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English - Or. English

STATISTICS DIRECTORATE  
COMMITTEE ON STATISTICS

## Working Party on National Accounts

FISIM tests on maturity and default risk

Common day

To be held on 3 October 2012  
OECD Conference Centre  
Beginning at 9:00 a.m.

*This document has been prepared by Leonidas Akritidis (Eurostat) and will be presented under item 6 of the draft agenda*

*The complete document is only available in PDF format*

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# **FISIM tests on maturity and default risk**

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National accounts methodology,  
sector accounts, financial indicators.**

# FISIM tests on maturity and risk

- Background on FISIM developments that led to establishing the European Task Force on FISIM, and its recommendations;
- FISIM test on maturity:
  - **presentation of analysis on the test on maturity**
  - **summary of countries' responses**
- FISIM test on default risk:
  - **presentation of analysis on the test on default risk**
  - **summary of countries' responses**
- Next step

# Background on FISIM developments

- In the context of the revisions SNA and ESA, it was agreed that FISIM methodology should be further investigated, on issues related to currencies, maturities, risks, and price and volume measures in FISIM. The new method should be relevant in reflecting the economic reality and simple in its implementation. These developments led to the preparation of the mandate agreed by CMFB in June 2010 for the European Task Force on FISIM of 2010-2011;
- The European Task Force on FISIM met twice: in Luxembourg on 4-5 October 2010, and in Frankfurt on 28-29 March 2011. The Task Force was chaired by Mr Rudy Acx from the National Bank of Belgium. The members of Task Force included: Eurostat, ECB, 8 NSIs, 5 NCBs, 4 non-European experts, and OECD.

# Recommendations of the Task Force

The European FISIM TF completed its work and made the following 4 recommendations agreed by the CMFB at its meeting on 30 June 2011:

- 1) FISIM should be calculated by at least two groups of **currencies**, following the principles as outlined in ESA2010, chapter 14;
- 2) FISIM by **maturity** based on an improved reference rates approach, which does not lead to elimination of term premia, should be **tested** by MSs using EURIBOR and ISDAFIX rates;
- 3) FISIM calculated excluding **default risk** should be **tested** by MSs, using source data on write-offs and provisions for bad and doubtful loans;
- 4) FISIM in **real terms** should be calculated using deflated stocks on loans and deposits as described in chapter 14 of ESA2010. It was also considered that research on output indicators for FISIM should be pursued in future.

# FISIM test on maturity

This test analysed methods based on the following two reference rates :

- Currently used, defined by the Regulation 448/98, calculated based on interest and stocks on loans and deposits between Financial Intermediaries;
- An alternative method based on a single Weighted Average Reference Rate calculated using EURIBOR 3-month (or equivalent for non-euro countries) for short-term operations and ISDAFIX 5-year (or equivalent) for long-term operations, weighted by stocks of loans and deposits.

# FISIM test on maturity

NAWG Members were invited to provide their opinion on the alternative method "weighted average reference rates" presented in the report: does this method introduce a significant improvement justifying the replacement of the present method?



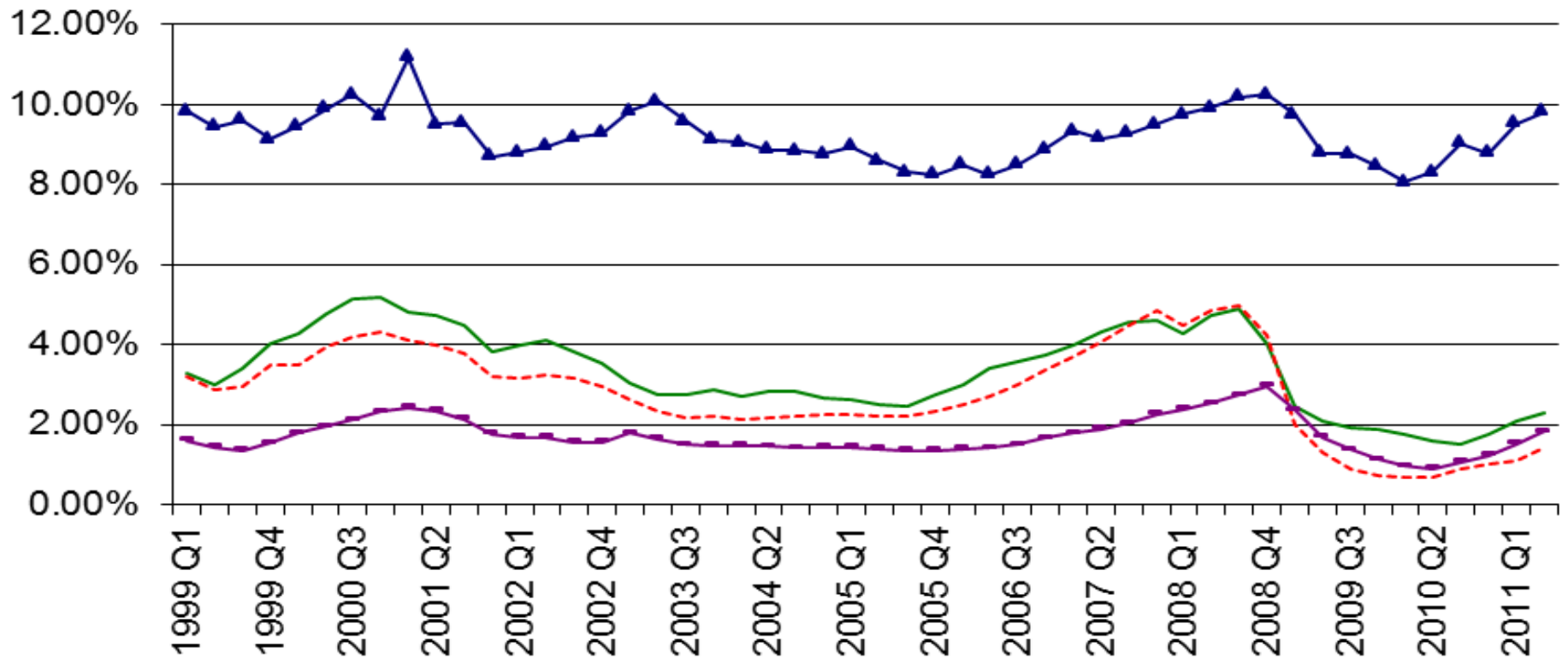
# FISIM test on maturity

- In some countries, like Portugal or Finland, the results showed that the Weighted Average Reference rate approach can be considered an improvement compared to the method according to Regulation 448/98 currently used, because:
  - **it solves the continued occurrence of negative FISIM;**
  - **FISIM estimates allocated to GDP are less volatile**



European  
Commission

## Portugal: HH Consumers (S.14)



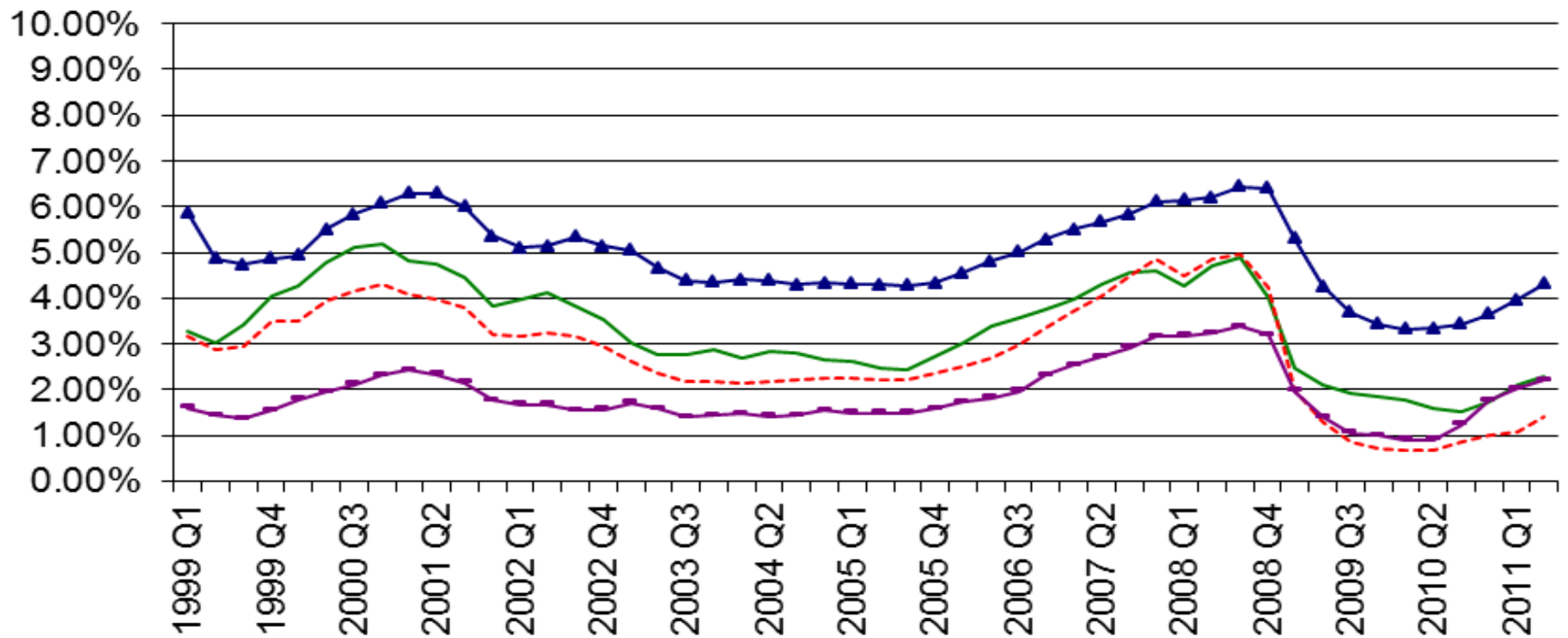
— Weighted Internal Reference Rate  
—▲ Interest rate on loans: S.14 consumers

- - - 448/98 Internal Reference Rate  
— Interest rate on deposits: S.14 consumers



European  
Commission

## Portugal: Non-Financial Co. (S.11)



— Weighted Internal Reference Rate

- - - 448/98 Internal Reference Rate

—▲ Interest rate on loans: S.11

— Interest rate on deposits S.11



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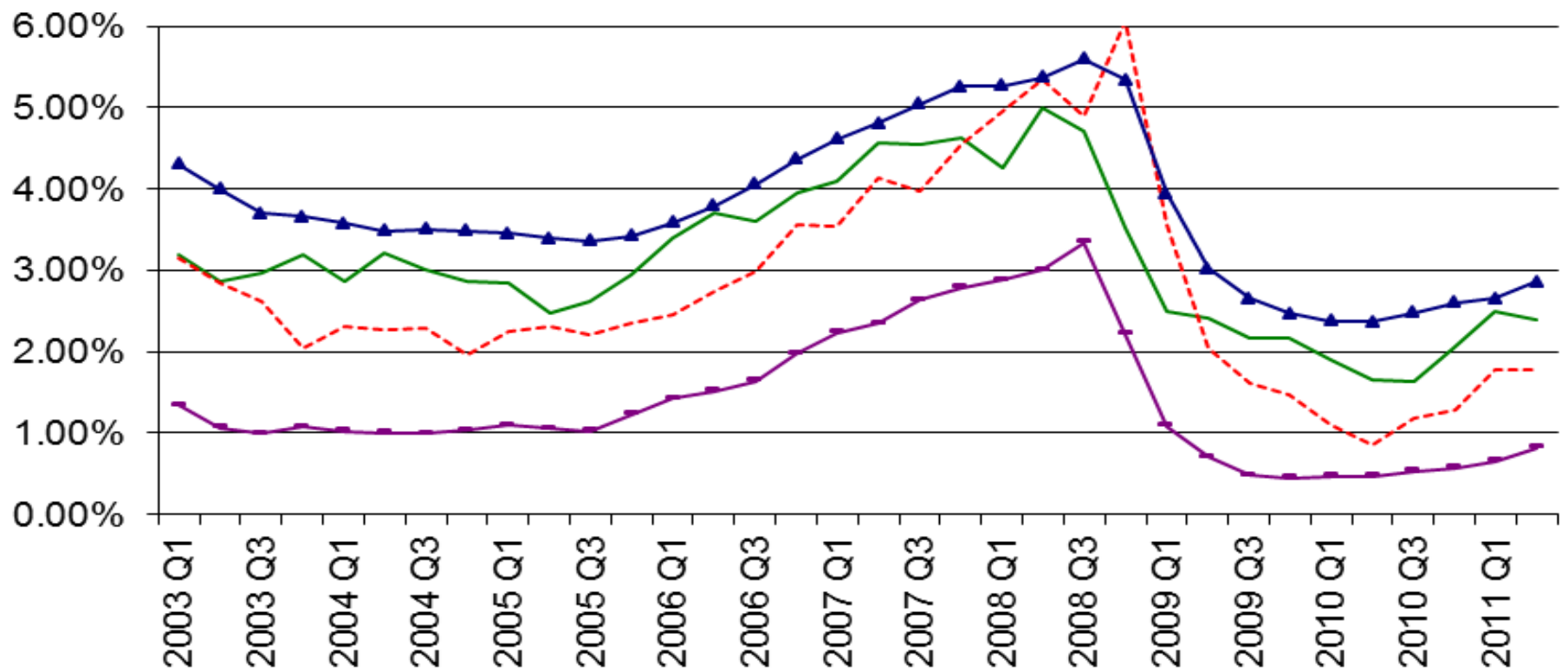
## Portugal: Share of FISIM on loans&deposits in GDP





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## Finland: Non-Financial Co. (S.11)



— Weighted Internal Reference Rate

- - - 448/98 Internal Reference Rate

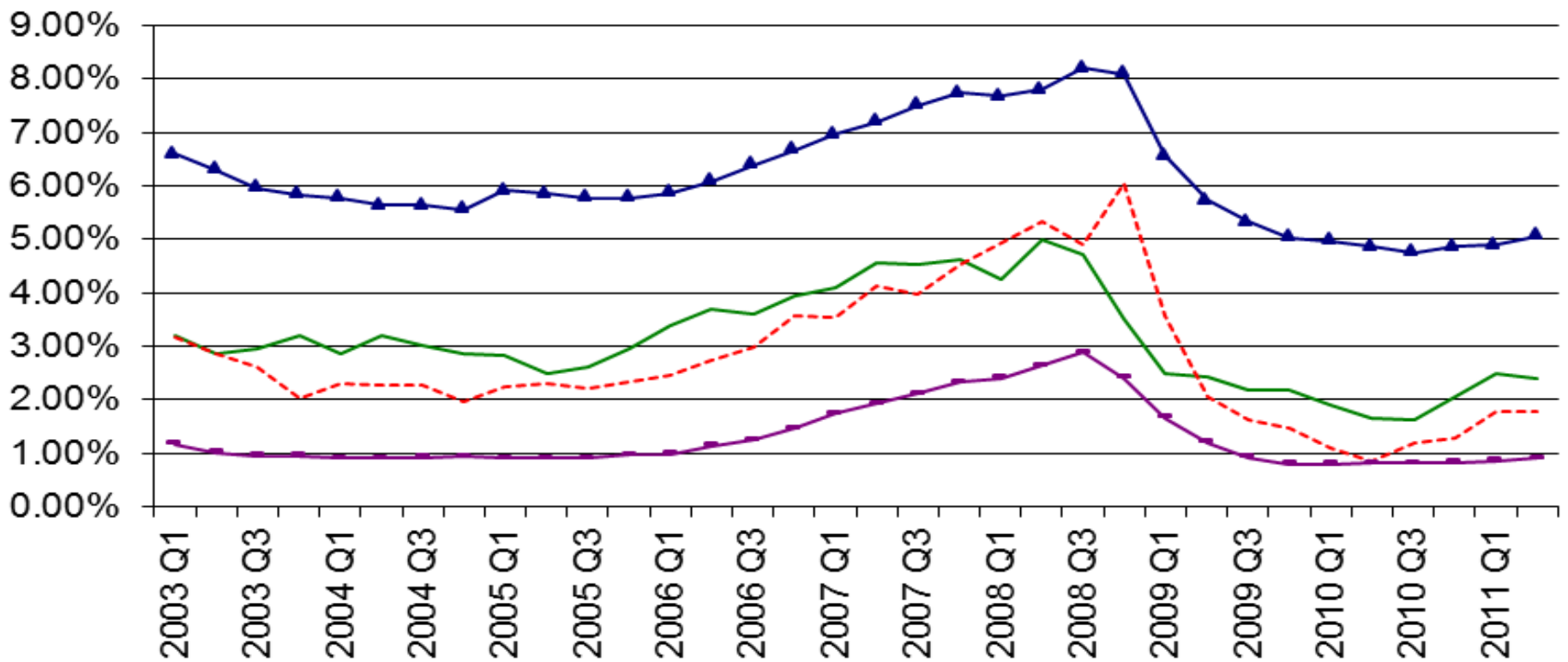
—▲ Interest rate on loans: S.11

— Interest rate on deposits S.11



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Commission

## Finland: HH Consumers (S.14)



— Weighted Internal Reference Rate  
—▲ Interest rate on loans: S.14 consumers

- - - 448/98 Internal Reference Rate  
—■ Interest rate on deposits: S.14 consumers



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Commission

## Finland: Share of FISIM on loans&deposits in GDP

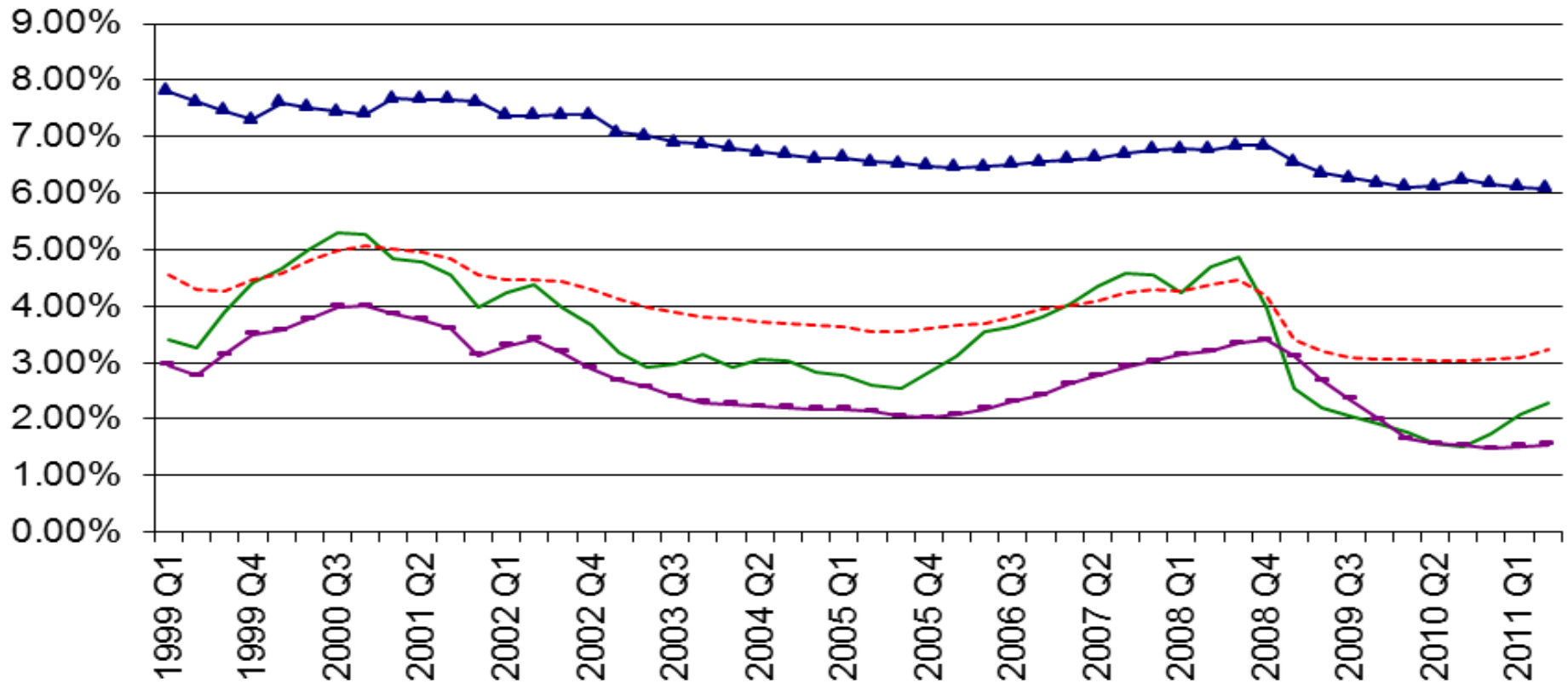


## FISIM test on maturity

- In some other countries, like Germany or Spain, the results showed that the Weighted Average Reference rate approach cannot be considered an improvement compared to the method according to Regulation 448/98 currently used, because:
  - **it generates negative FISIM on deposits in some periods;**
  - **in some cases, FISIM estimates allocated to GDP are more volatile**



## Germany: HH Consumers (S.14)



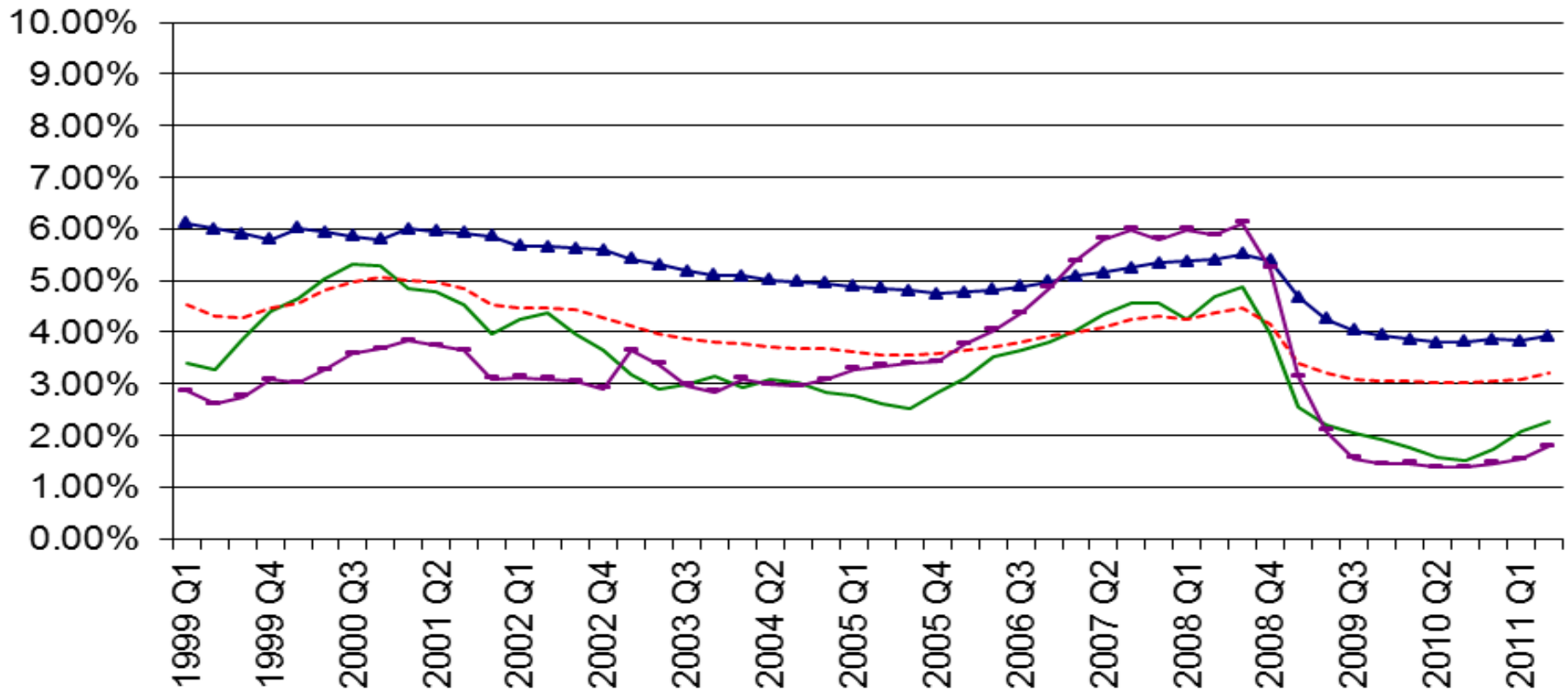
— Weighted Internal Reference Rate

- - - 448/98 Internal Reference Rate

—▲ Interest rate on loans: S.14 consumers

—■ Interest rate on deposits: S.14 consumers

## Germany: Non-Financial Co. (S.11)



— Weighted Internal Reference Rate

- - - 448/98 Internal Reference Rate

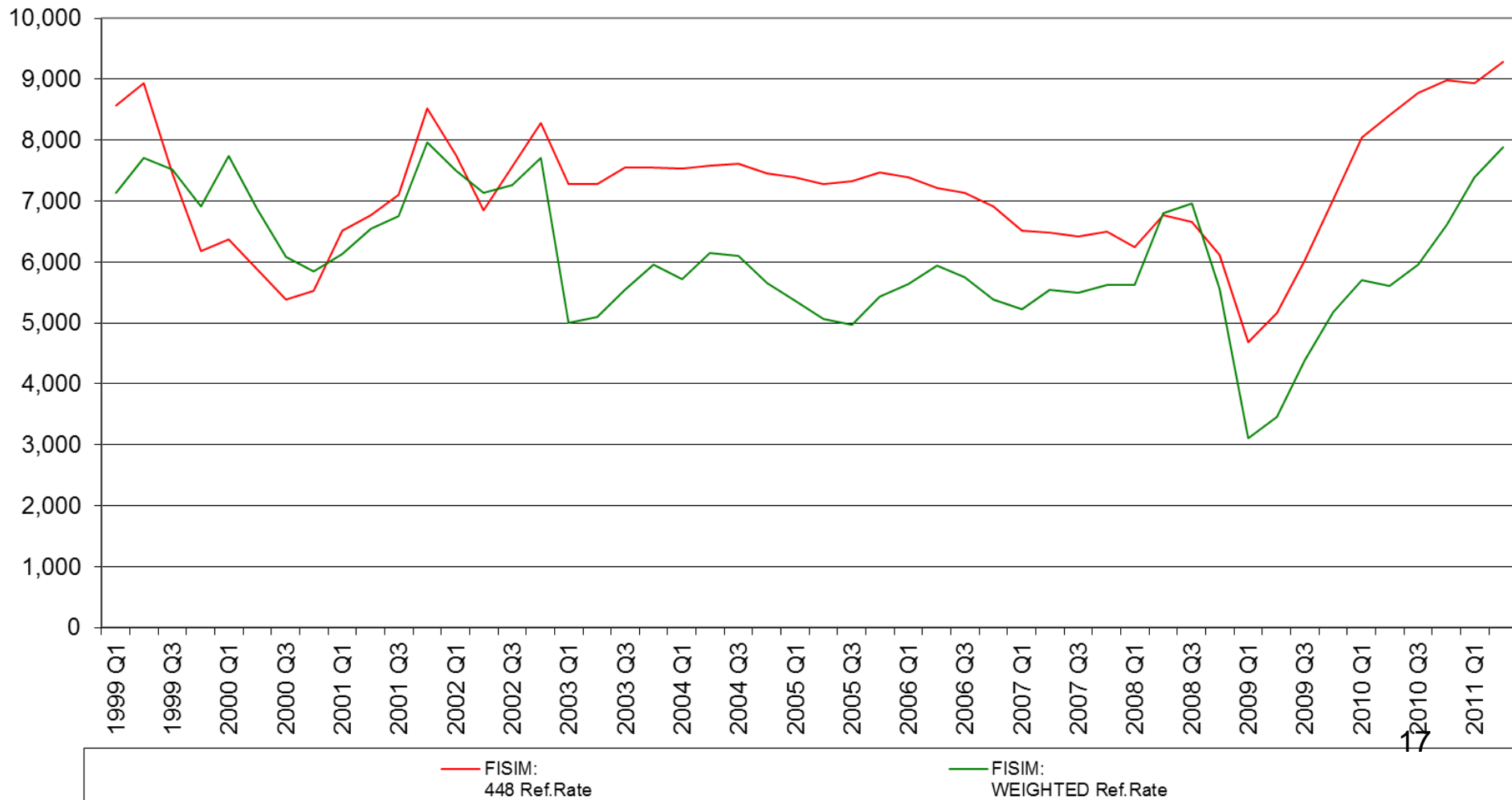
—▲ Interest rate on loans: S.11

—■ Interest rate on deposits S.11



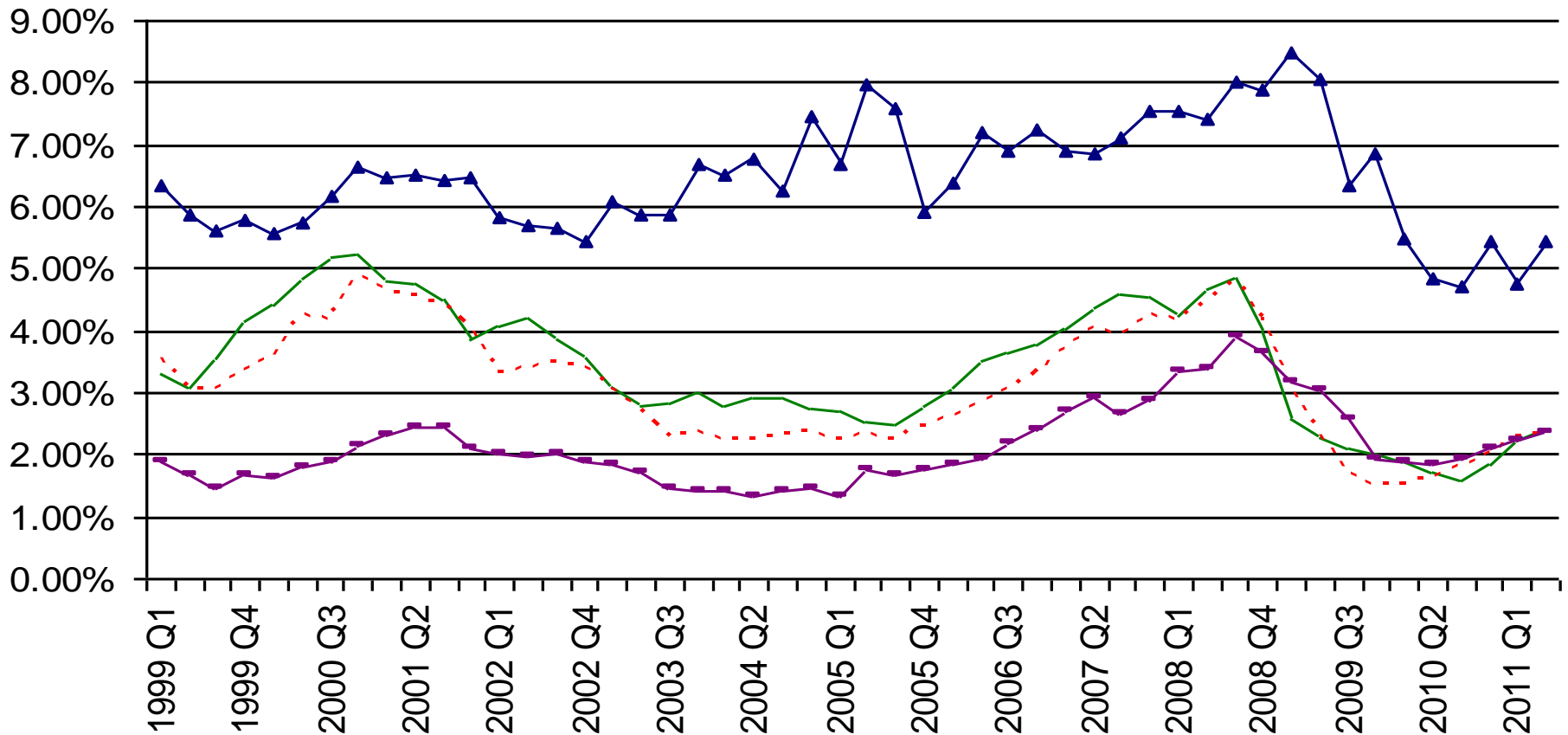
European  
Commission

## Germany: FISIM on loans&deposits allocated to GDP





## Spain: HH Consumers (S.14)



— Weighted Internal Reference Rate

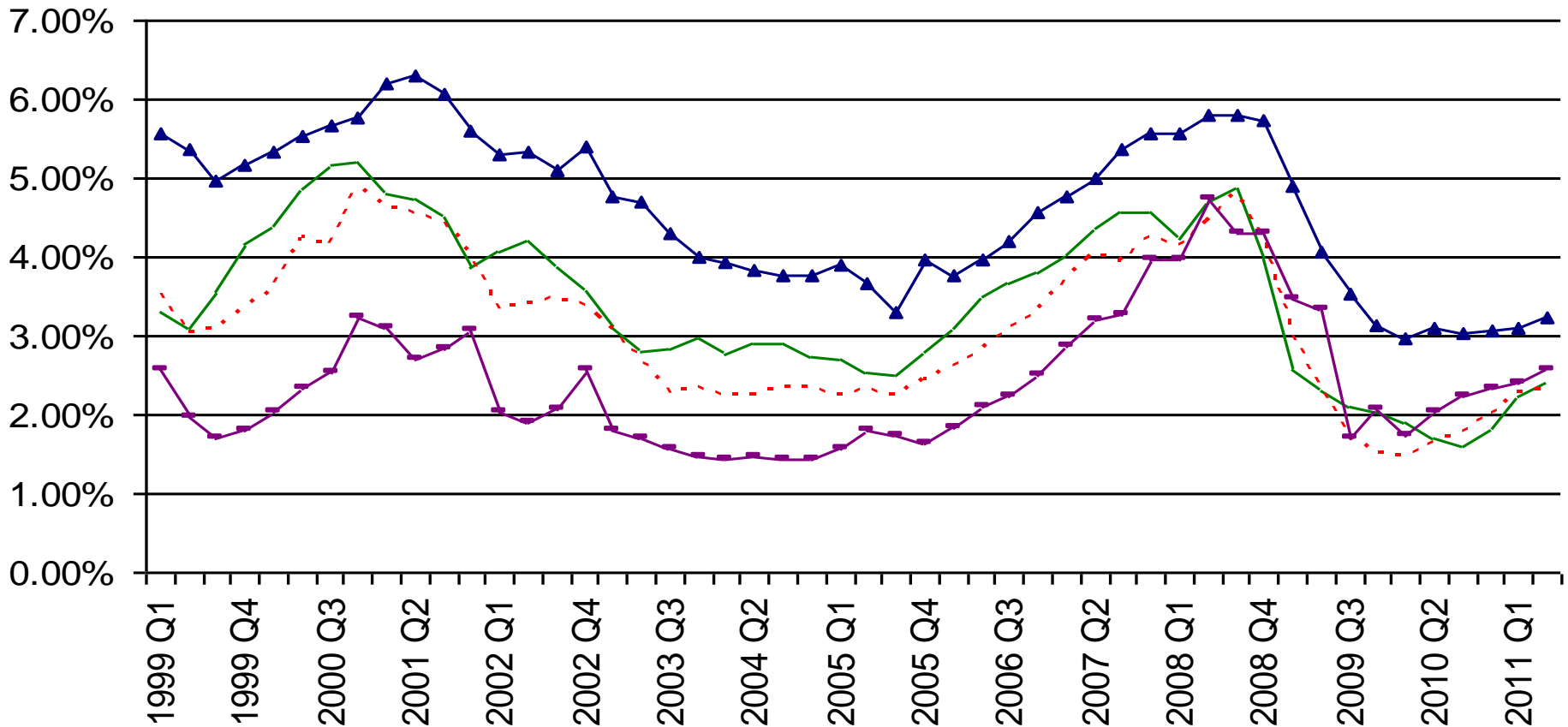
- - - 448/98 Internal Reference Rate

—▲ Interest rate on loans: S.14 consumers

—■ Interest rate on deposits: S.14 consumers



## Spain: Non-Financial Co. (S.11)



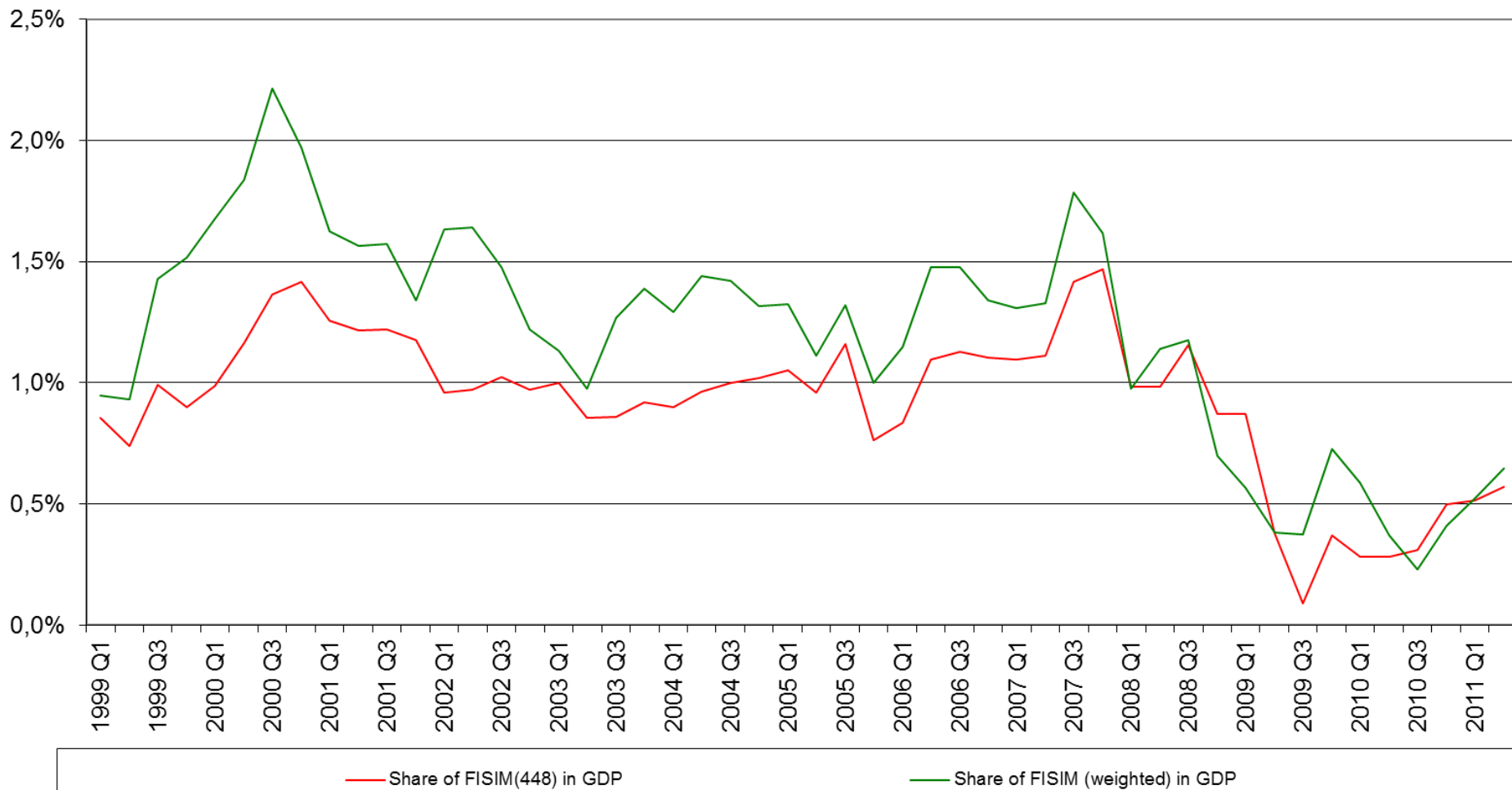
— Weighted Internal Reference Rate

—▲ Interest rate on loans: S.11

- - - 448/98 Internal Reference Rate

—■ Interest rate on deposits S.11

## Share of FISIM on loans&deposits in GDP



# Summary of the responses on FISIM test on maturity

- Eurostat received **21 responses** with expressed preferences and opinions on the proposed Weighted Average Reference Rate method.

# Summary of the responses on FISIM test on Maturity

- **13 responses were against** the Weighted Average Reference Rate Method, because:
  - the improvement in the results by using the weighted average reference rates is not good enough to justify the replacement. Additionally, it introduces some negative FISIM (the proposed reference rate does not fit very well in some sectors);
  - accounting data are more reliable than market rates. The "weighted average reference rates" method only deliver a very marginal improvement, even if some issues are solved (like negative FISIM), thus not convinced that this new method brings a significant improvement justifying the replacement;
  - the main comment is that the FISIM TF is most likely to opt for a methodology that uses LIBOR and EURIBOR as key sources. Problems in selling a new methodology that uses LIBOR/EURIBOR as an improvement, given the manipulation and fiddling problems highlighted in the media.



# Summary of the responses on FISIM test on maturity

- **8 responses were in favour** of the Weighted Average Reference Rate method, stating that this method:
  - solves continued negative FISIM on (mainly) deposits;
  - leads to more stable FISIM;
  - in practice is rather easy to apply.

# FISIM test on default risk

This test analysed the following methods based:

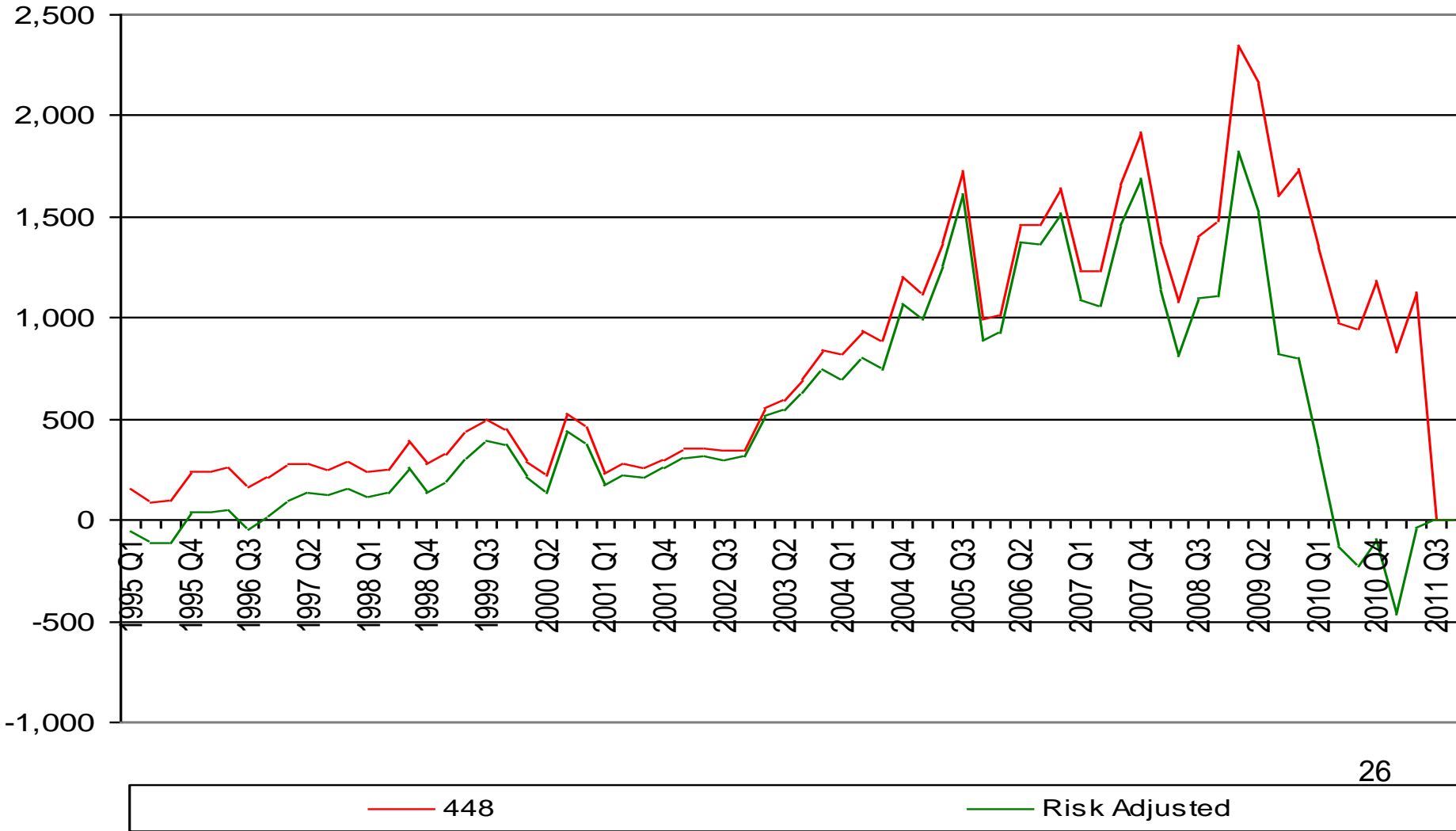
- Currently used, defined by the Regulation 448/98;
- An alternative method, where the detailed sectorised FISIM estimates on loans are adjusted for default risk using data on write-offs and provisions for bad and doubtful loans.

# FISIM test on default risk

- The results of the test show considerable problems with the availability of detailed sectorised information in substantial majority of the MSs. Even though data on write-offs or provisions for loans were available for total economy in a number of countries, the sectoral breakdown was derived using alternative source data or assumptions.
- There were cases where the information on write-offs on loans was bundled with write-downs on loans, and cases where write-offs information was collected for all bad and doubtful debts (loans and securities bundled together).

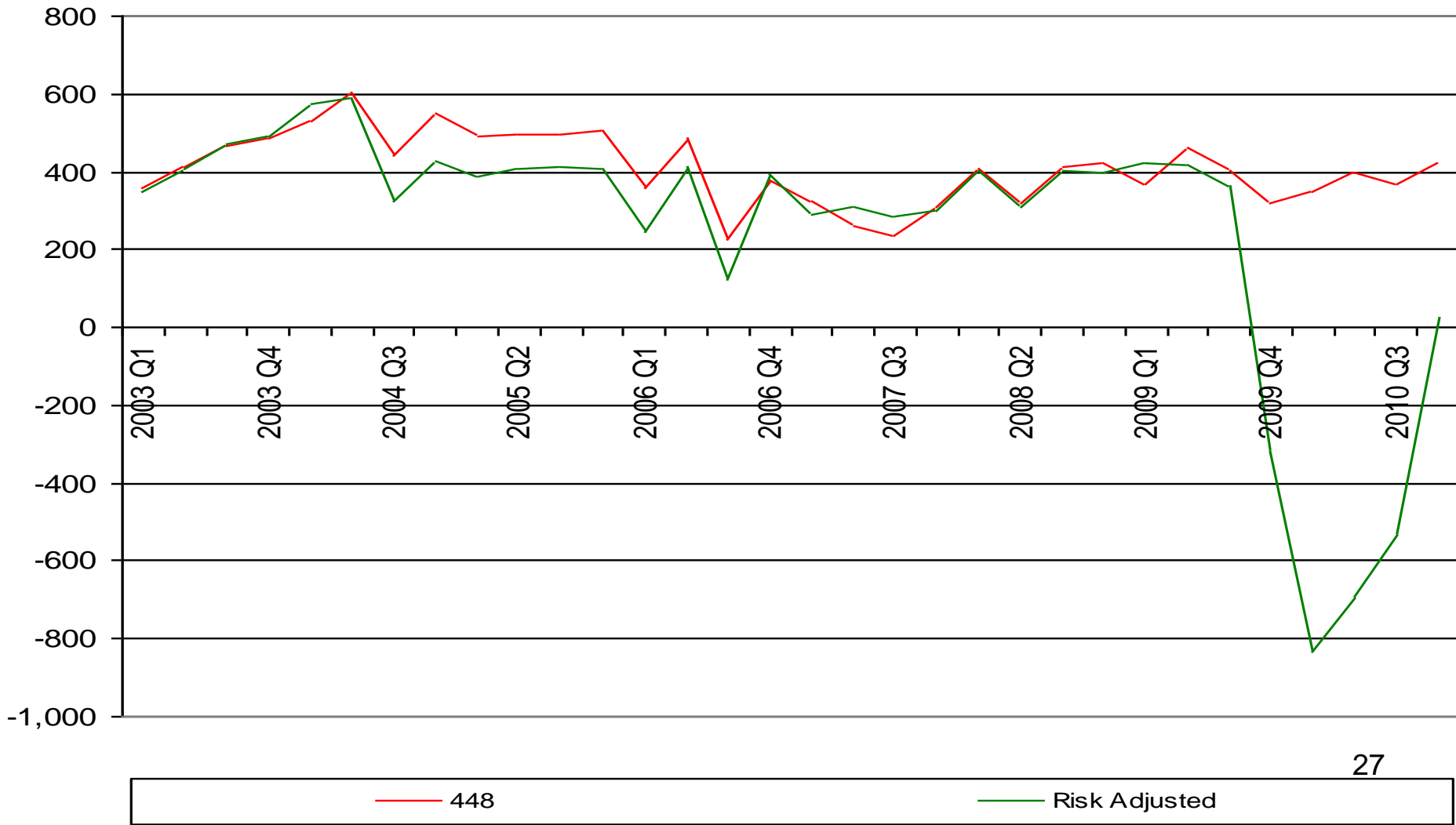


## Spain: FISIM on loans to GDP



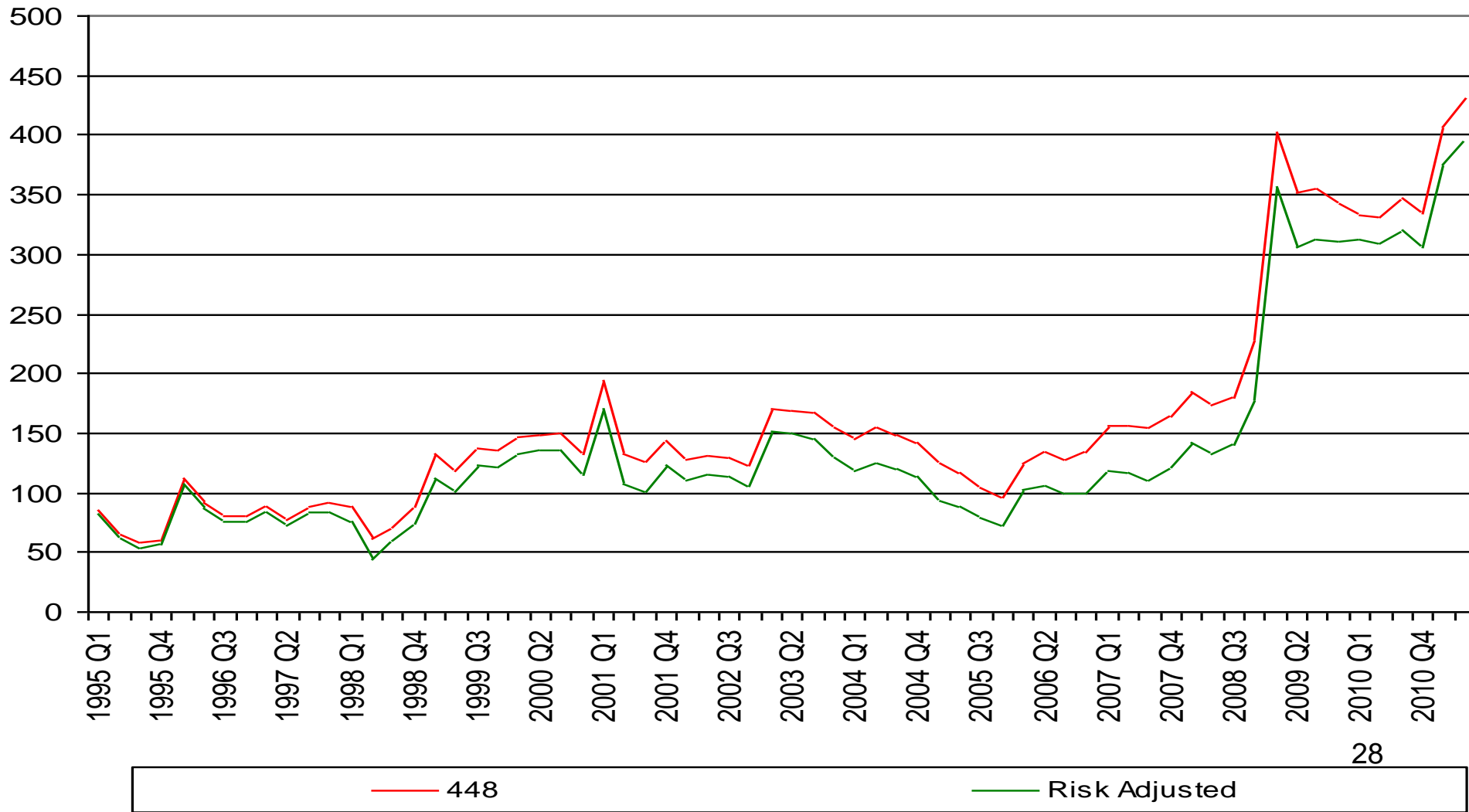


## Belgium: FISIM on loans to GDP





## Portugal: FISIM on loans to GDP





## UK: MFIs in GBP: FISIM on loans to GDP



# Summary of the responses on FISIM test on default risk

- Countries in their responses confirmed that:
  - the test demonstrated that the biggest challenge on risk adjustment is the unavailability of detailed and quality data by sector, and thus some assumptions had to be considered. In some cases, risk adjustment implies implausible results, notably very negative figures for FISIM on loans. On other cases, as it is the Portuguese case, risk adjusted FISIM on loans is not markedly different from the original figures (although they are lower, as expected), and they do not show an increase in risk adjustment associated to the financial crisis;
  - given the unavailability of data for many MSs and that the risk adjustments is modest (at best) in some cases or hard to understand (negative FISIM for example), we agree on not implementing this approach.



## Next step

- The results of the FISIM tests on maturity and default risk together with the consultation with the National Accounts Working Group (NAWG) will be presented to the Directors of Macroeconomic Statistics (DMES) on 7 November 2012.