TO: Market Structure Subcommittee

FROM: Stephen Holmes

DATE: September 21, 2012

SUBJ: Quick Overview of Decimalization

During our initial agenda-setting conference call on Wednesday, September 19, I accepted the task of developing a "one-pager" to help the Subcommittee better understand and prioritize the topic of Decimalization. As I feared, this turned out to be a little more than a "one-pager"….

Decimalization is a topic that many of us know very little about. And yet, the JOBS Act specifically directs the SEC to conduct a study regarding the impact that quoting in penny increments has had on (i) the number of IPOs, (ii) liquidity for the securities of small and middle capitalization companies and (iii) whether, at penny increments, there is "sufficient economic incentive" for market makers to support trading in these securities. Further, the JOBS Act gives the SEC discretionary authority, based upon the results of its study, to pass rules that would increase the minimum trading increment for securities of emerging growth companies to up to $0.09 cents per share.

It is clear that Decimalization is a priority topic for Congress, and the SEC is currently addressing it. We learned on our call that the SEC's Trading and Markets Division would like to know whether we, as the Market Structure Subcommittee, have any views on Decimalization. This Division is responsible for establishing and maintaining standards for fair, orderly and efficient markets.

Decimalization is a controversial topic. You probably know that there has been a dramatic reduction in the number of IPOs by Emerging Growth Companies. Many people have argued that the decline in the number of IPOs can, in part, be attributed to the SEC's move toward Decimalization—which they argue reduced broker-dealers' economic incentive to make markets in less liquid stocks, such as those of smaller companies. It is also argued that the illiquidity of the many thinly-traded stocks is at least partially the result of Decimalization. Others would argue that the low level of IPOs and illiquidity is aggravated by macro factors other than Decimalization. It is not a black-and-white situation. Our Subcommittee would need to hear all sides of the story and determine whether there is a consensus on how to proceed.

Recommendation: I think Decimalization is a topic that the Subcommittee should examine. Is it possible and desirable to have modified rules for Emerging Growth Companies? Are some institutional and individual investor groups supportive of this concept? This issue is important to the SEC, to Investors and to the nation's overall economy.

Please review the two-page 'primer' on Decimalization below, which hopefully provides you with the salient context that will inform our discussion of this critical subject.

Decimalization

Title I, Section 106(b) of the JOBS Act is entitled "Other Matters – Tick Size." This section, overlooked by many, may in fact be the most important provision in the Act. In it, Congress requires the SEC to conduct a study on the "transition to trading and quoting securities in one penny increments, also known as decimalization... and the impact that decimalization has had on the number of initial public offerings since its implementation relative to the period before its implementation."

Decimalization has become a catch-all term to describe a series of regulatory changes that were implemented by the SEC beginning in 1997. These changes collectively served to shrink tick sizes – the minimum increment in which a stock can trade – from 25 cents down to 1 cent.

While these changes were intended to benefit investors, many prominent market structure experts have asserted that the decline in economic incentive has dramatically harmed capital formation for small and mid-cap companies by destroying the economic infrastructure that once supported them so successfully in this country.

A brief synopsis:

<u>Order Handling Rules</u> (1997) required specialists and market makers to provide investors with their most competitive quotes. These new rules laid the groundwork for greater competition between dealers, and set the stage for the shrinking of trading spreads and tick sizes from the longstanding levels of one-quarter and one-eighth of a dollar.

<u>Regulation ATS (Alternative Trading Systems)</u> (1998) enabled electronic networks to link their orders with registered exchanges. It exposed traditional trading venues like NASDAQ to fierce competition, driving tick sizes down to as low as one-thirty-second of a dollar, or 3.125 cents.

<u>Decimalization</u> (2001) required stocks to be quoted in decimals instead of fractions. Decimal quoting allowed a minimum tick size of 1 cent, which resulted in decreased liquidity in already illiquid stocks and increased algorithmic trading and speculative activity especially in already liquid stocks.

<u>Regulation NMS (National Market System)</u> (2005) implemented several rules intended to improve exchanges and overhaul their structures. While prohibiting sub-penny stock quotes, the SEC allowed certain exceptions for quoting and trade execution in these increments, such as dark pools, algorithmic trading or broker-dealers providing price improvements to a customer order. Unfortunately, these exceptions became the rule, and sub-penny trading proliferated, further cementing the erosion of trading spread economics that began in 1997.

So, when we speak of "decimalization," we're really speaking of the collective impact of these rule changes. ***In simplest terms, decimalization can be thought of as the SEC-mandated shrinking of tick sizes to one penny for all stocks, regardless of price, market cap, volume or liquidity.***

Decimalization, in the context of rapidly advancing trading technology, has created a stock market that is highly efficient. Investors' cost of execution is better than ever. There is growing evidence, however, that the market has become divided: Small company shares have not experienced the efficiency and cost benefits that have accrued to larger, more liquid stocks.

As instructed by Congress, the SEC did conduct a study on decimalization this summer, concluding that the SEC "should not proceed with the specific rulemaking to increase tick sizes… but should consider additional steps that may be needed to determine whether rulemaking should be undertaken in the future." Further, the SEC recommended that it "should solicit the views of investors, companies, market professionals, academics, and other interested parties on the broad topic of decimalization, how to best study its effects on IPOs, trading, and liquidity for small and middle capitalization companies, and what, if any, changes should be considered." As long ago as eleven years ago, there was some concern about possible unintended negative consequences from decimalization. For example, in a speech before the Exchequer Club in Washington, DC, in July 2001, Acting SEC Chairman Laura S. Unger warned:

> *Rapidly changing quotes in a sub-penny environment could have ramifications on market rules limiting "locked" and "crossed" markets and trading at inferior prices. These various rules are dependent upon being able to identify the best bids and offers at a given point in time — a feat not easily accomplished when any given quote is only visible for a brief moment.*

Just last month, former SEC Chairman Arthur Levitt said to Bloomberg:

> *The irony of all this is that the change in Order Handling Rules that were instituted under my watch at the [SEC] has resulted in the proliferation of markets, technologies and automation that brought about the flash crash and yesterday's [Knight Securities] events. I think public confidence is severely shaken by things of this kind.*

An increasing number of market and securities industry experts have gone on the record in recent months in recognizing the deleterious effects of decimalization and favoring the increase of tick sizes – either via algorithmic customization by the exchanges (for all stocks or perhaps limited to small caps) or by giving issuers control over establishing their own tick sizes.

This last solution is one that was introduced by David Weild, who heads capital markets at Grant Thornton, one of the global six audit, tax and advisory firms, and the former vice chairman of the NASDAQ Stock Market. He is widely recognized as expert on market structure and has been prolific in his appearances before Congress and in his published studies on the capital formation crisis in this country.

Over a dozen leading market experts and practitioners publicly support the increase in tick sizes, including:

- Duncan Niederauer, CEO of NYSE-Euronext
- Jim Toes, President and CEO of the Securities Traders Association
- Kevin Cronin, global head of trading at INVESCO
- Jeffrey Solomon, CEO of Cowen and Company, a growth company investment bank
- James Angel, professor at Georgetown University

Professor Angel, in particular, has been notably vocal in his attack against the structure of one-size-fits-all tick sizes. In a letter to the SEC in June 2012, he wrote:

> *It is quite logical that the optimal tradeoff [of tick sizes] will be different for different companies. Large, liquid companies may have such sufficient liquidity that additional incentives for liquidity providers are unnecessary. On the other hand, smaller and less liquid companies may benefit from providing relatively more protection for liquidity.*

A near-term approach that has been espoused by many experts is for the SEC to initiate a broad-based pilot program to examine the impact of increasing tick sizes, especially for micro-cap and small-cap companies. Any such program will have to be sufficiently large and diverse enough (hundreds of stocks with a range of stock prices, market cap, volume and liquidity) to lead to statistically significant results.

I believe there is increasing support within the SEC and Congress for such an initiative.

My Background

Full Disclosure Item: I want to make sure that everyone is aware of my background. I am not an expert on Securities Law or Capital Markets. I am a GP and COO at a well-established venture capital firm that makes long-term commitments to early-stage IT and Life Science companies. The vast majority of these companies are located in the U.S. Inevitably, a significant percentage of our investments fail. That's the price of major innovation. Those that do succeed often aspire to become large, public companies. I know from first-hand experience that today it is much more costly to go public and be public than it used to. But that is not the major problem for micro-cap and small-cap public companies – and there are a lot of them. Their major problem, in my opinion, is the absence of an ecosystem that supports these companies in the stock market in the form of market makers and investment research. This used to exist. We invest on behalf of "blue chip" institutional investors – public pensions, private pensions, endowments, charities, banks, insurers, etc. If we are successful, our investors are successful. Our successful companies are the economic engines for job and economic growth. Studies show that 92% of the job growth created by venture-backed companies occurs after the companies go public and have capital to expand their operations. Our interests are aligned with those of our investors and of our country. Our common success is dependent on a stock market that is supportive of micro-cap and small-cap companies, enabling them to attract investment capital and sustain their growth. My resume is shown below.

Stephen Holmes joined InterWest in 1989 and is responsible for all of the company's financial, fundraising, investor relations and administrative functions. Viewed by many in the industry as a leader in venture capital financial reporting, investor relations and administrative issues, Stephen is a frequent guest speaker at conferences hosted by the NVCA, Venture Economics, the Private Equity Investor and the International Business Forum. He coauthored the chapter on "Limited Partner Financial Reporting" for PEI's *Investor Relations Manual* (published in 2011).

In 2012, Stephen was appointed to the [Security and Exchange Commission's newly-formed Investor Advisory Committee]. This 21-member, permanent committee was formed to advise the commissioners on regulatory priorities and initiatives to protect investor interests and the market's integrity. Mandated by the Dodd-Frank Act, the committee was appointed by all five SEC commissioners and represents a wide variety of stakeholders, including individual investors, institutional investors, academia, mutual funds, private equity, and state securities regulators. He is also a member of the Market Structure Subcommittee.

From 2008-2012, Stephen was a director of the National Venture Capital Association (NVCA), and is a founding member of its CFO Task Force. As the voice of the venture capital community, the NVCA advocates policies that encourage innovation, spur job creation and reward long-term investment in startup companies.

Stephen is a member of the International Private Equity and Venture Capital Valuation Guidelines Board (IPEV Board). The IPEV Board was created in 2005 to develop and promote valuation guidelines and to provide guidance on the application of those guidelines to all worldwide stakeholders in the private equity and venture capital industry, including practitioners, investors, regulators and auditors. IPEV has also developed Investor Reporting Guidelines, which were developed and are intended to be used by both general partners and limited partners.

Stephen is a founding member of the Financial Accounting Standards Board's (FASB) Small Business Advisory Committee, representing the venture capital industry. He was also a founding member of the Private Equity Industry Guidelines Group (PEIGG) in 2002. PEIGG, the private equity industry's first broad-based alliance, included general partners, limited partners and service providers participating in both the venture and buyout segments in the U.S. and overseas. The group's objective was to promote consistent and transparent valuation and reporting guidelines for the private equity industry.

Prior to joining InterWest, Stephen was vice president, finance and administration, of the highly successful venture-backed international manufacturer, Specialty Brands, a $140 million specialty foods company headquartered in San Francisco.

Stephen is a graduate of Lehigh University (summa cum laude, Phi Beta Kappa) and the Harvard Business School (with distinction). Prior to his business career, Stephen served as an officer in the U.S. Navy, where he volunteered for a tour of duty in Da Nang, Vietnam.