Written Testimony of

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Subcommittee on Investor Protection, Entrepreneurship, and Capital Markets

"Oversight of America's Stock Exchanges: Examining Their Role in Our Economy"

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Good morning. Thank you Chairman Sherman, Ranking Member Huizenga, and Members of the Subcommittee for inviting me to testify today.

My name is Mike Piwowar, and I am the Executive Director of the Milken Institute Center for Financial Markets.[1] I had the pleasure of serving as a Visiting Academic Scholar, Senior Financial Economist, Commissioner, and Acting Chairman of the U.S. Securities and Exchange Commission ("SEC" or "Commission"). I am testifying today on my own behalf.

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The U.S. capital markets are the envy of the world due, in large part, to the role that our stock exchanges play. Competition among exchanges, alternative trading systems, and market makers has led to the best market quality environment for publicly traded securities in history.[2] Transaction costs are low, market depth is high, and execution speeds are fast.

America's stock exchanges list the thousands of public companies that millions of Americans invest in. Our stock exchanges execute billions of trades every day, representing trillions of dollars traded every year.

The U.S. stock exchanges are incredibly resilient. When most of the U.S. (and the world) economy was shut down in March 2020, America's stock exchanges remained open. In fact, when the New York Stock Exchange closed its trading floor due to Covid restrictions, it moved seamlessly from its hybrid model of floor trading and electronic trading to fully electronic trading.

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[1] The Milken Institute is a nonprofit, nonpartisan think tank that promotes evidence-based research that serves as a platform for policymakers, industry practitioners, and community members to come together in catalyzing practical solutions to challenges we face both here in the U.S. and globally. The Center for Financial Markets conducts research and constructs programs designed to facilitate the smooth and efficient operation of financial markets—to help ensure that they are fair and available to those who need them when they need them.

[2] See, e.g., A Century of Stock Market Liquidity and Trading Costs, Charles M. Jones (May 23, 2002), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=313681; Equity Trading in the 21st Century, James J. Angel, Lawrence E. Harris and Chester S. Spatt, Quarterly Journal of Finance, Vol. 1, No. 1 (2011); and Equity Trading in the 21st Century: An Update, James J. Angel, Lawrence E. Harris and Chester S. Spatt (May 23, 2013), available at https://www.q-group.org/wp-content/uploads/2014/01/Equity-Trading-in-the-21st-Century-An-Update-FINAL.pdf.

During that time, America's stock exchanges provided liquidity for retail investors who had to sell shares to meet cash needs. They provided large institutional investors, many of which invest on behalf of retail investors, with the ability to pursue new investment opportunities and manage risk. America's stock exchanges also provided price discovery for government policymakers to help them craft targeted fiscal, monetary, and regulatory responses to the pandemic-induced economic crisis.

Mr. Chairman, thank you for calling this oversight hearing to examine the role of America's stock exchanges in our economy. As this Subcommittee evaluates various legislative proposals to change regulatory policies regarding U.S. stock exchanges, my comments today will be in the following areas:

I. Guiding principles for market structure policy,
II. Select policy proposals, and
III. Investing in America's Future.

I. Guiding Principles for Market Structure Policy

There Are No Solutions; There Are Only Trade-Offs[3]**.** The regulatory framework of the U.S. equity markets is complicated; it reflects a complex system of legal and regulatory decisions that have been made over decades. The markets have evolved within this framework into a highly interconnected system. U.S. stock exchanges compete with alternative trading systems and market makers for trading volumes. Moreover, the U.S. equity markets are part of a larger global capital markets system where U.S. stock exchanges compete with international competitors for listings and trading volumes.

As a result, any change to market structure policy, including the regulation of stock exchanges, in one area will likely affect other areas.

Economic Analysis Is a Particularly Useful Tool. The lens of economic analysis is well-suited for evaluating tradeoffs. While serving as an SEC commissioner, I found my economics training was a valuable tool for virtually every regulatory and enforcement decision I made.

In 2012, the Commission recognized the importance of going beyond statutory obligations and mere quantitative exercises to incorporate comprehensive economic analysis in the rulemaking process by adopting "Current Guidance on Economic Analysis in SEC Rulemaking" ("Current Guidance").[4] The Guidance was adopted under SEC Chairman Mary Schapiro. It has been followed on a bipartisan basis by Chair Mary Jo White, myself as Acting Chairman, and Chairman Jay Clayton.[5] I was glad to see that SEC Chairman Gary Gensler committed to following the Current Guidance in response to a question during his nomination hearing.

[3] This phrase is often attributed to Thomas Sowell.
[4] Current Guidance on Economic Analysis in SEC Rulemaking (Mar. 16, 2012), available at http://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.
[5] The Commission has not proposed or adopted any new rules under current Acting Chair Allison Herren Lee.

The SEC's Current Guidance requires the Commission to evaluate a rule's likely economic consequences, including potential negative unintended consequences. It requires the Commission to compare a proposed regulatory action with reasonable alternatives, including the alternative of not adopting a rule.

Because U.S. equity markets and their regulatory framework are so complex, the SEC's Current Guidance is a particularly useful tool for evaluating potential changes to market structure and market infrastructure policy.

Frequent Retrospective Reviews of Existing Rules Are Necessary. The only constant in financial markets is change. Markets and technologies are continually evolving. If we want our capital markets to remain the envy of the world, our regulatory framework needs to evolve with them.

Throughout my tenure as an SEC commissioner, I was an outspoken advocate of retrospective reviews of Commission rules.[6] I believe it is a fundamental best practice of good government to observe how the Commission's regulations work in the real world. Armed with this information, the Commission can propose thoughtful improvements to its rules to advance the Commission's essential work to protect investors, maintain fair, orderly, and efficient markets, and promote capital formation.

I am not alone in this view. For example, the Regulatory Flexibility Act of 1980 requires agencies such as the Commission to perform a periodic review of rules that have or will have a significant economic impact upon a substantial number of small entities within ten years of the publication of such rules as final rules "to determine whether such rules should be continued without change, or should be amended or rescinded."[7] The Regulatory Flexibility Act identifies the following factors for analysis: (1) the continued need for the rule; (2) the nature of complaints or comments received concerning the rule from the public; (3) the complexity of the rule; (4) the extent to which the rule overlaps, duplicates, or conflicts with other federal rules, and, to the extent feasible, with state and local governmental rules; and (5) the length of time since the rule has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the rule.[8]

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[6] See, e.g., Advancing and Defending the SEC's Core Mission, Speech by Commissioner Michael S. Piwowar at the U.S. Chamber of Commerce (Jan. 27, 2014), available at https://www.sec.gov/news/speech/2014-spch012714msp; Remarks to the Securities Enforcement Forum 2014, Speech by Commissioner Michael S. Piwowar (Oct. 14, 2014), available at https://www.sec.gov/News/Speech/Detail/Speech/1370543156675; Statement Regarding Publication of List of Rules to be Reviewed Pursuant to the Regulatory Flexibility Act, Public Statement by Commissioner Michael S. Piwowar (Sept. 15, 2016), available at https://www.sec.gov/news/statement/piwowar-statement-list-of-rules-regulatory-flexibility-act.html; Remarks at FINRA and Columbia University Market Structure Conference, Speech by Commissioner Michael S. Piwowar (Oct. 26, 2017), available at https://www.sec.gov/news/speech/speech-piwowar-2017-10-26; and Statement of Commissioner Piwowar at Open Meeting Regarding Amendments to the Commission's Whistleblower Program Rules, Commissioner Michael S. Piwowar (June 28, 2018), available at https://www.sec.gov/news/public-statement/statement-piwowar-whistleblower-062818.

[7] 5 U.S.C. 610.

[8] 5 U.S.C. 610(b).

In 2011, President Obama signed an Executive Order to enhance the Regulatory Flexibility Act's goals by directing independent agencies such as the SEC to develop and implement a plan to conduct ongoing retrospective analyses of existing rules.[9] The stated goal is "to determine whether any such regulations should be modified, streamlined, expanded, or repealed so as to make the agency's regulatory program more effective or less burdensome in achieving the regulatory objectives."[10]

Because markets and technologies are continually evolving, frequent retrospective reviews of market structure rules by the Commission are necessary to ensure that they are not outdated, obsolete, or overly burdensome.

II. Select Policy Proposals

***SEC Pilot Studies*.** Pilot studies can be useful tools for the Commission. SEC pilot studies involve applying a new rule only to a group of securities while maintaining the existing rule for another group. This allows the SEC to more accurately measure and analyze the effects of a rule change by comparing the two groups. Based upon the results of the pilot study, the SEC can choose to make the new rule apply to all securities or to revert all securities back to the old rule.

One successful example is the SEC's 2016-2018 Tick Pilot Program.[11] The program was designed to study and assess the impact of wider tick sizes on certain small-capitalization stocks. Some proponents hoped that wider tick sizes would result in greater liquidity and analyst coverage. However, researchers found that the larger tick size led to a substantial deterioration in market quality. Investor transaction costs increased, volatility increased, and price decreased.[12] Moreover, wider tick sizes did not lead to greater analyst coverage. As a result, the Commission reverted all securities back to the old tick size rule.

Unfortunately, in June 2020, the United States District Court for the District of Columbia ruled that the SEC did not have the authority to implement a pilot program to analyze the effects of exchange transaction fee and rebate pricing models.[13]

As this Subcommittee considers legislative changes to the SEC's authority, I suggest that you consider legislation that would explicitly grant authority to the Commission to conduct pilot studies. As a starting point, you might consider Section 912 of the Dodd-Frank Act, "Clarification of Authority of the Commission to Engage in Investor Testing."[14] Because pilot studies are not

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[9] See Executive Order 13579 – Regulation and Independent Regulatory Agencies (July 11, 2011), available at https://obamawhitehouse.archives.gov/the-press-office/2011/07/11/executive-order-13579-regulation-and-independent-regulatory-agencies. See also M-11-28 – Memorandum for the Heads of Independent Regulatory Agencies (July 22, 2011), available at https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2011/m11-28.pdf.
[10] Ibid.
[11] See "Tick Size Pilot Program" at https://www.sec.gov/ticksizepilot.
[12] See, e.g., Edwin Hu, Paul Hughes, John Ritter, Patti Vegella, and Hao Zhang, Tick Size Pilot Plan and Market Quality, DERA Working Paper (Jan. 31, 2018), available at https://www.sec.gov/dera/staff-papers/white-papers/dera_wp_ticksize_pilotplan_thresholdanalysis.
[13] New York Stock Exchange LLC, et al. v. SEC, No. 19-1042, available at https://www.cadc.uscourts.gov/internet/opinions.nsf/BE5AD5AD3C00644085258589005371 63/$file/19-1042-1847356.pdf
[14] Dodd-Frank Wall Street Reform and Consumer Protection Act, § 912, Pub. L. No. 111-203 (2010).

always the most appropriate way to engage in evidence-based rulemaking,[15] you might consider adding limitations to this authority. Since pilot studies can be very costly for market participants, you might also consider requiring the SEC to engage in pilot studies through notice-and-comment rulemaking (which requires cost-benefit analyses) and prohibiting the SEC from using NMS Plans (which do not require cost-benefit analyses).

Dual-Class Share Structures and the SEC's Accredited Investor Definition. If dual-class share structures were banned, restricted, or phased out, some public companies listed on U.S. stock exchanges would likely delist. Some would go private, and some would list on a competing international stock exchange that allows dual-class structures. In addition, some private companies would delay or cancel their public offerings.

These outcomes will disproportionately harm low-income households because they are effectively prohibited from investing in private companies. The SEC's accredited investor definition essentially divides the world of private company investors into two arbitrary categories of individuals—those persons who are accorded the royalty status of being an accredited investor and those who are not.[16] In short, if you make $200,000 or more in annual income or have $1 million or more in net worth, then you are "investor royalty" and can choose to invest in the full panoply of investments, whether public or private.[17] If not, the SEC has decided that, for your protection, you are restricted access to invest in private companies.

As an SEC commissioner, I took my investor protection mandate extremely seriously. However, I challenge the SEC's investor protection rationale for prohibiting non-accredited investors from investing in high-risk companies. Here, I appeal to two well-known concepts from the field of financial economics. The first is the risk-return tradeoff. Because most investors are risk-averse, riskier securities must offer investors higher expected returns. As a result, prohibiting non-accredited investors from investing in high-risk securities is the same as prohibiting them from investing in high-expected-return securities.

The second economic concept is modern portfolio theory. By holding a diversified portfolio of securities, investors reap the benefits of diversification; that is, the risk of the portfolio as a

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[15] See, e.g., Statement on Evidence-Based Regulation and the Limits of Pilot Studies, Financial Economists Roundtable (October 2019), available at https://www.financialeconomistsroundtable.com/statements/statement-on-evidence-based-regulation-and-the-limits-of-pilot-studies; Lawrence Harris, Charles M. Kahn, Robert L. McDonald, and Chester S. Spatt, The Role of Pilot Studies in Financial Regulation (Dec. 1, 2021), available at https://ssrn.com/abstract=3979297.

[16] See, e.g., Remarks at the Meeting of the SEC Advisory Committee on Small and Emerging Companies, Public Statement by Commissioner Michael S. Piwowar (May 18, 2016), available at https://www.sec.gov/news/statement/piwowar-opening-remarks-acsec-051816html.html; Remarks at the "SEC Speaks" Conference 2017: Remembering the Forgotten Investor, Speech by Acting Chairman Michael S. Piwowar (Feb. 24, 2017), available at https://www.sec.gov/news/speech/piwowar-remembering-the-forgotten-investor.html.

[17] The SEC recently expanded the definition of accredited investor to include, among other things, individuals "holding in good standing one or more professional certifications or designations or other credentials from an accredited educational institution that the Commission has designated as qualifying an individual for accredited investor status[.]" See Accredited Investor Definition, Final Rule, SEC Release Nos. 33-10824; 34-89669 (Aug. 26, 2021), 85 Fed. Reg. 64234 (Oct. 9, 2020), available at https://www.sec.gov/rules/final/2020/33-10824.pdf. However, the expanded definition is not likely to substantially increase the number of low-income individuals who qualify under the new definition.

whole is lower than the risk of any individual securities. The statistical correlation of returns is key. When adding higher-risk, higher-return securities to an existing portfolio, as long as the new securities' returns are not perfectly positively correlated with (move in exactly the same direction as) the existing portfolio, investors can reap higher portfolio returns with little or no change in overall portfolio risk. In fact, if the correlations are low enough, the overall portfolio risk could actually decrease.

These two concepts show how even a well-intentioned investor protection policy can ultimately harm the very investors the policy is intended to protect. Moreover, restricting the number of accredited investors in the privileged class can have additional adverse impacts. The accredited investors may enjoy even higher returns because the non-accredited investors are prohibited from buying and bidding up the price of high-risk, high-expected-return securities. Remarkably, by allowing only high-income and high-net-worth individuals to reap the risk and return benefits from investing in certain securities, the SEC is actually exacerbating wealth inequality.[18,19]

***Improved Disclosures for Index-Linked Annuities*.** The bipartisan bill H.R. 4865, "Registration for Index-Linked Annuities Act," would require the SEC to amend its rules and create a new form for annuity issuers to use when filing registered index-linked annuities (RILAs). The bill's purpose is to improve disclosures so that investors can make better-informed decisions about purchasing RILAs.

The bill correctly recognizes the Commission's important role as a disclosure regulator, and I like the factors the SEC must consider in improving RILA disclosures. I also like that the bill sets reasonable deadlines for the SEC to propose and finalize new rules to fulfill this mandate. Finally, I really like the bill's requirement that the SEC engage in investor testing and incorporate the results of such testing in the design of the form. The stated goal of this requirement is to ensure that key information is conveyed in terms that a purchaser can understand. As an SEC commissioner, I championed the role of investor testing to receive constructive feedback to ensure that SEC disclosures are understandable.[20]

***Venture Exchanges*.** The bipartisan bill H.R. 5795, "Main Street Growth Act," would amend Section 6 of the Securities Exchange Act of 1934[21] to create a new type of national securities exchange ("venture exchange") to trade the securities of certain small companies, such as startups and emerging growth companies. The bill recognizes that many small-cap companies listed on stock exchanges suffer from a lack of liquidity.

The bill also recognizes that exchanges lack incentives to experiment with changing rules to improve the liquidity of small-caps because of unlisted trading privileges (UTPs). UTPs allow stocks to trade on venues other than the listing exchange. As a result, if a listing exchange

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[18] See Thomas Piketty, Capital in the Twenty-First Century, translated by Arthur Goldhammer (Cambridge MA: The Belknap Press of Harvard University Press, 2014).
[19] Another unfortunate consequence of the accredited investor definition is that small businesses face higher costs of capital.
[20] See, e.g., Statement of Commissioner Piwowar at Open Meeting on Form CRS, Proposed Regulation Best Interest and Notice of Proposed Commission Interpretation Regarding Standard of Conduct for Investment Advisers, Commissioner Michael S. Piwowar (Apr 18, 2018), available at https://www.sec.gov/news/public-statement/statement-piwowar-041818.
[21] 15 U.S.C. 78f.

experiments with changing a rule, it is at risk of losing trading volume to other exchanges. The bill would prohibit stocks traded on a venture exchange ("venture securities") from being traded on a non-venture exchange. The bill includes examples of permitted experimentations, such as allowing venture exchanges to change the tick size of venture securities and allowing them to trade in periodic call auctions instead of continuous trading.

III. <u>Investing in the America's Future</u>

As everyone at this hearing knows, the SEC has a threefold mission: to protect investors; maintain fair, orderly, and efficient markets; and facilitate capital formation. Oversight hearings like this one ensure that the SEC remains focused on the second part of its noble mission so that capital markets work as intended and work for everyone.

Capital markets are the engines for economic growth. Stock exchanges are the pistons in the engine, capital provided by millions of individual investors is the fuel for those engines, and entrepreneurial firms are the vehicles.

Capital markets make America's future bright for everyone.

For some, that future is to take their entrepreneurial spirit and put it into action. Take an idea for a product or service and start a company. Raise capital from investors. Hire workers. Thereby raising the standards of living for the customers they serve, the employees they hire, and the investors who share in their success.

For others, that future is to take their hard-earned savings and invest in job-creating entrepreneurs. And then take the proceeds of those investments to provide financial security in retirement, invest in the education of their children, and re-invest in other entrepreneurs in their community.

So, when all is said and done, capital markets help all Americans invest in America's future by investing in each other.

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Mr. Chairman, thank you for bringing attention to the critical role that exchanges play in our capital markets, our economy, and America's future. Thank you for the opportunity to testify here today. I am happy to answer any questions you may have.