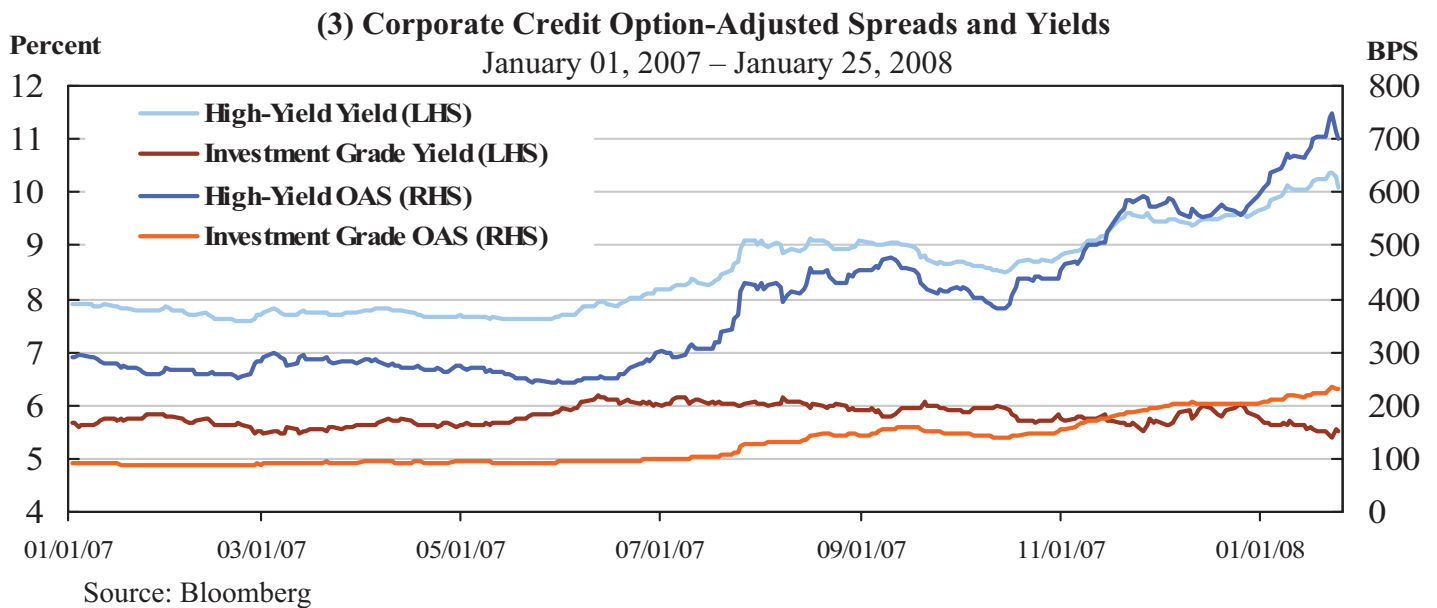
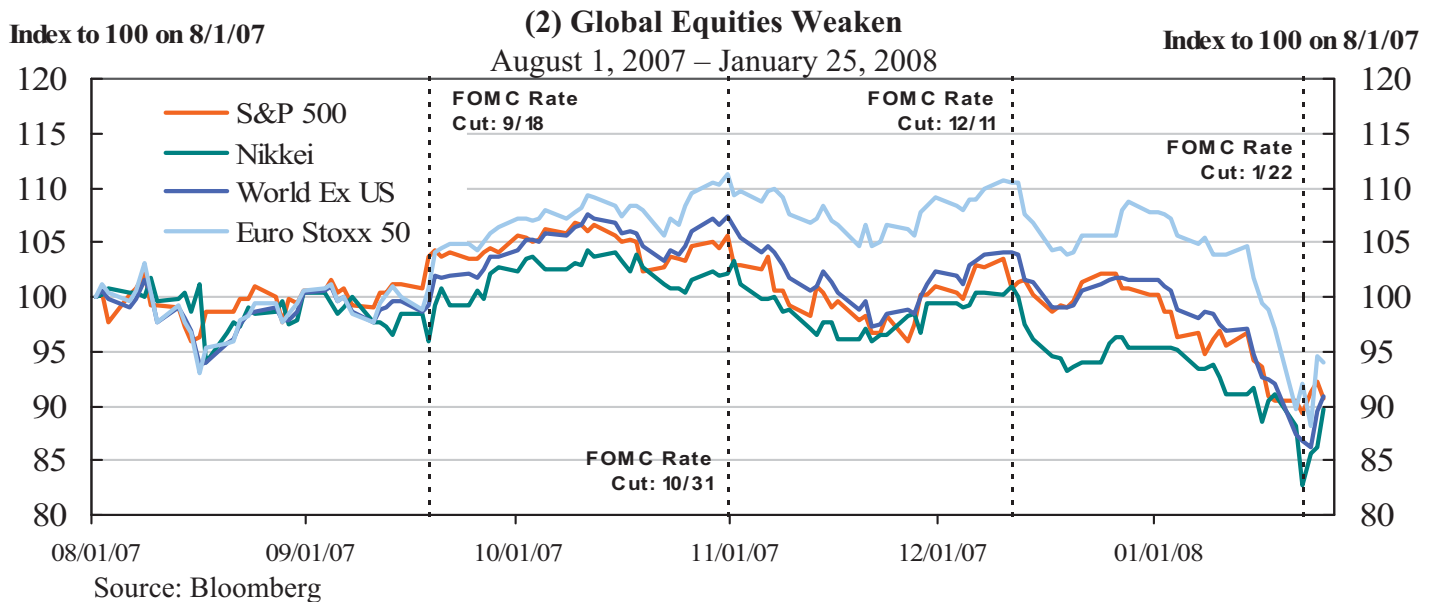
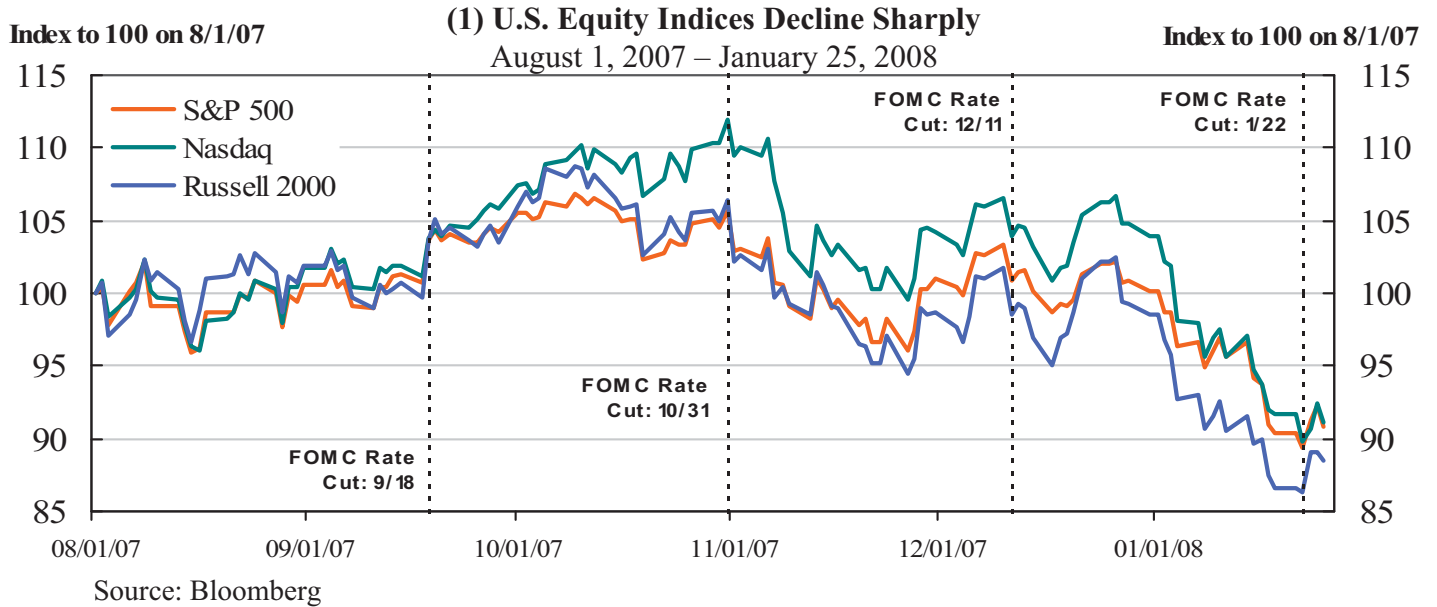
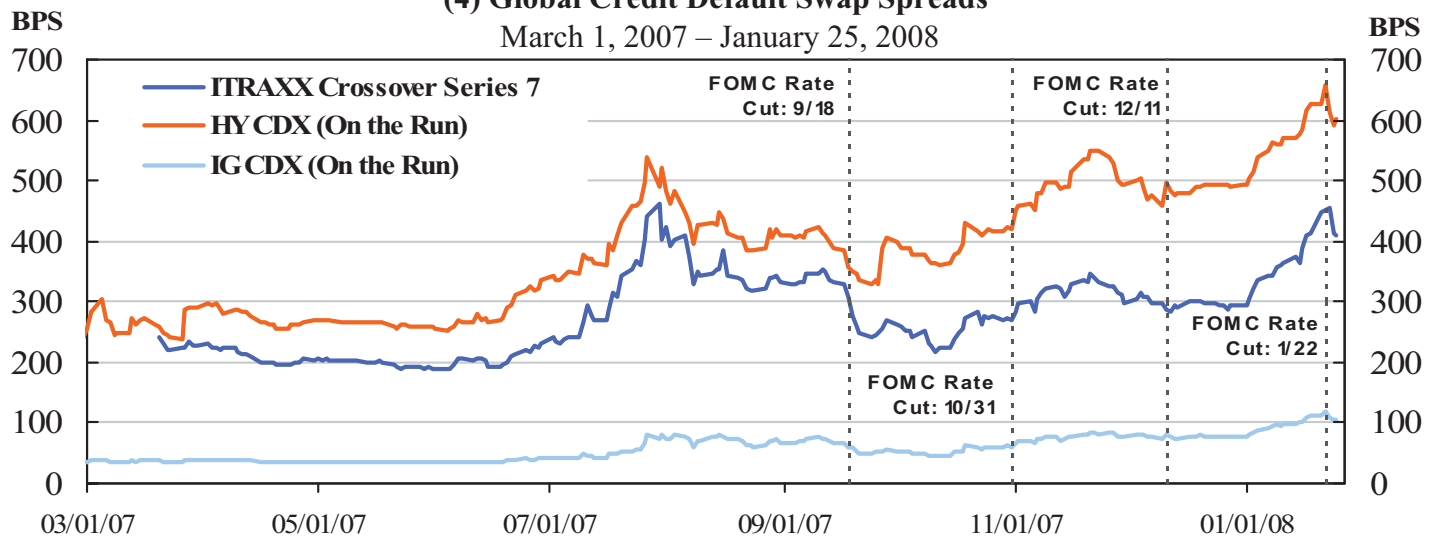


Appendix 1: Materials used by Mr. Dudley



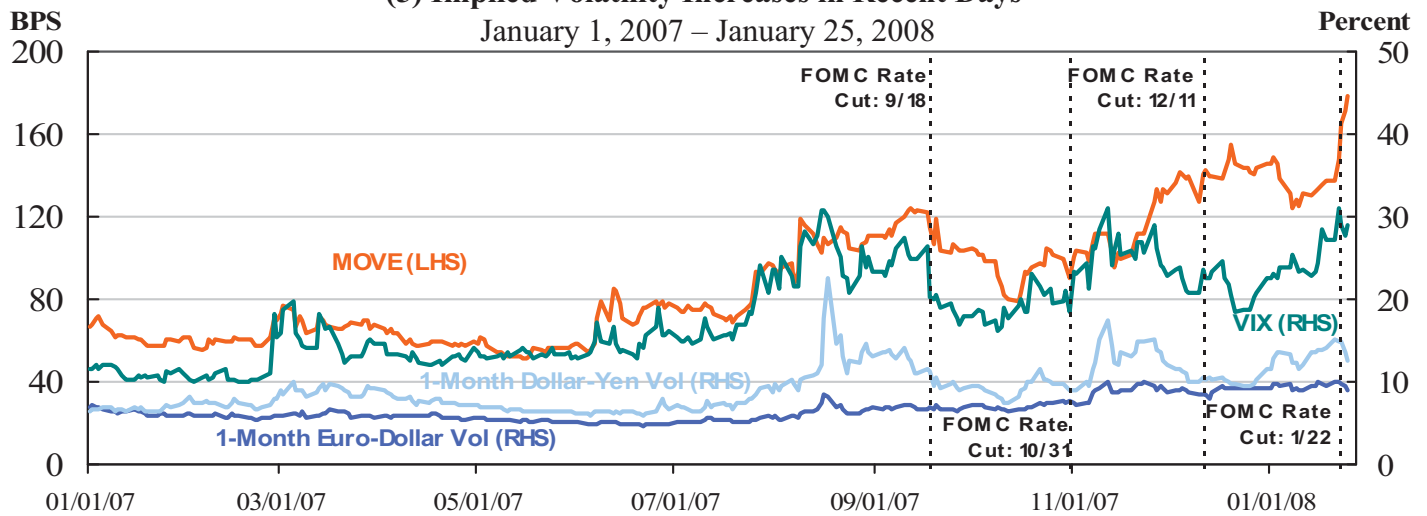
(4) Global Credit Default Swap Spreads

March 1, 2007 – January 25, 2008



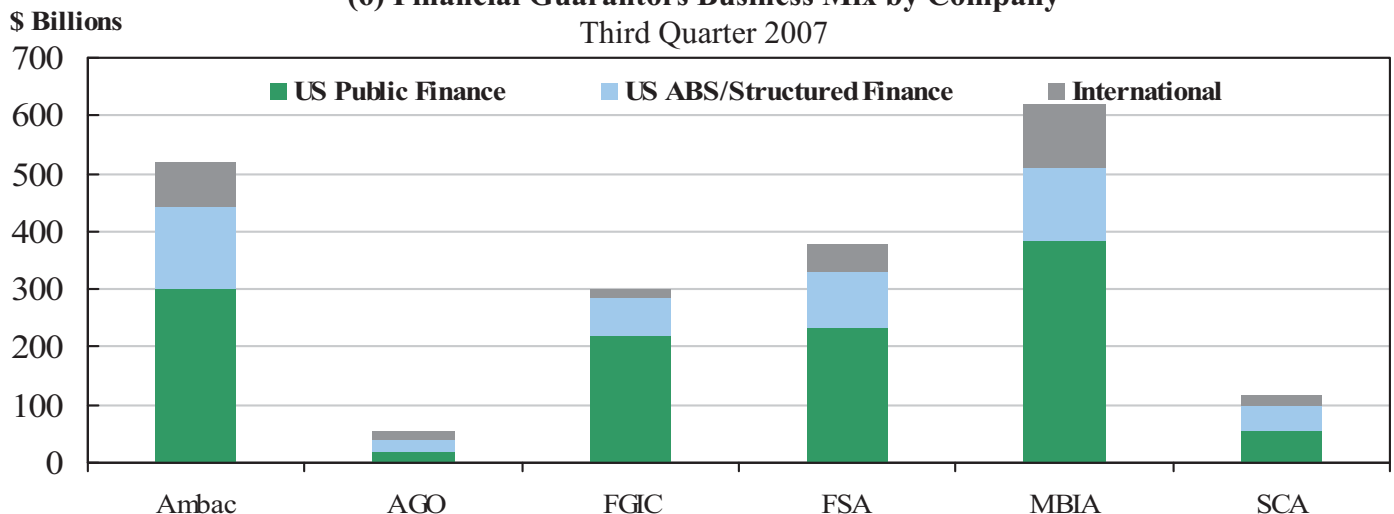
(5) Implied Volatility Increases in Recent Days

January 1, 2007 – January 25, 2008



(6) Financial Guarantors Business Mix by Company

Third Quarter 2007

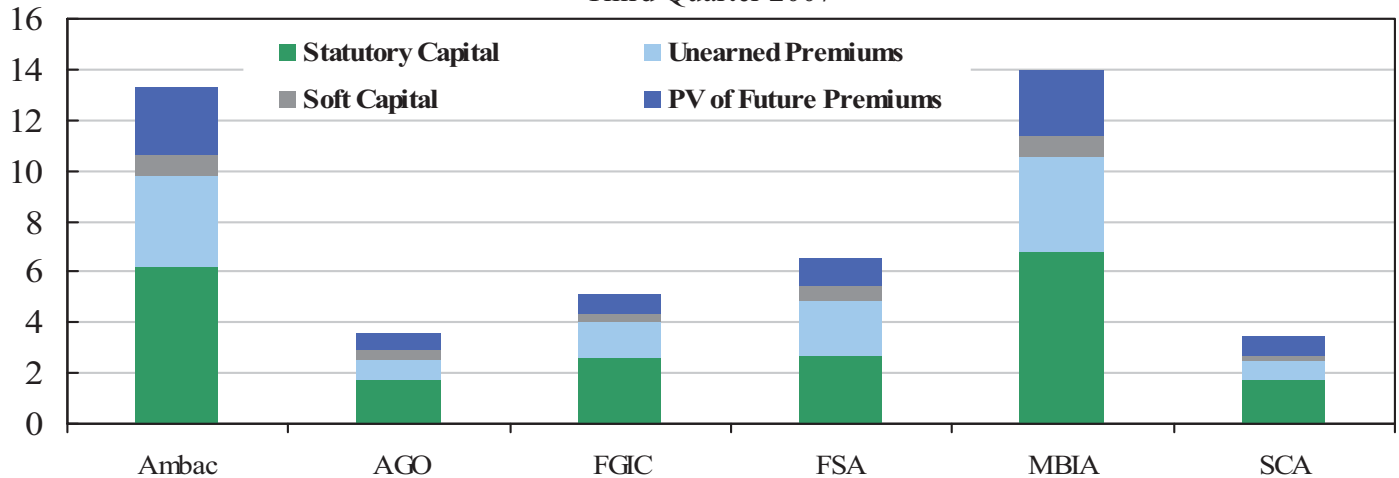


Source: Company Documents and UBS

(7) Financial Guarantors Claims Paying Resources

Third Quarter 2007

\$ Billions

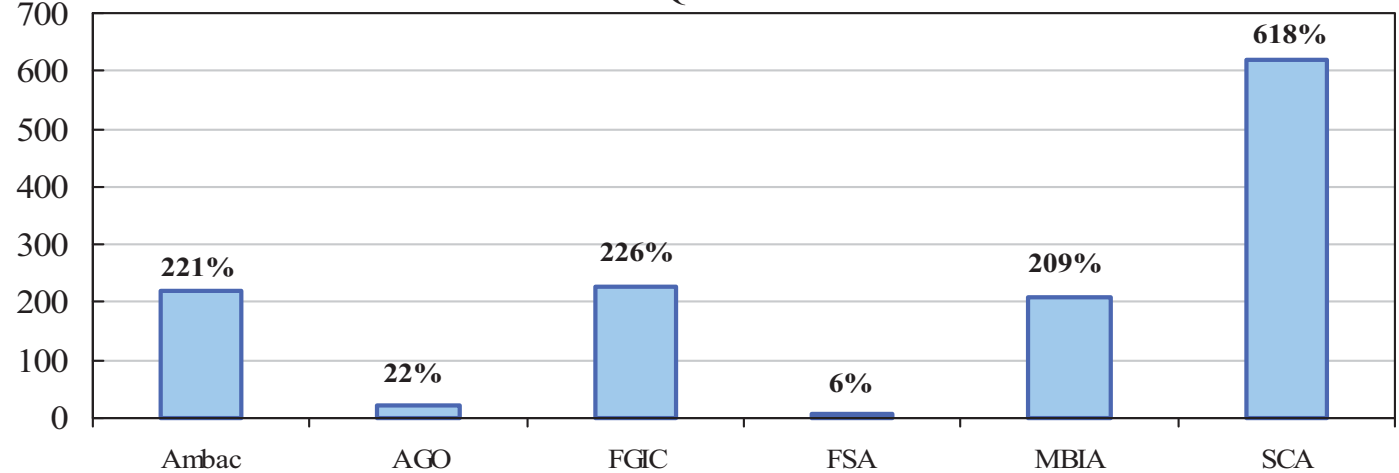


Source: Company Documents and UBS

(8) ABS CDO Net Par Exposure* as a Percent of Claims Paying Resources

Third Quarter 2007

Percent



Source: Company Documents and UBS

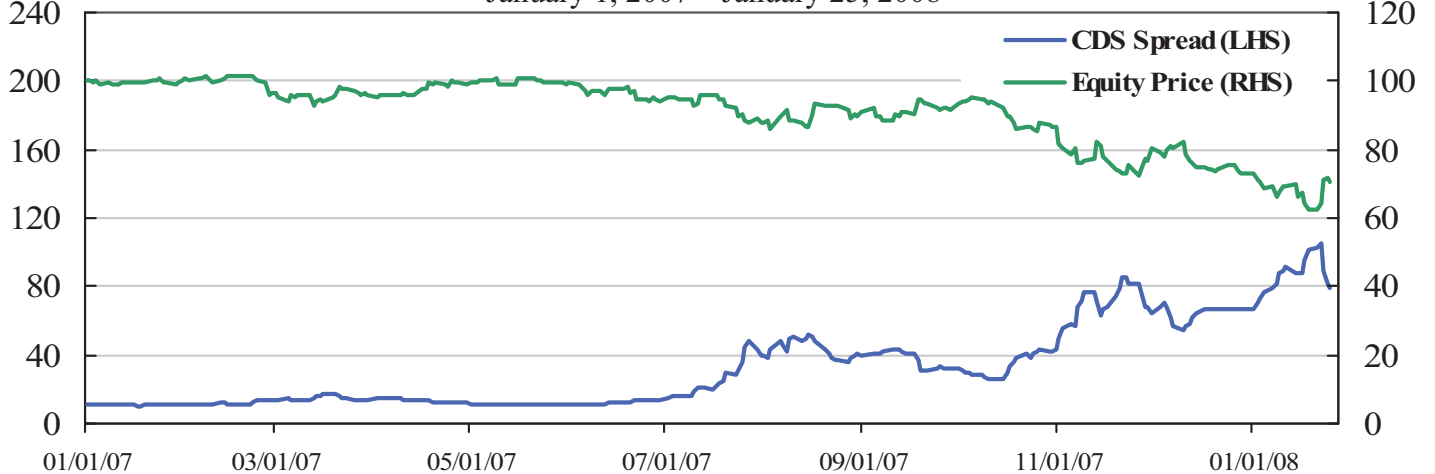
*Collateralized to some degree by subprime mtg. assets

(9) Large Commercial Banks Equity Prices and CDS Spreads**

January 1, 2007 – January 25, 2008

BPS

Index to 100 on 1/1/07



Source: Markit and Bloomberg

**Includes Bank of America, Citigroup, JP Morgan, Wells Fargo, and Wachovia

(10) Large Investment Banks' Equity Prices and CDS Spreads**



Source: Markit and Bloomberg

*Includes Goldman Sachs, Lehman Brothers, Merrill Lynch, Morgan Stanley, and Bear Stearns

(11) Reported Write-downs for Selected Banks**

Q3 2007 – Q4 2007

Institution	3Q07	4Q07*	Total Reported/Estimated
Bank of America	1.5	5.3	6.8
Barclays	1.0	1.6	2.6
Bear Stearns	0.7	1.9	2.6
Citigroup	3.8	18.0	21.8
Countrywide	1.0	N/A	1.0
Credit Suisse	1.9	N/A	1.9
Deutsche Bank	3.1	N/A	3.1
Goldman Sachs	1.5	0.0	1.5
HSBC	0.9	N/A	0.9
JPMorgan Chase	1.6	1.3	2.9
Lehman Brothers	0.7	0.8	1.5
Merrill Lynch	8.4	14.1	22.5
Morgan Stanley	1.4	9.4	10.8
UBS	4.4	10.0	14.4
Wachovia	1.3	1.7	3.0
Washington Mutual	0.3	1.6	1.9
Wells Fargo	0.5	0.3	0.8
TOTAL	34.0	66.0	100.0

* Values in *Italics* are estimates

** In billions of dollars

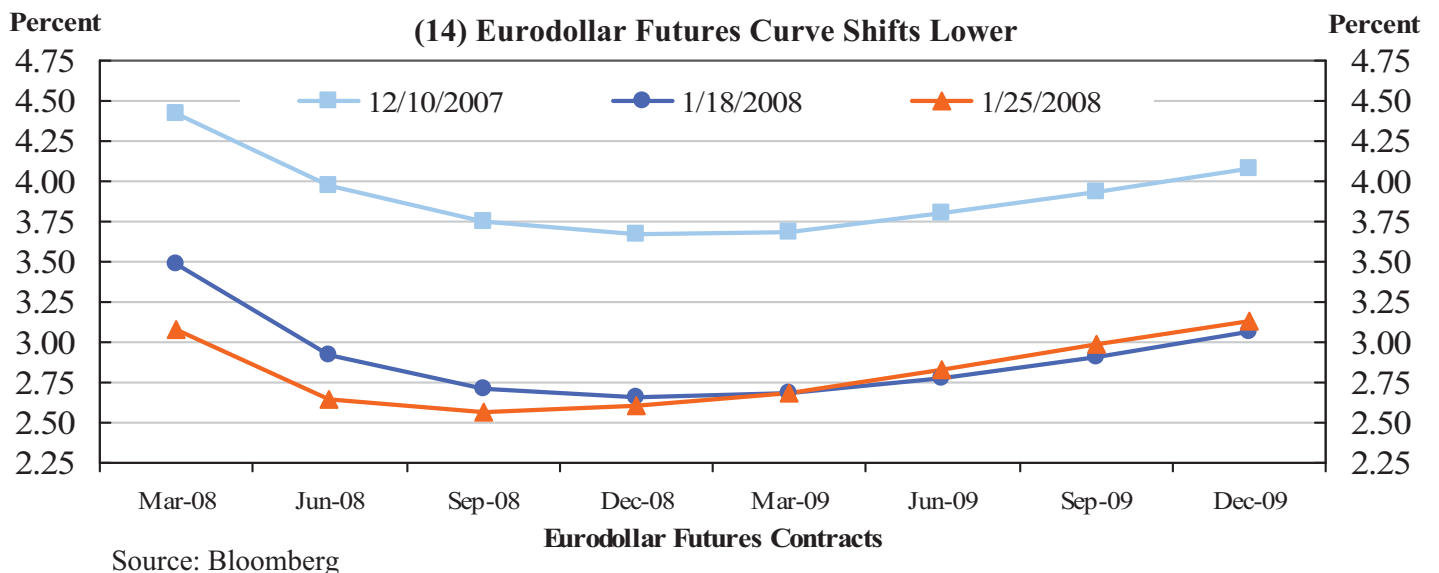
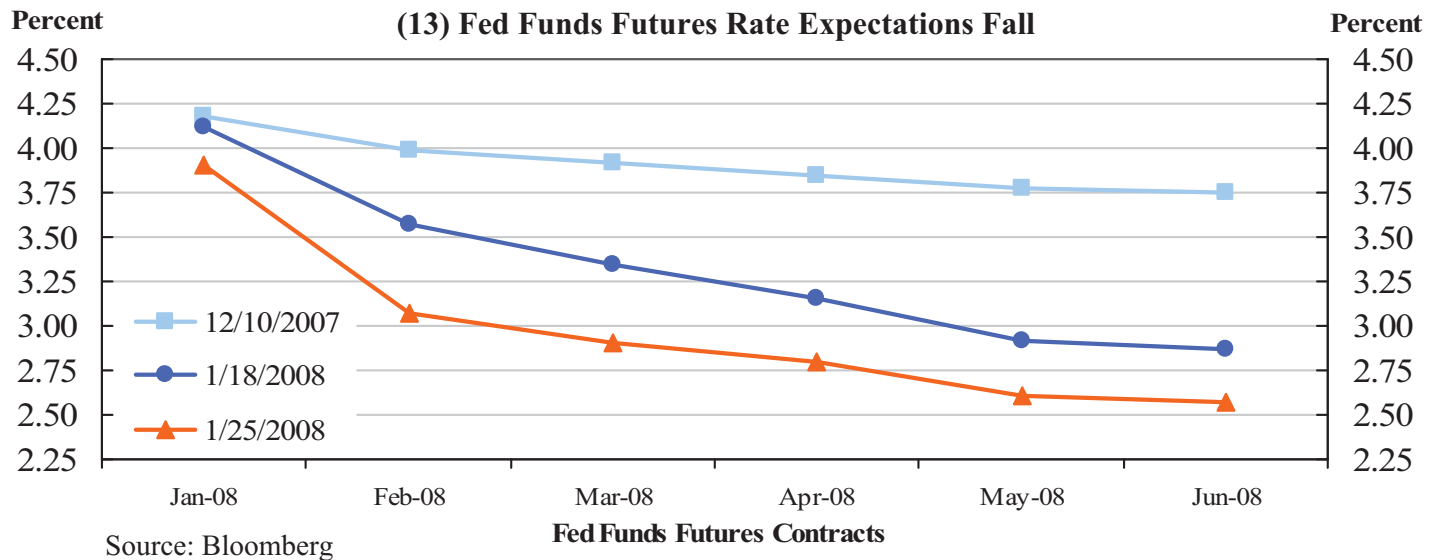
Source: JP Morgan

(12) Capital Ratios Continue to Fall
Q2 2007 – Q4 2007

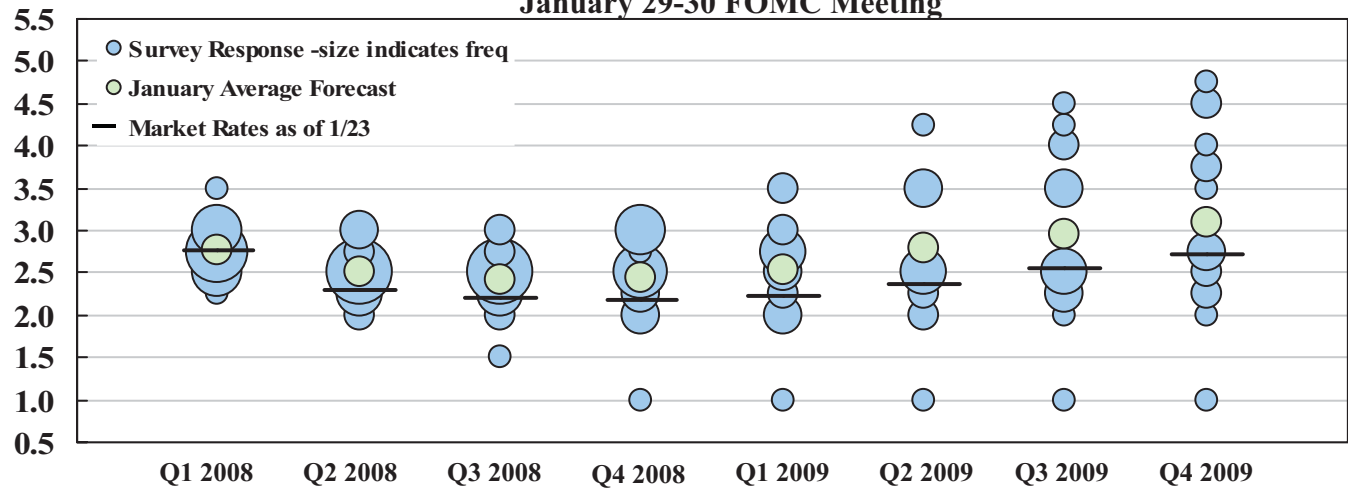
Holding Co.	2Q07	3Q07	4Q07	Change 4Q07 - 2Q07*
Bank of America	8.52	8.22	6.87	-165
Citigroup	7.91	7.32	7.10	-81
JPMorgan Chase	8.40	8.37	8.40	0
Wachovia	7.47	7.10	7.20	-27
Wells Fargo	8.57	8.21	7.59	-98
Average	8.17	7.84	7.43	-74

Source: JP Morgan

* In basis points

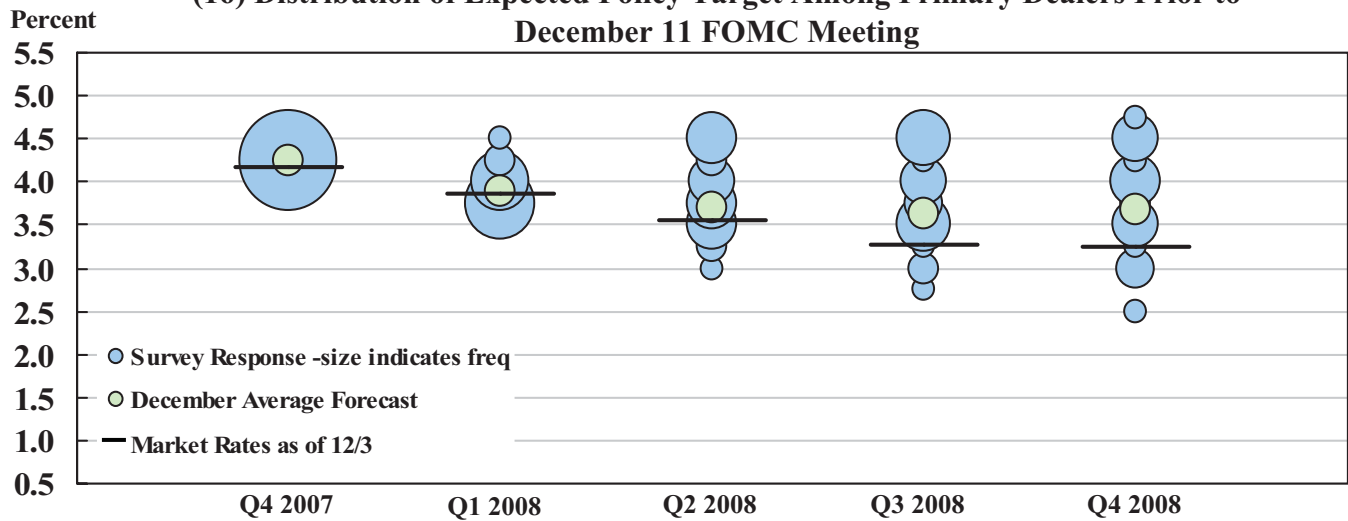


(15) Distribution of Expected Policy Target Among Primary Dealers Prior to January 29-30 FOMC Meeting



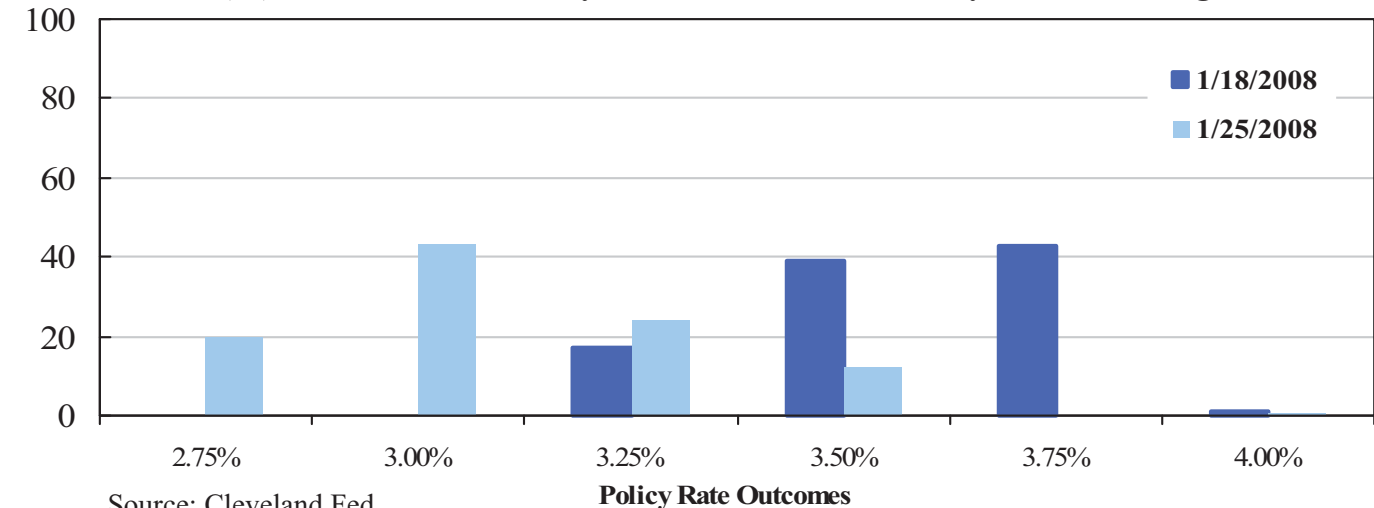
Source: Dealer Policy Survey

(16) Distribution of Expected Policy Target Among Primary Dealers Prior to December 11 FOMC Meeting



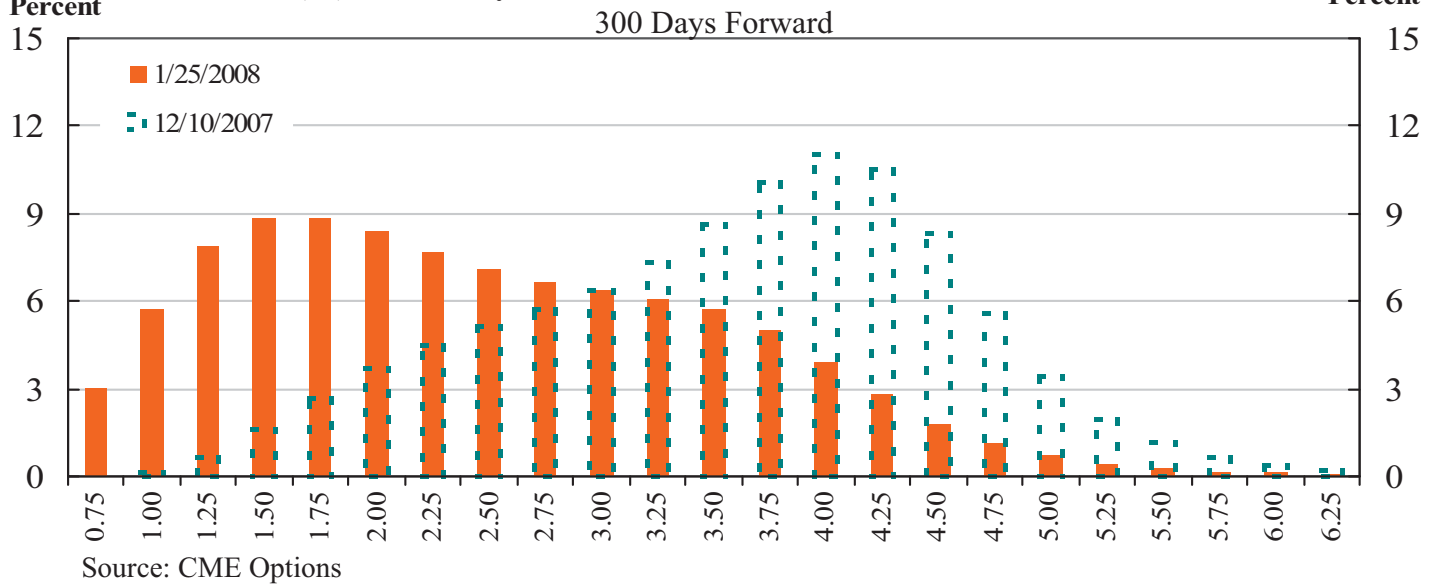
Source: Dealer Policy Survey

(17) Probabilities for Policy Rate Outcomes for January FOMC Meeting

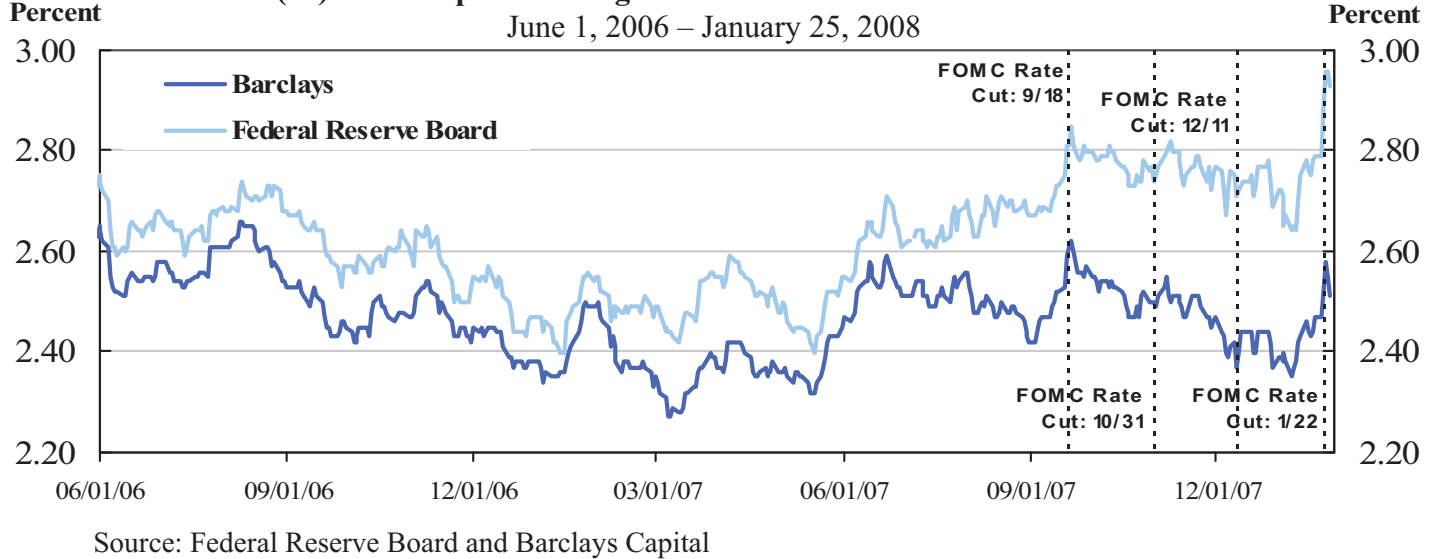


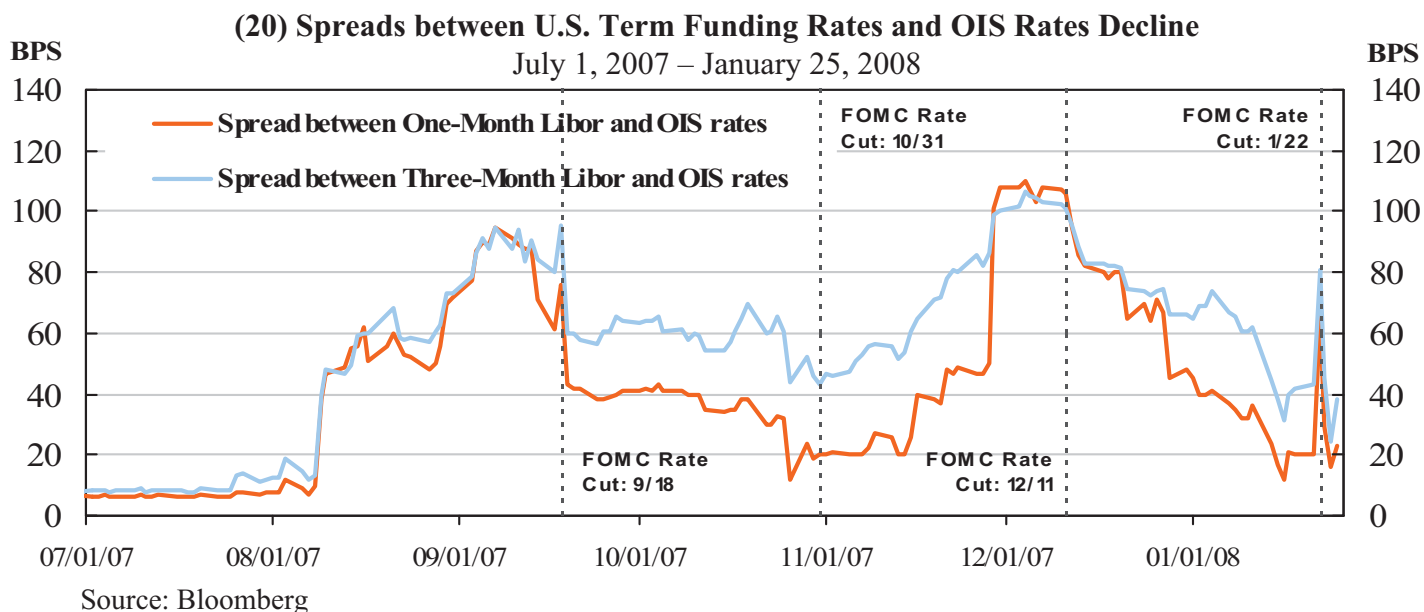
Source: Cleveland Fed

(18) Probability Distribution on Eurodollar Futures Contract



(19) TIPS Implied Average Rate of Inflation: 5-10 Year Horizon





(21) Central Bank Term Funding Facilities

Federal Reserve Term Auction Facility:

<u>Auction Settlement</u>	<u>Term</u>	<u>Amount</u>	<u>Minimum Bid Rate</u>	<u>Stop-out Rate</u>	<u>Propositions</u>	<u>Bid/Cover</u>	<u>Bidders</u>
12/20/2007	28 Days	\$20 b	4.17%	4.65%	\$61.6 b	3.08	93
12/27/2007	35 Days	\$20 b	4.15%	4.67%	\$57.7 b	2.88	73
1/17/2008	28 Days	\$30 b	3.88%	3.95%	\$55.5 b	1.85	56
1/31/2008	28 Days	\$30 b	TBD	TBD	TBD	TBD	TBD

European Central Bank:

<u>Auction Settlement</u>	<u>Term</u>	<u>Amount</u>	<u>Fixed Rate</u>	<u>% of All at Fixed Rate</u>	<u>Propositions</u>	<u>Bid/Cover</u>	<u>Bidders</u>
12/20/2007	28 Days	\$10 b	4.65%	45.29%	\$22.08	2.21	39
12/27/2007	35 Days	\$10 b	4.67%	70.85%	\$14.12 b	1.41	27
1/17/2008	28 Days	\$10 b	3.95%	67.61%	\$14.79 b	1.48	22

Swiss National Bank:

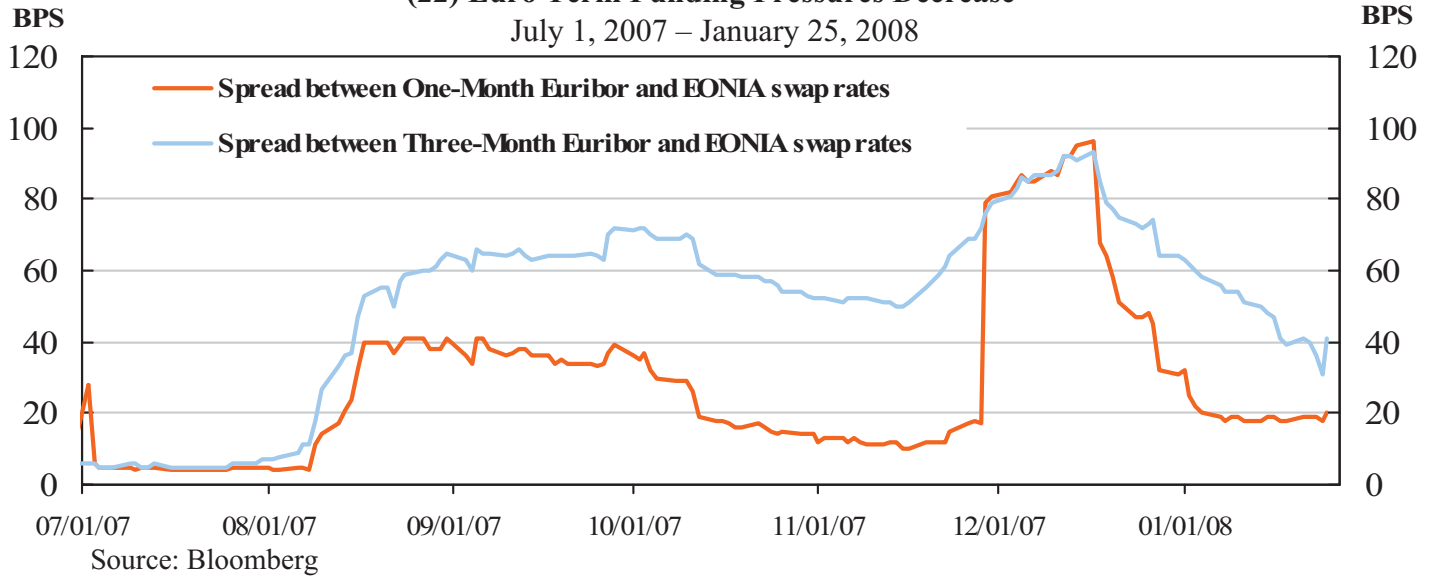
<u>Auction Settlement</u>	<u>Term</u>	<u>Amount</u>	<u>Marginal Interest Rate</u>	<u>% of All at Fixed Rate</u>	<u>Weighted Avg. Interest Rate</u>	<u>Propositions</u>	<u>Bid/Cover</u>	<u>Bidders</u>
12/20/2007	28 Days	\$4 b	4.50%	30.28%	4.79%	\$17.01 b	4.25	17
1/17/2008	28 Days	\$4 b	3.88%	15.03%	3.91%	\$10.87 b	2.72	10

Source: Federal Reserve Board, European Central Bank, and Swiss National Bank

APPENDIX: Reference Exhibits

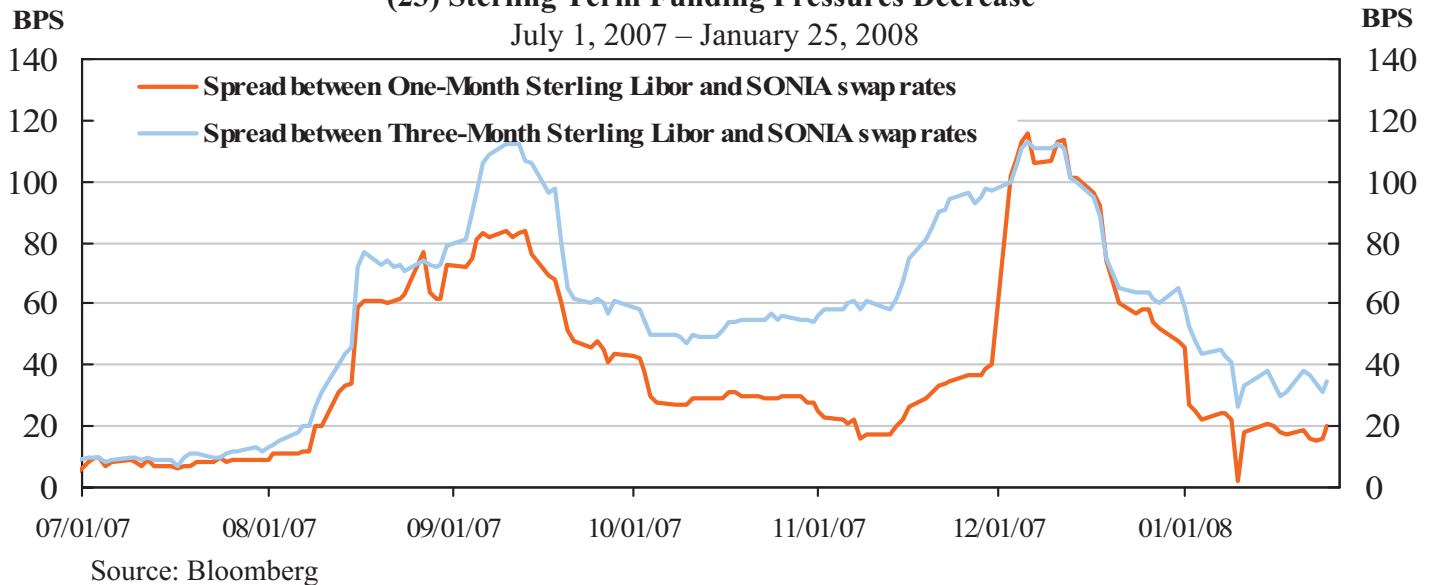
(22) Euro Term Funding Pressures Decrease

July 1, 2007 – January 25, 2008



(23) Sterling Term Funding Pressures Decrease

July 1, 2007 – January 25, 2008



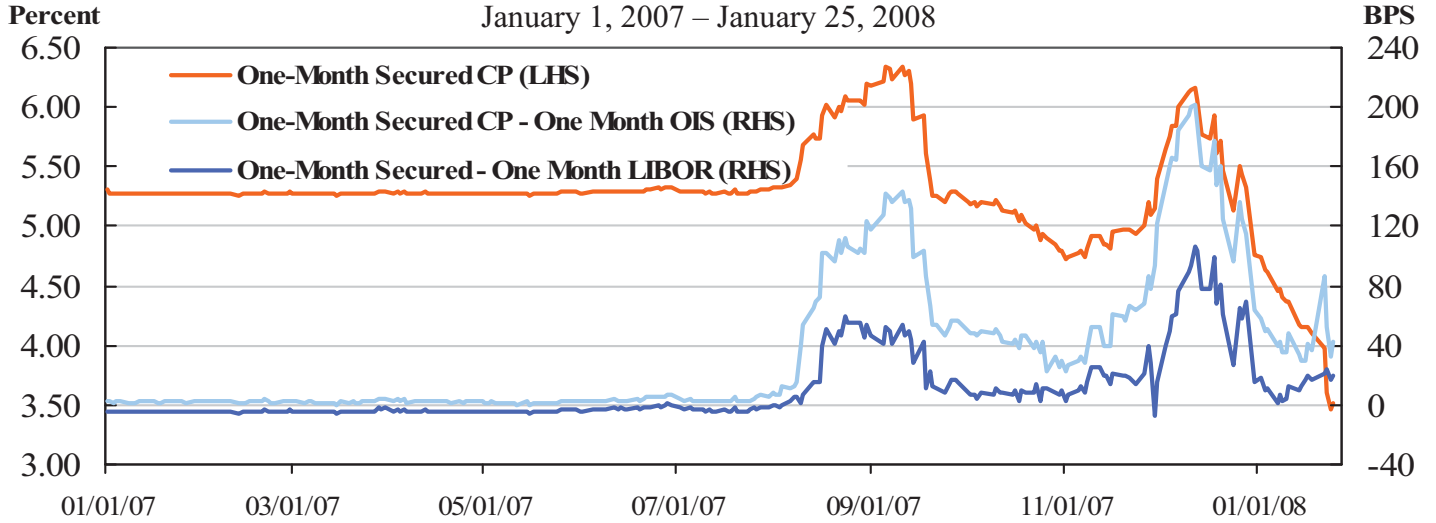
(24) One-Month LIBOR to OIS Spread

July 1, 2007 – March 11, 2008



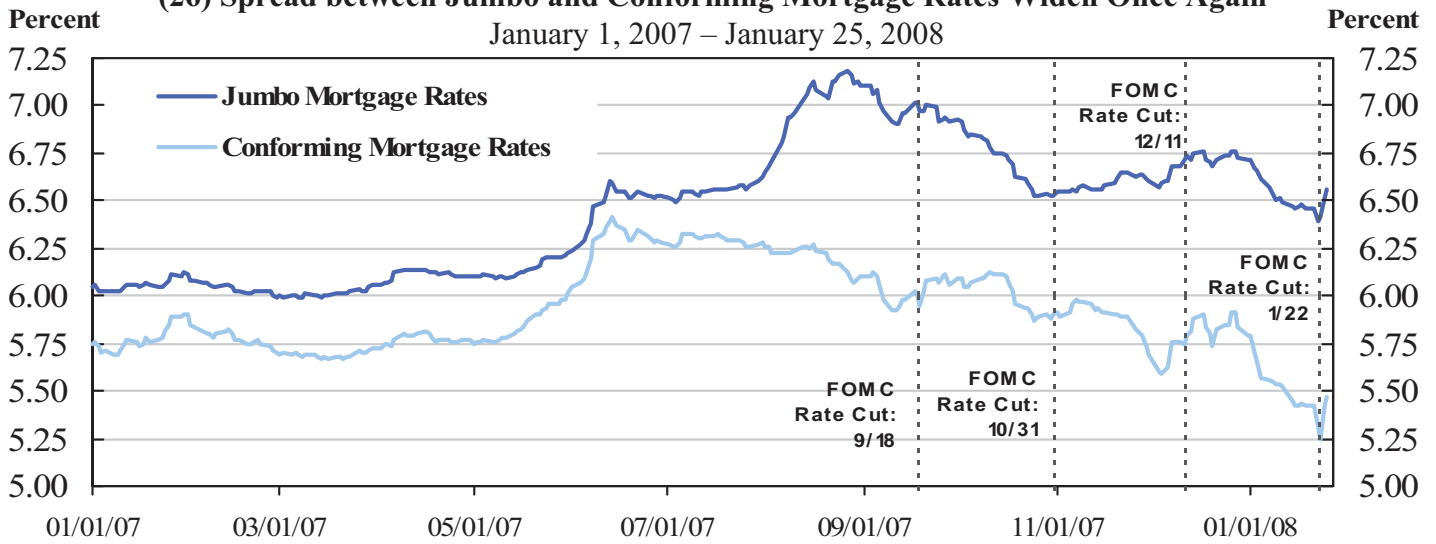
(25) Secured CP Rate Spreads Narrow

January 1, 2007 – January 25, 2008



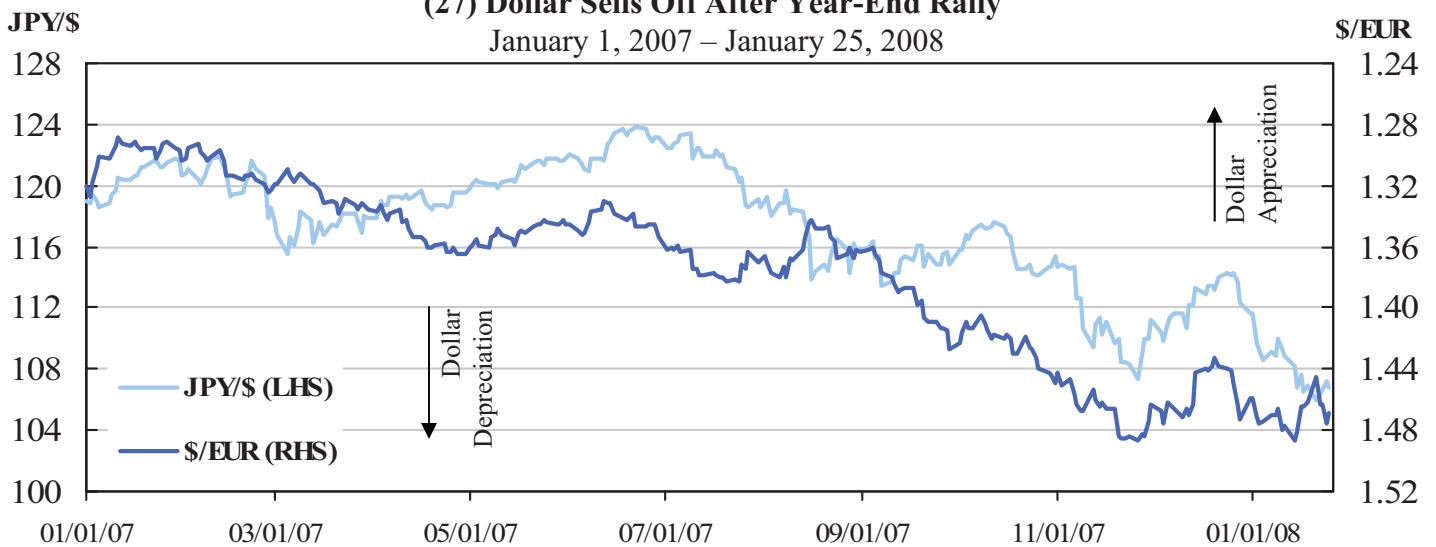
(26) Spread between Jumbo and Conforming Mortgage Rates Widen Once Again

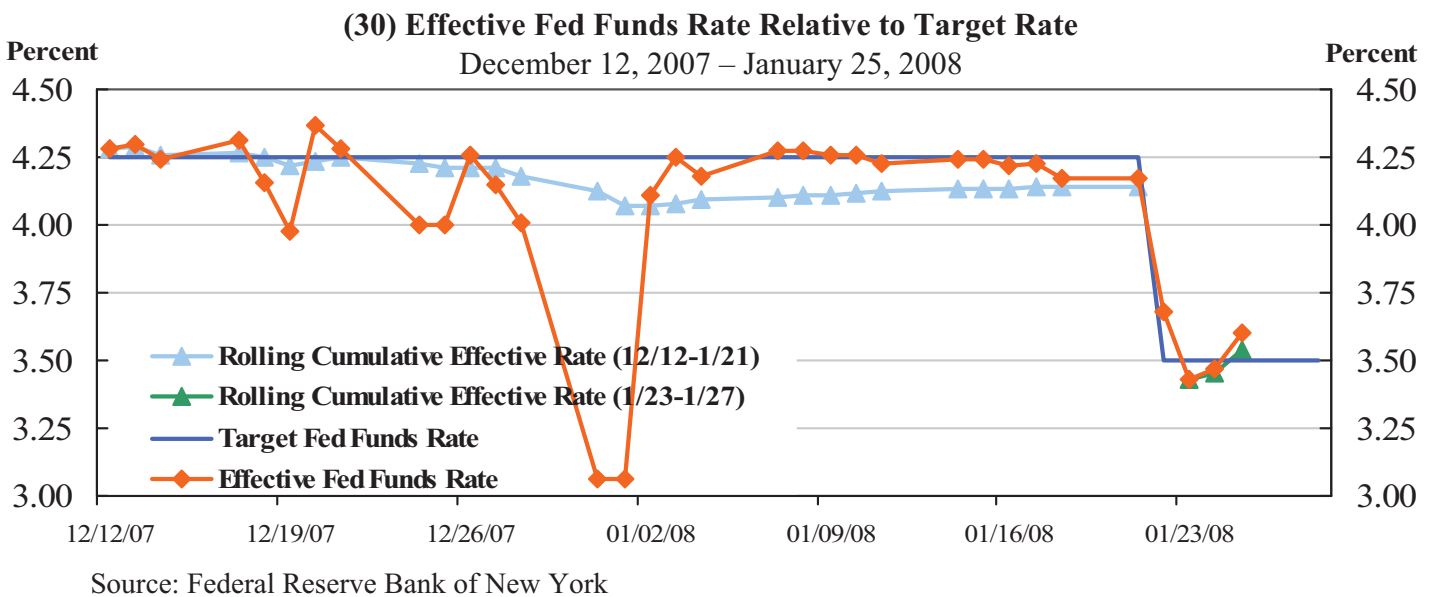
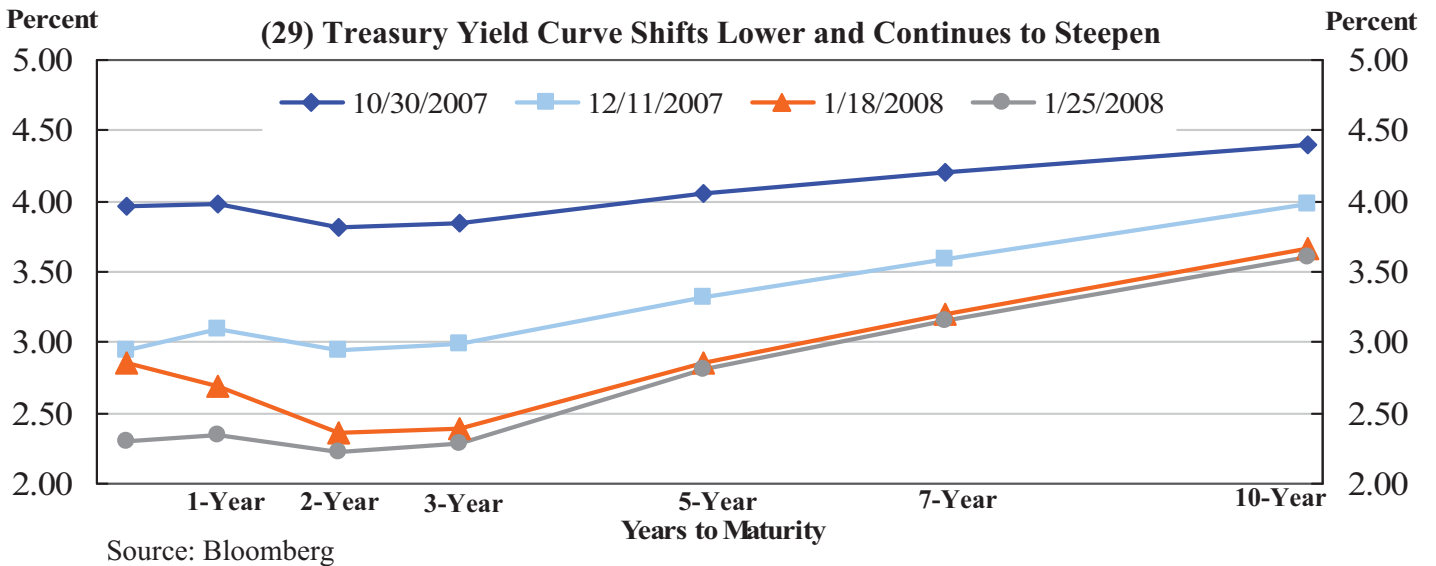
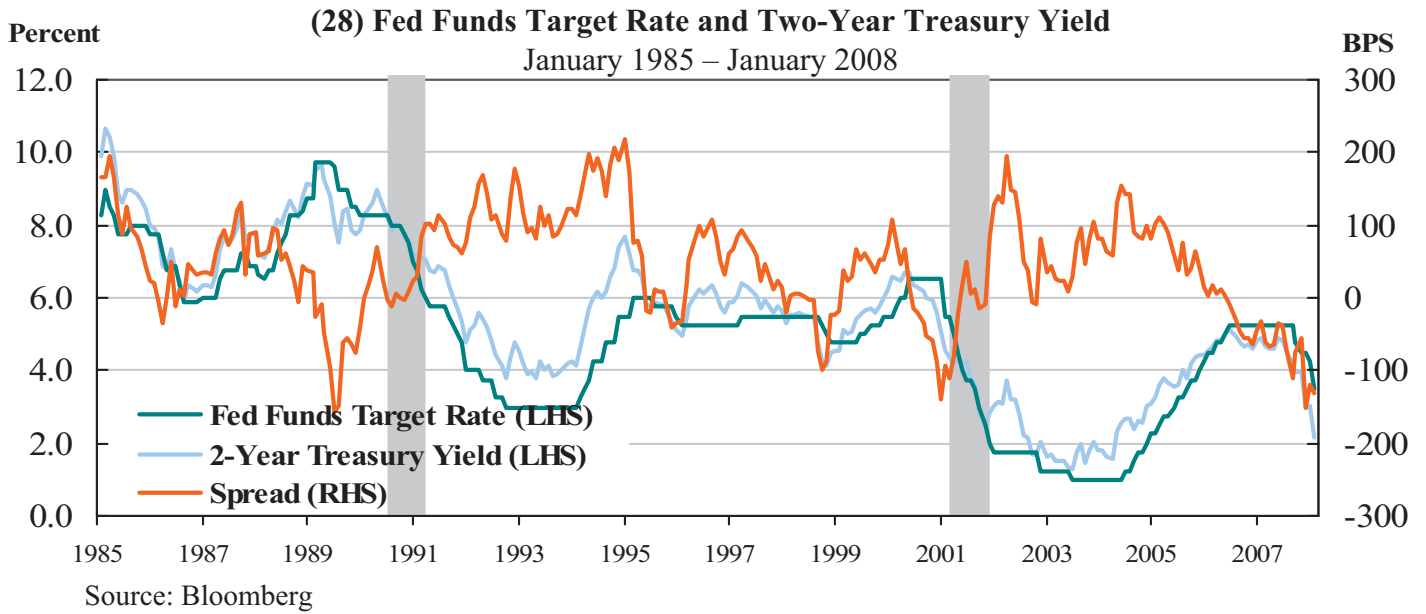
January 1, 2007 – January 25, 2008



(27) Dollar Sells Off After Year-End Rally

January 1, 2007 – January 25, 2008





Appendix 2: Materials used by Mr. Reifschneider, Ms. Liang, and Mr. Sheets

CLASS II FOMC - Restricted (FR)

Material for

*Staff Presentation on the
Economic Outlook*

January 29, 2008

Gauging the Cyclical State of the Economy

Data Surprises Since the December Greenbook

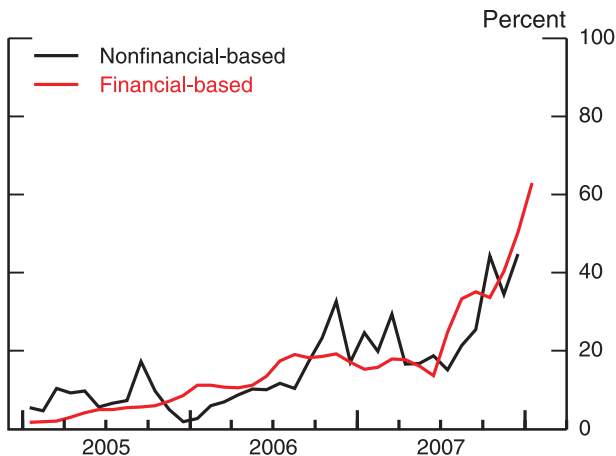
Negative

Private payroll employment
 Unemployment rate
 Industrial production
 Housing starts and permits
 New home sales
 Orders and shipments
 Business sentiment
 Financial market conditions

Positive

Construction put-in-place
 Defense spending
 Retail sales

Recession Probability Estimates



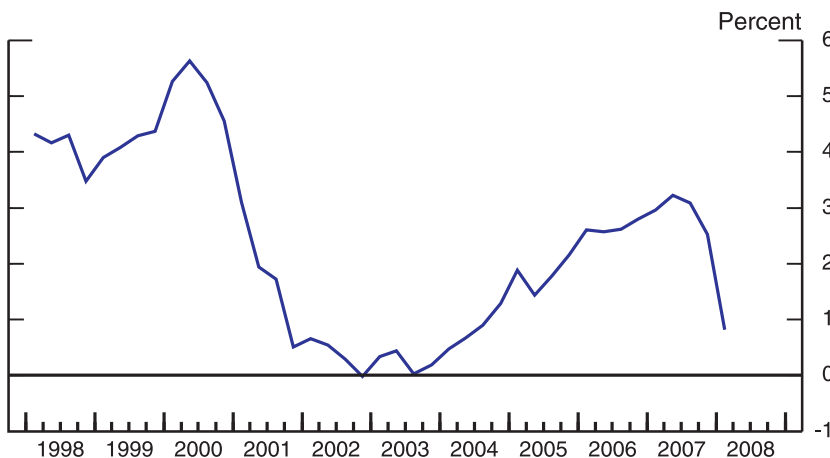
Note: Estimates based on monthly data for 85 nonfinancial indicators and 20 financial indicators.

Reasons for Not Calling a Recession

- Estimated probabilities not uniformly high
- No apparent inventory overhang
- Weakness in labor market and spending indicators still limited
- Monetary and fiscal stimulus in process

... but it was a close call.

Greenbook-Consistent Short-Run R*

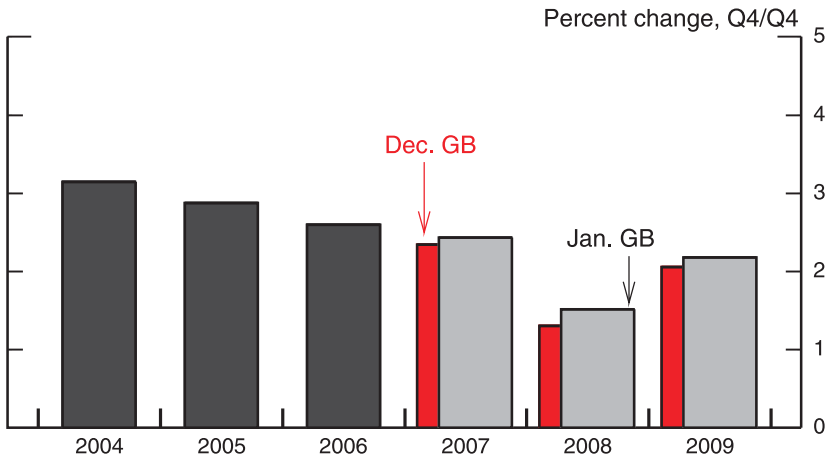


R* Revisions

- R* down 1¼ percentage point since December
- Jump in equity premium main culprit

Forecast Summary

Real GDP

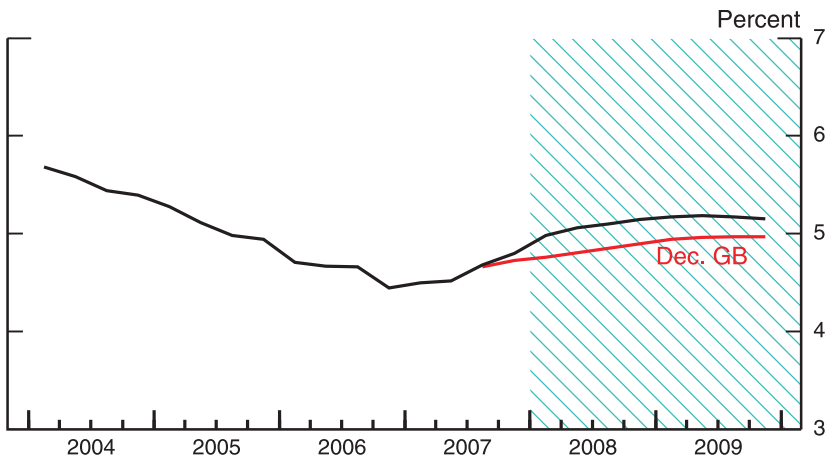


Real GDP

Quarterly percent change (annual rate)

	Dec. GB	Jan. GB
2007:Q3	5.0	4.9
Q4	0.1	0.5
2008:Q1	0.7	0.6
Q2	1.4	1.2

Unemployment Rate

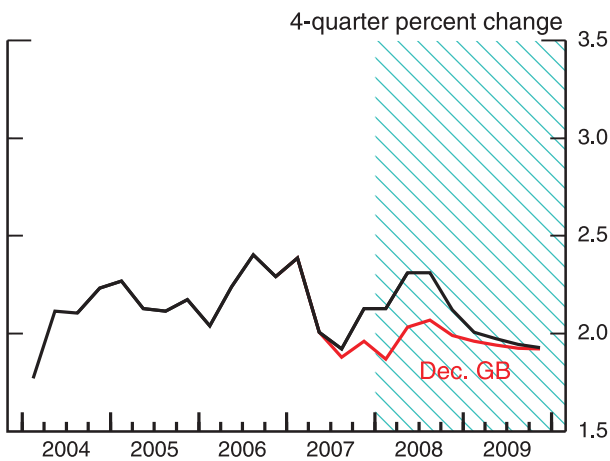


Unemployment Rate

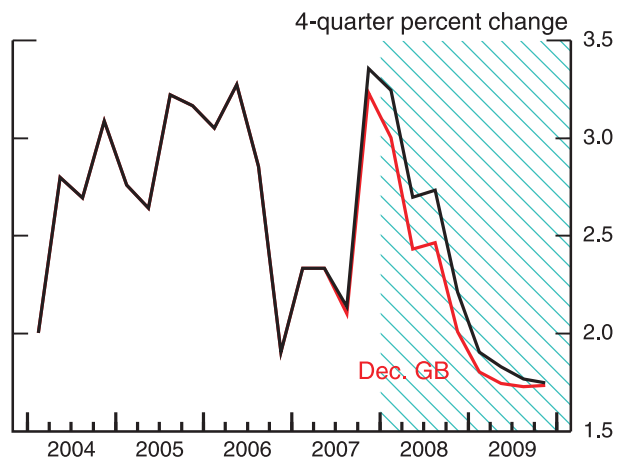
Percent

	Dec. GB	Jan. GB
2007:Q3	4.7	4.7
Q4	4.7	4.8
2008:Q1	4.8	5.0
Q2	4.8	5.1

Core PCE Prices

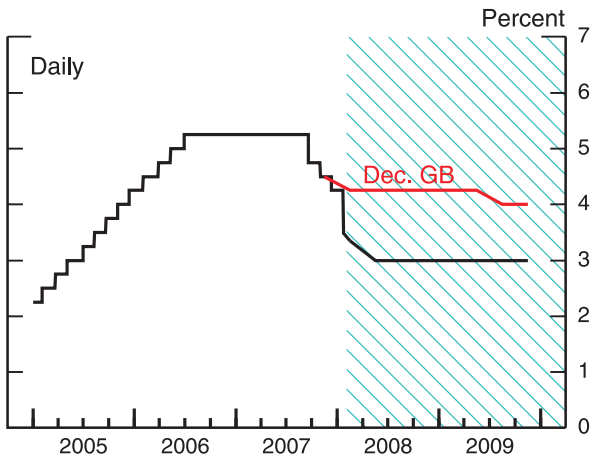


Total PCE Prices

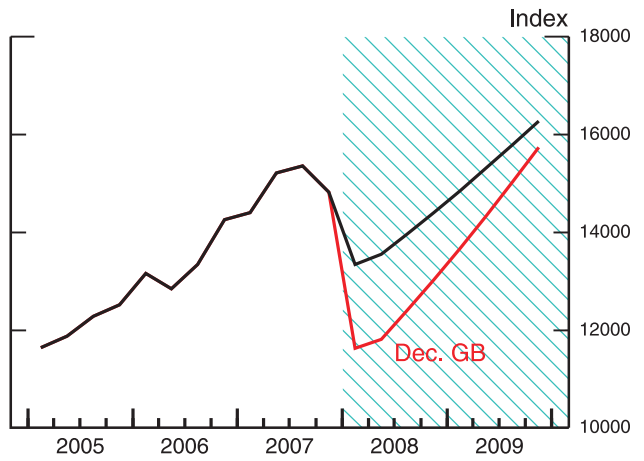


Key Conditioning Assumptions

Target Federal Funds Rate



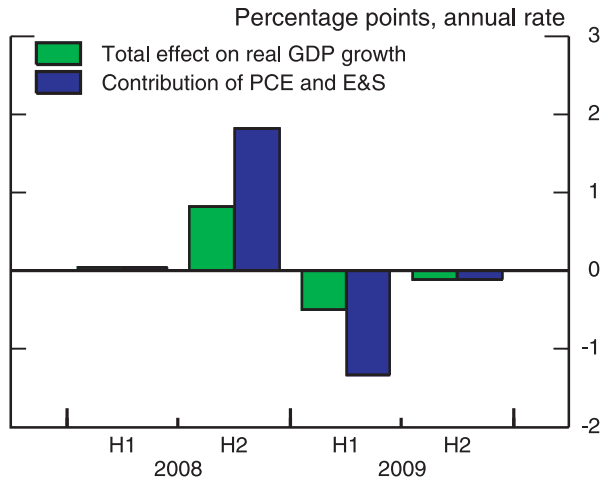
Wilshire 5000



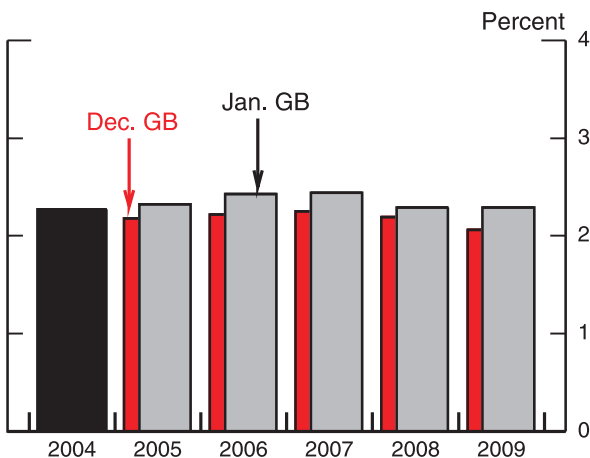
Fiscal Stimulus Package

- \$125 billion placeholder package includes:
 - \$75 billion in personal tax rebates
 - \$50 billion bonus depreciation
- Economic effects:
 - Temporary boost to PCE
 - Small investment response
 - Inventory and import offset

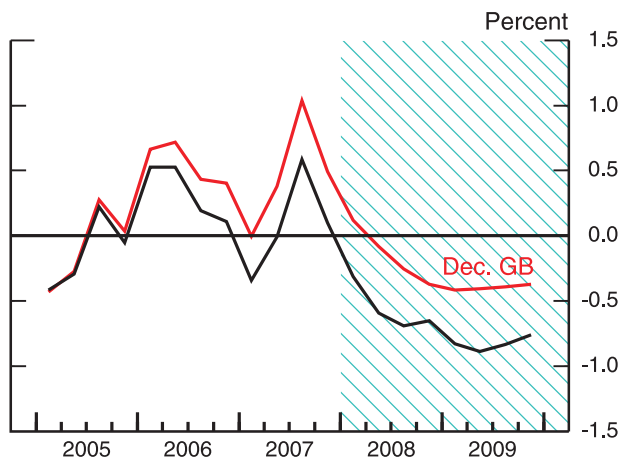
Effects of the Fiscal Stimulus Package



Potential GDP Growth

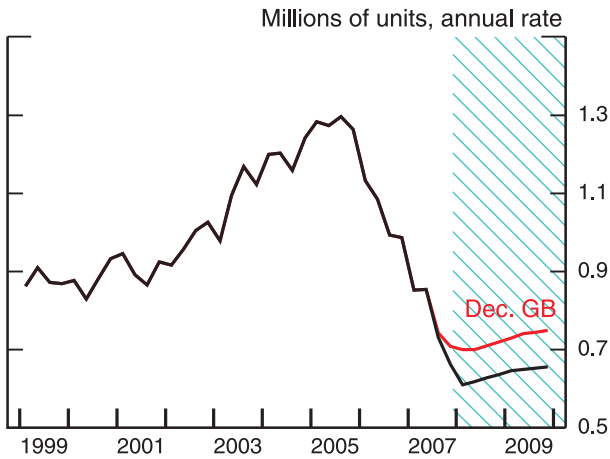


Output Gap

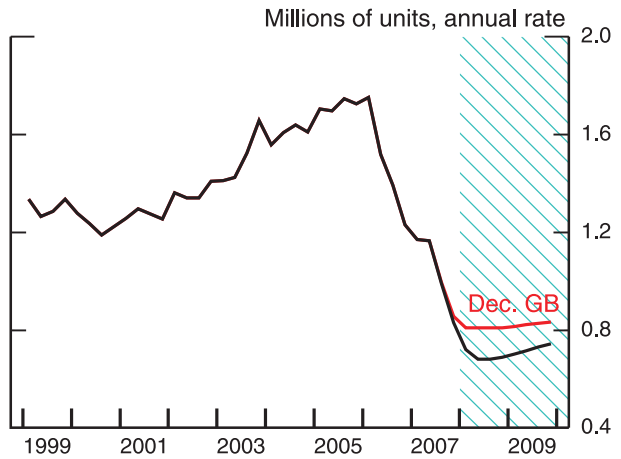


Housing, Investment, and Consumption

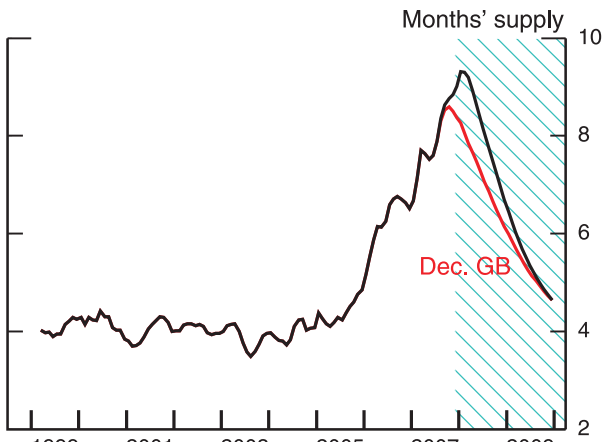
New Home Sales



Single-Family Housing Starts

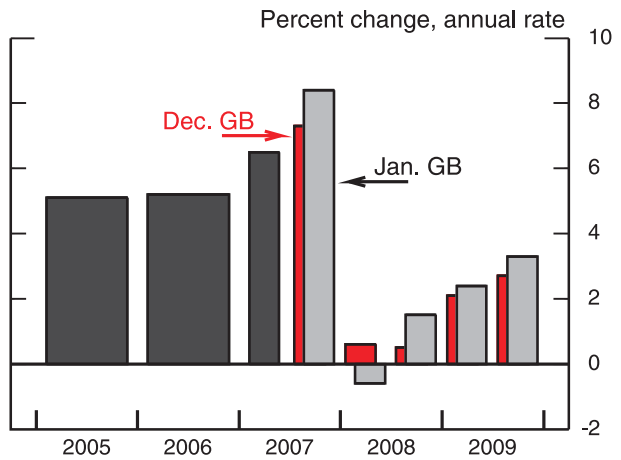


Inventory of Unsold New Homes*

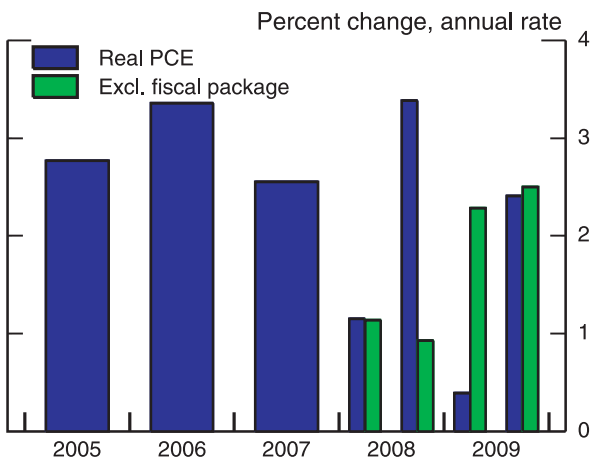


* Relative to three-month moving average of sales.

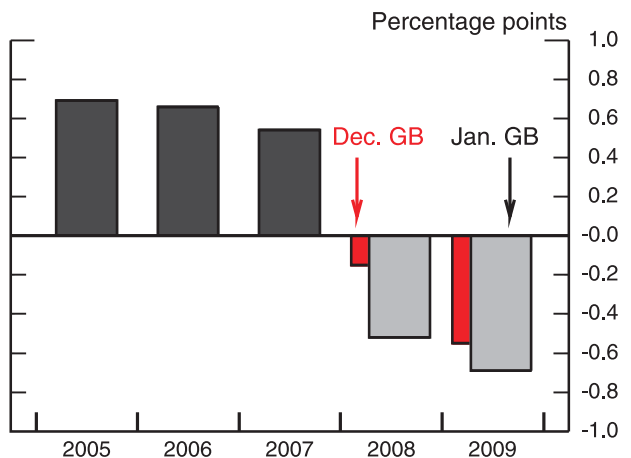
Real Business Fixed Investment



Personal Consumption Expenditures

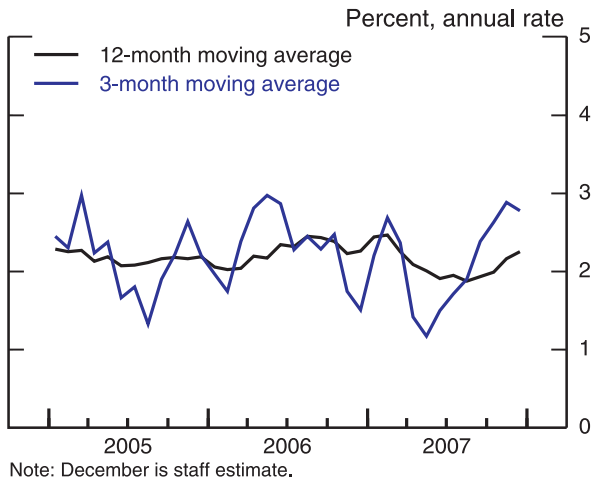


Contribution of Wealth to PCE Growth

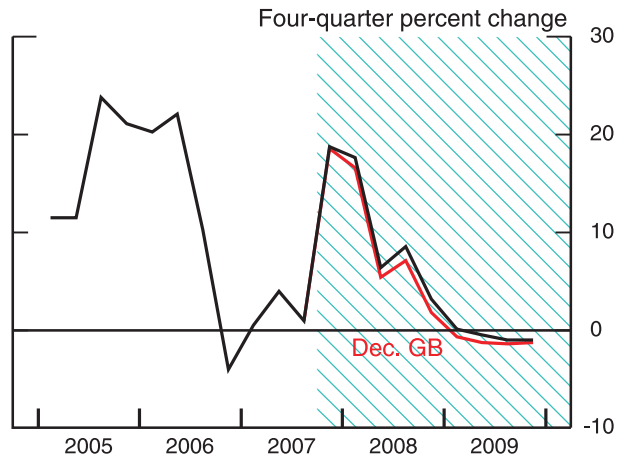


Inflation

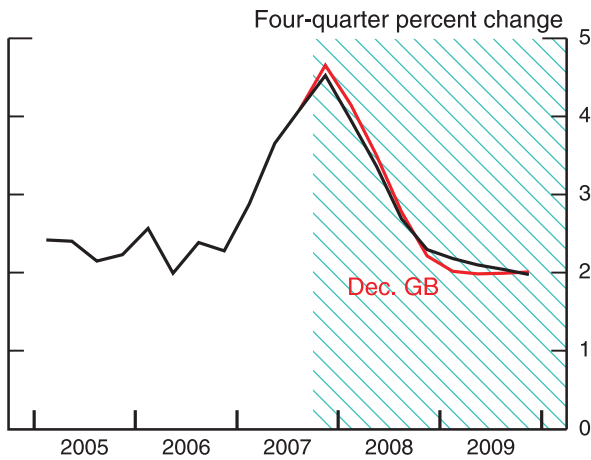
Core PCE Prices



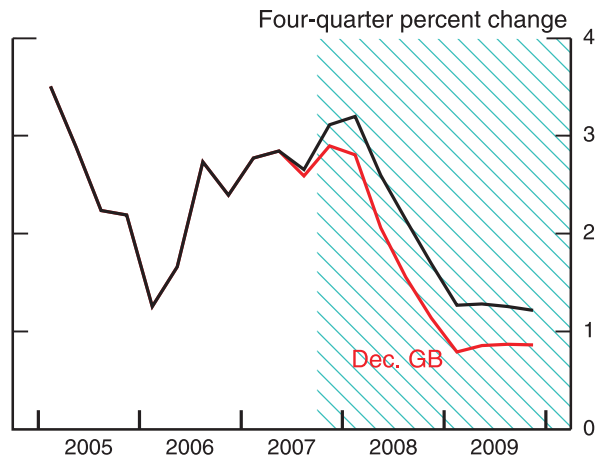
PCE Energy Prices



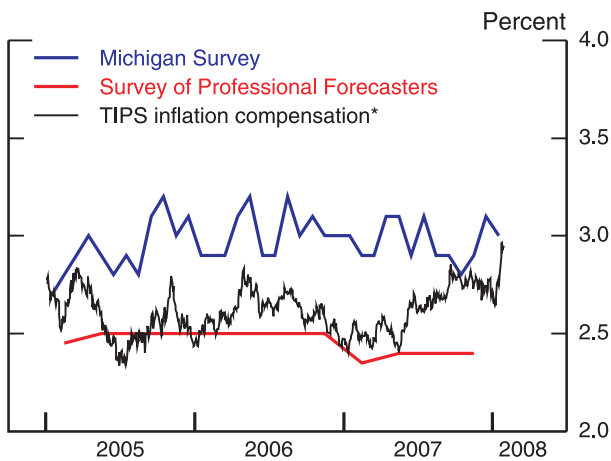
PCE Food Prices



Core Nonfuel Import Prices



Long-Run Inflation Expectations



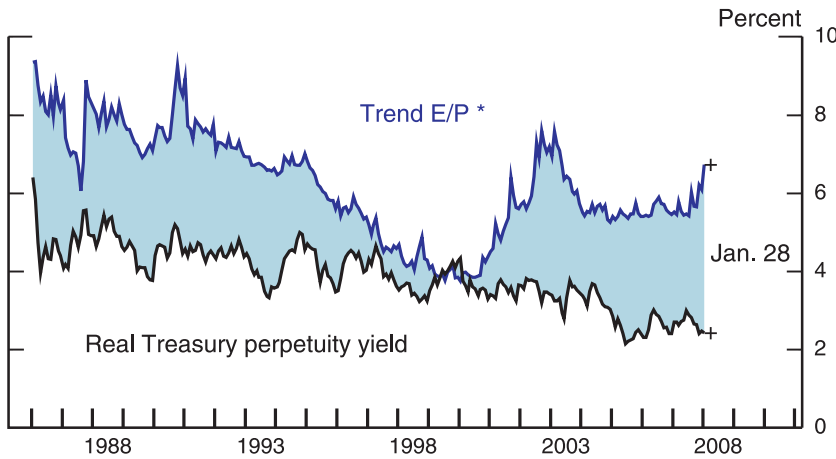
PCE Price Projection

(Percent change, Q4/Q4)

	2007	2008	2009
Total	3.4	2.2	1.7
<i>Prev.</i>	3.2	2.0	1.7
Core	2.1	2.1	1.9
<i>Prev.</i>	2.0	2.0	1.9

Financial Market Developments

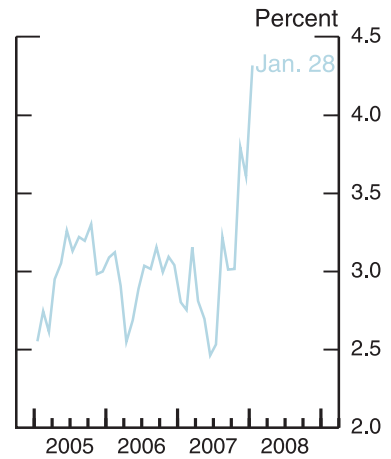
Equity Valuation for S&P 500



+ Denotes latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

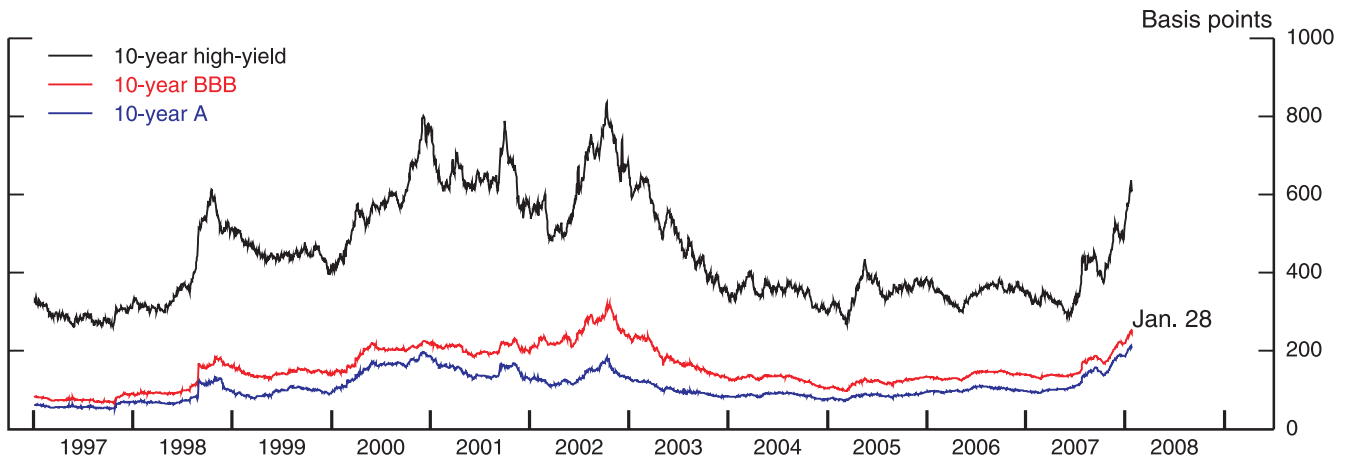
* Estimated using analyst year-ahead earnings from I/B/E/S.

Estimated Equity Premium*



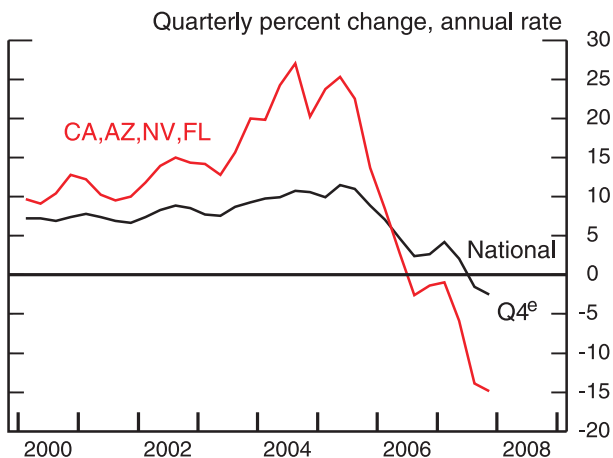
* Trend E/P ratio less real Treasury perpetuity yield.

Corporate Bond Spreads



Note: Measured relative to comparable-maturity Treasury.

House Price Appreciation



e - Staff estimate.

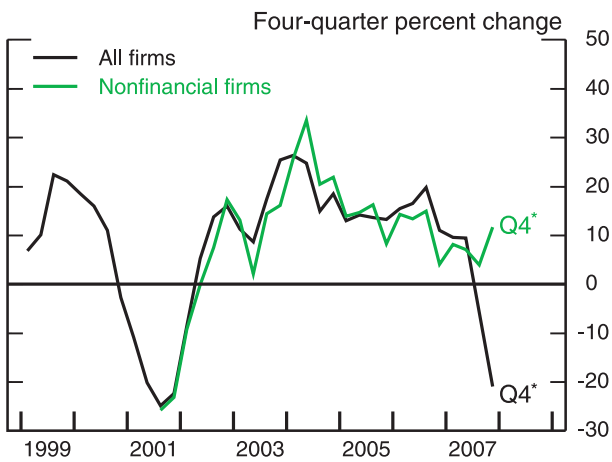
Source: OFHEO purchase-only indexes.

Financial Sector Results

- Writedowns more than \$80 billion in Q4
 - Most from subprime mortgages and CDO exposures
 - Banks increased loan loss provisions
- Firms raised capital and cut dividends and share repurchases
- Risks: house prices, slow activity, financial guarantors, previous commitments

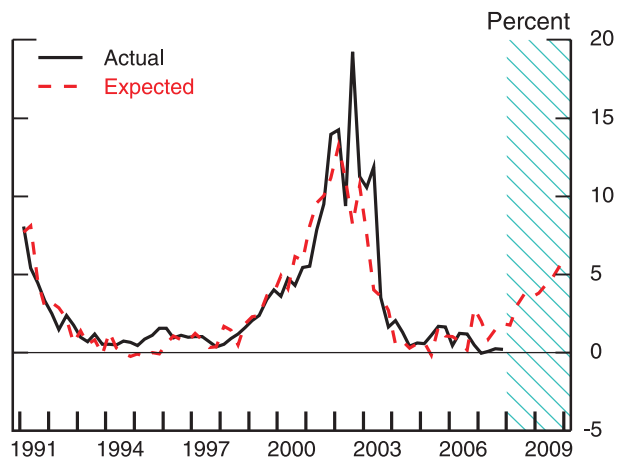
Business Financial Conditions

S&P 500 Earnings Per Share

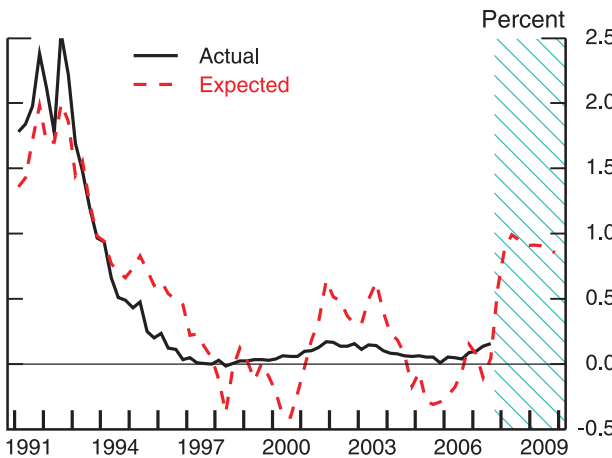


* Preliminary.
Source: I/B/E/S.

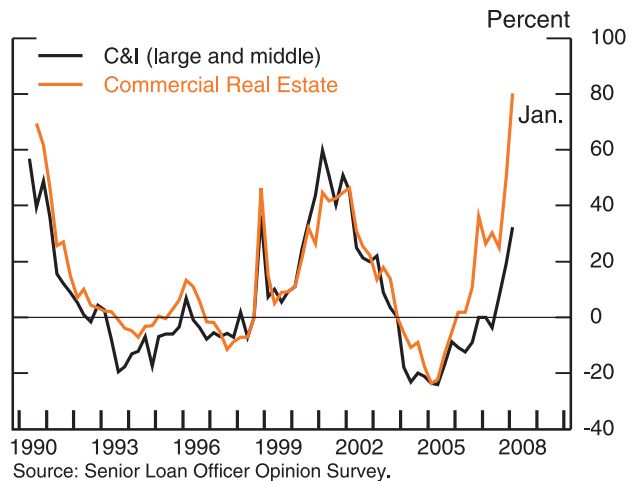
Loss Rates on High-Yield Corporate Bonds



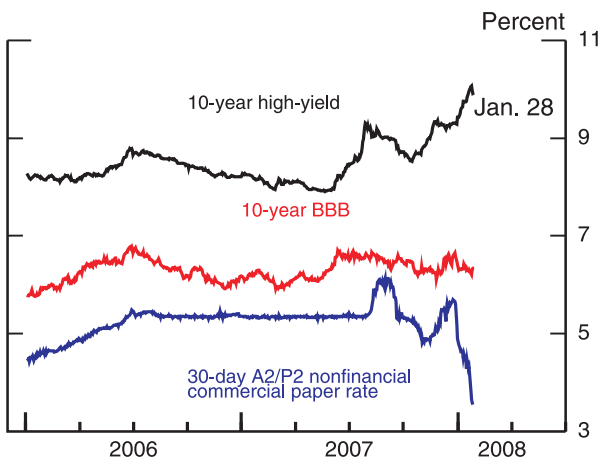
Charge-Off Rates on Commercial Real Estate Loans at Banks



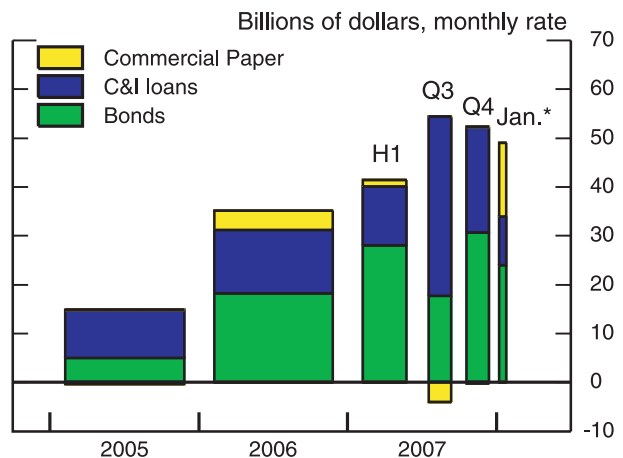
Net Percentage of Banks Tightening Standards



Borrowing Rates

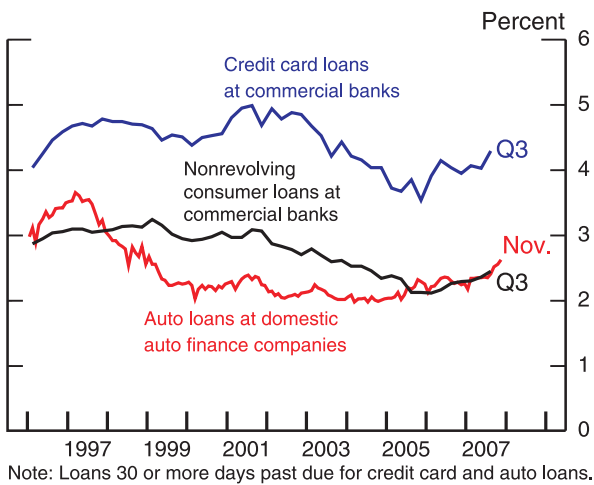


Net Changes in Selected Components of Nonfinancial Business Debt

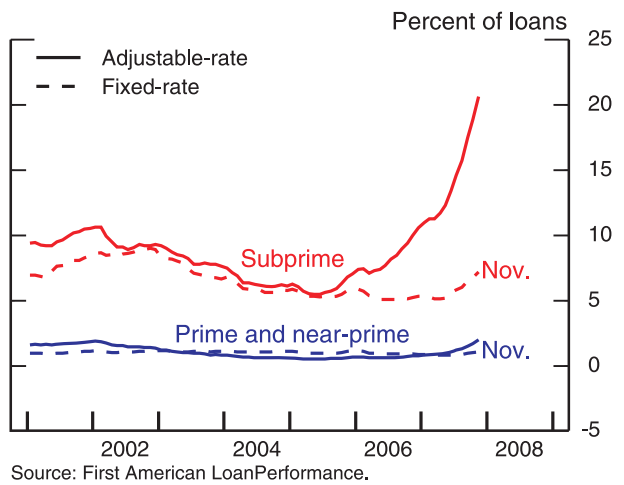


Household Financial Conditions

Consumer Loan Delinquency Rates



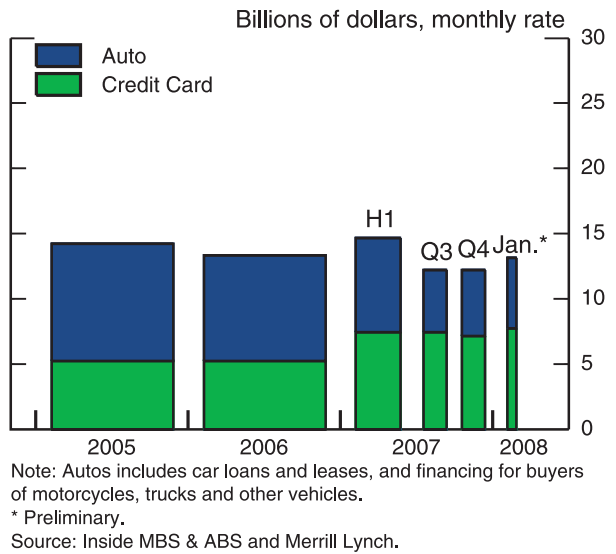
Mortgage Delinquency Rates



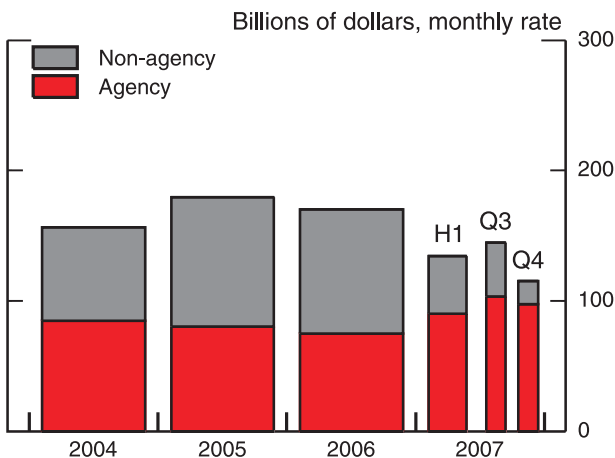
Lending Conditions

- January Senior Loan Officer Survey
 - Net tightening of standards on credit cards and other consumer loans
 - Substantial net tightening of standards for subprime and prime mortgages
- Risk spreads on consumer ABS jumped in January

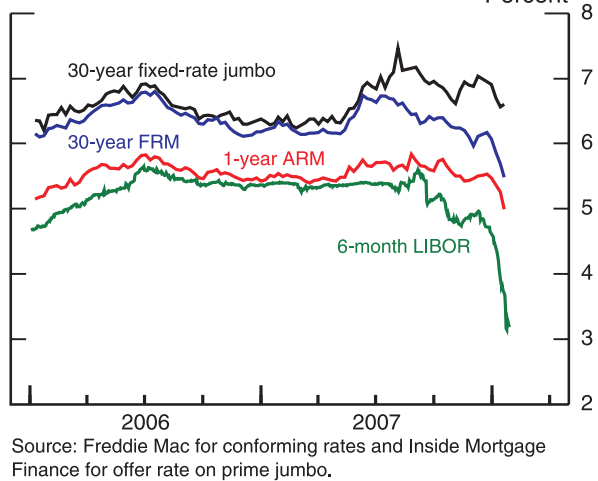
Gross Issuance of Consumer ABS



Gross Issuance of MBS by Type

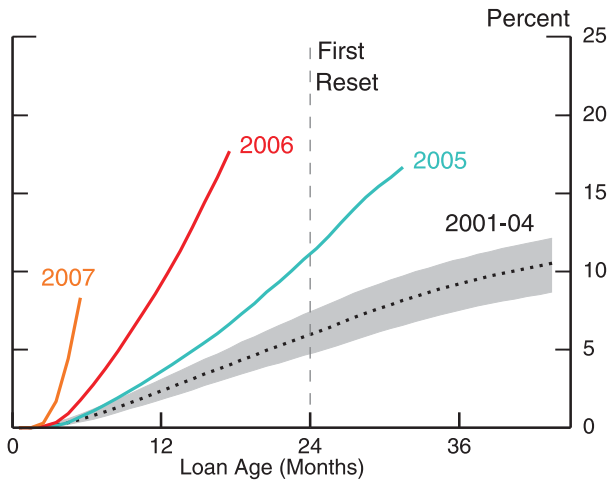


Mortgage Rates



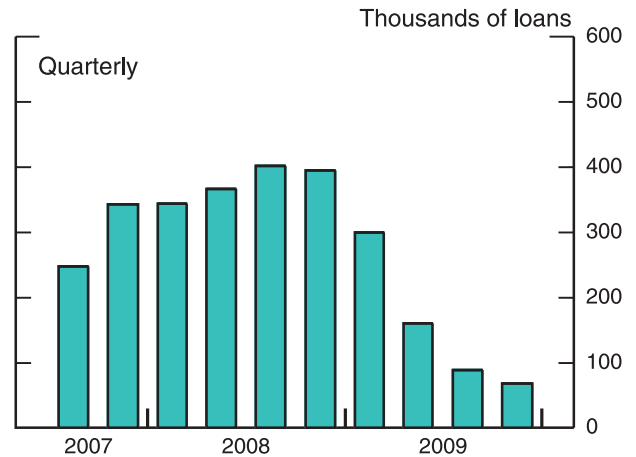
Mortgage Default Outlook

Cumulative Defaults on Subprime 2/28 Loans



Source: Staff calculations from First American LoanPerformance data as of November 2007. Last nine months based on incomplete data.

Subprime First Mortgage Rate Resets

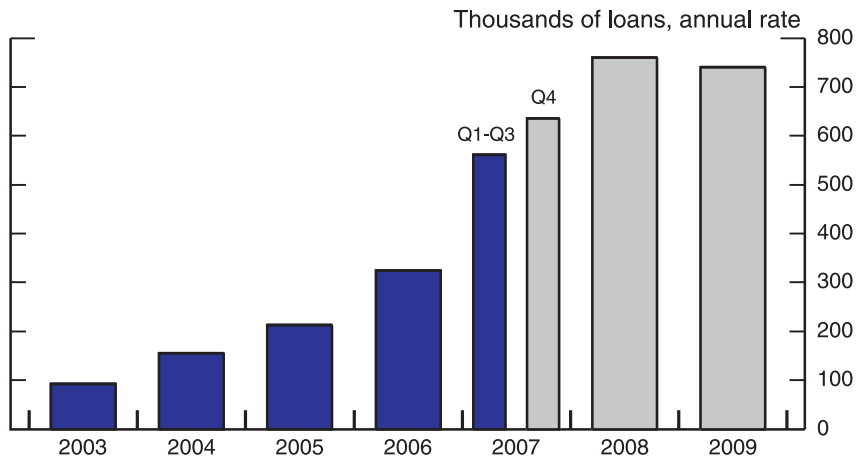


Source: Staff calculations based on First American LoanPerformance data as of November 2007.

Model of Subprime ARM Defaults

- Loan-level model of prepayments and defaults
- Loan and borrower characteristics at origination
- Subsequent MSA or state house prices and employment, interest rates, and “vintage” effects

Subprime ARM Defaults



Note: Staff calculations from First American LoanPerformance data and Mortgage Bankers Association National Delinquency Survey.

Estimated Loan-to-Value Ratios (Percent of existing mortgages)

	LTV > 100*	
	2007:Q3	2009:Q4**
Subprime	20	44
Prime	5	15

Loan Modifications

- Loan workouts and modifications were modest in Q3, but likely accelerated in Q4.
- Servicers are strained with loans that are delinquent before the first reset.
- Servicers assisted about 15 percent of subprime borrowers with past-due accounts in Q3.

* Includes closed-end second liens.

** Assumes Greenbook house price path.

Projected Credit Losses

Method

- Projections of credit losses in the next two years for major categories of business and household debt.
- The paths for house prices, unemployment, interest rates, and other factors from the Greenbook baseline.
- Also from the alternative recession scenario with the assumption that national house prices fall 20 percent.
 - Real GDP growth turns negative in 2008 and the unemployment rate rise above 6 percent in 2009.

Projected Credit Losses in 2008 and 2009 by Scenario (Billions of dollars)

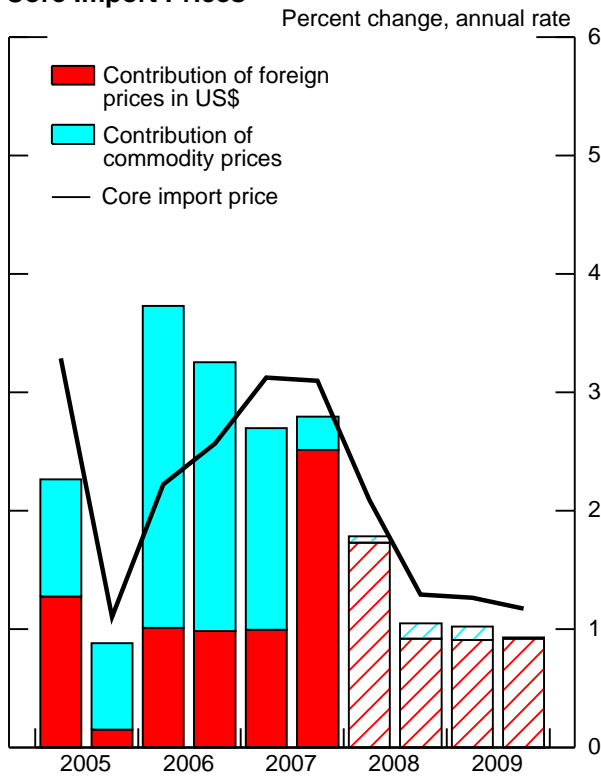
	Average based on long-run loss rates	Greenbook baseline	Recession alternative and 20 percent house price decline
1. All Mortgages	180	417	677
2. Nonprime - first liens	89	192	335
3. Consumer credit	129	154	184
4. Nonfinancial business	131	156	233
5. CRE at banks	13	28	35
6. Total	440	727	1094

U.S. Trade Outlook
Trade in Real Goods and Services

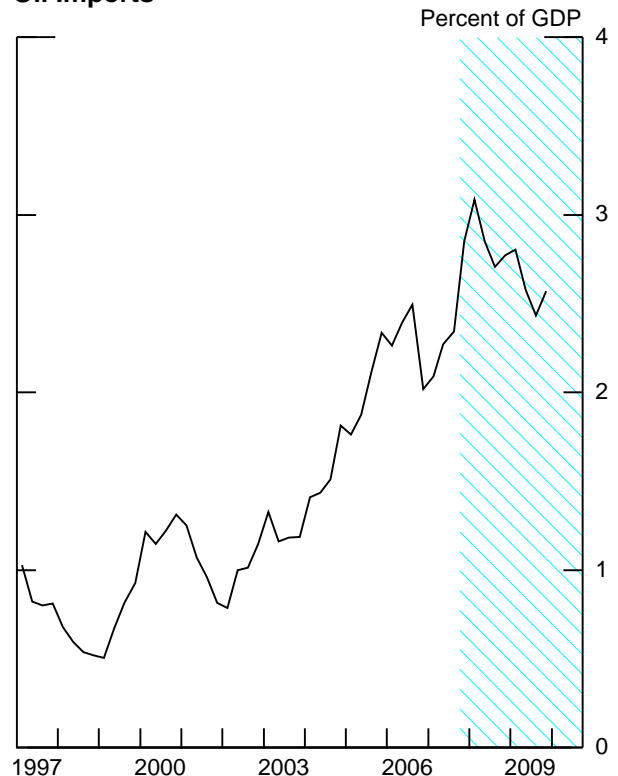
	2006	H1	2007	Q4e	2008p	2009p
Growth rates (percent, annual rate*)						
1. Exports	9.3	4.3	19.1	4.6	7.2	7.3
2. Imports	3.7	0.5	4.4	2.1	1.9	3.8
Contribution to U.S. real GDP growth (percentage points, annual rate*)						
3. Net exports	0.4	0.4	1.4	0.2	0.5	0.3
<i>Memo:</i>						
4. Current account balance (% of GDP)	-6.2	-5.7	-5.1	-5.5	-5.4	-4.7
5. Non-oil trade balance (% of GDP)	-3.5	-3.0	-2.6	-2.4	-2.0	-1.6

* Years are Q4/Q4; half year is Q2/Q4.

Core Import Prices

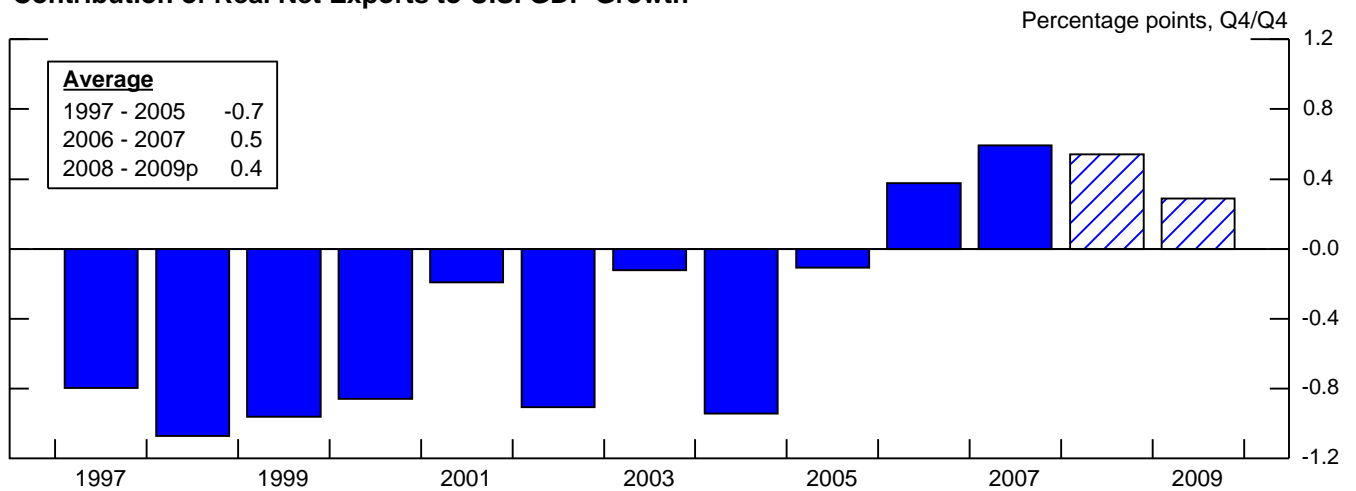


Oil Imports



Long-Term Performance of U.S. Trade

Contribution of Real Net Exports to U.S. GDP Growth



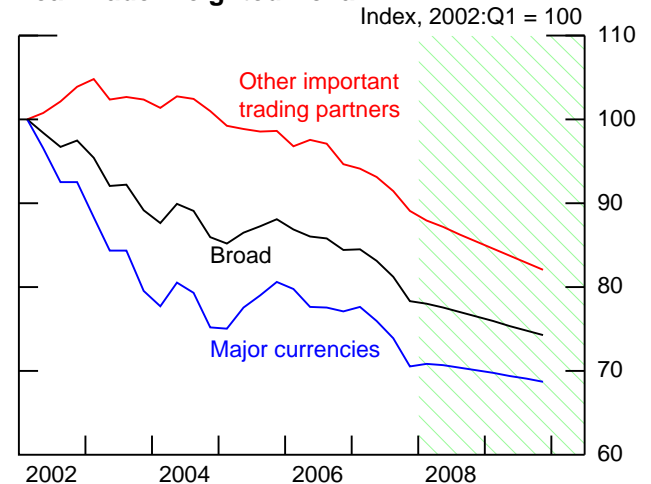
Real Export and Import Growth

Percent, Q4/Q4

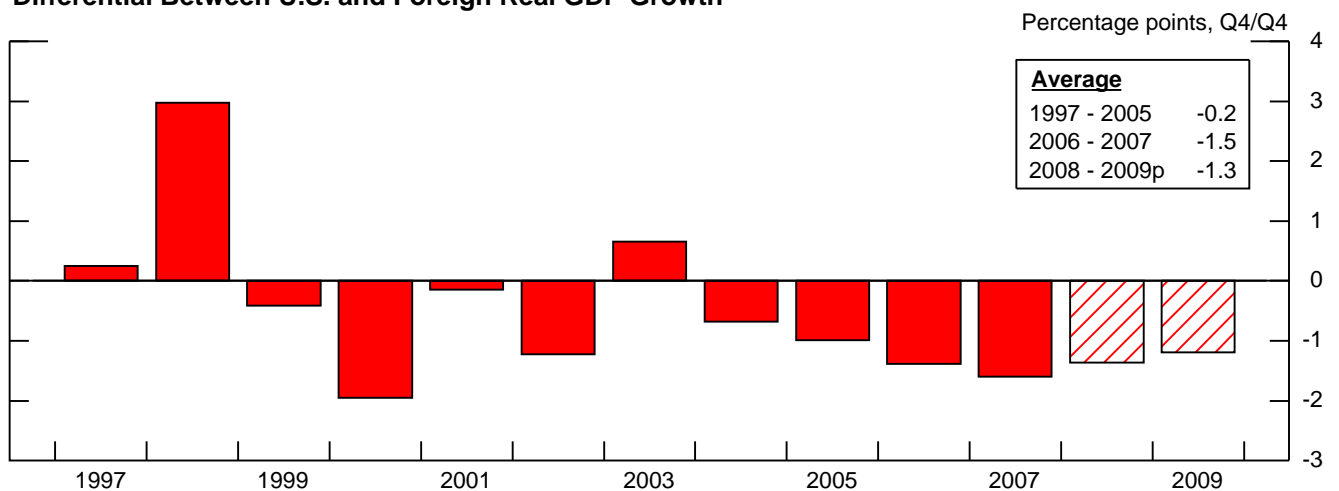
	Avg. Growth	Avg. Contribution*
Exports		
1. 1997-2005	3.7	0.4
2. 2006-2007	8.6	1.0
3. 2008-2009p	7.3	0.9
Imports		
4. 1997-2005	8.0	-1.1
5. 2006-2007	2.8	-0.5
6. 2008-2009p	2.9	-0.5

* Contribution to U.S. GDP growth.

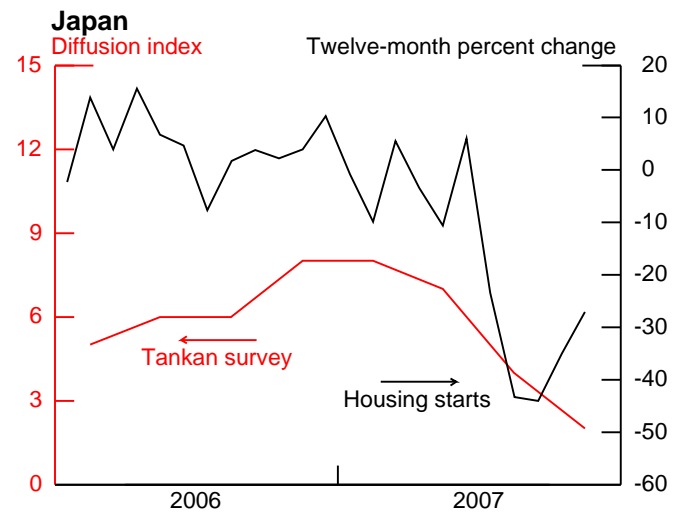
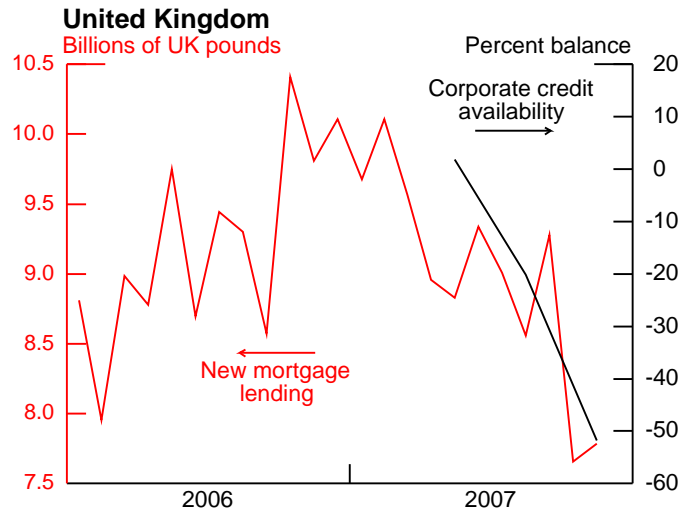
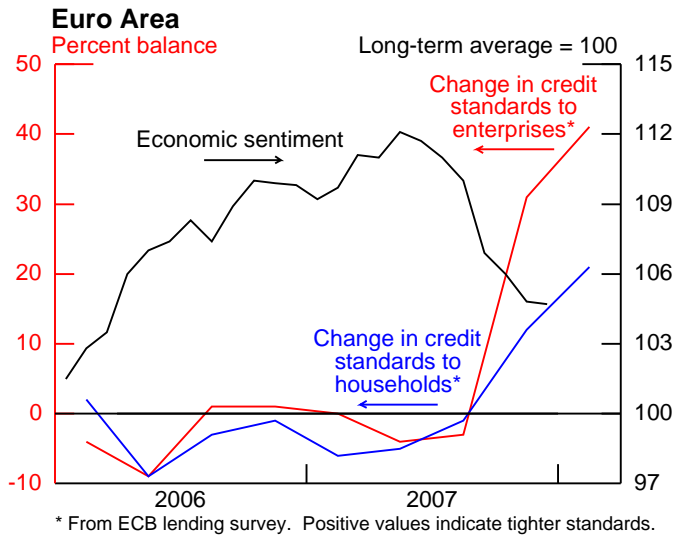
Real Trade-Weighted Dollar



Differential Between U.S. and Foreign Real GDP Growth



Outlook for Foreign Growth



Sources of Near-Term Slowing

- Headwinds from financial turmoil, including sharp recent declines in equity markets
- Softening of U.S. growth
- Expected cyclical moderation

Real GDP Projections*

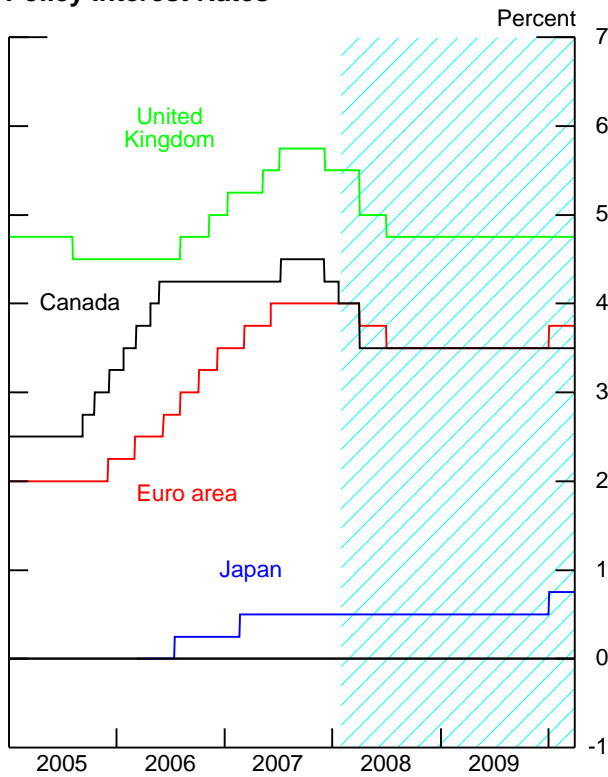
Percent change, annual rate**

	2006	2007		2008p		2009p
		Q1-Q3	Q4e	H1	H2	
1. Total Foreign	4.0	4.4	2.8	2.7	3.0	3.4
2. Advanced Foreign	2.5	2.9	1.7	1.4	1.7	2.2
3. Euro Area	3.2	2.5	1.5	1.2	1.6	2.2
4. United Kingdom	3.3	3.1	2.5	1.6	2.0	2.6
5. Japan	2.5	1.0	1.1	0.9	1.2	1.4
6. Canada	1.9	3.4	1.7	1.3	1.6	2.2
7. Emerging Markets	5.9	6.4	4.3	4.5	4.8	5.0
8. Mexico	4.3	4.3	1.5	2.3	3.2	3.3
9. China	10.5	11.8	9.6	9.2	9.5	9.4

* Aggregates weighted by U.S. exports.

** Years are Q4/Q4; half years are Q2/Q4 or Q4/Q2; Q1-Q3 is Q3/Q4.

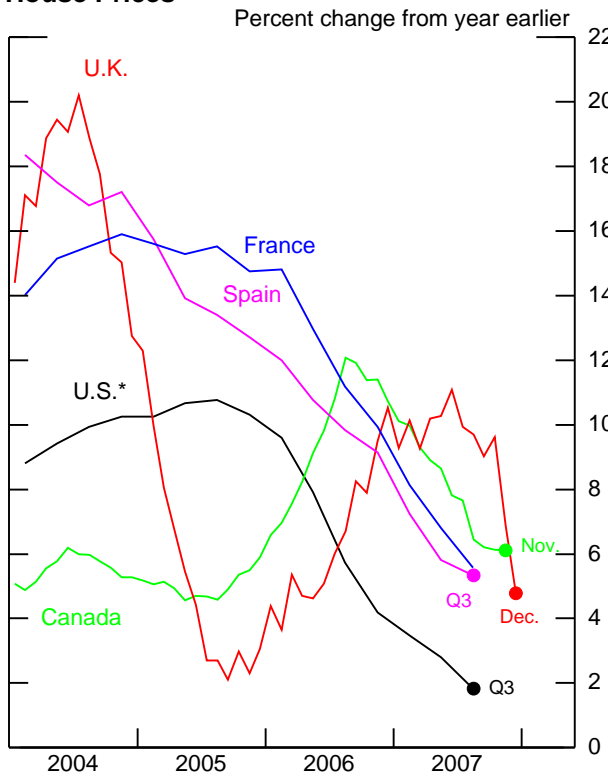
Policy Interest Rates



Risks to the Foreign Outlook

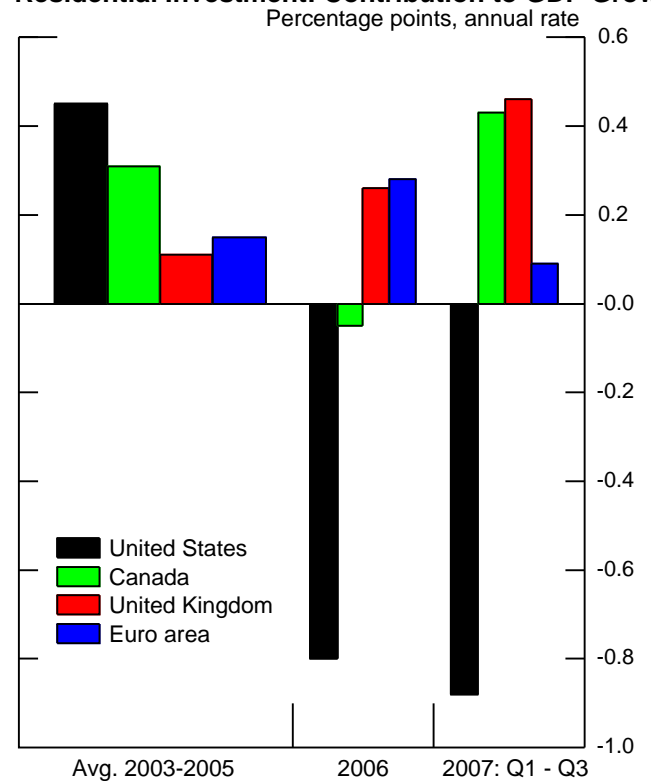
- Financial headwinds or U.S. slowing may exceed current projections.
- Year-end financial statements could bring bad news.
- Overly optimistic expectations of decoupling might lead to policy mistakes.
- Housing markets in some countries may be vulnerable.

House Prices



* OFHEO purchase-only index.

Residential Investment: Contribution to GDP Growth



Outlook for Foreign Inflation

Headline CPI Projections*

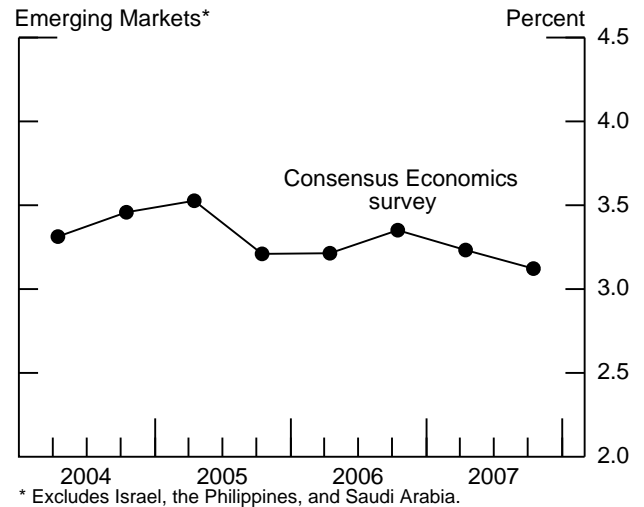
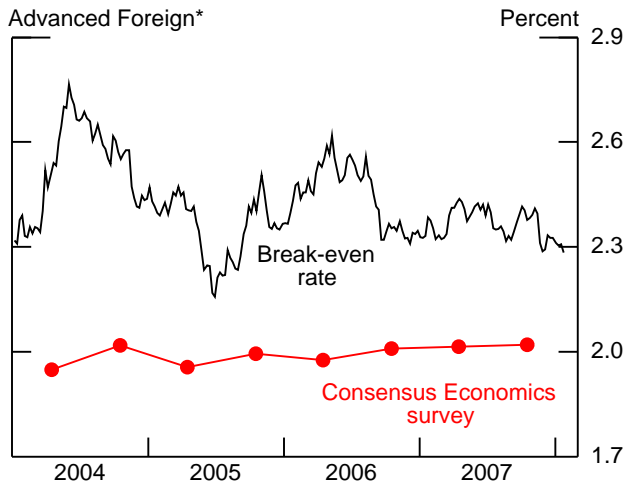
Percent change, annual rate**

	2006	2007		2008p		2009p
		Q1-Q3	Q4e	H1	H2	
1. Average Foreign	2.1	3.4	4.5	2.7	2.5	2.5
2. Advanced Foreign	1.3	1.9	3.1	1.8	1.7	1.7
3. Euro Area	1.8	2.2	5.1	1.8	1.8	1.9
4. United Kingdom	2.7	1.5	3.8	2.8	2.1	2.1
5. Japan	0.3	0.2	1.6	0.3	0.6	0.6
6. Canada	1.3	2.7	2.2	2.3	2.1	2.0
7. Emerging Markets	2.9	4.8	5.8	3.6	3.3	3.2
8. Mexico	4.1	3.7	4.1	3.5	3.5	3.3
9. China	2.1	6.8	6.3	3.5	3.0	3.0

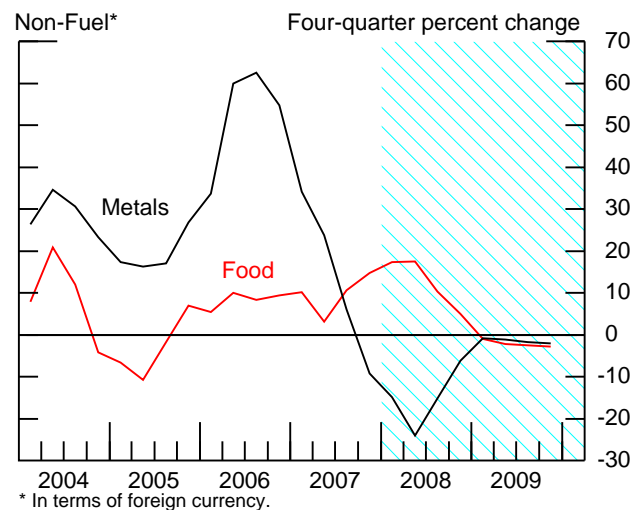
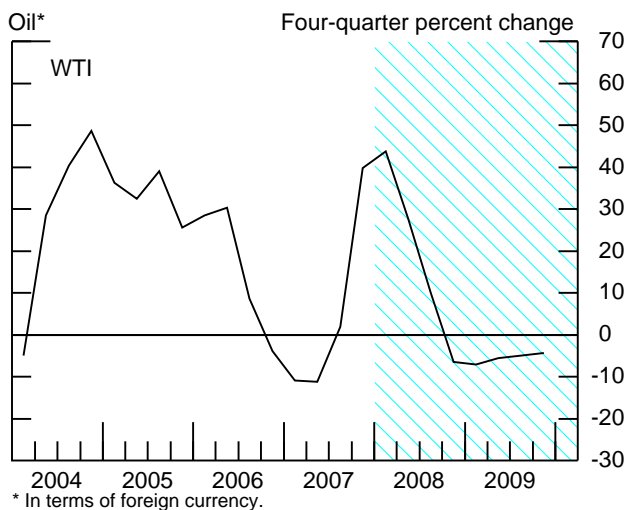
* Aggregates weighted by U.S. non-oil imports.

** Years are Q4/Q4; half years are Q2/Q4 or Q4/Q2; Q1-Q3 is Q3/Q4.

Ten-Year Inflation Expectations



Commodities Prices



Appendix 3: Materials used by Mr. Madigan

Class I FOMC – Restricted Controlled (FR)

*Material for
FOMC Briefing on Economic Projections*

Brian Madigan
January 29, 2008

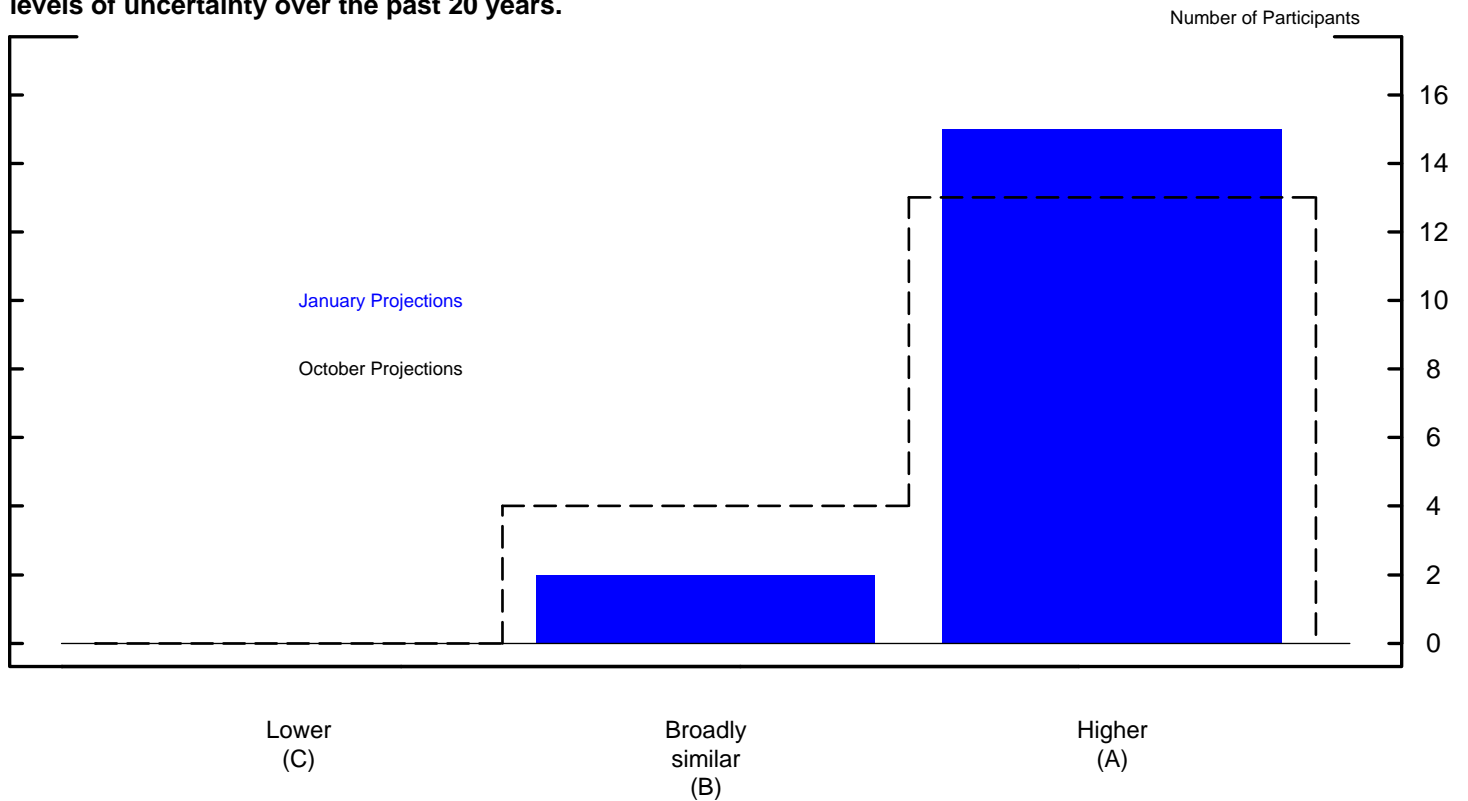
Table 1: Economic Projections of Federal Reserve Governors and Reserve Bank Presidents ¹

	2008	2009	2010
Central Tendencies			
Real GDP Growth	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
<i>October projections</i>	<i>1.8 to 2.5</i>	<i>2.3 to 2.7</i>	<i>2.5 to 2.6</i>
Unemployment Rate	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
<i>October projections</i>	<i>4.8 to 4.9</i>	<i>4.8 to 4.9</i>	<i>4.7 to 4.9</i>
PCE Inflation	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
<i>October projections</i>	<i>1.8 to 2.1</i>	<i>1.7 to 2.0</i>	<i>1.6 to 1.9</i>
Core PCE Inflation	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
<i>October projections</i>	<i>1.7 to 1.9</i>	<i>1.7 to 1.9</i>	<i>1.6 to 1.9</i>
Ranges			
Real GDP Growth	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
<i>October projections</i>	<i>1.6 to 2.6</i>	<i>2.0 to 2.8</i>	<i>2.2 to 2.7</i>
Unemployment Rate	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
<i>October projections</i>	<i>4.6 to 5.0</i>	<i>4.6 to 5.0</i>	<i>4.6 to 5.0</i>
PCE Inflation	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
<i>October projections</i>	<i>1.7 to 2.3</i>	<i>1.5 to 2.2</i>	<i>1.5 to 2.0</i>
Core PCE Inflation	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0
<i>October projections</i>	<i>1.7 to 2.0</i>	<i>1.5 to 2.0</i>	<i>1.5 to 2.0</i>

1. Projections of real GDP growth, PCE inflation and core PCE inflation are fourth-quarter-to-fourth-quarter growth rates, i.e. percentage changes from the fourth quarter of the prior year to the fourth quarter of the indicated year. PCE inflation and core PCE inflation are the percentage rates of change in the price index for personal consumption expenditures and the price index for personal consumption expenditures excluding food and energy, respectively. Each participant's projections are based on his or her assessment of appropriate monetary policy. The range for each variable in a given year includes all participants' projections, from lowest to highest, for that variable in the given year; the central tendencies exclude the three highest and three lowest projections for each variable in each year.

Exhibit 2 Uncertainty and Risks - GDP Growth

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.



2(b): Please indicate your judgment of the risk weighting around your projections.

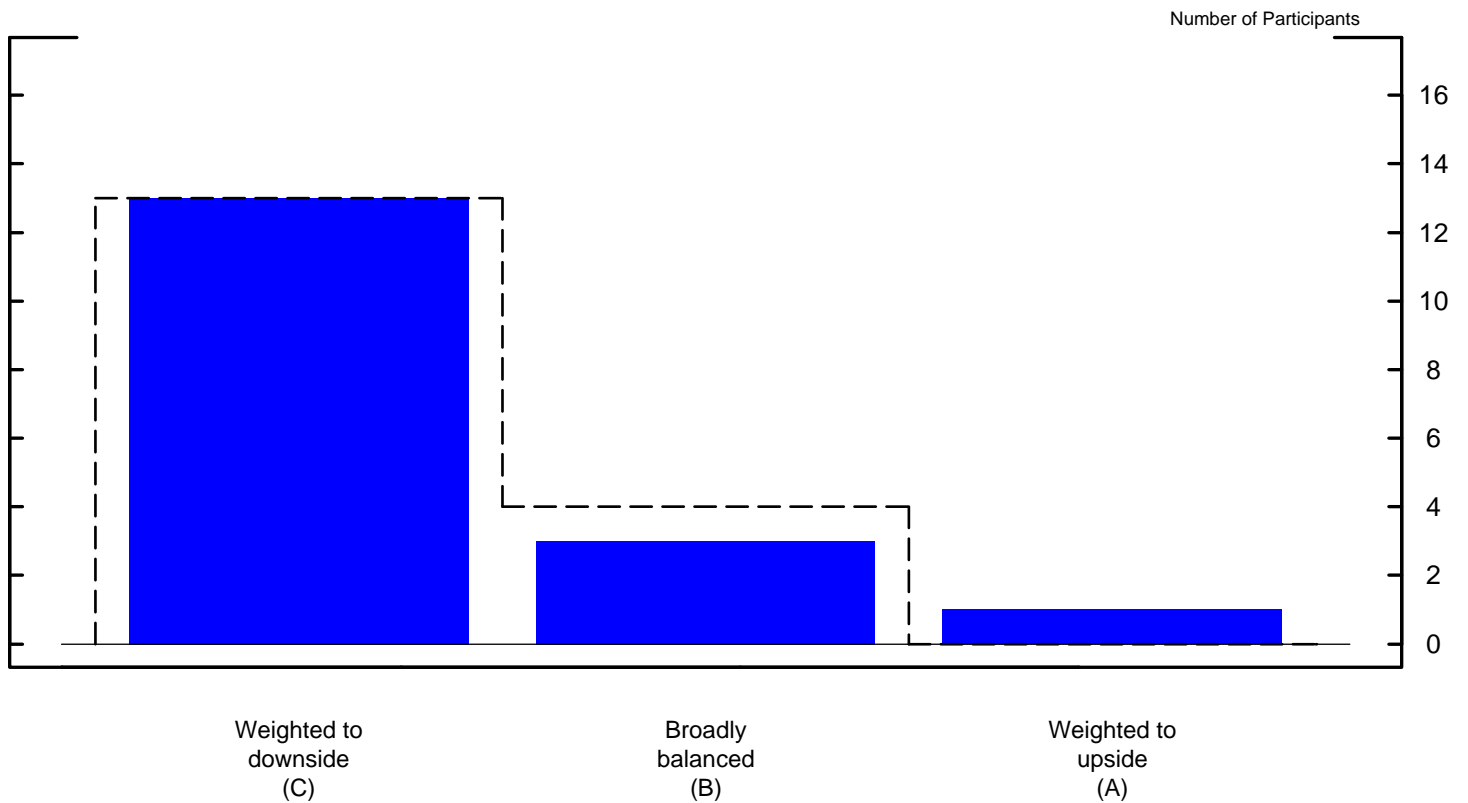
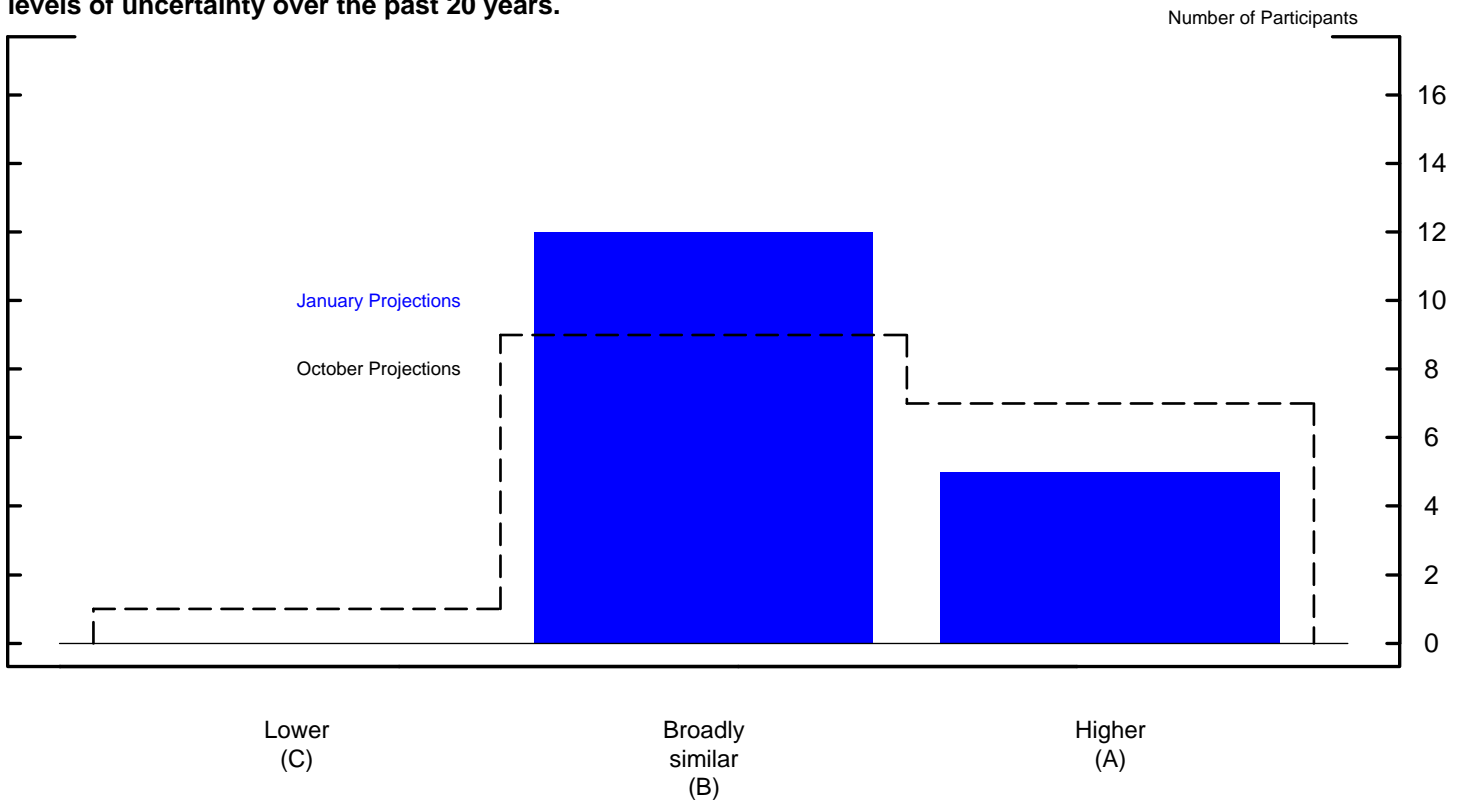
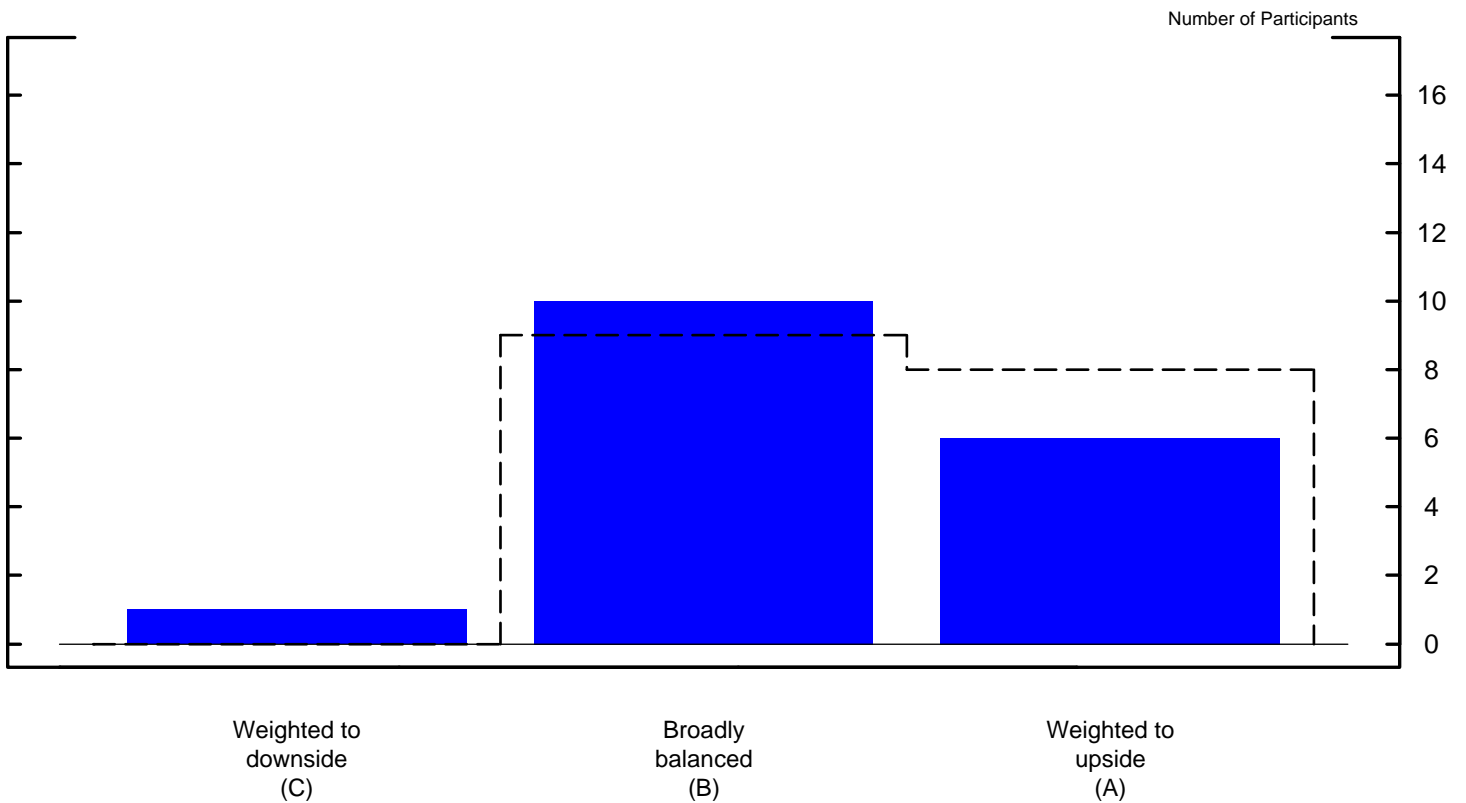


Exhibit 3 Uncertainty and Risks - Total PCE Inflation

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.



2(b): Please indicate your judgment of the risk weighting around your projections.



Appendix 4: Materials used by Mr. Stockton

Gross Domestic Product

(percent change at an annual rate)

	2007-Q3	2007-Q4	
	Final	Greenbook	Advance
Real GDP	4.9	0.5	0.6
Final Sales	4.0	1.7	1.9
Personal Consumption	2.8	2.2	2.0
Durables	4.5	5.2	4.2
Nondurables	2.2	1.7	1.9
Services	2.8	1.9	1.6
Business Fixed Investment	9.3	7.4	7.5
Nonresidential Structures	16.4	15.3	15.8
Equipment and Software	6.2	3.8	3.8
Residential Investment	-20.5	-30.6	-23.9
Government	3.8	4.0	2.6
Federal	7.1	4.8	0.3
State and Local	1.9	3.6	4.0
Exports	19.1	4.6	3.9
Imports	4.4	2.1	0.3
<u>Level in chained 2000 dollars:</u>			
Change in nonfarm business inventories	26.0	-8.1	-6.9
Change in farm inventories	4.1	1.0	2.5
Net Exports	-533.1	-526.9	-521.0
<u>Price Indexes:</u>			
Total PCE Chain Price Index	1.8	3.9	3.9
Core PCE Chain Price Index	2.0	2.7	2.7

Appendix 5: Materials used by Mr. Madigan

Class I FOMC – Restricted Controlled (FR)

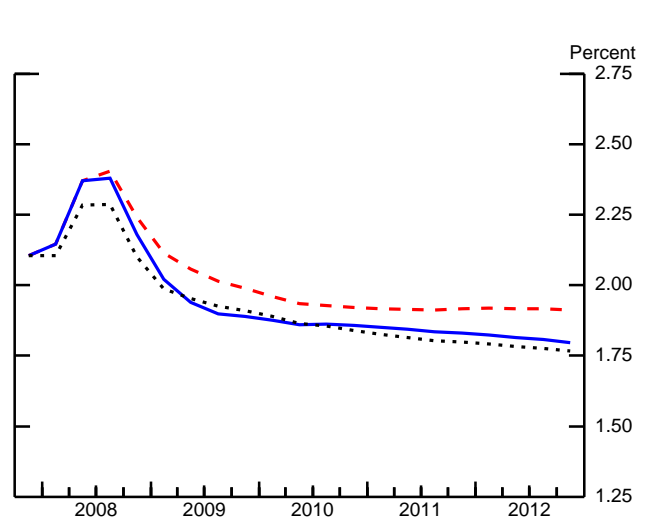
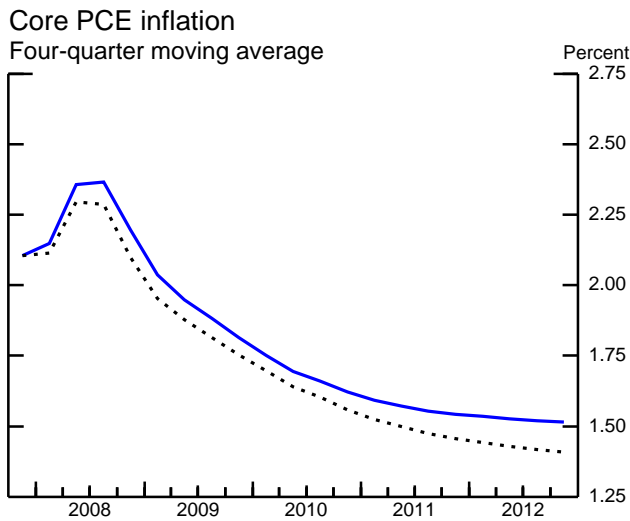
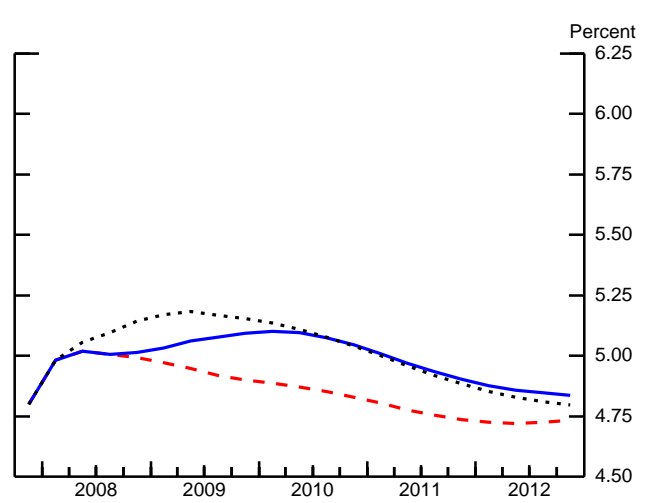
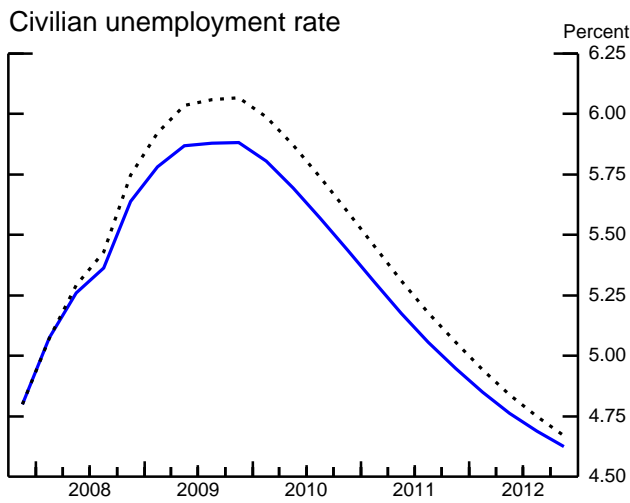
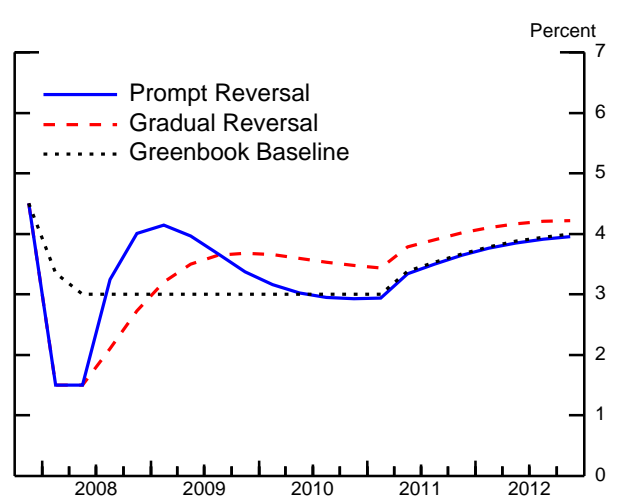
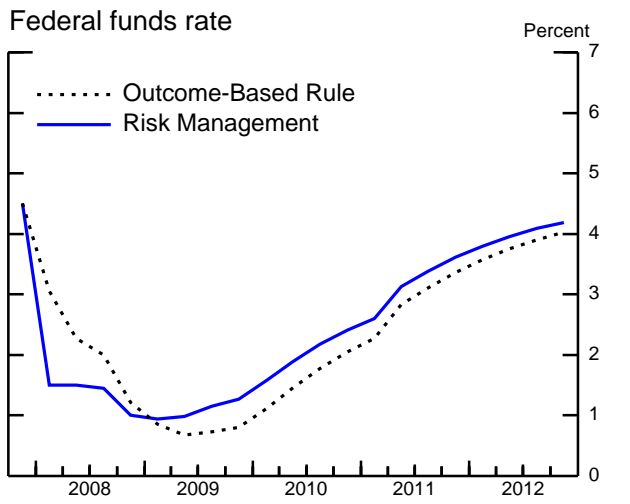
*Material for
FOMC Briefing on Monetary Policy Alternatives*

Brian Madigan
January 29-30, 2008

Exhibit 1 Risk Management Strategies

Benefits

Costs



Class I FOMC – Restricted Controlled (FR)		Table 1: Alternative Language for the January 30, 2008 FOMC Announcement			Bluebook Version
	Alternative A	Alternative B	Alternative C	Alternative D	
Policy Decision	1. The Federal Open Market Committee decided today to lower its target for the federal funds rate 75 basis points to 2-3/4 percent.	The Federal Open Market Committee decided today to lower its target for the federal funds rate 50 basis points to 3 percent.	The Federal Open Market Committee decided today to lower its target for the federal funds rate 25 basis points to 3-1/4 percent.	The Federal Open Market Committee decided today to keep its target for the federal funds rate at 3-1/2 percent.	
Rationale	2. Financial markets remain under considerable stress , and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.	Financial markets remain under considerable stress , and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.	Financial markets remain under considerable stress , and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.	Financial markets remain under considerable stress , and the tightening of credit and the deepening of the housing contraction could weigh further on economic growth. However, recent policy actions should promote moderate growth over time.	
	3. The Committee expects inflation to moderate in coming quarters, reflecting well-anchored inflation expectations, a projected leveling out of energy prices, and easing pressures on resource utilization. However, further increases in energy and commodity prices, as well as other factors, could put upward pressure on inflation. Therefore, it will be necessary to continue to monitor inflation developments carefully.	The Committee expects inflation to moderate in coming quarters, but it will be necessary to continue to monitor inflation developments carefully.	The Committee expects inflation to moderate in coming quarters. However, upward pressure on inflation could result from several factors, including further increases in energy, commodity, and other import prices. Therefore, it will be necessary to continue to monitor inflation developments carefully.	The Committee expects inflation to moderate in coming quarters. However, upward pressure on inflation could result from several factors, including further increases in energy, commodity, and other import prices. Therefore, it will be necessary to continue to monitor inflation developments carefully.	
Assessment of Risk	4. Today’s policy action, combined with those taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth may well remain. The Committee will continue to assess the effects of financial and other developments on economic prospects to determine whether further action is needed to address those risks.	Today’s policy action, combined with those taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.	Today’s policy action, combined with those taken earlier, should help promote moderate growth over time. However, appreciable downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.	Appreciable downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.	

Appendix 6: Materials used by Mr. Parkinson, Mr. Gibson, Ms. Hirtle, Mr. Greenlee, and Mr. Angulo

Class I FOMC – Restricted-Controlled FR

Material for

**FOMC Briefing on Analysis of Policy Issues
Raised by Financial Market Developments**

January 30, 2008

Exhibit 1 Background and Overview

Background

- In response to a request from the G-7, the Financial Stability Forum (FSF) created a Working Group on Market and Institutional Resilience.
- The President's Working Group on Financial Markets is conducting its own analysis and will ensure coordination among U.S. members of the FSF working group.
- The Staff Umbrella Group is supporting Federal Reserve participation in the FSF working group and PWG's effort.

Issues being analyzed by the staff

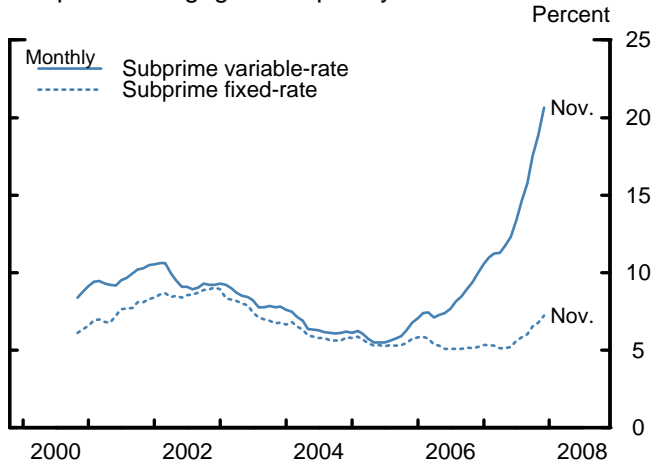
- Credit rating agencies
- Investor practices
- Bank risk management
- Bank regulatory policy
- Counterparty risk management and hedge funds
- OTC derivatives market infrastructure
- Fed's liquidity tools
- Tri-party repos
- Supervisory and regulatory structure

Overview of today's briefing

- Three presentations
 1. A diagnosis of underlying reasons why losses on U.S subprime mortgages triggered a global financial crisis.
 2. An analysis of issues relating to credit rating agencies and investor practices with respect to the use of credit ratings.
 3. An analysis of risk management weaknesses at large global financial services organizations and the extent to which bank regulatory policies contributed to, or failed to mitigate, those weaknesses.

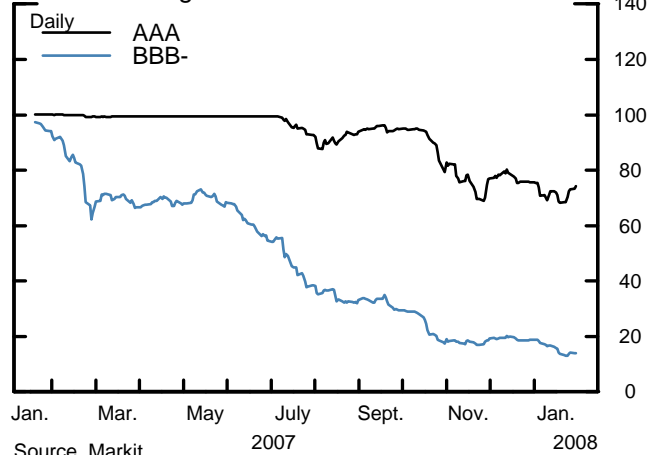
Exhibit 2: Diagnosis Subprime Mortgages and Securitization Markets

Subprime mortgage delinquency rates



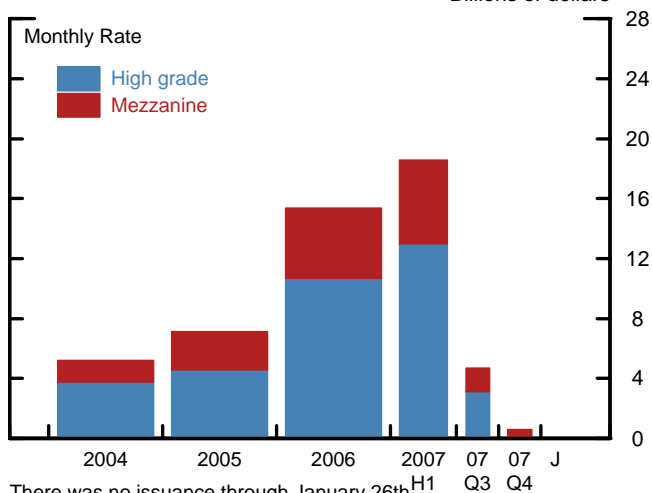
Note. Percent of loans 90 or more days past due or in foreclosure. Covers first liens only. Source. First American LoanPerformance.

ABX prices
2006:H2 vintage



Source. Markit.

ABS CDO issuance



There was no issuance through January 26th, 2008. Source. JPMorgan.

Typical ABS CDO structure*

	High Grade	Mezzanine
	- percent -	
Super Senior	88	62
AAA	5	14
AA	3	8
A	2	6
BBB	1	6
Unrated	1	4

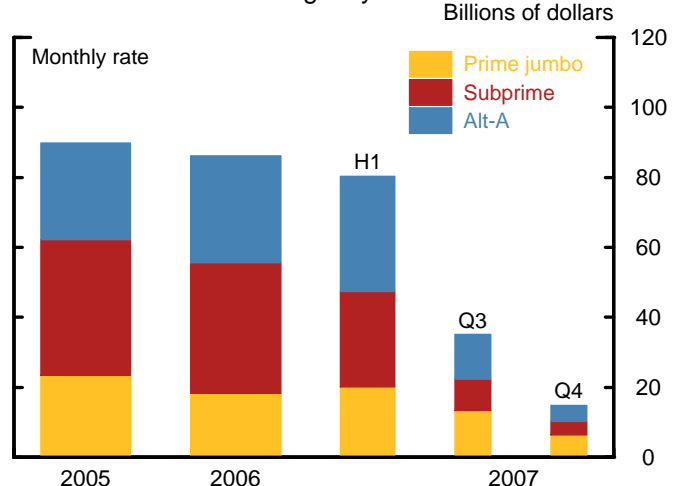
*At origination. Percent of par value at origination. Source. JPMorgan.

ABS CDOs downgraded or placed on watch*

	High Grade	Mezzanine
	- percent -	
AAA	45	63
AA	87	81
A	77	87
BBB	77	91
BB	62	80

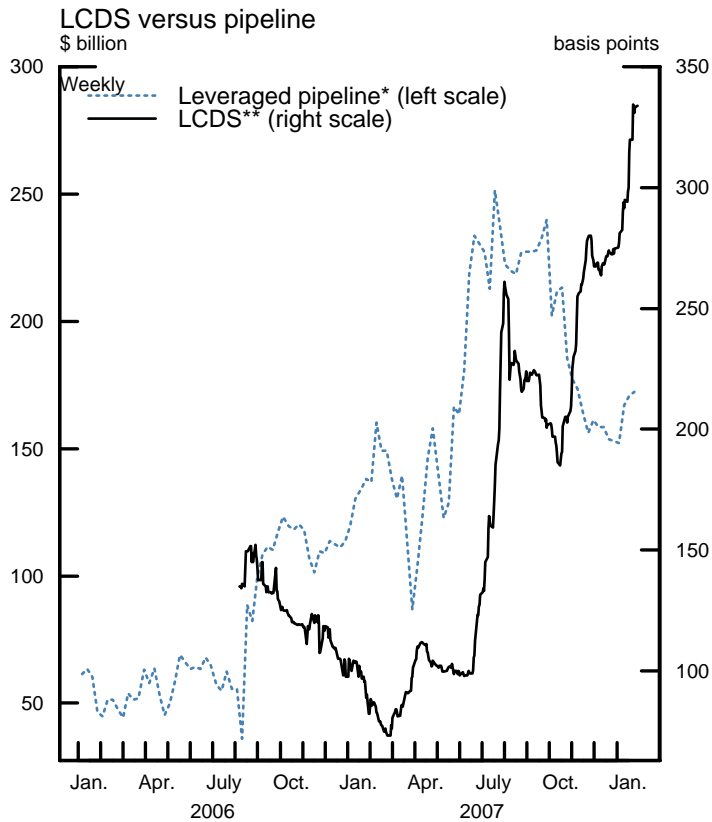
*Percent of total issued in 2007, as of January 22, 2008. Source. JPMorgan.

Gross issuance of non-agency RMBS

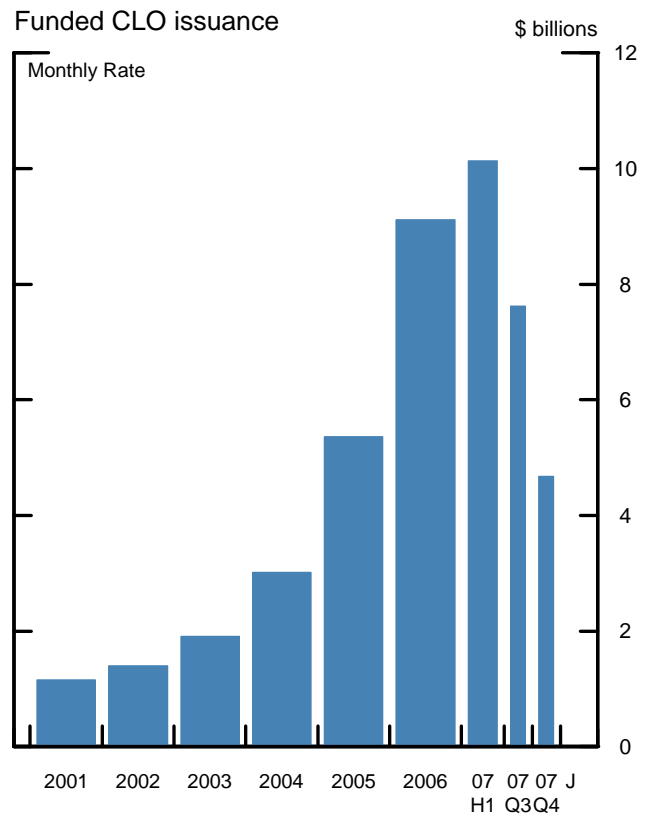


Source. Inside Mortgage Finance MBS database, Deutsche Bank.

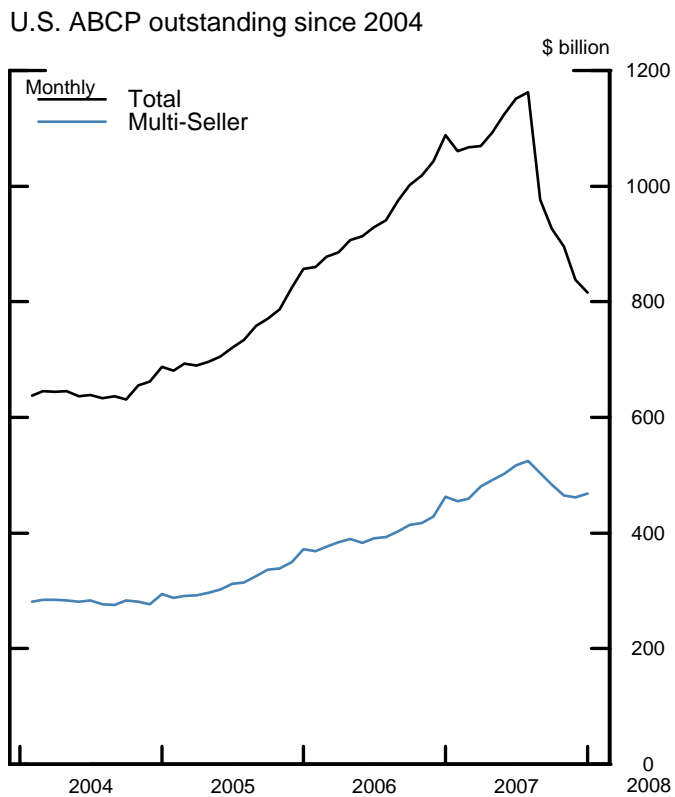
Exhibit 3: Diagnosis Leveraged Loans and ABCP



* Amount of leveraged lending committed but unfunded.
 ** Average of spreads on liquid loan CDS.



There was no issuance through January 26th.
 Source: JPMorgan.



Note. Not seasonally adjusted.
 Source: DTC.

Growth of U.S. ABCP outstanding by program type

	Jan 05 -Jul 07	Jul 07 -Dec 07	Memo: Dec 07 Level - \$ billions -
	- percent -		
Total	70	-30	816
Multi-Seller	82	-10	469
Single Seller	84	-72	36
Securities Arbitrage & Hybrid	55	-29	167
SIVs & CDOs	167	-67	42
Others	19	-30	102

Note. Not seasonally adjusted.
 Source: Federal Reserve Board based on data from DTC and Moody's Investors Service.

Exhibit 4: Diagnosis Impact on the Banking System

Principal sources of exposure to financial stress

- Leveraged loan commitments
- Sponsorship of ABCP programs
- Retention of exposures from underwriting ABS CDOs

Leading arrangers of leveraged loans*

	Market share - percent -
1. JPMorgan	20.4
2. Bank of America	15.5
3. Citigroup	10.4
4. Credit Suisse	8.8
5. Deutsche Bank	7.1
6. Goldman Sachs	4.9
7. Wachovia	4.6
8. Lehman	3.8
9. Merrill Lynch	3.4
10. General Electric	2.8

Source. Reuters LPC.

*Market shares are an average over 2005, 2006 and 2007:H1

Leading bank sponsors of global securities-related ABCP

	Total ABCP*	
	\$ bil	Pct of Total Assets
1. HBOS	42	4.3
2. HSBC	33	2.1
3. Fortis	26	2.9
4. Citigroup	26	1.6
Memo:		
20. State Street	4	4.2
23. Zions	4	9.2

*As of June 30, 2007

Leading underwriters of U.S. ABS CDOs

	Billions of Dollars		
	Issuance*	Losses**	Exposures**
	(2006-2007)	(H2:2007)	(12/31/07)
1. Merrill Lynch	76	18	5
2. Citigroup	58	18	30
3. UBS	43	20	17
4. Barclays	29	2	8
Memo:			
10. BoA	17	7	8
12. Wachovia	10	1	1
18. JPMorgan	3	1	0

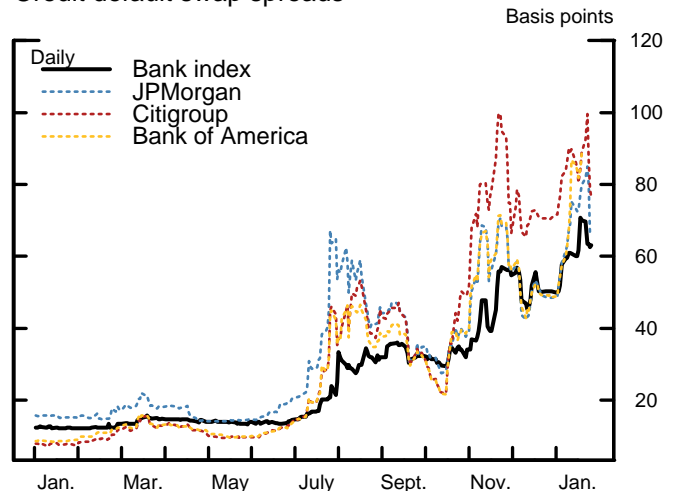
*Source. JPMorgan

**Staff estimates.

Total risk-based capital ratios of largest U.S. BHCs

	Q2	Q3	Q4
	- percent -		
Citigroup	11.2	10.6	10.9
JPMorgan	12.0	12.5	12.6
Bank of America	12.1	11.9	11.0
Wachovia	11.5	10.8	11.5

Credit default swap spreads



Source. Markit.

Exhibit 5
Where did Credit Rating Agencies Play a Role in the Crisis?

Key points

1. Credit rating agencies are one of the weak links (though not the only one).
2. The way that some investors use credit ratings for their own risk management has not kept up with financial innovations.

Road map

1. Role of rating agencies in the financial crisis.
2. Make recommendations on rating agency practices.
3. Link up with investor issues.

Subprime RMBS

1. Rating agencies got it wrong.
2. Rating agencies relied too much on historical data to estimate:
 - how severe a housing downturn could become.
 - how poorly subprime loans would perform when house prices fell.
 - whether the originator mattered.
 - whether refinancing would dry up.
3. No evidence that conflicts of interest had an impact on ratings.

ABS CDOs

1. Rating agencies got it wrong.
2. Rating models were crude, because rating agencies:
 - used corporate CDO models to rate ABS CDOs.
 - had no data on correlation of defaults across ABS.
 - used ratings as the main measure of quality of subprime RMBS.
 - only did limited, ad hoc analysis of the timing of cash flows.
3. Investors did not understand that structured finance securities have more systematic risk and less idiosyncratic risk than corporate securities.

SIVs

1. Rating agencies got it wrong.
2. Rating model for SIVs relied on a rapid liquidation of assets.
3. Even SIVs with no subprime exposures cannot roll over CP.

Exhibit 6
Recommendations on Rating Agency Practices

Six recommendations aimed at structured finance ratings

1. Differentiate structured finance ratings from corporate ratings by providing additional measures of risk or leverage.
2. Convey a rating's uncertainty in an understandable way.
3. More transparency for structured finance ratings.
4. Be conservative when rating new or evolving asset classes.
5. Enhance the rating frameworks for structured products.
6. Regulators should differentiate better between corporate and structured finance ratings.

Exhibit 7 Investor Practices

Approach

- Public pension funds are an informative example of how investors use credit ratings.
 - Limited financial expertise in some cases.
 - High portion of funds use credit ratings in investment guidelines.
 - Significant public information on their activities.
- We gathered information on investment practices and fund governance for 11 funds, ranging from \$250 billion in assets (CALPers) to 6 with \$6 to \$11 billion.

Key conclusions

- Funds have developed workable solutions to address inexperience or lack of financial sophistication, including hiring professional investment managers and investment consultants.
- The mandates guiding investment managers have not always kept pace with the growth of structured credit markets. These mandates:
 - Require managers to meet or exceed returns on a benchmark index or of a peer group of investment managers.
 - Constrain the risk the managers may assume.
- Credit ratings play an important role in these risk constraints.
 - However, few of the funds we profiled made significant distinctions between ratings on structured credit and on other securities.
- This provides scope for investment managers to move into structured credit to generate high returns, without raising warning signals about additional risk.
 - Not a "naive" use of credit ratings by the investment managers.
 - Instead, a previously effective mechanism used by fund boards falling out-of-date.

Recommendations

1. The pension fund industry and other investors should re-evaluate the use of credit ratings in investment mandates.
 - Investment mandates should acknowledge differences in risk, return and correlation across instruments, rather than rely on generic credit ratings.
2. Investors should ensure that investment consultants have independent views of the quality and adequacy of the ratings for the types of positions in the investors' portfolios.

Exhibit 8
Observations on Risk Management Practices
During the Recent Market Turbulence

Senior supervisors group

- Commission Bancaire (France)
- Federal Financial Supervisory Authority (Germany)
- Swiss Federal Banking Commission (Switzerland)
- Financial Supervisory Authority (UK)
- Office of the Comptroller of the Currency
- Securities and Exchange Commission
- Federal Reserve System

Firms interviewed

- Bank of America
- Citigroup
- JP Morgan Chase
- Merrill Lynch
- Goldman Sachs
- Barclays
- HSBC
- BNP Paribas
- Deutsche Bank
- Credit Suisse
- UBS

Firms' overall performance

- Most firms, while affected by market developments, generally avoided significant losses.
- Most firms' risk management processes worked as intended.
- Some firms recognized the emerging additional risks and took deliberate actions to limit or mitigate them.
- Other firms recognized the additional risks and accepted them.
- Still other firms did not fully recognize the risks in time to mitigate them.
- Risk management practices varied by firm and by strategy, as did the range of outcomes.
- Primary risk management weaknesses observed are not new.

Exhibit 9
Observations on Risk Management Practices
During the Recent Market Turbulence

Four factors differentiated performance:

- The effectiveness of senior management oversight of balance sheet, liquidity, and capital positions;
- The effectiveness of communications among senior management, business lines, and risk management functions;
- The sophistication, diversity and adaptability of risk measures utilized;
- The attention devoted to valuation issues.

Effectiveness of senior management oversight of balance sheet, liquidity, and capital positions

- More Effective
 - More disciplined in measuring and limiting risks in advance of the crisis.
 - More agile in reducing exposures or hedging.
 - Focused on maintaining a strong balance sheet.
 - Established capital and liquidity buffers that included lack of access to the market for funding for a period of time.
 - Created and enforced internal pricing mechanisms, capital allocation methodologies, and limits.
- Less Effective
 - Not as focused on the overall strength of their balance sheet.
 - Operated with less of a liquidity and capital buffer.
 - More focused on earnings growth or defense of market leadership position.
 - Did not have limit structures that were consistently or effectively enforced.
 - Did not properly aggregate or monitor off balance sheet exposures.

Exhibit 10
Observations on Risk Management Practices
During the Recent Market Turbulence

Effectiveness of communications among senior management, business lines, and risk management functions

- More Effective
 - Emphasized a comprehensive, firm-wide consolidated assessment of risk.
 - Well established processes for routine discussion of current and emerging risks.
 - Collectively made decisions about the firm's overall risk appetite, exposures, and risk mitigation strategies.
 - Effectively leveraged the assessments of risks from one business line to consider how exposures may affect other businesses.
 - More timely and well-informed perspective.
 - Implemented plans for reducing exposures while it was still practical and more cost effective.
- Less Effective
 - Did not effectively share information across business lines on emerging risks.
 - Comparatively slower in taking actions to mitigate exposures.
 - Each business line had to assess and consider emerging risks on their own.

The sophistication, diversity, and adaptability of risk measures utilized

- More Effective
 - Used a wide range of risk measures and analytical tools.
 - Used a combination of different risk measures and scenario analysis.
 - Committed more resources to risk management and management information systems.
 - More timely and scalable management information systems.
- Less Effective
 - Too dependent on a single quantitative measurement.
 - Did not utilize scenario analysis in their decision making.
 - Management information systems not as scalable.
 - Need to develop a number of ad hoc reports.

Exhibit 11
Observations on Risk Management Practices
During the Recent Market Turbulence

Attention devoted to valuation issues

- More Effective
 - More disciplined in how they valued the holdings of complex or potentially illiquid securities.
 - Invested in the development of pricing models and staff with specialized expertise.
 - Less reliant on external ratings.
 - Emphasized mark-to-market discipline.
- Less Effective
 - Did not have key valuation models in place prior to the market disruption.
 - Relied heavily on third-party views of risks.
 - More narrow view of the risks associated with their CDO business.
 - Did not actively seek market valuation information.

Supervisory response

- Address risk management deficiencies at each company through the supervisory process.
- Re-emphasize the importance of strong independent risk management.
- Complete the work already underway within the Basel Committee on Bank Supervision to update liquidity risk management guidance.
- Review existing guidance.
- Develop on an interagency basis guidance related to the effective management of the originate-to-distribute model.

Exhibit 12
Regulatory Policy

The question

- To what extent did regulatory incentives contribute to or fail to mitigate weaknesses exposed by the recent turmoil?
 - Regulatory capital requirements.
 - Financial reporting requirements.

Conclusions

- For banks, regulatory capital incentives are much more important than financial reporting incentives.
- The current regulatory capital framework is not neutral to how banks structure risk positions.
- Although not a significant driver of bank behavior, financial reporting issues, particularly disclosure practices, have been a factor in how the turmoil is unfolding.

Basel 2 and related improvements

1. Capital charges for most unused short-term credit and liquidity facilities have been increased.
2. Standards for holding capital against the default risk of complex, less liquid products in the trading book are being finalized.
3. A more risk-sensitive capital treatment for securitization exposures has been established.

Exhibit 13
Regulatory Policy (continued)

Recommendations - regulatory capital

1. Reassess the treatment of certain securitizations in the Basel 2 Capital Framework.
2. Exercise supervisory oversight to ensure that banks sufficiently consider "reputational" risk and its implications for capital and liquidity buffers.
3. Rigorously assess banks' implementation of the Advanced Internal Ratings Based approach to Basel 2, including the conservatism of estimates of losses from defaults during a downturn ("downturn LGDs") and stress tests.
4. Explore ways to encourage the inclusion in the regulatory capital base of debt instruments that mandatorily convert into equity when a banking organization is under stress.

Recommendations - disclosure practices

1. Continue to push market participants to make timely and detailed disclosures about the size and composition of subprime-related exposures.
2. Sponsors and/or liquidity/credit enhancement providers to ABCP programs should disclose the distribution of assets underlying the programs by type, industry, and credit rating.
3. Sponsors should improve disclosures to investors in ABCP programs.