

**Comments on
“The Federal Reserve’s
Primary Dealer Credit Facility”
Tobias Adrian and James McAndrews**

SGE Session on
“The Fed’s New Lending Facilities”
ASSA Meetings San Francisco

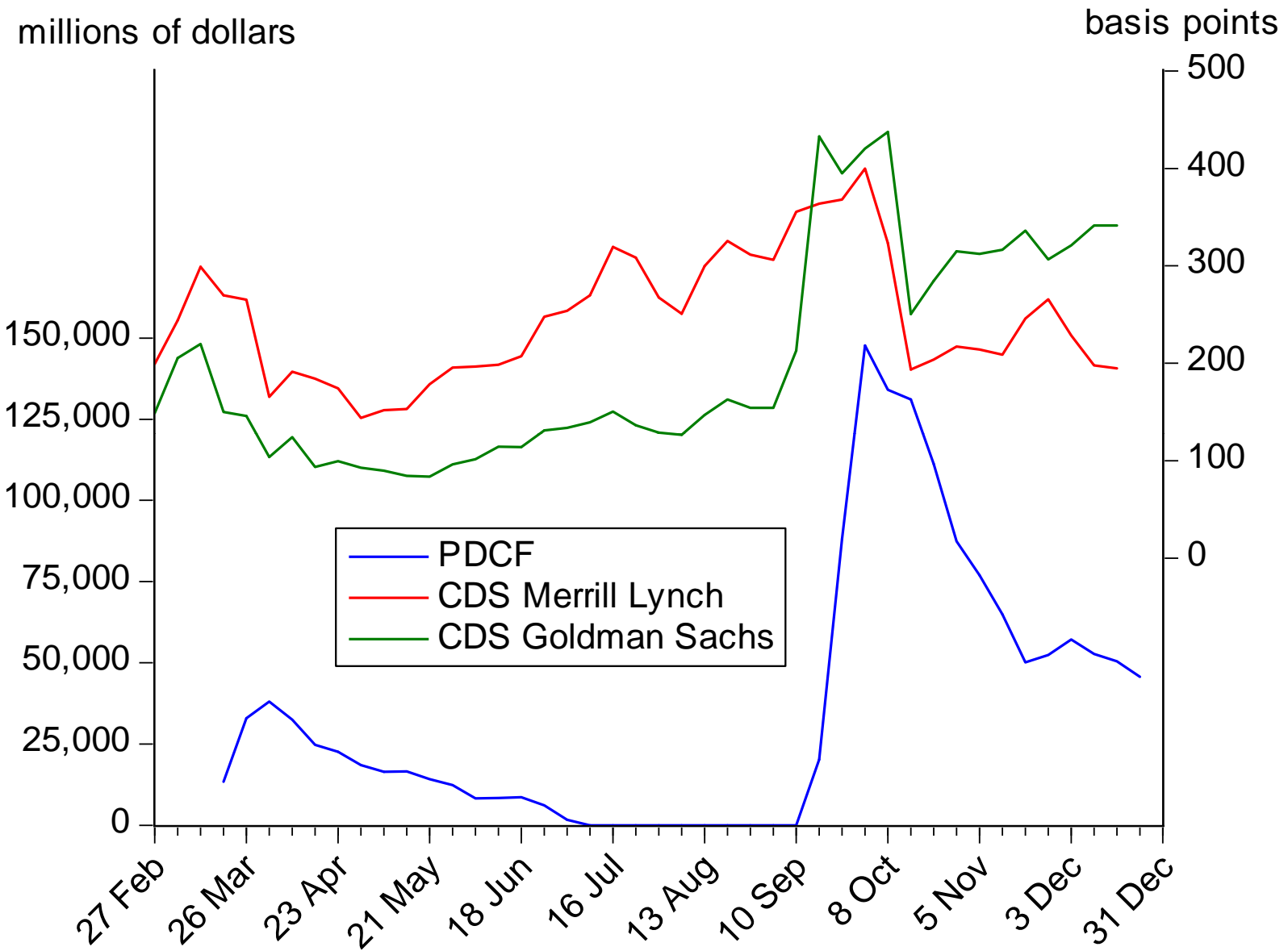
John B. Taylor
Stanford University
January 4, 2009

Summary

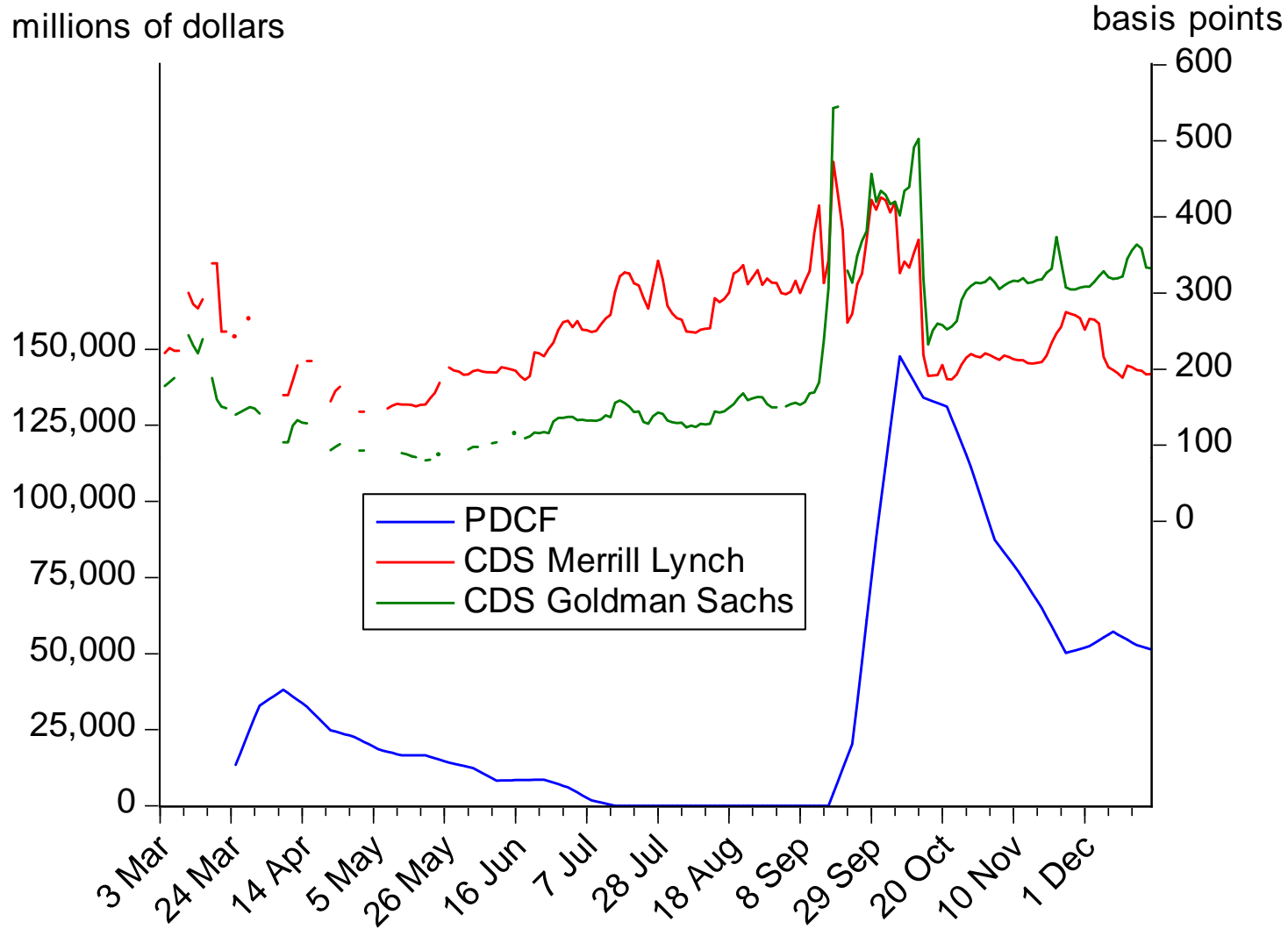
- Excellent paper on economic rationale for PDCF
 - Analogy: Broker-Dealers (PDCF), Depository Institutions (PCF)
- Focus on role of the Repo market
 - Haircuts, margins, leverage, downward spirals (33:1 to 20:1)
 - Leverage first rose in recent crisis (SIVs, large rate cuts)
- Structural changes over time:
 - Growth of broker-dealers and hedge funds relative to depository institutions
 - Trend toward tradable assets and liabilities
 - *Repo runs or margin spirals* rather than classic bank runs
- Protections: Penalty rates, regulation, moral hazard
- Main Comments:
 - Empirical Impact
 - Slippery slope to more facilities

Empirical Findings

- “credit default swap prices of primary dealers fell after the introduction of the PDCF”
- “To date, the PDCF seems to be having measurable effects on the repo and other funding markets, as many primary dealers found that their perceived risk of default, as measured by credit default swap prices, declined after the facility’s introduction. ”
- Yet no evidence presented in the paper, so let’s take a look at CDS rates for Merrill Lynch and Goldman Sachs (for example)...



Weekly averages of daily CDS data and weekly average PDCF loans



Daily CDS data with daily PDCF date interpolated from weekly average data

Examine Dynamic Cross Correlations

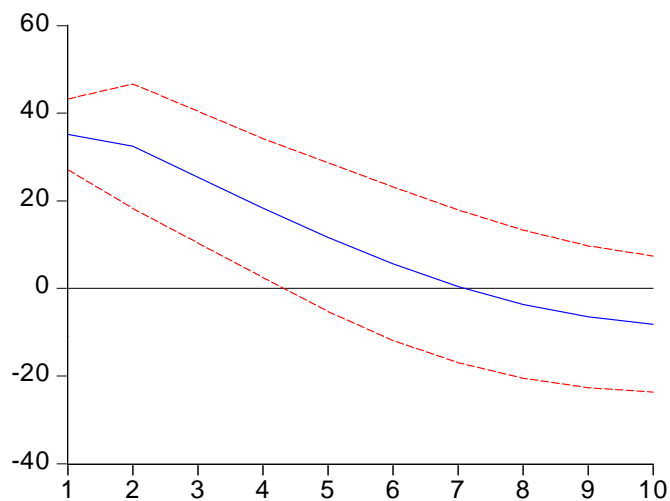
- Graphical evidence is difficult to interpret
 - CDS rates appear to increase when PDCF loans rise!
 - But there are cause and effect issues to sort out
 - We can apply time series methods to sort out the timing differences
- Estimate bi-variate vector auto-regressions (VARs) between CDS rates (on Merrill Lynch and Goldman Sachs) and PDCF loans
 - Compute impulse response functions from the VARs
 - Look for significant effects
- Here are the results...

PDCF and Goldman Sachs CDS Impulse Responses

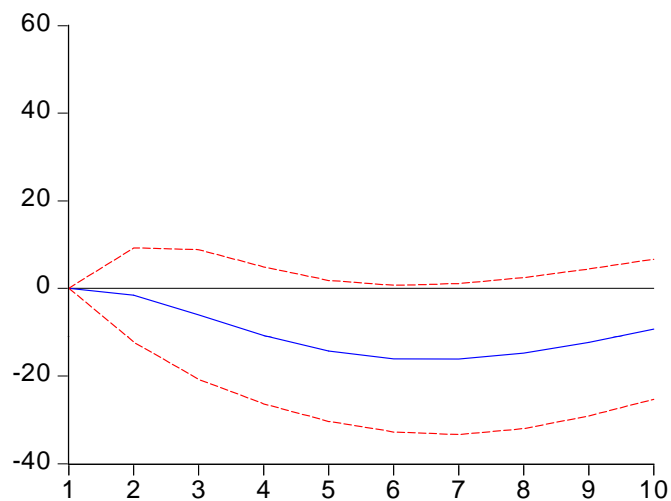
Based on Weekly Data

Response to Cholesky One S.D. Innovations ± 2 S.E.

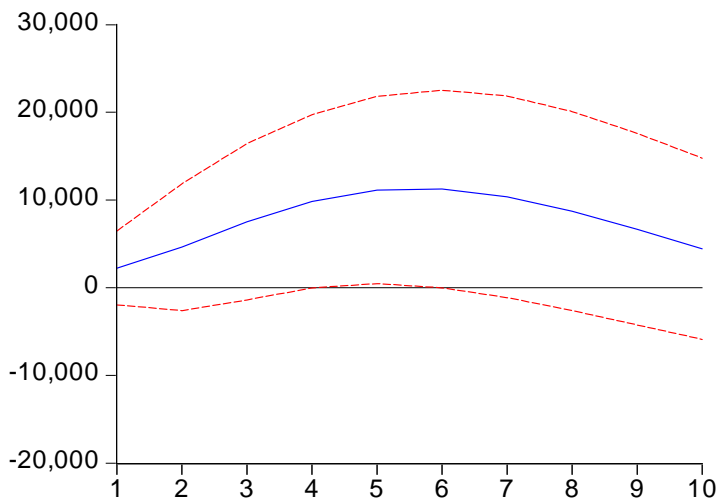
Response of CMER1U5 to CMER1U5



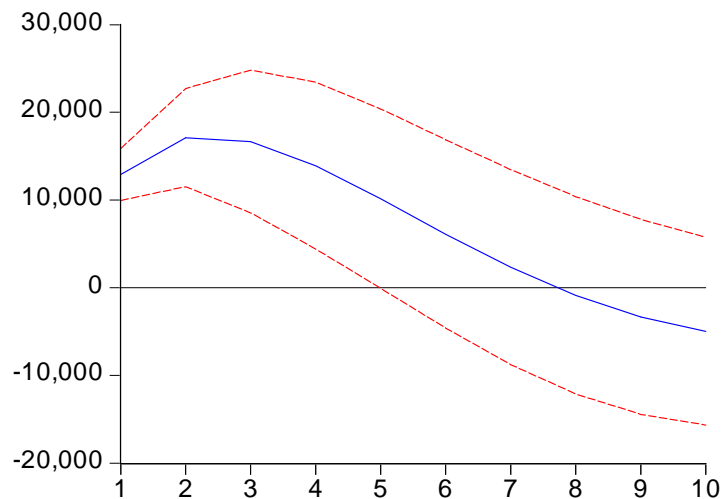
Response of CMER1U5 to PDCF



Response of PDCF to CMER1U5



Response of PDCF to PDCF

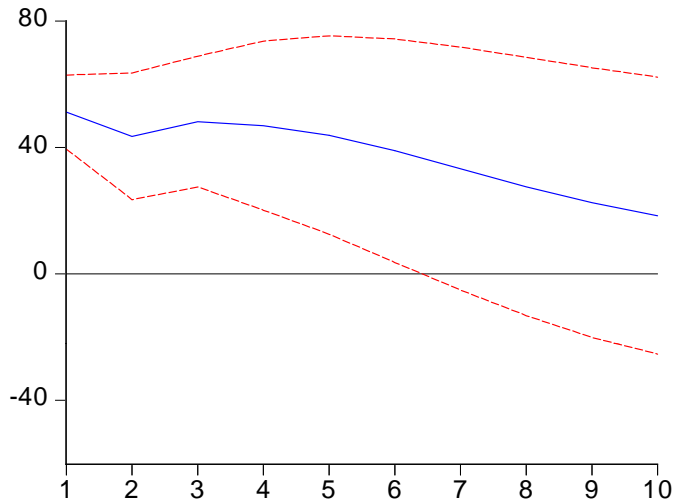


PDCF and Merrill Lynch CDS Impulse Responses

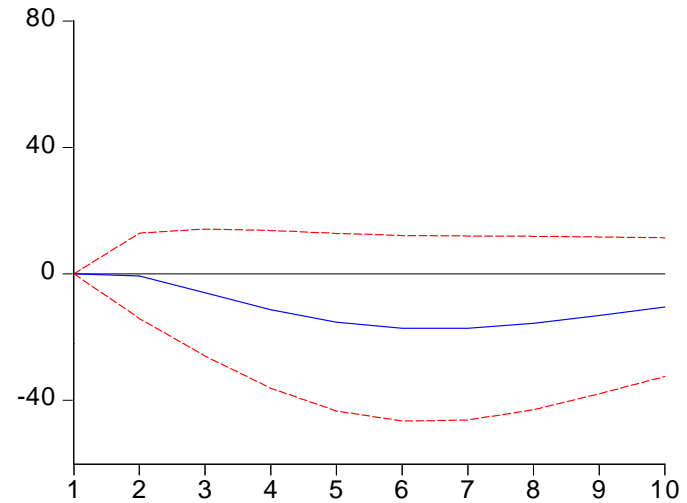
Based on Weekly Data

Response to Cholesky One S.D. Innovations ± 2 S.E.

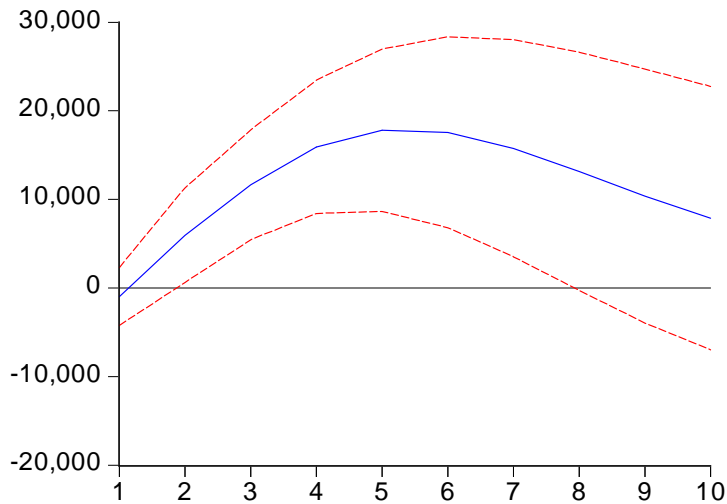
Response of CGS1U5 to CGS1U5



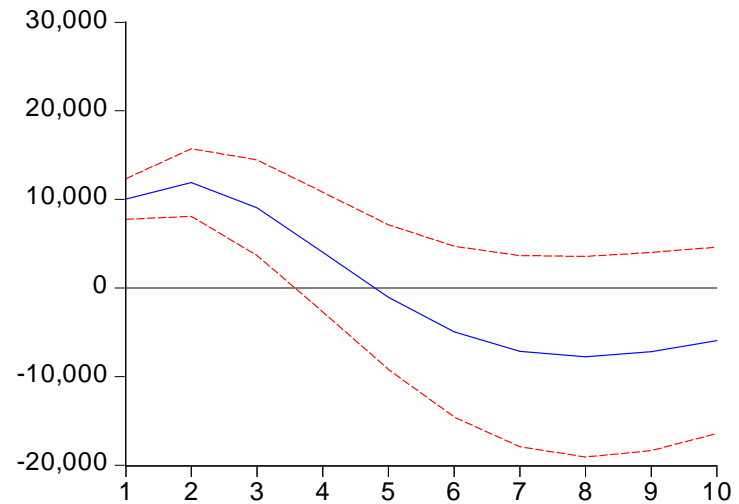
Response of CGS1U5 to PDCF



Response of PDCF to CGS1U5



Response of PDCF to PDCF



Evidence of Effectiveness of PDCF

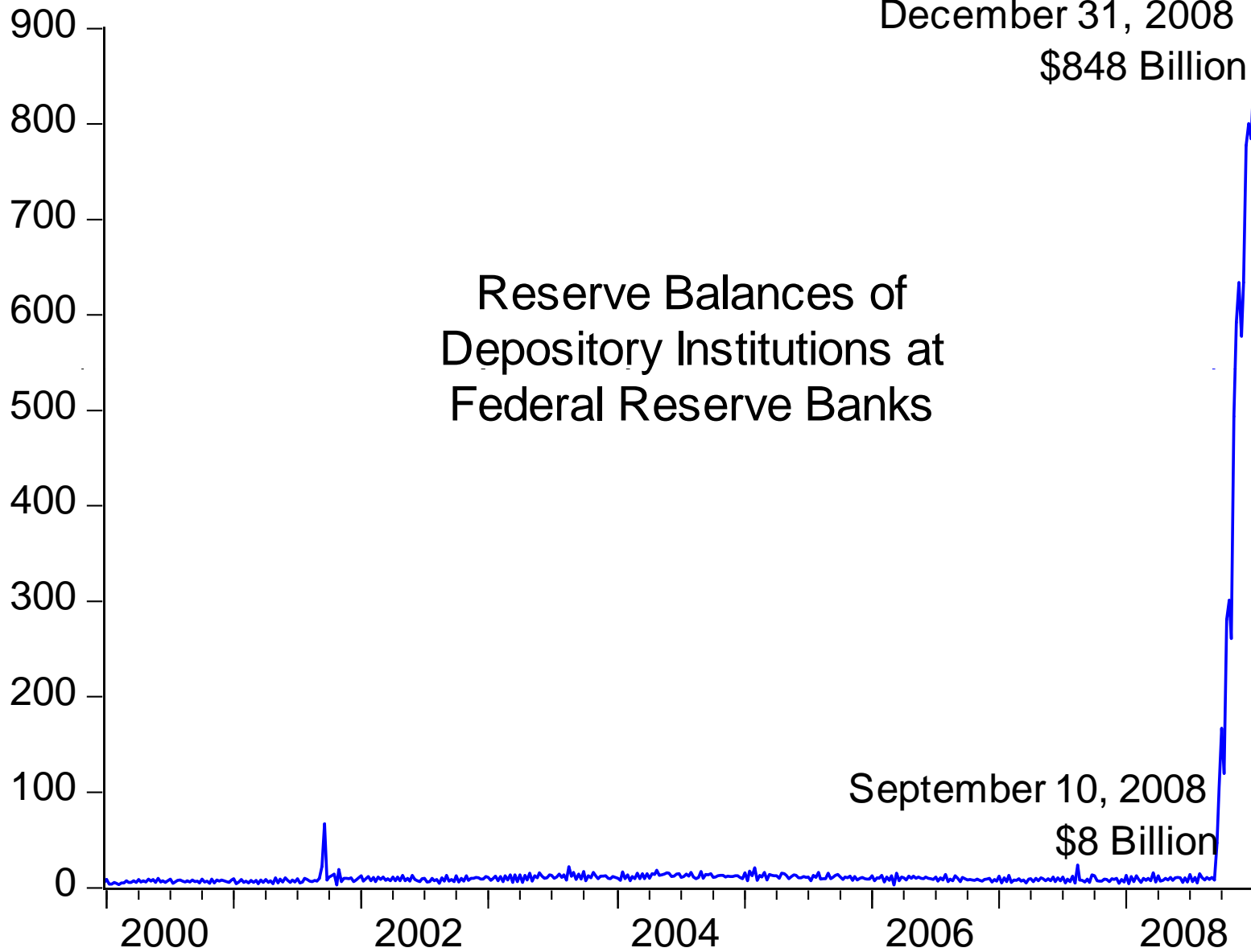
- PDCF loans “Granger-cause” CDS rates negatively
 - In this sense there is evidence of significant effectiveness of the PDCF
- CDS rates “Granger-cause” PDCF loans positively
 - Likely reflecting the increased demand for PDCF loans at the time of market stress

A Slippery Slope to More Facilities?

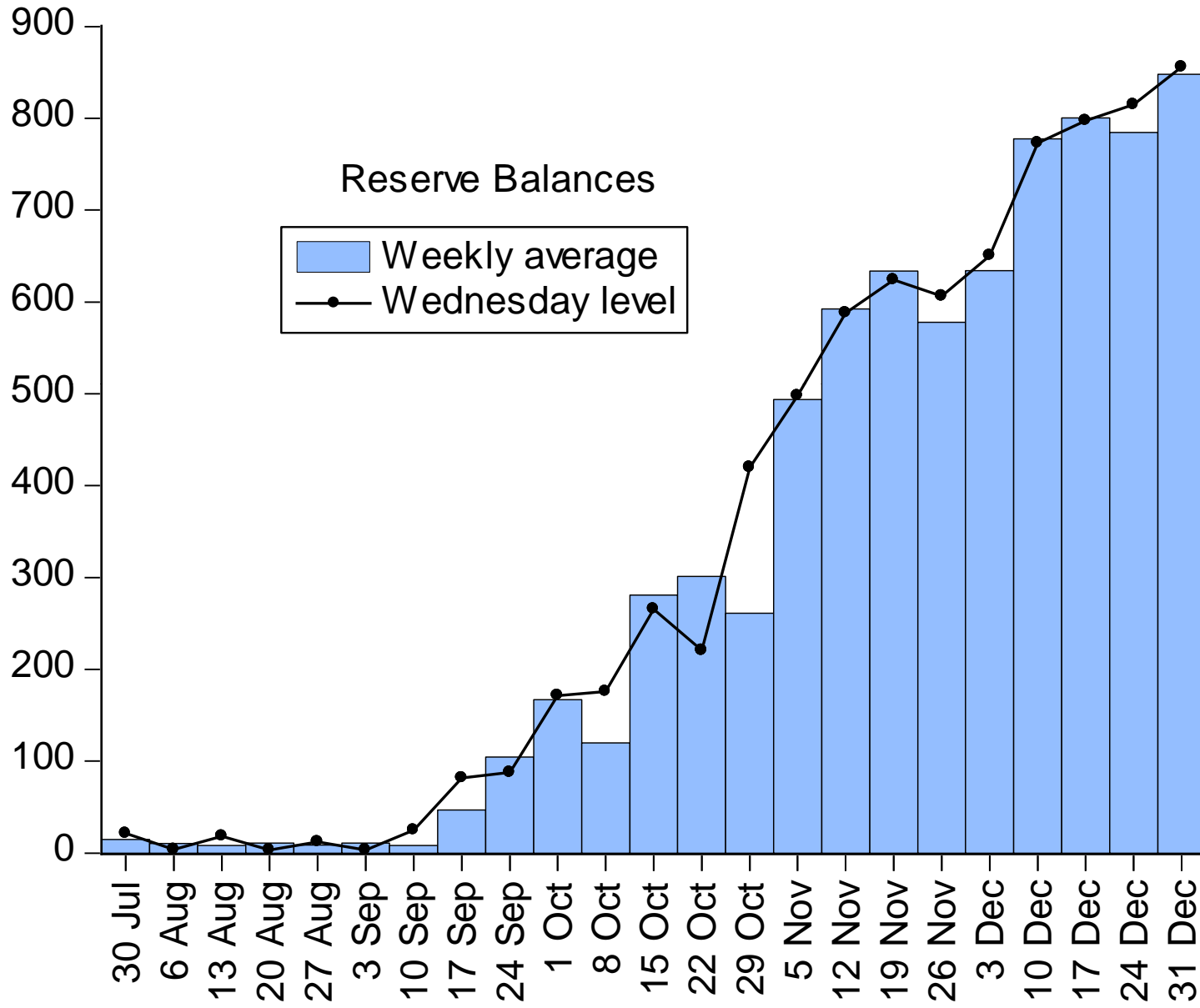
- Securities (Treasury and Agency) held outright
- Repos
- Loans from the TAF
- Other Loans
 - Primary Credit Facility (discount window)
 - Primary Dealer Credit Facility
 - Asset Back Commercial Paper Money Market Mutual Fund Liquidity Facility
 - Loans to AIG
 - Term Asset-Backed Securities Loan Facility (credit card, student, auto)*
- Private Portfolio holdings
 - Commercial Paper Funding Facility
 - Maiden Lane I (Bear Stearns)
 - Maiden Lane II (AIG)
 - Maiden Lane III (AIG)
 - Money Market Investor Funding Facility*
 - Mortgage Backed Securities Purchase Program*
- Other Federal Reserve Assets (**very large loans to foreign central banks**)

Note: Minimal change items are gold stock, SDRs, Treasury currency outstanding, seasonal and secondary discounts, float

billions of dollars



billions of dollars



Impact of PDCF on Monetary Policy?

billions of dollars

