Our Existing Regulatory Structure Can and Should be Used Better

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Start with the largest entities
… and follow the activities and exposures into the “shadows”
Financial Footprint, Dec 31, 2016
Top 50 Holding Companies by Footprint Size

Source: Thomas Hoenig, speech, Feb 2018. Y-9C, Y-15 & Call Report 12/31/2016 data includes all BHC, FHC, SLHC and Intermediate HC reporting a Y-9C. Due to differences in data availability, analysis does not include SLHCs that did not report a sufficient amount of the item captured in this analysis. For SLHCs included in the Top 50, some items may be understated due to varying data availability. The analysis excluded Y-9C filers that are not the top filing holding company within a holding company structure. “Assets” indicates all on-balance sheet assets. “Trading Liabilities (excl derivatives)” indicates on-balance sheet trading liabilities less trading derivatives with a negative fair value. “Derivative Liabilities” means trading derivatives with a negative fair value plus notional amount of all credit, equity and commodity derivatives. “Commitments” means unused commitments, letters of credit and guarantees. “Controlled Assets” means all managed and non-managed fiduciary assets. “Entrusted Assets” means all assets held as custody and safekeeping. Note: Holding Companies with an asterisk by their name indicate that the Holding Company is not within the Top 50. Note: Amounts in trillions. "Top 50 holding Companies" each have greater Total Consolidated Assets than any other Holding Company.

Financial Footprint in Context
Top 50 Holding Companies by Footprint Size Compared with All Other Holding Companies and U.S. GDP

Source: Thomas Hoenig speech, Feb 2018. Y-9C, Y-15 & Call Report 12/31/2016 data includes all BHC, FHC, SLHC and Intermediate HC reporting a Y-9C. Due to differences in data availability, analysis does not include SLHCs that did not report a sufficient amount of the item captured in this analysis. For SLHCs included in the Top 50, some items may be understated due to varying data availability. The analysis excluded Y-9C filers that are not the top filing holding company within a holding company structure. “Assets” indicates all on-balance sheet assets. “Trading Liabilities (excl derivatives)” indicates on-balance sheet trading liabilities less trading derivatives with a negative fair value. “Derivative Liabilities” means trading derivatives with a negative fair value plus notional amount of all credit, equity and commodity derivatives. “Commitments” means unused commitments, letters of credit and guarantees. “Controlled Assets” means all managed and non-managed fiduciary assets. “Entrusted Assets” means all assets held as custody and safekeeping. Note: Holding Companies with an asterisk by their name indicate that the Holding Company is not within the Top 50. Note: Amounts in trillions. "Top 50 holding Companies" each have greater Total Consolidated Assets than any other Holding Company.
Complex Structures of Global Systemic Banks (G-SIBs)

Subsidiaries for which the G-SIB is the ultimate owner with a minimum control path of 50.01% in each piece of the control chain. Source: Bankscope data, Carmassi, J. and R.J. Herring (2015), “Corporate Structures, Transparency and Resolvability of Global Systemically Important Banks.”

Bank of America Simplified Structure (June 2014)
Bank of America Corporation: Select Major Subsidiaries,

Subsidiaries for which the G-SIB is the ultimate owner with a minimum control path of 50.01% in each piece of the control chain. Source: Bankscope data, Carmassi, J. and R.J. Herring (2015), “Corporate Structures, Transparency and Resolvability of Global Systemically Important Banks.”

*This chart includes only select major operating subsidiaries and associated material holding companies of Bank of America Corporation. Not all subsidiaries of Bank of America are represented.

*Reflects a majority-owned subsidiary.

Subsidiaries for which the G-SIB is the ultimate owner with a minimum control path of 50.01% in each piece of the control chain. Source: Bankscope data, Carmassi, J. and R.J. Herring (2015), “Corporate Structures, Transparency and Resolvability of Global Systemically Important Banks.”
SIFI Resolution: Realistic? Smooth? (Exposures Notional in billion $)

Geographic diversification: Citigroup (Dec. 2013)
“Too Big To Fail remains with us.”

Tom Hoenig
(FDIC Vice Chair, 11/2012-4/1018)
February 2018

What do G-SIB Do?
Breakdown of majority-owned subsidiaries, 2013

* Majority-owned subsidiaries. Total does not sum up to 100% because of rounding. “Other financial subsidiaries” include, among other entities, hedge funds, private equity and venture capital subsidiaries. ‘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 (wholesalers, retailers, commodity brokers, etc.). We have allocated foundations and research institutes to this category as well.

The US System

Financial “Innovations” (aka Regulatory Arbitrage)

If out of favor (or regulated)… … try

- Bank ➤ Money market fund
- Leverage Buyout (LBO) ➤ Private Equity
- Insurance ➤ Swaps
- Special Purpose Vehicle (SPV) ➤ Variable Interest Entity (VIE)
- Collateralized Debt Obligations (CDOs) ➤ Collateralized Loan Obligations (CLOs)
- Securitized Loans ➤ Peer to Peer Lending
- Security ➤ Digital coin, token
Crisis exposed large regulatory gaps

Existing regulatory structure give sufficient authority to address them, yet gaps persist…

Lessons not learned? Lack of political will?

In “Normal Times”

- Regulated Bank
  - Assets
  - Insured Deposits

- Bank Holding Company

- Shadow Bank Vehicle Sponsored by Bank Holding Company
  - Assets
  - Uninsured Deposit-like Claims
In “Troubled Times”

Regulated Bank

- Assets
- Insured Deposits

Assets taken Back on Balance sheet

New Insured Deposits

Bank Holding Company

Shadow Bank Vehicle Sponsored by Bank Holding Company

- Assets
- Uninsured Deposit-like Claims

Money Market Funds: Invisible Shadows?

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Barclays Funding 1992-2007

Hyun Song Shin, “Global Banking Glut and Loan Risk Premium,” IMF Annual Research Conference, November 10-11, 2011; Figure 22.

“Goldman's Share of AIG Bailout Money Draws Fire”
Reuters, March 17, 2009
Notional Derivatives Exposures (OCC, 2017)
4 Institutions (JPM, BoA, Citi, Goldman) dominate

*Insured U.S. Commercial Banks and Savings Associations*

<table>
<thead>
<tr>
<th>Category</th>
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<th>All Other Banks</th>
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Where is Credit Rating Agency Reform?
Fear of “Shadow Banking” is an Excuse

Crisis exposed ineffective enforcement.
+ Rules are meaningless unless enforced properly.

Enforcement challenge is invalid argument against regulation:
+ Allow robbery if robbers go to dark alleys?

Regulators have sufficient authority to trace risk

FSOC and Regulators can do better

Example: Leveraged Loans
"Watchdogs Can’t Handle Wall Street’s Riskiest Loans
Jesse Hamilton, Craig Torres and Sally Bakewell, Bloomberg News, September 27, 2018

Regulators appointed by President Trump don’t seem focused on slowing things down...
If there’s a part of the government that could take away the punch bowl, it might be the Financial Stability Oversight Council...
Yellen: “Dodd Frank did not go far enough to give regulators power to deal with this.”

Many regulatory tools, not enough political will to use them.
“Banks and private Markets: Making Fresh Connections”
Paul J. Davies, *Wall Street Journal*, August 8, 2018

“We don’t know how much will wash back onto their balance sheets next time the music stops.”

“Banks have been increasing exposures to [private equity and private credit] in indirect ways that are hard to track. There are potential risks to financial stability here, we just don’t know how serious….

Non-banks took market share from the big banks, but almost all of the extra loan-arranging non-banks did was funded by borrowing from those big banks.”