International Coordination of Financial Supervision Why has it grown? Will it be sustained?

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Managing Global Financial Risks: Shifting Sands and Shock Waves

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Overview

- ✓ Why has it grown?
 - Avoidance of negative externalities
 - Achieving positive externalities
 - Given these externalities what factors make cooperation more likely?
- ✓ How did these factors affect the growth of coordination in international banking? (Basel Committee)
 - In Securities Regulation and Supervision? (IOSCO)
 - In Insurance Supervision? (IAIS)
- ✓ The aftermath of the Crisis: G-20 & FSB
- ✓ Future of international supervisory cooperation?

What's the motivation for international cooperation?

Motives

- ✓ Avoidance or mitigation of negative externalities
 - Generally after shock has occurred
 - Sometimes to avoid an anticipated shocks
 - Usually more difficult to reach consensus regarding events that may happen
- ✓ Attempts to achieve positive externalities
 - Generally less powerful
 - Often considerable uncertainty re: benefits vs. costs

Factors that facilitate cooperation

International cooperation is more likely

- 1. The smaller the group of countries that must agree
- The broader the international consensus on policy objectives and potential gains from cooperation
- 3. The deeper the international agreement on the probable consequence of policy alternatives
- 4. The stronger the international infrastructure for decision making
- 5. The greater the domestic influence of experts who share a common understanding of a problem & its solution

The Basel Committee on Banking Supervision

- ✓ Why cooperation began first & has been most ambitious in banking sector
 - 1. Relatively small group of countries controlled 90% of cross-border banking activity
 - 2. Keen awareness of the costs of failing to cooperate
 - 3. Broad consensus on value of first steps
 - Could build on the infrastructure of the G-10 central bankers in Basel
 - Bank supervisors tend to share a world view and, until recently, have had considerable scope for exercising discretion

Huge international impact of the failure of a small German bank Establishment of Basel Committee on Banking Supervision

Bankhaus Herstatt 1974



Herstatt Lessons

- ✓ A very small bank with international operations can have a large impact on global markets
 - The largest FX market ceased functioning for more than a month
 - Several banks were cut off from the E\$ interbank market
- Uncoordinated interventions by regulators can exacerbate market instability
- ✓ The option to control the timing of bankruptcy conveys substantial power
- ✓ Legal resolution took 35 years
 - Courts move slowly while markets move at the speed of light

The Basel Committee on Banking Supervision

- ✓ Initial challenge: how to cooperate?
 - Each foreign bank supervisor has at least two potential supervisory/regulatory authorities
 - Home country
 - Host country
 - —What if they do not coordinate policies?
 - In worst case could stifle cross-border expansion
 - A policy decision in either country could cause problems in the other
 - Lapses in oversight home country could cause problems in the host country
- ✓ Answer: The Basel Concordat

The Concordat

- 1. No foreign banking establishment should escape supervision.
- 2. Supervision is the joint responsibility of host_and parent authority.
 - ✓ The <u>host</u> has primary responsibility for supervision of liquidity.
 - ✓ The <u>parent</u> has primary responsibility for supervision of solvency.
- 3. Transfers of information between <a href="https://www.nost.gov/

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4. Banks should be monitored on a consolidated basis for assessing risk exposures.

Continuing Challenges in Information Sharing

- ✓ Considerable progress in eliminating legal barriers
- But enormous reluctance to share bad news
 - Managers withhold from supervisors as long as possible
 - Primary supervisors withhold from domestic function supervisors as long as possible
 - Domestic supervisors withhold from foreign counterparts even longer
- ✓ Perverse incentives at every stage
 - Wishful thinking, hope problem self-correcting
 - Desire to avoid sanctions or loss of reputation
 - Concern over loss of discretion to deal with problem
 - Fear leak of bad news could cause run
 - Worry that foreign counterparts may have legal obligations that could result in actions that would exacerbate problem

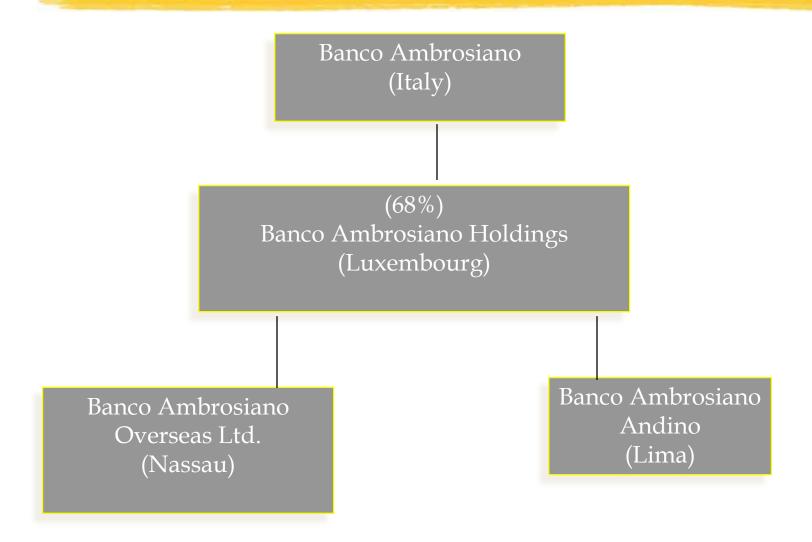
Consolidated Supervision

- ✓ A sound approach if banks are free to move capital and liquidity from foreign offices where surplus to those with shortfall
 - —In normal times, generally true
 - But in times of stress, the host country may ring fence
- ✓ Undoubtedly world financial system would be more efficient if could assume fungibility
 - But sovereigns cannot make a credible commitment to refrain from ring fencing
- ✓ Thus must meet standards on consolidated & stand alone basis

Banco Ambrosiano



The Corporate Structure of Banco Ambrosiano



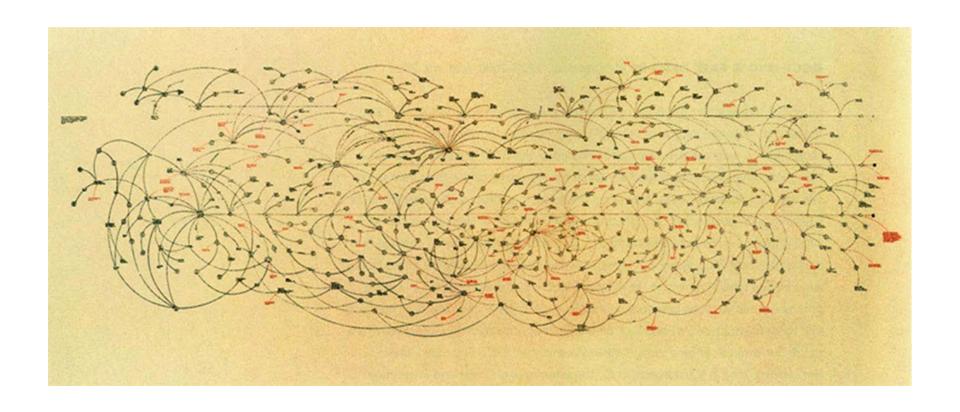
The Revised Concordat

Greater emphasis on the principle of consolidated supervision

New Points:

- ✓ If entity is not classified as a bank by host, then parent should either supervise or close.
- ✓ If host thinks parent supervision is inadequate, should either prohibit operations or place stringent conditions on operations.
- ✓ If parent is holding company, supervisors of separate banks should cooperate to supervise holding company.
- ✓ If holding company is a subsidiary, parent supervisor should supervise holding company and its subsidiaries or close.

Bank of Credit and Commerce International 1991



Lessons

- International banks can devise complex corporate structures that defy external oversight, much less consolidated supervision
 - BCCI managed to evade supervision
- 2. Although BoE urged cooperation to ensure no creditor would receive preferential treatment, a "single entity" or "universalist" approach
 - But several jurisdictions, most notably New York State applied a "separate entity" approach and ring-fenced the local operations
 - US also trumped all bankruptcy proceedings by instituting RICO proceedings against BCCI
- 3. Revealed profound international differences in institutional arrangements, objectives, and powers for dealing with an insolvent bank

Yet another revision of the Concordat

Minimum standards for supervision of foreign banks

- Supervisory authorities have the right to gather information from the cross-border banking establishments for which they are the home-country supervisor.
- ✓ If a host-country authority determines home country supervisor not performing competent consolidated supervision can impose restrictive measures to satisfy its prudential concerns.
- ✓ U.S. Foreign Bank Supervision Enhancement Bank of 1991

Parallel Basel effort to harmonize supervisory frameworks & set minimum standards

Continuing efforts to encourage members to adopt common supervisory frameworks

- Began from astonishing divergence in concepts & procedures
- ✓ Reached consensus on
 - Core Principles for Banking Supervision
- Produced a series of papers identifying sound practices in various aspects of supervision
- ✓ Have become increasingly important
 - Serve as standards for FSAP evaluations by IMF/WB
 - Semiannual reports on completeness of adopted standards & gaps
- ✓ No enforcement powers
 - Moral suasion
 - Name and shame

Basel Accord on Capital Adequacy

- ✓ In response to shared perception that banks not adequate capitalized for risk they had taken on
- ✓ Individual countries frustrated when attempted to raise capital standards unilaterally
- ✓ Anglo-American Accord prodded Basel Committee to Act
 - Prudential objective
 - Level Playing Field objective
- ✓ Successive versions Basel II & Basel III geometrically more complex

Barings, PLC



Lessons

- 1. Revealed fragmentation in oversight
 - Among functional regulators in home country
 - Between home & host country authorities
- Losses at Barings securities threatened exchanges on which it traded
 - Several firms threated to abandon membership in exchanges when loss-sharing arrangements clarified
 - Raised specter of contagion across derivatives exchanges
- 3. When losses discovered, BoE put Barings in Administration & stay imposed
- 4. Lack of segregation of customer funds → both customers and counterparties lost access to funds because of bankruptcy stay
 - Liquidity in several markets dried up over the few days before ING bought Barings for €1

The Windsor Declaration May 1995

- ✓ Supervisors of derivatives exchanges in 16 countries agreed to...
 - Cooperate in monitoring large exposures
 - Develop mechanisms to ensure protection of customer positions
 - Disclose procedures governing defaults
 - Establish an 'on call' schedule identifying a responsible regulator at each exchange
- ✓ IOSCO focus shifted from coordination of enforcement actions to cooperation in supervision



The disorderly failure that spurred G-20 to action

Lehman profile

- ✓ Asset size: \$634 billion
 - 4th largest investment bank (more than twice as large as Bear Stearns)
 - 25,000 employees
 - Fewer than current compliance staff of Citigroup*Record earnings in 2007
 - 150 years old
 - 6,000 legal entities in more than 40 countries
- ✓ Leverage (Debt/Equity) as high as 60:1 between reporting periods
- ✓ Main source of funding: O/N repos
- Extensive interconnections with the rest of the financial system
 - More than 1 million contracts outstanding at bankruptcy

Lehman Structure

- ✓ Managed as highly centralized single entity
 - Most employees did not know which legal entity they worked for
 - Traders booked on b/s sheets of several different entities, often without explicit knowledge of customers
 - Many operations located in London where customer funds could be mingled with the firm's own funds
- ✓ Holding Company, LBHI, acting as treasury & central bank for group
 - Issued debt
 - Managed cash
 - All cash swept in at the end of each business day
 - Distributed "as needed" the next day
- ✓ Most other support services—e.g. MIS, risk management centralized at various locations and shared among affiliates

Totally Unprepared for Bankruptcy

- ✓ When failed to find buyer, forced to seek Ch. 11 protection before Asia opened
 - By far the largest bankruptcy in history
 - Bankruptcy of LBHI occurred before cash returned to subs
 - Subs illiquid and unable to continue operations
 - Over 60 bankruptcy proceedings initiated around the world
 - Many countries ill-prepared to deal with resolution of this sort of institution
 - Example: in UK, no provision for DIP financing
 - Close-out netting intensified downward pressure on asset prices
 - Centralized record-keeping collapsed after filing.
 - Key IT systems sold to Barclays so that other affiliates lost access to information vital for resolution
 - Complex intra-affiliate transactions difficult to untangle
 - Minimal record keeping by legal entity
 - Difficult to identify who owed what to whom
 - Most insolvency proceedings lost access to critical MIS
 - 43,000 trades still live and had to be negotiated separately with each counterparty

Lehman exception seemed to justify usual reliance on bailouts

- ✓ Officials faced with two bad options
 - Let bankruptcy occur & try to deal with consequences
 - Bailout and incur heavy political and financial costs & worsen moral hazard
- Chose bailouts on massive scale.
 - Haldane estimate: over \$14 trillion (ca. 25% of world GDP)
 committed by the US, UK & euro area to support the banking system
 - How to justify that scale of support for one industry?
 - Would it be politically possible to repeat?
- ✓ Even with bailouts, world experienced most serious recession since the Great Depression
 - Not only did dislocations in financial markets lead to sharp falls in consumption and investment, but
 - Fiscal consequences of bailout impeded the ability of government to cushion the shock
- ✓ Lehman surely not the cause, but widely viewed as an unnecessary exacerbation of crisis

Officials Understood Lehman Was By No Means the Worst Case Conceivable

- ✓ Many G-SIBs had
 - Much larger balance sheets (trillions not billions)
 - Much more extensive interconnections
 - Much more complex intra-affiliate transactions
 - —Much more diverse lines of business
 - Much more complex organizational structures
 - Much more extensive international involvement
- ✓ If confronted with the collapse no plausible way to resolve without exacerbating financial instability

G-20 Meeting in Fall of 2008 Declared "Never Again!"

SET OUT TWO-PRONGED STRATEGY

- 1. Strengthen prudential regulation and supervision
- 2. Develop a credible resolution policy for large global banks

While stronger prudential safeguards represent a strengthening and broadening of the Basel Agenda, the emphasis on resolution policy is entirely new

The enormous bailouts made clear: When large losses Threaten to overwhelm GSIBs, regulators found they had no plausible way to implement an orderly resolution.

Attention to resolution policy was long overdue!

G-SIBs Have Grown in Geographic Scope, Legal Complexity and Range of Activities

- Management structure misaligned with legal structure
 - But legal structure cannot be ignored in event of financial distress
- ✓ Cross-border complexity implies <u>at least</u> two countries must be involved in resolution
 - Laws, processes and procedures vary substantially across countries
 - —Most G-SIBs have legal entities in scores of countries
- ✓ Cross-sectoral complexity implies <u>at least</u> two
 functional regulators must be involved in resolution

Crisis Moved Better Resolution Tools to the Top of the G-20 Reform Agenda

- ✓ The Financial Stability Board (and Basel Committee on Banking Supervision) have developed
 - Key Attributes of Resolution Regimes for Financial Institutions
 - Crisis Management Groups to review resolution plans for each of the G-SIBs
 - Annual reports to G-20 re: progress and obstacles to implementing the core principles
- ✓ Each G-SIB now required to file a resolution and recovery plan each year
 - Dodd-Frank requires that systemically important banks show how this can be done under bankruptcy procedures

But highlighted limits to international coordination

- ✓ National authorities will inevitably place a heavier weight on domestic objectives in the event of conflict
- ✓ Even if adopt Key Attributes, important differences
 - Asymmetry of resources
 - Asymmetry of financial infrastructure
 - Asymmetry of exposures
- ✓ Unlikely to agree ex ante or ex post on allocation of losses
 - G-SIBs are prospectively ring fencing
 - US intermediate h/c s
 - Intent to require intermediate h/c s in EU
 - Vickers commission implementation in UK

Will international coordination continue?

Velocity of regulatory change beginning to slow

- ✓ Welcome relief to regulatees
 - Has imposed heavy costs on both regulators & regulatees
- ✓ Useful to pause and take stock
 - Are regulations fit for purpose?
 - Could we have achieved the same outcomes at lower cost?
 - Could we place greater reliance on disclosure & market discipline and less on prescriptive rules and regulatory oversight?
 - Why has it been so difficult to achieve a mutual recognition regime?
 - Have we attempted to coordinate too many details of financial regulation and supervision?
 - Have we attempted to harmonize the wrong things?
 - E.g. NSFR instead of standardizing data definitions and regulatory reports

As memory of crisis recedes will enthusiasm for regulatory reform fade?

- ✓ Factors that explained growth in cooperation suggest more difficult to achieve in future
 - Much larger group of countries need to achieve consensus BC('75) 12 vs. BC('17) 28
 - Urgency of cooperation seems less strong as crisis recedes, some believe it's time to claim victory
 - Beginning to see disagreements about additional tightening of prudential policies
 - Some even claim Basel III has slowed recovery & contributed to economic stagnation
 - Although substantial infrastructure to facilitate supervisory coordination, support for these efforts beginning to erode in key jurisdictions

Domestic influence of experts in decline

- ✓ Widespread view that they failed to safeguard international financial system before & during crisis
- ✓ Growing contempt for experts associated with rise of populism on both sides of Atlantic
- ✓ Bank supervisors & regulators have reduced scope to exercise discretion
 - Issues no longer regarded as technical to be relegated to specialists
 - Now highly politicized
 - Is regulatory change a convert way to redistribute power or income?
 - Is it yet another way to provide a hidden subsidy to Wall Street?

Concern re: new administration and Congress

- ✓ Pres. Trump vow to "do a number" on D-F & Executive Order on Principles for Reform
 - "advance American interests in international financial regulatory negotiations and meetings
- Congressman McHenry letter to Governor Yellen
 - —"Despite clear message...from Pres. Trump, it appears that the Federal Reserve continues negotiating international regulatory standards for financial institutions among global bureaucrats in foreign lands with transparency, accountability or authority to do so. This is unacceptable."

Choice Act requires U.S. diverge from several Basel standards and agreements

- ✓ Key issue: Repeal of Title II of D-F Act
 - Astonishing anger
 - 1. Conviction that an administrative resolution would inevitably become a way to subsidize large banks
 - 2. Belief that Title 2 perpetuated the notion of 2B2F
 - If too large or complex to go through bankruptcy, then too large and complex and needs to be broken up
 - Strong preference for a rules-based approach with strong procedural safeguards
 - Dislike bureaucratic discretion
- ♦ View not shared by authorities abroad
 - ☐ Tendency to place more emphasis on recovery than resolution

Strains with Basel Committee

- ✓ Unable to meet deadline for completion of Basel III
 - Revisions aim to reduce substantial discrepancies in risk weights for similar exposure through imposition of output floor to internal-model estimates of risk weights
 - Europeans and Japanese complain that they will be a competitive disadvantage
 - Some typical bargaining to protect national champions
- ✓ But also a serious structural difference
 - European and Japanese banks hold mortgages on b/s
 - U.S. banks shift most risk to GSEs
- May suggest important limit to harmonization of international standards in absence of harmonization of financial structures

Conclusion: Waning interest in supporting multilateral institutions to facilitate cooperation

Let's hope we don't experience another shock that demonstrates the costs of failing to cooperate

Living Wills

- ✓ Focus: identification of core business lines and critical operations that must be considered in resolution
 - Must map lines of business into legal entities
 - Must identify
 - Funding & liquidity needs,
 - Interconnections and interdependencies
 - Management information systems
- ✓ In US if FRB & FDIC determine plan is not credible, can impose more stringent prudential requirements and require restructuring
- ✓ Intent is to encourage
 - Resolution planning & strategy
 - Encourage simplification of complex legal structures
 - Provide sufficient information to implement resolution

US Implementation

- ✓ Title I of Dodd-Frank Act mandates living wills for all banks with ≥ \$50 billion in assets
- ✓ Must submit plans for rapid and orderly resolution under the <u>bankruptcy code</u>
- ✓ If FRB & FDIC determine plan is not credible, can impose sanctions
 - More stringent capital and liquidity requirements
 - Activity restrictions
 - Constraints on growth
 - Restructuring or divestment

Ist Substantive Review Did Not Go Well

- ✓ August 2014, FED & FDIC rejected living wills submitted by all 11*in October 2013
 - —FDIC voted to deem submissions "not credible"
 - Would start clock for deployment of sanctions
 - —FED found "shortcomings," but warned that if no immediate action to improve by 2015 submission would join FDIC in finding of "not credible"
- ✓ FDIC stated living wills would not facilitate an orderly resolution based on the bankruptcy code and are not sufficient to realistically exclude the need of direct or indirect public support in case of a crisis

^{*}In March 2015, rejected living wills submitted by HSBC, RBS and BNP Paribas

Authorities demanded improvements in 5 areas

- Rationalize and simplify legal structure to better align legal entities with lines of business
- 2. Develop "clean" h/c structures to facilitate resolution
- Amend qualified financial contracts to permit brief stay to avert immediate close-out netting
- 4. Show how shared services –e.g. IT, risk management, treasury –would support critical operations and core business during resolution
- Demonstrate ability to provide information on a timely basis to facilitate resolution

Last April Learned that 5 US G-SIBs had Failed to Make Sufficient Improvement

- ✓ "Not Credible" finding set sanction clock ticking
- ✓ Regulators made public lightly-redacted letters to each of the G-SIBs setting
 - —Areas in which progress made
 - Areas of concern
 - "Deficiencies"
 - "Shortcomings" that must be corrected by July 1, 2017
- ✓ Set October deadline to demonstrate substantive progress with regard to deficiencies

But Some Signs of Reduction in Complexity of G-SIBs

G-SIBs	% change in the number of majority-owned subsidiaries from December 2011 to June 2015
Citigroup	-72%
ING Groep	-57%
BNP Paribas	-33%
Unicredit	-19%
Deutsche Bank	-17%
Bank of America	-14%
Morgan Stanley	-13%

Unfortunately, Countries Have Not Agreed on the Best Resolution Strategy

2 Different Approaches

- 1. Single Point of Entry (SPOE)
- 2. Multiple Points of Entry (MPE)

FDIC has Developed a Single Point of Entry (SPOE) with Bank of England

- ✓ Adapts FDIC Strategy to Holding Company (h/c)
 - If bank fails, FDIC will place it in receivership as usual
 - If bank h/c fails or another subsidiary causes failure, the FDIC will take over the h/c and transfer its assets and <u>some</u> of its liabilities to a "bridge institution"
- ✓ Bridge institution
 - Solvent by design
 - Some liabilities left behind (with bad assets) in h/c bankruptcy estate and will be converted into equity claims on the new h/c
 - Intended to be liquid because transparently solvent
 - FDIC has access to a line of credit at Treasury in case of shortfall
- ✓ SPOE attempts to finesse the cross-border problems

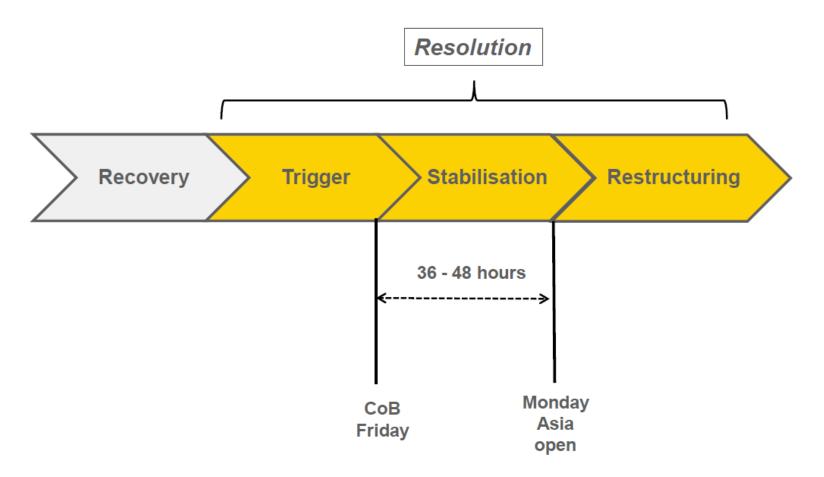
SPOE: Application of Resolution Powers to Top of the Group

- ✓ General strategy
 - Accomplish financial restructuring rapidly in a <u>non-operating</u> entity
 - Buy time for operational restructuring
- ✓ Place parent h/c in receivership
- ✓ Keep operating subsidiaries open
 - Protects against contagion
 - Maintains vital linkages among critical operating subsidiaries
 - Ensures continuity of services

How banks are organized matters less than preparations for resolution

- ✓ 3 conditions for an institution to be resolvable.
 - Continuation of normal customer transactions on the next business day
 - Continuing authorization to operate as a bank
 - Continuing <u>capability</u> to operate
 - Continuing access to financial market infrastructures
 - Continuing access to adequate liquidity
 - 2. Protection against significant disruption of financial markets or the economy at large
 - Must follow announced rules of resolution and follow strict priorities
 - Must not accelerate fire-sales of assets
 - Must not interrupt client access to their funds
 - Should not trigger the failure of financial market infrastructure
 - 3. Ready capitalization without recourse to taxpayer money;
 - Bailinable debt must at least meet common equity minimum
 - Implementation of bail-in should not trigger cross-default clauses

Tight timeframe for resolution requires planning!



¹Tom Huertas, 2013, "Safe to Fail," p. 1.

Implementation

- ✓ Transfer assets (primarily the equity and investments in subsidiary) from receivership to newly created bridge company
 - Leave most liabilities in receivership estate; transfer obligations supporting subsidiaries' contracts to bridge
 - Since shareholders' equity and substantial unsecured claims will be left behind, the assets transferred to the bridge co will significantly exceed its liabilities
 - Establish and implement plan for restructuring that would ensure strong capital base
 - Change in businesses e.g. shrinkage of businesses, liquidation of some lines, closure of certain operations
- ✓ Before returning restructured institution to private sector will be valued to determine the recapitalization requirement and losses in receivership
 - Losses will be apportioned to shareholders, subordinated and unsecured creditors according to priority
 - The remaining claims (likely only those of some creditors) will be converted into equity claims to capitalize the new operations

But many countries do not <u>have</u> and do not <u>want</u> holding companies

- ✓ Thus alternative multiple points of entry (MPE) strategy
 - Resolution focused on entity that fails to meet its capital requirements
 - Resolution will be conducted by the host country without dependence on foreign parent bank or parent country resolution authority
 - More appropriate for groups with a modular structure

✓ Assumes

- Market confidence in rest of the group will <u>not</u> be diminished because of faltering affiliate
- Other countries will <u>not</u> use the initiation of the resolution process in one country to trigger intervention in local entities

Neither strategy is certain to succeed

But ambiguity creates a problem:

Need clarity about the endgame – SPOE or MPE -- for market discipline to be effective.

Creditors need to know the preferred strategy for each material entity

Have we made comparable progress in devising resolution strategies for systemic Financial Market Utilities (FMUs)?

Important because many of the reforms in prudential regulation of banks have pushed risks off bank b/s onto exchanges and clearing and settlement systems

As mandated by D-F Act FSOC has identified them

✓ 5 CCPs

- 1. Chicago Mercantile Exchange
- 2. ICE Clear Credit
- 3. The Options Clearing Corporation
- 4. National Securities Clearing Corporation
- 5. Fixed Income Clearing Corporation

✓ 3 Others

- 1. The Depository Trust
- 2. The Clearing House Payments Company
- 3. CLS Bank International

Post-Crisis Bank Reforms Have Made Them Even More Systemic

- ✓ Greater regulation of banks shifts activity to capital markets
- ✓ Some bank regulation specifically designed to reduce interconnectedness and counterparty risk by shifting OTC business to CCPs
- ✓ But have we reduced systemic risk?
 - Have we reduced counterparty risk at G-SIBs, but increased concentration risk at FMUs?

Is progress with regard to resolution policy comparable to progress with prudential regulation?

Not clear.

Luckily Resolution Policy has not been tested

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 - Much more extensive interconnections
 - Much more complex intra-affiliate transactions
 - —Much more diverse lines of business
 - Much more complex organizational structures
 - Much more extensive international involvement
- ✓ If confronted with the collapse no plausible way to resolve without exacerbating financial instability