William C Dudley: The importance of incentives in ensuring a resilient and robust financial system

Remarks by Mr William C Dudley, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the US Chamber of Commerce, Washington DC, 26 March 2018.

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It is a pleasure to have this opportunity to speak to you. In my remarks today, I will discuss financial regulation and the ways in which proper incentives help ensure resiliency in the financial system. As always, what I have to say reflects my own views and not necessarily those of the Federal Open Market Committee or the Federal Reserve System.[1]

We have come a long way since the global financial crisis in building a more resilient financial system—one that can better support the provision of financial services to American households and businesses such as those represented here, both in good times and in bad. But, there is still unfinished business.

On the regulatory side, for example, there is more work to be done to ensure that a systemically important bank can be resolved effectively on a cross-border basis in the event of failure. Additionally, the efficiency, transparency, and simplicity of the regulatory system could be improved without weakening the core reforms to capital, liquidity, and resolution that have made the financial system much stronger.

Most importantly, we need to recognize that an effective regulatory regime and comprehensive supervision are not sufficient. We also need to focus on the incentives facing banks and their employees. After all, misaligned incentives contributed greatly to the financial crisis and continue to affect bank conduct and behavior.[2]

Today, I will address this issue of incentives, with emphasis on the complementary roles of regulation, supervision, and bank culture. Each of these is necessary to ensure that we have a robust and resilient financial system not just today, but also in the future.

Progress since the financial crisis

The financial crisis was a watershed event that exposed severe deficiencies in the financial system—including the inadequacy of bank capital and liquidity buffers, poor risk management and internal controls, and bad bank cultures. Many financial firms took on an excessive amount of risk and did not always act in ways consistent with the interests of their customers or the broader public. The crisis revealed woeful shortcomings in many of these elements, with terrible consequences for the economy and millions of people.

Over the past decade, the official sector and the financial industry have made considerable progress in addressing these problems. The banking system is much sounder and more resilient as a result, in a number of ways.

First, systemically important banks are much safer.[3] They have much bigger liquidity and capital buffers, and the quality of capital is much improved. Moreover, the capital regime now has a forward-looking element in which annual stress tests examine banks' ability to withstand losses under severely adverse economic conditions and constrain the amount of capital that can be returned to shareholders via dividends and share repurchases. Strengthened liquidity standards have given the market greater confidence that banks possess adequate resources to weather temporary storms that arise. At the global level, Basel III has helped to level the competitive playing field in a number of ways—including, most recently, by imposing constraints on banks' use of internal models to meet their capital requirements, and by introducing a leverage buffer for

systemically important firms, similar to what we already have in place in the United States.

New regulatory standards have been complemented by a supervisory framework for the largest banks that explicitly acknowledges the impact that distress at such firms could have on financial markets and the economy.[4] These efforts have led to considerable improvement in risk management at banks, which should help better sustain the flow of credit to the real economy throughout the business cycle.

Second, considerable progress has been made in terms of resolution. Systemically important banks now have living wills that provide a roadmap for how these firms would be resolved in the event of imminent failure. Moreover, there is now a well-defined mechanism under Title II of the Dodd-Frank Act for recapitalization of a failed systemically important firm. The FDIC now has the authority to initiate a "single point of entry" resolution, which places the parent holding company into FDIC receivership and transfers its subsidiaries to a new parent company. Total loss-absorbing capacity, or TLAC, of the old parent company would be available to absorb losses and could be used to recapitalize the new parent company. But, the task of operationalizing resolution for large, global banks—including achieving full clarity on the roles of the home and host supervisors—is still not complete. It is key that work continues on this front to ensure that a systemically important firm can fail without threatening to topple the rest of the financial system—an important step toward ending "too big to fail."

Third, some of the obvious systemic vulnerabilities exposed by the financial crisis have been remedied. Important changes include mandatory clearing of standardized over-the-counter derivatives through central counterparties, or CCPs; more intensive supervision of systemically important CCPs; and reforms of the tri-party repo system and the money market mutual fund industry. But, even as we reduce or eliminate old vulnerabilities, we must not rest on our laurels, for new vulnerabilities will inevitably take their place.

These accomplishments notwithstanding, I have no doubt that the current regulatory framework could be improved. Indeed, the official sector should assess the efficiency and effectiveness of regulations on an ongoing basis. I agree with Vice Chairman Quarles' observation that there is more we can do to make the regulatory regime more efficient, transparent, and simple—including relief for small banks, greater tailoring based on a firm's level of systemic importance, and simplifying the Volcker Rule.[5] Some of these changes have already been adopted or are in process.

Greater focus on incentives is needed

But, I also think we must take a broader view of what characterizes a resilient and robust financial system. To that end, we need to carefully monitor the incentives that influence the behavior of financial firms and their employees.

Indeed, the record from the crisis and more recent years shows just how powerful incentives can be in driving firms and individuals to do things that are imprudent and/or unethical. Bad incentives can lead to conduct that not only generates large risk exposures and market excess, but also erodes trust and confidence in the financial system. For example, the pre-crisis housing boom would not have gone so far, for so long, without the widespread breakdown in mortgage underwriting practices that was driven by poor incentives.[6]

Some examples of bad incentives that contributed to the financial boom and bust included:

- Compensation practices at financial firms that rewarded volume and short-term performance over longer-term, sustainable returns;
- The willingness of the credit rating agencies to designate tranches of subprime mortgages triple-A in exchange for fees paid by a small number of issuers of mortgage-backed

securities;

- The willingness of Fannie Mae and Freddie Mac to use their implicit government support to take on large amounts of mortgage risk with very little capital backing;
- The willingness of AIG to use its triple-A rating to provide credit protection to banks and securities firms against complex mortgage obligations with little direct capital support or an adequate liquidity backstop; and,
- The pegging of money market mutual fund share prices at par, which led to investors running at the first sign of trouble.

Since then, we have seen a number of other costly breakdowns that were driven, in part, by poor incentives.

- In the LIBOR scandal, a relatively small number of banks manipulated LIBOR to their benefit through rate-setting submissions that were not based on actual transactions. In contrast, a new U.S. Treasury repo reference rate will be based on actual transactions in a deep and liquid market, and is designed to be compliant with new principles set forth by the International Organization of Securities Commissions.[7]
- In the foreign-exchange market, bad incentives helped encourage rate rigging at particular rate-fixing times. Reforms were subsequently introduced, including recommendations from the Financial Stability Board's Report on Foreign Exchange Benchmarks and the recent publication of the FX Global Code, developed by central banks and market participants.[8]
- The creation of millions of unauthorized accounts at Wells Fargo also reflected bad incentives. Bank employees were compensated on sales volume with aggressive cross-selling targets without customers actually receiving beneficial services. In response, the Federal Reserve Board entered into a consent cease-and-desist order with Wells Fargo that requires the firm to improve its governance and risk management processes.

These recent cases were particularly disturbing in terms of their scale and flagrancy, and—in the case of the rate-rigging scandals—the collusion by employees across firms. I am particularly struck by the fact that manipulation of the foreign exchange market occurred even after the LIBOR scandal was well known. These episodes underscore the tremendous power that incentives have to influence and distort behavior, potentially leading to massive damage to bank cultures, reputations, and finances.

Some lessons on incentives that stand out for me include:

- Guarding against technical design flaws that can be manipulated and exploited for profit;
- Ensuring that incentives are aligned and consistent with desired behaviors;
- Recognizing how rules, however well-intentioned, can be gamed; and,
- Having appropriate mechanisms in place to identify problems early and to ensure rapid escalation and amelioration.

Many of these issues and risks likely also apply to your companies. But, I think they are particularly important for financial institutions—especially those that are systemically important. The scale of such firms magnifies the impact of bad incentives on the financial system and economy. At the same time, that scale also makes it more difficult for senior management to properly control a firm's activities and monitor the conduct and behavior of its employees. For these reasons, we need strong internal and external checks on banks—an area to which I will now turn.

The complementary roles of regulation, supervision, and culture

As I said earlier, a sound financial system is one that is safe and resilient, can support the

provision of financial services at a reasonable price to the real economy in good times and in bad, and promotes confidence and trust among its customers and counterparties. Financial institutions should be prudently managed and subject to strong internal checks—including risk management policies and procedures, internal controls, compliance, and audit. Meanwhile, an effective financial regulatory and supervisory regime should be as efficient, transparent, and simple as possible.

I think these goals are broadly shared by supervisors and banks alike, which suggests to me that the relationship between supervisors and banks does not always need to be adversarial. Indeed, a healthy dialogue helps this supervisory process to work well. For example, it is important that firms are proactive in revealing problems to their supervisors. And, individual institutions can certainly benefit from the horizontal perspective that supervisors bring to examinations. This perspective can highlight where the firm stands vis-à-vis best practices, or where there may be important vulnerabilities in its operations.

Of course, there is an irreducible amount of tension built into this relationship, given that each party's roles, interests, and responsibilities will not always coincide. Banks are naturally more sensitive to constraints on their profit opportunities or dividend policies and to the costs of regulation. They may also question how much protection is necessary—for example, how stringent the capital requirements or how severe stress testing assumptions should be. These are areas where I would expect perspectives to differ.

Supervisors are principally focused on compliance with laws and regulations as well as issues of safety and soundness. They also bring to their work a perspective on financial stability that may not match the more narrow interests of the firm. For example, supervisors seek to address the externalities created by the failure of a systemically important firm by imposing higher capital and other requirements than the firm would likely select if left to its own devices.

The financial crisis is a vivid reminder that there can be many risks to financial stability, and of the need for strong internal and external constraints on banks. Here, the "three pillars" of regulation, supervision, and bank culture must all play effective roles. Regulation establishes what is legally permissible for banks to do; supervision helps to reinforce those rules and evaluate whether the bank's controls and other processes are conducive to safety and soundness; and bank culture sets the norms for what is appropriate behavior.[9] But, at the same time, these pillars are mutually reinforcing. Regulation and supervision, for example, attempt to address various market failures in banking that can contribute to excessive risk taking.[10] Bank culture, in turn, helps establish norms in areas where regulation may be silent.

In this way, regulation, supervision, and bank culture are complements, and deficiencies in any of these pillars can be problematic. For example, as we have seen in cases of unsafe or unethical behavior in recent years, strong regulation and supervision cannot substitute for deficiencies in bank culture—especially not on a timely basis.

It is the public sector's job to establish and enforce rules, but rules are inherently limited in their ability to constrain conduct and behavior. Much of our regulatory regime has been developed in response to financial problems that have arisen over time. Because regulation is typically reactive in this way, it may not always keep pace with the evolution of the financial system or the broader economic environment. Also, we must recognize that, at times, actions will be taken that are clearly inconsistent with the spirit of the rules that are place, or the rules will simply be violated.

Consider the use by Lehman Brothers of so-called Repo 105 transactions to window-dress its balance sheet. Beginning in late 2007, Lehman used Repo 105 transactions to temporarily remove securities from its balance sheet for a few days in order to mislead investors and counterparties about its financial condition. These transactions had the benefit of being

recognized as "sales" even though they were nearly identical to standard repo transactions that stayed on the balance sheet.

In another example, following the introduction of Basel III, some banks tried to reduce their capital requirements by transferring risk to other counterparties. In certain cases, this occurred even when those counterparties did not provide any additional resources to absorb potential losses—either because they were very thinly capitalized, or were affiliated with the banks in question.

I would also note that the establishment of too many bright-line rules may prove counterproductive to the goal of encouraging good bank cultures. For one thing, detailed rules can be construed as implying that the responsibility for good conduct rests with the public authorities. For another, rules may create opportunities or incentives for legal or regulatory arbitrage. When banks work to find creative ways around rules, it can have an insidious effect on culture.

As I see it, an organization's culture gets into trouble when it equates "what is right" with what is legally permissible, and when "what is wrong" becomes viewed as what is legally impermissible. A proliferation of rules—followed by the gaming of these rules—can be ultimately self-defeating. The end result may not only be a loss of trust, but also over time a more burdensome regulatory regime than would otherwise be the case.

So, while regulation and supervision are necessary to ensure a resilient and robust financial system, I very much doubt that they are sufficient. They need to be supplemented by bank management that pays close attention to incentives, conduct, and culture. As I have previously said, incentives drive conduct, which establishes the social norms that help define a firm's culture.[11] The first step is for firms to evaluate the incentives that they have in place with respect to personnel evaluation, compensation, and promotion and to make sure they are consistent with the type of behaviors they want to encourage. For example, how are compliance violations treated in compensation and promotion decisions? Are incentives in place to encourage people to speak up early, when problems are smaller and more manageable? When employees do speak up, how are they subsequently treated?

My colleagues and I at the New York Fed have commented previously on the essential role of good culture in a bank's reputation, financial condition and performance, and in customer confidence and trust.[12] As we have argued, "cultural capital"—through its ability to limit misconduct risk—can be an important bulwark to a firm's financial capital.[13]

Culture is often viewed as a "soft" topic, but I would disagree. The financial penalties associated with misconduct are anything but soft—with bank fines since the crisis estimated at more than $320 billion as of year-end 2016.[14] The hit to a bank's reputation from misconduct can also be quantified through, for example, the associated impact on its share price or funding costs. Culture should be about concrete incentives and behaviors that help achieve specific goals, implying that it should not be viewed as a "soft" issue.

I have argued on several occasions that bank leaders could get a better view into their firms' progress on conduct and culture by doing more collectively.[15] For example, major banks in the United States could participate in an industry-wide survey of their employees conducted by an independent third party, with the results anonymized to encourage respondents to be candid in their assessments. I suspect that these results would create a more accurate picture of how banks are doing, and would likely underscore how much work continues to be needed to improve bank cultures.

Another idea that I have discussed is the creation of a database of banker misconduct to combat the problem of "rolling bad apples." In these cases, employees who are dismissed due to suspicion or proof of misconduct are unwittingly hired by other firms in the industry, where they

have the opportunity to repeat their actions. Understandably, firms are concerned about legal risk if they share information about banker misconduct, but there may be ways to address these concerns through legislation. Once again, I invite the industry to take the initiative on these issues, and to look to the public sector for support.

For their part, I believe that supervisors have a special role to play in assessing incentives at the firm level and their possible implications for bank behavior and misconduct. Supervisors can mitigate misconduct risks by supporting the development of effective corporate governance regimes, prudent risk management policies, and strong compliance and control structures—all within a framework of effective oversight from the firm's board of directors.

Ultimately, establishing and maintaining an effective culture with appropriate risk governance and controls is the responsibility of individual firms and the industry, but the official sector can help by highlighting best practices and addressing collective action problems and other market failures.

Areas where further work on incentives is warranted

I would like to briefly touch on some areas where further work on incentives may be warranted, including regulatory changes that might address certain incentive and first-mover problems. At the outset, let me say that I do not have all the answers and do not mean to suggest that these are the only areas that need improvement. But, these issues are ones where more investigation into possible solutions may be warranted.

As I discussed earlier, we have made substantial progress in raising banks' capital buffers. But, I believe it would also be worthwhile to evaluate other changes to our capital regime to encourage earlier action by banks when the economic environment deteriorates. Banks are naturally reluctant to raise capital due to concerns about stigma and potential equity dilution. This hesitancy was demonstrated clearly during the financial crisis. Bank management may also delay such a move because they may be prone to over-optimism about the outlook for their firm or the economy. There is also an externality problem, as a bank does not internalize the benefit that accrues to the financial system when it takes steps to strengthen its own financial condition.

Although supervisors have tools available in such circumstances, these require a safety-and-soundness basis that may not always be available in a timely manner. Changes in the 2018 Comprehensive Capital Analysis and Review program enable banks to avoid a Federal Reserve Board objection based on the quantitative assessment by raising new capital. While this is a step in the right direction, the current regime may not be sufficient to ensure that banks will raise capital more proactively.

Compensation is also a powerful incentive. As I mentioned earlier, the emphasis in compensation practices on short-term performance over longer-term sustainable returns was a key vulnerability revealed during the crisis that helped motivate imprudent behavior. Currently, senior bankers are paid mainly in cash and deferred stock grants. This structure creates incentives to take actions to maximize a bank's share price, rather than to minimize the risk of the bank's failure. While compensation practices today feature a larger deferred component, greater emphasis on deferral in the form of long-term debt—which can also be recognized as TLAC—could better align senior managers' interests with the long-term safety and soundness of the firm.[16]

As I see it, this approach could have two benefits. For one, it would reduce the incentives for risk-taking. For another, if TLAC debt holdings were at risk of conversion to equity in the event of failure, I believe senior bankers would be incentivized to cut dividends or raise equity capital earlier to reduce the risk of failure. Having a regime in place that creates strong incentives for management to steer aggressively away from bad outcomes would be better than one in which management has incentives to temporize in the face of rising risks.

Some banks have experimented with such compensation schemes, and I would encourage more to do so. But, this type of reform may also need a push from the regulatory side. Banks may be reluctant to adopt such pay structures on their own for competitive reasons. They may perceive that there is a first-mover disadvantage in attracting and retaining talent.

Another possible reform could involve putting a greater onus on senior management for the costs incurred from regulatory fines or other legal liabilities, rather than on shareholders alone. Shareholders should not be shielded from such costs and fines—as they may have also profited from associated gains—but it doesn't seem fair or prudent to shield the decision-makers from responsibility for costly breakdowns as much as they are now. Greater personal liability may also be a powerful incentive to promote better behavior. I suspect changes in these areas would lead senior managers to encourage their staff to speak up earlier about emerging risks, be more attentive when red flags were raised, and respond sooner and more forcefully.

I would also note that the many regulatory reforms introduced over the past decade may create incentives of their own, with important implications for bank behavior. Such incentives may alter the nature and locus of risk-taking, and therefore need to be closely monitored. Risks could be shifted outside the banking system, or the incentives could lead to different bank strategies, business models, and product offerings that introduce new risks.

There is a long history of such behavior. For example, off-balance-sheet instruments rose sharply in the 1980s in response to the introduction of minimum primary and total capital requirements based on balance sheet size. More recently, in some jurisdictions the use of leverage ratios based on period-end reporting of assets—as compared to period averages in the United States—has encouraged window-dressing behavior by some banks at quarter-end. So, while the reforms have mostly had the intended effect of encouraging safer institutions, authorities and financial institutions should also be mindful of potential unintended consequences.

Conclusion

To sum up, we have made considerable progress toward a more resilient and robust financial system. While we should do more to make the regulatory regime more efficient, transparent, and simple, there are outstanding issues that still require additional work—such as the cross-border resolution of large global banks. We should also focus more on incentives, which can help ensure that regulations are dynamic and work well, and that banks are incentivized to take action early to steer away from trouble. Finally, regulation and supervision are necessary but not sufficient—they must be supplemented by bank cultures that encourage ethical behavior, the early identification of problems, and a willingness to address those problems proactively.

Thank you for your kind attention. I would be happy to take a few questions.

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[1] Won Chai, Gerard Dages, James Hennessy, Beverly Hirtle, Thomas Noone, Kevin Stiroh, Katherine Tilghman Hill, and Emily Yang assisted in preparing these remarks.

[2] See Financial Crisis Inquiry Commission, *The Financial Crisis Inquiry Report* (January 2011).

[3] For further discussion, see remarks by Kevin J. Stiroh, A Perspective on Supervisory Objectives and Trade-offs, February 23, 2017.

[4] See Board of Governors of the Federal Reserve System, *The Federal Reserve System: Purposes and Functions* (2018).

[5] See remarks by Randal K. Quarles, Early Observations on Improving the Effectiveness of Post-Crisis Regulation, January 19, 2018. See also remarks by William C. Dudley, Lessons from the Financial Crisis, November 6, 2017.

[6] For further discussion, see Ashcraft and Schuermann, Understanding the Securitization of Subprime Mortgage Credit, Staff Report No. 318, March 2008.

[7] See remarks by Lorie Logan, The Role of the New York Fed as Administrator and Producer of Reference Rates, January 9, 2018. See also the Alternative Reference Rates Committee.

[8] See Financial Stability Board, Final Report on Foreign Exchange Benchmarks, and FX Global Code.

[9] For further discussion of supervisory activities, see Eisenbach, Haughwout, Hirtle, Kovner, Lucca, and Plosser, Supervising Large, Complex Financial Institutions: What Do Supervisors Do? February 2017. For a discussion of the complementarity of supervision and regulation, see Eisenbach, Lucca, and Townsend, The Economics of Bank Supervision, Staff Report No 769, January 2017.

[10] For a discussion in the context of misconduct risk, see remarks by Kevin J. Stiroh, Misconduct Risk, Culture and Supervision, December 7, 2017. See also Chaly, Hennessy, Menand, Stiroh, and Tracy, Misconduct Risk, Culture and Supervision, December 2017.

[11] William C. Dudley, Opening Remarks at Reforming Culture and Behavior in the Financial Services Industry: Expanding the Dialogue, October 20, 2016.

[12] See for example William C. Dudley, Enhancing Financial Stability by Improving Culture in the Financial Services Industry, Remarks at the Workshop on Reforming Culture and Behavior in the Financial Services Industry, October 20, 2014. William C. Dudley, op. cit. October 20, 2016. William C. Dudley, Remarks at the Culture Imperative – An Interbank Symposium, January 11, 2017. William C. Dudley, Reforming Culture for the Long Term, Remarks at the Banking Standards Board, March 21, 2017. Michael Held, Reforming Culture and Conduct in the Financial Services Industry: How Can Lawyers Help? March 8, 2017. Kevin J. Stiroh, op cit. December 7, 2017.

[13] See Stiroh, op. cit. December 7, 2017 and Chaly et al op. cit.

[14] Boston Consulting Group, "Staying the Course in Banking," March 2, 2017.

[15] See e.g., William C. Dudley, op cit. October 20, 2014 and William C. Dudley, op. cit. March 21, 2017.

[16] For related discussion, see Mehran and Tracy, Deferred Cash Compensation: Enhancing Stability in the Financial Services Industry, August 2016, and Mehran and Tracy, Performance Bonds for Bankers: Taking Aim at Misconduct, November 9, 2016.