liquidity does help them recycle that cash into new investments into the economy. So I think providing some liquidity when we have seen this dramatic expansion of how long companies stay private is fairly important. So that would be an additional viewpoint.

Senator WARNER. I think one of you all raised what about the adverse selection issue. You could say the good companies that are still roaring with huge market caps are going to go straight to Nasdaq or New York. You know, will—how do we protect against that at least perception or reality? Would you encourage that ev-
everybody would start on a venture exchange? Or any comments on that?

Mr. Griggs. Yeah, I will make a comment. I think that is our viewpoint, that leveraging the existing market that exists today with some smarter regulation is a preferred path by Nasdaq as opposed to creating a brand-new venture market that would be, again, very challenging to attract that first company. And if you look at the existing pool of companies on the Nasdaq Capital Market, there are about 600 companies. I am not saying that is the right size of companies that would be in this venture exchange, but if you would look at that as a subset and then how far down you want to go in terms of what the different qualifying standards are, that would be a discussion we would want to have. But I think that is how you would start this, again, not open it up to 2,000, 3,000 companies that may, if you look at the Toronto exchange, other exchanges around the world that are venture-like, they are that expansive. And I think our viewpoint would be that we limit the number of companies and hopefully deflect some of the adverse selection.

Mr. Farley. As reflected in our written testimony—again, I did not deliver all of it here today—we are not cavalier about moving to this kind of venture exchange idea, and we have some of the same concerns that you do. And so we need to at a minimum be very deliberate about how we implement it.

One of the things we suggested in our testimony and I did mention today is that the existing listing standards today are reasonable. So to the extent that we lower those listing standards, we think that we would need to provide additional disclosure to the end investor and not just us, the exchange, but also there would be an obligation on the broker-dealers.

You mentioned Canada. My understanding of the venture market in Canada is they actually have a ticker where they flag for every single stock that it is a "V" for a venture stock, which I think is a reasonable approach.

My guess is your adverse selection concern is not—it is not theoretical. That is exactly what would happen. And Uber is not going to choose to list on a venture exchange, if you will. And so it is important and it is incumbent upon all of us and you to make sure that there is the appropriate level of disclosure for the companies that would choose to list using these lower standards.

Senator Warner. Mr. Chairman, I guess my time is up and go back to your round, but I do think we ought to—I think this is a very good hearing, but we ought to get from the panel and others, you know, what steps we can take within some of the existing frameworks, because my sense is that venture exchanges have been tried, maybe we need to move toward that. But there are a series of things—I am coming back to you, Mr. Luparello—that if we can get the SEC to go ahead and finish some of the work they are already working on, we might have some—we would have more good data.

Could I just get—the Chairman has been generous to give me one more question. I was quite excited 5 years ago when the notion of crowdfunding came about. You know, it has been slower to develop, partially because of the lack of rules, partially as well even
in other countries that have been more forward leaning. Do you all want to make any comment on what you see as the future of crowdfunding? You know, will it be the kind of broad-based capital-raising tool? I particularly thought it was a potential for more rural areas and areas where companies did not have access to sophisticated venture money. Or is it going to be—you know, still remain kind of a niche? Comments?

Mr. KUPO. I will make a comment on it. So I agree with your position, which is I think it is more likely a viable source of capital for things that probably are not accessible to the broader venture capital market, and I think for that, that is actually quite valuable and could be helpful.

You know, I will also say, you know, I do have a concern that it is a little bit the same adverse selection concern that we have talked about here with respect to venture exchanges, which is we are talking about obviously the riskiest portion of the market. We are talking about seed capital where we know the failure rates are tremendously high. And I do worry a little bit about the dichotomy here, which is we have—we are granting access to potentially unaccredited investors even to be able to invest in what is probably the riskiest portion of the market. At the same time we keep kind of pushing out the IPO timeframe and, you know, kind of restricting to accredited investors the much later end of the market, you know, maybe even some of these larger offerings that we are seeing out there.

So, to me, my concern would be just, you know, do we really feel like we have enough of a regulatory framework to be able to kind of protect against bad actors in that market? And if so, I think it can be a very viable economic alternative. But I do think it could also end up as a significant opportunity for people to find that there is greater risk than I think can be appreciated at the time of investment.

Mr. GRIGGS. We tend to agree with the comments. When we look at the JOBS Act, when it did come out, we were very excited about some of the private market provisions, and they go down the path of the Nasdaq Private Market. But I think a comment was made initially by Mr. Luparello about geographical areas so that will echo Mr. Kupor’s comment about the fact that this would be—is not needed in certain parts of the marketplace that are very robust from angel investing today. But there are certain parts that certainly could be beneficial, but you would have to be extremely vigilant on the adverse selection because there will be some great stories on the positive side, but there is also going to be quite a bit of downside risk there as well.

Senator WARNER. I do think for rural underserved areas, you know, the ability to—because there is no seed capital, there are no angel investor networks, it has the potential for—that we still need to push. And, Mr. Luparello, I am going to try to hold the Chair’s comments about making sure that we get those final regulations out.

Mr. Chairman, I really appreciate you holding this hearing. I think it has been a very informative one.

Senator CRAPO. Well, thank you, Senator Warner. And, again, thanks to the witnesses.
I have a ton of other questions, but we are going to probably have to wrap up here. What I would like to do is to follow up on Senator Warner's suggestion that we ask each of the witnesses to provide—you were asking, I think, for a list or a description of what steps we could take, short of creating a formal venture exchange, to help improve the dynamics. We have heard a lot of discussion about that here today, but if the witnesses could—even though you have it in your written and in your oral testimony here today, provided and said a lot of this, if you could just succinctly give us a statement of what you think those steps might be that we could take now even before the creation of an exchange, if the creation of an exchange is a good idea, I think that would be very helpful.

Senator CRAPO. And then I would like to add a request for another list, and that would be a list of what you think the necessary regulatory and legal fixes need to be made or structure needs to be of an existing—the creation of a venture exchange. And let me just give you an example of what I am thinking here.

In terms of the information that we have received so far, it seems that there has been a strong suggestion that the potential characteristics of any venture exchange should be to have scaled disclosure requirements and more basic listing standards, wider tick sizes for securities trading, and some have said that the trading of venture exchange-listed securities should be limited to occur only on a venture exchange. If there are other characteristics that a venture exchange should have, I would love to have you give us that list as well so that we can help to continue narrowing and identifying the scope of the discussion and the action that we may need to take here.

Senator CRAPO. Do you have anything else, Senator Warner?

Senator WARNER. No. Thank you.

Senator CRAPO. I would like to thank each of you. Your written as well as your oral presentations have been outstanding and are very helpful to us. And as I said at the beginning of this hearing, I think that there is a tremendous amount of potential for us to do some good things in this next Congress. And I will also state again I am elated to be able to have as my co-partner here in this endeavor on this Subcommittee, Senator Warner. He and I are good friends, but we also are committed to making sure we have a bipartisan effort to build good policy.

And so, again, thank you all for coming. Without anything else, this hearing will be adjourned.
[Whereupon, at 10:57 a.m., the hearing was adjourned.]

[Prepared statements, responses to written questions, and additional material supplied for the record follows:]
Chairman Crapo, Ranking Member Warner, and Members of the Subcommittee:

Thank you for inviting me to testify on behalf of the U.S. Securities and Exchange Commission (“SEC” or “Commission”) regarding exchanges focused on the listing and trading of stocks of smaller companies. Smaller companies are important to the strength of our economy. The SEC welcomes the opportunity to discuss approaches that address the market structure needs of smaller companies and their investors, which can serve to facilitate capital formation for such companies—an important part of the agency’s mission.

The SEC is considering innovative approaches that appropriately balance the needs of smaller companies for efficient secondary markets and the interests of investors in smaller companies. Venture exchanges potentially could achieve such a balance by providing the investors a transparent and well-regulated environment for trading the stocks of smaller companies that offers both enhanced liquidity and strong investor protections. As such, they could strengthen capital formation and secondary market liquidity for smaller companies and expand the ability of all investors to participate through well-regulated platforms in the potential growth opportunities offered by such companies.

Venture exchange listings could include both smaller companies that do not qualify under the listing standards of the large securities exchanges and smaller companies that do qualify under such standards.1

My testimony today will provide an overview of market structure challenges for smaller companies, efforts that the SEC already has taken and is taking in this area, and statutory provisions that set the context for SEC review of venture exchange proposals. It is important to consider, as part of our review of current market structure, the distinctive needs of smaller companies and their investors.

I. Market Structure Differences for Smaller Companies

The market for small companies is different from the market for large companies. While smaller companies contribute significantly to the U.S. economy, the opportunities for smaller companies seeking capital and for investors seeking to invest in smaller companies are not comparable to such opportunities with respect to larger companies.

For example, the smaller the company, the lower the level of ownership by institutional investors, which act as intermediaries for much of the available capital in the modern U.S. equity markets. Smaller companies face the challenge of attracting the attention of these institutional investors that typically seek to invest in large sizes that are significant given the size of their portfolios. Moreover, given that most smaller companies will inevitably have a significant percentage of ownership by individuals who are self-directed investors, small companies face the challenge of attracting the attention of these individual investors, who often do not have the time and resources of institutional investors to evaluate companies. To illustrate, Table 1 below sets forth ownership data for exchange-listed companies categorized by their market capitalization. As can be seen, institutional investors dominate ownership (83.5 percent) in Table 1’s category of largest companies, which are defined as those with more than $1 billion in market capitalization. In contrast, for companies with less than $100 million in market capitalization, individuals dominate ownership with 80.1 percent of ownership or higher.

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1 Venture exchanges potentially could include existing or new exchanges that operate nationally. The Commission could also consider local or regional exchanges that focus on companies from a particular geographic area.

A recent academic working paper found that, between 1980 and 2010, institutional investors increased their holdings of the smallest companies that make up 10 percent of the value of the market from 3.5 percent to 10.2 percent. See Marshall E. Blume and Donald B. Keim, Working Paper, Institutional Investors and Stock Market Liquidity: Trends and Relationships, 1 (Aug. 21, 2012), available at http://finance.wharton.upenn.edu/keim/research/ChangingInstitutionPreferences_21Aug2012.pdf. While the study uses market value percentages, and thus is not directly comparable to an analysis using percentages of the number of stocks, it provides evidence of a potential upward trend in institutional ownership of small-cap stocks.

Solomon Presentation, citing CapitalIQ as of September 6, 2013.

### Table 1

<table>
<thead>
<tr>
<th>Market Cap (millions)</th>
<th>Median Institutional Ownership</th>
<th>Median Individual Ownership</th>
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</thead>
<tbody>
<tr>
<td>$0-50</td>
<td>10.9%</td>
<td>89.1%</td>
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<tr>
<td>$51-100</td>
<td>19.9%</td>
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<td>$101-250</td>
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</tr>
<tr>
<td>$501-1000</td>
<td>62.4%</td>
<td>37.6%</td>
</tr>
<tr>
<td>$1001+</td>
<td>83.5%</td>
<td>16.5%</td>
</tr>
</tbody>
</table>

These major ownership differences between small companies and large companies are reflected in their coverage by research analysts. Table 2 below sets forth data on the research coverage of NASDAQ-listed companies categorized by market capitalization. For Table 2’s largest category of companies with more than $1 billion in market capitalization, only 1 percent have no coverage, and the median number of analysts is 14. For companies with less than $100 million in market capitalization, the median number of analysts is 1 or less, and 40 percent or more of companies have no research coverage.

### Table 2

<table>
<thead>
<tr>
<th>Market Cap (millions)</th>
<th>No Coverage</th>
<th>Median Analysts</th>
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</thead>
<tbody>
<tr>
<td>$0-50</td>
<td>62%</td>
<td>0</td>
</tr>
<tr>
<td>$51-100</td>
<td>40%</td>
<td>1</td>
</tr>
<tr>
<td>$101-250</td>
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<td>3</td>
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<tr>
<td>$251-500</td>
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</tr>
<tr>
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<td>3%</td>
<td>7</td>
</tr>
<tr>
<td>$1001+</td>
<td>1%</td>
<td>14</td>
</tr>
</tbody>
</table>

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Tables 1 and 2 also illustrate that not all “small” companies are alike. Although all companies with less than $1 billion in market cap often are considered small-cap or micro-cap companies, there are major differences in ownership and research coverage even within this category. They range from 62.4 percent institutional ownership and a median of 7 research analysts for NASDAQ-listed stocks with $501 million to $1 billion market cap, to 10.9 percent institutional ownership and a median of 0 analysts for NASDAQ-listed companies with less than $50 million market cap.

These differences among tiers of smaller companies are also replicated in various measures of secondary market liquidity. The Office of Analytics and Research in the Division of Trading and Markets posted a research paper in September 2014 that analyzed the market quality for small capitalization U.S. equities. Among other things, the paper sets forth differences in volume, bid-ask spreads, and order book depth for exchange-listed companies with different market capitalizations and stock prices (see Table 3).

### Table 3

<table>
<thead>
<tr>
<th>Market Cap (millions)</th>
<th>Ticker Symbols</th>
<th>Median Dollar Volume</th>
<th>Median Quoted Spread</th>
<th>Cumulative Order Book Depth (buy orders 10x from midpoint of best bid and offer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100-249</td>
<td>122</td>
<td>$11,000</td>
<td>28.64</td>
<td>$9,200</td>
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<tr>
<td>$250-499</td>
<td>175</td>
<td>$185,000</td>
<td>10.51</td>
<td>$27,900</td>
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<tr>
<td>$500-999</td>
<td>143</td>
<td>$761,000</td>
<td>4.78</td>
<td>$1,400</td>
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<tr>
<td>$1,000-1,999</td>
<td>92</td>
<td>$2,413,000</td>
<td>2.49</td>
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<td>$5,828,000</td>
<td>1.40</td>
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<td></td>
<td>$10,754,000</td>
<td>1.03</td>
<td>$858,400</td>
</tr>
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</table>

This research illustrates that significant measures of market quality rapidly deteriorate as market capitalization decreases. Smaller companies generally will have less favorable metrics of market quality than larger companies. Among other things, smaller companies on average have less public float than larger companies, which yields less potential for trading volume. Most market quality metrics are highly correlated with trading volume. The key issue for the Commission to consider is whether the current U.S. market structure optimally promotes capital formation for smaller companies and the interests of their investors, which necessarily requires an analysis of whether smaller companies can maximize their volume and other measures of liquidity and market quality. The data in Tables 1–3 counsel an ongoing evaluation of how market structure can be changed to improve secondary mar-

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4 For example, the S&P SmallCap 600 Index includes companies with market capitalizations that range from $400 million to $4 billion. See S&P Dow Jones Indices, available at http://us.spindices.com/indices/equity/sp-600. The Russell Microcap Index includes companies with market capitalizations that average $860 million and range as high as $3.47 billion. See Russell Investments, available at https://www.russell.com/indexes/americas/indexes/.


7 Some of the lower liquidity of small cap stocks also may be due to greater informational asymmetries, hence, higher information risk for small caps. See Easley, David, Soeren Hvidkjaer, and Maureen O’Hara, 2002, Is Information Risk a Determinant of Asset Returns? Journal of Finance 57(5), pp. 2185–2221.


9 A recent study estimates the monthly illiquidity premium to be 0.5 percent. This study also finds that return anomalies are attenuated when liquidity increases and concludes that policies to stimulate liquidity and ameliorate trading costs improve capital market efficiency. See Chordia, Tarun, Avanidhar Subrahmanyam, and Qing Tong, 2014, Have Capital Market Anomalies Attenuated in the Recent Era of High Liquidity and Trading Activity? Journal of Accounting and Economics 58(1), pp. 41–58. Investment banks’ fees in seasoned equity offerings (SEOs) are...

9 The Advisory Committee’s materials are available at http://www.sec.gov/info/smallbus/acsec-archives.shtml#recommendations.


II. SEC Efforts to Improve Market Structure for Smaller Companies and Their Investors

A. SEC Advisory Committee on Small and Emerging Companies

The challenges facing smaller companies and their investors have been a focus at the SEC for some time. This focus has been highlighted in the SEC’s Advisory Committee on Small and Emerging Companies (“Advisory Committee”). The Advisory Committee’s mandate relates to small and emerging privately held businesses and publicly traded companies with less than $250 million in public market capitalization. Its mission is to provide the Commission advice with respect to protecting investors, maintaining fair, orderly, and efficient markets, and facilitating capital formation, as they relate to capital raising, trading, public reporting, and governance requirements in the securities of these small companies.

In March 2013, the Advisory Committee recommended to the Commission the creation of a separate U.S. equity market that would facilitate trading in the securities of small and emerging companies.9 The supporting materials for that recommendation indicate that two of the most significant challenges facing such companies in the secondary market are attracting the attention of a wide range of investors and—closely related—achieving a liquid secondary market.

B. Prior Approval of Venture Exchange

Traditionally, exchanges have offered a suite of services that are tailored to meet the needs of two key constituencies of an equity market—listed companies and investors. For listed companies, exchanges can offer heightened visibility and a more liquid trading market than might be available in the unlisted markets. For investors, exchanges can offer important investor protections, such as heightened transparency of trading, and effective oversight of trading and listed company standards. These investor protections help promote confidence in the integrity of the trading market and listed companies. In addition, a good secondary market can support capital formation and issuers’ ability to raise capital on more favorable terms. By offering greater liquidity and more efficient pricing, a good secondary market helps assure that investors will have an efficient means of liquidating their positions in a company if and when they choose. And a strong secondary market generates price discovery that helps efficiently allocate capital to the companies most able to put it to productive use.

In addressing the unique needs of smaller companies and their investors certain considerations need to be addressed. For example, smaller companies generally involve greater investment risk. For investor protection purposes, it is vital that investors understand those risks and that the nature and size of their investment is suitable for their investment objectives. Exchanges, the SEC, and other regulators must be aware of the risks associated with smaller companies and put appropriate protections and surveillances in place to help minimize them.

The Commission also has previously approved market-driven proposals that appropriately balance the benefits and risks of smaller companies, while protecting investors. For example, the Commission approved a venture exchange in 2011—the BX Venture Market created by NASDAQ OMX BX, Inc.10 The BX Venture Market is designed for securities of smaller companies being delisted from another national securities exchange for failure to meet quantitative listing standards and for smaller companies contemplating an initial exchange listing. The goal of the BX Venture Market is to provide an opportunity for smaller businesses to have their securities traded in an environment that offers the potential for enhanced transparency, liquidity and regulatory oversight, which could make these companies more attractive to potential investors. The BX Venture Market’s rules include a variety of measures to address investor protection concerns. These include rigorous vetting of listing applicants, such as background checks and independent investigators, enhanced surveillance of trading, and clear disclosure to investors that BX-listed securities differ from other exchange-listed securities because they generally present more risk, among other things.

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In approving the exchange, the SEC noted that the exchange could provide small companies with an alternative to being quoted on the unlisted market by offering these companies the opportunity to list their securities on an exchange, in an environment that offers the potential of enhanced liquidity, transparency and oversight. Moreover, providing an alternative to the over-the-counter market could also facilitate competition for the quotation/listing of securities of smaller issuers. In addition, the SEC noted that the availability of an exchange listing, and the prospect of more efficient secondary market trading, could facilitate smaller issuers' ability to raise capital and invest in the growth of their businesses. Finally, the Commission believed that clear disclosures distinguishing BX Venture Market from the NASDAQ Stock Market would reduce the potential for investor confusion.

To date, however, the BX Venture Market has not been launched. My understanding is that concerns about ensuring adequate liquidity in BX-listed securities and attracting liquidity providers, at least in part, have caused the delay.

C. Tick Size Pilot

The Commission also has sought to address concerns about improving liquidity in the secondary market for smaller companies through the development of a pilot program that would allow smaller companies to trade at wider tick sizes. In June 2014, the SEC directed the equity exchanges and FINRA to act jointly in developing and filing a national market system plan to implement a tick pilot program.11 The Commission noted particularly that a pilot program could facilitate studies of the effect of tick size on liquidity, execution quality for investors, volatility, market maker profitability, competition, transparency, and institutional ownership in the stocks of small-capitalization companies.

The efforts to develop a tick size pilot for smaller companies have progressed over the last year. In November 2014, the SEC published for public comment a national market system plan submitted by the SROs to implement a tick size increase for the stocks of smaller companies.12 The comment period ended on December 22, 2014, and the SEC is closely considering the comments in assessing how to proceed.13 The data from the pilot program could help the SEC and market participants assess the impact of wider tick sizes for small and mid-cap companies.

Although widening tick sizes potentially could improve liquidity in smaller company stocks, it may not be a complete solution to the challenges faced by smaller companies as discussed in Section I above. For example, the smallest of these companies have average daily dollar volume of less than $10,000 and bid-ask spreads of more than 28 cents. For these and other smaller company stocks, it appears that other regulatory initiatives are worthy of consideration.

III. Exchange Act Provisions that Govern Venture Exchange Proposals

As with other types of national securities exchanges, venture exchanges are required to register with the SEC. Their rules and other material aspects of their operations are subject to a public notice and comment process, and, ultimately, SEC approval. To approve an exchange rule proposal, the SEC must find that it is consistent with the relevant provisions of the Securities Exchange Act of 1934 (“Exchange Act”).

As it did with the BX Venture Market, the SEC will carefully consider any efforts of exchanges to fashion innovative services that are particularly designed to meet the needs of smaller companies and their investors. The SEC will continue to be attentive to both the benefits and potential risks of venture exchanges, with a particular focus on whether it can facilitate capital formation and address concerns about investor protection. For example, venture exchanges must operate in ways that are transparent and forthcoming regarding the risks of investing in venture exchange companies. In general, the SEC has considerable flexibility to interpret the Exchange Act in ways that recognize the particular needs of smaller companies and their investors.

For example, the BX Venture Market adopted quantitative listing standards, such as stockholders' equity, that were lower than those of any other national securities exchange with an active listings program, but these lower listing standards were balanced by rigorous vetting, surveillance, examination, and disclosure requirements to protect investors. In addition, stocks to be listed in the BX Venture Market are not considered national market system securities under Section 11A(a) of the Ex-

change Act. They therefore are not subject to Regulation NMS, which applies only to national market system securities.

As discussed below, several Exchange Act provisions, however, do limit the flexibility available to the SEC in approving any proposed venture exchange models, particularly with respect to how they maximize liquidity in secondary market trading. As evidenced by the market quality statistics above, maximizing liquidity is likely to be essential to the success of venture exchanges.

In this regard, there are a variety of potential initiatives that a venture exchange might explore to promote liquidity. One option would be to limit all trading to particular times of the day or through particular mechanisms. Such an option could include running batch auctions at particular times that are designed to centralize liquidity across both price and time. Another option would be to attract dedicated liquidity providers with a package of obligations for making a market in listed companies, balanced by benefits for providing high-quality liquidity. A third option would be to explore different minimum tick sizes in ways not limited to those under consideration in a tick size pilot.

A key element that likely would be essential to the success of these and other efforts is protecting the liquidity pool on the venture exchange. If trading venues other than the venture exchange could execute trades in the venture exchange’s listings and thereby bypass the mechanisms designed to maximize liquidity, the effectiveness of these liquidity-enhancing mechanisms might well be impaired.

Trading volume in U.S.-listed equities today is widely dispersed across a variety of trading venues, including 11 exchanges, 46 dark pool ATSs, and more than 200 broker-dealers. This dispersal of trading volume is even greater for the stocks of smaller companies. For example, the table below breaks out the trading volume in January 2015 across the three tiers of NASDAQ-listed stocks—NASDAQ Global Select (“NGS”), NASDAQ Global Market (“NGM”), and NASDAQ Capital Market (“NCM”). The initial financial and liquidity requirements for the NGS tier are higher than those for the NGM tier and, likewise, the initial listing requirements for the NGM tier are higher than those for the NCM tier.

Table 4
Dispersal of Volume Across NASDAQ Listing Tiers

<table>
<thead>
<tr>
<th>Listing Tier</th>
<th>Total Volume</th>
<th>NASDAQ</th>
<th>NASDAQ TRF</th>
<th>Other Exchange and TRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGS</td>
<td>81.45%</td>
<td>29.02%</td>
<td>30.78%</td>
<td>40.19%</td>
</tr>
<tr>
<td>NGM</td>
<td>11.73%</td>
<td>20.47%</td>
<td>36.13%</td>
<td>43.40%</td>
</tr>
<tr>
<td>NCM</td>
<td>6.82%</td>
<td>22.06%</td>
<td>41.54%</td>
<td>36.40%</td>
</tr>
</tbody>
</table>

These data show that stocks in the NASDAQ listing tier (NGS) with the most extensive listing requirements account for the largest share of trading volume, relative to stocks in the bottom two listing tiers. When considering the composition of trading volume by trading venue for stocks in each NASDAQ listing tier, NASDAQ exchange trading accounts for a larger share of trading volume (29.02 percent) for stocks in the highest listing tier relative to stocks in the bottom two listing tiers (22.06 percent and 20.47 percent). Conversely, the off-exchange portion of trading (represented by NASDAQ TRF) accounts for a smaller share of trading volume (30.78 percent) for stocks in the highest listing tier, relative to stocks in the bottom two listing tiers (41.54 percent and 36.13 percent).

The broker order-routing practices that led to these statistics for NASDAQ-listed securities would likely be similar for venture exchange-listed securities. As a result, venture exchanges might seek to adopt rules applicable to their members, or request the SEC to adopt market-wide rules applicable to all exchanges and broker-dealers, that limit the extent to which other venues could bypass the venture exchange’s mechanisms for centralizing and maximizing liquidity.

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14 See NASDAQ OMX, Inc., available at https://www.nasdaqtrader.com/trader.aspx?ID=marketsharedaily. The column for Total Volume captures relative trading volume across the three tiers of NASDAQ-listed stocks, while the columns for NASDAQ, NASDAQ TRF, and Other Exchange and TRF capture relative trading volume within each listing tier.

15 The NASDAQ TRF (Trade Reporting Facility) reflects trades reported by off-exchange venues. Across all NASDAQ-listed stocks, the NASDAQ TRF represents approximately 95% of off-exchange volume. The other 7% of off-exchange volume in NASDAQ-listed stocks is reported to the NYSE TRF.
Two Exchange Act provisions provide standards for the SEC to adopt or approve measures to protect the liquidity pool of a venture exchange. Section 11A(c)(3) authorizes the Commission to prohibit broker-dealers from executing transactions otherwise than on an exchange, provided that the Commission is able to make certain findings. For example, Section 11A(c)(3)(A)(i) requires a finding that the fairness or orderliness of the markets has been affected in a manner contrary to the public interest or the protection of investors, and Section 11A(c)(3)(A)(ii) further requires a finding that the maintenance or restoration of fair and orderly markets may not be assured through other lawful means under the Exchange Act. Moreover, Section 11A(c)(3)(A)(ii) requires a finding that “no rule of any national securities exchange unreasonably impairs the ability of any dealer to solicit or effect transactions” for its own account. Accordingly, Section 11A(c)(3)(A) imposes a substantial test for the Commission before it can adopt rules that restrict the ability of broker-dealers to execute off-exchange trades in stocks listed on venture exchanges. It is worth noting that Section 11A(c)(3) was adopted in 1975, when a major congressional concern was the dominance of trading volume by the major stock exchanges in their listings.

The other Exchange Act provision limiting the extent to which a liquidity pool of a venture exchange can be protected is Section 12(f), which was enacted in 1994. It generally grants exchanges the right to trade securities listed on other exchanges (“unlisted trading privileges” or “UTP”) as long as the UTP exchange has appropriate rules in place to govern such trading. As with Section 11A(c), Congress adopted Section 12(f) when the major stock exchanges dominated trading in their listed companies. In the context of initial public offerings (“IPOs”), the statute gives the Commission authority to delay unlisted trading in IPO shares for a certain period after the IPO’s launch, with Section 12(f)(1)(C) setting an initial interval of two trading days. Consequently, even with respect to IPOs, Section 12(f) presents a meaningful test for approving an extended period when exchange trading may occur only on the listing exchange, particularly for periods sufficient to enable smaller companies to reach adequate levels of liquidity such that UTP restrictions were no longer reasonably necessary.

Of course, the Commission would need to carefully evaluate whether rules protecting the liquidity pool of a venture exchange would serve the needs of small companies, their investors, and the broader markets. Simply allowing a venture exchange or its liquidity providers to enjoy monopoly trading privileges would not be the justification or objective, and such rules could be approved only after a full opportunity for public notice and comment. As with any rule where the Commission must determine whether an action is necessary or appropriate in the public interest, the Commission must also consider the protection of investors and whether the action will promote efficiency, competition, and capital formation. Moreover, the Commission would have to evaluate whether and when any period of liquidity pool protection would need to end if a listed company reached significant size and levels of liquidity.

The Commission must also consider how efforts to protect a venture exchange’s liquidity pool would affect competition. While such efforts would restrict one form of competition—that is, competition among trading venues for order flow in a particular group of securities—it could potentially open up new forms of competition. Multiple venture exchanges might compete to fashion market structures designed to maximize liquidity for small companies and investors that currently are unavailable under the existing Exchange Act regulatory scheme. Such competing venture exchanges could be created by existing exchange groups or others, such as groups of dealers who believe they have the ability to offer innovative and competitive services to smaller companies. It is also possible, however, that high costs and other barriers to entry, such as network effects or cost-related economies of scale, may result in a more concentrated market with few active venture exchanges. The success or failure of the exchanges would largely depend on the extent to which the various venture exchanges were able to attract small companies and their investors.

In sum, competition in the equities markets can assume many forms across different stages in the listing and trading process. A key policy question is whether the current U.S. market structure for smaller companies enables competition in ways that ultimately redound most to the benefit of smaller companies and their investors. Particularly if combined with strong measures to promote investor protection and market integrity, opening up new forms of competition in the listing and trading of smaller companies potentially could offer significant benefits to smaller companies and their investors. Conversely, protecting the liquidity pools of venture exchanges in their listings and thus eliminating off-exchange competition for trading volume from broker-dealers may affect execution costs, resulting in potentially larger transaction costs for investors. The potential benefits and costs of various forms
of competition in the secondary market for smaller companies is an issue that warrants close consideration by Congress, the SEC, and the public.

IV. Conclusion
Thank you again for inviting me to discuss an issue of such importance to the U.S. equity markets and economy. I look forward to answering your questions.

PREPARED STATEMENT OF THOMAS W. FARLEY
PRESIDENT, NEW YORK STOCK EXCHANGE GROUP
MARCH 10, 2015

Chairman Crapo, Ranking Member Warner and Members of the Subcommittee, we appreciate your interest in capital raising for small-cap companies. My name is Tom Farley and I am President of the New York Stock Exchange Group (NYSE). I have been in the business of exchanges for most of my career including as President and COO of ICE Futures US (formerly the New York Board of Trade) and as Senior Vice President of Financial Markets at Intercontinental Exchange (ICE) where I oversaw the development of initiatives within ICE’s financial markets.

NYSE Group includes the iconic New York Stock Exchange as well as two additional equities exchanges, two options exchanges and a bond trading platform. Across these venues we list and trade cash equities, equity options, exchange traded products and debt securities which are accessible to all investors through their broker-dealer. Of our listing exchanges, NYSE MKT has traditionally been the listing venue for smaller public companies. Over the years there have been several efforts in the United States to address the needs of smaller companies seeking access to capital through both exchange and non-exchange solutions. In fact, NYSE recently announced a mid-day auction for less liquid securities that we intend to launch later this summer if approved by the Securities and Exchange Commission (SEC).

As many of you know, the data around smaller companies accessing the public markets for capital is discouraging when compared to the data of the late 1990s. Companies are spending more time as private companies in part due to increased regulatory hurdles to becoming and being a public company and, once public, a lack of liquidity in the trading of shares of smaller public companies. As a listing exchange, we have witnessed the negative impact on liquidity in shares of smaller public companies as the incentives for market makers to participate in these securities have diminished. As a result, venture capital is locked up in companies for longer periods of time, which decreases the availability of venture capital for new companies.

Venture Exchanges
NYSE believes that the idea of venture exchanges is worth Congress’s attention and may be of value to smaller companies seeking capital and their venture capital investors seeking a liquidity event that will free up money for new investment. While we believe many of the concerns raised about venture exchanges can be addressed through education, we also recognize that companies available for trading on venture exchanges will have a higher rate of failure and could potentially shed a dark cloud over the rest of the U.S. public markets. Consequently, we believe it will be important that companies listing on venture exchanges have an appropriate level of financial disclosure and that, in addition to the added oversight a venture exchange listed security would receive from the exchange’s Self-Organization (SRO), venture exchanges, broker-dealers and investment advisors should differentiate a venture exchange traded security from one listed on a national securities exchange.

Listing Standards
In addition to the appropriate levels of differentiation, NYSE believes there should be minimum listing standards in place that a venture exchange can develop and change over time to ensure that the intended companies are targeted. We believe two likely standards would be based on a minimum level of public float and

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1 In 1992 the American Stock Exchange launched the Emerging Company Marketplace which was closed in 1995. More recently several private markets have launched platforms for the trading of nonregistered securities and Congress enacted the JOBS Act, of which several provisions are designed to help capital raising for Emerging Growth Companies. In addition, last summer the national securities exchanges that trade cash equities and FINRA proposed an NMS Plan pilot to study the impact of wider tick sizes on the trading of smaller public companies.

a minimum number of shareholders. These thresholds can be set relatively low. We would suggest a public float of around $1 million and a minimum of 50 shareholders. We would warn against requiring a minimum price threshold for the venture exchange securities and, for this reason, believe that Congress should strongly consider exempting venture exchange securities from the penny stock requirements. Venture exchange companies should also be expected to graduate from a venture exchange to a national securities exchange where higher listing standards and greater financial scrutiny exists. Such thresholds for graduation could be designed around the current minimum listing standards for national securities exchanges.

Venture exchanges should be required to register as national securities exchanges, which are self-regulatory organizations. Through its obligations as an SRO, a venture exchange would be responsible for venture companies’ compliance with listing standards and the surveillance of trading activity taking place on the venture exchange. In fulfilling that obligation, NYSE would require and confirm that companies meet the minimum listing standards prior to listing and monitor for companies’ compliance with the continuing listing standards. An SRO would also conduct background checks of directors and senior management of the venture companies both prior to listing and upon any change of directors or senior management.

Market Structure

Several suggestions have been made with regard to the market structure for trading of venture companies. Among the suggestions is whether a venture exchange should be permitted to trade securities listed by another venture exchange. These unlisted trading privileges (UTP) are currently granted by Section 12(f) of the Securities Exchange Act of 1934 and permit an exchange to trade securities listed on another national securities exchange immediately following an initial public offering. It is this statutory privilege that allows NASDAQ OMX to trade NYSE listed securities and vice versa. Many have argued that eliminating UTP would result in less fragmentation of liquidity in venture securities and, thus, encourage market makers to post more liquidity at better prices. While we support eliminating UTP for venture exchange securities because it would have the effect of centralizing liquidity among venture exchanges, it is important to note that off exchange venues, such as dark pools, would continue to be able to trade venture securities away from venture exchanges in the over-the-counter market. If helping small companies source liquidity and raise capital is the goal, we believe it is essential that rules also be adopted to require liquidity at the National Best Bid (NBB) or National Best Offer (NBO) be given primacy over dark liquidity at the NBB and NBO, and that exceptions to the rule be limited to instances when brokers are matching trades of large size or when the orders receive meaningful price improvement better than the NBB or NBO. Without such a rule being adopted, we believe the incentive for market makers to participate in venture exchanges will be lost and liquidity will remain anemic in these securities. Eliminating UTP will, however, allow for each venture exchange to design its own market structure with regard to tick sizes and execution design (e.g., continuous trading or periodic auctions). This flexibility would give the venture exchanges the ability to test new designs and find the right balance that is best for venture exchange listed securities.

Another key topic is with respect to preemption of State registration of securities listed on a venture exchange. Again, if Congress’s intent is to create a venue with minimal hurdles to success, we believe Congress should give serious consideration to preempting State registration just as it has previously done for listed companies and products on national securities exchanges. If Congress does not preempt State registration, we recommend adopting a provision that gives the SEC the ability to preempt State registration after a stated period of time if it is determined by the SEC that State registration is an inhibitor to the success of venture exchanges. We recognize the efforts of State securities commissioners to establish an easier path to registration and can see value in testing that option. However if that effort does not succeed once it is further tested, it would be prudent to have a mechanism in place as a backstop.

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3 See Exchange Act Section 15(h) and Exchange Act Rules 3a51–1 and 15g–1 through 15g–100. http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title17/17cfr240_main_02.tpl.

Conclusion

NYSE believes that the U.S. capital markets are one of the best avenues available for companies of all sizes to access growth capital. We are protective of the confidence investors have in the U.S. capital markets but believe that if designed appropriately, venture exchanges may give small companies access to capital not currently available to them and investors the ability to invest in smaller companies with greater regulatory scrutiny than is currently available in the over-the-counter market for unlisted securities.

PREPARED STATEMENT OF SCOTT KUPOR
MANAGING PARTNER, ANDREESSEN HOROWITZ
MARCH 10, 2015

Chairman Crapo and Ranking Member Warner, thank you very much for the opportunity to speak with the Committee regarding capital formation and the topic of venture exchanges. I applaud this Committee for your efforts to examine liquidity challenges existing in today’s small cap market. This is a critical issue to the health of our markets, entrepreneurship and the American economy.

By way of background, I am the Managing Partner for Andreessen Horowitz, a $4.5 billion multi-stage venture capital firm focused on IT-related investments. We invest in both consumer-facing IT companies and those that sell primarily into corporate enterprises. We have been operating this business for just over 5½ years and some of the companies in which we have invested and with which you may be familiar include Facebook, Twitter, AirBnB and Pinterest.

Prior to joining Andreessen Horowitz, I held several executive positions in a publicly traded software company named Opsware, which we sold to Hewlett Packard in 2007. Prior to Opsware, I was an investment banker servicing technology companies at both Credit Suisse First Boston and Lehman Brothers.

The Current Landscape

Before jumping into the specific topic of venture exchanges, I’d like to spend a minute on the current state of capital formation for venture-backed startups in the United States.

It’s been well documented by various commentators that the number of Initial Public Offerings (IPOs) in U.S. markets has fallen significantly since 1997. This is, at least in part, a reason why the total universe of listed companies in the United States has fallen by nearly 50 percent over that same time period. [See David Weild, “The U.S. Need for Venture Exchanges,” March 4, 2015—attached hereto as an exhibit].

And while it is also true that, in large part due to the work of this institution through the passage of the Jumpstart our Business Startups (JOBS) Act, we have seen a more robust IPO environment in 2013 & 2014, the volume and characteristics of those IPOs remain very different.

In particular, IPOs that raise $50 million or less, a proxy for truly micro-cap companies with market capitalizations of $250–500 million, has remained below 25 percent of all IPOs for nearly 15 years. In contrast, from 1991–1997, as many as one-half to two-thirds of IPOs raised $50 million or less in proceeds.

Looking at the IT sector, which is the area in which we invest, we have seen similar trends.

From 1980–2000, the industry produced just north of 2,400 venture-backed IT-related IPOs. In contrast, for the 14-year period from 2001–2014, there were a total of approximately 500 IPOs.

Relatedly, time to IPO has significantly elongated over the same time periods: in the 1980–2000 time period, the median time to exit for IT-related IPOs was 6.5 years; for the 2001–2014 cohort, it was over 9 years. In 2014 alone, the median time to IPO was 11 years. [These data are published by Jay Ritter, “Initial Public Offerings: Updated Statistics,” December 20, 2014].

Combining these various data points, we see the following trends—the total number of IPOs has declined significantly, the average time to IPO has elongated and, correspondingly, the relative maturity of companies at the time of IPO has also grown (as an example, the median sales at time of IPO for the 1980–2000 class was $30 million, compared with just shy of $100 million for the 2001–2014 class).

Why should we care about this?

In addition to the strong nexus between IPOs and job growth, we are at risk of creating a two-tiered capital markets structure in which the vast majority of investment appreciation accrues to those institutions and wealthy individuals who have
access to invest into the private markets, at the expense of public market investors (and, in particular, the vast majority of individual Americans who comprise the retail investor base).

That is, when companies do in fact go public, because they do so at a later stage of financial development, they are of course lower risk investments, but also with the attendant lower return potential. As an example, public investors in Microsoft have seen an appreciation in the public stock price of approximately 500 times the initial public offering price. For public investors in Facebook to see this level of public market appreciation would require that Facebook grow to a market cap that exceeds the entire market cap of the global listed markets today.

In the absence of doing something to address these trends, we will continue to see the private markets developing their own solutions to enable private companies to remain private. In fact, today we see larger amounts of institutional capital being made available in the late-stage private markets—both in the form of primary capital and in the form of secondary sales intended to provide partial liquidity to employees. These transactions are being funded by hedge funds, sovereign wealth funds, family offices, large technology-focused buyout firms and mutual funds. With the exception of the last category of investor, none of these investors services the retail investor.

What are potential ways to address these trends?

Doing so requires that we address the underlying issues that are impacting companies' decisions to stay private longer:

- Economic issues—e.g., the one-time costs associated with going public and the ongoing costs associated with regulatory compliance
- The post-IPO trading environment—i.e., how will my stock trade in the aftermarket; will I be able to raise additional capital as a public company; will I achieve the benefits of going public without being an orphaned stock?

Economic Issues

While there are always more ways to streamline the economic costs of becoming and remaining a public company, the JOBS Act has done a good job of lessening the burden for emerging growth companies ("EGCs") in this area. When we talk with our portfolio companies, this is far less an impediment to going public, although it is more acute for smaller companies where the public company compliance costs as a percentage of their total cost base is still significant.

It should also be noted that the Confidential Filing provisions of the JOBS Act have been very significant in making the on-ramp to an IPO much smoother. Companies no longer have to expose themselves in a long quiet period, where their competitors have an unfair ability to paint their story without the company's ability to respond adequately.

Post-IPO Trading Environment

Thus, the most significant remaining deterrent to companies going public is the after-market environment in which they will have to live as a public company.

Outside the scope of this hearing—but an important issue nonetheless—has been the growth of activist shareholders and the tendency toward short-term investing more generally. Particularly in technology companies, where the product cycles ultimately drive most of the enterprise value, investments in R&D that have the near-term impact of depressing earnings per share to create long-term growth and competitive advantage can be difficult to make if subject to activist and other short-term investor pressures. This is the reason why you see a significant amount of dual class stock listings among recent tech IPOs—this is the best way to protect against short-term influences that could detract from R&D investments.

More fundamentally, the after-market trading environment is directly correlated to the market capitalization and ultimately liquidity, of the company post-IPO. If a company's market cap is large enough (a minimum of $1 billion), it can attract research support and market-making resources from the sell-side investment banks. As a result, this firm will garner institutional investor support, robust liquidity and, ultimately, the ability to tap the public markets for additional growth capital.

In contrast, for small market cap companies, the economics simply don't work for either sell-side research or market-making investments and, as a result, liquidity and institutional investor support are very low. The details of this phenomenon have been described more fully in the Equity Capital Markets Task Force November 2013 report to the Treasury Department (which is attached hereto as an exhibit).

Among the reasons for low liquidity is the move to decimalization and is why we have advocated for the robust tick size pilot program that is currently pending before the SEC. Empirical data is required to demonstrate that clustering trades at
fewer price increments will enhance trading liquidity and thus reduce the “tax” that
institutional investors face when trying to enter or exit such stocks. That is, any
attempt to buy a low liquidity stock causes the stock price to increase on entry and
attempts to sell similarly drive down the stock price.

As a result of this challenged after-market trading environment for small cap
stocks, many issuers simply choose to postpone an IPO until they matured to a
point where they can attain a market cap sufficient to engender adequate liquid-
ity—this explains the substantial decrease in the sub-$50 million IPO market. Li-
quidity is required to create a stable after-market, to enable meaningful stock price
appreciation through the attraction of institutional investors and to permit compa-
nies to raise follow-on growth equity financing in the public markets. This liquidity
seldom exists in the current market for small cap stocks.

Venture Exchanges

Given the above, how would venture exchanges impact capital formation? I’d like
to offer a few thoughts in relation to the economic issues and post-IPO trading envi-
ronment concerns noted above.

With respect to economic issues, a successful venture exchange would need to em-
ploy a regulatory framework that at a minimum incorporated the JOBS Act EGC
filing/ongoing requirements. However, if the goal were to enable a significant pro-
portion of sub-$50 million IPOs, it would likely require a framework that could scale
down to Reg A+-like regulations for smaller companies. This approach would likely
reduce the costs sufficiently to no longer serve as a barrier to participation in the
marketplace. Blue-sky pre-emption would also be a critical component of any well
functioning venture exchange. Any regulatory regime, however, would need to be
evaluated as well based upon its ability to attract and protect investors from bad
actors.

Turning to the post-IPO trading environment, at a minimum a venture exchange
would need the flexibility to set appropriate tick sizes (and likely trade-at require-
ments) to foster trading liquidity at fewer price increments. As a result, I strongly
believe that any decision to explore venture exchanges should not obviate the need
to ensure that critical changes are made to the pending tick size pilot, as the empir-
éical data from a well-designed pilot with an adequate length of at least 3 years
would prove critical to determining the right trading rules for a venture exchange.

There are also a number of open questions and concerns that I believe need to
be investigated further before determining whether a venture exchange is a better
alternative to simply implementing the small-cap market reforms for which we have
been advocating to date.

First, adverse selection in the form of the companies that elect to list on the ven-
ture exchange, as opposed to staying private longer and waiting until they meet the
existing national market listing requirements, is a legitimate concern. The most at-
tractive companies that can raise capital privately through other means, as some
are doing today, will simply continue to do so and only those that are in a weaker
position will choose to list on the venture exchange. In a sense, this is a chicken and
egg problem in that if the market works as designed and is policed appropri-
ately to root out fraud and bad actors, it will attract good companies, but it needs
to attract good companies in the first place to create a well-functioning market.

Some commentators have suggested that setting the listing requirements high for
the first set of potential issuers, accepting market capitalizations of up to $2 billion
and having a dedicated and strong SEC enforcement organization are ways in which
the adverse selection problem may be mitigated. In addition, one may need to con-
side economic incentives—at least at the outset—to attract the best companies to
list on the exchange. However, whether these suggestions in fact solve the adverse
selection problem remains an open empirical question for which further study is re-
quired.

Second, there is a real risk that separating out the venture exchange from the
existing national markets creates less liquidity for small caps by causing institu-
tional investors to simply wait for venture exchange companies to “graduate” to the
national markets instead of investing in them as venture exchange issuers. Again,
the ultimate determination of whether this risk is real depends upon the success
of the venture exchange—if liquidity is attractive in this market and the economic
incentives are such that the sell-side can in fact support research and market-mak-
ing activities, the institutional investors are likely to follow. As with the adverse se-
lection risk, further study is required to determine the potential liquidity impacts
of a dedicated venture exchange.

Summary

In summary, I would offer the Committee the following observations:
Fostering more IPOs—in particular, more IPOs at an earlier stage of company maturity—is important to job creation, to the long-term competitiveness of the U.S. securities markets and to extending significant stock appreciation opportunities to retail investors in the public markets.

In the absence of structural capital market changes, good companies will continue to tap private sources of capital and delay going public until employee liquidity needs cannot be satisfied in the public markets and a currency is required for broad, strategic M&A activity. This means that more value accretion will continue to accrue to private market investors at the expense of public market investors.

Independent of whether a venture exchange is the right solution, we must solve the core liquidity challenges that exist in today's small cap market. Thus, proceeding with a robust tick size pilot program of sufficient length (three years) is a crucial first step at a minimum to gathering the empirical data required to set-up the proper trading rules for a proposed venture exchange. In addition, empirical research should be undertaken to inform the adverse selection and liquidity bifurcation risks noted above.

I thank you for your time and look forward to the Committee's feedback.
From the On-Ramp to the Freeway:
Refueling Job Creation and Growth by
Reconnecting Investors with Small-Cap Companies

Issued by the Equity Capital Formation Task Force
November 11, 2013

Presented to the U.S. Department of the Treasury
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>II. Statement of Purpose</td>
<td>4</td>
</tr>
<tr>
<td>III. Introduction</td>
<td>5</td>
</tr>
<tr>
<td>IV. The Road to the Public Markets</td>
<td>6</td>
</tr>
<tr>
<td>A. The JOBS Act Reopens the On-Ramp</td>
<td>6</td>
</tr>
<tr>
<td>B. A Surge of Traffic</td>
<td>6</td>
</tr>
<tr>
<td>C. Increased IPO Flow</td>
<td>6</td>
</tr>
<tr>
<td>V. Roadblocks for Startups and EGCs Remain</td>
<td>9</td>
</tr>
<tr>
<td>A. Small Startups Need More Options for Capital Formation</td>
<td>9</td>
</tr>
<tr>
<td>B. Post-PO, Small-Caps and Investors Need Liquidity for Capital Formation</td>
<td>11</td>
</tr>
<tr>
<td>VI. Recommendations</td>
<td>12</td>
</tr>
<tr>
<td>A. Improved Access to Capital: Completing the On-Ramp for Promising Small Companies</td>
<td>13</td>
</tr>
<tr>
<td>B. Market Structure: Improving Capital Flow on the Freeway</td>
<td>16</td>
</tr>
<tr>
<td>VII. The Road Ahead</td>
<td>23</td>
</tr>
<tr>
<td>VIII. Conclusion</td>
<td>24</td>
</tr>
<tr>
<td>IX. Appendices</td>
<td>25</td>
</tr>
</tbody>
</table>
Chart Index

Chart A: Total Equity Listings ................................................................. 5
Chart B: JOBS Act Impact – the Stats ......................................................... 7
Chart C: JOBS Act Impact – the Stories ....................................................... 8
Chart D: Small-Cap Companies and Capital Formation ................................ 16
Chart E: Mutual Funds Snapshot ................................................................. 18
Chart F: Households Owning Mutual Funds ............................................... 18
Chart G: U.S. Equities Ownership & Trading Characteristics ........................ 19
Chart H: Institutional vs. Individual Ownership of All U.S. Listed Stocks ................ 21
I. Executive Summary

For generations, the U.S. capital markets have driven America’s economic growth and generated millions of private sector jobs. The sustained success of this vital ecosystem stems largely from its ability—decade after decade—to provide an environment where today’s most promising startup companies can develop into tomorrow’s global leaders because investors are willing to provide them with the capital to do so. By the late 2000s, however, the barriers to accessing capital for many small emerging growth companies had grown significantly—leading to a downturn in the U.S. initial public offering (IPO) market and threatening the long-term health of the U.S. economy.

In 2012, Congress passed The Jumpstart Our Business Startups (JOBS Act) to address the IPO market downturn. The JOBS Act aimed to right-size the risks, costs, and regulatory burdens that innovative startups face in becoming public companies. Importantly, it did so while preserving important investor protections implemented during the prior decade. Less than two years later, it is clear that the JOBS Act has re-energized interest in the public markets on the part of emerging growth companies. Almost immediately, it changed how small private companies approach the IPO process, and it has rekindled hope for companies that have been delayed or detoured from the public markets by a decade of adverse market conditions. More importantly, the JOBS Act has the potential to reignite interest in innovative technologies and revive the viability of business models that, without the prospect of an IPO, entrepreneurs and investors have deemed too capital-intensive to succeed. These are the very types of companies that can spawn entire new industries—spurring decades of private sector job creation and U.S. economic growth in the process.

Due to the momentum generated by the success of the JOBS Act, market participants and policy-makers now have the opportunity to address some of the remaining barriers in accessing growth capital faced not only by small private startups but also by many small capitalization companies that are already public. The process of undertaking an IPO and becoming a public company remains expensive. For the smallest companies, the five-year window for scaled compliance may close before the company has built sufficient revenue to absorb the cost of full public-company compliance. Similarly, publicly traded micro-caps may lack the financial resources to undertake the full registration process to raise smaller amounts of capital or even achieve listings on a national exchange. Both small startups and micro-caps benefit from greater access to capital, but they need a scaled down, more cost-efficient option than an IPO. Recognizing this need, Title IV of the JOBS Act aims to make Regulation A more accessible to startups. However, policy-makers have yet to complete a number of critical mandates in Title IV, and must make small amendments to the Securities Act of 1933 to resolve remaining conflicts between new JOBS Act provisions and state laws. As long as these issues remain unresolved, this otherwise low-cost and viable alternative tool for capital formation will remain unavailable to promising startups and micro-cap companies.

Recommendation #1

Expand access to capital for small startups and micro-caps by completing the JOBS Act’s mandates regarding Regulation A and resolving conflicts with state laws.

1.1 Implement Title IV of the JOBS Act immediately so that Regulation A+ becomes a viable option for small startup and micro-cap capital formation.

1.2 Amend Section 18(b)(4)(D) of the Securities Act to permit preemption of state securities laws for:
   (a) all securities offered pursuant to Regulation A or Regulation A+; or
   (b) securities sold pursuant to Regulation A or Regulation A+ provided such securities are offered or sold through a registered broker dealer.

1.3 Alternatively or in addition thereto, define "qualified purchaser" under Section 18(b)(4)(D) in a manner that would enable small business issuers to rely on preemption of state securities laws for Regulation A or Regulation A+ purposes.
1.4. Amend Section 18(b)(4) to clarify that secondary sales of Regulation A and Regulation A+ securities are similarly preempted from state securities laws.

Furthermore, policy-makers also have the opportunity to mitigate some of the challenges to post-IPO capital formation that emerging growth companies and other small-cap companies face. Chief among these challenges is an illiquid trading market for small-cap stocks. The rise of electronic trading and the regulations governing order handling, pricing and execution that followed have created a new market structure for equities trading marked by speed of execution and lower transaction costs. While these new dynamics work well in highly liquid, large cap stocks, they actually foster opacity and illiquidity in the small-cap market. This illiquidity makes it more costly and difficult for investors to invest, trade and make markets in small-cap stocks. Under these conditions, many institutional investors have not scaled their allocations to strategies that invest in small capitalization stocks. This development is significant because domestic equity small-cap mutual funds, which represent a major segment of institutional investors, hold $409 billion assets\(^1\) - much of it on behalf of U.S. households. Generally speaking, less institutional participation in the small-cap market leads to less trading volume and liquidity for most small-cap stocks, as well as less equity capital to provide growth. Absent this liquidity, small-cap companies struggle to attract the type of long-term investors that enable them to continue to raise the equity capital they need to sustain job creation and growth after their IPOs. The resultant lack of liquidity also harms the largely individual investor base that currently holds the majority of ownership in many small-cap stocks by marring the price appreciation they hope to capture through long-term investment. Again, this price appreciation cannot happen unless institutions accumulate positions and provide liquidity in these stocks. Given these dynamics, the Equity Capital Formation Task Force believes that the current market structure is not adequately serving the needs of small-cap companies as it relates to their ability to access capital, or the needs of the investors who would benefit from a more liquid market in which to buy and sell small-cap stocks. For this reason, the task force recommends developing new “rules of the road” for simplifying the trading of small-cap stocks (which the task force calls Small-cap Trading Rules, or STaR) and testing their effects via a carefully considered, well-designed pilot trading program.

Recommendation #2:
Encourage increased liquidity in small-cap stocks by fostering a simpler, more orderly market structure for small-cap companies and investors.

2.1. The national exchanges should conduct a pilot trading program, overseen by the SEC, in which select small-cap companies trade under new Small-Cap Trading Rules (STaR). Under STaR:
2.1.1 Participating companies will have market capitalizations below $750 million.
2.1.2 Participating companies should be quoted in minimum price increments of 50.05 and trade only at the bid, the offer or the mid-point between the two.

2.2 The SEC and the national exchanges should begin the process of designing and implementing the STaR pilot as soon as is feasible.

2.3. The STaR pilot design must include a clear methodology for collecting and analyzing data regarding STaR’s effects on small-cap trading. Metrics should include (a) relative level of trading liquidity, (b) changes in institutional ownership, and (c) rate of equity capital issuance.

2.4. The STaR pilot must run long enough to provide a true empirical test of STaR’s effects on the small-cap market.

2.5 At the STaR pilot’s conclusion, the SEC must use the empirical data generated by the pilot to

\(^1\) Morningstar. As of June 2013. "Small-cap" includes small value, small blend, small growth funds.
EXECUTIVE SUMMARY

evaluate whether Small-Cap Trading Rules should apply to small-cap trading on a permanent basis.

The Equity Capital Formation Task Force developed the action steps above to be highly specific, targeted and limited in application only to startups and small-cap companies. In all, the latter represents only 3 percent of trading volume on U.S. equities exchanges.\(^2\)

The health of the U.S. capital markets system is essential to driving critical private sector job growth and by extension, America’s future prosperity. As stewards of this system and the public interest, policy-makers have a responsibility to ensure that our markets remain fair and orderly, and that their benefits reach the largest number of Americans possible. The task force believes that by taking these action steps now, policy-makers can help refuel capital formation for America’s most promising private and public growth companies.

“We should never forget why there is a market. We seem to forget that in all the discussion about market structure.” — Oyvind G. Schanke, Norges Bank Investment Management\(^3\)

\(^{1}\) Bloomberg.

\(^{2}\) http://dealbook.nytimes.com/2013/10/20/wealth-fund-cautions-against-costs-exacted-by-high-speed-trading/?r=0
II. Statement of Purpose

Comprising professionals from across America’s startup and small-capitalization company ecosystems, the Equity Capital Formation (ECF) Task Force formed in June 2013 to 1) examine the challenges that America’s startups and small-cap companies face in raising equity capital in the current public market environment, and 2) develop recommendations for policy-makers that will help such companies gain greater access to the capital they need to grow their businesses and generate private sector job growth. The task force’s efforts have been informed by discussions flowing from The Securities and Exchange Commission’s Decimalization Roundtable (February 2013), which examined the impacts of decimalized pricing of securities on IPOs, trading, and liquidity for small and middle capitalization companies; and from the Capital Access Innovation Summit convened by the Treasury Department and the Small Business Administration in June 2013, which focused on the impact of the JOBS Act of 2012 on capital formation for emerging growth companies and what additional measures might benefit this process. This report outlines the Equity Capital Formation Task Force’s findings and recommendations.
III. Introduction

For generations, the U.S. capital markets have been the envy of the world by driving America's economic growth and generating millions of private sector jobs. The sustained success of this system stems largely from its ability – decade after decade – to develop today's most promising startups into tomorrow's global leaders. It does so by providing those companies with efficient access to the public capital they need to grow and create jobs, and by enabling a wide array of investors to participate directly in that growth through fair and orderly markets. According to the Kauffman Foundation, companies that go public increase their employment levels by approximately 45 percent after their initial public offerings (IPOs). More significantly, for small company IPOs, that number more than triples to 156 percent.¹

By the late 2000s, however, the challenges that innovative startups faced in getting to the public markets, and in realizing the benefits of doing so, had grown significantly. As a result, the number of yearly IPOs dropped significantly between 1996 and 2011, as did the number of listed companies on national exchanges in the U.S. These developments not only robbed the U.S. economy of a generation of leading companies, but led to less capital formation, and, in turn, less job creation. In fact, the U.S. economy may have created 1.87 million² fewer private sector jobs over this time period as a result.

Chart A: Total Equity Listings

The U.S. economy may have created 1.87 million fewer private sector jobs as a result of the IPO market downturn.

¹ Post-IPO Employment and Revenue Growth for U.S. IPOs, June 1996-2010 (May 2012)
² Ritter, Jay R. "Re-energizing the IPO Market." (December 2012)
IV. The Road to the Public Markets

A. The JOBS Act Reopens the On-Ramp

In early 2012, lawmakers took action to address the downturn in the IPO market. Working in a bipartisan manner, Congress passed the Jumpstart Our Business Startups (JOBS) Act, which President Obama signed into law in April 2012. The JOBS Act incorporates a number of innovative measures aimed at reducing the burdens and costs that promising startups faced on the path to the public markets. Most importantly, it applied the principle—already in place for a select group of small companies—that regulatory burdens should be commensurate with a company’s size, and increase as it matures, to a new category of companies called emerging growth companies (EGCs). This new scaled compliance regime aimed to lower the time and cost burdens that EGCs face in preparing to become public companies, and to reduce the risks associated with initiating the IPO process. It also aimed to accomplish these objectives while preserving important investor protections implemented over the prior decade.

B. A Surge of Traffic

Less than two years later, it is clear that the JOBS Act has re-energized interest in the public markets on the part of emerging growth companies. Since the law’s enactment, more than 200 companies have registered with the SEC as emerging growth companies. That represents 79 percent of all companies who have filed to go public over this time. As of October 25, 2013, there were 63 companies in registration for an IPO— including 48 registered as EGCs. Additionally, Renaissance Capital’s Private Company Watchlist estimates that there are 225 IPOs currently in confidential registration or are likely to register soon. The law has also rekindled hope for companies that have been delayed or detoured from the public markets by a decade of adverse market conditions.

94374.019

75% of companies that have filed to go public since the JOBS Act have registered as EGCs.

The JOBS Act has not only renewed interest in IPOs, but has also transformed how startups approach the IPO process while continuing their growth. First, thanks to scaled compliance with provisions such as SOX 404(b), EGCs can focus their capital on growing their companies and creating jobs. Meanwhile, management can focus its attention on strategy, operations and successful execution of company business plans. Second, the law’s “test the waters” provision enables management to build relationships with institutions and research analysts, get feedback on the company’s strategy, and gauge interest from investors before committing to an offering. After receiving valuable market feedback from public company investors, if company management or its board of directors believes the company isn’t ready, the company can pull back without penalty, embarrassment or significant cost outlay. Finally, the law’s confidential filing provision enables EGCs to begin the IPO filing process while still retaining the ability to protect intellectual property and other valuable strategic assets from competitors. In the year after the JOBS Act was signed, 63 percent of companies that registered with the SEC as EGCs used the confidential filing provision.

C. Increased IPO Flow

While the JOBS Act immediately re-energized interest by startups in going public, its impact on the actual number of IPOs has been—as many experts expected—more steady than explosive. As of October 25, 2013, 154 companies had gone public, versus 121 in all of 2012. Similarly, through the same period, 2013

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1 Deologic and Renaissance Capital as of October 25, 2013.
2 Ibid.
4 As of 10/25/2013.
5 Deologic.
produced 53 micro-cap (less than $250 million market cap) IPOs, versus 32 in all of 2012. In terms of
percentage of all IPOs, companies with less than $250 million market cap have constituted 34 percent of IPOs
so far in 2013 — up from 26 percent in 2012.15

The fact that the JOBS Act has helped to spur more IPOs has benefitted EGCs and investors alike. Through
the third quarter of 2013, EGCs had raised a total $26.2 billion in equity capital — capital that can be used to
advance product development, scale-up production capacity, build out marketing and distribution
capabilities, and — most importantly — hire new employees. In addition, the value accrued to public market
investors in these IPOs has been significant. The average EGC IPO currently trades at 64 percent above its
initial offering price, compared to 30 percent for non-EGCs.17

In addition to its immediate impact on the IPO space, the JOBS Act has the potential to deliver even greater
benefits to startups, investors and the American public in the future. By restoring the IPO as a credible
option for EGCs and their investors to raise capital to stay independent, the JOBS Act can reignite interest in
game-changing technologies and revive the viability of business models that, without the prospect of an IPO,
entrepreneurs and investors have deemed too capital-intensive to succeed. These are the very types of
companies that can spawn entire new industries — providing decades of job creation and U.S. economic
growth in the process. However, such outcomes are far from guaranteed, due to some difficult conditions
that persist beyond the IPO “on-ramp” and out on the public market.

Chart B: JOBS Act Impact – the Stats

<table>
<thead>
<tr>
<th>On the On-Ramp:</th>
<th>63 companies currently in registration with the SEC.17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Backlog:</td>
<td>225 estimated companies in confidential registration for an IPO or deemed close to registering for an IPO per Renaissance Capital’s Private Company Watchlist.</td>
</tr>
<tr>
<td>Sparked Interest:</td>
<td>More than 200 companies have registered with the SEC as emerging growth companies since the JOBS Act — representing 79% of all companies who have filed to go public over this time.18</td>
</tr>
<tr>
<td>IPO Confidential:</td>
<td>One year post-JOBS Act, 63% of companies that registered with the SEC as EGCs used the confidential filing provision.19</td>
</tr>
<tr>
<td>Trending Up:</td>
<td>Companies with less than $250 million market caps have constituted 34% of IPOs so far in 2013 — up from 26% in 2012.20</td>
</tr>
<tr>
<td>Dollars Raised:</td>
<td>$28.5 billion in proceeds from EGC companies.17</td>
</tr>
<tr>
<td>Aftermarket Performance:</td>
<td>EGC IPOs are up average of 64.2% offer/current versus 30.4% for the non-EGC IPOs in the comparable period.21</td>
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15 Ibid.
16 Bloomberg; Dealogic.
17 Dealogic and Renaissance Capital as of October 25, 2013.
18 Ibid.
19 Ibid.
21 Ibid.
22 Bloomberg; Dealogic.
Chart C: JOBS Act Impact — the Stories

Bluebird Bio (NASDAQ:BLUE)
Founded 1992 / IPO 2013
Focus: Innovative gene therapies for severe genetic and orphan diseases.

Nick Leschly, CEO:
“Our IPO has enabled us to plan and hire against a more aggressive strategic plan. Under the JOBS Act, the ability to file confidentially was incredibly important because it enabled us to keep more strategic options on the table, which is important in the face of the uncertainty involved with an IPO. In addition, the ability to ‘test the waters’ provided us visibility into our potential investor base, which allowed us to make more informed decisions about our strategic direction.”

LifeLock (NYSE:LOCK)
Founded 2005 / IPO 2012
Focus: Leading provider of proactive identity theft protection services for consumers and identity risk assessment and fraud protection services for enterprises.

Todd Davis, CEO:
“LifeLock’s decision to go public and raise the capital needed to invest in the technology and people we need to protect Americans from rapidly-evolving threats of identity theft was one of our most important strategic decisions of the past few years. While the process was appropriately rigorous, the greater access to resources to re-invest in our business made it a good choice. We should do whatever we can to streamline the process and make the option more attractive and easier for companies in the future.”

Portola (NASDAQ:PTLA)
Founded 2003 / IPO 2013
Focus: Fighting blood clots and bleeding disorders.

Mardi Dier, CFO:
“Prior to our IPO, we were operating with a thin staff due to the uncertain financing environment. Since then, we have increased our employee base by 20 percent and we expect to grow even more. The ‘testing the waters’ provision of the JOBS Act gave us extra time with investors to tell our story, and gave investors extra time to do their homework on us. I think that was key to our IPO’s success.”

Applied Optoelectronics (NASDAQ:AAOI)
Founded 1997 / IPO 2013
Focus: Advanced optical devices, packaged optical components, optical subsystems, laser transmitters, and fiber optic transceivers.

James Dunn, CFO:
“With the capital provided by the IPO, we plan to add two production lines in the U.S. With that expansion, we expect to drive revenue and increase overall production, which will ultimately lead to additional jobs being created in the U.S. – specifically in fast-growing R&D. Our biggest challenge will be to understand that this is a long-term effort, and that the IPO is only the beginning of that effort.”
V. Roadblocks for Startups and EGCs Remain

A. Small Startups Need More Options for Capital Formation

Amidst the IPO market downturn of the 2000s, the market segment representing IPOs under $50 million in proceeds experienced the steepest decline. Formally accounting for 80 percent of yearly IPOs in 2002, under-$50 million IPOs fell to 8 percent since 2012. While this segment has witnessed a modest rebound in the wake of the JOBS Act, this task force believes that small startups need more options for accessing public capital than just an IPO.

Even with the On-Ramp provisions, the process of undertaking an IPO and becoming a public company remains expensive. For the smallest companies, the five-year window for scaled compliance may close before the company has built sufficient revenue to meet the costs of full public company compliance. Similarly, small private companies as well as publicly traded micro-caps may lack the financial resources to undertake the full registration process to raise smaller amounts of capital or achieve listing on a national exchange. Such companies still need capital to continue product development, build their marketing and distribution capabilities and hire new employees—just not on the scale to justify the extra levels of cost and risk that a small IPO or follow-on offering would incur. However, due to their size and their risk profiles, raising capital from private networks or through debt financing remains difficult for small startups. For this reason, promising small companies need a viable option between these conventional methods and an IPO to raise the capital they need to grow.

WHO NEEDS REGULATION A+?

| Regulation A+ could provide small private companies and micro-cap companies with a scaled, cost-efficient option for raising public capital. Small biotechnology companies provide a poignant example: Many have market caps in excess of $250 million (because investors value these companies based on the present value of future potential earnings), but can generate very little revenue deep into their lives as public companies. This is because their core products can remain in the research, development and testing phases for a decade or more. These expensive processes, coupled with daily operating expenses and public company regulatory compliance costs, can significantly limit the resources these companies can deploy for hiring, product development and growth. Providing these companies with more cost-efficient options for raising capital could mean the difference between whether or not a significant medical breakthrough ultimately reaches the hands of doctors and patients. |

Title IV of the JOBS Act aimed to provide a lower cost alternative to an IPO by raising the offering limits for “small public offerings” under Regulation A and delegating authority to the SEC to resolve other issues that have limited the use of Regulation A prior to the JOBS Act. These issues include the costs of disclosure and compliance obligations for small companies under Regulation A, relative to the limited offering size, and the qualification requirements under state securities laws.

16 Ideology.
So far, Title IV has not achieved the desired result, as Regulation A remains virtually unused.\(^7\) The reasons for this are two-fold: 1) The SEC has not yet issued the rules mandated in Title IV, and 2) Title IV does not adequately address one of the key barriers limiting the appeal and utility of Regulation A: preemption of state securities laws. As long as these issues remain unresolved, this otherwise low-cost and viable alternative tool for capital formation will remain unavailable to promising young startups.

"Without legislation to supplement the JOBS Act, Emerging Growth Companies could be left to die on the vine, in reach of vital public capital but unable to fully access it." —Kenneth Mach, CEO, Chimerix, Inc.
B. Post-IPO, Small-Caps and Investors Need Liquidity for Capital Formation

In the style of the landmark Securities Act of 1933, the JOBS Act focuses on the process by which a company enters the public markets. However, while an IPO may be the most important step in an emerging growth company’s development, it is only Day One of that company’s life in the public market. Today, many small-cap companies are finding life there extremely difficult – not necessarily because of their operating performance, but rather due to a number of challenges afflicting the aftermarket support system on which newly public companies depend for follow-on capital raises necessary for future growth.

Chief among these challenges is an illiquid trading market for small-cap stocks. In its simplest sense, a liquid market is one in which buyers and sellers openly display their price and volume trading expectations in order to facilitate the execution of a stock trade. This type of “efficient” market balances the broad-based needs of issuers, individual investors and their agents. By attracting the broadest base of investors, companies achieve a level of liquidity that is commensurate with their size. Absent a liquid market, small-cap companies cannot attract long-term institutional investors, including those that administer mutual funds and pension funds, who are necessary to provide the growth capital required by these companies to fund their post-IPO growth needs. Long-term investors eschew illiquid markets because they are affected by what is commonly referred to as an “illiquidity tax,” under which the investor materially moves the price of a stock up when they accumulate a position in it, and down when they sell that position. The “illiquidity tax” makes it uneconomical for many long-term institutional investors to invest in small-cap stocks relative to larger stocks with more trading liquidity.

For this reason, investors generally value liquid stocks more highly than illiquid stocks. That’s important because a company’s market valuation plays a key role in determining how much equity capital the company can raise, and at what cost, in future financing events over its lifetime. Companies with liquid stocks that have demonstrated they can achieve a fully-valued stock price can more easily issue follow-on offerings, or use their stock as currency to fund acquisitions, compensate employees and compete for talent. By contrast, those public companies with a poor trading liquidity profile are sometimes unable to raise additional capital through the public markets, or can only do so at a higher cost of capital. This dynamic can constrain their growth and, in many cases, can defeat the purpose of going public in the first place.

Unfortunately, over the past decade and a half, hundreds of companies have learned this lesson the hard way. As a result, secondary market trading liquidity in the small-cap market has become a serious consideration for any company when it weighs the risks and costs of going public versus other financing alternatives or exit strategies. As long as the view from the IPO “on-ramp” suggests that the prospect of taking on all of the additional costs and risks of going public, but struggling to capture the benefits, many startup founders, managers and investors will continue to think twice about choosing to finance their growth via the public market.

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15 ibid.
VI. Recommendations

As discussed in prior sections, the success of the JOBS Act has created an opportunity for market participants and policy-makers to remove additional barriers to capital formation for private startups, EGCS and small-cap companies. In order to improve access to capital for additional small startups and micro-caps, we must give these companies more cost-effective options for accessing investor capital. In order to move more promising small companies from the “on-ramp” to the “freeway,” as well as improve capital formation for liquidity-challenged small-caps, we will need to increase trading liquidity for small-cap companies and the investors who want to invest in them. Doing so will require action by policy-makers and market participants on two fronts:

Improved Access to Capital: Completing the On-Ramp for Promising Small Companies

While the JOBS Act has re-opened the on-ramp to the public markets for many promising startups, small companies for which an IPO may not be cost effective remain in need of alternative options for accessing public capital. Title IV of the JOBS Act recognizes this need by calling for modifications to Regulation A. However, these modifications have not yet been made – leaving many promising small startups and micro-cap companies with the same capital formation challenges they faced prior to the JOBS Act.

Recommendation #1:
Expand access to capital for small startups and micro-caps by completing the JOBS Act’s mandates regarding Regulation A and resolving conflicts with state laws.

Market Structure: Improving Capital Flow on the Freeway

The current market structure is not serving the needs of small-cap companies or the investors who wish to buy and sell their stocks. Specifically, quote increments of 0.01 and the ability to trade in between pennies at fractions of one cent make it difficult for fundamental investors to find adequate trading liquidity in which they can accumulate or exit meaningful investment positions in small-cap stocks. As a result, many institutional investors – including those who invest an estimated $409 billion in small-cap U.S. equities through mutual funds19 – have found it more difficult to invest in small-caps. The resulting lack of liquidity makes it even more difficult for these companies to raise capital beyond their IPOs to fund hiring, product development and expansion of their marketing and distribution capabilities.

Recommendation #2:
Encourage increased liquidity in small-cap stocks by fostering a simpler, more orderly market structure for small-cap companies and investors.

These challenges and recommendations are examined in depth in the following pages.

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19 Morningstar. As of June 2013. “Small-cap” includes small value, small blend, small growth funds.
A. Improved Access to Capital: Completing the On-Ramp for Promising Small Companies

Recommendation #1:
Expand access to capital for small startups and micro-caps by completing the JOBS Act’s mandates regarding Regulation A and resolving conflicts with state laws.

Prior to the JOBS Act, small companies looking for a more cost-efficient option for raising investor capital than an IPO were limited to private placements, a 506(c) offering under Regulation D, or an offering under Regulation A. By design, each option has its limits. In the first two cases, the trading in the resulting security is restricted, and as such, provides less liquidity to investors (the implications of which are described on page 11.) By contrast, a Regulation A offering results in a security that can be traded publicly, but Regulation A has gone virtually unused by startups and micro-caps.

Regulation A provides an exemption for offerings up to only $5 million for issuers who are not subject to the reporting requirements of section 13 or 15(d) of the Securities Exchange Act of 1934 (the “Exchange Act”) immediately prior to the offering. The Regulation A exemption is subject to the filing of a Form 1-A with specified disclosure requirements, allows widespread solicitation, does not require purchaser qualifications and allows unlimited resale of securities purchased pursuant to Regulation A. The reasons for the relative non-usage of Regulation A include the costs of disclosure and compliance obligations relative to the limited offering size (notwithstanding that the disclosure requirements are less than those required by Form S-1) and the often costly and burdensome qualification requirements under state securities laws.

Title IV of the JOBS Act delegates to the SEC the authority to enact regulations to address the issues that have effectively rendered Regulation A non-viable as an alternative for efficient, broad-based capital formation for small businesses. Specifically, Title IV added a new section 3(b)(2) to Section 3(b) of the Securities Act of 1933 (the “Securities Act”), which requires the SEC to enact a new regulation to exempt offerings of up to $50 million in any 12-month period from registration. Additionally, section 3(b)(2) requires that:

(a) such exemption be conditioned upon an issuer filing annual audited financial statements;
(b) the securities shall not be restricted securities;
(c) that section 12(a)(2) civil liabilities will apply;
(d) the securities may be offered and sold publicly; and
(e) the issuer may solicit interest in the offering prior to the filing of any offering, on such terms and conditions that the SEC may prescribe in the public interest or for the protection of investors.

Further, new section 3(b)(2) provides that the SEC may enact other requirements it deems necessary in the public interest and for protection of investors, which may include requiring investors to file an offering statement, as well as ongoing periodic disclosures, with the SEC and prohibiting “bad actors” from availing themselves of the new exemption.

Last, and perhaps most significantly, Title IV amends Section 18(b)(4) of the Securities Act to exempt offerings made pursuant to new section 3(b)(2), provided the securities are offered and sold on a national exchange or offered or sold to a qualified purchaser, as defined by the SEC.

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17 Issuers must also be U.S. or Canadian issuers and may not be: a development stage company with no specific business plan or purpose or has indicated plan is to merge with unidentified company, an investment company, an entity issuing fractional undivided interests in oil or gas rights or similar interests in other mineral rights or disqualified under section 262. Regulation A, 17 C.F.R. §§ 230.251–263 (2012).
19 Currently under Regulation A, issuers are required to provide financial statements but such financial statements need not be audited.
21 Ibid.
other words, state securities laws would be preempted for offerings made under section 3(b)(2) as those securities would be “covered securities”, but only if such securities are traded on a national exchange or are offered or sold to a qualified purchaser.

However, Title IV does not appear to have had, and likely will not have, any measurable impact on the use of Regulation A as a means for small businesses to access capital. The reasons for the relative non-usage of Regulation A include the costs of disclosure and compliance obligations relative to the limited offering size (notwithstanding that the disclosure requirements are less than those required by Form S-1) and the often costly and burdensome qualification requirements under state securities laws.

Absent the enactment of the mandatory or discretionary provisions of Title IV, issuers are limited to current Regulation A, which has been relatively unused. Second, absent clarification or amendment, one of the barriers to more widespread appeal and utility of Regulation A, namely preemption of state securities laws, remains a significant obstacle under Title IV. Specifically, although Title IV provides that state securities laws will be preempted for section 3(b)(2) offerings, this preemption is predicated on the securities being traded on a national exchange or offered or sold to a qualified purchaser. With respect to the former, most small businesses are not likely to have their securities traded on a national exchange and, if required to do so, would incur additional burdensome compliance costs associated therewith. With respect to the latter, until the term “qualified purchaser” is defined, small business issuers are unable to rely on that provision for preemption purposes. Accordingly, section 10(b)(4)(D) in its current form does not adequately resolve the issue of preemption of state securities laws. It would seem incongruous to deem securities sold through Regulation A+ to be freely tradable at the federal level but to remain restricted at the state level, yet that remains the case. Absent resolution of the preemption issue, small business issuers will need to analyze and comply with the securities laws of the various and multiple jurisdictions in which it may offer or sell securities under Regulation A, as amended under Title IV or otherwise. In addition to the significant costs associated with such compliance, it is not clear that compliance with an applicable exemption under state securities laws would permit issuers to take advantage of some of the intended benefits of Title IV and section 3(b)(2), including “testing the waters” or general solicitation provisions of section 3(b)(2).

Detailed Recommendations:

1. Implement Title IV of the JOBS Act immediately so that Regulation A+ becomes a viable option for small startup and micro-cap capital formation.

1.2 Amend Section 10(b)(4)(D) of the Securities Act to permit preemption of state securities laws for:
   (a) all securities offered pursuant to Regulation A or Regulation A+ or
   (b) securities sold pursuant to Regulation A or Regulation A+ provided such securities are offered or sold through a registered broker dealer.

1.3 Alternatively or in addition thereto, define “qualified purchaser” under Section 10(b)(4)(D) in a manner that would enable small business issuers to rely on preemption of state securities laws for Regulation A or Regulation A+ purposes.

1.4 Amend Section 10(b)(4) to clarify that secondary sales of Regulation A and Regulation A+ securities are similarly preempted from state securities laws.

Analysis:

Making “Regulation A+” a reality for small startups and micro-caps will provide these companies with a number of critical benefits in their efforts to raise capital to grow and create jobs in the private sector. It will provide them with a lower cost, less burdensome process for raising public capital – a scaled registration, so
to speak. Although the process involves less rigor than a full registration, there is a level of due diligence and disclosure involved in a Regulation A+ offering that mitigates some of that risk for potential investors. In addition, this process provides early exposure and relationship-building opportunities for offering companies with an investor pool that trades in micro-cap stocks. Similarly, a full Regulation A+ process enables startups and micro-caps to use important JOBS Act options such as “test the waters” and “general solicitation.” Going forward, the Regulation A+ process results in a security that can be traded publicly, which provides more trading liquidity than other options such as a private placement or S06(c) offering. Finally, the entire process provides an invaluable primer for the full registration process, should a company’s growth make a follow-on issue or listing on a national exchange viable options.

The foregoing recommendations, coupled with implementation of ongoing periodic disclosure requirements which are reasonable in scope, balance investor protection concerns with regulatory and compliance costs, and will provide small businesses with a truly viable alternative for efficient, broad-based capital formation.
B. Market Structure: Improving Capital Flow on the Freeway

Recommendation #2:
Encourage increased liquidity in small-cap stocks by fostering a simpler, more orderly market structure for small-cap companies and investors.

Quite a few market observers have chronicled the changes that have occurred in the U.S. equities markets since the mid-1990s. Many have reached a similar conclusion: The rise of electronic trading and the regulations governing order handling, pricing and execution that followed have created a new market structure for equities trading marked by faster execution speeds and lower transaction costs. By 2010, it was estimated that electronic trading accounted for more than 70 percent of equity trades taking place in the U.S. These developments have produced a new generation of algorithm-based trading strategies that focus on high-volume, large-cap stocks and often prioritize speed of execution over price of execution.

Within this new market structure, the economics of large-cap trading remain relatively healthy, as the combination of low transaction costs, low trading commissions and high volume provides sufficient incentive for market makers to create active markets for these stocks. For this reason, the ECF Task Force is not recommending changes to trading practices for large-cap stocks. However, while narrower spreads and lower transaction costs have benefitted many investors, they are not the only meaningful metrics for measuring the health of the overall market ecosystem. Nor do they come without tradeoffs and costs of their own. So far, analysis on the part of many academics and market observers overwhelmingly suggests that these costs are being borne disproportionately by small-cap companies and fundamentals-based investors — both institutional and individual — who want to buy, sell or hold small-cap stocks as part of a long-term investment strategy.

From the small company perspective, the new market economics have put significant strain on the aftermarket support system for small-cap stocks. This effect goes beyond merely suppressing the number of IPOs over the last decade and a half. It’s a structural issue, as the entire support system of small investment banks, institutional sales desks, market makers and research analysts has been decimated by the new market economics. With less support for life after their IPOs, fewer startups may see the public markets as offering the best option in their quest to evolve into large, enduring institutions. In short, they may turn away from the IPO “on-ramp” — whether it’s “open” or not.

<table>
<thead>
<tr>
<th>Chart D: Small-Cap Companies and Capital Formation</th>
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<tbody>
<tr>
<td><strong>Before 1997</strong></td>
</tr>
<tr>
<td>Tick sizes</td>
</tr>
<tr>
<td>Investment banks (acting as a bookrunner)</td>
</tr>
</tbody>
</table>

Source: Baele, David, with E. Kim and J. Mephisto; Grant Thornton; "The Trouble with Small-Tick Sizes," (September 2012)

For institutional investors, the new market structure has made it more difficult and costly to trade, invest in and make markets in small-cap stocks. That’s because many of the new trading strategies — driven by faster execution speeds, lower transaction costs and sub-penny increments — that have proved so effective in large-cap trading actually foster opacity and illiquidity in small-cap trading. The following provides an example of this dynamic at work:

http://blog.themistraltrading.com/to-be-honest/
Suppose an institution were to post an offer to sell a lot of 1,000 shares of a small-cap stock at the price of $5.00. Under the current trading regime, another market participant can quickly “step in front” of that order at virtually no cost by offering to sell shares in the same company at a price that can be as little as 1/10 of a penny lower than the $5.00 ask. Moreover, the trader who is “stepping in front” can execute the trade off-exchange with an incoming order from one of his customers, thereby precluding the original price setter from having its original advertised trade executed.

“The U.S. market has gone through a lot of changes and has become quite complicated — and this complexity of the market creates a lot of challenges for a large investor like us.” — Oyvind G. Schanke, Norges Bank Investment Management, which holds $110 billion in U.S. stocks.13

To defend against the scenario above, many institutional investors and traders now break their large blocks into many series of smaller lots in order to appear to the market as small retail orders. This practice adds extra time and costs to the process of accumulating or exiting significant positions in small-cap stocks. In fact, one estimate puts the costs to the overall market of “stepping in front” of orders at five to 10 times that of any other cost.14 Worse, this practice reduces liquidity in the market for these stocks. In fact, the combination of low liquidity and higher risk in the form of single-stock volatility has prompted many institutions to underinvest in the small-cap market. This is significant for two reasons:

- First, research points to a positive correlation between higher levels of institutional ownership and more liquidity and higher company valuations.15 On the other hand, lower levels of institutional ownership correlate to less liquidity and lower valuations. As outlined on page 11, this lack of liquidity can lead to lower valuations and constrain a company’s ability to raise capital. In turn, this makes it more difficult to hire more employees, invest in research and development, and increase the overall scale and scope of its enterprise. In this sense, small companies once again bear the brunt of the new market structure’s cost.

- Second, the costs and effects of small-cap market trading dynamics on institutional investment strategies are not limited to the institutions themselves. That’s because individual investors are increasingly participating in the equities markets through mutual funds (see Chart F), most of which are managed by institutions. For many Americans, mutual funds are the only choices offered through their employer-provided retirement plans. In fact, according to a recent survey by the ICI, 93 percent of mutual fund owners invest in such funds in order to build their retirement funds.16 Domestic equity small-cap mutual funds now hold $409 billion in assets17 — much of it on behalf of U.S. households. For these reasons, the traditional distinction between institutional and individual investors — and what market dynamics benefit one or the other — has become increasingly difficult to draw clearly. What is clear is that institutional participation in the small-cap market affects millions of individual investors who access the equities market through no other investment vehicle. Increasing this participation on the part of individual investors could connect billions of additional investment dollars from average Americans with the emerging growth companies that need those dollars most for capital expansion — and that offer the greatest potential for long-term growth.

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13 http://dealbook.nytimes.com/2013/10/20/wealth-fund-cautions-against-costs-entailed-by-high-speed-trading/?_r=0
14 ibid.
16 Investment Company Institute. 2013
17 Morningstar. As of June 2013. “Small-cap” includes small value, small blend, small growth funds.
Of course, millions of individual investors also participate directly in the equities market without institutional products like mutual funds or pensions. Some argue that these investors are the primary beneficiaries of the current market structure due to the lower transaction costs they now enjoy. However, the task force believes that this argument misses the bigger picture. According to CapIQ, retail investors own nearly 75 percent of all small-cap company** shares in the market. By and large, these investors own small-cap stocks because they aim to realize price appreciation over the long term as those companies grow. Unfortunately, for most small-caps, that price appreciation will be muted without the liquidity that only comes from robust institutional participation in the market. For this reason, the ECF Task Force believes that a more liquid

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**Ibid.


*** Ibid.

Morningstar. As of June 2013. “Small-cap” includes small value, small blend, small growth funds.


** Defined as companies with market caps under $250 million.
small-cap market with greater participation by institutions will offer greater potential benefits to individual investors over the long term than price improvement on their trades.

<table>
<thead>
<tr>
<th>Chart G: U.S. Equities Ownership &amp; Trading Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub $750 Market Cap</td>
</tr>
<tr>
<td>Institutional Ownership</td>
</tr>
<tr>
<td>Retail Ownership</td>
</tr>
<tr>
<td>Research Analysts</td>
</tr>
<tr>
<td>30D ADTV</td>
</tr>
<tr>
<td>30D SADV</td>
</tr>
</tbody>
</table>

Source: CapIQ as of December 23, 2015. Includes all major U.S. exchanges.

Given the dynamics outlined above, the Equity Capital Formation Task Force believes that the current market structure is not adequately serving the needs of small-cap companies or the investors who wish to buy and sell their stocks. For this reason, this task force recommends developing and implementing new “rules of the road” for the trading of small-cap stocks. Specifically, public companies with market capitalizations of below $750 million should be quoted at minimum increments of five cents, and that they should trade at only the bid price, the ask price, or the mid-point between the two. The task force believes that these Small-Cap Trading Rules (STAR) will foster a market structure for small-cap stocks that will provide for fundamental trading liquidity in these issues.

Unfortunately, there exists no method for testing or studying STAR’s potential effects outside of the implementation of a program that can observe live trading over a significant period of time. Therefore, these rules should be implemented as part of a carefully considered, well-designed pilot trading program that limits its impact to small-cap stocks, tests the effects of STAR empirically over a significant time period, and enables the SEC to determine whether STAR should be implemented permanently for small-cap trading.

Detailed Recommendations:

2.1. The national exchanges should conduct a pilot trading program, overseen by the SEC, in which select small-cap companies trade under new Small-Cap Trading Rules (STAR). Under STAR:

2.1.1. Participating companies will have market capitalizations below $750 million. The $750 million market cap criterion was selected by the task force to focus the benefits of STAR on only those companies that need them, without impacting market structure for the vast majority of the market. According to our research, a cap of $750 million will limit STAR’s effects to only 2 percent of all trading volume on U.S. exchanges. 34

2.1.2. Participating companies should be quoted in minimum price increments of $0.05 and trade only at the bid, the offer or the mid-point between the two. Most of the analysis of current market structure has zeroed in on increasing minimum quote increments as the best option for mitigating the effects of the new market structure on the IPO and small-cap ecosystems. This theory posits that larger spreads will induce liquidity in small-caps, which in turn may eventually restore incentives for traditional aftermarket support. While this task force agrees with that assessment, its members also believe that widening minimum quote increments alone is not enough to affect all of the trading practices that currently inhibit small-cap liquidity.

34 Bloomberg.
For this reason, the task force has included the trading stipulations outlined above. Under STAR, both institutional and individual investors can be matched at the moment of a trade, and the internalization of order flow will still be able to provide price improvement for individual investors, but only at the midpoint between the bid and offer. By limiting the number of increments at which a small-cap stock can trade to the bid price, the offer price or the midpoint between the two, STAR will eliminate sub-penny increments and create fewer total points at which a market participant with a customer order in hand can “step in front” of an order — thus reducing the incidence of this practice. In turn, this will encourage fundamental institutional investors and fundamental market makers to post more liquidity on their bids and offers.

2.2. The SEC and the national exchanges should begin the process of designing and implementing the STAR pilot as soon as is feasible. As mandated by the JOBS Act, the SEC studied and reported on the impact of smaller spreads and decimalization (collectively referred to as “tick sites”) on capital formation. However, after its review of academic literature, the SEC’s report to Congress in July 2012 stated that further study was required to acquire the requisite data to draw a conclusion. During and since that time, the SEC has engaged in dialogue with the national exchanges on the possibility of developing an alternative market structure for small-cap trading. The Equity Capital Formation Task Force understands that this dialogue is ongoing, but this task force also believes that the time for taking action is now. That is because for each day that the U.S. small-cap ecosystem underperforms, Americans potentially lose innovative products and services, tax revenue and new jobs. Ultimately, the SEC must act as the final arbiter of the planning and implementation process. In this role, however, they must solicit and weigh input from all stakeholders in this process, as well as consider all relevant research and data that may inform the implementation plan.

2.3. The STAR pilot design must include a clear methodology for collecting and analyzing data regarding STAR’s effects on small-cap trading. This methodology should measure the effects of STAR through analysis of the following metrics:

(a) Relative level of trading liquidity. Relative level of trading liquidity will be measured by any changes in the number of stocks traded (more than 5,000 shares), number of trades (absolute), displayed liquidity (quote size), Average Daily Trading Volume, and single-name stock volatility.

(b) Changes in institutional ownership. Increases in institutional ownership would be desirable, both in number of institutions and as a percentage of ownership, because institutions generally provide higher trading volume.

(c) Rate of equity capital issuance. Higher rates of equity capital issuance would be a marker for lower costs of capital because issuers would resist issuing equity capital at depressed prices.

2.4. The STAR pilot must run long enough to provide a true empirical test of STAR’s effects on the small-cap market. Under the pilot, STAR must remain in effect long enough to allow for meaningful data capture and analysis across multiple business cycles and market environments. STAR must also remain in effect long enough to allow or encourage market participants to adjust their trading practices and/or business models to address potentially long-term market changes engendered by STAR. Otherwise, market participants may see less risk in simply “waiting out” the pilot, as opposed to changing their practices to capture or defend against resulting market effects.

2.5. At the STAR pilot’s conclusion, the SEC must use the empirical data generated by the pilot to evaluate whether Small-Cap Trading Rules should apply to small-cap trading on a permanent basis.

Analysis

While the factors and market dynamics behind the changes in the U.S. equities market are complex, the underlying economic imperative is relatively simple. If we want investors to assume the risks and extra costs inherent in trading small-cap stocks, market structure must provide the potential for profit in doing so. The
Equity Capital Formation Task Force believes that larger minimum quote increment sizes and fewer price increments at which to trade will help produce this outcome. That’s because the combination of these two important changes will allow for a simpler, more efficient market by enabling fundamentally oriented investors to more comfortably increase the posted size of their bids and offers while having to defend themselves less often against the practice of “stepping in front” by other market participants. Price improvement will still take place for a number of reasons, but it will do so at fewer and wider increments. As a result, the task force believes that these changes will encourage greater liquidity in small-cap stocks for investors.

Over time, the return of liquidity to the small-cap market may lead to a recovery of the aftermarket support system for small-cap stocks. With some of the economic incentives for small-cap trading restored, institutions may begin to invest resources in rebuilding their market-making and research functions. Research is a critical component of the information investors need to discover stocks, make informed investment decisions, and achieve positive outcomes. Yet, research can be scarce in today’s market environment. In fact, nearly 29 percent of all exchange-listed companies have no “meaningful” analyst coverage of their stocks. Among companies with market caps of less than $250 million, 55 percent lack meaningful coverage. Put another way, investors cannot access meaningful analyst research on more than half of all micro-cap stocks.

For companies without meaningful analyst coverage, the consequences for long-term capital formation are significant. There is a causal relationship between high-quality analyst coverage and a stock that is widely held, actively traded and fully valued. Correspondingly, the absence of coverage can lead to low visibility among investors, limited liquidity and lower market valuation relative to peers. This also results in higher illiquidity taxes paid by the individual investors who overwhelmingly own their stocks.

### Chart H: Institutional vs. Individual Ownership of All U.S. Listed Stocks

<table>
<thead>
<tr>
<th>Mkt Cap Range</th>
<th>Median Market Cap</th>
<th>Institutional Ownership</th>
<th>Individual Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5M – $50M</td>
<td>527.4</td>
<td>10.7%</td>
<td>69.3%</td>
</tr>
<tr>
<td>$51M – $100M</td>
<td>71.7</td>
<td>19.5</td>
<td>80.5</td>
</tr>
<tr>
<td>$101M – $250M</td>
<td>171.7</td>
<td>35.8</td>
<td>64.2</td>
</tr>
<tr>
<td>$251M – $500M</td>
<td>348.4</td>
<td>49.3</td>
<td>50.7</td>
</tr>
<tr>
<td>$501M – $1BN</td>
<td>712.8</td>
<td>70.0</td>
<td>30.0</td>
</tr>
<tr>
<td>$1BN +</td>
<td>3,448.3</td>
<td>84.0</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Source: Data from S&P IQ; methodology by Keating Investments.

In conclusion, the Equity Capital Formation Task Force believes that the combination of wider quoting increments and limited execution prices provided by SIF will bring back the fundamental institutional investors necessary to provide additional trading liquidity to small-cap stocks – and the positive equity capital formation that accompanies it. It must be noted that this task force does not make recommendations for changing market practices lightly. Nor is it suggesting that the market structure be changed for trading in

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45 Keating, Tim. Keating Investments, “Analyzing the Analysts: A Survey of the State of Wall Street Equity Research 10 Years after the Global Settlement” (January 2013). “Meaningful” is defined as having at least one analyst from the approximately 150 firms included on either the Institutional Investor or StarMine list of analyst rankings.


47 Ibid.
larger companies, where the bulk of the positive effects of decimalization are most prevalent. Again, the small companies that would be affected by STARR account for only 2 percent of all trading volume on U.S. exchanges. 54

That may seem like a small segment of the market on which to focus, but it is from where tomorrow’s leading U.S. companies will grow. For this reason, market participants and policy-makers must seize this opportunity to nurture this critical ecosystem. Critics may argue that the need for such nurturing proves that many of these companies do not belong in the public market. Such an argument is short-sighted and unfair. Every small-cap company should have the opportunity to succeed or fail based on its fundamental performance and the willingness of long-term investors to provide it with capital for growth—not because the mechanics of how stocks are bought and sold today, versus 20 years ago, has changed. STARR will help restore that opportunity.

54 Bloomberg.
VII. The Road Ahead

America’s capital markets work because they are fluid, dynamic, innovative and responsive. As stewards of these markets, we must embrace these same traits in our management of them. By acknowledging the issues outlined in the preceding sections, and by taking the recommended actions, this task force believes that market stakeholders will fulfill that responsibility. However, we must also see the bigger picture, and anticipate those roadblocks that lie beyond those we currently undertake to remove.

In this context, the Equity Capital Formation Task Force has identified two additional facets of the U.S. capital markets ecosystem that market participants and policy-makers will need to address in the wake of this report. These concern equities market research, and the regulatory landscape that emerging growth companies and other small-cap companies face – from the day they are founded to their daily operations in the public markets.

As described in the preceding market structure section, analyst research is a critical component of the information investors need to discover stocks, make informed investment decisions, and achieve positive outcomes. Yet the amount of research published by regulated, accredited research analysts and available to investors regarding many small-cap companies is insufficient for supporting requisite trading liquidity in those stocks. Recognizing the important role that equity research plays in the IPO process, the JOBS Act sought to address some of the limitations surrounding equity research for newly public companies. However, it did not change many of the rules governing liability in publishing research. As a result, the bar for publishing research remains high, so much so that many investment banks have decided that it is not worth the risk – especially where small-cap stocks are concerned. This situation has created an anomaly in the quality and flow of market information available to small-cap investors. In the absence of research from highly educated, highly qualified – and highly regulated – research analysts who work for broker-dealers, the majority of information available to small-cap investors now comes from unregistered, unregulated, non-accredited bloggers and other commentators who require only an internet connection to fill the information void.

Regarding the regulatory landscape, the creation of the “emerging growth company” category and the “on-ramps” in the JOBS Act signaled the growing recognition among policy-makers of the need for scaled securities regulations, as opposed to a one-size-fits-all approach. However, these provisions are still exceptions to the rules – quite literally. They do not repeal any of the regulations that were steering promising young companies away from the public markets; they merely provide narrow and temporary relief from those regulations. Nor do they represent explicit mandates for future rulemaking – despite the encouraging precedent they provide. However, it does make sense to build on the precedent set by the JOBS Act and institute protocols that ensure that all new regulations take into account the specific capital formation needs and job creation abilities of EGCs. Simply put, regulations that are appropriate to impose upon large-cap companies like IBM and General Electric may create disproportionate burdens on emerging growth companies.

Granted, fully opening the on-ramp and fostering a more orderly flow of traffic on the public freeway require more immediate attention than the issues above. However, as we make progress on the latter, we must begin to look at how we can enable more companies to pursue IPOs, create jobs and grow in the public markets – where investors can participate in that growth. The ECF Task Force believes that the health of the research ecosystem and the flexibility of our regulatory approach can play direct roles in effecting these outcomes. The members of the Equity Capital Formation Task Force look forward to participating in that conversation.
VIII. Conclusion

As America’s economy continues its slow but steady climb out of the Great Recession, the U.S. capital markets must once again lead the way by driving private sector job creation and growth. The Equity Capital Formation Task Force believes our system can do so, but only if it continues to provide America’s most promising startups and small-cap companies with the public capital they need to grow, and continues to provide investors with the opportunity to participate in that growth.

As stewards of the markets and of the public interest, policy-makers have a responsibility to ensure that those markets remain fair and orderly, and that their benefits reach the largest number of Americans possible. This is especially critical now that so many Americans invest in the equities market as part of their retirement strategies. Congress and President Obama recognized this in 2012 when they enacted the JOBS Act, whose initial success has proved the efficacy of scaling regulations and reducing the risks and costs for emerging growth companies looking to going public. The Equity Capital Formation Task Force believes that policy-makers now have a critical opportunity to seize the momentum generated by the JOBS Act’s success and apply its principles more broadly to benefit even more promising small companies — now and in the future. That’s why the members of this task force stand ready to assist market participants and policy-makers in fostering dialogue regarding the issues addressed by this report, and in taking any actions that result from our recommendations.

By doing so, all of us can help refuel capital formation for America’s innovative small companies. We can energize U.S. job creation and economic growth. And we can ensure that the road from innovative young startup to Fortune 500 Company and global leader continues to run directly through the U.S. capital markets.
IX. Appendices

Appendix A – Glossary of Key Terms

aftermarket: the trading of a stock between investors, subsequent to its IPO. Also called the secondary market.

emerging growth companies (EGCs): a new category of companies created by the JOBS Act. To qualify as an EGC, a company must have revenue of less than $1 billion in the most recent fiscal year, or a public float (excluding affiliates) below $700 million.

fundamentals: information about a company such as revenue, earnings, assets, liabilities and growth that analysts and investors use to value that company’s stock.

individual investor: a person who buys and sells stocks for his or her personal account, as opposed to on behalf of an institution or other entity. Also known as a “retail investor.”

initial public offering (IPO): a private company’s first sale of stock to investors on the public market. Companies do this to raise capital for growth.

institutional investor: a business entity that buys and sells stocks on behalf of clients or itself. Institutions generally work with large amounts of capital and operate under fewer protective restrictions regarding trading activities than individual investors. Examples include asset managers, mutual funds, hedge funds, insurance companies and pension funds.

issuer: a company that has created shares of stock to sell to investors.

gle cap: shorthand for “large market capitalization” or a company/stock that meets the criteria. Large-caps are the biggest companies in the markets, with market valuations of above $5 billion to $10 billion.

market maker: a regulated broker-dealer firm that facilitates trading in a particular security by maintaining an inventory of that security, advertising buy and sell quotes for it, and trading from that inventory to fill or match orders.

position: ownership of a particular stock.

price improvement: offering/providing a better price at execution on a stock than the price quoted at the time of the order.

small-cap: shorthand for “small market capitalization” or a company/stock that meets the criteria. In this report, it refers to companies with market valuations below $1 billion.

tick size: the smallest increment at which the price of a stock is quoted. Stocks on the national stock exchanges trade at $0.01 minimum tick sizes.

trading liquidity: the ability of investors to buy or sell large blocks of a company’s stock without materially affecting the price. This ability is affected by a number of factors, including market capitalization, trading volume, research coverage and visibility among investors.
Appendix B — Committee Details

About the Equity Capital Formation Task Force

Comprising professionals from across America’s startup and small-capitalization company ecosystems, the Equity Capital Formation (ECF) Task Force formed in June 2013 to 1) examine the challenges that America’s startups and small-cap companies face in raising equity capital in the current public market environment, and 2) develop recommendations for policy-makers that will help such companies gain greater access to the capital they need to grow their businesses and generate private sector job growth. The task force’s efforts have been informed by discussions flowing from The Securities and Exchange Commission’s Decentralization Roundtable (February 2013), which examined the impacts of decentralized pricing of securities on IPOs, trading, and liquidity for small and middle capitalization companies; and from the Capital Access Innovation Summit convened by the Treasury Department and the Small Business Administration in June 2013, which focused on the impact of the JOBS Act of 2012 on capital formation for emerging growth companies and what additional measures might benefit this process.

Members

We should note that the members of the task force listed below participated as individuals and not as representatives of their organizations. Thus, their input for this report and the positions contained herein do not necessarily reflect the views or positions of the organizations for which they work or are affiliated.

Issuers & Investor Relations:

- Jeff Corbin, CEO, KCSA Strategic Communications
- Charles Crain, Manager, Policy & Research, BIO
- Kenneth Moch, President & CEO, Chimerix, Inc.

Public Company Investors:

- Cheryl Cargie, Head of Trading, Ariel Investments
- Kevin Cronin, Global Head of Trading, Invesco
- Jason Vedder, Head of Trading, Drifteous

Venture Capitalists:

- Jennifer Connell Dowling, Senior VP Federal Policy, National Venture Capital Association
- Timothy J. Keating, President, Keating Investments
- Scott Kupor, Managing Partner, Andreessen Horowitz; Task Force Co-Chairman

Academicians:

- Hal S. Scott, Director, Committee on Capital Markets Regulation

Investment Bankers:

- Carter D. Mack, President, JMP Group Inc.
- Tom O’Mara, Co-Head of Equities, Cowen and Company
- Jeffrey Solomon, Chief Executive Officer, Cowen and Company; Task Force Co-Chairman

Securities Attorneys:

- Jorge A. del Calvo, Partner, Pillsbury Winthrop Shaw Pittman
- Joel Trotter, Partner, Latham & Watkins
APPENDICES

Exchanges & Trading Organizations:
- Reagan Anderson, Vice President, Government Affairs, NYSE Euronext
- Terry G. Campbell, Head of Global Government Relations, NASDAQ OMX
- James Toes, President & CEO, Security Traders Association
Appendix C — Acknowledgements

The Equity Capital Formation Task Force wishes to express its gratitude to the following individuals, whose input and expertise contributed to the preparation of this report. Please note that their appearance on this list does not imply endorsement of this report or its recommendations.

Joshua Green, General Partner, Mohr Davidow Ventures; Chairman, National Venture Capital Association
William Heyman, Vice Chairman & CIO, Travelers; Former Director of the Division of Market Regulation, SEC
Stephen Holmes, General Partner, InterWest Partners; Member, SEC Investor Advisory Committee
Laura Cox Kaplan, U.S. Government, Regulatory Affairs and Public Policy Leader, PwC
Lawrence Leibowitz, COO, NYSE Euronext
Kate Mitchell, Partner, Scale Venture Partners; IPO Task Force Chair
John Stanley, Analyst, Cowen and Company
David Weild, Founder, Chairman, IssaWorks and Weild & Co.
Nancy Wu, Director, Cowen Group, Inc.
The U.S. Need For Venture Exchanges

Recommendations for the creation of Congressionally-mandated stock exchanges designed to support small-cap companies and their investors and provide the necessary infrastructure to support a resurgence in innovation, job growth and the American Dream.

March 4, 2015
By David Weild and Edward Kim
Contents

Executive Summary .................................................................................. 3
Need for Dedicated Small-Cap Exchanges ............................................. 4
Viewed the World Over .......................................................................... 8
Large Cap Bias Everywhere We Look .................................................. 10
The Early NASDAQ, London AIM and Toronto TSX Venture Exchanges ................................................................. 12
Recommendations for Venture Exchanges ............................................. 16
Conclusion .............................................................................................. 21
Appendix .................................................................................................. 22
Contact Information ................................................................................ 23
About IssuWorks | About Weld & Co. ....................................................... 24
About the Authors ................................................................................... 25

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Executive Summary

The United States needs a “Venture Exchange” construct that will expand access to capital for entrepreneurs, enable earlier public participation in the company life-cycle, and attract aftermarket support (e.g., research, sales and capital commitment by market makers). One-size-fits-all stock markets, optimized for large cap trading, have been a significant growth deterrent in the U.S., causing a dramatic and abrupt decline in small IPOs. The U.S. fell from 1st place to 12th in small IPO output behind many smaller economies, and fell to 24th out of 26th in small IPO output on a GDP-weighted basis ahead of only Mexico and Brazil\(^1\) dating back to the 1990s and the widespread adoption of low-cost electronic markets. Certain foreign markets have benefited from their regulators and legislators recognizing the fundamentally different needs of small cap stocks by creating entirely separate markets (what the authors refer to as “Small-cap” or “Venture” exchanges) that embrace lower-cost disclosure models and higher per share market-making incentives. The authors make recommendations for legislators convinced that the United States can reestablish the small IPO market and its associated ecosystem to its former luster as “The stock market that was the envy of stock markets across the world.”

Need for Dedicated Small-Cap (Venture) Exchanges

While pundits are popping champagne corks in celebration of the best IPO market since the dot com bubble ended in 2000, we sound a note of alarm. While 2014 was the best IPO market in 14 years, it generated fewer IPOs than what is required to stop the U.S. listed markets from shrinking. There were 284 operating company IPOs in 2014—a pitiful number for a ‘bull market’ (see stock chart below). It takes 360 new listings per year for U.S. stock markets to break even and it takes 520 IPOs a year to keep up with 3% GDP growth rates. We have the largest economy in the world. On a GDP weighted basis, if the United States was performing at the level of some of the better markets (e.g. Canada, U.K., Singapore), the United States would be enjoying an average of 950 IPOs a year. We estimate that the difference between the number of IPOs that we have been doing since 2001 (approx. 150 per year), and what we believe we should be doing (upwards of 950 per year) is worth an incremental 10 million jobs to the U.S. economy.

Despite major bull markets from 2002-2007 and 2010-2014, the IPO market has not recovered to its pre-Dot Com Bubble size (1991-1995)

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3 Ibd.
The inescapable conclusion is that while the JOBS Act has helped IPOs, it only scratches the surface of what must be done to regain our stature. Speak with current and former stock exchange officials anywhere in the world, and most foreigners say that we’ve overregulated, overstuffed and stifled the very IPO market that once was the source of their envy: The IPO market of the 70’s, 80’s, and 90’s which was the bedrock of U.S. economic leadership in such industries as software, semiconductors, personal computers and biotechnology.

On October 11, 2011, the Wall Street Journal published an OpEd by one of the authors of this paper entitled, “How to revive small-cap IPOs.” In it, we first called for the creation of dedicated “small-cap” or Venture Exchanges:

*One-size-fits-all stock trading has become a disaster for all but our nation’s largest companies. Our rush to cut trading spreads and commissions has made large caps even more active—but we’ve abandoned the entrepreneur in the process. These are the people who take on most of the business risk and job creation in this country. With such inhospitable stock markets, mergers and acquisitions have become virtually their only outlet to realize value for their hard work.*

*And as we’ve so often seen during this tough economy, M&A generates job cuts, not new jobs. That’s why young, dynamic companies need renewed capital-market support so they can grow independently without being forced to sell.*

*What’s needed now is a new, parallel market for public companies under $2 billion in value. Trading rules in this new market would allow for higher commissions, which would provide adequate incentives for small investment firms to get back into the business of underwriting and supporting small-cap companies.*

Small capitalization stocks have strikingly different characteristics from large capitalization stocks. Small cap stocks generally lack natural visibility, natural followings and natural liquidity. Small cap stocks trade assymmetrically: Big buyer, no seller. Big seller, no buyer. So, it should come as no surprise that today’s “one-size-fits all” market structure, optimized for low-cost trading, index funds and computer-based trading, has precipitated a collapse in the ecosystem that supports these companies. Logically, this is why the United States has seen a decline from nearly 9,000 listed companies in 1997 to approximately only 5,000 today. If the SEC and Congress had not changed market structure beginning with the Order Handling Rules in 1997 and Regulation ATS (Alternative Trading System) in 1998, culminating in Decentralization in 2001, Sarbanes Oxley in 2002 and Regulation NMS (National Market System) in 2006, the American people would enjoy more than 13,000 listed companies versus the current 5,000 we currently have – and more than 10 million incremental jobs.

Prior to 1997, the United States had a small-cap “exchange” with a different structure: It was the dealer market, otherwise known as NASDAQ or the National Association of Securities Dealers Automated Quotation System. Stock trading on this market was quoted, not electronic. The NASD (now FINRA), of which NASDAQ was a subsidiary, was “member-owned.” The NASDAQ of today, just like the NYSE, looks nothing like it did in 1997. Today, both are for-profit stock-hold corporations whose primary objective is to grow shareholder value rather than to advocate for the members of the ecosystem (the many small investment banks, institutional investors and corporations whose confidence is required to support small cap markets).
Prior to 1997 there existed a vibrant ecosystem of many small investment banks. These banks thrived in small-cap stock market making and reinvested profits in equity research analysts, research, salesforces, market makers and investment bankers. The most notable of these firms were the so-called “Four Horsemen”—Alex Brown, Montgomery Securities, Robertson Stephens and Hambrecht & Quist. None of these firms could exist on the same scale today. The economic incentives are wholly inadequate to support the required infrastructure. This is the so-called “Ecosystem theory of small IPO decline,” attributed by academics to the work of the authors.

Stated simply, low-cost trading – publicized as a boon to consumers - gutted U.S. capacity to take companies public and to support them. The U.S. stock market no longer has the capital formation capacity that once made it “The stock market that is the envy of stock markets throughout the world.”
In 1994, 162 Banks Acted As A Bookrunner On A Small IPO (< $50 million). Only 34 Of These Are in Existence Today.

|-----------------------------|----------|--------|--------------|----------------|------------|------------|--------------------------|--------------------------|------------------|----------------|----------------|--------------------|--------------|-------------|---------------|--------------|-----------------|-----------------------|--------------------|------------------|-----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|----------------|-------------------|----------------|----------------|----------------|----------------|-----------------|--------------------|
Viewed the World Over

The United States is still the world’s largest capital market. Our innovations in markets, for better or worse, are frequently exported (e.g., derivative securities that contributed to the World Financial Crisis of 2007-2008 which still lingers; Knight Securities once occupied the floor of the old London Stock Exchange) but not always worth emulating.

Do not take for granted that the United States will remain the world’s largest capital market. Institutional capital is highly mobile. Whether it is Fidelity Investments with operations across the globe, or whether it is Alibaba coming to the U.S. for $25 billion in capital to be journaled into China, the trends clearly point to increasing globalization of institutional capital. We must make the United States a place that attracts “sticky” capital and where entrepreneurs easily congregate to create jobs through innovation and implementation.

We have a responsibility to get it right and to acknowledge when we get it wrong. The world is watching.

Much like a twelve-step program on the path to recovery, the SEC should acknowledge that the U.S. stock markets are no longer the envy of stock markets across the globe. We know. We ask. We listen. Yet Americans, including SEC Chairs, often repeat this claim even to Congress. However, when we ask overseas stock exchange executives, equity capital markets professionals in London and institutional investors, whether they envy U.S. stock markets, foreigners generally react with incredulity. What they once envied was Silicon Valley and the IPO market that birthed entire new industries. They cite U.S. leadership in semiconductors, personal computers and biotechnology as prime examples. In the same breath, however, they note the decline in our small IPO markets, the expansive reach and costs of Sarbanes Oxley and Dodd Frank, and the rise of high-frequency trading. They are deeply concerned.

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4 Chair Mary Jo White, “...the U.S. markets are the envy of the world...” from Testimony on SEC Budget. Before the Subcommittee on Financial Services and General Government, Committee on Appropriations, United States Senate, on June 25, 2013 see http://www.sec.gov/news/testimony/detail/testimony/1365171606099?VwM29gS5Ny
Percentage of Venture-Funded Companies that have Gone Public
(Note-shaded area highlights those years that are understated given the relative youth of those venture investments)

Source: National Venture Capital Association, based on number of first venture fundings each year
Large Cap Bias Everywhere We Look

Because of the decline in the small cap ecosystem and the shift to for-profit, stock-held exchanges, U.S. markets are dominated by thought leaders, institutions and regulatory bodies with experience, expertise and economic incentives derived disproportionately from large cap stocks and the firms that focus on them.

In our view, large-cap bias permeates the SEC (Securities & Exchange Commission), FINRA (Financial Industry Regulatory Authority), the NYSE, NASDAQ, SIFMA (Securities Industry Financial Markets Association) and DTCC (Depository Trust Company) – every institution that has a voice. Small cap companies (and their investors and their intermediaries) by contrast, are inadequately represented, and their voices are drowned amid the preponderance of large cap trading-oriented investors. Regulators have pursued an ideology that low-cost trade execution is the only measure that matters. Even that measure is perversely off the mark: Best execution is defined as the price of trade execution relative to the NBBO (National Best Bid and Offer) at the time of execution when in reality it should be measured from the time at which the order is received (not executed). Large orders take time and care to execute and information leakage can cause the stock to move adversely in one direction or the other. This is known as “slippage.” Small orders are sold (payment for order flow) and sometimes shipped across venues looking for the “best return” (not “best execution”) to the originating broker dealer.

The most recent example of domination by large capitalization interests is revealed in an examination of the SEC’s much trumpeted “Market Structure Advisory Committee”¹ – announced just this January 13, 2014:

Members of the Equity Market Structure Advisory Committee are:
- Matthew Andresen, Co-Chief Executive Officer, Headlands Technologies LLC
- Reginald Browne, Senior Managing Director & Global Co-Head, ETF Group, Cantor Fitzgerald & Co.
- Kevin Cronin, Global Head of Trading, Invesco Ltd.
- Brad Katsuyama, President and CEO, IEX Group Inc.
- Ted Kaufman, Professor, Duke University Law School and former U.S. Senator from Delaware
- Richard Ketchum, Chairman and CEO, FINRA
- Manisha Kimmal, Managing Director, Financial Information Forum
- Mehmet Kinak, Vice President and Head of Global Equity Market Structure and Electronic Trading, T.Rowe Price Group
- Andrew Lo, Charles E. and Susan T. Harris Professor of Finance and Director, Laboratory for Financial Engineering, MIT Sloan School of Management and Chairman and Chief Investment Strategist, AlphaSimplex Group
- Joseph Mecane, Managing Director, Barclays PLC
- Jamil Nazarali, Senior Managing Director & Head of Execution Services, Citadel Securities
- Eric Noi, President & CEO, Convergex Group
- Maureen O’Hara, Robert W. Purcell Professor of Finance, Johnson Graduate School of Management, Cornell University and Chairman of the Board, Investment Technology Group Inc.

• Joe Ratterman, CEO, BATS Global Markets Inc.
• Nancy Smith, Corporate Secretary & Chief Integration Officer, AARP
• Chester Spatt, Kenneth B. and Pamela R. Dunn Professor of Finance, Tepper School of Business, Carnegie Mellon University and Director of its Center for Financial Markets
• Gary Stone, Chief Strategy Officer, Bloomberg Tradebook LLC

We applaud the inclusion of institutional investors who have knowledge of small cap investing, namely Kevin Cronin of Invesco and Mehmet Kinak of T. Rowe Price.

We applaud as well the inclusion of Ted Kaufman who, in his December 16, 2009, speech on the floor of the United States Senate asked,

“How can we create a market structure that works for a USD 25 million IPO — both in the offering and the secondary aftermarket? If we can answer that question, Mr. President, this country will be back in business.”

We are extremely concerned, however, by the absence of participation by middle market investment banks including such firms as Piper Jaffray, Cowen & Company, William Blair, Leerink Partners, Robert W. Baird, Pacific Crest Securities (recently acquired by KeyCorp) and Stifel Financial. Middle market investment banks, whose numbers were once great, are now an endangered species. These firms reflect and are emblematic of the dwindling infrastructure (ecosystem) that the United States depends upon to support a robust small IPO and aftermarket. Their decline dates back to the disappearance of the Four Horsemen and has continued unabated into recent years with the sale (some would say collapse) of firms like Keefe Bruyette & Woods andThink Equity as well as the January 8, 2015, announcement that Standard Chartered Bank would close its equity sales and research business.

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6 See University of Delaware Library, Ted Kaufman, United States Senator for Delaware, Kaufman Calls Decline In IPOs “Choke Point” to Job Creation, Economic Recovery: “The failure of Wall Street to provide capital to small companies may be costing our economy millions of forgone jobs,” December 16, 2009 at
http://www.lib.udel.edu/webarchives/Kaufman senators.gov/archives/pres_releases/release/id=352c7341-1cad-4a0d-b31c-c67b492d91a.htm
The Early NASDAQ, London AIM and Toronto TSX Venture Exchanges

A number of small-cap or Venture Exchanges have been successful in the past. Today, all have converted to for-profit public shareholder models contributing to the deterioration in the small cap ecosystem in each of the U.S., U.K. and Canada. As the small-cap ecosystem shrinks, so do research, sales and marketing support and capital available to support liquidity. When the “aftermarket” declines, IPO production declines.

The Early NASDAQ – Nasdaq was established in 1971 as a member-owned trade reporting facility. It was not a “stock exchange” in the legal sense (not an SRO or Self-Regulatory Organization) but was a facility of the NASD (National Association of Securities Dealers) which itself was “Member-owned” (no public shareholders). Trades did not occur on Nasdaq in its infancy but occurred in the over-the-counter market between and within broker-dealers (its member firms). The primary innovation of Nasdaq in the early years was to create price transparency and to allow members to advertise their activity (volume) in any given Nasdaq stock.

The Intel Corporation went public on Nasdaq in 1971. It did not meet the qualifications of the listed stock exchanges at the time. The early Nasdaq was in essence a Small-Cap Exchange. It was the original U.S. Venture Exchange.

Notably, in the early years of NASDAQ, market makers could advertise their markets but they were not formally obligated to buy significant amounts of stock. The market was a telephone “quoted” market where dealers could back away from orders and thus manage their risk. Their quotes were not live orders that anyone could “hit” electronically, as they can today. When companies had poor results, dealers would short or back away and stock prices would decline. When companies had good results, dealers would get on the phone and “talk the stock up.” Wide quoted spreads which created “effective” tick sizes of as much as 25 cents per share, provided ample incentives for market makers to commit capital — whether to short stock to provide an institution with an initial position (to “get the investor going”), or to buy a block of stock from an investor at or below the “bid” side of the market and offer it to brokers to make sales calls “net” with 25 cents per share to the stockbroker as a maximum incentive. Liquidity in small-cap stocks was thus “manufactured” by the dealers and their salesforces.

Admittedly, there was quite a bit of conflict here. Salesmen (brokers) were motivated by money. Firms tried to control for this by investing in equity research and the so-called “Competition of ideas” — the fact that the typical firm had many stocks from which to choose under research coverage, caused them to disproportionately market their “buy” rated ideas while shying away from “hold” or “sell” recommendations.

Reg. ATS came in 1998 and represents the dawn of widespread electronic order book markets in the United States. These caused the effective tick size, the smallest increment in which a stock can trade, to

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8 While the actual permissible minimum “tick” size was in the pre-decimalization period 3.125 cents (1/32nds), the markets of the 70s and 80s were quoted and the convention was to quote in 25 cent increments. Thus, while an institution might be able to negotiate less than a 25 cent increment (usually 1/8 or 1/16), many orders would be marked up a 1/4 point or 25 cents which was thus the “effective” tick size.
drop from 25 cents per share to 3.125 cents per share – at the same time that the internet enabled widespread self-directed discount retail investing collapsing the commissions charged by retail brokers. While many micromarket economists will argue cause-and-effect here, for those of us that ran these businesses (David Weild co-chaired strategy for investment banking, equity research, institutional sales and equity trading at Prudential Securities), we reacted to the changes by cutting research commitments, capital commitments, and investment banking support of small capitalization companies. The profitability of $50 million IPOs was suddenly one-third of what it had been pre-Reg. ATS. The collapse of the ecosystem accelerated while a series of new trading-focused for-profit competitors to Nasdaq forced Nasdaq to convert to a for-profit company itself with public shareholders in order to raise adequate capital to remain competitive.

Today, small capitalization companies are frequently seen to announce good news but not enjoy the benefit of a positive reaction by the stock. Why? Because intermediaries are needed to market small cap stocks to investors, and under the current system, no one can earn a living bringing new buyers into smaller stocks.

LSE’s AIM [London Stock Exchange’s Alternative Investment Market] – AIM was founded in 1995 as asubmarket of the London Stock Exchange. As of December 2014, there was a total of 1,104 companies listed on the AIM market including 885 from the U.K., and another 219 international.9 The U.K. population is one fifth that of the United States so on the domestic side alone, this would be the equivalent, in U.S. terms, of contributing 4,425 (885 x 5) listed companies to the U.S. markets. An AIM-type market thus has the potential to nearly double the current population (approximately 5,000) of publicly listed companies in the United States. The AIM peaked in 2007, before the Financial Crisis, at 1,694 public companies – nearly twice the current number of listed companies. On a population-weighted basis, this would be the equivalent of adding 8,470 publicly listed companies to the U.S. listed markets – a number not seen in the United States since before the introduction of Reg. ATS in 1988.

Students of stock market history will note that most of AIM trading is based on a clone of the originalNASDAQ dealer system called SEAQ. “NASDAQ” stands for “National Association of Securities Dealers Automated Quotation” system while “SEAQ” stands for “Stock Exchange Automated Quotation” system. Ironically, representatives of the London Stock Exchange now travel to the United States to solicit U.S. companies to list on the AIM.10 U.S. companies cite the lack of Sarbanes-Oxley in the U.K., lower ongoing reporting costs on AIM, and market making as attractants. However, the company review process skips the FSA (the U.K. equivalent of the SEC) and is outsourced to underwriters who are known as NOMADS or Nominated Advisors. These NOMADS are responsible for due diligence and disclosure but critics say that the process is uneven and stigmatizing. For this reason, we would prefer to keep the SEC in this role in the United States.

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Actual Invitation to an Upcoming AIM New Business Event to be Held in Miami, Florida on March 10, 2015.

Hello,
You are invited to the following event:

THINK BIG, AIM HIGHER: RAISING CAPITAL THROUGH LONDON’S INTL GROWTH MARKET

Event to be held at the following time, date, and location:

Tuesday, March 10, 2015 from 8:00 AM to 10:00 AM (EDT)
The Breeze Council
60 Southwest 8th Street
#2400
Miami, FL 33130

For more details please contact: Rebecca Mowat HM Consul & Head
UKTI Southeast rebecca.mowat@fo.gov.uk (786 223 3713) Twitter
@UKTIUSA

three years old and unprofitable on an operating basis. It missed delivery of its first product and the stock price was cut more than fifty percent. Intel listed on the early Nasdaq, the original U.S. Venture Exchange that inspired President Jiang Jemin in 1998 to call the NASDAQ Stock Market, "...the crown jewel of the U.S. economy."

One of the authors of this study conducted a series of meetings several years ago with the then-head of the AIM market in London, AIM market makers and institutional investors on AIM. Dealers and institutional investors both said that dealers were feeling pressure as the LSE, in pursuit of its own profits, moved the largest AIM stocks from the dealer trading platform to the electronic bulletin board or CLOB (central limit order book). These more liquid AIM stocks were said to be still "AIM Listed" but now trading on the same platform as stocks in the Major Market (the LSE version of the "Big Board" in the United States). The impact was said to be greater profits for the LSE and lower profits for the dealer (market maker) community.

**TSX Venture Exchange** (TMX Group’s small cap exchange) – The TSX Venture Exchange traces its roots to the merger of the Vancouver Stock Exchange and the Alberta Stock Exchange in 1999 to form the Canadian Venture Exchange. In 2001, the TSX Group (Toronto Stock Exchange, now known as TMX Group) purchased the Canadian Venture Exchange, converting it at some point from a dealer market to an auction-style electronic stock market. We believe that, while this move was in the best economic interests of TMX Group, it likely siphoned off economics from the dealers (market makers) and put pressure on the Canadian small cap ecosystem. In a recent article[^1] in the Financial Post, “Can the once mighty TSX Venture Exchange be saved?" it is clear that the cumulative market value of the exchange is less than in 2001 when it was acquired by TMX Group, and market participants are voicing concern that access to capital and liquidity are extremely poor. Despite this, the TSX Venture Exchange still has over 2,100 listed companies with an aggregate value of approximately CAD$33.1 billion (U.S.$26.5 billion). 2,100 listings is astonishing when one considers that the Canadian economy is one-ninth the size of the U.S. economy, making it a 19,000 U.S.-listed-company weighted equivalent, and yet the entire U.S. listed stock market (NASDAQ plus NYSE) consists of only 5,000 listed operating companies.

*We believe that the member-owned model was and would be superior to balancing interests and that stock exchanges with public shareholders will inevitably be tempted to siphon economics in ways that undermine the ecosystem required to support a vibrant small cap marketplace.*

Recommendations for Venture Exchanges

RECOMMENDATIONS FOR PUBLIC MARKET VENTURE EXCHANGES – Our discussion of Small-Cap or "Venture Exchanges" generally presupposes public markets (e.g., the Nasdaq Stock Market of the ’70s and ’80s, the London AIM and the Toronto TSX Venture). Public Venture Exchanges are essential to restore higher economic growth rates. Moreover, Private Market Venture Exchanges may also fill another void in the U.S. arsenal of infrastructure required to support the entrepreneurial economy. As a result, we are also making recommendations for Private Market Venture Exchanges (see “Recommendation for Private Market Venture Exchanges” below).

Governance – “Venture Exchanges” should be chartered separately by the SEC. A distinct set of rules – apart from traditional stock exchanges and ATs (Alternative Trading Systems) – For example, “Reg. Venture Exchange,” would be enacted – either in Congress with the support of the White House, or through the SEC’s broad exemptive authority (which they have historically been reluctant to use without clear signals from Congress).13 In order to sustain and nurture small-cap liquidity:

- **Venture-Exchanges Should be Member-Owned Exchanges** – As seen from our preceding discussion of early Nasdaq, the LSE AIM and the TSX Venture Exchange, the for-profit, stock-held ownership structure of the U.S. stock exchanges puts stock exchanges in competition with value providers (broker/dealers that provide research, sales and capital to support liquidity). As a result, the for-profit shareholder model puts shareholders’ needs for profits ahead of the health and well-being of the ecosystem and the well-being of small cap companies that generate very little trading profit. As a result, we believe that Venture-Exchanges should be Member-Owned and that members should be Broker-Dealers who can receive capital calls in line with their size – broken into three tiers – Large, Medium and Small – to provide balanced representation on the Board of Directors. There should also be an Investor Advisory Committee and a Corporate Issuer Advisory Committee, each with the right to review all material rule changes and make recommendations to the Board.

- **Creation of a Separate Venture Exchange Division at the SEC** – A separate Venture Exchange Division of the SEC should be established to put focus on the specialized and distinct needs of the small-cap marketplace. It should be staffed with financial professionals (and not simply lawyers) and should be tasked to nurture a revival in small IPOs. The division would ensure a balancing of interests among the Venture Exchanges themselves, corporate issuers, intermediaries (the broker-dealers who provide research, sales and marketing and liquidity) and investors. It would horizontally integrate disciplines in:
  - Listings rules, disclosure, and use of shelf registrations to facilitate lower cost capital formation (currently within the Division of Corporation Finance) – We need lower cost disclosure (possibly along the lines of Reg. A+) for the smallest companies

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13 Congress appropriates the SEC’s budget. The SEC is naturally hesitant to take controversial positions where the SEC Chair is called to defend the SEC’s actions and risk cuts to the SEC’s budget.

14 See “SIFMA Calls For Review of SRO Structure” at http://www.sifma.org/newsroom/2013/sifma-calls-for-review-of-sro-structure/ “Exchanges Compete with the Broker-Dealers they Regulate. Combined with the transformation of exchanges into for-profit enterprises in search of ways to expand their businesses, exchanges and broker-dealers have become direct competitors in many aspects of their businesses. Most prominent is the competition for order flow between exchanges and broker-dealers.”
and broad allowance of shelf registrations for any issuer that is current with disclosure.
  - SEC review of disclosure will support confidence.
  - The disclosure regime should be scaled — Reg. A+ disclosure adopted at the low end. Something stronger for larger listed companies.
  - State regulation should be pre-empted by an “Exchange Listing” exemption for all Venture Exchange listed securities.

  o Trading rules (currently within the Division of Trading & Markets) — Trading in U.S. equities markets is “one-size-fits all” optimized for the trading of large-cap stocks - a description that was first coined by us and has subsequently been repeated in Congress and at the SEC. Why is this important? Because small cap markets are “asymmetrical” order-book markets with no “network effect.” They lack the natural visibility and liquidity of large cap stocks. By applying a highly price-competitive market structure to small cap trading, the U.S. has experienced a deterioration in large-buyer (and seller) liquidity and a contraction in the small-cap ecosystem (IPO on-ramps). In addition, because well more than 90% of stock trading occurs in stocks that are larger than $2 billion in market value, we find that many regulators bring large cap bias in their approach to small cap stocks. Venture Exchanges should be:
    - Exempt from the Order Handling Rules (but not the Manning Rule).
    - Exempt from Reg. ATS and Reg. NMS.
    - Exempt from UTP (Unlisted Trading Privileges — Rule 12f-2).
    - Exempt from Decentralization.

Venture Exchange listed companies should be:
  - Exempt from Sarbanes-Oxley.
  - Exempt from State Blue Sky.

  o Enforcement (currently within the Division of Enforcement) — Small cap markets need to prioritize enforcement over prevention. In our dealings with former SEC Commissioners, it became apparent that high cost regulation and low-cost trading may have been intended by some at the SEC and FINRA to prevent sales practice abuses. However, this cure was worse than the disease because it gutted the capital formation engine and source of economic renewal for the entire U.S. economy. When policymakers incentivize more research, sales and trading, there will undoubtedly be more sales abuses - including so-called “pump and dump” schemes. The SEC and FINRA must not be shy about putting flagrant offenders out of business and, for this reason, we think that a special Enforcement Group within a Venture Exchange Division and at FINRA, may be needed.

  o ETFs and Index Funds (currently within the Division of Investment Management) — ETFs and Index Funds are harmful especially to progressively smaller capitalization stocks. By taking a supply of securities off the market, they undermine liquidity in already less liquid stocks. They also cause consumers to take short-cuts in investing by buying “themes” and “baskets” in lieu of understanding company fundamentals. This likely undermines the “entrepreneurial IQ” of the American populace, dulling

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13 A wake-up call for America, by Weild & Kim, p. 20, November 2009, “In an epic case of unintended consequences, one-size-fits-all market structure added liquidity to large cap stocks, but... created a black hole for small cap listed companies. In addition, public companies find themselves in a market environment with a lack of research support, greater systemic risk and volatility, and structural impediments that block them from going private.”
the appetite for education about business and entrepreneurship. Worse, most ETFs and Index Funds are market cap weighted. While they purport to invest in indices, for a variety of liquidity and cost issues, most intentionally avoid investment in the smallest stocks, thus further siphoning capital away from this market segment. Finally, ETFs and Index Funds don’t buy new issue stock offerings. The more ETFs and Index Funds grow, the more capital is taken away from capital formation and job growth. Policymakers, at a minimum, should require that all ETFs and Index Funds place standing orders on all offerings.

- **Creation of Separate Venture Exchange Groups within FINRA and DTCC** – Again, we need to keep the focus on the needs of this ecosystem. Smaller FINRA member firms complain that FINRA and DTCC are creating unnecessary cost and friction in the small cap ecosystem. Broker-Dealers complain, for example, that they are searching for compliance vendors to improve compliance, but FINRA, as a matter of policy, refuses to share its knowledge of outside compliance service providers. As a consequence, well-intended broker-dealers make completely avoidable mistakes in compliance. This is not in the best interests of anyone. Most in the industry understand that FINRA and DTCC’s revenues are largely derived from the big Wall Street firms and that the big Wall Street firms’ business is disproportionately large-cap. Most in the industry also understand that SIFMA (the major industry trade association) is dominated by the big Wall Street firms. Clearly, Congress and the SEC must come up with a construct that institutionalizes and perpetuates a discipline in small-capitalization stocks and the care and feeding of the small-capitalization ecosystem. It should be mandated that:
  - DTCC is required to provide electronic settlement to Venture Exchange listed stocks.
  - Broker-dealers with equity powers are required to allow stock brokers to solicit all Venture-Exchange listed stocks.
  - Broker-dealers are required to allow customers to buy Venture-Exchange listed stocks on margin.
  - Broker-dealers and investors are required to “Hard locate” shares to borrow before shorting any common stock.
  - Market Makers are given an exemption whereby any investor that fails-to-deliver securities must be issued a “buy-in” 24 hours after the failure-to-deliver and cut off from further activity with the broker-dealer until such time as the failure is rectified.

- **Adequate Ecosystem Economics** – Intermediaries and service providers are essential to providing support for small cap companies. That support comes in three forms – sales and marketing support, equity research coverage and market making that employs capital to shoulder risk (drive large buyer liquidity – more liquidity drives more institutional investment in these stocks). Unlike large-cap markets where liquidity is naturally occurring due to the so-called “network effect,” small-, micro- and nano-cap liquidity has always needed to be supported. That support must be paid for through some combination of higher commissions, higher tick sizes and trading spreads, or direct subsidies (the old specialist system on the NYSE required specialists to subsidize liquidity in small cap stocks in exchange for making excess profits in large cap, naturally liquid stocks) and affirmative obligations on market makers. As a result: Venture Exchanges must be:
  - Allowed to list stocks up to $2 billion in market value – $2 billion is still considered small-cap by most institutional investors. A population of larger than $250...
million market value stocks (the ceiling for the SEC Advisory Committee on Small and Emerging Companies) will be essential to generate enough economics to grow the ecosystem and create sufficient on-ramps to drive IPO production and support.

- Allowed to compete for listings up to $2 billion in market value (with a CPI escalator) and larger (higher profits in larger stocks creates higher economics to build bigger IPO on-ramps) — Venture Exchanges must be allowed to recruit listings from other stock exchanges and vice versa. This will enable the Venture Exchange ecosystem to obtain critical mass much sooner than if it was dependent on the IPO market.
- Given the authority to set minimum commissions charged by participating brokers.
- Given the authority to set minimum tick sizes and trading spreads by market makers.
- Given the authority to set affirmative requirements of market makers.

Ultimately, the success of Venture Exchanges hinges more on the profitability of the Ecosystem (intermediaries and value providers) than it does on the profitability of the Venture Exchange itself. This is why public shareholder-based stock exchanges are poor custodians of venture-exchanges because they are naturally more interested in shareholder profitability than in ecosystem profitability. As a practical matter, this will require an absolute exemption from such pro-price competition rules as OHR and Regulations ATS, NMS, Decimalization and Unlisted Trading Privileges (UTP).

- Extension of Title 1 JOBS Act Research Rules to All Venture Exchange Listed Companies — The JOBS Act improved the ability and lowered the cost, of sell-side equity research analysts, to work with investment bankers. These liberalizations should be extended to all Venture Exchange listed companies – not just on the IPO. Specifically,
  - Investment bankers should be able to arrange analyst communications with investors.
  - Analysts should be able to join investment bankers in meetings with company management.
  - Analysts should be able to participate in road shows (this would go beyond the JOBS Act)
  - Research on Venture Exchange listed companies should be permissible before and after any IPO or follow-on offering.
  - Congress should limit liability for research published before an IPO - We understand that the reason why EGC (Emerging Growth Company) IPO research has not been published before the IPO, as is the case in Europe, is because of concerns over liability.

- Clarity On What Constitutes Equity Research — Congress or the SEC should specifically exempt published materials that do not include securities price targets or recommendations (e.g., Buy, Sell, Hold) from the definition of “Research.” FINRA rule 2711 is ambiguous as to what constitutes equity research, thereby restricting the flow of information in support of smaller market capitalization stocks.

- Disclosure of Investor Long Positions — SEC Form 13F ownership information and transparency breaks down in small-cap stocks because quarterly reporting is limited to investors with more than $100 million in qualifying assets. Most micro- and nano-cap investors manage less than $100 million in assets because of liquidity constraints. We
believe that managed portfolios all the way down to $10 million in size, including family offices, should disclose all long (and short) positions on a quarterly basis.

- **Disclosure of Investor Short Positions** – We continue to be disturbed that the SEC does not require the disclosure of short positions on the same basis as long positions. Corporate issuers have the right to disclose a meeting with an investor who has established a short position in the stock. Corporate issuers have the right to spend their time in ways that are not contrary to the interests of the Company’s owners (investors). However, without the disclosure of which investors short stock and the types of stock that they short, management’s limited and valuable time – time that would be better put to use managing the Company and creating jobs – is squandered. Worse, some short sellers spread rumors, knowing that it is virtually impossible for the public to attribute the source. Just as there is information value to the rest of the market in who is long a stock (high quality investors attract other long investors), there would also be information value to the rest of the market in who is short a stock. We believe that the lack of disclosure around short-selling undermines investor confidence and the rights of corporate issuers.

**RECOMMENDATIONS FOR PRIVATE MARKET VENTURE EXCHANGES** - While most students of stock market structure will view “Venture Exchanges” as a public market construct, enhancements to the regulatory framework for private markets are also needed. However, we view Private Market Venture Exchanges, open to only accredited investors and institutional buyers, to represent a partial remedy to the collapse in the small IPO market. “Private Market” Venture Exchanges should not be seen as a substitute for a well-thought out “Public Market” Venture Exchange construct. Private markets would benefit from the inclusion of:

- **Basic disclosure** – The requirement of annual financial statements (not audited) for any company that has raised over $1 million from outside investors.
- **A consolidated tape** – Activity in all secondary markets should be reported centrally by all market participants, and this information feed should be broadly distributed. The simple distribution of pricing information broadly should not be deemed a “solicitation.”
- **Freedom to solicit accredited investors** – States’ regulations should be pre-empted and brokers should be free to solicit in the private aftermarket any accredited or institutional investor. Non-accredited investors should be off-limits.
Conclusion

In our work for the Organization of Economic Cooperation and Development (OECD), we examined IPO markets throughout the world. It became obvious to us that the incentives and disincentives created by governments and regulators are the major determinant of the success (or lack thereof) of small IPO markets (and the aftermarket). The inescapable conclusion is that the collapse of the small IPO market in the United States was caused by ill-conceived and shortsighted public policy and that it can be rectified by improved and farsighted public policy that includes the creation of a regime designed to meet the very different needs of small-cap public companies. Intelligently designed “Venture Exchanges” would create a foundation for a resurgence in entrepreneurship, innovation and job creation. We believe that, once established and after perhaps a decade of operation, Venture Exchanges would lead to the creation directly (by companies accessing and investing capital) and indirectly (“multiplier effect” of jobs being created in the service sector of the economy because of the money spent by these companies and their employees) of 10 million jobs for the U.S. economy.

The ability of the United States to sustain itself as a world leader may rest on our ability to reverse the decades long trend of lower company start-up rates and lower IPO rates. Higher levels of entrepreneurship are the bedrock of a vibrant economy. The creation of Venture Exchanges, and the natural advocacy for entrepreneurship that would emerge from these exchanges, is one of the single most important actions that policy leaders can take to reignite the American Dream and restore America’s position as the “Capital market envied by capital markets throughout the world.”
Appendix

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IssuWorks
The Future of Stock Markets

Weild & Co.
About IssuWorks

IssuWorks is the brainchild of noted Wall Street executives, including David Weild and Ed Kim, whose work is credited with having led to The JOBS Act. IssuWorks uses technology, data and people to help corporate issuers and investment banks significantly improve the marketing and distribution of new issues and to better support companies in the aftermarket. This leads to better performance for public companies and their investors. The mission of IssuWorks is to be the global leader in equity distribution and marketing platforms to complement traditional investment banks. Our clients include both corporate issuers and investment banks.

About Weild & Co.

Weild & Co. is the investment banking arm of IssuWorks. Weild & Co. represents companies and investment banks with a securities distribution approach that allows managements and investment banks to reach longer-term and smaller institutional investors. Weild & Co. also provides advisory and placement services but does not accept commissions from investors.
About the Authors

David Weild is Chairman and CEO of IssuWorks and its broker dealer Weild & Co. He is a former Vice Chairman of the NASDAQ Stock Market who ran its listings businesses in the U.S., Europe, Asia and Latin America. The studies that David co-authored with Ed Kim documented the long-term decline in equity capital formation in the United States and provided the core arguments that gave rise to the JOBS Act and many of the specific provisions contained in the JOBS Act. For these reasons, he has been called “The father of the JOBS Act” (Forbes). David has worked on over 1,000 public equity offerings during the course of his career in senior management at a major Wall Street firm where he oversaw equity capital markets, corporate finance, online brokerage and technology investment banking. He has a BA in Biology from Wesleyan University and an MBA from the Stern School of Business.

Edward Kim is COO of IssuWorks. Ed has over 25 years of capital markets, finance, product development, and operations experience. Prior to helping form IssuWorks, he ran financial communications at Stern & Company, a strategic communications and public relations firm. Ed was formerly head of new products for the corporate client group at the NASDAQ Stock Market. Ed has worked in investment banking, trading, research and equity capital markets at firms including Lehman Brothers, Prudential Securities, and Robertson Stephens. He has a BS in Materials Science and Engineering from the Massachusetts Institute of Technology.
Thank you Chairman Crapo and Ranking Member Warner. I deeply appreciate the opportunity to share Nasdaq’s experience and views on the important subject of “Venture Exchanges and Small Cap Companies.”

Nasdaq owns 24 securities markets spanning the globe, including 18 that trade equities. Our First North Markets in Stockholm, Copenhagen and Helsinki are venture exchanges that list emerging growth companies in Europe. Seventy exchanges in 50 countries trust our trading technology to run their markets while at the same time, markets in 26 countries rely on our surveillance technology to protect investors—together driving growth in emerging and developed economies.

Upon the launch of its first initial public offering in 1971, Nasdaq created the modern IPO and has become the destination of choice for emerging, high growth companies. Nasdaq brought to the capital markets a trusted listings venue and a new view that companies could go public earlier in their growth cycle. We broke the Wall Street mold that kept companies from exchange listings—for example, there were rules that required companies to be profitable for 3 years and applied revenue hurdles that ruled out small companies. Nasdaq recognized that most companies need capital, and investors want access to ownership when companies are at earlier stages of growth. Around Nasdaq has emerged a diverse ecosystem of brokers, investors, legal advisors, and analysts that give growth companies unprecedented access to capital. Companies who go public on Nasdaq—such as Apple, Microsoft, Google, Intel, Staples, Biogen and Gilead Sciences—use that capital to make the cutting edge products and medical breakthroughs that enhance our daily lives. As public companies they grow rapidly and sustainably, and their growth drives the U.S. economy forward and ultimately creates jobs for millions of Americans. It is our unique heritage that drives our support of a renewed marketplace that supports and empowers cutting-edge, high growth companies.

However, changes to the regulatory landscape in recent years have reduced Nasdaq’s ability to facilitate stable, reliable and cost-effective capital formation for many emerging companies. Importantly, the one-size-fits-all approach of our regulatory regime has had unexpected and serious negative consequences for smaller companies—even as it has effected revolutionary improvements around more actively traded companies. While the 2012 JOBS Act did ease the disclosure burden on companies going public, the extent of that relief hasn’t reached small, venture size, companies. The disclosure and governance requirements for these small companies need to be further tailored to the financial realities and distinct challenges they face.

The continued aversion of small companies to public markets has created a sense among many that there is a need for a brand new type of market, a separate “venture market.” From Nasdaq’s point of view, this notion is somewhat misplaced: what’s needed—whether in a separate exchange or within the small cap listing tiers of existing exchanges like Nasdaq—are simple reforms to make the market structure attractive again for growth companies. Nasdaq’s approach to reform has two paths:

• First, change certain trading rules and listing requirements within a small company market tier to encourage and facilitate the ability for growth companies to raise capital on the public markets and thrive as publicly listed and traded companies—this includes the need for Nasdaq and other exchanges to evaluate and adjust their own listing standards and corporate governance standards to better serve venture companies.

• Second, further leverage the Jumpstart Our Business Startups Act (JOBS Act) from which Nasdaq has built and is operating a growth platform for companies wishing to stay private—the Nasdaq Private Market.

If Congress seeks to reinvigorate the already robust and vibrant U.S. capital infrastructure to support small companies, we respectfully suggest the following regulatory and legislative policy changes:

• Exempt certain growth stocks from the “tick price” provision of Regulation NMS and delegate the authority to define tick sizes to the listing exchange: The tick size is a surprisingly important—and extremely sensitive—variable in trading quality. Too wide and trading costs become burdensome to investors; too small and volatility becomes rampant. It is our view that the listing exchange is in the best position to optimize tick size policy, and to do so in a way that is responsive to the ever-changing needs of listed companies. Since exchanges do not
benefit from wide spreads which large tick sizes can impose, they can impartially assess the tradeoffs and protect the interest of investors and listed companies.

- Modify the definition of a “penny stock” in Rule 3a51–1: In 2004, the SEC essentially froze exchange listing standards as they then existed by defining any security not meeting those requirements to be a penny stock. This has inhibited innovation in listing requirements in the last decade. We believe that the SEC should reconsider this definition to allow exchanges greater flexibility to adopt novel listing standards for growth companies. Moreover, if we hope to attract new growth companies to our markets, beyond those already on exchange tiers for smaller companies, we will need to adjust the listing standards so they can qualify without being subject to burdensome penny stock and blue sky requirements.

- Expand availability of confidential filings: The ability to submit a confidential draft registration statement to the SEC is one of the most widely used provisions of the JOBS Act and is heralded with encouraging a large number of companies to go public, making their securities available to public investors. We believe that this ability will also be useful to smaller companies once they are listed, allowing these companies to prepare for a potential secondary offering without facing reputational risk and business uncertainty if they determine not to proceed with a registered offering.

- Adopt limited short selling regulations: We would encourage tailored rules to prevent aggressive short selling (selling at or below the best bid) of smaller companies, which lack resources to combat manipulative short selling and are consequently more vulnerable. We also recommend consideration of disclosures of short positions in smaller companies that are similar to the disclosures required of long positions, providing companies and other investors with transparency.

- Issuer choice to suspend “unlisted trading privileges” for certain growth companies: the purpose of the regulatory changes in U.S. equity markets over the past several decades was to encourage multiple markets to compete with each other. This revolutionized trading in many liquid securities, in particular by enabling innovative new technologies, dramatically increasing the speed and throughput of exchange systems, and by encouraging price competition. Unfortunately, these benefits are not meaningful to small, illiquid companies. As the SEC itself points out in a 2005 rulemaking:

  “. . . [C]ompetition among multiple markets trading the same stocks can detract from the most vigorous competition among orders in an individual stock, thereby impeding efficient price discovery for orders of all sizes . . . Impaired price discovery could cause market prices to deviate from fundamental values, reduce market depth and liquidity, and create excessive short-term volatility that is harmful to long-term investors and listed companies.”—Securities Exchange Commission, Release No. 34–51808; File No. S7–10–04.

Affording certain growth companies issuers with input into their market structure through the option to suspend unlisted trading privileges in their stock would refocus competition among orders in that stock by placing them all on a single platform. To the extent that this competition results in improved spreads and deeper liquidity, growth companies electing this option could enjoy many benefits, including reduced capital costs.

- Permit market maker support programs: Currently, Nasdaq allows ETF issuers to establish a fund to subsidize market makers who enhance liquidity in those shares. We believe that such support programs would also help growth companies. Market quality incentive programs of this kind have successfully enhanced liquidity and market quality for investors in Europe for several decades.

- Eliminate certain requirements for shareholder approval for smaller companies: Over the last decade, the SEC has made strides to reduce the time necessary for public companies to register and sell securities by allowing shelf registrations. However, the requirements Nasdaq imposes on its listed companies for obtaining shareholder approval of certain financing transactions have not followed suit. As a result, these approval requirements now can delay many transactions, causing companies to consider less favorable structures to avoid these requirements. This can be especially onerous for smaller companies that have an ongoing need to raise capital to fund their businesses. We are examining these requirements and hope that any proposal we present to the U.S. Securi-
ties and Exchange Commission to address this will be met with an under-
standing that rules applied to the world’s largest companies may not be appro-
priate to apply equally to emerging growth companies.

**NASDAQ PRIVATE MARKET IS A VENTURE MARKET**

There are improvements that can be made in the world of private companies as
well. The JOBS Act, passed by Congress and signed by the President in 2012, allows
companies to remain private longer. In light of the growing demand for liquidity in
these companies’ shares (especially by their employees) we created the Nasdaq Pri-
ivate Market to help private companies provide selective liquidity in their equity se-
curities. Nasdaq Private Market uses technology solutions to serve the unique needs
of private companies within the legal framework set forth by the securities laws
using Nasdaq’s established competence to help ensure transparency and investor
protection. The platform has had encouraging success in the short time that it has
been operational. It has a growing universe of companies and continues to build out
a robust toolkit specifically designed for private companies. However, from a legisla-
tive standpoint, private markets such as our own still need assistance to make them
robust capital markets for companies wishing to stay private.

The JOBS Act and prior laws make very clear that companies can sell shares to
accredited investors without registering the transaction. In theory, this category of
investor does not need the protections that registration requirements afford—due to
their net worth, income and sophistication. However, the subsequent sale of shares
from an existing shareholder to an accredited investor does not enjoy the same legal
status, notwithstanding the fact that the policy rationale for an exemption is similar
to that for issuer transactions. Due to a lack of certainty concerning the legal re-
quirements for exempt secondary transactions, a range of market practices have de-
veloped. As a result, these transactions often do not occur, and, when they do, they
take place amidst uncertainty and risk, as companies and their investors shoulder
unnecessary legal and regulatory costs to facilitate such transactions. The time has
come to provide clear guidance for secondary transactions where accredited inves-
tors—who are already deemed not to need registration level protection—are the pur-
casers. For these reasons, we encourage you to pass legislation exempting from
registration transactions where an existing shareholder in a private company sells
shares to an accredited investor. The SEC should further be encouraged to consider
changes to the accredited investor definition, so that an investor can establish their
sophistication through means other than their net worth and income. Regardless of
any future modifications, antifraud provisions must remain in effect for both issuer
and non-issuer transactions, whether registered or exempt.

Thank you again for inviting Nasdaq to testify on this important issue. We believe
that Nasdaq is uniquely positioned to help more companies go public, provide inves-
tors with access to companies earlier in their growth phase, employ the higher risk/re-
ward inherent in venture companies and bring our deep experience and com-
petencies of market transparency, quality and surveillance to these markets. We be-
lieve that our approach to reforming the public and private markets is the best road
forward for venture-class companies. Thank you and I am happy to answer your
questions.
RESPONSE TO WRITTEN QUESTIONS OF SENATOR CRAPO
FROM STEPHEN LUPARELLO

Q.1. What steps short of creating a venture exchange could help to improve the dynamics for smaller companies?

A.1. There are a variety of potential initiatives exchanges we could explore to promote liquidity in smaller companies that would not necessarily require the creation of a separate venture exchange. Exchanges could consider, for example, approaches designed to promote smaller company liquidity, such as running batch auctions at particular times, attracting dedicated liquidity providers with a package of obligations and benefits for making a market in listed companies by providing high-quality liquidity, or exploring different minimum tick sizes in ways not limited to those under consideration for the Commission’s own tick size pilot program. Of course, any exchange rule proposing any of these approaches or other mechanisms for promoting liquidity would need to be carefully evaluated by the Commission in accordance with the Federal securities laws.

Facilitating capital formation is an important part of the Commission’s mission, and we continue to consider ways to consider ways to facilitate small and emerging companies’ access to capital. These include:

- **JOBS Act Rulemakings**—The Commission recently adopted amendments to Regulation A to enable companies to raise up to $50 million over a 12-month period. SEC staff also is working on a recommendation to the Commission for final rules on crowdfunding, which remains an important priority. These exemptions from the registration requirements of the Securities Act should provide new ways for smaller companies to raise capital and provide investors with additional investment opportunities.

- **Tick Size Pilot**—The Commission recently approved a pilot program that would test whether wider tick sizes could positively impact liquidity and trading in some smaller companies.

- **Disclosure Effectiveness Review**—Staff in our Division of Corporation Finance is conducting a comprehensive review of the disclosure requirements for public companies. The goal is to find ways to improve the disclosure regime for the benefit of both companies and investors. Part of this initiative includes evaluating whether additional scaling of the disclosure requirements for smaller companies would be appropriate.

SEC staff also is continually working to ensure that the views of small business owners, investors, and other stakeholders in the small and emerging business community are heard. For example, we organize an annual small business forum to provide a platform to highlight perceived unnecessary impediments to small business
capital formation and whether, consistent with investor protection, they can be eliminated or reduced. The SEC also benefits from the expertise of its three advisory committees: the Advisory Committee on Small and Emerging Companies, the Investor Advisory Committee, and, most recently, the newly created Equity Market Structure Advisory Committee. Each of these committees has members with significant expertise investing in, advising, or trading small and emerging companies.

Q.2. What necessary regulations or legislative changes can be made/need to be made to aid the creation of a venture exchange? What characteristics should venture exchanges have including whether it should include:

- Scaled disclosure requirements and more basic listing standards
- Wider tick sizes
- Limit trading to only a venture exchange
- Anything else we view as necessary

A.2. Exchanges play a vital role in assuring the proper functioning of our securities markets. They have a statutory responsibility for overseeing trading on their markets and their members’ compliance with applicable statutory and regulatory provisions. They establish the rules by which securities are listed and traded and listing companies are vetted, and set standards of conduct for their members. They also generally are responsible for enforcing both their own rules and the relevant provisions of the Exchange Act, including the rules and regulations thereunder. In addition, they must have a robust and resilient technological infrastructure and operational integrity. Exchanges are required to register with the Commission and are subject to Commission examination and enforcement. Additionally, their rules and other material aspects of their operations are subject to a public notice and comment process, and, ultimately, Commission approval in accordance with the relevant provisions of the Exchange Act.

In general, the SEC has considerable flexibility to interpret the Exchange Act to accommodate a venture exchange business model. A venture exchange may seek to have disclosure requirements and listing standards it believes are suitable to the unique characteristics of smaller companies. In addition, robust vetting, surveillance, and examination programs by an exchange could help protect investors, and the exchange environment, from potential “bad actors” on the exchange.

There are, however, certain Exchange Act provisions that may limit the Commission’s flexibility regarding venture exchanges, particularly with respect to how a venture exchange might be able to maximize liquidity on the exchange:

- Section 12(f) of the Exchange Act grants unlisted trading privileges to exchanges as long as they have appropriate rules in place to govern such trading. For IPOs, the statute gives the Commission authority to prescribe the duration of a time period after an IPO before unlisted trading can begin. Section 12(f)(1)(C) set an initial interval of two trading days, and under current Commission rules unlisted trading privileges are
extended to a security when at least one transaction in that security has been effected on the listing exchange. Commission staff is looking at what flexibility there may be to establish an extended time period for centralized trading for smaller company securities.

- Section 11A(c)(3)(A) of the Exchange Act authorizes the Commission to prohibit broker-dealers from executing transactions otherwise than on an exchange (i.e., over-the-counter trading) provided that the Commission is able to make certain findings, such as a finding regarding the fairness and orderliness of markets and a finding that an exchange rule does not unreasonably impair the ability of any dealer to solicit or effect transactions for its own account. This test must be met before the Commission can adopt rules restricting the over-the-counter trading of broker-dealers that would allow a venture exchange to establish mechanisms to protect the liquidity pool on the exchange.

There are a variety of ways that a venture exchange might structure its operations to address the capital formation needs of smaller companies, including, but not limited to, measures to promote liquidity through mechanisms to protect the liquidity pool on the venture exchange and obligation/incentive packages to attract liquidity providers to the exchange. The Commission would need to evaluate any such mechanisms as part of its review of a venture exchange’s registration application to the Commission to determine whether such mechanisms were permissible under the securities laws and regulations and whether they would serve the needs of small companies, their investors, and the markets as a whole.

RESPONSE TO WRITTEN QUESTION OF SENATOR VITTER FROM STEPHEN LUPARELLO

Q.1. Mr. Luparello, in your testimony, you stated, “The SEC is considering innovative approaches that appropriately balance the needs of smaller companies for efficient secondary markets and the interests of investors in smaller companies. Venture exchanges potentially could achieve such a balance by providing the investors a transparent and well-regulated environment for trading the stocks of smaller companies that offers both enhanced liquidity and strong investor protections. As such, they could strengthen capital formation and secondary market liquidity for smaller companies and expand the ability of all investors to participate through well-regulated platforms in the potential growth opportunities offered by such companies.”

When do you believe the SEC will be ready to announce these “innovative approaches” and what is the reason to delay?

A.1. The SEC has supported innovative efforts to promote an appropriate secondary market structure for smaller companies. For example, the Commission recently approved a pilot program that will test the impact of wider quoting and trading increments, or ticks, on the securities of smaller capitalization companies. The pilot program is a significant market structure initiative and it will
generate data on whether wider tick sizes enhance the market quality for the stocks of smaller capitalization issuers.

Another example, noted in my written testimony on behalf of the Commission, was the Commission’s approval of the BX Venture Market in 2011. To date, however, the BX Venture Market has not been launched. My understanding is that concerns about ensuring adequate liquidity in BX-listed securities and attracting liquidity providers, at least in part, have caused the delay for the launch.

In light of these developments and broader discussions about improving markets for smaller issuers, Commission staff is assessing the hurdles facing exchanges that seek to maximize secondary market liquidity for such issuers. One focus is the design of approaches that would protect the exchange’s liquidity pool for a smaller company’s stock.

The three primary provisions of the Securities Exchange Act of 1934 that bear on efforts to protect an exchange’s liquidity pool are the national market system requirements of Section 11A(a), the unlisted trading privilege (“UTP”) provisions of Section 12(f), and the off-exchange trading provisions of Section 11A(c)(3).

As noted in my testimony, stocks to be listed on the BX Venture Market were not considered national market system securities and therefore would not have been subject to the provisions of Regulation NMS. With respect to Section 12(f) and Section 11A(c)(3), Commission staff is considering the extent to which interpretations or exemptions would be appropriate to help promote the efforts of exchanges to protect their liquidity pools for smaller companies.

In addition to these staff efforts, the Commission staff remains open to considering other innovative initiatives from exchanges or others that appropriately balance the needs of smaller companies for efficient secondary markets and the interests of investors in smaller companies. I anticipate that we would respond to such efforts in a timely and constructive manner.
ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

WRITTEN STATEMENT OF
WILLIAM BEATTY
PRESIDENT, NORTH AMERICAN SECURITIES ADMINISTRATORS ASSOCIATION, INC.
AND
WASHINGTON SECURITIES DIVISION DIRECTOR
BEFORE THE
SUBCOMMITTEE ON SECURITIES, INSURANCE, AND INVESTMENT
OF THE
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE
"Venture Exchanges and Small-Cap Companies"
MARCH 10, 2015
WASHINGTON, DC
Chairman Crapo, Ranking Member Warner, and Members of this Subcommittee, on behalf of the North American Securities Administrators Association, Inc. (NASAA), I am pleased to submit this statement to the Senate Committee on Banking, Housing, and Urban Affairs for inclusion in the record of the hearing entitled “Venture Exchanges and Small-Cap Companies,” held on March 10, 2015 by the Subcommittee on Securities, Investment, and Insurance.

Introduction

NASAA was organized in 1919, and is the oldest international organization devoted to investor protection. Its membership consists of the securities administrators in the 50 states, the District of Columbia, Canada, Mexico, Puerto Rico and the U.S. Virgin Islands, and its mission is to serve as the voice of securities agencies responsible for grassroots investor protection and efficient capital formation.

State securities regulators have protected Main Street investors for the past 100 years, longer than any other securities regulator. Ten state securities regulators are appointed by Secretaries of State, five are under the jurisdiction of their states’ Attorney General, several are appointed by their Governors and cabinet officials and others work for independent commissions or boards. State securities regulators closely interact with the business community and investors in their state, fostering a collaborative relationship with compliant registrants through accessibility and communication.

Collectively and individually, state securities regulators enforce state securities laws by investigating suspected investment fraud and, where warranted, pursuing enforcement actions that may result in fines, restitution to investors and jail time. State securities regulators ensure honest financial markets by licensing registrants – both firms and investment professionals – and conducting ongoing compliance inspections and examinations. They work with issuers to ensure that securities offerings include legally required disclosures, thus resulting in a transparent and fluid securities markets.

Evaluating Proposals for a New Generation of “Venture Exchanges”

State securities regulators understand the current interest by Congress and others in the establishment of a new generation of exchanges, referred to as “venture exchanges,” that could list the shares of smaller, emerging companies. We strongly share Congress’s interest in considering ways to improve access to capital for those companies. Indeed, many states are undertaking efforts to facilitate small business capital formation by fashioning intrastate exemptions for “crowdfunding” and other innovative ways to raise capital.  

1 Since 2011, sixteen states and the District of Columbia have enacted state-based crowdfunding laws or regulations and other forms of limited offering exemptions for small businesses, through exemptions and registrations. These jurisdictions include Alabama, the District of Columbia, Georgia, Idaho, Indiana, Kansas, Maine, Maryland, Massachusetts, Michigan, Nebraska, Oregon, Tennessee, Texas, Vermont, Washington, and Wisconsin. See www.nasaa.org/industry-resources/corporationfinance/intrastate-crowdfunding-resource-center.
Congress should examine the policy rationale for “venture exchanges”

There are many ways that new and growing businesses can access investment capital. In the early stages, this may include borrowing from friends and family, commercial loans, and increasingly, accessing investment capital through crowdfunding. For the most promising start-ups, investment capital also can be accessed from angel investors, venture capital and private equity firms.

Given these available sources of capital, the question becomes, what is the additive value of venture exchanges, which are by definition more opaque, less efficient, more volatile, and more illiquid than U.S. public markets, which continue to be the envy of the world?

We urge Congress to understand and examine the policy rationales for establishing “venture exchanges” for small and unestablished companies. While it is unclear how venture exchanges would augment the many tools available to provide capital to businesses, it is readily evident that establishing such exchanges could pose a risk to investors and the capital they invest in those markets. Indeed, the central features of the proposed “venture exchanges” – newer, untested companies, reduced disclosure, limited liquidity, and comparatively high rates of failure or bankruptcy and investment loss – sharply contrast with the robust disclosure and transparency regime that define America’s modern and efficient capital markets.

A major driver of recent proposals to establish new types of exchanges, generally with relaxed disclosures and listing standards, appears to be the desire to exempt securities traded on a venture exchange from regulations such as Unlisted Trading Privileges and National Market System rules. While NASAA members generally agree that some relief may be necessary and appropriate for the success of a venture exchange, we are concerned about the effects and extent of such relief. We believe further discussion of the regulatory relief that is sought from these regulations is necessary.

Further, before proceeding with legislation that may not facilitate a robust trading market for smaller, emerging companies, NASAA believes that a further study should be completed. One way to gather additional information would be to endorse Commissioner Stein’s recent suggestion and to direct the SEC to publish a concept release on this topic. This would also allow broad public participation in this important dialogue.

Finally, Congress should undertake a broadening of its own and the public’s understanding of the proposed “venture exchanges.” It should identify the investors that these exchanges would serve, and determine whether and why such investors are not optimally served by existing exchanges and other capital raising tools. Above all, prior to enacting any legislation, Congress should carefully consider the impact of “venture exchanges” on the investing public.

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99

Additional Policy Considerations for “Venture Exchanges”

NASA firmly believes that Congress and other interested stakeholders should be analyzing and studying the benefits and challenges to making venture exchanges a successful proposition for both companies and the investing public. However, at the suggestion of members of the Subcommittee, the Committee staff, and other interested parties, we focus the remainder of this statement on certain specific policy challenges inherent in establishing venture exchange for small and lightly traded companies.

1. What federal authority should regulate a “venture exchange”?

Current law allows the creation of new exchanges, including exchanges targeted to smaller companies. Today, there are many national exchanges registered with the SEC and that operate with varied listing requirements. In addition to traditional national exchanges, various alternative marketplaces exist, such as the OTCQB, OTCQX, and OTC Pink. In fact, OTC Markets refers to the OTCQB as “The Venture Marketplace.” It is not clear why, or if, new legislation or regulatory relief would be necessary to foster the creation of such an exchange.

2. Will enacting new legislation lead to the creation of new exchanges?

It is uncertain whether any venture exchange will be created, or succeed, with the enactment of new legislation. Over the past 80 years, more than 20 regional stock exchanges either have gone out of business or merged with other exchanges to stay afloat. One of the last regional exchanges to close, the Spokane Stock Exchange, shut down on May 24, 1991 after broker loyalty vanished for one of the few remaining regional mining exchanges in the United States. The fact that a so-called “venture exchange” does not already exist may be due to financial viability as opposed to regulation.

3. Are there baseline standards that must remain a part of any “scaled” disclosure?

Enacting legislation that is focused on facilitating the creation of exchanges with low listing standards or regulatory requirements may facilitate fraud at the expense of retail investors. Regulation is an essential component to maintaining investor confidence in the market, which ultimately fuels economic growth and job creation. The key to success will be to scale listing standards to the size of the enterprise while ensuring appropriate protections are in place to avoid

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4 Regional stock exchanges are exchanges that trade shares of companies that cannot meet the strict listing requirements of national exchanges may qualify to trade on regional exchanges. A partial list of former regional exchanges now closed includes: Baltimore, MD (1949), Buffalo, NY (1936), Cleveland, which merged with Chicago (1949), Colorado Springs (1966), Denver, CO (1936), Detroit, MI (1976), Hartford, CT (1934), Honolulu, HI (1977), Louisville, KY (1935), Milwaukee, WI (1938), Minneapolis, MN, which merged with Chicago (1949), New Orleans, LA, which merged with Chicago (1959), Pittsburgh, PA, which merged with Philadelphia (1969), Richmond, VA (1972), St. Louis, MO (1949), Salt Lake City, (1986), Seattle, WA (1942), Spokane, WA (1991), Washington, D.C., which merged with Philadelphia (1953), Wheeling, WV (1965).
fraud. We believe an essential component in a baseline standard must also include investor qualifications for participation.

4. Preemption of state review of listed securities:

A listing on national securities exchanges affords securities “covered security” status such that state registration requirements are preempted. Less stringent exchanges do not provide this status to securities (e.g., the Miami International Securities Exchange). The appropriate balance was struck regarding the level of rigorousness in listing standards that would afford “covered security” status and preemption of state law in 1996 with the enactment of the National Securities Markets Improvement Act (NSMIA). However, since that time, new exchanges have formed and some of these have been recognized as exchanges for which a listing will provide securities “covered security” status (e.g., BATS Global Markets exchange). 5

Preemption should not attach to securities based on a listing on an exchange that does not have rigorous listing standards. Where an exchange does not qualify for “covered security” status, secondary trading exemptions are available in the majority of states, e.g., a manual exemption. Manual exemptions facilitate secondary trading while providing for important investor protections. We believe the current regime between federal and state level review is sufficient.

5. Trading volume:

Companies who do not satisfy minimum trading volumes should be delisted from any future venture exchange as such a listing may mislead investors that an active trading market exists and can otherwise be used as a mechanism to perpetrate fraud. The appropriate trading volume requirements should be determined after a thorough study of trading volumes on the TSX Venture Exchange and the London Stock Exchange’s AIM.

6. Reporting:

There must be current financial statements and other company information available for investors to be able to make an informed investment decision. Transparency and quality information are essential. These should include, at a minimum, audited annual financial statements, quarterly reports, and material event reports.

For additional information about how frequently small companies listed on venture exchanges have reporting problems, fraud, and other issues, when compared with companies listed on more established securities exchanges, NASAA invites the Committee to consult a recent report on “Venture Exchanges and Investor Returns” published by the CFA Institute. The CFA Institute’s report notes that “Small companies should be afforded access to capital markets

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5 See, Sec. 18 and Rule 146.
to fund their growth and development, but they should provide investors the transparency and quality of information required for informed decisions and appropriate investor protections."

7. Preemption:

Sec. 18 and Rule 146 already provide for preemption based on appropriately rigorous listing standards. Preemption should not attach to securities based on a listing on an exchange that does not have rigorous listing standards.

8. Treatment of companies that fall below listing requirements:

There should be a mechanism to remove companies that fall below the listing standards. Shell or non-operating companies, for example, are often a mechanism for fraud. Indeed, since 2012, the SEC has suspended trading of more than 800 microcap stocks, including 128 earlier this month. According to the SEC, these actions reflect the Commission’s desire to “prevent fraudsters from having the opportunity to manipulate these thinly-traded stocks by pumping the companies’ stock value through false and misleading promotional campaigns and then dumping the stocks after investors buy in.”

9. Is it premature to enact legislation for the creation of a market catering specifically to Regulation A securities?

Securities offered and sold under Regulation A may currently apply for listing on an existing exchange. Existing exchanges have not elected to create specialized markets for Regulation A securities and it is unclear that such specialized markets would be created as a result of new legislation.

10. Are there lessons that proposed “venture exchanges” can take from other markets, including foreign venture exchanges?

It is important to note that other markets, specifically foreign venture exchanges, are not unregulated marketplaces. These exchanges explicitly acknowledge that regulation is the key to success for both the exchange and the companies that trade on them. Any “venture exchange” legislation should be based on a study of those markets and their successes and failures.

Prior regional exchanges and the existing venture exchanges became focused on a particular industry or region, thereby magnifying economic downturns in those markets or regions. One way to avoid this risk in any future legislation would be to prohibit venture exchanges from denying a listing based on a company’s business location within the United States or based on the company’s industry of operations. This would help to guarantee that trading could be centralized.

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in one or a small number of exchanges whose diversity of listings would better ensure the success of those exchanges.

**Conclusion**

Just as there are lingering questions about the policy basis for establishing additional exchanges whose primary selling point would be inferior listing and disclosure standards, there are obvious questions about the business model that would be required to support such an exchange. In recent decades, a large number of smaller exchanges have gone out of business, and the reason that no so-called “venture exchange” exists in the U.S. today may be more a function of inadequate financial viability as opposed to regulatory policy.

*Venture exchanges have the potential to be very risky for certain investors.*

No matter how effective the regulatory scheme for a venture exchange, securities that trade on such proposed exchanges will be significantly more risky investments than securities issued by public companies traded on a major national exchange. Congress should act with this in mind, and should thoroughly examine all of the issues NASAA and others have raised at today’s hearing.

State securities administrators appreciate the opportunity to comment on the concept of “venture exchanges.” We look forward to continuing to work the Senate Banking Committee, its members, and others in Congress to explore new exchanges, and other areas where state and federal regulators and policymakers might partner to promote greater access to investment capital consistent with responsible investor protection. We urge Congress to continue its engagement with relevant stakeholders including state and federal securities regulators as they explore this issue.
Chairman Crapo and Ranking Member Warner, thank you for providing me the opportunity to share my thoughts on policy changes that can be made to improve access to capital for startups and emerging growth companies. I commend your efforts to examine the current challenges these companies face in the private and public markets. Given the goal of improving economic growth and job creation in this country, you are right to focus on how best to support the growth and capitalization of small innovative companies.

As an active venture capitalist who spent a great deal of time working on the JOBS Act, I have seen firsthand that these legislative efforts make a difference. The elements of the JOBS Act that have been put into practice are having a significant effect on capital formation for emerging growth companies, including playing a role in an improved IPO environment. This is good news for the country, and I expect the full implementation of the JOBS Act will boost new company formation with all its attendant benefits to our economy for years to come.

But the JOBS Act should be viewed as the start, not the finish, of significant efforts needed to tackle the liquidity challenges facing startups and small cap companies. So I applaud both the intent and the content of your recent hearing, and believe that the work you are doing is as significant as any other in its potential impact on the American economy.

You have asked two questions for follow up which I understand to be, paraphrasing:

- What steps can be taken now in the current legal and regulatory structure to encourage capital formation for emerging growth companies?
- Could a public “venture exchange” improve emerging growth companies access capital?

In answer to your first question, please find below an initial list of ideas that I believe can be achieved in the short-term. These ideas cover the venture capital life cycle from seed stage to IPO and beyond. In addition to these ideas, I look forward to continuing to work with this committee to find the best opportunities to bolster new company formation and success.

**Public Market Reforms:**

**Tick Size Pilot** – As mentioned a number of times in your hearing, a robust tick size pilot of at least 3 years in length is absolutely critical. The SEC must extend their proposed pilot from its current one year duration. A well-designed pilot with a longer duration that will facilitate a fair evaluation has significant potential to positively impact job creation and global competitiveness in the American economy.

**Regulation A+ Blue Sky Preemption** – The SEC should also finalize the overdue rules for Regulation A+, which would exempt certain offerings of up to $50 million raised over a 12 month period from registration. In order to be effective, this exemption should include
preemption of state blue sky laws. A lack of blue sky preemption would effectively nullify congressional intent due to the significant costs of compliance that startups would need to undertake in order to comply with fifty different legal frameworks. In addition, Congress should review other rules, such as Regulation D, and ask if blue sky preemption doesn’t similarly make sense.

Private Market Reforms:

Crowdfunding – The SEC should expeditiously move to complete the crowdfunding regulations which are long overdue their statutory deadlines. I would suggest that the SEC run a viable crowdfunding pilot to better understand what safeguards would support early stage financings while maintaining investor protection. It is important to remember that the longer the SEC waits to finalize these rules, the longer it will take for the goals of crowdfunding to be realized. The lack of movement on this provision has been a source of disappointment to early state entrepreneurs, particularly in cities and states that lack strong angel and venture capital networks.

Accredited Investor Rules – Congress should hold the line on increasing the minimum wealth and income required to be an accredited investor. These investors are often the first life line entrepreneurs find in their struggles to build their company from the ground up. If the SEC tightens the definition of accredited investors, the consequence will inevitably be to reduce the amount of capital available to entrepreneurs at a time when they need it the most. In addition, Congress should review the concept of including “sophistication” as an alternative requirement for individuals who do not meet the financial thresholds in order to prudently expand the accredited investor pool.

General Solicitation – Congress should review the SEC’s JOBS Act rulemaking on General Solicitation to ensure that Congressional intent was not compromised. The final rules promulgated by the SEC raised concerns from a number of early stage investors and entrepreneurs due to the cumbersome nature of the restrictions written into the rules. These rules should be reviewed to ensure that congressional intent to allow limited general solicitation as an additional tool for entrepreneurs in their efforts to attract capital is not hamstrung.

Congress should also clarify the definition of general solicitation as not applying to “demo days” as defined in the Helping Angels Lead our Startups (HALOS) Act.

Needed Clarity for Secondary Transactions – A simple but powerful improvement that would help private markets is to amend Section 4 of the 33 Act to provide needed clarity and efficiency for secondary market transactions. These are transfers from employees, investors and other shareholders who need or desire liquidity to accredited investors (which is particularly important given the time to an IPO). We strongly encourage Congress to support legislation which amends Section 4 to bring needed clarity to the application of the Federal Securities Laws and Blue Sky Laws in secondary transactions involving accredited investors. The proposed change would add a new Section 4(a)(7) to the 33 Act, and I understand it is currently in draft form.
Potential Public Venture Exchange:

The second question that was asked as follow up to the subcommittee hearing was, “Could a public “venture exchange” improve emerging growth companies access capital?” The idea, as I understand it, would be to create a new exchange with a certain amount of regulatory relief and market structure adaptations that would encourage public listing of small cap companies in order to promote access to capital and public financing. The goal of more public listings for small cap companies is certainly laudable as an IPO often generates greater economic activity and job growth. But building a venture exchange before we see any data produced by the tick size pilot, provided the pilot is given an appropriate duration, seems premature. In addition, I question whether the regulatory relief and market structure reforms wouldn’t be more effective in achieving our shared goals if implemented in the current systems.

A public “venture exchange” raises two initial questions in my mind:

- First, is there a demonstrated need for a public venture exchange, as late stage private financing has been robust for more than a decade? The strongest late stage companies have abundant access to private capital and prefer to wait to go public until their business is sufficiently stable and predictable to perform well for public investors. The sources for late stage private financing have grown over the last decade beyond traditional venture investing and include the ability to raise primary and secondary capital.

- Second, are there any potential downsides to a public venture exchange? The risk is that it would become a second-tier market with limited appeal to investors and, therefore, offer limited liquidity for issuers. When we spoke to institutional investors during the development of the JOBS Act, there was concern about creating a second exchange which would bifurcate the interest of small cap buyers versus their strong preference for improving the existing public and private markets regulatory framework.

While there is a need to increase IPOs, an interim public exchange may not be the answer as startups and public investors ultimately want access to more, not less, liquidity. While open to learning more, it is hard to see the challenges that public venture exchanges solve which can’t be addressed under the current system. My suggestion is to pursue the same broad goal of market reform but to do so by pursuing the recommendations noted above and discussed during the hearing, and working with stakeholders to find more proposals to achieve our shared goal of a better capital formation environment for small emerging growth companies throughout their lifecycle.

Thank you again for the opportunity to comment on the important issue of access to capital for small companies. Again, I commend this committee for the critical issues you are raising. I look forward to hearing the committee’s feedback and am available to answer any questions.