Deutsche Bank

Five Misunderstandings About Government Debt

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Passion to Perform

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Five misunderstandings about government debt

1. **By definition: Assets = liabilities.** This means that saying that “there is too much debt in the world” is the same as saying “there are too many assets in the world”. But is "too many assets in the world" a problem that's holding back growth?
2. **It is not the amount of debt outstanding that matters but the market’s assessment whether the borrower can pay back the debt.** Japan as an example.
3. **The transmission channel from high debt to growth is via high interest rates.** If US long-term interest rates remain unaffected by government debt levels then US government debt levels may never be a problem.
4. **Causality tests show that growth explains future debt.** Debt does not explain future growth.
5. **Growth is not always driven by credit.** In many countries, for example Germany, growth is driven by exports and not by debt accumulation.

Source: DB Global Markets Research

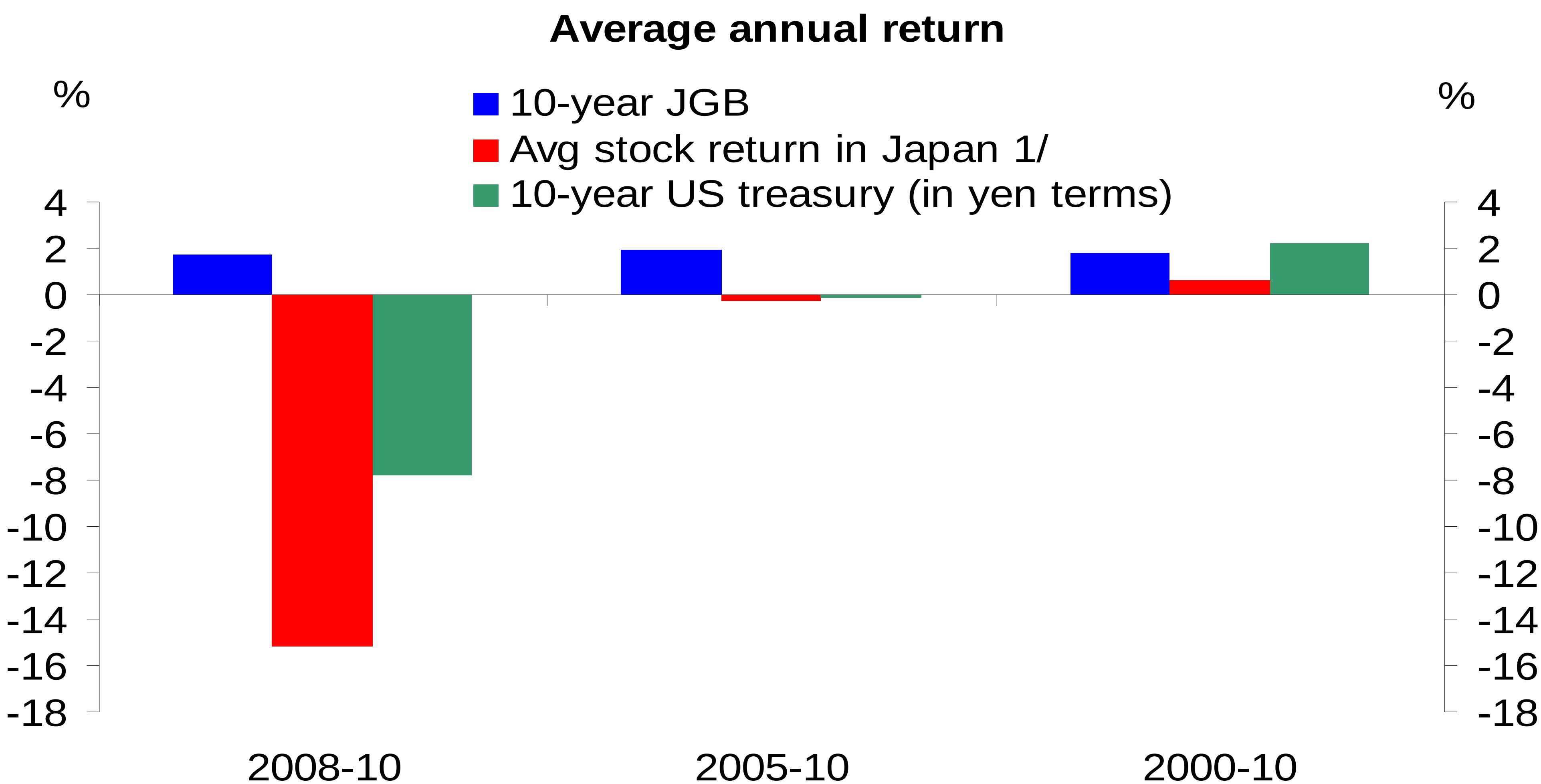
1. By accounting definition:

Assets = liabilities

In other words, every outstanding asset (equity, bonds, etc) is held by some investor. But what does it mean to say that “There are too many assets in the world?” And is that a problem for future growth?

2. It makes sense to talk about the quality of the assets outstanding. It is not the amount of debt outstanding that matters but the market's assessment whether the borrower can pay back the debt. Is US government debt a high-quality asset? Could US government debt reach Japanese levels with no impact on US rates? Japan as an example.

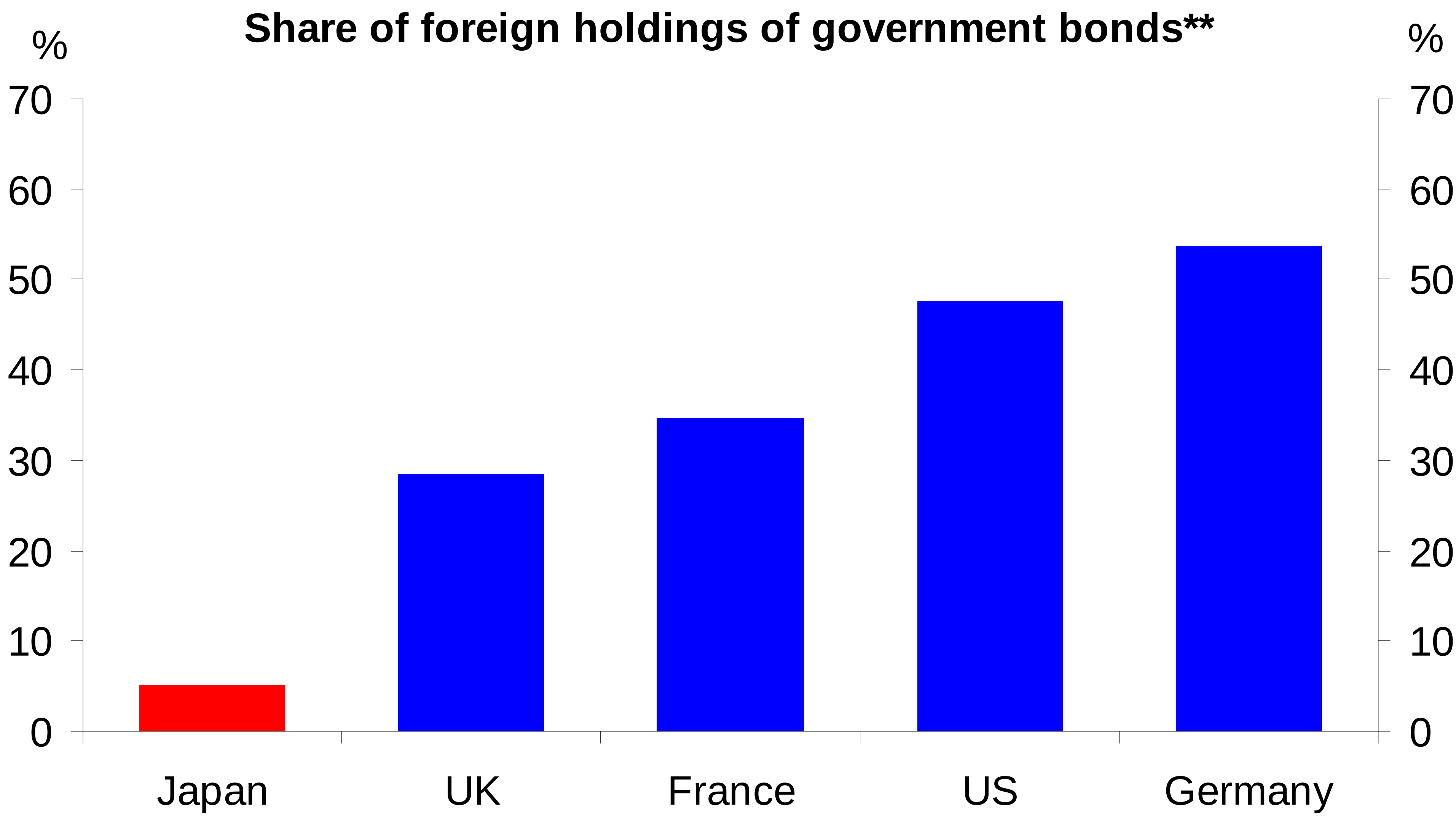
For Japanese investors JGBs look attractive



1/ Consisting of capital gains and dividend payouts.

Source Japan Securities Research Institute; IMF WEO and IFS databases., DB Global Markets Research

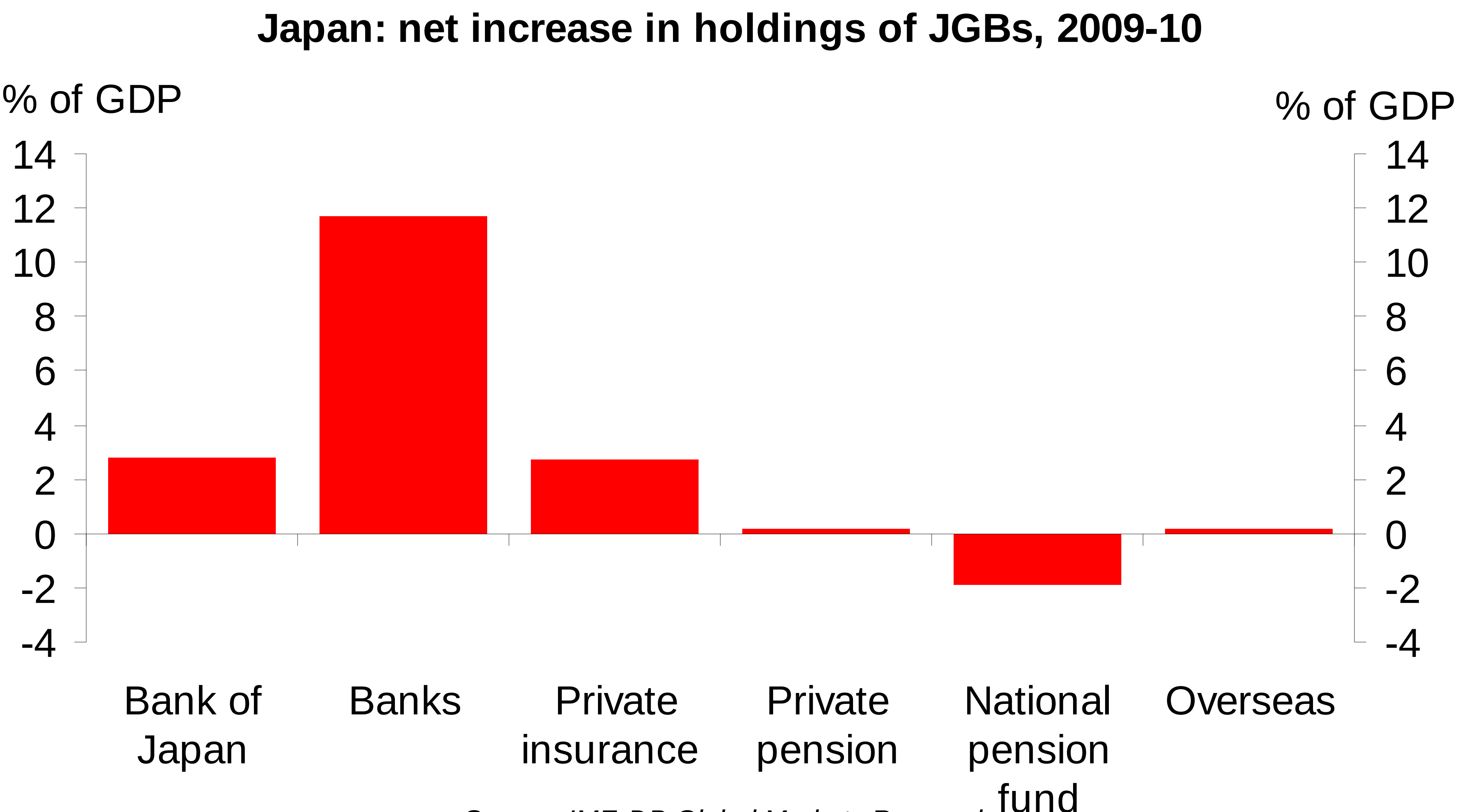
Foreigners own only 5% of JGBs



**Data for Japan , US and UK as of Dec. 2009 and for Germany and France as of Sep 2009 and June 2009 respectively

Source Debt Management Report 2010, Ministry of Finance Japan, DB Global Markets Research

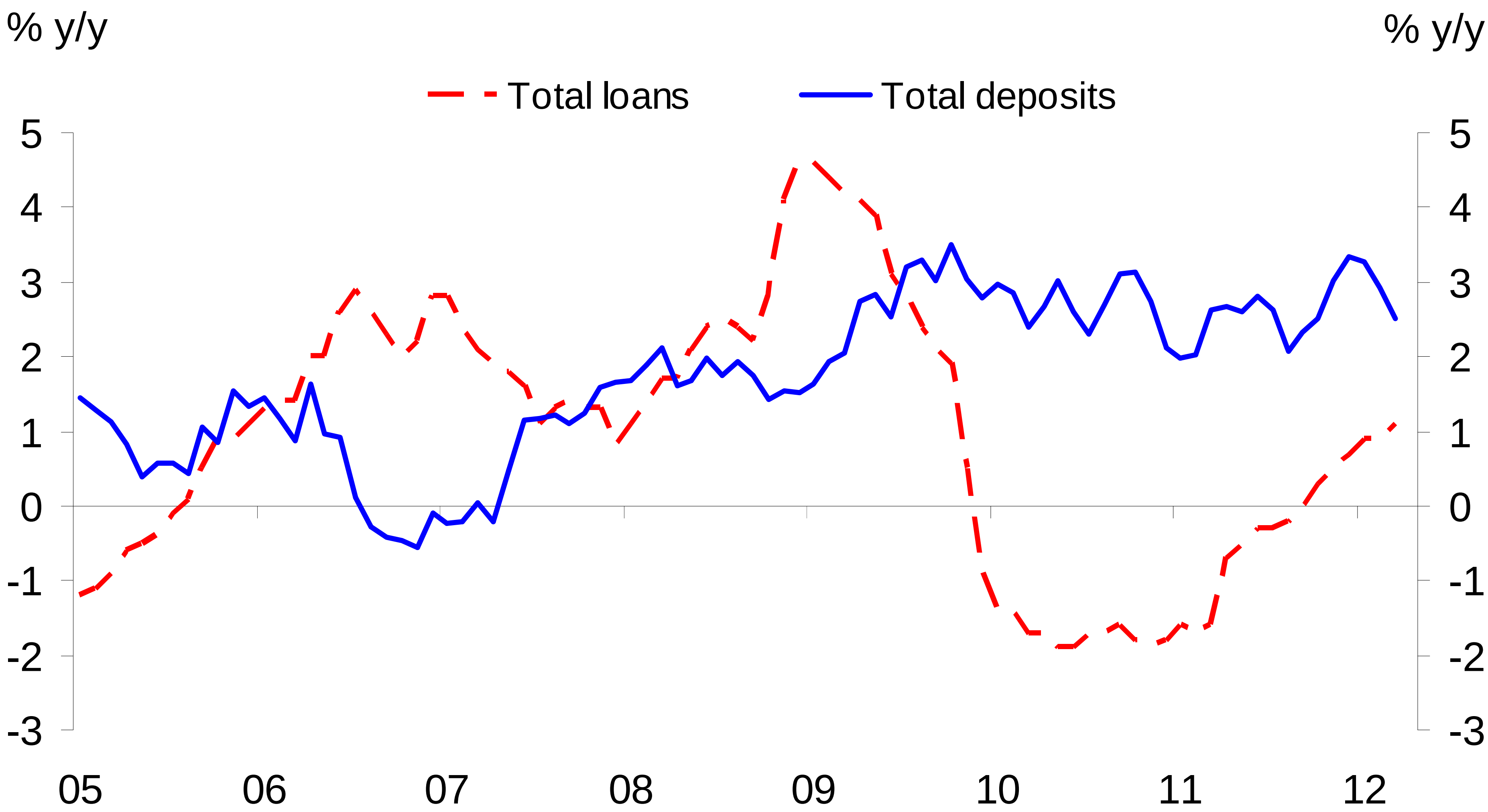
Japanese banks have been increasing their holdings of Japanese government bonds



Source IMF, DB Global Markets Research

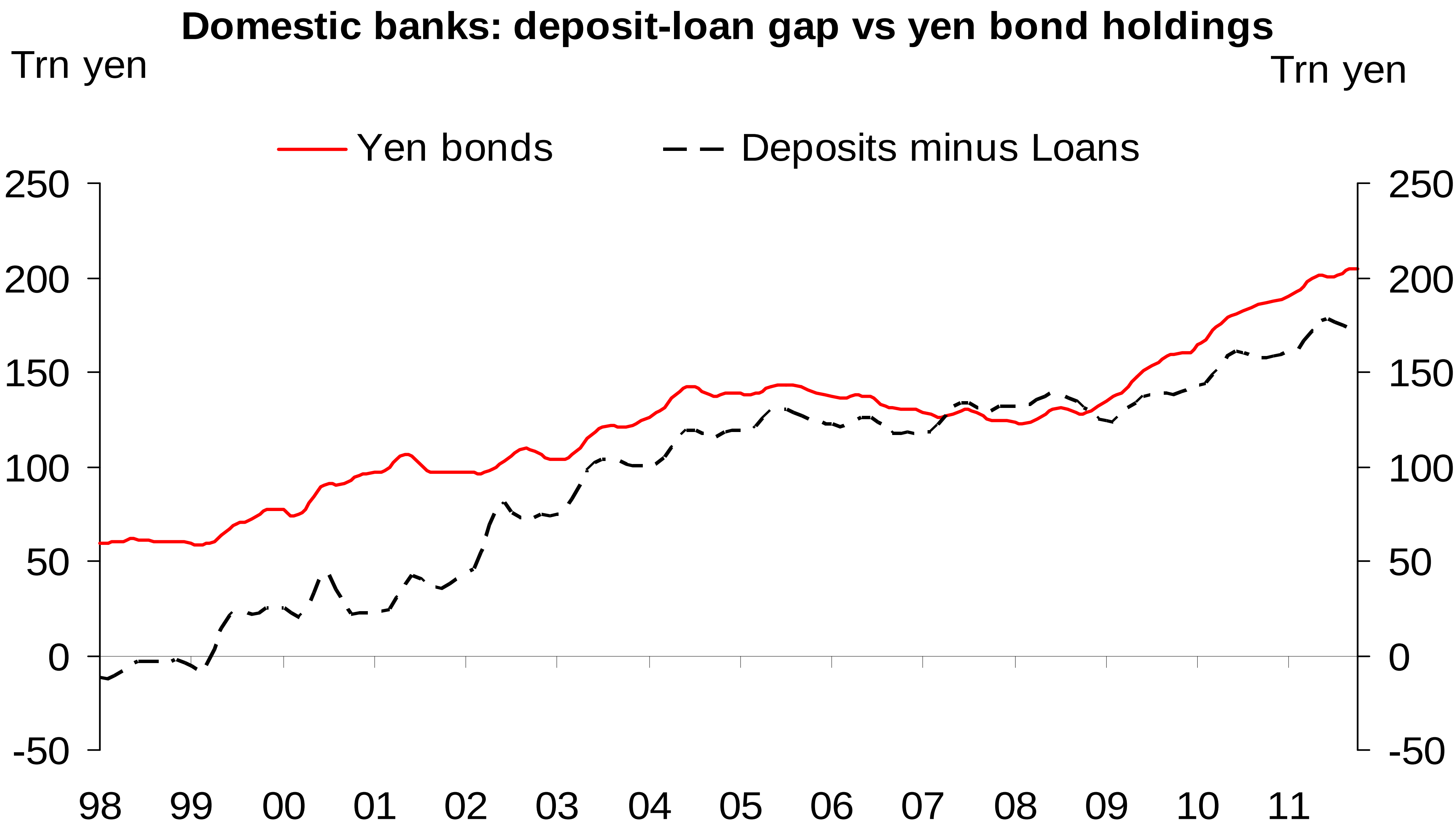
Japanese banks:
Deposit growth higher than loan growth

Bank lending and deposits (year-on-year percent changes)



Source Bank of Japan, Bloomberg Finance LP, DB Global Markets Research

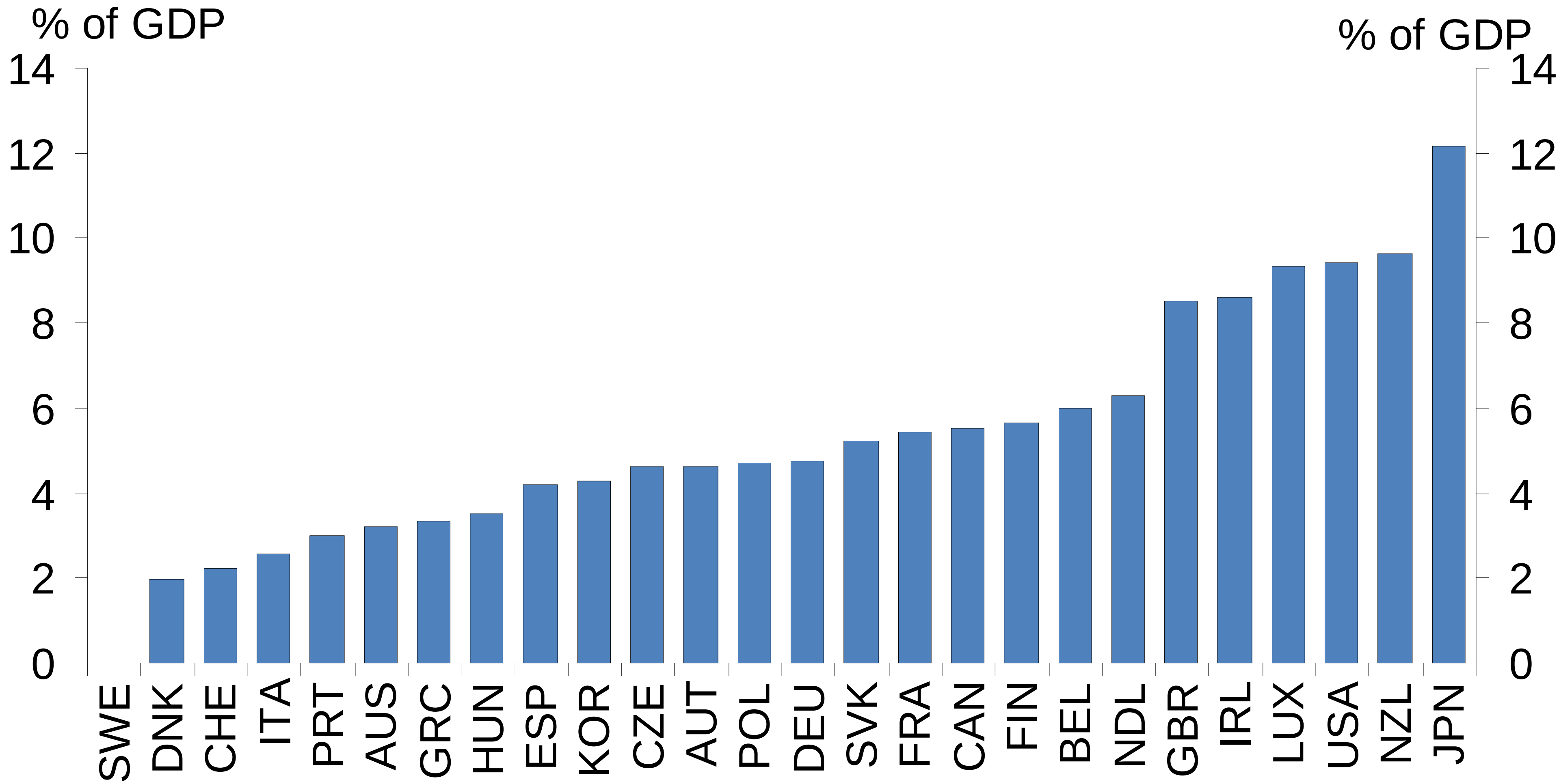
Japanese banks buying JGBs for their surplus deposits



Source Bank of Japan, DB Global Markets Research

Japanese fiscal situation is unsustainable but Japanese rates are still very low

Immediate rise in the underlying primary balance needed to bring gross financial liabilities to 50% of GDP in 2050

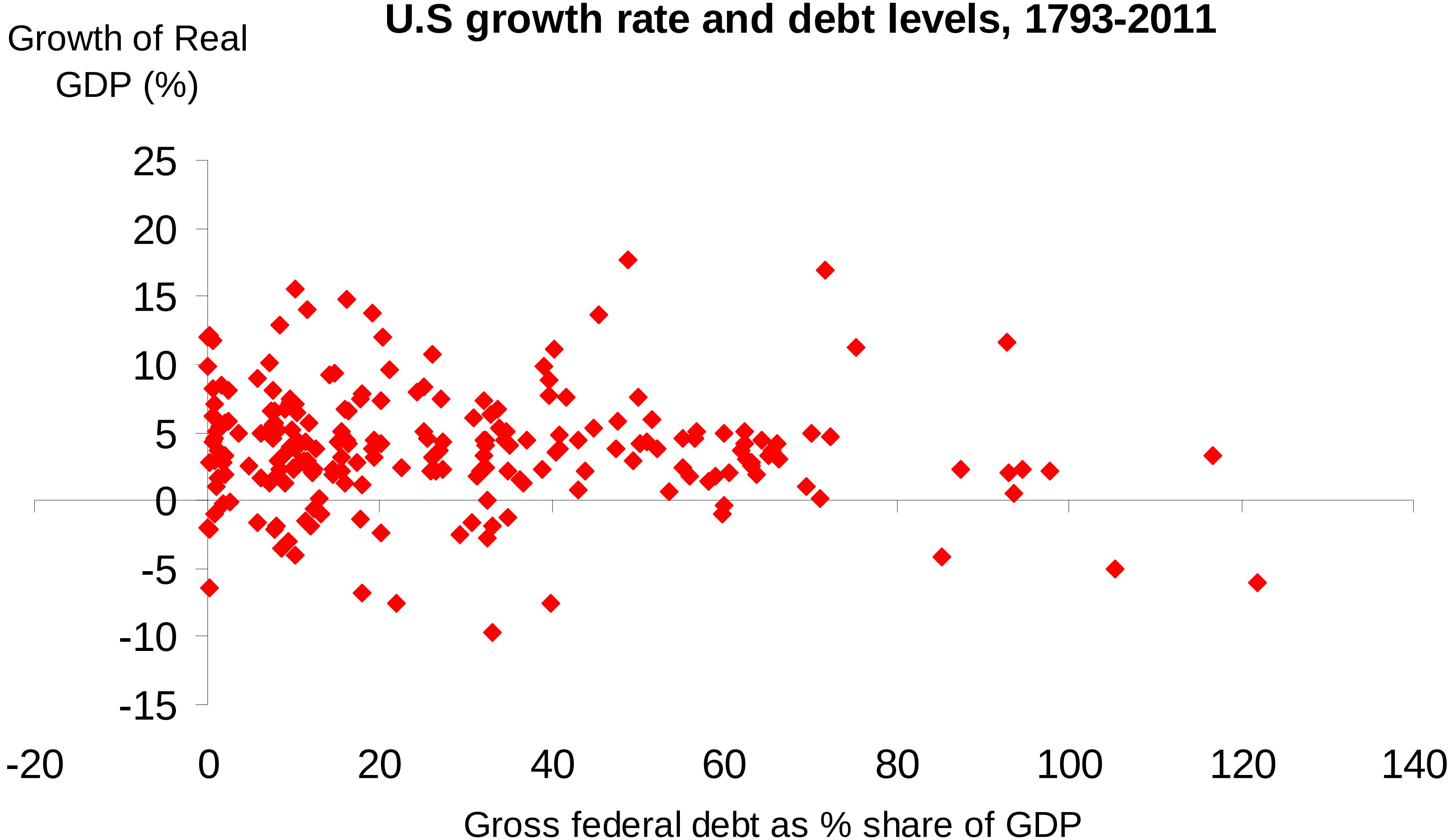


Source OECD, DB Global Markets Research

3. What is the link from high debt levels to growth?

No relationship between US growth and government debt levels

U.S growth rate and debt levels, 1793-2011



Source: BEA, DB Global Markets Research

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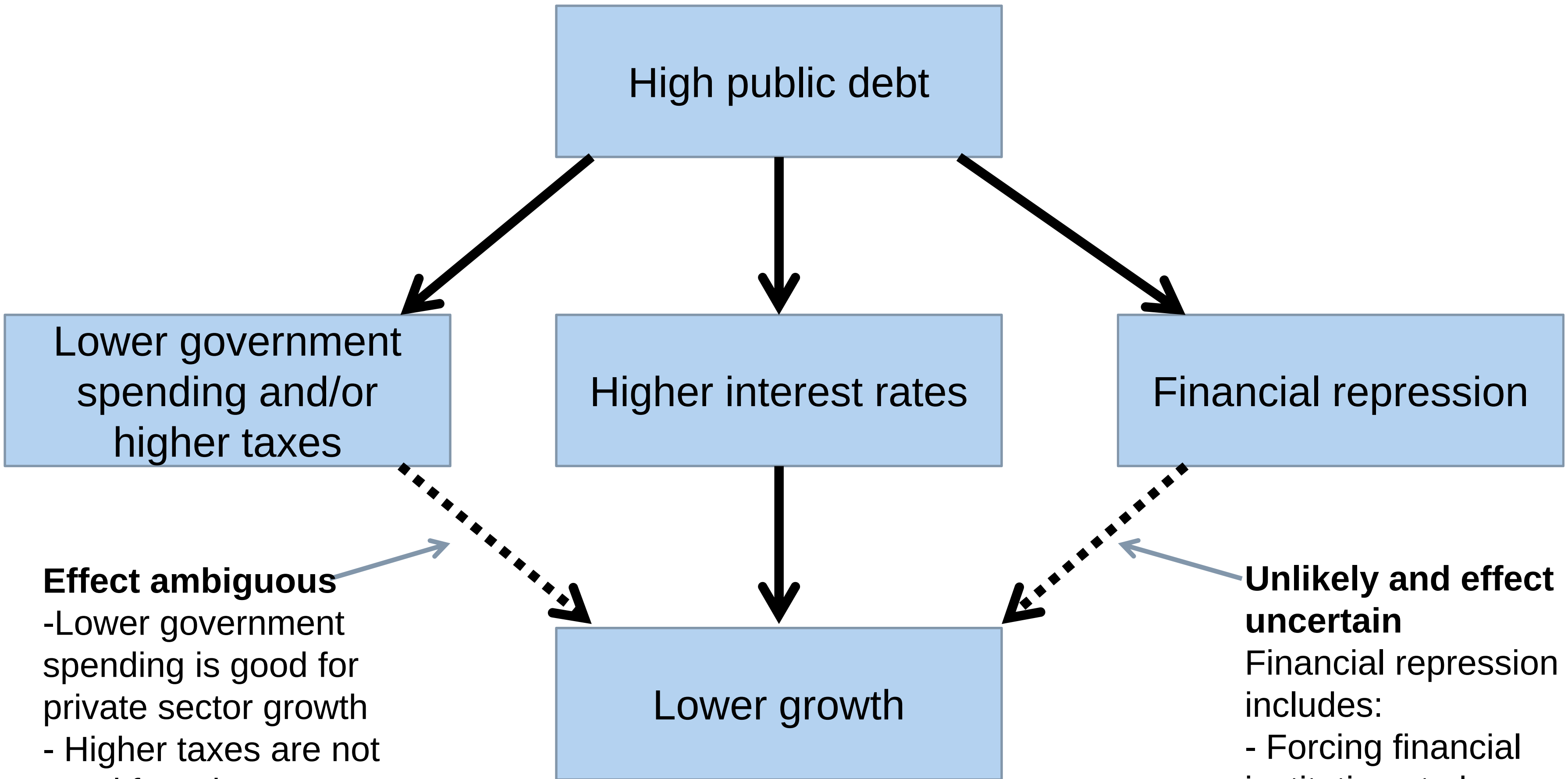
Higher debt levels impact growth via higher borrowing costs



Effect ambiguous
-Lower government spending is good for private sector growth
- Higher taxes are not good for private sector growth

Unlikely and effect uncertain
Financial repression includes:
- Forcing financial institutions to buy more government bonds
- Very high reserve requirements
-Securities transaction taxes

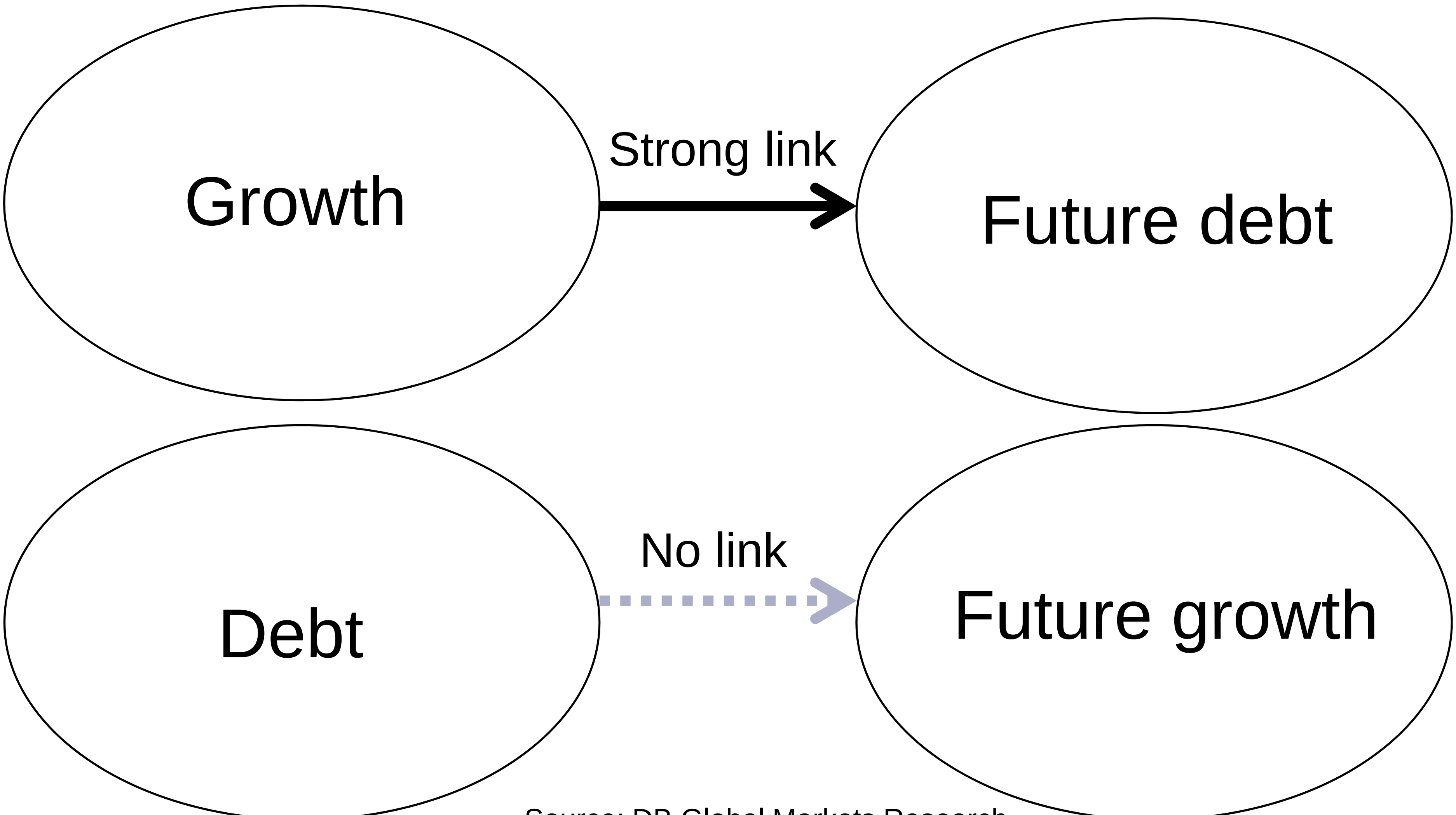
Source: DB Global Markets Research

If US long-term interest rates remain unaffected by government debt levels then US government debt levels may never be a problem for US GDP growth. It is often argued that long US rates are low because the USD is a reserve currency. USD likely to continue to be the reserve currency for many more years.

4. Growth predicts debt. Debt doesn’t predict growth

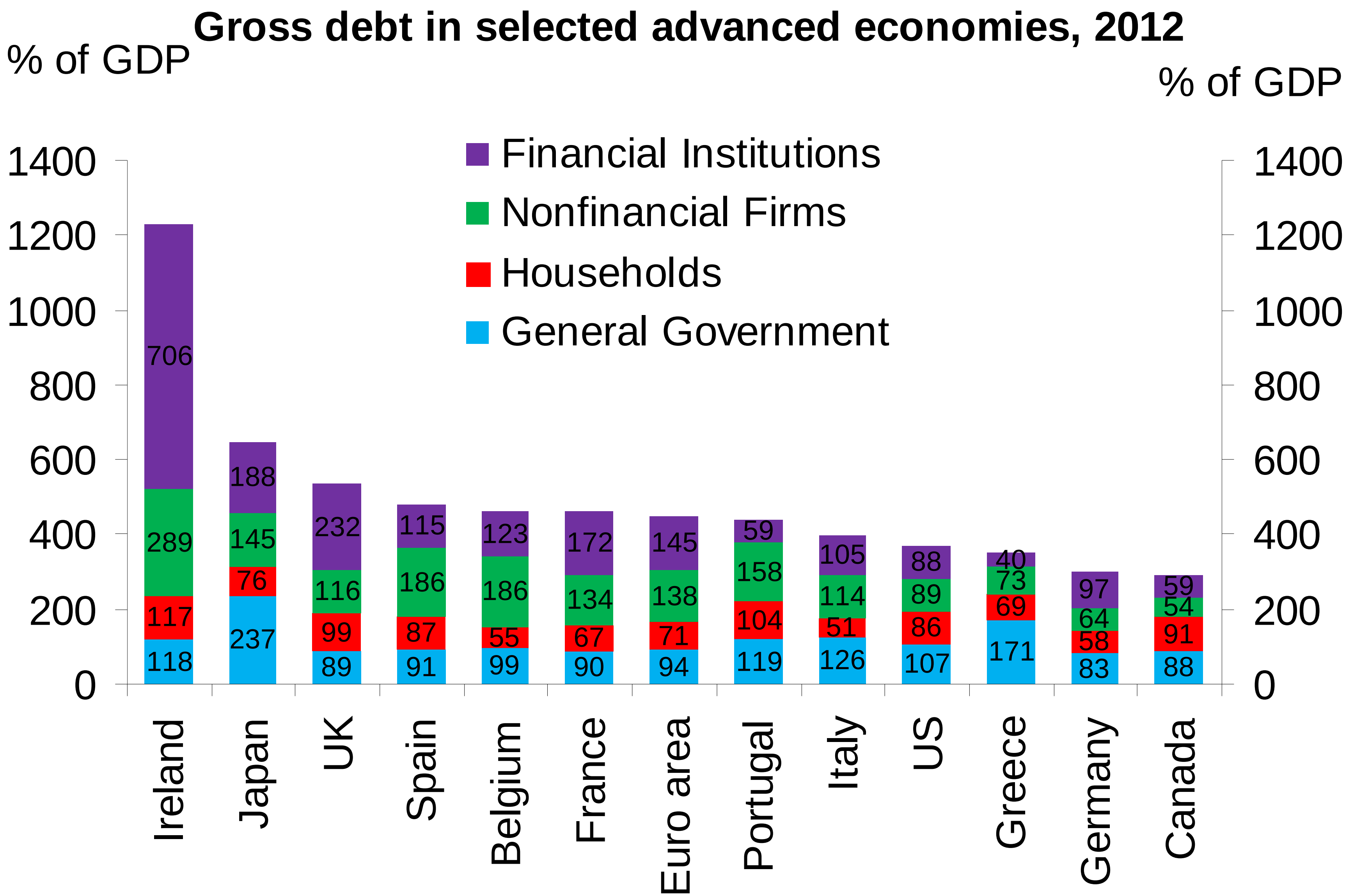
Changes in debt don't significantly explain future growth

Pair-wise Granger-causality tests



Source: DB Global Markets Research

US aggregate leverage is low



Source: IMF, DB Global Markets Research

5. Growth is not only driven by debt

Sources of GDP growth. Credit is used to finance labor, capital, or R&D.

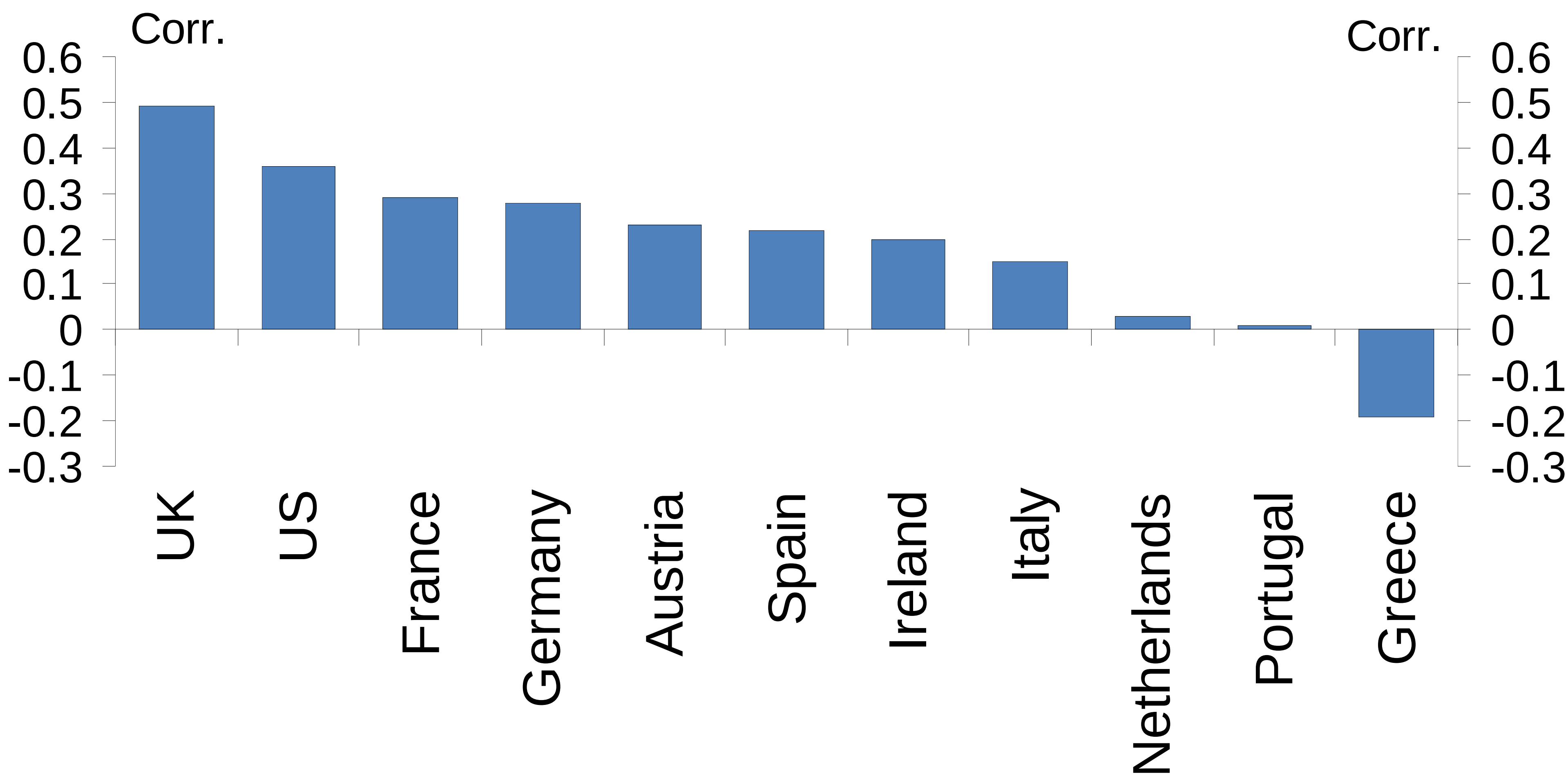
More and better labor:
- Population growth/ immigration
- Education

More and better capex:
- Growth in investment/ capital deepening
- Efficient allocation of capital

GDP growth

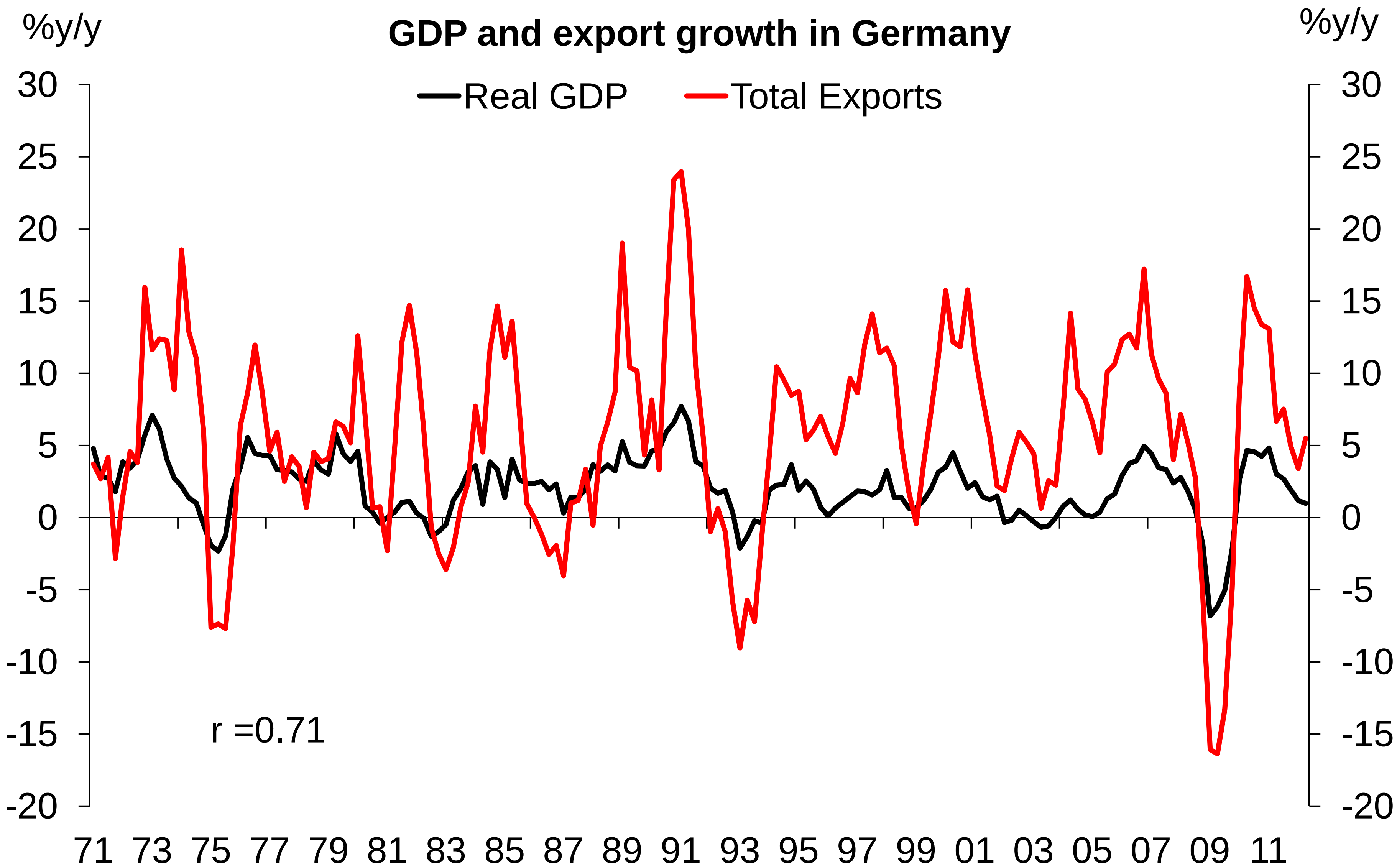
Productivity (TFP)
- R&D
- Product innovation
- Process innovation
- Marketing innovation
- Organizational innovation

Correlation between GDP growth and credit growth, 1980-2010: Highest in UK and US



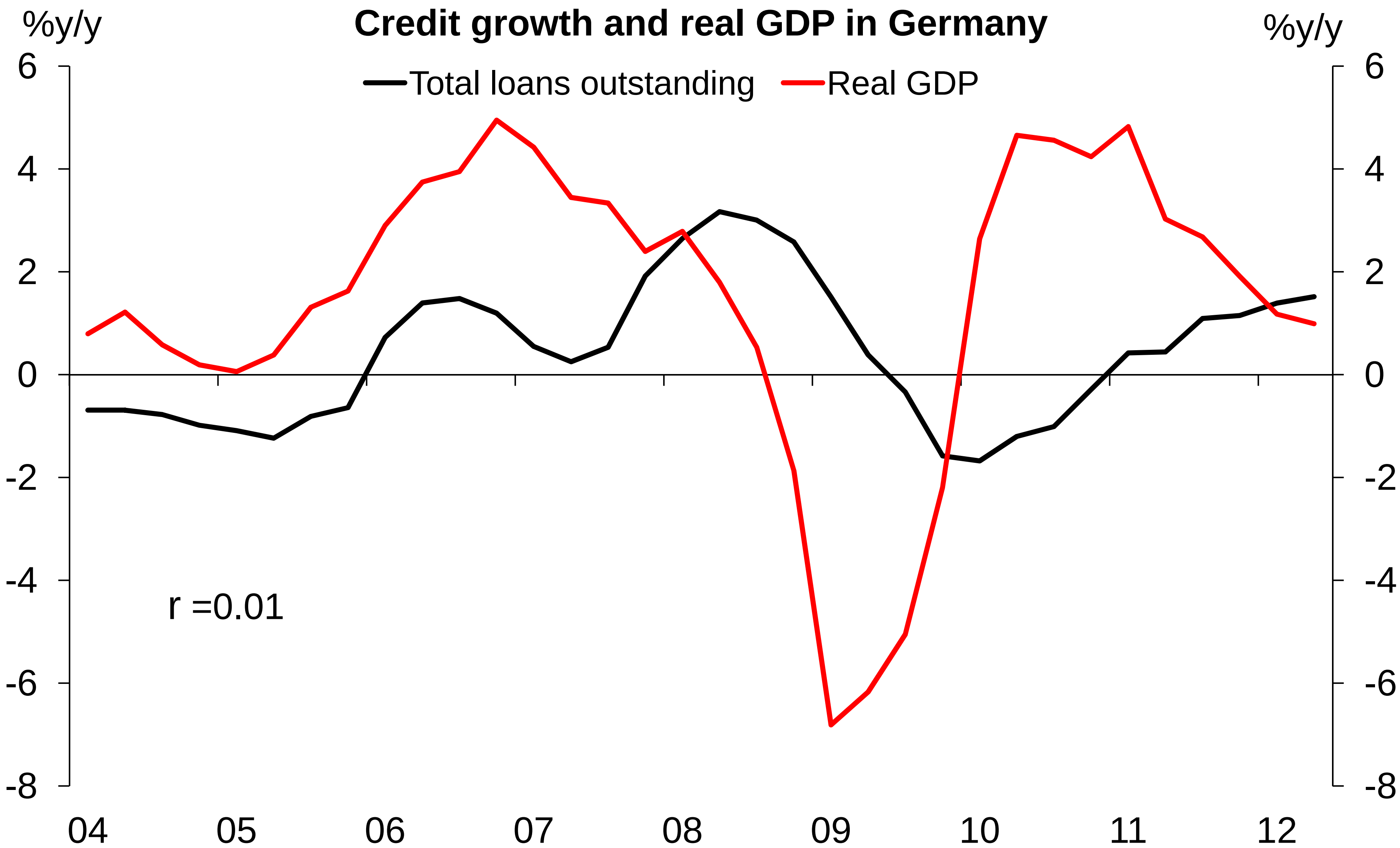
Source European Banking Federation (Nov 2011), DB Global Markets Research

Exports are a key driver of growth in Germany



Source- StBA, Bbk, Haver Analytics, DB Global Markets Research

Common misunderstanding that debt/credit growth is needed in order to have GDP growth



Source- StBA, Bbk, Haver Analytics, DB Global Markets Research

Conclusion

The relationship between government debt and GDP growth: It’s complicated.

In particular for the US, which is a reserve currency. Key question for investors: Is the US ever going to lose its reserve currency status?

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- Torsten Slok joined Deutsche Bank Securities in the fall of 2005.
- Mr. Slok's Economics team was ranked No. 1 in fixed income research by Institutional Investor in 2010 and 2011 and No. 2 in 2012. Slok currently serves as a member of the Economic Club of New York
- Prior to joining the firm, Mr. Slok worked at the OECD in Paris in the Money and Finance Division and the Structural Policy Analysis Division. Before joining the OECD he worked for four years at the IMF in the Division responsible for writing the World Economic Outlook and the Division responsible for China, Hong Kong, and Mongolia.
- Mr. Slok studied at University of Copenhagen and Princeton University. He has published numerous journal articles and reviews on economics and policy analysis, including in Journal of International Economics, Journal of International Money and Finance, and The Econometric Journal.

Appendix 1

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