

INSEAD

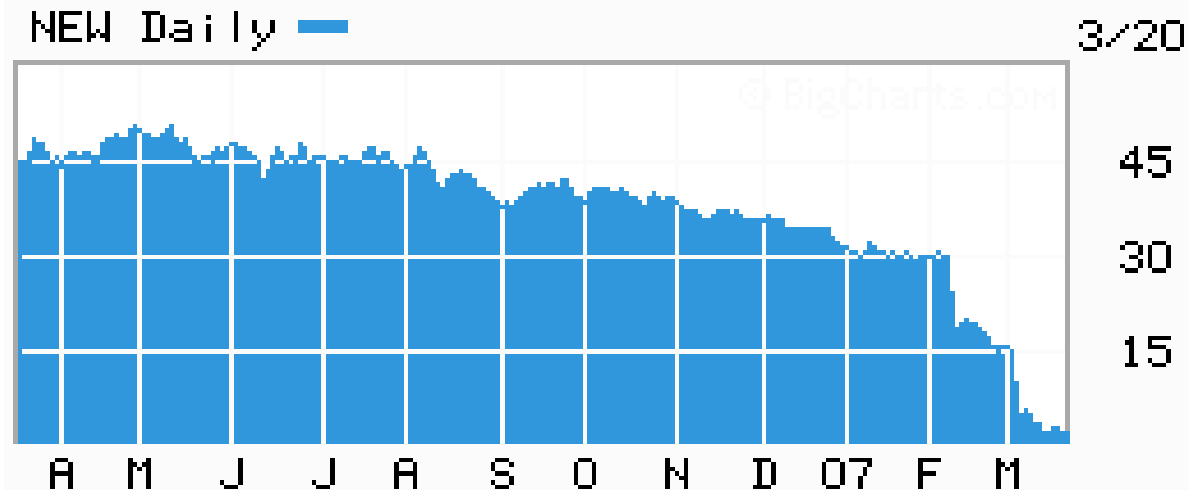
The Business School
for the World

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ACTS/INSEAD/Natixis

Global Investment Trends and Impact on FX

Introduction: Two unlucky companies.

New Century
Financial Corp
&
Bear Stearns Co.



BEAR STEARNS CO
as of 26-Sep-2007

Splits: ▼



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What had happened to them?

1. New Century Financial Corp:

- Second largest Subprime lender.
- March 2007: Estimated loss \$1.6 bil.
- March 12: its stock was halted on the NYSE.
- April 2: Files for Chapter 11.

2. Bear Stearns:

- Two Bear Stearns Cos. (BSC) hedge funds sought bankruptcy protection in New York in the last Tuesday of July, 2007.
- In June Bear Stearns pumped \$1.6 billion into the High-Grade Structured Credit fund in a failed attempt to save it.

They are not alone

- More than 20 subprime lenders filed for bankruptcy by March 2007. The bankruptcy number increased to **50** in Aug 2007, including standard mortgage lenders!
- Write-downs from the investor side:
 - BNP Paribas decides to freeze 3 funds (\$2.19bn) on Aug 9, 2007.
 - Goldman Sachs is to inject \$2 bn to bail out its Global Equity Opportunities hedge fund as reported in Aug 14, 2007.
 - Citigroup: 3rd quarter write-downs (2007)
 - \$Bn 0.6 Fixed income credit trading; \$Bn 1.3 Sub-prime mortgage backed securities; \$Bn 1.4 Highly-leveraged finance commitments
 - USB: 3rd quarter write-downs (2007)
 - \$Bn 0.9 CDOs; \$Bn 1.0 Residential mortgage backed securities; \$Bn 1.8 Structured products.

A Good Summary and An Interesting Comment

“The dead bodies keep floating to the surface in the subprime credit market contagion, ..., and sending global equities into a swoon.”

The Wall Street Journal, Aug 10, 2007

“Mortgage-backed securities yield a higher rate of return than a traditional U.S. Treasury bond with (the) same credit risk.”

(Dow Jones) U.S. Department of Housing and Urban Development Secretary Alphonso Jackson encouraged China to increase its investments in mortgage-backed securities in the U.S. in July 2007

What's behind the scene?

- There are some problems in the current financial market.
- What's the cause of this turmoil?
 - Too much money chasing too few assets: asset price bubbles.
 - Why we have so much money?
 - Soft dollar? Interest rate policy?

The potential missing dimension:
Financial wealth created by financial market expansion

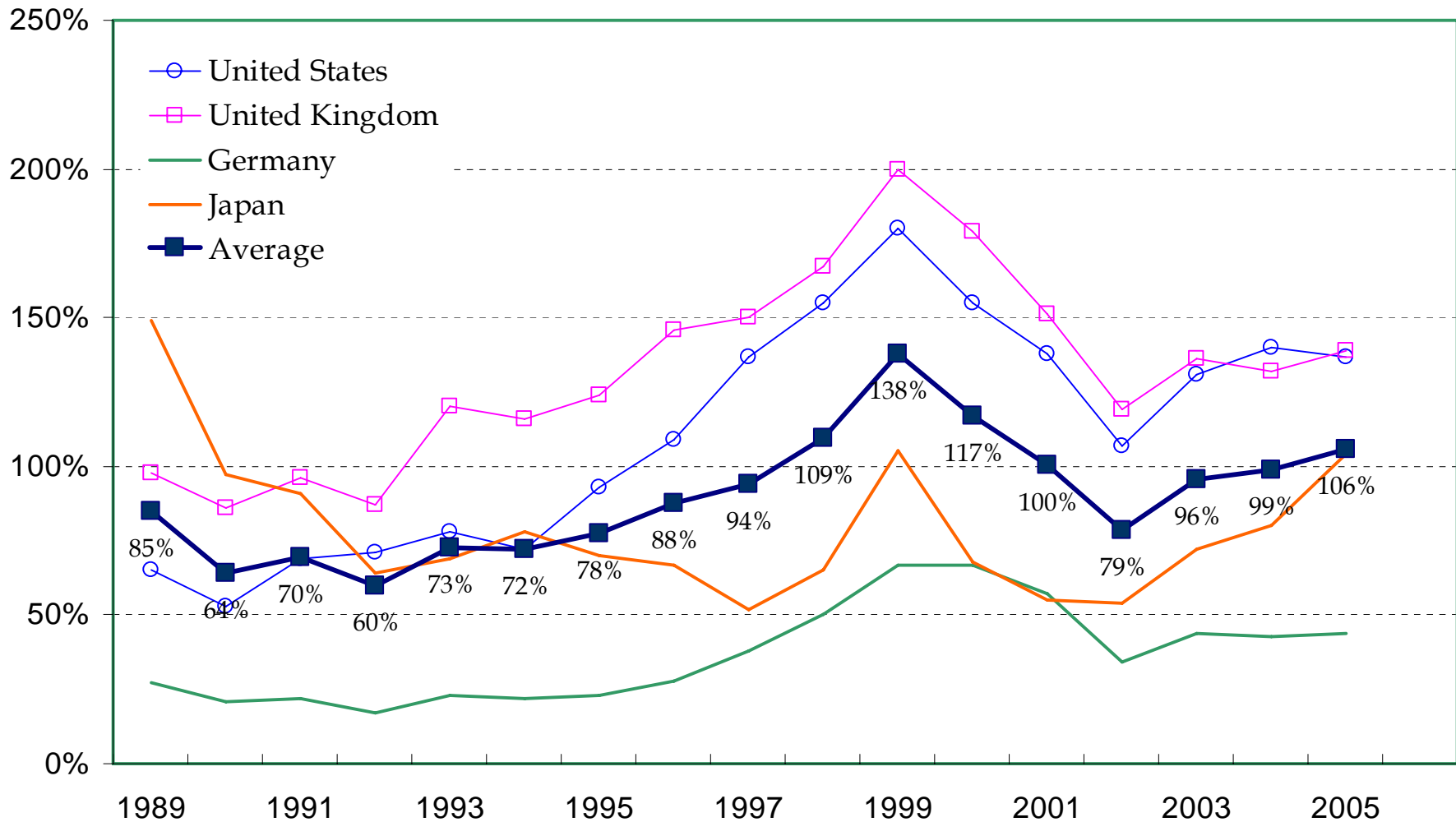


The wealth effect of securities

- People can consume their *future* earnings!
- IPOs
- Mortgages.
- Pros and Cons:
 1. When there are plenty of investment opportunities.
 - More efficient allocation.
 - Risk sharing.
 2. But what if real opportunities are limited?
 - Vast capital flows;
 - Financial imbalances; asset price bubbles.
 - Volatility and liquidity shocks.
- What's happening?

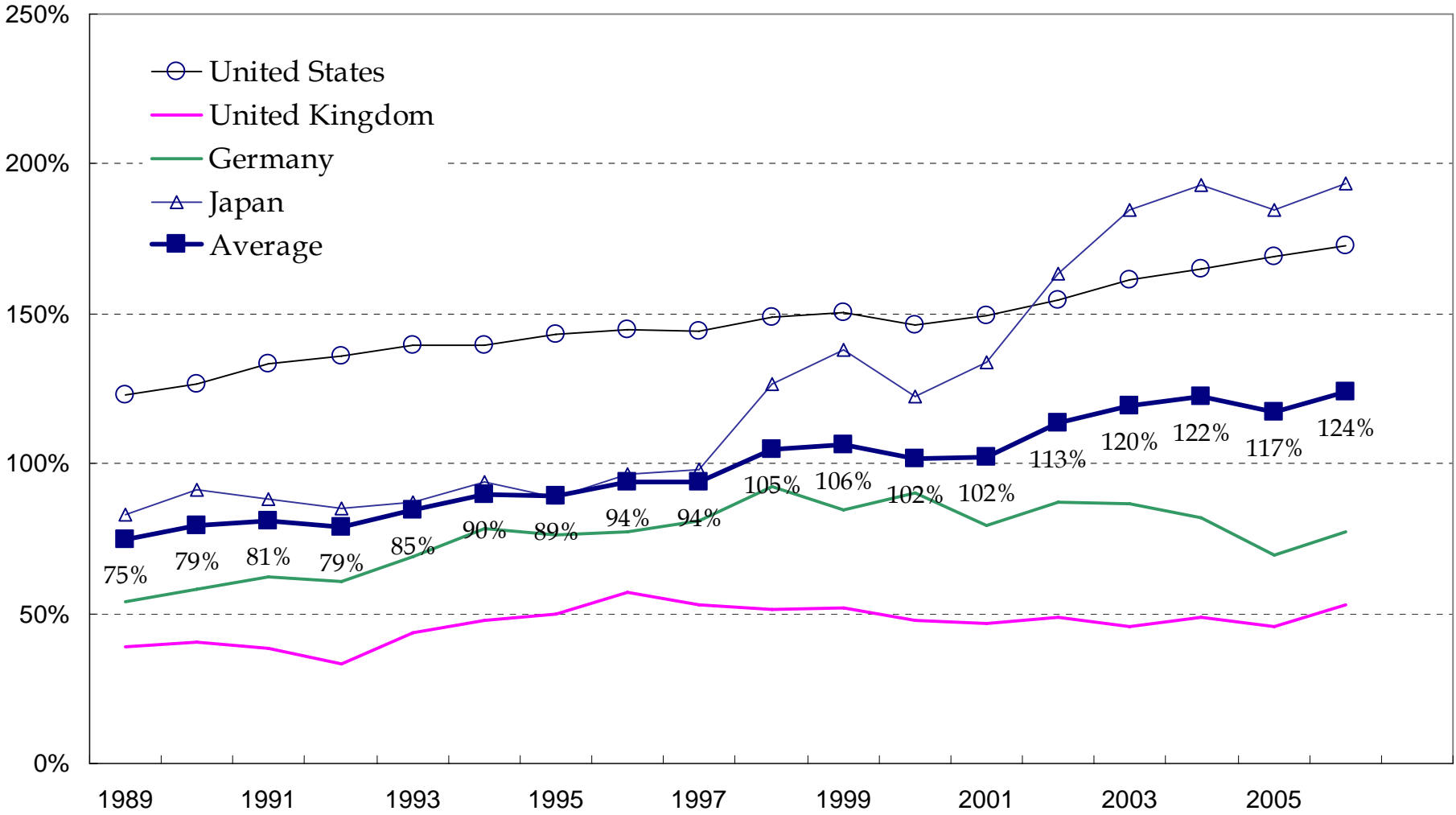
Fact 1: Market Cap/GDP Ratios.

Market Capitalization of Listed Companies (% of GDP)



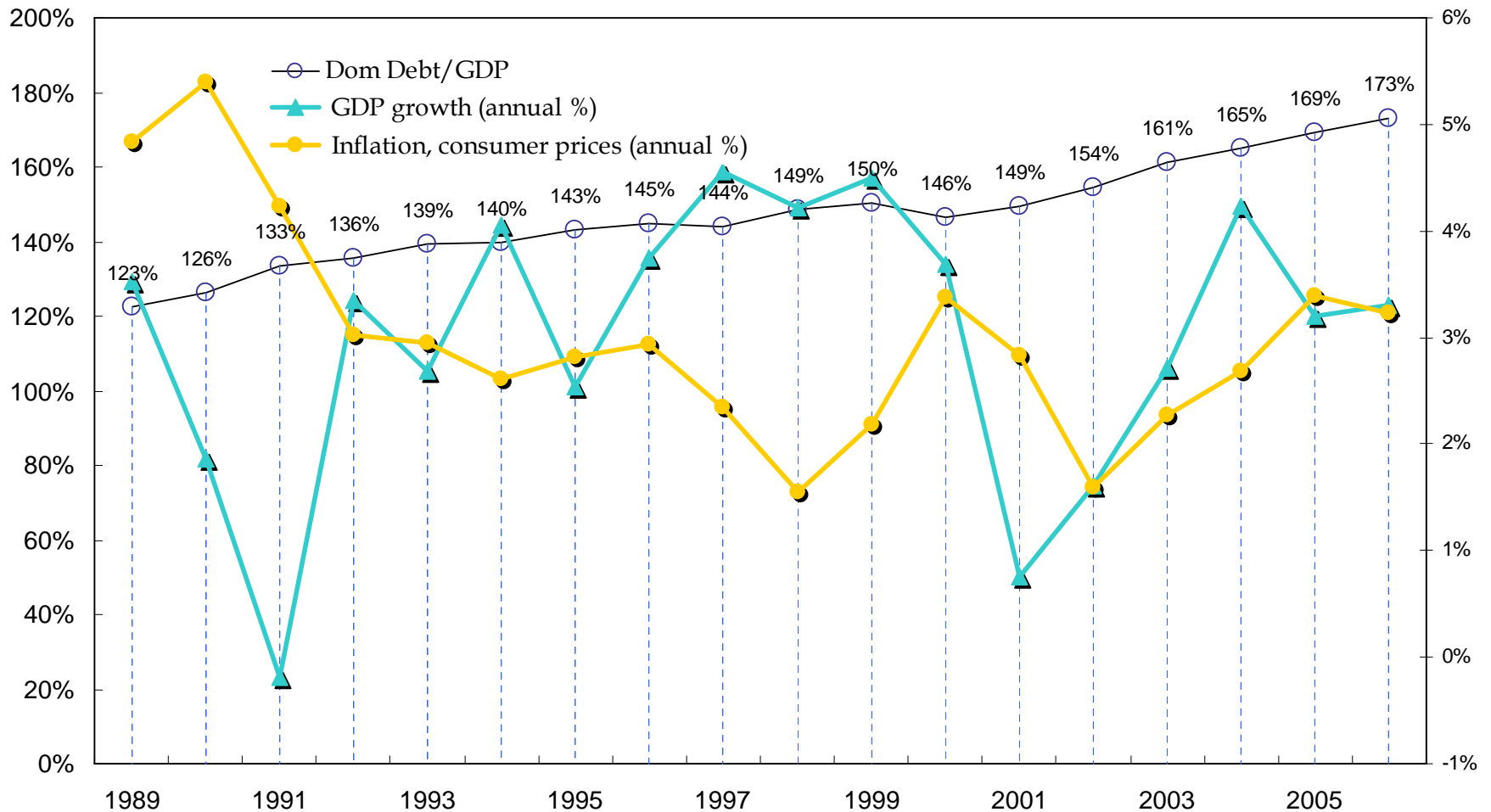
Fact 2: Higher Bonds/GDP Ratios.

Domestic Debt (% GDP)



Fact 3: U.S. Bonds/GDP ratio vs. inflation and productivity

Debt/GDP Ratio vs. Interest Rates



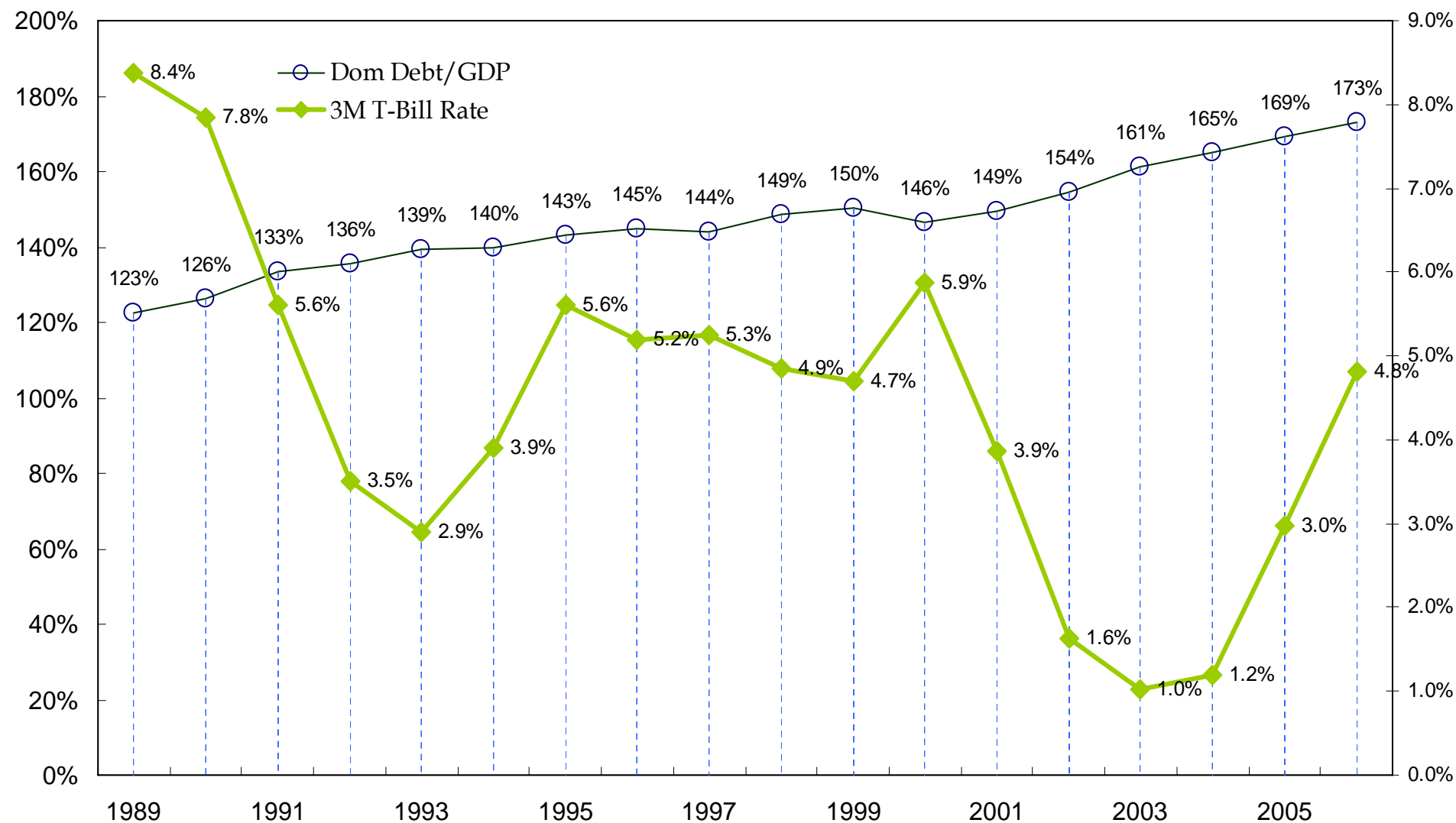
The observation: An increasing Security/GDP ratio.

1. Higher financial market/real economy ratios indicate an accelerated expansion of financial markets.
 - More financial wealth created.
2. More debts are needed to generate similar GDP. Productivity unchanged.
 - Do real opportunities increase at a lower pace than financial assets?
 - At least we should ask whether the expansion speed is healthy or not, because big mismatch might bring us problems.

A related question:
Is this expansion a result of short-term policy?

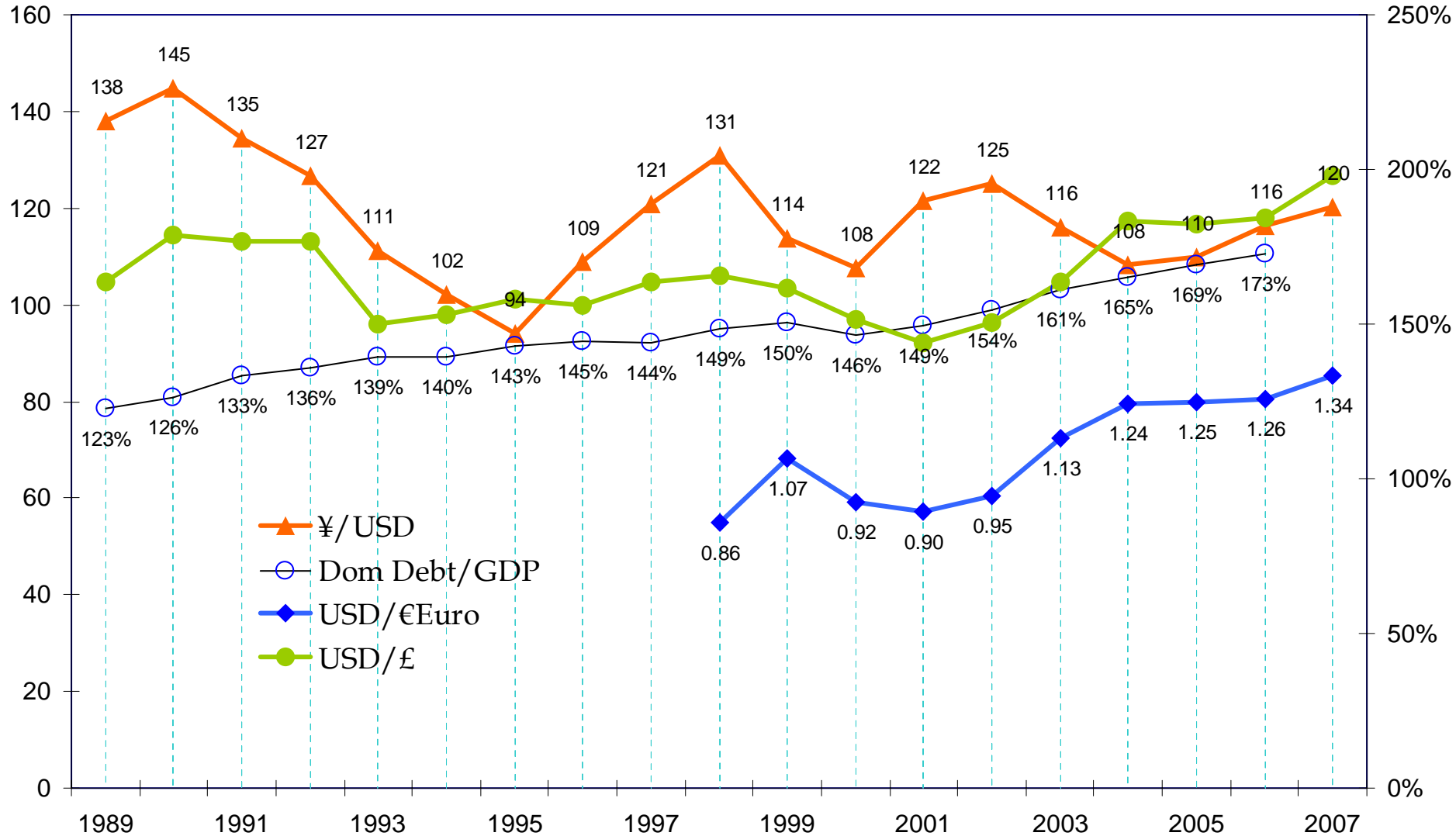
Debt/GDP Ratio vs. Interest Rates.


Debt/GDP Ratio vs. Interest Rates



Debt/GDP vs. Dollar FX Rates

Debt/GDP vs. USD Exchange Rates





Long-run trend or
Short-term policy?

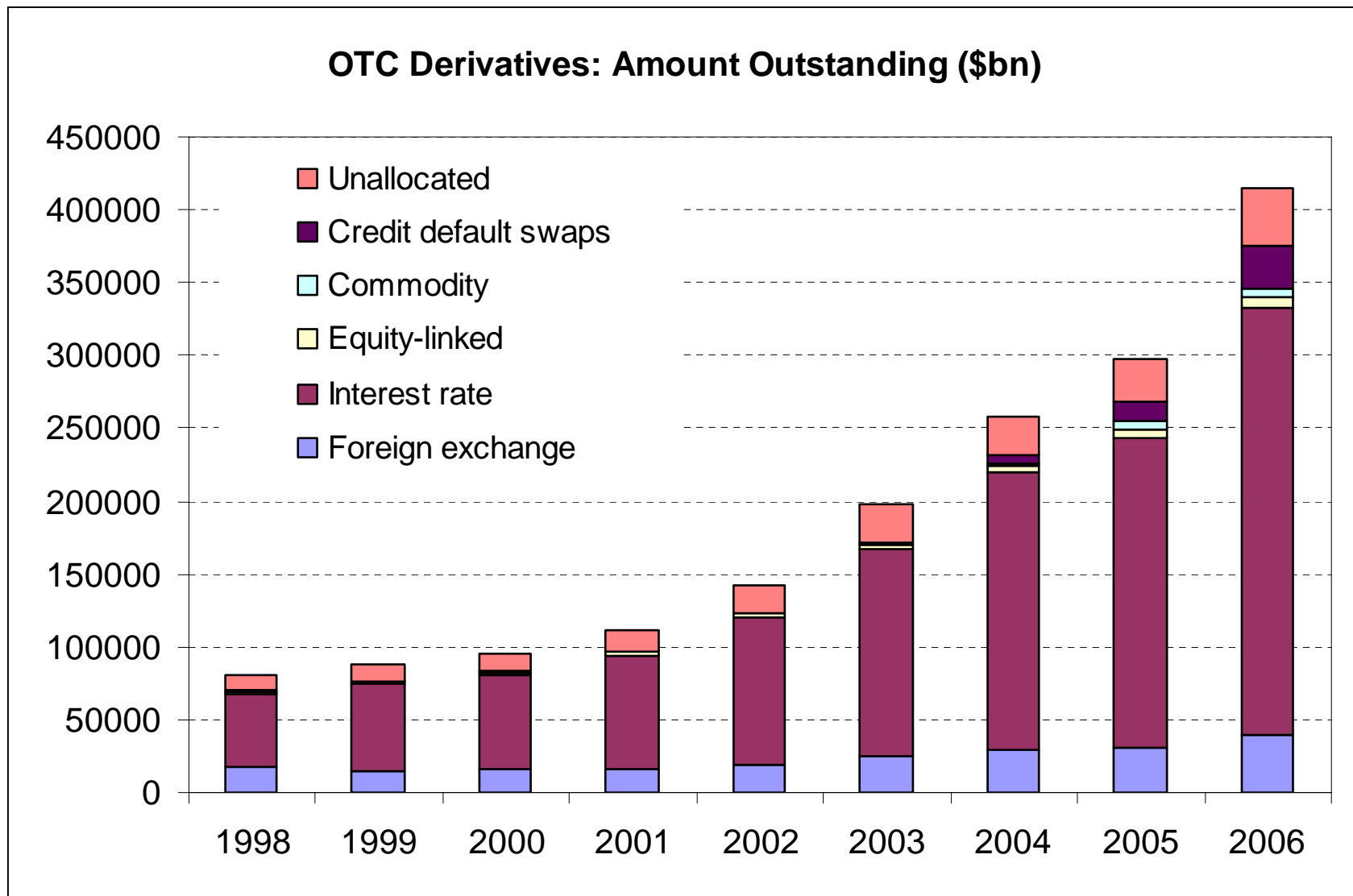
The trend for securitizing does not affect or be affected by interest rate policy or exchange rates.

Conclusion:

The increasing financial/real ratio is a **Long-Run Trend** and is market-driven.

The expansion and its wealth effect are likely to persist and become more complex.

The expansion of the derivative market.

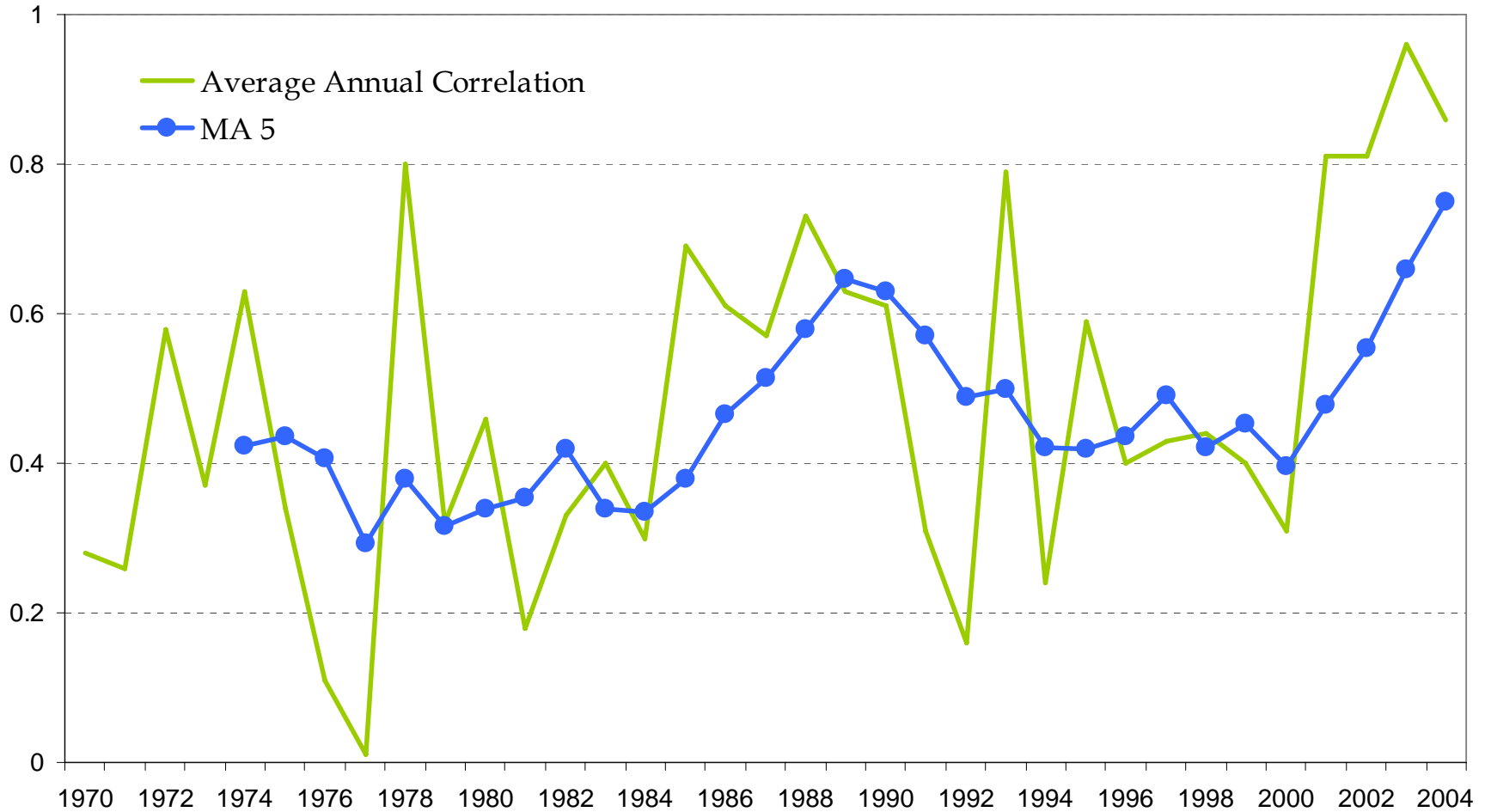


What are the impacts of this trend?

1. Impacts on risk and asset classes.
2. Impacts on the financial service industry.
3. Impacts on evaluation methods.
4. Impacts on FX rates.

1. Impacts on risk and asset classes

Average Correlation Between Market Indices of 18 Developed Countries



Impacts on risk and asset classes (2)

1. Assets become more correlated. More difficult to diversify.
2. Liquidity risk becomes more important due to capital flows.
3. Alternative assets may become more important for diversification, e.g., commodities, arts, etc..
4. Emerging markets may become more attractive because they provide different opportunities and because they correlate less with the old economy.

2. Impacts on the financial service industry.

1. Professional management may become more important because of the difficulty to achieve diversification or hedge risk. Combination with alternative assets.
2. Given the complexity and leverage of current market, simple instruments such as Exchange-Traded-Funds (ETFs) may become more popular for non-professional investors.
3. We may see more regulations on the complexity and expansion of our financial markets.

3. Impacts on evaluation methods.

- Traditional methods may find it difficult to properly estimate risk and alphas. We need to pay attention to:
 1. Liquidity – again, do we understand it?
 2. Dynamic risk exposure, especially due to capital flows.
 3. The value of investments (alphas or NPV).
- Evidence on the importance of the last two issues: Mamaysky, Spiegel, and Zhang, 2007, “Improved forecasting of mutual fund alphas and betas,” *Review of Finance*.

The back test of alphas

Back test:

Test whether alpha is consistent with realized return in the recent month.

Only use valid alpha.

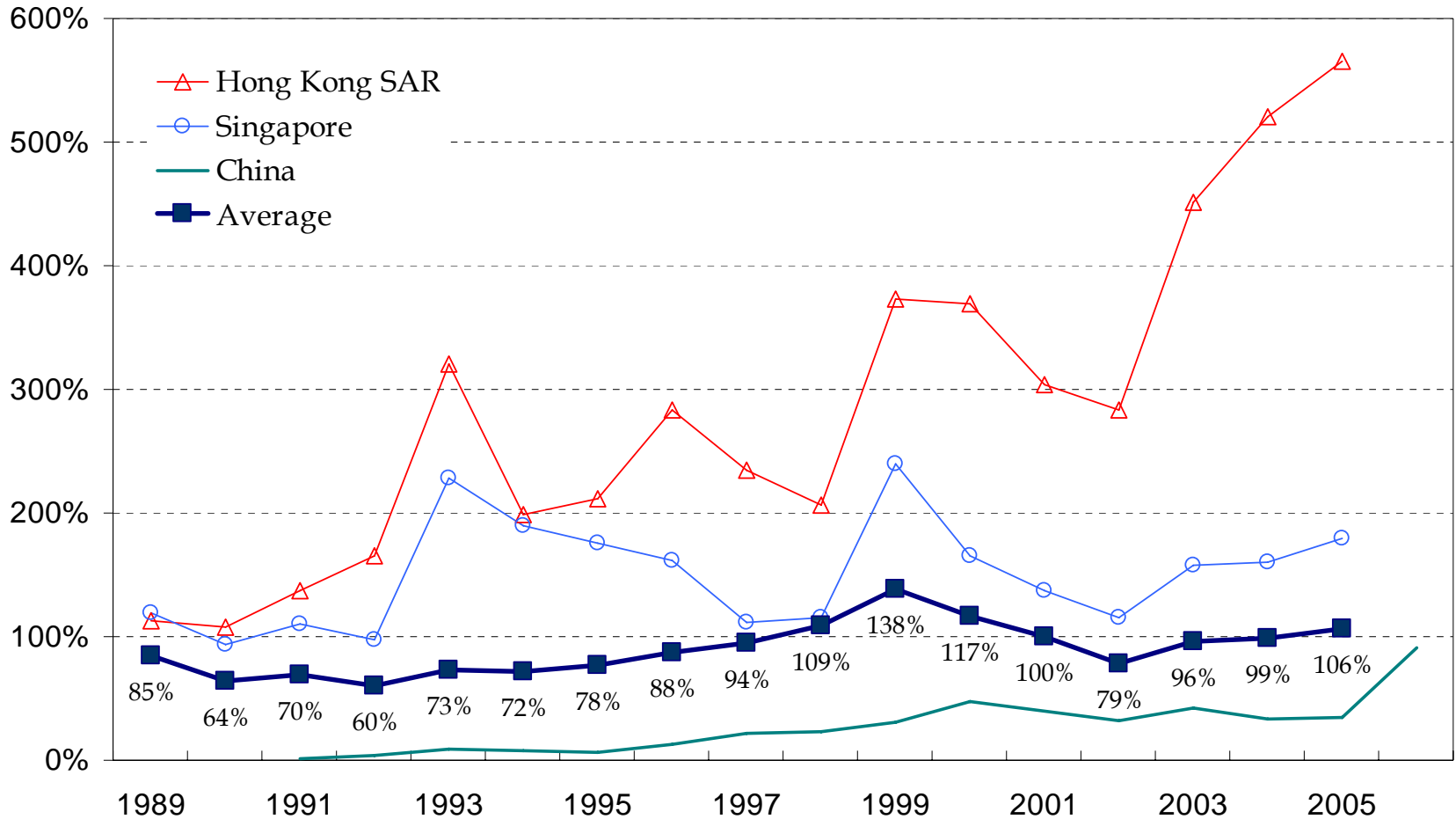
| Performance of best mutual funds (1970-2002) | | |
|---|--------|--------|
| | Return | Alpha |
| A. Selected by alpha | | |
| Top 10% | -0.96% | -0.84% |
| Top 20 | -1.07% | -0.84% |
| Top 10 | -0.60% | -0.84% |
| B. Selected by alpha, with back test | | |
| Top 10% | 8.73% | 2.55% |
| Top 20 | 8.21% | 2.30% |
| Top 10 | 9.77% | 3.66% |
| C. Selected by Dynamic Alpha, with back test. | | |
| Top 10% | 9.77% | 4.66% |
| Top 20 | 8.47% | 2.92% |
| Top 10 | 9.51% | 4.41% |

4. Impacts on FX rates.

1. Carry trade and currency overlay managements may become more important.
2. Traditional exchange rate theories focus on interest rate policy or PPP, but shall we also pay attention to securitizing and securitization process in developing countries?
 - “Securitizing” equilibrium. Maybe we need to have an index to measure the fraction of real economy that has been traded and securitized.
 - Example, if the Chinese government auctions the rights to use “state-owned” lands, what will happen to its GDP and exchange rate?

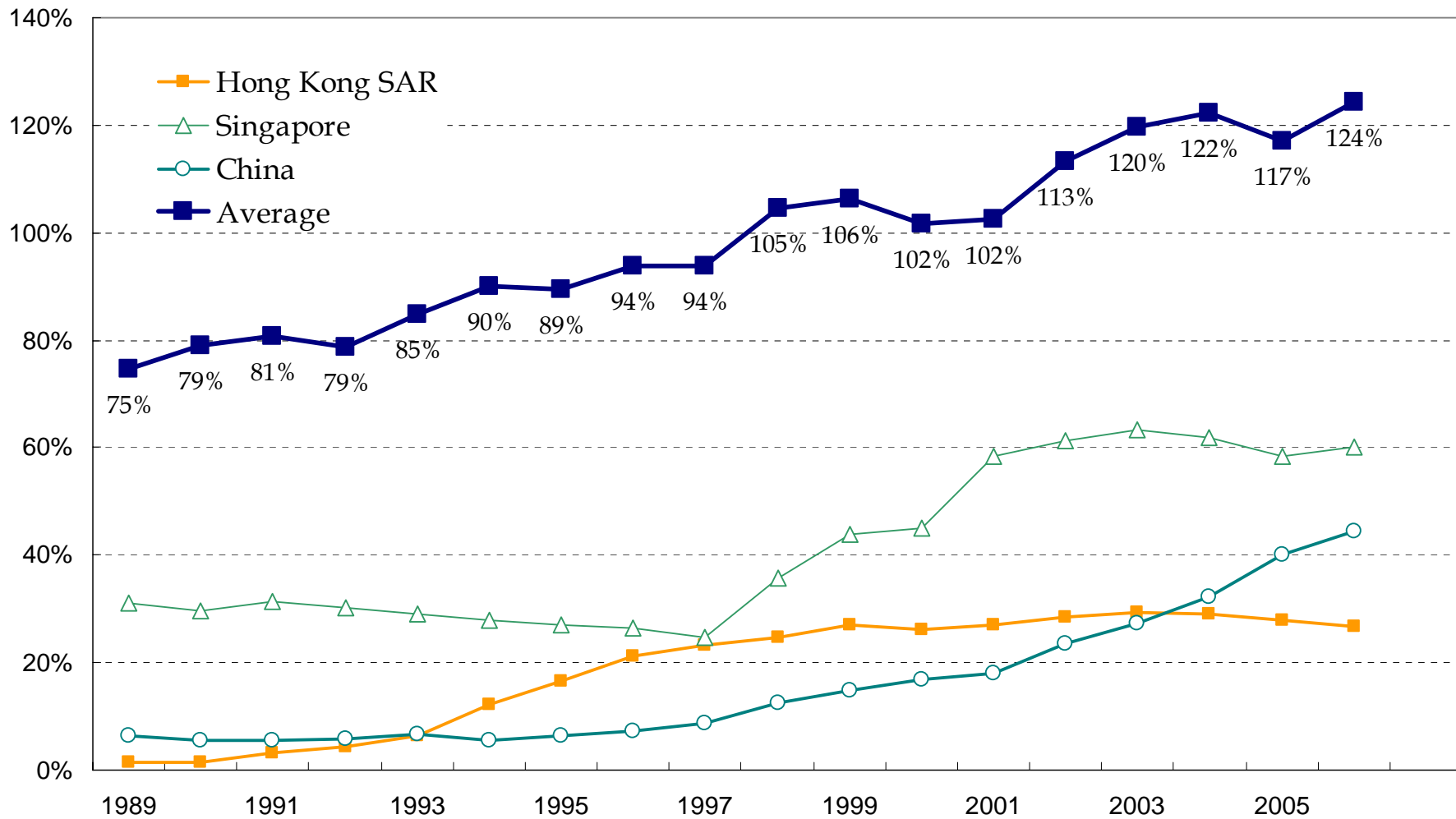
RMB's dual opportunities

Market Capitalization of Listed Companies (% of GDP)



More securitizing looking forward?

Domestic Debt (% GDP)



Conclusions

- Financial markets are important for real economy.
- However, is there an optimal ratio between financial market expansion and real market development?
 - Asset price bubble, volatility, and liquidity squeeze might be created by the mismatch between financial market and real economy expansions.
- Financial market expansion and “equilibrium” might be important for emerging markets and for Asia/Pacific area.