

## Daniel K Tarullo: Comments on “Regulating the shadow banking system”

Speech by Mr Daniel K Tarullo, Member of the Board of Governors of the Federal Reserve System, at the Brookings Panel on Economic Activity, Washington DC, 17 September 2010.

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Broadly speaking, threats to financial stability can arise in two ways: first, through the rapid deterioration or failure of a large institution with leverage sufficient to have widespread knock-on effects and, second, through the breakdown of a significant market in which large numbers of leveraged actors depend upon similar sources of liquidity and, importantly, backup liquidity in periods of stress. These two sources of systemic risk can be, and usually are, related. In fact, the severity of the recent crisis might be explained as an explosive combination of the two. But the different origins of risk call for different or, perhaps more precisely, complementary, policy responses.<sup>1</sup>

To date, reform in financial regulation and supervision has focused mainly on large regulated institutions: Three examples are the just-announced Basel III capital rules, much of the Dodd-Frank Act, and the Federal Reserve’s revamping of its large holding company supervision. Of course, attention has also been paid to the second source of systemic risk, notably in Dodd-Frank’s provisions for prudential supervision of payments, clearing, and settlement systems. But more will need to be done in this area, particularly as new constraints applicable to large regulated institutions push more activity into the unregulated sector.

This paper by Gary Gorton and Andrew Metrick, “Regulating the Shadow Banking System” (G-M), fits squarely within this enterprise. It builds on two important insights from work Gorton had pursued well before the financial crisis began: First, that the enormous growth of the shadow banking system generally, and the repurchase agreement, or “repo,” market specifically, depended on the engineering of AAA-rated securities that led participants to believe they did not need to inquire into the soundness of the underlying collateral. This financial engineering largely succeeded in insulating participants from idiosyncratic risk. But when the value of whole classes of the underlying collateral was drawn into serious question, initially by the collapse of the subprime housing market, participants’ lack of information about the collateral they held led to a shattering of confidence in all the collateral.

In the absence of the regulation and government backstop that have applied to the traditional banking system since the Depression, a run on assets in the entire repo market ensued. The resulting forced sale of assets into an illiquid market turned many illiquid institutions into insolvent ones. The fallout has been such that, to this day, the amount of repo funding available for non-agency, mortgage-backed securities, commercial mortgage-backed securities, high-yield corporate bonds, and other instruments backed by assets with any degree of risk remains substantially below its pre-Lehman levels.

The second Gorton insight on which this paper builds is the importance of statutory franchise value for the business model viability of at least some kinds of regulated financial entities. Where competition from unregulated entities is permitted, explicitly or de facto, capital and other requirements imposed on regulated firms may shrink margins enough to make them unattractive to investors. The result, as we have seen in the past, will be some combination of regulatory arbitrage, assumption of higher risk in permitted activities, and exit from the

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<sup>1</sup> The views presented here are my own and not necessarily those of other members of the Board of Governors of the Federal Reserve System or the Federal Open Market Committee. Tom King and Michael Palumbo of the Board’s staff contributed to these remarks.

industry. Each of these outcomes at least potentially undermines the original motivation for the regulation.

The G-M paper provides a concrete, though in some respects not fully elaborated, proposal to remedy the information problem in the repo market through creation of statutory franchise value for what G-M calls Narrow Funding Banks (NFBs). These banks would be “narrow” in that their only assets would be asset-backed securities (ABS) and very high quality instruments such as Treasuries. They would, it appears, make their money from the income streams associated with the ABS. They would raise the funds to purchase ABS through debt issuance and, most significantly for the proposal, the repo market, in which the collateral offered would be liabilities of the NFBs. The government would regulate the NFBs directly, as it does all banks, but also by setting requirements for the ABS that could be bought by the NFBs. This regulation is intended to provide market confidence in the liabilities of the NFBs, which would be further buttressed by NFB access to the discount window.

A key feature of the proposal is that, by law, *only* NFBs could buy securitized assets. The consequent franchise value would compensate NFBs for the costs they incur because they can hold only high-quality securities, are subject to supervision and prudential requirements, and have to operate in a highly transparent fashion. In essence, ABS-backed repo funding would be limited to NFBs.

The first two questions I would pose about this creative policy proposal are the most basic: What problem is it supposed to solve, and how does the breadth of the remedy align with that problem? Given their analysis of the breakdown of the repo market, Gorton and Metrick’s answer might be self-evident: The G-M proposal aims to solve the information problems that increased the risk from maturity transformation associated with ABS repo funding. This, of course, is not solving for the entire shadow banking system, though an effective plan for reforming the ABS repo market would be a major accomplishment in itself.<sup>2</sup>

But in proposing a solution to this problem, G-M would significantly restrict *all* asset-backed securitization. While it is obvious that too much credit was created through ABS and associated instruments in the years preceding the crisis, it seems at least reasonable to question whether the best policy response is this dramatic a change in the regulatory environment. One wonders, for example, if it is desirable to forbid anyone but NFBs from buying ABS, particularly if there are investors interested in holding these assets regardless of their utility in repo arrangements. The severe problems now associated with ABS began with assets held by mismatched entities like structured investment vehicles or financial institutions engaged in capital arbitrage under Basel II, not those held by end investors.

A variant on this initial question is how much the legal environment for securitization should be changed in order to provide a source of stable short-term liquidity in wholesale funding markets. Limiting securitization purchases to NFBs will surely result in some tailoring of ABS to the business models of NFBs, an outcome that might not be identical to a securitization market tailored to the funding needs of lenders providing credit to businesses and consumers. Also, as I will explain later, the G-M proposal would require non-trivial changes in bank regulatory policy, as well as the significant extension of discount window access to a new kind of institution. All this would be in pursuit of a mechanism for generating large amounts of liquidity. A cost-benefit discussion is probably needed at the outset, with careful specification of the benefits of the repo market that G-M are trying to save, weighed against the likely impact on – among other things – the securitization market and regulatory system.

A second set of questions concerns how the NFBs would operate in practice. As a threshold matter, it is worth noting that policymakers may find the proposal to have a certain binary

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<sup>2</sup> For a survey of the entire shadow banking system, see Pozsar, Zoltan, Tobian Adrian, Adam Ashcraft, and Hayley Boesky (July 2010): “Shadow Banking,” (928 KB PDF) Federal Reserve Bank of New York Staff Reports, no. 458.

quality. That is, it would structurally change the entire securitization market and a large portion of the repo market essentially overnight. In effect, G-M put all securitization eggs into one basket. If the new system worked well, the benefits presumably would be significant, and perhaps quickly realized. Indeed, the new system might succeed in helping to restart, on a sounder basis, various ABS submarkets that remain largely dormant three years after the crisis began to unfold.<sup>3</sup> If, on the other hand, the new system encountered major difficulties, there might be materially reduced adaptive capacity in other financial actors, possibly for a considerable period.

One obvious source of difficulty is the possibility, well recognized by G-M, that the business model mandated for NFBs might not be viable and stable. As with all forms of narrow banks proposed over the years, NFBs as a group would seem likely to generate relatively low revenues, given the low risk of the securities in which they would have to invest. G-M propose to counter this problem by granting franchise value through the statutory monopoly on securitization mentioned earlier and through access to the Federal Reserve's discount window. Picking up on their analogy to the creation of deposit insurance in the 1930s, the monopoly on securitization is intended to help offset the regulatory costs imposed on NFBs in the same way that the monopoly on the "business of banking" was intended to offset the regulatory costs imposed on insured depository institutions.

Unlike the business environment for banks in the 1930s, however, securitization and repo lending are national – if not international – activities, with little to suggest that any advantage would be derived from local knowledge. It seems quite possible that the economies of scale associated with the NFB model are sufficiently high that the industry structure would tend toward oligopoly, or even monopoly. That is, too *much* franchise value might be created. In that event, there would be significant additions to the cost side of the proposal's ledger, in the form of the price and quantity effects that result from non-competitive industry structures.

Regardless of the eventual structure of the industry, NFBs essentially would be monolines, with highly correlated risk exposures. They could be particularly vulnerable to funding difficulties in times of deteriorating credit conditions. Yet by the terms of the G-M proposal, they apparently would not be able to hedge interest rate or other risks. G-M propose giving NFBs access to the discount window to forestall liquidity problems and runs on the NFBs, presumably in the same way that deposit insurance stopped runs on traditional banks. Here again though, the analogy is not a perfect one. While banks and their depositors are assured that the Federal Deposit Insurance Corporation will keep the latter whole in the event of the former's failure, the Federal Reserve does not make binding commitments to lend to any institution and actively discourages reliance on the window for regular funding.

A third question about the G-M proposal arises because of the significant changes in current law and practice that would be required were the proposal to be adopted. The prohibition on ABS holdings by anyone other than NFBs is the obvious and major example. But there are several others: In addition to the possibly problematic features of discount window lending in general for the proposal, the Federal Reserve has traditionally opened the window to non-depository institutions only in particularly stressed conditions. Under the Dodd-Frank Act, any use of credit ratings in federal regulations will be prohibited, an obvious complication to the G-M proposal. This part of Dodd-Frank has accelerated and expanded the efforts already underway at the federal banking agencies to lessen regulatory reliance on ratings. In truth, it may pose no greater challenge for the G-M proposal than for many existing capital rules.<sup>4</sup>

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<sup>3</sup> The relative dormancy of these markets is also due in part to the limited supply of the loans needed to feed the securitization process.

<sup>4</sup> For a discussion of some of the issues raised in the context of capital requirements, see Board of Governors of the Federal Reserve System (2010), "Advance Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies," Joint Advance Notice of Proposed Rulemaking (August 10).

Still, it may require extension of G-M's confidence that the regulator could adequately oversee ABS ratings to confidence that it could assign ratings in the first place. I would observe that the substantial effort expended by staff at the Board and the Federal Reserve Bank of New York to evaluate the creditworthiness of a relatively small number of securitizations in the Term Asset-Backed Securities Loan Facility suggests the enormity of that task. Furthermore, the wisdom of having a government agency – even the independent central bank – assume such a permanent, central role in credit allocation should at least be subject to debate.

A final regulatory issue is raised by another G-M response to their expectation that equity returns for NFBs will be lower than for traditional banks. In place of the equity capital requirements generally applicable to banking organizations, G-M propose that NFBs would issue capital notes that are debt-like except in periods of stress, when they would convert to equity. In essence, all of an NFB's capital would be contingent capital. While contingent capital is an item on the financial regulatory agenda, it is considered a possible supplement to common equity, not a substitute for it. In this respect, the G-M proposal moves in the opposite direction from Basel III, which has followed markets in making common equity the centerpiece of capital evaluation and requirements.<sup>5</sup>

These inconsistencies with current law and practice in the G-M proposal do not themselves argue against its soundness. They do, however, underscore the degree to which the NFBs would require development of a new financial regulatory approach, as well as a restructuring of the ABS and repo markets.

More generally, the existence of costs or problems does not counsel the rejection of the proposal as such. In the face of very real flaws in the pre-crisis state of these markets, and the failure of some ABS markets to recover, even where it seems they could function sensibly, there is a very good case for a policy initiative. So let me consider briefly whether variants on the basic G-M approach might retain its core benefits while addressing some of its potential problems.

One possibility would be to broaden the permissible ownership of NFBs to include bank holding companies. This modification would make the most sense if one believed that the basic G-M approach was promising but that the risks of either an untenable business model or high industry concentration, and consequent anti-competitive effects, were high. It is possible that a number of large, diversified financial holding companies would find an NFB a viable part of their operations. G-M require that NFBs be stand-alone entities, and specifically prohibit ownership by commercial banks in an effort to avoid implicit contractual guarantees. This is a legitimate concern, to be sure, but one that might be at least imperfectly addressed through specific restrictions on relationships between affiliates in a bank holding company. The relevant comparison is thus between the residual costs of the regulated relationship and the effects of an anti-competitive industry structure.

A second variant on the G-M approach, also motivated by industry structure problems, would be to turn NFBs from privately owned public utilities (as G-M describe them) to actual public utilities. However, the extent to which this change in ownership structure would ameliorate the anti-competitive problems is uncertain. Moreover, the concerns mentioned earlier with respect to government judgments on credit allocation would remain, even if they are provided another layer of insulation through the device of a government corporation. In addition, of course, the history of Fannie Mae and Freddie Mac is a cautionary tale of the potential for a government monopoly with a conservative mandate to expand its operation into much riskier activities.

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<sup>5</sup> It also seems likely that the kinds of quantitative liquidity requirements currently under development by the Basel Committee on Banking Supervision would be difficult for NFBs to satisfy.

At first glance, then, it is not at all clear that structural modifications to the basic G-M approach would be preferable to the proposal as they have described it. Options that depart from the G-M approach would need to find different ways of solving the information problems that G-M identify. Let me briefly speculate about possible alternatives that would use regulatory requirements to create a class of ABS in which markets could, without inquiry into the nature and quality of the underlying assets, have confidence even in periods of stress. One way, of course, would be to follow more closely the deposit insurance analogy by establishing an insurance system. G-M suggest that an insurance system for the repo market would be impractical, question whether insuring collateral (i.e., certain classes of securitized assets) would be sustainable without creating franchise value, and worry that the creation of franchise value through limiting entry into securitization would, in their words, “limit the amount of money created.” Yet, as I suggested earlier, the G-M proposal itself might constrain securitization in undesirable ways, both related and unrelated to repo transactions.

In addressing the franchise value issue, it would be interesting to pursue an important idea that G-M mention, but which is not at the center of their proposal: making the repo bankruptcy exception available only where the collateral conforms to certain criteria established by law or regulation. Given the demand for repo funding, it seems worth considering whether this device could be used to create the necessary franchise value. Indeed, if this approach had promise, it might be feasible for a regulatory body to establish the requisite criteria without providing insurance. With or without insurance, the “franchise value” might attach more to the instrument than to an institution.

There is not time here to enumerate the potential difficulties with these ideas, but they are not hard to discern, even as stated in such skeletal form. In common with the G-M proposal, they would require a level of expertise and involvement in credit rating by the government that could pose practical and, in some conceivable alternatives, policy concerns. In any case, these are thoughts for further discussion, rather than developed options. Gary Gorton and Andrew Metrick have, in setting forth this proposal, continued to shape our understanding of the role and risks of the shadow banking system, as well as to add a specific proposal to our menu of possible responses.