

Principles of financial crises in the first two decades of the 21st century

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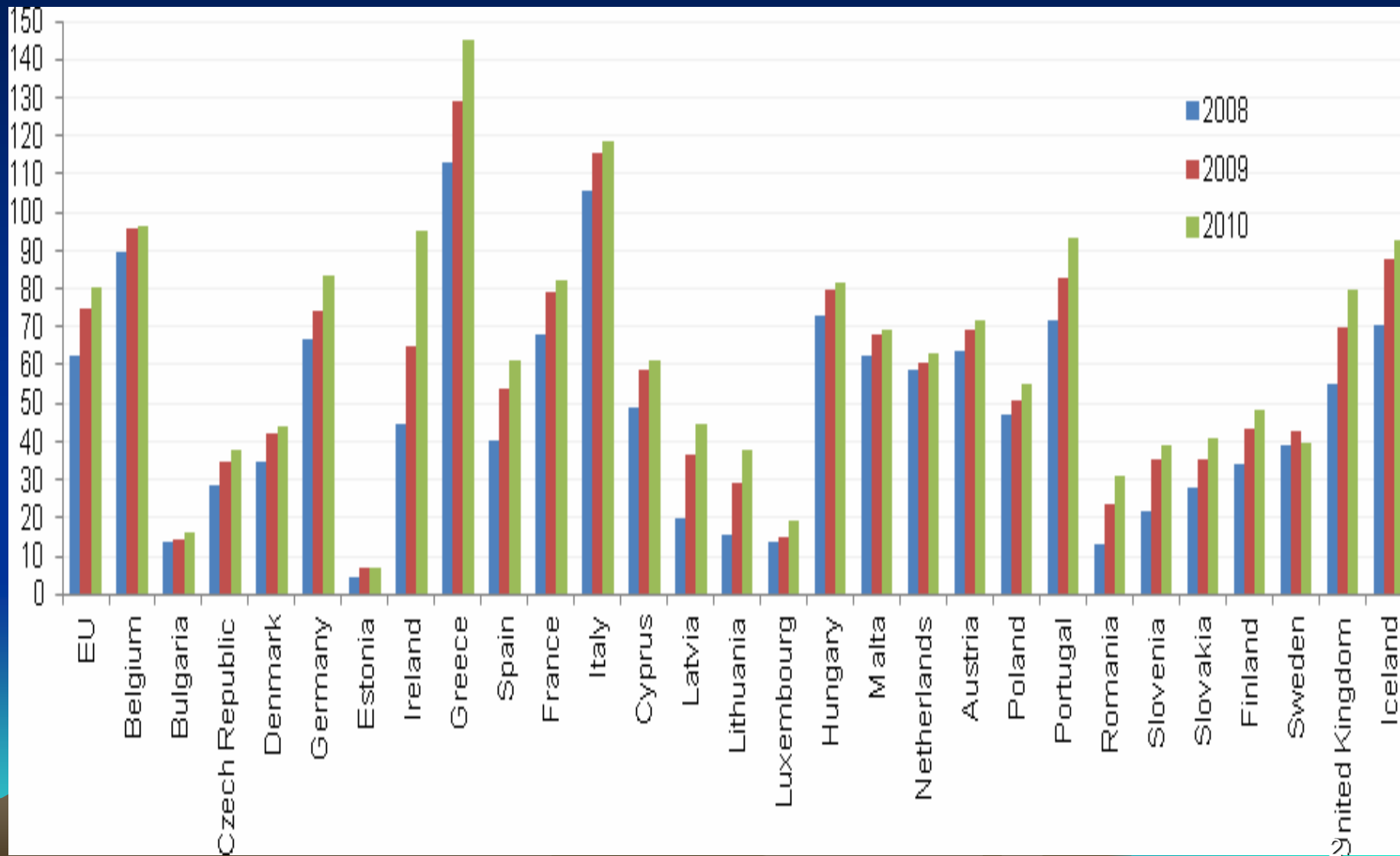
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General government gross debt [% GDP]

Source: EUROSTAT <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsieb090>



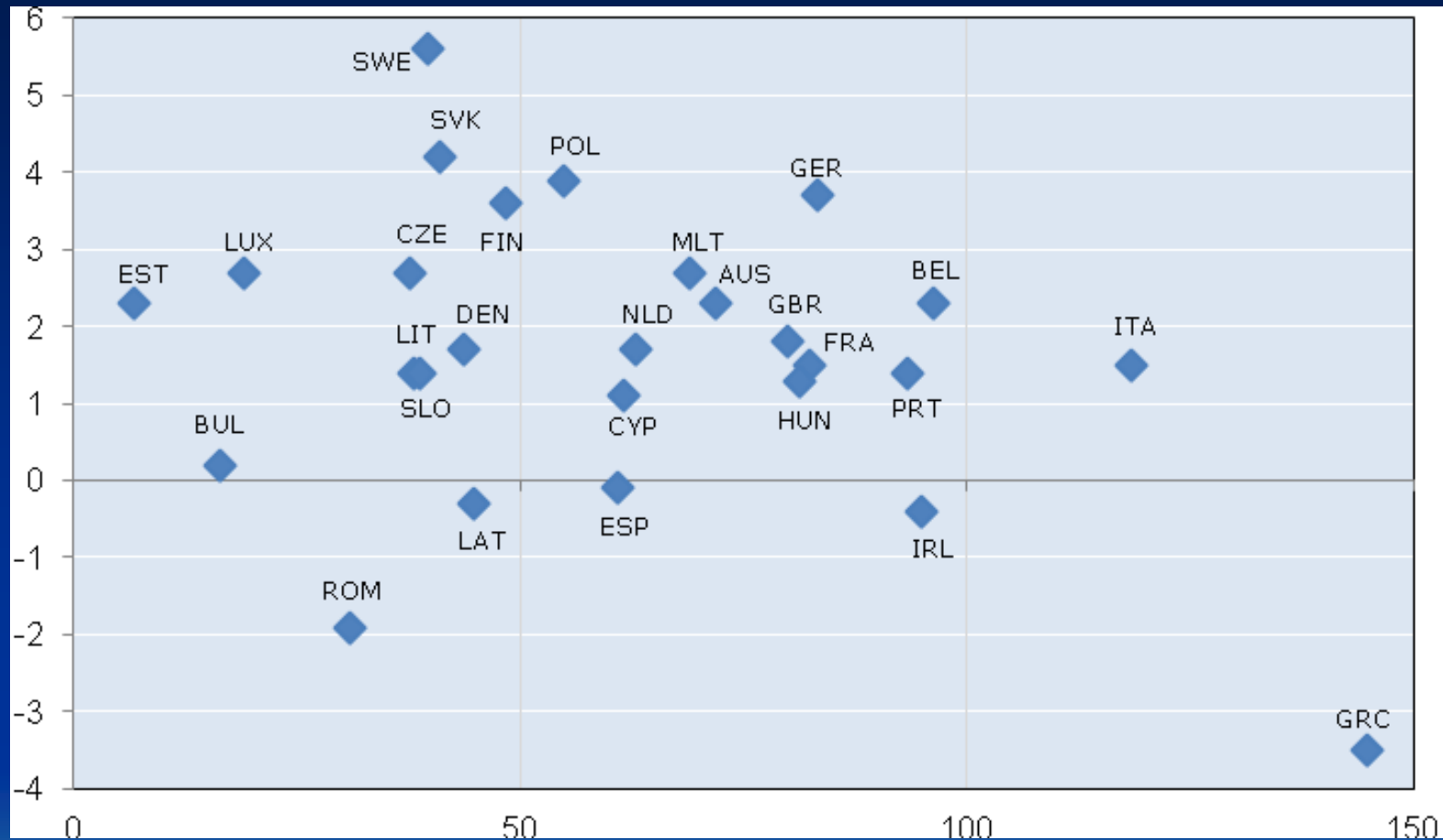
General government gross debt in % of GDP, growth debt rate 2008-2010 [%]

Country	Growth rate
Bulgaria	140,2
Lithuania	140,1
Cyprus	126,4
Romania	125,5
Slovakia	122,9

Growth rate EU 27 countries is only 101,3%

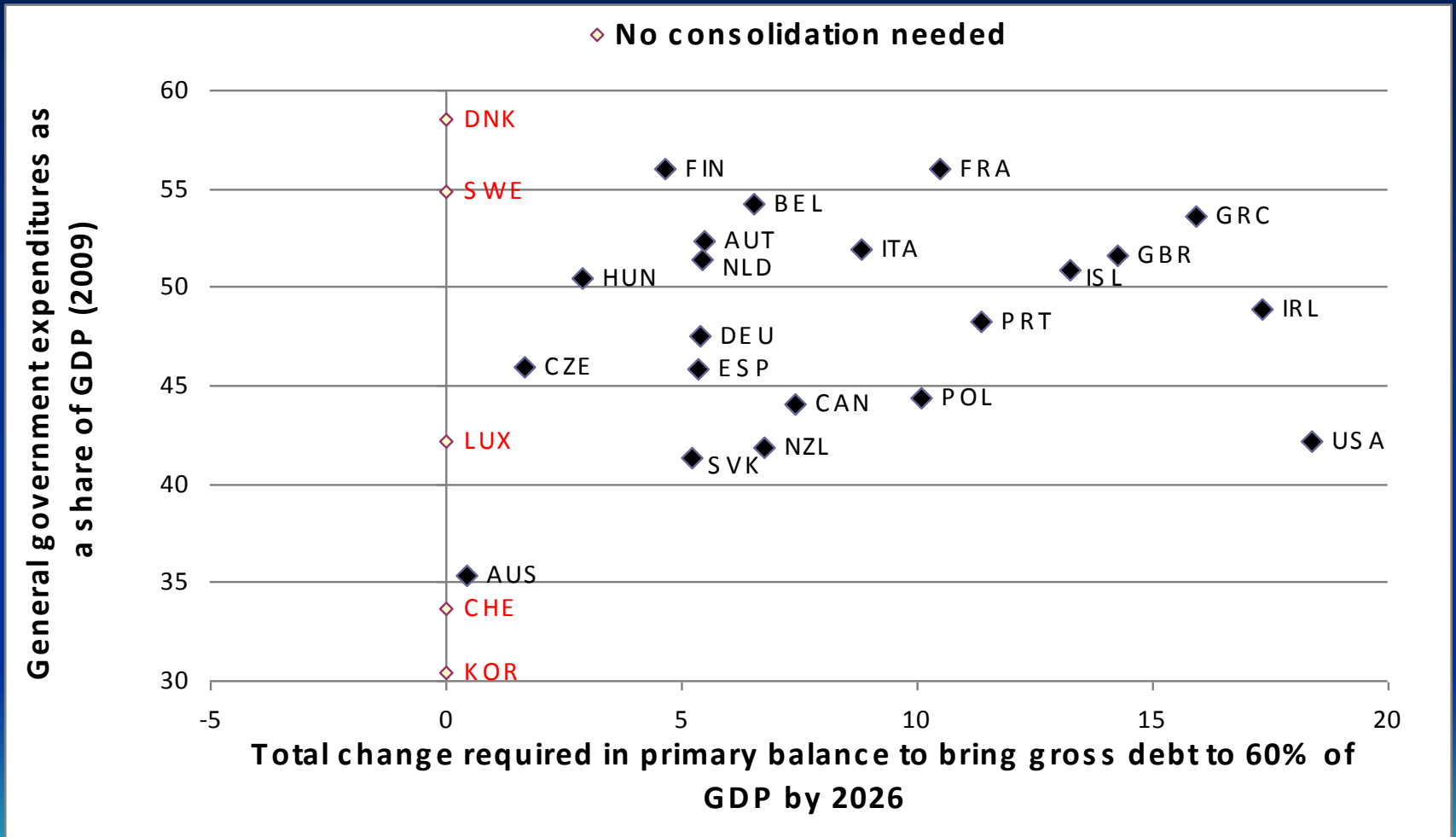
Source: EUROSTAT and own calculation

Relation between General government gross debt [% GDP] and Real GDP growth rate [% change on previous year 2009/2010]



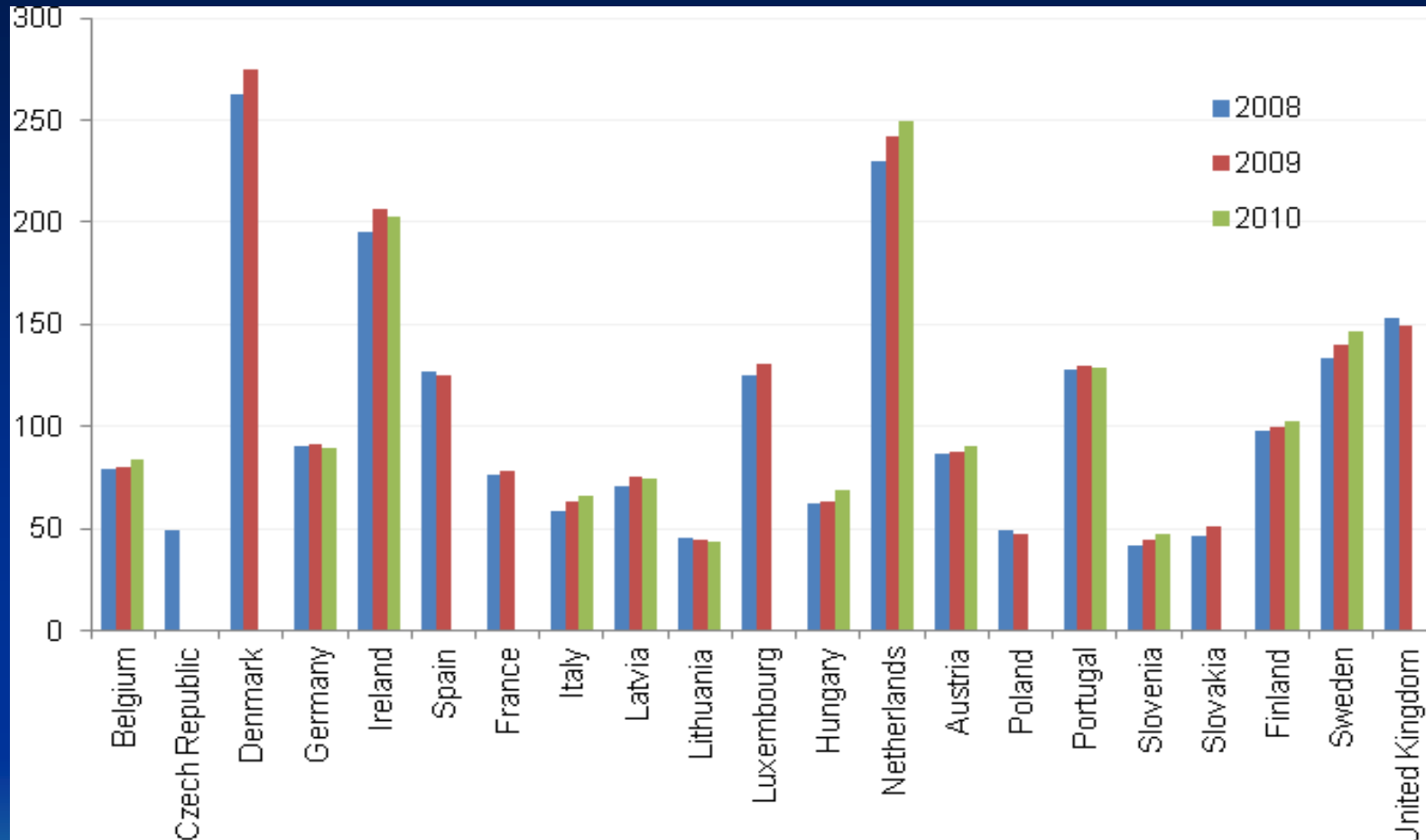
Source: EUROSTAT

Fiscal consolidation requirements



Source: OECD, Government at a Glance, 2011

Gross debt-to-income ratio of households [%]



Source: EUROSTAT

Gross debt-to-income ratio of households, growth debt rate 2008-2010 [%]

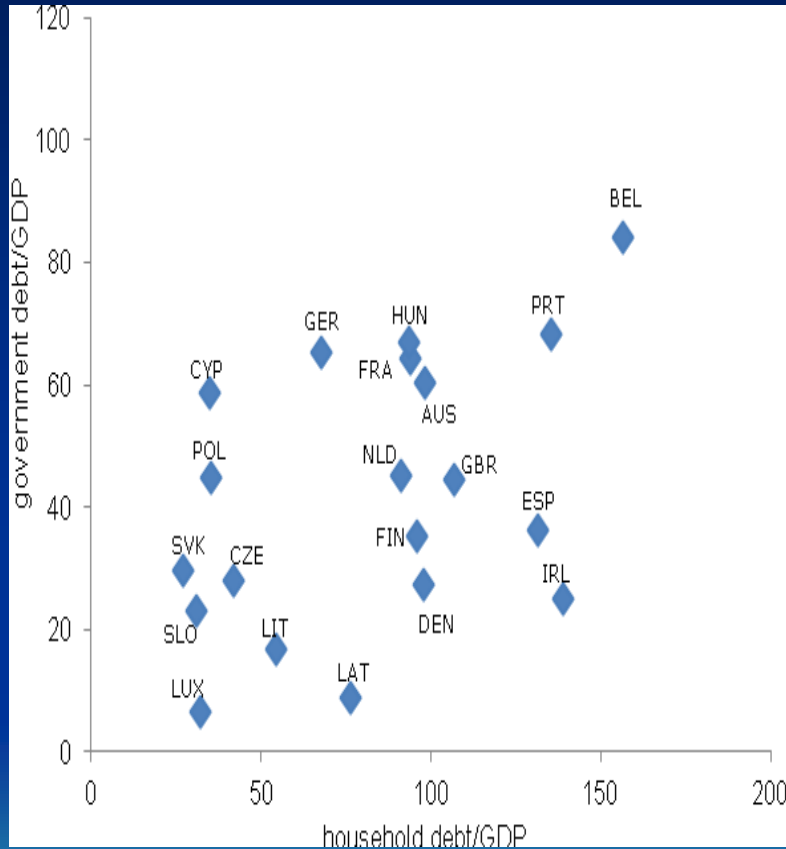
Country	Growth rate
Slovenia	112,5
Italy	112,2
Slovakia	110,1
Hungary	109,9
Sweden	109,9

Source: EUROSTAT and own calculation

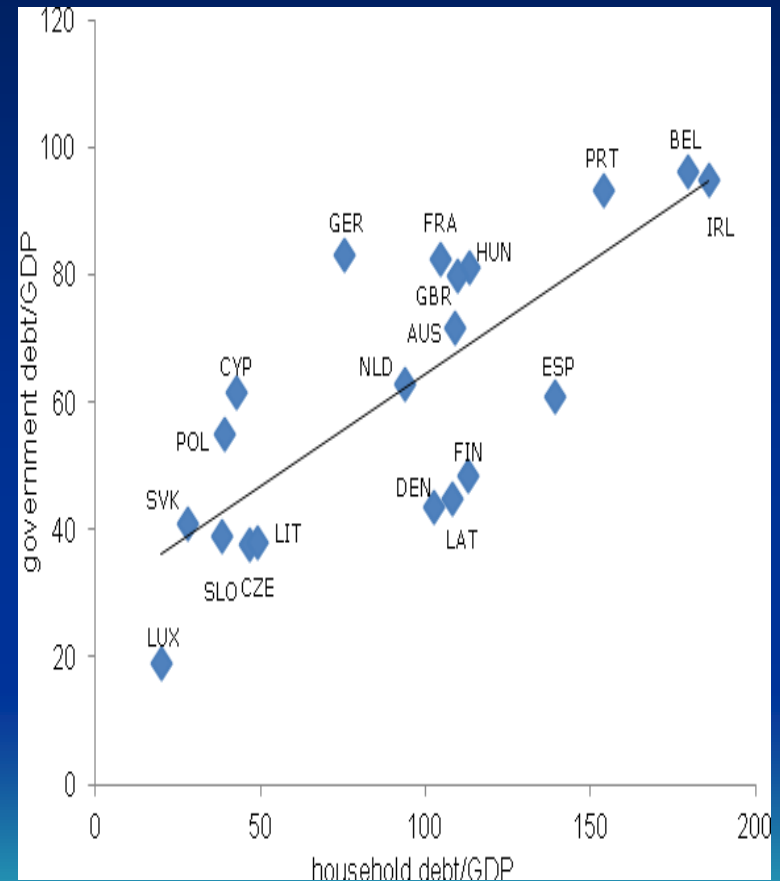
Relation between government debt and household debt (%GDP) in chosen EU countries

Regress analyses

2007



2010



Source: ECB, own calculation

$$\text{Government debt} = 29,127 + 0,352 * \text{household debt},$$

(7,26) (0,07)

Strength of dependency $R^2 = 59\%$ shows middle dependency

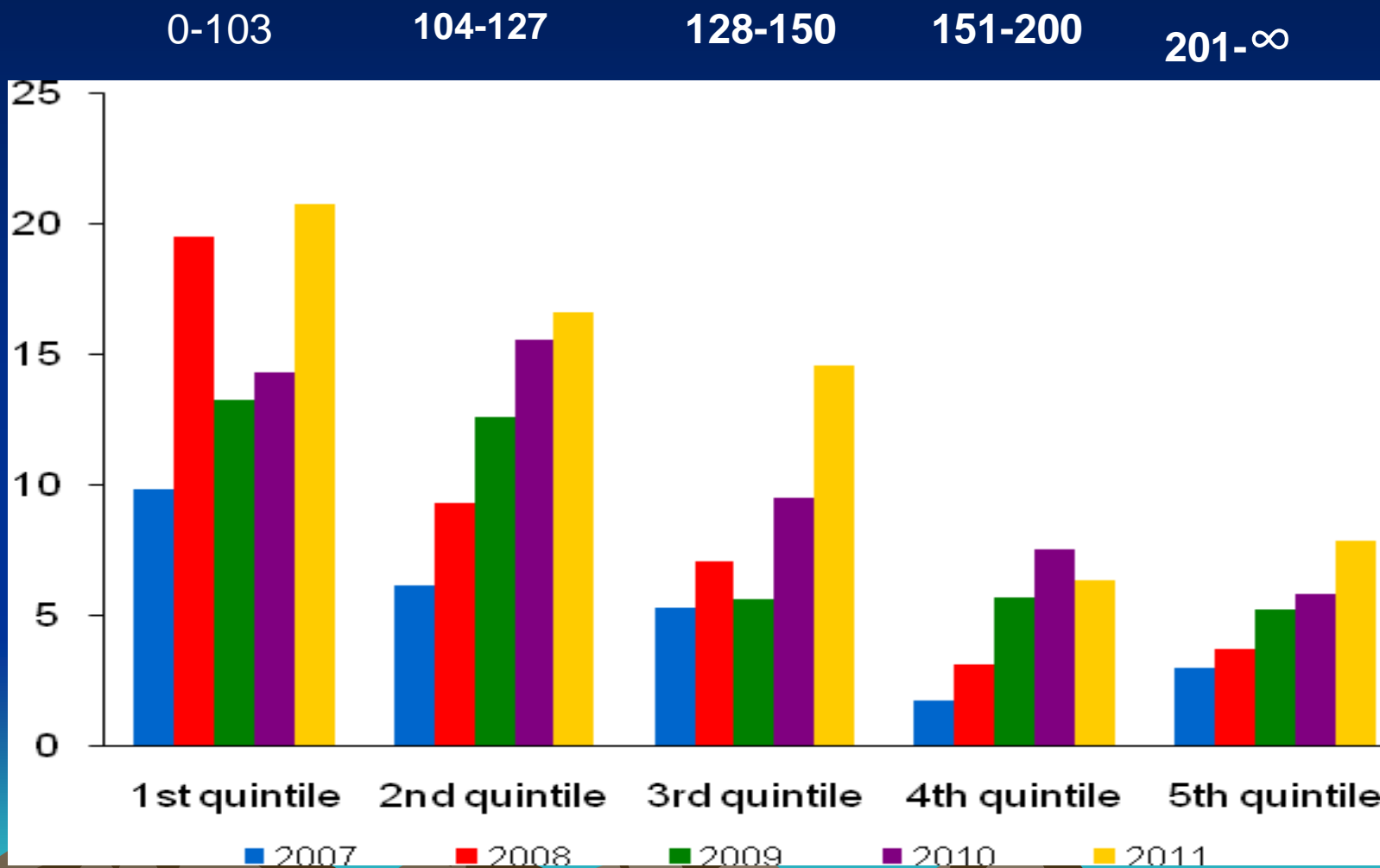
F-test ($F = 25,55$) and Durbin-Watson statistics ($DW = 1,74$)

Confirm that model is fine

This relationship means that in 2010 increase of HD about 1% caused increase of GD about 0,352 percentage point.

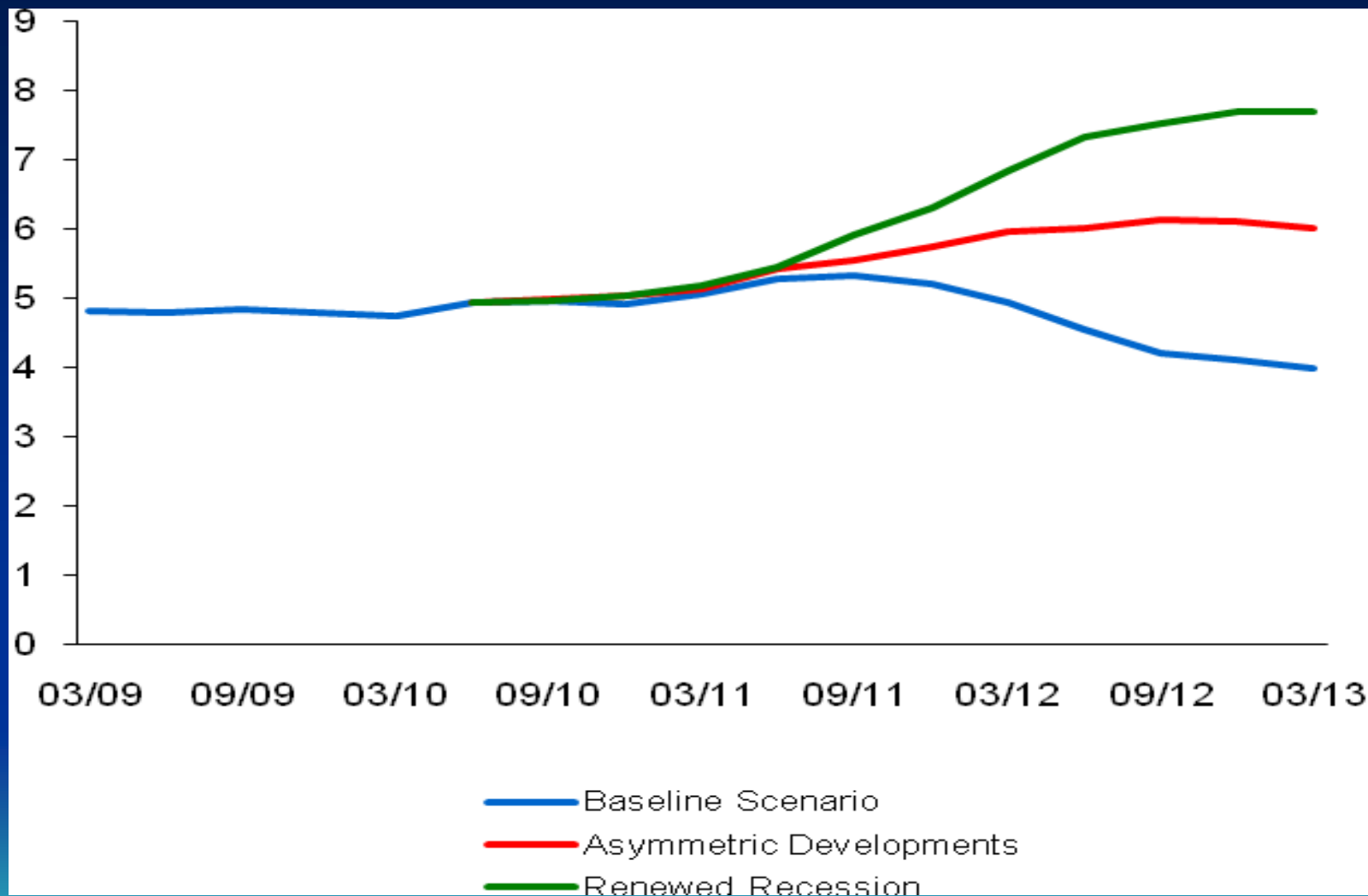
Shares of insolvent households in total number of indebted households divided by income category – simulation results

Net income in thousands CZK per 1 member of household



Source: CZSO Household Budget Survey, CNB calculation

12-month default rate on bank loans to households



Source: CNB Financial Stability Report 2010/2011,
http://www.cnb.cz/cs/financni_stabilita/zpravy_fs/fs_2010-2011/index.html

Conclusion

In 2013 we may expect the household default rate to be at 8 to 10%.

The segment of consumer's loans will be affected more the segment of mortgages.

This process will affect the financial health of the banking sector
and can caused **a third wave of financial turmoil.**