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Over the past few years, there has been significant debate about the economic impact of High Frequency Trading (HFT) on the Equity Capital Markets in the United States. Much of this discussion focuses on the specific activities of these market participants and how the rise in their trading activity has introduced increased risk and volatility – even within the inner workings of equity market function. In other words, memories of the May 2010 "Flash Crash" are still fresh in the minds of market participants and fears of a repeat event are prevalent.

However, HFT, in and of itself, is not the root cause of increased market risk. Indeed, we would argue that the challenges surrounding HFT are actually a symptom of a more complex market structure that promotes and encourages potentially counterproductive trading behavior - behavior that reduces the availability of capital for smaller capitalization companies to expand their business and reduces liquidity for investors. As such, any debate about the pros and cons of HFT really needs to address the structure of the equity market that has given rise to its existence.

Today's market structure has evolved over the past decade and half as a result of several regulatory changes regarding trading increments, fair access and order routing changes just to name a few. To be clear, each of these changes was well-intended and has had positive effects on market participants. Yet there are a significant number of market participants who have grown increasingly skeptical that the sum total of these changes has actually resulted in a market that is holistically better or worse.

Rather than debate that point, we are encouraging lawmakers and regulators to explore and implement modifications to the current market structure to further improve equity market function. In doing so, our aim should be to accomplish objectives that further enhance the capital markets in the United States, which are still the best in the world, but are increasingly under siege as other global marketplaces evolve. These goals should be clearly defined in their objectives, observable in their outcomes, and easily modified as additional data around market performance is gathered.

To be clear, if we remain stagnant in our approach to equity market structure in this country, we are increasingly putting our economic growth and private sector job creation at risk. Conversely, improvements to the equity market function will not only improve the market experience for all participants, but it will continue to foster the kind of economic activity that has been the hallmark of the American Experience since the outset of the Industrial Revolution. Later in this testimony, we will lay out specific observations around market structure that we strongly believe are inhibiting

capital formation in industries that are vital to the continued economic growth of the United States.

In making assessments about market structure, we have encouraged regulators and legislators to be balanced and thoughtful in their approach, while attempting to implement change. With just about any market-developed convention, there are both positive and negative aspects to the presence of electronically-driven trading firms that utilize algorithmic-based programs to identify profit opportunities and execute upon them. One such positive is that many market participants who engage in High Frequency Trading are able to generate profits at very thin trading spreads. This attribute has led to a significant reduction in transaction processing and execution costs which has translated into lower commissions paid by all market participants.

However, in the quest to accomplish this goal, we have created a highly fragmented marketplace that is quite hostile to the vital functions necessary to promote the capital formation that leads to private sector job growth. Not only has there been a substantial decline in small company IPOs over the past decade and a half (transactions raising $60 million or less), but many small-cap public companies have also suffered from a lack of capital formation which has inhibited their ability to raise capital efficiently leading to limited job creation, innovation and investment opportunities stemming from startups and small companies.

For this reason, a group of market participants representing a cross section of the startup and small-cap company ecosystem formed the Equity Capital Formation (ECF) Task Force to examine the challenges that America's startups and small-cap companies face in raising equity capital in the current public market environment and develop recommendations for policymakers that will help such companies gain greater access to the capital they need to grow their businesses, create new industries, provide increased competition to the markets, and ultimately create private sector job growth.

The attached report from the ECF Task Force*, "From the On-ramp to the Freeway: Refueling Job Creation and Growth by Reconnecting Investors with Small-Cap Companies,"* was presented to the United States Treasury in November 2013 and sets out two areas for consideration: (1) the implementation of a pilot program aimed at increasing liquidity in small-cap stocks by fostering a simpler, more orderly market structure for trading small-cap stocks and (2) the expansion of access to capital for small startups and micro-cap companies by completing the regulatory changes outlined in the JOBS Act relative to Regulation A+ and resolve conflicts with state laws. These recommendations are designed to enhance capital formation for small companies while balancing the needs of investor protection and preserving many of

the important improvements made to the market structure to which we have become accustomed.

The United States' one-size-fits-all capital markets ecosystem makes capital formation for small-cap companies challenging. Today's market structure is marked by speed of execution, lower transaction costs and sub-penny increments, which favors liquid, large-cap stocks and inadvertently fosters illiquidity in small-cap stocks where the benefits of High Frequency Trading are less obvious. As we discuss in the attached report, for many small-cap investors, true price discovery and market depth are of greater importance than speed of execution. Indeed, the current market structure which favors speed over price discovery is highlighted as a key reason why institutional investors, who are the primary providers of capital for small companies, have remained on the sidelines – forgoing investment in this critical ecosystem because the risk of position illiquidity is too great.

A well-designed pilot trading program that allows for a true empirical test of the effects of wider spreads and limited increments in small-cap stocks will encourage fundamental buyers and sellers to meaningfully engage with each other, bringing the volume and depth necessary to enhance liquidity in the small-cap market. These proposed recommendations would extend to approximately 2 percent of the average daily market volume and would certainly be worth the upside of greatly expanded economic activity. Importantly, long-term market structure changes in the small-cap market will cause other market participants to adjust their trading practices and/or business models accordingly.

The health of the U.S. capital markets system is critical to driving private sector job growth and by extension, America's future prosperity. As stewards of this system and the public interest, policymakers and market participants have a duty to ensure that our markets remain fair and orderly, and that their benefits reach the largest number of Americans possible.

We have the opportunity to re-examine the current market structure as it relates to small companies and address some of the remaining barriers to accessing growth capital to further support the momentum generated by the success of the JOBS Act. We can support the growth of America's most promising private and public growth companies by allowing them to access the capital markets to fund their growth, create new industries and provide increased competition to the markets. We owe it to those seeking jobs and those small companies creating opportunities to try to adjust a small part of the market in order to bring job opportunities to those hard working individuals. And we can do it without sacrificing many of the benefits that many investors enjoy that were brought about by the advent of the current electronically-driven market structure.

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

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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 muting 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 $0.05 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.*

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 2 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]

[2] *Bloomberg.*

[3] *http://dealbook.nytimes.com/2013/10/20/wealth-fund-cautions-against-costs-exacted-by-high-speed-trading/?_r=0*

II. Statement of Purpose

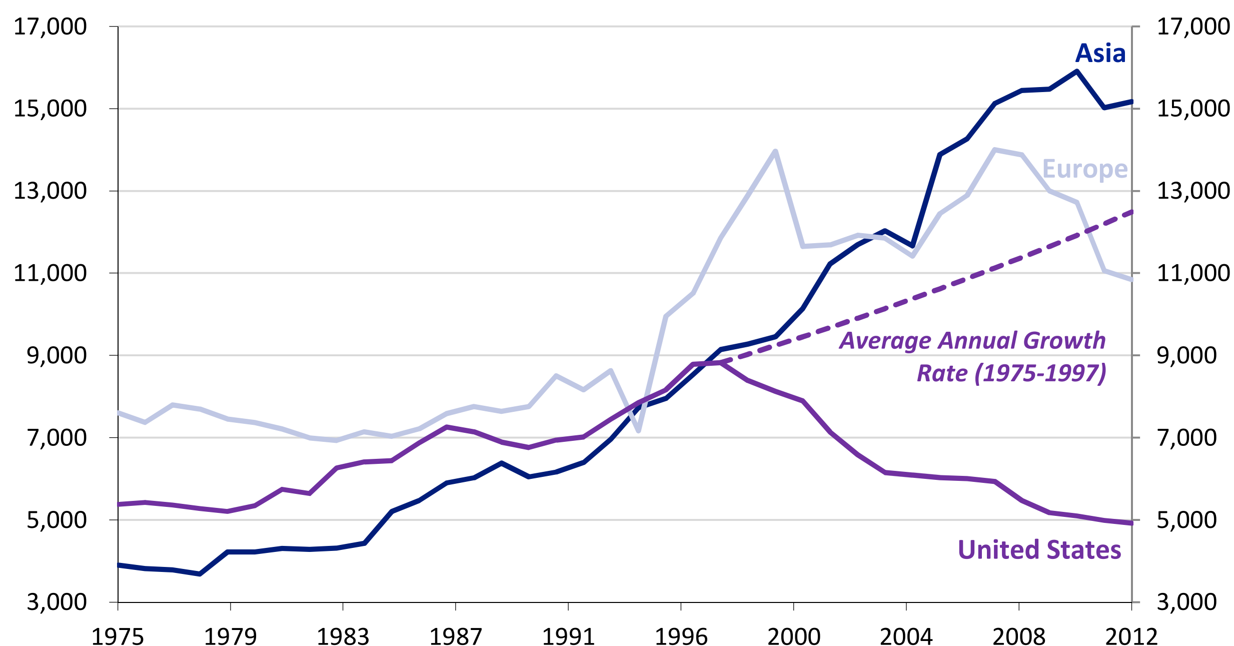
Comprising professionals from across America's startup and small-capitalization company ecosystems, the Equity Capital Formation (ECF) Task Force formed in June 2013 to 1) examine the challenges that America's startups and small-cap companies face in raising equity capital in the current public market 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.[4]

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 million[5] fewer private sector jobs over this time period as a result.

Chart A: Total Equity Listings



Source: Source: Weild, David and Kim, Edward. IssuWorks. Voss, Jason. CFA Institute.

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

[4] *Post-IPO Employment and Revenue Growth for U.S. IPOs, June 1996-2010. (May 2012)*

[5] *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.[6] 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.[7] 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.

79% 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 filling provision.[8]

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[9], versus 121 in all of 2012.[10] Similarly, through the same period, 2013

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[6] *Dealogic and Renaissance Capital as of October 25, 2013.*

[7] *Ibid.*

[8] *"The JOBS Act One Year Later: A Review of the New IPO Playbook." Latham & Watkins April 2013.*

[9] *As of 10/25/2013.*

[10] *Dealogic.*

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.[11]

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.[12]

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

On the On-Ramp:	63 companies currently in registration with the SEC.[13]
Estimated Backlog:	225 estimated companies in confidential registration for an IPO or deemed close to registering for an IPO per Renaissance Capital's Private Company Watchlist.
Sparked Interest:	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.[14]
IPO Confidential:	One year post-JOBS Act, 63% of companies that registered with the SEC as EGCs used the confidential filing provision.[15]
Trending Up:	Companies with less than $250 million market caps have constituted 34% of IPOs so far in 2013 — up from 26% in 2012.[16]
Dollars Raised:	$28.5 billion in proceeds from EGC companies.[17]
Aftermarket Performance:	EGC IPOs are up average of 64.2% offer/current versus 30.4% for the non-EGC IPOs in the comparable period.[18]

[11] *Ibid.*

[12] *Bloomberg; Dealogic.*

[13] *Dealogic and Renaissance Capital as of October 25, 2013.*

[14] *Ibid.*

[15] *"The JOBS Act One Year Later: A Review of the New IPO Playbook." Latham & Watkins April 2013.*

[16] *Dealogic.*

[17] *Ibid.*

[18] *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 a 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 fostering 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. Formerly accounting for 80 percent of yearly IPOs[19], under-$50 million IPOs fell to 8 percent since 2012.[20] 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[21] 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.[22]

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[19] *Represents IPOs from 1991 to 1997, prior to electronic-order-book market. Source: Weild, David, with E. Kim and L. Newport. Grant Thornton, "The Trouble with Small Tick Sizes," (September 2012).*

[20] *Dealogic.*

[21] *Jumpstart Our Business Startups Act, Pub. L. No. 112-106, Title IV (2012).*

[22] *Rutheford B. Campbell, Jr., Regulation A: small Business' Search for 'A Moderate Capital', 31 Del. J. Corp. L. (2006); Rutheford B. Campbell, Jr, Regulation A and the JOBS Act: A Failure To Resuscitate, (2012) (hereinafter, "Campbell, A Failure to Resuscitate").*

So far, Title IV has not achieved the desired result, as Regulation A remains virtually unused.[23] 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 Moch, CEO, Chimerix, Inc.**

[23] *Ibid.*

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[24] 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.[25] 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.

[24] *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). Based on price-to-sales ratio.*

[25] *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, those 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 funds[26] – 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.

[26] *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.[27] 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.[28]

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.[29]
(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.[30]

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.[31] 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. In

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[27] *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).*

[28] *Rutheford B. Campbell, Jr., Regulation A: Small Business' Search for 'A Moderate Capital', 31 Del. J. Corp. L. (2006); Rutheford B. Campbell, Jr., Regulation A and the JOBS Act: A Failure To Resuscitate, (2012) (hereinafter, "Campbell, A Failure to Resuscitate").*

[29] *Currently under Regulation A, issuers are required to provide financial statements but such financial statements need not be audited.*

[30] *15 U.S.C. S 77(b) (2012).*

[31] *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 18(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:

1.1 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.

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 506(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.[32] 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.

Chart D: Small-Cap Companies and Capital Formation

	Before 1997	After 2001	% change
Tick sizes	$0.25 per share	$0.01 per share	-96%
Investment banks (acting as a bookrunner)	167 (1994)	39 (2006)	-77%
Small company IPOs	2,990 (1991–1997)	233 (2001–2007)	-92%

Source: Weild, David, with E. Kim and L. Newport. 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:

[32] *Themis Trading http://blog.themistrading.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.[33]**

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.[34] 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.[35] 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 insitutions. 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.[36] Domestic equity small-cap mutual funds now hold $409 billion in assets[37] – 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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[33] *http://dealbook.nytimes.com/2013/10/20/wealth-fund-cautions-against-costs-exacted-by-high-speed-trading/?_r=0*

[34] *Ibid.*

[35] *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).*

[36] *Investment Company Institute. 2013*

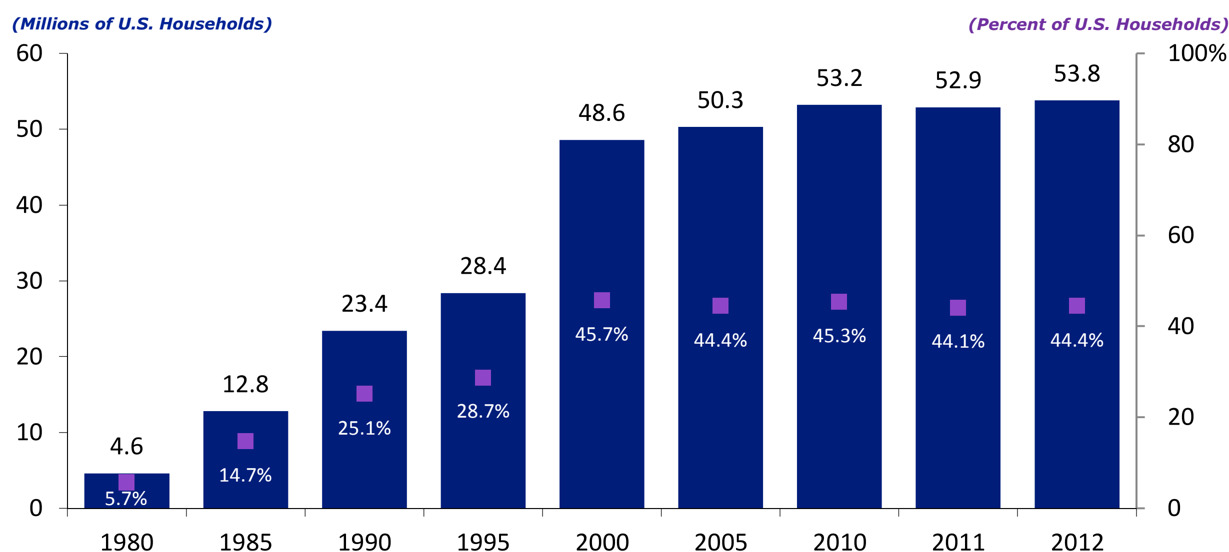
[37] *Morningstar. As of June 2013. "Small-cap" includes small value, small blend, small growth funds.*

Chart E: Mutual Funds Snapshot

U.S. Mutual Fund Assets:	$13 trillion at year-end 2012[38]
Percentage of Mutual Funds Assets Owned by Households:	89%[39]
Percentage of Mutual Funds in Equities:	45%[40]
Assets Held by Equity Small-Cap Mutual Funds:	$409 billion[41]

Source: Morningstar; Investment Company Institute. 2013.

Chart F: Households Owning Mutual Funds



Source: Investment Company Institute. 2013.[42]

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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[43] 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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[38] *Ibid.*

[39] *Investment Company Institute. 2013.*

[40] *Ibid.*

[41] *Morningstar. As of June 2013. "Small-cap" includes small value, small blend, small growth funds.*

[42] *2013 Investment Company Fact Book: A Review of Trends and Activity in the Investment Company Industry. Washington, DC: Investment Company Institute. Available at www.icifactbook.org<http://www.icifactbook.org.*

[43] *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.

Chart G: U.S. Equities Ownership & Trading Characteristics

	Sub $750 Market Cap	Above $750 Market Cap
Institutional Ownership	31.3%	83.3%
Retail Ownership	68.8%	16.7%
Research Analysts	2	14
30D ADTV	0.3 million shares	1.8 million shares
30D $ADTV	$2.0 million	$70.0 million

Source: CapIQ as of October 25, 2013. 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.[44]

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.

[44] *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 increment. Institutions that internalize order flow will still be able to provide price improvement for individual investors, but only at the mid-point 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 mid-point 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 sizes**") 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 blocks 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 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.[45] Among companies with market caps of less than $250 million, 55 percent lack meaningful coverage.[46] 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.[47] 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

	Median		
Mkt Cap Range	**Market Cap**	**Institutional Ownership**	**Individual Ownership**
$0M – 50M	$27.4	10.7%	89.3%
$51M – 100M	71.7	19.5	80.5
$101M – 250M	171.7	35.8	64.2
$251M – 500M	348.4	49.3	50.7
$500M – 1BN	712.8	70.0	30.0
$1BN +	3,448.3	84.0	16.0

Source: Data from CapIQ; 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 STaR 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

[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 100 firms included on either the Institutional Investor or StarMine list of analyst rankings.*

[46] *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).*

[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 STaR account for only 2 percent of all trading volume on U.S. exchanges.[48]

Small cap stocks account for only 2% of trading volume on U.S. exchanges.

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. STaR will help restore that opportunity.

[48] *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-ramp" 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.

large-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 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.

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.

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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.

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