

Corporate Complexity & the Orderly Resolution of G-SIBs

*Selected Highlights of the
Carmassi/Herring Study*

Jacopo Carmassi
LUISS Guido Carli University
jcarmassi@luiss.it

Richard J. Herring
herring@wharton.upenn.edu

The Wharton School, University of Pennsylvania

*FDIC Systemic Resolution
Advisory Committee*

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The core problem

- ✓ Crisis revealed complex and opaque interconnections among G-SIBs
 - Impeded effective oversight by authorities *ex ante*
 - Complicated crisis management & resolution *ex post*
- ✓ Global in life, but fragmented into a huge number of separate legal entities in death
 - Insurmountable difficulties in coordinating legal proceedings in multiple jurisdictions
 - Information so fragmented that impossible to preserve any going concern value group may have had
- ✓ Current disclosures for creditors to evaluate:
 - Corporate structure
 - Priority of claims in a resolution
 - Resolution strategy

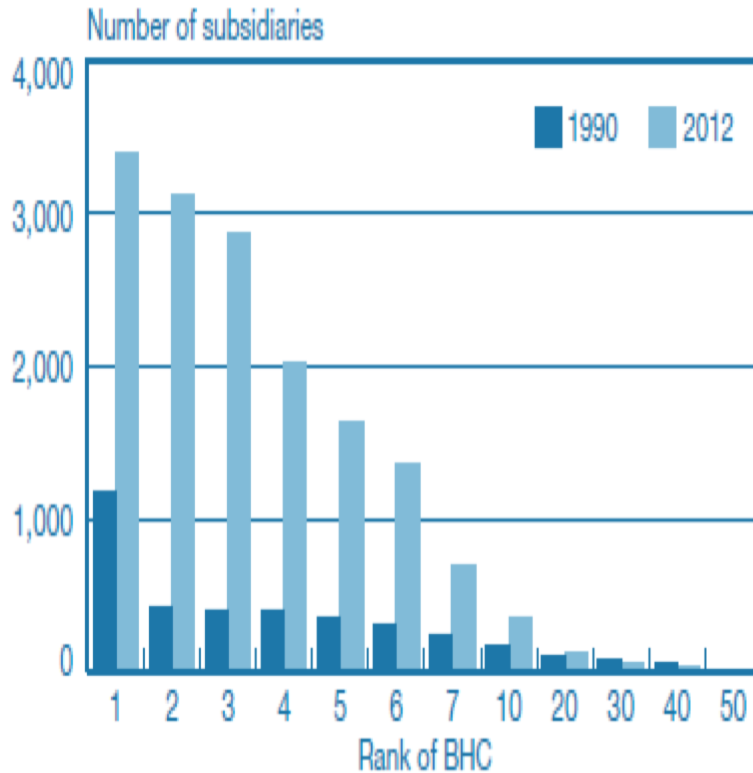
Dimensions of complexity

1. Interconnectedness with other G-SIBs and systemic clearing & settlement systems
2. Share of systemically important activities & availability of substitutes
3. Complexity of activities – opacity
4. **Extent of cross-jurisdictional activity**
5. **Size**
6. **Organizational complexity**

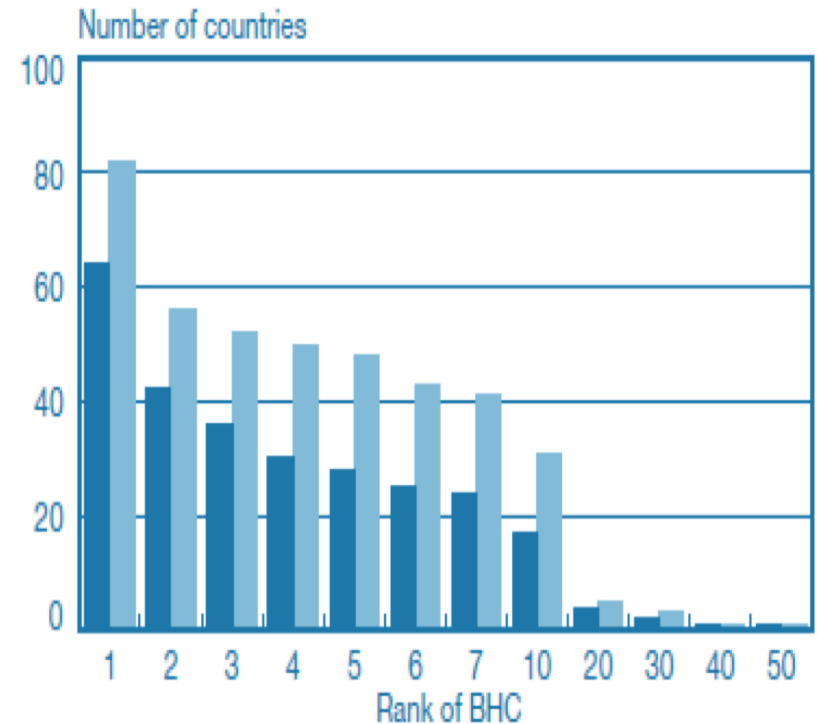
Perhaps not the most important, but in principle, easiest to measure objectively and fundamental to deeper analysis

Growth in organizational & geographic complexity 1990 vs. 2012

Number of Subsidiaries



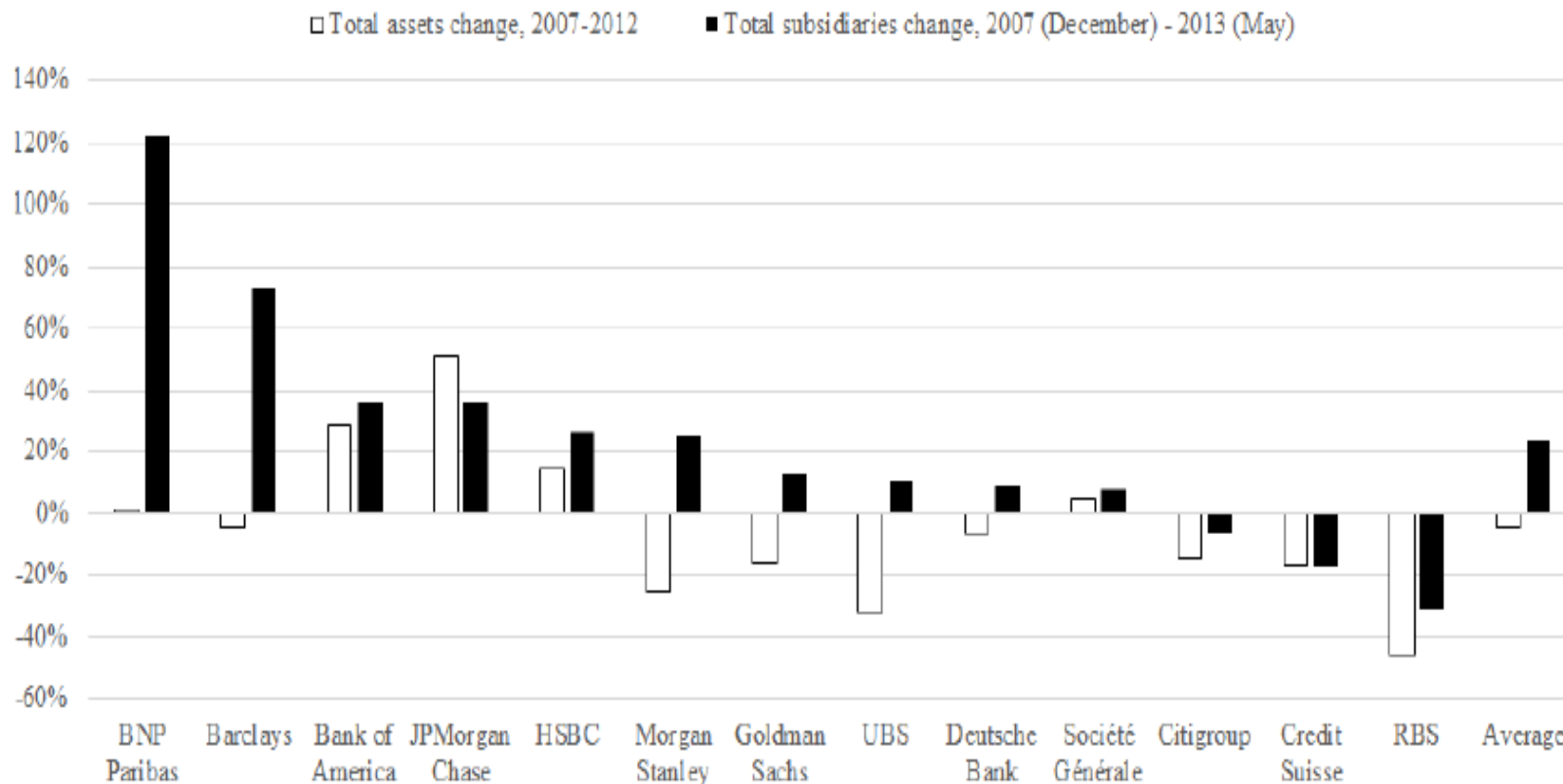
Number of countries



Source: Avraham et al. (2012) on National Information Center data and FR Y-10. Data as of February 20, 2012 and December 31, 1990.

On Average, More Complex than before the Crisis

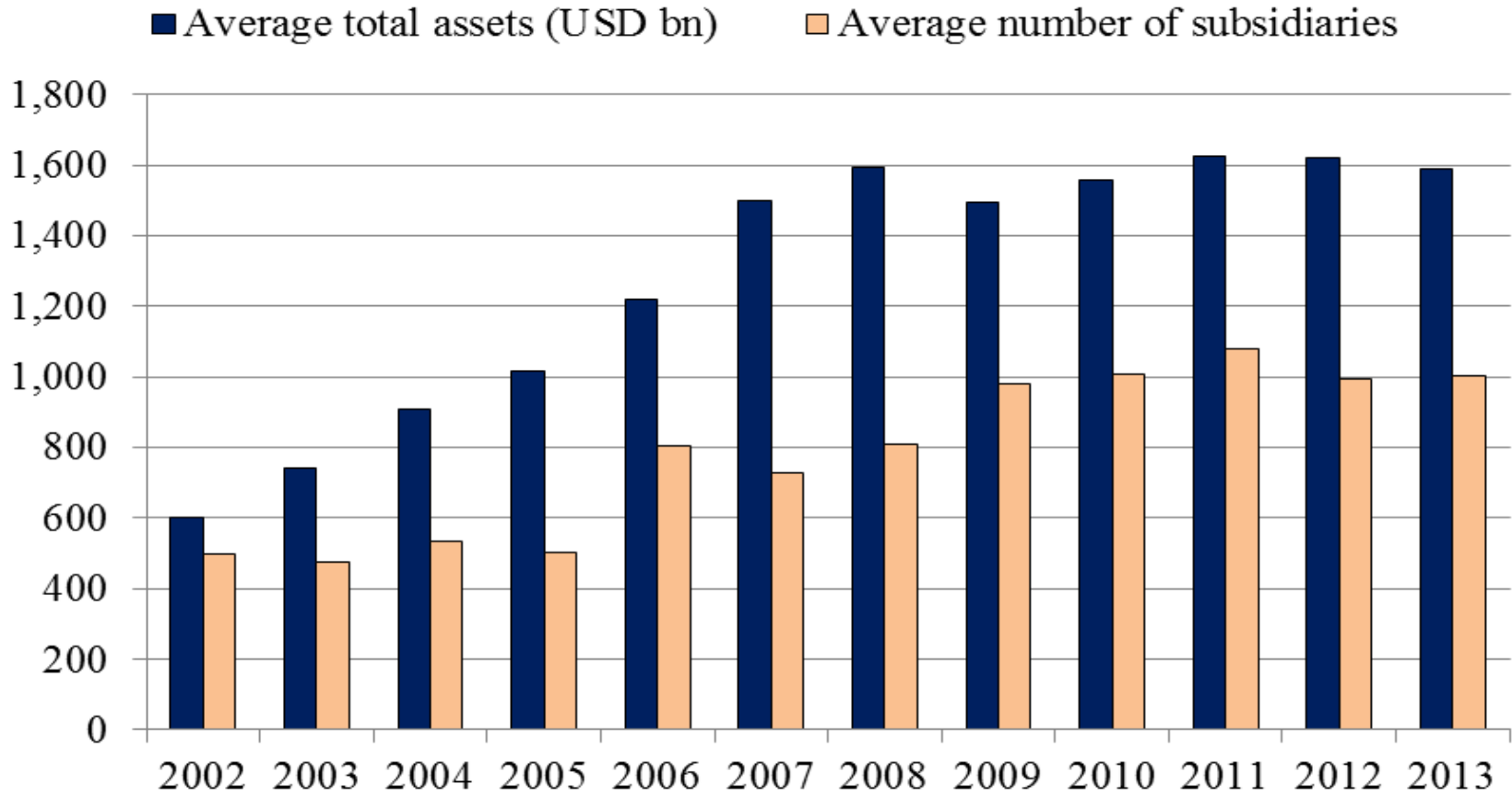
Evolution of Size & Complexity 2007 (pre-crisis) vs. 2012 (post-crisis)



Source: Computations based on Bankscope data. Note assets are not adjusted for significant remaining differences between GAAP and IFRS accounting standards regarding, among other things, netting of derivatives and treatment of investments held for sale and held to maturity.

But Some Evidence of Simplification in Most Recent Data

Evolution of Average Number of Subs* and Total Assets for G-SIBs



*Majority-owned subsidiaries for which G-SIBs are the ultimate owners with a minimum control path of 50.01% at all steps of the control chain. Source: Computations from Bankscope data.

Focus: G-SIBs

Overview Bankscope data

✓ Cross-border complexity

	<u>Assets</u>	<u>% foreign assets</u>	<u>Total subsidiaries</u>	<u>Number of countries</u>	<u>% foreign subsidiaries</u>	<u>% subs in off-shore centers</u>
Average	\$1.587 trillion	42%	1,002	44	60%	12%
High	\$3.100 trillion	87%	2,460	95	95%	28%

Assets and total subsidiaries as of yearend 2013; number of countries, % of foreign subsidiaries and % of subsidiaries in offshore financial centers as of May 2013; % of foreign assets as of 7 yearend 2012. Source: Computations from Bankscope data and banks' annual reports.

Activity by industry classification (13 G-SIBs, May 2013)

Banks	4%
<i>Insurance Companies</i>	<i>1%</i>
Mutual & pension funds, nominees, trusts & trustees	22%
<i>Other financial subsidiaries</i>	<i>25%</i>
Non-financial subsidiaries	47%

- ✓ Little additional detail available
- ✓ Some may be trivial and not an obstacle to an orderly resolution
 - Example: An SPV that is liquidated when a trigger is crossed
- ✓ But an external observer can't tell

Footnote to Preceding Table Bankscope Industry Classifications

- 1. 'Other financial subsidiaries' include hedge funds, private equity and venture capital subsidiaries.*
- 2. 'Non-financial subsidiaries' include all companies that are neither banks nor insurance companies nor financial companies. They can be involved in manufacturing activities but also in trading activities (wholesaler, retailers, commodity brokers, etc.) We have allocated foundations and research institutes to this category as well.*

Regulation Often Increases Corporate Complexity

- ✓ G-SIBs have 2.5 x more subsidiaries than non-financial institutions with comparable market caps
- ✓ Safety and soundness and other regulatory requirements tend to increase the number of host and home country subsidiaries:
 - To facilitate host and home country supervision and regulation
 - To impose jurisdictional restrictions
 - To impose activity restrictions
- ✓ Regulators have the opportunity to foster transparency and simplicity
 - Improved disclosures in public section of living wills
 - Reconsider regulations with an emphasis on facilitating transparency, simplicity and orderly resolution

Tax Incentives Often Increase Corporate Complexity



Often G-SIBs can minimize their tax expense by conducting a transaction or structuring a line of business through multiple separate entities

- This requires the expenditure of substantial resources in tax planning and increases the complexity and opacity of a transaction or line of business
- An average of 12% of G-SIB subsidiaries are located in tax havens
 - High of 28%
 - Low of 3%
- Off-shore transactions are but a fraction of the ways in which tax considerations distort the organization of business

Tax Minimization Strategies Often Increase Corporate Complexity

- ✓ 3 common techniques to reduce in-country and US taxes on international operations that increase corporate complexity:
 1. Create entities in low tax jurisdictions to house service operations and intangible property
 - Charge entities in high tax countries for use of intangible property, financing, and services thereby shifting profits to tax haven
 2. Create “buffer” intermediate holding company entities between profitable subsidiaries and US parent to avoid foreign subsidiary earnings and profits from being considered repatriated to the US and thus immediately taxed in the US
 3. Create entities in jurisdictions with favorable income tax treaties and low tax withholding rates
 - Route movement of money for payments and dividends between group members through these entities
- ✓ Despite the obstacle to an orderly resolution that the resulting complexity presents, no indication that considered in design of tax policy
 - Yet potential fiscal costs of dealing with consequences of complexity can be very substantial


Current disclosure practices hinder public monitoring of progress in simplification



1. Across institutions
2. For the same institution over time

Lack of transparency undermines credibility of resolution planning

Disclosures in Living Wills Inadequate



- ✓ Definitions and terminology are not applied by banks consistently, even for material entities
 - Banks do not publicly disclose the rationale used for identifying core business lines or material entities
 - Intermediate holding companies are not consistently reflected in disclosure
- ✓ Opaque and inconsistent disclosures prevent meaningful comparisons of the public section of living wills across banks
 - And because these informal disclosure standards change, difficult to track changes for a single bank over time

Selected Public Information Provided By the 11 First Wave Institutions (2012)

	Number of Core Business Lines	Number of entities with individual b/s or income data	Number of material payment, clearing & settlement systems	Number of material supervisory authorities
<i>High</i>	30	2	19	45
Low	2	0	10	8

Were consistent standards applied by the G-SIBs?

- One institution that reported participation in 16 material payment, clearing and settlement systems reports participation in 550 in another source

Recommendations

- ✓ Definition of material entity should be standardized based on consolidating statements
 - If more than x% of consolidated assets; or
 - If generate more than x% of consolidated revenues
 - Should include not only operating entities above threshold, but also holding companies that issue public debt
- ✓ Organization chart showing hierarchy of material entities
- ✓ Information regarding material entities should include information relevant to creditors, counterparties, and host regulatory authorities
 - Type of business
 - Total assets
 - Income data
 - Location
 - Intra-group financial transactions and guarantees
 - Intra-group operational dependencies
 - Membership of each entity in payment, clearing and settlement systems
 - Tier 1 Common Equity Ratio
 - Liquid Short-term Funding Ratio
 - Presumptive resolution strategy

Recommendations (cont'd)

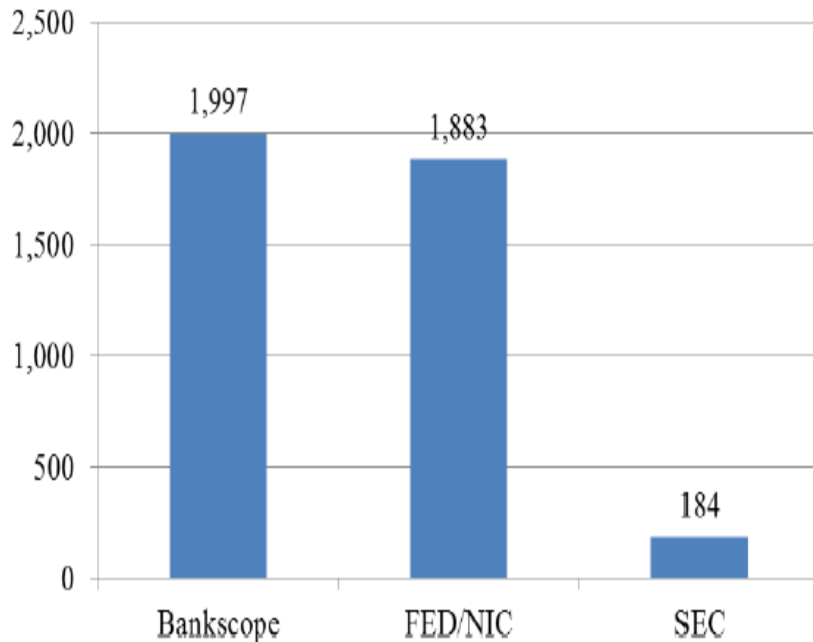
- ✓ Entities not considered material should be listed and classified in standardized groups
 - Each standardized group should include an explanation about why such entities would present no obstacle to an orderly resolution
 - With each standardized group each entity in group should be identified by
 - * Name
 - * Location
 - * Primary function
 - * Rationale
- ✓ Foreign branches located outside the jurisdiction in which the entity is chartered should be disclosed
 - During a crisis a foreign branch might be ring-fenced and treated as if it were a subsidiary in resolution
 - Identify location of branches, principal lines of business and assets
- ✓ How should non-consolidated variable interest entities be disclosed?
 - Currently must state maximum possible loss

Recommendations (cont'd)

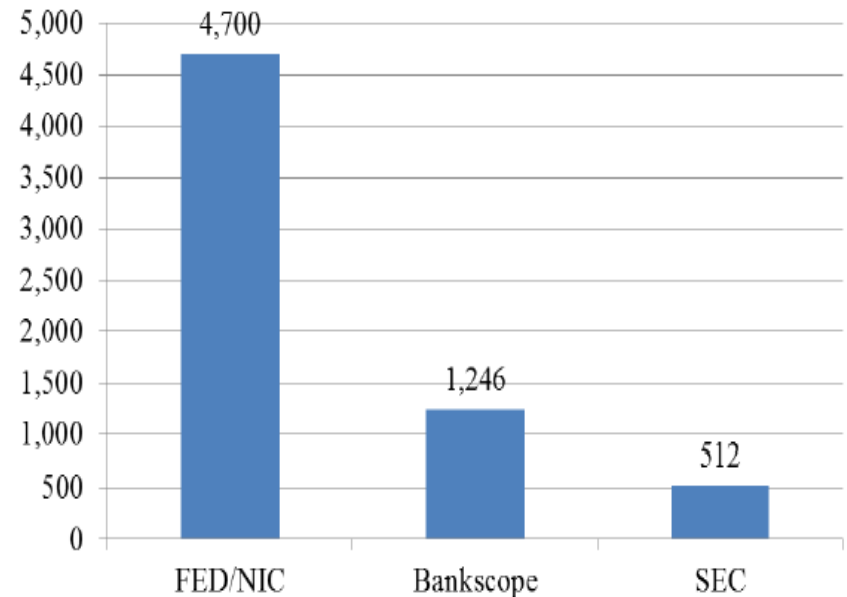
- ✓ The disclosure of relevant data in other public filings should be reviewed and reconciled to increase transparency:
 - Annual reports and SEC filings
 - Results of stress testing and other supervisory reports
 - Enhanced disclosures via rulemaking under Dodd-Frank Act §165(f)
- ✓ Reporting objectives do differ, but differences should be reconciled
 - Currently even something as basic as the number of subsidiaries can vary markedly across reporting agencies

Sometimes significant differences

Citigroup, Yearend 2013



JPMorgan Chase & Co, Yearend 2013



Sources: Bankscope (majority-owned subsidiaries), National Information Center/Federal Reserve, corporate 10-K SEC filing for 2013.

G-SIBs should meet higher global standards

- ✓ U.S. disclosure standards should be improved, but the rest of the world is far behind even current US standards
 - Only the U.S. requires any disclosure of information in living wills
 - The identification of G-SIBs is an international undertaking and so transparency should be enhanced across jurisdictions
- ✓ FSB has responsibility for designating G-SIBs
 - Should be collecting this information for its own purposes
 - Better disclosure consistent with mission to set global standards and enhance market discipline
 - Should take the lead in harmonizing definitions, ensuring consistent reporting across G-SIBs
 - Should make the data publicly available in easily researchable form via the web
 - At a minimum should monitor and report on compliance with best practices in disclosure

*These results are based on a preliminary draft of a report by
Jacopo Carmassi and Richard Herring,*

Improving Resolvability of Systemically Important Banks:

Mapping Corporate Structures and Exploring "Subsidiarization" as a Regulatory Tool to Preserve Financial Stability and Reduce Systemic Risk*

*Support for this project was provided by the Systemic Risk Council, an independent and non-partisan council formed by CFA Institute and The Pew Charitable Trusts to monitor and encourage regulatory reform of US capital markets focused on systemic risk. The views expressed should be attributed solely to the authors and do not necessarily reflect the views of the Systemic Risk Council, its members, or the supporting organizations. The authors are very grateful to a number of experts in the private and public sector who generously shared their insights with them.