A Dissenting Opinion and <u>Alternative Recommendation #1</u> regarding the Market Structure Subcommittee's Recommendation #1 Decimalization and Tick Size

Submitted by Stephen Holmes for the 1/31/14 Investor Advisory Committee ("IAC") meeting

I am a member of the Market Structure Subcommittee. For the past 25 years I have been a general partner and COO at InterWest Partners, a large, well-known venture capital firm that invests in early-stage Information Technology and Healthcare companies that are developing transformative technologies. Nearly all of these companies are located in the United States and are privately held when we make our initial investment. If these companies are successful, many will eventually need to raise growth capital. A robust public market is the most effective mechanism for these companies to access capital.

The investors in America's 2,000 small-cap public companies, defined here as companies with a market capitalization of less than $750 million, face a serious and worsening problem. Today the vast majority of these companies' stocks are highly illiquid and their stock prices are quite volatile. Institutional investors are still very interested in small-cap growth companies. However, the institutional investors have significantly decreased their level of capital committed to this market segment due to adverse market conditions created by illiquidity and volatility. As a result, these small-cap companies usually have difficulty in attracting much-needed equity capital infusions to fuel their future growth as public companies. The current situation has obvious serious negative impacts on the owners of these small companies—***<u>and these owners are mostly individual investors</u>****<u>. Further, the lack of capital reduces the growth in jobs and innovation at these companies, which traditionally have been the engines of growth in the U.S. economy.</u>*

To alleviate this situation, I advocate that the IAC recommend to the SEC Commissioners this proactive Alternative Recommendation #1 along with the Specific Implementation Suggestions (beginning on page 10). I will discuss Alternative Recommendation #1 after providing some background information. I believe that Alternative Recommendation #1 would be very constructive for long-term, fundamental investors in small-cap companies.

When considering Alternative Recommendation #1, it is important to remember that it applies <u>only</u> to the trading volume of small-cap company stocks, which is just ***<u>2%</u>*** of the stock markets' *total* trading volume. Alternative Recommendation #1 is <u>*not*</u> a wholesale, broad-based change that would affect the other 98% of the markets' transactions.

The rest of this document is organized into seven sections, as follows:

SECTION 1: Current Stock Market Structure Rules Harm Small-Cap Investors

I believe that it is time for the Commission to test whether or not its Decimalization, tick size and related market rules, as implemented in the late 1990s and early 2000s, have been major factors in hindering the growth and success of the small-cap segment of America's capital markets. Additionally, I believe that the current market rules have been major factors in the creation of a market segment where most individual investors are not benefitting from institutional investor participation.

There were many very good reasons for creating the SEC's current Decimalization and related market rules. In the vast majority of cases, companies and investors have benefitted significantly from these innovative rules as transaction costs for buying and selling equities have come down substantially. However, most of the benefit for investors has been only in large-cap stocks where there were already good levels of trading liquidity. There is an important exception to Decimalization's benefits: Decimalization appears to have seriously, and unnecessarily, disadvantaged America's small-cap companies and their long-term, fundamental investors—the significant majority of whom are individual investors.

For a high percentage of today's small-cap stocks, liquidity is low, volatility is high and capital formation is low (compared to earlier decades including the 1980s and 1990s). This clearly refutes the notion that "**one size fits all**." Decimalization and its related market rules are not working for the small-cap market segment or its investors.

> *(For an ultra-brief background on what "Decimalization" means and the very substantial changes in the SEC's market rules over the past fifteen years, please see the attachment called "Attachment for Dissenting Opinion and Alternative Recommendation #1." I wrote this attachment sixteen months ago at the request of the Market Structure Subcommittee to provide them with an overview of this topic.)*

Today's dire situation is much worse than it was in the 1980s and 1990s, before the implementation of Decimalization in 2001 and its two foundations: the Order Handling Rules (1997) and Regulation Alternative Trading Systems (1998). As the Market Structure Subcommittee learned from meetings with a variety of experts, market structure is failing to provide adequate institutional liquidity in small-cap public companies. We met with three experts—a well-known professor who focuses on micromarkets, a former senior executive at a major stock exchange, and the head of equity trading at a major sell-side institution that represents the investment interests of a large number of individual investors. They expressed the view that "Decimalization" and "penny tick sizes" were a likely cause of the observed declines in liquidity in small-cap stocks, which in turn had likely undermined capital formation. We did not hear from any outside experts offering opposing or alternative views.

Therefore, I cannot support the Market Structure Subcommittee's "do-nothing" Recommendation #1, which states: *"The Committee recommends that the Commission not reverse its decimal pricing policy. That includes not engaging in 'tests' or 'pilot' programs."*

SECTION 2: Small-Cap Companies and Their Investors

Nearly *70%* of the outstanding small-cap shares are owned by *individual* investors. Small-cap companies are broadly accepted as being important economic engines and sources of job growth for America's future. Their share of stock market transactions is tiny, but they have the potential of being disproportionately important to America's future.

Congress recognized this fact when it enacted the JOBS Act with the intention of helping small-cap companies to overcome significant, but unnecessary, regulatory impediments to their growth. This Act had strong support from both Democrats and Republicans. The JOBS Act has demonstrated that it is possible to have regulations that balance the needs of investor protection while removing barriers to capital formation for private companies that can now access the markets with Emerging Growth Company ("EGC") status. However, the JOBS Act stopped short of mandating any market structure reform aimed at promoting increased trading liquidity. Instead, the JOBS Act ***mandated the SEC to consider pilot programs for alternatives to its current Decimalization, tick size and related market rules for small-cap companies.***

Congress continues to have a high level of interest in Decimalization. Just recently, on November 14, 2013, the bi-partisan Tick Size Bill (H.R. 3448) passed the House Financial Services Committee by a *unanimous vote: 57–0*. ("Tick size" refers to the smallest increment at which the price of a stock may be quoted and traded.)

The lack of trading liquidity for many new EGCs and other small-cap companies remains a key barrier to capital formation because the primary providers of capital, specifically mutual funds and other institutional investors, remain unwilling to invest their capital in small public companies with limited trading volume. This barrier also adversely impacts the many individual investors in small-cap stocks.

Small-cap companies often need to raise capital by issuing stock to make investments in their future growth, which usually includes the addition of jobs. At first, these companies raise capital via their Initial Public Offering (IPO) and later via follow-on offerings of their stock. A low level of investor interest in small-cap companies can make it quite expensive for these companies to raise additional capital to fund future growth. It is thought by many that the decline in institutional interest in smaller companies, as observed by Wall Street, is mostly the result of the loss of these stocks' liquidity—which is the result of "Decimalization" and "penny tick sizes." This significantly harms the company, its employees, and its investors (most of whom are individuals).

The following statistics demonstrate that over the past 10+ years, small-cap companies, and their long-term, fundamental investors, have been substantially limited in their ability to raise money:

- For the years between 1991 and 1997 (*before* the "Dot Com stock bubble"), there were 2,990 small IPOs (less than $50 million raised).
- For the same number of years between 2001 and 2007 (*after* the "Dot Com stock bubble"), there were only 233 small IPOs—a decrease of 92%. Note that during this time period, tick sizes had been substantially reduced by the SEC's current market rules for *all* companies (including small-cap companies).

- The headlines at the end of 2013 discuss the stock markets' recent strong performance and the rebound of IPOs. In reality, this is only a very, very modest rebound for small IPOs (less than $50 million IPOs) from an abysmally low number of such IPOs in recent years. I believe this persistently low number of small IPOs is largely the result of the SEC's current market rules implemented in the late 1990s and early 2000s. For example, in 2013 there were only 21 small IPOs and 161 larger IPOs. Strikingly, in 1993, long before the "Dot Com stock bubble," there were 504 small IPOs and 161 (*this is not a typo!)* larger IPOs.

Unlike the investor profile for mid-cap and large-cap stocks, the ***individual*** investor is the predominant owner of small-cap stocks. This means that institutional investors are not nearly as involved with small-cap stocks as with the balance of public stocks. This is *not* in the best interests of individual investors. Here are the facts:

- Institutional investors own only 31% of small-cap stocks vs. 83% of larger-cap stocks.
- Average daily trading volume (in shares) of small-cap stocks is, at most, 1/6th that of larger-cap stocks.
- Average daily trading volume (in dollars) of small-cap stocks is, at most, 1/35th that of larger-cap stocks.

This has an adverse impact on an individual investor's investment in small-cap stocks. Fundamental institutional investors hold large pools of funds; these potential investors are definitely still *interested* in many small-cap stocks, but they are not very *invested* in them today. With the relatively low institutional investment level, it is more difficult for the individual investor to ultimately realize a profit from price appreciation. Of course, this begs the question: Why aren't institutional investors more *invested* in small-cap stocks? Much of the answer lies in the small-cap stocks' trading illiquidity and price volatility (institutions can't buy or sell these stocks without triggering significant adverse movements in price), as discussed in the next section.

SECTION 3: Low Liquidity Means Low Institutional Ownership

Without reasonable liquidity, most fundamental institutional investors cannot or will not invest in small-cap stocks (defined as stocks for companies with market capitalizations of less than $750 million). Here is how one trader describes the liquidity and volatility of small-cap stocks: "The market for small- and micro-cap stocks dried up," said Tom Carter, managing director specializing in trading small-cap stocks on behalf of mutual funds at JonesTrading Institutional Services LLC. "When you get a lack of liquidity, it creates more volatility." Another trader, Dennis Dick, describes the unattractive nature of the small-cap market for institutional investors this way: "It's nearly impossible to execute any sizable order without significant price impact. Our firm would be a proponent of this move to wider spreads, such as a nickel."

Low liquidity discourages institutional investment, shutting off a main source of trading liquidity and negatively impacting capital formation for small-cap stocks. It seems like a vicious circle, but it does not have to be this way.

I believe that Decimalization and the related market rules are ***the*** major contributors to the important illiquidity problem of small-cap stocks.

In today's stock market, it is very difficult for liquidity providers, fundamental traders or traditional market makers to make a reasonable return on the capital that they put at risk for traditional market making activities of small-cap stocks, which are generally quite illiquid. This dynamic makes it more difficult for institutional investors to accumulate, or to liquidate, a meaningful position in a small-cap stock without severe adverse price impacts, again because of their illiquidity. As a result, many institutions have vacated the small-cap investment universe. Stocks that are institutionally held generally perform better and have greater liquidity. The lack of participation by liquidity providers and fundamental institutional investors generally has had an adverse price impact on the individual investor's potential return on his/her small-cap investments.

The current market structure is largely the result of the current market rules, which not only provide for small tick sizes, but allow trading to occur between the ticks at *very* small price increments. These market rules conspire to discourage fundamental market participants from making meaningful bids and offers for small-cap stocks because computer-based traders, with little or no capital at risk, are able to jump in front of those bids and offers. Often the spreads are reduced to sub-penny increments, even if they are initially quoted wider than a penny. These market rules apply to all stocks, but their adverse impact is largely felt only among small-cap stocks.

It is true that you will often see a bid–ask spread of a dime or more for a small-cap stock. You might think that should be an attractive inducement for a fundamental trader or liquidity provider. But it is not. Wider spreads in small-cap stocks are the function of a serious lack of interest or liquidity and many of those stocks only trade episodically. Why? Because as soon as a liquidity provider begins to show interest in accumulating or liquidating a position in such a security, electronic traders tighten the spread to sub-penny levels in order to get the transaction. In other words, there is no incentive for a liquidity provider to put its capital at risk by indicating a market with any depth or size because the quoted spread is often not indicative of a level where the trade can be realized by that market participant. In fact, a much narrower spread for the same transaction is often realized by the computer-based traders with no capital a risk—and the market maker that initiated the activity often loses the trade, or is forced to pay a greater amount or sell for less. So instead, these liquidity providers (which used to be called market makers) have vacated the market because there is no incentive for them to put capital at risk when others are actually completing the trade. With the current market rules, liquidity providers cannot justify committing their capital to invest in the small-cap market segment. This is why small-cap stocks evidence the worst of all worlds—high spreads that "collapse" and little real fundamental trading or liquidity being provided.

For trades initiated by individual investors, it often appears as if the investor has benefitted from the sub-penny "price improvement" because the trade appears to have crossed at a somewhat better price than offered by the initial liquidity provider. However, if the overall effect of these individual trades results in a market structure that excludes the institutional investors from providing capital to these small, growing companies, then it behooves us to explore whether the current penny/sub-penny regime for trading small-cap stocks is really benefitting the market participants and companies alike. Not only are companies finding it more difficult and costly to raise equity capital in illiquid markets like these, but the individual investor's ability to accomplish the long-term price appreciation that often accompanies involvement by institutions is seriously inhibited by the current market structure. This results in individual investors saving a few "sub pennies" on the trade, but often missing significant longer-term price appreciation due to the lack of institutional involvement.

Multiple fundamental institutional investors have confirmed to me that they will not focus on small-cap stocks until two revised market rules are established for small-cap stocks —a wider tick size and limited trading increments within the tick.

There is little question that, over time, today's long-term, fundamental *individual* owners of small-cap public stocks (and they are the primary owners of small-cap stocks) would significantly benefit in terms of pricing and liquidity from greater fundamental institutional investments in small-cap stocks. Liquid stocks, of course, are valued higher than comparable illiquid stocks. For the same reasons, companies would benefit from a lower cost of capital.

The Decimalization and related market rules have greatly reduced brokerage costs for all trades. However, small-cap stocks do not have significant liquidity to benefit from this. The small-cap investor *does* save some pennies from brokerage fees as a result of Decimalization and its related market rules. However, that individual investor is now stuck with a fairly illiquid stock that often cannot be readily sold without a significant price concession involving *many, many* pennies. This especially applies to the majority of individual investors who have their exposure to equities through mutual funds. In a way, for small-cap stocks and their investors, Decimalization has become a "**penny wise and pound foolish**" situation for most individual investors in small-cap stocks. All investors want to reduce costs, but they also want to sell their stock in a liquid market where they achieve reasonable price appreciation.

SECTION 4: Others See the Same Problems…and Solutions

I am not the only person who recognizes the above problems, their highly-likely underlying causes, and, for some, the need for the Commission to create three or more pilot programs regarding Decimalization. For example:

- The November 11, 2013 report "*From the On-Ramp to the Freeway: Refueling Job Creation and Growth by Reconnecting Investors with Small-Cap Companies*" issued to the U.S. Department of the Treasury by the Equity Capital Formation Task Force. This Task Force includes individuals affiliated with small-cap companies, fundamental institutional investors in public companies, venture capitalists, academics, investment bankers, securities attorneys, exchanges and trading organizations. Their views are very similar to mine. The report can be accessed at: www.equitycapitalformationtaskforce.com

- The October 23, 2013 detailed plan sent by Citigroup to the SEC for a tick-size pilot program with the goal of promoting more trading and less volatility for small-cap public stocks. While some observers disagree with certain elements of Citigroup's plan, it is important to note that Citigroup's head of equities for the Americas said: "We believe wider tick sizes would help enhance liquidity and therefore we support a tick size pilot program…"

- The February 1, 2013 formal recommendation of the SEC Advisory Committee on Small and Emerging Companies (comprising a wide array of market participants, including investors, corporate issuers, securities attorneys, investment bankers and venture capitalists) that "the Commission adopt rules to increase tick sizes for smaller exchange-listed companies that will allow such companies, on a voluntary basis, to choose their own tick size within a limited range designated by the Commission" and "…allow sufficient time for the effects…to be evaluated."

- Recent comments from several of the SEC Commissioners themselves:

  - On October 2, 2013, Chair White instructed the SEC staff to work with the exchanges on a pilot program that would allow smaller companies to use wider tick sizes. Speaking to the Security Traders Association, she also challenged current assumptions about market structure, saying "despite the marketplace's ability, and our explicit authority, to differentiate between stocks with different trading characteristics, today's market structure has evolved to be '*one-size-fits-all*'." She went on to say: "For the most part, market rules and trading mechanisms are, today, the same regardless of wide variations in the 'size' of public companies. The Security Traders Association has been a leading voice for market structure rules that fit the particular needs of smaller companies. Similarly, our Advisory Committee on Small and Emerging Companies submitted recommendations earlier this year with the goal of improving market structure for smaller companies."

- On November 6, 2013, Commissioner Gallagher said: "I look forward to working with the staff on this potential pilot program."

- On December 5, 2013, Commissioner Aguilar said: "Many factors have been blamed for the decline, but one theory worth further analysis is that penny pricing and other market structure changes have adversely affected the economics of market making, leaving many small issuers—and their investors—as virtual orphans in the equity markets, with…few market makers willing to hold the inventory positions necessary to maintain liquidity."

- On December 9, 2013, Commissioner Piwowar said: "I believe we should move quickly to introduce a pilot program on increasing the tick size for small-capitalization companies."

SECTION 5: It's a Complicated Situation: *Alternative Recommendation #1*

I would be the first person to acknowledge that the solutions to our small-cap stock problems are not a clear-cut, black-and-white situation. There are many variables involved and it is impossible to really prove causality retroactively. Surely, there is no single cure. Surely, that is not a good reason to do nothing.

I fully agree with the suggested actions in the Market Structure Subcommittee's Recommendation #2 and Recommendation #3. However, I do not believe that these actions alone will be nearly sufficient to significantly alleviate the current problems of small-cap illiquidity, price volatility, and low institutional investor involvement. That is why I cannot agree with the Committee's Recommendation #1.

As described below, I believe that it is absolutely necessary for the Commission to implement Alternative Recommendation #1. We need a meaningful test and all of us should hope it has positive results. Even if the results are not clearly positive, we will have gained useful insights into a small, but quite important, segment of the equity market.

Alternative Recommendation #1

We are faced by a crucial and complex problem. We should do the most we can to alleviate it in a manner that is rational and judicious. After evaluating all of the factors discussed above, proactive Alternative Recommendation #1 is:

The Commission should engage in meaningful and substantial "pilot" programs to determine whether *a modified decimal pricing rule and the rules discussed in the Market Structure Subcommittee's Recommendations #2 and #3* for small-cap public companies will significantly improve the liquidity and reduce the volatility of their stock prices.

These proposed changes are vital for achieving these goals:

- **To enhance returns for long-term, fundamentals-based individual and institutional investors**
- **To improve the ability of small-cap companies to raise capital to finance their growth post-IPO, and consequently,**
- **To create additional jobs**

Another significant benefit of the successful pilot programs should be that promising, young, growing private companies would once again prefer to raise capital via IPOs rather than selling out in M&A transactions to slower-growing, larger, already-established companies.

I believe that the above-recommended pilot programs are a necessary component to satisfy the JOBS Act's mandate that the SEC "study" the impact of Decimalization.

Given the importance and magnitude of the small-cap challenges, I encourage the Commission to act expeditiously.

To implement the above Alternative Recommendation #1, the Commissioners may want to appoint a small advisory committee of independent experts to work with the SEC staff regarding the design, implementation and monitoring of these important pilot programs.

SECTION 6: Specific Implementation Suggestions

1. The duration of the pilot programs needs to be sufficiently long so as to encourage the cost and effort incurred by market makers/block traders to adjust to, and potentially profit from, any revised market rules for small-cap stocks. Further, institutional investors need to be convinced that participating in this segment of the stock market may once again be financially attractive. A short duration would doom the pilot programs to failure. A duration of approximately three years is suggested.
2. The pilot programs need to test tick sizes of at least a nickel and a dime for small-cap stocks, as discussed in more detail below.
3. Equally importantly as #2 immediately above, the pilot programs need to change the market rules so that trading is allowed only at the ticks, or at most, also at one point between the ticks for small-cap stocks.
4. These pilot programs and any revised market rules must apply to all trading venues.
5. "Small-Cap Stocks" needs to be defined. A market cap below $750 million is suggested.
6. The SEC's economists need to decide how many pilot programs should be run and whether there is a need for a simultaneous control group for measuring outcomes. To test the impact of larger tick sizes, there might be three pilot programs:
   a. one with a dime tick, with trading also allowed halfway between the bid and the ask,
   b. one with a nickel tick, with trading allowed only at the bid and ask, and
   c. one with a nickel tick, with trading also allowed halfway between the bid and the ask. Note: some market participants have cautioned that this last pilot program may not provide sufficient economic incentives to alleviate the problems of illiquidity and volatility.
7. If the pilot programs do not include *all* small-cap companies, the SEC would need to assign companies to the pilot programs or control group in a manner that avoids a self-selection or other type of bias.
8. The pilot programs need to be designed to objectively demonstrate their success or failure over time, with the key measures being liquidity and volatility. Some specific suggestions are:
   a. Relative level of trading *liquidity* as shown by:
      - changes in the number of block trades
      - number of trades made
      - displayed quote sizes
      - average daily trading volume
      - average daily trade size
      - average daily quote size
      - average daily trading volume as a percentage of float
      - a stock's inter day volatility
   b. *Institutional ownership* changes:
      - number of institutions that own a small-cap company's stock
      - institutional ownership as a percentage of total ownership

   c. *Rates of equity issuance*: If more stock is issued by a company, that usually means that it is satisfied with its stock price and its implied cost of capital. This applies to IPOs and subsequent equity issuances.

9. While the pilot programs are active, they should be monitored by the SEC staff quarterly or semiannually to determine whether accelerated actions are suggested either by phenomenal success or substantial failure.

SECTION 7: In Conclusion

I believe the potential "opportunity cost" to investors and to America's economy of *not* implementing pilot programs far exceeds the cost of conducting well-designed pilot programs for a sufficient duration to make sure the results are meaningful. I believe that investors (and most of these investors are individual investors) in small-cap public stocks are unnecessarily and substantially burdened by the impact of illiquidity and volatility as a result of today's Decimalization and related market rules.

I am not aware of any alternative proposals for change whose benefits might come anywhere close to the potential benefit of pilot programs that increase tick sizes and limit trading increments in all venues.

Further, I would like to repeat my support for the Market Structure Subcommittee's Recommendations #2 and #3. I have not elaborated on these Recommendations in this document because the Committee's report sufficiently addresses these issues.

Therefore, I recommend that the SEC begin the pilot programs as soon as possible. This is ***vital*** to our nation's unique ability to grow the economy through vibrant, innovative, smaller companies. A revised market structure for our small-cap companies should enhance their liquidity, reduce their volatility and reduce their cost of capital. This is expected to induce fundamental institutional investors to increase their investment in many of these small-cap companies, which should:

- benefit both individual and institutional long-term, fundamental investors
- foster improved capital formation
- improve America's economic competitiveness
- benefit most Americans—either directly or indirectly
- facilitate the creation of additional jobs