Understanding "Toxic Assets"

THE CRISIS CREDIT

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http://crisisofcredit.com/

GEOGRAPHY OF A RECESSION

http://www.nytimes.com/interactive/2009/03/03/us/20090303_LEONHARDT.html?ref=economy
http://money.cnn.com/news/storysupplement/economy/bank_failures/

ROAD TO RECOVERY

THE GOVERNMENT AS **INVESTOR**

$4.6 trillion

SPENT: **$921 BILLION**

Includes direct investments in financial institutions, purchases of high-grade corporate debt and purchases of mortgage-backed securities issued by Fannie Mae, Freddie Mac and Ginnie Mae.

THE GOVERNMENT AS **LENDER**

$2.4 trillion

SPENT: **$666 BILLION**

A significant expansion of the government's traditional overnight lending to banks, including extending terms to as many as 90 days and allowing borrowing by other financial institutions.

THE GOVERNMENT AS **INSURER**

$1.8 trillion

SPENT: **$252 BILLION**

Includes insuring debt issued by financial institutions and guaranteeing poorly performing assets owned by banks and Fannie Mae and Freddie Mac.

Commercial paper — Committed: **$1.6 trillion** / Spent: $257 billion

The Federal Reserve has become the buyer of last resort in the $1.6 trillion commercial paper market.

Public-private investment fund — **$1.0 trillion** / $0 billion

This fund, which is not operational yet, will seek private investors and use a combination of private and public money to buy nonperforming assets from banks.

Troubled Asset Relief Program (TARP) | See TARP recipients » — **$700 billion** / $510 billion

In return for bailout cash, the Treasury now owns stock in hundreds of banks, General Motors, Chrysler and the insurer A.I.G. The two largest recipients are Bank of America ($45 billion) and Citigroup ($45 billion cash and $5 billion in support of a loan guarantee).

Federal Home Loan Bank securities — **$600 billion** / $212 billion

The Treasury and the Federal Reserve have begun buying debt and mortgage-backed securities from Fannie Mae, Freddie Mac and Ginnie Mae.

Money market funds — **$600 billion** / $17 billion

The Treasury originally guaranteed these accounts up to $50 billion, but the program has been extended by the Federal Reserve, which has, in a few cases, had to step in and buy some illiquid assets of some funds to help them meet their obligations.

A.I.G. — **$53 billion** / $44 billion

The Federal Reserve has provided seed money to create investment vehicles to buy, hold and possibly dispose of bad securities held or insured by A.I.G.

Bear Stearns — **$29 billion** / $29 billion

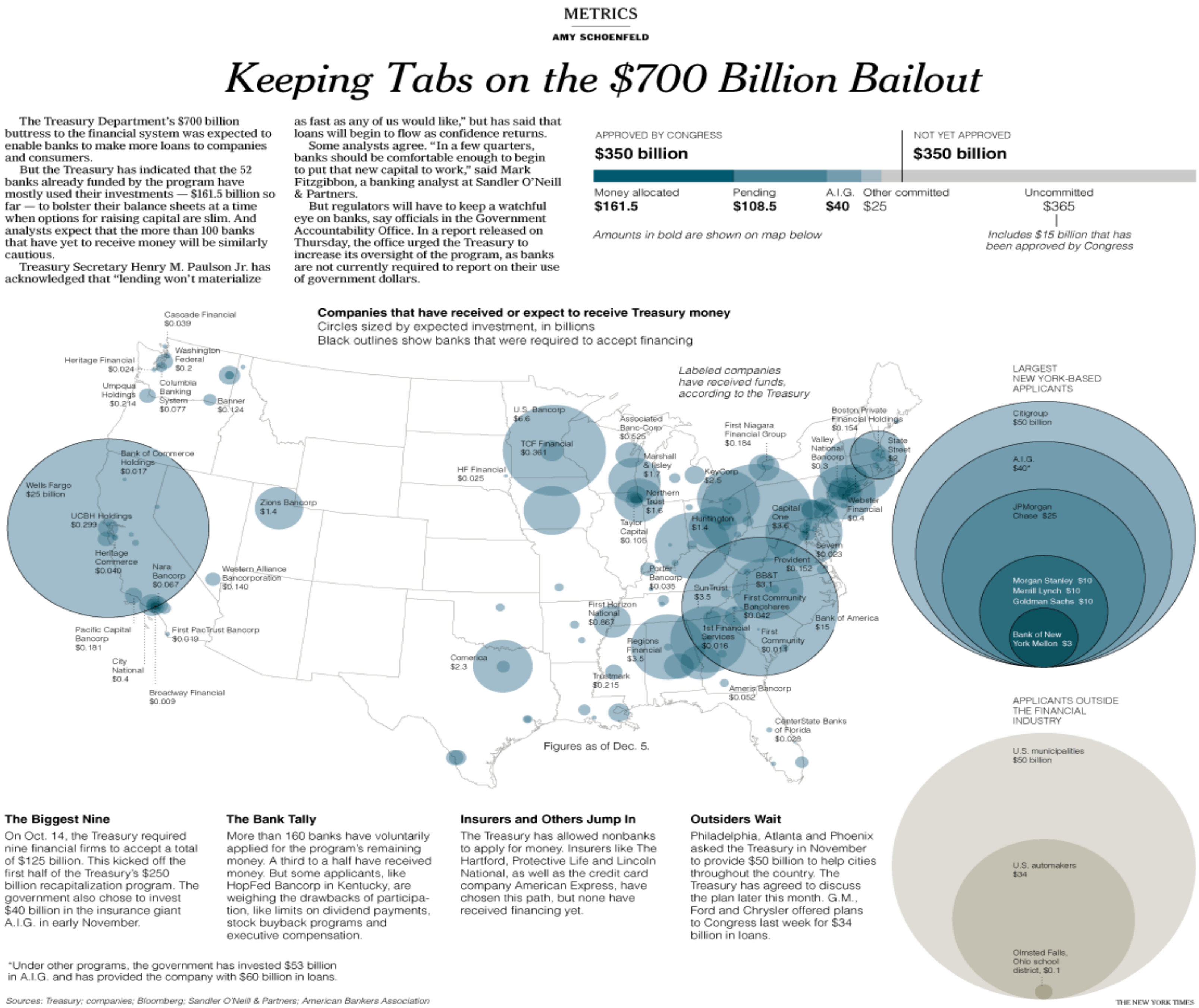
The Federal Reserve bought distressed assets from Bear Stearns to facilitate its sale to JPMorgan Chase.

Reserve U.S. Government Fund — **$4 billion** / $4 billion

Despite the name, this was a private fund, not part of the government. It was the first big money market fund to experience liquidity problems, and the Treasury eventually bought some high-quality assets to help the fund unwind.

Sources: Treasury; Federal Reserve; Federal Deposit Insurance Corporation

The New York Times



METRICS

AMY SCHOENFELD

Keeping Tabs on the $700 Billion Bailout

The Treasury Department's $700 billion buttress to the financial system was expected to enable banks to make more loans to companies and consumers.

But the Treasury has indicated that the 52 banks already funded by the program have mostly used their investments — $161.5 billion so far — to bolster their balance sheets at a time when options for raising capital are slim. And analysts expect that the more than 100 banks that have yet to receive money will be similarly cautious.

Treasury Secretary Henry M. Paulson Jr. has acknowledged that "lending won't materialize as fast as any of us would like," but has said that loans will begin to flow as confidence returns.

Some analysts agree. "In a few quarters, banks should be comfortable enough to begin to put that new capital to work," said Mark Fitzgibbon, a banking analyst at Sandler O'Neill & Partners.

But regulators will have to keep a watchful eye on banks, say officials in the Government Accountability Office. In a report released on Thursday, the office urged the Treasury to increase its oversight of the program, as banks are not currently required to report on their use of government dollars.

The Biggest Nine

On Oct. 14, the Treasury required nine financial firms to accept a total of $125 billion. This kicked off the first half of the Treasury's $250 billion recapitalization program. The government also chose to invest $40 billion in the insurance giant A.I.G. in early November.

The Bank Tally

More than 160 banks have voluntarily applied for the program's remaining money. A third to a half have received money. But some applicants, like HopFed Bancorp in Kentucky, are weighing the drawbacks of participation, like limits on dividend payments, stock buyback programs and executive compensation.

Insurers and Others Jump In

The Treasury has allowed nonbanks to apply for money. Insurers like The Hartford, Protective Life and Lincoln National, as well as the credit card company American Express, have chosen this path, but none have received financing yet.

Outsiders Wait

Philadelphia, Atlanta and Phoenix asked the Treasury in November to provide $50 billion to help cities throughout the country. The Treasury has agreed to discuss the plan later this month. G.M., Ford and Chrysler offered plans to Congress last week for $34 billion in loans.

*Under other programs, the government has invested $53 billion in A.I.G. and has provided the company with $60 billion in loans.

Sources: Treasury; companies; Bloomberg; Sandler O'Neill & Partners; American Bankers Association

THE NEW YORK TIMES

http://www.ritholtz.com/blog/wp-content/uploads/2008/12/1207-sbn-sub3metrics.gif

Approaches to Recovery: Credit Crisis

Government Approach

- **Public-Private Investment Program (P-PIP)** – a federal program designed to buy back troubled assets on the balance sheets of lending institutions

Market Approach

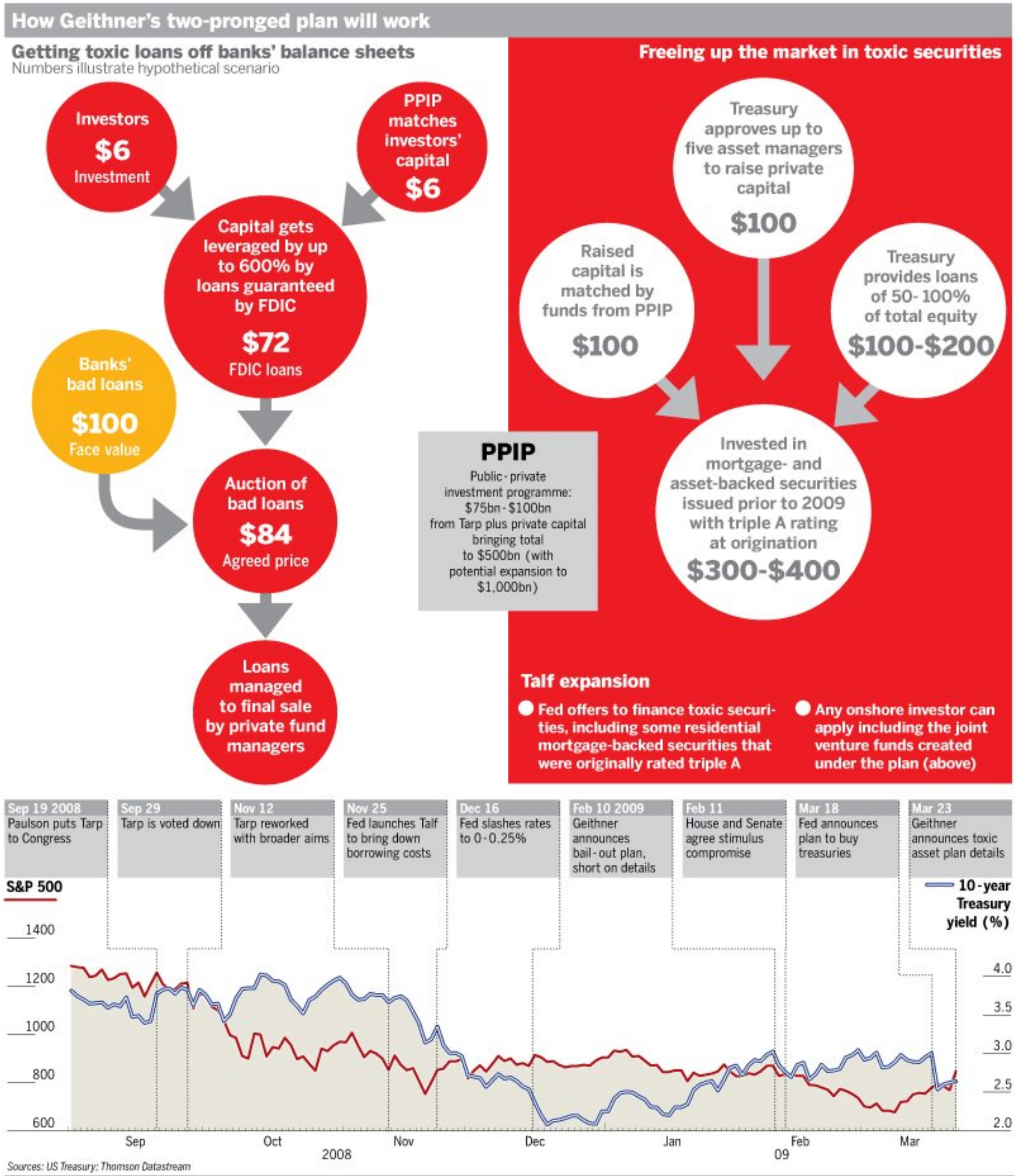
- **Peer-Peer Lending** - market makers and sales advisers for debt securities can sell, possibly on behalf of the federal government, troubled assets (example companies: DebtX, Prosper)

Approaches to Recovery: Mortgage Crisis

- **Key components of any mortgage crisis policy should:**
  - Help homeowners facing foreclosure remain in their homes
  - Not be considered a bailout for mortgage lenders and investors, creating a moral hazard
  - Limit the costs to the federal government
  - Be able to be implemented quickly

Approaches to Recovery: Mortgage Crisis

- **Congressman Barney-Senator Dodd Proposal**
  - Have the FHA refinance loans that reduce the principal owed up to 90%
  - Establish an auction process to expedite refinancing
  - Similar to proposals from the Office of Thrift Supervision, the National Community Reinvestment Coalition, investment banks, academic economists, etc.
- **Home Appreciation Mortgage Plan**
  - Have the mortgage lenders refinance loans that reduce the principal owed up to 90% of the first and second mortgage loans
  - Modify original first mortgage loan and second home appreciation loan (backed by FHA)
  - If sold if 3-10 years, equity is shared between lender and homeowner (also used to pay off FHA fees and lender write down amounts)



How Geithner's two-pronged plan will work
Getting toxic loans off banks' balance sheets
Numbers illustrate hypothetical scenario
Investors $6 Investment
PPIP matches investors' capital $6
Capital gets leveraged by up to 600% by loans guaranteed by FDIC $72 FDIC loans
Banks' bad loans $100 Face value
Auction of bad loans $84 Agreed price
Loans managed to final sale by private fund managers
PPIP
Public-private investment programme: $75bn-$100bn from Tarp plus private capital bringing total to $500bn (with potential expansion to $1,000bn)
Freeing up the market in toxic securities
Treasury approves up to five asset managers to raise private capital $100
Raised capital is matched by funds from PPIP $100
Treasury provides loans of 50-100% of total equity $100-$200
Invested in mortgage- and asset-backed securities issued prior to 2009 with triple A rating at origination $300-$400
Talf expansion
Fed offers to finance toxic securities, including some residential mortgage-backed securities that were originally rated triple A
Any onshore investor can apply including the joint venture funds created under the plan (above)
Sep 19 2008 Paulson puts Tarp to Congress
Sep 29 Tarp is voted down
Nov 12 Tarp reworked with broader aims
Nov 25 Fed launches Talf to bring down borrowing costs
Dec 16 Fed slashes rates to 0-0.25%
Feb 10 2009 Geithner announces bail-out plan, short on details
Feb 11 House and Senate agree stimulus compromise
Mar 18 Fed announces plan to buy treasuries
Mar 23 Geithner announces toxic asset plan details
S&P 500
10-year Treasury yield (%)
1400
1200
1000
800
600
4.0
3.5
3.0
2.5
2.0
Sep
Oct
Nov
Dec
Jan
Feb
Mar
2008
09
Sources: US Treasury; Thomson Datastream

Drawing Down TARP

Just over half of the Treasury Department's $700 billion Troubled Asset Relief Program, or TARP, was committed during the Bush administration. On Tuesday, Treasury Secretary Timothy F. Geithner unveiled some details about how the new administration would use the fund.

COMMITTED UNDER THE BUSH ADMINISTRATION

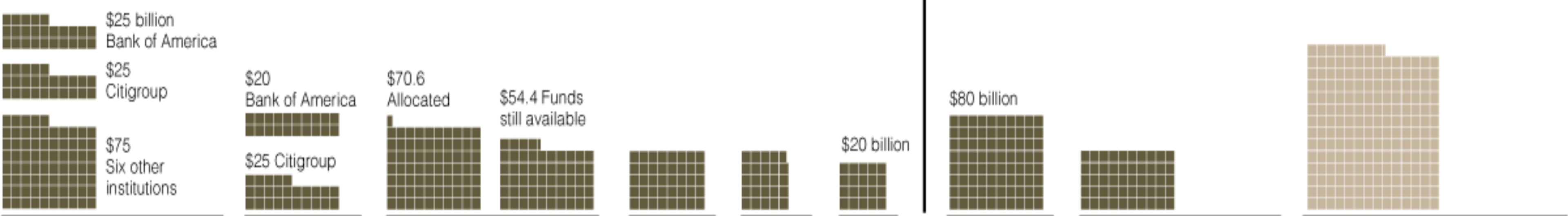
$379.8 billion

ANNOUNCED **TUESDAY**

$320.2 billion

■ Equivalent to $1 billion committed

■ Equivalent to $1 billion not yet committed



$125 Capital for big banks
Congress required nine big banks to participate in the program. The $10 billion for Merrill Lynch went to Bank of America after their merger.

$45 Additional capital for big banks

$125 Capital for small banks
Available to public and private financial institutions by application. As of Feb. 11, the Treasury has purchased stock from more than 350 companies.

$40 Capital for A.I.G.

$24.8 Capital for automakers

$100 Funds to back a Fed program that will encourage lending to consumers and business

$50 Help for homeowners
A new program is planned to help millions of homeowners facing foreclosure to renegotiate the terms of their mortgages.

$190.2 Remaining funds
Without providing an exact figure, the Treasury said that remaining TARP funds could be used for additional capital injection into banks.

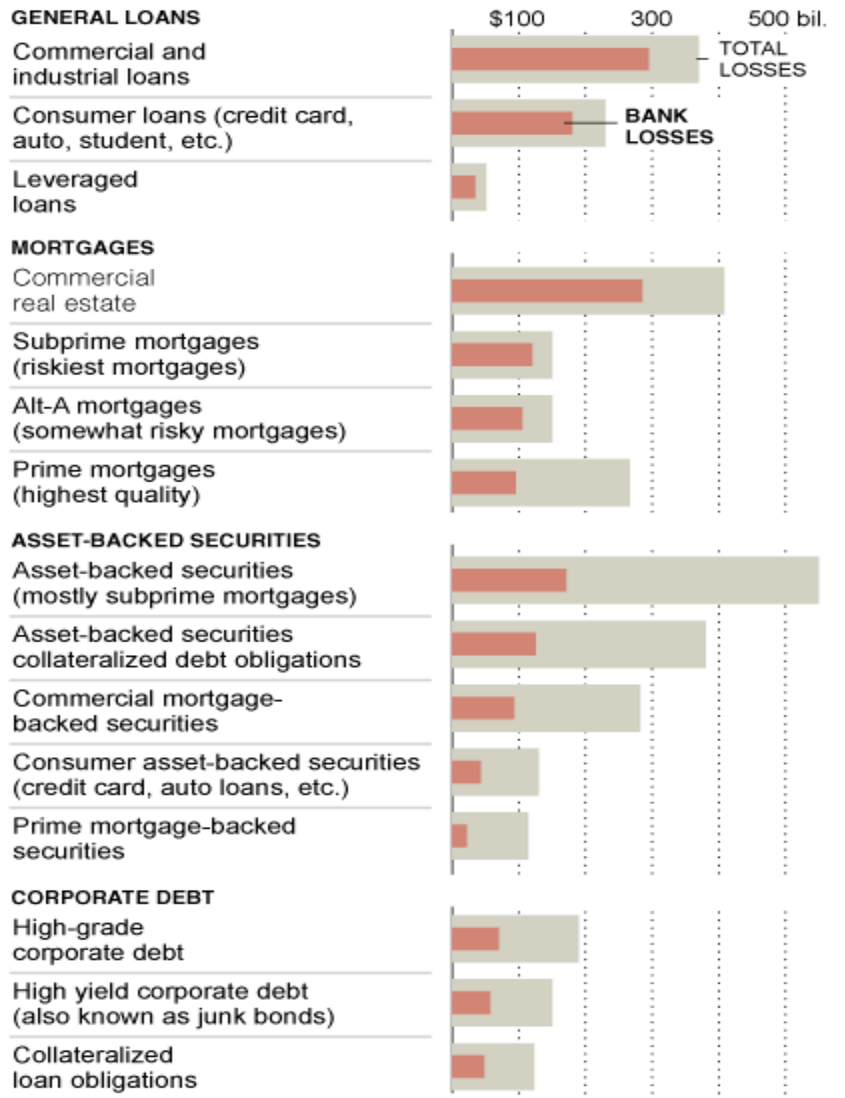
Source: Treasury

THE NEW YORK TIMES

An Estimate: Adding Up Bank Losses

Analysts say they believe that banks will have more losses, but estimates vary of how much. Here is a breakdown by RGE Monitor, a consulting firm started by Nouriel Roubini, an economics professor at New York University. RGE's total estimated bank losses are $1.7 trillion to $1.8 trillion.

ASSUMPTIONS Total contraction in the United States economy from its peak reaches 5 percent; housing prices decline another 20 percent from current levels; unemployment peaks at 9 percent.



Source: RGE Monitor

http://www.nytimes.com/2009/02/13/business/economy/13insolvent.html?pagewanted=2&_r=2

BENCHMARKING PROJECTS

CityCentre, Las Vegas NV

- Estimated Costs : $14.6 billion

http://www.condohotelcenter.com/images/mgm-city-center.jpg

Central Artery/Tunnel, Boston MA

- Estimated Costs : $14.6 billion

http://images.businessweek.com/ss/06/01/wonders_bigdigs/image/big-dig-1.jpg

Eurotunnel

- Estimated Costs : $ 16 billion (1994)

http://www.francedirect-travel.com/images/eurotunnel_train.jpg

Hoover Dam, Boulder City NV

- Estimated Costs : $690 million

http://www.korto.com/images/Hoover%20Dam.jpg

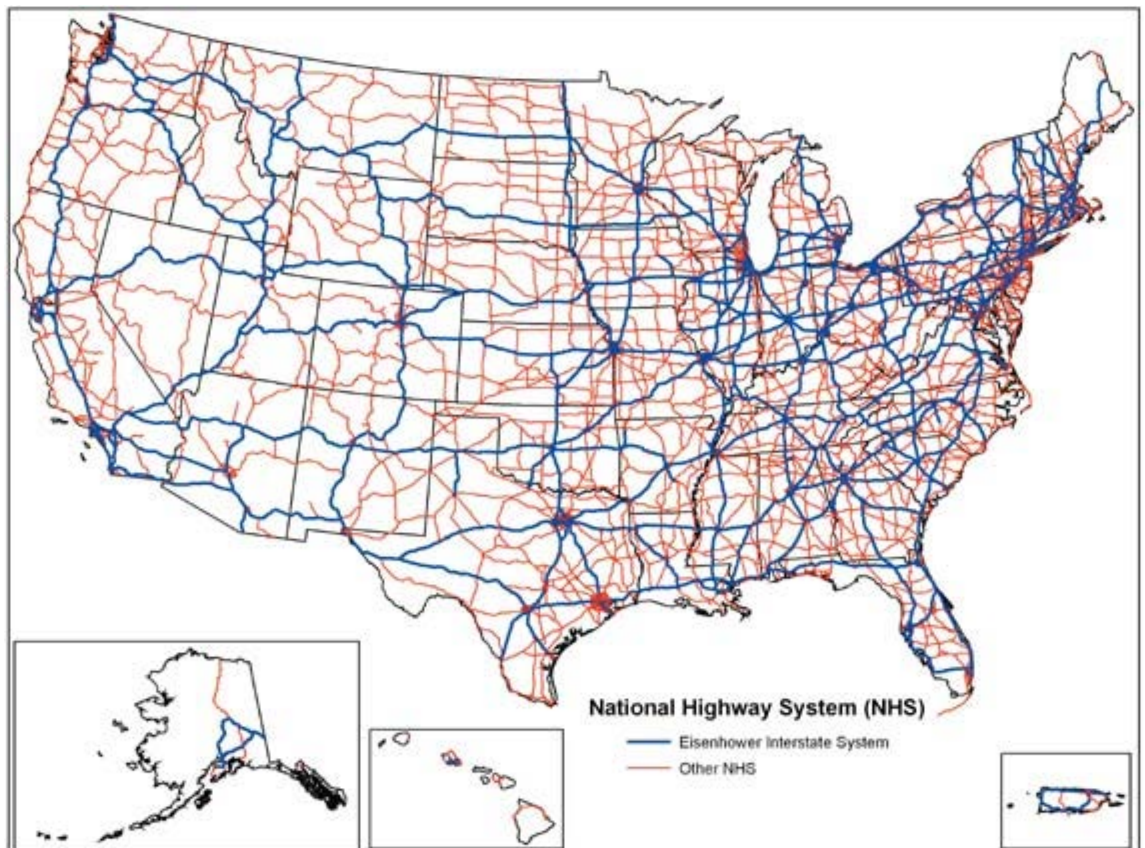
Panama Canal

- Estimated Costs : $14.3 billion (2007 dollars)

http://www.scd.eu/Panama/panama_canal2.JPG

Interstate Highway System

- Estimated Costs : $500 billion



http://www.upa.pdx.edu/IMS/currentprojects/TAHv3/Content/Conservation/JPGS/Natl_Hwy_System.jpg

Masdar City, Abu Dhabi UAE

- Estimated Costs : $22 billion

http://www.ens-newswire.com/ens/jan2008/20080114_masdar.jpg

Hong Kong International Airport

- Estimated Costs : $20 billion

http://www.som.com/resources/category/5/0/4/4/6/9/images/001_21588324.jpg

Definitions

- **Subprime Mortgages** – loans made to borrowers with less than perfect credit
- **Collaterized Debt Obligations** – an asset-backed securities issued with several maturity and credit risk characteristics
- **Troubled Asset Relief Program (TARP)** – a P-PIP initiative established to buy back assets from lending institutions
- **Term Asset-Backed Securities Loan Facility (TALF)** – a federal program established to buy securities (i.e. issue credit) for different types of debt, including credit card, auto, student and small business loans