The Credit Crisis

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Outline

- The Crisis: Origins
- The Freeze
- Macroeconomic outcomes and responses
- Possible scenarios
- Medium Term Concerns

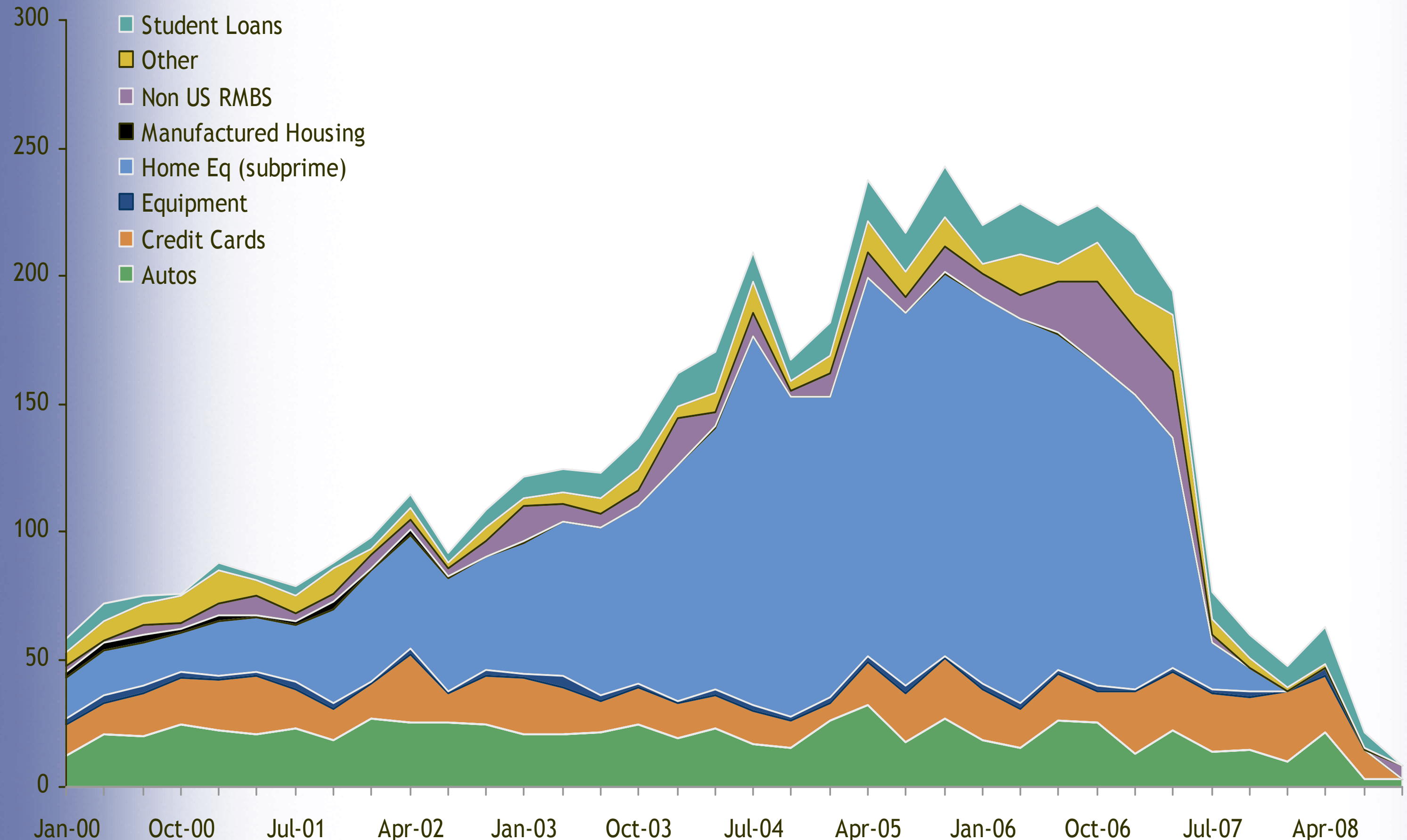
Bad Investments

- Child of past crises
  - Emerging markets => Industrial country corporations => Industrial country household
- Sophisticated U.S. Financial Sector
  - Matched mortgage borrowers from Arizona with lenders from Stuttgart.
- But risk stayed within the financial system.
  - “Earthquake insurance”
  - AIG and European banks
  - Where were the risk managers?

Financed with short term debt

- Short term debt cheaper because
  - Rolling over financing is easy in good times.
  - Lenders better protected.
  - Market requires banks to hold little capital because losses remote.
- Aided and abetted by low policy rates.

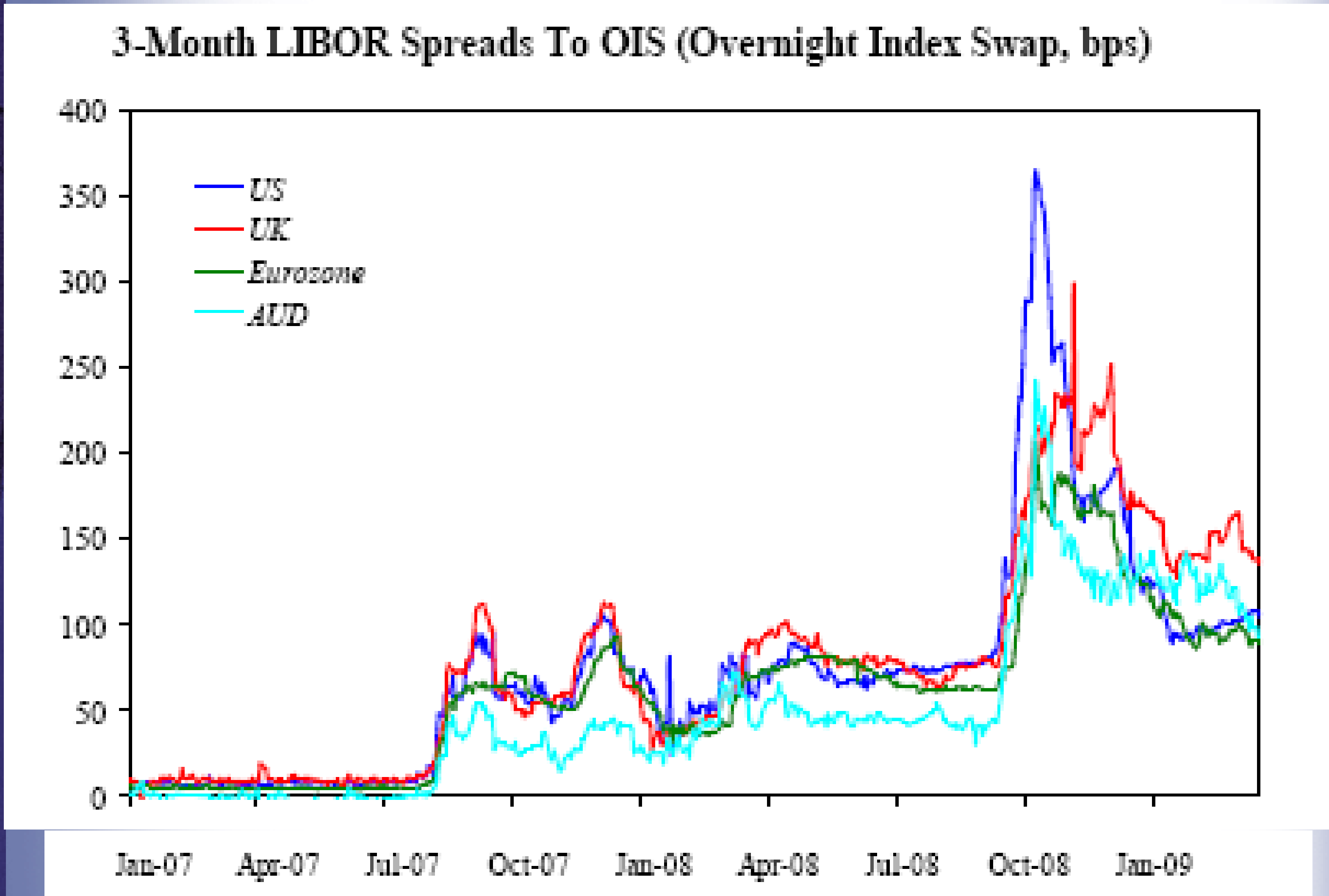
The Impact: Issuance of ABS



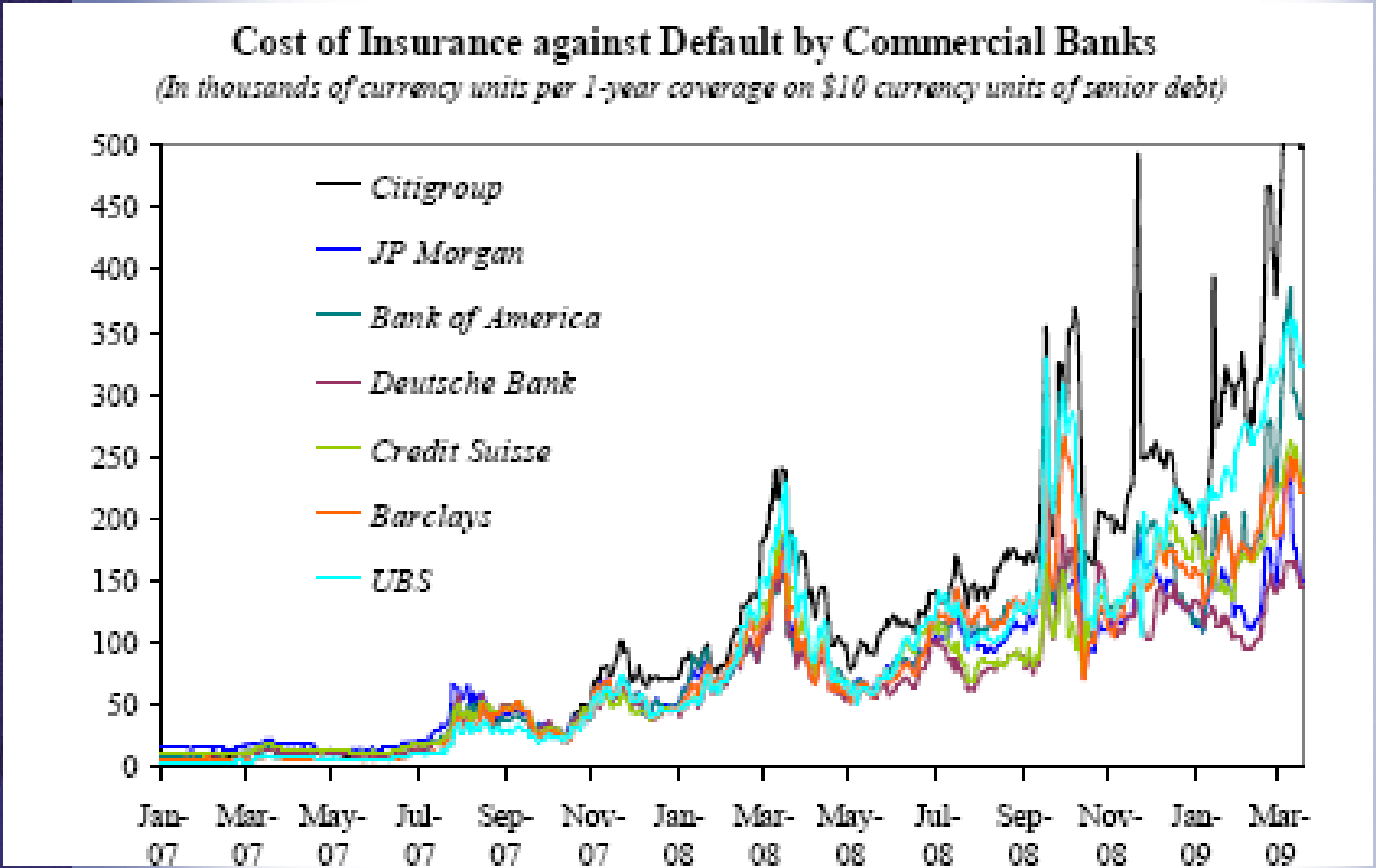
Source: JP Morgan

Credit markets freeze

- Banks unwilling to substitute for shadow financial system
  - Worries about borrower credit risk.
  - Worries about own liquidity if lenders want money back.
  - Worries about likely fire sales pushing securities prices further down.
- Banks unwilling to raise enough equity
- Banks unwilling to sell impaired assets
- Banks frozen: Problem of credit will get worse and will hamper recovery.



Source: IMF GMM



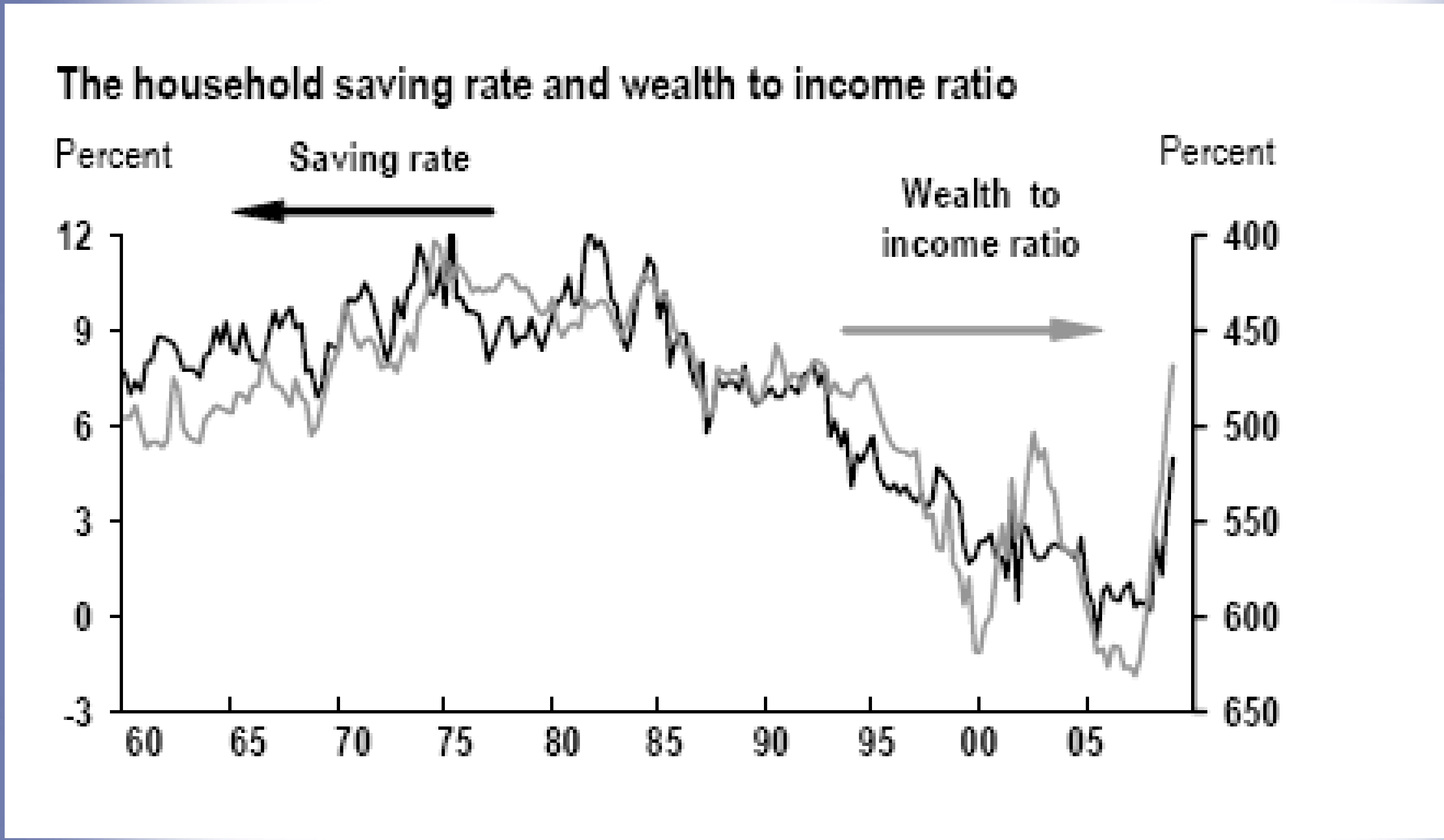
Source: IMF GMM

Macroeconomic response

- Typically monetary policy is the right tool – but policy has lost traction
  - Interest sensitive sectors impaired
  - Credit contraction shrinking investment and durable goods purchase

- Household consumption has slowed dramatically, savings up
  - – Wealth effects
  - – Labor market
  - – Credit
  - \+ Energy prices

Consumption in the United States

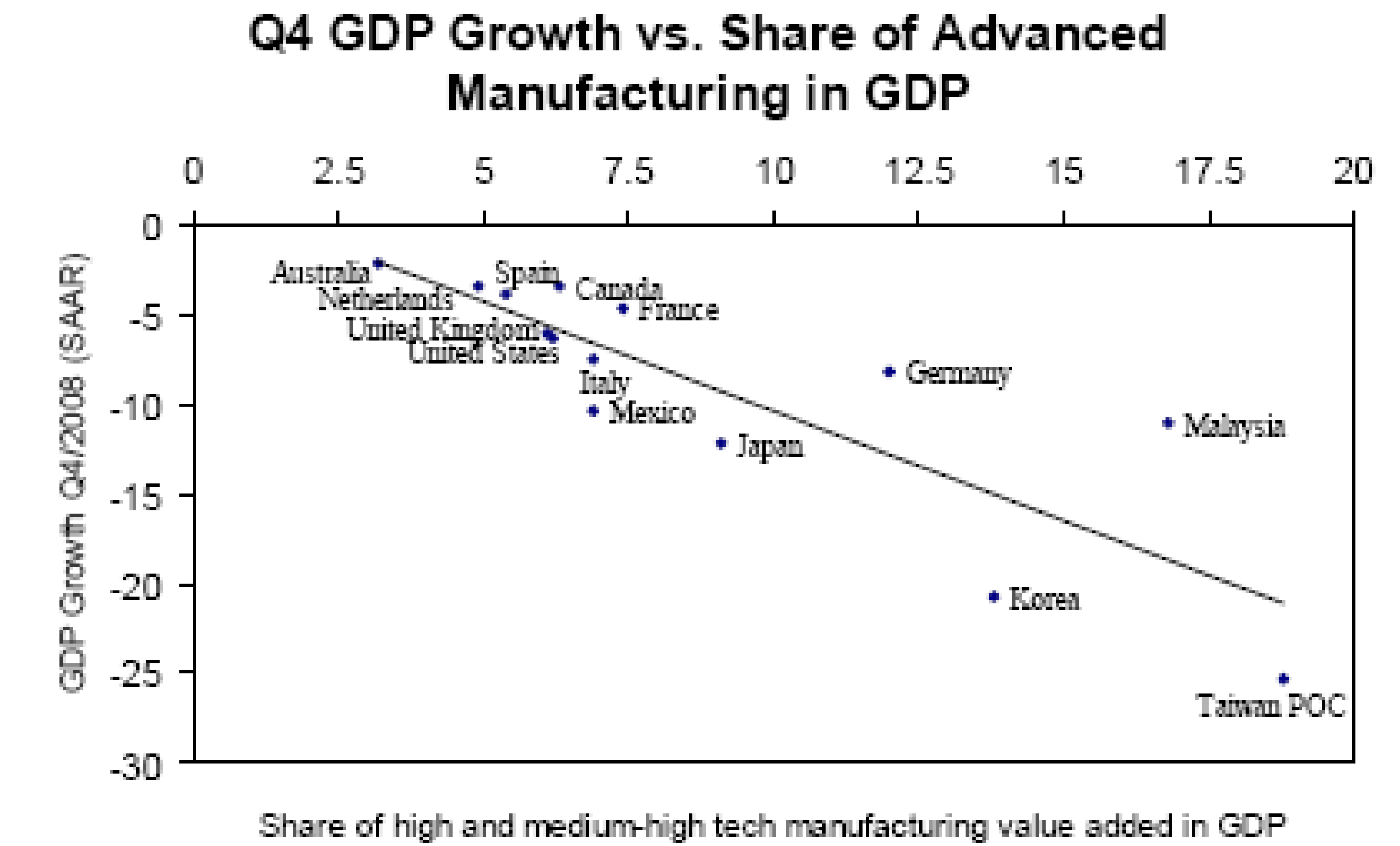


Source: JP Morgan

Macroeconomic outlook in other industrial countries.

- European collapse: External demand (Germany, Italy), housing (Spain, UK), and financial sector
  - Bank-based system in continental Europe exacerbates problems

- Japan: Collapse in exports, investment, and consumption
  - Corporate profitability falling because of reluctance to fire workers

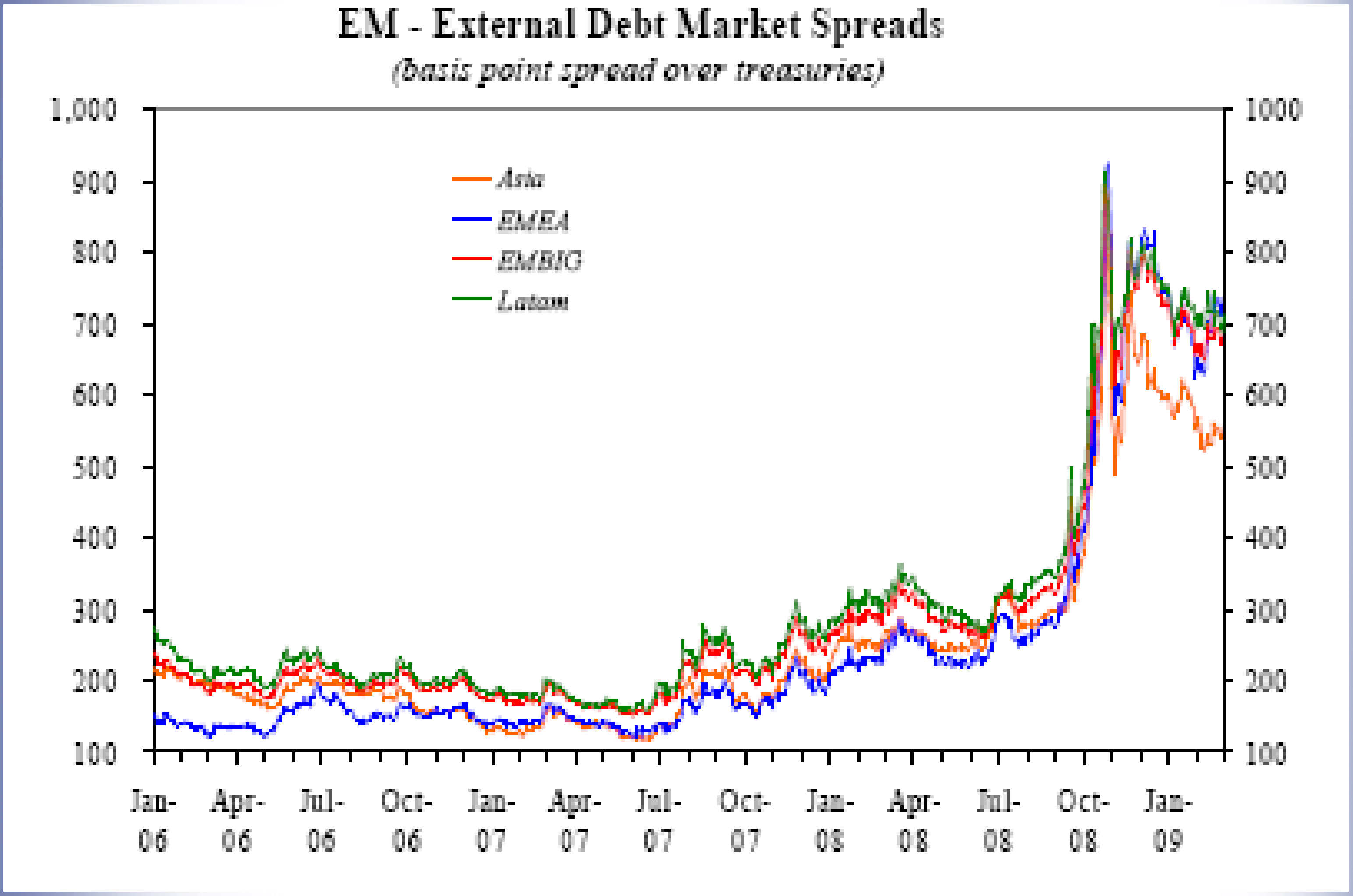


Sources: CEIC; Haver Analytics; OECD; and IMF staff estimates.
Note: For the definition of advanced manufacturing, see Figure 1.

Emerging market exporters

- External demand collapse
  - E.g., China and East Asia
    - Domestic demand picking up in China as a result of credit and stimulus, offsetting some of the export collapse
    - But too small to substitute for the U.S. household
    - Qualitatively different
  - Commodities producers (e.g., oil)
    - More favorable in medium term?

- What about those reliant on foreign financing?



Source: IMF GMM

Emerging market importers

- Sudden stop of external flows.
  - Shortage of risk capital for investment
  - Drop off in safe sources like remittances
  - Currency mismatches, especially in corporate and household sector
- Danger spots around the world
  - Central and Eastern Europe, Argentina, South Africa, Turkey
  - Many countries vulnerable if recession persists
- Lesson: Neither a borrower nor a lender be!

Where will demand come from?   The U.S.!

Why will the U.S. be the residual demander of last resort?

- Less social insurance – less public tolerance for unemployment
- More willingness for government/Fed to do what it takes.
- More willingness of the world to fund the US in times of trouble
  - Dollar stays strong

Key factors for US demand Revival

- The Fed
  - Credit Easing: TALF, CP program, Treasury purchases
  - Insuring debt
- The Fiscal Stimulus
- The Financial Sector finding a bottom
- Reviving the Housing Sector

Macroeconomic response contd.

- Fiscal Policy:
  - Support for extending benefits, spending on health, energy, education, research, infrastructure
  - Right priorities in the medium term but is it all too much? Political capacity!
  - Concerns
    - Spending back loaded
    - Excessively rosy predictions of growth?
    - Trillion dollar deficits till 2013?
    - Incentives and crowding out
    - Debt to GDP of 80 percent?

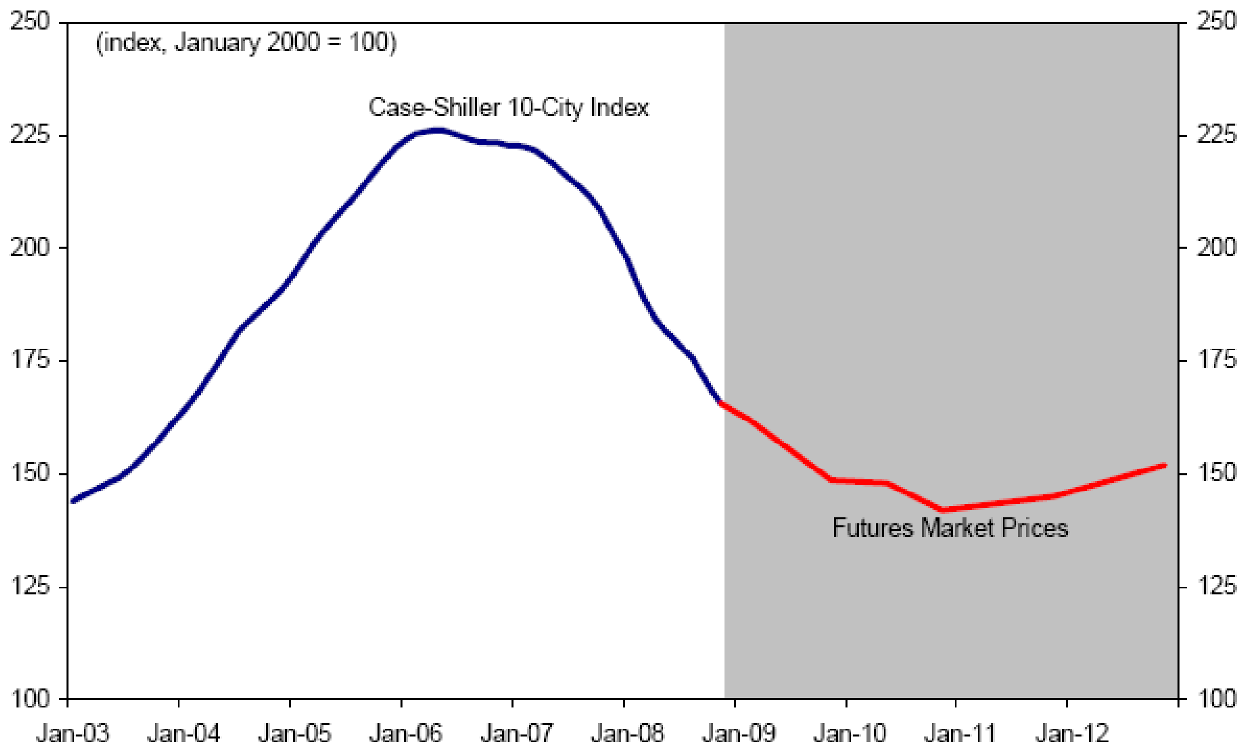
When will credit markets find a bottom?

- When the risk of large institutions collapsing is small.
  - Guarantee debt
  - Audit institutions (the Stress Test)
  - Clean up bank balance sheets by isolating/selling problem assets
    - Good bank/bad bank
  - Recapitalize banks through a mix of private and public funds
  - Some actions may have to be mandated

- This will allow asset prices to recover and credit to flow more freely, thus not impeding recovery.

- Will require more public money: political support weak

When will housing find a bottom?

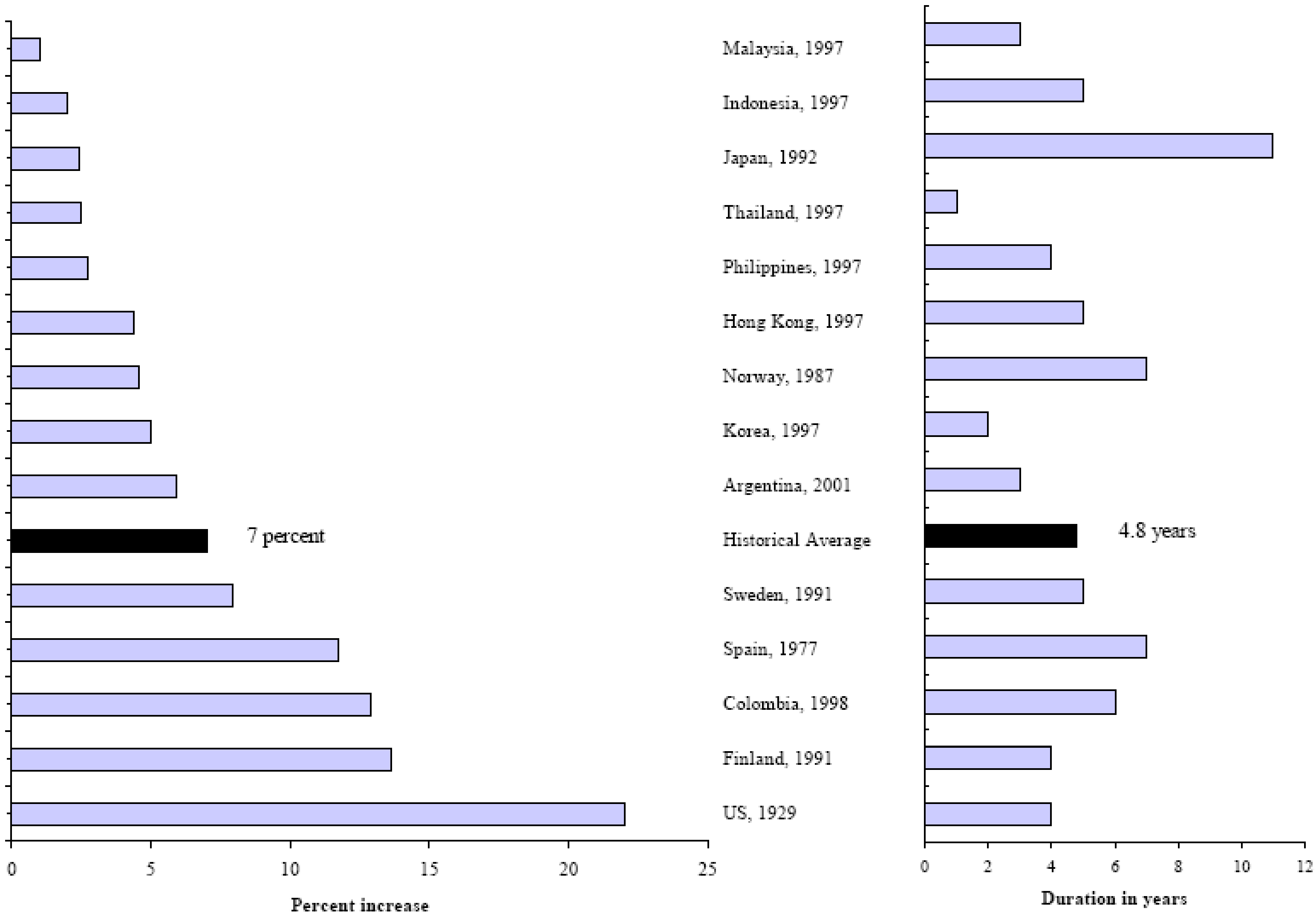


Source: Haver Analytics and Bloomberg LP.

Possible scenarios

- V shaped
  - Inventory adjustment comes to an end
  - Stimulus kicks in
  - Bond markets substitute for bank credit
  - Confidence returns
  - Policies need to be appropriate and well-executed – financial sector key
- U shaped
  - Households continue increasing savings
  - Financial sector is not cleaned up quickly
  - Housing problems persist
  - Too many bailouts
  - Unemployment goes to 10-12%.
- L shaped (The D word)
  - Political incompetence
  - Protectionism
  - Societal conflict, perhaps war

Past Unemployment Cycles and Banking Crises: Trough-to-peak
Percent Increase in the Unemployment Rate (left panel) and Years Duration of Downturn (right panel)



Sources: OECD, IMF, Historical Statistics of the United States (HSOUS), various country sources, and authors' calculations.

Medium term Concerns:
1) Pullback from Globalization

- Both surplus and deficit countries badly affected, the latter worse=>Pull back from globalization?
  - Is $500 billion in reserves too little?
- Global imbalances -- where will demand come from
- Restrictions on cross-border investment
  - Fear of multinationals, including multinational banks

Medium term Concerns:
2) Inflation

- Underinvestment
  - E.g., Energy
- Overregulation, increase in costs and reduction in competition
- Government expansion
  - Large fiscal deficits
  - Explosion in government debt
- Inflation
  - Cost push and weakening of central bank credibility

Medium Term Concerns:
3) Political change

- More hostility to markets and friendliness to government action
- Less support for capital and property rights
  - More willingness to support organized labor?
- More willingness to weaken competition and entry, especially foreign
- Advantages of size? Incumbency?
- Implications for innovation and productivity growth.

Medium term: Who will emerge stronger?

- More resilient and flexible political system
- More flexible economic system
  - Reorienting production
- Where less damage has been done to middle class wealth.
- Government debt? Foreign exchange reserves?

The Silver Lining

- A more sustainable process of global growth?
- A rethinking of international economic architecture?
- Getting finance back to basics?

THANK YOU!

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