

The Impact of Global Capital Flows and Foreign Financing on the US Mortgage Market

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Some Stylized Facts

- **US Running Large Current Account Deficits (Over \$856 billion in 2006, or over 6% of GDP)**
- **China's Trade Surplus with US \$232 billion**
- **Surplus Being Channeled into Purchases of Dollar-Denominated Securities**
- **Emerging Economies, Oil Exporting Countries plus Japan, UK and tax havens Financing US Deficits**

These Large Foreign Purchases of US Treasuries and Agencies Raise Two Key Questions

- **Are these purchases and foreign holdings sustainable?**
- **What is the likely impact on US Treasury and mortgage interest rates if foreign investors, begin to redeploy their investment resources?**

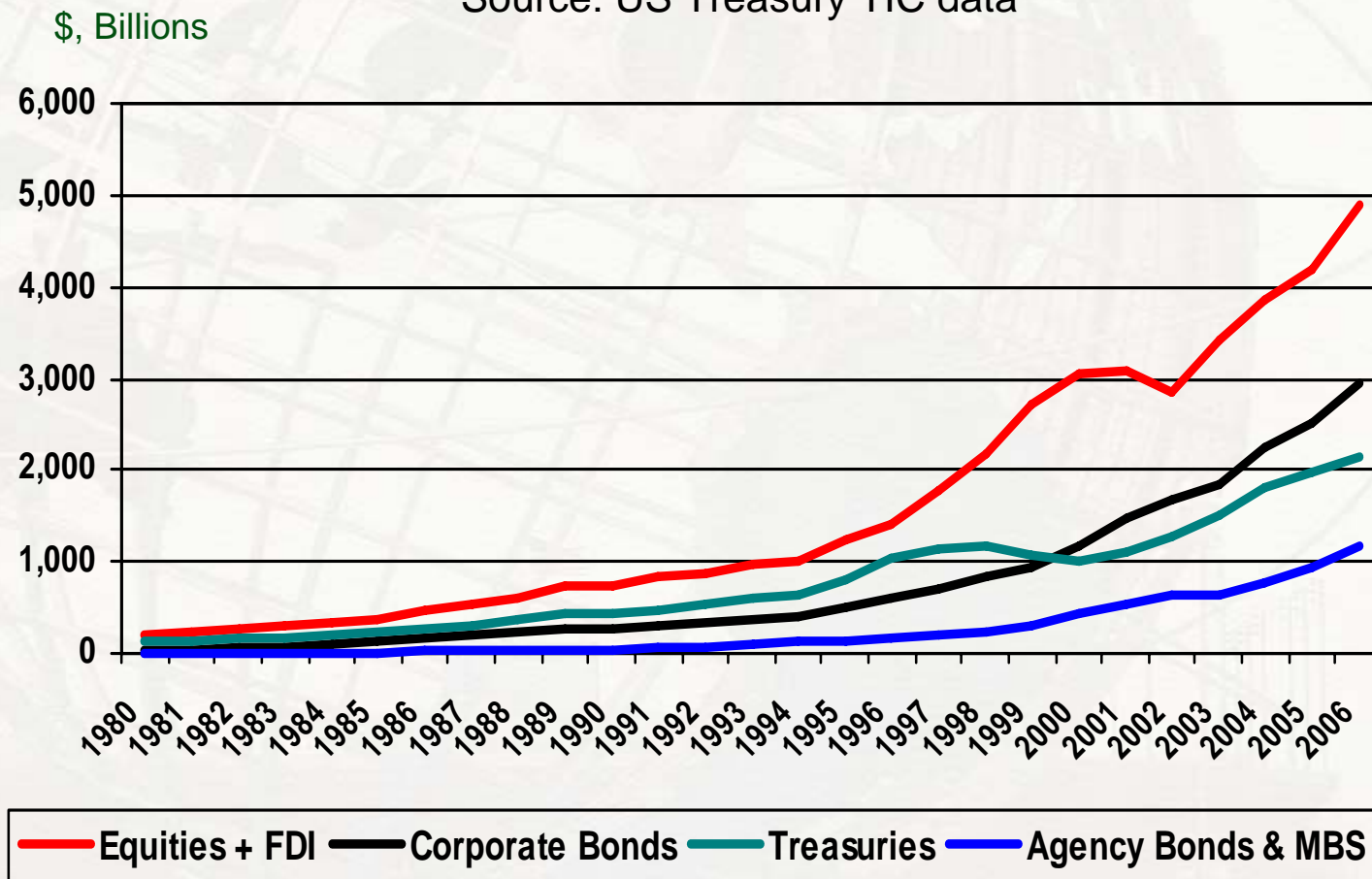
Total Credit Market Debt Held by Rest of World as Share of Total US Credit Market Debt Outstanding; 1945-2006



Source: Flow of Funds;
Table L 1

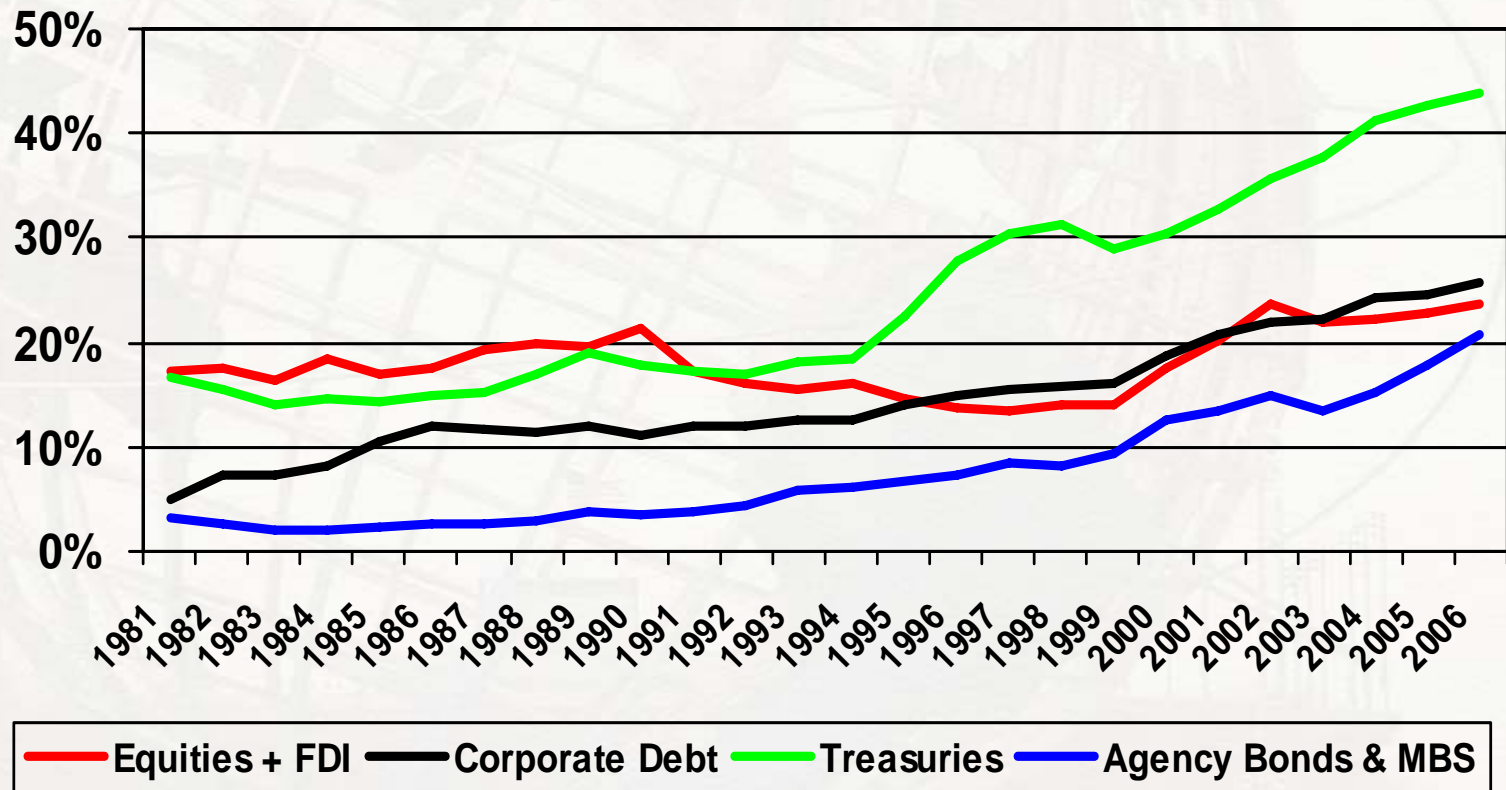
Foreign Holdings of US Securities

Source: US Treasury TIC data



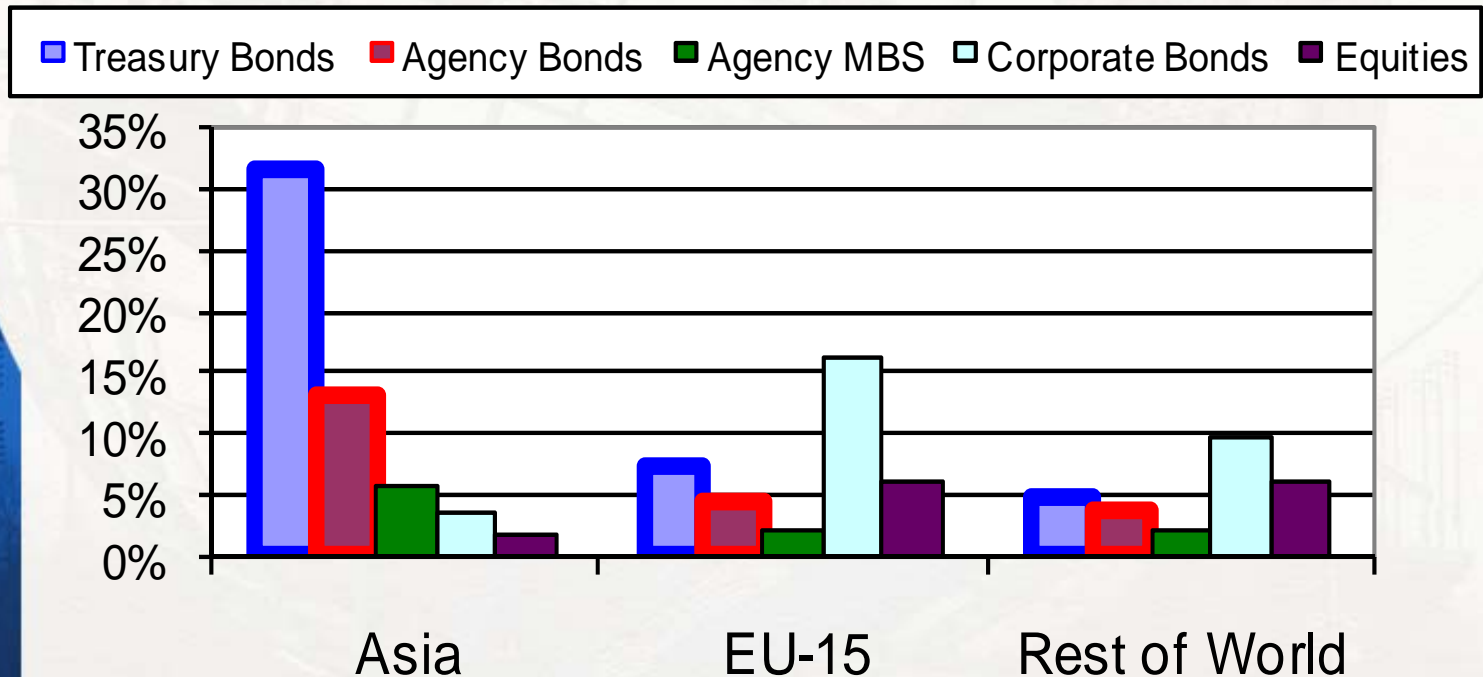
Foreign Holdings of US Securities as Share of Total Amount Outstanding

Source: US Treasury TIC data; Federal Reserve Flow of Funds



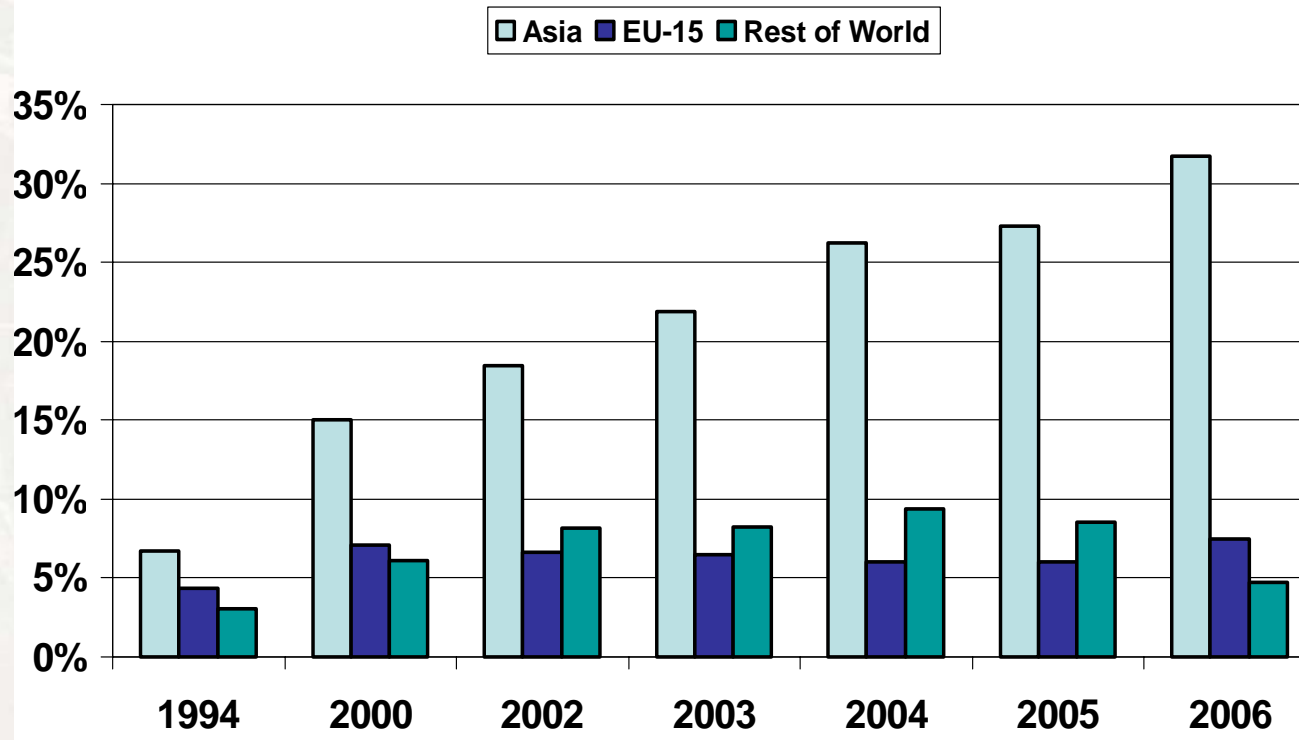
Foreign Holdings of US Securities as Shares of US Security Class Outstanding, by World Region, 2006

(Source: Federal Reserve Flow of Funds and Treasury TIC Data)



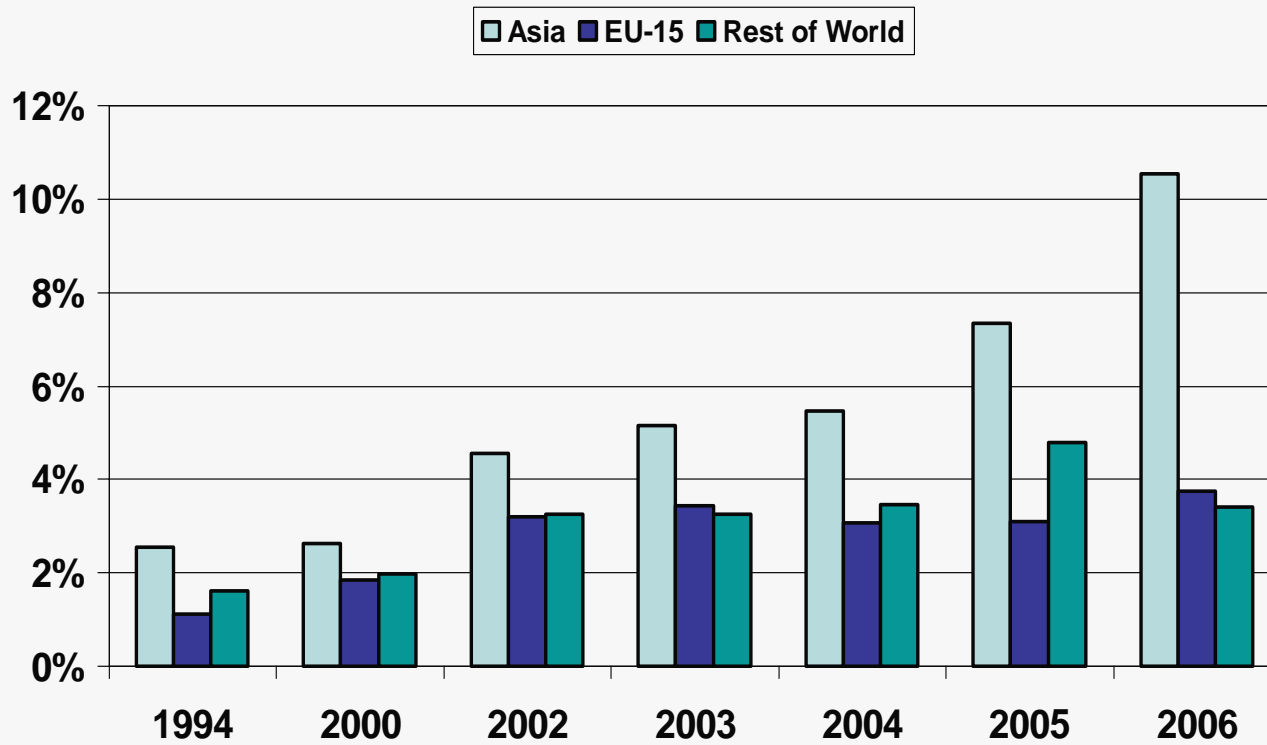
Foreign Holdings of US Treasury Securities by Region and Year, As Shares of Total US Treasuries Outstanding

(Source: US Treasury TIC Data)



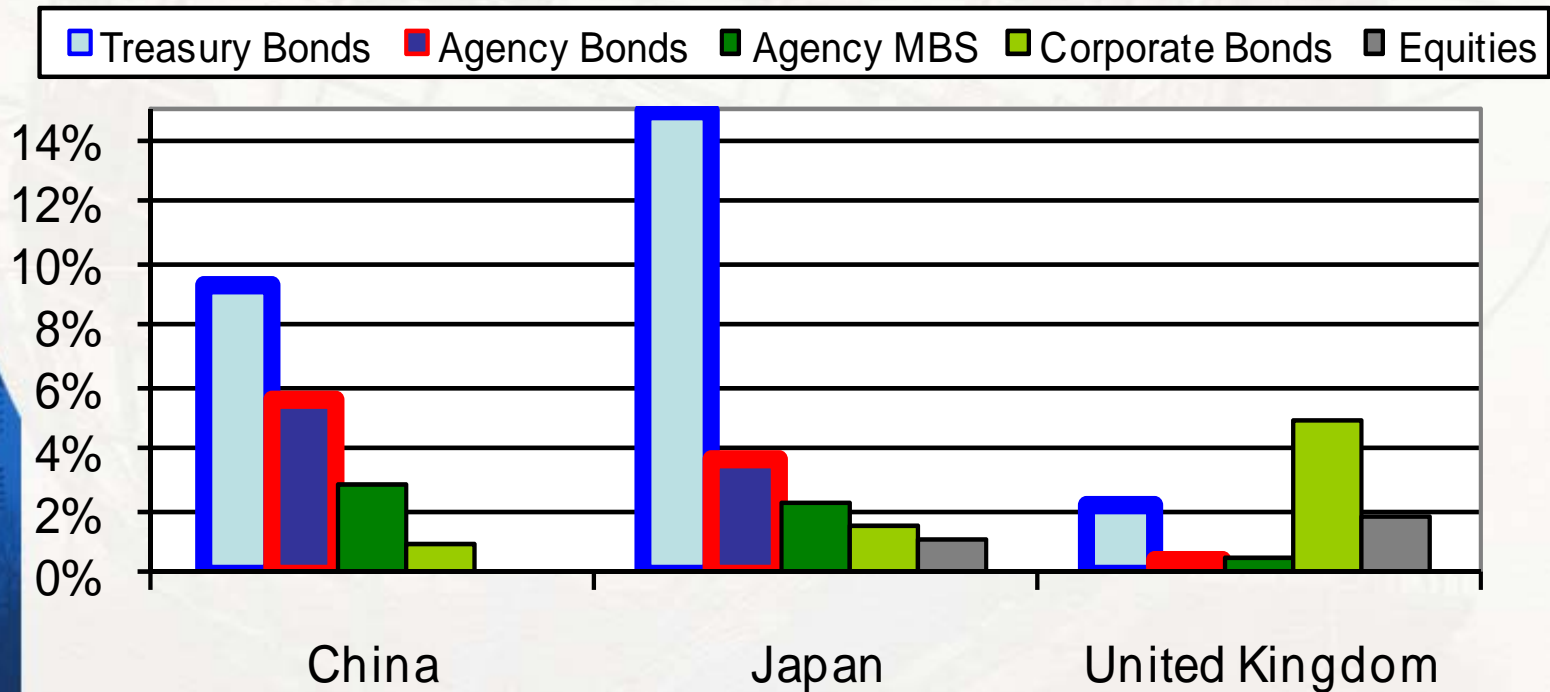
Foreign Holdings of US Agency Bonds and MBS by Region and Year, as Shares of Total Agency Securities Outstanding

(Source: US Treasury TIC Data)



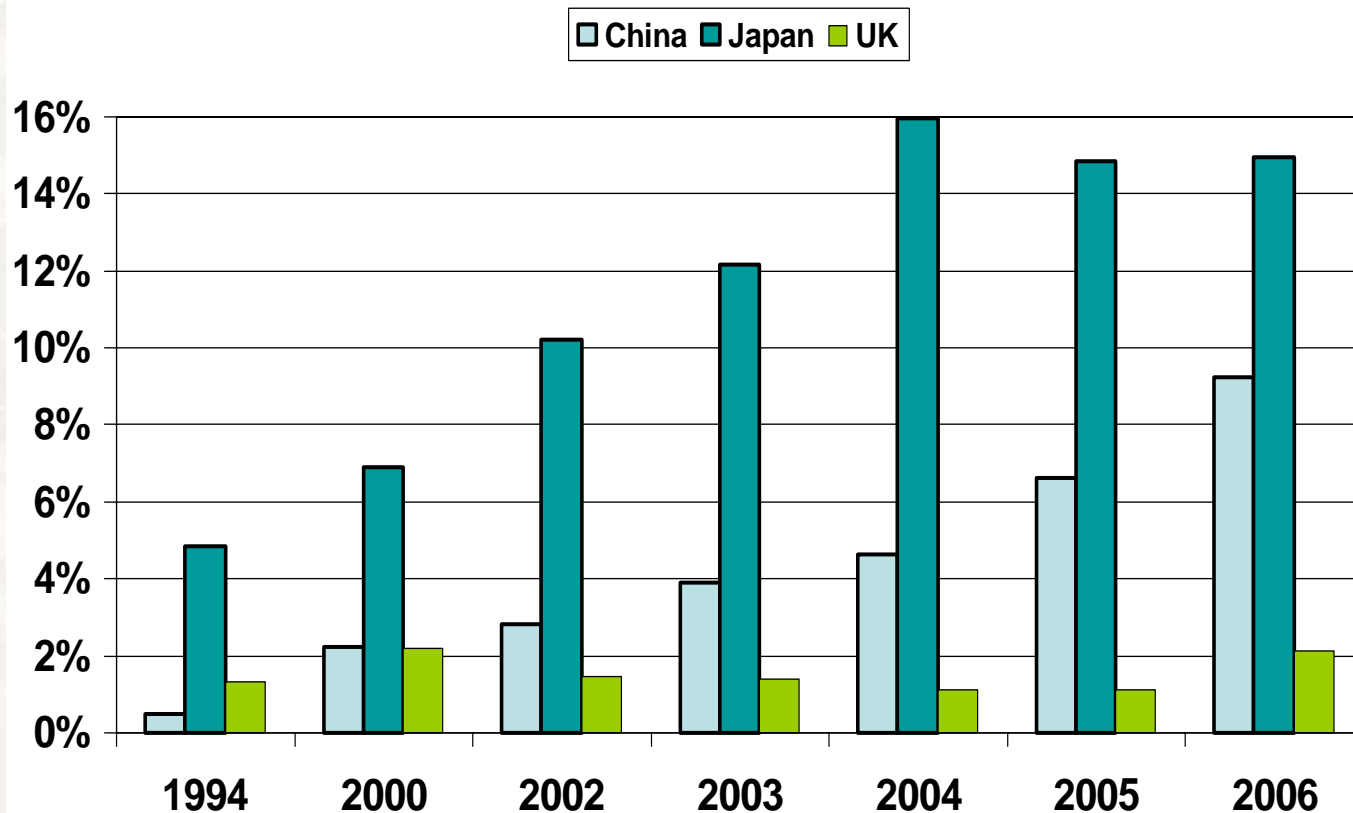
Foreign Holdings of US Securities as Shares of US Security Class Outstanding, by Major Holding Country, 2006

(Source: Federal Reserve Flow of Funds and Treasury TIC Data)

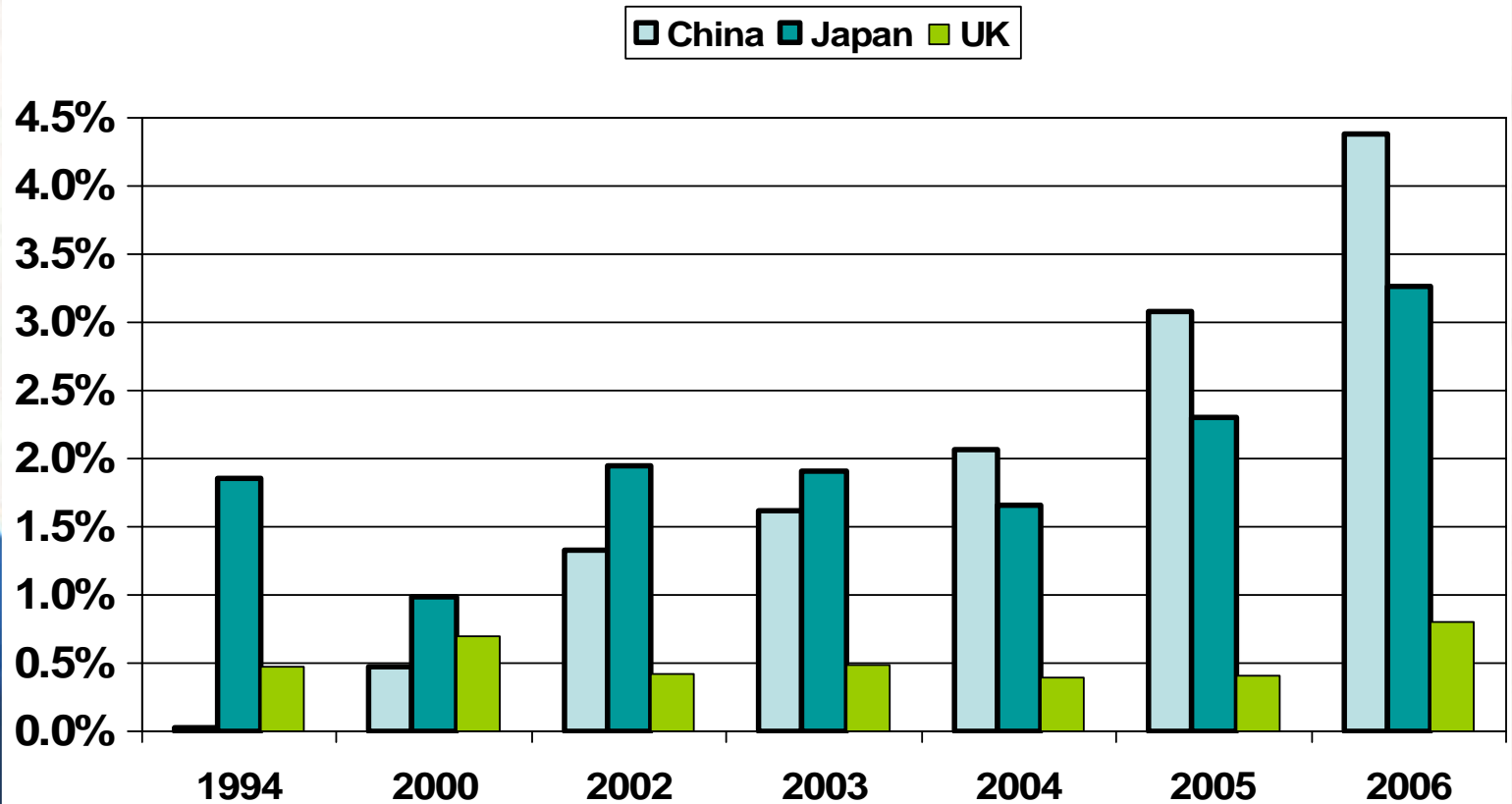


Holdings of US Treasury Securities by Country and Year, As Shares of Total US Treasuries Outstanding

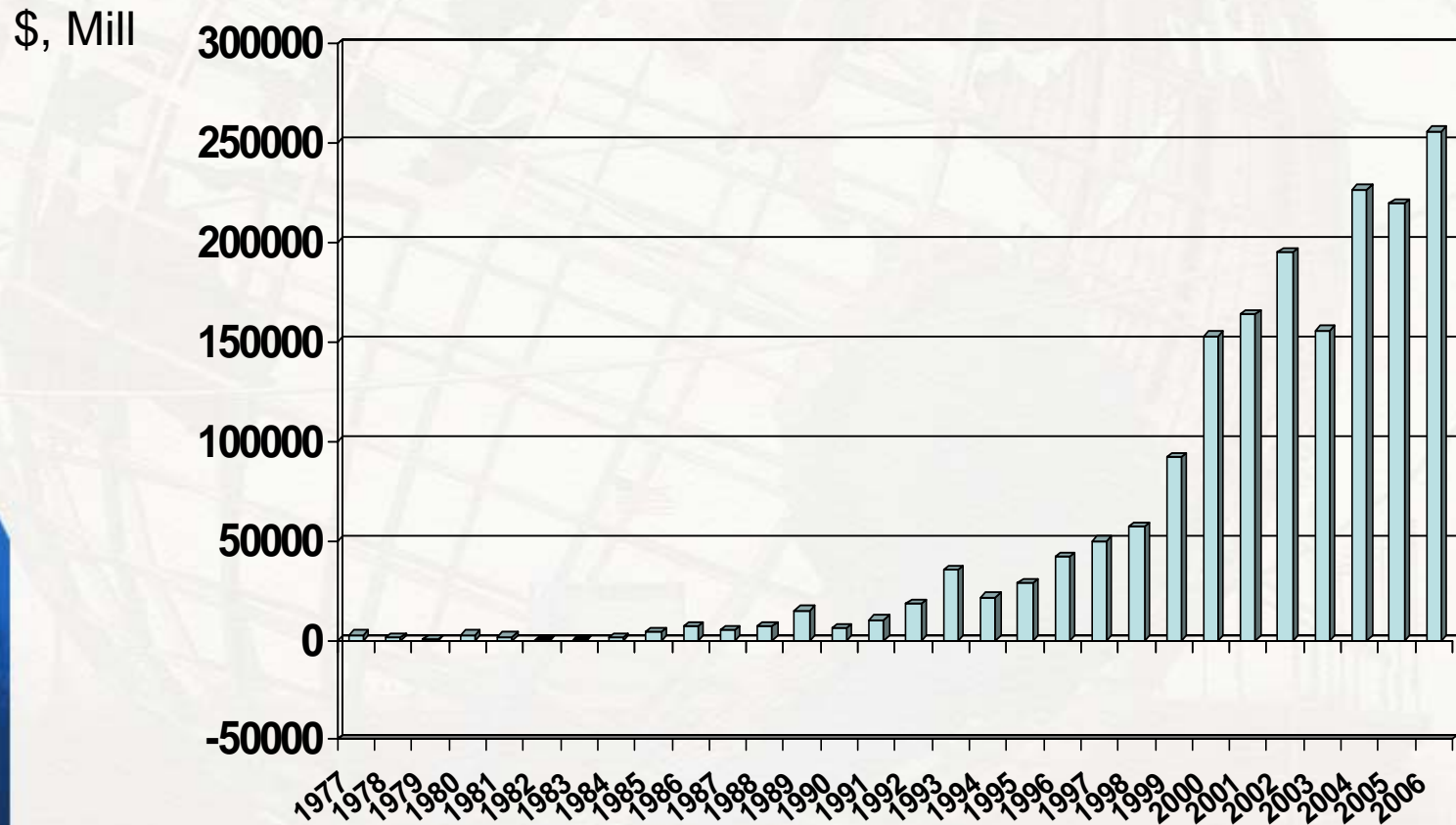
(Source: US Treasury TIC Data)



Holdings of US Agency Bonds and MBS by Country and Year, As Shares of
Total US Agencies Outstanding (Source: Treasury TIC Data)



Net Annual Purchases by All Foreigners of US Agency Bonds



Source: http://www.ustreas.gov/tic/s1_99996.txt

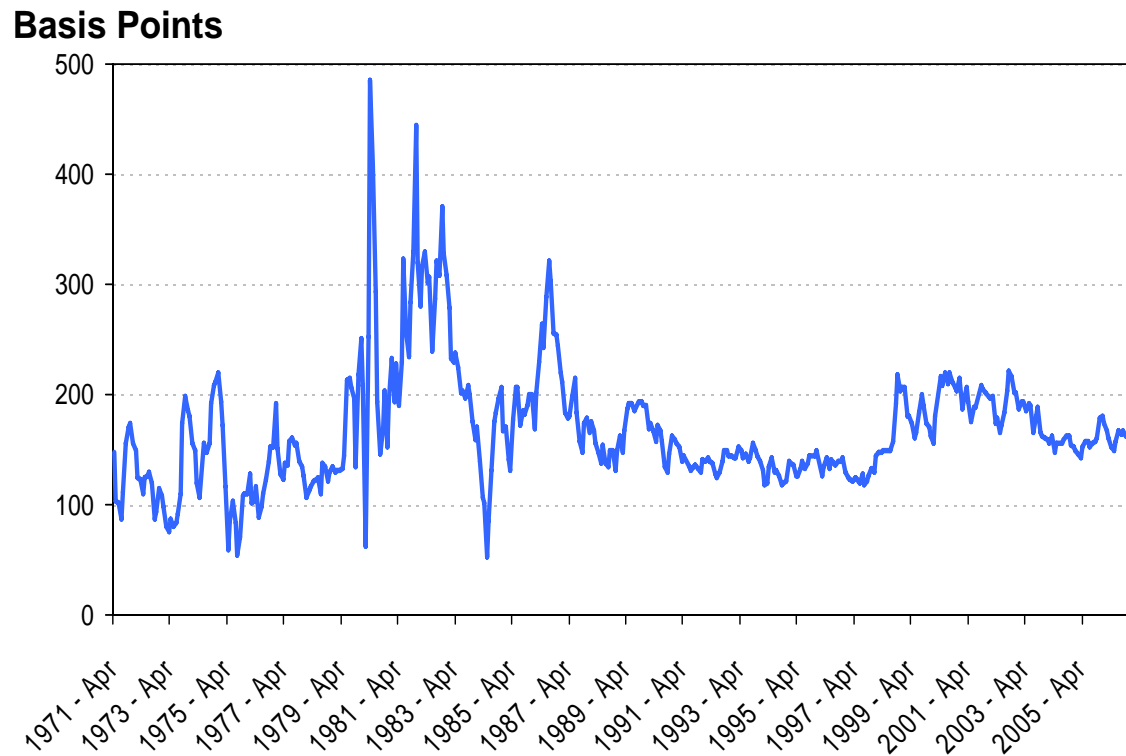
Data Summary and Questions Raised

- **Rapid Increase in Foreign Holdings of US Securities, especially by newcomer China**
- **China's Accumulation of Agencies and Agency MBS**
- **What kind of shift in purchasing and holding patterns are possible?**
- **The Likely Consequences**

Hypothetical Cases

- **Case 1: Sell Agency Bonds, Buy Treasuries**
 - Singe-digit impact on Agency rate (Close Substitutes)
- **Case 2: Sell Agency MBS, Buy Treasuries**
 - (Good But not Close Substitutes; Low double digit impact)
 - No Exchange Rate Effect in these Cases

**Figure 11a: Yield Spread,
30-Year Fixed Mortgages and 10-Year Treasuries**



Source: Federal Reserve Board

- **Case 3: Sell US Treasuries, Buy Eurodollar Securities**
(Again low double digit impact)
- **Case 4: Sell Treasuries, Buy other dollar denominated assets ...Blackstone deal**
(Mid double digit impact)
 - No Exchange Rate Effect in these Cases

Case 5: Sell Dollar-Denominated Securities

- **China - Extreme case is to buy yuan assets; the social spending story; Go West.....**
 - Warnoch and Warnoch indicate perhaps 90 bp shock in rates.
- **Perhaps less extreme would be to buy Euro-denominated Securities;**

The Political Economy of China's Demand

- **What are the Motivations?**
- **The Case for Diversification vs. the Status Quo**
- **Can anything be said about timing, triggering events or tipping points?**

China's Motivations

- **Maintenance of a relatively undervalued yuan vis-à-vis the dollar in order to promote exports to the US;**
- **The current political economy of the development strategy for China; employment; rural-urban divide.**
- **The continuing process of economic integration within Asia.**
- **The possibility of relatively safe and stable returns with low transactions costs.**

China's Purchase Behavior

- **Chinese monthly Agency purchases are positively associated with Chinese and Japanese Agency purchases in the previous month, as well as contemporaneous Chinese Treasury purchases.**
- **Japanese monthly Treasury and Agency purchases are in a world of their own...they are affected only by their own one-month lag.**

China's Case for Diversification

- **The low yield obtained on current investments**
- **An impending slide of the dollar, creating losses on all dollar assets;**
- **Risks inherent in a large and non-diversified dollar portfolio;**
- **Reserve bonanza could be used for broader social and economic goals in what is still a developing country.**

China's Case for Status Quo

- **The costs of a major portfolio reallocation; the costs of researching new investments and the costs associated with dislocations in trade with third parties;**
- **Domestic political-economy**
- **The global savings glut, together with a shortage of creditworthy assets**
- **History of slow, deliberative, shifts in major policies in China;**
- **The need to continue to invest very large inflows;**

Other Issues Relating to Sustainability of Global Imbalances

Sustainable

- US banking and financial intermediary infrastructure's role in financing global debt and equity operations; need for channeling funds through the US.
- The US economy accounts for, in dollar terms, just under 25% of the global GDP; Only around 15% of global savings are being channeled into the US at present.

Not-Sustainable

- Nature of China's capital investments - mostly official, and non FDI..
- Unsustainability of high consumption & household indebtedness could lead to a wave of bankruptcies, and ultimately a correction in the current account.

Timing Issues Regarding Diversification

- **Critical Thresholds**
- **Exogenous events**
- **Domestic politico-economic strains in China**
 - Some Indications of Gradual Rethinking
 - Formation of Investment Company
 - New Flexible Rule on Yuan Fluctuation

Position could be characterized as Zugzwang

Conclusions: The Good News

- **Likely result of increased foreign financing is that US mortgage rates have been 50 to 100 basis points lower; no indications YET of SUDDEN AND DRASTIC withdrawals or slowing down**

Conclusions: The Bad News

- **The bad news is that the good news could change.**
- **Gains from diversification may outweigh the benefits of China's present policy**
- **Much more likely is a strategic redeployment as opportunities arise, with drawn out, gradual impact on US interest rates and on dollar-yuan exchange rates.**
 - **The big unknown – Impact on Market Expectations**

A Happy (and Continuing) Run for the Mortgage Market?

- **The benefits of international trade happen to have landed on one of the most land-locked assets imaginable, the US housing and mortgage markets.**
- **These benefits could well shrink in coming years, as Chinese and other Asian investors start to diversify their investment portfolio away from dollar assets.**
- **But the likelihood of a major and sudden change away from US dollar assets by foreign investors, is unlikely; gradual diversification probably inevitable.**