

Global Economy – What's the Next Deal?

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Outline

1. Normal recession versus balance sheet recession
2. What happens after bubbles burst?
 - Implications of de-leveraging
 - Credit growth, inflation, currency and bond yields
3. Balance sheet repair
4. Stimulus programs versus private de-leveraging
 - Who is in the driving seat -- private sector or governments or central banks?
5. GDP outlook
 - DEVELOPED versus EMERGING
 - How much rebalancing?
6. Inflation or deflation?
 - Money and credit growth versus government debt

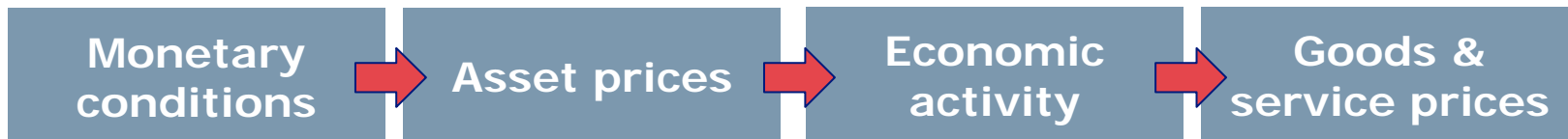
Why did the credit bubble produce a more severe recession?

Two types of economic downturn

1. CONVENTIONAL or STANDARD RECESSION

Inflation \Rightarrow interest rate hikes \Rightarrow economic slowdown \Rightarrow decline in inflation \Rightarrow interest rates lowered \Rightarrow economic recovery

This model emphasises **FLOWS** (not ASSETS & LIABILITIES)

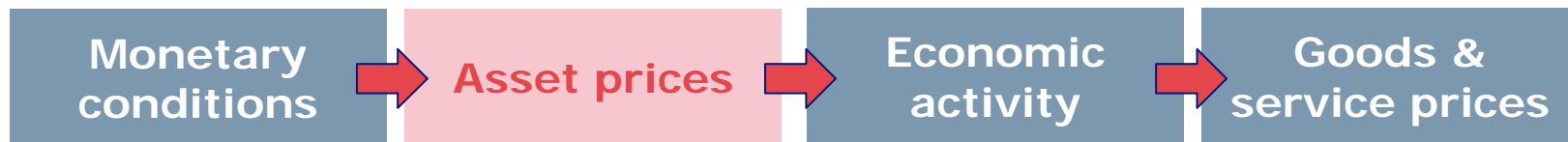


Two types of economic downturn

2. UNCONVENTIONAL or BALANCE SHEET RECESSION (after Irving Fisher, US economist)

Credit bubble \Rightarrow asset bubble \Rightarrow asset price collapse \Rightarrow debt deflation or credit shrinkage \Rightarrow economic downturn and deflation

This model emphasises **BALANCE SHEETS**



Sequel to the global financial crisis:

Developed versus Emerging

DEVELOPED ECONOMIES

- Credit & housing bubble
- Current A/C deficits
- Household & financial sector balance sheets over-indebted
- Require balance sheet repair
- Monetary & fiscal policy unable to gain traction

EMERGING ECONOMIES esp. ASIA

- Financial crisis 1997-98
- Current A/C surpluses
- Did not participate in credit and housing bubble
- Balance sheets in good shape
- Monetary & fiscal policy gaining traction quickly

Sequel to global financial crisis:

After credit addiction...comes credit aversion

Inflation and interest rate declines after bubbles burst (% p.a.)

	10 years pre-crisis	10 years post crisis	
Japan	1980-89 average	1990-99 average	Change
10-y JGB yield	6.02	3.91	-2.11
CPI %YoY	2.53	1.21	-1.32
Sweden	1980-92 average	1993-02 average	
Govt bond yield	11.85	6.42	-5.43
CPI %YoY	7.0	1.0	-6.00
Thailand	1989-98 average	1999-09 average	
Govt bond yield	10.42	5.09	-5.33
CPI %YoY	5.5	2.3	-3.20
Average decline in bond yield			-4.29
Average decline in CPI inflation			-3.51

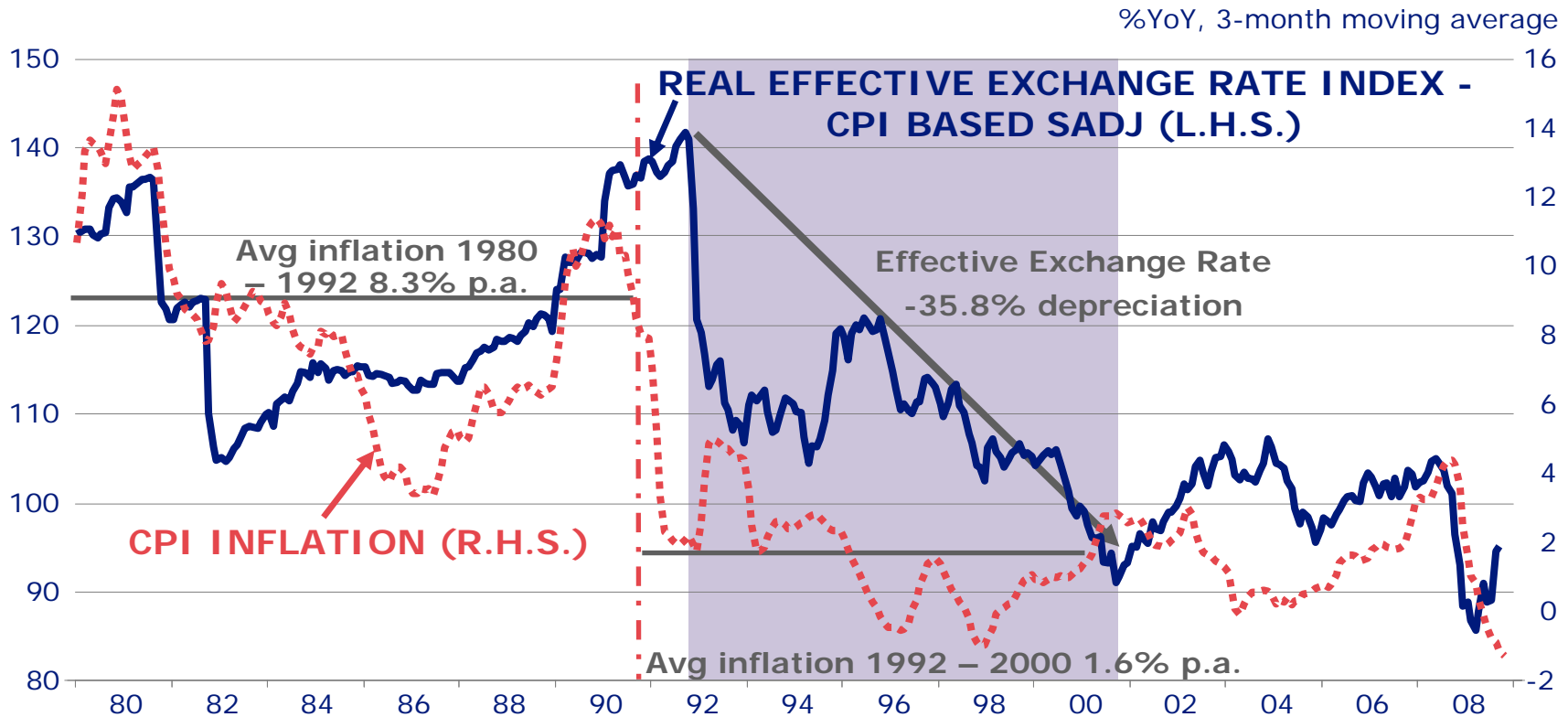
Source: Thomson Datastream, as at 6 November 2009.



Aftermath of bubbles bursting

1. Sweden after 1992

SWEDISH INFLATION & REAL EFFECTIVE EXCHANGE RATE



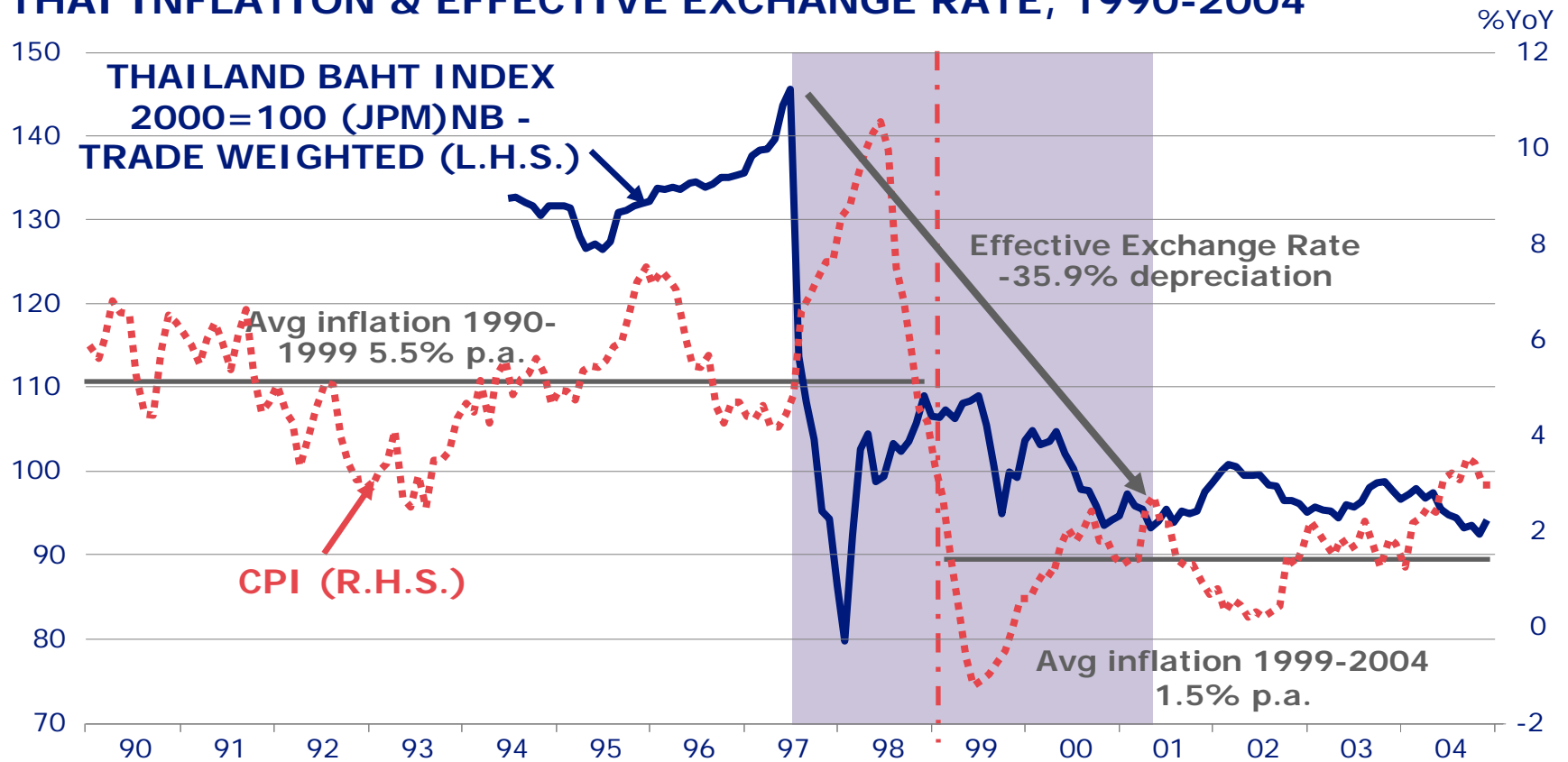
Source: Thomson Datastream, as at 8 December 2009.



Aftermath of bubbles bursting

2. Thailand after 1997

THAI INFLATION & EFFECTIVE EXCHANGE RATE, 1990-2004



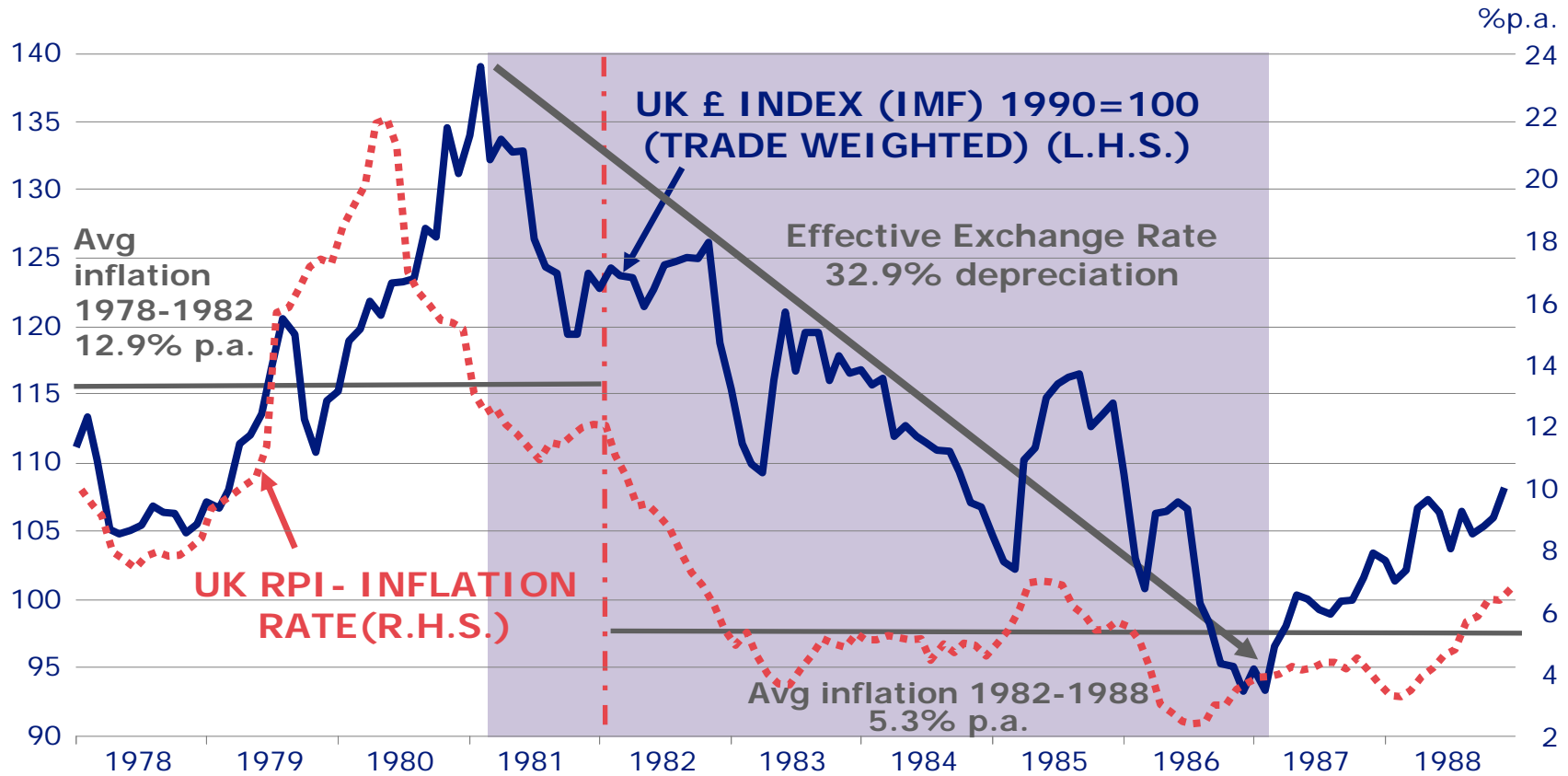
Source: Thomson Datastream, as at 8 December 2009.



Aftermath of money & credit squeeze

3. UK after 1980

UK: INFLATION & TRADE-WEIGHTED EXCHANGE RATE INDEX, 1978-1988



Source: Thomson Datastream, as at 9 December 2009.



Sequel to global financial crisis:

Currencies depreciate....but inflation declines

Currency depreciation and inflation decline (% p.a.)

	Trade weighted currency depreciation	Inflation decline
Sweden	1992 - 2001	1980 - 1992 average 8.3%
		1992 - 2000 average 1.6%
	-35.8%	-6.7%
Thailand	1997 – 2001	1990 - 1999 average 5.5%
		1999 - 2004 average 1.5%
	-35.9%	-4.0%
UK	1981 – 1986	1978 -1982 average 12.9%
		1982 - 1988 average 5.3%
	-32.9%	-7.6%

Source: Thomson Datastream, as at December 2009.



Sequel to global financial crisis:

Developed versus Emerging

DEVELOPED ECONOMIES

- Interest rates very low
- Private sector demand for credit weak ⇒ low money & credit growth
- Search for yield
- GDP & earnings growth sub-par

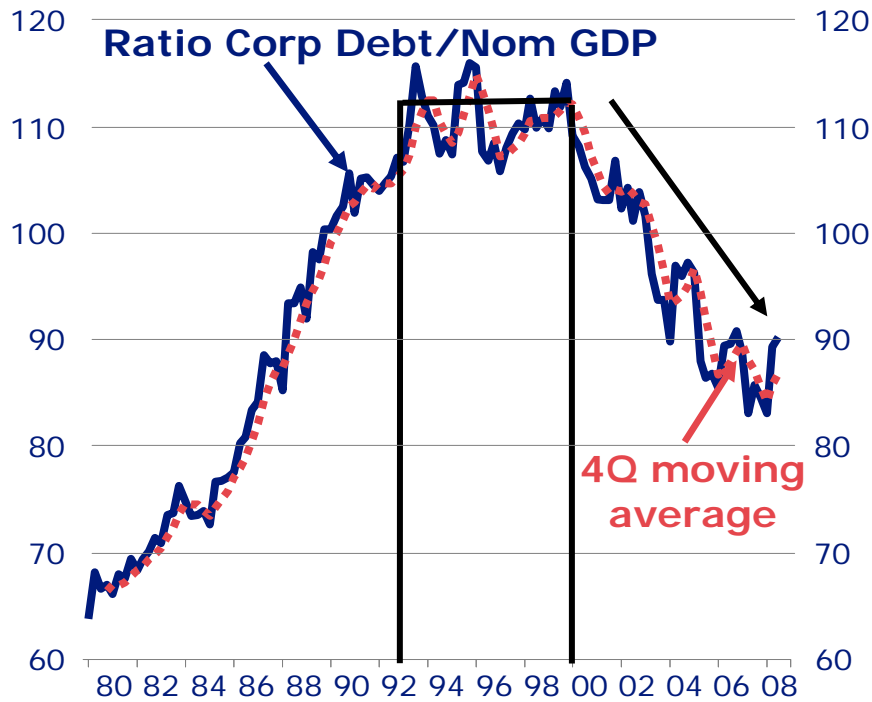
EMERGING ECONOMIES

- Interest rates still low
- Rising private sector demand for credit ⇒ rapid money & credit growth
- Search for inflation hedges
- GDP & earnings growth strong

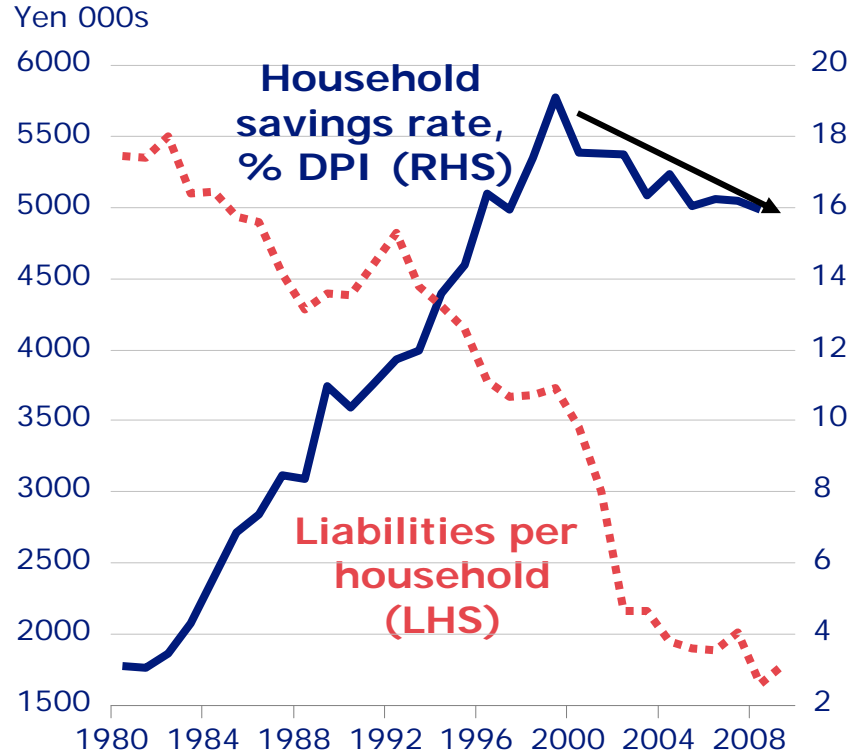
Balance sheet repair in Japan:

Corporate & household de-leveraging from 1998

Ratio of corporate debt to GDP (%)



Household debt & savings rate

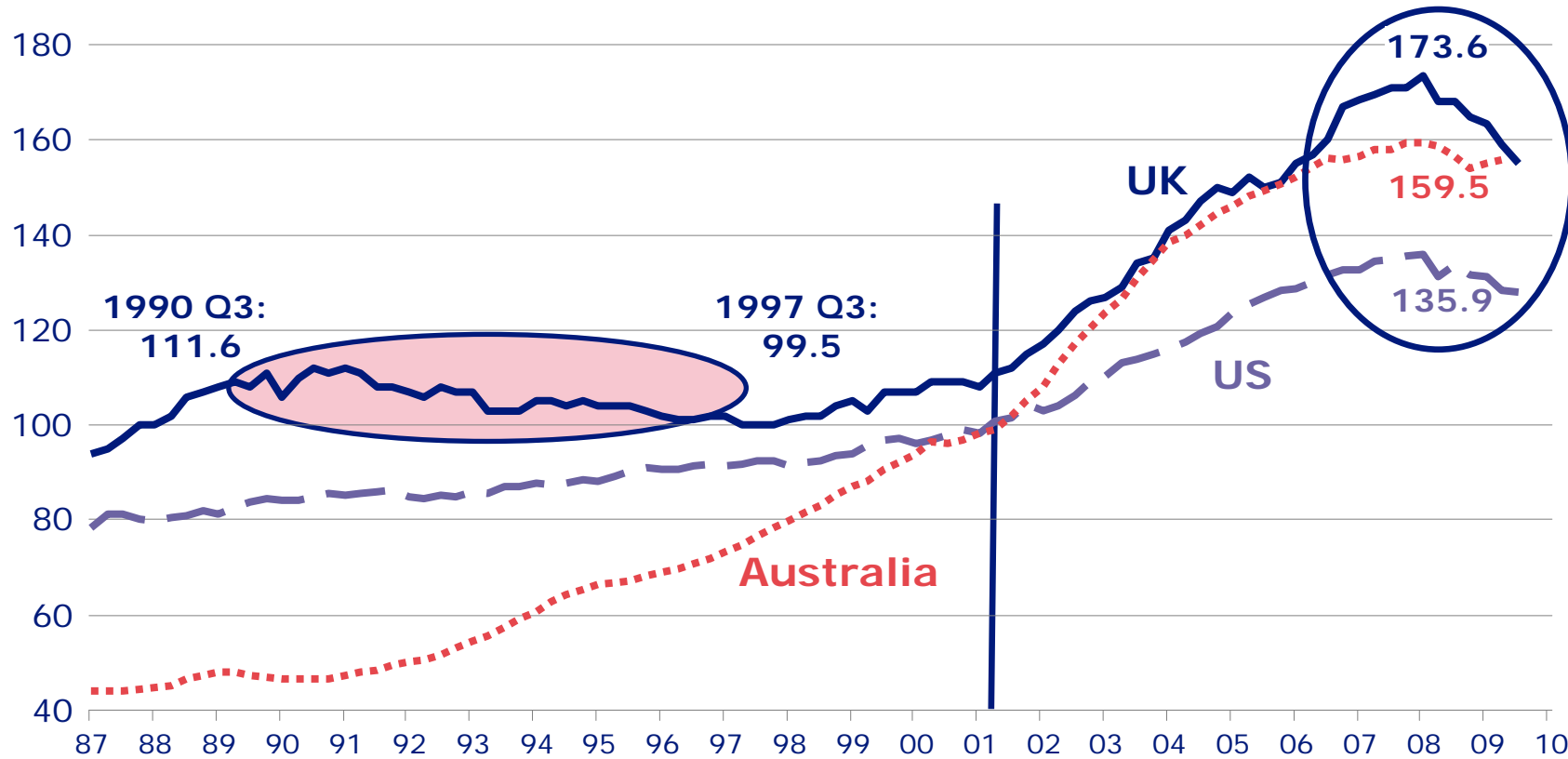


Source: Thomson Datastream, as at 2 March 2009. DPI = Disposable Personal Income.



Balance sheet repair in the US & UK: Its only just begun

US, UK, Australia: Household debt to disposable income ratios (%)

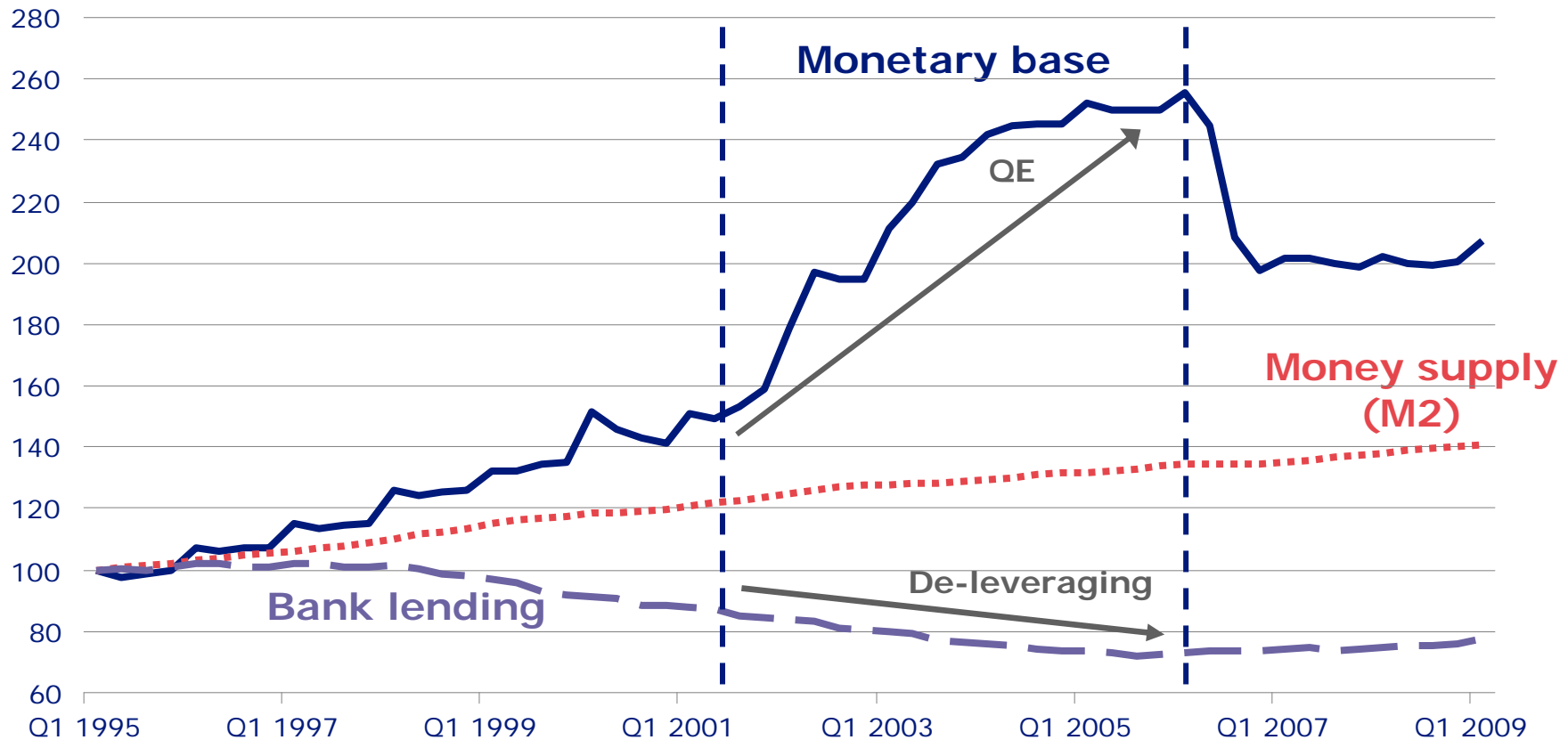


Source: Thomson Datastream, as at 31 December 2009.



Balance sheet repair in Japan:

Quantitative Easing (QE) in Japan (2001-06) produced no upturn in money growth, in part due to de-leveraging

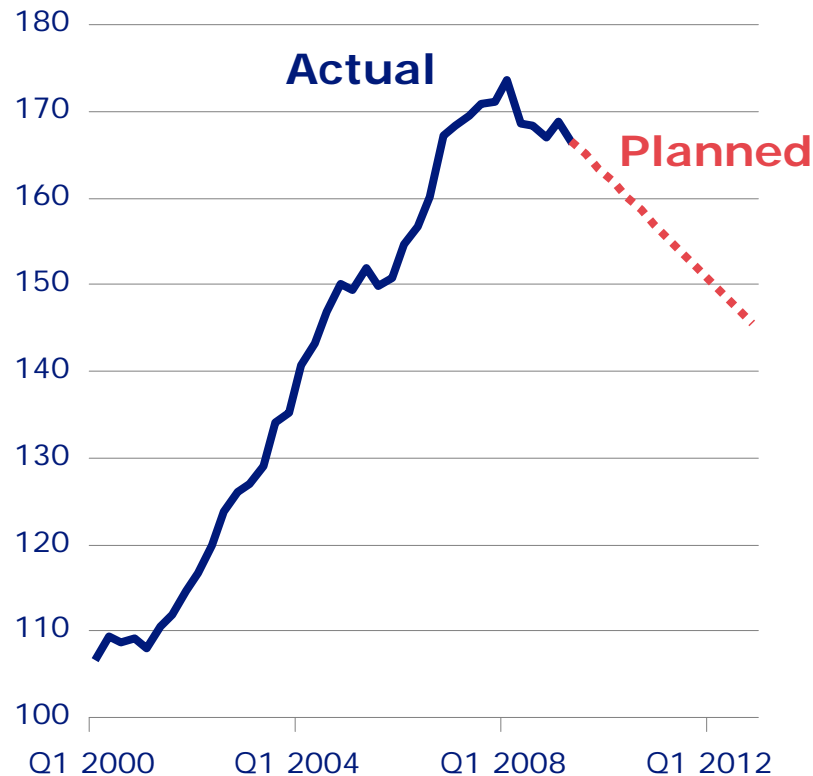


Source: Thomson Datastream, Q1 1995 rebased to 100. Data to Q1 2009 (latest available).



Implications of de-leveraging: Slower money growth

UK: household debt-to-income ratio (%)

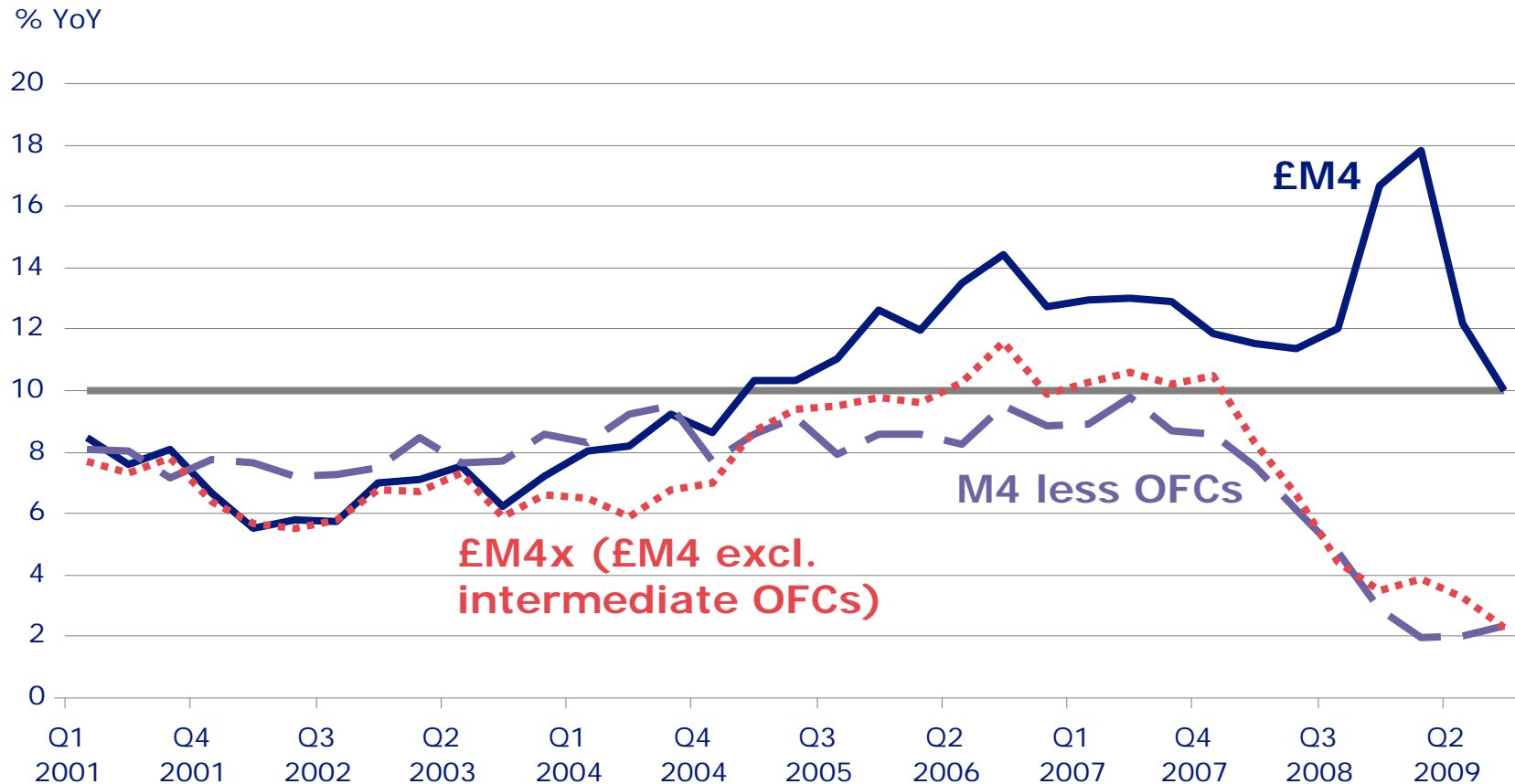


- M4 ex OFCs (M4x) in 2009 Q2 was £1,228 bn
- Assume household income grows at 3% p.a.
- If household de-leveraging reduces the debt-to-income ratio from 166% (2009 Q2) to 145% by end-2012, then household debt will decline by £50 bn
- Assuming no change in UK non-financial corporate borrowing, and no growth in bank holdings of securities, then on its own this would reduce M4x to £1,179 bn, a decline of 4%

Source: Thomson Datastream. Actual data to 30 June 2009 and planned estimates to 31 December 2012.
OFC = Other Financial Corporation.



Evidence: UK money growth has remained slow, despite Quantitative Easing

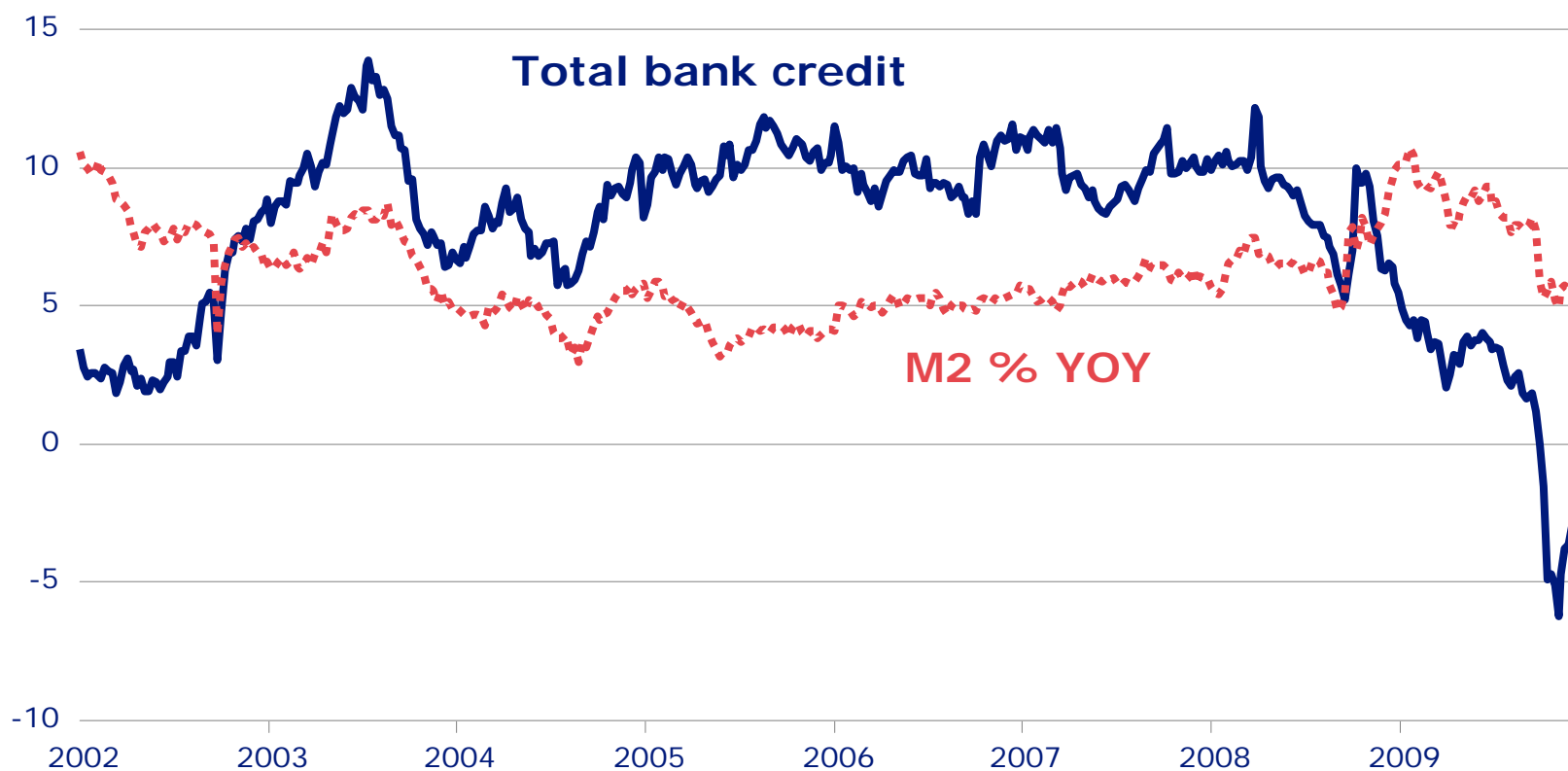


Source: Thomson Datastream, as at 31 December 2009.



Evidence: Money & credit growth in US

US: M2 and bank credit growth – 13 weeks annualised, % change

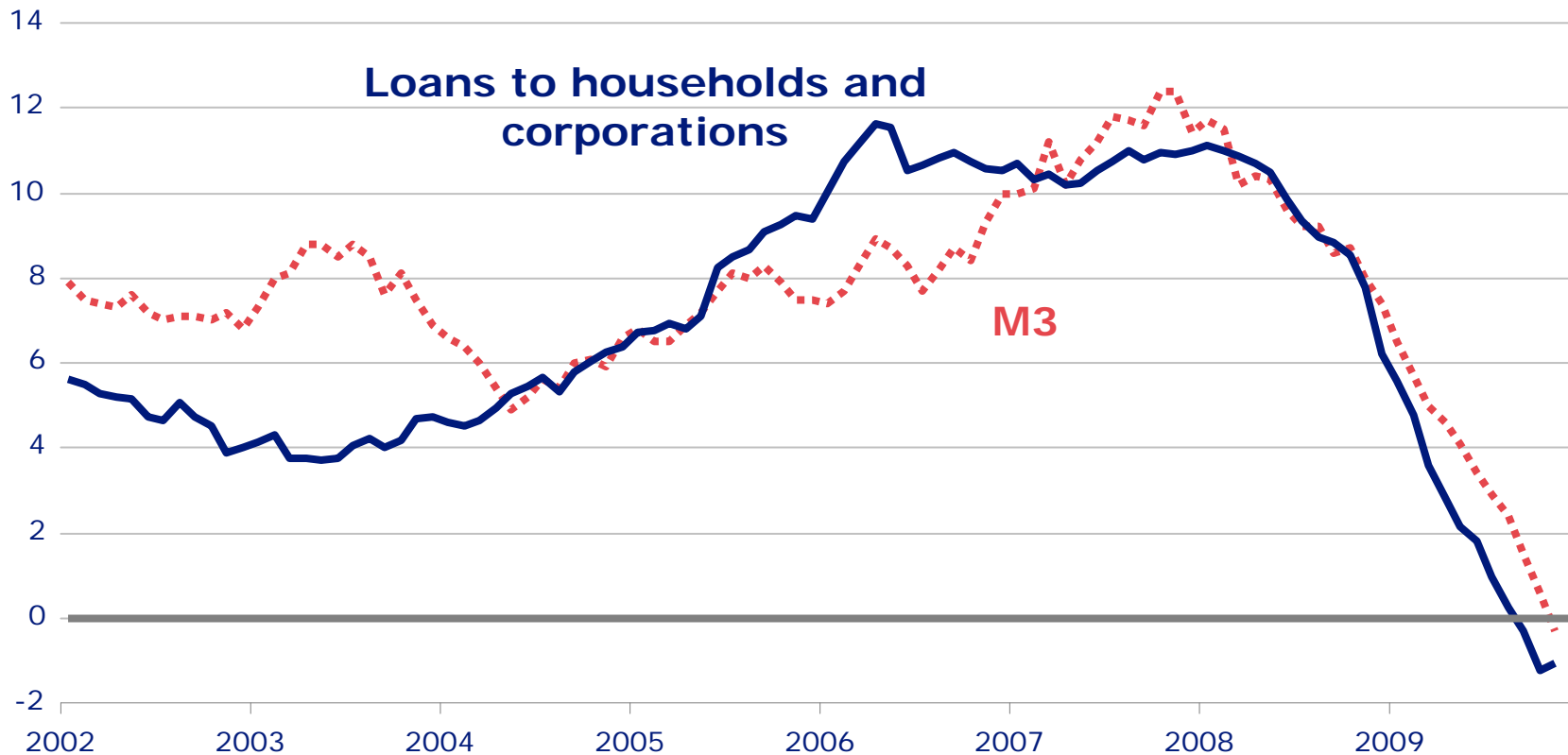


Source: Thomson Datastream, as at 31 December 2009.



Evidence: Money & credit growth in Europe

Europe: Eurozone M3 and bank lending, % YoY

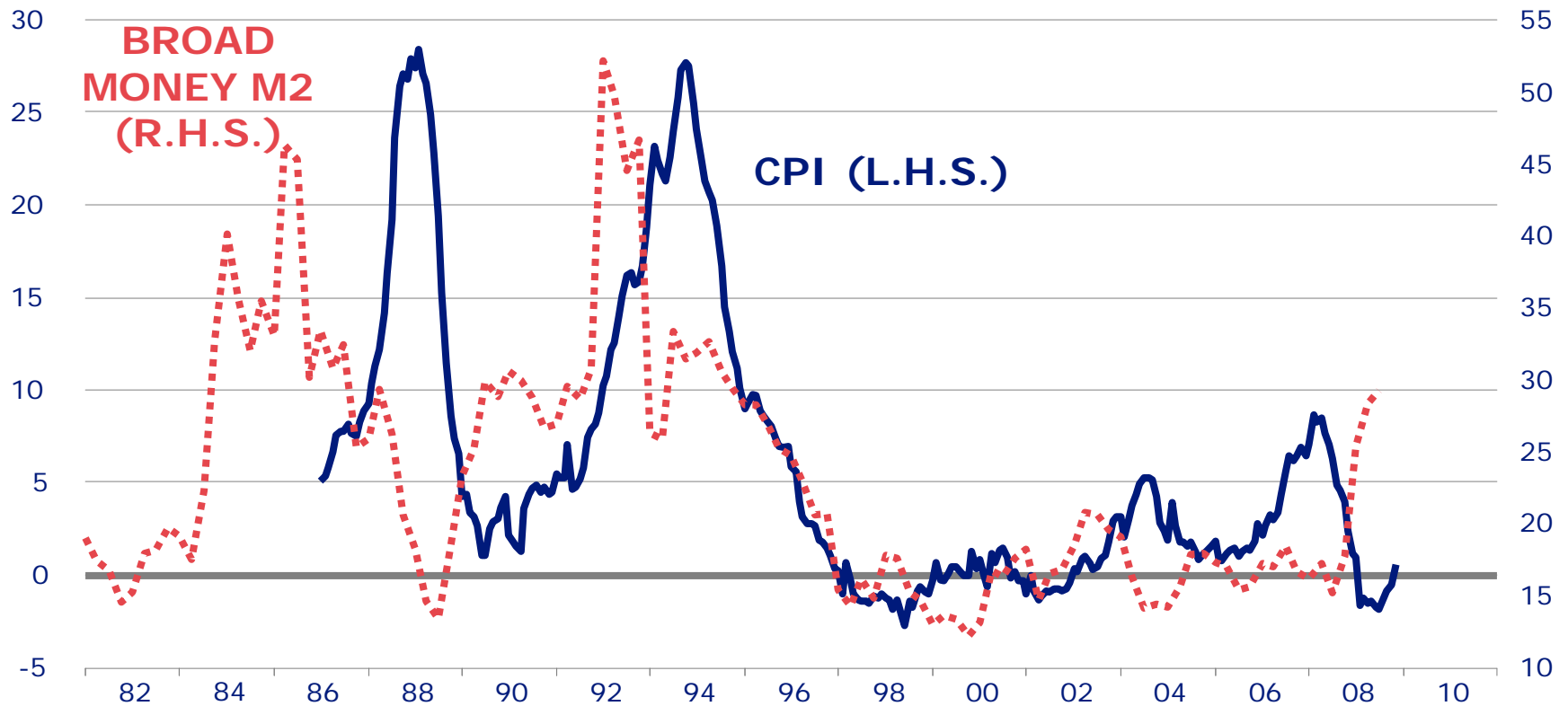


Source: Thomson Datastream, as at 31 December 2009.



Evidence: Money growth surging in China

CHINA: BROAD MONEY & INFLATION, %YOY



Source: Thomson Datastream, as at 18 December 2009.



Economic forecasts

Consensus Economics	2009 Estimate		2010 Consensus Forecast (Invesco Forecast)	
	Real GDP	CPI Inflation	Real GDP	CPI Inflation
U.S.	-2.5%	-0.4%	2.7% (2.2%)	2.1% (1.6%)
EU-16	-3.9%	0.3%	1.3% (1.4%)	1.2% (1.2%)
U.K.	-4.5%	2.1%	1.4% (1.2%)	2.3% (1.5%)
JAPAN	-5.3%	-1.3%	1.5% (1.4%)	-1.0% (-0.7%)
AUSTRALIA	1.1%	1.8%	2.9% (2.0%)	2.4% (2.1%)
CANADA	-2.5%	0.3%	2.6% (1.5%)	1.7% (1.2%)
CHINA	8.5%	-0.7%	9.6% (9.4%)	2.5% (3.0%)
INDIA	6.6%	10.4%	7.7% (7.5%)	7.2% (8.5%)

Source: Thomson Datastream, as at 31 December 2009.



Can Asia decouple?

Two-tier growth pattern in Asia

	Actual		Forecast		Growth slowdown, 2007 to 2010
	2007	2008	2009F	2010F	
Asia-Pacific	9.1	6.5	4.8	7.4	-1.7
NIEs	6.2	1.5	-2.6	4.3	-1.9
SE Asia-4	6.1	4.3	-0.1	4.3	-1.8
China	11.9	9.0	8.4	9.5	-2.4
India	9.0	6.7	6.1	7.5	-1.5

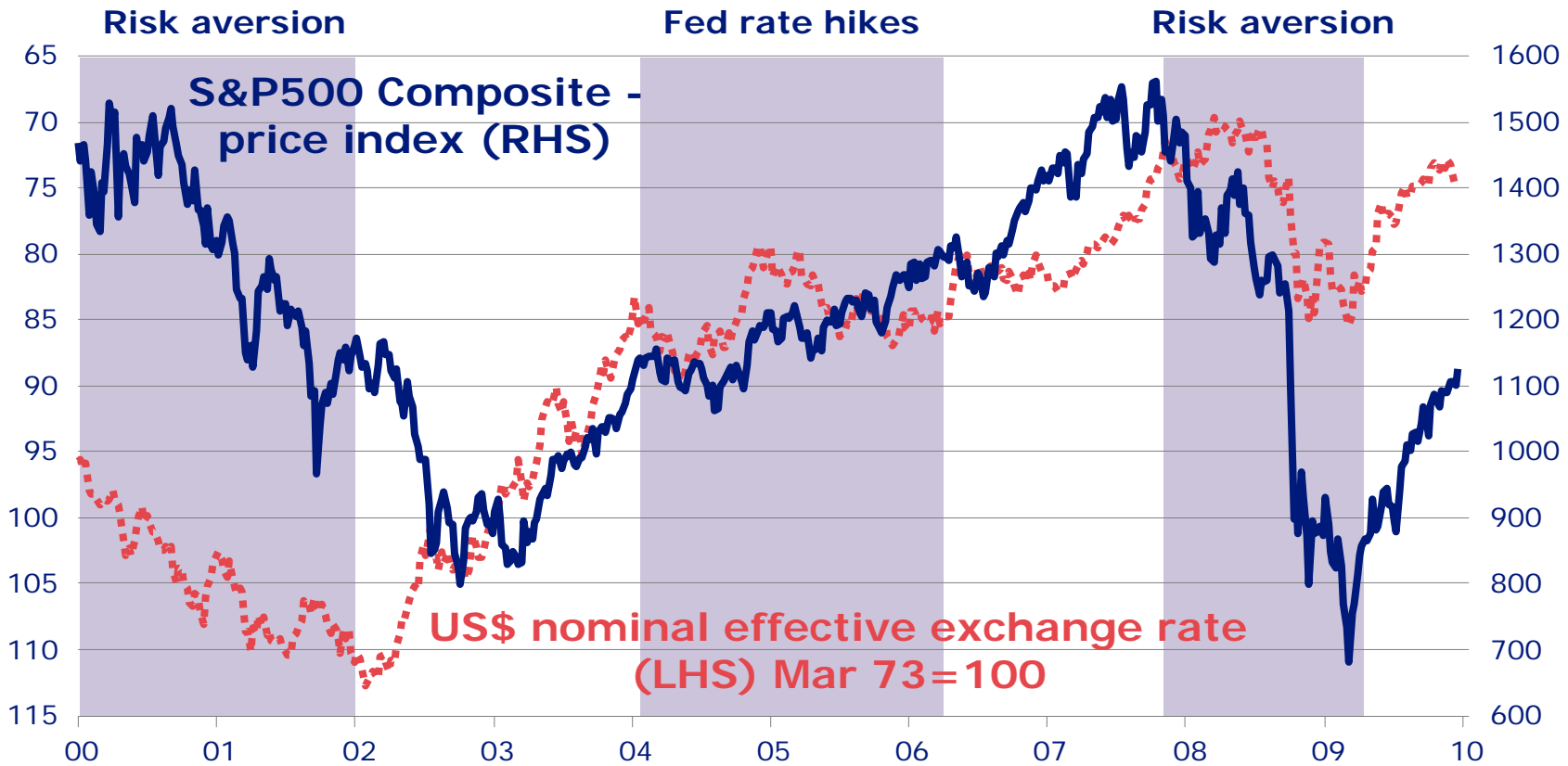
NIEs are Korea, Taiwan, Hong Kong and Singapore. SE Asia-4 includes Indonesia, Malaysia, the Philippines and Thailand. Asia Pacific is NIEs+SE Asia-4+China+India, GDP-weighted. Table shows real GDP annual growth rates.

Source: Consensus Economics and Invesco calculations. Data to and forecasts as at 12 October 2009.



US Dollar prospects

Mainly a reflection of risk appetite



Source: Thomson Datastream, as at 23 October 2009.



Summary & conclusion

- Balance sheet recession
 - In the DEVELOPED economies, but not in Asia or Latin America
- Implications of de-leveraging: the aftermath
 - Slower money and credit growth, lower bond yields
 - Exchange rate depreciation → structural, not inflationary
- Stimulus programs versus private de-leveraging
 - Private sector in driving seat, not governments or central banks
- GDP Outlook
 - Sub-par growth in DEVELOPED, with rebalancing
 - Solid growth in EMERGING Asia and Latin America ; focus on Domestic Demand
- Inflation or deflation?
 - DEVELOPED: much depends on magnitude of debt repayment
 - Without QE, deflation risks would prevail
 - EMERGING Asia: significant inflation risk in China for 2011

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