White Paper:
Guiding Principles for Policymakers and Lawmakers in the Market Structure Debate

Center for Financial Stability (CFS) Working Group[1]

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The Securities and Exchange Commission (SEC) recently established an advisory committee to "focus on the structure and operations of the U.S. equities markets."[2] The formation of this committee comes as a salve in the heated debate over equity market structure.[3] That debate has been fueled largely by concerns that the equity markets are rigged. The formation of the SEC advisory committee also comes ten years after the SEC undertook a major equity market structure initiative—Regulation NMS.[4]

Since Regulation NMS, markets have changed dramatically.

This white paper offers guidance, rather than specific policy recommendations, to the SEC, its new advisory committee, and other policymakers considering changes to the equity market structure. As a nonpartisan think tank, we seek to lay out broad principles to which the policymakers and lawmakers should adhere in contemplating, adopting, and implementing market structure reform.

Key principles include:

- Avoid Rhetoric and Generalizations,
- Craft Clear, Transparent, and Predictable Regulations,
- Structure Markets to Serve a Diverse Clientele,
- Use a Careful Regulatory Process,
- Develop Cost-Effective – Yet Impactful – Regulation, and
- Deepen Diversity in the Decision-Making Process

I. Avoid Rhetoric and Generalizations

Market structure reform raises technical issues, but much of the debate has been driven by highly charged rhetoric and broad generalizations rather than careful analysis and data. Discussions of high

[1] **Under the leadership of Senior Fellow Bradley J. Bondi, the Center for Financial Stability (CFS) organized a nonpartisan working group with a wide range of market participants, academics, lawyers, and public officials, who possess extensive knowledge of financial markets. The CFS working group hosted panel discussions in New York and Washington, D.C. and synthesized the comments from those events into a draft white paper. The draft was circulated to the working group and other market participants for additional feedback. After additional review and consideration, the draft was finalized into this white paper.**
[2] SEC, *Press Release: SEC Announces Members of New Market Structure Advisory Committee* (Jan. 13, 2015), available at http://www.sec.gov/news/pressrelease/2015-5.html.
[3] *See* Michael Lewis, *Flash Boys* (2014).
[4] *SEC, Final Rules and Amendments to Joint Industry Plans, Regulation NMS*, 70 Fed. Reg. 37496 (June 29, 2005).

frequency trading (HFT), speculation, and dark pools quickly devolve into contentious arguments. Policymakers therefore must be careful to avoid adopting such rhetoric and generalizing behavior. Instead, ***they should take a measured, analytical approach as they explore whether and how equity market structure regulations should be reformed to yield markets that serve investors and issuers efficiently, effectively, and equitably.***

A thoughtful and deliberative approach mandates defining relevant terms clearly. For example, HFT should not be conflated with algorithmic trading, and not all HFT involves the types of conduct vilified by recent media attention such as predatory trading. Similarly, dark pools encompass a variety of trading venues, many of which serve important market functions such as ensuring the prompt execution of large order flows without creating undue disruption. A failure to carefully define terms could result in regulatory restrictions having a much more far-reaching effect than intended. ***The imprecise use of other terms such as market making, frontrunning, and market manipulation has contributed to confusion in the debate and has unnecessarily undermined retail investor confidence in the markets.***

The formation of the SEC's advisory committee is an important step toward replacing rhetoric with a reasonable and respectful exploration of the issues at hand. The first meeting of the advisory committee exemplified this approach.[5] We urge the Committee and other policymakers to continue in this vein.

II. Craft Clear, Transparent, and Predictable Regulations

An effective regulatory framework sets and consistently enforces clear, transparent, and predictable rules, which function well under differing market conditions and are not merely reactionary to a market crisis. The goal should be to have a rulebook with which well-intentioned market participants can comply without fear of running afoul of obscure or ambiguous provisions. Clear, consistent, and predictable rules enable market participants to transact with one another freely in the knowledge that contractual obligations will not be overridden by a subsequent change in a rule or its interpretation.

A well-crafted rulebook also makes it easier for regulators to pursue violators of rules. Unambiguous rules are difficult to evade through regulatory arbitrage, and violations of clear rules are difficult to explain away. Moreover, with clear rules, market participants could expend fewer resources understanding the legal parameters and instead spend more resources on other initiatives such as cybersecurity and risk management. Unduly complex rules generate inefficient compliance efforts and technology investments by market participants and create unnecessarily difficult obstacles to effective enforcement.

The current regulatory framework governing the equity markets is overly complex and convoluted. Years of regulatory build-up in the area have multiplied the complexity of the rulebook. Rules by the SEC, the Commodity Futures Trading Commission, the Financial Industry Regulatory Authority, and other self-regulatory organizations complicate the U.S. regulatory picture. Further complicating matters, U.S. equity markets interact with international markets subject to separate set of rules.

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[5] A webcast of the meeting is available at http://www.sec.gov/news/otherwebcasts/2015/equity-market-structure-advisory-committee-051315.shtml.

Supplementing the relevant rulebooks is a growing library of less formal guidance. For example, Regulation NMS—already lengthy and complex—was followed by staff interpretations that add to the intricacy of the regulatory framework. Although enforcement actions can provide additional guidance, such an *ad hoc* approach is not only unfair, it is an inefficient form of notice to market participants as to their regulatory obligations.

The complexity of the current regulatory framework has generated a corresponding complexity and Balkanization of the equity markets. The multiplicity of order types and trading venues is one manifestation of this complexity. Itis mirrored in the complexity of the software used by firms and markets. Regulatory complexity makes software problems more likely, discovering and remedying those problems more difficult, and the consequences of such problems for the marketplace more severe. In other words, regulatory complexity can contribute to systemic instability.

Of course, markets are large and complex, so there are limits to how simple the regulatory structure within which they operate can be. Nevertheless, any review of equity market structure needs to be alert to ways in which rules can be reasonably eliminated or simplified. This exercise will require cooperative efforts among the various domestic and international governmental and non-governmental financial regulators. Because of the important role that information technology plays in translating rules into reality, information technology professionals and engineers should be part of the discussion.
Part of the simplification task may entail policymakers and lawmakers ceding certain structural decisions to the marketplace, or at the very least, seeking and accepting significant input from market participants. This would be a change for the SEC, which historically has taken a very active role in shaping the markets. A more principles-based approach could allow markets to develop in ways that best serve the investors and issuers that use them.

III. Structure Markets to Serve a Diverse Clientele

Policymakers and lawmakers should focus on appropriately and effectively incentivizing market actors to engage in socially productive trading activities. The SEC's mission consists of maintaining ***fair, orderly and efficient markets***, ***facilitating capital formation***, and ***protecting investors***.[6] A well-functioning market structure is key to each component of the mission. The regulatory framework within which market participants operate plays a critical role in determining how they behave. Carelessly crafted regulations can induce people and firms to do things that they otherwise would not do. Well-crafted regulations, by contrast, enable market participants to achieve their own ends without compromising the welfare of others in the marketplace.

Policymakers and lawmakers should ensure that the regulatory framework provides adequate room for all market participants to trade in ways that address their unique needs. The SEC's task in this regard is difficult because the agency has to balance the needs of many different types of market participants with sometimes conflicting objectives and priorities. Among the relevant actors are short-term traders, long-term investors, retail investors, financial intermediaries, institutional investors, and issuers. In crafting rules, the SEC should bear in mind that these participants' objectives, strategies, and priorities are not uniform.

[6] SEC, *The Investor's Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*, http://www.sec.gov/about/whatwedo.shtml (last visited July 7, 2015).

Assessments of market quality likewise vary across market participants. Transparency and liquidity are important indicators of market quality, but they are not the only market features that matter to investors. Stability, legal certainty, and order also matter in assessing market integrity. For some investors, price trumps all other considerations. For others, trading without moving the market is of utmost importance. For still others, the assurance that they will be able to trade when they want to and in the size they want is what matters most. Other market participants prefer to trade on markets that actively deter high-frequency trading or confine themselves to certain order types.

As part of considering regulatory reform, policymakers and lawmakers should identify how different participants are faring under the current regulatory structure. Understanding how effectively the market is serving different participants will help to indicate where changes are needed. The SEC Advisory Committee aids greatly in this exploration by including numerous regulatory, industry, and investor perspectives. Size constraints, however, prevent the Committee from being entirely representative, so both the Committee and the SEC should actively encourage additional voices to engage in the debate.

If regulated with sufficient flexibility, U.S. equity markets can accommodate the different participants and their different objectives and strategies. To accomplish this, the regulatory framework may allow and even encourage different trading venues to cater to specific needs. A flexible regulatory framework allows markets to adjust in response to changes in investor and issuer demand.

IV. Use a Careful Regulatory Process

The process by which regulations are made affects the quality of regulations, the probability and magnitude of unintended consequences, and perceptions about market integrity. ***Regulators should craft rules with broad input, careful analysis, and a willingness to reassess under changed circumstances or in light of unintended consequences.***

Broad participation from market participants in all stages of rulemaking is crucial. Broad participation makes it more likely that relevant issues will be identified and addressed before implementation. Notice-and-comment rulemaking under the Administrative Procedure Act is the preferred tool for engaging the public. Staff guidance and other less formal means should be reserved for necessary clarifications of regulatory obligations. The SEC should impose or change regulatory obligations only through the notice-and-comment process to ensure that everyone who will be affected by a new obligation can weigh in.

Even before it makes a formal proposal, the SEC sometimes uses a concept release to solicit input about problems and potential solutions. This approach enables the Commission to think carefully about the nature and scope of the problem it is trying to solve. It allows the SEC to explore a broader range of issues than does a proposing release.[7]

Before undertaking rulemaking, the SEC should identify a specific market or regulatory failure that needs to be solved. One-off problems do not likely warrant a regulatory response. If the problem is

[7] *See, e.g.*, SEC, *Concept Release on Equity Market Structure*, 75 Fed. Reg. 3593 (Jan. 21, 2010).

systemic, the SEC should ask whether that problem results from an existing regulation; in other words, is eliminating one or more regulations the appropriate way to deal with the problem?

If government regulations are not the source of the problem, the SEC should consider whether government regulations are an effective cure. The SEC should not attempt to fix problems that markets are able to correct on their own. If, for example, market participants can set up trading venues that contractually agree to avoid market practices perceived to be harmful, SEC intervention may be unnecessary. Likewise, if new technologies that will address a particular market failure are imminent, a preemptive regulatory solution may be unnecessary. Sometimes, however, problems are so pervasive and intractable that government intervention is appropriate.

Once the SEC (with the help of knowledgeable outsiders) has identified a problem for which a government solution is necessary, the agency should consider alternative solutions. It should assess these solutions against a common baseline—the status quo if no regulatory action is taken. The SEC should clearly set forth the assumptions and data it uses in making these assessments. Doing this will allow others to challenge and supplement the work of the SEC. The SEC staff memorandum on economic analysis is a useful guide.[8]

V. Develop Cost-Effective – Yet Impactful – Regulation

The goal should be to identify the solution that imposes the fewest costs and yields the greatest benefits. Among the costs the SEC should consider are the indirect costs and the opportunity costs; resources spent complying with rules will not be available for cybersecurity and other important initiatives. Analyzing how a new regulation might harm rather than help market function is extremely important. The SEC also should consider the distributional consequences of contemplated regulatory approaches: how different approaches will benefit or harm particular types of market participants. This analysis should include consideration of how a rule will complement, undercut, or duplicate other existing or planned rules.

Macro testing and modeling should be utilized to attempt to predict consequences to the entire marketplace of any proposed regulation. Drafting new regulations or rules should never be done in a vacuum. Economists can utilize market data to help predict the consequences and to help avoid the unintended consequences of a proposed regulatory scheme. The application of both endogenous and exogenous factors, which can be extracted from existing data, might provide a realistic environment with which to view a proposed regulation's or rule's impact within an actual operating environment. The result of this macro testing would allow for a more educated assessment of the level to which the SEC is achieving its mandates of a fair, orderly, and efficient market for all types of participants.

Even with thorough economic analysis, predicting unintended and adverse consequences is difficult. Consequently, provision should be made for retrospective review of existing regulations at some point—such as five years after implementation. In preparation for that review, when the SEC adopts a rule, it should identify the metrics that it will use in this retrospective review. Clearly setting forth regulatory

[8] Memorandum from the Division of Risk, Strategy and Financial Innovation and the Office of General Counsel to the Staff of the Rulewriting Divisions and Offices (Mar. 16, 2012), available at https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

objectives when a rule is put in place will help the agency later to understand whether the rule is successfully meeting those objectives. The creation of the Advisory Committee acknowledges the importance of looking back at rules once they have been in operation for a period of time.

The SEC should employ empirical evidence in its analyses. In some instances, it may be possible to run pilot programs or create synthetic markets and run experiments. Looking to international markets may be helpful, but differences in market and regulatory structure may limit the value of these comparisons. Given the limits of empirical evidence regarding market structure, standard microeconomic principles about market function are also useful in informing the SEC's regulations. In choosing among potential solutions, the SEC should avoid requiring market participants to adopt particular technologies, which may become obsolete over time and could make markets unnecessarily vulnerable to technical failures and hacking efforts.

Here too, the SEC should set forth clearly the assumptions and data it uses in making these assessments.

VI. Deepen Diversity in the Decision-Making Process

The SEC is dominated by lawyers, but the markets are not. Understanding how regulations will work requires rulemaking teams that include engineers, data consultants, economists, traders, investors, and issuers. The Advisory Committee serves a useful role in bringing a wide range of perspectives into the debate, but the SEC needs to conduct additional outreach to ensure that all relevant expertise is part of rulemaking and implementation discussions. Implementation deadlines should be reasonable to ensure that changes are made in a way that allows market participants to carefully design and test necessary modifications to their systems and practices.

Good procedure is time-consuming and expensive, but the SEC should resist the temptation to take short cuts. The payoff from good process comes in better rules, an industry that is prepared and able to implement them, and investors who trust the markets. Good procedures and robust public participation bring additional expertise to bear in solving problems and offer the chance to discover and address problems in their early stages.

VII. Conclusion

The SEC has taken commendable first steps toward addressing equity market structure. As this process unfolds, the Commission should keep an open mind about whether, where, and how changes in the regulatory framework should be made. Stepping beyond the rhetoric to investigate the technical, legal, and economic realities that have shaped our equity markets will not be easy, but the prospect of strengthening our equity markets is critical to our country.