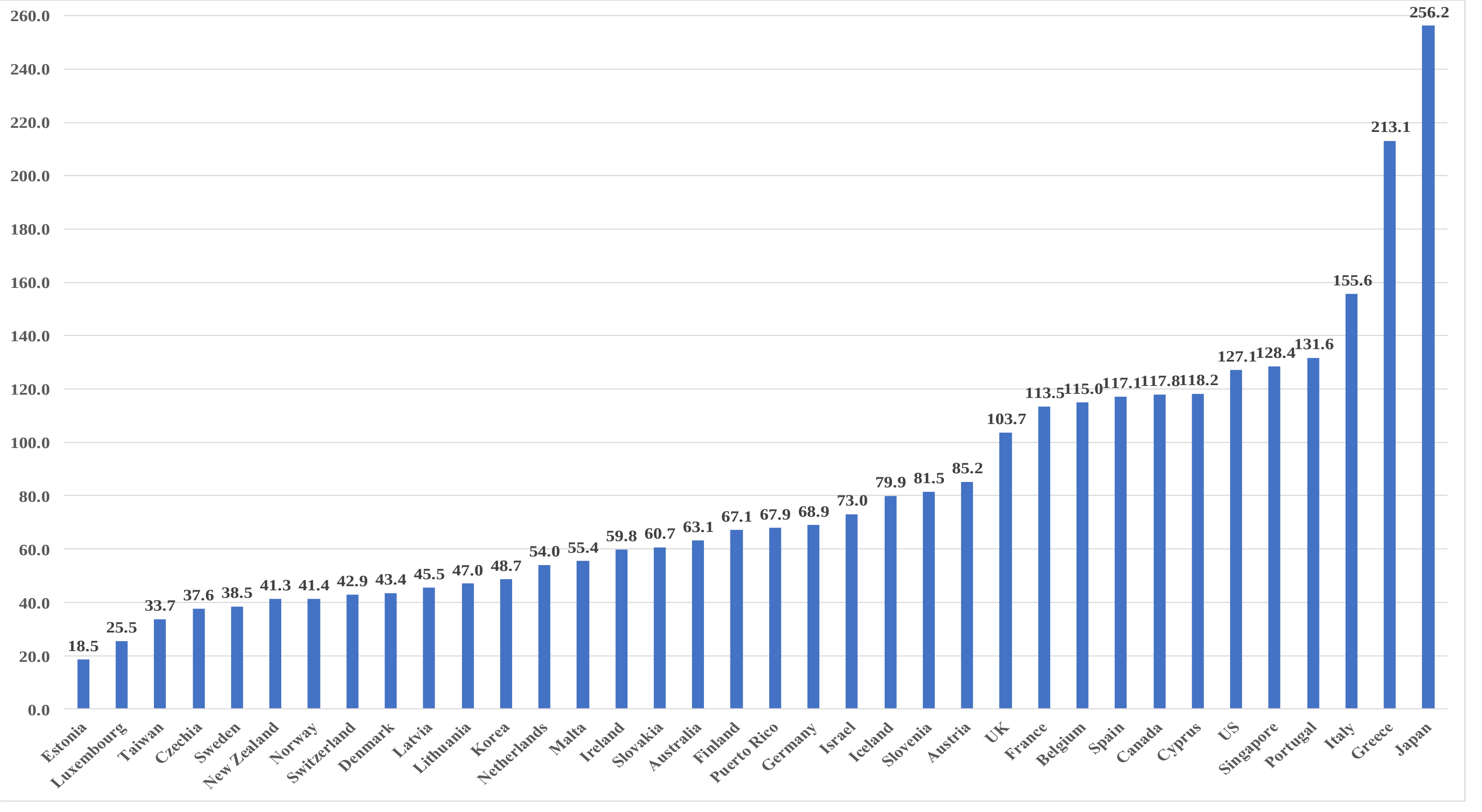
Marek Dąbrowski

O zagrożeniu kryzysem zadłużenia i finansowym w krajach wysoko rozwiniętych

Prezentacja na 172 seminarium mBank-CASE nt. „Rosnące zadłużenie państw i jego ryzyka", 24.02.2022

GG gross debt to GDP, in %, 2020 (IMF WEO April 2021)

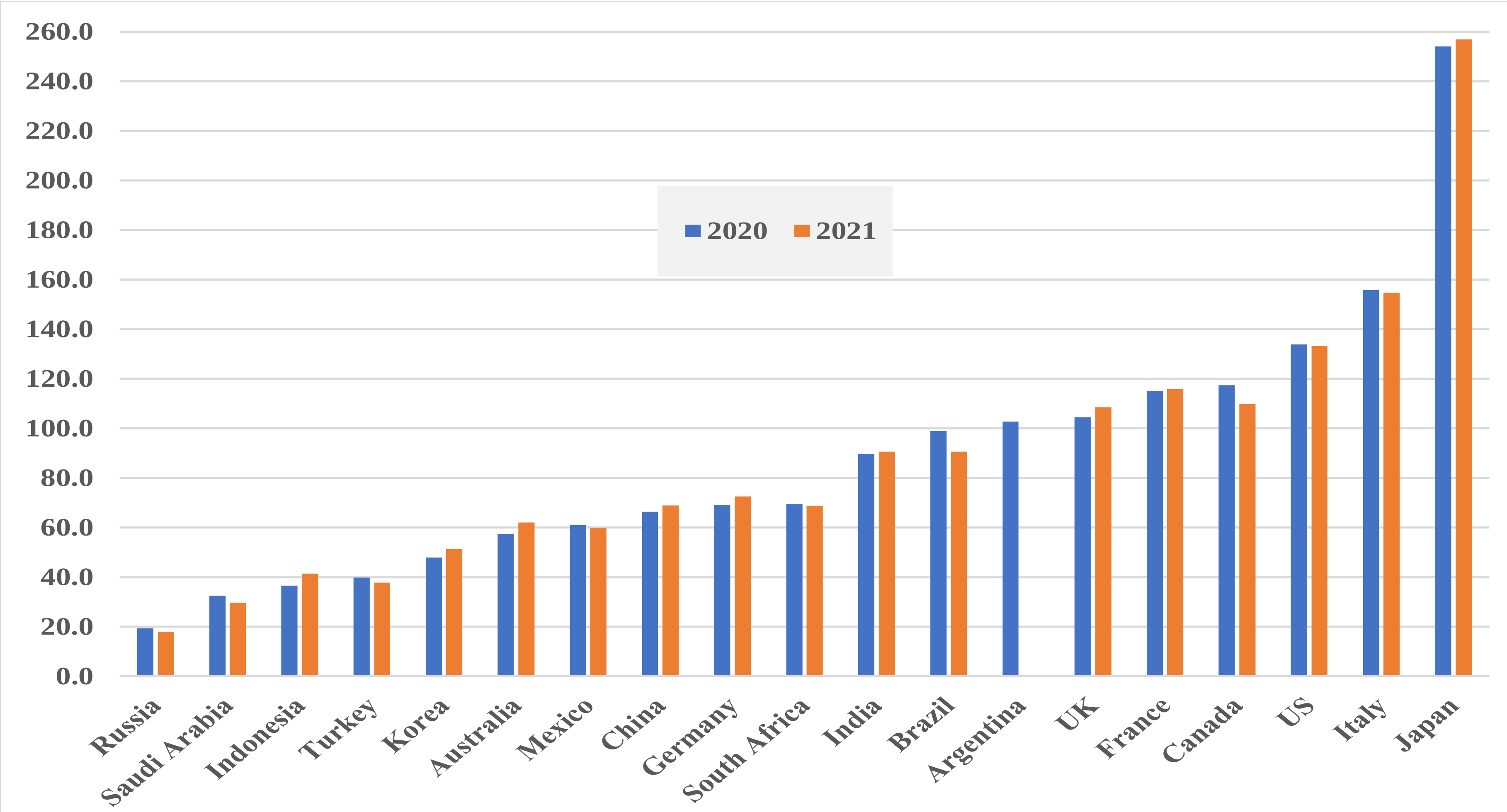


CASE

bruegel

НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ

G20: General government gross public debt, % GDP, 2020-2021



Source: IMF World Economic Outlook database, October 2021

Public debt dynamics (1)

The public debt dynamic is described by the following equation (Escolano 2010):

$$d_t - d_{t-1} = \frac{r_t}{1+g_t} d_{t-1} - \frac{g_t}{1+g_t} d_{t-1} - p_t$$

(Eq.1)

where d_t = general government (GG) gross debt-to-GDP ratio at the end of period t

d_{t-1} = general government gross debt-to-GDP ratio at the end of period t-1

r_t = real interest rate in period t computed as $r_t = [(1+ i_t)/(1+ \pi_t)]–1$

i_t = nominal interest rate in period t

π_t = change in the GDP deflator between t – 1 and t

g_t = the rate of growth of real GDP between t-1 to t

p_t = the ratio of primary fiscal balance (deficit or surplus) to GDP in period t

CASE

bruegel

НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ

Public debt dynamics (2)

Changes in the general government gross debt-to-GDP ratio can be explained by:

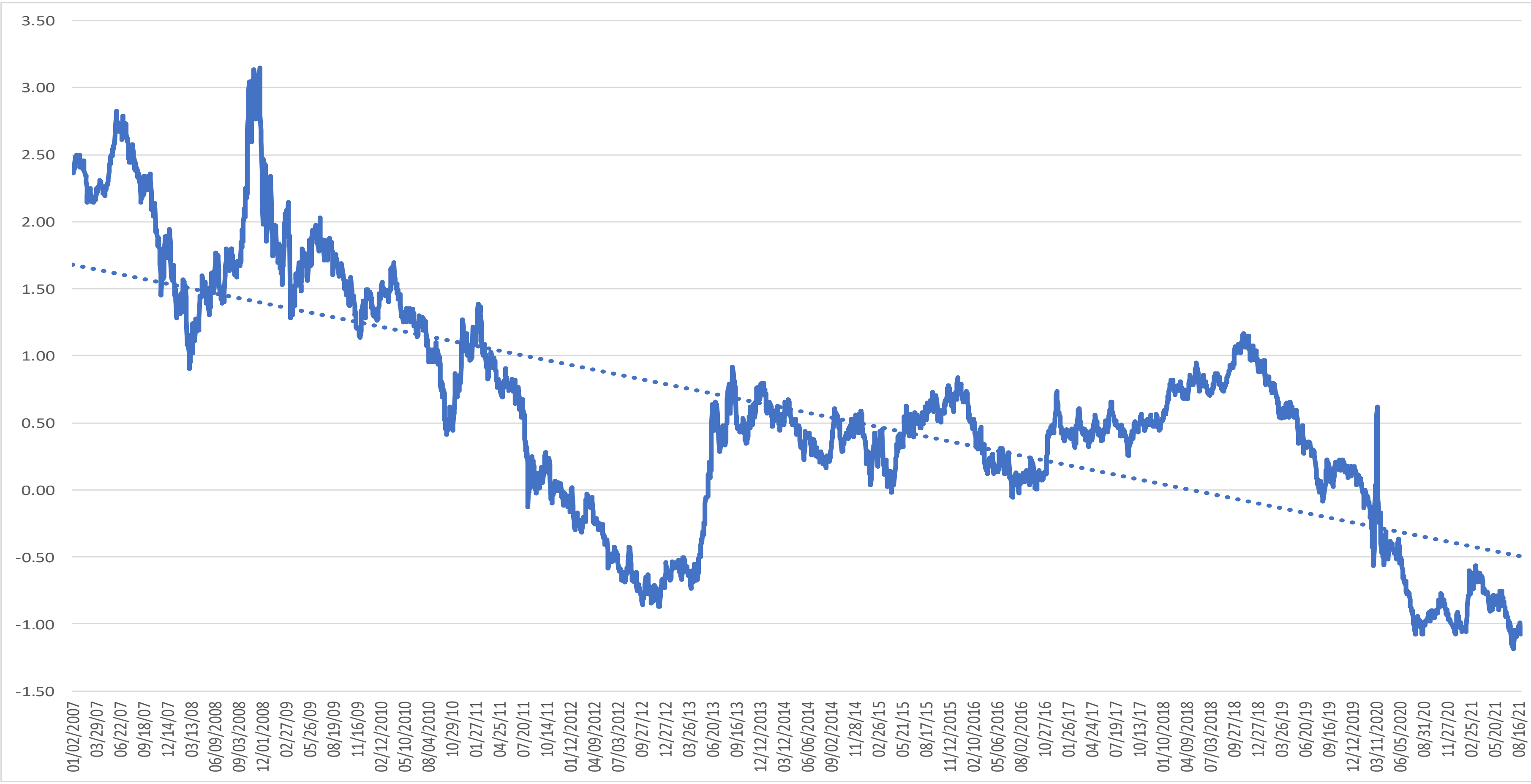
- changes in GG primary balance, i.e., the difference between non-interest GG expenditure and revenue;
- changes in the difference between the real interest rate of GG borrowing (r) and the growth rate of real GDP (g);
- changes in exchange rate (in case of foreign-currency borrowing – EMEs)

НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ

Factors determining future public debt sustainability

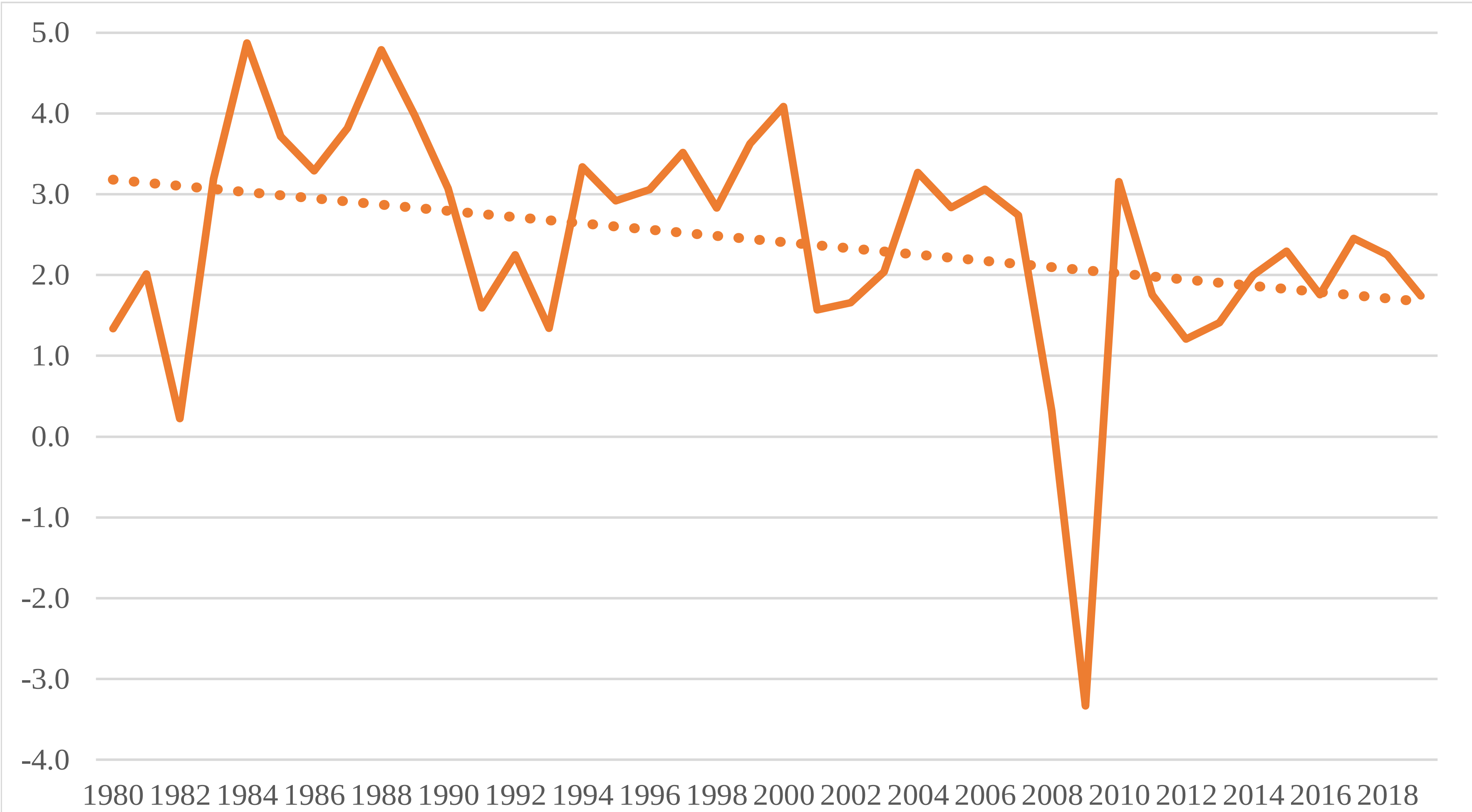
- Given a limited appetite for fiscal adjustment difference between r and g will play a decisive role
- Blanchard, O.J. (2019) ‘Public Debt and Low Interest Rates.’ *NBER Working Paper*, No. 25621, February. Available at https://www.nber.org/papers/w25621.pdf
- Declining trend in r since the GFC driven by surplus of saving in EMs and oil exporters and QE may not continue (demography, lower oil prices, investment needs related to green transition, monetary policy normalization)
- Goodhart, C., and Pradhan, M. (2020) *The Great Demographic Reversal: Aging Societies, Waning Inequality and Inflation Revival*. Cham: Palgrave Macmillan. Available at https://link.springer.com/book/10.1007%2F978-3-030-42657-6
- Prospects for higher g in AEs are not optimistic (demography, slower productivity growth, costs of green transition)

Daily US Treasury Real Yield Curve Rates (10-Year bonds)



Source: US Treasury

Annual real growth rate of GDP in advanced economies, in %, 1980-2019

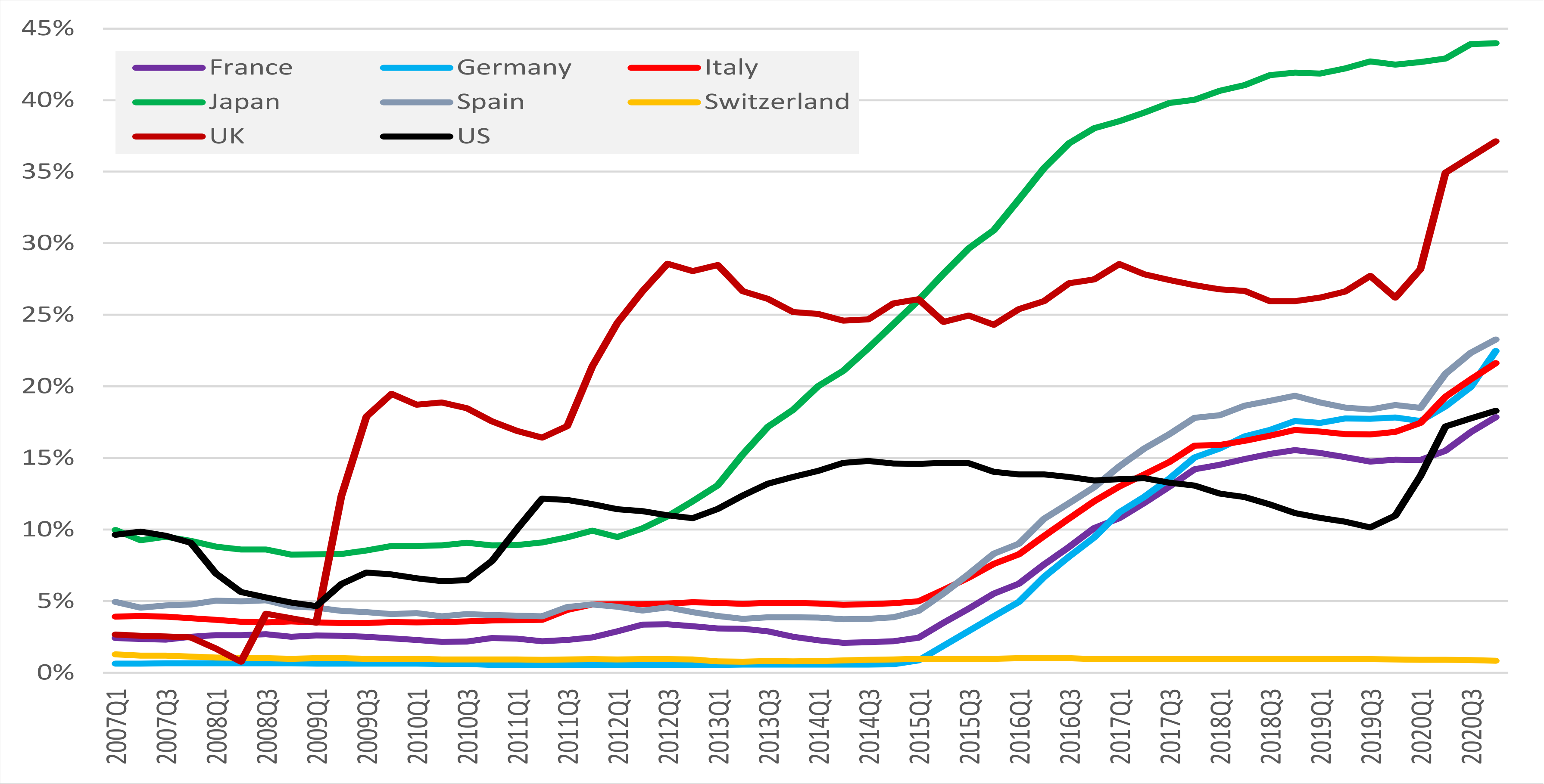


Source: IMF World Economic Outlook database, October 2021

Increasing fiscal dependence of CBs

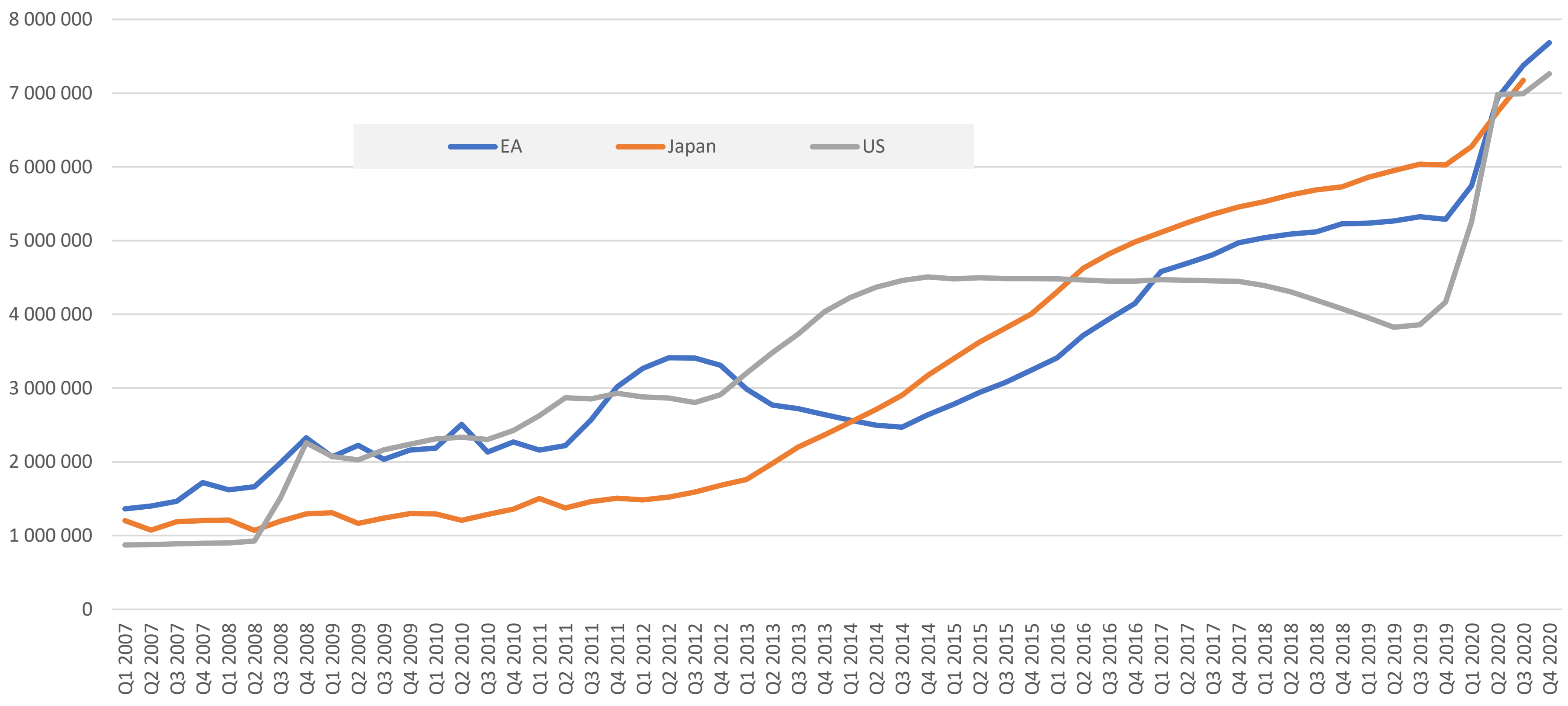
- Rapidly increasing stock of government bonds in CB assets (side-effect of QE) makes CBs hostages of fiscal policy and governments' readiness to conduct fiscal adjustment
- Each form of monetary tightening (reduction of CB balance sheets, increase in CB interest rates) will lead to higher interest payments and higher public debt, other things being equal

The share of general government gross debt in selected AEs held by domestic CBs, 2007-2020, in % of total



Source: IMF Sovereign Debt Investor Base for Advanced Economies (version of 30 April 2021)

Key currency areas: central bank total assets, January 2007 – December 2020



Note: (ECB in EUR million, BoJ in JPY hundred million, US Fed in USD million); Source: IMF IFS

Conclusions

- The trend of decreasing real interest rates will not necessarily continue. It depends on long-term saving rates determined by demography and investment cycles, and continuation of QE by CBs.
- r will not necessarily will be lower than g
- Perspective of additional expenditure in short-term (COVID-19) and medium-to-long-term (population aging, green transition)
- CBs have become dependent on fiscal situation due to accumulated stocks of government bonds
- The sovereign debt crisis in one large advanced economy can trigger a contagion effect across the world and lead to a new global financial crisis
- Principle of fiscal policy must be changed as quickly as possible to avoid a catastrophe – fiscal adjustment, returning to fiscal rules,, abandoning never-ending fiscal stimulus
- Ambiguous role of the IMF

CASE

bruegel

НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ