All Financial Crises Are Not Alike

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Three Important Differences

• Consider the Three Big Financial Crises
  - Great Depression
  - Thrift Crisis
  - Great Recession

• Three Important Differences
  - Macro and Related Policy Dimensions
    • Short term policy responses differed
  - Different systemic risks and patterns of financial institution failures.
  - Longer term policy responses were directed towards different perceived problems and driven by different theories of the functioning of financial institution markets and institutions
Macro Economic and Policy

- Great Depression was postwar environment
- Thrift crisis was heavily driven by inflation, attempts to stem inflation and the regulatory environment
- Great Recession was first and foremost an unintended government housing policies
Great Recession - 2007- Present -
US Unemployment, GDP Growth and CPI Inflation

- Recession Years
- Average Unemployment
- GDP Growth Annual
- US Inflation Rate

Unemployment
Inflation
GDP
Short Term Policy Responses
Short Term Responses to the Great Depression

• The Fed’s overall response to the 1929 stock market crash and Great Depression was rather anemic
  - In 1929 the NY Fed lowered the discount rate and lent freely to money center banks independently from the Board in DC
  - Discount lending increased as did open market purchases, but were quickly reversed as each shock dissipated
  - The Fed sat passively by as gold flowed into the country after the UK abandoned the gold standard

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Short Term Responses to the Thrift Crisis

• Unlike the Great Depression and the Great Recession, fallout during the thrift crisis was prolonged
• Much of the focus was on protecting thrifts from disintermediation by selectively relaxing deposit rate ceilings permitting banks and thrifts to pay more market rates on the most interest sensitive sources of funds while preserving the thrift/bank differential
• Treasury imposed a $10,000 minimum size on Treasury obligations
• Asset powers of thrifts were expanded in an attempt to enable them to diversity and to grow their way out of their problems
• NOW accounts were authorized to permit the payment of interest on transaction accounts
Short Term Policy Responses - The Great Recession

• Not only were the macro economic conditions leading up to the Great Recession different from those preceding both the Great Depression and the recession and thrift crisis of the 1980s, but also the short term policy responses to the liquidity problems experienced in the highly leverage asset backed commercial paper market and subprime mortgage market in the Great Recession were unique.

• The Fed cut the discount rate in response to the initial signs of a liquidity problem in wholesale money markets in Sept 2007 when the TED spread widened from 25 to 237 bp.

• When Lehman Brothers failed followed by Freddie and Fannie, in the fall of 2008, the Fed still viewed the problem as a temporary liquidity problem and lowed the discount rate.

• This was followed by a series of programs detailed in this next chart.


<table>
<thead>
<tr>
<th>Facility</th>
<th>Date Announced</th>
<th>Eligible Borrowers</th>
<th>Maximum Amount Outstanding</th>
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<tbody>
<tr>
<td>Discount window</td>
<td>Ongoing</td>
<td>Depository institutions</td>
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<td>Term Auction Facility</td>
<td>December 12, 2007</td>
<td>Depository institutions</td>
<td>493</td>
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<tr>
<td>Single-tranche open market operations</td>
<td>March 7, 2008</td>
<td>Primary dealers</td>
<td>80</td>
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<tr>
<td>Term Securities Lending Facility</td>
<td>March 11, 2008</td>
<td>Primary dealers</td>
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<tr>
<td>Primary Dealer Credit Facility</td>
<td>March 16, 2008</td>
<td>Primary dealers</td>
<td>147</td>
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<td>Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility</td>
<td>September 18, 2008</td>
<td>Depository institutions</td>
<td>152</td>
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<tr>
<td>Commercial Paper Funding Facility</td>
<td>October 7, 2008</td>
<td>Commercial paper issuers</td>
<td>351</td>
</tr>
</tbody>
</table>

**Programs for Central Banks and Non-Bank, Non-Primary Dealer Borrowers**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Date Announced</th>
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<th>Maximum Amount Outstanding</th>
</tr>
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<tr>
<td>Central bank liquidity swaps</td>
<td>December 12, 2007</td>
<td>Banks</td>
<td>583</td>
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<tr>
<td>Money Market Investor Funding Facility</td>
<td>October 21, 2008</td>
<td>Money market investors</td>
<td>0</td>
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<tr>
<td>Term Asset-Backed Securities Loan Facility</td>
<td>November 25, 2008</td>
<td>Asset-backed securities investors</td>
<td>48</td>
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</tbody>
</table>

Notes: Maximum amounts outstanding in billions of dollars based on weekly data as of Wednesday. Primary Dealer Credit Facility includes other broker-dealer credit. Central bank liquidity swaps are conducted with foreign central banks which then lend to banks in their jurisdiction.

29 Institutions That Received the Most Liquidity Support from the Programs?

Source: Eisenbeis and Herring 2015
Runs and Systemic Risks
Runs and Systemic Risk

Depositors/creditors of financial intermediaries can do three things with their funds.

• They can exchange them for currency (classic run that has occurred several times in US history)

• Transfer funds to other similar but perceived safe intermediaries

• Exchange them for greater liquidity
Runs in the Crises

- In the Great Depression the runs were into currency
- The result was a decline in aggregate bank credit and collapse of the money supply
Failures Peaked in 1934 and Decade Ended with 15,16 Failures
Runs in the Thrift Crisis

- In the thrift crisis, there weren’t really runs per se but rather movement of funds by depositors to higher rate alternatives – disintermediation
- Nevertheless, the rapid rise in interest rates put thrifts and real estate specializing banks into a negative earnings and net worth situation leading to failures
Thrift Crisis Failures

Bank and S&L Failures During the Thrift Crisis Peaked at 2,912
Runs During the Great Recession

• In the Great Recession the runs were by creditors to quality – ie. US Treasuries, and haircuts on collateral as it was revalued
  - Credit may have been constrained but there was not a collapse in the money supply

• There is also evidence from Ivashina and Sharfstein (2010) that firms moved to take down loans under lines of credit in anticipation of a loan supply squeeze

• We can see the flight to quality in the movement of funds into money market funds
Flight to Quality

Government Money Funds as a Percent of Total Prime Money Funds

Assets in Government funds increased from 21.7% in 2006 to 44.6% in 2008 illustrating the quality flight
Failures During the Great Recession Hit Especially the Largest Banks and Investment Bank

Bank Failures Peaked During the Great Recession at 525

- Bank Failures-(left)
- Cumulative Failures-(right)
Major US and Foreign Financial Institution Acquisition and Failures

- Bear Stearns
- Countrywide
- Fannie and Freddie
- Merrill-Lynch
- Washington Mutual
- Wachovia
- Lehman Bros
- IndyMac
- ABN AMRO
- Northern Rock
- HBOS
- Fortis
- Dexia
- Royal Bank of Scotland
- Lloyds
- UBS
The Potential for Systemic Risks Increase with Banking Concentration

Figure 1

Concentration of US banking system
Total assets of top three US banks
as % of total commercial banking sector assets

[Graph showing concentration trend over time]
Longer Term Legislative and Regulatory Responses
Longer Term Policy Responses – Great Depression

Financial Legislation
• Federal Home Loan Bank Act of 1932
• Banking Act of 1933
• Securities Act of 1933 (the Truth in Securities Act)
• National Housing Act of 1934
• Banking Act of 1935

Key Features
• Created FDIC and Home Loan Bank System
• Glass-Steagall separating banking and investment banking
• Instituted deposit rate ceilings
• Established SEC and regulated exchanges
• Restructured Fed and Created FOMC
• Eliminated double Liability for bank shareholders
Longer Term Policy Responses – Thrift Crisis

Major Legislation

- Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMICA)
- The Garn-St Germain Depository Institutions Act of 1982
- Competitive Equality in Banking Act of 1987 (CEBA)
- Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA)
- The Federal Deposit Insurance Improvement Act of 1991 (FDICIA)

Some Key Features of Legislation

- Expanded thrift asset and liability products
- Phased out deposit rate ceilings on time deposits
- Increased deposit insurance coverage to $100K per acct.
- Permitted NOW accts
- Expanded ability of FDIC to provide aid to troubled institutions.
- Reformed and then abolished the FSLIC
- Tightened capital standards
- Cross guarantee provisions for bank holding companies
- Prompt corrective action and early intervention
- Risk-based deposit insurance premiums
- Limited Fed’s ability to provide discount window loans to troubled institutions.
Longer Term Policy Responses – Great Recession

Dodd-Frank Act

- Creates the Financial Stability Oversight Council
- Creates Office of Financial Research in Treasury
- Creates Bureau of Consumer Financial Protection Bureau
- Creates Office of national Insurance within Treasury
- Creates Office of Credit Rating Agencies within SEC
- Fed takes over regulation of thrift holding companies
- SEC to require registration of municipal financial advisors
- Volcker rule to prohibit proprietary trading, sponsorship of hedge funds and private equity funds
- Requires living wills by systemically important institutions
- Orderly liquidation authority and Orderly Liquidation Fund
- Provides for oversight of over the counter swaps market by SEC and CFTC
- Gives Fed responsible for systemic risk in payments and settlement systems
- Limits Troubled Asset Relief Program by reducing its authorized funding and limits use of unused funds
- Numerous other provisions and requires over 250 studies to be conducted
Summary and Conclusion

• In summary, although excessive credit expansion and price bubbles were major causes of each of the three major financial crises, each crisis differed substantially in its characteristics – the macro environment that lead up to it, the nature of runs and bank and thrift failures and the legislative responses to the crises.

• Periodic crises are likely to be with us and credit bubbles will likely be central

• But the likely symptoms, consequences and public corrective responses will be different

• The approach should be forward looking not backward looking if we are to really avoid the problems

• The key questions are have we put in place the seeds for the next crises in our attempt to prevent it and have we increased too-big-to-fail and the likely costs to taxpayers
Disclosure

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