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Structural Solutions: Blinded by Volcker, Vickers, Liikanen, Glass Steagall and Narrow Banking

The phrase “structural solution” is a polite term for breaking up the banks. These “solutions” are presented as the key to solving the problem of “too big to fail” (TBTF).¹ They come in three main varieties, one in the United States (the Volcker Rule), one in the United Kingdom (the Vickers Report) and one in the European Union (the Liikanen Report). The problem they seek to address is real. It is the dilemma faced by public authorities when confronted with the potential failure of a financial institution that could result in destabilizing the financial system in a country or region under conditions of uncertainty and in the absence of appropriate tools to contain the adverse consequences of failure on the financial system and the broader economy. Enormous amounts of public resources were devoted to supporting the financial system in 2008/2009. In some cases this support resulted in increasing public sector debt to levels that make a repeat of public support on a similar level hard to conceive of even if public opinion would tolerate it. Thus, solving TBTF is crucial both to the financial sector and to the common good. But the “structural solutions” proposed are illusory, at best are complementary to other more targeted measures being actively pursued, and at worst divert valuable attention and resources away from more targeted solutions.² They are perhaps best understood as threats of what could happen to financial institutions if these other measures are not implemented in a timely and credible manner, rather than as real solutions to the TBTF problem.

1 For a good description of the TBTF problem and why it arises, see John F. Bovenzi, Randall D. Guynn & Thomas H. Jackson, *Too Big to Fail: The Path to a Solution*, Report of the Failure Resolution, Report of the Failure Resolution Task Force of the Financial Regulatory Reform Initiative of the Bipartisan Policy Center, May 2013, pp. 1–2.

2 In its recent report to the G-20 Leaders on structural banking reforms, the Financial Stability Board was carefully neutral on the advisability of the proposed reforms, but does cite a number of concerns raised by jurisdictions which have not adopted such reforms relating to the spillover effects that the reforms may have. Prominent among these concerns is the potential for interfering with the efficient resolution of financial institutions if liquidity or capital are trapped in domestic silos and cannot be freely used for resolution. In particular, the strategy of resolution through the ‘single point of entry’ approach could be impaired. Financial Stability Board, *Structural Banking Reforms: Cross-border consistencies and global financial stability implications*, Report to G20 Leaders for the November 2014 Summit, October 27, 2014.

The more targeted measures include increases in the capital and liquidity requirements decided upon by the Basel Committee on Banking Supervision in the package of reforms known as Basel III and the development or expansion of resolution regimes and strategies such as the single-point-of-entry (SPOE) strategy in the US, the UK, France, Germany and at the Community level in the EU.³ These are the real solutions to TBTF because they aim to reduce both the risk of failure of financial institutions, based on an analysis of what caused the failures in 2008/2009 (through the Basel III reforms), and the loss given failure through the adoption of appropriate resolution regimes which would allocate losses upon failure to existing investors in the failed institutions without fostering contagious panic, thus preventing the failure of one institution from having systematic consequences. They are solutions endorsed by the Financial Stability Board acting to carry out decisions of the G-20 heads of state and governments on a coordinated worldwide basis. Their adoption will increase uniformity of regulation and outcomes worldwide, reducing the chances for regulatory arbitrage and contributing to financial stability. The structural solutions, in contrast, are ad hoc regional initiatives, in part contradictory, which will lead to fragmentation and to a more brittle financial system. They are based on theory, ideology, wishful thinking and nostalgia. They will not work and will in fact be counterproductive by diverting valuable time and resources away from real solutions.

The term too big to fail predates the crisis of 2008/2009. It was coined in the 1980s in the United States as a result of the rescue of Continental Illinois Bank and Trust, but it is fair to say that it was not top of mind among bankers and regulators in the run up to the financial crises until March and September 2008. It was revived then to describe the problem created by the rescue of a non-bank financial institution, Bear Stearns, in March 2008 and the failure to rescue another non-bank financial institution, Lehman Brothers, in September 2008. The first action created an expectation that financial institutions above a certain size, regardless of whether they were deposit taking institutions as Continental Illinois had been, or pure investment banks as Bear and Lehman were, would not be allowed to fail. Bear was rescued for fear of what its failure would do to financial stability. The failure to rescue Lehman illustrated how severe those consequences could be. Lehman's failure was followed in the US by the

³ For a good description of the SPOE strategy, see Bovenzi, Guynn & Jackson, note 1 above, pp. 23–32. For a description of how the SPOE strategy was developed, and how quickly it has been accepted around the world as the most promising solution to the TBTF problem, see Randall D. Guynn, *Framing the TBTF Problem: The Path to a Solution*, in *Across the Great Divide: New Perspectives on the Financial Crisis*, Joint Publication by the Brookings Institution and the Hoover Institution, Edited by Martin N. Baily and John B. Taylor, 2014.

rescue of an insurance conglomerate, AIG, and of the money market mutual fund industry in general. None of these entities had insured deposits or access to the Federal Reserve System's normal "lender of last resort" authority – the Discount Window. None of them ran a payments system or provided substantial amounts of credit to consumers or to small and medium sized enterprises outside the debt capital markets. Other than perhaps AIG, none of the entities involved would have been a candidate for being labeled a globally systemically important financial institution, i.e. a G-SIFI.

Based on this historical record, it is hard to understand how we arrived at the point where it is seriously argued that too big to fail is a problem caused by globally systemically important banking groups, i.e., G-SIBs, and that the way to solve it is to separate deposit taking and consumer and SME lending from trading or other financial activities, especially in view of the fact that, as we explain below, the degree of structural separation proposed in Europe by Vickers, Liikanen and Barnier does not go beyond the structural separation in effect in the US in 2008 under Sections 16 and 21 of the Glass-Steagall Act, which survived the repeal of the rest of the Glass-Steagall Act in 1999.⁴

The Varieties of Structural Reform

There are three main strains of structural solutions which have made it to international prominence, one for each of the US, the UK and the EU, showing that no one country or region has a monopoly on bad ideas. Since they are ably described and defended by other contributors to this volume, we will mention only a few of their salient features useful to convey our arguments in this chapter. The first in time is the Volcker Rule, technically section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, named after its progenitor, the highly respected former Chairman of the Federal Reserve System, Paul Volcker. It focuses on prohibiting deposit taking institutions *and* their separately incorporated non-deposit-taking affiliates from engaging in proprietary trading (but not long-term investing or market making) in certain financial instruments and from acquiring or retaining ownership interests in, sponsoring, or entering into certain lending and other covered transactions with related, hedge funds, private equity funds and many other vehicles (including most securitization ve-

⁴ As a purely technical matter, the Glass-Steagall Act consisted of Sections 16, 20, 21 and 32 of the US Banking Act of 1933. It has become common usage, however, to refer to these sections as sections of the Glass-Steagall Act, so we have adopted that convention in this chapter even though it is not technically accurate.

hicles) defined as “covered funds.” The Volcker Rule requires these activities to be pushed out of banking groups entirely. As a result, we refer to it as a total separation solution, in contrast to Vickers or Liikanen, which are only partial separation solutions because they do not require investment banking to be pushed out of banking groups entirely, but only out of deposit-taking institutions into separately capitalized non-bank affiliates. The total separation required by the Volcker rule is not based on empirical evidence that either proprietary trading or investing in, sponsoring, or entering into covered transactions with related, hedge funds or private equity funds had any significant part in the failures of financial institutions in 2008/2009,⁵ but rather on a theoretical or cultural, not to say ideological view of what activities are appropriate for officially licensed deposit-taking institutions and their separately capitalized non-deposit-taking affiliates to engage in and what activities are incompatible with this traditional idea of what deposit-taking institutions and their affiliates should be and do.

The second in time is the Vickers Report (technically the report of the UK Independent Banking Commission chaired by another respected former central banker, Sir John Vickers). It also seeks to separate trading activities from commercial banking, but allows the two to co-exist within the same banking group, so long as they are in separately capitalized entities which may only transact with each other on an arm’s length basis. This structural separation regime is similar to the partial separation regime that was in place in the United States after enactment of the Gramm-Leach-Bliley Act of 1999 but before the Volcker Rule. It adds a requirement that the entity engaging in commercial banking activities be subject to higher capital and lower leverage requirements than otherwise applicable under the Basel III standards and narrows substantially the activities in which this “ring-fenced” commercial bank may engage. Such a bank is to focus primarily on consumer, real estate and small and medium sized entity financing within the European Economic Area. While it may also engage in lending to larger corporate clients and deal in certain simple derivatives products, the “ring-fenced” bank cannot offer any more sophisticated products to its custom-

5 Indeed, Representative Jeb Hensarling, the Chairman of the Financial Services Committee of the U.S. House of Representatives has repeatedly called the Volcker Rule “a solution in search of a problem.” See, e.g., *The Impact of the Volcker Rule*, Hearings Before the Committee on Financial Services, U.S. House of Representatives, January 15, 2014. The Volcker Rule was a last-minute addition to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and has no clearly articulated purpose in the statutory text or legislative history. It is also impossible to infer any coherent purpose from the text since the Volcker Rule prohibits certain low-risk activities (e.g., short-term proprietary trading in highly liquid financial instruments) and permits certain high-risk activities (e.g., long-term investment in highly illiquid instruments such as commercial loans).

ers. The non-ring-fenced entities cannot take deposits from EEA individuals or SMEs or operate payment systems. The ring-fenced entity will thus have higher costs (due to the capital and leverage requirements), a focus on traditionally risky consumer, real estate and SME lending and be cut off from most sources of often more lucrative and sometimes less risky fee business. The fee business will be in the non-ring-fenced entity which can be part of the same corporate group but which will be deprived of access to an historically stable retail deposit base and thus will have to finance itself through the historically less stable capital and repo markets.

What is striking about this “solution” is that the ostensibly safer ring-fenced entity will be required to focus on areas of lending, consumer, real estate and SMEs, which have traditionally been viewed as risky and carried correspondingly high risk weightings under the Basel system for risk capital. It was real estate lending which was the downfall of Northern Rock in the UK and Washington Mutual and Wachovia in the US⁶. And it was the lack of a stable deposit base, and reliance funding from the capital and repo markets, which led to the downfall of Bear Stearns and Lehman Brothers in the US. Northern Rock’s failure was also triggered by an excessive reliance on capital market funding. Furthermore, the ring-fencing solution does little more than recreate the conditions which applied in the US in 2008/2009 under Sections 16 and 21 of the Glass-Steagall Act, which survived the repeal of the rest of the Glass-Steagall Act by Gramm-Leach-Bliley and which required separation of deposit-taking institutions and investment banks under a common bank holding company. These entities could only transact business on an arm’s length basis. However, this separation did not prevent a series of failures on both sides of the divide. As Thomas Huertas, former Alternate Chair of the European Banking Authority notes in his recently published book “Safe to Fail”: “This set-up has not brought financial stability to the United States. In the crisis, stand-alone investment banks failed, single purpose commercial banks failed and diversified financial holding companies failed. There is no conclusive evidence to suggest that the separation of investment and commercial banking limits risk, fosters safety or enhances stability.”⁷

Third in time is the report of the Liikanen EU High Level Expert Group in October 2012, which became the basis for a proposed directive by Commissioner Barnier in 2014. Liikanen, like Vickers, focuses on a separation of traditional commercial banking from trading within a single banking group, but includes

⁶ Barth, J.R. and D. McCarthy, Trading Losses: A Little Perspective on a Large Problem, Milken Institute, November 2012.

⁷ Thomas F. Huertas, *Safe to Fail, How Resolution Will Revolutionise Banking*, Palgrave Macmillan, 2014, p. 42.

a *de minimis* exception from mandatory separation where trading makes up a small percentage of the banking entity's activities and focuses more on preventing insured deposits from being used to finance proprietary trading and on the ease of resolution of separated entities than on the dangers of trading per se. The Barnier proposal for an EU directive combines elements of Liikanen and Volcker, rather like the Chinese restaurants in the US of our youth where one could choose one dish from column A and one from column B on the menu.

In the background of these three proposals can be found an older idea, that of "narrow banking" which has its origins in a proposal made in 1933 to President Franklin D. Roosevelt by a distinguished group of economists from the University of Chicago, including Frank Knight and Irving Fisher, and known as the "Chicago Plan". It would have split banks' two main functions, taking deposits and making loans. Banks would have had to keep 100 % of their deposits readily available for withdrawals. Lending would have been funded by equity or bank liabilities other than insured deposits or otherwise left to private investors. The US Congress rejected narrow banking in favor of deposit insurance as a better way to steer against bank collapses,⁸ but the idea of narrow banking has resurfaced since the financial crisis. The current incarnation of the idea has been most closely associated with John Kay in the UK and Lawrence Kotlikoff in the US.⁹ While their prescriptions differ in detail, the general idea is to create institutions which, in the words of John Kay, separate the "utility" functions of running payments systems and taking deposits from individuals and small and medium sized enterprises ("SMEs"), from the "casino" functions, basically most everything else they do, including anything to do with investment banking. Banks would be required to hold 100 % of their deposits primarily if not entirely in cash and government securities. There are differences among these proposals in exactly what else banks would be allowed to do (Kotlikoff sees them as providing mutual fund style investments to their customers) and the extent to which the activities cast out from within the banks would need to be regulated (Kay is not concerned with that at all; Kotlikoff is somewhat more concerned). However, all variations have in common pushing activities viewed as risky out of the bank and radically narrowing the scope of bank activities.¹⁰

⁸ *Narrow-minded, A radical proposal for making finance safer resurfaces*, The Economist, June 7, 2014.

⁹ John Kay, *Narrow Banking, The Reform of Banking Regulation*, September 15, 2009; Lawrence Kotlikoff, *Jimmy Stewart is Dead: Ending the World's Ongoing Financial Plague with Limited Purpose Banking*, John Wiley & Sons, 2011.

¹⁰ US Senators Elizabeth Warren, John McCain, Maria Cantwell and Angus King have introduced a narrow banking bill in the United States Senate. See <http://www.warren.senate.gov/>

Since none of these proposals has been adopted as legislation or regulation we will not linger further on them, except to make three short remarks. First, tying the credit of banks to the credit of their sovereigns turned out to be dangerous in the Euro debt crisis of 2010 – 2012. Second, these proposals present many of the same definitional problems we will discuss below concerning the three main “solutions”. For example, why is consumer and SME lending, traditionally viewed as risky, suddenly a utility function, less risky than underwriting highly rated corporate bonds? Why is that activity not as much a utility? Third, we would like to cite Charles Goodhart’s acute observations on narrow banks:

“A problem with proposals of this kind is that they run counter to the revealed preferences of savers for financial products that are both liquid and safe, and of borrowers for loans that do not have to be repaid until some future date. It is one of the main functions of financial institutions to intermediate between the desires of savers and borrowers, i.e. to create financial mismatch. To make such a function illegal seems draconian.”¹¹

Martin Wolf who, over the years, has shown a certain sympathy for the arguments of John Kay, has noted that any fragility such proposals would banish from the banking system would be recreated outside of them,¹² and concluded in his recent book that however fascinating it might be to see one of these proposals enacted, “the difficulties involved in making such a transition would be huge. So let’s first consider less radical ways of buttressing a system that would be much more like our own.”¹³

To return to the three less radical structural solutions that have made it out of the starting blocks, they all target activities (trading, hedge funds and private equity funds) without explaining how these contributed to the last crisis. Vickers and Liikanen would recreate the same situation which existed in the US under Sections 16 and 21 of Glass-Steagall (as left in place by the Gramm-Leach-Bliley

files/documents/21stCenturyGlassSteagall.pdf. Although they have called it the 21st Century Glass-Steagall Act of 2013, it is substantially more restrictive than the Glass-Steagall Act of 1933, both in terms of more extensive restrictions on the direct activities of banks and on their ability to affiliate with companies engaged in securities and other financial activities. The original Glass-Steagall Act only prohibited banks from being affiliated with securities affiliates that are “engaged principally” in underwriting and dealing in corporate securities. See Section 20 of the US Banking Act of 1933.

11 Charles A.E. Goodhart, *The Optimal Financial Structure*, LSE Financial Markets Group Paper Series, Special Paper 222, March 2013, p.5.

12 Martin Wolf, *Why narrow banking alone is not the finance solution*, Financial Times, September 29, 2009.

13 Martin Wolf, *The Shifts and the Shocks, What we’ve learned – and still have to learn – from the financial crisis*, Penguin Books, 2014, p.237.

Act) on the eve of the 2008 financial crisis when Washington Mutual and Wachovia collapsed and Citigroup and Bank of America had to be rescued, without explaining why, if that degree of separation did not avoid collapse or the need to rescue those institutions in the US it will fare better in Europe. They also do not bring any evidence of internal contagion within a banking group from the investment banking and trading side to the commercial banking side. Vickers will clearly lead to creating palpably weaker institutions carved out of existing groups, with the ring-fenced banks making what have traditionally been considered the riskiest loans and the investment banks deprived of the support of a stable deposit base.

Moreover, none of these three structural changes do anything to prevent trading and hedge fund activities from migrating to the shadow banking system and for the shadow banking system to compete for the same retail funds that might otherwise be stored in deposit accounts and used for payments through the official banking system by offering money-like substitutes such as mobile payments, BitCoins, google money or other demand or short-term credit instruments to the public. Thus, the three structural changes do little more than create a financial Maginot Line that existing and future shadow bankers will just drive around and which is almost sure to be the cause of some future financial crisis. The Volcker Rule already has led to the flight of proprietary trading, hedge fund, and private equity activity to the shadow banking system. And the Volcker Rule has done so without any explanation of how such flight would have solved the problems of the last crisis.

Volcker stands out from the rest of the Dodd-Frank Act in that it violates a core principle of the Act, which was also a key lesson of the financial crisis. This is that activities should be regulated according to their nature and not according to the type of charter or license that the institution has in which they are conducted. If fund sponsorship and proprietary trading are dangerous, why are they dangerous only for commercial banks and their affiliates? The answer from the proponents of structural reform appears to be that this is because commercial banks and their nonbank affiliates benefit from a safety net (deposit insurance and access to liquidity from a central bank lender of last resort) and because payment system products and credit to consumers and SMEs are socially useful activities, whereas proprietary trading or providing hedge funds or private equity funds are not socially useful. They see the combination of deposit taking and lending activities within the same legal entity or the same group of affiliated legal entities as constituting a public subsidy through lower borrowing costs and as encouraging moral hazard in the form of riskier investments on the assumption that tax payers will end up bearing the cost of failure. This is often presented as if money were flowing from the government to the banking

sector rather than from the willingness of the debt markets to accept a lower interest rate.¹⁴ It is argued that these advantages were only meant to accrue to deposit taking institutions, which engage in traditional banking activities, and have been internally misappropriated by banks to support other extraneous and riskier activities. Thus, if only we could separate the subsidized socially useful parts of financial institutions from the riskier and socially useless parts, we would reduce the instances in which bail-outs would be needed because risky and socially useless shadow banks would not need to be rescued. While this line of reasoning may have a superficial plausibility, it is deeply flawed on a number of levels: historically, empirically and methodologically.

What is Wrong with this Picture?

From an historical point of view, let us start with who was “bailed out” in the US in the last crisis. Putting aside the point that it was their creditors and not the shareholders of the institutions themselves who were protected from loss, in the US it was a broker dealer with no commercial banking operations, Bear Stearns, an insurance group, AIG, and the entire money market mutual fund industry. None of these were deposit-taking institutions and yet the threat of their collapse resulted in public authority intervention to prevent their disorderly collapse from having serious adverse effects on the U.S. financial system. Equally important, historically there is one institution that was not bailed out and whose collapse did create precisely the kind of contagion public authorities fear: Lehman Brothers. Lehman was not a deposit-taking institution and yet its collapse caused damage to the financial system and ultimately to the “real economy” entirely out of proportion to its size. It had a balance sheet on the order of \$600 billion and its collapse was at least partly responsible for stock market losses of nearly \$1 trillion in a single day. Thus, it is clear that not only do government authorities face pressure to bail out deposit-taking institutions to avoid the adverse consequences of their collapse, but that these pressures also apply in the case of certain non-deposit taking financial institutions.

From an empirical point of view, proponents advance the subsidy-to-borrowing-costs thesis, based largely on contradictory analyses of ambiguous empirical data and on approaches to rating financial institutions by credit rating agencies.

14 Because it is really the latter rather than the former, some commentators have started referring to it as a funding advantage rather than an implicit subsidy. See Martin N. Baily, Douglas J. Elliott & Phillip L. Swagel, *Big Bank Theory: Breaking Down the Breakup Arguments*, October 2014, pp. 14–18.

This battle of experts on subsidies resembles the similar battle of experts on whether banks experience economies or diseconomies of scale as they grow larger.¹⁵ As lawyers, we must leave the analysis of empirical data to others and only say there appears to be no serious consensus on economies of scale, but that we find that the evidence adduced for a specific subsidy attributable to TBTF at the present point in time is insufficient to reach any actionable conclusion.¹⁶ With respect to ratings, it is true that for a period of time after the crisis the credit rating agencies (the same ones whose misjudgment of the creditworthiness of mortgage-backed securities cost them a good deal of public trust during the crisis) added an uplift to their ratings of financial institutions to reflect the potential for government support. These uplifts are in the process of disappearing, not because of the prospect of these institutions being divided up, but country-by-country, according to the degree to which bank resolution laws have been adopted there, which will allow or even require the costs of failure to be internalized by the financial institutions and their creditors and not be shared with taxpayers.¹⁷ A recent study by the US Government Accountability Office confirms that whatever funding advantage there was to the largest US banks has disappeared or even turned negative in 2012 and 2013.¹⁸ An interesting observation in the IMF's examination of the issue in Chapter 3 of its annual Global Financial Stability Report in April 2014 is that estimates of the size of the funding advantage in the EU are six times the size of the subsidy in the US.¹⁹ This would be consistent with the general analysis of the rating agencies that the single-point-of-entry approach to implementing the Orderly Liquidation Authority mandate in Dodd-Frank by the US Federal Deposit Insurance Corporation (FDIC) "is emerging as an accepted and credible alternative to tax payer-funded capital infusions from the government that might otherwise be needed to avoid the contagion

15 Compare Wheelock, D.C. and P.W. Wilson, Do Large Banks Have Lower Costs? New Estimates of Returns to Scale for U.S. Banks, *Journal of Money, Credit and Banking*, 44(1), 2012 and Hughes, J.P. and L.J. Mester, Who Said Large Banks Don't Experience Scale Economies? Working Papers No. 11–27, 2011 Federal Reserve Bank of Philadelphia.

16 Oliver Wyman, Do Bond Spreads Show Evidence of Too Big To Fail Effects, April 2014; Baily, Elliott & Swagel, note 14 above.

17 Moody's Investor Service Special Comment: Moody's Concludes Review of Systemically Important US Banks – Frequently Asked Questions. November 14, 2013. Fitch Ratings, Peer Review: Global Trading and Universal Banks, Special Report, March 27, 2014 and Sovereign Support for Banks, Rating Path Expectations, Special Report, March 27, 2014.

18 Government Accountability Office, Large Bank Holding Companies: Expectations of Government Support. July 31, 2014.

19 International Monetary Fund, Global Financial Stability Report, April 2014, p. 14.

and systemic risks from a disorderly failure of one or these institutions.”²⁰ This is in contrast to the continuing questions the agencies had at the time concerning how the EU’s draft Bank Recovery and Resolution Directive would function.²¹

Reducing the *ex ante* Risk of Failure

This brings us to the methodological point. As Andy Haldane of the Bank of England reminded us at the conference out of which this chapter grew, there are basically two ways to solve a problem relating to the failure of an institution: *ex ante* to reduce the likelihood of failure and *ex post* to reduce the loss given failure. On the *ex ante* side, when we examine the sources of fragility of both individual financial institutions and the overall financial system in the run-up to the crisis, we see the following factors: some financial institutions were levered up to 30 and 40 times and had too little capital that was truly loss-absorbing on a going concern basis. Thus, even a small loss could easily reduce their capital drastically and lead to their becoming insolvent. These and other institutions (mainly investment and other shadow banks in the US, but also universal banks in Europe) suffered from the absence of a sufficiently large stable deposit base to support their assets, with the consequent need to rely increasingly on short-term capital market debt instruments. They also lacked liquidity reserves and concentrated on lending to or investing in financial instruments backed by various forms of real estate. It was bad lending decisions and holding on to or investing in the products of that bad lending, which caused the losses, not proprietary trading. These losses led to the potential for failure in highly leveraged institutions whose loss absorbing capital was quickly reduced and whose liquidity reserves were insufficient to allow them to weather the decisions of capital market investors not to roll over short-term debt, leaving them with no alternative other than having to engage in fire sales of assets, which led to further losses and to contagion to other financial institutions holding the same or similar assets. The reforms embodied in the Basel III rules and in related supervisory initiatives attack all of these weaknesses and thus reduce directly the risk of failure of financial institutions.

How does structural separation reduce the risk of failure? The argument is by reducing the chance that losses on the trading side of the bank will bring

²⁰ Moody’s, note 17 above, p. 4.

²¹ Moody’s Investors Services, Special Comment, EU Bank Resolution: Draft Directive Offers Clarity on Future Support Framework, But Important Questions Remain Unanswered, September 30, 2013.

down the traditional banking side. But that is not what we observed in the last crisis. The losses originated on the banking side, i.e. bad lending decisions, or in assets held in the banking book (bad loans) or as assets such as collateral debt obligations available for sale, not in the trading book. Trading, if one can call it that, predominantly played a role through fire sales once losses had begun to spread and financial institutions had to de-lever. What do the structuralists propose in addition to this? They underline how much easier it will be to resolve a financial institution if it is divided up into a trading and commercial lending operation and imply that there will be no need to bail out the trading entity if the exposure of the commercial lending entity to it is at arm's length and capped. As noted above, this argument is contradicted by the historical record. Under the sort of structural solution mandated by Volcker, Vickers and Liikanen, the separation takes place along pre-ordained ideologically determined lines, not the relative riskiness of activities, which constantly changes over time.

Another *ex ante* argument made by the structuralists is – overtly – the argument from complexity and – usually rather more indirectly – the issue of size. While a respectable argument could be made that a bank whose balance sheet is a multiple of the GDP in the country in which it is incorporated (which is the case in almost all European countries, but not the US) must present a greater danger to financial stability than a smaller institution, since rescuing it may be beyond the fiscal resources of the public purse, especially after the strains put on that purse by supporting the financial system in the last crisis, none of the three main flavors of structuralism address size directly. Only the US, in Dodd-Frank, has a limitation on size (10 % of total nationwide bank deposits or 10 % of the aggregate consolidated liabilities of all financial companies), but only if that size results from an acquisition and this restriction is merely an updated version of pre-existing size limitations.²² This reluctance to attack size alone reflects the fact that TBTF rarely has much to do with the absolute size of the institutions involved. Lehman Brothers was only the fourth largest investment bank in the US and monoline US investment banks were considerably smaller than US commercial or universal banking groups. None of Northern Rock in the UK, Sachsen LB, IKB or Hypo Real Estate in Germany was a very large bank. This has led to variations on the label TBTF such as “too interconnected”, “too complex” or “too important” to fail. Part of the problem of finding an appropriate label derives from the fact that, in addition to elements endogenous to the institution, a

²² For the moment this prohibition would only prevent the two largest banking groups in the US from growing by acquisition, JP Morgan Chase and Bank of America. Barth, J.R. and Apanard Prabha, *Breaking (Banks) Up is Hard to Do: New Perspectives on Too Big to Fail*, December 2, 2012.

key factor in a TBTF scenario seems to be the fragility of other financial institutions and the entire financial system at the time one institution faces a crisis. If there are a sufficient number of other institutions which might be facing the same problem, so that if the first one collapses it could be taken as a sign that the others might also collapse, that first institution, regardless of its absolute size or level of interconnections, will present its government with the TBTF dilemma. Under conditions of uncertainty, if financial institutions engage in maturity transformation – i.e., they have demand or other short-term liabilities and long-term or other illiquid loans or other assets that do not have stable and transparent market prices – and some common shock causes investors to question the value of assets throughout the banking system, contagion can quickly grow into a system wide crisis. Faced with this uncertainty, a government may well opt for a “bail-out” regardless of the size of the institution involved unless it believes it has the tools needed to contain contagion by resolving the affected entity in an orderly fashion.

The argument from complexity (too complex to manage) is largely based on anecdotal incidents involving operational risk and on the number of subsidiaries to be found in many financial groups (Lehman’s 3000 subsidiaries is an oft-cited figure). But operational risk in the form of traders who double down on losing bets and seek to circumvent internal exposure limits in doing so when the markets turn against them is an old story and where banks have been brought down by such activities, such as Baring Brothers in the UK in 1995, it has been smaller, simpler institutions rather than large, complex ones who seem to have failed.²³

Finally, much of the complexity in corporate structure has come from regulatory requirements to separate various activities into separate entities and both Vickers and Liikanen will result in additional complexity in this regard.

Reducing the *ex post* Losses Given Failure

Turning now to the *ex post* side, reducing losses given failure, the key initiatives are the ones establishing or expanding resolution regimes tailored to financial institutions in the US, the UK and elsewhere in the EU both at the Member State and at the Community level (via the Bank Recovery and Resolution Directive). The fundamental problem faced by public authorities during the crisis

²³ Barth & McCarthy, note 6 above, analyse 15 instances of trading losses of at least \$1 billion between 1990 and 2012 (at hedge funds, manufacturers and oil refiners, investment banks, governments and commercial banks) and conclude that losses relative to equity were lowest at banks (5.3 %). At investment banks they amounted to 34.2 % of capital.

when confronted with a potentially failing institution was the absence of appropriate tools to handle its failure in an orderly fashion. In the absence of such tools, the choices are a disorderly sale through the liquidation of financial assets at the bottom of the market during a financial panic or a value-destroying reorganization that takes so long to complete that the institution involved loses most of its value by the time the reorganization is approved.

The experience with Lehman Brothers on both sides of the Atlantic made clear that ordinary bankruptcy or insolvency laws, at least as traditionally conceived and without advance resolution planning or certain amendments, were inappropriate tools to reduce the loss upon failure of a financial institution, for a number of reasons. First, unless traditional bankruptcy laws can be used in creative ways to separate the good and bad parts of a banking group quickly, such as through the quick transfer of the good parts of a failed banking group to a bridge entity (the good bank) under Section 363 of the U.S. Bankruptcy Code and the ability to leave the bad parts of the failed group (the bad bank) behind in a bankruptcy proceeding,²⁴ the bankruptcy process is too slow and financial institutions' value evaporates too quickly. Second, because central to a bankruptcy proceeding is a general stay of claims against the bankrupt, and this stay interferes with what *Tom Huertas* has identified in his paper in a prior volume in this series as "the very essence of banking," "the ability to make commitments to pay."²⁵ Another problem is that bankruptcy courts have not traditionally viewed their roles as including a consideration of the need to maintain depositor confidence and financial stability. In the US, the FDIC has long had powers tailored to resolving commercial banks without producing financial instability, but these powers did not extend either to broker-dealers like Lehman or to bank holding companies like Citigroup or Bank of America Corporation. There were no comparable legal frameworks in Europe. The application of ordinary bankruptcy laws to Lehman Brothers, especially in the UK, in the absence of resolution planning and some of the creative thinking that has taken place since 2008 about how the U.S. Bankruptcy Code can be used to execute a good bank / bad bank resolution structure,²⁶ resulted in a very messy collapse with repercussions throughout the financial system in the US and the EU, with multiple uncoordinated national bankruptcy and insolvency proceedings seeking to liquidate assets for the benefit of local creditors and to the detriment of just about everyone else, including

²⁴ Bovenzi, Guynn & Jackson, note 1 above, pp.33–34, 38–39, 75–76.

²⁵ Thomas F. Huertas, *Resolution Requires Reform*, in Patrick S. Kenadjian, *Too Big To Fail – Brauchen wir ein Sonderinsolvenzrecht für Banken*, Institute for Law and Finance Series, De Gruyter 2012.

²⁶ Bovenzi, Guynn & Jackson, note 24 above.

the financial system. None of the judicial authorities involved had a mandate to take into consideration the health of the financial system. In addition, there was no advance resolution planning that might have resulted in recapitalization strategies being carried out in bankruptcy proceedings that would have taken those considerations into account.

The consensus solution to this problem developed by the FSB and approved by the G-20 has been to design a system tailored to deal with the failure of financial institutions, through what has become known as “resolution”. The key idea is to recognize that financial institutions are different from other kinds of enterprises and that their failure needs to be dealt with in a way which preserves the stability of the financial system by allowing them to be recapitalized and reorganized outside of the regular bankruptcy or insolvency process, at least in the US if it is not possible to do so within the regular bankruptcy process. In Europe the focus has been on a procedure that internalizes the cost of failure as much as possible through the concept of “bail-in”. This can happen either outside of a resolution proceeding at the “point of non-viability” of the enterprise or as part of a resolution proceeding overseen by a resolution authority. Under “bail-in”, the long-term senior and subordinated creditors of the failing enterprise can be required to absorb its losses to the extent required to recapitalize it by having their debt written off or converted into an amount of equity sufficient to absorb the losses incurred and bring its capital ratio back up to that required by its license. They do this in reverse order of seniority and subject to certain exceptions, such as for insured deposits and secured debt which are either contractually, structurally or legally made senior to the claims of long-term creditors. Assuming the institution has sufficient total loss-absorbing capacity (TLAC) in the form of combined regulatory capital and long-term unsecured debt, bail-in prevents the institution from having to file for bankruptcy or insolvency protection from its creditors and assures depositors and other super senior short-term creditors that they need not run on the institution. Because the losses are borne by equity and long-term debt holders, the need for public capital is eliminated, the need for the institution to deleverage by reducing lending is also lessened and the effect on the “real economy” is correspondingly reduced. Under the rules of the European Union, “state aid” (i.e. public funds) is permitted to be provided to a financial institution only after equity and unsecured long-term debt holders have absorbed losses up to an amount equal to 8 % of the institution’s liabilities.²⁷ It is calculated that this amount of loss-absorbing capacity

²⁷ The Bank of England’s approach to resolution, October 24, 2014, p. 9, note 1.

would have sufficed to repair the capital of the EU institutions that received bail-outs during the crisis of 2008/2009.

What do the structuralists propose that supplements or improves this? Little more than the assertion that we only provide deposit insurance and central bank lender-of-last-resort liquidity to deposit taking institutions because they provide socially useful products and services. In other words, they argue that if trading and other investment banking activities can be separated from deposit taking, the deposit taking institutions will not fail or any loss to the public purse will be smaller. As noted above, this flies in the face of history. Financial institutions were rescued regardless of whether they had insured deposits because public authorities feared contagion throughout a fragile financial system and did not have an instrument other than bail-out to avoid a messy bankruptcy with fire sale liquidations of illiquid assets. New resolution regimes, and creative new resolution strategies designed under those regimes or even under normal bankruptcy regimes, provide a solution out of the dilemma between bailouts and fire sale liquidations, regardless of the activities within the institution. Those tools can also be tailored to achieve in practice what structural solutions aim for in theory: once a financial institution is in resolution, the resolution authority can decide to divide it up, transferring parts of it to a bridge bank which is recapitalized by bailing-in existing debt and continue operations uninterrupted, while leaving other parts behind to be liquidated over time. To quote Bank of England Deputy Governor John Cunliffe: “The aim is to enable the critical parts of the group – the parts vital to the real economy and the parts that financial stability depends on – to keep operating so the group can be safely resolved over time. The ultimate solution could involve a mixture of sales, administration and run-off”.²⁸ And that is the true solution to TBTF.²⁹

But What Harm do Structural Solutions Cause?

The fundamental problem with structural solutions is that they divert attention and resources away from real solutions to the TBTF problem by focusing attention on traditional regulated commercial banks and they create incentives for

²⁸ Sir John Cunliffe, *Ending Too Big To Fail – progress to date and remaining issues*. 13 May 2014. See also The Bank of England’s approach to resolution, October 24, 2014.

²⁹ Interestingly enough, in an FAQ issued in connection with this pamphlet cited in footnote 9 above, John Kay acknowledges that “the plans for ‘living wills’, combined with a proper resolution regime” probably would “do the trick”. John Kay, *Narrow Banking FAQs*, available at www.johnkay.com/wp-content/uploads/2009/09/Narrow-Banking, p. 7.

that portion of the overall financial system to shrink relative to the part of the financial sector typically referred to as shadow banking. That is, of course, a term which covers a very broad array of institutions, and which has changed over the years;³⁰ today it includes investment banks, money market mutual funds, hedge funds, on-line peer-to-peer lending clubs, various kinds of crowd funding arrangements, alternative payment systems on line or via mobile networks and various issuers of virtual currencies such as BitCoin. Tomorrow it could include Walmart, Amazon, Facebook and Google.

We know from a quick review of the 2008/2009 crisis that many of the entities that needed to be bailed out were part of what was then considered the shadow banking sector. We have noted Bear Stearns, Lehman and AIG. We can add the two government sponsored entities active in mortgage financing, Fannie Mae and Freddie Mac, commercial paper conduits and other securitization vehicles and note that many of the commercial banks that failed did so because they relied excessively on the shadow banking sector for financing or were excessively exposed to loans made to the shadow banking sector in the form of investments in collateralized debt obligations. Many of their problems resulted from their failure to fully understand their interconnections, or the risks of those interconnections, to the shadow banking sector. The Financial Stability Board has recognized this issue and created five working groups to focus on shadow banking, but only two of them, the one focusing on money market mutual funds and the one focusing on secured lending seem to have made much progress. The US and the EU have adopted inconsistent approaches to money market mutual fund regulation and there has been no coordinated action on secured lending, despite significant concerns about repos and the existence of FSB recommendations on their reform.³¹ Focusing on illusory structural solutions for the official

30 Shadow banks of the past have included (1) unofficial banks or colonial governments (e. g., Rhode Island) that issued money or money-like instruments that were not legal tender under the then-existing laws; (2) commodities merchants that provided commodities money such as tobacco, grain, gold or silver that functioned as official or unofficial money; (3) merchants and farmers that issued notes and other IOUs that functioned as money in local communities; (4) private banks and other unchartered banks (i. e., nonbank banks) that issued bank notes or took deposits; (5) wildcat banks that issued paper money on the American frontier with insufficient gold and silver reserves for purposes of converting the paper money to gold or silver; and (6) nonbank banks that escaped regulation in the 1980s under the US Bank Holding Company Act of 1956 by issuing deposits that were withdrawable upon demand as a practical matter but were legally subject to a 7-day delay. See Bray Hammond, *Banks and Politics in America from the Revolution to the Civil War*, 1957, for examples 1–5.

31 Financial Stability Board, *Strengthening Oversight and Regulation of Shadow Banking: Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos*, 2013.

banking sector detracts valuable attention and resources from dealing with the very real issues arising from the shift of maturity transformation from the official banking sector to the shadow banking sector that has taken place and will continue to take place despite and in part because of the so-called structural solutions. It is a bit like the British guns in Singapore facing the wrong way and equipped with the wrong kind of shells to be effective against infantry rather than battleships in 1942. It gives a false sense of security against yesterday's perceived problems while being useless against tomorrow's ever-evolving real dangers.

A second problem is that the solutions that the structuralists propose are both brittle and rigid. Structural solutions will clearly reduce the flexibility of the commercial banking sector to respond to market changes, much in the way the Glass-Steagall Act of 1933 did. The original judgment which underlay Glass-Steagall that underwriting and dealing in corporate securities was riskier than lending was overtaken in time by changes in the breadth and depth of the US capital markets which made it cheaper for the best corporate credits to raise debt from the capital markets than to borrow from commercial banks. As a result, by the 1980s, the market for commercial bank lending and the profits from them had shrunk, forcing the commercial banks to concentrate on lending to riskier and riskier credits, which resulted in their risk exposures to soar instead of staying the same or decreasing.

At the same time, the market for investment banks had grown by the 1980s, as did their profits, and their risks had declined. The investment banks had also found ways around the restrictions on deposit-taking and money creation through the development of overnight repos, money market funds and securitization of bank loans. Talent followed profits from the commercial banks to the investment banks. It is not too hard to conjure up a similar scenario as a result of today's proposed structural solutions. One can see the size and the profitability of the commercial banking sector continuing to shrink under ever-heavier regulation and the growing competitive advantage of the shadow banking sector.

Taking, for example, the Volcker Rule and comparing it to Glass-Steagall, Volcker reflects a similar judgment that proprietary trading and investing in certain funds is riskier than lending and other commercial banking activities. Putting aside the fact that this judgment is highly questionable based on the historical record, it is also unlikely to stand the test of time for the same reason the judgment underlying Glass-Steagall did not. The US financial markets will evolve in ways not anticipated by the Volcker Rule.

While this is happening, the official banking sector will shrink, become less profitable and more risky relative to the shadow banking sector. The shadow banking sector in turn will grow, become more profitable and less risky relative

to the official banking system. Those shadow banks will continue to develop alternatives to whatever restrictions on deposit banking or money creation they are under and continue to attract talent away from the official banking sector.

As the shadow banks increase their share of the financial system, so will the danger of contagion and market meltdown increase, in the event one of them fails, thus increasing the chances that public authorities will feel they have no choice but to bail them out, unless they too are subject to a resolution system comparable to that being applied to official banking groups. So, having divided up the banks, ring-fenced their traditional commercial banking activities and kept them out of the profitable fee generating businesses, will not end TBTF. It will only result in the migration of some prohibited activities from the official banking sector to the shadow banking system and encourage the official banking system to engage in riskier and riskier versions of their permitted activities in order to remain competitive. As the shadow banks account for a larger and larger percentage of the US financial system, the likelihood of their being bailed out can only grow.

It would be a fool's errand to try to prohibit shadow banks from providing money-like instruments to compete with the official banking system. History is littered with attempts by governments to grant monopolies over the money creation process to certain specially licensed institutions or groups of institutions. The best example of this is the ill-fated attempt by the U.S. government to give a monopoly over the paper money creation process to a new national banking system in 1864 and drive the state-chartered banks out of existence.³² The

32 Other examples include (1) the British Tonnage Act of 1694 and the Bubble Act of 1720, which attempted to grant money-making monopolies to the Bank of England and existing corporations such as the South Seas Company; the shadow banks of the day in the American colonies (e.g., pools of merchants or US colonial governments, e.g., Rhode Island) responded by issuing bills of credit which were not legal tender but nevertheless functioned as money; (2) the British Acts of 1741, 1751 and 1764, which severely restricted the power of the colonial shadow banking system to create money; these acts caused a public uproar in the colonies, were cited by Benjamin Franklin in a 1767 speech as one of the reasons for growing colonial hostility to the British Parliament, and were ineffective as the shadow banks in the colonies continued to circulate unofficial paper money that was used in local commercial transactions; (3) American Constitution of 1789, which gave the federal government exclusive control over the money creation process and expressly prohibited the states from coining money, emitting bills of credit or making any thing but gold or silver legal tender; the states responded by chartering banks which issued bills of credit and other forms of paper money and took deposits that could be debited or credited to make payments; (4) the Glass-Steagall Act of 1933, which prohibited investment banks and other shadow banks (e.g., money market mutual funds) from engaging in the business of taking deposits; the investment banks responded by taking overnight repos and other forms of short-term credit that could be transferred by book-entry to pay for transactions and money market

state-chartered banks responded by offering checking accounts to their customers instead of bank notes (paper money). Checking accounts proved to be as efficient as, and in some cases more efficient than, bank notes as a medium of exchange and store of value – i.e., money. If the government had prohibited the state-chartered banks from offering checking accounts, they almost certainly would have invented some other form of money substitute that was not within the ambit of the prohibition.

Conclusion

In conclusion, there is nothing that the structural solutions propose to do to solve the TBTF problem that cannot be done better by more targeted measures such as increased capital and liquidity requirements under Basel III and various new resolution regimes and strategies such as the SPOE bail-in or recapitalization strategy. Basel III should reduce the risk that financial institutions will fail in the first place and the new TLAC requirements, resolution regimes and resolution strategies should allow the cost of failure to be imposed on the private sector rather than taxpayers, without resulting in a destabilization or collapse of the financial system and related collateral consequences to the “real economy”. Structural solutions mostly serve to distract attention and resources away from these real solutions.

mutual funds responded by issuing debt securities that were redeemable upon demand or within a matter of days. Bray Hammond, note 30, for examples 1–3.