Deutsche Bank

Update on U.S. Government Initiatives

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A Passion to Perform.



Deutsche Bank Securities Inc., a subsidiary of Deutsche Bank AG, conducts investment banking and securities activities in the United States.

Summary Overview of \$10.7 Trillion U.S. Gov't Initiatives

Approximately \$3.3 trillion of the \$10.7 trillion in U.S. Government programs have already been utilized

Most of these initiatives have been part of an effort to deploy unorthodox policy tools to keep credit flowing in the economy

However, the fundamental issue of "toxic bank assets" remains largely unaddressed by most of the U.S. Government programs to date

Summary of \$10.7 Trillion U.S. Government Initiatives

Government Agency	Size (\$bn)	Used (\$bn)
Federal Reserve	5,186.1	1,841.2
Treasury Department	4,147.0	688.4
FDIC	1,046.5	488.4
Housing and Urban Development (HUD)	300.0	300.0
Total	10,679.6	3,318.0

Sources: Fed, FDIC and Treasury websites, as well as WSJ and other public articles

- The above figures do not include any of the widely expected new initiatives from the Obama Administration, including in particular:
 - Economic stimulus package (~ \$1 trillion expected)
 - New initiatives to address "toxic bank asset" purchases
- With rates already at zero, the Federal Reserve has shifted the focus of Tuesday / Wednesday's FOMC meetings (1/27-28) to a detailed review of its wide range of new lending and asset purchase programs
 - Concerns about size of Fed's Balance Sheet and inflationary impact
 - Preserving Fed's "independence"
 - Effectiveness and unwinding of programs



Detailed Overview of \$10.7 Trillion U.S. Gov't Initiatives

Breakdown of \$10.7 Trillion U.S. Government Initiatives by Agency and Program

Federal Reserve (\$5.2 trn, 48.6%)

Federal Reserve - \$5.255 trillion	Max Amount (\$bn)	<u>Used</u> (\$bn)
CP Funding Facility (CPFF)	1,800.0	334.7
Term Auction Facility (TAF)	900.0	371.2
Other Assets	602.0	602.0
Money Market Investor Funding Facility (MMIFF) 540.0	0.0
MBS Purchase Program (11/25/08)	500.0	52.4
GSE Debt Purchase Program (11/25/08)	100.0	25.0
Term Securities Lending Facility (TSLF)	250.0	190.2
Term ABS Loan Facility (TALF)	200.0	0.0
Other Credit Extensions (AIG)	112.5	85.8
Primary Credit Discount	92.6	92.6
ABCP Money Market Fund Liquidity F. (AMLF)	16.1	16.1
Primary Dealer and Others (PDCF)	33.7	33.7
Net Portfolio Maiden Lane LLC (Bear Sterns)	28.8	27.1
Securities Lending Overnight	10.3	10.3
Secondary Credit	0.1	0.1
Subtotal	5,186.1	1,841.2
% of combined \$10.7 trn / % or utilization	48.6%	35.5%

- With no losses to date, Treasury collected \$800 mm in premiums on this program as of 12/31/08.
- Includes \$14 bn capital injection in Freddie Mac and \$49 bn in Fannie/Freddie MBS purchases.
- 3) \$700 bn based on FDIC indication, though could theoretically be as high as \$1.4 trn.
- 4) Portion of guarantee being covered by Treasury. \$306 bn (Citi) / \$118 bn (BofA) in guarantees with loss sharing. First losses to be borne by Citi (\$29 bn) / BofA (\$10 bn) and additional losses are split 90% U.S. Government and 10% Citi / BofA.

Sources: Fed, FDIC and Treasury websites, as well as WSJ and other public articles

Treasury (\$4.1 trn, 38.8%)

Treasury Department - \$4.147 trillion	Max Amount (\$bn)	<u>Used</u> (\$bn)
Money Market Mutual Funds	3,000.0	0.0 (1)
Troubled Asset Relief Program (TARP)	700.0	378.4
Fannie Mae / Freddie Mac Bailout	200.0	63.0 ⁽²⁾
Stimulus Package	168.0	168.0
Treasury Exchange Stabilization Fund (ESF)	50.0	50.0
Tax breaks for banks	29.0	29.0
Subtotal	4,147.0	688.4
% of combined \$10.7 trn / % or utilization	38.8%	16.6%

FDIC (\$1.05 trn, 9.8%)

FDIC - \$1,046 billion	Max Amount (\$bn)	<u>Used</u> (\$bn)
FDIC TLG Debt Guarantees	700.0	141.9
Asset Guarantee to Citigroup / Bank of America	346.5	346.5
Subtotal	1,046.5	488.4
% of combined \$10.7 trn / % or utilization	9.8%	46.7%

Dep't of Housing and Urban Development (\$300 bn, 2.8%)

Н	UD - \$300 billion	<u>Max</u> Amount (\$bn)	<u>Used</u> (\$bn)	
	Hope For Homeowners	300.0	300.0	
	Subtotal	300.0	300.0	
	% of combined \$10.7 trn / % or utilization	2.8%	100.0%	3



The Evolution of Treasury's TARP Program

The Evolution of T	TARP					
Oct 3, 2008	Oct 14, 2008	Nov 23, 2008	Nov 25, 2008	Dec 19, 2008	2009	
Troubled Asset Purchases	Capital Purchase Program	Targeted Investment / Asset Guarantee Program	TALF Program	Automotive Industry Financing Program	тво	
■ \$0 ■ Paulson cancels program on 11/12/08	 \$250 billion Over 300 financial institutions received CPP approvals to date 	■ ~ \$80 billion to date - Citi: \$20 bn - BofA: \$20 bn - AIG: \$40 bn	 \$20 billion Contribution to Fed's \$200 bn lending facility (for ABS) 	■ \$25 billion - \$17.4 bn on 12/19/08 - \$6 bn on 12/30/08 - \$1.5 bn on	■ ~ \$350 bn	

TARP Allocations of first \$350 Billion

<u>Date</u>	<u>\$ bn</u>	Institution / Program
10/14 - present	250.0	Over 300 banks, financials
11/09	40.0	AIG
11/23	25.0	Citigroup (1)
11/25	20.0	Fed's TALF Program
12/19	17.4	GM/Chrysler
12/30	6.0	GMAC/GM
Total	358.4	Over-Allocation

¹⁾ In addition to commitment on 10/14

Remaining \$350 Billion

1/16/09

- Senate released second \$350 billion of TARP funds on January 15, 2009
- Nearly \$30 billion already allocated
 - \$8.4 billion over-allocation on initial \$350 billion
 - \$20 billion to BofA on 1/16/09
- Focus of remaining ~ \$320 billion TBD
 - Significant additional restrictions
 - Foreclosure mitigation efforts
 - "Toxic bank assets"





~\$25 Billion Government Support for U.S. Auto









Bank HoldCo Approval ■ GMAC received approval on December 24, 2008

■ Chrysler Financial did not apply

■ Ford Credit did not apply

TARP

General Motors

- Loan Size: \$13.4 billion
- Loans may be called or increased pending March '09 status review

GMAC

- \$5 bn preferred stock capital injection
- \$1 bn GM government loan to capitalize GMAC

Chrysler

- Loan Size: \$4 billion
- Loans may be called or increased pending March '09 status review

Chrysler Financial

■ \$1.5 bn in government loans on January 16

<u>Ford</u>

■ Has <u>not</u> requested federal loans or capital to date

Ford Credit

■ Has <u>not</u> requested federal loans or capital to date

FDIC Debt Guarantee ■ GMAC now qualifies

- Chrysler Financial could potentially qualify
- Ford Credit could potentially qualify

Fed CPFF

- Qualifies for ABS CP only
 - Ratings too low for regular
 CP
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 CP
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 - Ratings too low for regular
 CP

Fed TALF

■ Available

■ Available

■ Available



FDIC's TLG Debt Guarantee Program

The FDIC's Debt
Guarantee
Program was
among the most
successful U.S.
Government
initiatives in 2008,
as evidenced by
the \$142 bn of
issuance, and
significant
secondary market
tightening

There has <u>not</u> been a senior unsecured non-guaranteed issuance from a large bank/broker since September 2008

Over 5,800 eligible institutions chose to affirmatively "Opt-out" of the program on December 5, 2008

Total FDIC Guaranteed Debt Issuance

Issuer	Total (\$mm)	Tranches**
GECC*	24,325	13
JP Morgan*	20,800	6
Bank of America	19,850	8
Citigroup	17,750	7
Goldman Sachs*	14,600	7
Morgan Stanley	14,425	10
Wells Fargo	6,000	2
American Express Bank	5,900	3
Regions Financial	3,750	4
SunTrust Bank	3,000	2
PNC Funding	2,900	3
HSBC USA	2,675	2
John Deere	2,000	1
Sovereign Bank	1,350	1
KeyBank	1,000	1
NY Community Bank	512	1
KeyCorp	500	2
Zions Bancorp	255	1
Sovereign Bancorp	250	1
NY Community Bancorp	90	1
Total	141,932	76

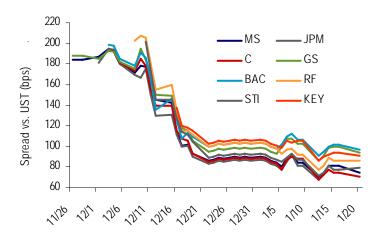
^{*} Includes EUR and/or STG issuance

Source: Deutsche Bank, Bloomberg

2009 Outlook

- ~ \$400 \$700 billion of additional FDIC guaranteed issuance in 1H 09 expected
 - In addition to the \$142 billion issued to date
- FDIC to extend for maturities up to 10 years
 - Collateral posting requirement expected
- Significant backlog for special FDIC approvals
 - Insurance, finance, and newly formed entities
 - Requests to increase capacity cap

Secondary Trading Performance (3 – 3.5 yr)





- Reducing term financing costs for financials
- Providing critical liquidity to Bank Balance Sheets with > \$500 bn 2009 redemptions
- Reducing the probability of default at the anticipated low point of the credit/economic cycle (1st Half 2009)



^{**} Taps are not counted as separate tranches



Fed's Commercial Paper Funding Facility (CPFF)

The implementation
of the Fed
Commercial Paper
Funding Facility
(CPFF) was critical
in addressing the
lack of liquidity in
the front-end of the
credit markets

With a Balance Sheet ballooning to \$2.245 trillion, the Fed made nearly \$1.9 trillion of commitments in 2008, over \$330 bn of which was made to the CPFF

program

Note: Index Data includes securities with at least "1" or "1+" in short term ratings

Source: Federal Reserve, Bloomberg



- Program expires on April 30, 2009
 - Extension possible (some say "likely")

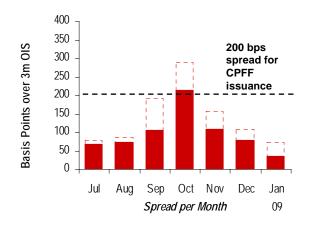
CPFF Issuance

- Over \$330 billion total issuance to date
 - Represents approx. 20% of \$1.8 trn CP market
- Majority of CPFF users are ABS CP issuers

Pricing / Market Improvement

- Significant pricing improvement in CP market (across various maturities) since implemented on 10/27/08
- <u>Issuer</u> confidence in rolling existing CP
- Investor comfort in exiting CP investments if desired

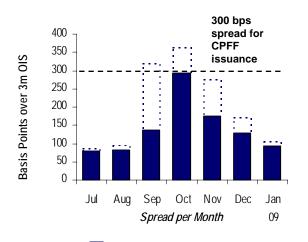
Financials CP Index (90 days)



Average Spread per month

Max. Spread per month

ABS CP Index (90 days)



Average Spread per month

Max. Spread per month



\$200 bn Fed Term ABS Loan Facility (TALF)

Program Development

■ Announced: November 25, 2008

■ Revised: December 19, 2008

■ First Purchase / Implementation: Expected in February 2009

■ Expiry Date: December 31, 2009

Program Objective

 Providing investors with low cost, non-recourse financing to kick-start ABS market and increase origination of consumer / auto / small business loans

Loan Pricing Mechanism

■ Loan Term: 3 years

■ Rate: Fed will determine rates and haircuts for each asset class

■ Form: fixed or floating

Allocations

■ Fed will offer TALF loans on a monthly basis

 On a fixed day each month, borrowers will be able to request 1 or more TALF loans by indicating for each loan the following: (i) required ABS collateral, (ii) desired loan amount (minimum size is \$10 million), (iii) desired interest rate (fixed or floating)

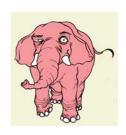
Eligible Collateral

- Eligible collateral must be "AAA" rated and issued on or after January 1, 2009
- Requirements of underlying credit exposures are as follows:
 - Auto Loan: Originated on or after October 1, 2007
 - Small Business Loan: Originated on or after January 1, 2008
 - Student Loan: First disbursement on or after May 1, 2007
 - Credit Card: Must refinance existing credit card ABS maturing in 2009 (amount no greater than maturing ABS)

Outlook / TALF 2.0

■ Potential expansion (via TALF 2.0) into CMBS, RMBS and other assets

- May be in question given expected FDIC 10 year guarantee program



Although most U.S.

Government programs to date have largely focused on keeping credit flowing in the economy...

... the core issue of toxic bank assets remains largely unaddressed

To date, global financial institutions have had writedowns of ~ \$1 trillion...

... significant additional writedowns will follow

The Big Elephant in the Room?

Selected Estimates of Remaining U.S. Financial Sector Losses / Writedowns

Sources



ISI Group, Inc.
International Strategy &
Investment

Forecast

- Estimates \$2.4 trillion of remaining U.S. bank / brokerage bad assets
 - \$1.2 trillion from the top 4 banks
 - \$1.2 trillion from the rest of industry



- NYU Economics Professor, Nouriel Roubini
- Elisa Parisi-Capone

- Estimates \$3.6 trillion of additional losses from U.S. originated assets (U.S. banks / brokers are exposed to 50%, or ~ \$1.8 trillion)
 - \$1.6 trillion of loan losses on \$12.4 trillion of unsecuritized loans (~ \$1.1 trillion for U.S. banks / brokers)
 - \$2.0 trillion of mark-to-market writedowns based on a further
 \$10.8 trillion in securities (~ \$700 billion for U.S. banks / brokers)
- U.S. bank / brokerage loss projections suggest the sector may need as much as
 \$1 \$1.5 trillion of additional private / public capital
- 2009 bank earnings could fill part of this need



Source: ISI Group, RGE Monitor

Alternatives Under Consideration for Toxic Bank Assets

"Bad Bank" Purchase Vehicle / Aggregator

■ RTC (S&L Crisis)

Government Asset Guarantee Program

- Citigroup, \$306 billion (11/23/08)
- Bank of America, \$118 billion (1/16/09)

Nationalization

- AIG, Fannie Mae, Freddie Mac (79.9%)
- Northern Rock and Bradford & Bingley in the U.K.
- Sweden, early 1990s

Pros

Selected

Precedents

- More transparent
- "Cleaner" solution
- Toxic assets moved off Balance Sheet
- Avoids huge upfront cost of direct purchase approach
- Limits bank downside on writedowns
 - "Ringfences" bad assets
- Reduces asset risk-weighting to 20%
 - Facilitates deleveraging without new capital
 - Increases Tier 1 capital

- Speed
- Halts creditor exodus and deposit runs
- Addresses large and systemic situations with no adequate or timely alternative

Considerations

- Significant upfront taxpayer cost
- Price discovery on assets
- Purchasing mechanism (auctions?)
- Impact of immediate write-downs
 - Forced insolvencies / liquidations
- Limited precedent

- Less transparent
- Toxic assets remain On-Balance Sheet
- Price discovery on insurance premium
- Ability of Government to efficiently run banks
- Impact on competitive landscape (capital / customers)
- Impact on markets
- Impact of potential asset fire sales



A combination of the above alternatives will likely be utilized to address the magnitude of the U.S. toxic bank asset problems

Relevant U.S. Toxic Asset Case Studies To Date

Sep 7, 2008



Nov 10, 2008



Nov 23, 2008



Jan 16, 2009

Capital Injections

- \$100 bn (each) Preferred Stock
- Unlimited secured credit facility expiring on 12/09
- \$40 billion of Preferred / Warrants
- \$60 billion 5 yr revolving credit facility (initially \$85 billion 2 yr facility)

■ \$45 billion of **Preferred / Warrants** ■ \$45 billion of **Preferred / Warrants**

Asset Purchase / Guarantee

- **■** Treasury commitment to open-market purchase of newly issued MBS
 - Support liquidity
- Treasury announcement on 11/25/08 of two additional purchase programs:
 - \$100 bn of direct GSE debt obligations
 - \$500 bn of MBS guaranteed by GSE

- Creation of 2 financing entities capitalized by AIG and Fed to purchase:
 - \$23.5 bn RMBS related to AIG's securities lending program, and
 - \$70 bn CDOs on which AIG has written CDS
- AIG loss limited to market declines prior to asset transfer and \$6 billion of funding

- Up to \$306 bn asset guarantee
 - 10 years for residential assets
 - 5 years for nonresidential assets
- **Loss Sharing**
 - Citi first \$29 bn
 - Excess amount shared 90% US Gov't and 10% Citi

- Up to \$118 bn asset guarantee
 - 10 years for residential assets
 - 5 years for nonresidential assets
- **Loss Sharing**
 - BofA first \$10 bn
 - Excess amount shared 90% US Gov't and 10% Citi

Treasury Ownership Stake

- 79.9% equity interest
- 79.9% equity interest
- Small equity stake via warrants (to date)
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