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Common Capital: A Thought Experiment in Cross-Border Resolution


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Common Capital: A Thought Experiment in Cross-Border Resolution

ANNA GELPERN*

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INTRODUCTION

This Essay is a thought experiment in international bank failure. It is an old problem that has stumped economic policy makers around the world for decades, and is the subject of countless coordination efforts, agreements, expert reports, and academic works. It has returned to the top of the policy agenda after 2008, as financial conglomerates collapsed and entire banking sectors unraveled.¹ A

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1. PAUL TUCKER, HUTCHINS CENTER ON FISCAL & MONETARY POLICY AT BROOKINGS,

monumental reform effort is underway across national regulatory systems and international institutions. It is in its early stages, and success is anyone's guess. This Essay takes a step back to recast the problems of cross-border banking, failure, and resolution in the most basic terms. It starts with a stylized bank balance sheet, and imagines what would happen if the government presence now implicit in that balance sheet were made explicit. The result is Common Capital, a dormant public share in the capital of an internationally active bank, which can serve as a burden-sharing key in the event of its failure.

The balance sheet of a modern bank is a policy vehicle and a bundle of government commitments. The simplest bank issues money, allocates credit to the private sector and the government, and operates the payment system—all at once. This combination makes banks prone to failure² and aggravates collateral damage from failure.³ In response, governments regulate and support banks in multiple ways. Like the public policy functions, government commitments permeate the bank balance sheet. Central bank liquidity support, deposit insurance, regulatory valuation of assets and liabilities, and resolution procedures all represent government commitments that shape the way in which a bank does business.

Other kinds of firms—hospitals, farming cooperatives, nuclear power plants—might deliver public goods, receive public support, be subject to intrusive regulation, or all of the above. Banks are extreme in two ways. First, a bank's balance sheet *is* its policy work, most plainly visible in the combination of demand deposits (money issuance) and long-term loans (credit allocation). A hospital's financial structure is at best indirectly relevant to its impact on public health. Second, the number of policy functions and government commitments on a private bank's balance sheet is high compared to just about any other enterprise. Governments direct, value, or underwrite virtually every line of the bank balance sheet. In this way, a bank balance sheet represents a thick bundle of contingent claims on the government.

A bank that operates across national borders reflects commitments by different governments. For example, a bank chartered in Iceland may rely on Iceland's deposit insurance to backstop its liabilities.⁴ In return, it submits to Icelandic regulations that may determine the value of its assets and the adequacy of its capital. But it may also take deposits in U.S. dollars from Dutch citizens and lend U.S. dollars to Polish banks or the government of Brazil. This bank and its creditors depend on Iceland's promise of insurance, on the availability of U.S. dollars from the Federal Reserve, on Poland's commitment to stand behind its banks, and on Brazil's promise to repay its debts. This

REGULATORY REFORM, STABILITY, AND CENTRAL BANKING 1 (2014).

2. See Douglas W. Diamond & Philip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. POL. ECON. 401, 401–04 (1983) (presenting an overview of bank-run underpinnings, including those on solvent banks); HEIDI MANDANIS SCHOONER & MICHAEL W. TAYLOR, *GLOBAL BANK REGULATION: PRINCIPLES AND POLICIES* 19–27 (2010) (discussing further bank-run and bank-panic underpinnings).

3. See, e.g., Frederic S. Mishkin, *Global Financial Instability: Framework, Events, Issues*, 13 J. ECON. PERSP., Autumn 1999, at 6–7 (1999) (discussing proliferation of bank failures resulting from runs and their impact on the economy).

4. See, e.g., Case E-16/11, *EFTA Surveillance Auth. v. Iceland* (Eur. Free Trade Ass'n Ct. 2013), available at http://www.eftacourt.int/fileadmin/user_upload/Files/News/2013/16_11_Judgment.pdf (discussing the legal ramifications within the European Union (EU) of Iceland's failure to pay depositors during the country's recent financial crises).

hypothetical Icelandic bank represents a bundle of contingent claims on different governments.

Government commitments are not strictly enforceable. When a private obligor breaches a contract, a court may compel performance, order compensation, and seize its property.⁵ Governments enjoy immunities from suit and more expansive immunities from enforcement—even when the underlying obligation is a simple promise to pay.⁶ When it comes to regulation, governments have broad leeway to change their minds to suit their policy preferences; exceptions are very rare.⁷

Applying this familiar insight to banks recasts them as bundles of unenforceable government commitments. For example, in good times, a government might require banks to keep minimum capital against risky loans, insure deposit liabilities in failed banks up to \$100,000, and promise unlimited central-bank credit for solvent banks facing depositor panics.⁸ A crisis prompts banks and governments to renegotiate their bargain.⁹ When banks run out of capital to cover losses from bad loans, shutting them down may have knock-on effects on other banks and the economy. To avoid or delay these knock-on effects, the government might pretend that bank assets and capital are worth more than they are. In the alternative, the central bank as Lender of Last Resort might keep insolvent banks on life support by lending against dubious collateral.¹⁰ Governments also can—and do—raise or remove the cap on deposit insurance in crisis. In sum, earlier balance-sheet commitments are relaxed, substituted, and traded for one-another.

Banks' leverage in this renegotiation comes from the spillover effects of their failure. The more damage it causes, the more unthinkable it becomes for the government; the result is regulatory forbearance and “bailouts” (*ad hoc* public recapitalization). Conversely, the government's leverage comes from its capacity to absorb and mitigate the spillover costs. When the cost of a bailout is lower than the cost of a broad-based economic collapse, the government will find it hard to withhold

5. RESTATEMENT (SECOND) OF CONTRACTS §§ 344–45 (1981). *See also* Ugo Panizza et al., *The Economics and Law of Sovereign Debt and Default*, 47 J. ECON. LITERATURE 651, 652–55 (2009) (discussing the ability of a court to order a debtor to “hand over assets”).

6. Panizza et al., *supra* note 5, at 653–55.

7. One exception involved an express promise of regulatory forbearance in the U.S. savings and loan crisis, made by the U.S. government to encourage healthy institutions to buy distressed ones. *See United States v. Winstar Corp.*, 518 U.S. 839, 868 (1996) (holding that the U.S. government was contractually obligated, pursuant to agreements with federal regulatory agencies, to allow financial institutions to use special accounting methods with regard to certain acquisitions). Sometimes, those promises can even be enforced. *Id.* at 892–93.

8. *See* Thomas F. Hellmann et al., *Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?*, 90 AM. ECON. REV. 147, 147–48 (2000).

9. *See generally* Luc Laeven & Fabian Valencia, *Resolution of Banking Crises: The Good, the Bad, and the Ugly* (Int'l Monetary Fund, Working Paper 10/146, 2010) (discussing liquidity support and recapitalization for banks in the context of the financial crisis); Anna Gelpern, *Financial Crisis Containment*, 41 CONN. L.R. 1051 (2009).

10. *See* Simon Johnson, *Sadly, Too Big to Fail Is Not Over*, N.Y. TIMES (Aug. 1, 2013), available at <http://economix.blogs.nytimes.com/2013/08/01/sadly-too-big-to-fail-is-not-over/> (examining why the Federal Reserve might finance insolvent banks under the guise of liquidity support).

a bailout.¹¹ The result is moral hazard: banks taking risks and configuring themselves to maximize the chances of a bailout from a commitment-challenged government.

Cross-border banking adds another layer of negotiation to an already complex picture. If a purely domestic bank is a bundle of unenforceable government commitments, an internationally active bank is a bundle of overlapping unenforceable commitments by multiple governments. The government that regulates a bank may not be the same as the one that suffers the most collateral damage from bank distress; moreover, the second government may have no legal or economic capacity to manage the damage, or to mount a bailout.¹² For example, suppose Japanese regulators are worried about their banks' portfolio of U.S. mortgages, and order Japanese banks to raise more capital. To conserve capital, the Japanese banks might cut back on lending in Korea. In this hypothetical scenario, solvent Korean banks that borrow from Japanese banks suddenly lose access to credit and, perhaps more importantly, to their source of Japanese yen. Unless they find yen funding elsewhere, the Korean banks may default on their yen-denominated debts. The Korean central bank cannot help because it cannot print yen. To avoid default, Korea and its banks must rely on Japan to loosen regulatory demands on the Japanese banks, or to supply yen to Korea through alternative channels.¹³ Korea's economy and fiscal resources are at risk if its banks fail.¹⁴ But the health of Korean banks may not be a priority for Japan. With its own banks on the line, Japan might refuse, letting Korean taxpayers absorb some of the collateral effects of its regulatory move.

In a cross-border banking crisis, banks maneuver to get the benefit of the deepest public pocket available, while governments maneuver to shift losses onto one another.¹⁵ However, if all the governments got all the banks to internalize the costs of their failure, then governments would not need to have a burden-sharing negotiation among themselves. This is the Holy Grail of resolution reform today.

The United States and Europe have renounced taxpayer bailouts of banks and, through the Financial Stability Board, have sought to commit everyone else to do the same—and to regulate their banks accordingly.¹⁶ Unless everyone does it, there remains the possibility that banks in one country would impose costs on taxpayers in another. Successful reform would mean, *first*, that in good times, all the governments correctly value their collective contingent liability from all their banks in crisis; *second*, that they correctly apportion this contingent liability among the different jurisdictions and

11. Cf. Adam J. Levitin, *In Defense of Bailouts*, 99 GEO. L.J. 435, 438–39 (2011) (addressing the need for bailouts and observing that *ex ante* regulation cannot fully address systemic risk).

12. See generally Jay Lawrence Westbrook, *SIFIs and States*, 49 TEX. INT'L L.J. 327 (2014).

13. For example, through direct arrangements between the Bank of Japan and the Bank of Korea. See Brad Setser, *Where Is My Swap Line? And Will the Diffusion of Financial Power Balkanize the Global Response to a Broadening Crisis?*, COUNCIL ON FOREIGN REL. (Oct. 18, 2008), <http://blogs.cfr.org/setser/2008/10/18/where-is-my-swap-line-and-will-the-diffusion-of-financial-power-balkanize-the-global-response-to-the-broadening-crises/> (describing inter-governmental arrangements for currency access).

14. See *id.* at 162 (“The model suggests that the home country would be left with the decision, including the funding, on the recapitalization of a failing bank.”). The failure of Lehman Brothers in 2008 illustrated that U.K. regulators may be ill disposed to forbear to save a U.S. financial institution, while the United States sought to avoid using taxpayer funds and central bank lending to bail Lehman out.

15. See *infra* Parts III & IV.

16. FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (Oct. 2011), [hereinafter FSB, *Key Attributes*] available at http://www.financialstabilityboard.org/publications/r_1111104cc.pdf.

institutions; *third*, that they all effectively regulate their banks to build up private capacity to absorb losses in crisis (for example, through higher capital requirements), eliminating contingent liability to the public; and *fourth*, that they all stick by these commitments in crisis, even if their original valuation or allocation turns out to be incorrect. In a world of imperfect foresight and unenforceable commitments, success would take truly heroic assumptions.

It is right and sensible for governments to get banks to internalize their costs up front,¹⁷ and minimize the scope for public-private burden-sharing negotiation in crisis. But it is virtually inconceivable that governments would succeed in eliminating the need to negotiate burden sharing among themselves. As a result, focusing solely on public-private burden sharing in cross-border resolution in practice means deferring government-to-government negotiations until crisis time.

In this essay, I use the simple bank balance sheet as a device to frame the problem of allocating losses from bank failure between banks and governments, and among governments. The emerging reform consensus avoids questions of loss distribution among governments, so as to boost the credibility of government commitments to “bail in” private creditors. Exposing the presence of governments on the balance sheet of a failing bank makes distribution choices explicit up front, and harder to avoid.

I proceed as follows. Part I describes the bank-government relationship. Part II highlights challenges in cross-border bank failure and resolution. Part III elaborates the balance sheet description of the bank-government relationship. Part IV considers implications for cross-border resolution, and introduces the idea of Common Capital.

I. BANKS AND THEIR GOVERNMENTS¹⁸

A. Bank Functions

Banks have long stood apart from other firms for the mix of public functions they perform and for their fragile capital structure.¹⁹ The bulk of bank funding traditionally comes from demand deposits.²⁰ Because people and firms can use their

17. See generally TUCKER, *supra* note 1.

18. Portions of this part are adapted from Anna Gelpern, *Banks, Governments, and Debt Crises*, in FOREIGN POLICY ASSOCIATION, GREAT DECISIONS 49–59 (2011).

19. See Howell E. Jackson, *Regulation in a Multisectoral Financial Services Industry: An Exploratory Essay*, 77 WASH. U. L. REV. 319, 329, 335–37 (1999) (discussing the public/private implications of various financial services—including depository institutions like banks—and the externalities associated with those service institutions); Franklin Allen & Douglas Gale, *Optimal Financial Crises*, 53 J. FIN. 1245, 1245–50 (1998) (reviewing the fragility of capital structure by cataloging a history of bank runs and the models that explain them); Ben S. Bernanke, *Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression*, 73 AM. ECON. REV. 257, 259–61 (1983) [hereinafter Bernanke, *Nonmonetary Effects of the Financial Crisis*] (discussing the public effects of bank failure); see generally Robert Charles Clark, *The Soundness of Financial Intermediaries*, 86 YALE L.J. 1 (1976) [hereinafter Clark, *Soundness of Financial Intermediaries*].

20. See E. Gerald Corrigan, *Annual Report Essay: Are Banks Special?*, 1982 FED. RES. BANK MINNEAPOLIS 5, 7 (1982), available at http://fraser.stlouisfed.org/docs/historical/frbminn/1982_frb.

bank deposits to buy and sell goods and services, deposits function as money.²¹ Banks use deposit funds to make short, medium, and long-term loans.²² By on-lending most of their deposits, banks multiply money: the initial deposit turns into deposits at other banks, most of which are on-lent, and so on.²³ Banks also operate national and international payment systems. On the asset side, banks' traditional lending role makes them especially important for financing growth and development; it also turns them into repositories of valuable information about investment opportunities in the economy.²⁴ But some of the very things that make banks valuable to the broader economy beyond their immediate customers also make them vulnerable. The mismatch between banks' long-term assets (loans) and short-term liabilities (deposits) creates the possibility of a run on deposits.²⁵ And the very linkages that made banks useful for payments and credit allocation can turn deadly, spreading distress across the financial system and to the real economy.²⁶

Firms called "banks" do not have a monopoly on all banking functions and vulnerabilities. Insurance firms and investment funds intermediate savings, credit-card systems and mobile telephones perform payment functions, and nonbank dealers in government securities help transmit monetary policy.²⁷ Loan securitization and short-term wholesale funding markets put nonbank firms at the heart of credit intermediation and money issuance, creating bank-like risks in unregulated parts of the financial system.²⁸ In principle, any firm sufficiently big or interconnected with

minneapolis.pdf (discussing demand deposits as "the purest form of transaction account" and the unique treatment of transaction accounts by banks).

21. See HOWELL E. JACKSON & EDWARD L. SYMONS, JR., REGULATION OF FINANCIAL INSTITUTIONS 4 (1999) ("[T]he claim of even the smallest demand deposit account holder at a commercial bank is, at any given time, quickly convertible into a fixed amount of currency or, indeed, usable as money itself.").

22. Felicia Omowunmi Olokoyo, *Determinants of Commercial Banks' Lending Behavior in Nigeria*, 2 INT'L J. FIN. RES. 61, 61 (2011).

23. See FED. RESERVE BANK OF CHI., MODERN MONEY MECHANICS: A WORKBOOK ON BANK RESERVES AND DEPOSIT EXPANSION 8 (5th ed. 1992), available at http://www.archive.org/details/Modern_Money_Mechanics

(The lending banks, however, do not expect to retain the deposits they create through their loan operations. Borrowers write checks that probably will be deposited in other banks. As these checks move through the collection process, the Federal Reserve Banks debit the reserve accounts of the paying banks ... and credit those of the receiving banks.)

24. See Bernanke, *Nonmonetary Effects of the Financial Crisis*, *supra* note 19, at 263

(Banks presumably choose operating procedures that minimize the [cost of credit intermediation]. This is done by developing expertise at evaluating potential borrowers; establishing long-term relationships with customers; and offering loan conditions that encourage potential borrowers to self-select in a favorable way.)

25. Diamond & Dybvig, *supra* note 2, at 403–04.

26. This structural maturity mismatch makes banks prone to deposit runs, where even institutions that made perfectly sound loans cannot meet the nervous public's demand for immediate withdrawals. *Id.* at 404.

27. Biagio Bossone, *What Makes Banks Special? A Study of Banking, Finance, and Economic Development* 6 (World Bank, Policy Research Working Paper No. 2408, 2000), available at http://www-wds.worldbank.org/external/default/WDSContentServer/TW3P/IB/2000/08/26/000094946_00081406502629/Rendered/PDF/multi_page.pdf ("In advanced economies, transaction account facilities are supplied by non-depository—and even non-financial—institutions with access to payment clearing and settlement systems.")

28. See, e.g., ZOLTAN POZSAR ET AL., FED. RESERVE BANK OF N.Y., SHADOW BANKING (2012), available at http://www.newyorkfed.org/research/staff_reports/sr458.pdf (stating that nonbank firms help fund shadow banking); Morgan Ricks, *Regulating Money Creation After the Crisis*, 1 HARV. BUS. L. REV.

the rest of the financial system can threaten the system as a whole. Knock-on effects from failures and near-failures at hedge funds, insurance firms, and broker-dealers have now prompted governments to treat more and more “systemically important” firms in a bank-like fashion.²⁹

There are two reasons to focus on banks as a starting point for thinking about cross-border resolution. They combine the largest number of policy functions, the most intrusive regulation, and the most generous and varied public support, on a single balance sheet. Solving the bank resolution puzzle holds the key to the rest.

Banks receive two key forms of public support. Since the 1933 Glass-Steagall Act in the United States, governments have promised to compensate depositors in failed banks.³⁰ Such promises are usually limited (for example, to \$250,000 per person per account category in the United States at this writing)³¹ and usually (though not always)³² either funded or backstopped with public funds.³³ Although the promise of deposit insurance runs to depositors, it also benefits banks because it takes away depositors’ incentive to run. In addition, banks benefit from the public promise of emergency liquidity in the event of a panic.³⁴ While deposit insurance pays off depositors in a dead bank,³⁵ emergency liquidity takes the form of loans to solvent banks in order to keep them alive.³⁶ The loans usually come from the central bank, acting as a Lender of Last Resort (LOLR).³⁷ In theory, it only lends to illiquid firms. In practice, illiquidity and insolvency can be hard to tell apart.

75, 92 (2011) (discussing the risks firms face); Viral V. Acharya & Matthew Richardson, *Causes of the Financial Crisis*, 21 CRITICAL REV. 195, 197–204 (2009) (discussing the risks investment banks took during the financial crisis); GARY B. GORTON, SLAPPED BY THE INVISIBLE HAND: THE PANIC OF 2007 76–78 (2010) (discussing bank-like functions and vulnerabilities of the repo market).

29. See, e.g., Ricks, *supra* note 28, at 122–29 (detailing Dodd-Frank’s orderly liquidation of nonbank firms implemented in response to the financial crisis).

30. Mark W. Olson, Member, Bd. of Governors of the U.S. Fed. Reserve Sys., Remarks at the Annual Washington Conference of the Institute of International Bankers: Are Banks Still Special? 1 (Mar. 13, 2006), available at <http://www.bis.org/review/r060322c.pdf>.

31. *Your Insured Deposits: FDIC Insurance Coverage Basics*, FED. DEPOSIT INS. CORP. [FDIC], <http://www.fdic.gov/deposit/deposits/insured/basics.html> (last visited Apr. 6, 2014).

32. Particularly when those accounts belong to foreign nationals. See, e.g., Case E-16/11, EFTA Surveillance Auth. v. Iceland (Eur. Free Trade Ass’n Ct. 2013), available at http://www.eftacourt.int/fileadmin/user_upload/Files/News/2013/16_11_Judgment.pdf (providing an example of where the Iceland government made a distinction between domestic deposit accounts and foreign deposit accounts).

33. See Eric J. Gouvin, *Of Hungry Wolves and Horizontal Conflicts: Rethinking the Justifications for Bank Holding Company Liability*, 3 U. ILL. L. REV. 949, 960 (1999) (acknowledging the “observation that the major source of funding for banks comes from the general public”); see also Robert Charles Clark, *The Regulation of Financial Holding Companies*, 92 HARV. L. REV. 787, 814–15 (1979) [hereinafter Clark, *Regulation of Financial Holding Companies*] (“The major reason for the enormous amount of special regulation of financial intermediaries, as opposed to nonfinancial business corporations, is to insure their soundness, in order that their public suppliers of capital may be protected against the risk of the intermediaries’ financial failure.”).

34. See Peter P. Swire, *Bank Insolvency Law Now That It Matters Again*, 42 DUKE L.J. 469, 497 (1992) (stating “[the] creation of deposit insurance drastically reduced the number of bank failures by reducing the likelihood of [bank] runs”).

35. See *When a Bank Fails: Facts for Depositors, Creditors, and Borrowers*, FDIC, <http://www.fdic.gov/consumers/banking/facts/payment.html> (last visited Oct. 25, 2013) (explaining how the FDIC resolves a closed bank).

36. See Allan H. Meltzer, *Financial Failures and Financial Policies*, in REPORT OF THE TECHNICAL COMMITTEE, NEW YORK: GLOBAL ACTION INSTITUTE 79, 83 (Tepper Sch. of Bus. ed., 1985) (discussing

Deposit insurance and LOLR make bank failure a contingent liability of the government.³⁸ As with all insurance, public support raises the threat of moral hazard: Banks might take excessive risks knowing that if they fail, someone else will pay.³⁹

B. Safety and Soundness

Solvency (or “safety and soundness”) regulation is traditionally justified by the need to protect depositors and public funds, to limit moral hazard from insurance, and to cushion the effects of bank failure on the rest of the economy.⁴⁰ A solvency regime combines deposit insurance, LOLR,⁴¹ rules to mitigate risk-taking by insured firms, and a special resolution regime to preserve banks’ public functions while safeguarding public funds.⁴² Solvency regulation requires firms to keep minimum capital against their assets and prohibits activities and affiliations that pose excessive risks and potential conflicts.⁴³ Since the 1980s, capital adequacy has become the focus of national reforms and transnational coordination.⁴⁴ Activity and affiliation restrictions are making

the central bank’s role as Lender of Last Resort (LOLR) in preventing solvent banks from failing).

37. See Stephen G. Cecchetti & Piti Disyatat, *Central Bank Tools and Liquidity Shortages*, 16 FED. RES. BANK N.Y. ECON. POL’Y REV., Aug. 2010, at 29 (2010) (stating that “a vital responsibility of central banks in most countries is to perform the role of LOLR”).

38. See Emil-Maria Claassen, *The Lender-of-Last-Resort Function in the Context of National and International Financial Crises*, 121 REV. WORLD ECON. 217 (1985) (discussing how financial intermediaries take greater risks because they know they can rely on a LOLR and deposit insurance).

39. See Cecchetti & Disyatat, *supra* note 37, at 29, 37 (discussing the moral-hazard concern that extending liquidity assistance could establish precedents that lead to lax risk management); see also Bossone, *supra* note 27, at 36–37 (discussing the tendency for increase in moral hazard of individual banks due to deposit insurance).

40. See generally Clark, *Soundness of Financial Intermediaries*, *supra* note 19. To operate an effective credit and payments infrastructure, financial institutions must be interconnected. As a result, the failure of one institution can spread quickly throughout the financial sector and the broader economy.

41. In theory, potential distortions from LOLR support are addressed by charging high interest and taking good collateral. In practice, these safeguards rarely apply in pure form. Cecchetti & Disyatat, *supra* note 37, at 30.

42. See TIMOTHY EDMONDS, THE INDEPENDENT COMMISSION ON BANKING: THE VICKERS REPORT 7, 13 (2013), available at <http://www.parliament.uk/briefing-papers/SN06171> (providing an example of a recommended rule to restrict risk taking through capital controls and an example of suggested activity restrictions for financial institutions in the United Kingdom); cf. Brady Dennis, *Volcker: Derivatives Rule Goes Too Far; Banks Shouldn’t Have to Shed Businesses*, WASH. POST (May 8, 2010), <http://www.washingtonpost.com/wp-dyn/content/article/2010/05/07/AR2010050704897.html> (noting that under the current system taxpayers were forced to bail out large banks). See generally ERKKI LIIKANEN ET AL., HIGH-LEVEL EXPERT GROUP ON REFORMING THE STRUCTURE OF THE EU BANKING SECTOR (2012), available at http://ec.europa.eu/internal_market/bank/docs/high-level_expert_group/report_en.pdf (assessing existing deposit-insurance schemes in Europe and recommendations for the reform of deposit insurance and for mandatory activity restrictions on deposit-accepting institutions, including restrictions from derivative trading in order to, among other things, counteract); Jessica Silver-Greenberg & Nelson D. Schwartz, *Living Wills’ for Too-Big-to-Fail Banks Are Released*, N.Y. TIMES (July 3, 2012), <http://www.nytimes.com/2012/07/04/business/living-wills-of-how-to-unwind-big-banks-are-released.html> (detailing special resolution procedures for large banks in the United States).

43. See EDMONDS, *supra* note 42, at 13 (summarizing a report which recommended adjusting capital controls as a principal part of the U.K.’s solvency regime, in addition to recommending extended activity restrictions on certain financial institutions); LIIKANEN ET AL., *supra* note 42 (recommending mandatory activity restrictions on deposit-accepting institutions, including restrictions from derivative trading).

44. DANIEL K. TARULLO, BANKING ON BASEL: THE FUTURE OF INTERNATIONAL FINANCIAL

a comeback in some post-crisis reforms, but capital remains the dominant mode of solvency regulation.⁴⁵

Regulatory capital is the difference between the value of a bank's assets and non-residual liabilities, such as deposits; it represents the bank's net worth and its cushion against losses.⁴⁶ If a bank's capital falls below the regulatory minimum, the government can require it to raise more, to reduce lending, and even to shut down.⁴⁷ Regulators in most jurisdictions calculate a bank's capital adequacy ratio (CAR) by dividing qualified residual claims, such as common equity, by the sum of the bank's risk-adjusted assets.⁴⁸ This approach dates to the first iteration of the international capital accords, promulgated under the auspices of the Basel Committee on Banking Supervision in 1988, which introduced both the idea of a shared minimum CAR and risk-adjustment for assets.⁴⁹ Risk adjustment distinguishes CAR from another solvency metric, the leverage ratio, with capital in the numerator and all assets in the denominator at their stated balance-sheet value.⁵⁰ The purpose of risk adjustment is to discourage banks from investing disproportionately in risky assets.⁵¹ Regulation determines both what claims on the bank count as capital in the numerator of the capital adequacy fraction and the risk-weighting of the assets in the denominator.⁵²

A simplified example illustrates. A bank established in a hypothetical jurisdiction is required to have at least 8% of the value of its assets as capital. This means that a loan of \$100 presumptively requires this bank to hold \$8 in capital, unless the loan has a regulatory risk weighting of less than 100%. Figure 1 is a stylized bank balance sheet before risk adjustment.

REGULATION 36–42 (2008); *see also* Beth A. Simmons, *The International Politics of Harmonization: The Case of Capital Market Regulation*, 55 INT'L ORG. 589, 602 (2001).

45. *See* LIIKANEN ET AL., *supra* note 42, at 67–73, 83–87 (discussing activity restrictions, size limits, structural separation of certain activities, and increased capital requirements).

46. *See* Basel Comm. on Banking Supervision [BCBS], *International Convergence of Capital Measurement and Capital Standards*, at 3–13 (July 1988) (defining the component parts of regulatory capital) [hereinafter BCBS, *International Convergence of Capital Measurement and Capital Standards*].

47. *E.g.*, 12 C.F.R. § 6.1 (2012).

48. BCBS, *International Convergence of Capital Measurement and Capital Standards*, *supra* note 46, at 8 (“[A] weighted risk ratio in which capital is related to different categories of asset or off-balance-sheet exposure, weighted according to broad categories of relative riskiness, is the preferred method for assessing the capital adequacy of banks.”); *see* Ronan O’Connor et al., *A Value-At-Risk Calculation of Required Reserves for Credit Risk in Corporate Lending Portfolios*, 3 N. AM. ACTUARIAL J. 72, 72 (1999) (reviewing the BCBS approach).

49. *See* BCBS, *International Convergence of Capital Measurement and Capital Standards*, *supra* note 46, at 2, 8 (defining the capital-adequacy ratio and risk adjustment according to the Basel regime’s proposals).

50. *Cf.* Council Regulation No. 575/2013 art. 499, 2013 O.J. (L 176) 1, 284 (EU) (explaining how the leverage ratio is calculated).

51. Laurence H. Meyer, Governor, Fed. Reserve Bd. of Governors, *Why Risk Management Is Important for Global Financial Institutions*, Address Before the Bank of Thailand Symposium: Risk Management of Financial Institutions (Aug. 31, 2000) (available at <http://www.bis.org/review/r000904b.pdf?frames=0>).

52. *See, e.g.*, 12 C.F.R. § 167.5 (2012) (defining “core capital”); 12 C.F.R. § 565.2(j) (2012) (defining “total risk-based capital”); 12 C.F.R. § 567 App. C (2012) (providing a variety of definitions relevant to risk-based capital requirements).

Figure 1: A Stylized Bank Balance Sheet

Assets		Liabilities and Capital	
Cash	50	Insured deposits	600
Loans to private borrowers	550	Uninsured deposits	120
Credit to own government	100	Other debt	200
Credit to other governments	100		
Interbank loans (domestic)	100		
Interbank loans (cross-border)	100	Common equity	80
TOTAL	1000	TOTAL	1000

Regulatory risk weighting works like this. Assume that in the United States, a \$100 loan secured by a first mortgage on a primary residence is weighted at 50%. A bank that holds such a loan would have to set aside only \$4 in regulatory capital, instead of the \$8 that would be required for a loan to a generic private borrower. If the same loan is made to a U.S. bank, and if loans to U.S. banks have a regulatory weighting of 20%, it would require \$1.60 in capital. The same requirement would apply to a \$100 loan to a German bank, if loans to German banks have the same regulatory weighting as loans to U.S. banks. A \$100 investment in U.S. Treasury securities has a zero-risk weighting and requires no capital, as does \$100 held in cash and \$100 in German government securities. Figure 2 illustrates the benefits of risk-weighting: what was a \$100 million bank grew by over 40% without raising a penny in new capital.

Figure 2: A Stylized Bank Balance Sheet after Risk-Weighting

Assets		Liabilities and Capital	
Cash	(0)50	Insured deposits	1010
Loans to private borrowers	960	Uninsured deposits	120
Credit to own government	(0)100	Other debt	200
Credit to other governments	(0)100		
Interbank loans (domestic)	(20)100		
Interbank loans (cross-border)	(20)100	Common equity	80
TOTAL	1410	TOTAL	1410

How do regulators know that 8% is the right capital cushion, how do they decide what claims should count as capital, how can they tell that mortgages are half as risky as ordinary business loans, and how do they know all government debt is risk-free? In-depth answers to these questions have filled many textbooks, research papers, and policy reports. But the short version is simple. It is widely acknowledged that 8% was a late 1980s political compromise, designed to ensure that U.S. and U.K. banks would be considered solvent under the Basel Capital Accords, the new internationally-coordinated capital regime.⁵³ Although the effective minimum requirement has waxed and waned in recent decades, and is rising with the third and latest revision of the Basel accords, 8% has become entrenched as a solvency benchmark for regulators around the globe. Risk weights for private loans are similarly negotiated among governments mindful of their policy priorities, especially in sensitive sectors like housing.⁵⁴ Since the second revision of the Basel accords, some governments have substituted private credit ratings for regulatory risk categories and have allowed large internationally active banks to use internal models to measure risk on their balance sheets.⁵⁵ Regulators still have to approve the models; they also decide what counts as capital, how much of it is enough, and what happens when it falls short.⁵⁶

Government debt merits a separate look. Bank funding of government budgets is an old phenomenon. In one sense, it is an extension of banks' work as financial intermediaries; their ability to pool popular savings makes them an attractive source of credit for the government, usually the biggest borrower in the economy. Beyond

53. See Simmons, *supra* note 44, at 602–04 (stating the origins of the 8% capital-adequacy rule and that many countries have adopted it).

54. BCBS, *The Standardised Approach to Credit Risk*, at 6 (Jan. 2001) [hereinafter BCBS, *The Standardised Approach to Credit Risk*].

55. John Puts, *Bank Balance Sheet Optimization Under Basel III* 25–27 (Mar. 2012) (unpublished M.S. thesis, Faculty of Sciences of VU University Amsterdam) (on file with editor).

56. DEUTSCHE BUNDESBANK, *APPROVAL FOR BANKS TO USE INTERNAL RATINGS BASED (IRB) APPROACHES TO CALCULATE REGULATORY CAPITAL REQUIREMENTS IN GERMANY* 6 (2005).

their size,⁵⁷ governments as borrowers present special attractions and risks for banks. They have special sources of revenue (taxation); a subset of captive, noncontractual creditors (public-service recipients); distinct reputational constraints (including security and diplomacy); and—in many cases⁵⁸—the capacity to print enough money to pay their debts. All these can be sources of flexibility and motivation to enhance the prospects of repayment—or a source of political pressure that diminishes such prospects. Sovereign governments enjoy important immunities from debt enforcement, which has led commentators to question the strength of sovereign repayment commitments.⁵⁹ On the other hand, governments have considerable control over the legal environment in which they operate, including matters critical to debt repayment, such as transfer restrictions.⁶⁰

In addition to these characteristics, most of which follow from their sovereignty, governments as regulators create incentives for financial institutions to hold their debts. For example, the U.S. Civil War-era National Bank Act linked banks' ability to issue money (national bank notes) to their holdings of U.S. government debt.⁶¹ More recently, the Basel Capital Accords have treated a significant proportion of government and government-guaranteed debt as risk-free.⁶² This means that banks are not required to set aside any capital to hold government debt, which in turn makes lending to the government cheaper than lending to private firms.⁶³ The risk-free treatment of government debt is not limited to a bank's own government or to governments with sterling credit. Under more recent iterations of the Basel capital-adequacy standard, governments with less than perfect scores from private credit-rating agencies retain the option of letting their own regulated institutions treat their local-currency debt as risk-free.⁶⁴

57. Size is related to liquidity. Government debt is typically more liquid than the debt of its nationals. *To Strive, to Seek, to Find, and Not to Yield*, *ECONOMIST* (June 30, 2012), <http://www.economist.com/node/21557734>; Jens Dick-Nielsen et al., *Liquidity in Government Versus Covered Bond Markets* 3 (Bank for Int'l Settlements, BIS Working Paper No. 392, 2012).

58. However, there are functional limits to the ability to print money. Swaminathan S. Anklesaria Aiyar, *How to Tackle a Crisis When Governments Can't Print Money*, *ECON. TIMES* (Aug. 17, 2011), http://articles.economictimes.indiatimes.com/2011-08-17/news/29896547_1_print-currency-debt-ceiling-bonds.

59. See, e.g., *NML Capital, Ltd. v. Republic of Argentina*, 699 F.3d 246, 248–52 (2d Cir. 2012) (demonstrating Argentina's reticence to pay out bondholders). For more discussion on the case and Argentina's subsequent refusal to pay, see generally John A.E. Pottow, *Mitigating the Problem of Vulture Holdout: International Certification Boards for Sovereign-Debt Restructurings*, 49 *TEX. INT'L L.J.* 219 (2014).

60. See generally Christopher J. Neely, *An Introduction to Capital Controls*, *FED. RESERVE BANK ST. LOUIS: RESERVE*, Nov./Dec. 1999.

61. National Bank Act, Sec. 5159. See, e.g., David M. Gische, *The New York City Banks and the Development of the National Banking System 1860–1870*, 23 *AM. J. LEGAL HIST.* 21, 38–39 (1979).

62. The Basel I capital-adequacy framework allowed banks to set aside no capital against credit to governments and central banks of Member States of the Organization for Economic Co-operation and Development (OECD), which includes wealthy states in Europe, North America, and Asia, as well as major emerging economies such as Mexico, Korea, and Poland. BCBS, *International Convergence of Capital Measurement and Capital Standards*, *supra* note 48, at 10; *List of OECD Member Countries Ratification of the Convention on the OECD*, OECD, <http://www.oecd.org/general/listfoecd> membercountries-ratificationoftheconventionontheoecd.htm (last visited Apr. 6, 2014).

63. See generally Bd. of Governors of the Fed. Reserve Sys., *Capital Standards for Banks: The Evolving Basel Accord* (2003), 89 *FED. RES. BULL.* 395 (2003).

64. BCBS, *The Standardised Approach to Credit Risk*, *supra* note 54, at 3.

This guideline has particularly interesting implications in the euro zone: because the euro is the domestic currency of Greece and Germany alike, the Basel capital-adequacy framework allowed regulators to treat euro-denominated debts of both governments as risk-free despite the different credit quality of the two governments.⁶⁵ For example, if the hypothetical bank in Figure 2 were German, it would have to set aside the same amount of capital to invest in German bonds, which might pay barely over 1% in interest, and Greek bonds, which might pay closer to 10%—presumably corresponding to a higher likelihood of default.⁶⁶

Beyond the euro zone, where a government treats its own-currency debt as risk-free, other governments have the option of adopting this treatment in regulating their banks.⁶⁷ This can create diplomatic and supervisory awkwardness, in effect asking one sovereign to choose between calling another a bad credit and letting its banks engage in regulatory arbitrage. Quite apart from the Basel standards, which become binding law only when voluntarily implemented by national authorities,⁶⁸ all governments retain ultimate discretion over how domestic regulated institutions treat their debts. Financially pressed governments rarely shy away from using this discretion.

Capital adequacy may be the most graphic but is far from the only area of bank regulation where government debt gets favorable treatment. Activities restrictions;⁶⁹ transactions with affiliates;⁷⁰ large-borrower concentration rules;⁷¹ and even famously—the Volcker Rule on proprietary trading, enacted as part of the Dodd-Frank Act in the United States,⁷² all permit investments in government debt where other categories of assets would be off limits. In many instances, the exemption only applies to own-government debt, which prompts diplomatic pressure to let other governments partake of the privilege.⁷³

In sum, banks do essential work for the economy as a whole. In return, governments provide them with deposit insurance and LOLR. To ensure the continued performance of public functions, to protect public funds, and to mitigate

65. Council Directive 2006/48, 2006 O.J. (L 177) (EC), Annex VI, pt. 1.

66. *Long Term Interest Rate Statistics for EU Member States*, EUR. CENT. BANK (Mar. 12, 2014), <http://www.ecb.int/stats/money/long/html/index.en.html>

67. Hervé Hannoun, Deputy Gen. Manager, Bank Int'l Settlements, *Sovereign Risk in Bank Regulation and Supervision: Where Do We Stand?*, Address Before Fin. Stability Inst. High-Level Meeting 12 (Oct. 26, 2011) (available at <http://www.bis.org/speeches/sp111026.pdf>) (discussing the ability of banks to adopt approaches to risk evaluation that treat government debt as risk-free, despite some government debt not meriting such a designation).

68. See generally BCBS, *Report to G20 Leaders on Monitoring Implementation of Basel III Regulatory Reforms* (Aug. 2013) [hereinafter BCBS, *Report to G20 Leaders*]; Michael S. Barr & Geoffrey P. Miller, *Global Administrative Law: The View from Basel*, 17 EUR. J. INT'L L. 15 (2006).

69. 12 U.S.C. 24 (Seventh).

70. 12 U.S.C. 371(c).

71. Hannoun, *supra* note 67, at 13.

72. Francesco Guertera et al., *EU Red-Flags 'Volcker': Planned U.S. Rule on Banks' Bets Is Seen as Threat to Worsen Debt Crisis*, WALL ST. J. (Jan. 27, 2012), <http://online.wsj.com/article/SB10001424052970204573704577185100193763384.html>.

73. See *id.* (explaining the European Commission's planned complaint to the U.S. Treasury Secretary about the potential impact of restricting "U.S. banks from making bets with their own capital").

moral hazard, governments regulate banks in an intrusive way, which includes minimum capital requirements, affiliation restrictions, and rules to manage risks on the asset side of the bank balance sheet. Even so, banks sometimes fail.

C. Resolution

Bank insolvency presents a distinct challenge, which has led some jurisdictions (notably the United States) to resolve banks under a separate regime quite unlike corporate bankruptcy.⁷⁴ Bank failure threatens to disrupt the essential functions described earlier and carries potentially significant collateral consequences thanks to the fragility and interconnectedness of banks and the financial system. Where a set of functions is an essential public good, a set of institutions that performs them becomes essential. The only unresolved question is whether any particular institution in the set is indispensable. Indeed, the focus of post-crisis reforms across the Group of Twenty (G20) has been ensuring the continuity of public functions without necessarily insuring particular private institutions.⁷⁵

Unlike a bankrupt manufacturing firm—which might have a mix of long- and short-term liabilities, brick-and-mortar assets, and intangible assets⁷⁶—an insolvent bank traditionally owes the most to insured depositors,⁷⁷ while nearly all its assets are financial contracts (IOUs); both can vanish with a keystroke. Resolution regimes are designed to move fast, to minimize disruption in intermediation and other bank functions.⁷⁸ For example, in most ordinary cases of bank failure in the United States, deposits in a failed bank are moved to a solvent one over the weekend.⁷⁹ Effective resolution then requires authority to transfer assets and liabilities, suspend contract enforcement, and establish bridge banks and asset-management vehicles.⁸⁰ Regulators may require affiliates to provide guarantees for insured depository institutions, which are called upon in distress to complement contributions from deposit insurance.⁸¹ Because a major part of bank liabilities is insured, the resolution process tends to be dominated by deposit-insurance imperatives.⁸² Insured and uninsured depositors in the United States, and increasingly in other countries,

74. See BCBS, *Report and Recommendations of the Cross-Border Bank Resolution Group*, at 8 (Mar. 2010) [hereinafter BCBS, *Cross-Border Bank Resolution Group*] (discussing how general bankruptcy law did not provide the special powers needed to address systemic bank risks and the creation of a special resolution regime with power to address such risks).

75. See Carl Schwartz, *G20 Financial Regulatory Reforms and Australia*, RES. BANK OF AUSTL. BULL., Sept. 2013, at 78–80 (listing the four key areas of reform, all of which stress the public function of financial institutions).

76. See generally L. E. Terry, *Analyzing a Balance Sheet*, 3 CHI.–KENT REV. 13 (1924).

77. Acharya & Richardson, *supra* note 28, at 198.

78. See generally Martin Čihák & Erlend Nier, *The Need for Special Resolution Regimes for Financial Institutions—The Case of the European Union*, 2 HARV. BUS. L. REV. 395 (2012).

79. GILLIAN G.H. GARCIA, IMF, DEPOSIT INSURANCE: ACTUAL AND GOOD PRACTICES 5 (2000).

80. Fin. Stability Bd. [FSB], *Consultative Document: Effective Resolution of Systemically Important Financial Institutions—Recommendations and Timelines*, at 10, 26, (July 19, 2011) [hereinafter FSB, *Consultative Document*].

81. See GARCIA, *supra* note 79, at 5 (highlighting the importance of deposit insurance given that “[t]he effect of failure on real activity should also depend on the manner in which the institution is resolved”).

82. ADAM B. ASHCRAFT, FED. RESERVE BANK OF N.Y., STAFF REPORT NO. 176: ARE BANKS REALLY SPECIAL? NEW EVIDENCE FROM THE FDIC-INDUCED FAILURE OF HEALTHY BANKS 1 (2003).

receive priority in distribution, reflecting the political and macroeconomic importance of their claims.⁸³ The order of distribution more broadly has been in the policy limelight of late, with banks under pressure to “bail-in” non-deposit debt and hybrid instruments, turning these into loss-absorptive quasi-capital.⁸⁴

Put differently, while the bankruptcy of a manufacturing firm primarily effects distribution among the debtor and its creditors, bank failure triggers three-way burden-sharing among debtors, creditors, and taxpayers against the background of potentially severe—even system-wide—spillover effects. It is not hard to see why governments might prefer to avoid or defer the day of reckoning, especially when failure is systemic. A government may even prefer to recapitalize an insolvent bank with public funds, to preserve it as a going concern,⁸⁵ especially when the scale of economic disruption and the cost of managing it would dwarf the immediate costs of recapitalization.

II. CROSS-BORDER BANKING AND FAILURE

Banks’ international operations take two basic forms.⁸⁶ First, a bank can engage in transactions with foreign residents, in foreign currency, or with counterparts outside the country where it is chartered without setting up shop abroad. For example, a bank chartered in Argentina might lend euros to an Argentine psychologist, accept a U.S. dollar deposit from an insurance firm in Uruguay, and help a Spanish oil company make tax payments to the Argentine government in Argentine pesos. Second, a bank can establish an institutional presence in another country. Branch and subsidiary are the two most important forms of cross-border institutional expansion.⁸⁷ A branch is an extension of the original bank in the home country.⁸⁸ It is not separately chartered, nor separately capitalized—though host authorities may require branches to hold liquid local assets as a condition of operation.⁸⁹ A subsidiary is a separately chartered, separately capitalized bank in the

83. Daniel C. Hardy, *Bank Resolution Costs, Depositor Preference, and Asset Encumbrance* 7–8 (IMF, Working Paper No. 13/172, 2013); Int’l Monetary Fund [IMF], *GLOBAL FINANCIAL STABILITY REPORT* 120–27 (2013) <http://www.imf.org/external/pubs/ft/gfsr/2013/02/pdf/text.pdf>.

84. *See id.* at 25 (posing the question “[i]n what ways would a statutory bail-in of unsecured creditors be symmetric to the granting depositors preferred status . . . ?”).

85. FSB, *Consultative Document*, *supra* note 80, at 35; David A. Grigorian & Faezeh Raei, *Government Involvement in Corporate Debt Restructuring: Case Studies from the Great Recession* 10 (IMF, Working Paper No. 10/260, 2010), available at https://www.financialstabilityboard.org/publications/r_110719.pdf.

86. Victor Pontines & Reza Siregar, *How Should We Bank with Foreigners? An Empirical Assessment of Lending Behavior of International Banks to Six East Asian Countries* 4–5 (Ctr. Applied Macroeconomic Analysis, Working Paper 4/2012, 2012).

87. JONATHAN FIECHTER ET AL., IMF, *SUBSIDIARIES OR BRANCHES: DOES ONE SIZE FIT ALL?* 3 (2011).

88. *Id.* at 7.

89. *See id.* at 5 (“[H]ost countries have the lead responsibility for supervising foreign subsidiaries of [international] banking groups.”); *see also* BCBS, *Principles for the Supervision of Banks’ Foreign Establishments (The Concordat)*, (May 1983) [hereinafter BCBS, *The Concordat*], available at <http://www.bis.org/publ/bcbsc312.pdf> (“[A] branch’s liquidity is frequently controlled directly by the parent bank . . .”).

host country, which happens to be owned by another bank (or more likely, a holding company) abroad.⁹⁰

Home and host states share regulatory responsibility for banks that operate across national borders, but the extent of that responsibility depends on the form of cross-border expansion. With purely transactional expansion, the home authorities that charter the bank are responsible for its solvency.⁹¹ However, authorities in the host country where the bank is taking deposits, lending, or processing payments may oversee aspects of its business conduct (for example, to protect consumers).⁹² On paper, a foreign subsidiary of a bank looks like a bank chartered by the host country—which is formally responsible for its solvency.⁹³ However, as a practical matter, the subsidiary's management might take orders from the headquarters in the home country. The banking conglomerate as a whole might even be subject to home-country regulations that conflict with host-country rules or policy priorities. Things get still more complicated with branches. They are located abroad but are an integral part of a bank chartered and regulated at home. Host regulators may restrict the activities of foreign branches (for example, block them from accepting demand deposits) and stop or condition entry into their market; however, they do not oversee their solvency.⁹⁴

Adding to the confusion, deposit insurance and LOLR functions do not follow neatly from this breakdown. Assume a U.S. bank has established a branch in Argentina and takes dollar deposits from Argentine residents. On the one hand, it is part of the bank in the United States, subject to U.S. solvency regulation; it has no separate capital cushion in Argentina.⁹⁵ On the other hand, the U.S. authorities are unlikely to worry about the savings of Argentine depositors—or even about a run on a branch in Buenos Aires—nearly as much as they might about U.S. residents' savings and irate crowds outside a bank in New York. In fact, U.S. deposit insurance does not cover foreign branches of U.S. banks.⁹⁶ In the example, Argentina would have a hard choice: either let its residents' deposits go uninsured or guarantee a branch it cannot regulate. Alternatively, if the U.S. bank forms a subsidiary in Argentina, the insurance question becomes more straightforward (it is a local bank, after all). However, if the subsidiary has trouble repaying dollar deposits, the

90. FIECHTER ET AL., *supra* note 87, at 5, 7.

91. See Lawrence G. Goldberg et al., *From Subsidiary to Branch Organization of International Banks: New Challenges and Opportunities for Regulators* 8 (Ctr. for Law, Econ. & Fin. Insts. at Copenhagen Bus. Sch., Working Paper No. 2005-04, 2005) (“When host country activities are performed within subsidiaries[,] the home country is responsible for supervision of the *consolidated* entity . . .”).

92. *Id.*

93. FIECHTER ET AL., *supra* note 87, at 7 (“A subsidiary is a separate legal entity, which is licensed and supervised by local regulators . . .”).

94. BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74, at 34.

95. See, e.g., Peter Coy, *The Fed Wants More Protection Against Losses at Foreign Banks' U.S. Units*, BLOOMBERG BUSINESSWEEK (Sept. 19, 2013), <http://www.businessweek.com/articles/2013-09-19/the-fed-wants-bigger-cushions-for-u-dot-s-dot-units-of-deutsche-bank-and-others>

(Many [banks raise] money where it's cheapest and invest[] it where it earns the highest return. So in certain countries, banks can have more liabilities than assets. Regulators allow them a free hand on the assumption that if one of their national operations runs into trouble, the home office will quickly route it all the funds it needs.).

96. Press Release, FDIC, FDIC Approves Proposed Rule on the Definition of Insured Deposit at Foreign Branches of U.S. Banks (Feb. 12, 2013) (available at <http://www.fdic.gov/news/news/press/2013/pr13009.html>).

Central Bank of Argentina can do little to help: it does not print U.S. dollars, has a limited stock on hand, and may have trouble procuring more. The authorities might turn to the U.S. Federal Reserve, which might (or might not) agree to serve as LOLR either through the Argentine central bank or through the U.S. parent.⁹⁷

Cross-border bank distress highlights these uncertainties and exposes others. In the 1980s, imminent debt default by developing-country governments threatened to wipe out the capital of all the largest U.S. banks, which had made the bulk of the cross-border loans.⁹⁸ The banking catastrophe was avoided—and the crisis became known as the Third World Debt Crisis—when rich-country governments brokered debt roll-overs and exercised regulatory forbearance.⁹⁹ By the time banks built up enough capital and reserves to write off some of the debt, First World bank distress had been managed, even as Third World government debt stocks went up.

When the Bank of Credit and Commerce International (BCCI) failed in 1991, it had dozens of branches and subsidiaries around the world arranged in a deliberately convoluted corporate structure designed to escape supervision¹⁰¹—despite the fact that bank regulators meeting in Basel had agreed on international standards for supervision since the early 1980s.¹⁰² BCCI bankruptcy proceedings in Luxembourg, one of its two home jurisdictions, sought to gather all the bank's assets for the benefit of all creditors; however, the United States ring-fenced BCCI's U.S. assets until the U.S. creditors were paid in full.¹⁰³ Another round of national and international reforms in the late 1990s produced more standards—notably the Basel Core Principles on Effective Banking Supervision—including a stronger mandate for consolidated supervision and home-host coordination.¹⁰⁴

The financial crisis that began in 2007 saw the bankruptcy of Lehman Brothers, with its 2,985 legal entities resolved in proceedings spanning fifty countries.¹⁰⁵ Then there was the nationalization of AIG, where U.S. public support paid European banks in full on their derivatives contracts;¹⁰⁶ the failures of banks in Iceland, whose

97. See, e.g., Setser, *supra* note 13 (discussing European and Japanese access to the Fed as an indirect lender of last resort).

98. See FDIC, *The LDC Debt Crisis*, in AN EXAMINATION OF THE BANKING CRISES OF THE 1980S AND EARLY 1990S 191, 195 (1997) (highlighting that the “largest portion of Latin American claims originated from U.S. banking organizations” and that by 1978 the debt owed by these developing countries equaled 208% of capital and reserves on average for the eight largest U.S. banks involved).

99. *Id.* at 207–09.

100. See *id.* at 208 (quoting L. WILLIAM SEIDMAN, FULL FAITH AND CREDIT 128 (1993)) (“[F]orbearance gave the lending banks time to make new arrangements with their debtors and meanwhile acquire enough capital so that losses on Latin American loans would not be fatal.”).

101. Barbara C. Matthews, *The Second Banking Directive: Conflicts, Choices, and Long-Term Goals*, 2 DUKE J. COMP. & INT'L L. 89, 89 (1992).

102. RAJ K. BHALA, FOREIGN BANK REGULATION AFTER BCCI 207–08 (1994).

103. *Id.* at 162–63.

104. See, e.g., BCBS, *Core Principles for Effective Banking Supervision*, at 40 (Sept. 1997) [hereinafter BCBS, *Core Principles*], available at <http://www.bis.org/publ/bcbs30a.pdf> (stating the importance of “the implementation of effective consolidated supervision” and the “understandings relating to contact and collaboration between home and host country authorities in the supervision of banks’ cross-border establishments”).

105. BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74, at 14.

106. CONG. OVERSIGHT PANEL, 111TH CONG., AUGUST OVERSIGHT REPORT: THE GLOBAL

government refused to compensate U.K. and Dutch depositors while making local residents whole;¹⁰⁷ two rounds of resolution and nationalization of Franco-Belgian Dexia, improvised between the two governments;¹⁰⁸ the mad squabble over depositor priorities and distribution fairness in Cyprus, where insured depositors suffered losses and capital controls, while the uninsured (mostly foreign) creditors came out ahead;¹⁰⁹ and on and on. Like so many that came before, these cases show authorities in different jurisdictions using overlapping, mismatched, and often competing resolution regimes, while fighting over burden-sharing ad hoc and ex post.

Post-crisis reform efforts at the G20, the Basel Committee, the Financial Stability Board, and the International Monetary Fund (IMF),¹¹⁰ as well as the somewhat distinct case of the European banking union,¹¹¹ highlight the importance of cross-border resolution on the policy agenda. All these forums and institutions have proposed attributes, principles, and practices to improve the process. Substantive recommendations include harmonizing national resolution regimes, home-host coordination, advance resolution planning, and depositor preference, among others.¹¹² With the partial exception of the IMF paper, not one of the official accounts proposals acknowledges the need for or offers ideas on burden-sharing.¹¹³ Instead, the plan seems to be for everyone to improve their regulation and resolution, to plan ahead, and talk to one another so taxpayer losses are out of the question—or at least minimal. Officials tread gingerly on the delicate questions of who provides deposit insurance, LOLR, and recapitalization funds. Memoranda of Understanding, entered into by national regulators pursuant to these policy statements, are similarly heavy on process (coordination, communication) and silent on loss distribution.¹¹⁴ Yet, distribution remains the most vexing question in cross-border bank failure.

CONTEXT AND INTERNATIONAL EFFECTS OF THE TARP 16 (2010); Meghan Kelly, *U.S. Bailout Funds Saved European Banks—Without Much Transatlantic Reciprocity*, EUR. INST. BLOG (Aug. 2010), <http://www.europeaninstitute.org/August-2010/us-bailout-funds-saved-european-banks-without-much-transatlantic-reciprocity.html>.

107. See *Excerpts: Iceland's Oddsson*, WALL ST. J. (Oct. 17, 2008), <http://online.wsj.com/news/articles/SB122418335729241577> (quoting Iceland's central bank chief David Oddsson) (“These players lent this money to make a profit . . . and they must face the consequences and not innocent citizens . . . [We] are not going to pay the banks' foreign debts.”).

108. See BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74, at 11–12 (describing two measures taken by Belgium and France to jointly guarantee Dexia's assets and sell off its U.S. subsidiary).

109. *The Cyprus Bail-Out: Unfair, Short-Sighted and Self-Defeating*, ECONOMIST (Mar. 16, 2013), <http://www.economist.com/blogs/schumpeter/2013/03/cyprus-bail-out>.

110. See generally BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74; IMF, *Resolution of Cross-Border Banks—A Proposed Framework for Enhanced Coordination* (June 11, 2010) [hereinafter IMF, *Resolution of Cross-Border Banks*]; FSB, *Key Attributes*, *supra* note 16; FSB, *Thematic Review on Resolution Regimes: Peer Review Report* (April 2013), available at https://www.financialstabilityboard.org/publications/r_130411a.pdf.

111. See Yves Mersch, Member of the Exec. Bd., Eur. Cent. Bank, *The Single Market and Banking Union*, Address Before the European Alpbach Forum (Aug. 29, 2013) (available at <http://www.ecb.europa.eu/press/key/date/2013/html/sp130829.en.html>) (discussing the role the European Banking Union can play in “encouraging greater cross-border banking integration”).

112. See, e.g., BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74, at 22–43 (providing “recommendations to address the challenges arising in the resolution of a cross-border bank”).

113. See IMF, *Resolution of Cross-Border Banks*, *supra* note 110, at 4 (mentioning burden-sharing, although with insignificant detail).

114. Compare FED. DEPOSIT INS. CORP. & BANK OF ENG., *RESOLVING GLOBALLY ACTIVE, SYSTEMICALLY IMPORTANT, FINANCIAL INSTITUTIONS* (2012), available at <http://www.fdic.gov>.

III. GOVERNMENT COMMITMENTS

It is time to return to the bank balance sheet introduced in Part I and the idea that it represents a bundle of government commitments. What follows is a summary overview of the idea as it applies to cross-border banking, in search of clues to the resolution puzzle.

Like Figure 2 in Part I, Figure 3 shows a very simple bank in a hypothetical country. Its funding comes from a mix of insured and uninsured deposits, as well as bonds issued in the global capital markets. It lends most of these funds to private firms and individuals, as well as other banks at home and abroad. It also invests in the bonds of its own government and those of another. Assuming that the hypothetical country is neither Japan nor a member of the euro zone, Figure 3 also specifies that some of the bank's borrowing and lending is in foreign currencies (euro and yen). In the case of foreign bonds and euro deposits, the transactions also involve foreign residents.

gov/about/srac/2012/gsiifi.pdf with Memorandum of Understanding Concurring Consultation, Cooperation and the Exchange of Information Related to the Resolution of Insured Depository Institutions with Cross Border Operations in the United States and the United Kingdom (June 25, 2008) (on file with the author). See also, Charles Goodhart & Dirk Schoenmaker, *Fiscal Burden Sharing in Cross-Border Banking Crises*, INT'L J. CENT. BANKING, Mar. 2009, at 141, 160–61

(We believe that memoranda of understanding . . . will not be sufficient A legal basis . . . can be readily provided within the EU Clear and hard-edged ex ante rules are also helpful during a crisis, when speed of decision making is crucial. By contrast, ex post principles on burden sharing leave themselves open to interpretation, delaying the decision-making process.).

Figure 3: A Stylized Bank Balance Sheet, Risk-Adjusted (Reprise)

Assets		Liabilities and Capital	
Cash	(0)50	Insured deposits	510
Loans to private borrowers (EUR)	100	Insured foreign deposits (EUR)	500
Loans to private borrowers	860	Uninsured deposits	120
Credit to own government	(0)100	Foreign bonds (JPY)	200
Credit to other governments	(0)100		
Interbank loans (domestic)	(20)100		
Interbank loans (cross-border)	(20)100	Common equity	80
TOTAL	1410	TOTAL	1410

Now consider the assumptions behind each line item. On the asset side, cash in local currency is worth 50 for as long as it maintains its purchasing power and perhaps its value in relation to other currencies. By regulation, it requires no capital set-aside; hence the value of zero for risk-adjusted CAR purposes. The euro-denominated loans to private borrowers may have a face value of 100—or a market value of 100—we do not know. We do know that they are booked at 100 by regulation, which also includes 100% of this value in the risk-adjusted CAR calculation. The same goes for 860 in local currency loans to private borrowers. Domestic and foreign government bonds require no capital set-aside (zero risk weight). Loans to domestic and foreign banks have a 20% risk weight.

On the liability side, both local currency and euro deposits are insured, without regard to the residence of the depositor. In this hypothetical (and in most jurisdictions),¹¹⁵ the government is either formally or implicitly understood to back the insurance scheme with budget resources. Uninsured deposits get no promise of public money, but they do get the promise of distribution priority in liquidation alongside the insured depositors.¹¹⁶ The yen bonds on the balance sheet also get a spot in the distribution queue, but they are behind the depositors and therefore at a

115. See Luc Laeven, *International Evidence on the Value of Deposit Insurance*, 42 Q. REV. ECON. & FIN. 721, 721–22 (2002) (“Recently, many countries have implemented deposit insurance schemes and many more countries are planning to implement deposit insurance When countries elect not to introduce explicit deposit insurance, insurance is implicit.”).

116. Statutory priorities exist in corporate and personal bankruptcy as well, but they are a tiny portion of all claims. More and more bank resolution regimes give statutory priority to deposits, which form a large part of bank liabilities. See Daniel C. Hardy, *Bank Resolution Costs, Depositor Preference, and Asset Encumbrance* 7–9 (IMF, Working Paper No. 13/172, 2013), available at <http://www.imf.org/external/pubs/ft/wp/2013/wp13172.pdf> (outlining different countries’ approaches to establishing depositor preference by law); Niall Lenihan, Assistant. Gen. Counsel, Eur. Cent. Bank, Claims of Depositors, Subordinated Creditors, Senior Creditors and Central Banks in Bank Resolutions, Speech at the AEDBF Conference in Athens (Oct. 5–6, 2012) (available at <http://www.aedbf.eu/fileadmin/eu/pictures/news/2012/athens/presentations/LENIHAN.pdf>) (explaining the need for a depositor preference regime that stems from the majority of liabilities of U.S. banks comprising of deposits).

high risk of suffering losses (or being bailed in) when the bank is resolved.¹¹⁷ Capital is at the bottom of the distribution waterfall, the first to take losses and the last to collect.

The amount and form of capital in a solvency-regulated bank is determined by law as a fraction of the bank's risk-adjusted assets.¹¹⁸ For example, our simple bank has all its capital in the form of common equity. Some regulators might permit the bank to hold part of its regulatory capital in preferred stock and even subordinated debt.

In all, each item and number on the balance sheet of our hypothetical bank is a function of one or more government commitments. Almost all these commitments fit into two broad categories: commitments to pay, such as insurance, and commitments to regulate, as in the level of capital and the value of assets.¹¹⁹ Some line items comprise two or more government commitments. For example, public debt reflects both a payment commitment and a regulatory value. Figure 4 illustrates.

117. See Lenihan, *supra* note 116

(The relationship between a depositor preference rule and a bail-in regime also needs to be carefully considered. If the claims of senior, unsecured creditors can be written down under a bail-in regime, and senior, unsecured creditors rank behind depositors in insolvency, this will obviously make senior bank bonds less attractive.).

118. O'Connor et al., *supra* note 48, at 73 ("Current regulatory requirements for lending banks stipulate capital adequacy (asset excess) of 8% of risk-weighted assets . . .").

119. Cash stands out because it is a distinct sort of promise—a promise of purchasing power—that depends on government policy, but that is not unique to banks. Everyone who holds the local currency receives the same promise. Moreover, the purchasing-power promise is embedded in every item on the bank balance sheet that is denominated in the local currency. See Stephanie Bell, *The Role of the State and the Hierarchy of Money*, 25 CAMBRIDGE J. ECON. 149, 161 (2001) ("The general acceptability of both state and bank money derives from their usefulness in settling tax and other liabilities to the state. This makes them the 'decisive' money of the hierarchy and enables them to circulate widely as means of payment and media of exchange.").

Figure 4: A Stylized Bank Balance Sheet as a Bundle of Commitments

Assets		Liabilities and Capital	
Purchasing Power	(0)50	Insurance	510
Regulatory Value*	100	Insurance*	500
Regulatory Value	860	Priority (Depositor Preference)	120
Repayment, Regulatory Value	(0)100	Priority* (Bail-in)	200
Repayment,* Regulatory Value	(0)100		
Regulatory Value, Insurance	(20)100		
Regulatory Value, Insurance*	(20)100	Regulatory Value	80
TOTAL	1410	TOTAL	1410

Because the bank is engaged in cross-border transactions, some of the commitments on its balance sheet (for example, domestic and foreign government debt) are made by different governments. However, not all cross-border transactions—marked with an asterisk (*)—represent an express commitment of a foreign government. At least in theory, the chartering government backs all the insured deposits in Figures 3 and 4, even though some of them are denominated in euro and placed by foreign residents.

Things are more complicated in practice. To understand why, one last balance sheet is in order.

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Figure 5: A Bundle of Commitments, Read Between the Lines

Assets		Liabilities and Capital	
Purchasing Power	(0)50	Insurance	510
Regulatory Value*	100	Insurance*	500
Regulatory Value	860	Priority (Depositor Preference)	120
Repayment, Regulatory Value	(0)100	Priority* (Bail-in)	200
Repayment,* Regulatory Value	(0)100	LOLR	?
Regulatory Value, Insurance	(20)100	Public Recapitalization	?
Regulatory Value, Insurance*	(20)100	Regulatory Value	80
TOTAL	1410	TOTAL	1410

The two shaded lines represent contingent government support or two more commitments to pay amounts as yet unknown. The first, LOLR, is an express commitment of liquidity support for a solvent bank, extended against high-quality collateral.¹²⁰ Should the depositors try to withdraw more cash than our bank has on hand, the LOLR might replace some of the loans on the asset side of the balance sheet with cash or super-safe and liquid government securities.¹²¹ The LOLR would then replace the vanished depositors as a claimant on the liability side of the bank balance sheet.¹²² The second, public recapitalization, almost never takes the form of an express commitment—quite the opposite, it has been vigorously disavowed in the aftermath of the crisis. However, the fact that every modern-day banking crisis has seen governments injecting public capital in private financial institutions makes it prudent to reflect the public capital contingency on the bank balance sheet.¹²³ When governments recapitalize banks, they may inject cash, or more likely their own bonds, on the asset side of the bank balance sheet, and take a claim (for example,

120. See Cecchetti & Disyatat, *supra* note 37, at 29–30 (describing LOLRs practice).

121. See *id.* at 32–33 (describing ways in which central banks, as the LOLR, may influence the availability of liquidity in the financial system).

122. Note that neither the LOLR nor the insurance promise is entirely credible when it comes to euro-denominated deposits and yen-denominated loans: the hypothetical country's central bank cannot issue either of these currencies. However, it might be able to procure them in the market, or from the European Central Bank, or from the Bank of Japan.

123. See Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., Stress Testing Banks: What Have We Learned?, Address at the Maintaining Financial Stability: Holding a Tiger by the Tail Financial Markets Conference (Apr. 8, 2013) [hereinafter Bernanke, Stress Testing Banks] (available at <http://www.federalreserve.gov/newsevents/speech/bernanke20130408a.htm>) (discussing the steps the U.S. government took during the 2008 financial crisis, including capital injection).

preferred stock) on the liabilities side.¹²⁴ Both the LOLR and the recapitalization commitments are made by the chartering government, just like the deposit insurance commitment.

Unfortunately for the hypothetical bank, none of the government commitments on its balance sheet are enforceable in the traditional legal sense. Because governments are sovereign, they can change their minds quite freely about regulation, and can even walk away from their debts with limited consequences.¹²⁵ As noted earlier, British and Dutch depositors in Icelandic banks learned about this problem the hard way in the fall of 2008 when Iceland refused to stand by its banks' foreign deposit obligations.¹²⁶ On the bright side, the foreign depositors' own governments, which had no formal obligation to insure them, compensated them in Iceland's stead.¹²⁷

The government's inability to commit to regulate tightly or loosely, to insure or not to insure, to bail out or not to bail out, sets off a perennial bargaining cycle where the largest banks use alternative means to extract regulatory benefits and transfers from the government—while the government tries to extract benefits from the banks yet preserve discretion with respect to regulation and transfers. For example, knowing that the government's insurance, LOLR, and recapitalization commitments are not strictly enforceable, a big bank might configure itself so as to maximize the collateral damage from its failure. Failure becomes unthinkable, and a transfer becomes more likely.¹²⁸ Bribing or otherwise “capturing” regulators is another way to extract regulatory benefits and ex-post bailouts.¹²⁹ The government itself need not be innocent: because it cannot and need not commit to a given level of regulation, it may be tempted to repress the financial sector to extract public-policy and private benefits on nonmarket terms.¹³⁰ This is one of the explanations for the favorable regulatory treatment of government debt on bank balance sheets.

124. See Cecchetti & Disyatat, *supra* note 37, at 34 (“Because of the moral hazard implications, officials are tremendously hesitant to grant such loans. When they do, they not only charge high rates of interest to mitigate taxpayer exposure but have the ability to write down shareholder equity as well as replace management.”).

125. See *Excerpts: Iceland's Oddsson*, *supra* note 107 (discussing the Icelandic government's ability to decline to pay off an Icelandic bank's foreign debts).

126. Stephanie Bodoni & Omar R. Valdimarsson, *Iceland Wins Court Case Over Dutch, U.K. Icesave Compensation*, BLOOMBERG BUSINESSWEEK (Jan. 28, 2013), <http://www.businessweek.com/news/2013-01-28/iceland-wins-court-case-over-dutch-u-dot-k-dot-icesave-compensation>.

127. *UK Lenders Compensate for Iceland's Losses*, NEWS.COM.AU (Sept. 1, 2013), <http://www.news.com.au/world/breaking-news/uk-lenders-compensate-for-iceland-losses/story-e6frfkui-12267084> 12029; *Iceland Asks for More Time to Repay Icesave Cash*, DUTCH NEWS (Oct. 1 2013), http://www.dutchnews.nl/news/archives/2013/10/iceland_asks_for_more_time_to.php.

128. See Richard M. Salsman, *Bankruptcies, Bail-Outs & Bail-Ins: The Good, Bad & Ugly of Bank Failure Resolution*, FORBES (May 1, 2013), <http://www.forbes.com/sites/richardsalsman/2013/05/01/bankruptcy-bail-ins-bail-outs-the-good-bad-ugly-of-bank-failure-resolution/> (discussing factors that lead to bank failure and the reasons why transfers are likely in order to avoid bank failure).

129. Daniel Carpenter & David Moss, *Introduction to PREVENTING REGULATORY CAPTURE: SPECIAL INTEREST INFLUENCE AND HOW TO LIMIT IT 21–22* (Daniel Carpenter & David A. Moss eds., Cambridge Univ. Press 2014).

130. See, e.g., Nouriel Roubini & Xavier Sala-i-Martin, *A Growth Model of Inflation, Tax Evasion, and Financial Repression 2* (Nat'l Bureau Econ. Research, Working Paper No. 4062, 1992) (discussing various views on repression of financial institutions in connection with economic optimization).

The government's inability to make binding commitments to abide by the promises that make up bank balance sheets has another interesting consequence: it makes the commitments more fungible. A government that cannot or will not make a budget transfer to bail out a bank can substitute liquidity support or regulatory forbearance instead. This flexibility to substitute fiscally or politically plausible commitments for ones that are neither can be a useful tool in crisis. For example, most governments facing a financial crisis go to great lengths to frame it as a liquidity problem¹³¹ to avoid using taxpayer funds and the concomitant need for legislative approval.¹³²

The bank-government relationship as it works today is not subject to either market or democratic discipline, and is prone to distortions and externalities. The simplest solution would be either to nationalize banking entirely or to remove all guarantees and regulation, ending the bank-government codependence mediated through the bank balance sheet. Neither is in the cards. By way of modest improvement, it is at least plausible to make public presence on the bank balance sheets more explicit with a new category of contingent public capital. I suggest that exposing the extent to which banks depend on government commitments at all times, not just in crisis, and framing the connection in ownership terms can both help improve market discipline and force a more open political debate about distribution.

Because it confronts burden-sharing head-on, contingent public capital is also an attractive response to the distribution challenge in cross-border banking. However, it poses a formidable design challenge.

IV. COMMON CAPITAL: A THOUGHT EXPERIMENT

Imagine an Icelandic bank that takes insured deposits and makes small-business loans in Iceland, takes insured and uninsured deposits, finances municipalities in France, lends to consumers in Hungary, and underwrites bond insurance in the United States.¹³³ Assume (unrealistically) that all this activity is carried out through a single institution, using a single consolidated balance sheet. Icelandic and French deposits represent about half of its funding; most of the rest comes from the global capital markets. Now suppose that the U.S. bond-insurance business has imploded in a financial crisis and threatens the entire bank with insolvency. In a last-ditch attempt to survive, the bank is pulling back all the loans it can from Hungarian consumers, French municipalities, and Icelandic dentists. Wholesale deposits in France are beginning to run. If the bank fails, it will be unable to pay deposits and will likely default on its U.S. bond-insurance commitments as well as its capital-

131. Johnson, *supra* note 10.

132. Laeven & Valencia, *supra* note 9, at 16.

133. This scenario is very loosely based on a combination of crises in Iceland and Eastern Europe, as well as the failure of Dexia. See generally Case E-16/11, EFTA Surveillance Auth. v. Iceland, (Eur. Free Trade Ass'n Ct. 2013), available at http://www.eftacourt.int/fileadmin/user_upload/Files/News/2013/16_11_Judgment.pdf; BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74, at 1–3; EUR. BANK FOR RECONSTRUCTION & DEV., VIENNA INITIATIVE—MOVING TO A NEW PHASE (2012).

markets obligations. Separately, Iceland will be on the hook for retail deposit insurance.

Iceland, France, Hungary, and the United States each has an interest in the continuity of the bank's functions in its jurisdiction. If the bank were to fail, each wants to minimize the collateral damage in its jurisdiction, including its own taxpayer liability. In today's world, it is Iceland's show: it can forbear and supply liquidity; direct the bank to raise private capital and/or reduce lending; shut it down and pay deposit insurance; or recapitalize it, perhaps on condition that it keep lending to the Icelandic dentists.¹³⁴

Iceland's rescue of a domestic financial institution can operate as a transfer to banks in other jurisdictions—or to other governments.¹³⁵ For budget and political reasons, Iceland might structure bank resolution to prefer its own residents over all other creditors, even refusing to honor the deposit guarantee when the French come to call. The French authorities are worried about their own depositors, about the credit crunch facing their municipalities, and about being blamed for their residents' losses in Iceland. France might put its own budget resources on the line, compensating depositors and replacing credit lines. On the other hand, France might apply diplomatic pressure to get Iceland to keep the bank alive or at least to pay the promised deposit insurance. Similarly, if Iceland represents a significant portion of consumer credit in Hungary and municipal-bond market function in the United States, the two governments have a choice of putting their own resources on the line or pressuring Iceland to perform. The outcome depends on a combination of economic and political factors, some of which may not be apparent until crisis strikes. These factors include each country's budget and political capacity (domestic and international), the value of the distressed bank's assets in each jurisdiction, and the importance of its functions to each affected economy.¹³⁶

The cross-border resolution regime deals with this conundrum by harmonizing institutions, improving communications, and resolution planning.¹³⁷ Loss-sharing among governments remains unmentionable and unmentioned. It is easy to see why: it is politically unpalatable and technically imponderable. Discussing public burden sharing would be seen as conceding defeat on public-private burden sharing, or bail-in. As it stands, loss-sharing can be negotiated through technocratic channels *ex post*

134. Laeven & Valencia, *supra* note 9, at 6–7 (describing policy interventions banks currently take in times of systemic financial crisis).

135. *Hey, Germany: You Got a Bailout, Too*, BLOOMBERG VIEW (May 23, 2012), <http://www.bloombergvew.com/articles/2012-05-23/merkel-should-know-her-country-has-been-bailed-out-too>. The related debate about resolution of cross-border financial conglomerates is long on process and conspicuously short on concrete ways of ensuring equitable burden-sharing among governments backing their respective financial institutions. *See generally*, IMF, *Resolution of Cross-Border Banks*, *supra* note 110; FSB, *Key Attributes*, *supra* note 16.

136. In a more realistic scenario where operations in each country are conducted through separate legal entities, the resolution process might either consolidate all the assets and liabilities or isolate and sell the healthy business lines without putting them in resolution. Shareholders and creditors of the failing U.S. subsidiary and its holding company (presumably Icelandic in this case) would take the bulk of the losses. The success of such an approach would depend on the feasibility of disaggregating what had been an integrated transnational business and the willingness of each jurisdiction to let its residents suffer losses. *Cf.* Goodhart & Schoemaker, *supra* note 114, at 143–44 (describing the contagion of financial crisis that spreads from one country to many others).

137. *See* BCBS, *Cross-Border Bank Resolution Group*, *supra* note 74, at 22–43 (discussing “[r]ecommendations to address the challenges arising in the resolution of a cross-border bank”).

and ad hoc.¹³⁸ The process is nontransparent and unaccountable, despite its huge distributional consequences.¹³⁹ Whether the bulk of the loss falls on the debtors, creditors, or taxpayers of Iceland, France, Hungary, or the United States, the bargaining is equally invisible to those affected by it and to the markets.

Now consider a thought experiment: each of the four jurisdictions involved in the hypothetical Icelandic bank holds a contingent equity stake in the institution in proportion to the bank's activities in its jurisdiction. Iceland's portion would be a function of the combined insured deposits and small-business loans, France's would key off the combined deposits and loans to municipalities, Hungary's off the consumer loans, and the United States' off the value of the bond insurance exposure. Any one of the four governments would have the capacity to trigger the capital call; once it does, all four must participate.¹⁴⁰ Any injection of public capital would come with pre-agreed and preannounced unpleasant consequences for current management and shareholders, and perhaps even some creditors, though not depositors.

In practice, such an agreement would not bring about automatic nationalization.¹⁴¹ In the first instance, it would create a powerful incentive for the bank to find private capital to avoid government takeover. Second, it would give each government a say in the bargaining outcome in proportion to its stake in the bank, as measured by its share in the bank's gross assets and liabilities. This share may or may not reflect the bank's importance to a given government. For example, if the Icelandic bank in the hypothetical is truly enormous, it may be responsible for half of all municipal lending in France—but that lending might form a relatively small part of the bank's overall business. If France desperately wants to recapitalize the bank and keep it going, but Iceland would just as soon lose the French business, it might be willing to pay off France to avoid the firm-wide capital call. If the United States cares about the bond-insurance business, it might be willing to contribute capital. If not, it might try to buy its way out for less than the capital call liability. It is also possible that individual governments would simply refuse to comply with the call; however, it is more likely that they would try to bargain their way out to avoid the appearance of diplomatic confrontation.

The objective of such a shared contingent public capital pool—Common Capital—is to make each government's presumptive stake in the distressed bank and the outcome of its resolution as transparent as possible, and to create a default key to loss distribution.¹⁴² It creates a common currency, channeled through bank equity, in which the

138. See generally Goodhart & Schoenmaker, *supra* note 114.

139. See *id.* at 159–61 (acknowledging the difficulties in transparent communication and complexity of cross-border resolution).

140. Compare to Basel III countercyclical charges process. See BCBS, *Consultative Document: Countercyclical Capital Buffer Proposal*, (July 2010)

(This proposal implies there would be jurisdictional reciprocity . . . [R]eciprocity does not entail any transfer of power between jurisdictions, in keeping with Basel Committee agreements more generally; the power to set and enforce the regime will ultimately rest with the home authority of the legal entity carrying the credit exposures.).

141. Cf. Laeven & Valencia, *supra* note 9, at 30 (stating nationalization implies government has taken full control over a bank).

142. See *id.* at 14–15 (detailing procedures for communicating information in time of crisis).

governments can bargain in the shadow of default, even where some authorities might prefer to use other crisis-management tools, such as regulatory forbearance.¹⁴³ This currency would be intelligible to the outside world, markets and citizens alike, who could monitor and demand explanations for any deviations from the default loss-allocation scenario.¹⁴⁴ Importantly, this approach does not end the current technocratic negotiation, but prods it toward more openness and standardization. It should also create better incentives for governments to coordinate *ex ante* on monitoring the bank's activities in their jurisdictions to determine their respective stakes in it and on the triggers and terms of public capital infusions, so as to maximize the bank's incentives to raise private capital.

CONCLUSION

This Article has framed the relationship between banks and governments as one of multiple unenforceable commitments to pay and to regulate, which effectively structure banks' way of doing business. Knowing that government commitments are not strictly enforced, it makes sense for banks to configure themselves to take excessive risks, and to maximize the possibility of a bailout in crisis. The largest financial institutions—those that can credibly threaten governments with macroeconomic damage—have the incentive to configure their business to maximize the damage, and with it, their chances of favorable treatment (deregulation, subsidies, forbearance, bailouts).

Bank-government negotiations get complicated in cross-border banking because governments must agree on the total magnitude of their exposure to bank failure, allocate it among themselves, and ensure that their respective regulatory regimes force banks to absorb the costs that would otherwise fall on the public. The challenge of getting all the valuation and allocation steps right in good times makes cross-border crisis management and bank resolution more difficult. While the prevailing approaches to cross-border resolution reform emphasize harmonization and coordination (all good things), the biggest challenge remains with burden-sharing.

Making government presence on the bank balance sheet explicit in the form of contingent public equity forces the distribution debate out into the open. It reflects the pervasive public presence on the bank balance sheet, now obscured in the bundle of implicit promises of liquidity support, insurance, distribution priority, and regulatory valuations.

Where a bank balance sheet reflects the commitments of multiple governments, the contingent equity tranche should reflect their respective interests in a simple, politically intelligible way. The idea of Common Capital is to help structure negotiations between the bank and the governments that have a stake in its operations, and, importantly, among the governments. The goal in the first place is to create the strongest possible incentives for private recapitalization of an insolvent institution. Beyond this, the possibility of a shared public recapitalization should

143. *See id.* at 20–21 (describing suggested communication practices among cross-border authorities).

144. *See* FSB, *Key Attributes*, *supra* note 16, at 13–14 (stating that the treatment of creditors and ranking in insolvency should be transparent and disclosed to affected parties).

motivate governments to monitor banks' activities in their respective jurisdictions and to confront burden-sharing challenges in a more structured and transparent way.

In this Essay, I have deliberately characterized Common Capital as a thought experiment, rather than a practical policy proposal, for two reasons. First, an actionable proposal requires considerable technical elaboration beyond the scope of this Essay, accounting for the complexities of conglomerate structures including nonbank institutions. Second, default nationalization by multiple governments looks like a radical political proposition—even if the end result is unlikely to be the default. The thrust of this Essay has been to show that it is not nearly as radical as it seems at first blush. As a matter of fact, the idea of a pristinely private national bank is much further removed from reality. The fictions of private banks, complete bail-in, and full home or host government responsibility, obscure constant high-stakes bargaining over distribution among debtors, creditors, and taxpayers in multiple jurisdictions. Such bargaining proceeds through a set of recurring trade-offs on bank balance sheets. Exposing the bargain to market and democratic scrutiny is likely to produce more efficient resolution, more equitable burden-sharing and, ultimately, safer banks.