

"The Changing Financial Footprint and Its Effects on Competition and Banking" - Remarks by FDIC Vice Chairman Thomas M. Hoenig delivered to the Western Independent Bankers Directors Conference in San Francisco, CA

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The economics profession often cites Adam Smith's *The Wealth of Nations*, written in 1776, as the inception of modern economics. In it, he introduced the concept of the "invisible hand," which held that the free interaction of individuals within a market system enables a nation to achieve its greatest wealth. This is a fundamental and profound tenet of capitalism and one that I strongly support.

Adam Smith, however, spoke about much more than the invisible hand. He knew the nature of the players in the market and cautioned against market abuses, which he said were too often aided by governments. He spoke of the dealers' constant effort to narrow the market and restrict competition, and he emphasized the inevitable negative effect these actions would have on the public.¹

The United States, from the free banking period of the 19th century to well into the 20th century, fostered a highly decentralized and mostly competitive banking and financial industry. During this period banks failed and individuals suffered losses, but, importantly, the economy recovered and remained dynamic. Through this dynamism, the United States became the leading economy in the world. As recently as the 1980s there were more than 15,000 U.S. banks, and there seemed to be at least one operating within nearly every market in the country. These banks served large and small businesses, as well as a broad cross section of the public.

In recent decades, however, the U.S. banking industry has become increasingly concentrated, and the largest banks have become far more economically and politically powerful. Only time will tell how this will play out, but the implications on broad economic growth and sustainability are sure to be profound. What is already clear is that Adam Smith's admonition regarding the narrowing of the market, made more than 200 years ago, has never been more relevant than it is today with regard to the U.S. banking industry.

Chart 1 shows the trend in bank asset concentration within the United States since 1984. The chart also contrasts this trend among different groups of banks: Global Systemically Important Banks (G-SIBs), non G-SIBs with more than \$50 billion in assets, regional banks with \$10 to \$50 billion in assets, and smaller community banks with less than \$10 billion in assets. Notably, at the start of the period, the largest banks controlled 15 percent of total industry assets, while

¹ Adam Smith, *An Inquiry Into the Nature and Causes of The Wealth of Nations*, Book I, Chapter XI, March 9, 1776.

regional and community banks controlled the remaining 85 percent. The industry was decentralized, highly competitive, and as theory would have it, highly motivated to serve business and consumers well.

Since 1984, however, the distribution of assets has changed dramatically. Today, the eight U.S. G-SIBs control 50 percent of industry assets. In contrast, the largest 41 regional commercial banks that are non G-SIBs and that have assets of more than \$50 billion control only about 20 percent of industry assets, while the remaining more than 5,700 U.S. commercial banks combined hold less than 30 percent of total industry assets.

Chart 2 and Chart 3 contrast the financial footprint of the eight G-SIBs (including their trading, derivatives, trust assets and safe keeping arrangements) with all banks in the United States. These charts show the full scope and financial dominance of a handful of banks that each control assets that are multiples of U.S. GDP. All but two of the universal banks at the top of Chart 2 are G-SIBs. The top four each have individual footprints exceeding U.S. GDP of \$18 trillion.

Such concentration of assets reflects a striking change in industry structure. The full effect on the economy of this concentration of financial power and the continuing trend toward consolidation is yet to be fully determined. However, it raises important questions regarding the long-term implications.

The causes of the trend toward concentration are many. Some are natural changes in market conditions. Others reflect an uneven playing field, often facilitated by government actions, which raises the question of whether such actions should be questioned and modified. Among the natural influences are technological advancements that reduce transaction costs and encourage scale of operations. Such advances naturally spur mergers. Technology also enables vast improvements in communications across greater distances and makes the management of sprawling operations less costly. While these factors are certainly among the forces driving consolidation, they fail to explain all the changes that have occurred in the banking industry and the dramatic increase in size and power of the largest firms today. Studies show, for example, that economies of scale for banks run their course long before banks reach \$100 billion of assets, far below the trillions of dollars of assets that the G-SIBs control.

Beyond these more organic influences, therefore, I want to take the next few minutes to outline some of the specific government-related factors that contribute substantially to the consolidation of banking and finance, and consider the consequences of these largest firms becoming an ever-more powerful force within the economy. Such factors include, for example, the subsidy of too-big-and-too-complex-to-fail that gives disproportionate funding and capital advantages to the largest, most systemically important banks. They also include long periods of abnormally low interest rates, as well as anti-trust tools developed in an earlier period and for a different market and market structure. Today, regional commercial banks even more so than smaller community banks are in danger of disappearing as the advantages of size and

complexity encourage consolidation, narrow competition, and may serve businesses and consumers poorly.

Government Subsidy and the Funding Advantage

Capitalism works best when both exit and entry are permitted. However, given the banking industry's financial footprint today and its implication for stability, a presumption exists that certain of the largest firms — G-SIBs — cannot be allowed to exit the economy through failure. This presumption was aptly demonstrated during the 2008 crisis. It was abundantly clear that had the market ruled, some of the largest banking firms would have failed. Most likely, other banks would have filled the void over time, keeping the industry fresh and more efficient; but the transition costs would have been enormous. Instead, the G-SIBs were kept in place and remain dominant.

Despite provisions under the Dodd-Frank Act to assure an orderly resolution should a G-SIB become insolvent or experience a run on its liabilities, the financial footprints of the largest firms are so expansive, as Chart 2 illustrates, it is unlikely governments could stand by and do nothing. At some point they would assure continuity of operations for the largest systemically important banking firms. The gross amount of assets under their corporate organization is multiples of U.S. GDP and could not safely be made subject to the bankruptcy process. The market understands this and prices its effect accordingly.

One dimension of this pricing effect on the relative cost of capital of the G-SIBs compared to the rest of the industry is illustrated in [Table 1](#). The G-SIBs hold on average more than 200 basis points less tangible capital. Their tangible equity-to-assets ratio is 6.6 percent. The largest regional banks hold on average 8.7 percent.

An analogy of this competitive advantage would be if the airline industry were subsidized in such a way that a handful of carriers received a 25 percent fuel subsidy, while the fuel cost supports for all the other airlines was significantly smaller. Over time we can be confident which airlines would dominate that industry. In the banking industry, G-SIBs receive a government-backed “fuel subsidy” in the form of a cost-of-capital advantage because the market perceives them as too-big-to-fail. That advantage overwhelms the benefits stemming from the financial safety net that their smaller, regional and less economically influential commercial bank counterparts receive. Since the way to achieving this advantage is size and complexity, it encourages consolidation.

Low Interest Rates

For most of the past three decades monetary policy has been accommodative or highly accommodative, with its policy rate systematically below the long-term growth rate of GDP, as shown in [Chart 4](#). A case can be made that low nominal interest rates facilitate the consolidation of industries. Borrowing to acquire a competitor is more likely to be successful when the cost of debt is low. Rather than invest in new capacity or means of production, it is

better to borrow at low rates and acquire other firms, thus, achieving a dominant influence over product capacity and price.

Market Power and Anti-Trust

As recently as 1984, banking firms equivalent to today's G-SIBs owned 14 banks and held less than 10 percent of industry assets. Today's G-SIBs own 20 banks and control 50 percent of industry assets. These are notable increases in concentration and reflect a trend toward ever-greater levels of resource concentration.

While the structure of the industry has changed, methods to evaluate the effects of mergers and consolidations on competition remain rooted in a different time. Traditionally, bank mergers are judged on a local market basis and around control of demand deposits. Limited analysis exists about the effects of consolidation on lending in local markets or the effects of resource concentration on market structure and pricing behavior more broadly. There also has been little analysis of the effects of too-big-to-fail on resource concentration, market power and industry competition, or its long-run effects on the U.S. market system. As a result, there has been limited restraint on bank consolidations over the past two decades.²

Available evidence suggests that this trend has consequences to the economy. Where larger banks acquire smaller regional or community banks, loans to small business decline.^{3, 4} Although the results are not conclusive, research suggests that increased concentration in developed economies is associated with slower growth rates in GDP.⁵

These effects may be as responsible as regulatory burden in influencing the availability of credit. Theory tells us that as oligopolies and monopolies increase their influence, industry capacity and competition generally decline while market prices and profits increase. If the market structure of banking in the United States is evolving toward that of an oligopoly, then concentration is as important as regulatory burden in its effects on growth and its influence on the availability of credit.

Market structure matters in the successful deployment of economic resources. We should be thoughtful in judging the evolution of the U.S. banking industry structure from that of a highly

² There are limits on total retail deposits held by a bank but new source of funds using repurchase agreements has moderated the effects these limits have on bank size or influence.

³ Berger, Allen N., Anthony Saunders, Joseph M. Saline, and Gregory F. Dell. "The effects of bank mergers and acquisitions on small business lending." *Journal of Financial Economics*, 50, no. 2 (1998): 187-229.

⁴ Kolari, James W., and Afghan Zardkoohi. "The impact of structural change in the banking industry on small business lending." US Small Business Administration, Office of Advocacy, 1997.

⁵ Diallo, Boubacar, and Wilfred Koch. "Bank Concentration and Schumpeterian Growth: Theory and International Evidence." *Review of Economics and Statistics* (2017). "Finance, investment, and growth." *Journal of Financial Economics* 69.1 (2003): 191-226.

decentralized system to one that emulates those countries and regions where concentrated economic power and government control is preferred and economic dynamism is lost.

The Unintended Consequences of Regulatory Policy

While the factors I just discussed — the inherent subsidy of too-big-to-fail, below-market capital requirements, abnormally low interest rates, and the obsolescence of anti-trust analysis — are changing the competitive landscape for banking, other recent banking policies may also be unintentionally encouraging consolidation.

A recent example is the requirement of Total Loss-Absorbing Capacity, or TLAC. Under this rule a broad base of banking firms must hold certain levels of long-term debt that is meant to absorb losses should a bank fail. Its intention is laudable: to improve the resolvability of banking firms and to assure that, should they fail, they can be resolved without turning to the taxpayer for help. To meet this goal, however, some regional and less leveraged large banks must add debt to their balance sheets.

Regardless of its purpose, the effect of TLAC, in some instances, is to force banks into a different business model, away from core commercial banking portfolios and toward greater reliance on trading activities for income. This may have the further effect of encouraging acquisitions to build needed capacity and scale to manage and service the increased leverage. The very banks we want to see continue in the business of making loans are being forced to change their business model from commercial banking to universal banking, which on balance may not facilitate economic growth.

Regulatory Reform and the Financial Footprint

The diversity of business models in the U.S. banking industry has served the U.S. economy well. The unique attributes of different financial firms are not tied to their size but to their varying financial activities. Therefore I have long advocated that regulatory oversight of the industry should center on activities, not asset size.

Fundamentally, two groups of banks operate in the United States: commercial banks and universal banks. Universal banks engage in commercial banking as well as a significant amount of trading through their investment banking, broker-dealer, fiduciary and global custody operations. Commercial banks, even the largest among them, generally confine their activities to the commercial banking business model and have dramatically smaller financial footprints. Also, consider the significant difference in the amount of trading between U.S. G-SIBs — or universal banks — and the largest commercial banks. G-SIBs have trading activities measuring 20.7 percent on average, while trading activities comprise only 1.3 percent of assets on average of the largest regional commercial banks. The large non-G-SIB regional commercial banks that do trade or have derivatives mainly do so to accommodate their existing loan customers or hedge their own risks, while the G-SIBs with their universal bank models are typically global market makers dealing in a cadre of financial contracts, many that are complex and opaque.

Some of these G-SIBs on a standalone basis have trading activities equal to 40 percent or more of total assets.

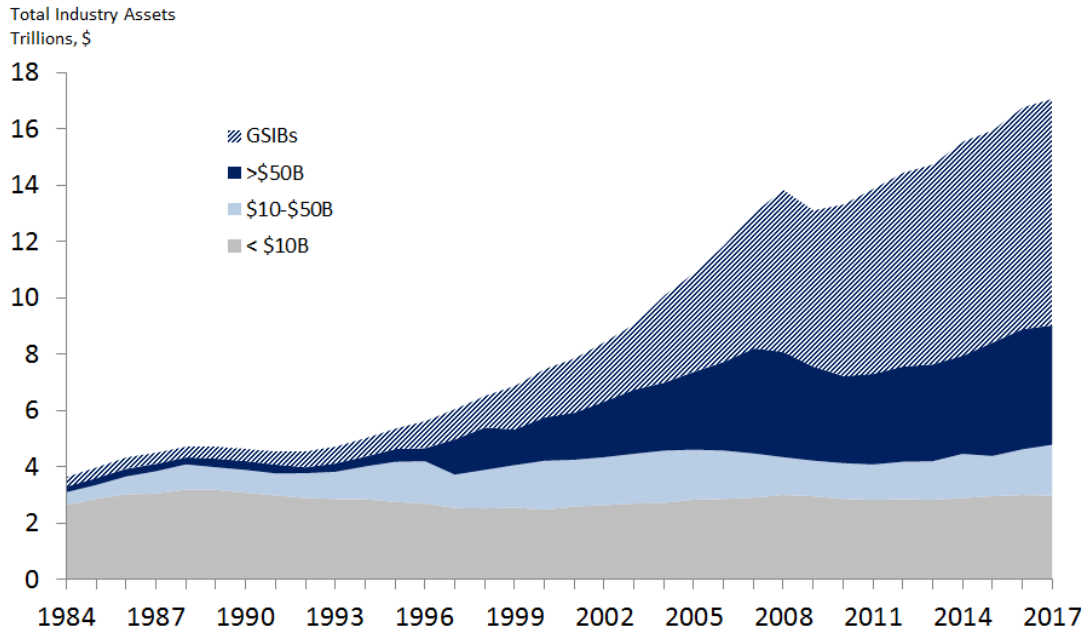
Many of the Dodd-Frank regulations and enhanced prudential standards were rightly established to constrain the impact of universal banking on the public safety net and to address the too-big-and-too-complex-to-fail concerns that the U.S. G-SIBs pose. However, because the remainder of the industry — with its simpler commercial bank business model — holds less than 10 percent of its assets in trading activities and maintains higher levels of tangible capital of approximately 8 percent, it is less of a systemic threat. The differences between universal and commercial banks are real and should not be ignored when calibrating an appropriate regulatory regime. They call for an approach that focuses on the business model, not size, thereby eliminating the need to rely on arbitrary asset size thresholds that become obsolete almost from the time they are established.

Analysis of the industry's financial footprint suggests that regulatory relief should be extended to community and regional banks that are principally engaged in traditional commercial banking activities while universal banks should remain subject to enhanced prudential standards. The data show this can be done effectively by using criteria that measures a bank's engagement in activities outside the commercial bank business model; for example, the degree to which a bank engages in trading, its designation as a G-SIB, and the level of tangible equity it relies on to fund its balance sheet. As a backstop the primary regulator could also have authority to designate a firm as a universal bank in the case it has expanded into non-commercial bank activities to such a degree that there is a need to address systemic risk concerns.

To be sure, the U.S. banking industry needs more than regulatory relief if it is to regain its vigor. Unless the trajectory for consolidation and concentration in the banking system is diverted, the implications for the broader economy are profound. As Adam Smith advised long ago, market structure matters. We must be mindful of seemingly unconnected factors that combine to influence the evolution of the U.S. banking structure from a highly competitive, decentralized system to a concentrated one where dynamism is lost to influence peddling and distortive government intervention.

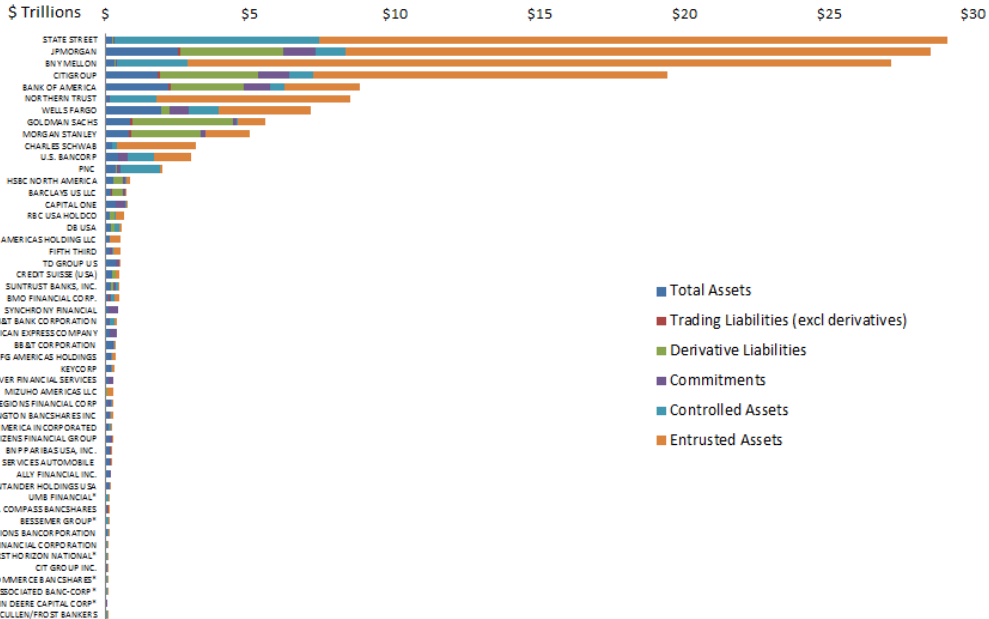
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Chart 1: Bank Asset Concentration 1984-Present



Source: FDIC Call Reports

Chart 2: Financial Footprint Top 50 Holding Companies (by Footprint Size)

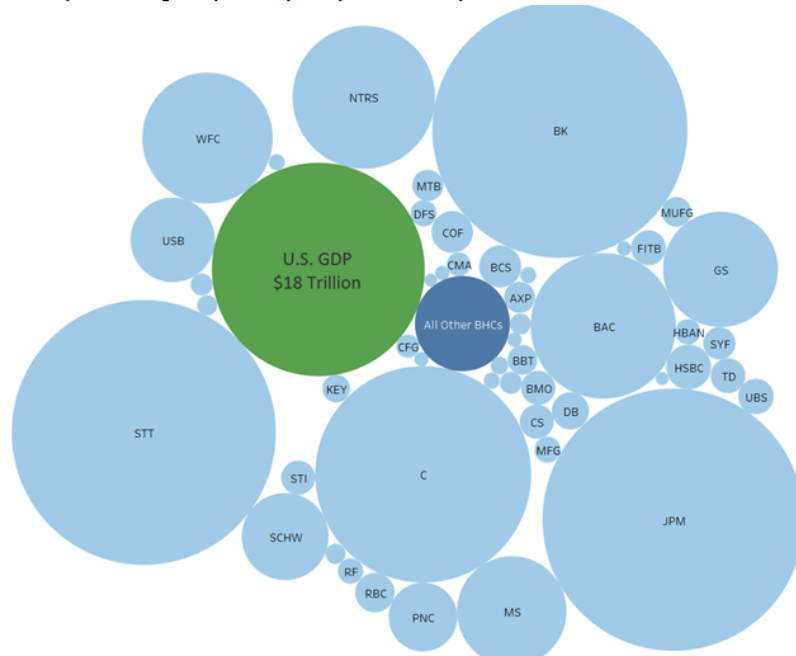


Source: FR Y-9C, FR Y-13 & Call Report 12/31/2016 data. Includes all BHC, FHC, SMC and Intermediate HC reporting a Y-9C. Due to differences in data availability, analysis does not include SMCs that did not report a sufficient amount of the items captured in this analysis. For SMCs included in the Top 50, some items may be understated due to varying data availability. The analysis excludes Y-9C filers that are not the top filing holding company within a holding company structure. *Assets*, *Trading Liabilities (excl derivatives)*, *Derivative Liabilities* and *Commitments* reflect BHC Y-9C data. *Controlled Assets* and *Entrusted Assets* reflects Call Report data for (i)(6) and nondeposit trust company(ies) that are part of a given Top 50 Holding Company, except in cases where the holding company files an FR Y-13 (in which case FR Y-13 data is used for *Entrusted Assets*).

Note: Amounts in this chart's Top 50 Holding Companies' represents the largest 50 banking organizations by total financial footprint for the 12/31/2016 period. *Assets* means all on-balance sheet assets. *Trading Liabilities (excl derivatives)* means 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 Holding Companies if measured solely based upon Total Consolidated Assets.

Chart 3: Financial Footprint
Top 50 Holding Companies by Footprint Size Compared with All Other HCs & U.S. GDP

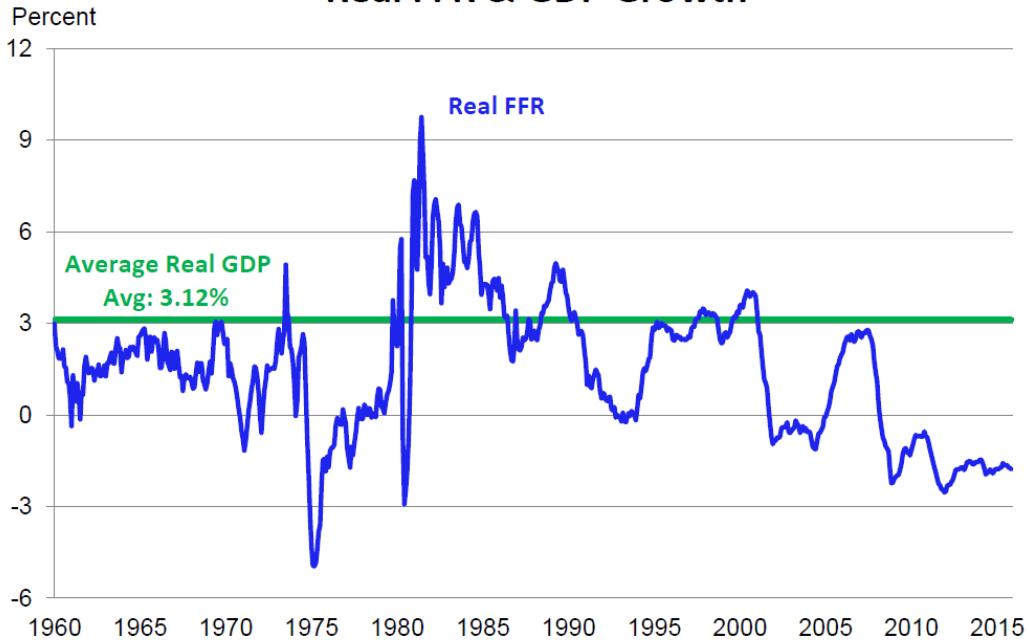


Source: FR Y-9C, FR Y-13 & Call Report 12/31/2016 data. Includes all BHC, FHC, SLMC and Intermediate HC reporting a Y-9C. Due to differences in data availability, analysis does not include SLMCs that did not report a sufficient amount of the items captured in this analysis. For SLMCs included in the Top 50, some items may be understated due to varying data availability. The analysis excludes Y-9C filers that are not the top filing holding company within a holding company structure. "Assets", "Trading Liabilities (excl derivatives)", "Derivative Liabilities" and "Commitments" reflect BHC Y-9C data. "Controlled Assets" and "Entrusted Assets" reflects Call Report data for ID(s) and non-deposit trust company(ies) that are part of a given Top 50 Holding Company, except in cases where the holding company files an FR Y-13 (in which case FR Y-13 data is used for "Entrusted Assets").
 Note: Amounts in trillions. "Top 50 Holding Companies" represents the largest 50 banking organizations by total financial footprint for the 12/31/2016 period. "Assets" means all on-balance sheet assets. "Trading Liabilities (excl derivatives)" means 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.
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Table 1

U.S. Bank Holding Companies by Size: G-SIB & Non G-SIB				
(6/30/2017; in billions; weighted averages; U.S. GAAP assets)				
BHCs by Size	Total Assets	Total Trading Assets and Liabilities	Trading / Assets	GCI Tangible Equity Ratio (payment netting)
U.S. G-SIBs	\$10,955	\$2,271	20.70%	6.62%
Ten Largest (non G-SIBs)	\$2,310	\$29	1.30%	8.72%
Ten Largest (non G-SIBs <\$50bn)	\$366	\$3	0.90%	8.79%

Real FFR & GDP Growth



Source: Federal Reserve, Bureau of Labor Statistics (Moody's); Bureau of Economic Analysis (Haver).

Thomas M. Hoenig is the Vice Chairman of the FDIC and the former President of the Federal Reserve Bank of Kansas City. His material can be found at <http://www.fdic.gov/about/learn/board/hoenig/>.

The views expressed are those of the speaker and not necessarily those of the FDIC.