



EUROPEAN CENTRAL BANK

# The use of the CPIS at the ECB

International Conference on the CPIS – Banco de  
España *1-2 March 2006*

**Filippo di Mauro**  
**European Central Bank**

# The issues

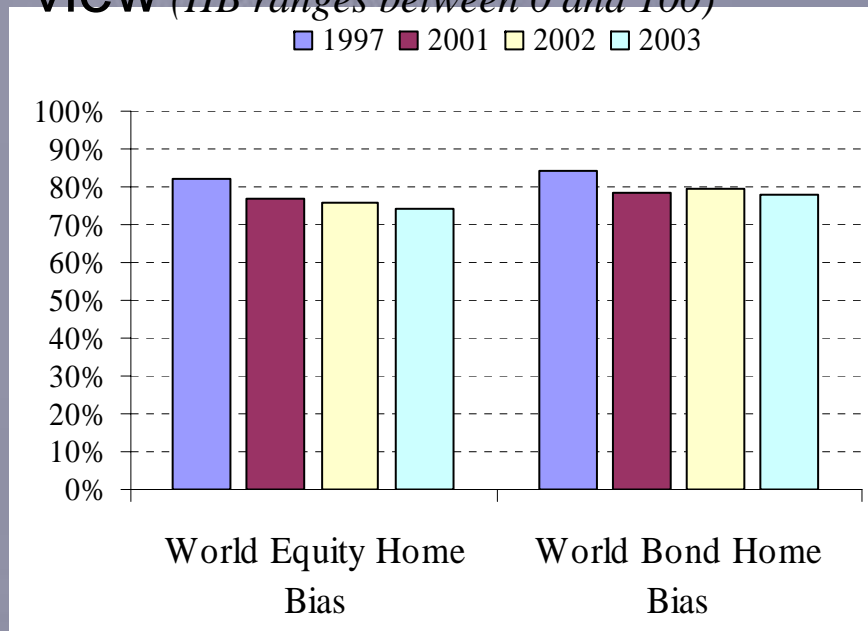
- Global financial integration is increasing
- Is home bias declining as expected?
- Is EMU enhancing regional financial integration in the euro area? (including econometric application)



# Global financial integration

# Global Home Bias

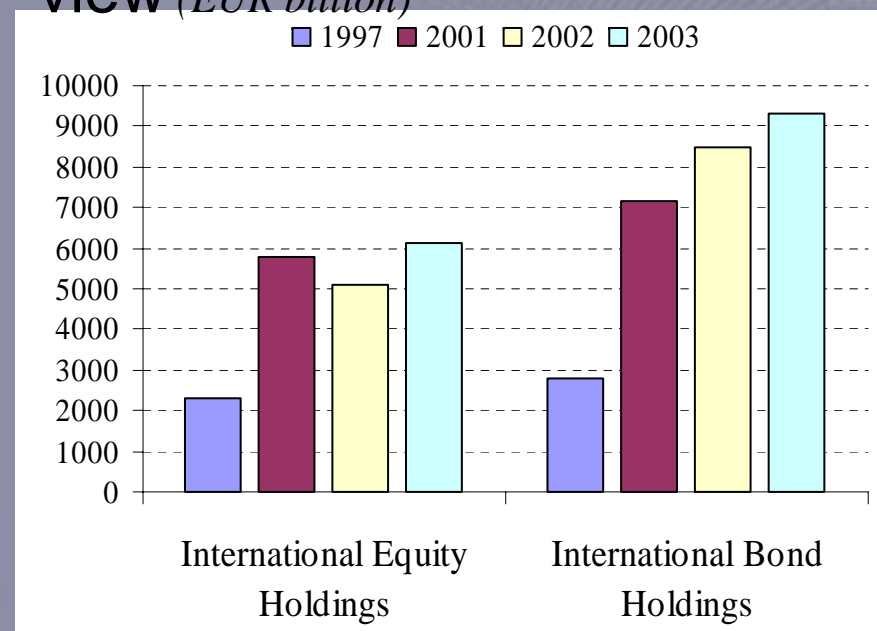
## Home Bias: Greenspan's view *(HB ranges between 0 and 100)*



Sources: BIS, DataStream, IMF, ECB staff.

Note: The world average is computed on the basis of 30 countries and the weights are GDP weights

## Savings Glut: Bernanke's view *(EUR billion)*



Sources: IMF, ECB staff.

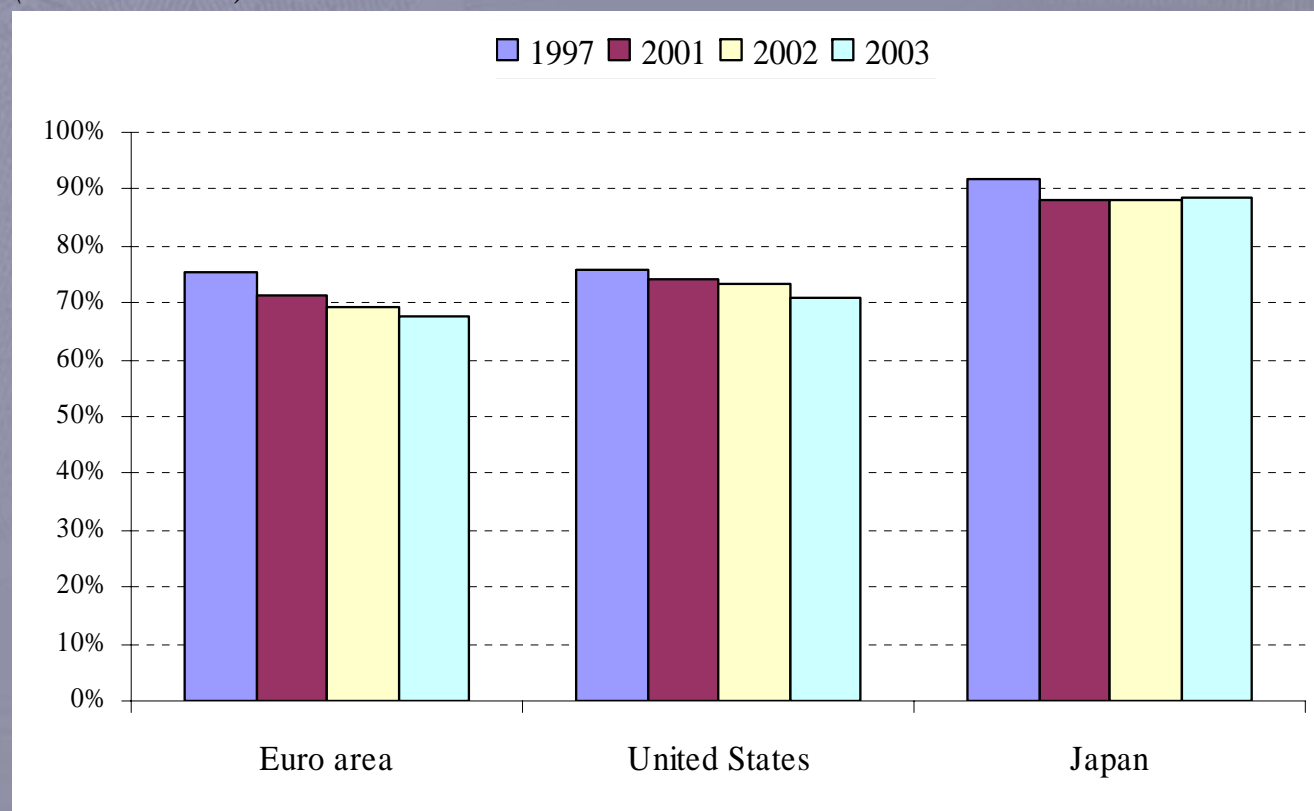
# Optimal portfolio allocation and Home Bias

- Optimal share of foreign asset =  
1 - domestic market capitalization / world market capitalization
- $HB = (1 - \text{actual share of foreign assets} / \text{optimal share}) * 100$   
→ 100 = full home bias, 0 = No home bias

# Home bias in the equity markets decrease, but slowly..

## Home Bias in the Equity Market

(annual data)

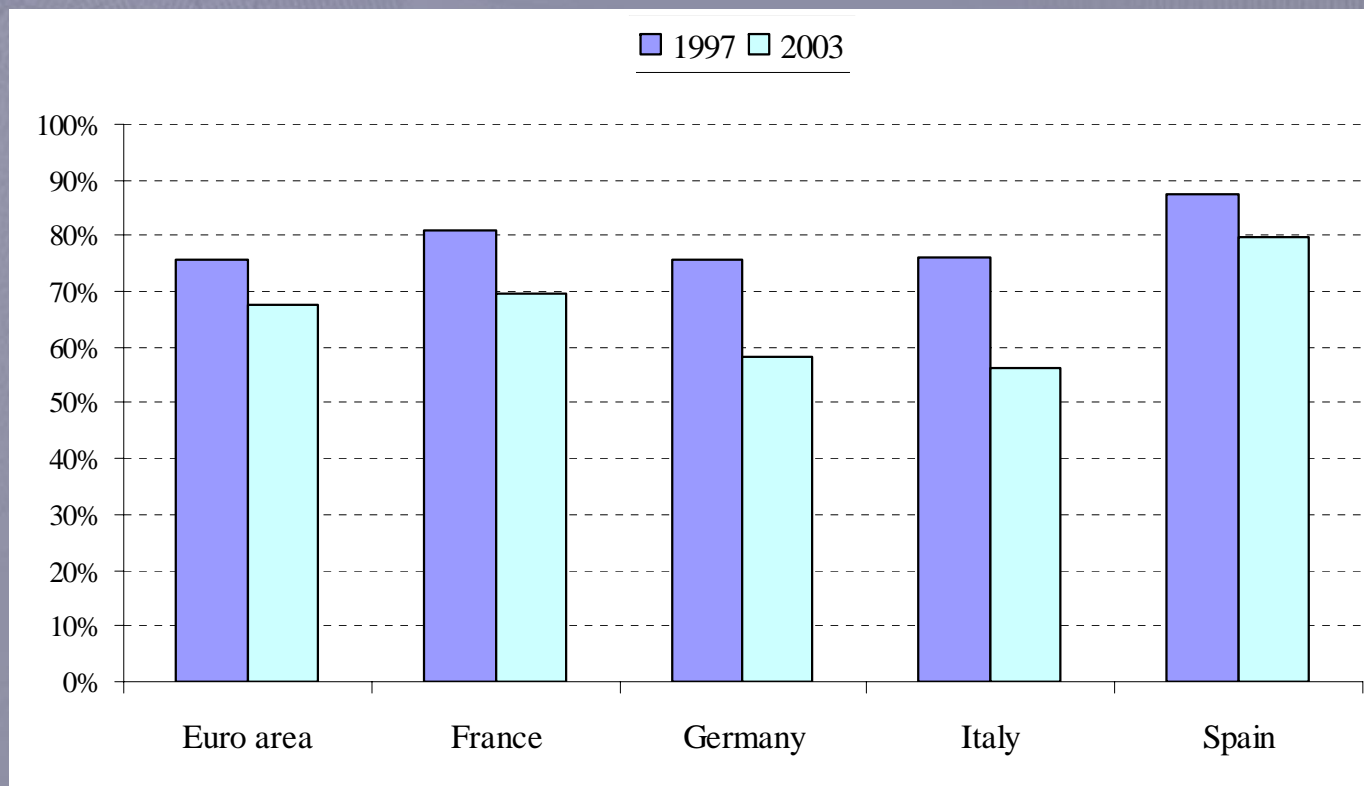


Sources: IMF, Thomson DataStream, ECB staff.

# ...more if considering individual euro area countries

## Home Bias in the Equity Market

*(annual data)*

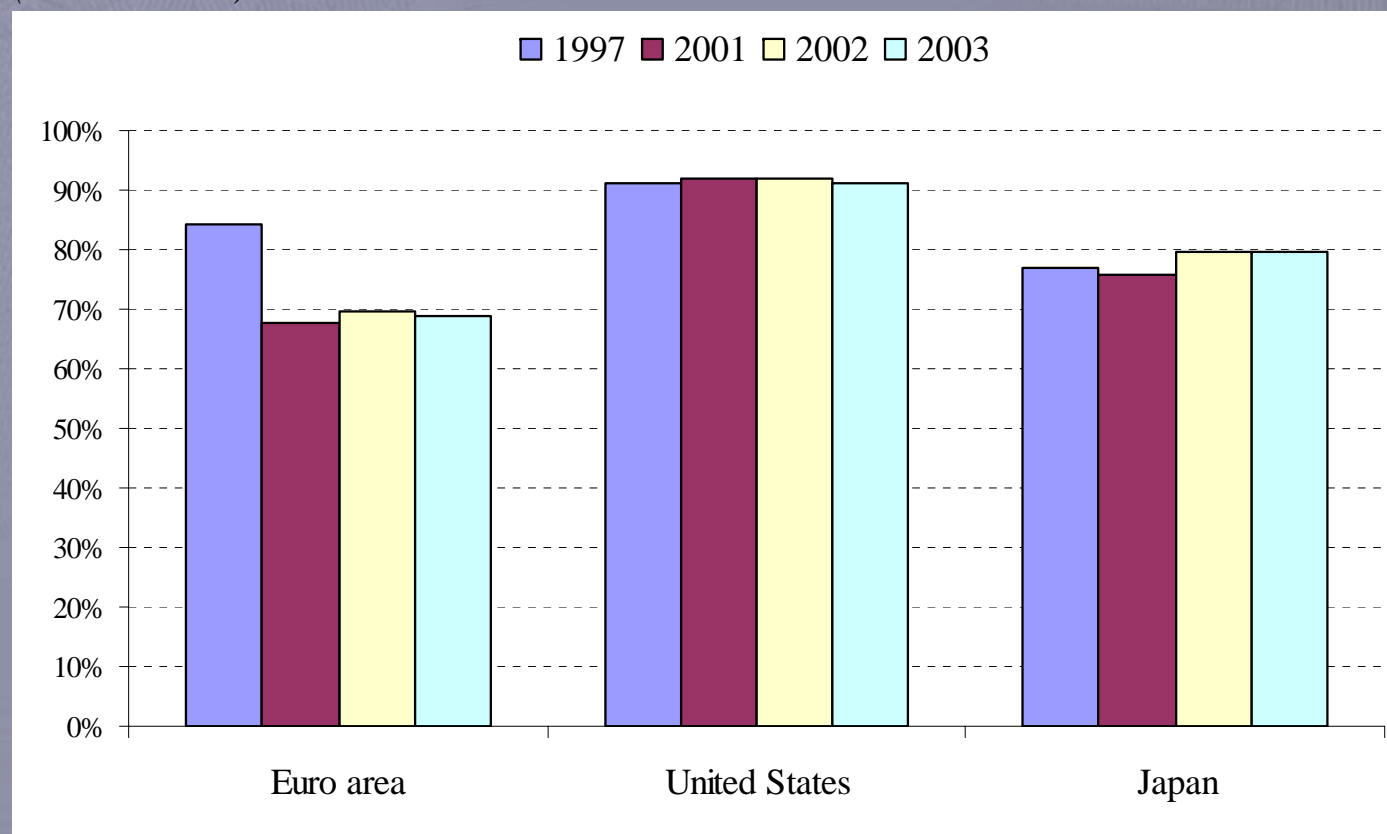


*Sources: IMF, Thomson DataStream, ECB staff.*

# Home bias decrease is even weaker for bonds, overall....

## Home Bias in the Bond Market

*(annual data)*



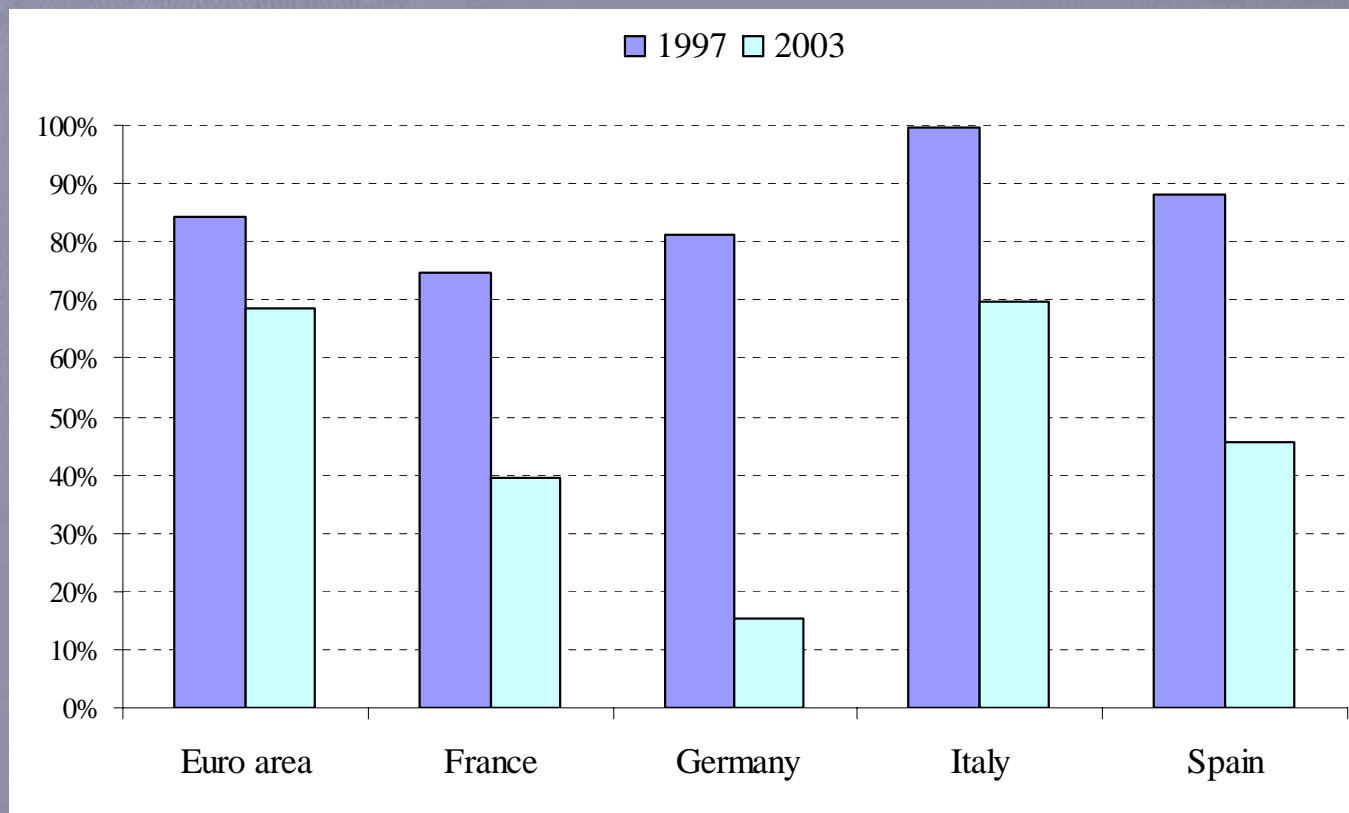
*Sources: BIS, IMF, ECB staff.*



# ....but stronger among euro area countries

## Home Bias in the Bond Market

*(annual data)*



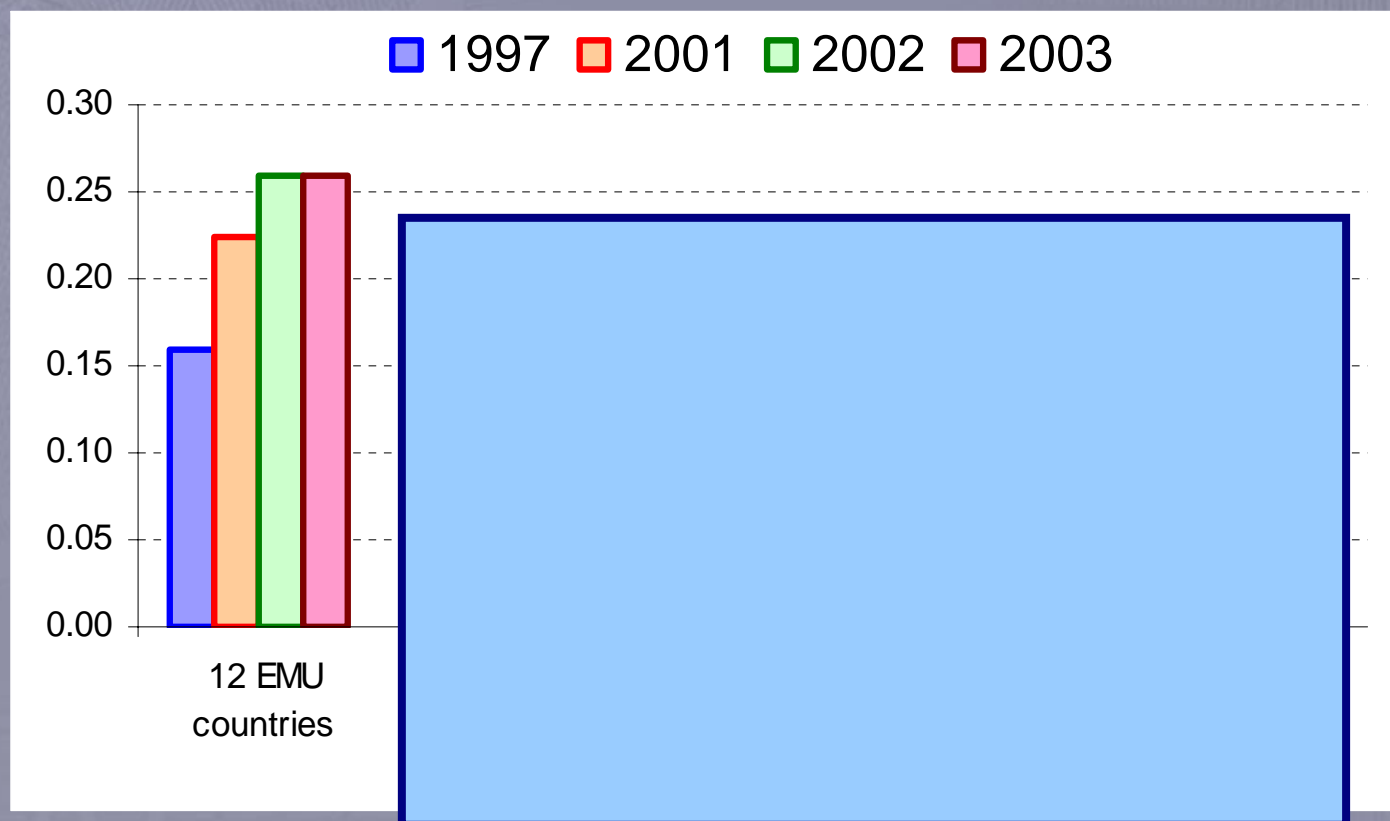
*Sources: BIS, IMF, ECB staff.*



# Regional financial integration

# Role of the euro area assets in the world

## Share of euro area equities

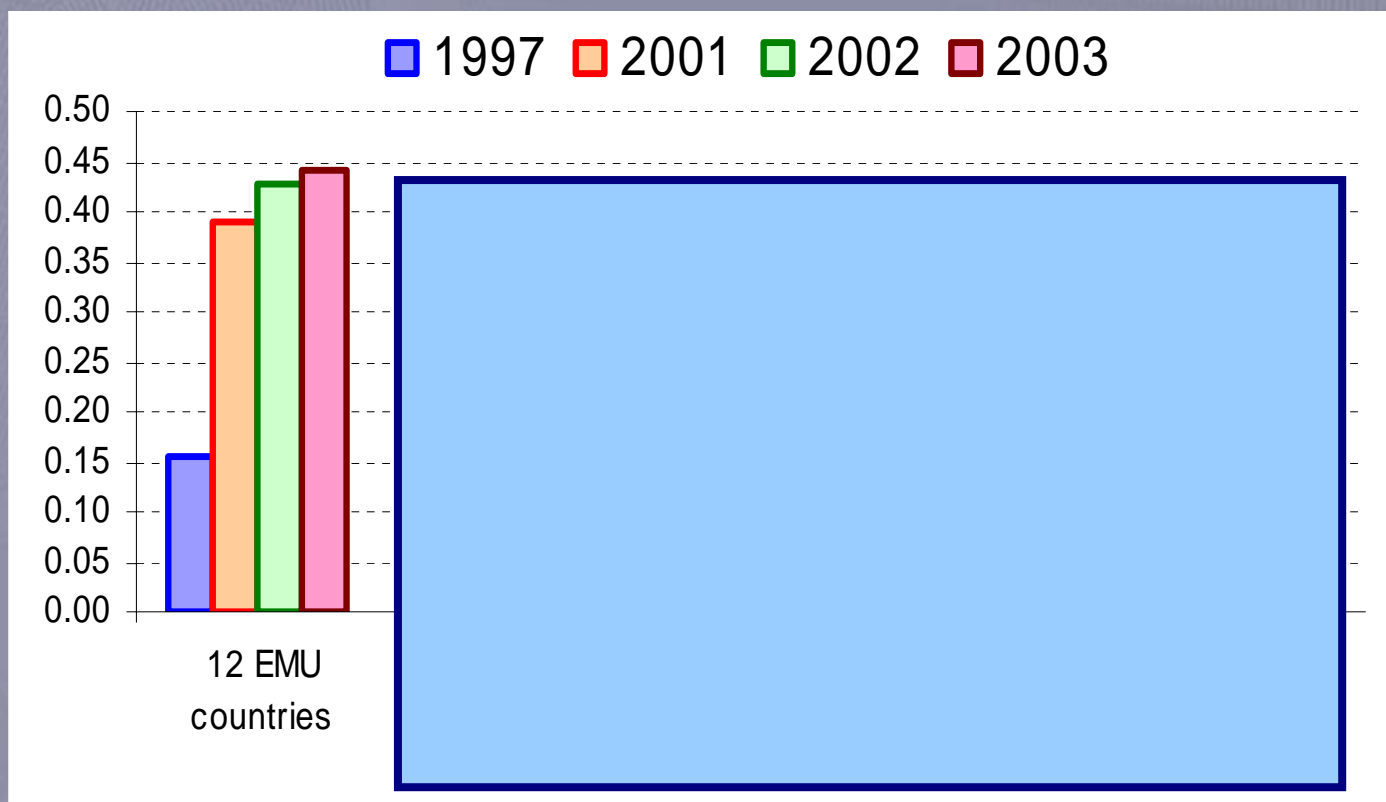


Sources: IMF, Thomson DataStream, ECB staff.

Note: 12 EMU countries = share of intra euro area holdings over total  
Control group = share of EA issued assets over total.

# Role of euro area bond assets in the world

## Share of euro area bonds



*Sources: BIS, IMF, ECB staff.*

*Note: 12 EMU countries = share of intra euro area holdings over total*

*Control group = share of EA issued assets over total.*

# The impact of EMU on change in portfolio weights

	Equity	Bond
D1 (all countries inc. EA investing in EA)	0.006**	0.018***
D2 (Rose effect = EA in EA)	<b>0.014***</b>	<b>0.025***</b>
Under-weight in 97	0.234***	0.394***
Divers. Benefits	17.35***	188.84***
Asset returns	0.003**	0.004
Asset returns (-1)	0.005	0.037***
Other	.....	.....
Adj. R <sup>2</sup>	0.444	0.241

**Source: De Santis and Gerard (2006), "Financial Integration, International Portfolio Choice and the EMU", ECB Working Paper Series, forthcoming.**

**Note: \*\*\*, \*\*, \* statistically significant at 1%, 5% and 10%.**

# Conclusions

- Equity home bias is declining, but only very slowly
- Bond home bias decline only for the euro area, not for the US and Japan
- The adoption of the euro has eased market access, enhancing regional financial integration in both equity and bond markets in the euro area
- This is confirmed by empirical analysis on changes in portfolio holdings (“Rose effect”).



**The end**

# (reserve) International portfolio choice model

Y1	X1	X2	X3	X4	X5
Change in portfolio weights	Degree of underweight	Expected diversification benefits	Contemporaneous and past performance	$D_{k \subset EMU}$	$D_{k \subset EMU}$ $D_{c \subset EMU}$



## (reserve) The Rose's effect in the asset market (D2)

	Germany	France	US
Germany	1	1	1
France	1	1	1
US	0	0	0

$$D1 = D_{k \subset EMU}$$

	Germany	France	US
Germany	1	1	0
France	1	1	0
US	0	0	0

$$D2 = \begin{matrix} D_{k \subset EMU} \\ D_{c \subset EMU} \end{matrix}$$