

Testimony of Eric Noll
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Government Reform and Oversight

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Thank you Chairman Davis, Ranking Member Quigley. My name is Eric Noll and I am the Executive Vice President of NASDAQ OMX Group in charge of NASDAQ Transaction Services United States. On behalf of the NASDAQ OMX Group I am pleased to testify regarding roadblocks in our public markets that prevent job creation.

Forty years ago NASDAQ introduced the world to electronic trading which is now the standard for markets worldwide. In our early years, we gave growth companies the opportunity to raise capital that wasn't previously available to them. Those companies (Intel, Microsoft, Apple, Cisco, Oracle, and Dell, to name a few) used the capital raised on The NASDAQ Stock Market to make the cutting edge products that are now integral to our daily lives. These companies have also created millions of jobs around the world along the way.

Today, the NASDAQ OMX Group owns and operates 24 markets, 3 clearing houses, and 5 central securities depositories, spanning six continents. Eighteen of our 24 markets trade equities. The other six trade options, derivatives, fixed income, and commodities. We are the largest single liquidity pool for US equities and the power behind 1 in 10 of the world's securities transactions. Seventy exchanges in 50 countries trust our trading technology to power their markets, driving growth in emerging and developed economies.

At NASDAQ OMX, we believe the challenges that we face in today's equity markets around liquidity and capital formation can be characterized as the following four items:

- 1.) Market Structure weaknesses and their concurrent effect on price discovery.
- 2.) A lack of regulatory focus on rules and trading venues that would assist in the development of a vibrant small growth company environment.
- 3.) Regulatory barriers to small and mid-cap companies that impede the IPO process and raise the costs of being public for those companies.
- 4.) Development of H-1B and other immigration reforms to assist companies in their internal hiring and growth plans.

We believe that addressing these issues is critical for generating job creation and growth in the U.S. economy.

Equity Market Structure Does Not Support the Engine of Job Growth:

Today's U.S. markets, the engine of economic growth, are increasingly fragmented and volatile. Liquidity in US stocks is dispersed across 13 exchanges and over 40 other execution venues. The declining cost of launching and operating electronic order crossing systems has led to a proliferation of decentralized pools of liquidity that compete by offering the owner and customers reductions in fees, obligations, transparency and order interaction.

Nearly one-third of public company stocks trade 40% to 50% of their volume away from the organized exchanges. In the past 2 years the percentage of U.S. market share traded in systems that do not post their bids and offers rose from 20% to over 30%. Many retail and core investor orders are executed away from the primary exchanges.

While we identify market fragmentation as a source of some of the issue in regards to capital formation in the US, there have been many benefits of that fragmentation - they have reduced investors costs and improved execution quality in already listed securities. Additionally, they have spurred technological and market structure innovation in the marketplace which has real benefits for investors. However, the unintended consequences of the market fragmentation has been a lack of liquidity and price discovery in listed securities outside of the top 100 traded names and a disturbing absence of market attention paid to small growth companies by all market participants including exchanges.

Such fragmentation of trading creates a thin crust of liquidity that is easily ruptured, as occurred on May 6th. From the SEC "Flash Crash" report: "The Commission has noted that absent extraordinary conditions such as those occurring on May 6, 2010, retail orders are generally executed by internalizers away from exchanges and without pre-trade transparency, exposure or order interaction." Fragmentation and current market structure raises investor costs. In 2010, the US, which has perennially ranked first globally for institutional investor costs, fell to fourth in the world, behind Sweden, Japan, and France.

Although recent market volatility has led to a slight movement towards exchange markets, trading in shares of public companies on these private trading systems, accounts for more volume than on NASDAQ and the NYSE combined. Price discovery and available transparent liquidity are essential parts of vibrant market systems. James Brigagliano, former Acting Head of Trading and Markets for the SEC has stated that anything that "significantly detracts from the incentives to display liquidity in the public markets could decrease that liquidity and, in turn, harm price discovery and worsen short-term volatility."

Just as our markets continue to evolve and adapt so must the regulatory structure of our markets. We need to strengthen regulation by modernizing systems and increasing transparency to regulators. We support the development of a consolidated audit trail with real time market

surveillance and new regulatory tools to help regulators keep pace with technology advances and other changes in the markets.

While we recognize that there are situational benefits and value to some orders being internalized, whenever possible, public price discovery should be encouraged to ensure a robust and balanced marketplace. Internalization serves an important role at times and in those situations should be encouraged -- when a customer can get price improvement, can minimize market impact for larger institutional orders or can contribute to price discovery by posting prices at the NBBO. That said, we must also ensure there is ample liquidity contributing to the critical role of price discovery. Transparency is critical to efficient markets. NASDAQ supports the SEC's proposals to include actionable items of interest within the definition of bids and offers; to move towards a presumption in favor of visible liquidity; and to establish post-trade transparency for dark executions. Modifications to the market data revenue allocation formula could also emphasize the value of public quotations.

Venture Companies Need a Home in the Capital Markets – On an Exchange Platform:

Between 2003 and 2007, the amount of capital raised by private equity funds increased by 300% according to the Private Equity Growth Capital Council. Issuing private equity allows companies to avoid the disclosure and governance obligations created to protect investors. Additionally, the economic slowdown that began in 2008 has depressed interest rates, making bank lending a relatively more affordable source of funding for business expansion.

Few IPOs have been consummated despite an increasing number of companies reaching the stage where a deal is appropriate. 2008 and 2009 were the worst years for IPOs since at least 1980. In 2009, there were just 12 venture-backed IPOs raising \$1.6 billion and 270 acquisitions with disclosed deals totaling \$14.1 billion.

According to a recent joint survey by Deloitte and the National Venture Capital Association, difficulty in exiting an investment either through sale or IPO is the number one problem facing venture capital. The problem is thought to be the most severe in the U.S.

U.S. stock listings are on the decline. In 1995, there were around 8,000 U.S. listings. Today, there are only around 5,000. Meanwhile, the number of listings on non-U.S. exchanges has increased from around 23,000 in 1995 to over 40,000 today.

Exchange listing helps companies raise capital both directly and indirectly. In addition to selling shares, exchange trading establishes a fair and transparent price for a company. The amount of capital investors and lenders are willing to commit depends on a company's value and marketability. A company that has a clear price and many potential buyers will attract further

investors and lenders to help them fund growth. A company that has exchange-traded shares can use its stock as a currency to grow its business and incent employees.

It is well recognized that companies that do not trade on exchanges are valued at a discount. Companies that do not trade on exchanges must establish their value through ad-hoc valuation and opaque negotiation. Few potential investors can bid for private companies. Financial experts, the US IRS, SEC, and courts, recognize that discounts for lack of marketability ranges from 30% to as high as 75%. A company valued 30% or more below its true value will not be able to invest, grow and create jobs as quickly. Plainly stated; the higher the number of bidders for an asset, the higher the sales price. A healthy public equity market enables companies to raise capital more efficiently, funding more rapid growth and more jobs.

The fastest growing listing markets in the world are also the least fragmented. Using a popular scale of fragmentation, the unfragmented Hong Kong Hang Seng Index scores a 1 whereas the U.S. S&P 500 trails developed markets with a score of 4.5, meaning an order has to visit 4.5 markets to achieve best execution in the U.S. but only 1 in Hong Kong. Hong Kong saw 60% growth in the value of its IPOs each year between 2001 and 2007.

While IPO activity has increased since the end of the recession, there remain significant concerns about the long term health of the IPO market. The IPO market affects the long term health of the overall economy.

Public companies generate revenues from trading, research, and other brokerage activities. IPOs generate substantial underwriting fees for accountants, bankers, and lawyers as well as jobs in public relations and other IPO related industries. Academic research has estimated that between 2000 and 2005, a \$50B drop in foreign IPOs on U.S. markets cost the U.S. \$3.3 billion in lost annual trading related revenues for U.S. brokers. These revenue losses mean jobs in financial services and related industries are moving from the U.S. to the foreign markets.

According to data gathered by Renaissance Capital, in 2010 IPO issuance from the Asia-Pacific region – particularly China, Hong Kong, India and Japan – accounted for almost two-thirds of global capital raised. North America lost share, falling to 16% of global proceeds, the lowest share for North America on record. Were it not for the renewed GM IPO, North America's market share would have fallen to a pitiful 10%.

In any free market society the number one source of job creation is entrepreneurship. Very much the way business incubators nurture small companies until they are ready to leave the security of that environment and operate independently, there is a space for incubating small public companies until they are ready to graduate to a national listing. The U.S. must create a space for these markets just as our foreign competitors have successfully done.

Canada, the United Kingdom, and Sweden have successful venture markets with significant numbers of listed companies and substantial capital-raising success. These markets list hundreds of small companies that create jobs at a fast rate. Venture market companies regularly grow and then graduate to the main markets in those countries. The U.S. has no equivalent exchange-supported, organized venture market.

According to the London Stock Exchange, The London AIM Market has been one of the fastest growing markets in the world for the last decade. They have listed over 1,200 listed companies, including 234 international listings; including some American firms. 141 AIM Market listings have graduated to LSE's main market.

In just five years, the Swedish First North Market, run by NASDAQ OMX has grown to 141 listings with a total capitalization of 2.8 billion Euros. 22 First North companies have graduated to the main market since 2006.

The Toronto Stock Exchange Venture Exchange may be the most successful of these venture markets. 2,100 companies with a total market cap of \$37.8B, with a median cap of \$4.2 million have listed on the Toronto Stock Exchange Venture Exchange. 451 TSX Venture Exchange companies have graduated to the Toronto Stock Exchange since 1999. Graduates account for more than \$87B in market capitalization. 15% of Toronto Stock Exchange companies with a market capitalization greater than \$1B are TSX Venture Exchange graduates.

BX Venture Market can be the Home for Small Companies to Access the Capital Markets:

The NASDAQ OMX Group has received approval to create a new listing venue on the former Boston Stock Exchange. The companies listing on BX will be smaller companies and the availability of the BX market will facilitate their ability to raise capital to continue and expand their businesses, creating jobs and supporting the U.S. economy.

The BX Venture Market will have strict qualitative listing requirements, similar to other exchanges, but lower quantitative standards that would attract smaller, growth companies. Under our Qualitative Listing Standards companies must: be registered under Section 12 of the Exchange Act; be current in periodic filings; have a fully independent Audit Committee; have independent directors make compensation decisions for executive officers; comply with the Voting Rights Rule; hold independent director executive sessions; use an auditor registered with the PCAOB; obtain shareholder approval for the use of equity compensation; hold an annual shareholders' meeting; and comply with all requirements of Sarbanes-Oxley. BX will also conduct a public interest review of the company and significant associated persons.

Under our Quantitative Listing Standards companies must have: an initial listing price of \$0.25 for companies previously listed on a national securities exchange or \$1.00 for all others; a continued listing price of \$0.25; 200,000 publicly held shares for initial and continued listing; 200 public shareholders for initial and continued listing; \$2 million market capitalization for initial listing and \$1 million for continued listing. Companies not previously on an exchange will have to meet additional balance sheet requirements and have at least a one-year operating history.

The BX Venture Market will provide a well-regulated listing alternative for companies that otherwise would transfer to, or remain on, the largely unregulated Pink Sheets or OTCBB, where there are no listing requirements, no public interest review, limited liquidity, and limited transparency, or list on junior tiers of non-US markets.

While we are certain this Venture Exchange is needed, we also believe that innovative trading rules are required to make the market successful. Small companies do not trade like Microsoft, Intel, Apple or Oracle. As you look at the trading behaviors of small companies in this range, building and maintaining liquidity is a constant challenge. Thus, this exchange needs new incentives for market makers to pledge their capital for these stocks, needs market structure protections that can be built-in to allow trading in these stocks to flourish, needs new thinking about issues like tick sizes and unlisted trading – “Nothing *ventured*, nothing gained” has real resonance on these issues in a very literal sense.

Remove Regulatory Barriers for IPOs:

We also ask the SEC to be open to market based solutions put forward by NASDAQ OMX and other exchanges to create competitive solutions to market problems.

The U.S. environment for IPOs is being viewed as less inviting. Where litigation and market fragmentation are certainly factors, Sarbanes-Oxley has become the catch-all term for regulatory hurdles to going public in the U.S. Although Sarbanes-Oxley has improved investor protections that contribute to the U.S. reputation for having the safest, best regulated, markets in the world, it has equally added to the financial obstacles that small and medium sized companies are reluctant to hurdle. The result is less foreign and small domestic companies opting for a U.S. public listing. The President’s Jobs Council found that Sarbanes-Oxley was a key factor in reducing the number of IPOs smaller than \$50 million from 80 percent of all IPOs in the 1990s to 20 percent in the 2000s. The Committee on Capital Markets Regulation has observed that “willingness of U.S. companies to do their IPOs abroad is a strong indication of their concern with the burdens of the U.S. public market.”

Nearly a decade after its passing, it is time for subject matter experts and policy makers to review the requirements of Sarbanes-Oxley and its' effects on capital formation and propose changes that will maintain its safeguards while easing its financial burdens. There are several viable proposals that should be considered:

- **Make Section 404(B) a bi-annual rather than an annual event.** Once a public company completes an initial, broad audit, reduce the frequency of the audits to biannual – particularly for companies that pass their Sox audit with no material weaknesses. Any controls that are changed or fail in the previous audit should be retested the following year.
- **Consider increasing the size of the smaller public company exemption.** NASDAQ applauds Congress' codification of the SEC's practice of exempting public companies under \$75 million dollars in market capitalization. However, we feel that this should be higher and the recommendation of the President's Job Council to increase the exemption to \$1 billion should be considered. I understand the House Financial Services Committee is considering legislation in this area and working to get an exemption passed in the \$350 million range. This is a positive, but somewhat more limited exemption and I hope they can go higher to match President Obama's call for a \$1Billion exemption.
- **Implement a time or size grace period for new public companies.** New public companies can be temporarily exempted from Sarbanes-Oxley requirements for either a specified number of years or until they reach a specific market capitalization; whichever comes first.
- **Reject Expensive and Expansive New Regulations on Public Companies:** Policy makers and regulators must also be careful about imposing new regulations that lack necessity, yet will raise a public company' costs. For example a recent PCAOB proposal would require public companies to rotate auditors. Public companies and auditors both agree that this proposal will raise public companies' cost by eliminating efficiencies created through established relationships in which auditors retain knowledge of public companies they audit. In 2005 after the PCAOB was created, a hearing was held in the House Financial Services Committee and then Chairman William J. McDonough was asked about the viability of required auditor rotation. Chairman McDonough rejected it as a requirement due to potential problems of auditor independence.

Create Jobs by allowing Companies to Hire the Employees They Need:

I just mentioned how entrepreneurship is the greatest source of job creation in a free market society. It follows that the greatest source of entrepreneurship is human innovation. The United States achieved its economic prominence by inviting the best and the brightest from around the globe to unleash their creative capabilities on American soil and contribute to the American mosaic, culturally, politically and economically. Immigrants have been some of the greatest contributors to business, science and technology in American Society. 25% of technology and engineering companies from 1995 to 2005 had at least one immigrant key founder.

Over one decade, immigrant founded ventures created 450,000 jobs and represented a market capitalization of roughly \$500 billion. One out of three Ph.D. candidates in science and engineering are foreign born. More than 50% of advanced degree graduates from U.S. universities in the STEM disciplines are foreign nationals.

Our economy and NASDAQ itself have directly benefited from the contributions of foreign-born talent. Looking just at the Fortune 500 companies, we found at least 14 active NASDAQ companies that have foreign-born original founders. These companies represent over \$522 billion in market capitalization and employ almost 500,000 workers.

Legal immigration is a source of economic growth in the United States and I am concerned that its' continued entanglement in the illegal immigration debate will only exacerbate our already anemic economy. Every year we send approximately 17,000 STEM graduate students back to their home countries after educating them here in the finest universities in the world. It is critical that we reform our immigration system to accommodate these graduates. If U.S. companies cannot hire them here, they will hire them for the same job overseas. Therefore, I recommend the following to the U.S. Congress:

- ***Debate Legal Immigration on its own merits:*** Do not link *legal* reform to reform of *illegal* immigration – Americans are losing jobs and opportunity while one issue drags down the other. American workers, with good jobs, cluster around these highly-skilled workers. Achieving a comprehensive solution will take years – years Americans who need jobs do not have.
- ***Enact a more flexible and stable regime for Legal Immigration:*** Reform must convey economic priorities about job growth and global competitiveness. Increasing H-1B numbers is no longer enough. We need to admit and keep entrepreneurs here so that the creative dynamism of our marketplace has the very best skills and minds. The default should be “yes,” not “no.”
- ***Attack the “job stealing” myth directly:*** Opponents of Legal Immigration reforms argue that when a foreign born immigrant gets a job, American graduates are the losers. Research tells a different story. The National Federation for American Policy says that for every H-1B worker requested, U.S. technology companies *increase* their employment by five workers.

Thank you again for inviting me to testify. I look forward to responding to your questions.