FEDERAL RESERVE BANK *of* NEW YORK

Shadow Maturity Transformation and Systemic Risk

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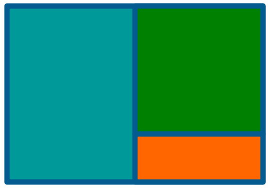
Overview of discussion

- What is shadow bank maturity transformation and why do we care about this?
- What role did this play leading up to and during the recent financial crisis?
- How will financial reform affect the shadow banking system?
- What more needs to be done?

What is credit intermediation?

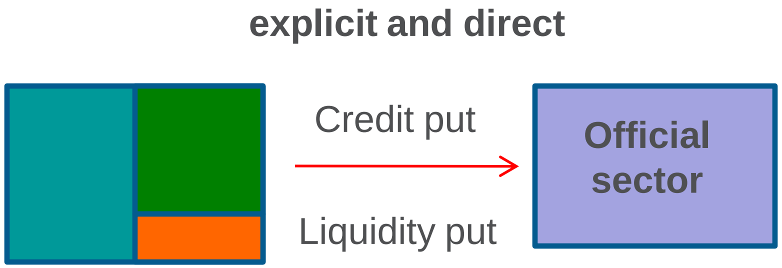


Maturity transformation: fund long-term assets with short-term liabilities

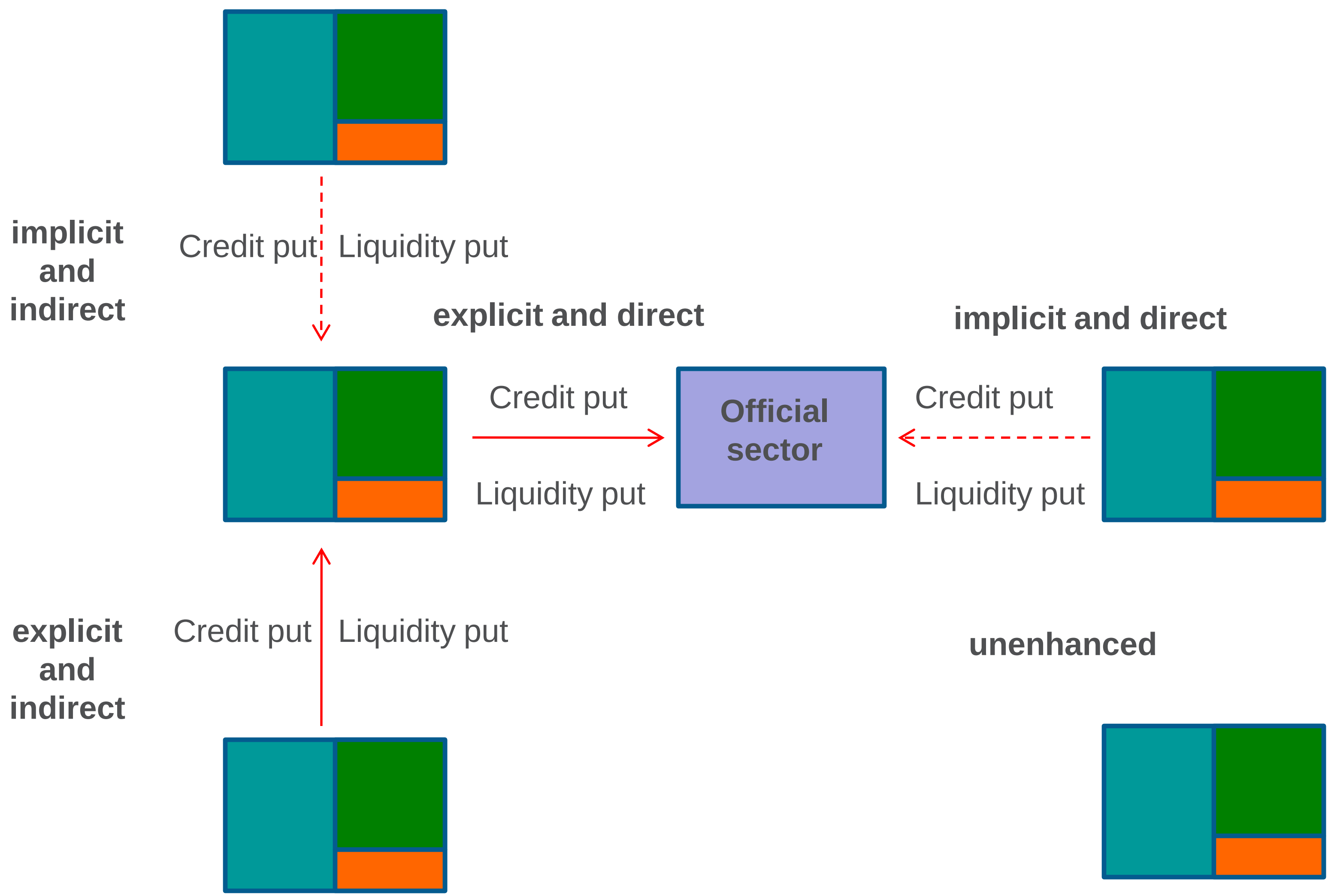
Credit transformation: enhancement through use of priority or guarantees

Liquidity transformation: illiquid assets funded by liquid liabilities

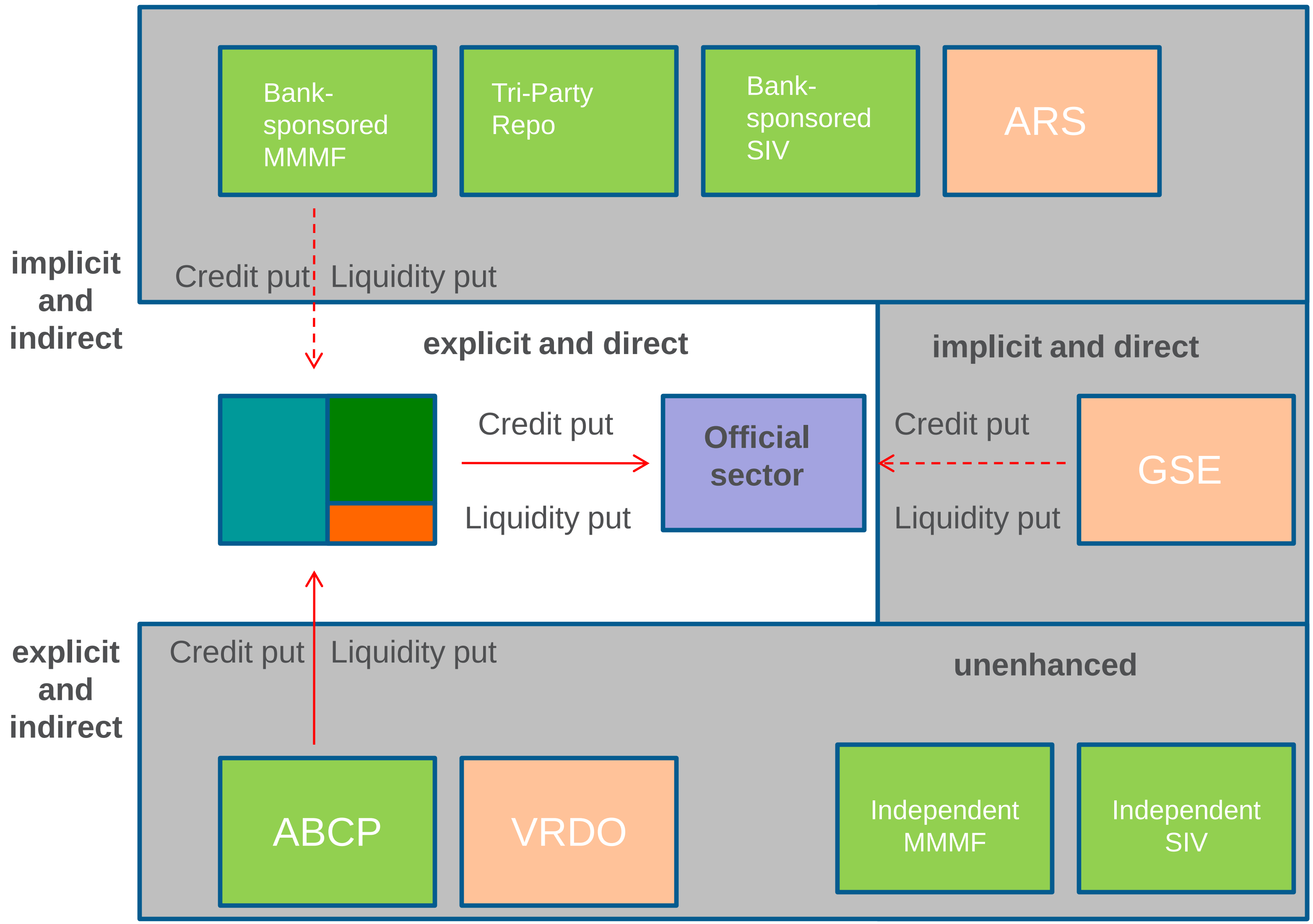
Topology of Credit Intermediation



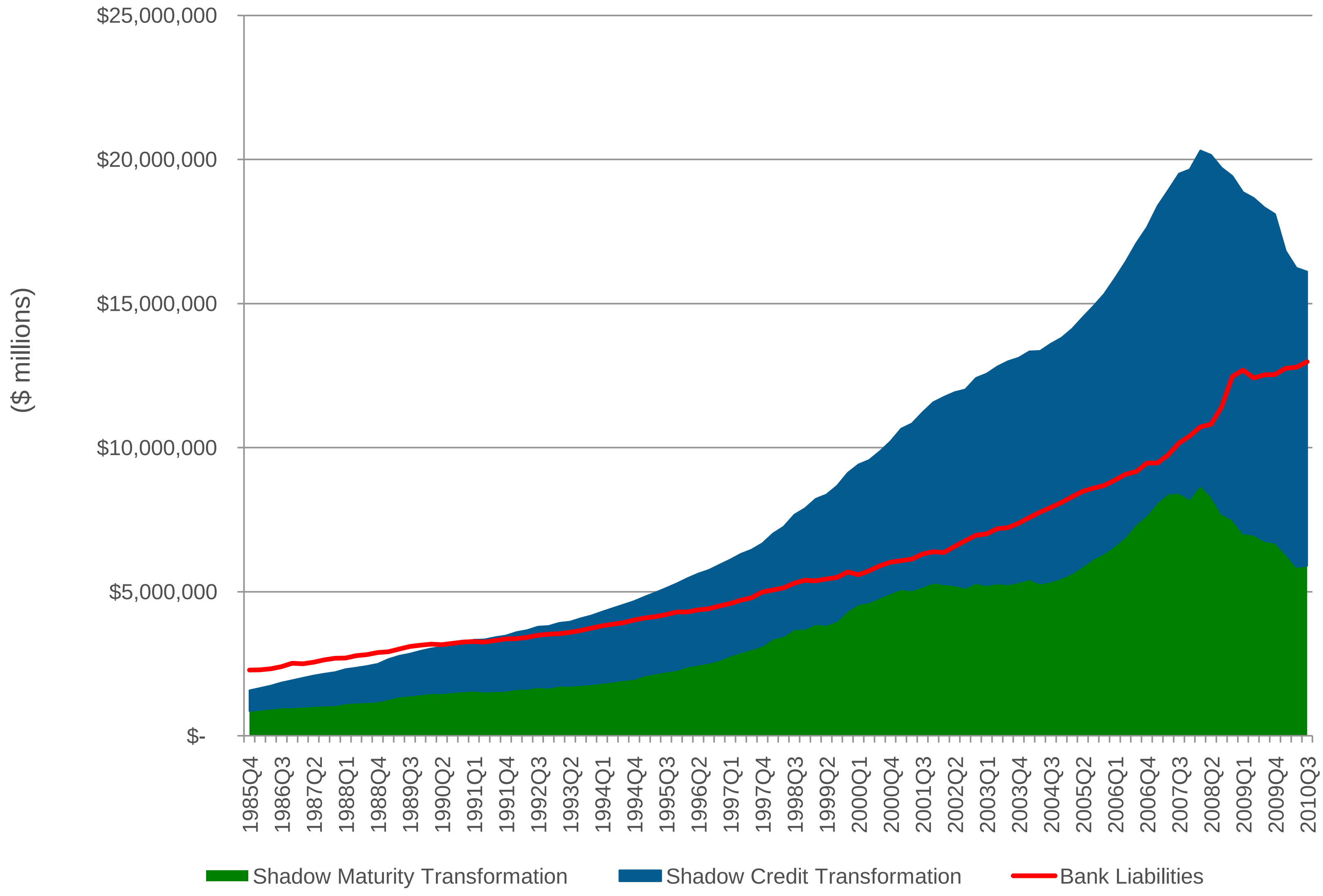
Topology of Credit Intermediation



Shadow Maturity Transformation



Shadow Banking Sector

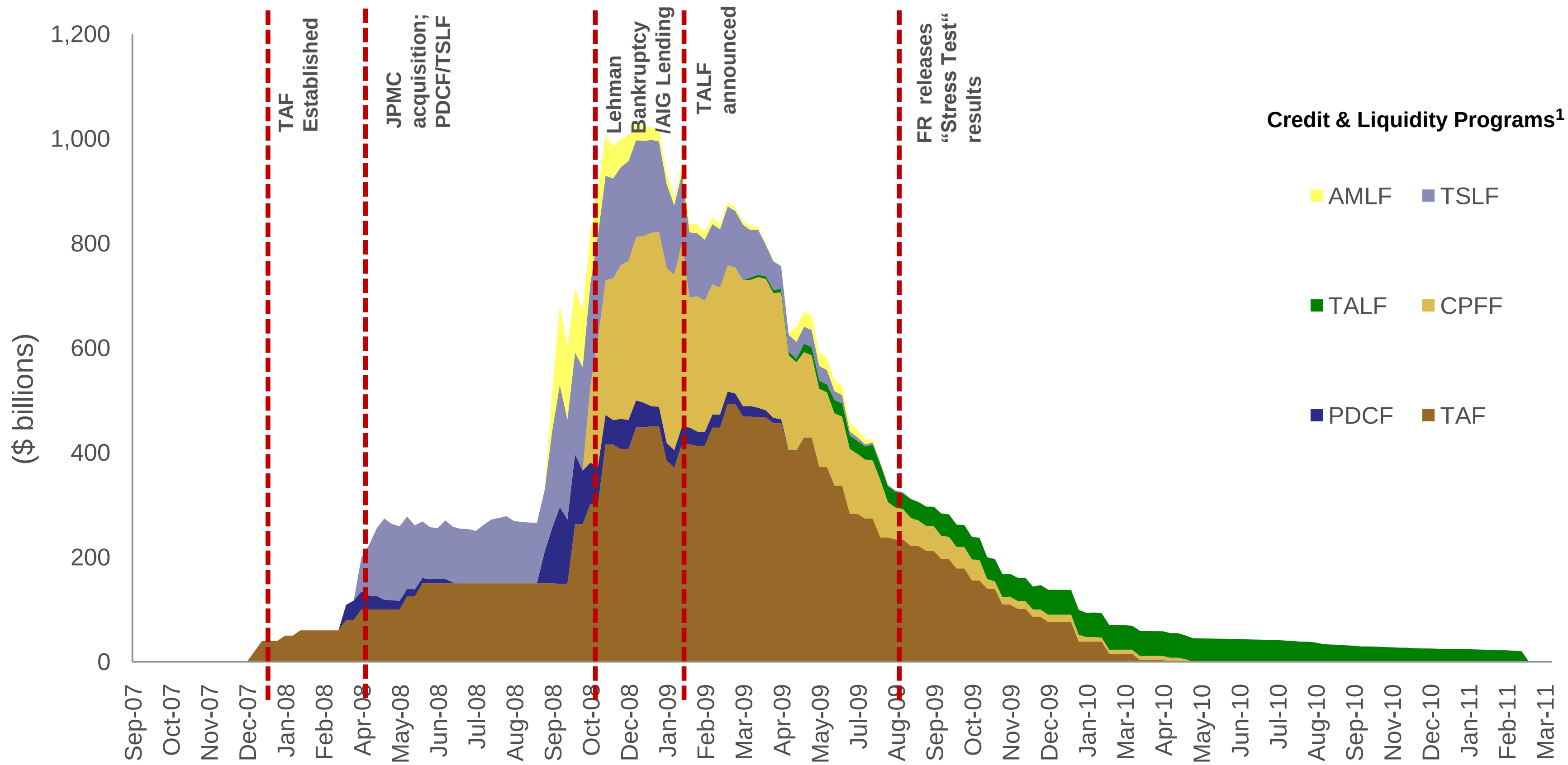


CP, Repo and Securities Lending, Money funds

ABS, GSE debt, Agency MBS

Official Sector Support for Shadow Banking Activities

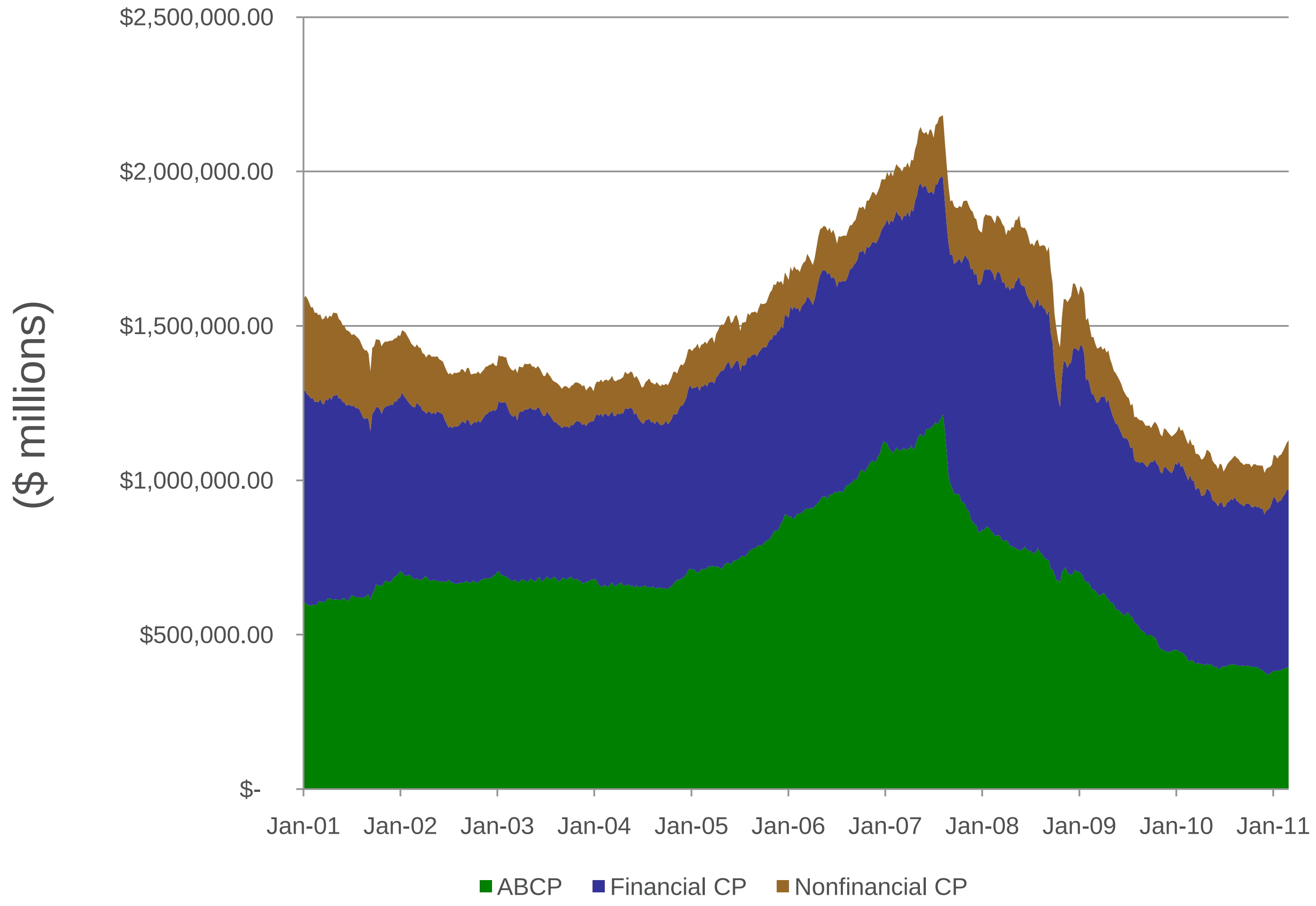
September 2007 to March 3, 2011



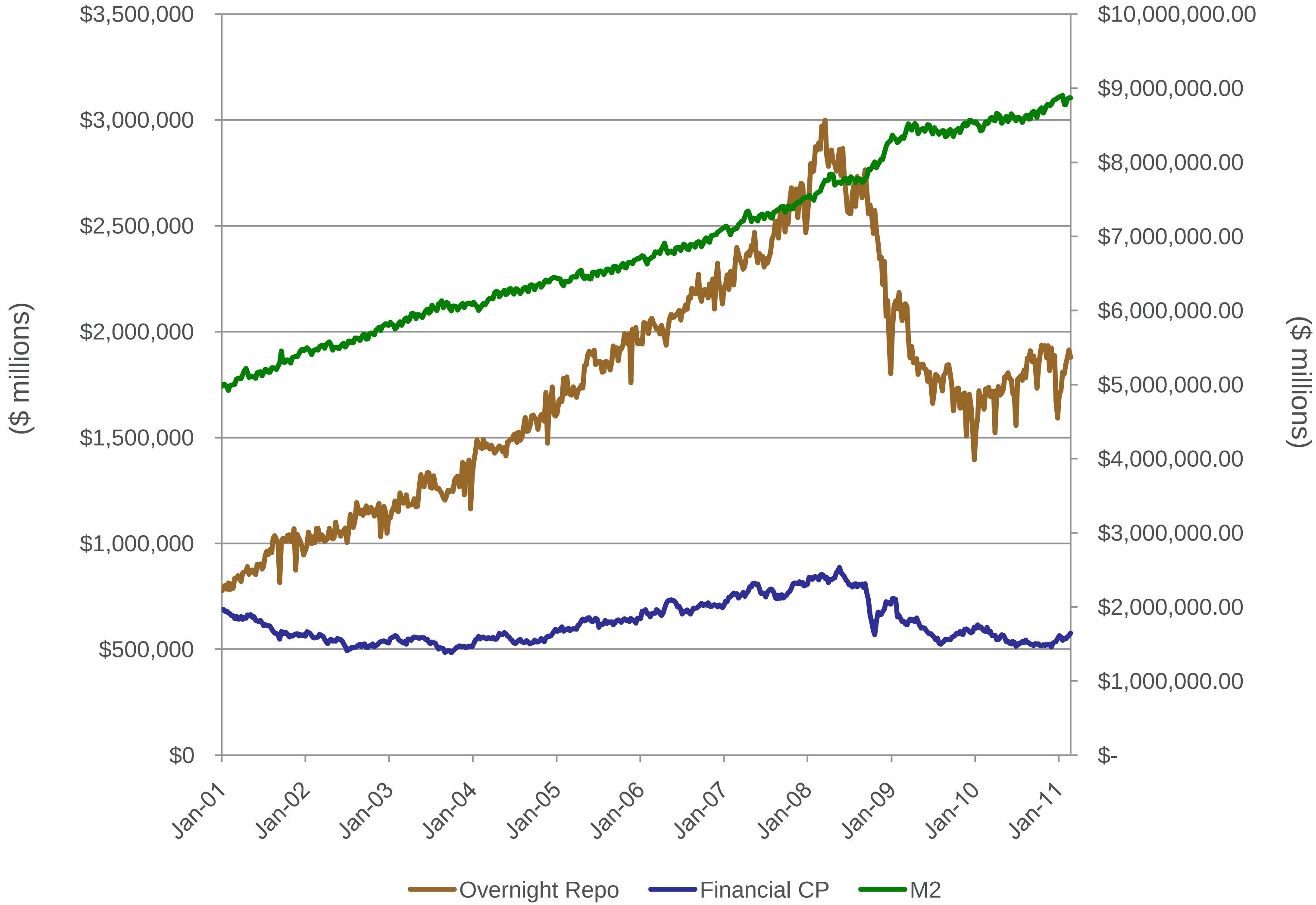
Source: March 3, 2011 H.4.1 release. Differences in balances compared to other material in this presentation may be due to differences in timing or metrics

1. AMLF - Asset-Backed Commercial Paper Money Market Fund (ABCP MMMF) Liquidity Facility; TSLF- Term Securities Lending Facility; TALF - Term Asset-Backed Securities Loan Facility; CPFF -Commercial Paper Funding Facility; PDCF- Primary Dealer Credit Facility; and TAF - Term Auction Facility.
2. Assets of the portfolio are exhibited and not the loans.

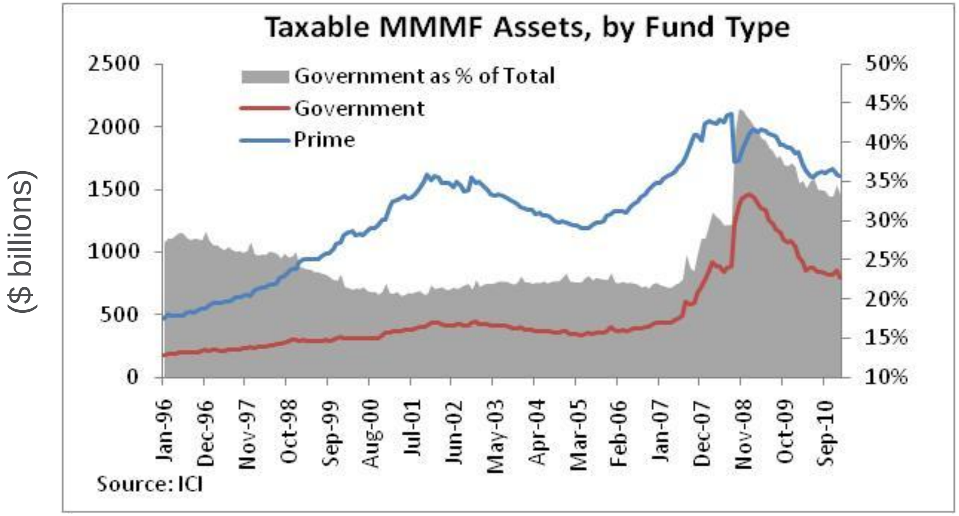
Asset-backed commercial paper market (ABCP)

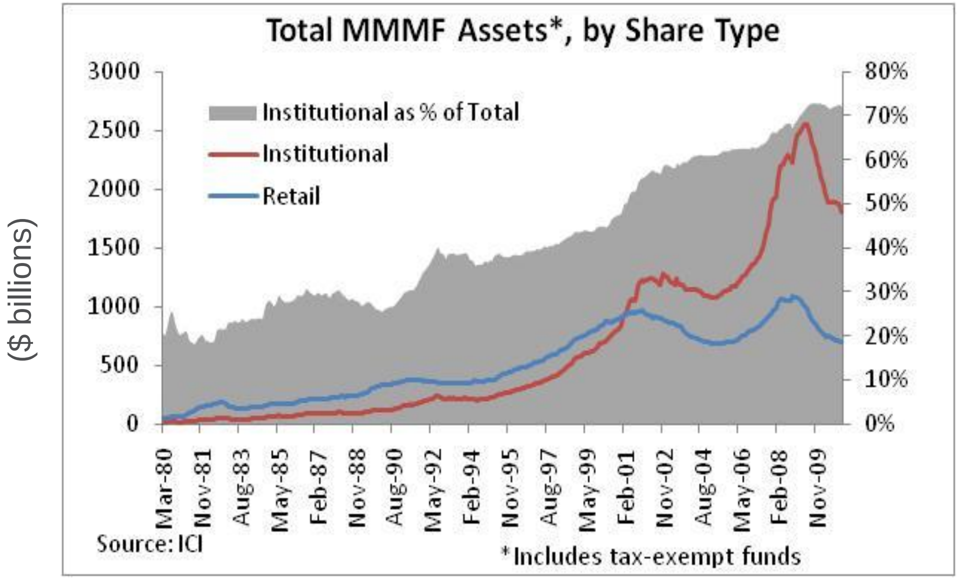


Tri party Repo



Money Market Mutual Funds





ABCP: Current regulatory changes

- FAS 166/167 and Basel capital rules may significantly increase liquidity and capital requirements for bank backup lines of credit for conduits
- Balance sheet consolidation for loans or securities of the conduit
  - increased risk-based leverage ratio and capital requirements as well higher loan loss reserves
- Proposed liquidity requirements for banks could make backup lines more expensive
  - liquid assets must be sufficient to meet its stress liquidity needs for a 30-day time horizon

The Future for ABCP

The cumulative impact of these changes will likely include:

- More required capital and liquidity for bank-sponsored conduits, corresponding to higher-cost lines of credit to finance companies
- Likely end of programs which exist solely for off-balance sheet capital arbitrage

Mitigating behavior by the industry might include:

- Shift in conduit sponsorship from US banks to non-banks or foreign banks with balance sheet capacity
- Re-structuring of conduits in order to avoid accounting consolidation (e.g. sale of first-loss tranche to transfer control to third-party)

- The ABCP market will be smaller and more expensive, sponsored by non-banks and largely fund asset-backed loans originated by non- bank finance companies

Tri Party Repo Market: Current Regulator-Driven Changes

- Industry Tri-Party Task Force has suggested improvements in the following areas
  - Operational Arrangements
  - Dealer Liquidity Risk Management
  - Margining Practices
  - Contingency Planning
  - Transparency
- "Tri-Party Repo Infrastructure Reform" White Paper by FRBNY
  - Market reliance on intra-day credit from clearing banks
  - Aggressive dealer liquidity management
  - Cash investor and clearing bank risk management
  - Cash contingency plans around large dealer default

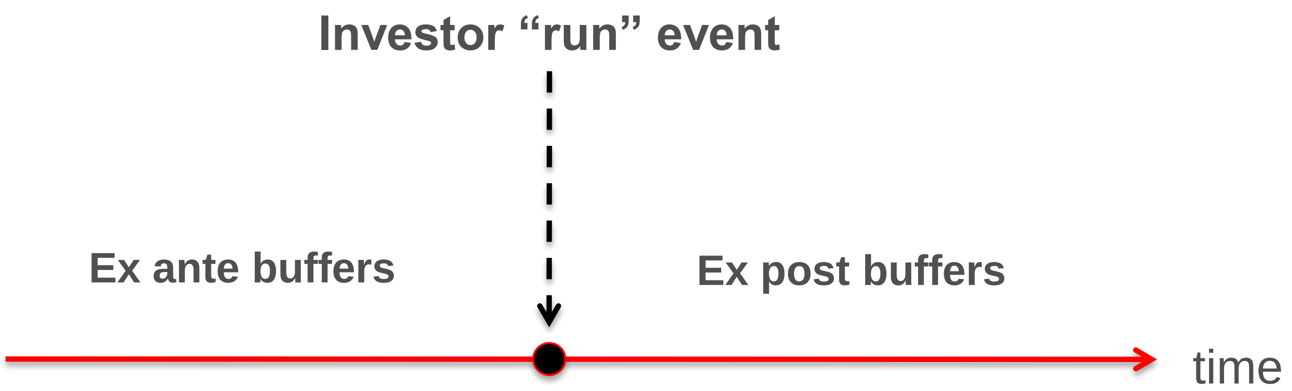
Taskforce Website:

http://www.newyorkfed.org/banking/tpr_infr_reform.html

The Future for Tri-Party Repo

- Impact on the market
  - Reduced intra-day credit and daily unwind
  - Higher margins, less cyclical margins, higher-quality collateral
- Future of broker-dealer model
  - Broker-dealer model now has liquidity backstop, but will be subject to leverage requirements and prudential supervision instead of voluntary oversight
  - Need tri-party solution to failure of major borrower to reduce systemic risk

MMMF Buffers



Ex ante buffers are costly but allow preservation of stable NAV	Absorbing losses when they occur is less costly but is not consistent with stable NAV
Preferred option if investors care more about liquidity	Preferred option if investors care more about yield
Example: Capital, liquidity, risk standards	Examples: variable NAV or "hold back"

Loss absorption buffers address the risk of "credit" losses but may not adequately reduce the risk of losses associated with sales of assets at fire sale prices

Access to a source of non-official emergency liquidity could further reduce this risk

Conclusions

- The motivations for shadow banking have become even stronger with increases in capital and liquidity requirements on traditional institutions;
- The objective is to reduce the risks associated with maturity transformation through more appropriate, properly priced and transparent backstops – credit and liquidity "puts".
- Regulation has done some good, but more work needs to be done to prevent shadow credit intermediation from being a continued source of systemic concern.