



From US Mortgage Excess to Global Economic Distress in Eighteen Months: How will it change the world and financial services?

February 14, 2009

Jeff Shafer

Vice Chairman, Global Banking

Senior New York Representative for Asia Pacific

(212) 816-1246

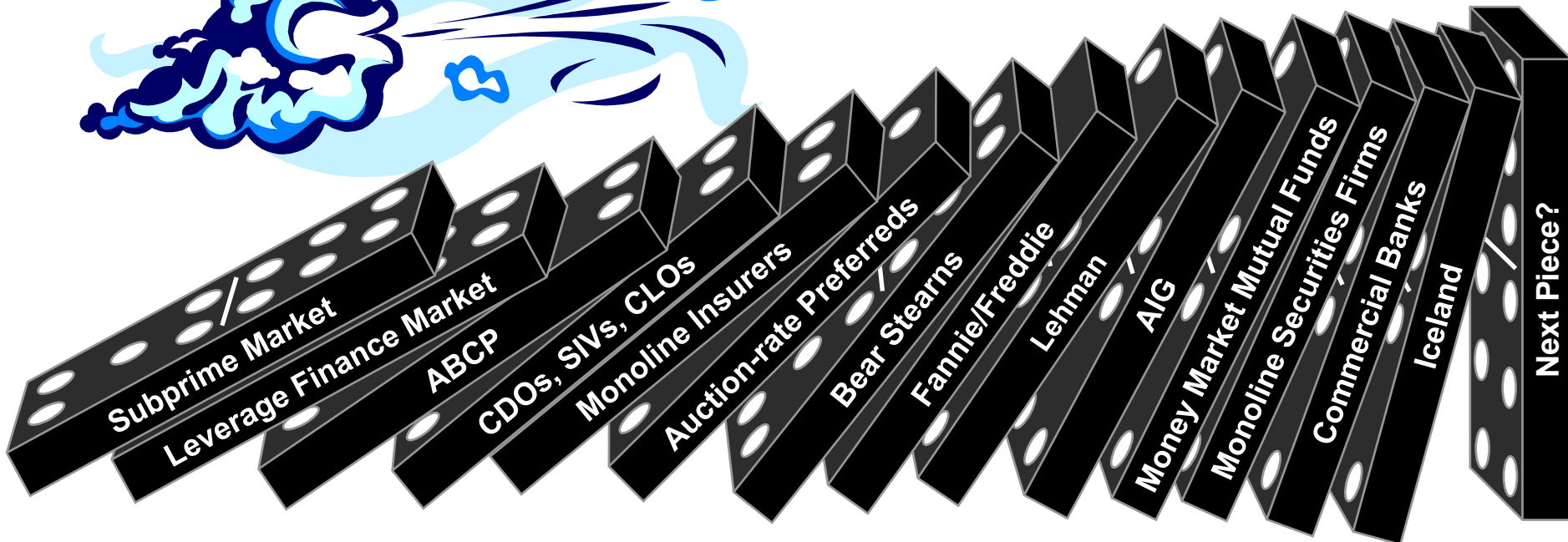
jeffrey.r.shafer@citi.com

A Year and a half of falling dominos in the US

From lax lending standards to no credit is safe

From covenant-lite transactions to lending handcuffs

From tight spreads to extreme credit markups

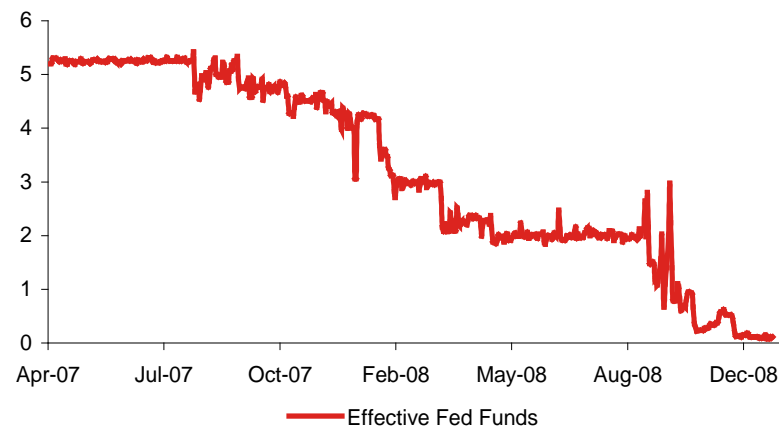


Investors stopped seeking a return on capital and only cared about return of capital

US Policy-makers Have Taken Unprecedented Actions

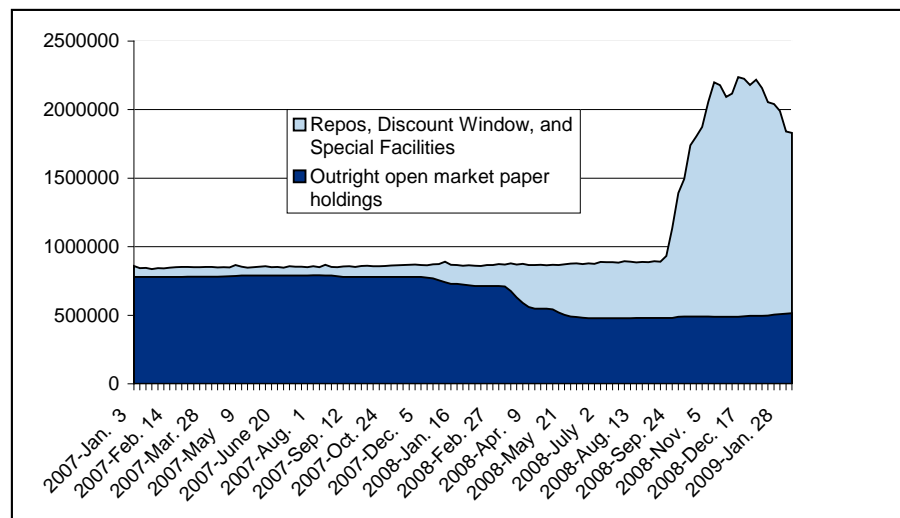
- **Fed interest rate cuts and credit risk assumption**
- **Takeover of financial institutions**
- **Troubled Asset Recovery Program**
- **Fiscal stimulus of nearly \$1 trillion**
 - \$168 billion in 2008
 - \$787 billion passed yesterday
- **Obama Financial Stability Plan**
 - **Financial Stability Trust**
 - **Public Private Investment Fund for legacy assets (\$500 billion to \$1 trillion)**
 - **Consumer and Business Lending Initiative (up to \$1 trillion)**
 - **Transparency and Accountability Agenda**
 - **Affordable Housing Support and Foreclosure Prevention Plan**
 - **Small Business and Community Lending Initiative**

Federal Funds Rate (percent)



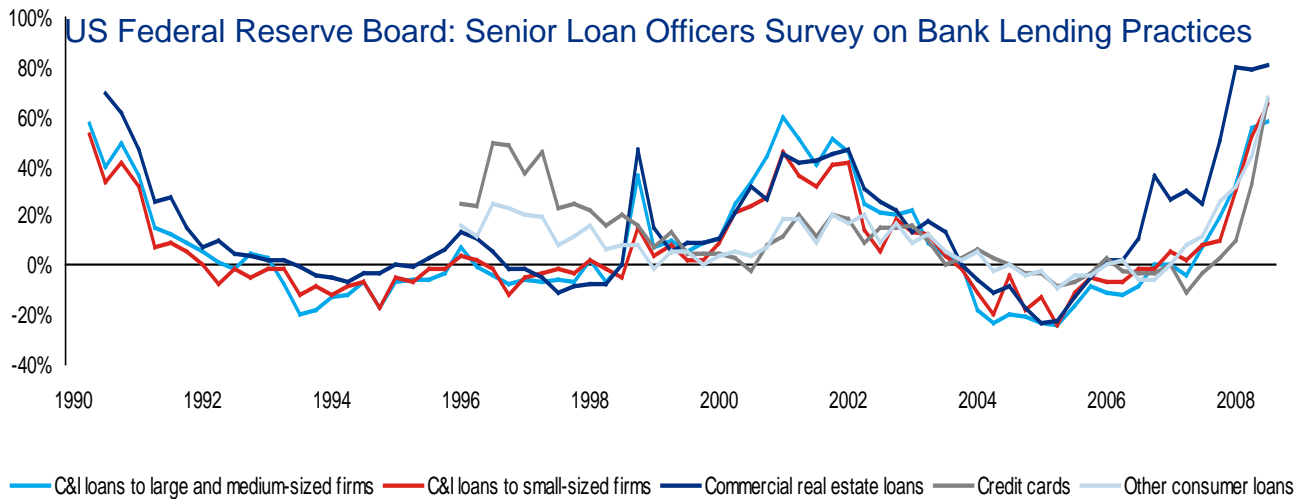
Source: US Federal Reserve

Liquidity Provided by Federal Reserve (\$mil.)



Source: US Federal Reserve, (accessed February 13, 2009)

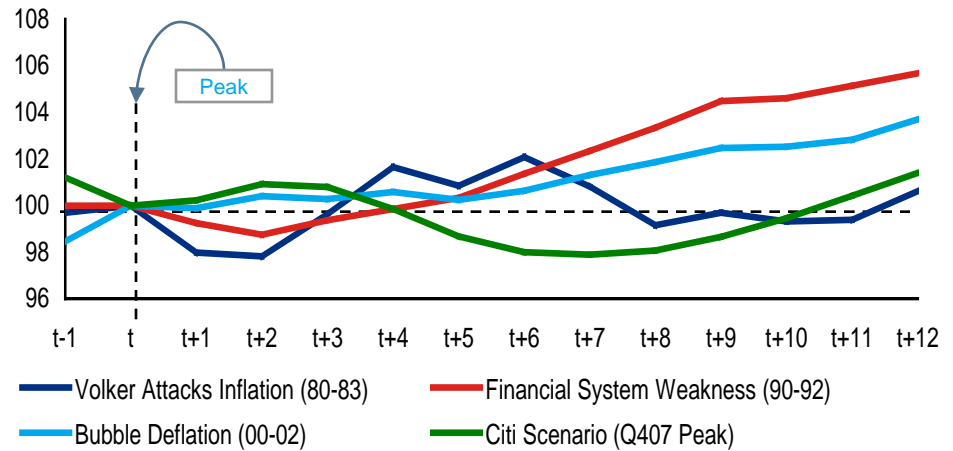
Bond investors and banks are still extremely risk averse



US Economic Outlook Deteriorated as Markets collapsed

- US economy has been declared to be in recession since 4Q2007. The decline accelerated in 2H2008 and is continuing.
- Business investment is dropping markedly with loss of credit access.
- Housing will remain a drag on the economy at least until late this year.
- The consumer is constrained as credit and jobs shrink but not in a tailspin.
- Inflation risks evaporated as the economy slowed and commodities weakened.
- Fiscal stimulus is on the way.

Recessions Come in Different Shapes & Sizes



Source: US Bureau of Economic Analysis website (www.bea.gov accessed February 13, 2009); Citi EMA, "Comments on Credit," February 13, 2009.

Citi Economists' Scenario of a Second Half Upturn: US

	2009				Annual Change (YoY)		
	1Q 2009	2Q 2009	3Q 2009	4Q 2009	2008	2009F	2010F
GDP (SAAR)	(4.7%)	(2.7%)	(0.5%)	0.8%	1.1%	(1.8%)	3.0%
Consumption (SAAR)	(1.7)	(1.4)	(0.1)	1.1	0.3	(0.5)	2.5
Business Investment (SAAR)	(12.8)	(12.5)	(12.3)	(8.6)	1.8	(11.5)	1.1
Housing Investment (SAAR)	(31.4)	(25.7)	(10.1)	2.9	(20.8)	(17.2)	13.5
Consumer price increase (Y/Y%)	(2.6)	1.0	0.8	0.5	3.8	(0.1)	0.1
Unemployment Rate (%)	7.9	8.6	9.0	9.2	5.8	8.7	9.5

Source: Citi EMA, "Comments on Credit," February 13, 2009.

Governments have become Lenders of Last Resort:

	United States: -trillions committed to support financial system		United Kingdom: -£200B Capital -Guarantees on £250B bank debt		Italy: -Undisclosed amount		UAE: -Guarantees on all interbank lending
	France: -€40B Capital -€320B for Bank refinancing		Austria: -€35B clearing house, will purchase shares if necessary		Saudi Arabia: - \$40B capital -Guarantees on all deposits		Germany: -€80B Capital -€400B Bank guarantees
	Spain: -€30B Capital fund -\$100B Bank guarantees		Ireland: -Guarantees on €400B in bank deposits		Australia: -Guarantees on all US\$400-450B in savings deposits		Netherlands: -€20B capital
	Portugal: -€20B in loan guarantees		Russia: -\$36B Capital -Guarantees on bank deposits		New Zealand: -Guarantees on all savings deposits		Hong Kong: -Full guarantees on all bank deposits
	Sweden: -\$271.5B fund -Guarantees on credit		Kuwait: -Guarantees all bank deposits		South Korea: -\$130B Capital -Guarantees on foreign debt		

And Spenders of Last Resort:

- **United States** The new administration and Congress are implementing new fiscal measures of over \$787 bil. including a combination of tax cuts and expenditure increases.
- **Japan** Two supplementary budgets to fund fiscal packages amount to 1.1% of GDP.
- **Germany** The government approved a second stimulus package for 2009 and 2010 (worth around 1% of GDP per year).
- **United Kingdom** Fiscal stimulus of roughly 1% of GDP for 2009 via cut in VAT.
- **China** The State Council announced a Rmb4 trillion stimulus package in early November 2008. The provincial governments have since put together investment proposals of more than Rmb25 trillion, equivalent to 100% of 2007 GDP, for the coming two years. Policymakers are working on additional stimulus measures.
- **Korea** A W35.6 trillion (3.7% of GDP) total fiscal package in Korea was approved last year. W9.0 trillion was spent in 2008, leaving W26.6 trillion (2.7% of GDP) for 2009.

The Recession Has Nevertheless Become Global

- The Euro area is feeling the effects of financial distress most strongly
 - Liquidity distress has spread and financial institutions are vulnerable
 - Housing adjustment is taking place, notably in Ireland, UK, Spain
 - A stronger Euro had been negatively affecting exports, and now weak demand abroad is
- US and European problems have spilled over to emerging markets in recent months.
 - Credit squeezes, together with declining demand for exports from the center of the storm, are translating into falling growth.
 - China is relatively well-placed to replace foreign demand with domestic demand and should lead Asia through a milder slowdown than elsewhere

Global Forecast Overview—2009 could see the first global GDP decline in more than 60 years

	GDP Growth			CPI Inflation			Current Balance (% of GDP)		
	2008	2009F	2010F	2008	2009F	2010F	2008	2009F	2010F
World	2.3%	(0.7%)	2.5%	5.1%	2.0%	2.6%			
United States	1.1	(2.3)	2.3	3.8	(1.2)	0.5	(4.5)	(2.6)	(3.1)
Euro Area	0.7	(2.7)	0.5	3.3	0.8	1.4	(0.4)	0.7	(0.6)
Japan	(0.5)	(3.4)	0.6	1.5	(1.3)	(0.5)	3.2	2.4	2.7
Emerging Markets	5.5%	2.7%	4.8%	8.8%	5.9%	5.6%	3.8%	1.1%	1.7%
Asia	6.8	4.7	6.7	6.7	1.2	2.4	5.5	5.3	4.8
China	9.1	7.6	8.6	5.9	(0.4)	1.5	9.8	7.6	6.6
Korea	2.5	(1.8)	3.6	4.7	2.8	2.5	(0.7)	2.2	1.5
India	6.8	5.5	6.6	9.0	3.0	4.5	(3.5)	(2.1)	(1.3)

Source: Citi EMA, "Prospects for Financial Markets," December 3, 2008.

How will the world be changed?

- **Government control and micromanagement of financial institutions**
- **Less leverage**
- **Stronger economic nationalism**
- **A more questioning public--less willingness to accept what the experts say**
- **Sustained work by tough and determined people to restore the place of finance**
- **Stronger policy efforts to contain imbalances, international and domestic**
- **A rebalancing of roles in the international financial sphere**
 - **G-20 to push G-7/8 into the shadows along with the G-10**
 - **A G-3, official or not, will become the key group for coordination**
 - **The United States**
 - **Europe**
 - **China**
- **A prolonged effort will be needed to re-establish market forces where they work**

The key to a more stable future—focus on financial excess

- Central banks have had one instrument
 - The money market interest rate
- They have been able to pursue one target at a time
 - Inflation (usually consumer prices), with output receiving attention so long as inflation is in bounds
- Central banks have not responded to asset bubbles (in Japanese equity and real estate in the 1980s, in the US tech sector in the 1990s, in US and much European housing in the 2000s).
 - They have not had the tools
- Aggregate financial controls need to be put in place and moved counter cyclically with broad asset prices
 - Margin requirements
 - Leverage ratios
 - Supplementary capital requirements
- International coordination will be important but national (or currency area) implementation will be needed

Without macro financial stability instruments we will have a replay

Disclaimer

Citigroup Global Markets Inc. is a registered broker-dealer in the United States. It is a member of Citigroup Inc. and is affiliated with Citibank, N.A. and its subsidiaries and branches worldwide (collectively "Citi"). Despite those affiliations, securities recommended, offered, sold by, or held at, Citigroup Global Markets Inc.: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citi); and (iii) are subject to investment risks, including the possible loss of the principal amount invested.

This publication is being provided to recipients solely for informational purposes. Although this publication may make reference to research reports that have been prepared and distributed by Citigroup Global Markets Inc. and/or its affiliates, this publication has not been prepared by research personnel and the information provided herein is not intended to constitute "research" as that term is defined by applicable regulatory authorities. This publication does not constitute an offer or solicitation to purchase or sell any securities or other financial products; or to participate in any particular trading strategy. This publication has been prepared and is based on an assessment of general economic, market and financial conditions. However, such assessments and any associated comments related to projections, trends or future expectations involve elements of subjective judgment and analysis, and there can be no assurance that such projections, trends or future expectations will be attained. The information contained in this publication is based on generally available information and, although obtained from sources believed to be reliable, its accuracy and completeness is not guaranteed. This material has been provided for informational purposes only, without regard to any particular user's investment objectives, financial situation, or means. Certain transactions and trading strategies, including those involving futures, options, and high-yield securities, give rise to substantial risk and are not suitable for all investors. No liability whatsoever is accepted for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this publication.

This publication is proprietary to Citi and any copying or distribution to a third party without the prior written consent of Citi and without the inclusion of the appropriate disclaimers as approved by Citi's internal legal counsel is strictly prohibited.

Citi does not provide tax or legal advice. Any discussion of tax matters in this publication (i) is not intended to be used, and cannot be used or relied upon, by you for the purpose of avoiding any tax penalties and (ii) may have been written in connection with the "promotion or marketing" of the matters discussed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

Nothing in this presentation should be considered to be an endorsement of any political party or candidate. In addition, this presentation is not a solicitation for contributions or votes for any political party or candidate.

©2008 Citigroup Global Markets Inc. Member SIPC. All rights reserved. CITI is a trademark and service mark of Citigroup Inc. or its affiliates and is used and registered throughout the world.