

# FINANCIAL MARKETS AND EUROZONE CRISIS

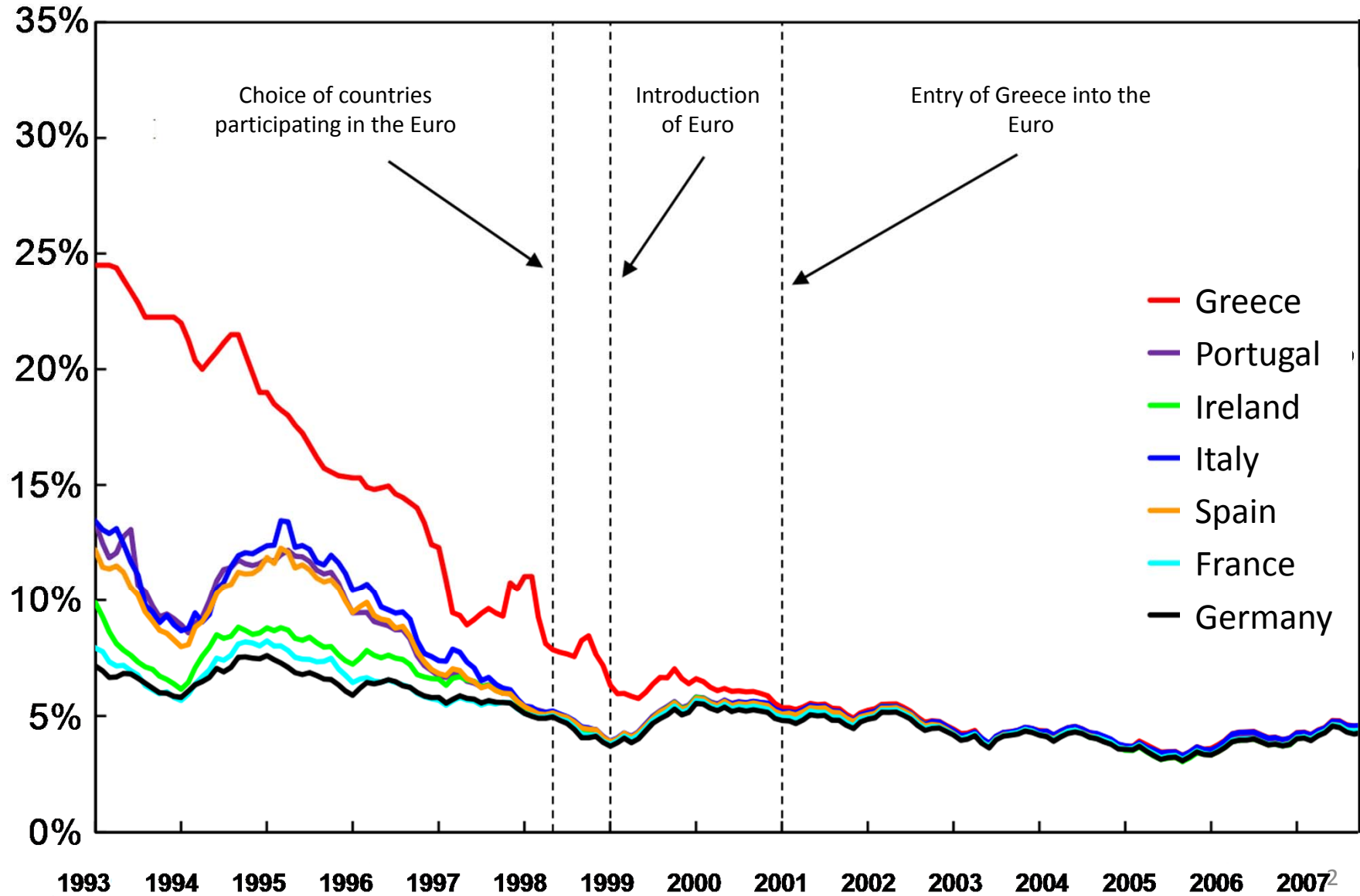
GENERAL OVERVIEW

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**MARCELLO MINENNA**

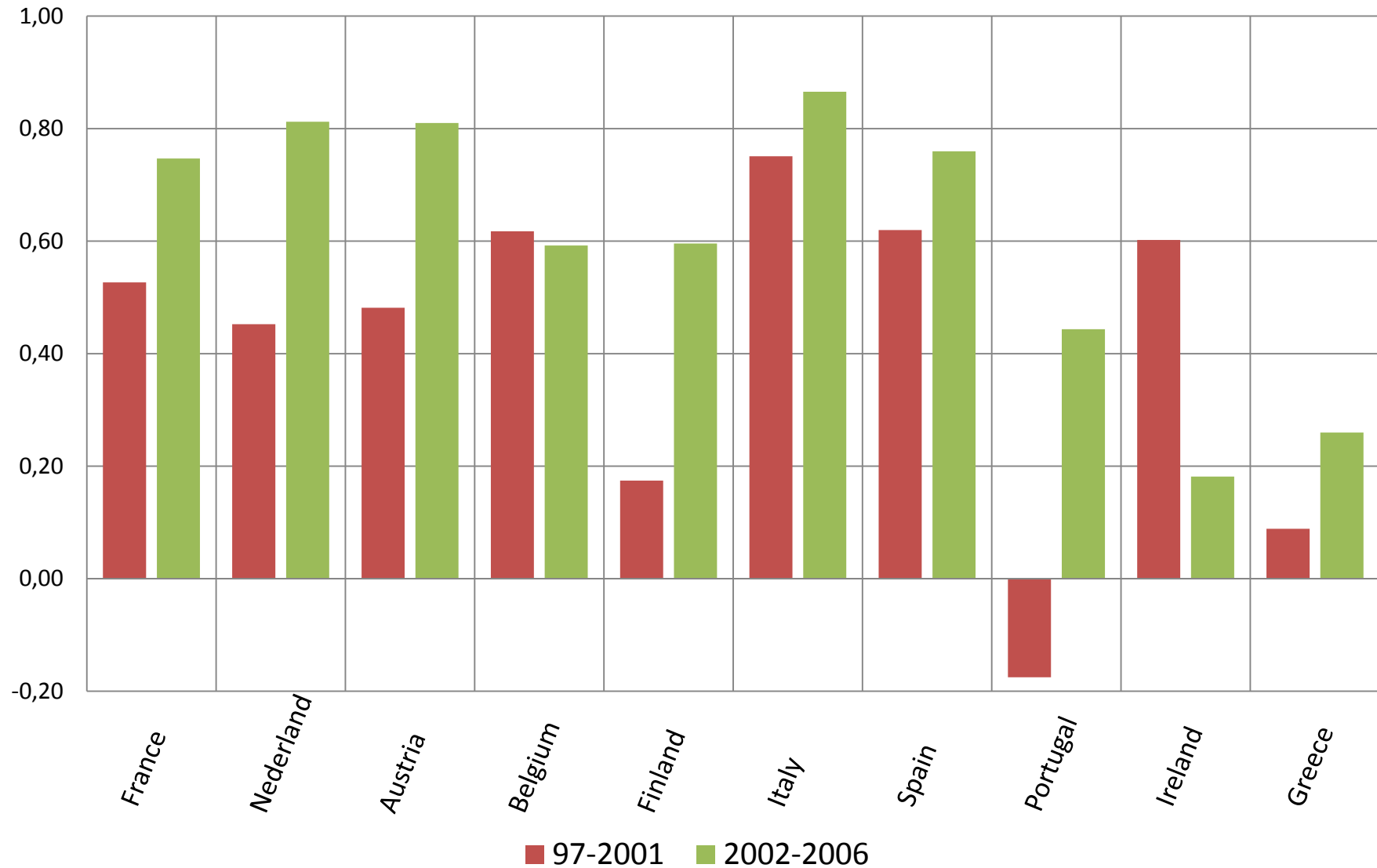
# A SINGLE CURRENCY, A SINGLE CURVE

## Trend of the 10 year interest rates over the period 1993 - 2007



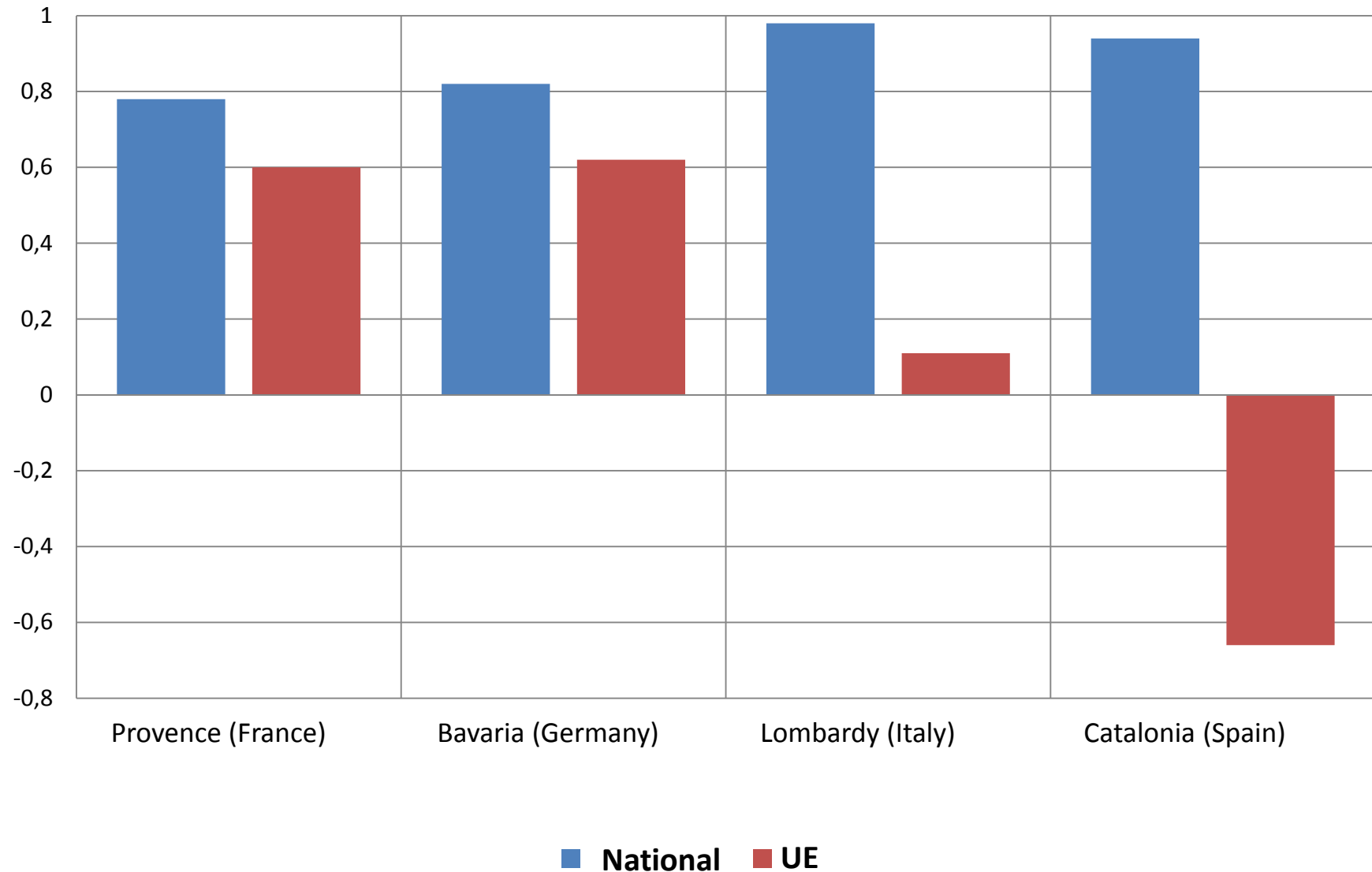
# A SINGLE CURRENCY, A SINGLE CURVE

## Correlation between economic cycles of Germany and eurozone countries Period 1997-2006



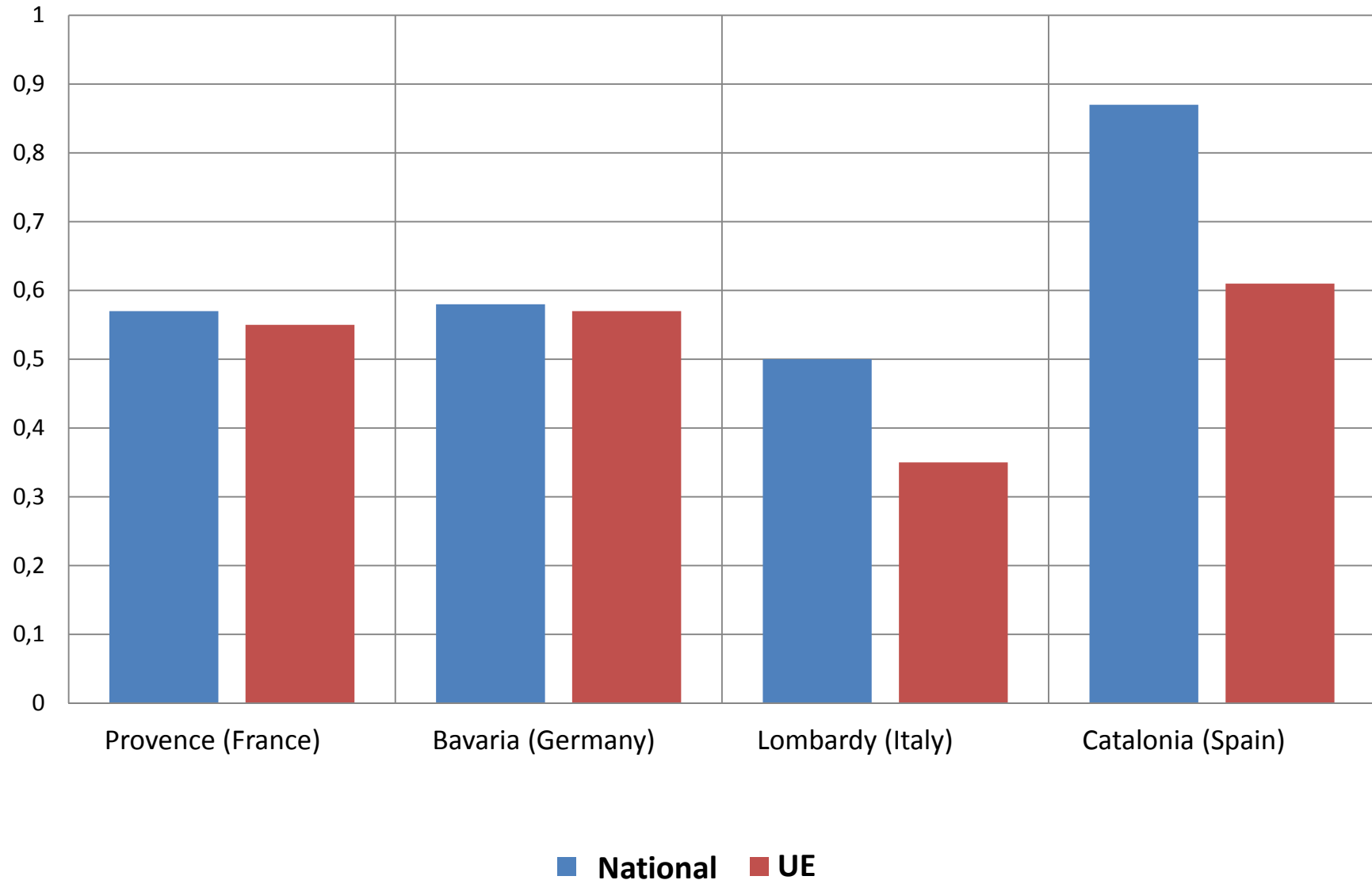
# A SINGLE CURRENCY, A SINGLE CURVE

## Correlation between regional and aggregate (national or UE) employment growth 1996-2000



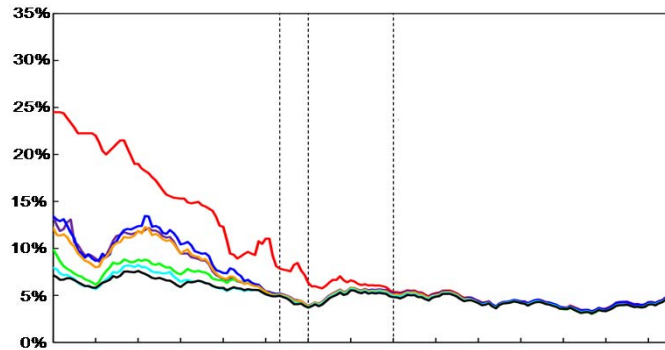
## A SINGLE CURRENCY, A SINGLE CURVE

### Correlation between regional and aggregate (national or UE) employment growth 2001-2006







# A SINGLE CURRENCY, A SINGLE CURVE

## CONVERGENCE TRADE STRATEGY





### January 1996

-  Italy issues 2 years BTP with an 8% yield - issue price 100 €
-  Germany issues 2 years BUND with a 2,5% yield - issue price 100 €

- Forward purchase 2 years BTP 8% 
- Forward sell 2 years BUND 2,5% 

Net cashflows = 0 €

### January 1998

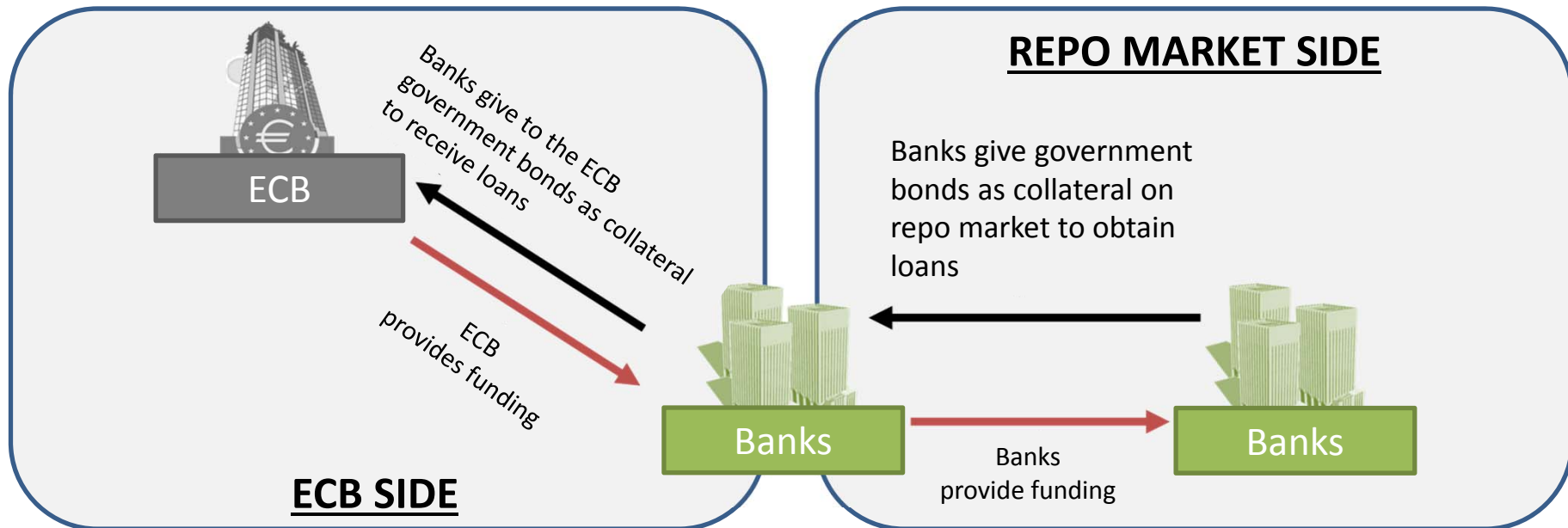
-  Italy issues 2 years BTP with a 5% yield - issue price 100 €
-  Germany issues 2 years BUND with a 2,7% yield - issue price 100 €

- Recieve 2 years BTP 8% 
- Sell 2 years BTP 8% (+106 €) 
- Buy 2 years BUND 2,5% (-99 €) 
- Deliver 2 years BUND 2,5% 

Net cashflows = + 7 €

# A SINGLE CURRENCY, A SINGLE CURVE

## “Collateral Discrimination” before the crisis (1999-2007)



AAA  
A-  
BBB+  
BBB-

The ECB accepts all eurozone bonds at 100% of face value

The ECB applies the same 5% haircut on all securities in the Eurozone below A-

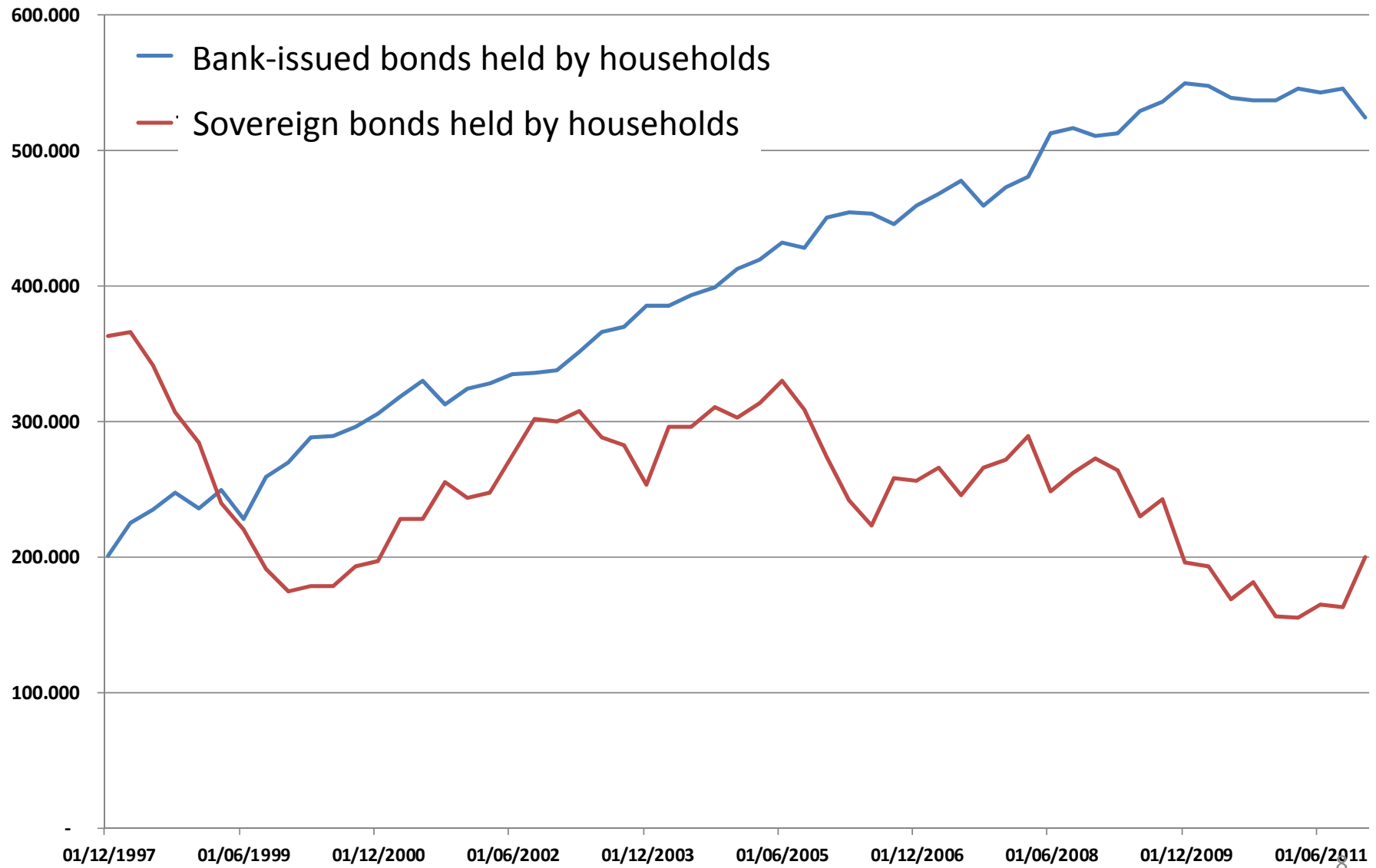
The interbank market applies the same haircut



All EU sovereign bonds are considered investment grade (above the BBB) and therefore **NOT DISCRIMINATED**

# IMPLICATIONS OF THE FUNCTIONING OF THE EUROPEAN FINANCIAL SYSTEM

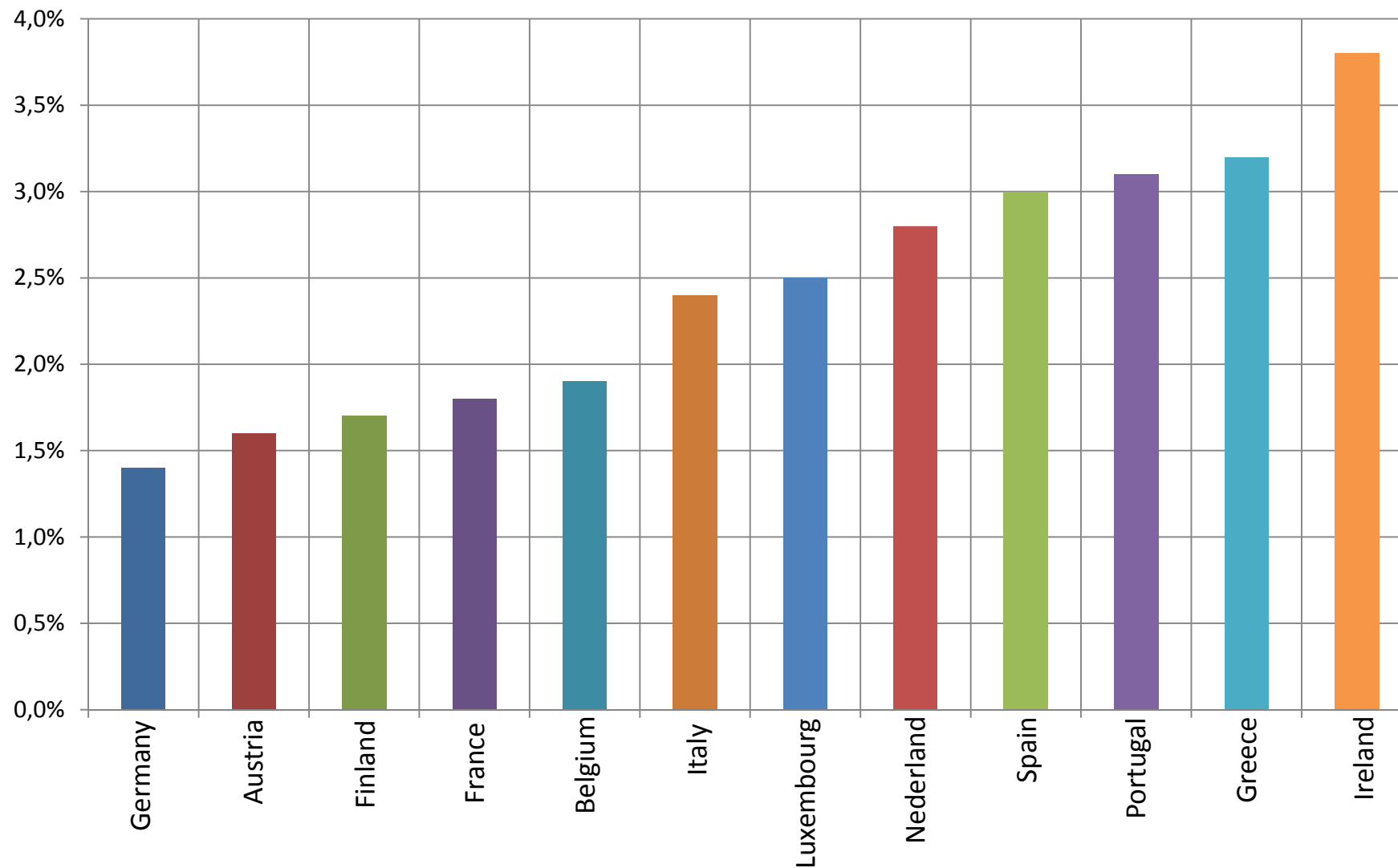
## Public Debt disintermediation by the *retail* investors





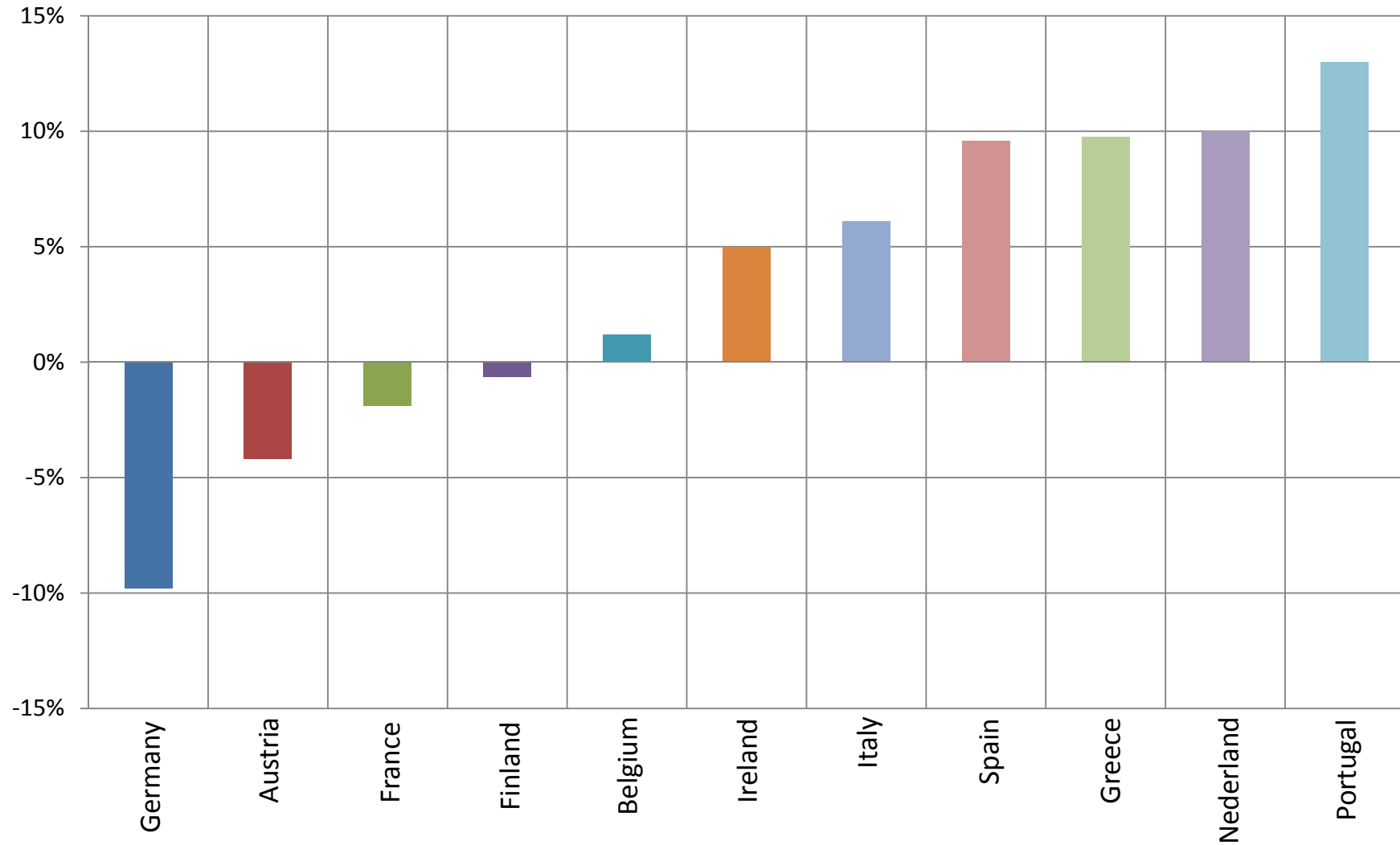
# IMPLICATIONS OF THE FUNCTIONING OF THE EUROPEAN FINANCIAL SYSTEM

## Average inflation in the Euro countries 1999-2007



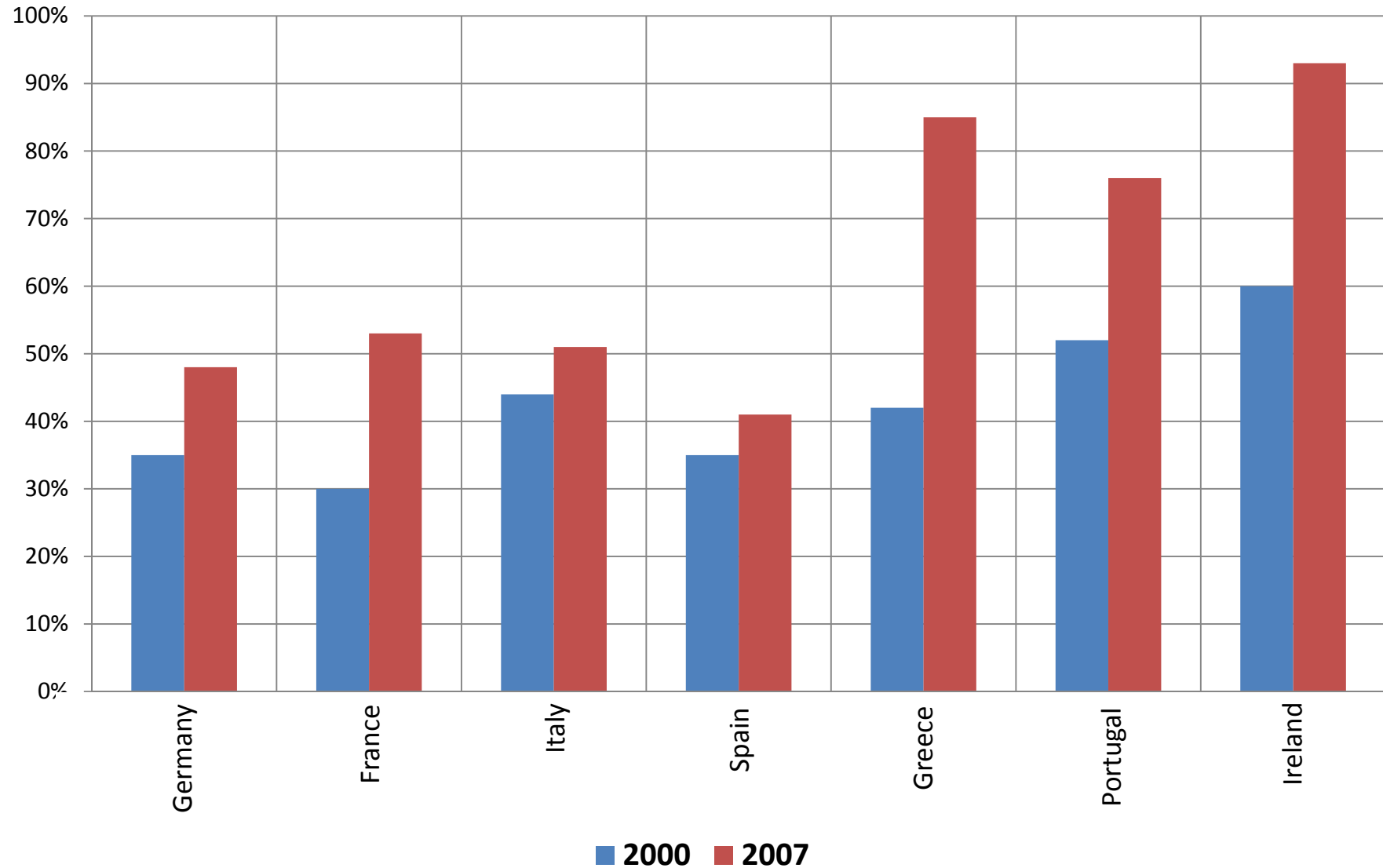
# IMPLICATIONS OF THE FUNCTIONING OF THE EUROZONE FINANCIAL SYSTEM

## Real foreign exchange rate in the Eurozone in the pre-crisis period (1999-2007)



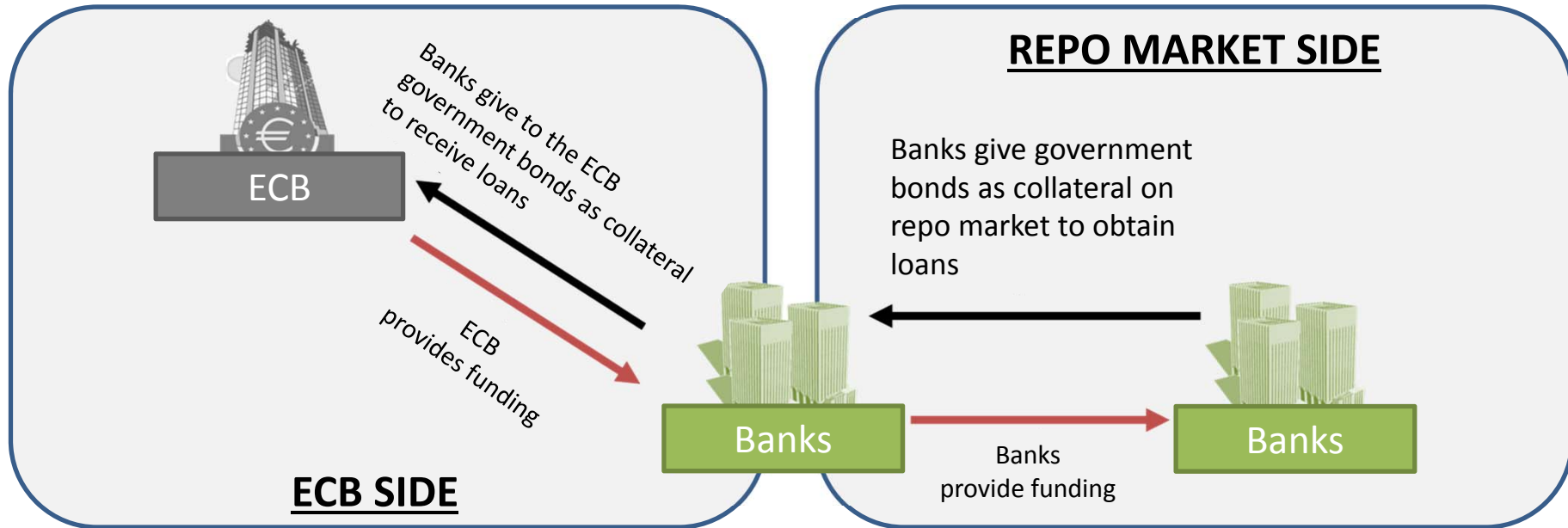
# IMPLICATIONS OF THE FUNCTIONING OF THE EUROPEAN FINANCIAL SYSTEM

## Percentage of Sovereign Debt held by foreign investors



# BEGINNING OF THE CRISIS

## “Collateral Discrimination” during the crisis



AAA  
A-  
BBB+  
BBB-

ECB applies different haircuts on government bonds depending on *rating* and maturity

e.g. *haircut* on fixed coupon:

Rating Maturity	3-5	7-10
AAA / A-	2,5%	4,0%
BBB+ / BBB-	7,5%	9,0%

The interbank market applies different haircuts

e.g. *haircut* on fixed coupon:

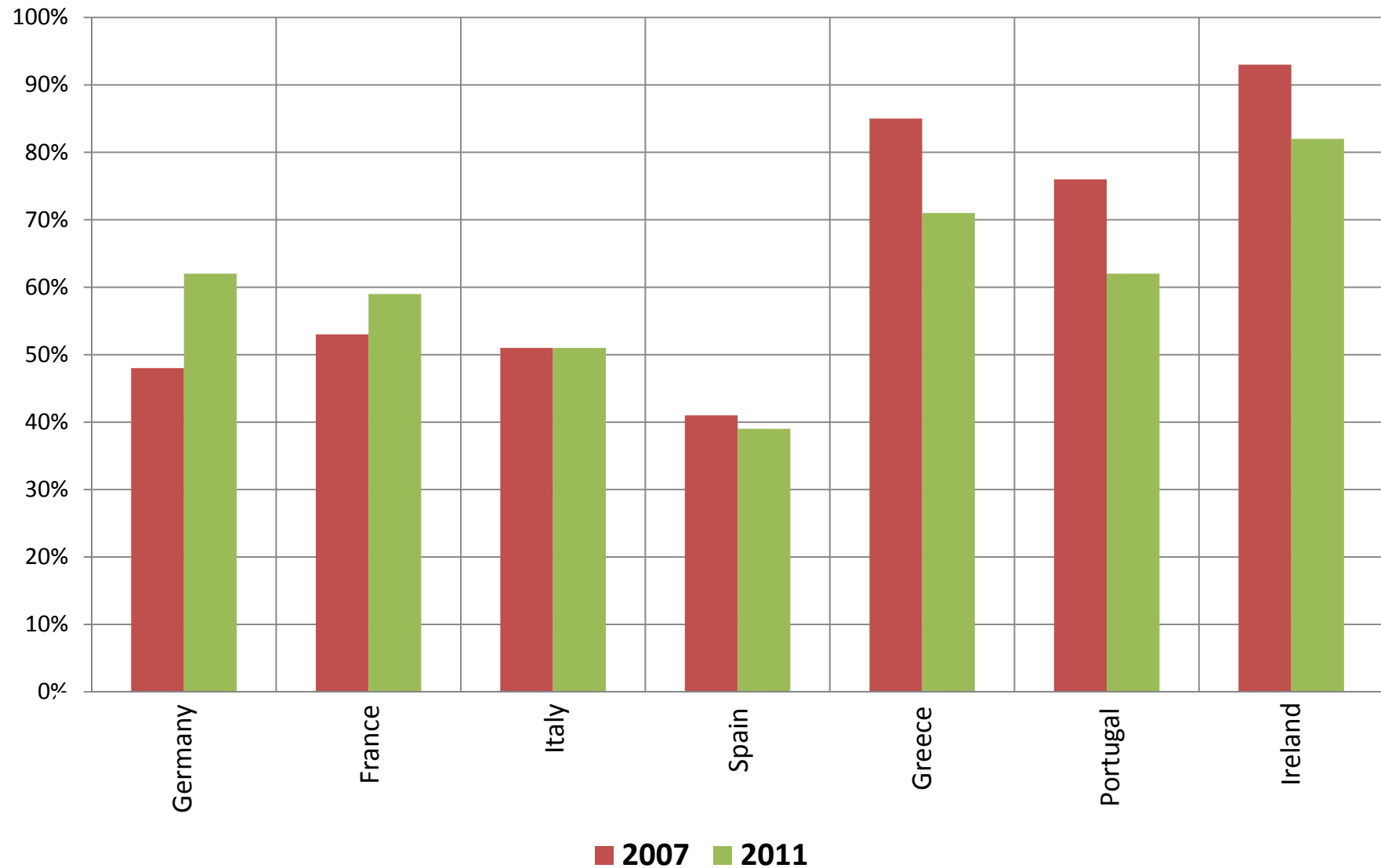
Country Maturity	3-5	7-10
Germania	1,25%	2,5%
Spagna	3,5%	7,75%



EU sovereign bonds are considered **DIFFERENT** and therefore **DISCRIMINATED**

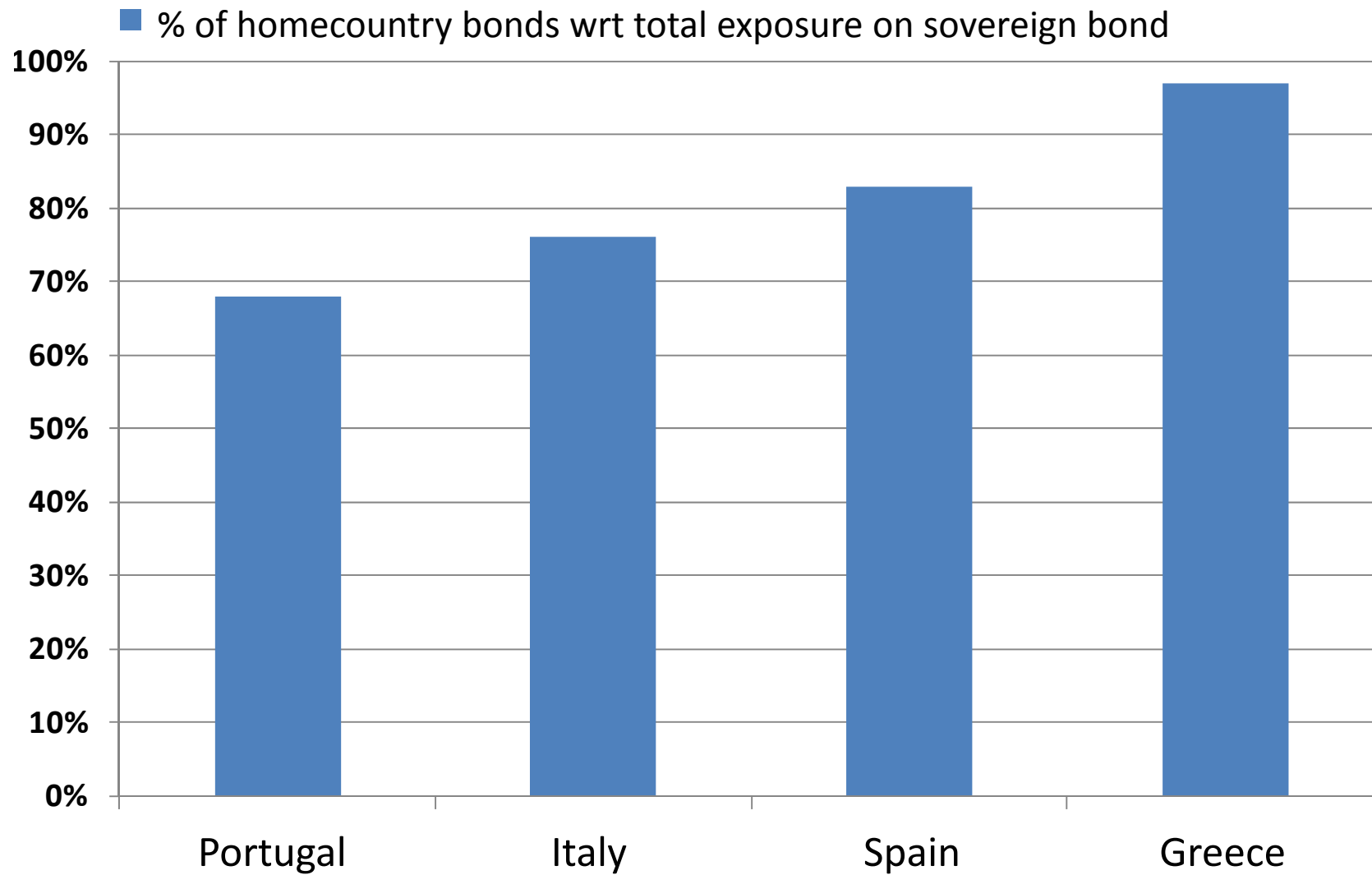
# BEGINNING OF THE CRISIS

## Percentage of Sovereign Debt held by foreign investors



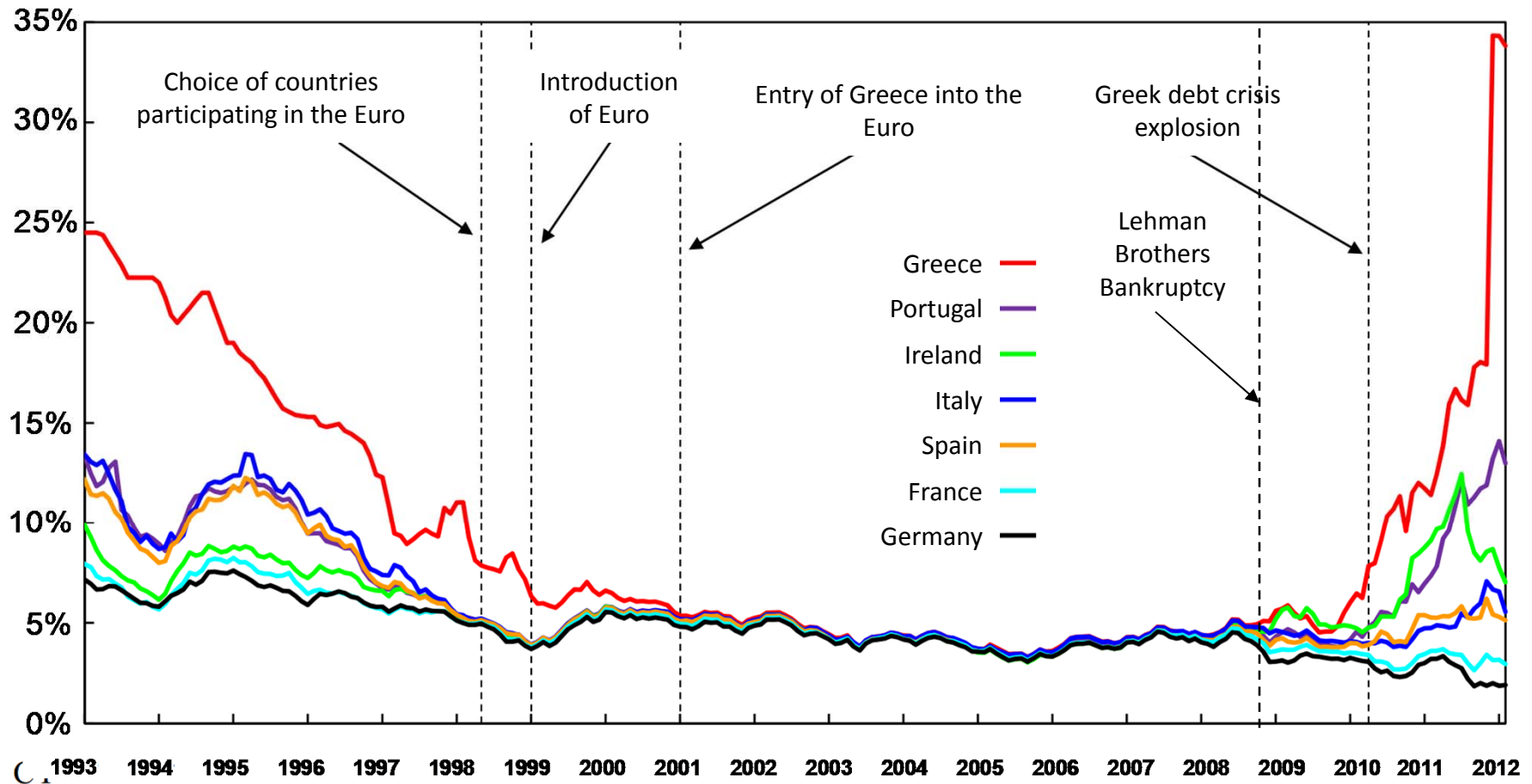
## BEGINNING OF THE CRISIS

### Banks exposure on national debt



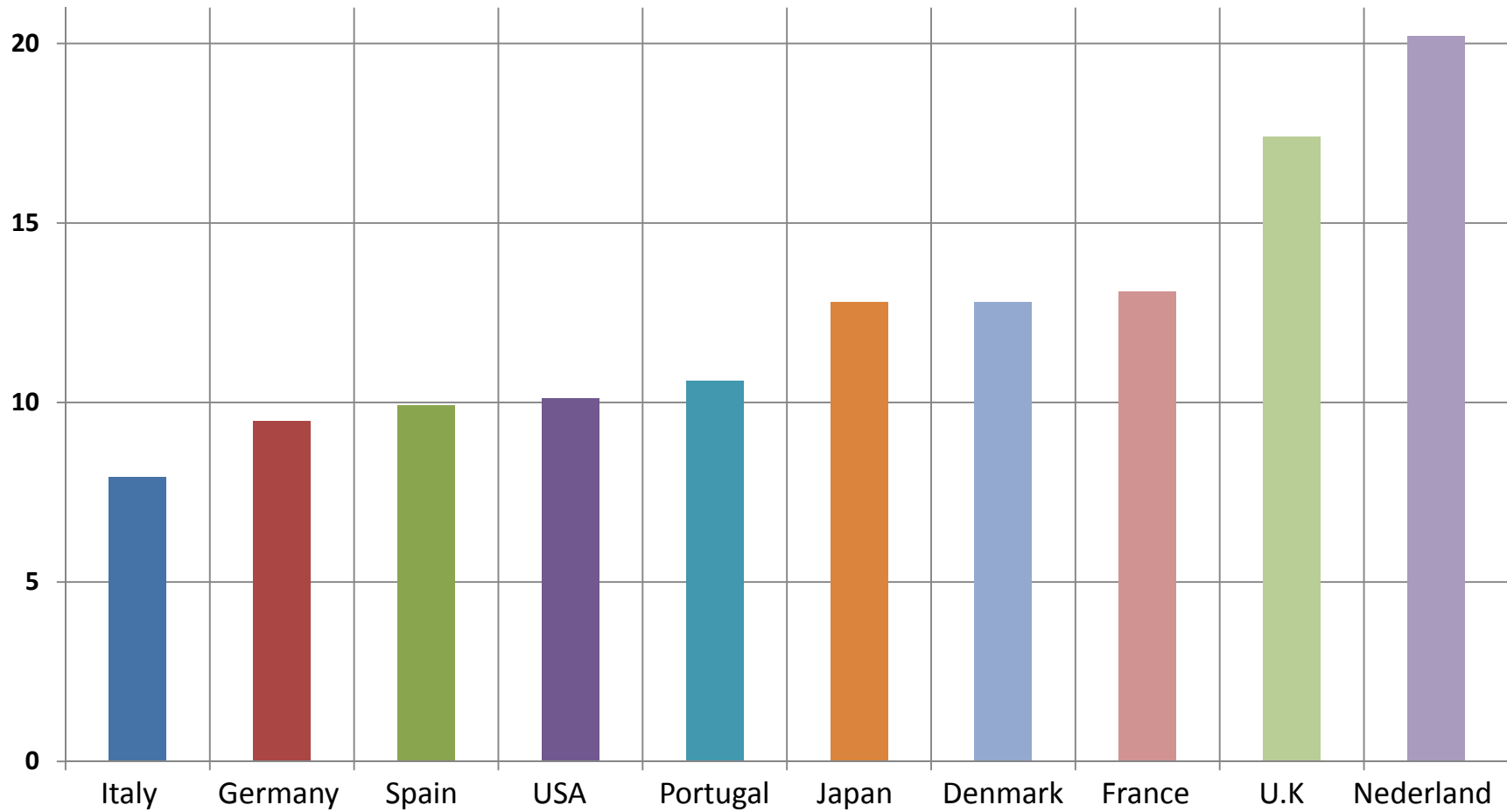
# BEGINNING OF THE CRISIS

## Trend of the 10 year interest rates over the period 1993 - 2012



# BEGINNING OF THE CRISIS

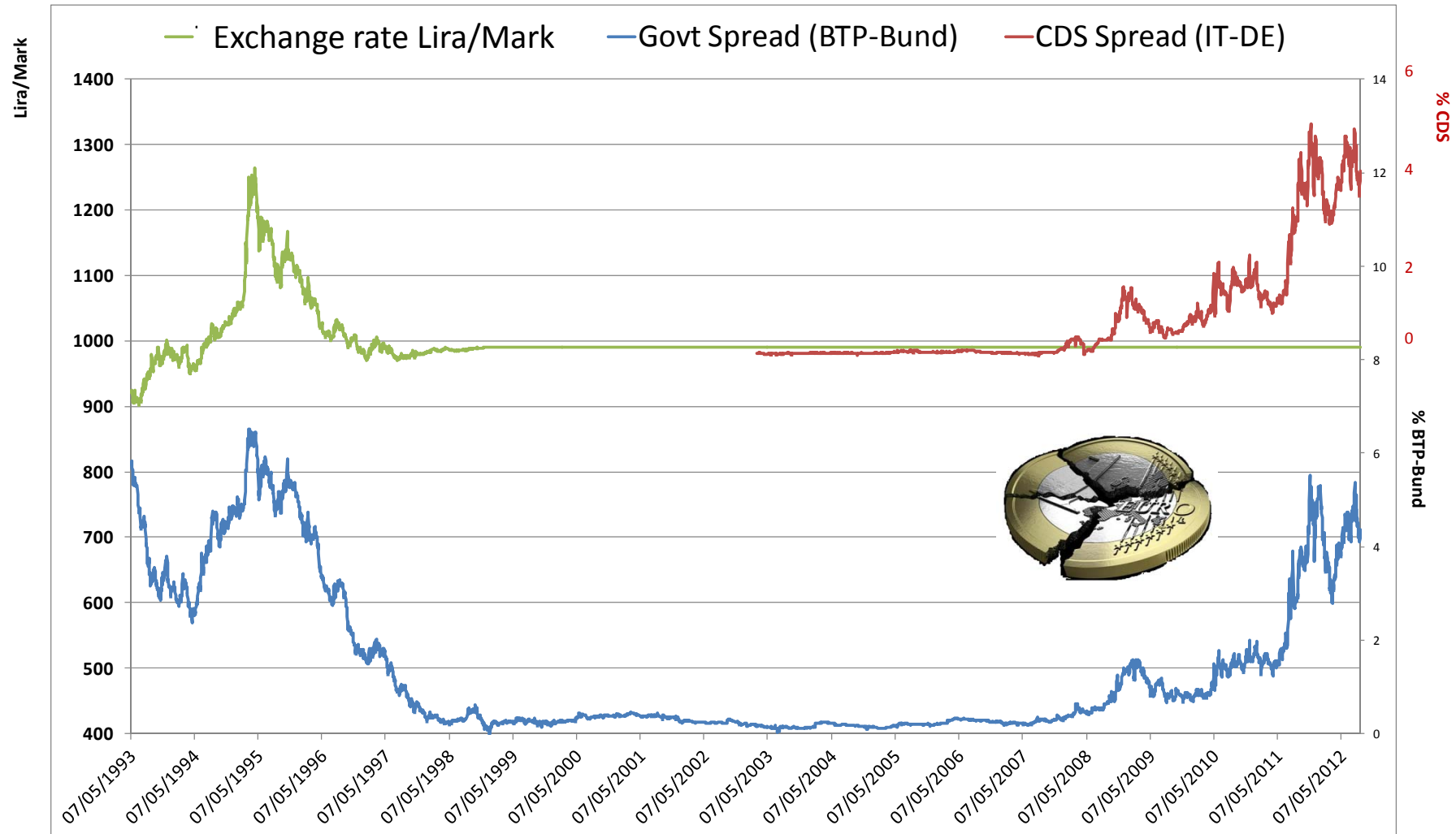
## Total Financial Activities/GDP





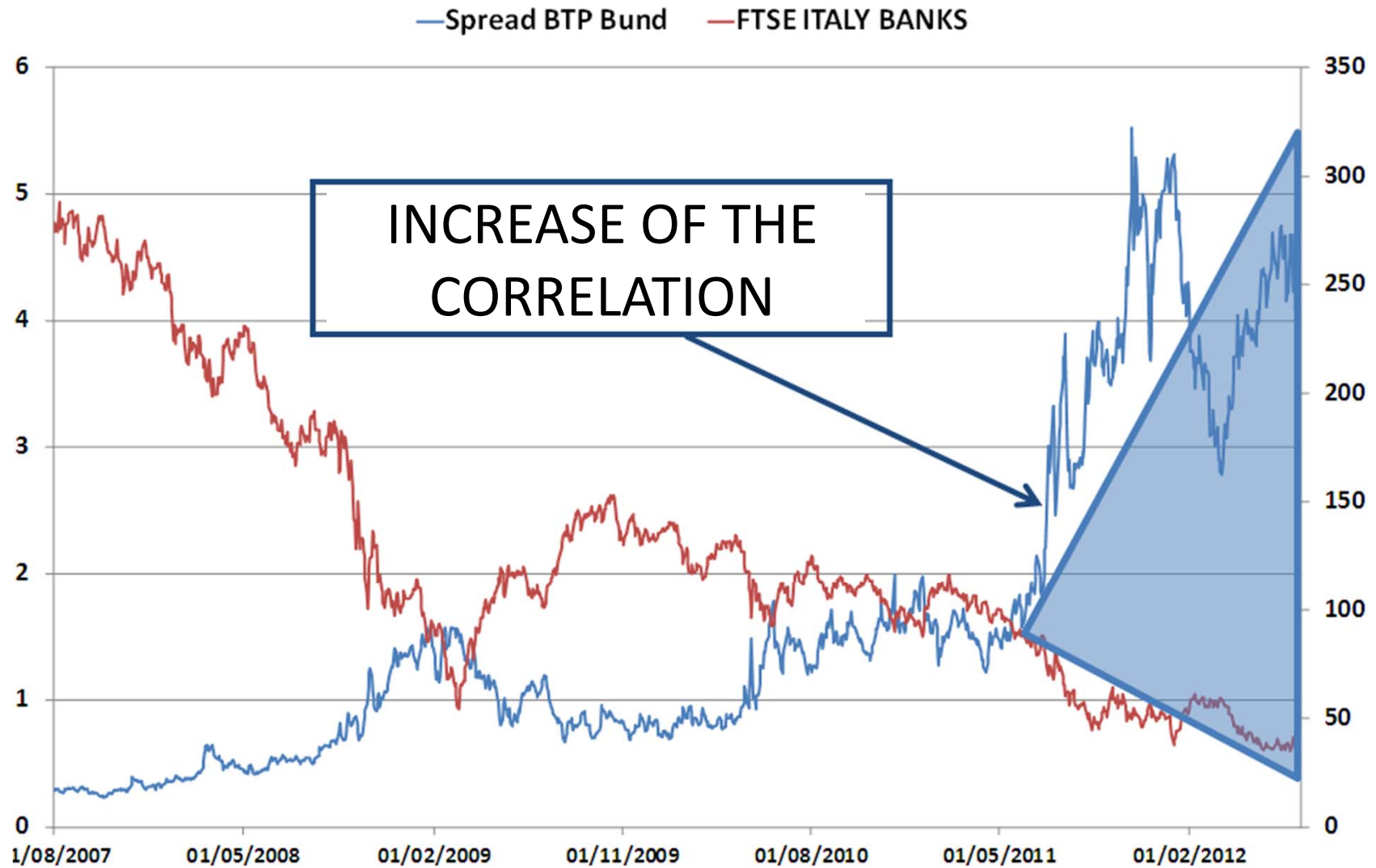
# BEGINNING OF THE CRISIS

## Exchange rate Italian Lira/German Mark; Sovereign bond spread and Sovereign CDS spread Period 1993-2012



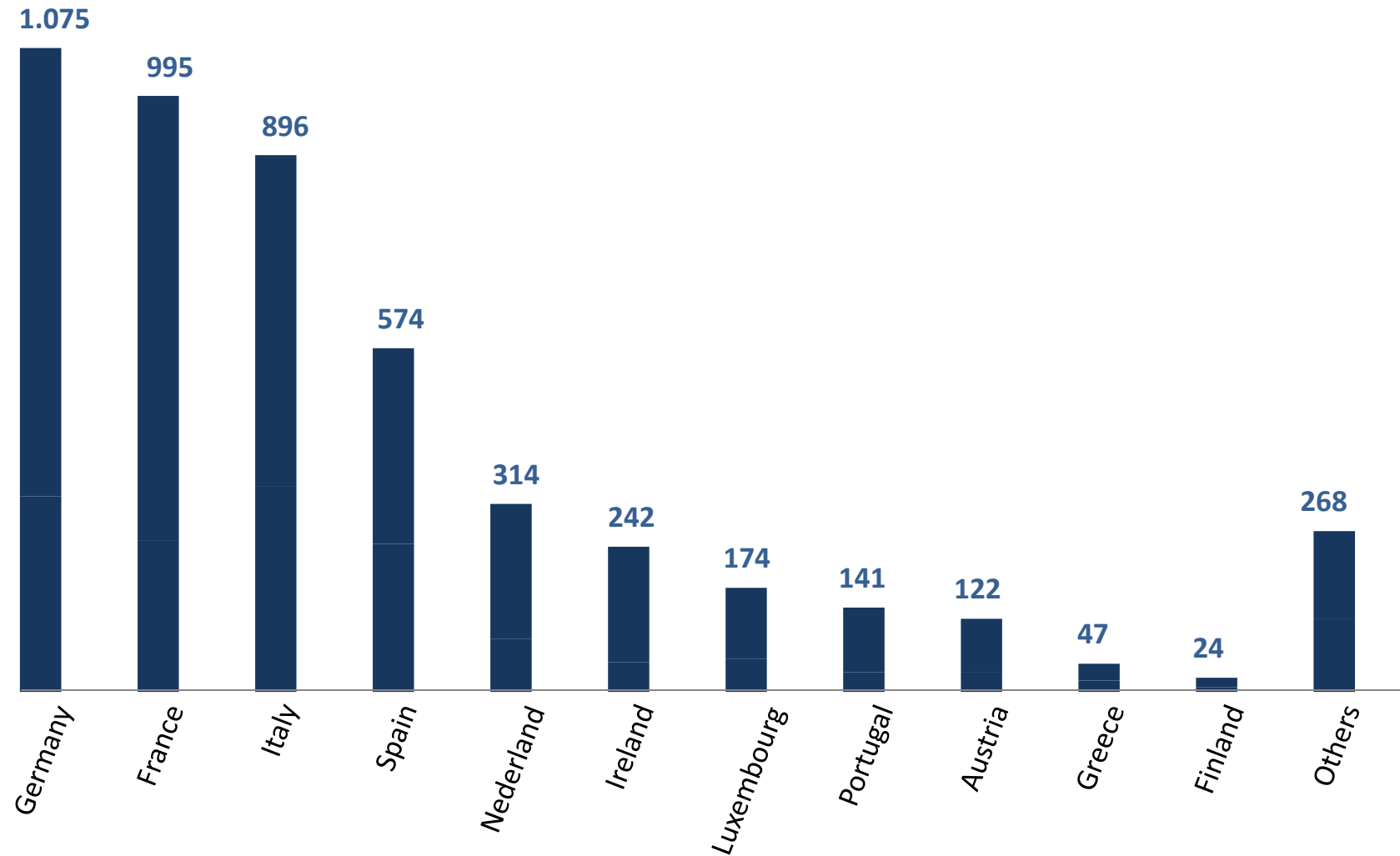
# THE COLLATERAL DISCRIMINATION AS AN ACCELERATOR OF THE CRISIS

## Correlation between Countries and Banks: the Italian case



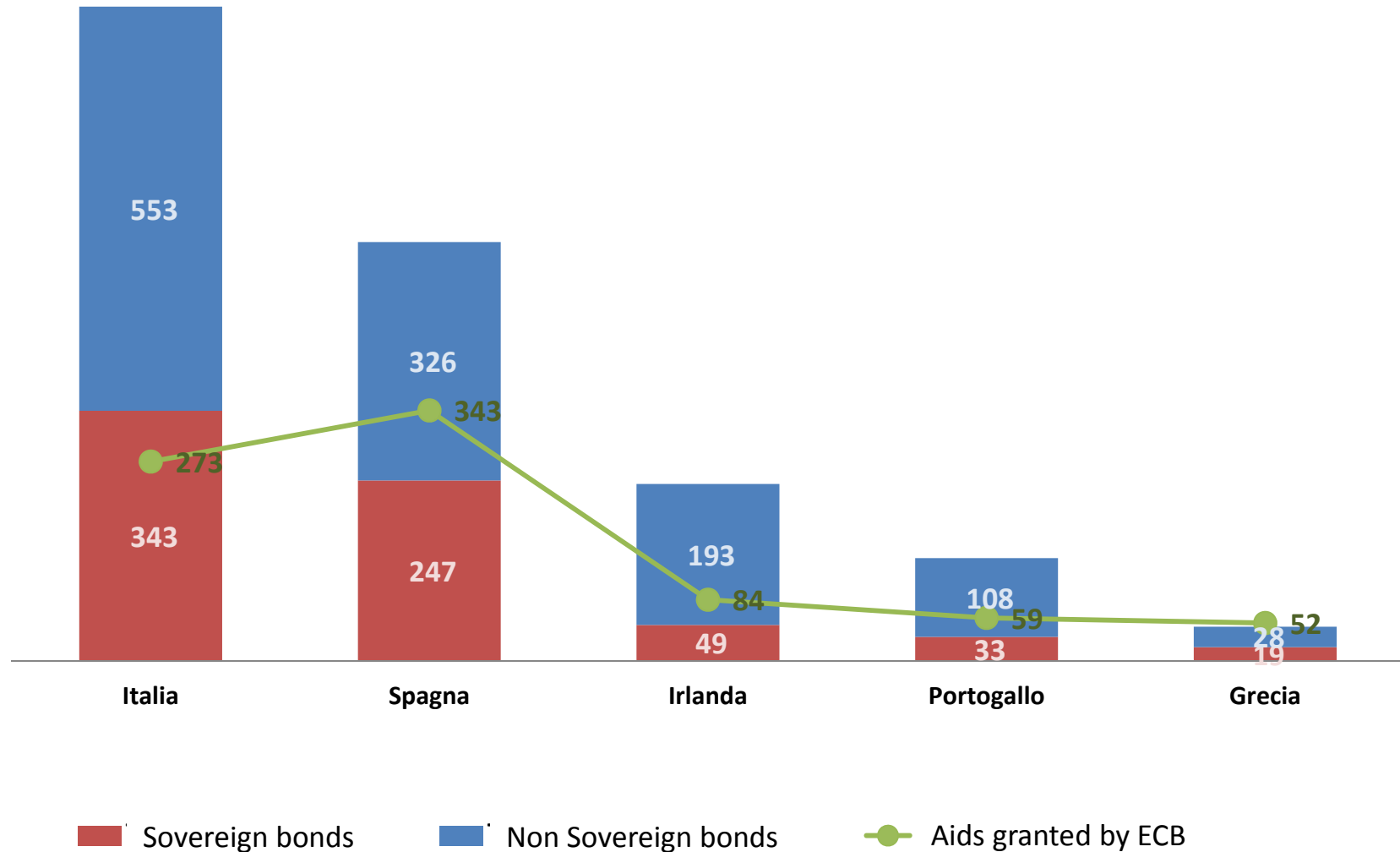
# THE COLLATERAL DISCRIMINATION AS AN ACCELERATOR OF THE CRISIS

## Amount of collateral available to the banking systems December 2011

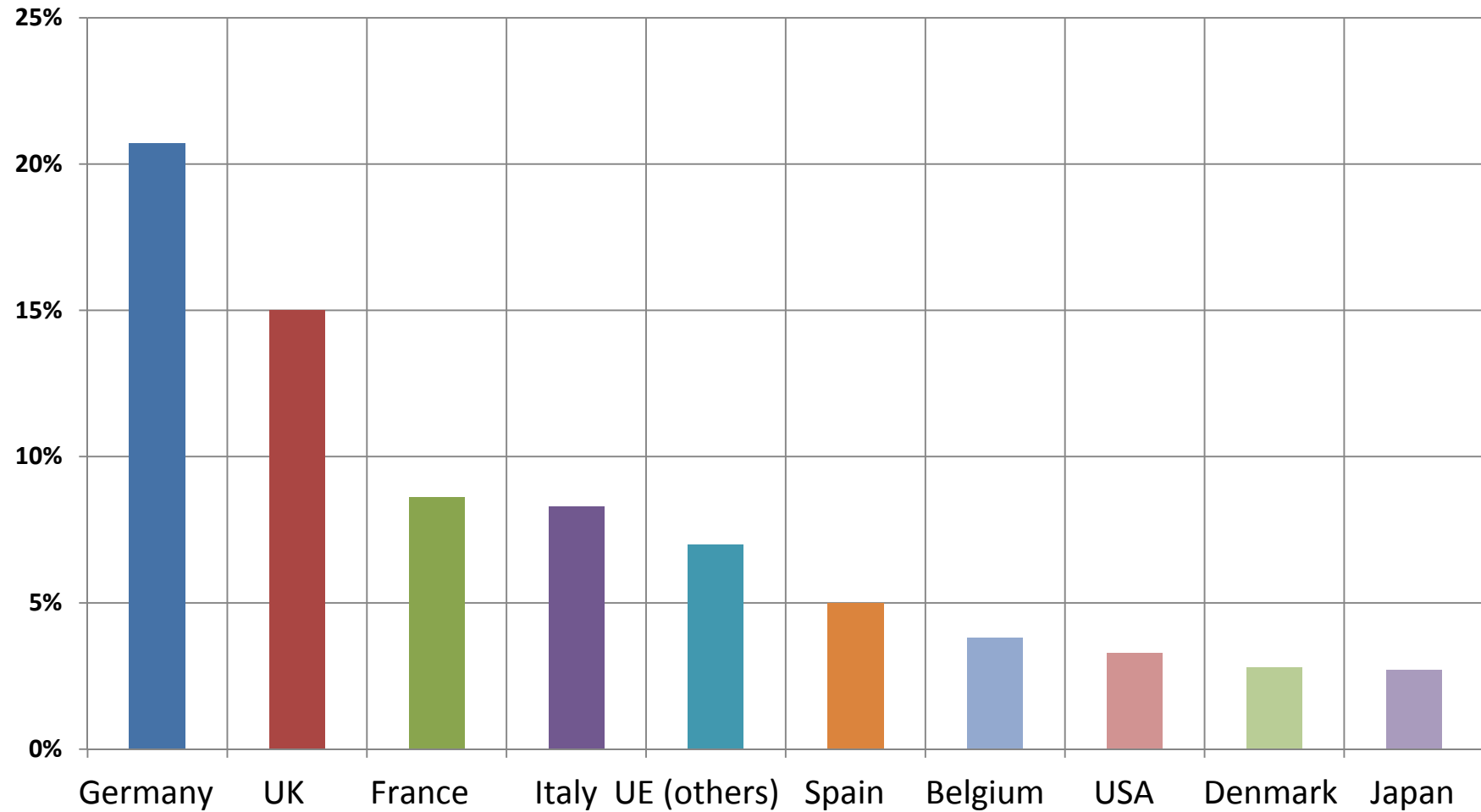


# THE COLLATERAL DISCRIMINATION AS AN ACCELERATOR OF THE CRISIS

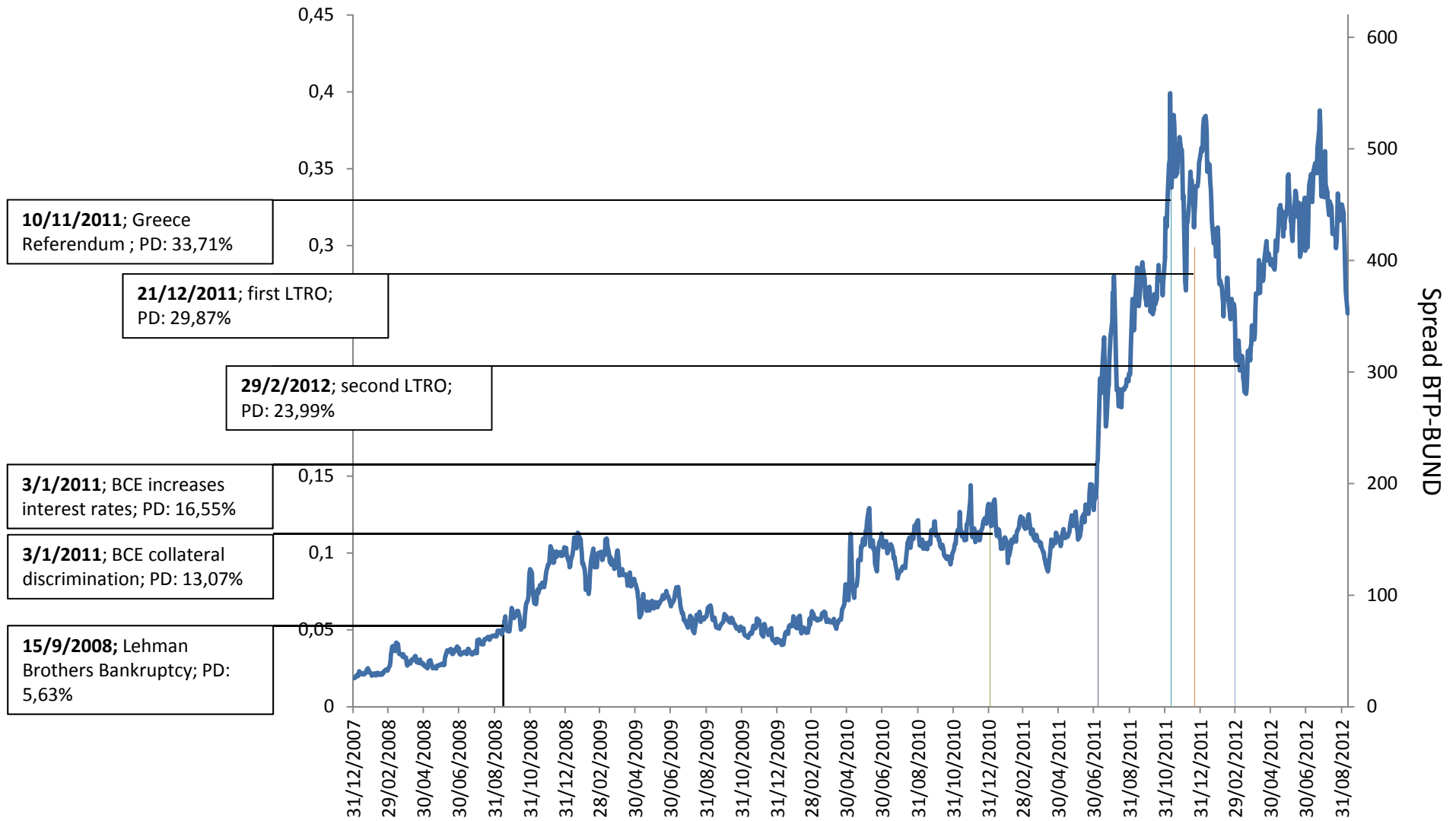
Amount of collateral available to the banking systems  
VS aids granted by the ECB  
December 2011



## Percentage utilization of financial assets as collateral on the repo markets by issuer's nationality (june 2012)



## Trend of the BTP-BUND Spread vs implied default probabilities



## Management of Italian public debt

