



**Preliminary Lessons From the Crisis, Global Economic Prospects,
and Policy Challenges 1/**

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1/ The views expressed are my own and should not be attributed to the staff, Management and Board of the IMF

Road Map of Presentation

- The Financial Crisis—what have we learnt?
 - Prelude to the crisis
 - How does it relate to previous crises?
 - Where are we now?
 - Preliminary lessons
- Consequences of the Crisis - Global Economic Prospects
- Policy Challenges Looking Forward

The Financial Crisis—What Have we Learnt?

Prelude to the Crisis

Benign Macro-Financial Conditions, but Some Concerns

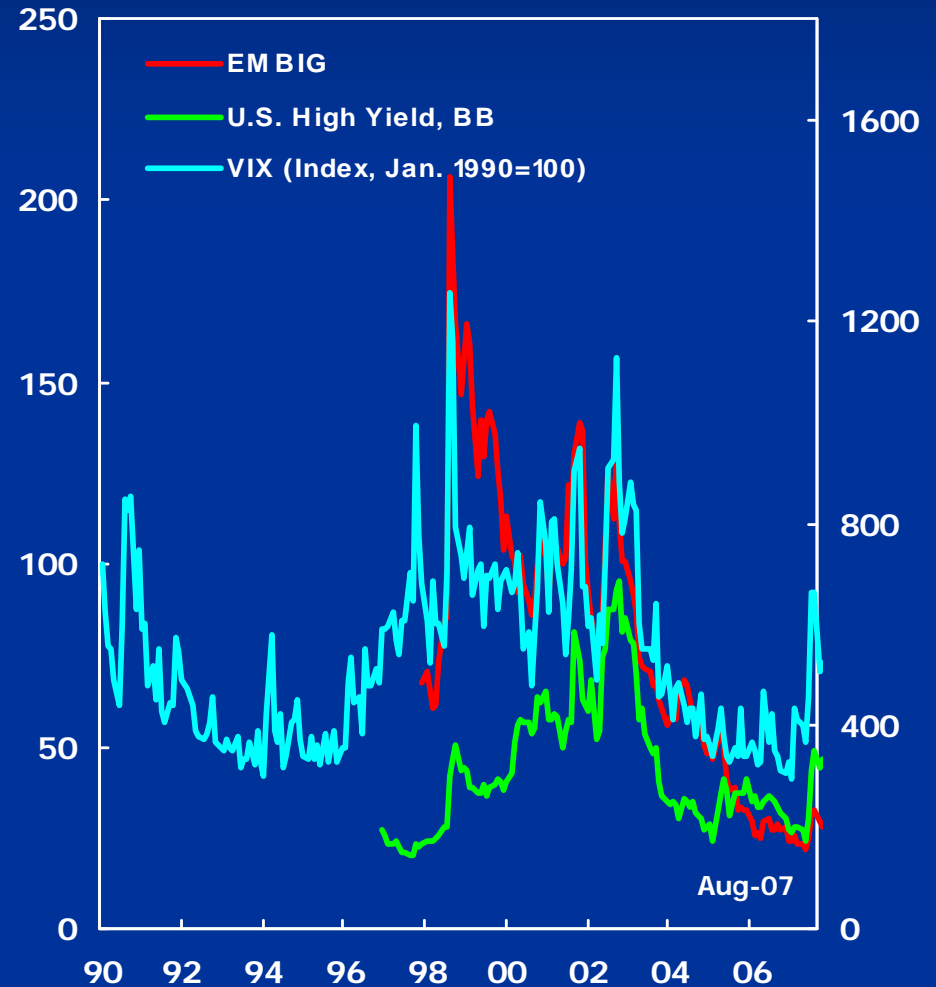
- Benign conditions
 - High global growth and productivity; low inflation
 - Low market volatility and risk spreads
- But some sources of concern
 - Global imbalances, large capital inflows into US
 - Low real interest rate, search for yield
- US is largest economy/finance
 - Bound to have global effects because of size and interconnectedness

An Environment with Low Interest Rates, Volatility and Spreads

10-year Govt. Bonds Yields (in percent)



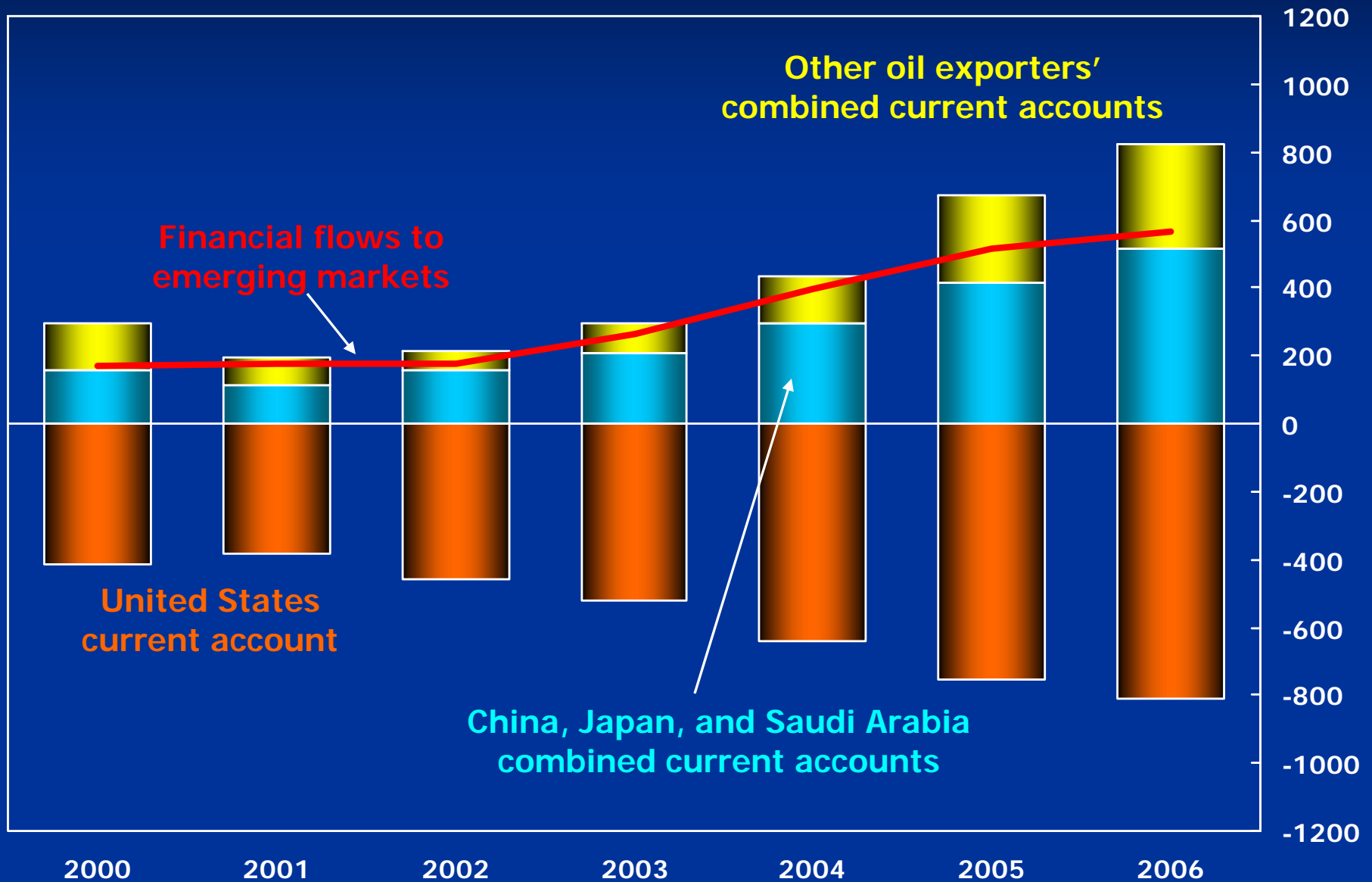
Volatility and Spreads (in basis points)



A Global "Savings Glut"

Current Account Trends and Capital Flows

(In billions of U.S. dollars)

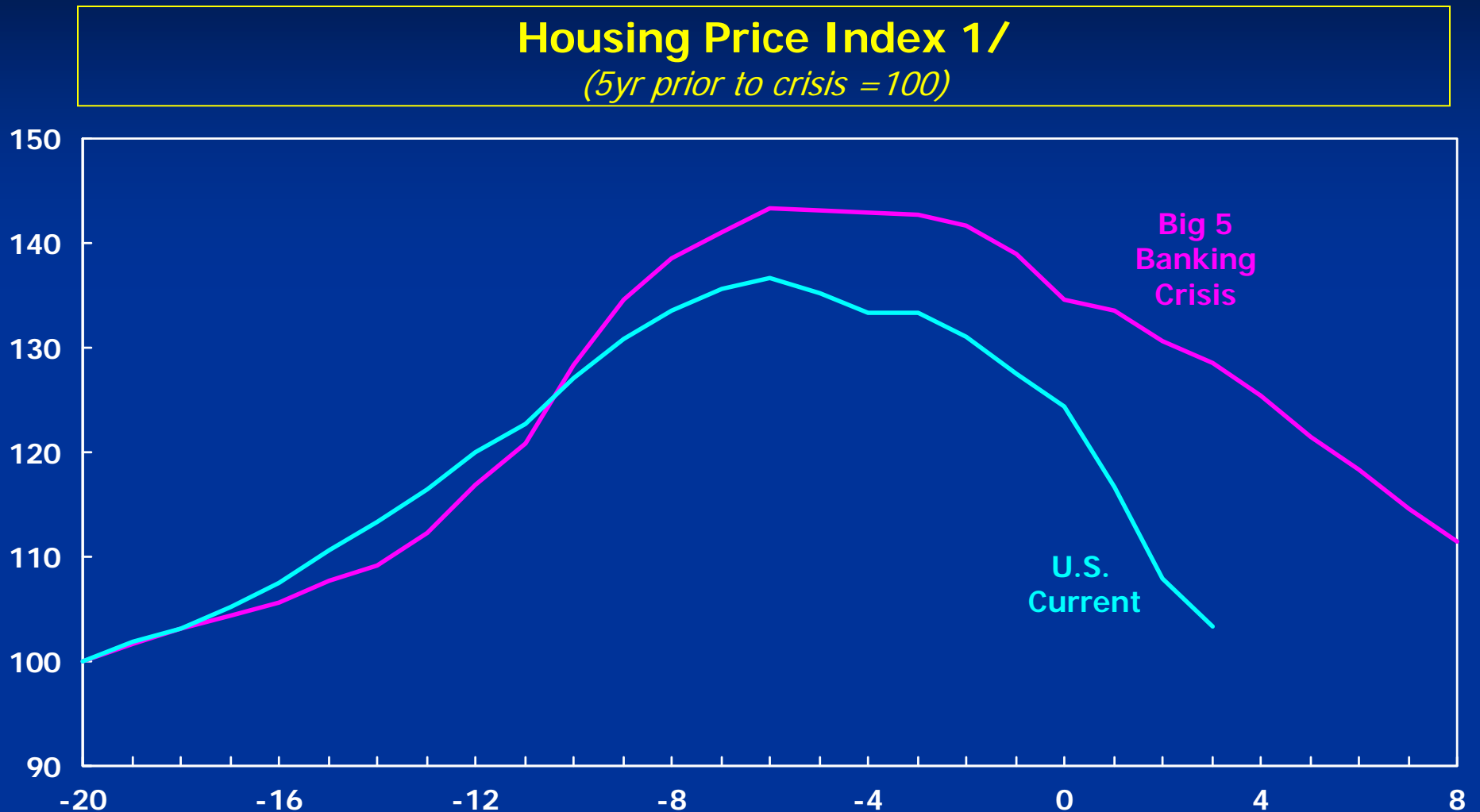


How Does it Relate to Previous Crises?

Many Commonalities with Previous Crises

- Asset price bubbles: housing, equity, .com
 - Ex-post clear, ex-ante always less
- Credit booms
 - With deteriorating lending standards
 - Now too, but this time more households
- Systemic risk buildup
 - Subprime and loans in FX, became correlated
- Regulation and supervision failures
 - Do not keep up, this time especially derivatives

A Housing Boom Similar to the Big 5 Banking Crisis

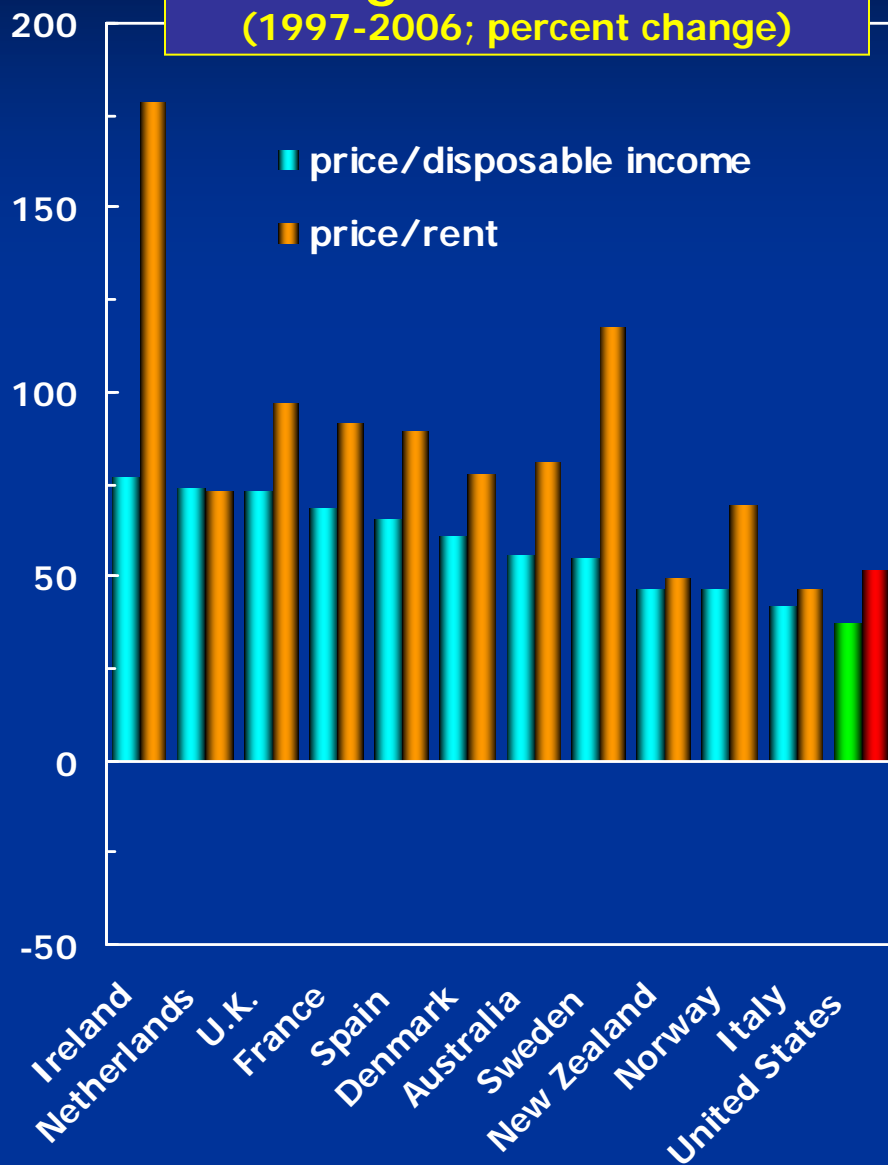


Sources: BIS and Haver Analytics.

1/ House price index is equal to 100 five year prior to banking crises. Big Five refers to the average of indices for the 5 major banking crises. For the current crisis in the United States, the beginning date is assumed to be 2007:3.

Not Just Confined to the United States

Housing Valuation Ratios
(1997-2006; percent change)

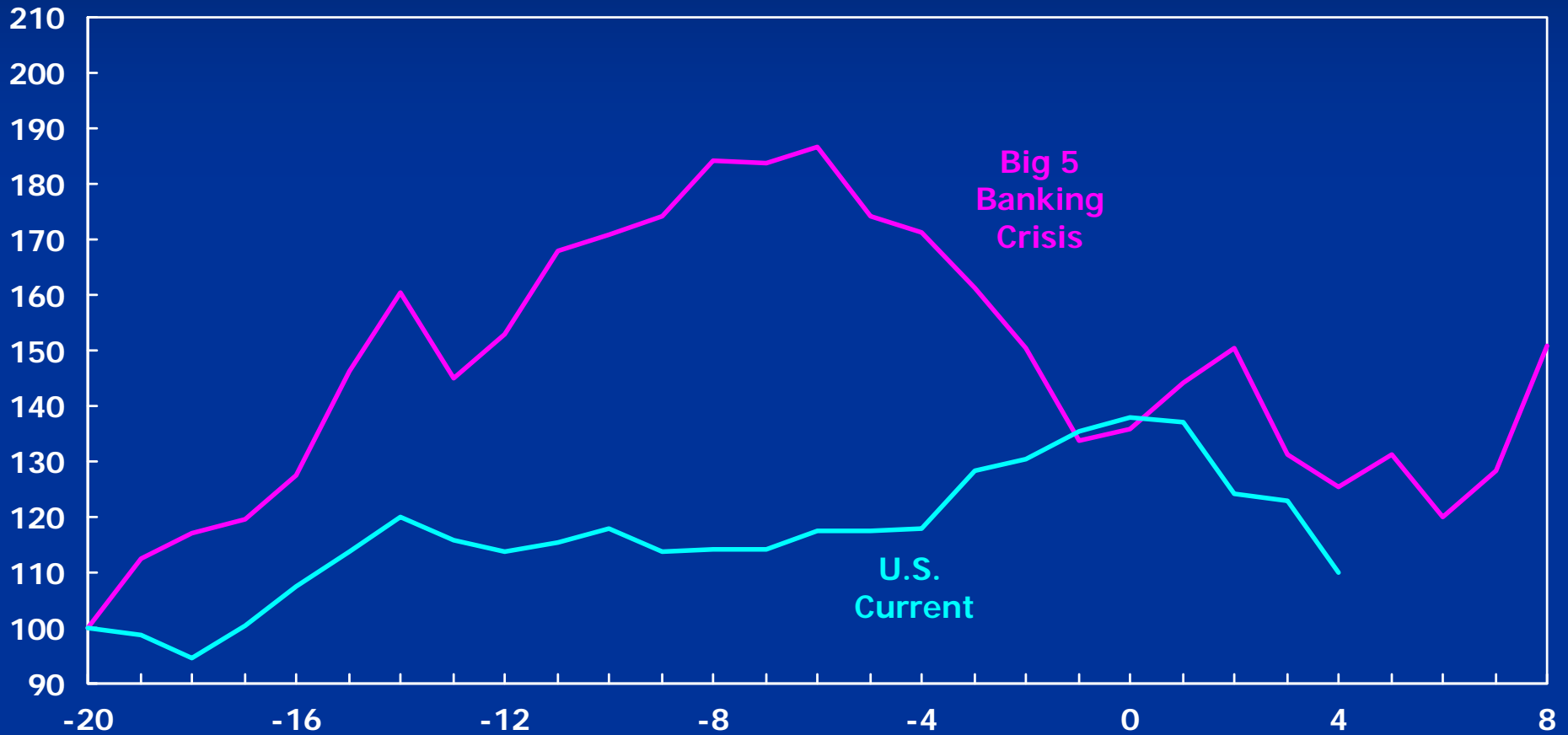


Housing Prices in Emerging Markets
(2000-2006; percent change)



Equity Prices Also Increased (in Moderation), But Different Cycle

Equity Price Index 1/
(5yr prior to crisis = 100)

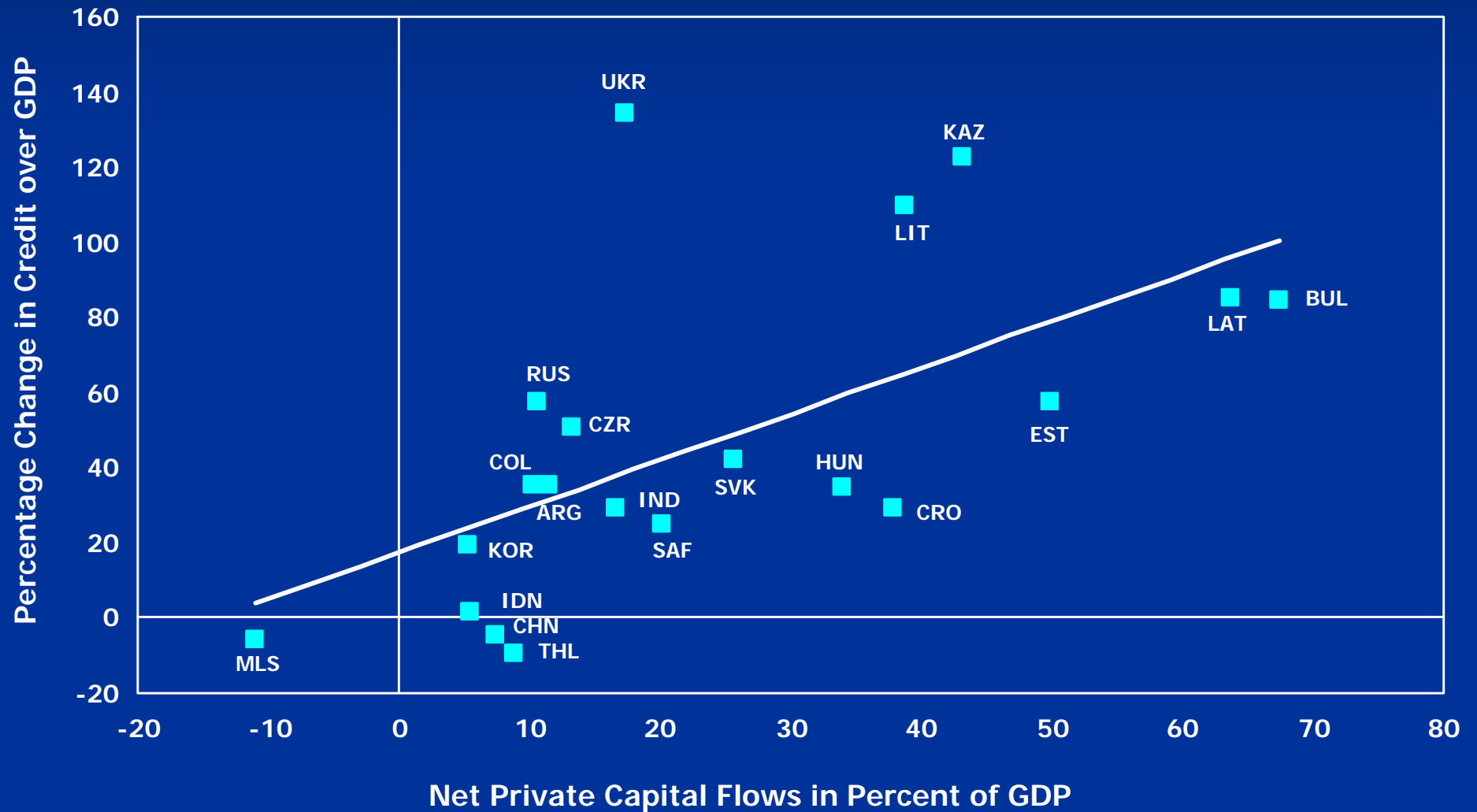


Source: IMF, International Financial Statistics.

1/ Equity price index is equal to 100 five year prior to banking crises. Big Five refers to the average of indices for the 5 major banking crises. For the current crisis in the United States, the beginning date is assumed to be 2007:3.

In Emerging Economies Capital Flows Led to Credit Booms ¹²

Credit Inflows and Credit Growth (2004-2007)



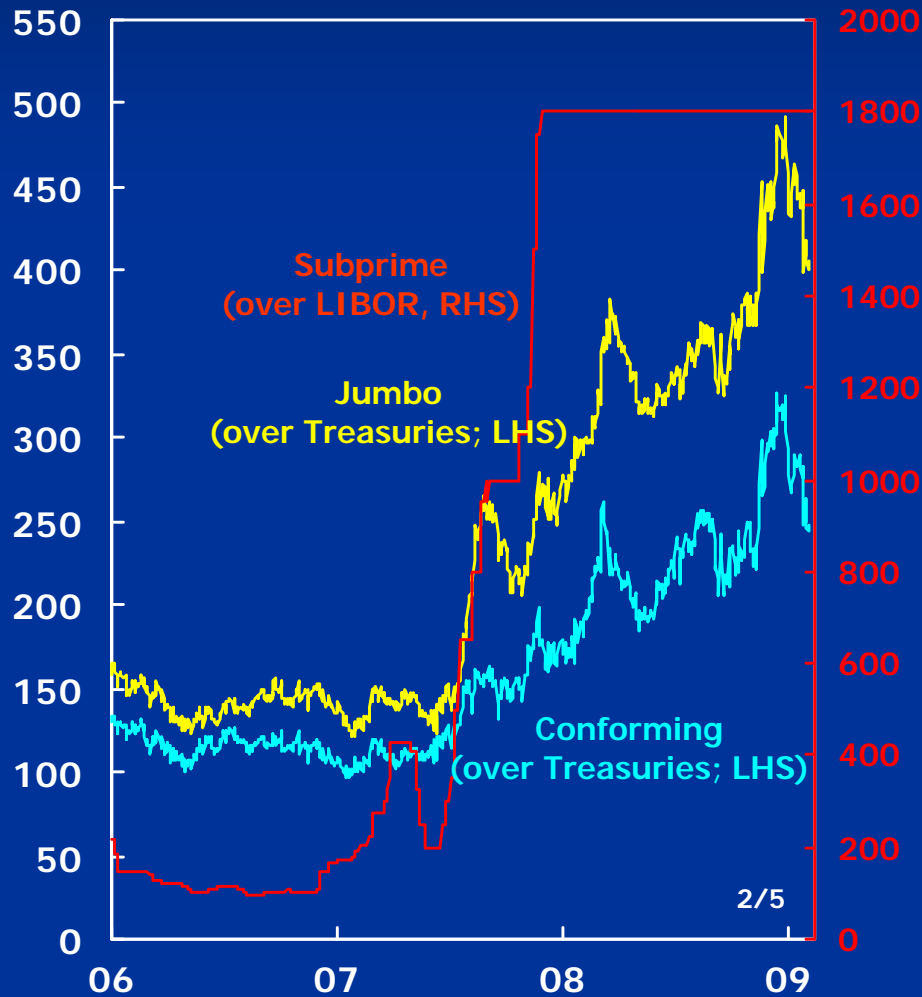
New Elements of the Crisis
*(Leverage, Opaqueness, Central Role of
Households, and Interconnectdeness)*

Some New Dimensions of the Crisis

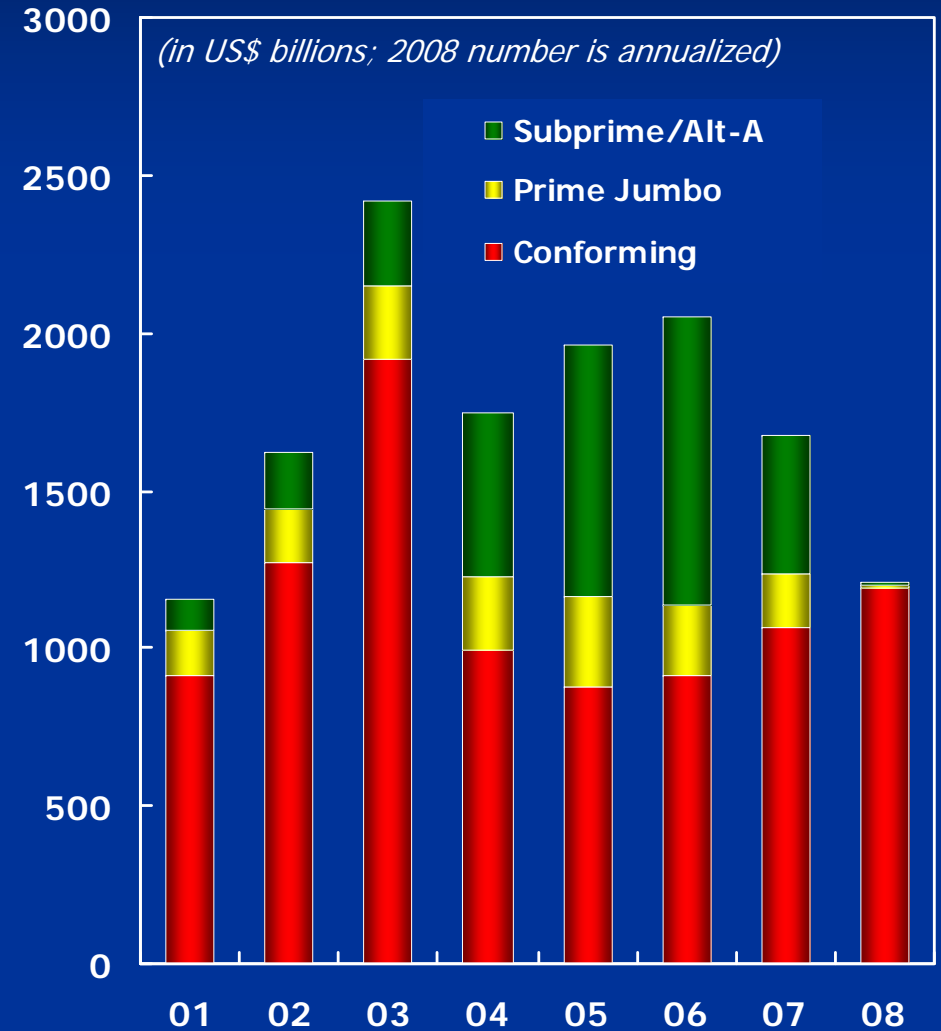
- Increased opaqueness
 - Securitization: poorer risk assign, monitoring
 - Harder to value once crisis started
- Financial integration & interconnectedness
 - Larger capital flows /cross-border positions
 - Greater connection between markets
- Increased role of leverage
 - In many sectors and markets
- Central role of households
 - Complicating restructuring

Expanding (Non-Conforming) Mortgage Securitization Accompanying the U.S. Housing Boom

U.S. Mortgage Spreads *(in basis points)*



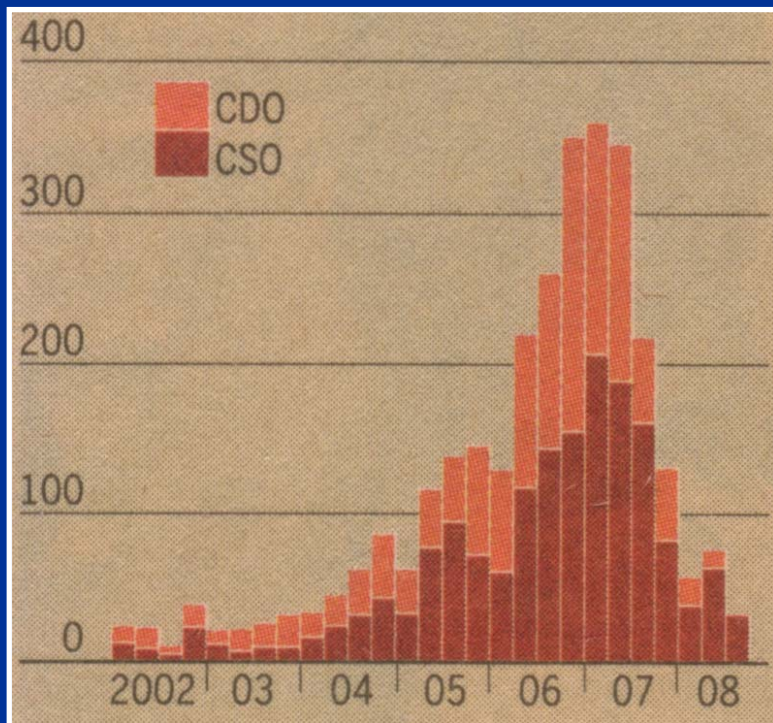
Mortgage Securitization



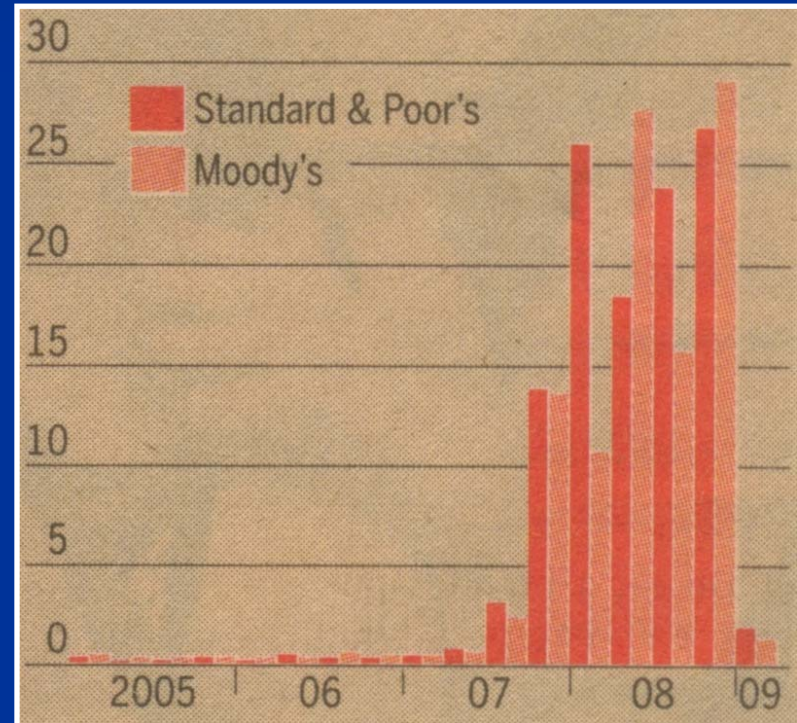
Sources: IMF staff estimates.

Rapid Increase in "Opaque" Instruments

Quarterly Issuance (US\$ billion)



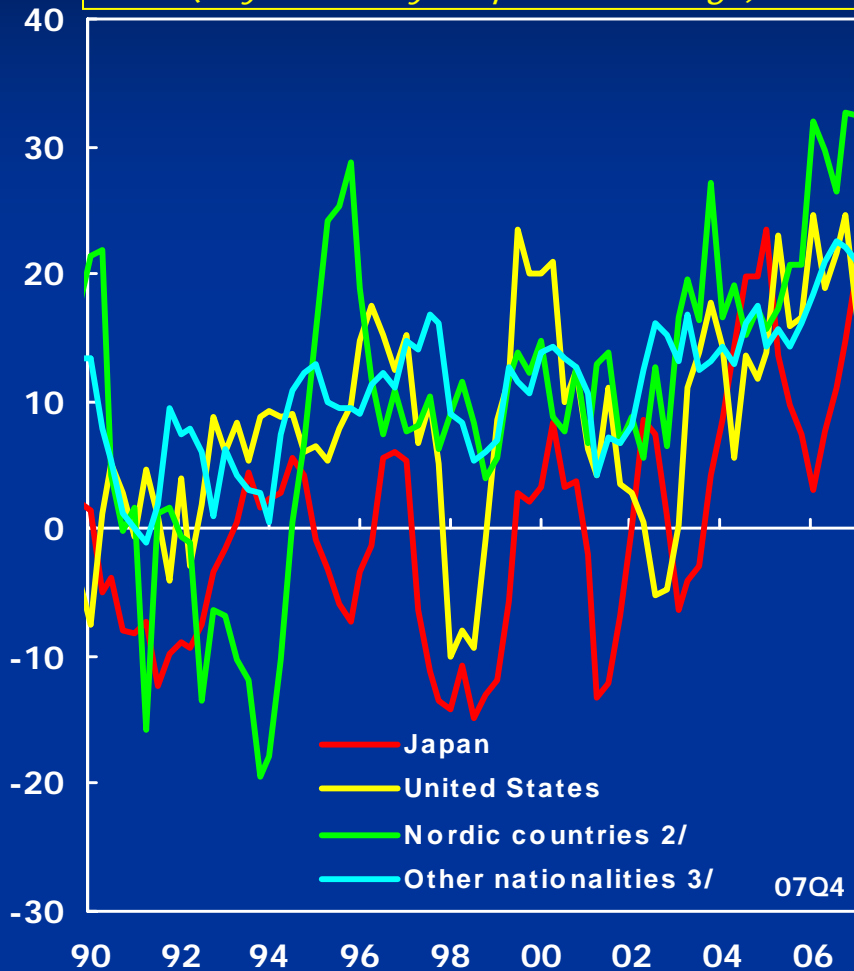
Historical Downgrades of Structured Products ('000)



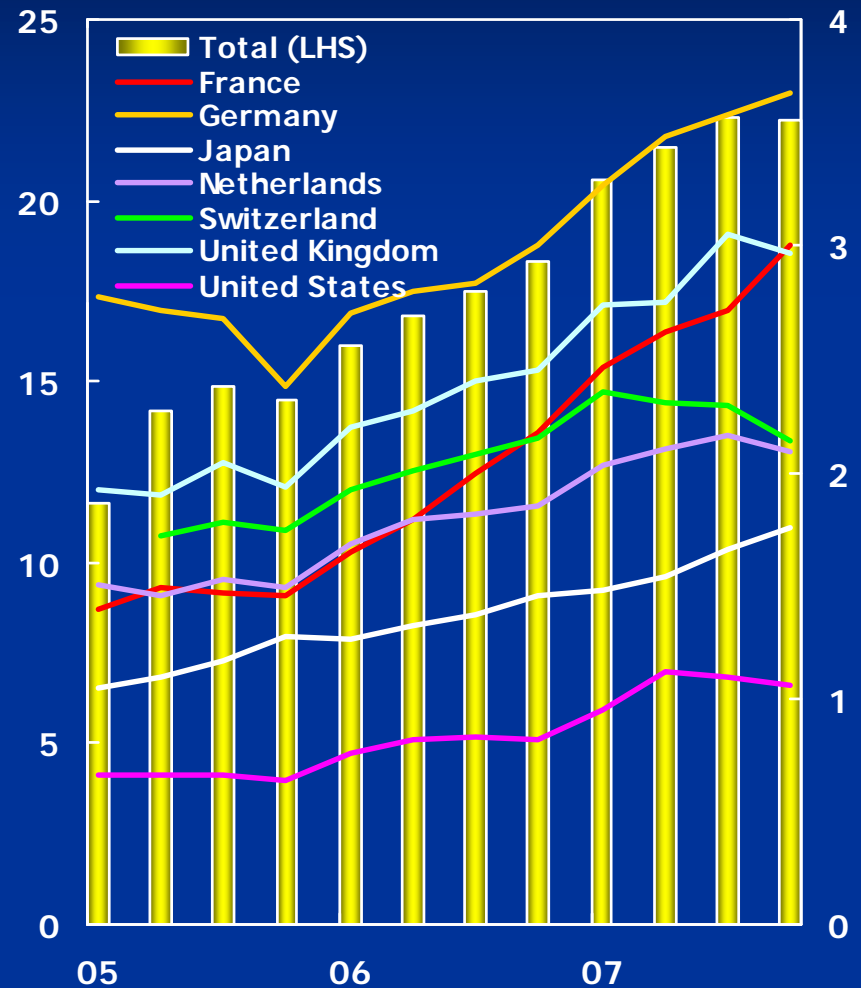
Source: Financial Times article on February 5, 2009.

Rising Interconnectedness in Bank Lending & Exposures 17

**Growth in International Claims,
by Bank Nationality 1/
(in year over year percent change)**



**Foreign Exposures 4/ 5/
(in trillions of U.S. dollars)**



1/ Foreign currency claims on home country residents are excluded.

2/ Danish, Finnish, Norwegian and Swedish banks.

3/ Total international claims excluding those booked by Japanese, Nordic and US banks.

4/ On an ultimate risk basis and excluding inter-office transfers.

5/ Foreign claims vis-à-vis entities (banks and non-banks) in advanced economies, booked by banks headquartered in the countries shown.

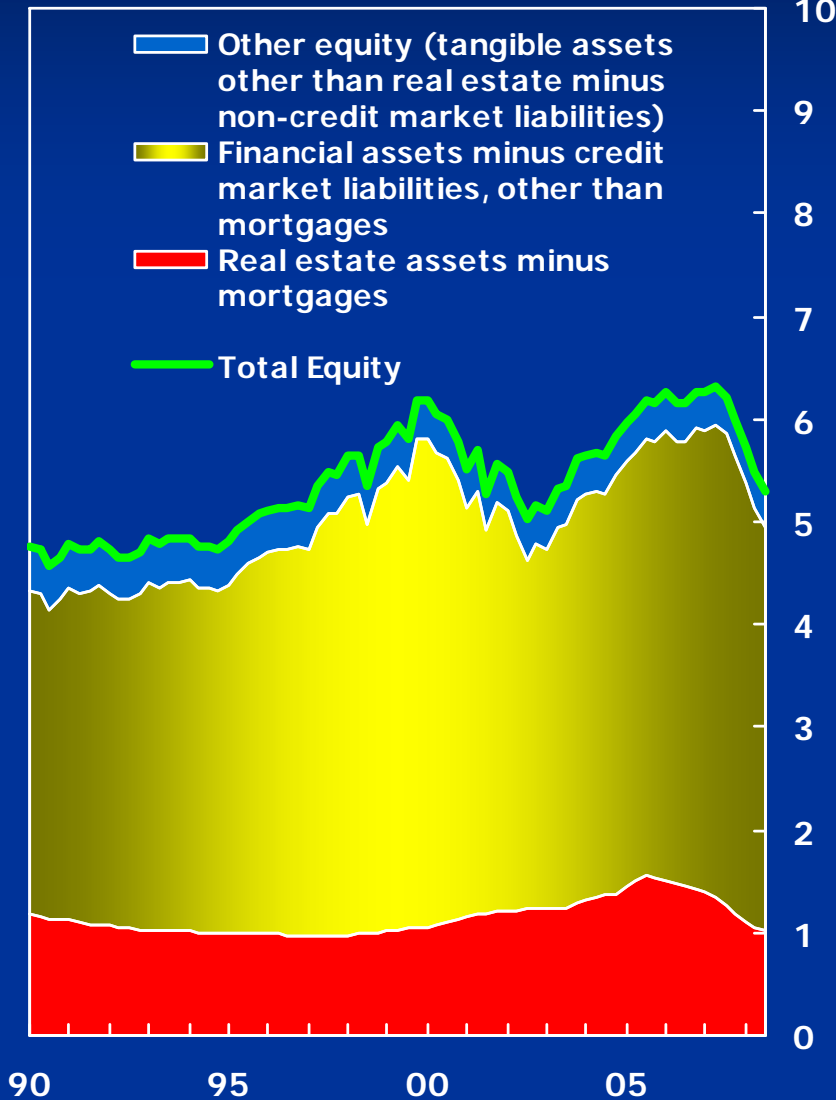
Rising Leverage in Investment & Commercial Banks 18

(total assets relative to household assets; percent change since 2000)

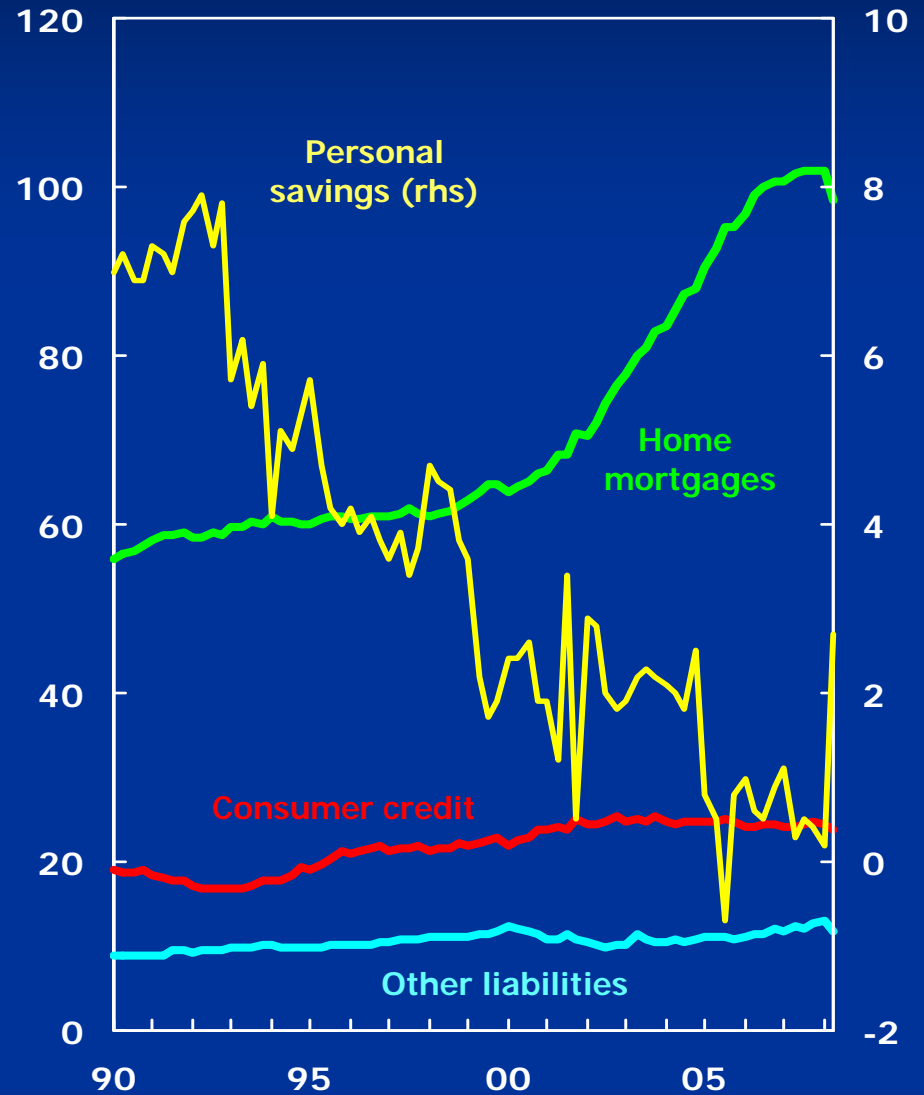


Rising U.S. Household Leverage and Declining Savings

Household Equity
(ratios to disposable income)



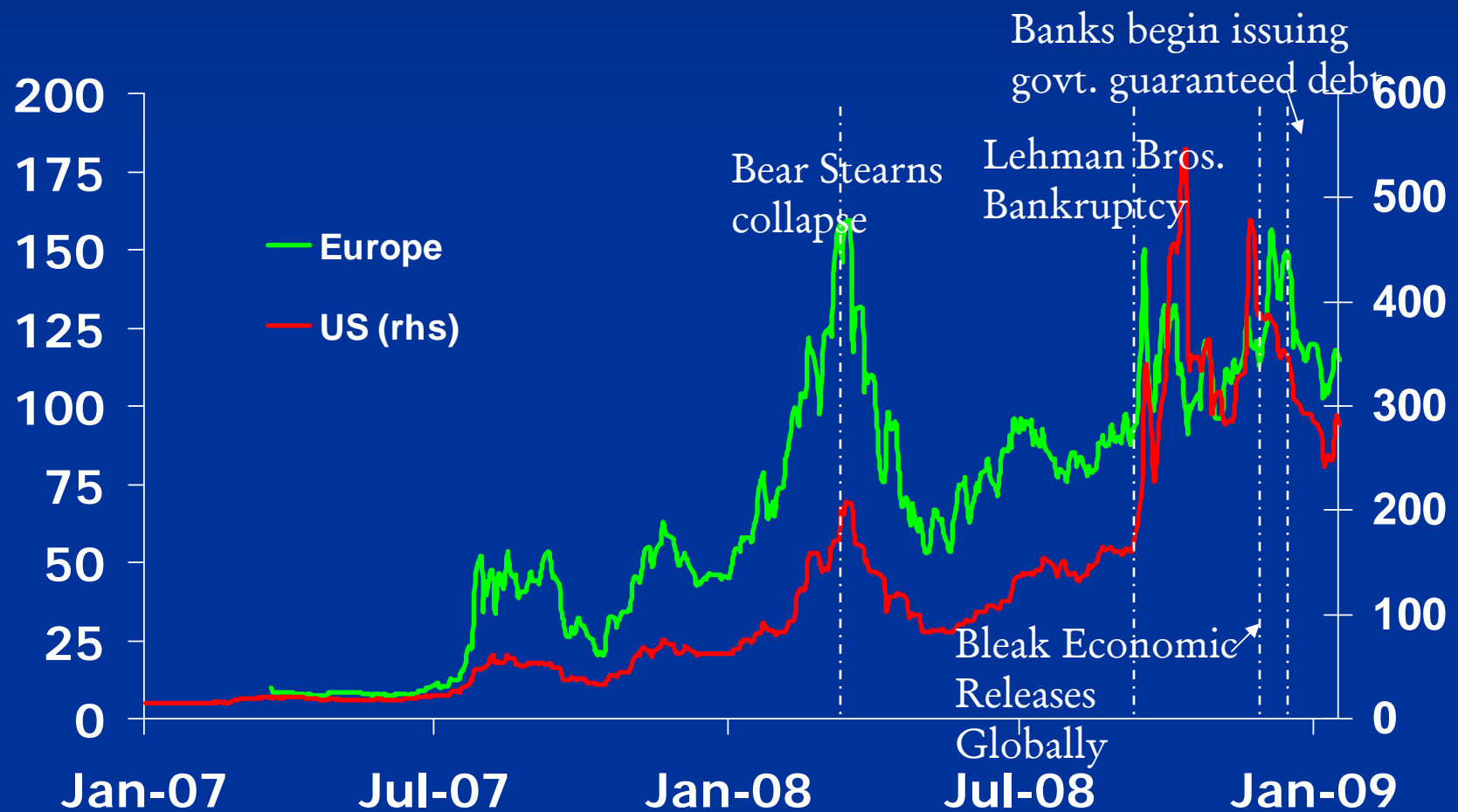
Household Indebtedness
(in percent of disposable income)



Where Are We Now?
(Systemic Risks Remain High)

Systemic Risks Remain Elevated Despite Government Interventions

CDS Spreads for High-Grade Financials (basis points)



Source: Bloomberg

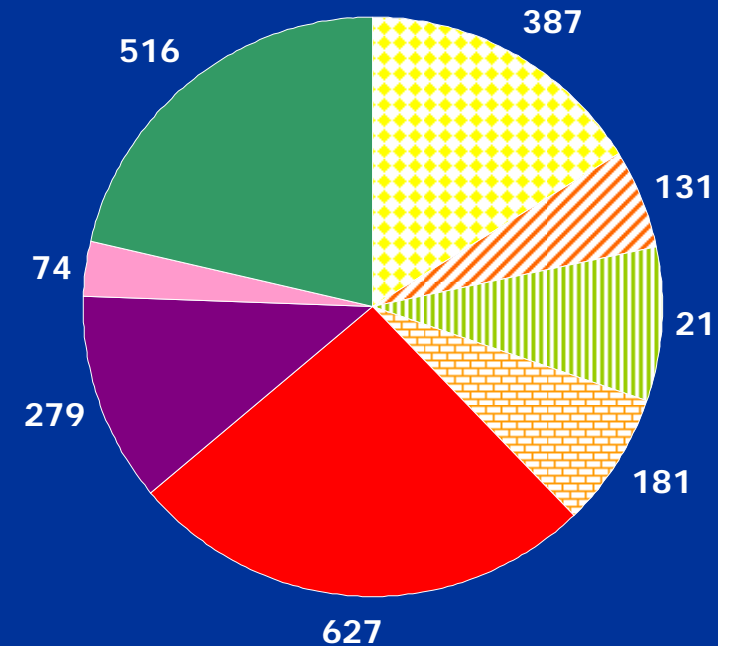
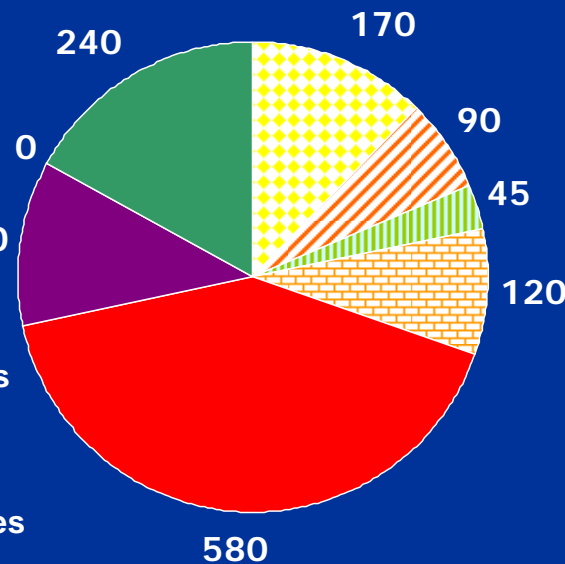
Credit Deterioration is Deepening and Spreading

Estimates of Potential Financial Sector Writedowns on US Assets (as of January 2009)

2008 GFSR Loss Estimate
(\$ 1.40 tn)

Updated Loss Estimate, 2009
(\$ 2.20 tn)

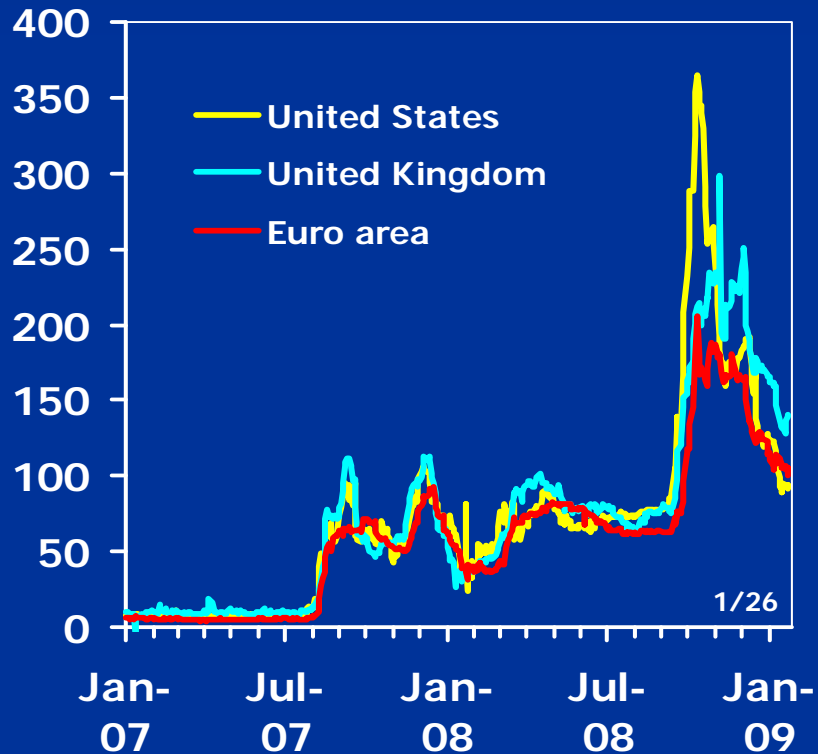
- Mortgages(Prime+Subprime)
- ▨ Commercial Real Estate
- ▨ Consumer
- ▨ North American Corporates
- US Residential Mortgage Securities
- US Commercial Mortgage Securities
- US Consumer Securities
- North American Corp Debt Securities



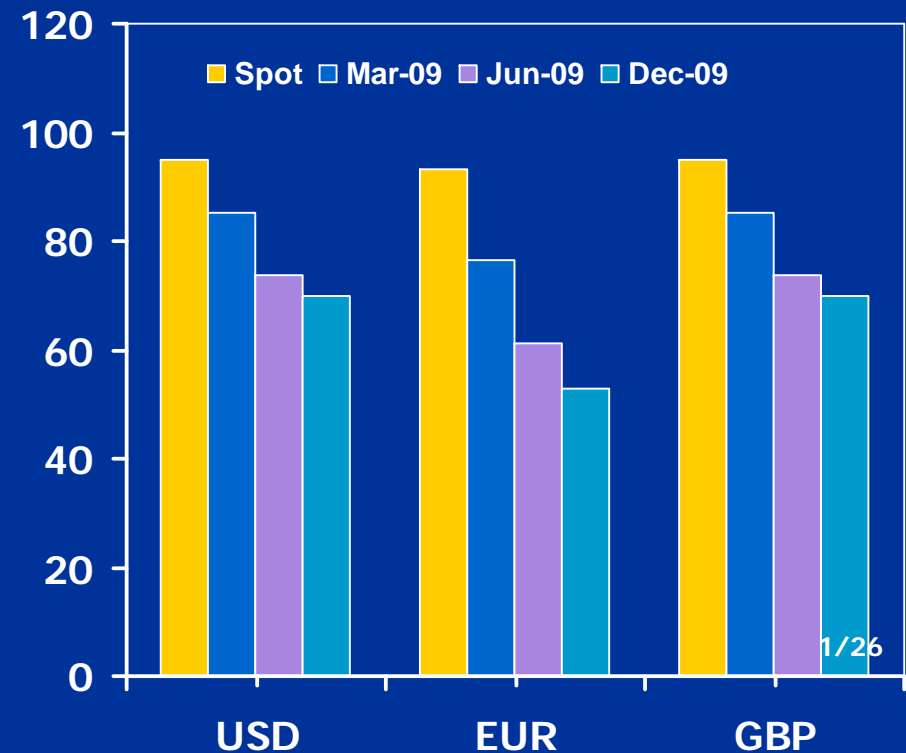
Numbers are in \$ Billions

Interbank Spreads have Declined Sharply, But Interbank Liquidity Remains Impaired

**Libor-Overnight Index
Swap Spreads
(basis points)**

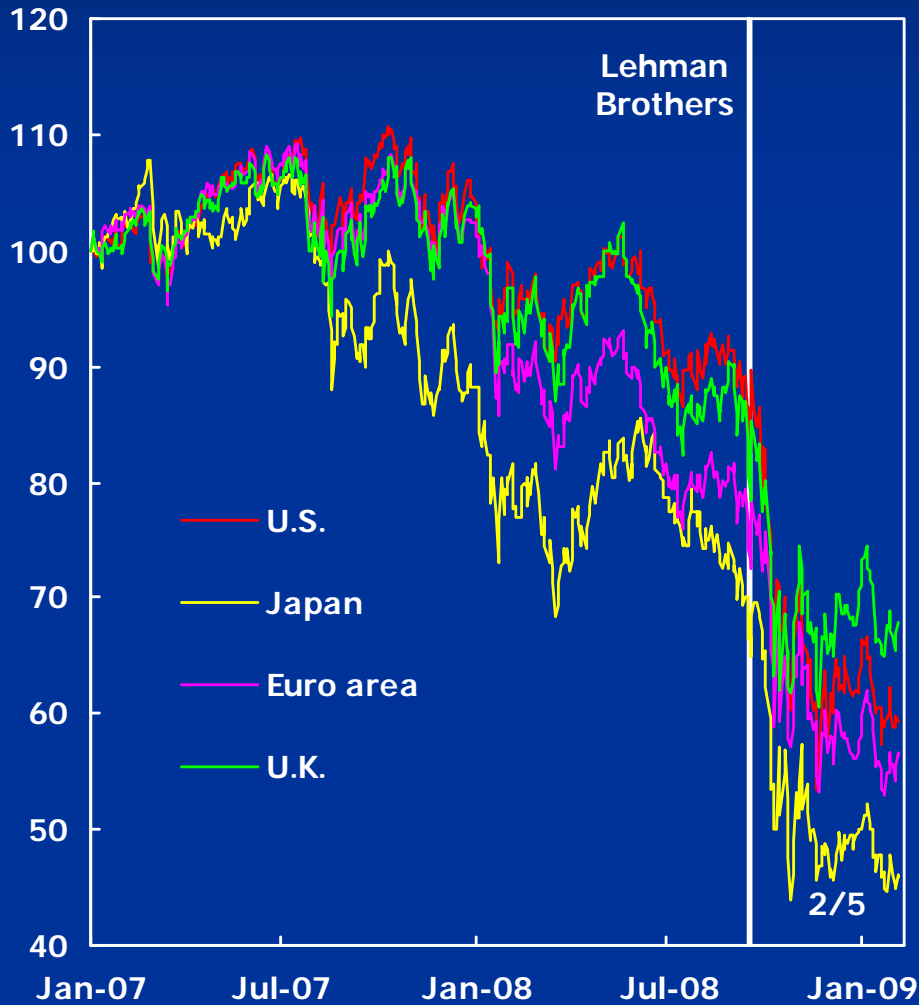


**Spot and Forward LIBOR-
OIS Spreads
(basis points)**

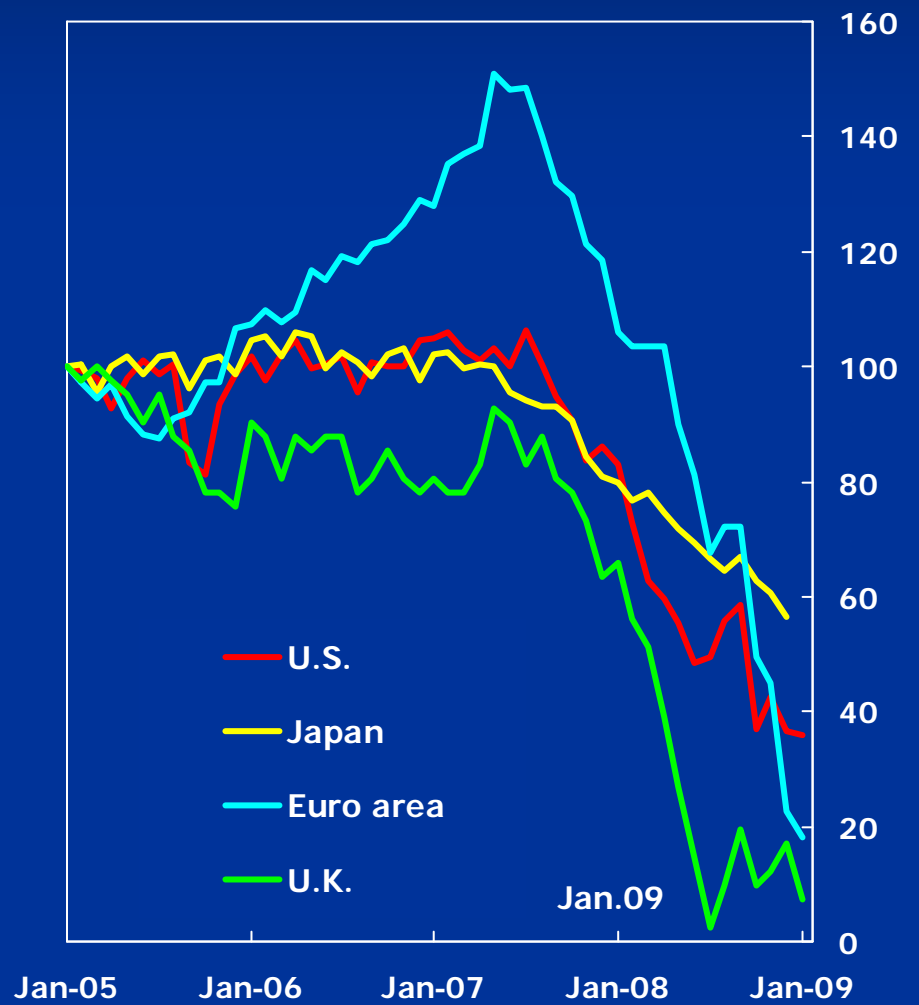


Dramatic Declines in Equity Markets and Confidence

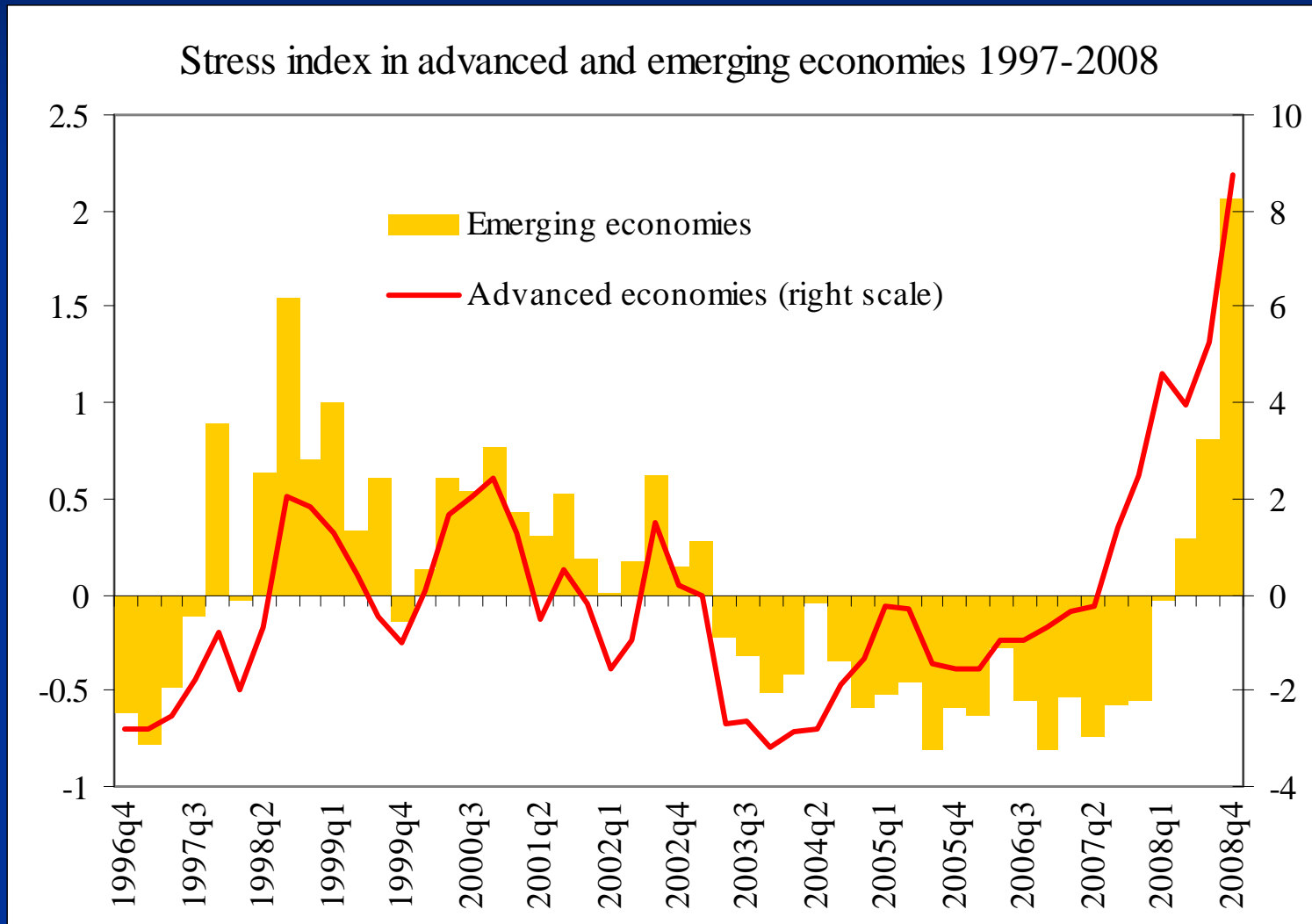
Equities
(1/1/2007=100; FTSE)



Consumer Confidence
(Jan. 2005=100)



Market Stress Levels At Historic Highs



Preliminary Lessons from the Crisis

Preliminary Lessons From the Crisis

- Macroeconomic policies and financial stability considerations were not sufficiently integrated
- Fragmentation of financial regulation promoted regulatory arbitrage, which in turn fueled a shadow banking system – outcome was excess leverage in the system
- Changing financial landscape of credit creation not matched by updated regulatory frameworks, while oversight not dynamic enough.
- Risk management not strong enough – need for greater emphasis on systemic (macro-prudential) risks.
- Procyclicality of prudential regulations, compensation, and accounting magnified the boom-bust cycles

Macroeconomic Policies

- Monetary policy and asset bubbles
 - “Doctrine:” 1. too hard to predict bubbles; 2. too blunt to stop; 3. easier to clean up
 - Learned less valid when financial sector is involved and leverage is increasing
 - And while regulation and supervision should be first defense, may not suffice
- Fiscal policy
 - Build buffers in good times to create headroom
 - Adjust tax policy to avoid encouraging leverage

Regulation and Supervision

- Regulatory perimeter
 - Broaden to capture systemic institutions and anchor it on activities (not institutions); retain flexible perimeter
 - Consider systemic risk/interconnections more
- Market discipline
 - Reduce conflict of interests, encourage due diligence
 - Discourage too large/connected and ramp up oversight
 - Better resolution framework
- Procyclicality
 - Prudential regulation: buffers, leverage ratio, provisioning through the cycle
 - Accounting: complement mean with variance
 - Compensation: risk based and long-term
- Information
 - Reduce gaps; greater transparency on valuation of complex instruments; reporting of both on and off balance sheet exposure to allow systemic risk assessment

Financial Architecture

- Surveillance
 - Less fragmented, deeper, more integrated, and better communicated
- Multilateralism
 - More coordinated, ex-ante and ex-post
- Financial Regulation
 - Greater convergence in practices & rules
 - Especially cross-border, burden sharing
- Financing
 - Larger insurance/ex-ante liquidity/financing mechanisms, backed-up

Consequences of the Crisis
(Synchronized Recession)

Global Outlook Has Deteriorated, but Modest Turnaround Anticipated with Policy Stimulus

WEO Real GDP Growth Projections (In percent change from a year earlier)

	U.S.	Euro	Japan	China	India	World
2009 (Jan.09)	-1.6	-2.0	-2.6	6.7	5.1	0.5
2009 (Nov.08)	-0.7	-0.5	-0.2	8.5	6.3	2.2
Change	-0.9	-1.5	-2.4	-1.8	-1.2	-1.7
2010 (Jan.09)	1.6	0.2	0.6	8.0	6.5	3.0
2010 (Nov.08)	1.5	0.9	1.1	9.5	6.8	3.8
Change	0.1	-0.7	-0.5	-1.5	-0.3	-0.8

Source: IMF, World Economic Outlook.

Behind the Forecasts—Advanced Economies

- Financial stress remains higher than previously envisaged, notwithstanding policy efforts.
- The feedback loop from financial strains to real activity has proven to be stronger than anticipated.
- Output collapse being driven by lower wealth, dramatic declines in confidence, and a “wait and see” attitude of households and businesses.
- Forecasts assume sizeable fiscal stimulus; financial strains will ease gradually; and U.S. housing market will find a bottom.
- Lower commodity prices should help bolster demand.

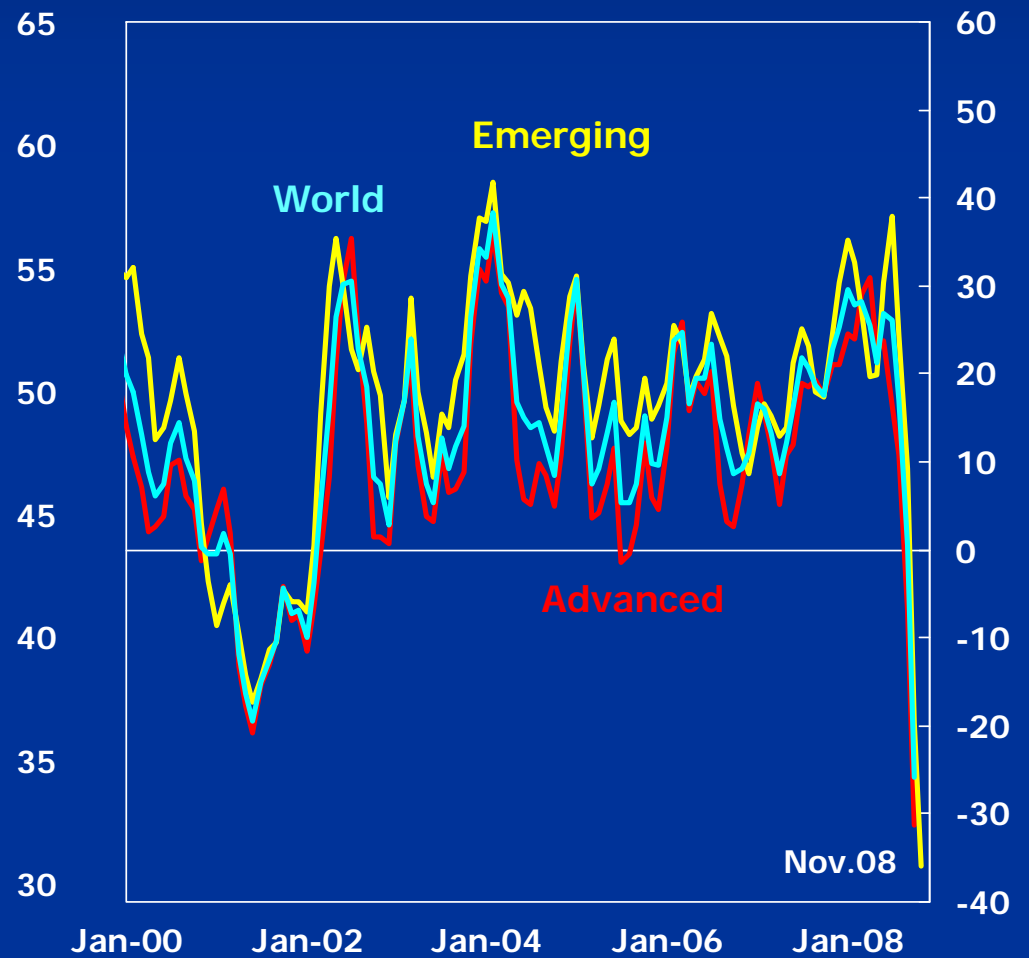
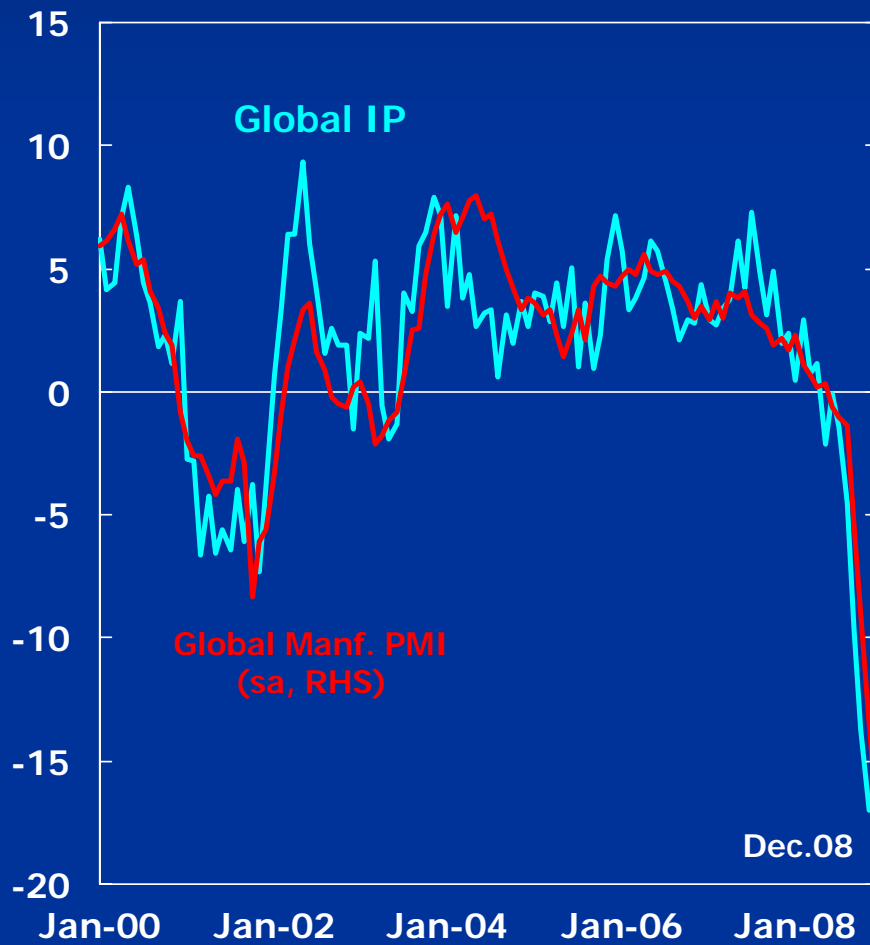
Deteriorated Outlook Reflects Abrupt Fall in Industrial Activity and Global Trade

Industrial Production

(Annualized percent change of 3mma over previous 3mma)

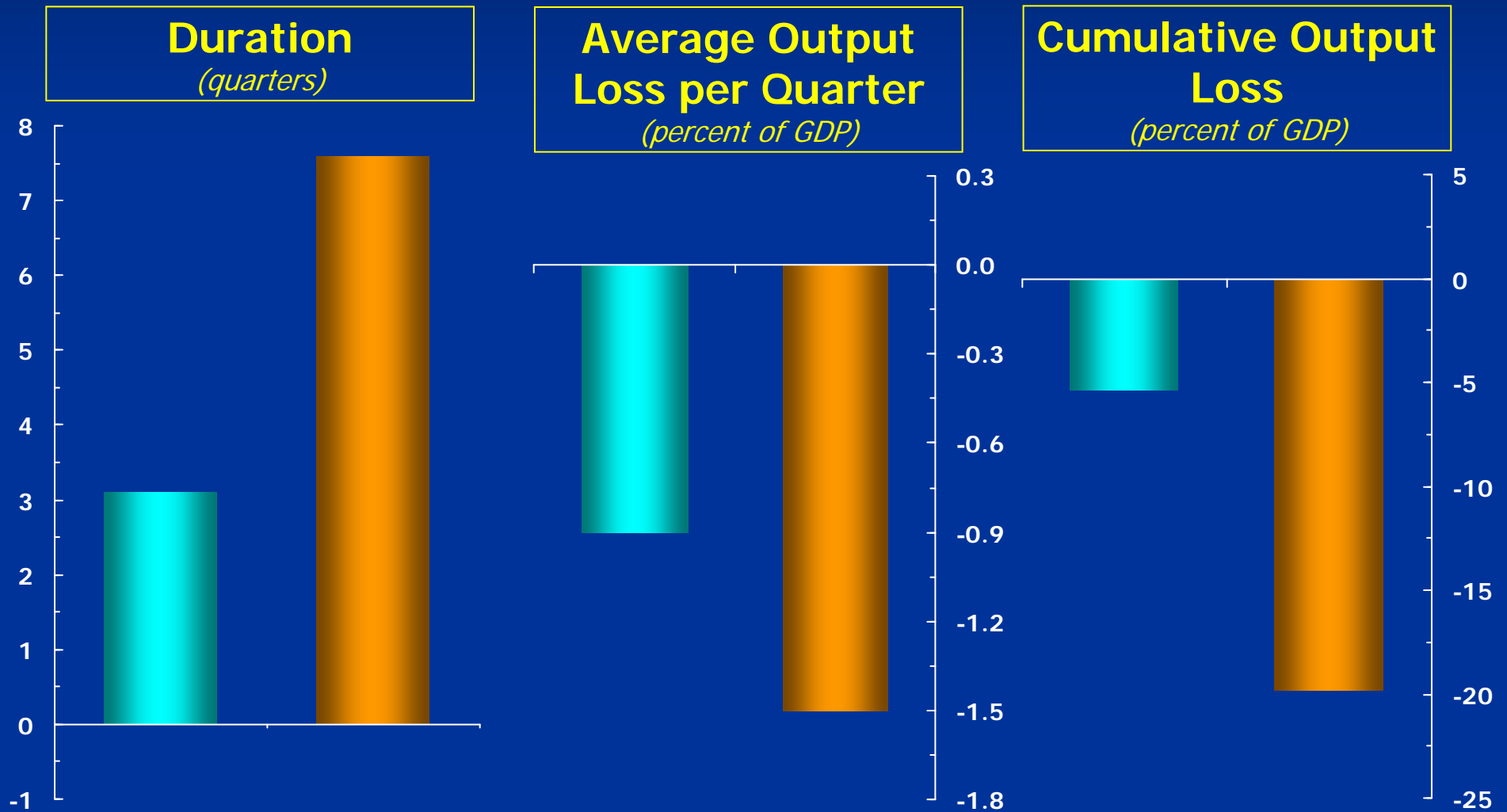
Merchandise Exports

(Annualized percent change of 3mma over previous 3mma)



Banking Stress Drives Larger and Deeper Downturns 35

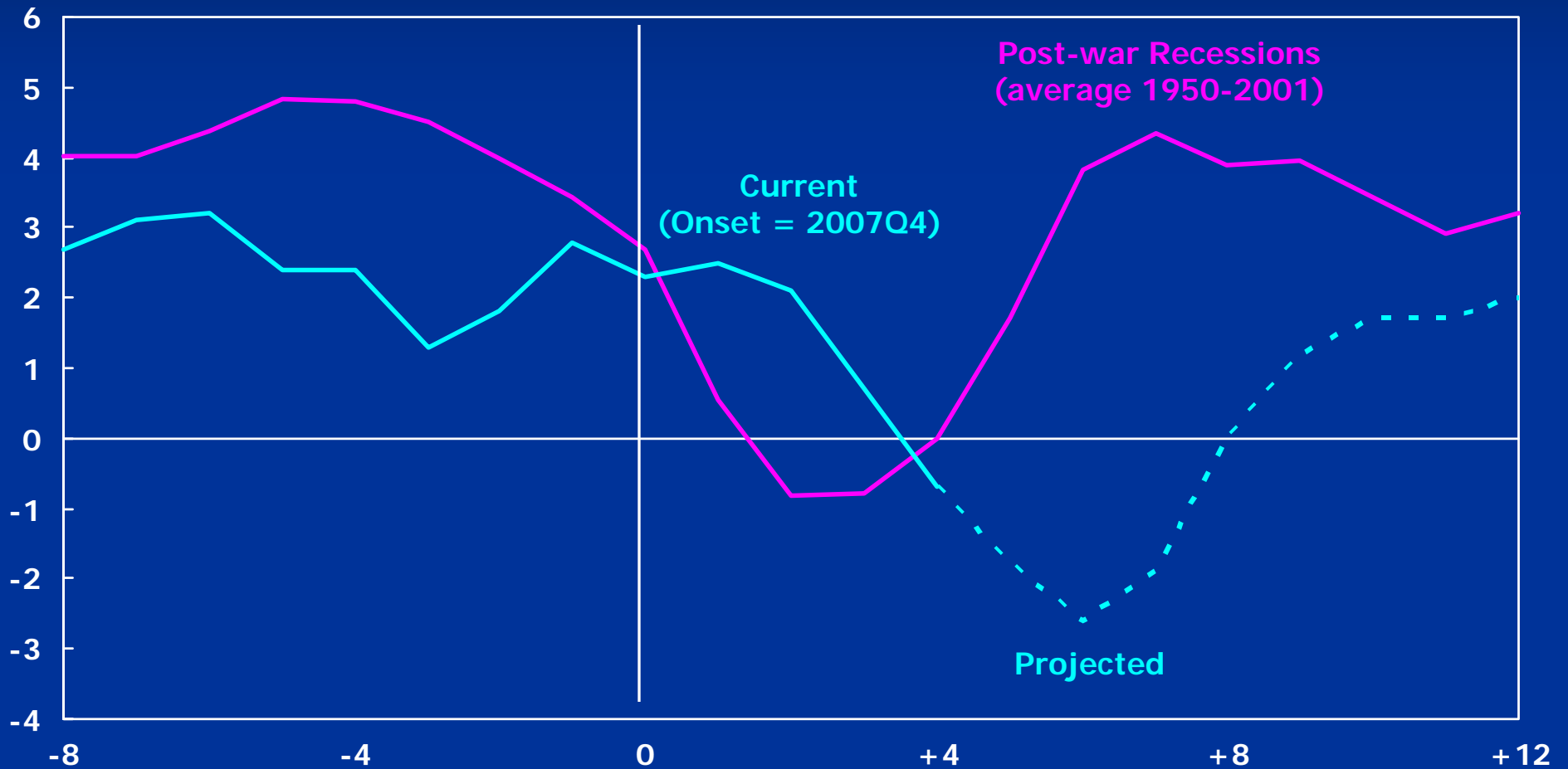
- Recession not preceded by financial stress¹
- Recession preceded by bank-related financial stress¹



¹ See Table 4.2 of Chapter 4 of October 2008 World Economic Outlook.

Current Recession is Likely to be Deeper than All Previous Post-war Recessions

U.S. Real GDP Growth: Recessions and Recoveries
(in percent change from year earlier; quarterly path)



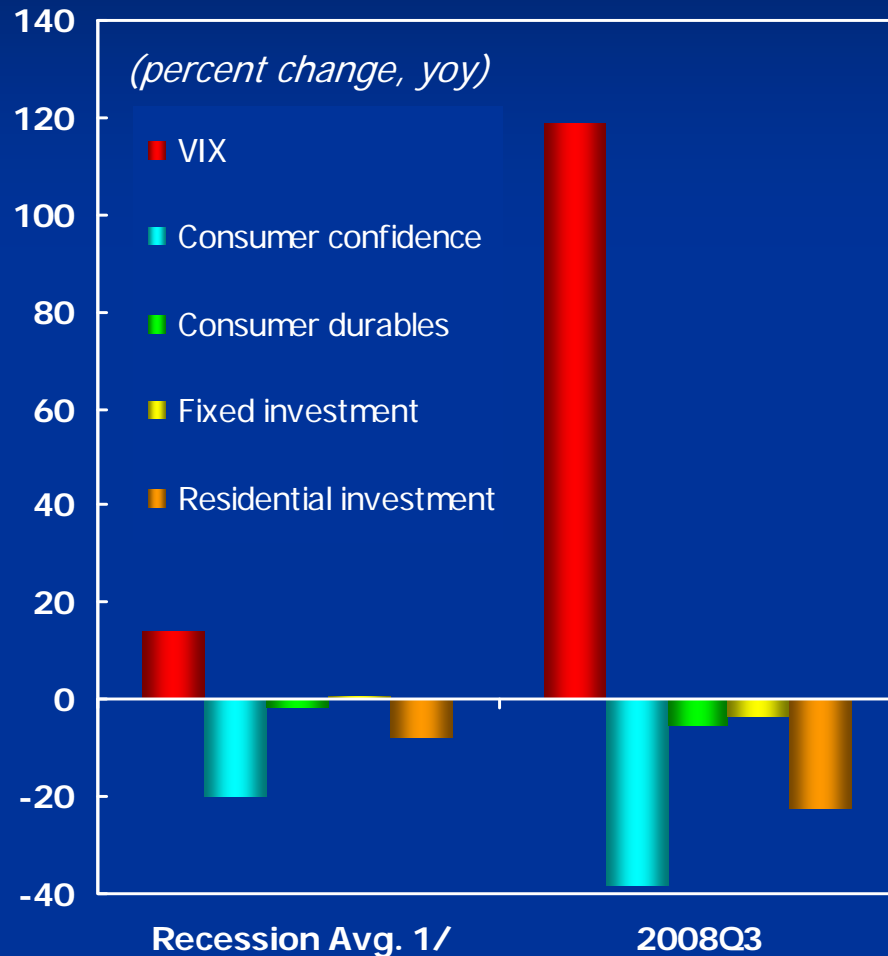
Sources: IMF, World Economic Outlook, Bloomberg L.P. and Haver Analytics.

Role of Uncertainty in the Crisis

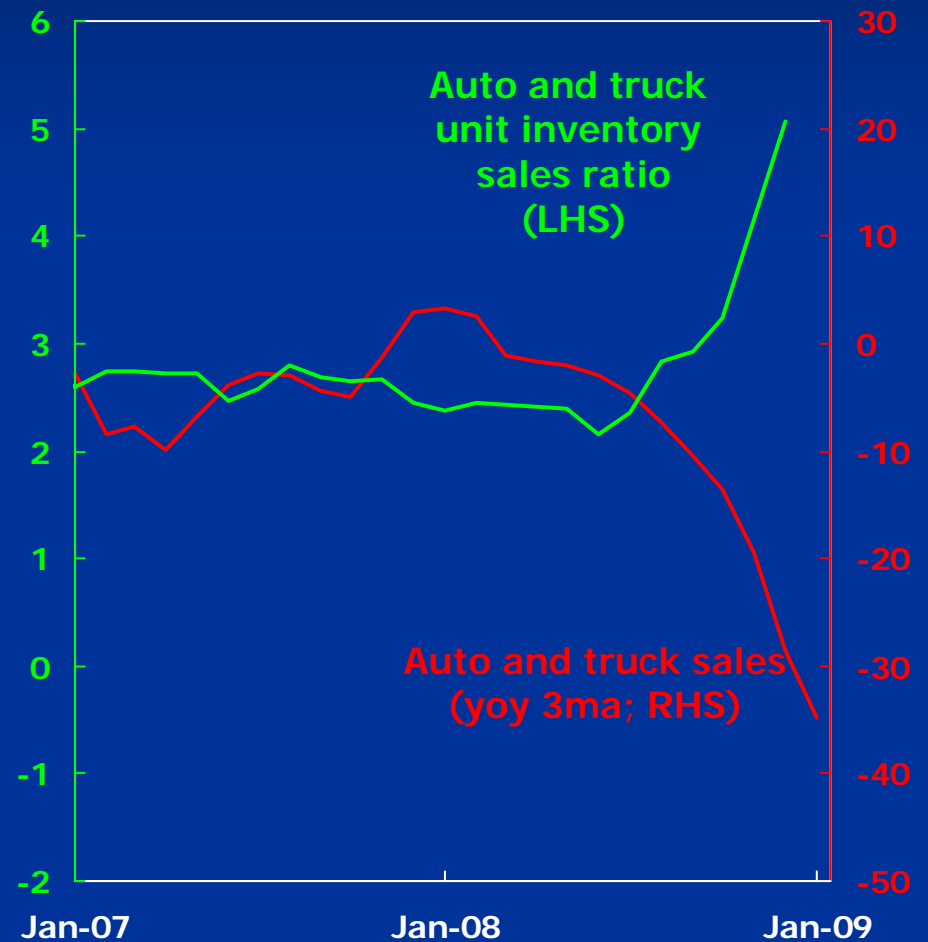
- Affecting portfolio decisions: Shift towards riskless assets (US T-bills) away from risky assets.
- Affecting consumption/saving decisions: Wait and see, by consumers and firms.
- Both making the crisis much worse. High spreads. Demand collapse.

Elevated Uncertainty Weighing on Spending

VIX , U.S. Confidence & Spending



U.S. Vehicle Sales (in percent)



Source: Bloomberg L.P.
 1/ Average of year-on-year percent changes during NBER recession dates from 1980-2008.

Behind the Forecasts—Emerging Economies

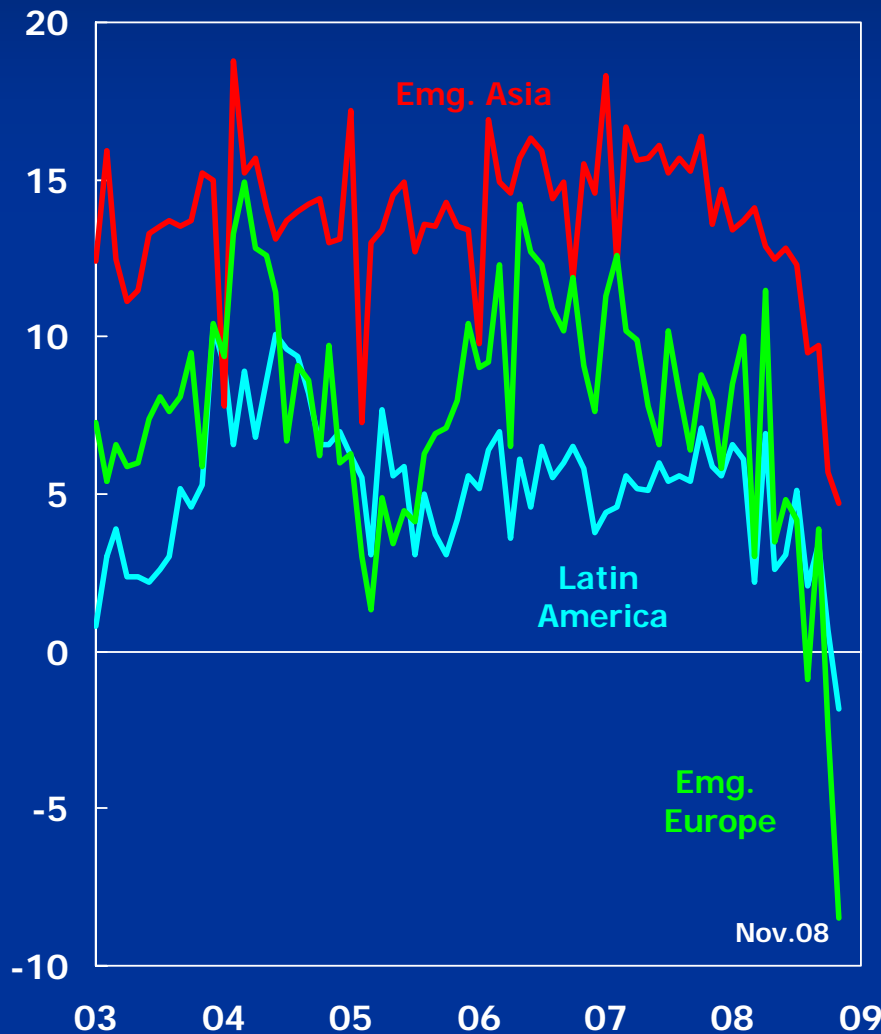
Three Major Shocks:

- Declining External Demand and Exports.
- Tighter Credit (External Financing).
- Lower Commodity Prices.

Emerging Economies Growth Slowed By Falling Exports and Industrial Production

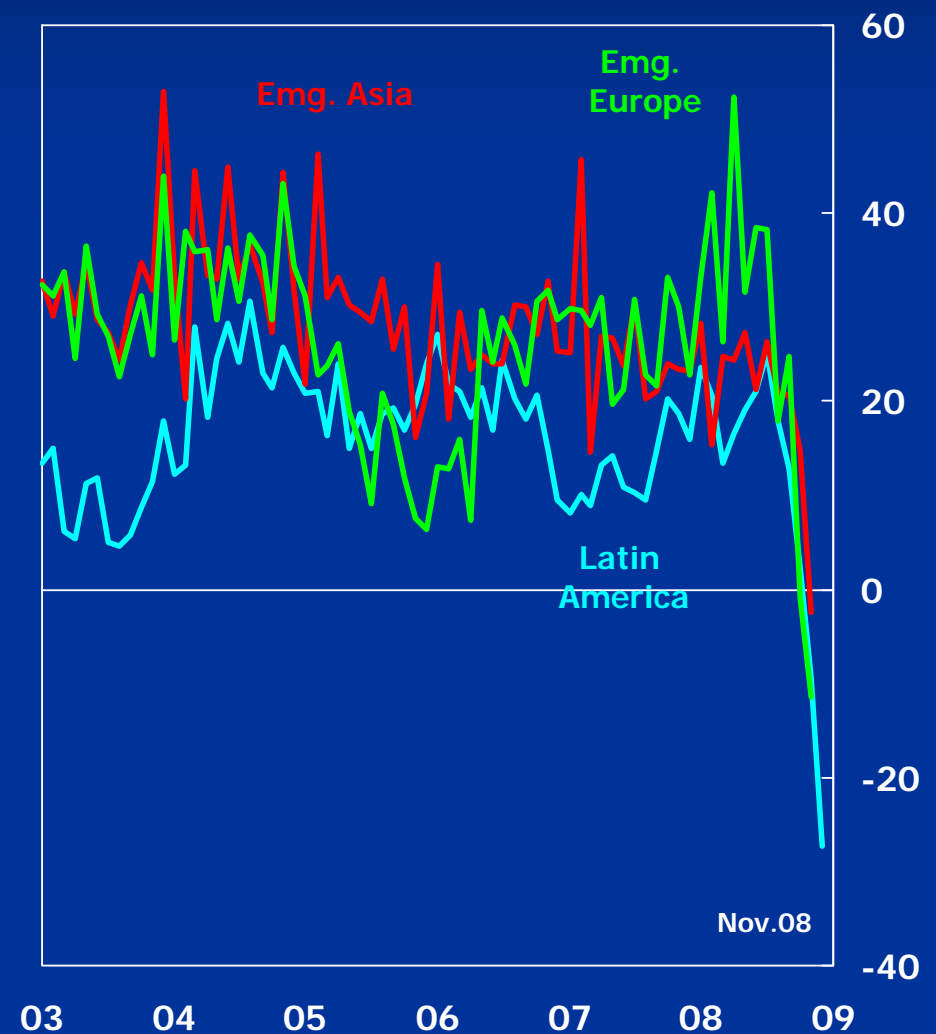
Industrial Production

(in percent change from a year earlier)



Merchandise Exports

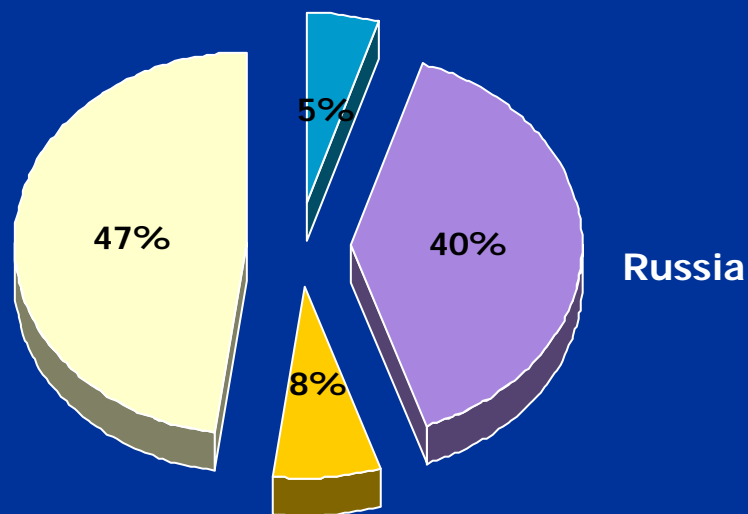
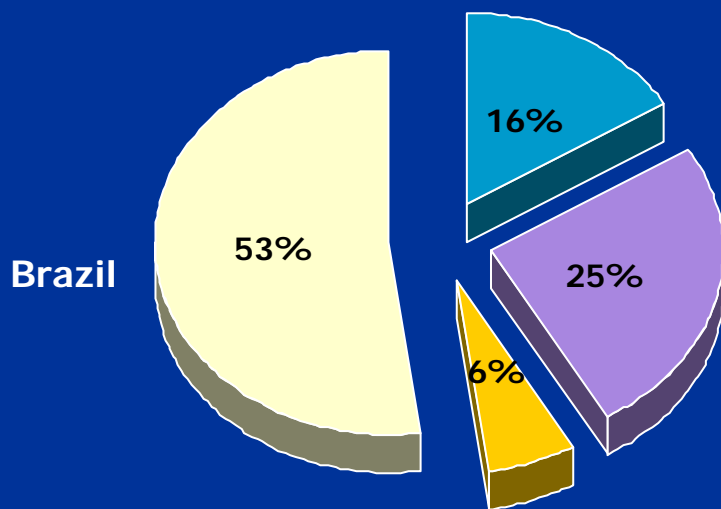
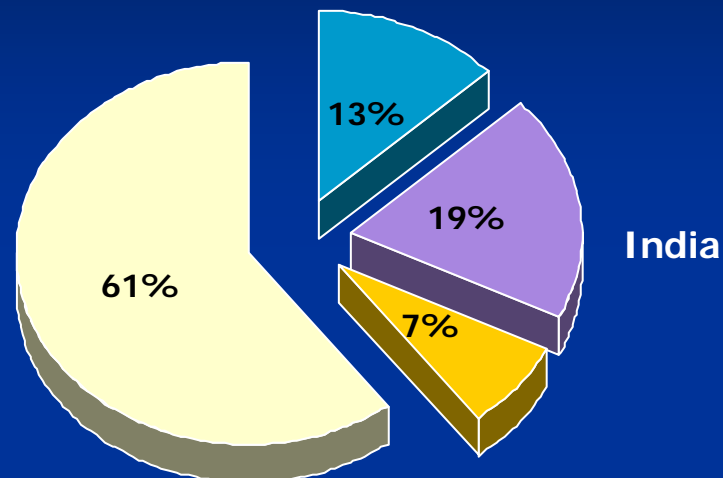
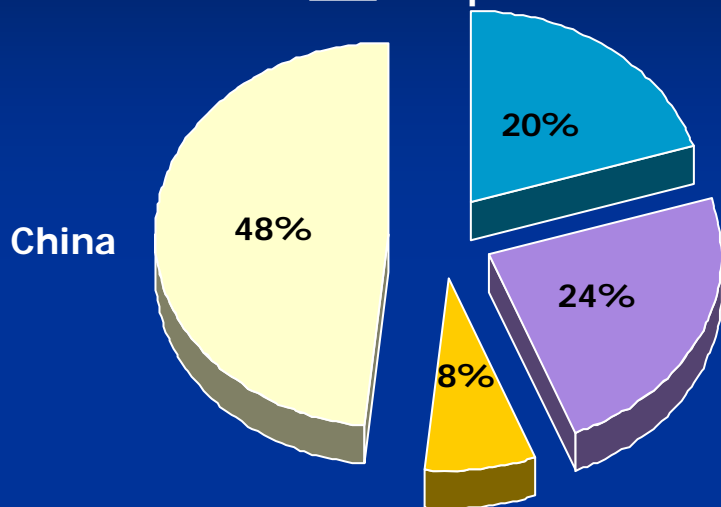
(in percent change from a year earlier)



Major Emerging Economies Remain Focused on Exports to Industrial Countries 1/

(in percent of Exports to World)

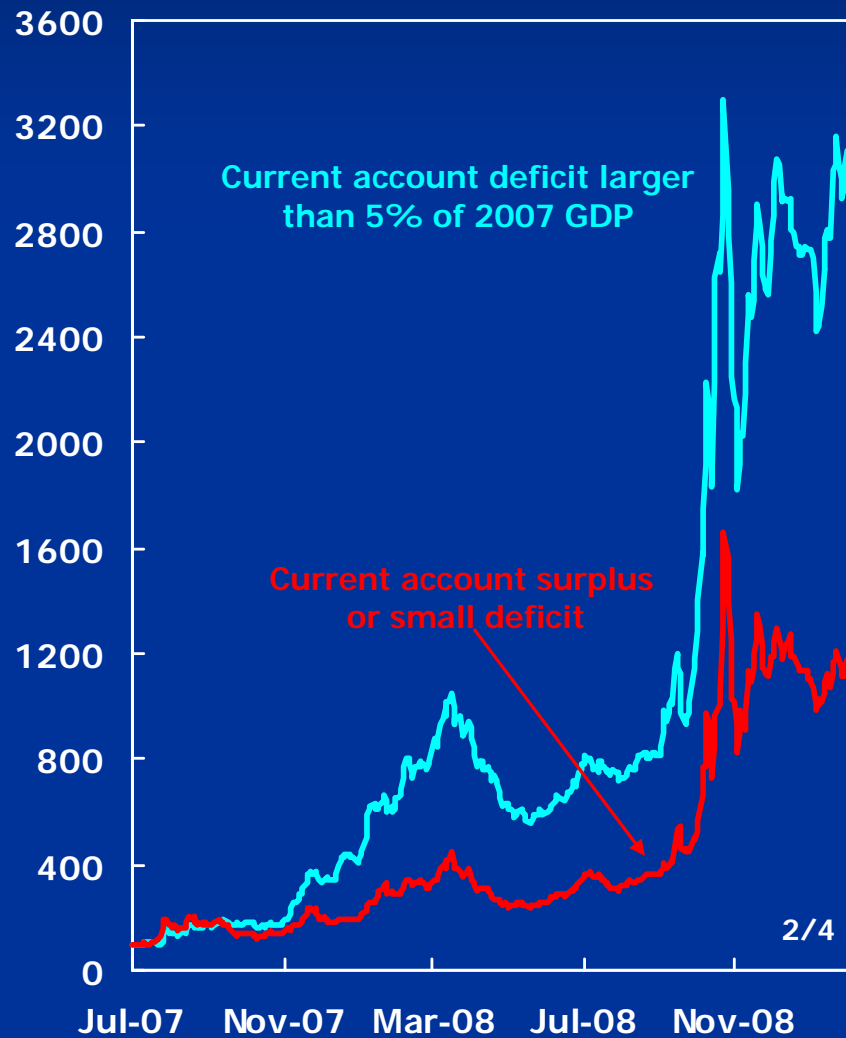
- United States
- Japan and Euro area
- Other Industrial countries
- Rest of World



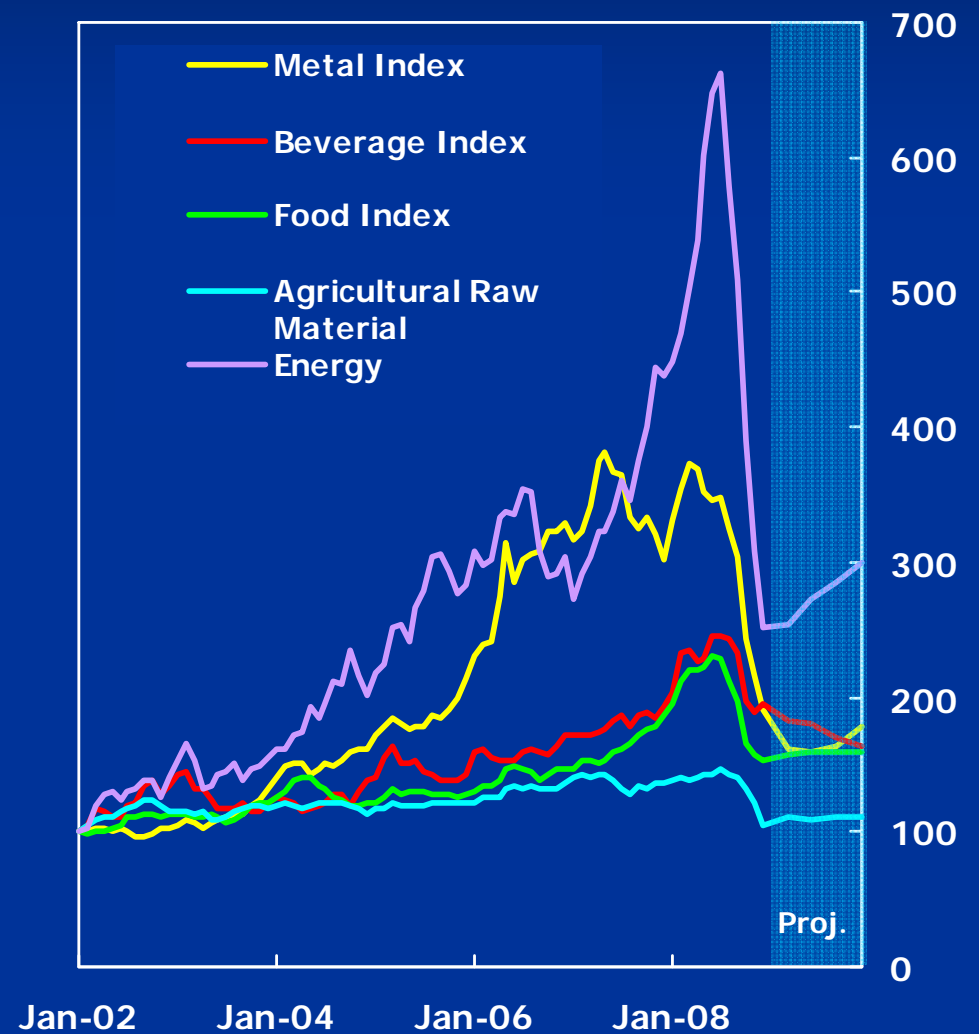
Source: IMF, Direction of Trade.
1/ Sum of Jan 2008 through July 2008.

External Financial Pressures and Lower Commodity Prices

Emg. Sovereign CDS Spreads (index: 7/1/2007=100)

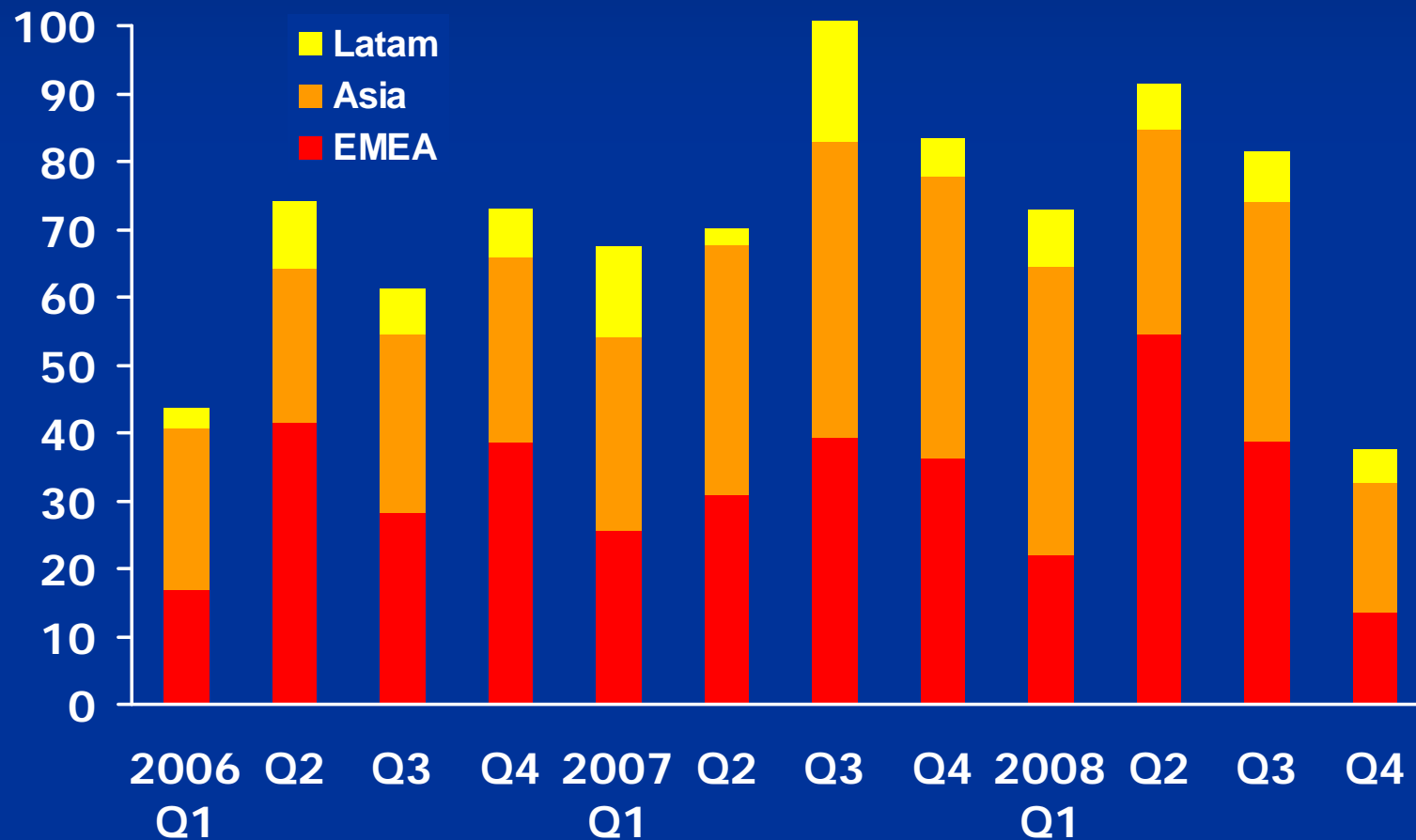


Commodity Price Indices (index: Jan. 2002=100)



Syndicated Lending to EMs – Contracted Sharply

Syndicated Lending to Emerging Markets (in billions of U.S. dollars)



Source: Dealogic.

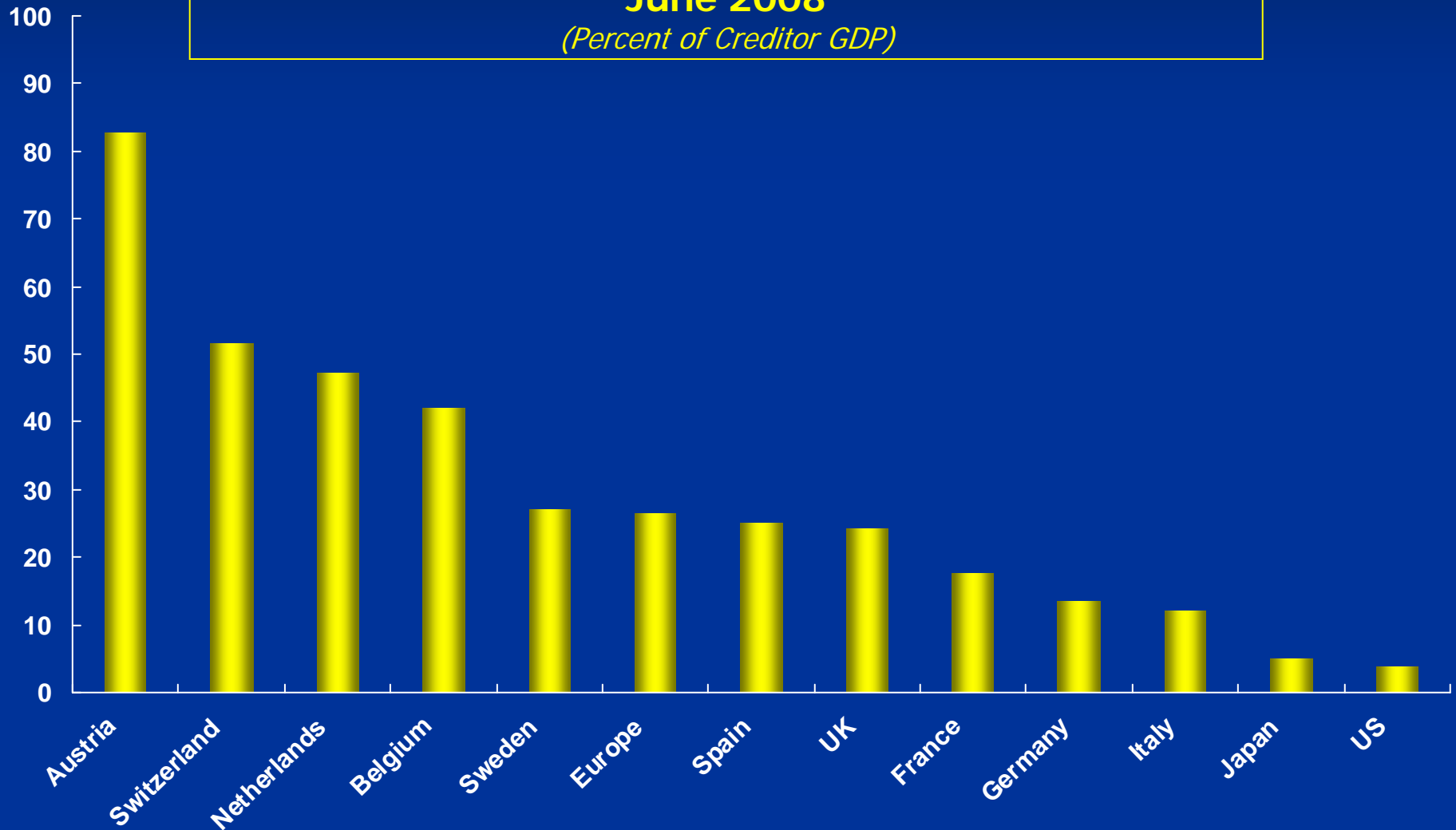
Market-based financing tighter with home bias

Emerging Markets Bond Financing (in billions of U.S. dollars)



Lower Growth in EMs Will Feed Back to Advanced Economies' Banking Systems

Claims on Emerging Markets by BIS Reporting Banks, June 2008
(Percent of Creditor GDP)



Policy Challenges

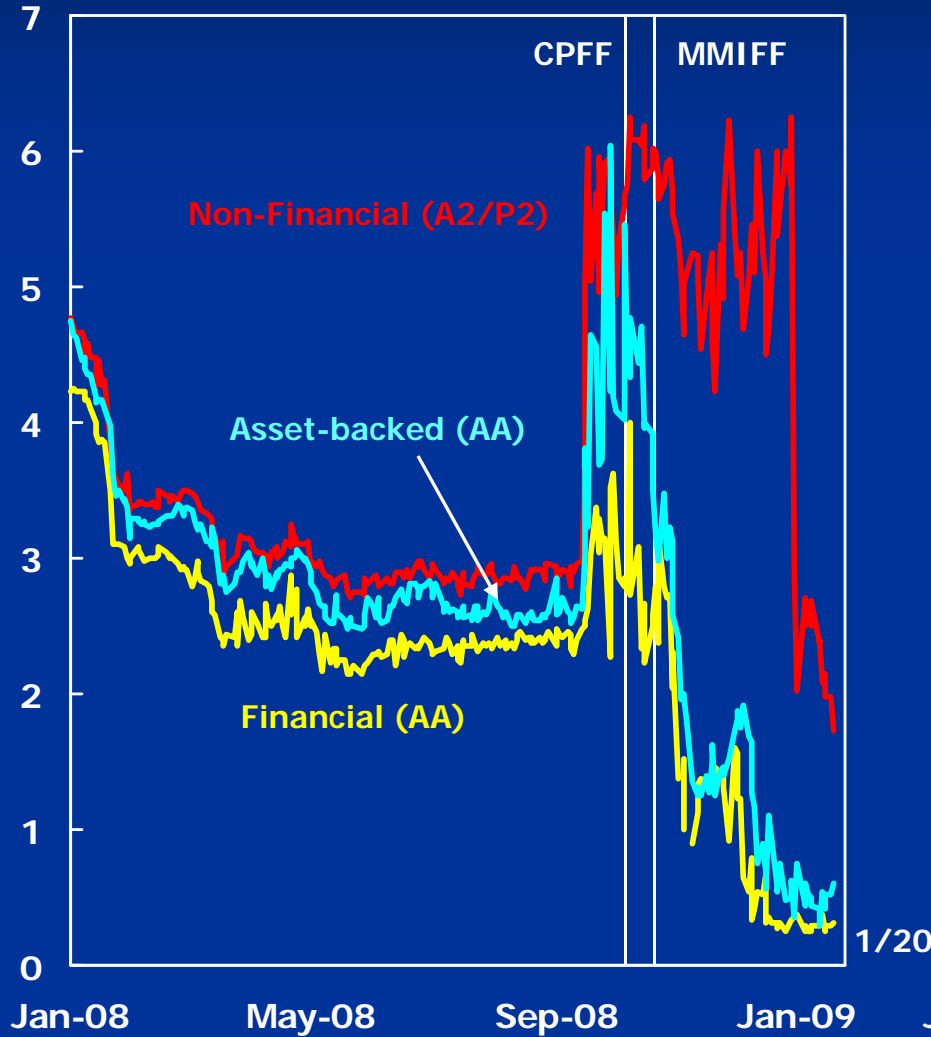
Policy Challenges—Advanced Economies

- Policy action is need on two fronts – (i) Restoring financial sector health; and (ii) bolster demand.
- Overarching challenge is to address “distressed assets” on bank balance sheets, followed by a recapitalization (on a large scale) of viable banks.
- Monetary policy may need to focus on “credit easing.”
- Need to boost demand (fiscal stimulus)—focus more on spending (higher multipliers) rather than general tax cuts.
 - Big challenge if long rates go up (sustainability concern), then much of the positive effects is offset.
 - Need well defined, credible medium-run plans.

Counteracting Portfolio Shifts through "Credit Easing"

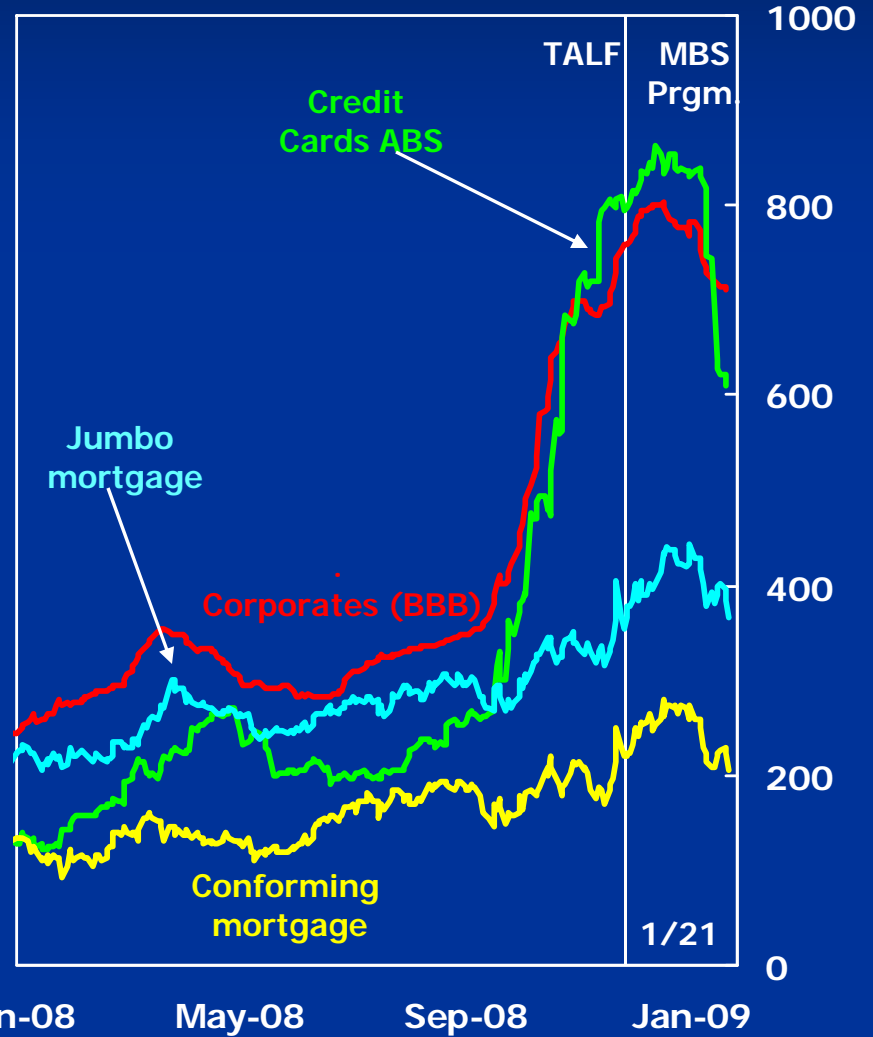
U.S. Commercial Paper Rates

(30-day rates; in percent)



U.S. Credit Spreads

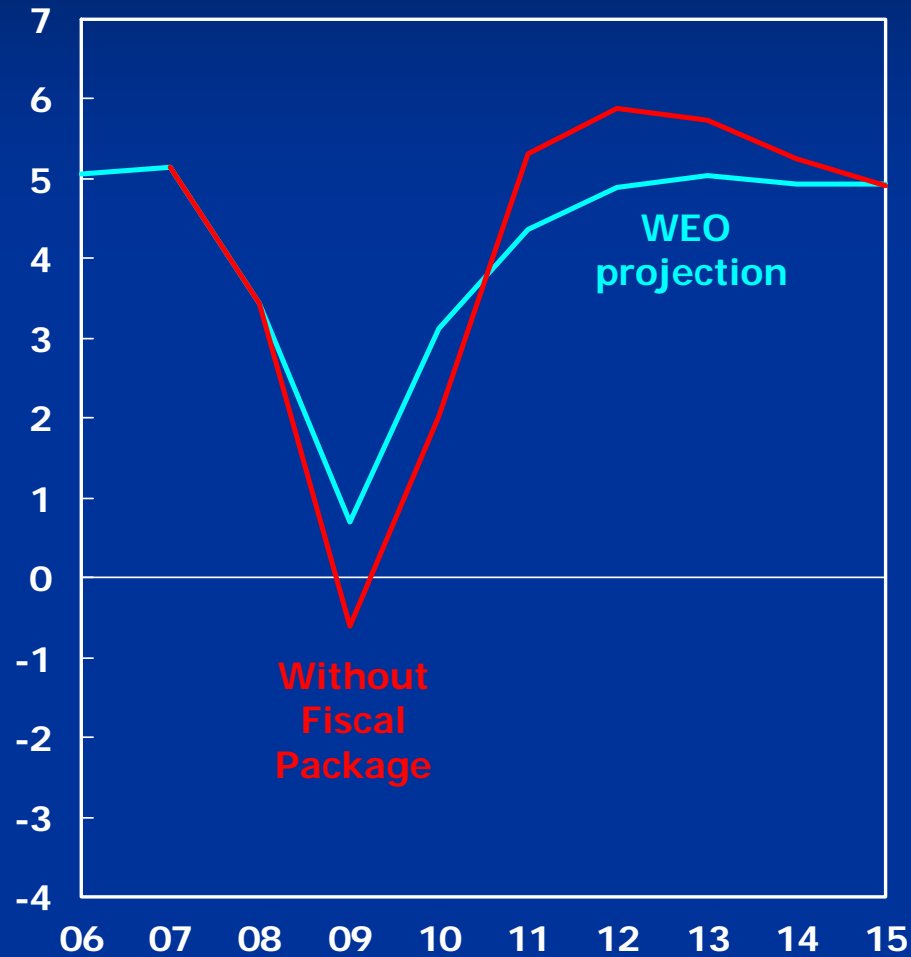
(over Treasuries; in basis points)



Global Growth and Contributions of Fiscal Stimulus 1/

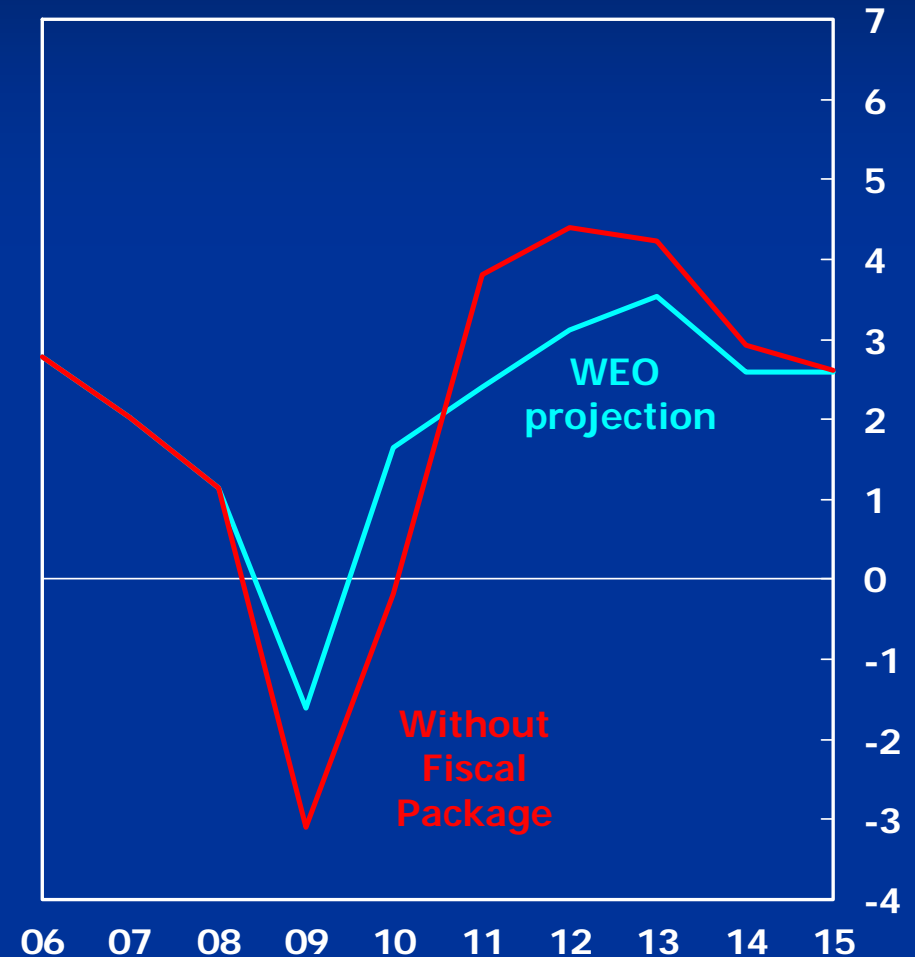
World

(in percent, GDP Growth)



United States

(in percent, GDP Growth)



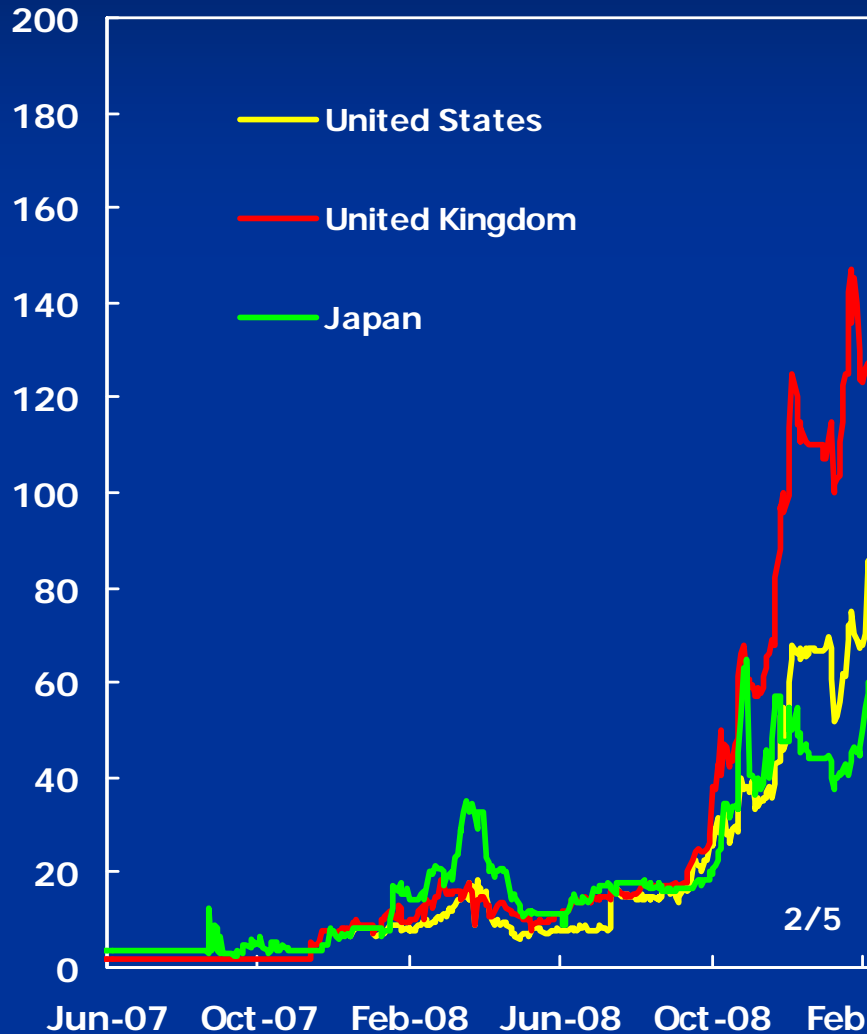
1/ GIMF simulation; fiscal shock based on G-20 fiscal packages plus two-year monetary accommodation.

Rising Concerns Over Fiscal Sustainability

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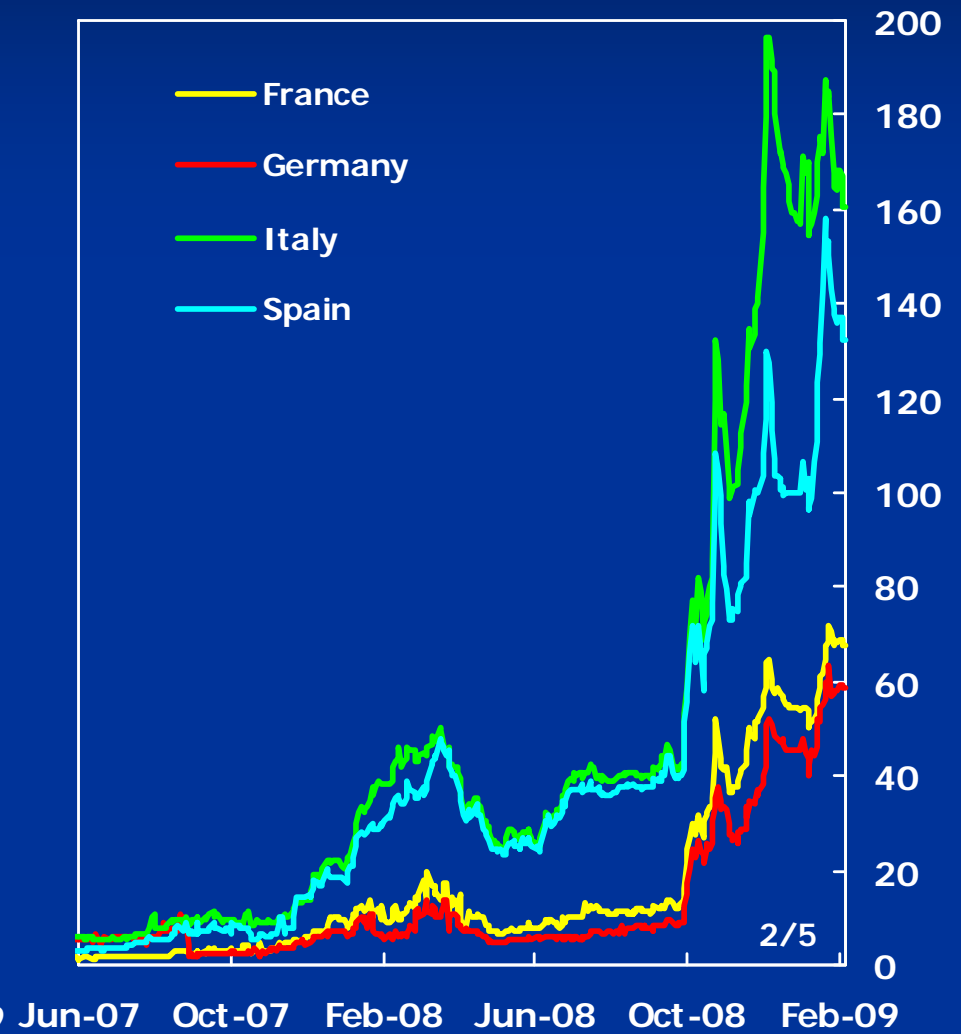
Industrial Economies

(5yr Sovereign CDS; in basis points)



Selected Europe

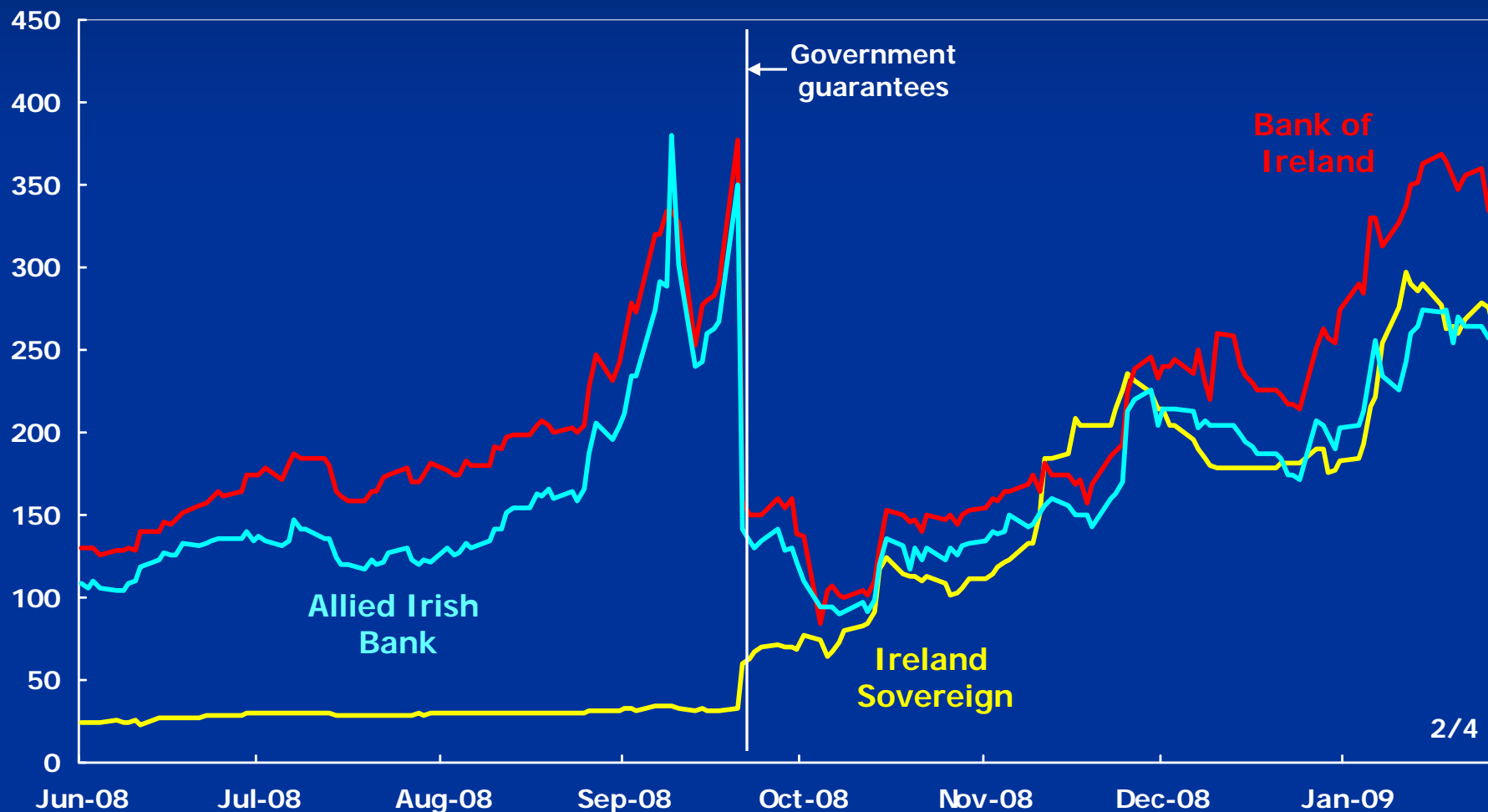
(5yr Sovereign CDS; in basis points)



Source: Bloomberg, L.P.

Ireland Sovereign and Bank CDS Spreads Before and After Public Guarantees

Irish Bank and Sovereign CDS Spreads
(5-year CDS Spreads; in basis points)



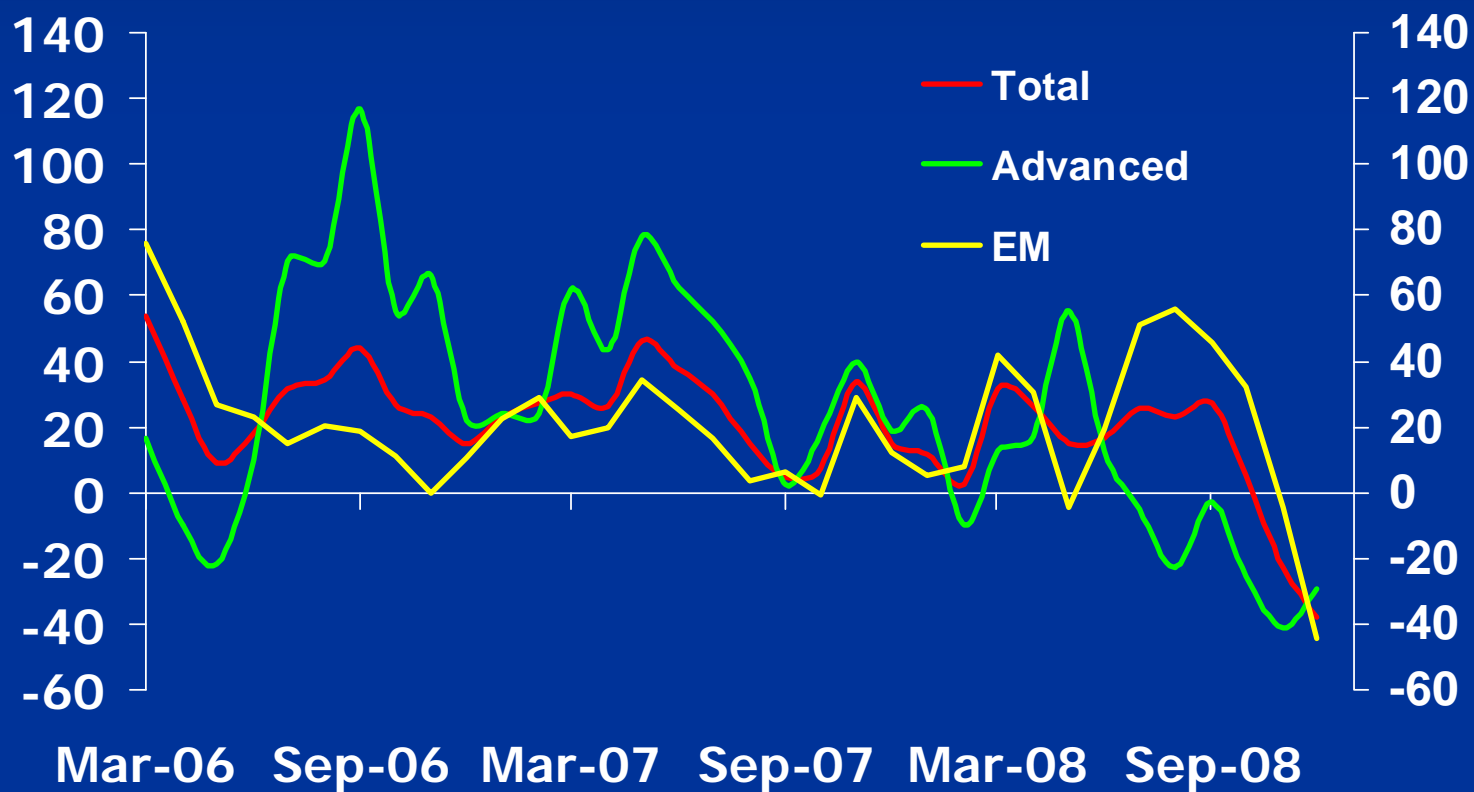
Policy Challenges—Emerging Economies

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- Use policy buffers to smooth the impact of interruptions or reversals in capital flows – recognize some capital flows may be permanent.
 - Countries with flexible exchange rate regimes, allow the exchange rate to absorb much of the pressures.
 - Increase the flexibility of the exchange rate regime, while ensuring the maintenance of a credible anchor for monetary policy
 - Use large stock of reserves for intervention to avoid disorderly market conditions.
- Continue providing liquidity support, to reduce risks that sudden stops in foreign capital could generate solvency problems.
 - Use reserve buffers to provide foreign currency liquidity.
 - Seek recourse to swap facilities (and lines for trade credit) from major advanced economy central banks and to the new Fund facility.
- Prepare contingency plans for limiting risks of bank runs, comprehensive mechanisms to reduce the risks of systemic solvency problems, and strengthen corporate work-out frameworks.

A Global Credit Crunch may Contribute to Sharp Drop in Trade Finance

Syndicated Loans for Trade Finance (%yoy change on 3-month moving average)

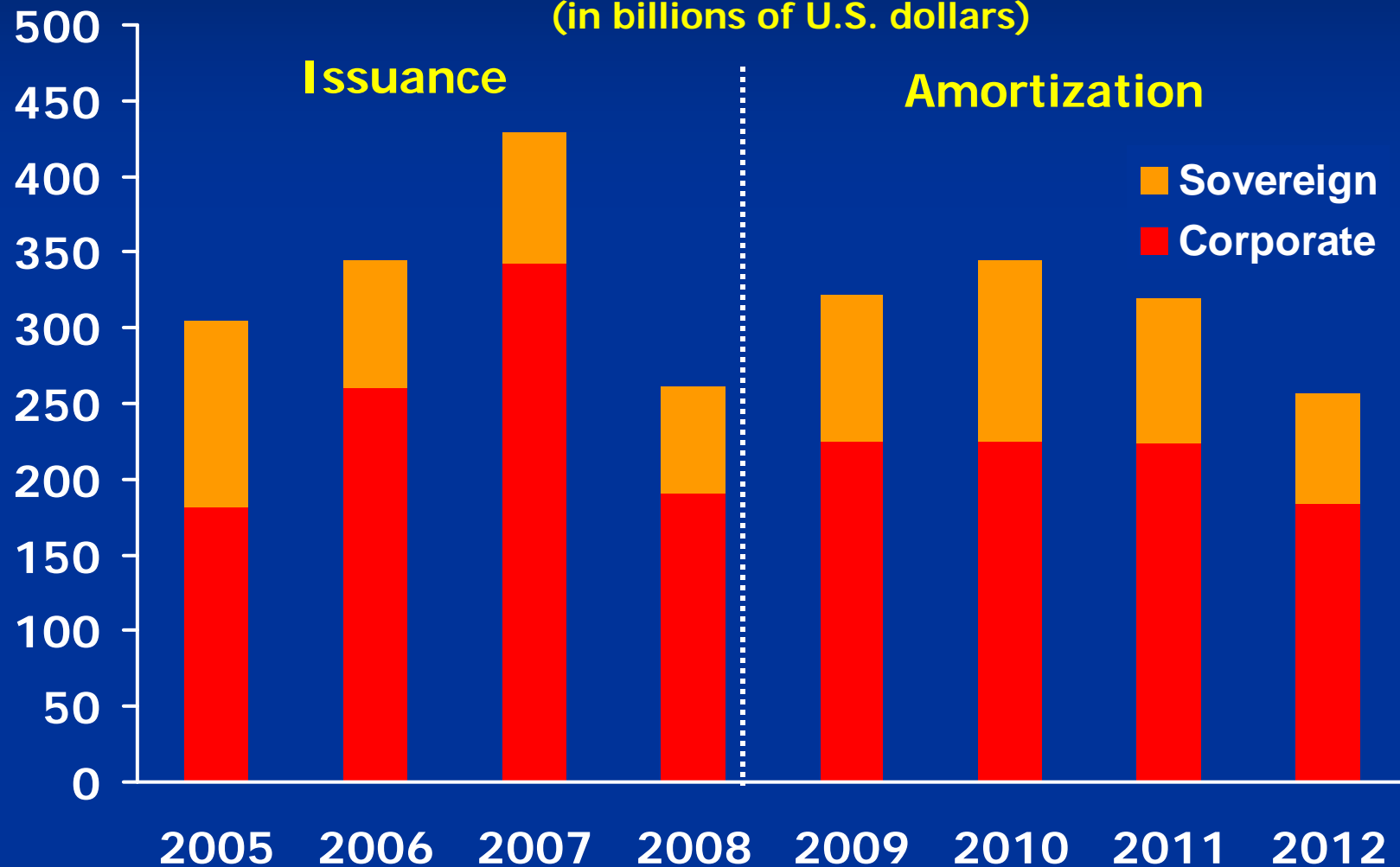


Emerging Market Corporates will have Large Rollover

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Needs in Coming Years

Historical Issuance and Upcoming FX-Denominated Debt
(in billions of U.S. dollars)



Source: Dealogic, Bloomberg, Staff Estimates