

# Global Themes and Risks

## January 2009

<b>Abby Joseph Cohen, CFA</b>	Goldman, Sachs & Co.	1-212-902-4095	abby.cohen@gs.com
<b>Michael A. Moran, CFA</b>	Goldman, Sachs & Co.	1-212-357-3512	michael.moran@gs.com
<b>Amy C. Semaya</b>	Goldman, Sachs & Co.	1-212-902-7009	amy.semaya@gs.com

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# Composition of US GDP, 2003-2010

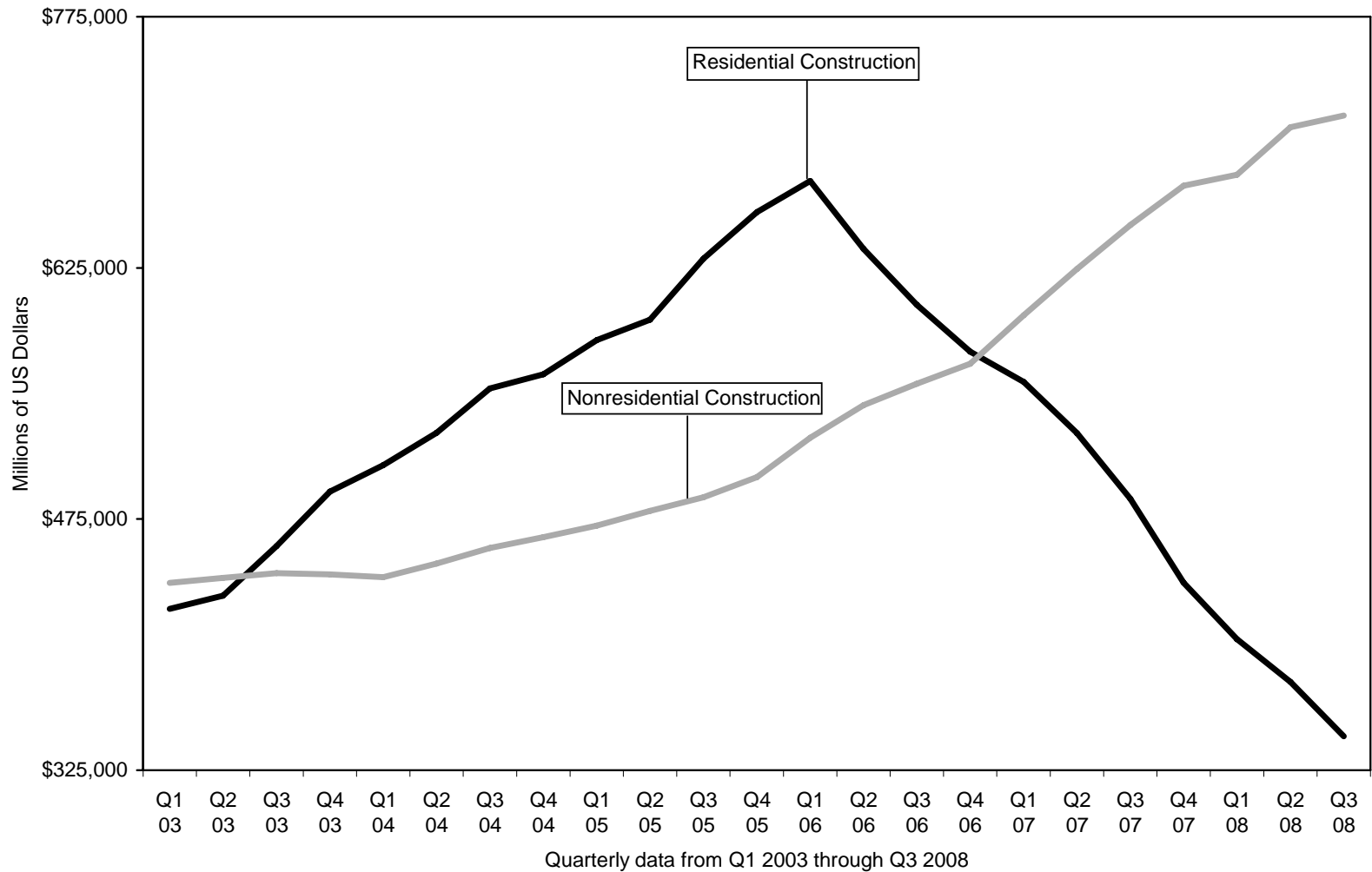
## Recession now visible in aggregate data, not just housing

	Growth Rates							
	2003	2004	2005	2006	2007	2008(E)	2009(E)	2010(E)
GDP	2.5 %	3.6 %	2.9 %	2.8 %	2.0 %	1.2 %	(1.6) %	1.3 %
Domestic Final Demand	2.8	4.1	3.0	2.6	1.4	(0.1)	(2.0)	0.9
Personal Consumption	2.8	3.6	3.0	3.0	2.8	0.2	(1.7)	1.2
→ Residential Fixed Investment	8.4	10.0	6.3	(7.1)	(17.9)	(20.5)	(9.4)	2.2
Business Fixed Investment	1.0	5.8	7.2	7.5	4.9	1.8	(12.7)	(7.6)
Government	6.8	4.2	1.2	2.3	1.6	5.5	3.2	3.7
→ Exports	1.3	9.7	7.0	9.1	8.4	7.3	(1.3)	2.3
Imports	4.1	11.3	5.9	6.0	2.2	(2.4)	(3.7)	(0.1)

Source: Goldman Sachs Economics Research.

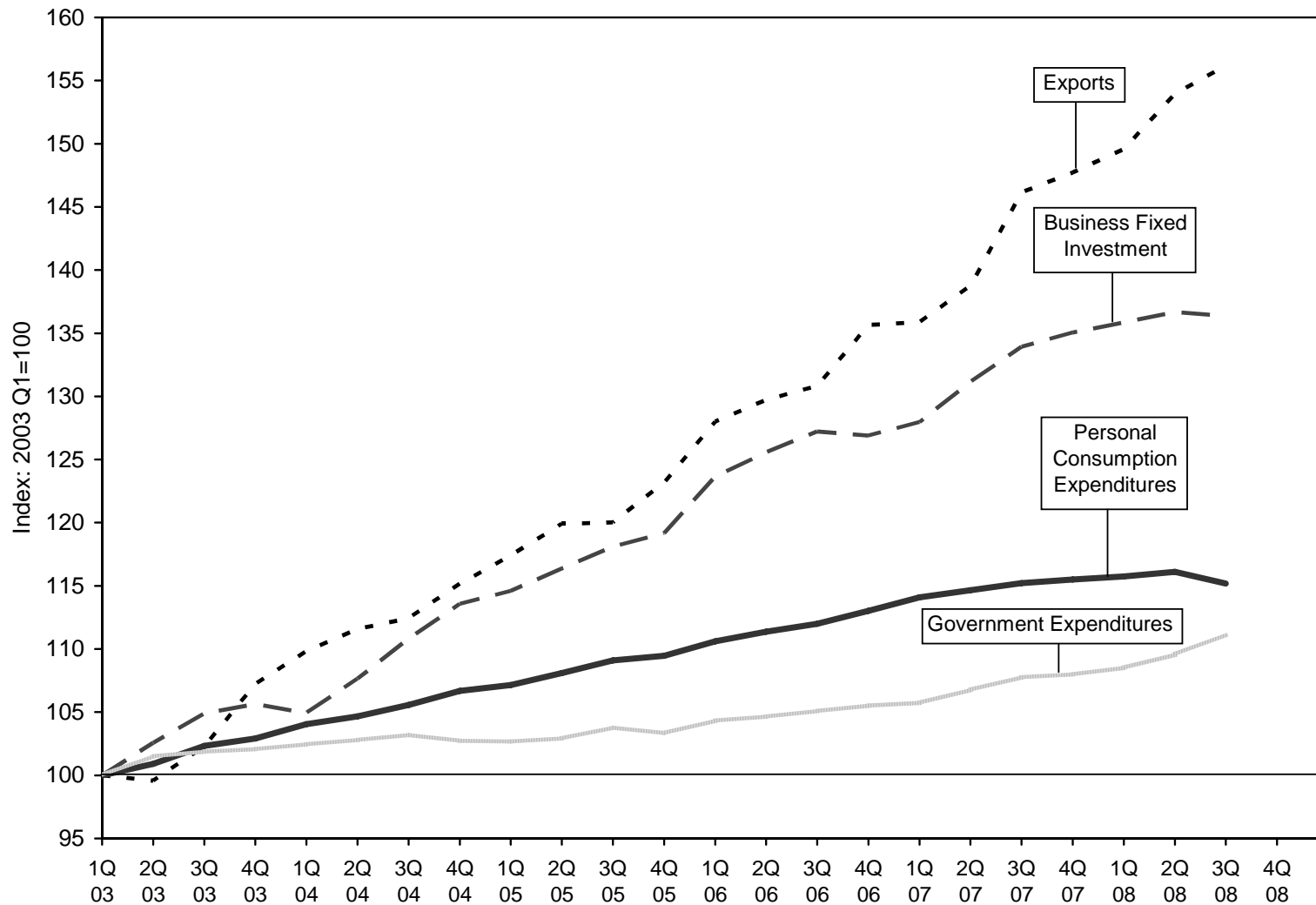
# Residential and nonresidential construction

## Nonresidential construction spending is now larger than housing



Source: US Department of Commerce.

# Exports and BFI growth have led all other sectors since 2003



Source: Bureau of Economic Analysis.

Data from 2003 Q1 through 2008 Q3

# Global growth outlook

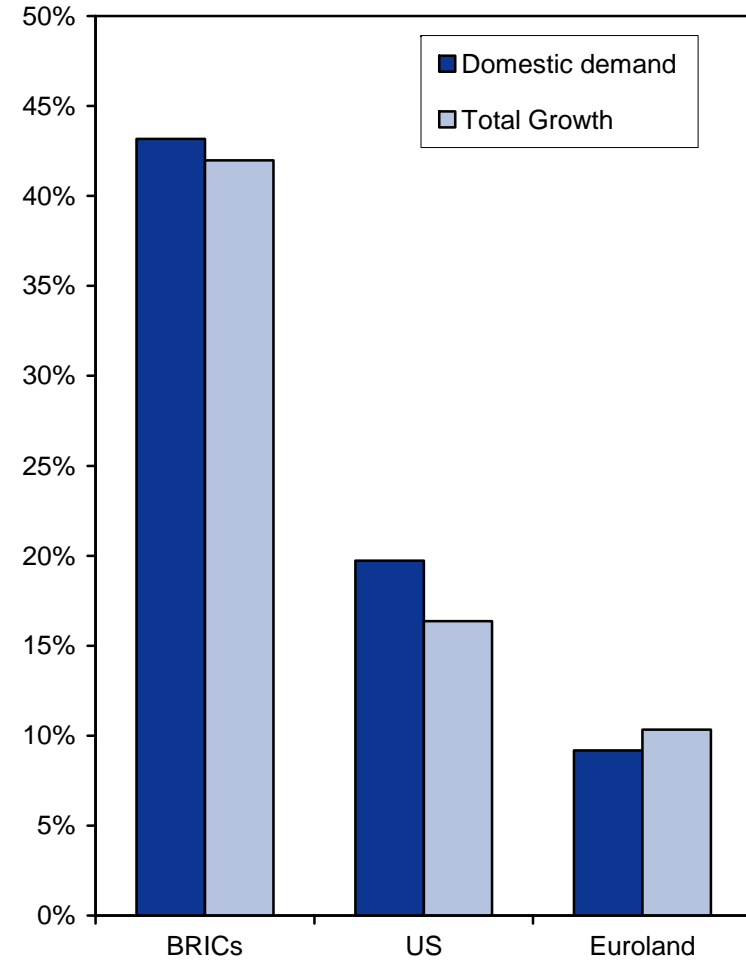
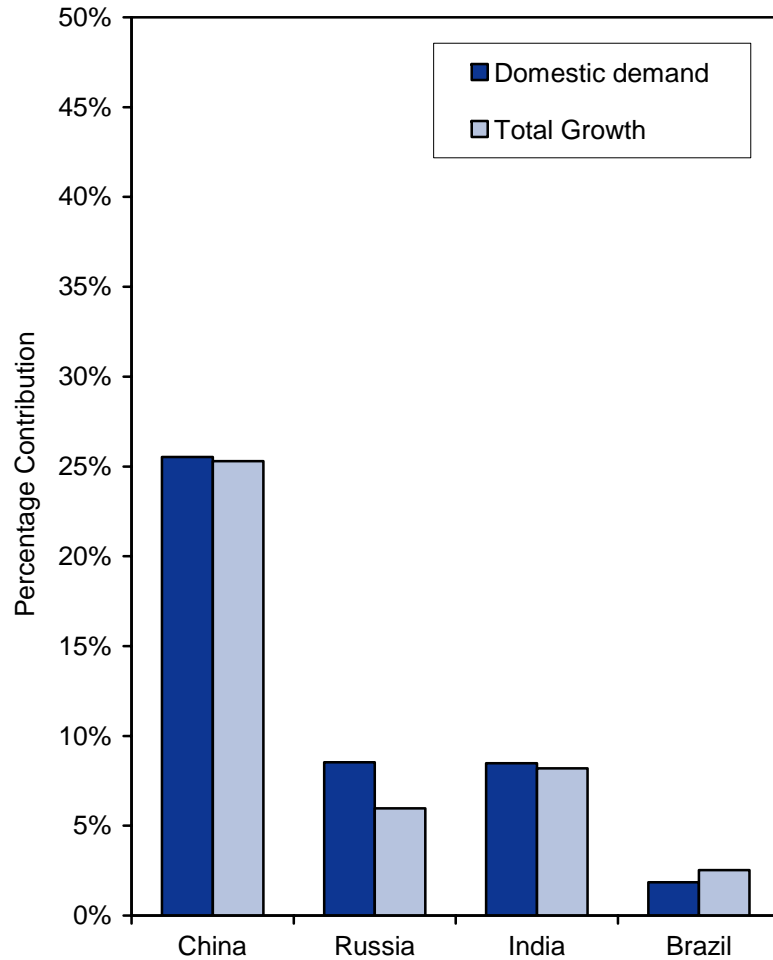
## Declines are occurring in all regions

	Growth Rates					
	2005	2006	2007	2008(E)	2009(E)	2010(E)
US	2.9 %	2.8 %	2.0 %	1.2 %	(1.6) %	1.2 %
Japan	1.9	2.0	2.4	0.2	(1.6)	0.6
Eurozone	1.8	3.0	2.6	0.9	(1.4)	1.2
United Kingdom	2.1	2.8	3.0	0.8	(1.4)	1.5
China	10.4	11.6	11.9	8.9	6.0	9.0
BRICs	8.4	9.5	9.9	7.6	4.7	6.8
Brazil	3.2	4.0	5.7	5.8	1.5	3.7
Russia	6.4	7.4	8.1	6.2	0.5	2.0
India	9.0	9.6	9.0	6.7	5.8	6.6
China	10.4	11.6	11.9	8.9	6.0	9.0
<b>G7</b>	<b>2.3</b>	<b>2.6</b>	<b>2.2</b>	<b>0.9</b>	<b>(1.5)</b>	<b>1.1</b>
<b>Advanced Economies</b>	<b>2.6</b>	<b>3.0</b>	<b>2.7</b>	<b>1.2</b>	<b>(1.2)</b>	<b>1.4</b>
<b>Emerging Economies</b>	<b>7.4</b>	<b>8.3</b>	<b>8.4</b>	<b>6.3</b>	<b>3.4</b>	<b>5.6</b>
<b>World</b>	<b>4.3</b>	<b>5.0</b>	<b>4.9</b>	<b>3.2</b>	<b>0.6</b>	<b>3.1</b>

Source: Goldman Sachs Economics Research.

# Contributions to global growth, 2000-2005

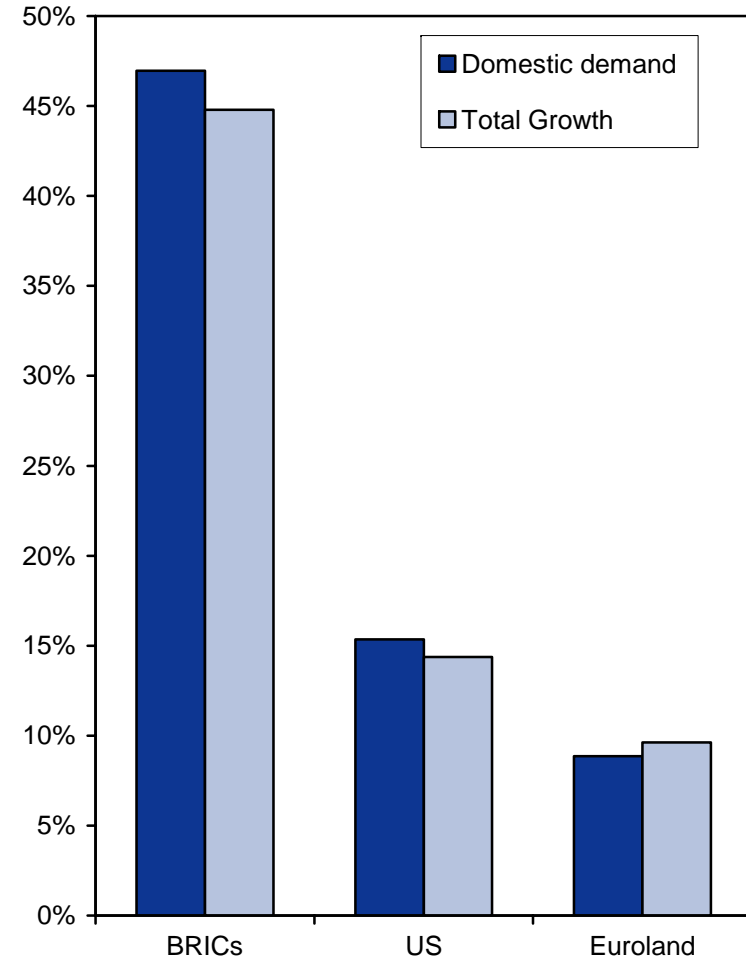
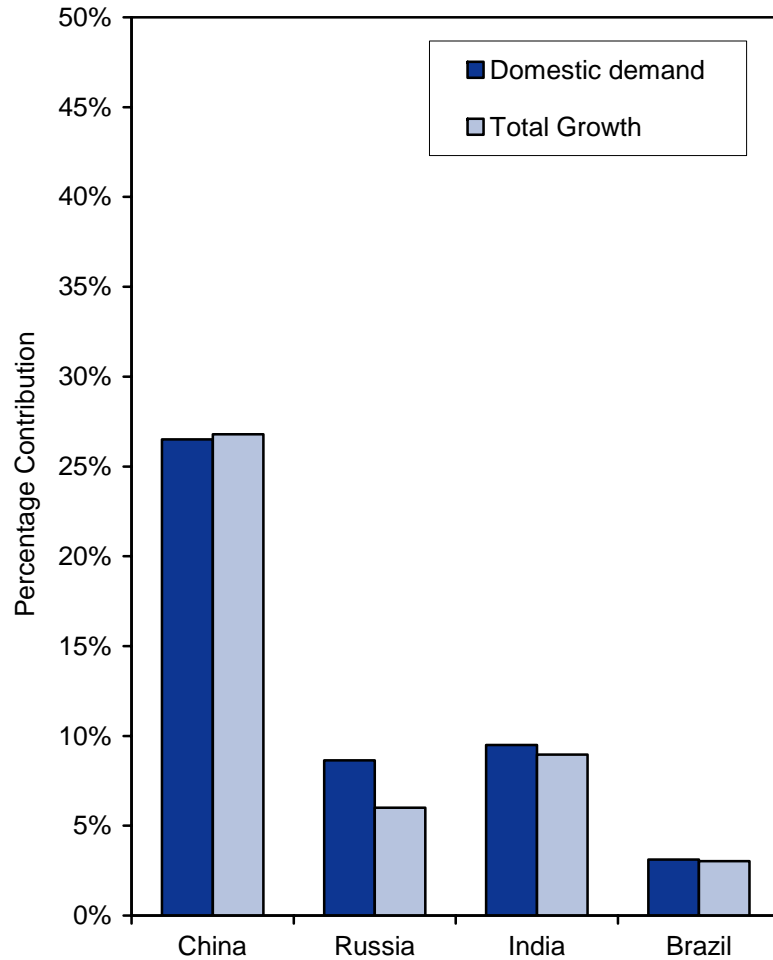
## Economic vigor has come from the US, emerging economies



Source: Source: World Bank, Goldman Sachs Economics Research.

# Contributions to global growth, 2000-2008

## Economic vigor has come from the US, emerging economies



Source: Source: World Bank, Goldman Sachs Economics Research.

# Global inflation outlook

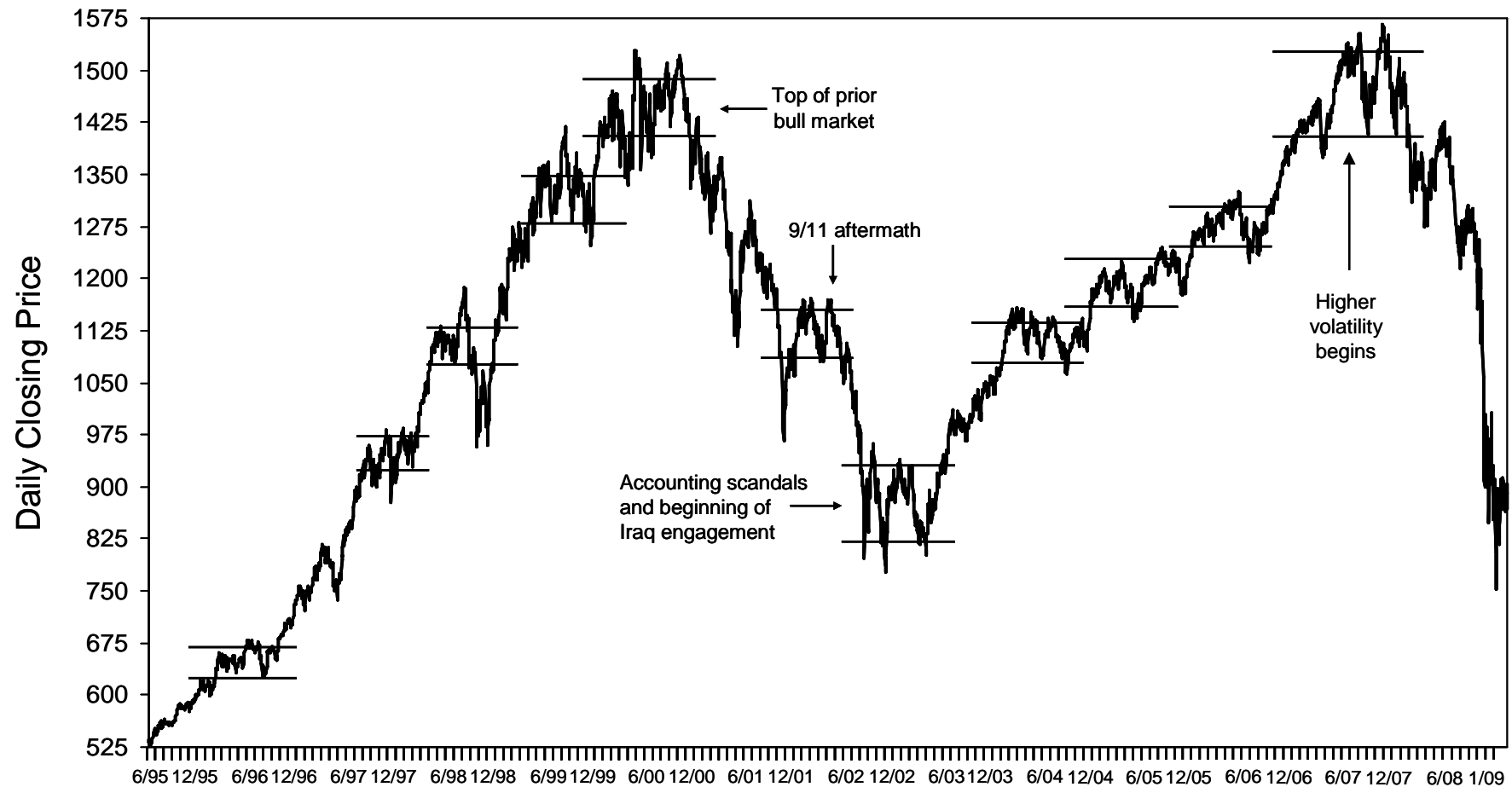
## Inflation projected to drop sharply in 2009

	Consumer Prices (% change, yoy)					
	2005	2006	2007	2008(E)	2009(E)	2010(E)
US	3.4 %	3.2 %	2.9 %	3.8 %	(1.0) %	0.9 %
Japan	(0.3)	0.2	0.1	1.4	(0.2)	0.1
Eurozone	2.2	2.2	2.1	3.3	0.4	2.3
United Kingdom	2.1	2.3	2.3	3.6	0.3	4.2
China	1.8	1.5	4.8	6.0	(0.5)	1.0
BRICs	4.7	4.2	5.6	7.5	2.5	3.6
Brazil	6.6	4.2	3.6	5.7	6.2	5.1
Russia	12.5	9.7	9.0	14.1	13.5	10.7
India	4.4	5.5	4.6	7.6	1.0	4.5
China	1.8	1.5	4.8	6.0	(0.5)	1.0
<b>G7</b>	<b>2.3</b>	<b>2.4</b>	<b>2.2</b>	<b>3.2</b>	<b>(0.4)</b>	<b>1.3</b>
<b>Advanced Economies</b>	<b>2.3</b>	<b>2.3</b>	<b>2.2</b>	<b>3.4</b>	<b>0.0</b>	<b>1.5</b>
<b>Emerging Markets</b>	<b>5.5</b>	<b>5.3</b>	<b>6.0</b>	<b>8.7</b>	<b>4.3</b>	<b>4.5</b>
<b>World</b>	<b>3.4</b>	<b>3.4</b>	<b>3.6</b>	<b>5.5</b>	<b>1.7</b>	<b>2.7</b>

Source: Goldman Sachs Economics Research.

# S&P 500 performance: Staircase pattern

June 1995 – December 2008

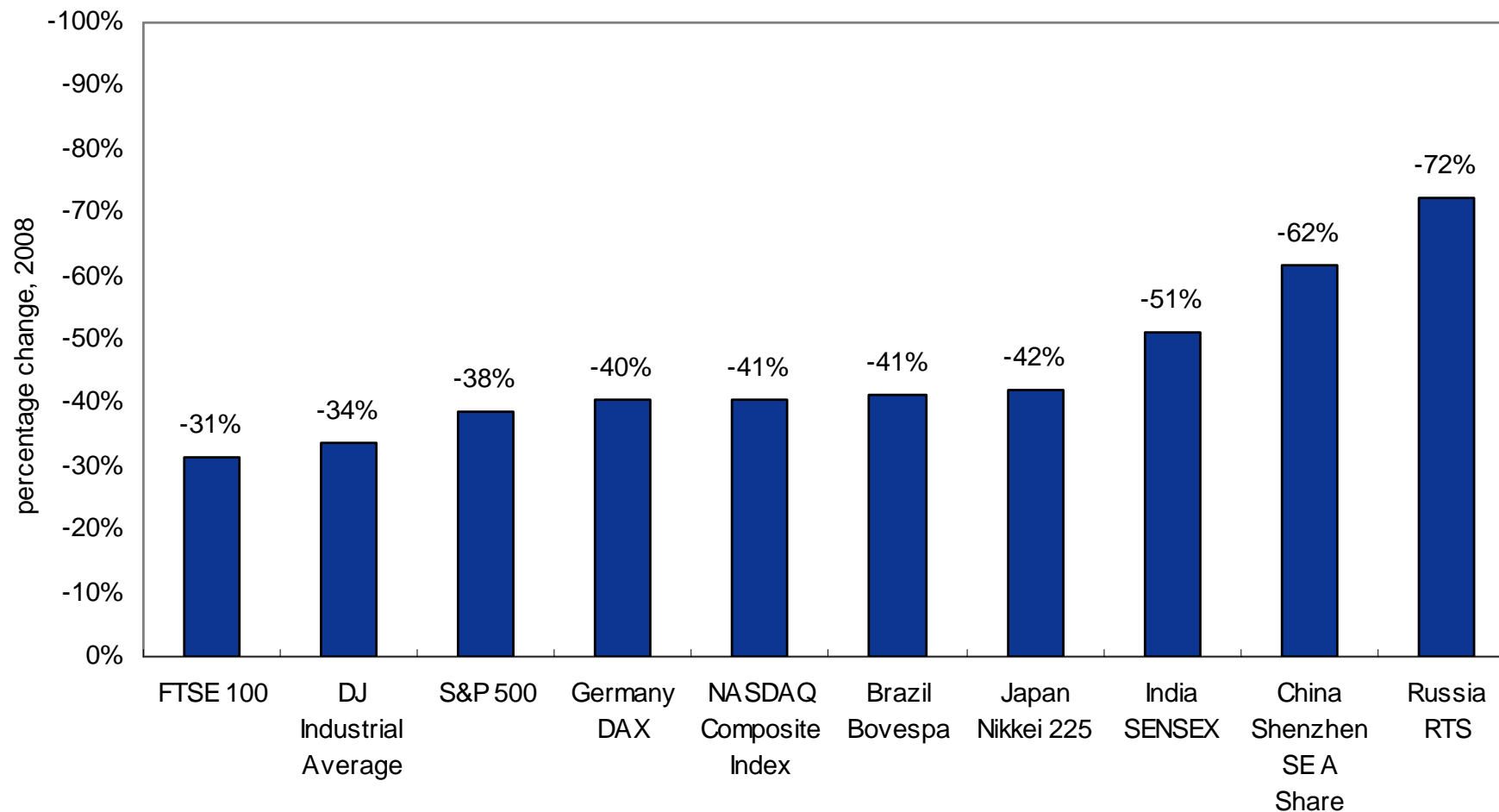


Daily closing price from 6/1/95 through 12/31/08

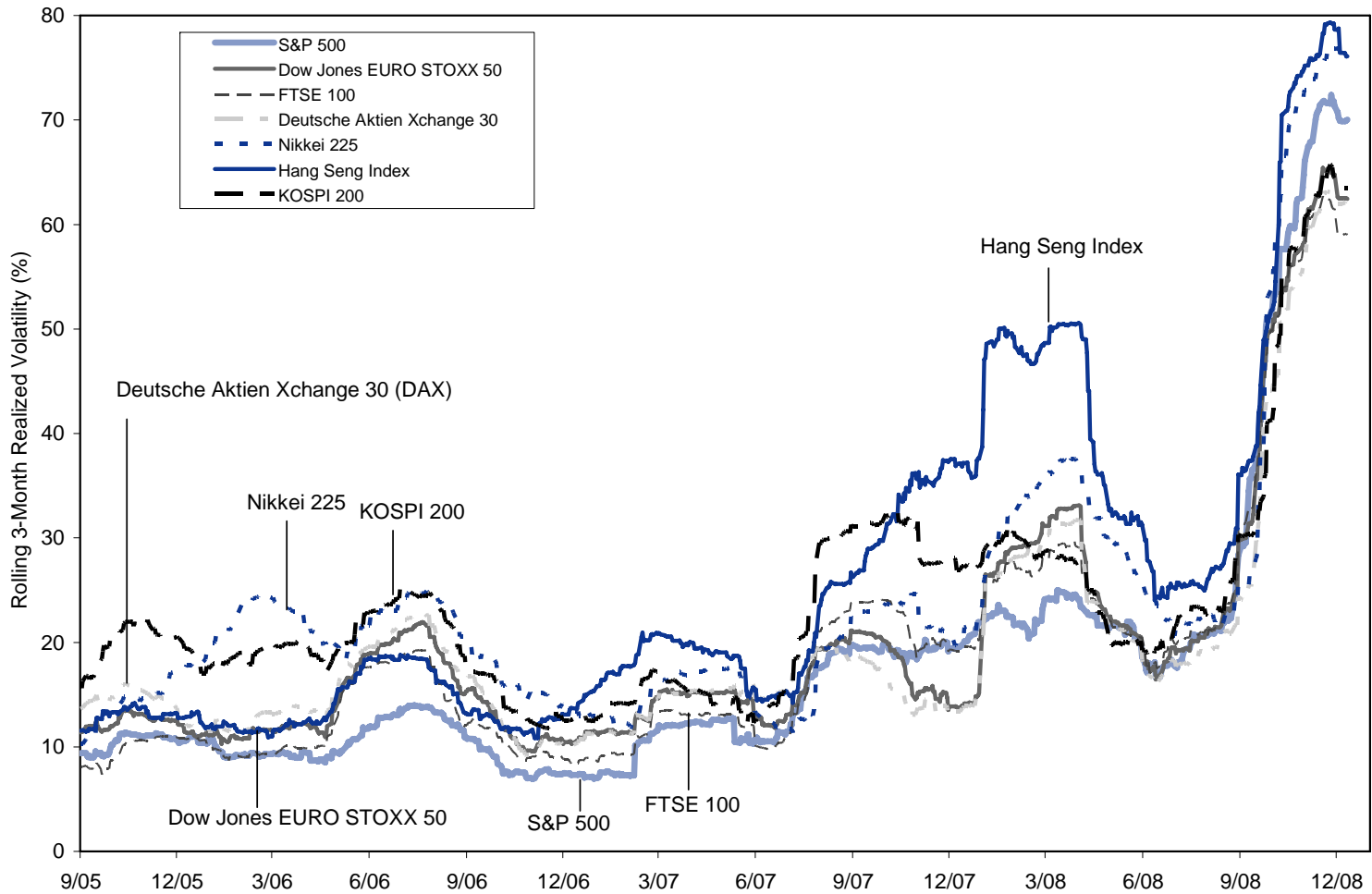
Source: Standard & Poor's, FactSet, Goldman Sachs Portfolio Strategy.

# Equity market performance in 2008

Persistent declines in all regions, greatest in emerging markets

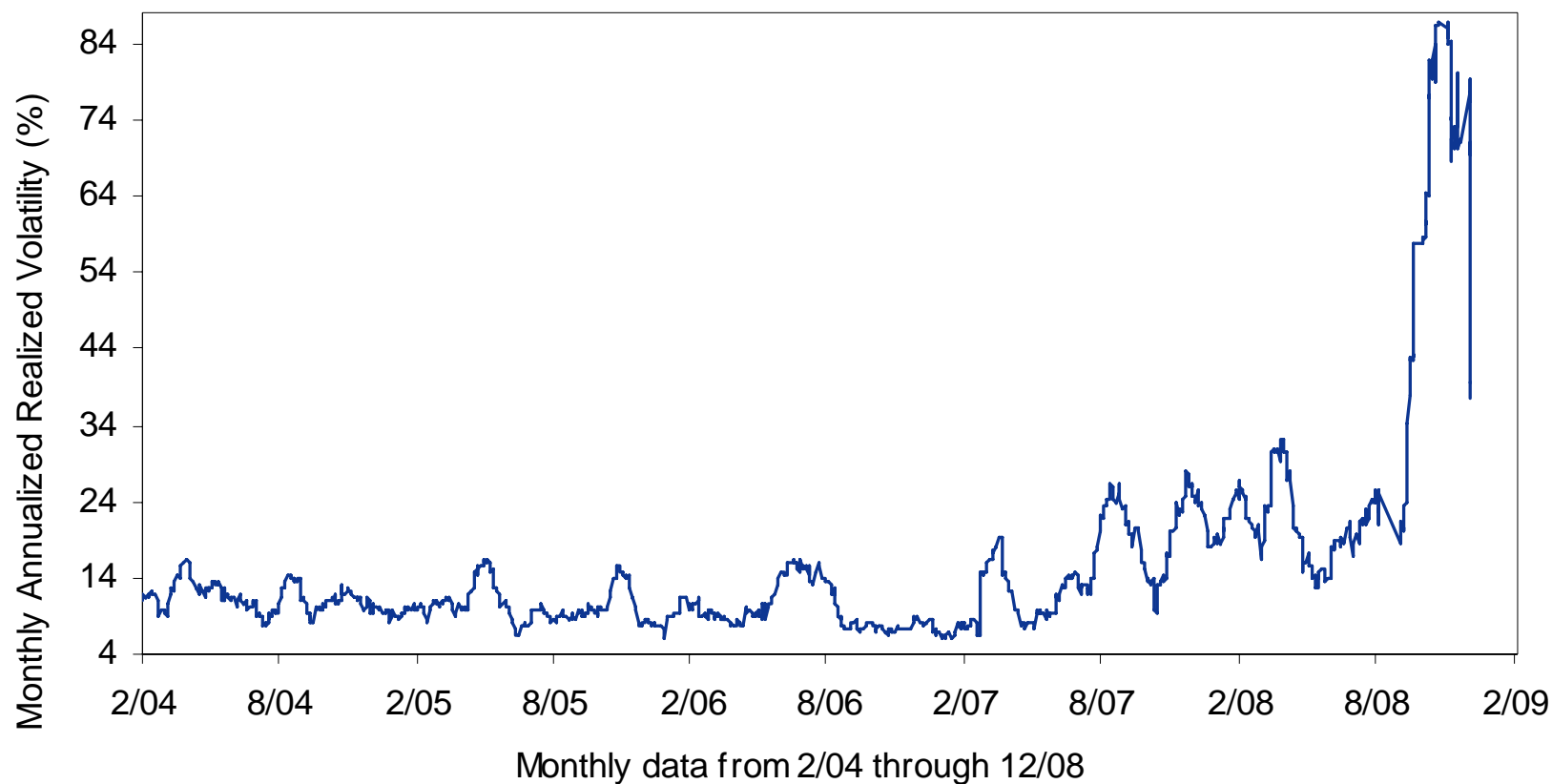


# Realized volatility for major indices



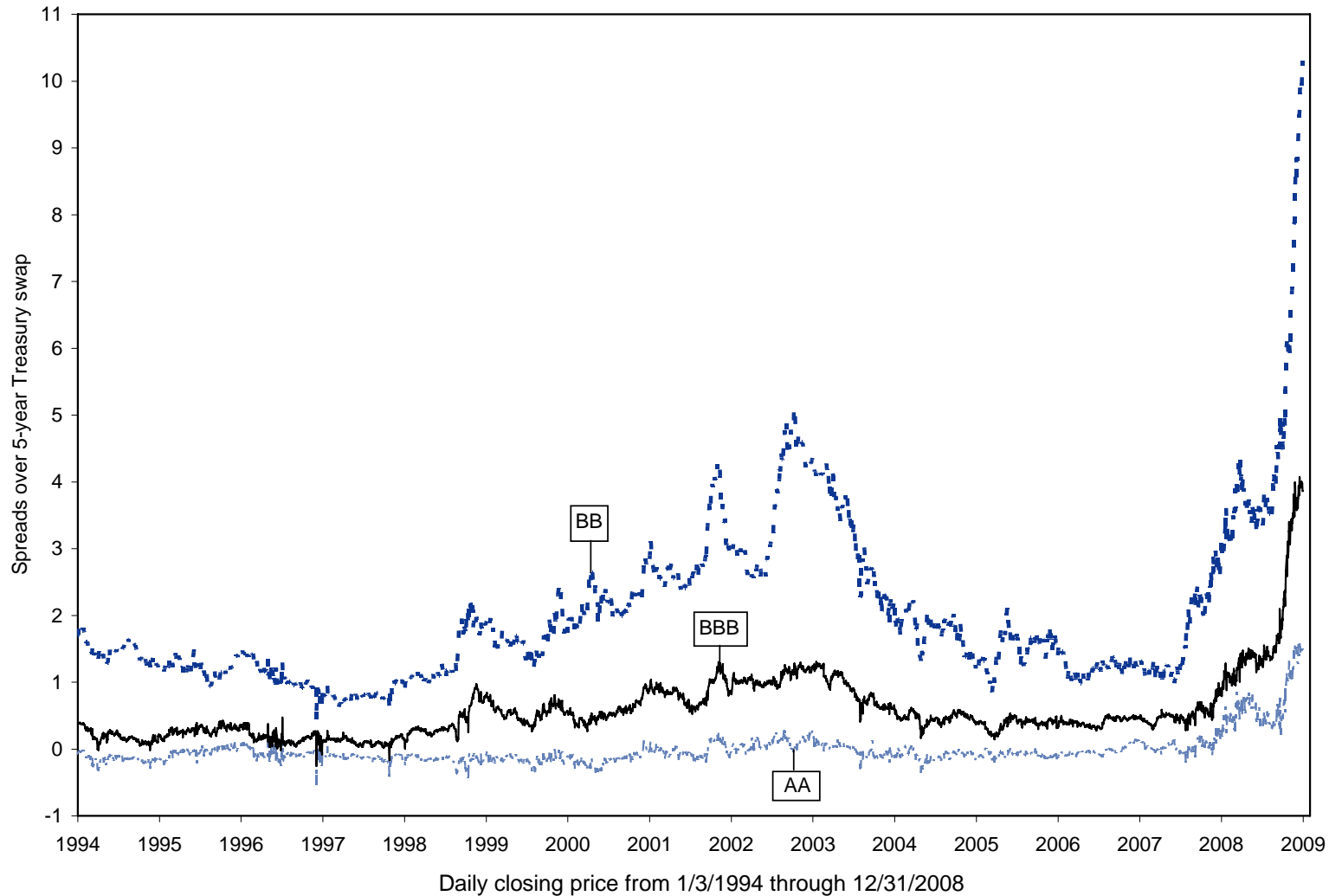
Source: Goldman Sachs Options Research.

# Recent volatility of the S&P 500



Source: Goldman Sachs Equity Derivatives Research.

# Corporate bond spreads were abnormally narrow for lower-quality issues until mid-2007

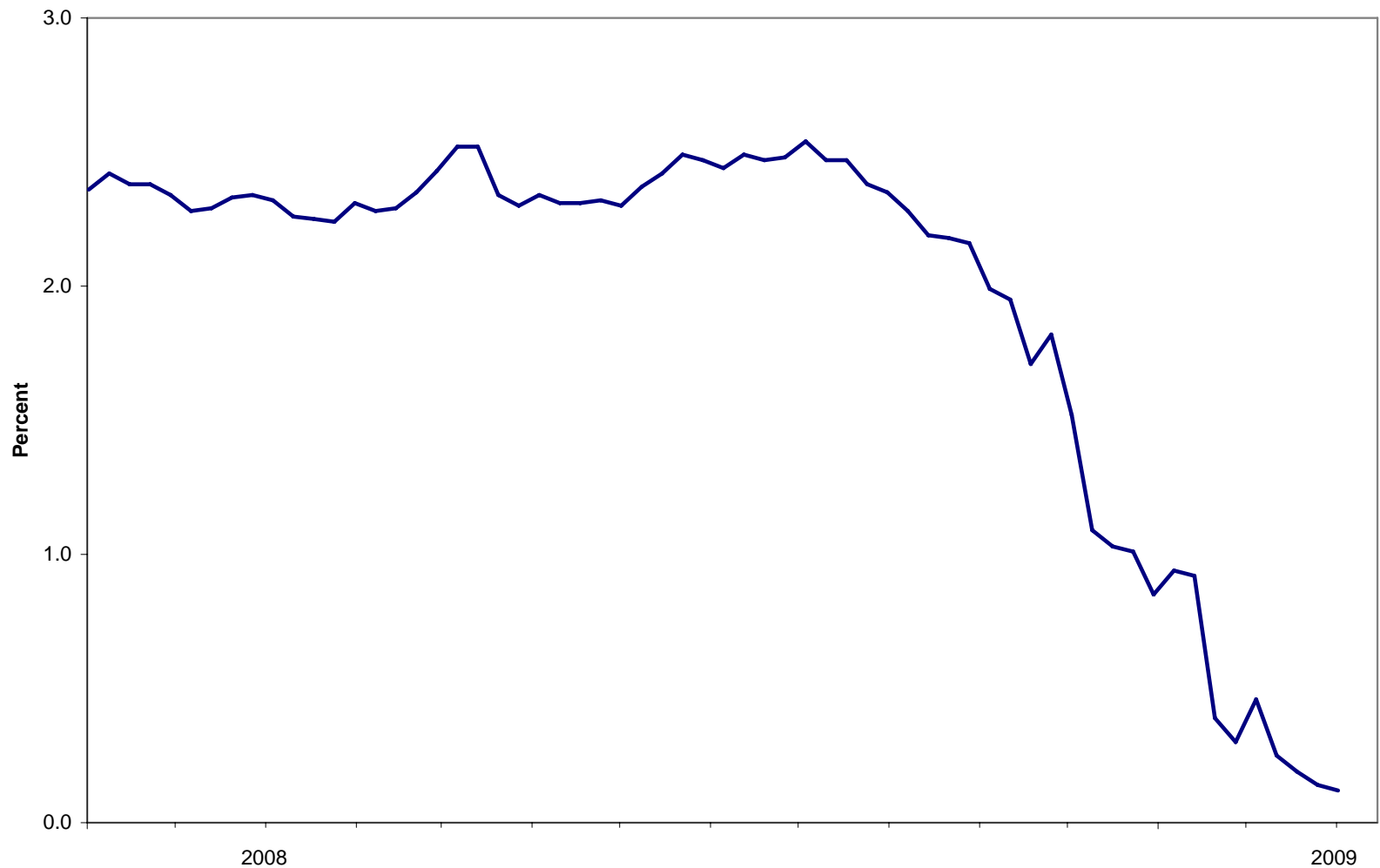


Source: Bloomberg, Goldman Sachs Credit Strategy.

# Narrowing TIPS spread

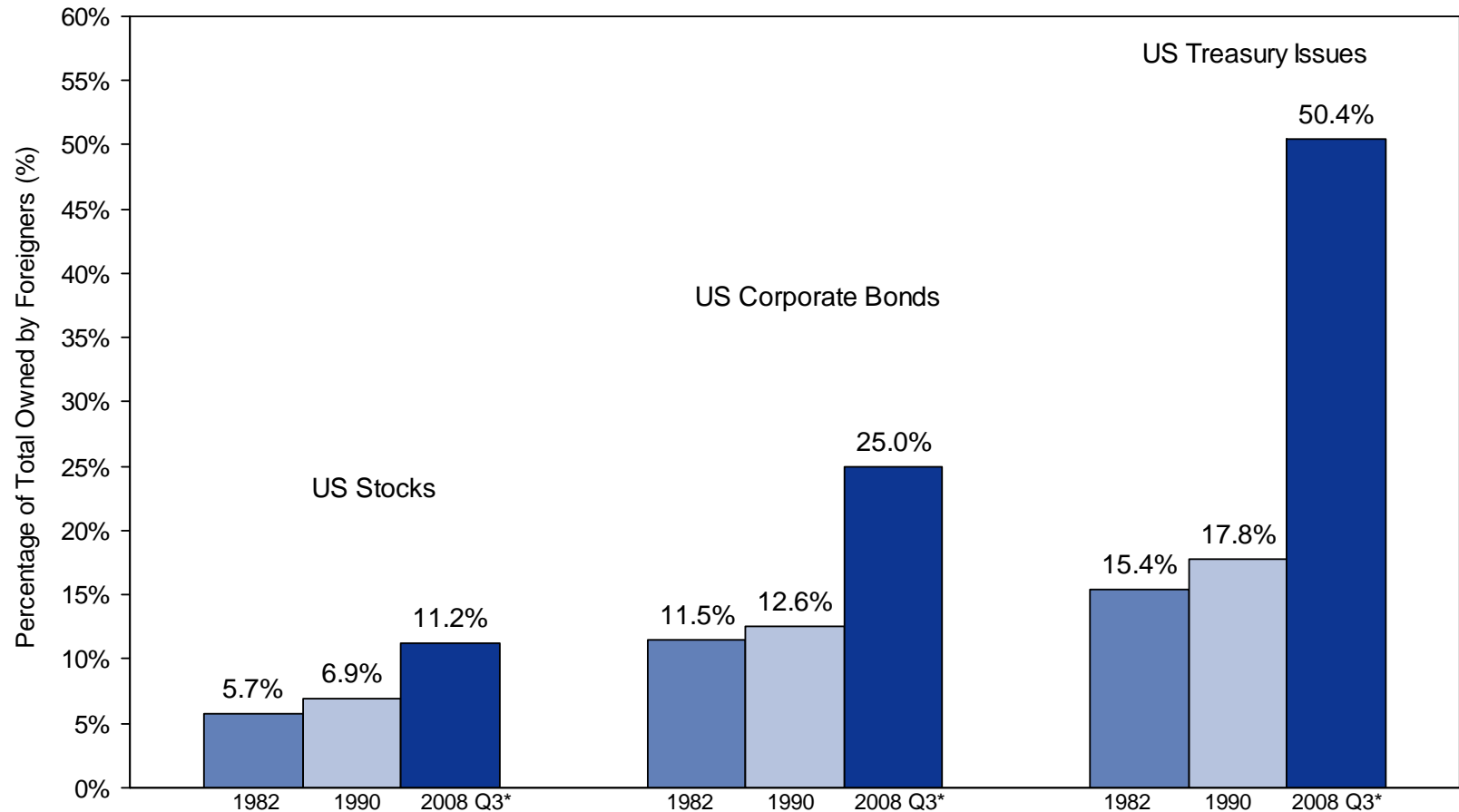
## Sharp drop in inflation expectations

**10-Year Inflation-Indexed Treasury Yield Spread**  
Averages of Daily Figures



# Foreign ownership of US stocks and bonds

## A smaller proportion of stocks than bonds



\*Data for 2008 Q3 are preliminary.

Source: Federal Reserve Board.

## Foreign holdings of US Treasury securities

Asian governments are key; increased UK participation due to petrodollars

	Jan-01	Jan-02	Jan-03	Jan-04	Jan-05	Jan-06	Jan-07	Jan-08	Oct-08
Japan	30.9%	30.2%	31.0%	37.1%	35.6%	31.9%	29.4%	24.4%	19.2%
China (ex. Hong Kong)	6.1	7.5	9.7	10.0	11.7	15.3	18.9	20.5	21.5
United Kingdom	4.7	4.5	6.5	5.8	5.3	7.7	4.9	6.7	11.8
OPEC	4.8	4.6	3.9	2.8	3.5	4.4	5.2	5.9	6.2
Caribbean (a)	3.1	3.7	3.9	3.0	4.9	3.1	3.5	4.5	7.2
Hong Kong	3.9	4.5	4.0	3.5	2.4	2.2	2.6	2.3	2.1
Germany	4.7	4.3	2.9	3.2	2.8	2.3	2.3	1.8	1.4
Taiwan	3.4	3.3	3.0	3.4	3.6	3.4	2.8	1.6	1.3
Switzerland	1.7	1.8	2.8	2.9	2.1	1.5	1.6	1.6	2.0
Korea	2.8	3.1	3.0	3.8	2.8	3.5	2.9	1.8	1.1
<b>Total foreign holdings (\$ billions)</b>	<b>\$1,010.8</b>	<b>\$1,029.6</b>	<b>\$1,240.7</b>	<b>\$1,568.5</b>	<b>\$1,908.6</b>	<b>\$2,045.1</b>	<b>\$2,132.4</b>	<b>\$2,402.5</b>	<b>\$3,042.7</b>
<b>Total government as % of foreign holdings</b>	<b>61.0%</b>	<b>59.9%</b>	<b>62.1%</b>	<b>61.3%</b>	<b>64.9%</b>	<b>63.3%</b>	<b>68.0%</b>	<b>70.2%</b>	<b>62.6%</b>

(a) Caribbean includes Bahamas, Bermuda, Cayman Islands, Netherlands Antilles, and Panama.

Source: Federal Reserve Board, New York Stock Exchange, Goldman Sachs Portfolio Strategy.

# Foreign net purchases of US Treasuries

## Large purchases from United Kingdom since 2004 linked to petrodollars and global asset management located in London

(\$ Billions)

	1993	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
												Q1	Q2	Q3 (a)
Europe	(\$2.4)	\$23.8	(\$38.2)	(\$50.7)	(\$20.6)	\$43.7	\$48.7	\$88.4	\$173.6	\$99.0	\$178.5	\$54.4	\$72.8	\$55.1
Netherlands	(0.5)	(5.5)	2.1	2.1	(6.7)	(17.0)	0.4	(3.2)	(6.1)	0.7	1.5	(0.8)	0.5	(3.3)
United Kingdom	6.2	14.4	(20.2)	(33.7)	(7.3)	61.6	32.8	78.7	134.1	91.8	208.8	39.2	80.5	54.5
Latin America-Caribbean	(4.6)	(3.7)	(7.5)	(4.9)	4.3	20.0	17.1	33.5	68.4	12.0	88.5	(1.4)	20.7	11.8
Asia	20.6	27.4	29.4	1.6	36.3	55.7	181.1	214.8	68.3	68.7	(67.9)	49.11	4.8	30.8
China	0.5	2.6	8.2	(4.0)	19.1	24.1	30.4	18.9	37.4	40.6	(8.0)	20.2	24.2	36.1
Hong Kong	2.4	9.7	0.9	(0.3)	7.2	(9.1)	6.1	1.1	12.3	16.3	2.1	6.7	1.7	0.9
Japan	17.1	13.0	20.1	10.6	16.1	30.5	146.5	166.4	(5.0)	1.3	(47.4)	21.4	(12.7)	(6.2)
Australia	(3.2)	(2.2)	1.6	1.4	1.4	3.3	6.6	(2.2)	0.1	(2.6)	(1.3)	(0.5)	(0.5)	(0.3)
<b>Total</b>	<b>\$23.6</b>	<b>\$49.0</b>	<b>(\$10.0)</b>	<b>(\$54.0)</b>	<b>\$18.5</b>	<b>\$119.9</b>	<b>\$263.6</b>	<b>\$352.1</b>	<b>\$338.1</b>	<b>\$195.5</b>	<b>\$200.9</b>	<b>\$106.4</b>	<b>\$111.0</b>	<b>\$89.7</b>

(a) 2008 data are preliminary and not annualized.

Source: US Department of the Treasury.

# Foreign net purchases of US equities

## Little portfolio interest in 2008

(\$ Billions)

	1993	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
												Q1	Q2	Q3 (a)
Europe	\$10.7	\$68.2	\$98.1	\$164.7	\$88.1	\$32.9	\$21.4	\$19.6	\$39.6	\$97.1	\$89.3	\$1.5	\$4.5	\$7.6
United Kingdom	4.6	24.0	42.9	58.7	38.5	15.2	0.7	15.2	19.8	75.8	69.5	(7.7)	13.6	17.5
Canada	(3.2)	(4.7)	(0.3)	6.0	11.0	8.2	11.7	1.3	16.5	11.8	8.1	1.8	4.0	0.8
Latin America-Caribbean	5.7	0.8	5.2	(17.8)	(5.2)	(15.4)	(0.9)	0.6	15.3	37.2	49.4	(9.2)	(20.9)	5.9
Asia	7.9	(13.8)	3.4	21.7	22.5	21.4	2.8	6.2	10.2	3.5	44.0	37.6	13.6	(7.4)
Hong Kong	1.1	(2.2)	(0.2)	0.2	0.7	1.8	0.8	(0.8)	1.1	(0.5)	35.4	9.8	12.4	2.3
Japan	3.8	(1.2)	5.7	2.1	6.8	12.3	(2.2)	2.8	0.1	(0.7)	(5.0)	5.0	1.9	1.8
Singapore	3.1	(8.4)	(0.9)	10.8	13.1	8.2	3.5	(1.7)	7.2	(4.5)	(2.5)	11.0	(1.4)	(10.3)
Australia	(0.1)	(0.6)	0.9	1.4	0.1	3.0	(0.6)	0.3	0.1	1.0	4.8	0.5	1.6	(0.3)
<b>Total</b>	<b>\$21.6</b>	<b>\$50.0</b>	<b>\$107.5</b>	<b>\$174.9</b>	<b>\$116.4</b>	<b>\$50.2</b>	<b>\$34.7</b>	<b>\$28.5</b>	<b>\$82.0</b>	<b>\$150.4</b>	<b>\$195.5</b>	<b>\$29.7</b>	<b>\$2.6</b>	<b>\$4.8</b>

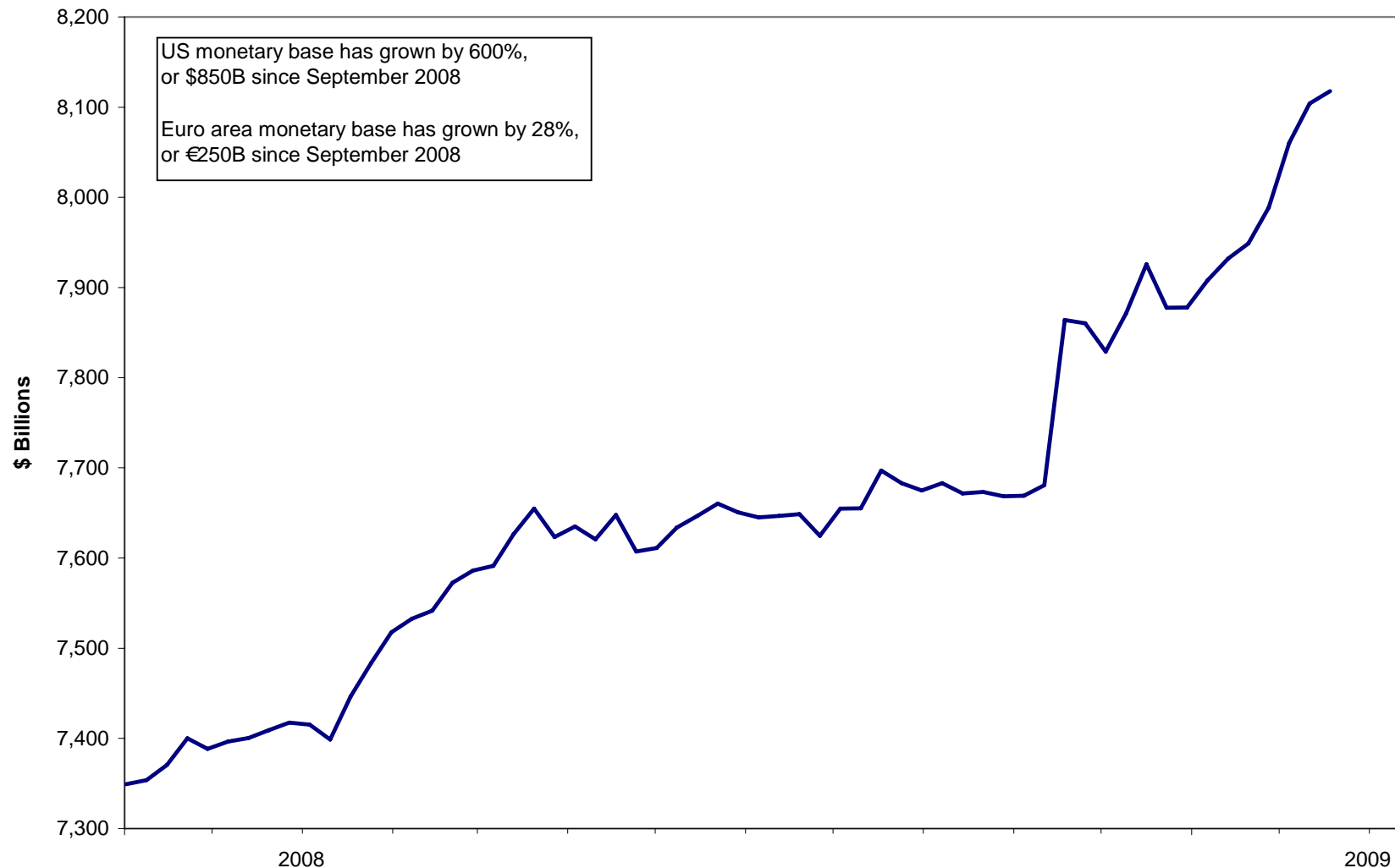
(a) 2008 data are preliminary and not annualized.

Source: US Department of the Treasury.

# Sharp expansion of the M2 money supply Aggressive actions by the US Fed not matched abroad

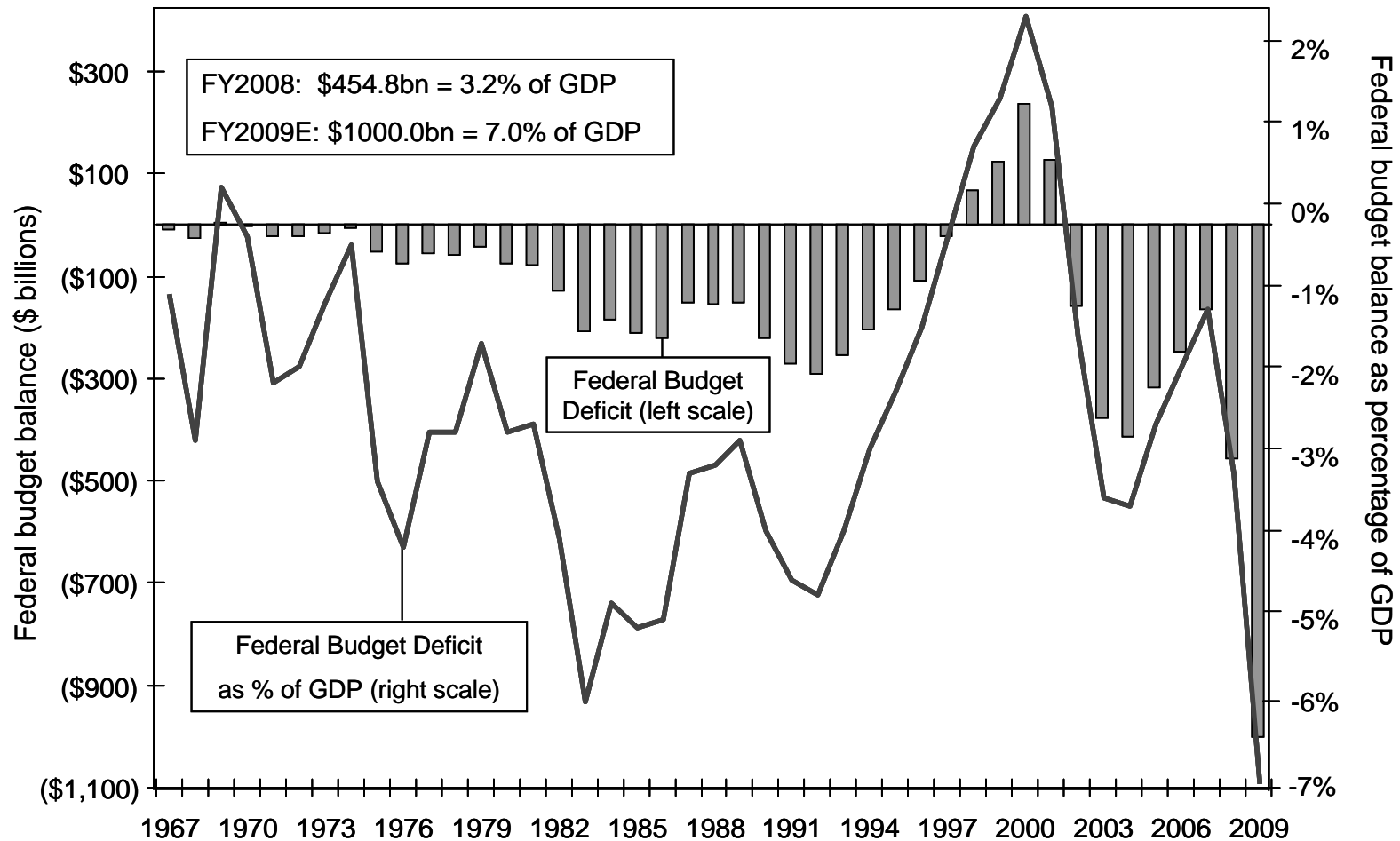
**M2**

Averages of Daily Figures, Seasonally Adjusted



# Federal budget deficit has worsened since the late 1990s

2008 within norms for most industrial nations as % of GDP

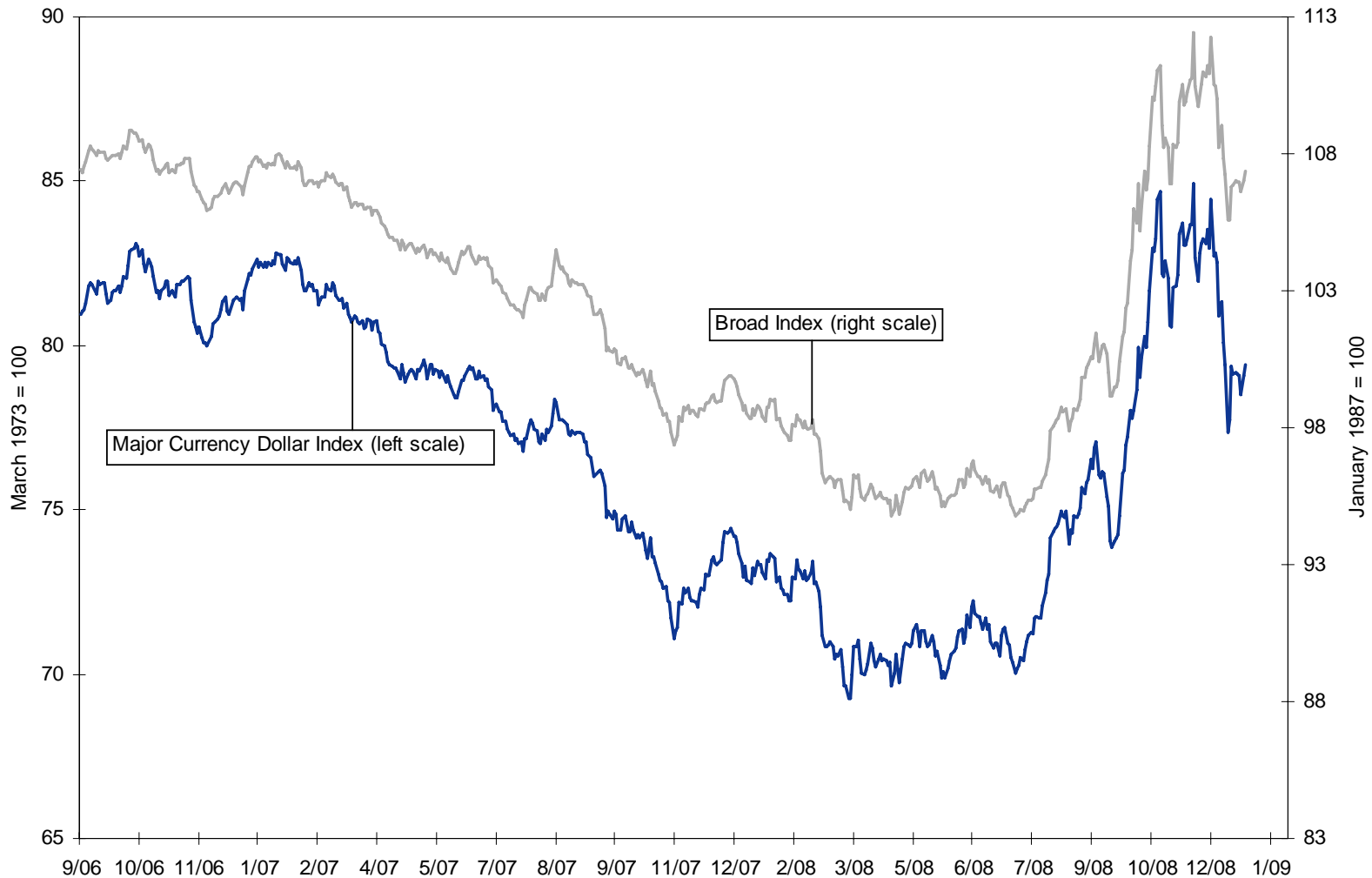


Annual data from 1967 through 2009E

Source: US Department of the Treasury, Goldman Sachs Portfolio Strategy.

# Trade-weighted exchange rate indexes

## Reversal of the dollar's multiyear decline



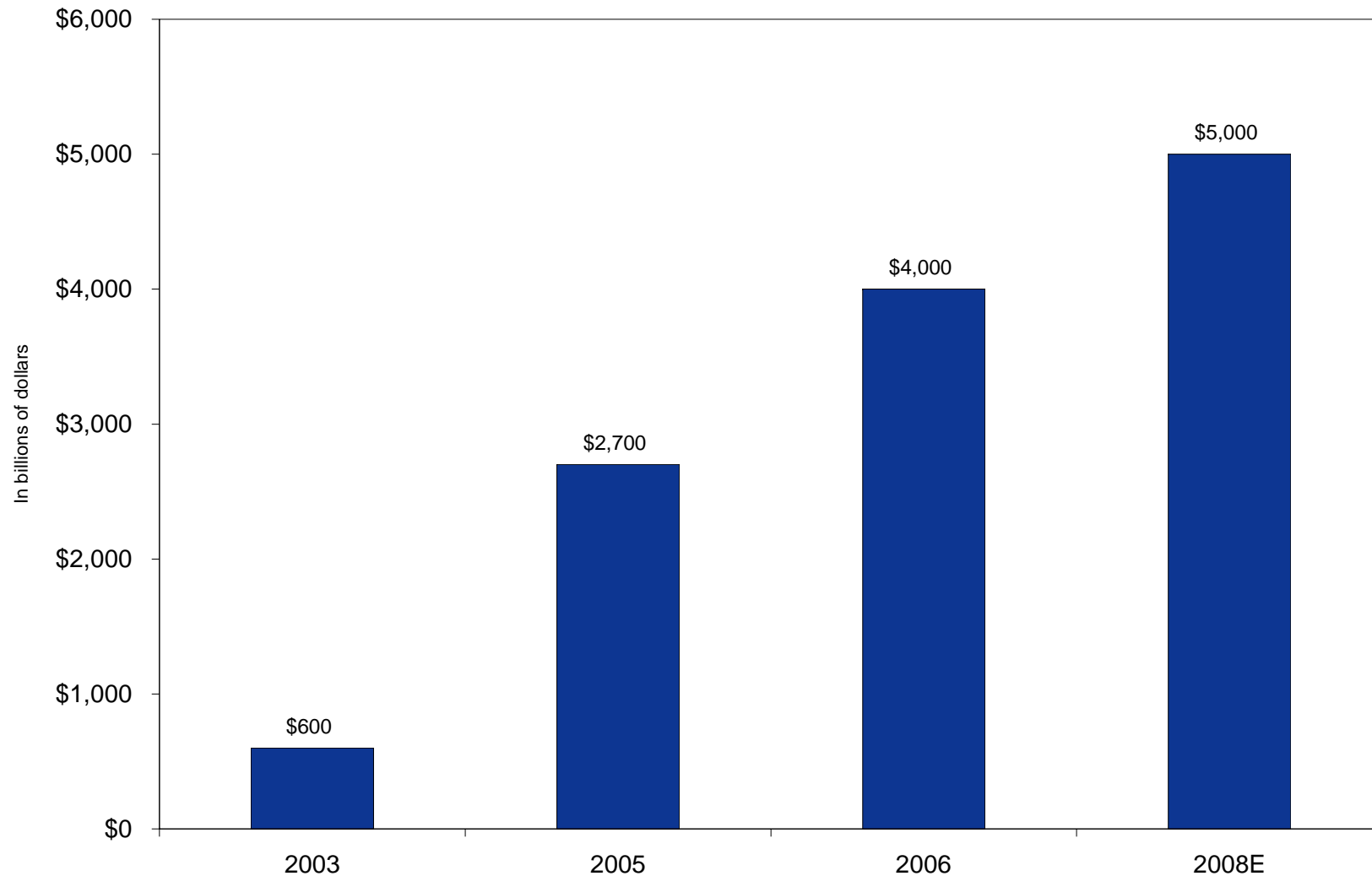
Source: Federal Reserve Bank of St. Louis.

## Environmental awareness is growing for both corporations and investors

- Large increase in ESG investment: Environmental, Social Responsibility, and Governance. Has this reached critical mass?
- Pension funds must focus on fiduciary responsibilities: Does “green” investing generate good returns? What are the long-term liabilities of ignoring environmental issues?
- Corporations look to become good citizens and enhance competitive position.
- Outsourcing of industrial production to nations with higher energy intensity and lower environmental standards. What are the global implications?

# Assets controlled by INCR participants

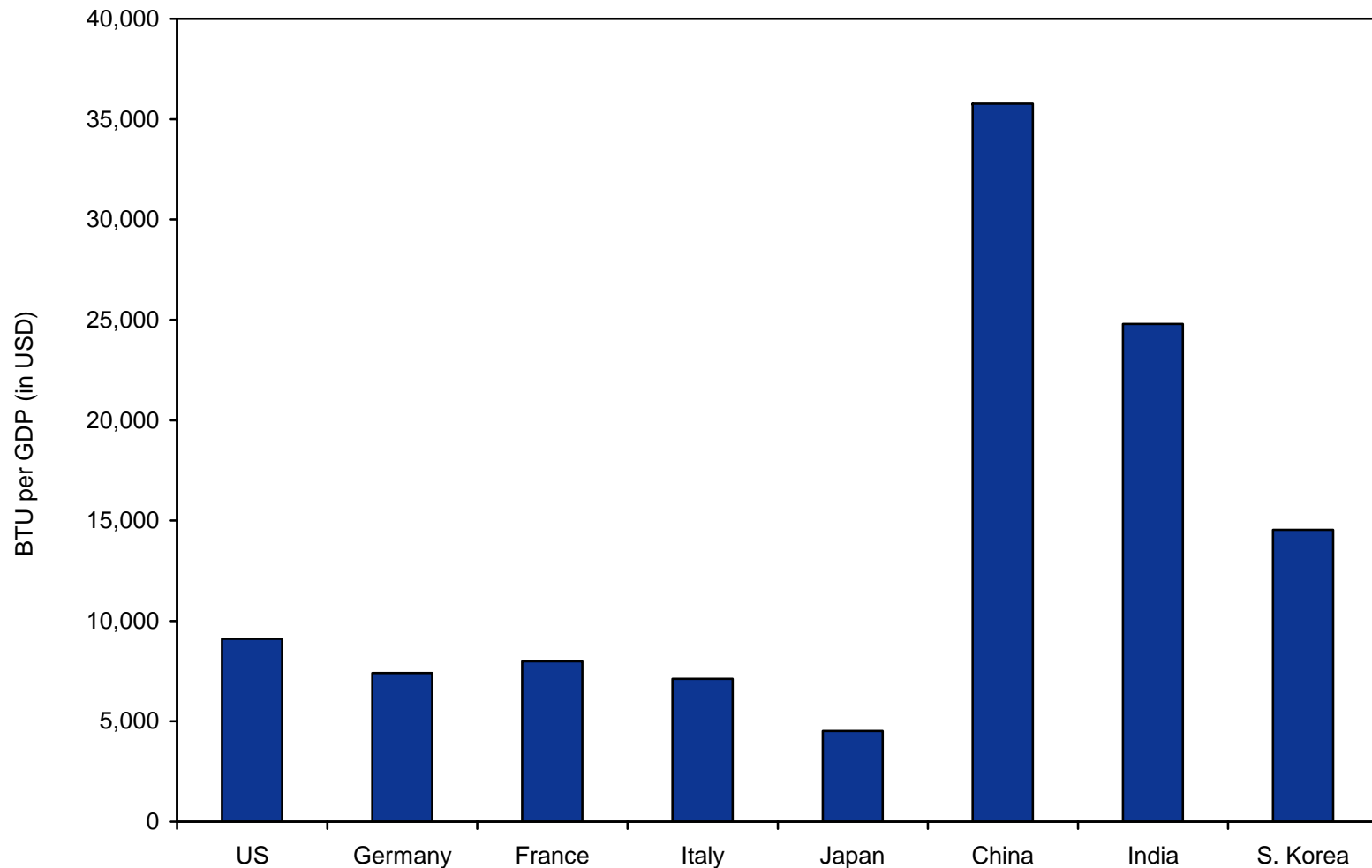
\$5.0 trillion in total assets for 2008E



Source: Investor Network on Climate Risk, CERES.

# Energy intensity gap between developed and developing economies, 2005

Energy-intensive activities are being outsourced along with pollution



Source: US Department of Energy.

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