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SCALED TO SERVE: THE ROLE OF COMMERCIAL BANKS IN THE U.S. ECONOMY

July 2012

The U.S. banking system is appropriately scaled to support the U.S. economy especially firms with global reach

- Growth of the U.S. banking system is crucial to support U.S. economic growth.
  - Over the past 20 years, U.S. bank assets have grown 261% while the S&P 500 and U.S. exports grew 297% and 293%, respectively.
- The drivers of U.S. economic growth are increasingly global in nature, and U.S. multinational corporations are therefore becoming ever more global.
  - Over the past decade, non-U.S. revenue has increased by 14% as a percentage of total revenue for the Fortune 50.
- U.S. banks with a global footprint are especially important in serving increasingly global U.S. corporations.
  - Yet compared to the banking systems of other developed nations, U.S. banks are relatively less concentrated.
- Large banks provide unique contributions to the U.S. economy, including unique products and services, economies of scale, and the promotion of innovation.

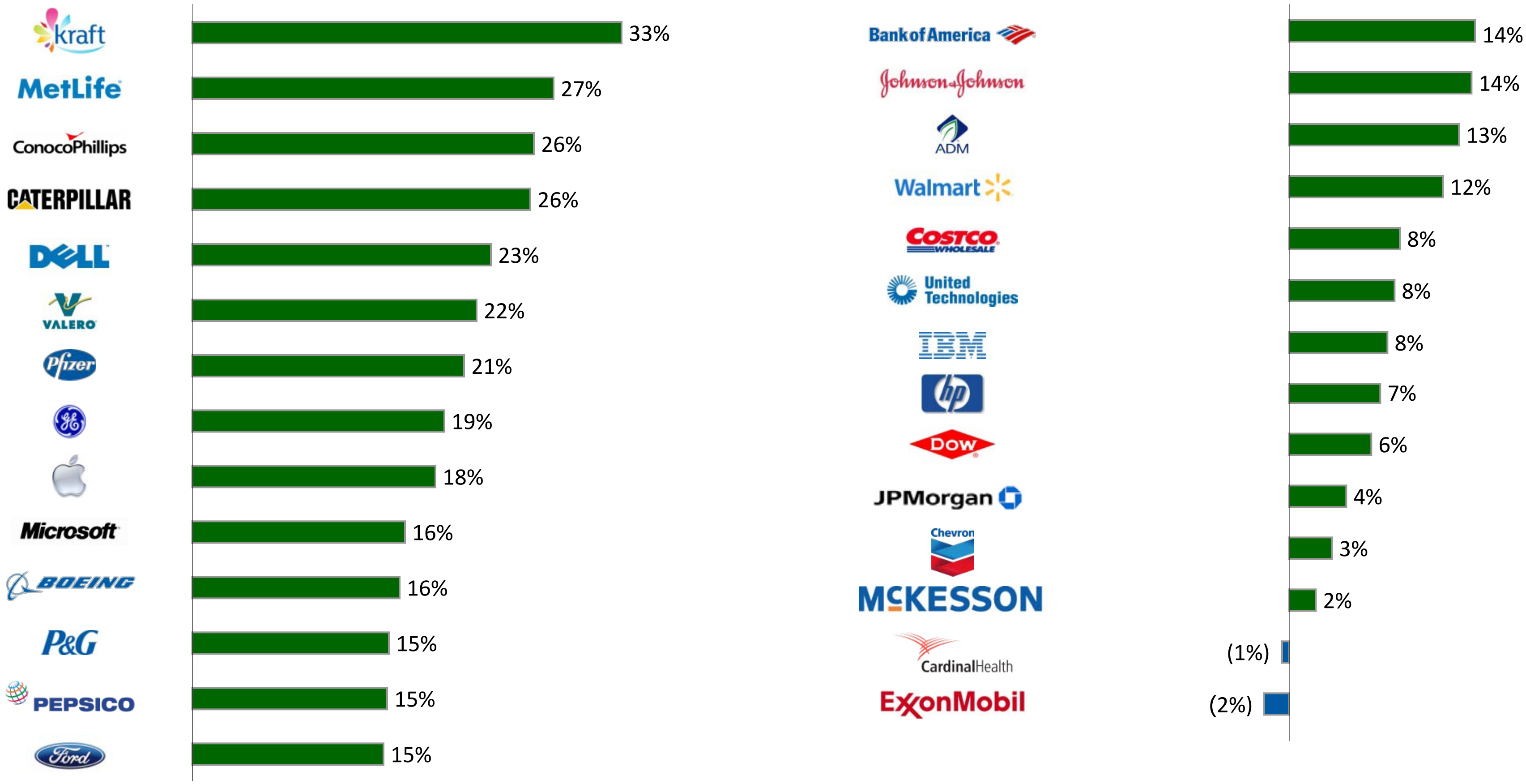
The U.S. banking system is relatively less concentrated than those of other developed countries

- The U.S. banking system is small (117% of GDP) compared to the banking systems in other developed countries such as the UK (373%), Germany (332%), Australia (192%), and Canada (138%).
  - Looking at assets as a percent of GDP basis, the U.S. system is the smallest of the G7 countries similarly sized to that of South Africa, and 51% smaller than China's banking system when compared to GDP.
- The relatively small U.S. banking system is also less concentrated relative to other developed countries.
  - On an asset basis, the top 5 U.S. banks hold 56% of the country's banking assets – the least of the G7 countries.
- The largest U.S. banks are relatively small compared to foreign banks when assets are compared as a percentage of home country GDP.
- The growth in the size of the U.S. financial system has been primarily driven by the growth of less, or even unregulated financial institutions such as mutual funds, REITs, and other alternative vehicles.
  - Over the past 20 years, U.S. banks have maintained a steady asset base while non-bank financial institutions have doubled in size to over 220% of GDP.
  - During this same period, non-bank financial institutions have increased their financial asset holdings to 65% of all U.S. financial assets, while banks have shrunk their holdings to 35%.
- Even in relation to other U.S. industries, the U.S. banking system is significantly less concentrated.
  - On a revenue basis, the top 4 U.S. commercial banks account for 32% of the industry's revenue, while industries such as wireless telecom, auto manufacturing, and petroleum refining are significantly more concentrated at 80%, 71%, and 48% respectively.

U.S. companies and their banking needs are increasingly global in nature

The growth engines of the U.S. economy are becoming ever more global as evidenced by non-U.S. revenue having increased by 14% as a percent of total revenue for the Fortune 50 over the last decade

2000 to 2011 Change in Portion of Sales from Abroad for Fortune 50 Corporations



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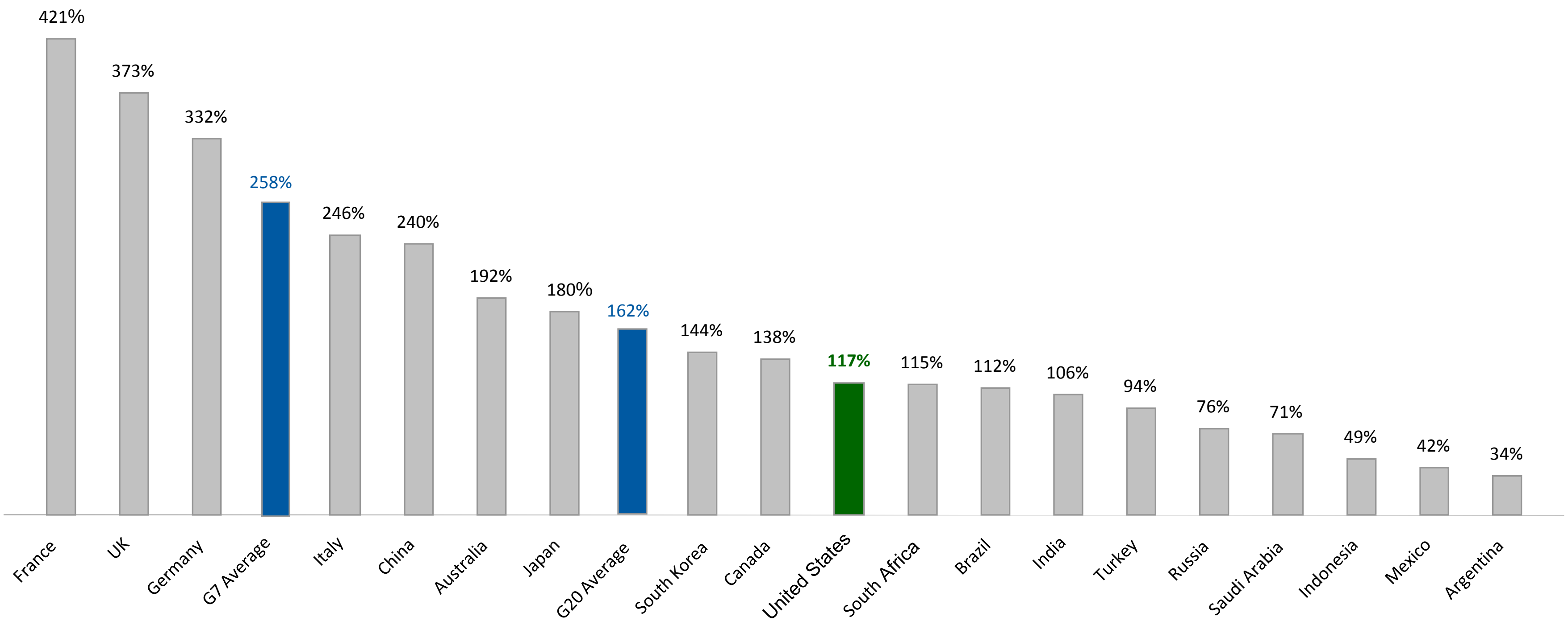
Source: Capital IQ and company filings.

Note: Fortune 50 corporations that derive all sales from the U.S. or do not report geographic segments have been excluded. In cases where a Fortune 50 corporation reports geographic segments, but does not report a U.S. segment, the North America segment is used as a proxy for the U.S. where available.

The U.S. banking system is relatively small compared to those of other developed countries

In relation to the underlying economy it supports, the U.S. banking system is relatively small as compared to the banking systems of other developed countries

Total Banking System Assets as a Percent of GDP by Country (2011)



Source: Bank Indonesia, Bank of Canada, Bank of Japan, Bank of Korea, Board of Governors of the Federal Reserve System, Central Bank of Brazil, Central Bank of Turkey, China Banking Regulatory Commission, Comision Nacional Bancaria y de Valores de Mexico, Company filings, European Central Bank, International Monetary Fund, Reserve Bank of Australia, Reserve Bank of India, South African Reserve Bank, and Swiss National Bank.

Note: Banking system assets generally refers to commercial banks, domestic credit institutions, and savings institutions, though definitions may moderately vary by country.

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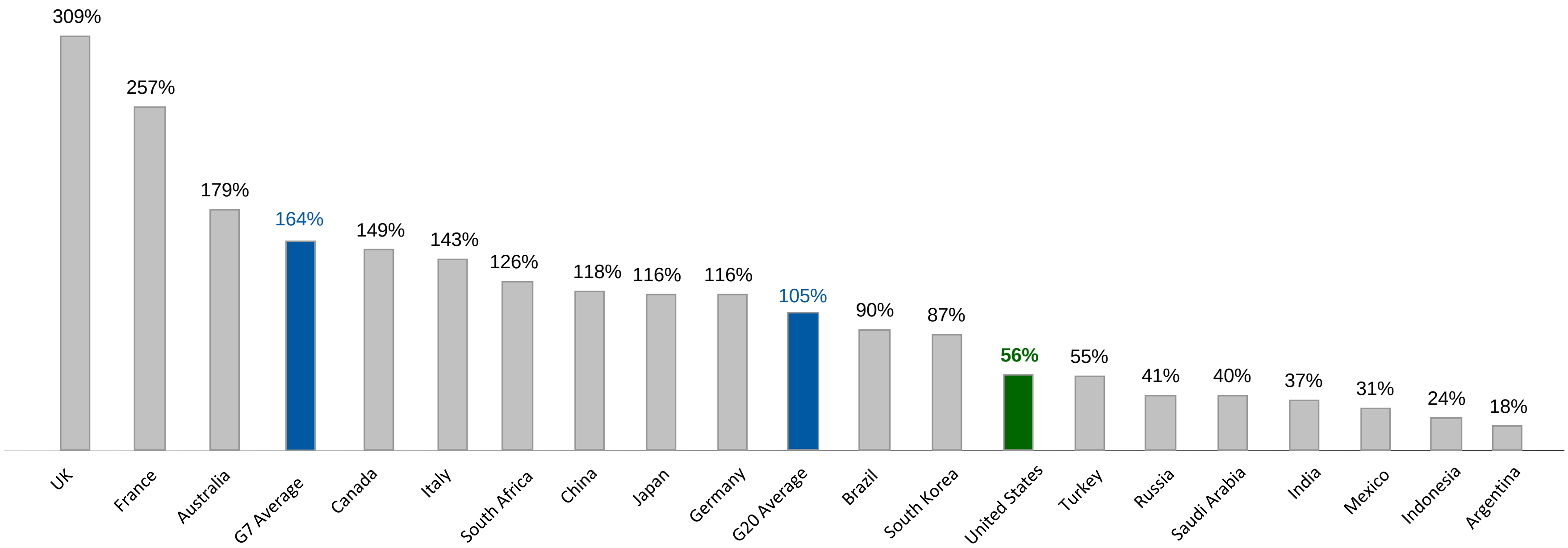
The U.S. banking industry is less concentrated than the banking systems of other countries

By total assets, the five largest U.S. commercial banks are a smaller portion of total GDP than any of the other G7 nations

Top 5 Banks by Assets as a Percent of GDP by Country (2011)



Source: Board of Governors of the Federal Reserve System, Bank of Canada, Bank of Japan, Central Bank of Brazil, Central Bank of India, China Banking Regulatory Commission, European Central Bank, International Monetary Fund, Reserve Bank of Australia, and Swiss National Bank.

Note: Top 5 Bank Asset data is as of the latest available reporting period as of December 31, 2011. Banks presented on a U.S. GAAP basis when available; otherwise, adjusted to exclude IFRS reported derivative assets for an estimated proxy for U.S. GAAP derivative netting rules.

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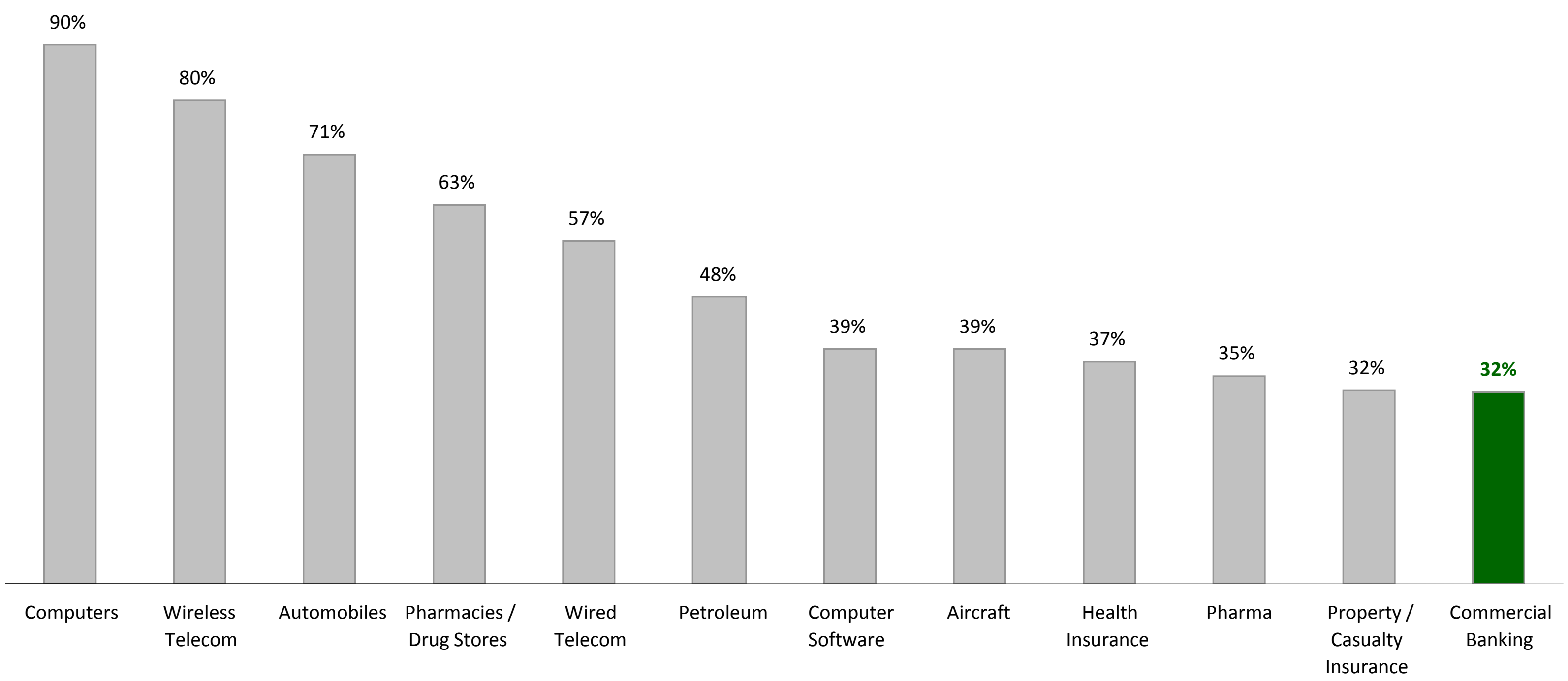
The U.S. banking industry is less concentrated than other U.S. industries

Of the industries that touch American's lives everyday, the commercial banking system is less concentrated than numerous others including insurance providers, automobile manufacturers, and telecom providers

Top 4 U.S. Firm Concentration by Revenue by Industry
(2007)



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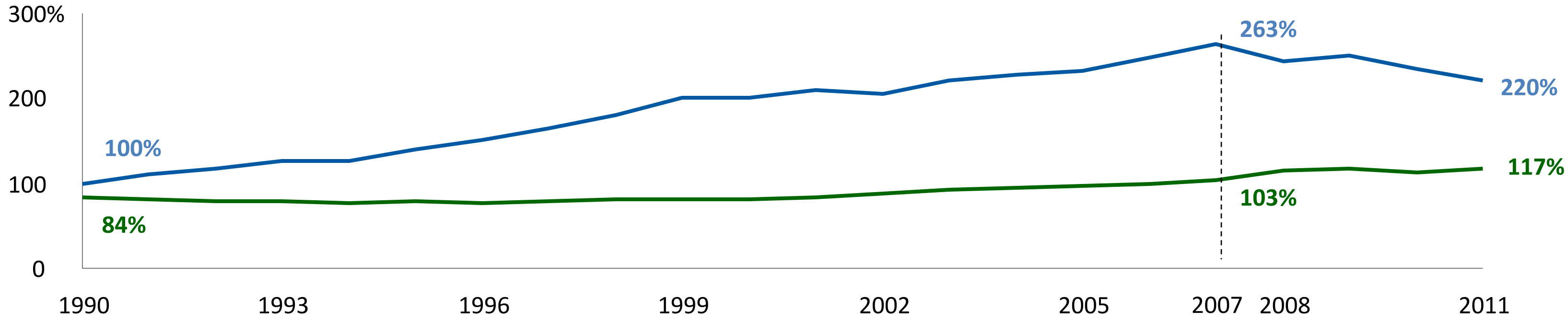
Source: U.S. Census Bureau
Note: Concentration defined as the sales, receipts, or revenue from the top 4 firms as a percent of the total sales, receipts, or revenue within the industry.
U.S. Census Bureau releases industry concentration data every 5 years with 2007 being the most recent release.

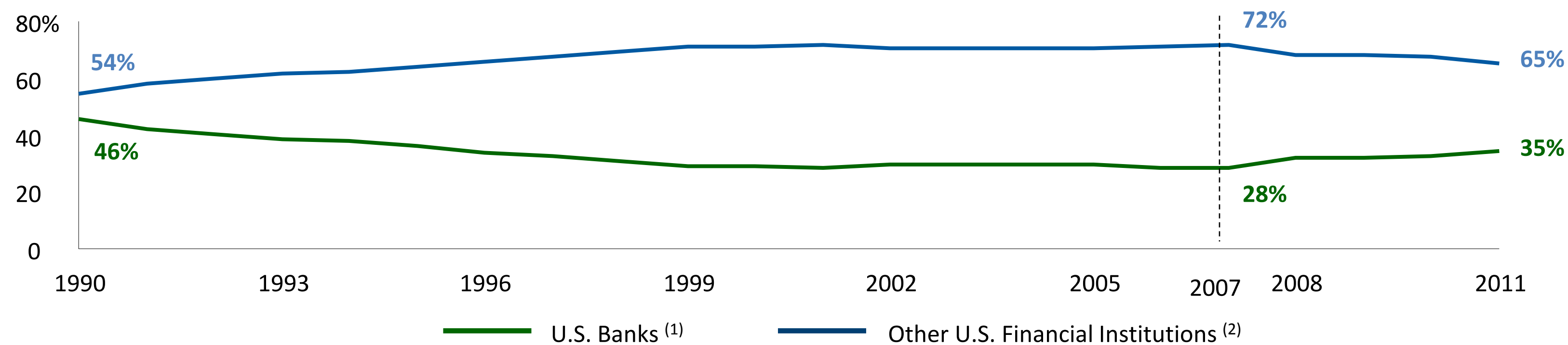
U.S. bank assets comprise around half of financial assets

While the U.S. financial system has grown to over 335% of GDP through the proliferation of mutual funds and other vehicles, the banking system has share of total financial assets has grown less rapidly

U.S. Financial System Assets by Institution Type as a percent of U.S. GDP



U.S. Financial System Assets by Institution Type as a percent of U.S. Financial System Assets



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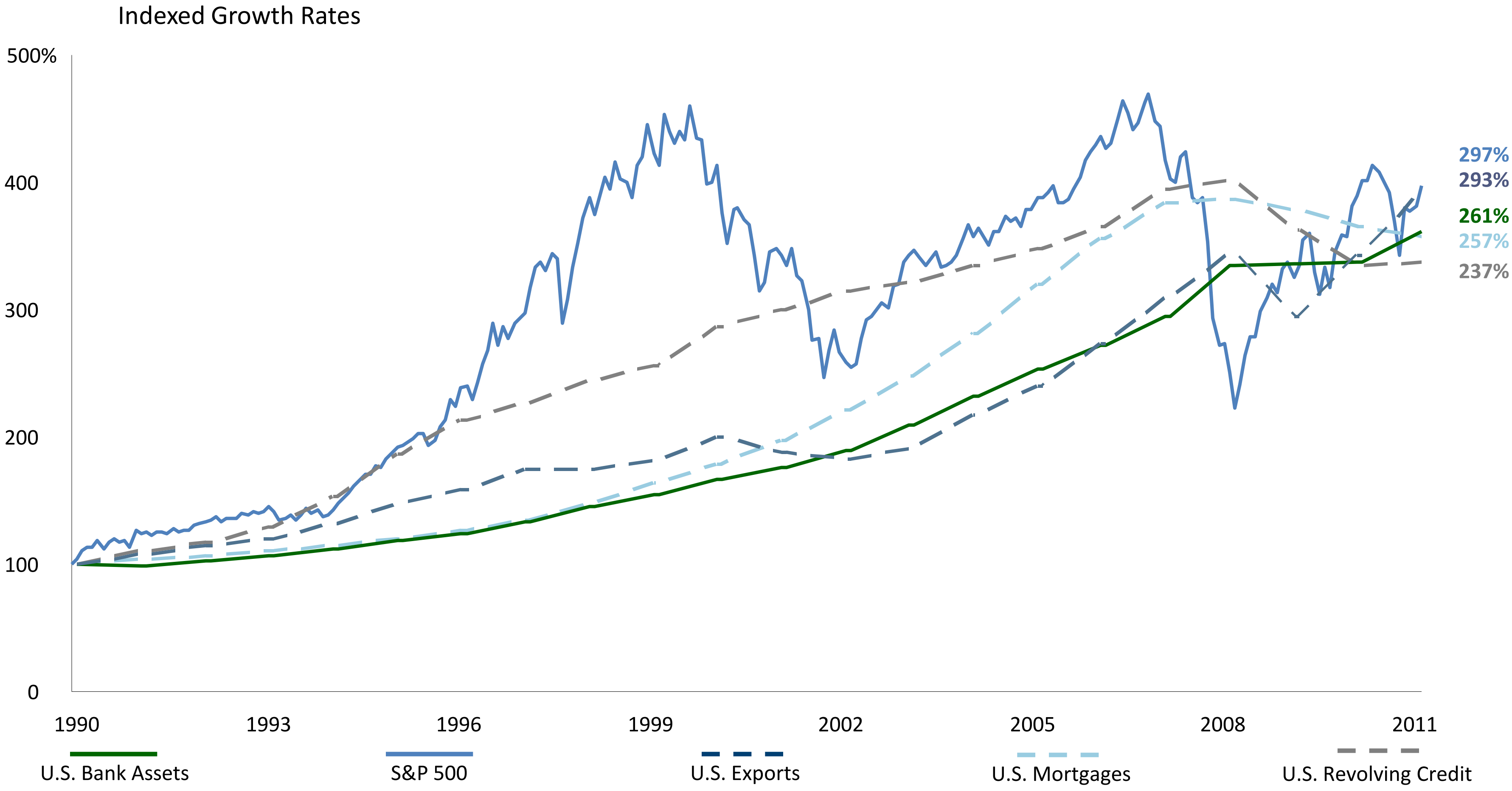
Source: Board of Governors of the Federal Reserve System and International Monetary Fund.
(1) U.S. Banks include Commercial Banks, Savings Institutions, and Credit Unions.
(2) Other U.S. Financial Institutions include Insurance Companies, Securities Institutions (Mutual Funds, Money Market Funds, etc.), Agency and GSE Related, and Other (REITs, Finance Companies, etc.).

The size of the U.S. banking system is a natural function of the size and growth of the real economy

The size of the U.S. banking system has always supported the growth expectations of the U.S. economy, and U.S. banks often finds themselves conservatively playing catch up to the realized growth



Source: Bloomberg, Board of Governors of the Federal Reserve System, and the United States Census Bureau.
Note: U.S. Bank Assets include the assets of Commercial Banks, Savings Institutions, and Credit Unions.

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Large banks offer several unique contributions to the U.S. economy

These contributions include unique products and services, economies of scale, and spread of innovation

	Scope of products and services	Economies of scale	Spread of innovation
Benefit	• Products and services that smaller banks cannot provide	• Reduced unit costs from spreading fixed costs	• Scaling innovations which become market-standard
Direct beneficiaries	• Retail Consumers • Companies of all sizes • Money Managers • Governments	• Retail consumers • Companies of all sizes • Money managers • Governments	• All bank customers • Smaller banks
Needed dimensions of size	• Scale of balance sheet • Scope of products • Geographic scope	• Scale in businesses • Scale in geographies	• Scale in businesses • Scale in number of users • Geographic scope and scale

Large banks add value and lend social utility

- Large banks (greater than $50 billion in total assets) provide $50 billion to $110 billion annually in benefits to companies, consumers, and governments.

- Banks larger than $500 billion provide over half of the total benefit amount.

- Large banks provide a broad scope of products and services that smaller institutions do not. These benefits equate to an estimated $15 to $35 billion in annual direct value to customers, including companies of all sizes, retail consumers and governments. Additionally, customers receive greater diversity of products and the added convenience of bundled products by sourcing multiple products from a single large bank.

- Large banks offer economies of scale. They reduce unit costs by spreading fixed expenditures, particularly for infrastructure and technology over a larger customer base. These economies of scale provide an estimated $25 to $45 billion of annual value.

- Large banks spread the majority of banking innovations throughout the industry. The historical contributions of large banks have led to as much as $15 to $30 billion in annual savings, with these benefits particularly benefiting retail customers, as well as the smaller banks that adopt these innovations.

- Large banks have the capacity to acquire larger troubled institutions and thereby limit government bailouts.

The banking system provides the funding needs of U.S. consumers and businesses

U.S. banks are able to meet the funding needs of U.S. consumers and businesses; make markets for those same businesses; and to manage internal liquidity and risk

Common Clients + Common Products + U.S. Needs + Illustrative Share = $1.5 Trillion in Bank Assets

Common Clients	Common Products	U.S. Needs	Illustrative Share
U.S. Consumers	• Direct		• Hold 3.0%
	– Mortgages	– $9.8 trillion	– $295 billion
	– Credit Cards	– $0.8 trillion	– $25 billion
	– Personal Loans	– $1.7 trillion	– $50 billion
U.S. Small Businesses & Multinational Corporations	• Direct		• Hold 3.0%
	– Mortgages	– $3.3 trillion	– $100 billion
	– Short-Term Credit	– $1.3 trillion	– $40 billion
	– Long-Term Credit	– $1.4 trillion	– $43 billion
	• Indirect		• Market in 1.0%
	– Credit Instruments	– $11.7 trillion	– $120 billion
	– Corporate Bonds	– $4.9 trillion	– $50 billion
	– Equities	– $14.3 trillion	– $140 billion
U.S. Governments	• Indirect		• Market in 1.0%
	– Federal Debt	– $10.4 trillion	– $104 billion
	– State / Local Debt	– $3.0 trillion	– $30 billion
	– Agency / GSE Debt	– $7.6 trillion	– $75 billion
U.S. & Foreign Consumers / Businesses / Governments	• Direct – Local Denominated Mortgages – Local Denominated Credit		• Indirect – FX – Rates

=	$1.5 Trillion in Bank Assets	
~$375bn	Consumer Loans	Client-driven funding
~$210bn	Corporate Loans	Client-driven funding
~$210bn	Trading Assets	Client-driven market making
~$175bn	Securities Under Resale Agreements	Client-driven short-term funding / liquidity
~$100bn	Cash	Internal bank liquidity requirements
~$250bn	Investments	Internal bank risk and liquidity management
~$180bn	Other Assets	Internal bank premises, equipment, and goodwill
~$???bn	Foreign Loans and Assets	Foreign client-driven funding and market making

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Source: Board of Governors of the Federal Reserve System and Federal Reserve Bank of New York.

Even the largest U.S. banks are of modest relative size compared to the U.S. economy

Global Peer Banks by Assets

(Dollars in Billions)

Bank	Assets	Home Region
Mitsubishi UFG	$2,487	Developed Asia
Industrial & Construction Bank of China	2,453	Emerging Markets
HSBC	2,430	Western Europe
JP Morgan	2,266	North America
Bank of America	2,129	North America
BNP Paribas	2,078	Western Europe
China Construction Bank	1,946	Emerging Markets
Credit Agricole	1,919	Western Europe
Mizuho	1,900	Developed Asia
Citi	1,874	North America
Bank of China	1,870	Emerging Markets
Agricultural Bank of China	1,851	Emerging Markets
Deutsche Bank	1,834	Western Europe
Sumitomo Mitsui	1,682	Developed Asia
Barclays	1,588	Western Europe
RBS	1,515	Western Europe
Santander	1,489	Western Europe
Lloyds	1,402	Western Europe
BPCE	1,360	Western Europe
Wells Fargo	1,314	North America
Societe Generale	1,280	Western Europe
Unicredit	1,177	Western Europe
UBS	1,065	Western Europe
Credit Suisse	1,065	Western Europe
Goldman Sachs	923	North America
Intesa Sanpaolo	815	Western Europe
BBVA	748	Western Europe
Commerzbank	737	Western Europe
Bank of Communications	731	Emerging Markets
National Australia Bank	721	Developed Asia

Global Peer Banks by Percent of Home Country GDP

Bank	% GDP	Home Region
Credit Suisse	177.0%	Western Europe
UBS	177.0	Western Europe
HSBC	100.5	Western Europe
Santander	99.7	Western Europe
BNP Paribas	80.4	Western Europe
Credit Agricole	74.2	Western Europe
Barclays	65.7	Western Europe
Unicredit	63.7	Western Europe
RBS	62.7	Western Europe
Lloyds	58.0	Western Europe
Deutsche Bank	55.1	Western Europe
BPCE	52.6	Western Europe
BBVA	50.1	Western Europe
Societe Generale	49.5	Western Europe
National Australia Bank	48.4	Developed Asia
Intesa Sanpaolo	44.1	Western Europe
Mitsubishi UFG	41.2	Developed Asia
Industrial & Construction Bank of China	32.8	Emerging Markets
Mizuho	31.4	Developed Asia
Sumitomo Mitsui	27.8	Developed Asia
China Construction Bank	26.0	Emerging Markets
Bank of China	25.0	Emerging Markets
Agricultural Bank of China	24.7	Emerging Markets
Commerzbank	22.2	Western Europe
JP Morgan	15.0	North America
Bank of America	14.1	North America
Citi	12.4	North America
Bank of Communications	9.8	Emerging Markets
Wells Fargo	8.7	North America
Goldman Sachs	6.1	North America

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Source: Capital IQ, Company filings, and International Monetary Fund.

Note: Asset data is as of the latest available reporting period. Banks presented on a US GAAP basis when available; otherwise, adjusted to exclude reported gross derivative assets for an estimated proxy for US GAAP derivative netting rules.

While the U.S. banking system is relatively smaller than other countries, significant steps have been taken to address risk in the financial system

The Regulatory Response

The recent financial crisis highlighted vulnerabilities in the bank regulatory and supervisory framework including structural weaknesses in the financial systems, regulatory gaps, high levels of leverage, and deficiencies in risk management. Signed into law by President Obama in 2012, The Dodd-Frank Wall Street Reform and Consumer Protection Act aimed to curb institutional bad behavior, address theses vulnerabilities and deficiencies, and prevent any recurrence of the events that led to the 2007-2009 financial crisis.

- The Dodd-Frank Act specifically targets the largest banks, or Systemically Important Financial Institutions (SIFIs, institutions with over $50 billion in consolidated assets), whose size and interconnectedness could threaten the entire financial system.

- Regulations to minimize systemic risk include:
  - Enhanced regulatory oversight via a 10-member Financial Stability Oversight Council (FSOC) to monitor firms' stability and the risk they pose to the financial system as a whole. The Dodd-Frank Act also allows FSOC, if necessary, to break up firms that pose immediate threats to the U.S. financial system.
  - More stringent prudential standards (e.g. activity restrictions, higher capital and liquidity requirements, "living wills").
  - The creation of the Orderly Liquidation Authority (OLA) which has the power to place any institution into FDIC receivership to be wound down in a way that would not have serious adverse effects on the financial stability of the U.S.
  - Annual stress-tests of each SIFI to determine whether the institution has the capital necessary to absorb unexpected losses.

- Finally, as part of Dodd-Frank, 2008-style bailouts that simply give money to firms to keep them from going bankrupt are illegal. Thus, the legislation puts an end to Too-Big-To-Fail.

Regulatory reforms are already mitigating systemic risk in the U.S. banking system

Reforms have already and will further reduce the potential for systemic risk in the U.S. banking system through recovery and resolution planning as well as strengthened capital requirements

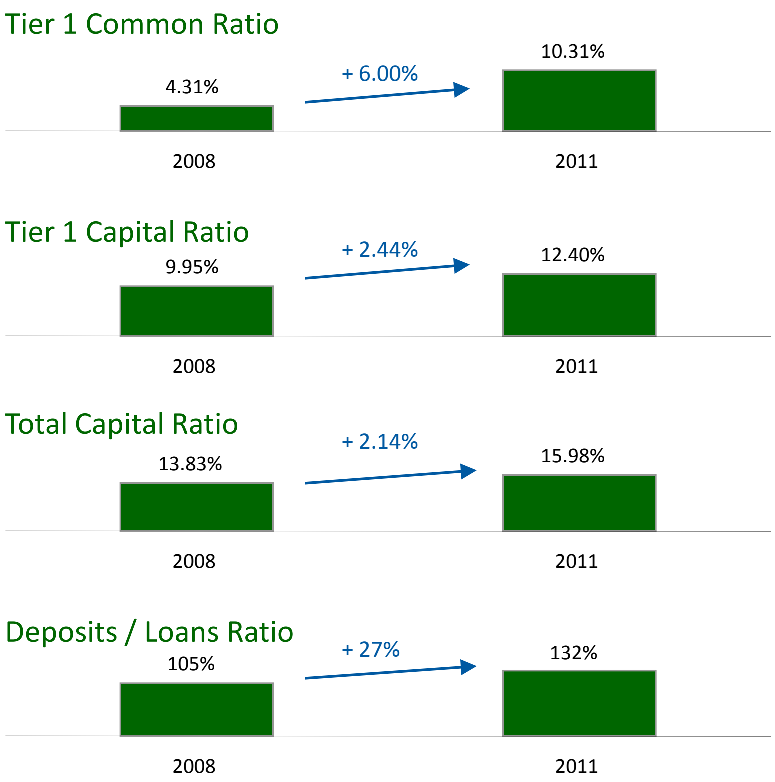
Recovery & Resolution Reforms

- Title I and II of the Dodd Frank Act end Too-Big-To-Fail by creating the plans for resolution today and giving regulators the authority and tools to manage a bank failure with no / limited systemic disruption and no losses to tax payers.
- The FDIC has made considerable progress in developing the capabilities to “close” large banks while maintaining financial stability, replacing bank management, and holding investors in the failed firm accountable.

Capital Reforms

- New capital requirements have, and will continue to, enhanced both the quantity and quality of required capital including higher risk weightings on trading assets as well as higher capital buffers and surcharges for systemically significant firms.
- The Fed’s stress tests are complementary to the new capital requirements as they are designed to ensure that banks are able to withstand adverse economic scenarios .
- With full implementation of Basel III 7% CET1, the U.S. banking industry will double its pre-crisis CET1 capital (TCH capital study).

Top 4 U.S. Banks Average Soundness Ratios *(2008 - 2011)*



Source: Company filings
Note: Top 4 U.S. Banks are by assets and include JP Morgan, Bank of America, Citi, and Wells Fargo.

Conclusion

- Comparing banking assets to GDP ratios across countries, the U.S. banking system is both smaller and less concentrated than other countries.
- Compared to other important U.S. industries, the top 4 commercial banking firms comprise a much smaller portion of the overall industry.
- Large U.S. banks (greater than $50 billion in total assets) provide $50 billion to $110 billion annually in benefits to companies, consumers, and governments.
- Since the recent financial crisis, many significant steps have been taken, and continue to be taken, by regulators to increase the stability of the U.S. banking system.