Chester Spatt's Statement for Senate Subcommittee on Securities, Insurance, and Investment hearing on "Derivatives Clearinghouses: Opportunities and Challenges," May 25, 2011

I am pleased and honored to have the opportunity to present my views to the Senate Subcommittee on Securities, Insurance, and Investment at its hearing today on "Derivatives Clearinghouse: Opportunities and Challenges." I am the Pamela R. and Kenneth B. Dunn Professor of Finance at the Tepper School of Business at Carnegie Mellon University, where I have been a faculty member since 1979. I also served as the Chief Economist of the U.S. Securities and Exchange Commission in Washington, D.C. from July 2004 until July 2007. My expertise as a faculty member includes such areas as trading mechanisms, derivative securities, asset valuation, financial regulation, and the financial crisis. In addition to my faculty position my current affiliations include serving as a Research Associate of the National Bureau of Economic Research, Senior Economic Advisor to Kalorama Partners, and a member of both the Shadow Financial Regulatory Committee and Financial Economists Roundtable. I also was one of the founders and the second Executive Editor of the *Review of Financial Studies*, which quickly emerged as one of the preeminent journals in financial economics, as well as a Past President and Program Chair of the Western Finance Association.

The changes in how our financial markets trade and clear derivative securities and swaps that now are being implemented are fundamental to the design of these markets. In the aftermath of the financial crisis the focus on migrating standardized swaps and derivatives to clear through central counter-parties (CCPs) is a natural one and one to which I am sympathetic as an attempt to reduce the contagion associated with counter-party risk and make the structure of risk much more transparent. However, it is unclear whether the extent of use of clearinghouses will ultimately lead to a reduction in systemic risk in the event of a future crisis. Additionally, it will be crucial to manage carefully the risks within the clearinghouses. To the extent that risks or the fees of the clearinghouse are lower compared to uncleared derivatives, market participants could choose to increase their risk exposures. Of course, it is important that the fees for holding uncleared derivatives reflect economic costs and not be punitive to create artificial concentration of risk within the clearinghouse and also that the clearinghouse be sensitive to the incentives to dump transactions into it that are not marked properly.

The clearinghouse structure is potentially subject to considerable moral hazard as there is a strong incentive for market participants to trade with weak counter-parties (who may offer more favorable pricing), subject to their eligibility to clear through a centralized counter-party (CCP). However, at some point a CCP may not be willing to clear contracts from a weak counter-party because of the risk associated with the counter-party being unable to deliver on its dynamic margin obligations on a going forward basis. Then the CCP would be subject to serious counter-party risk. In situations where trading with weak counter-parties (and effectively with the CCP) is especially attractive to other market participants, there is a greater risk exposure to the overall economy. For this reason and also because of the concentration of risk in the CCP, it is easy to anticipate that central clearing actually could raise systemic risk substantially in the event of a financial crisis.

A number of observers have emphasized the absence of clearinghouse failures in the United States during the recent financial crisis. Of course, not every potential financial crisis is the same with respect to its causes, scale or transmission. Consequently, in my judgment we can only take limited comfort for the future from the absence of failure of a clearinghouse during the recent financial crisis. Indeed, Federal Reserve Chairman Ben Bernanke attributed the lack of failure of a clearinghouse during the financial crisis to "good luck"[1] in a speech at the recent Atlanta Federal Reserve Bank conference. Of course, many institutions that were previously thought to be essentially impervious and under various forms of federal oversight either did collapse or would have collapsed without massive federal guarantees (including Fannie Mae,

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[1] Speech at the Federal Reserve Bank of Atlanta conference on April 4, 2011.

Freddie Mac, AIG, Lehman Brothers, Bear Stearns, Citigroup and Bank of America). It is generally recognized that clearinghouses can fail,[2] and indeed, a recent editorial in the *Wall Street Journal*[3] cited such relatively recent failures as those in France in 1974, Kuala Lumpur (Malaysia) in 1984 and Hong Kong in 1987. The regulatory and supervisory system will require much more of clearinghouses in the future than during the recent financial crisis, potentially amplifying their vulnerability. In his Atlanta Federal Reserve speech Chairman Bernanke summarized this point as follows, "As Mark Twain's character Pudd'nhead Wilson once opined, if you put all your eggs in one basket, you better watch that basket." Of course, this not only highlights the potential importance of regulatory supervision of the clearinghouse, but also that clearinghouses should be properly designed to limit their risk exposure.

One of the challenges confronting the supervisor of the clearinghouse is whether the clearinghouse could require the possibility of a "bailout" to ward off failure. At hearings of the Senate Banking Committee in mid-April CFTC Chairman Gary Gensler agreed that the clearinghouses would not receive "too big to fail" guarantees or subsidies. Arguably, this is reflective of a political environment, which is now quite unsympathetic to the use of such guarantees. But this highlights

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2 Roe, M., "Derivatives Clearinghouses are No Magic Bullet," *Wall Street Journal*, May 6, 2010.

3 "Pudd'nhead Wilson in Washington," *Wall Street Journal* editorial, April 23-24, 2011, page A14.

the crucial importance of strong risk management of the central counter-party to avoid the potential collapse of a major clearinghouse in a financial crisis. While it's a delicate balance, the importance of strong risk management potentially could be even at the expense of other values, such as promoting more competitive pricing of clearinghouse services.

A key role of the clearinghouse is to make trading entities informationally insensitive to their specific counter-parties. At the same time, there is a danger of a potentially large increase in systemic risk unless the risk is well managed by the clearinghouse, because the clearinghouse is a risk management platform that concentrates the risk in the economy. Thus, the governance of a clearinghouse must reflect a strong incentive to control risk and internalize the costs and benefits associated with alternative collateral standards. Limiting greatly the role of trading firms in the governance and promoting "independent directors" (who would lack the incentives to focus on managing and minimizing the risk and perhaps in some instances relevant experience) would create significant challenges and even reluctance by trading firms to allocate capital to the clearinghouse and back-stop the risks of the clearinghouse. Mutualization of risk is essential to the success of a clearinghouse model and affording protection against the ultimate risks being borne by society in the form of "too big to fail" guarantees. Yet the commentary of regulators focuses upon the more abstract notion of "conflicts of interest" in governance, without explicit focus on the incentives to control the underlying risks that would arise in the clearinghouse model. In light of this it is crucial that the governance of the clearinghouse, including the composition of the Board and especially the Risk Committee, reflect the importance that the broader society places on the elimination of “too big to fail” guarantees. To the extent policymakers choose to concentrate risk within a clearinghouse, it is crucial that the risk management of the clearinghouse mitigate the underlying systemic risk, including a strong risk management structure and governance aligned with that goal.

Incentives are crucial to ensure that there is a reasonable attempt to align the incentives of various parties. For example, in the event of a crisis clearing members would potentially contribute financial and human capital to the CCP. It would create incentive problems to absolve smaller members of these duties (except for the limits related to their underlying capital contribution) or to allow them to outsource these to third parties whose incentives would not be aligned. It also is important to ensure that in the event of a crisis that the clearing members have funding available for their contingent capital obligations—to the extent that individual CCPs are unable to monitor their clearing members along such lines, it may be important for the regulator to supervise this to avoid a default cascade that would jeopardize the clearinghouse through a sequence of defaults.

In fact, it's important for the regulator to be sensitive to the complications that arise from the incentives of a set of profit-maximizing clearinghouses.

Analogously, regulators are focused upon "access" to the clearinghouse by investing firms—but it is important to recognize that this is not a traditional trading platform, but an organization in which mutualization of risks by the membership is fundamental. Indeed, members should be required to have appropriately high capital pledged to protect the organization in that they are counter-parties whose risk is being accepted by the clearinghouse and indeed, the members become the ultimate guarantors through the mutualization of risk.

The issue of "direct access" surfaces in a number of different forms across markets—for example, requiring that orders be presented through intermediaries would be a way to protect markets against obvious errors in order presentation. Indeed, because of concerns about "direct access" in equity trading the SEC adopted a rule late last year eliminating direct unfiltered customer access in the order transmission process due to the systemic risk that would create for our system of equity clearance and settlement.[4]

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[4] "SEC Adopts New Rule Preventing Unfiltered Market Access," Press Release 2010-210, November 3, 2010. http://www.sec.gov/news/press/2010/2010-210.htm Also see discussion in Angel, J., L. Harris and C. Spatt, 2011, "Equity Trading in the 21st Century," *Quarterly Journal of Finance*, 1, 1-53.

Another crucial policy choice is whether the clearinghouse would likely be a recipient of a bailout in the event of a failure in its risk management. The strong political consensus against the possibility of a bailout emphasizes the importance of strong risk management by the clearinghouse and a governance system, including restrictions on access through non-members and a board structure that makes risk management the central priority. From an economist's perspective this highlights how restricting direct access is a partial substitute for "too big to fail."[5] Using governance and access (as compared to other governmental regulatory tools) to enhance the competitiveness of pricing of clearinghouse services comes at the cost of making a bailout of the clearinghouse more likely.

The analogy between risk management for a swaps clearinghouse and that for the clearinghouse for a payments system is striking. In the payment systems context my colleague Marvin Goodfriend [1990] writes,[6] "[I]t was efficient for private clearinghouses before the Fed to limit their membership to a relatively exclusive core of banks, allowing other banks access to the clearing system through agent-member banks. This suggests that it is efficient for the Fed to restrict direct access to its

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[5] Analogously, allowing the composition of directors to focus on risk management incentives and expertise also is a substitute for "too big to fail."

[6] M. Goodfriend, 1990, "Money, Credit, Banking, and Payments System Policy," in *U. S. Payments System: Efficiency, Risk, and the Role of the Federal Reserve*, edited by David B. Humphrey, Kluwer Academic Publishers; also reprinted in Federal Reserve Bank of Richmond *Economic Review*, January/February 1991, pp. 7-23.

national clearing system as well, both to protect Fed lending generated in the payments systems and to protect the interbank credit market." Goodfriend [1990] also observes that it is valuable "to restrict direct access to its national clearing system as well, to protect Fed daylight overdrafts and the interbank credit market." In the context of a derivatives and swaps clearinghouse restriction on direct access by non-members leads to a system in which the clearinghouse members are responsible to protect the integrity of the clearinghouse. In that sense restrictions on direct access help assure financial stability and protect society against bearing greater costs from implicit "too big to fail" guarantees for the clearinghouse. If the clearinghouse member has strong incentives to monitor its customers, by imposing much of the risk created by customer losses on the introducing member, then a strong compatible risk management system will result.

The absence of failures of clearinghouses in the financial crisis has been viewed by some as offering reassurance about the inherent stability of the clearinghouse model. Indeed, the clearinghouse model has a number of attractive features, such as, netting of exposures and greater transparency of risks. At the same time, this model presents greater sources of vulnerability due to concentration of risk and greater moral hazard at the customer level because there is no pricing differential or penalty imposed on weak counter-parties as long as they are acceptable

to the clearinghouse. In addition, to the extent that financial services firms believe they have essentially fully transferred various risks to the clearinghouse they likely will bear additional risks (systemic and otherwise) because of their enhanced risk-bearing capacity. It is extremely important to recognize and acknowledge the implications of the endogeneity of risk. Improvements in the management of collective risk potentially will incentivize financial services firms to take on more risk at the margin. For example, decisions about leverage will emerge endogenously. It is important to bring considerable caution and skepticism to discussions about risk management in the clearinghouses, especially in light of their broader contemplated role.[7]

My underlying view on the relevance of economic principles to the structuring of clearinghouses also highlights the broader point that in restructuring the derivatives and swaps markets it is important to be sensitive to the economic consequences of contemplated rule-makings and undertake cost-benefit analyses that will identify these consequences and help to inform rule proposals.

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[7] **For example, see "Derivatives, Clearing and Exchange-Trading," Statement No. 293 of the Shadow Financial Regulatory Committee, April 26, 2010, http://fic.wharton.upenn.edu/fic/policy%20page/Statement%20No.%20293-%20Derivatives,%20Clearing%20and%20Exchange%20Trading.pdf**