



DIFC | Dubai International Financial Centre

DIFC 2008 Workshop Series

Recent Financial Market Turmoil

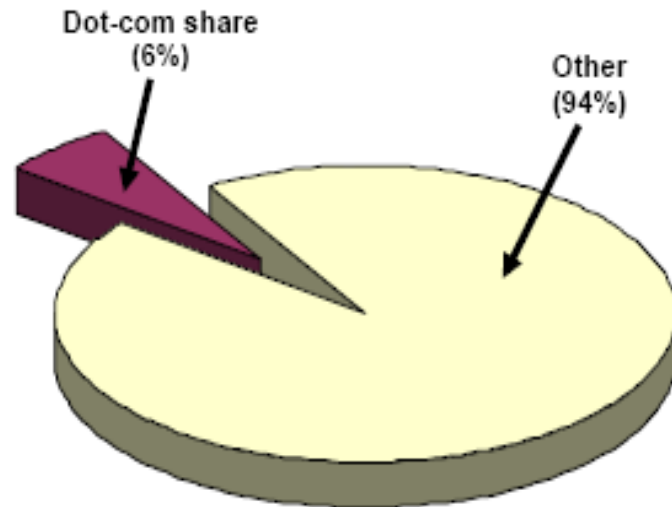
An Introduction

- **Not a surprise**
- **Recent business cycle has been extended since 2002.**
- **Low interest rates, increased consumer spending, amid rising asset prices leading to a dramatic increase in liquidity and fuelling the housing bubble**
- **Risk was being built up over a period with exceptionally low volatility.**
- **Correction/pullback in reaction to overheating and expansion in markets globally**

The Orders of Magnitude

Dot-Com Bubble

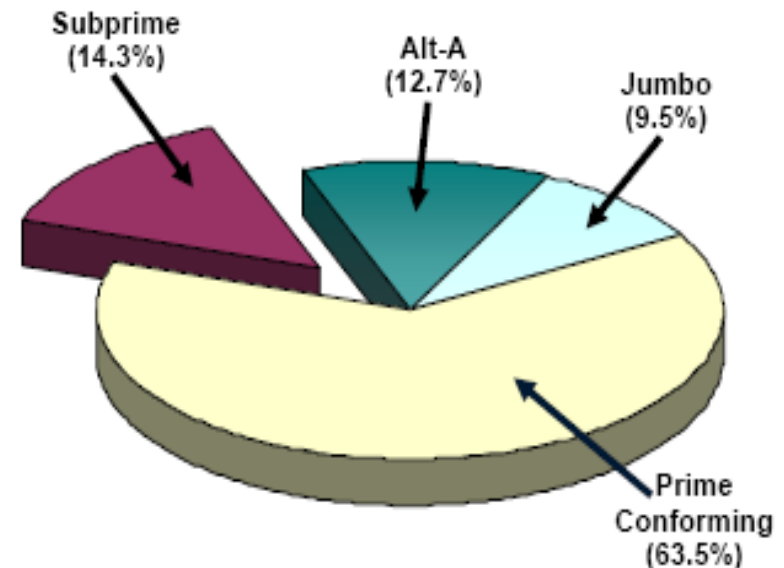
Market Capitalization: US Equities
(year-end 1999)



\$17.2 trillion total equity market cap

Subprime Bubble

Securitized Mortgage Debt Outstanding
(March 2007)



\$6.3 trillion total securitized mortgages

Source: Federal Reserve, FDIC, MBA, Morgan Stanley Research

Sub-Prime Blues, Credit Crunches & Transmission Effects

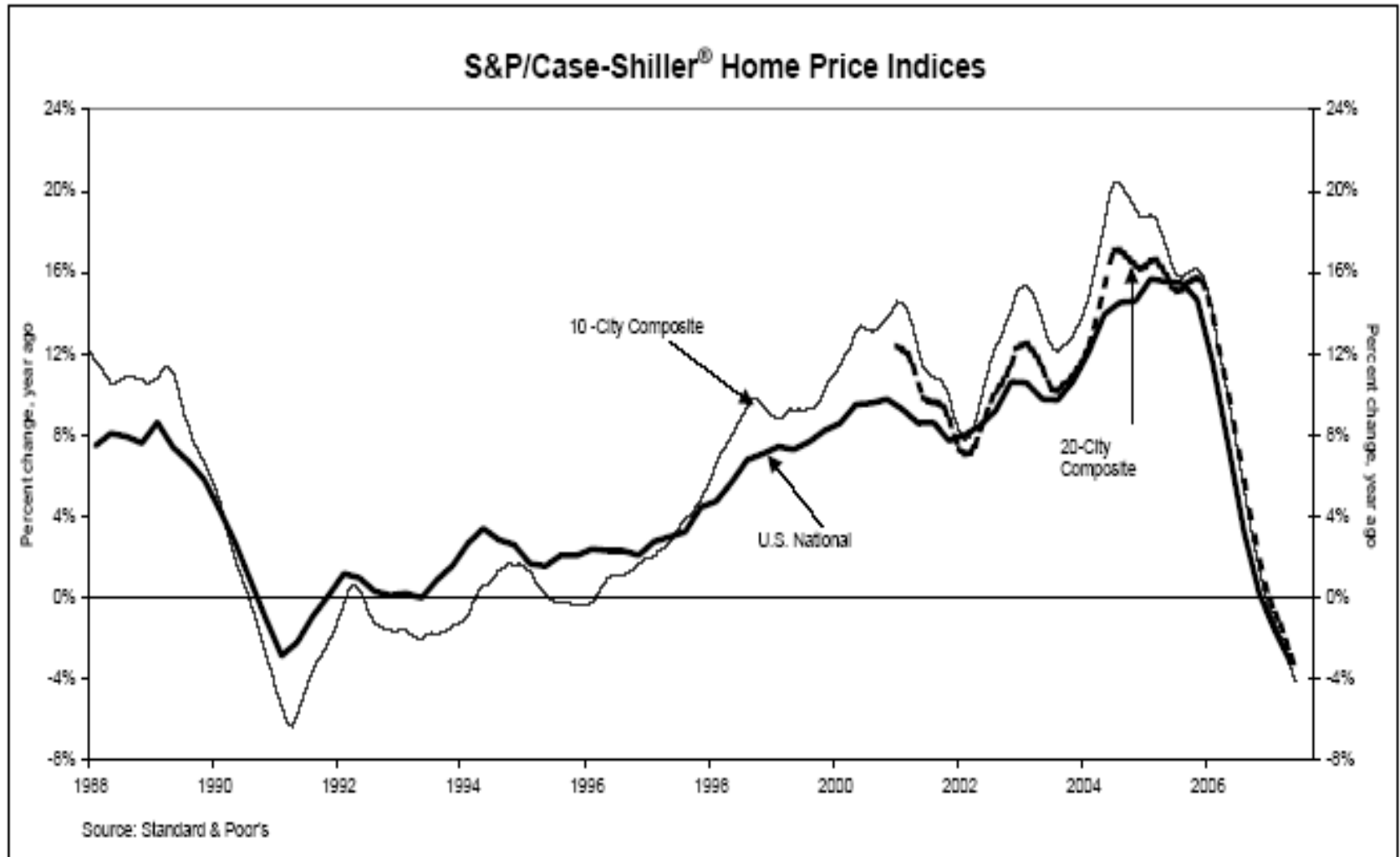


- **Second longest expansion period witnessed in the post-war period (starting in November 2001) except for the exuberant 1990s (1991-March 2001): slowdown would be ‘normal’ business cycle phenomenon**
- **US experienced housing exuberance**
- **Policy reaction:**
 - **Fiscal/tax package**
 - **Monetary policy easing**
- **Uncertainty phase leading to credit and capital market volatility. SP losses and write-downs currently running at \$120 billion. Likely total losses: \$300 to \$350 billion of the \$1.2 trillion SP market**

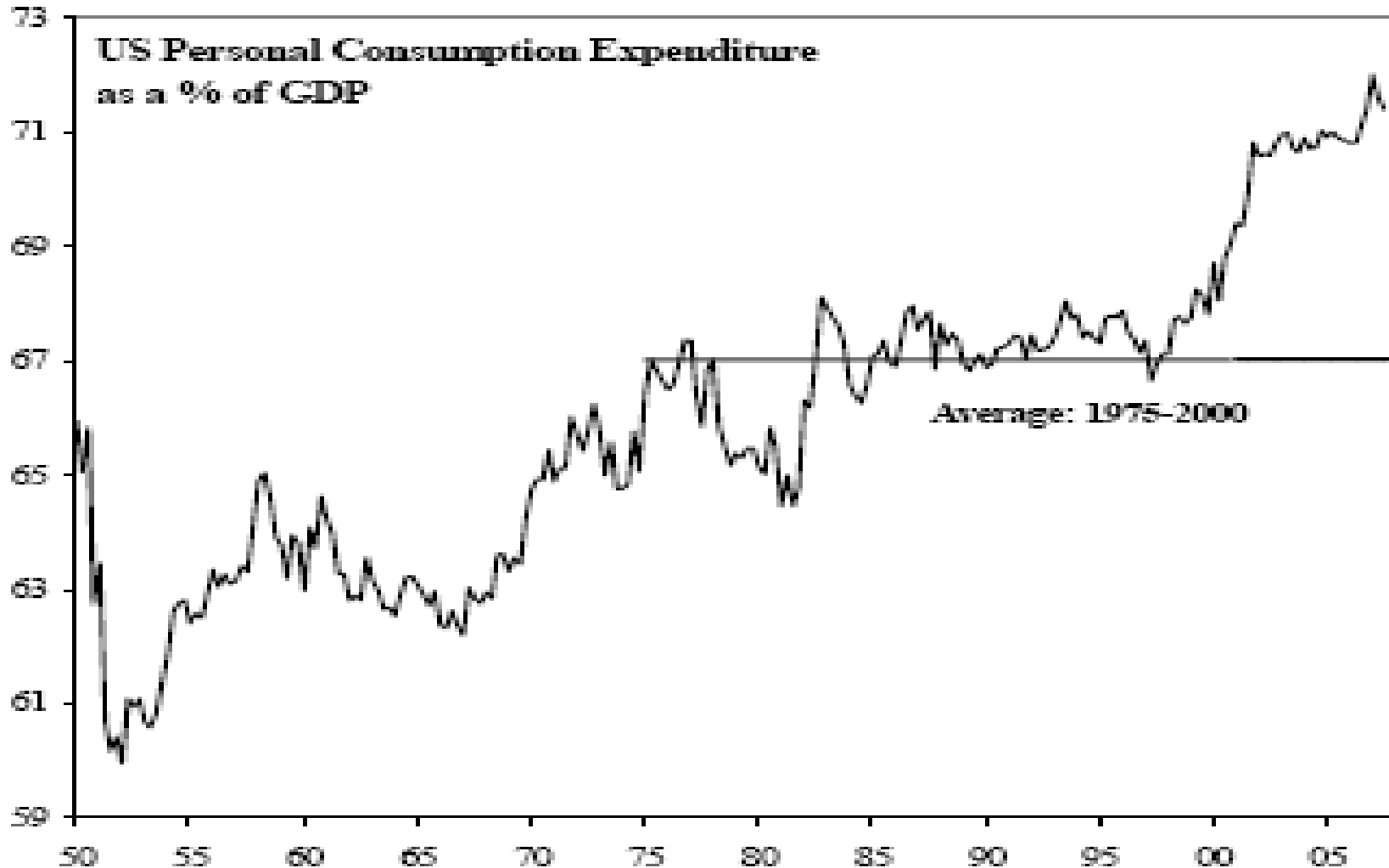
SINCE 2000

	Correlation	Return	Volatility	Sharpe
S&P/CSI	1.00	88.82%	0.73%	1.50
Bonds	-0.09	67.31%	1.44%	1.33
Commodities	0.58	155.59%	5.29%	0.48
REITs	0.22	110.33%	4.24%	1.06
Stocks	-0.11	2.65%	3.44%	0.09

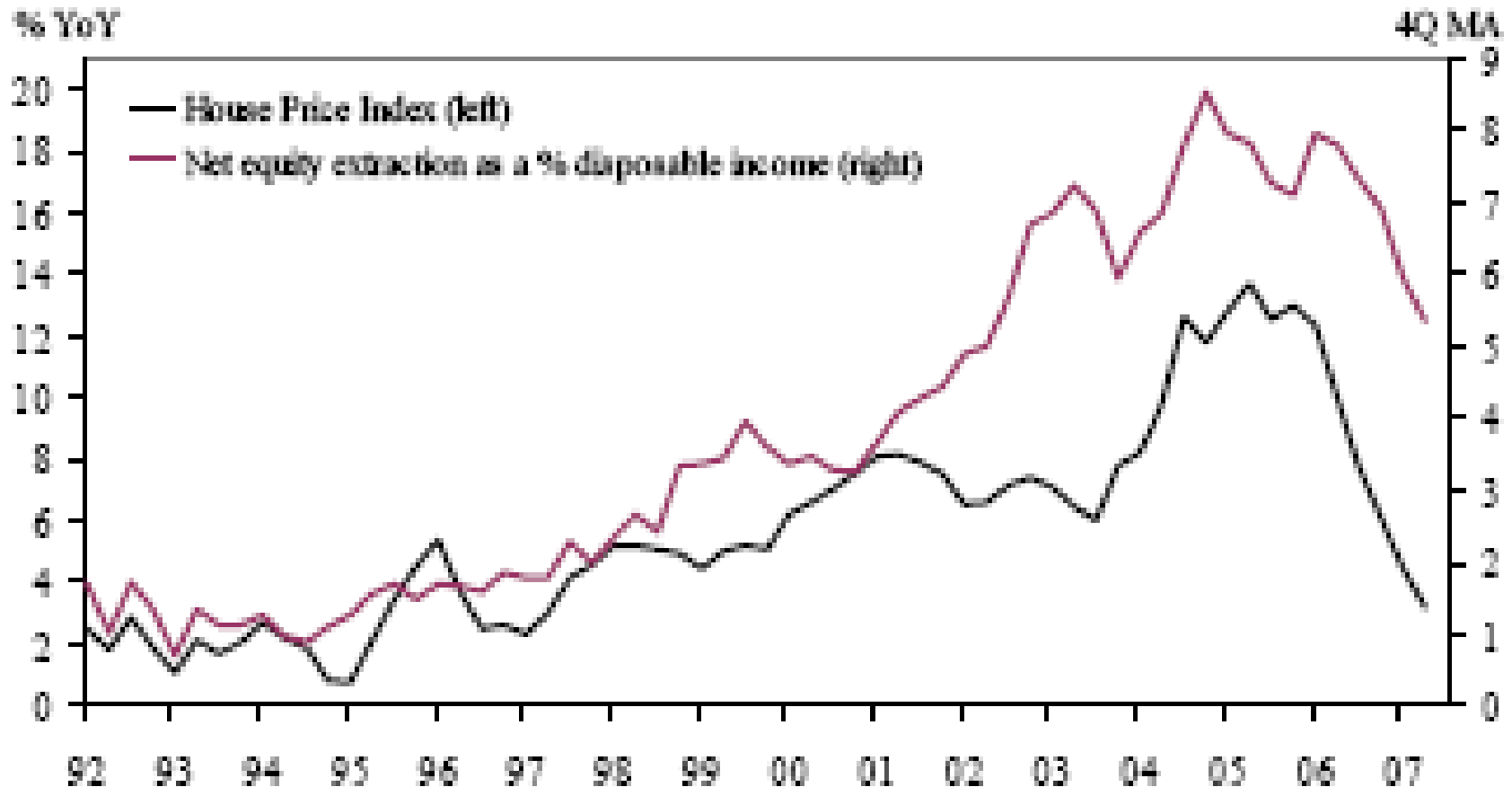
House Price Effect



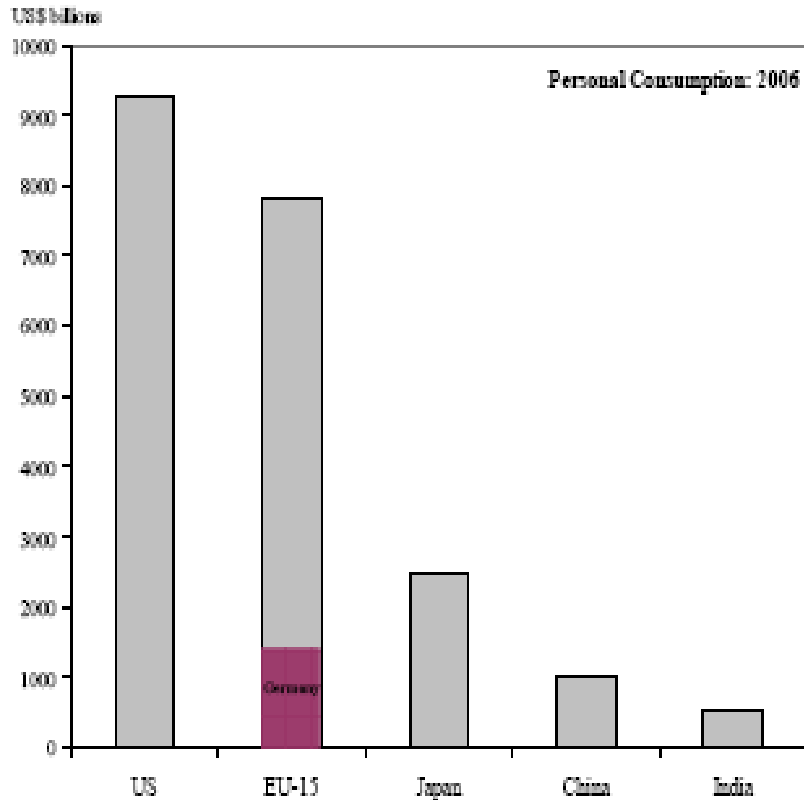
US Consumption Binge



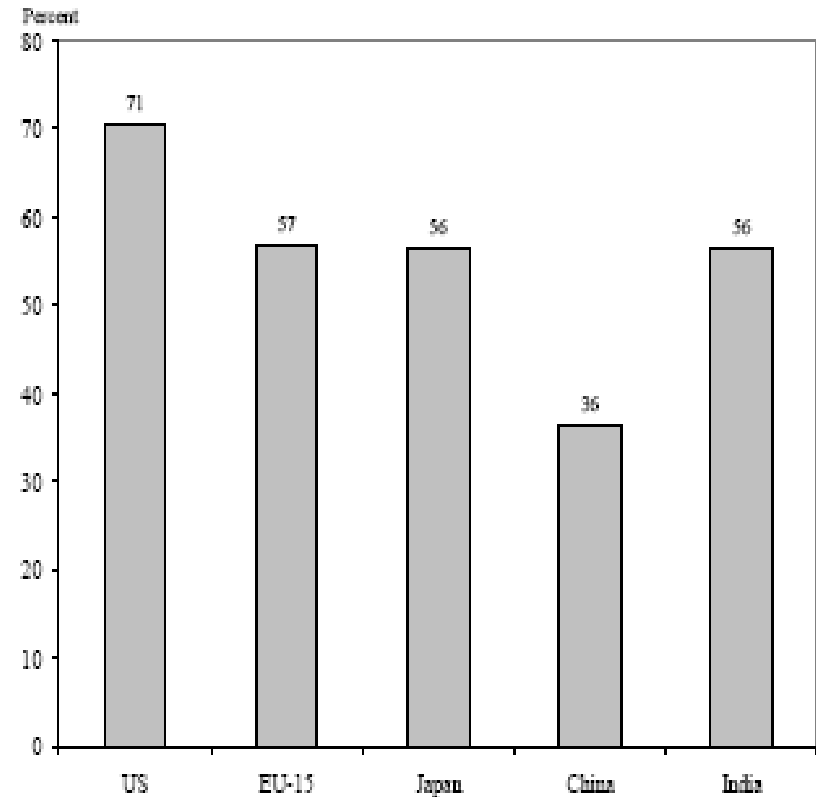
Wealth Effects



Scale Matters



Consumption Share of GDP



Reinhart and Rogoff (2008)

The Five Big Five Crises:

Spain (1977), Norway (1987), Finland (1991), Sweden (1991) and Japan (1992),

Other Banking and Financial Crises:

Australia (1989), Canada (1983), Denmark (1987), France (1994), Germany (1977), Greece (1991), Iceland (1985), and Italy (1990), and New Zealand (1987), United Kingdom (1974, 1991, 1995), and United States (1984).

Figure 1: Real Housing Prices and Banking Crises

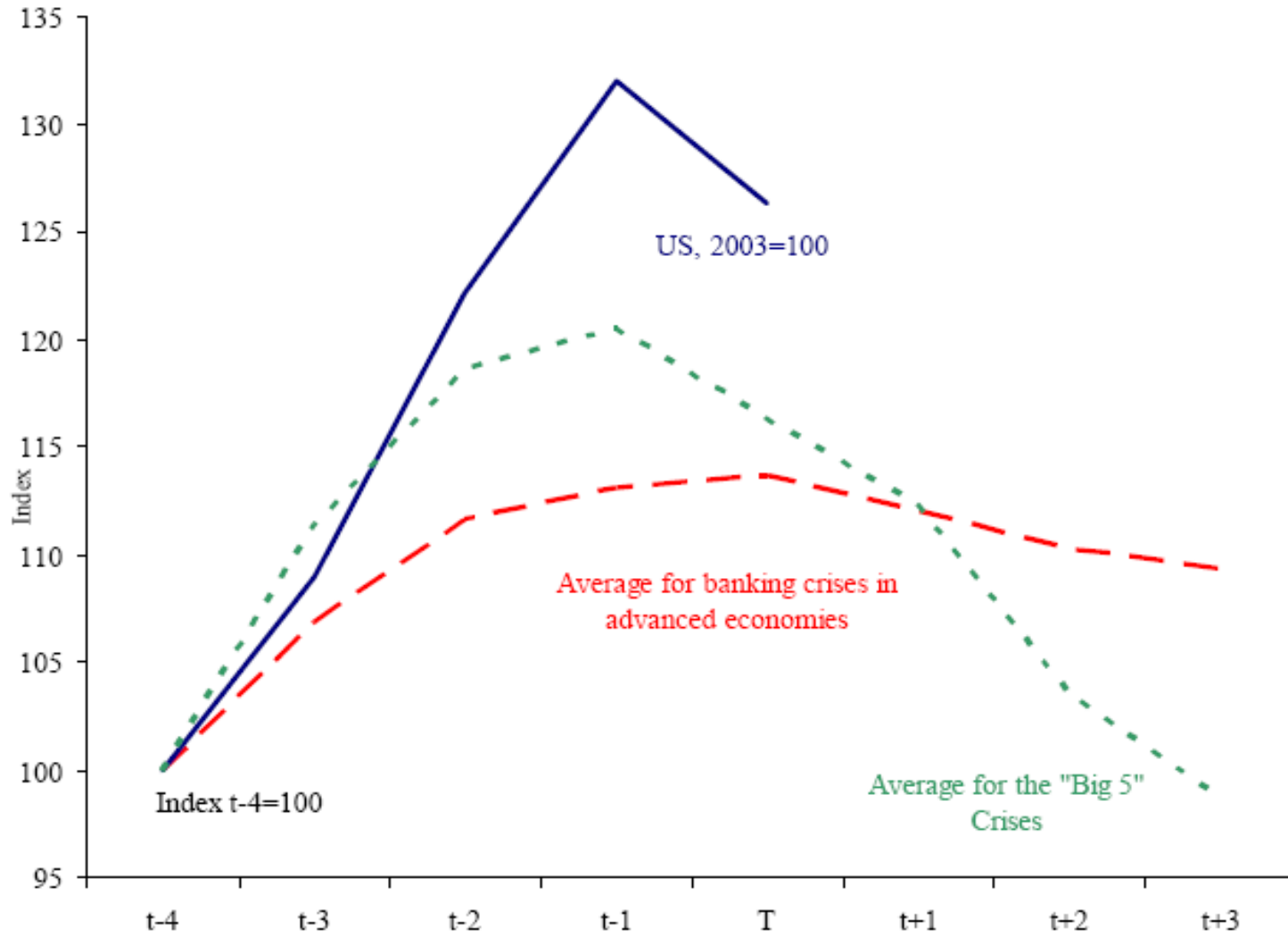


Figure 2: Real Equity Prices and Banking Crises

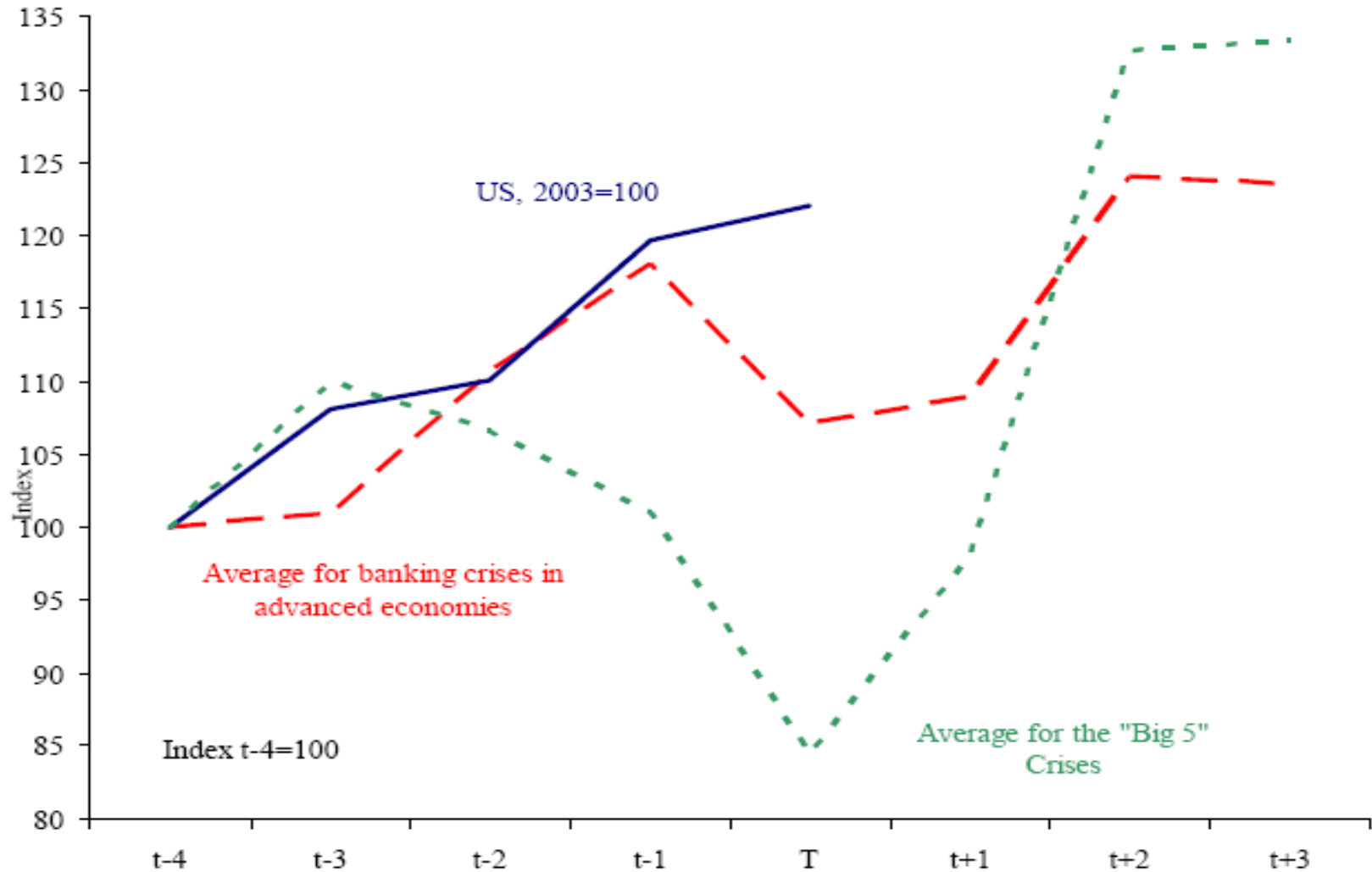


Figure 3: Current Account Balance/GDP on the Eve of Banking Crises

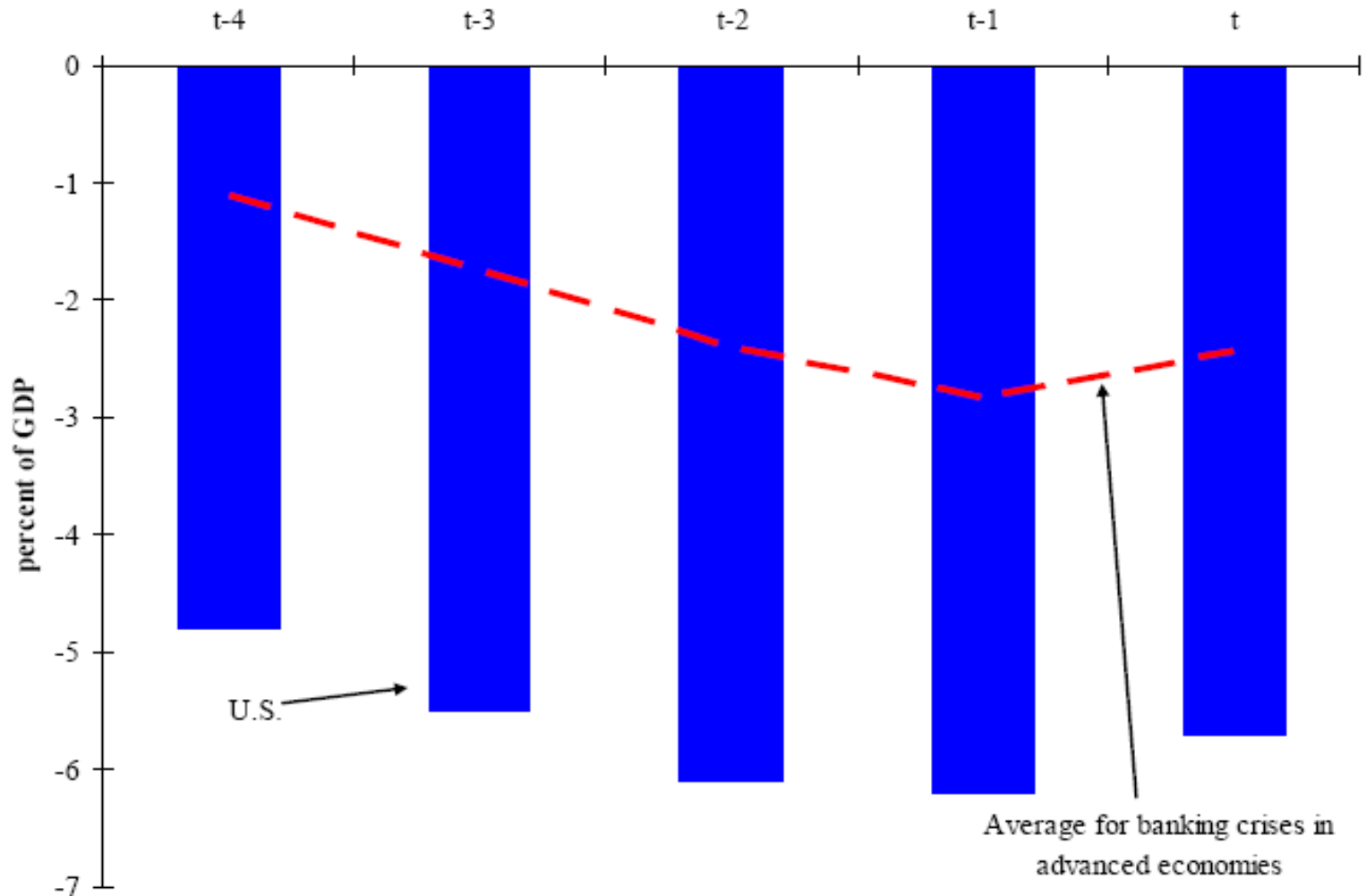


Figure 4: Real GDP Growth per Capita and Banking Crises
(PPP basis)

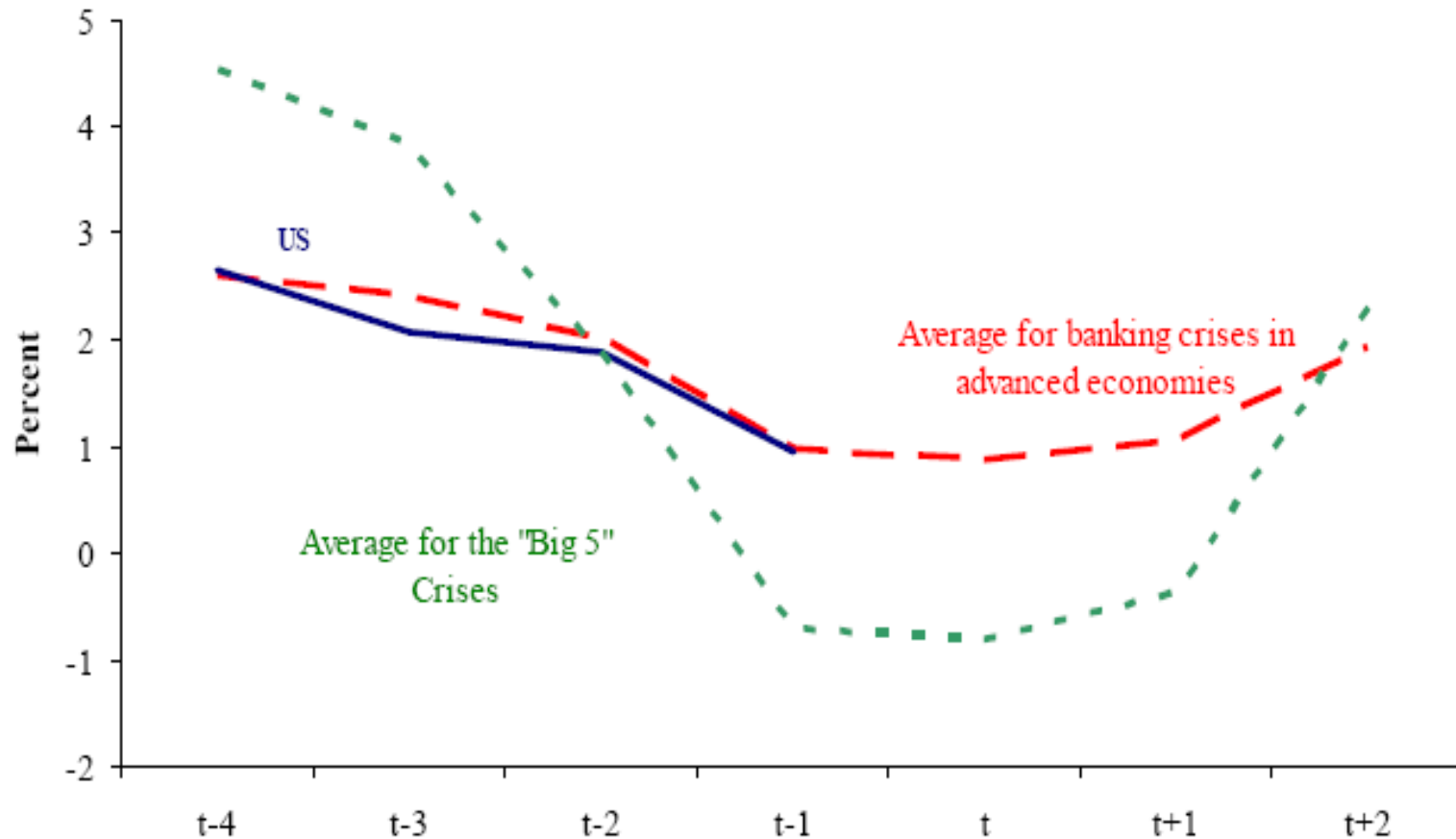
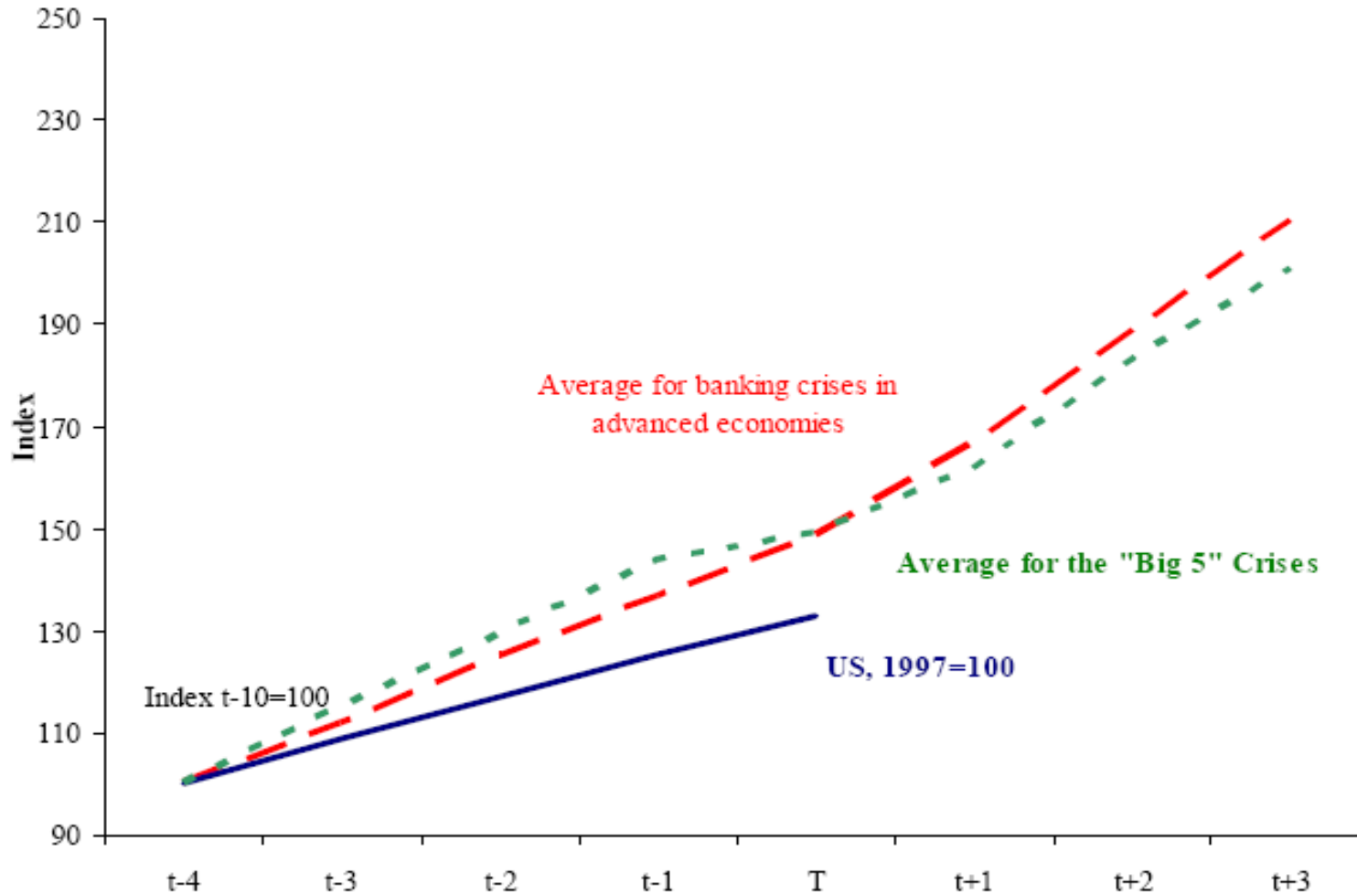


Figure 5: Public Debt and Banking Crises



- In the 1980s petrodollars were recycled through the US banking systems to profligate governments in developing economies when interest rates were low and the dollar cheap
- This time funds from countries with huge current account surpluses have been recycled into the “developing economy within the USA” i.e. the poorest and least credit worthy individuals.
- REMARK: the United States issue the currency in which these loans are denominated so they have an easy route of escape in the short run. In the long run the dollar’s international standing will be severely dented.

Financial Crises = Recessionary Fears ?



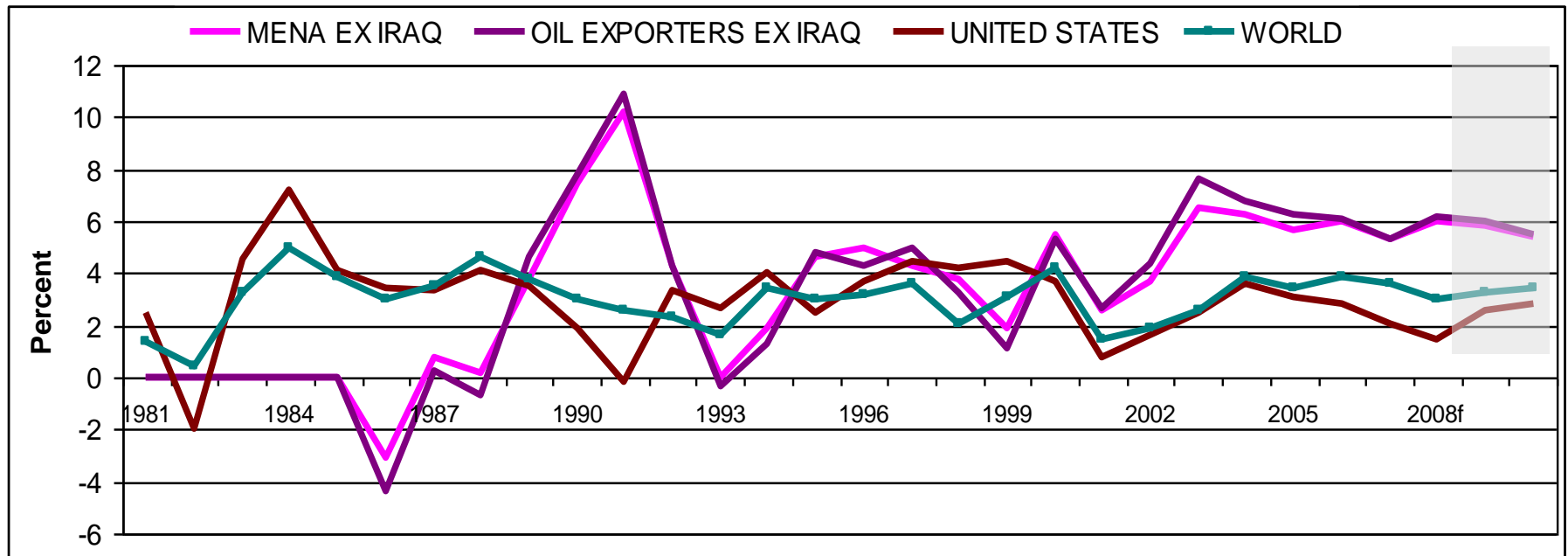
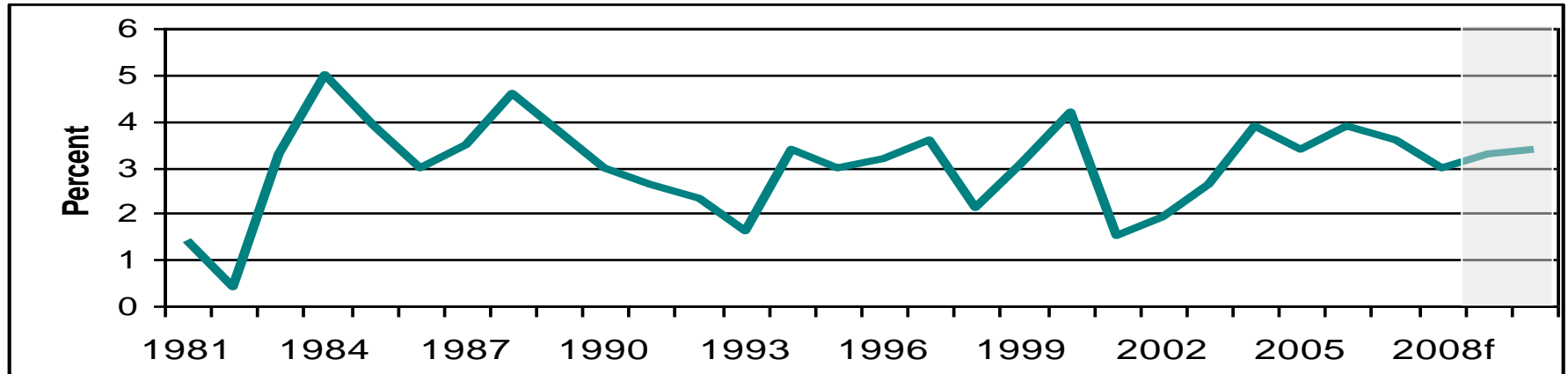
- **Sub prime shock resembles LTCM induced financial crisis: possibility that a credit contraction will trigger a series of hedge fund failures in succession.**
- **But Sub Prime shock occurred in a period with:**
 - Greater liquidity in markets
 - Consumption rates sustained and have increased in tandem with household wealth
 - Most plausible estimate is that 10% in housing prices would lower consumption ratio by about 1%
- **There have been 3 'crashes' in recent history:**
 - Saving & Loans Crisis (late 1980s to beginning of 1990s)
 - LTCM Crisis (1998)
 - Enron/WorldCom Crisis (2001-2002)
- **Current equity market decline looks small in relation to previous declines.**

Policy Effects:

- **Tighter lending terms and standards in the sub prime mortgage market**
- **Commitment of central banks to ensuring liquidity**
- **Concerted policy action by central banks**

Assessment: US slowdown rather than 'recession'

World Real GDP Growth @ 30 Year High & Less Volatile



Source: EIU, February 2008

- **Uncertainty phase leading to credit and capital market volatility.**
- **SP losses and write-downs currently running at \$180 billion.**
- **Likely total losses: \$300 to \$350 billion of the \$1.2 trillion SP market**

- According to a report by S & P the exposure of Gulf banks to U.S. subprime mortgage-related instruments is limited.
- A survey assessed the exposure of 20 of the largest banks in the Gulf to U.S. subprime mortgage-related instruments. The aggregate subprime exposure of the banks according to the survey stands at less than 1% of total assets.
- Therefore no major change in fundamentals
 - Economic growth is set to remain sound in the context of positive demographics and record-high oil prices
 - income growth expected to continue
- Structural differences in the mortgage market in region compared to that of US: **No subprime market in the GCC**

GCC markets show low correlation with emerging and developed markets, offering potential risk diversification



Monthly Net Return Correlations, Dec. 2003-Feb. 2008

	Bahrain	Kuwait	Egypt	Saudi Arabia	Dubai	Abu Dhabi	Qatar	Oman	Brent	NYSE 100	India	China	MSCI EM	FTSE
Bahrain	1.00													
Kuwait	0.55	1.00												
Egypt	0.51	0.14	1.00											
Saudi Arabia	0.35	0.31	0.21	1.00										
Dubai	0.40	0.46	0.35	0.48	1.00									
Abu Dhabi	0.38	0.46	0.11	0.45	0.76	1.00								
Qatar	0.29	0.21	0.38	0.29	0.39	0.42	1.00							
Oman	0.36	0.29	0.32	0.35	0.53	0.49	0.25	1.00						
Brent	-0.06	-0.12	0.19	0.04	-0.10	-0.10	0.24	-0.02	1.00					
NYSE 100	-0.02	-0.06	0.07	-0.18	-0.04	-0.12	0.05	-0.07	-0.19	1.00				
India	-0.04	-0.23	0.31	0.09	0.09	-0.04	0.19	0.08	0.11	0.49	1.00			
China	-0.06	-0.06	-0.10	-0.10	-0.16	-0.15	0.06	-0.15	0.08	0.40	0.23	1.00		
MSCI EM	0.15	-0.09	0.37	0.02	0.01	-0.13	0.18	-0.02	0.18	0.64	0.72	0.45	1.00	
FTSE	-0.06	-0.14	0.31	0.09	0.09	-0.06	0.27	0.07	0.19	0.69	0.68	0.26	0.71	1.00

Source: Reuters 3000Xtra, Author's calculation

- Value of oil wealth of Middle East oil exporters increased by an estimated \$32 trillion between 1995 and 2007
- Massive Wealth Creation:
 - Currently, the GCC region's proven oil reserves stand at 484.3 billion barrels and natural gas reserves at 41.4 trillion cubic meters accounting for 40.3% of the world's proven oil and 23% of natural gas reserves, respectively.
 - Given global energy demand growth projections, using conservative estimates for oil prices at \$48/bbl, the projected cumulative oil and natural gas revenues for the GCC in the 2005-2030 period totals \$5.1 trillion. [Goldman Sachs]
- Permanent Income increase of some **\$650** billion at a real rate of 3%

- Accumulation of Net Foreign Assets with cumulative Current Surpluses (2003-2007) of oil producers \$934 billion (GCC \$702 billion) & international reserves
- MENA international reserves have tripled between 2003 and 2007: \$242.9bn (2003) to \$776.6bn (2007)
- ***GCC have become 'asset based' economies with income from net foreign assets more important than income from energy exports => interest rates more important than oil prices***

- Fiscal Policy:
 - Oil producers policy reaction has been fiscally conservative: $\frac{1}{2}$ of increased oil revenues have been saved
 - But expenditure rapidly rising
 - Fiscal position of GCC remains in surplus for an oil price in the range of \$35-\$38
- Investment policies less dependent on oil revenues

Strong macroeconomic fundamentals imply low macro risks:

- High growth rates driven by higher oil prices, diversification and economic liberalization policies imply high expected corporate profits and investment returns
- Investment-led growth with large infrastructure component
→ increased productivity growth & ↑ private sector investment
- Expectations of GCC Regional Economic Integration: lower the cost of equity capital and lead to convergence of asset prices
- Gradual Market de-segmentation & liberalization of access to real assets and financial markets, de jure & de facto: free zones, property freehold
- Safe haven: attracting capital and elites from neighboring countries.

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- Banks, lenders and financial Intermediaries need to work on facilitating refinancing options that would be beneficial to borrowers.
 - Legislation needed on securitisation (critical for real estate companies looking to spread risk)
 - Regulation needed to facilitate selling of debt and other structured securities
 - Effective disclosure needed