

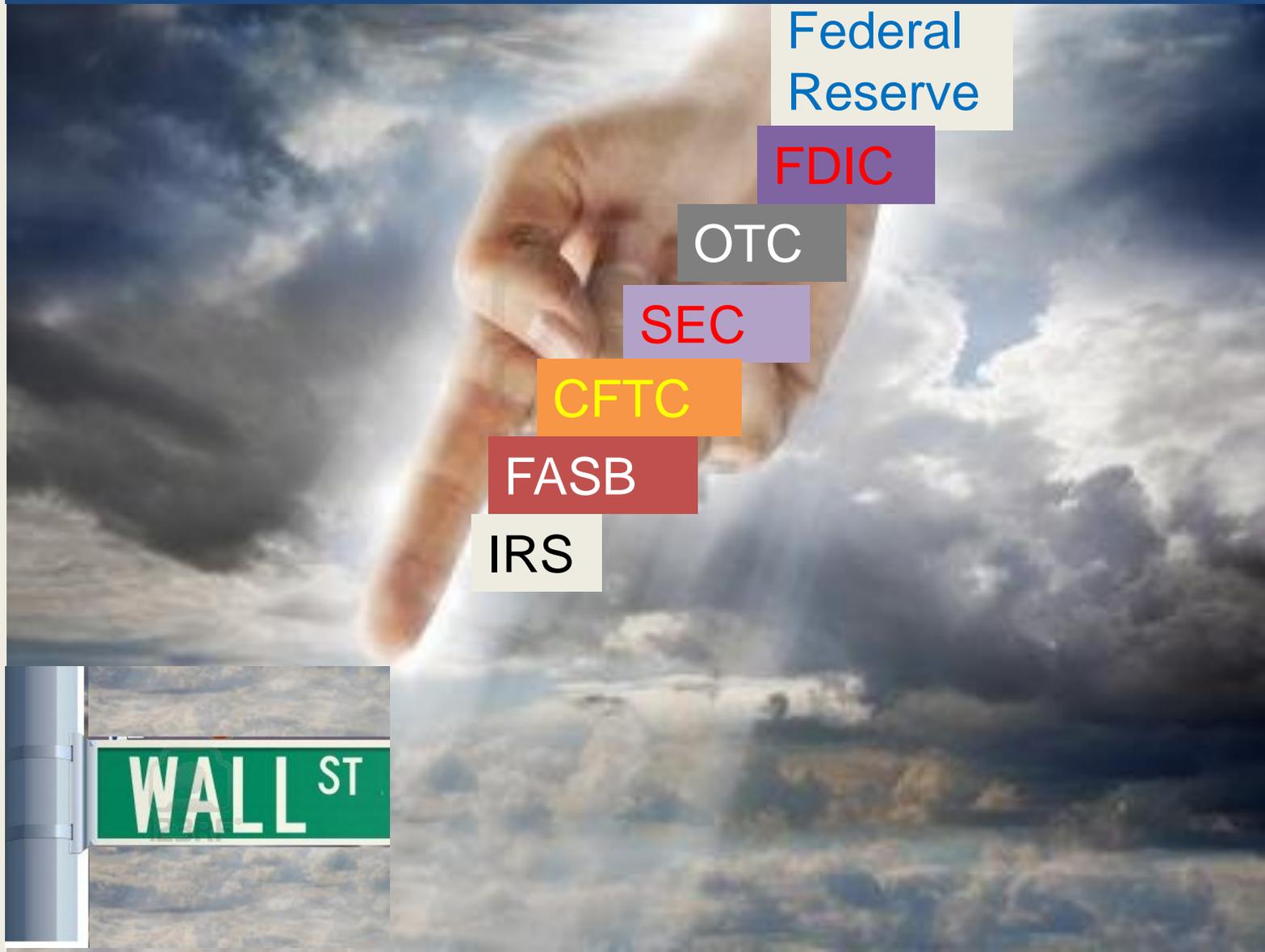
Evaluating the Government as a Source of Systemic Risk

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Outline

- ▶ Introduction
- ▶ Sizing up the Government as a Financial Institution
- ▶ Sources of Systemic Risk from the Government
- ▶ Examples from the Mortgage Market
- ▶ Mitigating the Risks: Data Initiatives and Analyses

Academics have studied government as a regulator of financial institutions



Federal Reserve

FDIC

OTC

SEC

CFTC

FASB

IRS

WALL ST

But relatively little work has been done on the government as major financial institution in its own right...



Introduction

- ▶ **A simple idea:**
 - ▶ Congress created FSOC/OFR to address the concern that policymakers and investors lacked sufficient data to anticipate emerging threats to financial stability or assess how shocks to one financial firm could impact the system as a whole.
 - ▶ Most discussions of how they will carry out that mission focus on private sector institutions.
 - ▶ Yet the U.S. government functions as the world's largest and most interconnected financial institution, and it represents a major source of systemic risk.
 - ▶ Hence it arguably falls under the mandate of the FSOC and OFR to devote resources to monitoring and studying it.

Introduction

- ▶ **Goals of the paper:**
 - ▶ Make the case that the government is a source of systemic risk.
 - ▶ Identify and discuss the major reasons why:
 - ▶ Its size and influence as a financial institution
 - ▶ The incentives created by its rules and regulations
 - ▶ Its lack of transparency
 - ▶ It may have other objectives that conflict with the goal of promoting financial stability
 - ▶ Suggest some specific areas where the OFR could help to mitigate those risks.

Introduction

▶ Caveats:

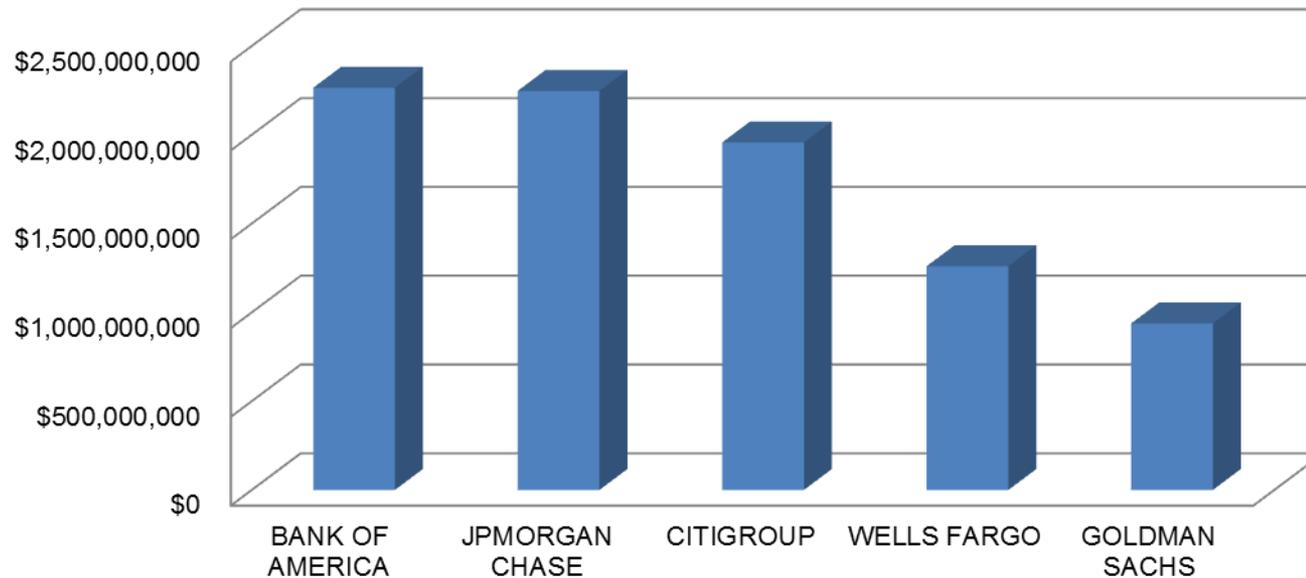
- ▶ Government can also act as an important counterweight to systemic risk
- ▶ The analysis is not comprehensive:
 - ▶ Neglects most regulatory activities, and the risk from fiscal imbalances
 - ▶ Does not rank the sources of risk by importance
 - ▶ Does not compare the magnitudes with risks arising from private-sector activities
 - ▶ A research agenda, not a completed project

Sizing up the government as a financial institution

- ▶ The most basic measure of potential systemic risk is a financial institution's size.
- ▶ Three measures considered:
 - ▶ A narrow measure of the government as a financial institution is the size (asset value of the underlying loans) of its traditional direct lending and loan guarantee programs such as FHA and student loans.
 - ▶ A broader measure also includes Fannie Mae and Freddie Mac
 - ▶ An even broader measure adds to that the Federal Home Loan Banks, the Farm Credit System, the FDIC, the PBGC and some activities of the Federal Reserve System

Largest bank holding companies

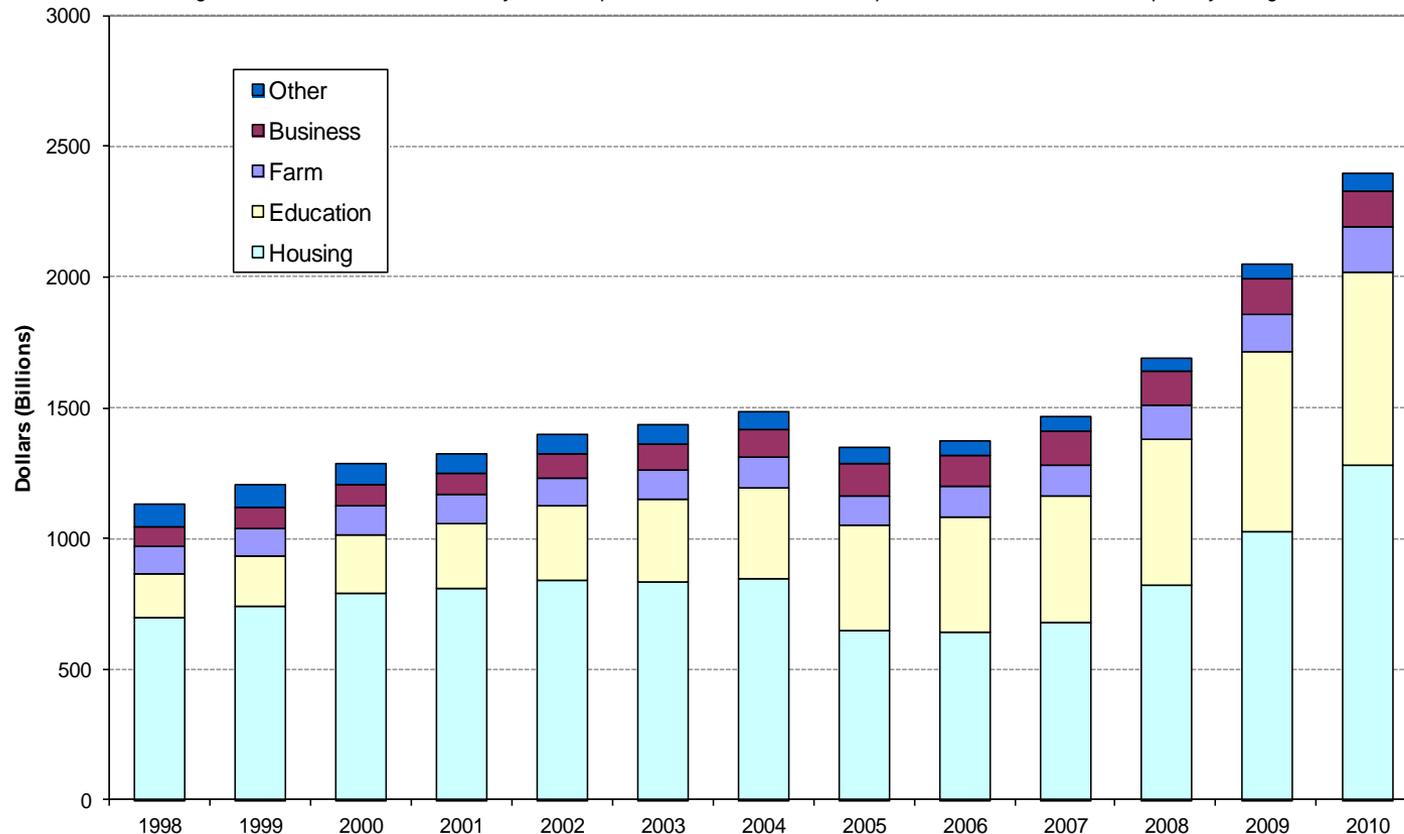
**Largest Bank Holding Companies
by Assets (6/30/2011, \$000s)**



Federal direct and guaranteed loans outstanding topped \$2.3 trillion in 2010

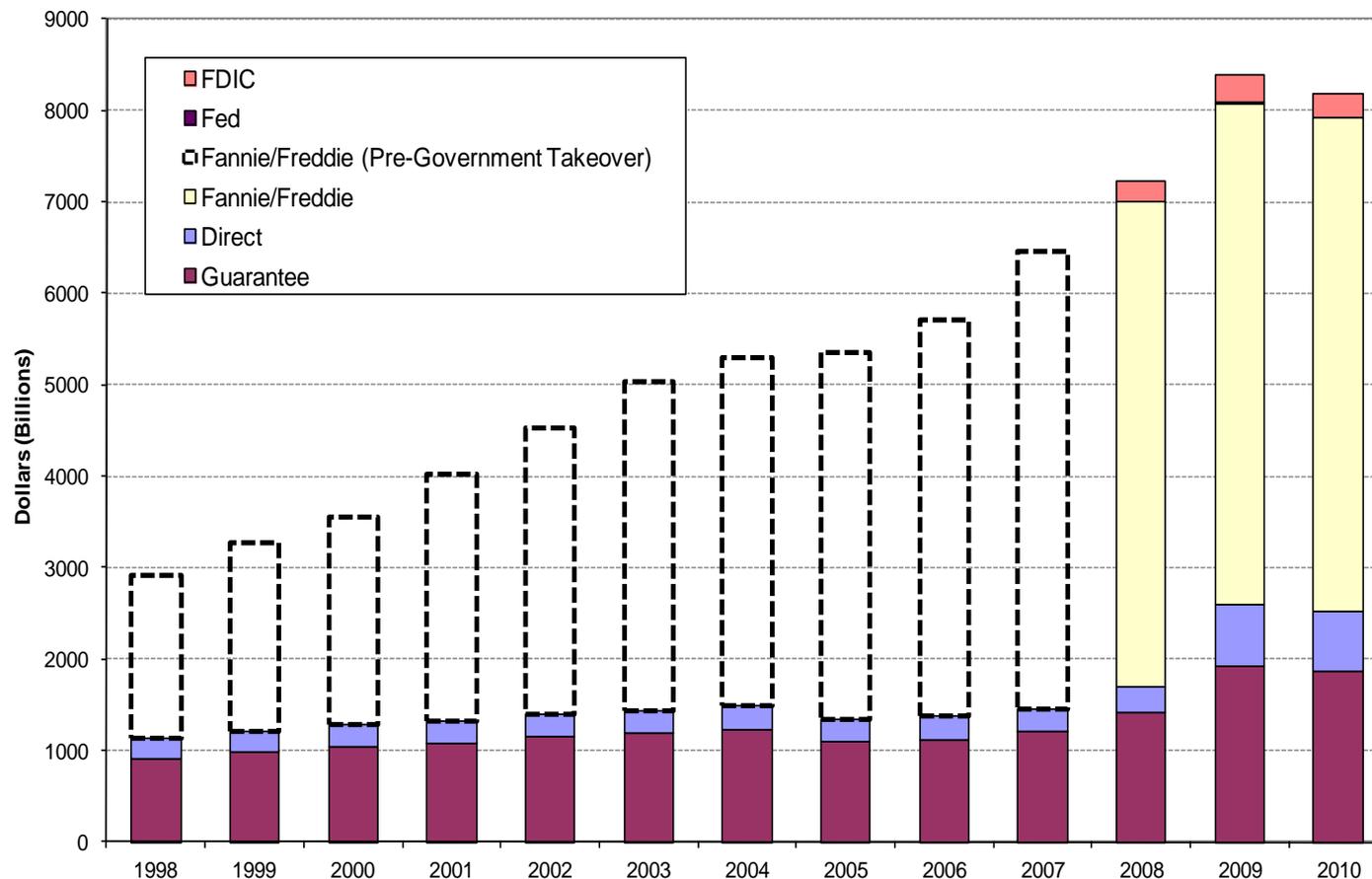
Figure 1: Total Non-Emergency Federal Loans Outstanding (Direct and Guaranteed) by Category: 1998-2010

Source: Budget of the U.S. Government, Analytical Perspectives, FY2001-2012, as reported in Uncle Sam in Pinstripes, by Douglas Elliott.



Including the mortgages held or guaranteed by Fannie Mae and Freddie Mac brings the total to over **\$8 trillion** in 2010

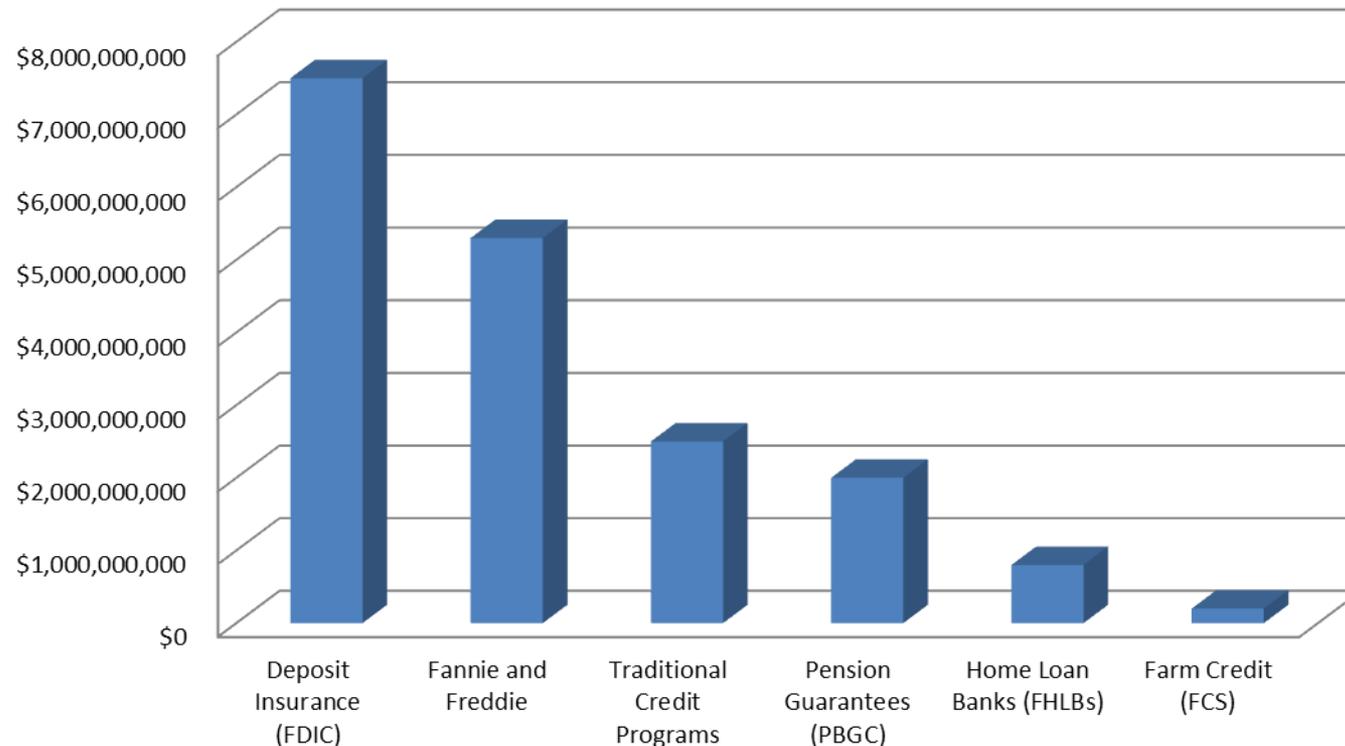
Figure 2: Total Federal Loans and GSE Obligations Outstanding (Direct and Guarantees): 1998-2010



Source: Budget of the U.S. Government, Analytical Perspectives, FY2001-2012, as presented in Bankers in Pinstripes by D. Elliott.

Largest federal credit activities

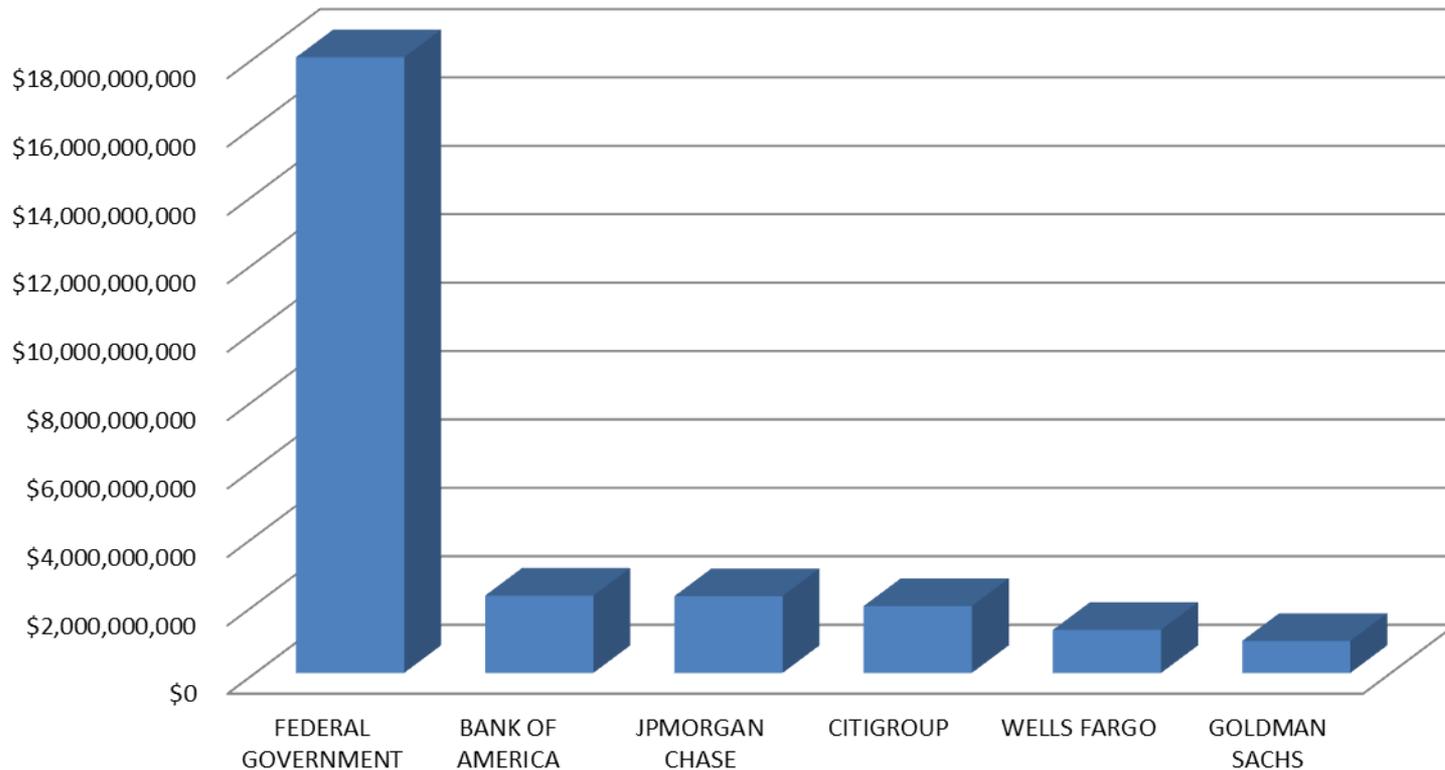
Federally-Backed Credit Outstanding, 2010
(\$000s)



- Excludes the Federal Reserves emergency lending facilities
- Excludes federal health/life/P&C insurance/gov't pensions

Largest financial institutions

Assets or Insured Obligations (\$000s)



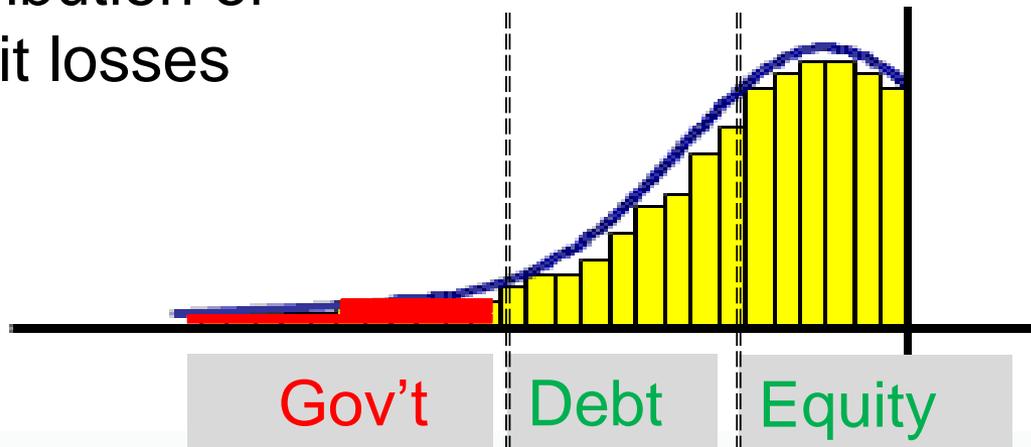
Expanded federal balance sheet including direct loans and guarantees, 2010

Assets	Liabilities				
	<table><tr><td data-bbox="948 386 1642 514">Treasury debt held by public</td><td data-bbox="1642 386 1819 514">9,060</td></tr><tr><td colspan="2" data-bbox="948 514 1819 1202"></td></tr></table>	Treasury debt held by public	9,060		
Treasury debt held by public	9,060				

Assessing costs and benefits

- The government's **risk exposure is enormous**
- But **most of the time** the **realized costs** will turn out to be **small**
- **That situation is a source of systemic risk**

Distribution of credit losses



Government as a source of systemic risk

- ▶ **Attributes that give rise to systemic risk are similar for private-sector and government financial institutions**
 - ▶ Size (absolute and relative to important sectors)
 - ▶ Interconnectedness through the financial infrastructure
 - ▶ Lack of transparency
 - ▶ Inadequate supervision

- ▶ **But the resulting risks and their causes are different than for private-sector institutions for a number of reasons:**
 - ▶ The government makes the rules (and exempts itself from many of them, it cannot tie its own hands)
 - ▶ The government responds to political rather than financial incentives
 - ▶ The government is slow in its ability to react and make changes
 - ▶ The government doesn't engage in high frequency trading
 - ▶ The government is generally not a source of counterparty risk

Size

- ▶ Already established that it is enormous.
- ▶ But that only matters if it affects prices, allocations, or incentives.
- ▶ It does (Gale, 1991, Lucas 2011).

Interconnections through the financial infrastructure

- ▶ Financial infrastructure is the legal and accounting procedures, the organization of trading and clearing facilities, and the regulatory structures that govern the relations among the users of the financial system (Merton and Bodie, 1995)
- ▶ Clearly the government has a first order effect on incentives through the financial infrastructure
 - ▶ Example is the interaction of bank capital requirements and rules requiring fair value accounting
 - ▶ Could exacerbate downward liquidity spirals
 - ▶ Could cause capital requirements to be too low in booms and too high in busts

Transparency

- ▶ **Government financial institutions lack transparency**
- ▶ **There are several shortcomings related to financial disclosures:**
 - ▶ The quality and scope of financial disclosures vary markedly across government agencies.
 - ▶ Accounting standards differ across government entities, and between the public and private sectors.
 - ▶ There is no central data repository like Edgar.
 - ▶ Market price or fair value information is generally not available for government financial activities.
 - ▶ Government accounting--both for the valuation of state and local pension liabilities, and for budgetary cost of credit programs--generally does not incorporate the price of market risk.
 - ▶ Creates incentives for risk-taking by government financial institutions

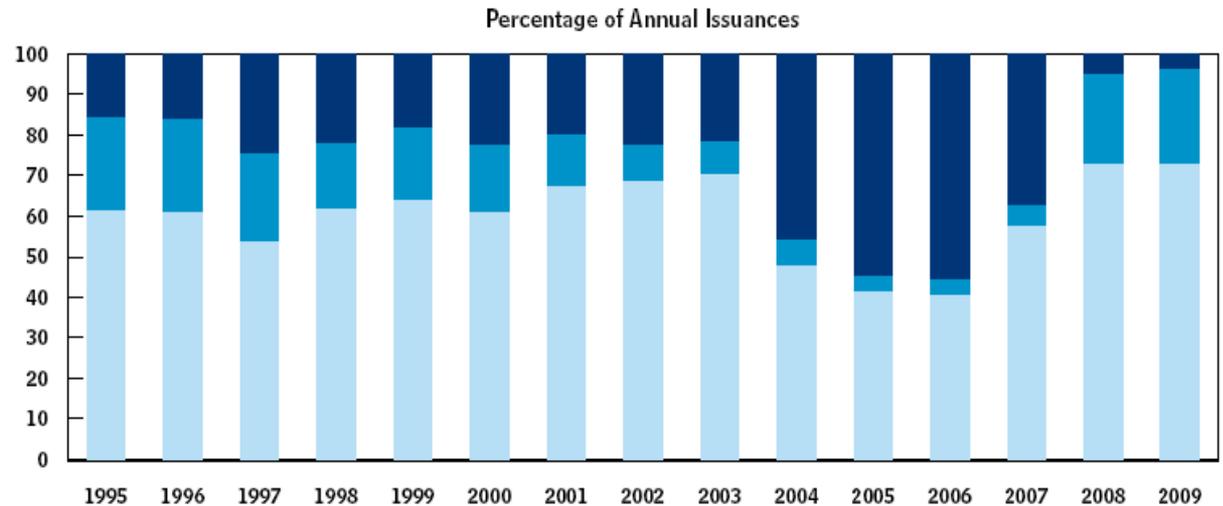
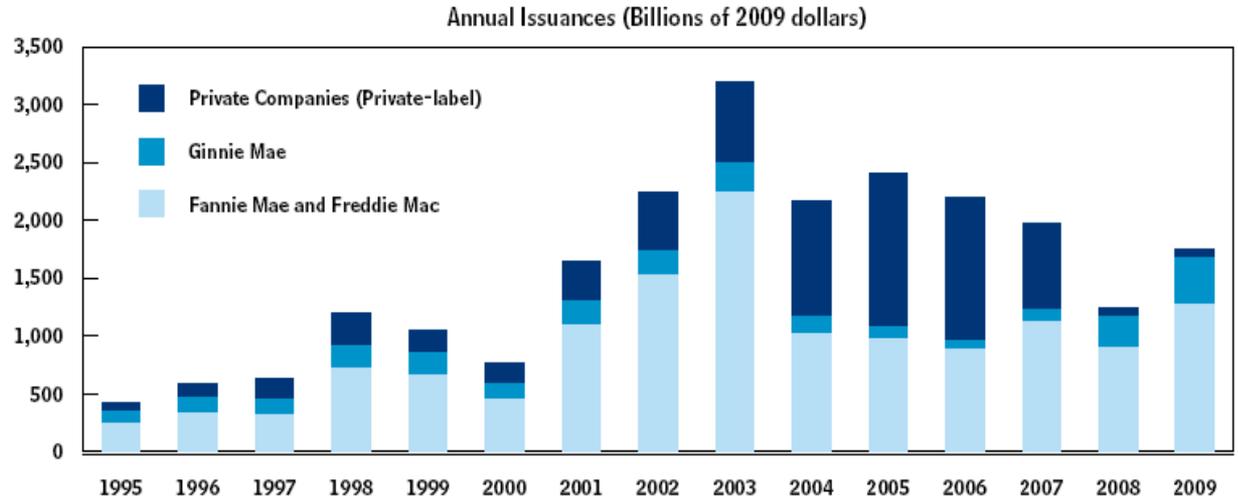
Inadequate supervision

- ▶ Although government institutions are tasked with achieving public purposes, they may still need special oversight to control systemic risk.
- ▶ As for private firms, government institutions have objectives that are narrowly mission-focused and not directed at financial stability.
- ▶ The reasons for creating a new systemic risk regulator to oversee already-regulated private financial institutions also apply to government institutions.

Systemic risk from government activities in the mortgage market

Through Fannie, Freddie, FHA, VA, etc. backed 86% of new originations in 2010.

Mortgage-Backed Securities, by Issuer



Systemic risk from government activities in the mortgage market

- ▶ Clearly the government is in a position to influence allocation of mortgage credit and its riskiness.
 - ▶ Sets rules for eligibility, underwriting, guarantee pricing, products offered
 - ▶ Incentives for risk-taking created by implicit guarantees to GSEs
- ▶ But there is disagreement about how much the government contributed to the housing bubble and subsequent crisis.
 - ▶ Also about whether it is supplying too much or too little mortgage credit now.
- ▶ What isn't in dispute is that those activities turned out to be expensive for taxpayers.
 - ▶ (Net) payments from Treasury to Fannie and Freddie of \$130 billion through March 2011
 - ▶ Upward reestimates of budgetary cost of FHA guarantees of \$40 billion between 1999 to 2011

Mitigating the Risks: Data Initiatives and Analyses

- ▶ The OFR could undertake a variety of initiatives and analyses that could help to mitigate the risks that have been identified.
- ▶ **Regulatory audit.**
 - ▶ Undertake a comprehensive evaluation of federal financial regulations to identify unintended systemic consequences.
- ▶ Commence a study that **compares government and private sector accounting standards** and assesses **best practices.**
 - ▶ Study could serve as an input and impetus to more rapid harmonization of accounting standards and practices.

Mitigating the Risks: Data Initiatives and Analyses

- ▶ Undertake initiatives to **improve and standardize financial disclosures.**
 - ▶ The OFR could work with federal financial institutions, and with academic and private accounting experts, to develop more uniform and informative reporting standards.
 - ▶ The OFR could also house a website that would make those disclosures readily available to the public.
- ▶ Encourage the provision of **fair value disclosures.**
 - ▶ To help address the lack of market price information that would make more transparent the cost and risks of government financial activities

Mitigating the Risks: Data Initiatives and Analyses

- ▶ **Evaluate unmet data needs** for assessing systemic risk from federal credit programs.
 - ▶ Information collected is primarily to determine eligibility.
 - ▶ It may be insufficient to assess systemic risk.
 - ▶ Example is lack of credit score data for student loans that make it more difficult to assess whether debt levels are sustainable, and lack of timely default statistics.
- ▶ **Create data sets** that combine information on federal and private credit at the household level.
 - ▶ For example, getting combined data on first and second mortgages would greatly improve understanding of stresses on households.

Mitigating the Risks: Data Initiatives and Analyses

- ▶ **Disseminate** data on federal credit programs.
 - ▶ Loan level data from those programs is generally unavailable.
 - ▶ Exception is for mortgages, but that data is very expensive
 - ▶ Also FOIA
 - ▶ Would encourage more research on federal credit programs.
 - ▶ Could help private financial institutions better understand their own and aggregate risks.
 - ▶ Fewer concerns about proprietary value than for private financial institutions; borrower privacy could be protected.
 - ▶ Costly for agencies to undertake such initiatives, and OFR could make the results more useful through coordination and standardization.

The MIT Center for Finance and Policy

- ▶ Addressing these types of issues through research, education and data development is one of the goals of MIT's new Center.

- ▶ **Thank you!**

