Comment on Barry Bosworth "US Economic Policy in a Low-Interest Rate World"

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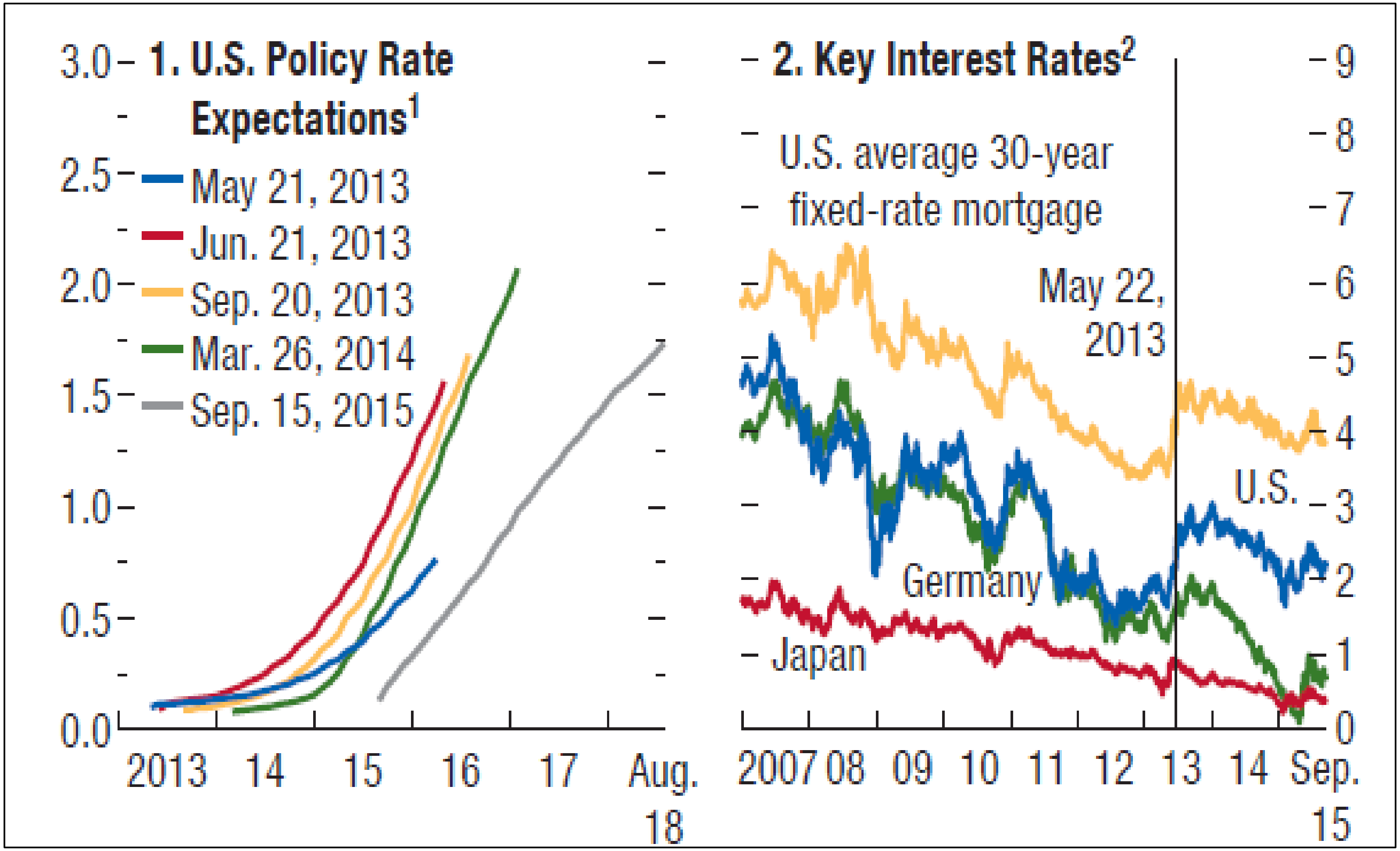
1. Issues

- Bosworth tries to assess the strength of the US economic recovery and the timing of future policy rate increases
- He tries to find reasons for the sustained decline in the global long-term real interest rate
- He does so in the context of possible secular stagnation in developed countries and weakening growth prospects of emerging market economies

2. Assessing the strength of US economic recovery and the timing of the US rate hike

Developed economy financial conditions

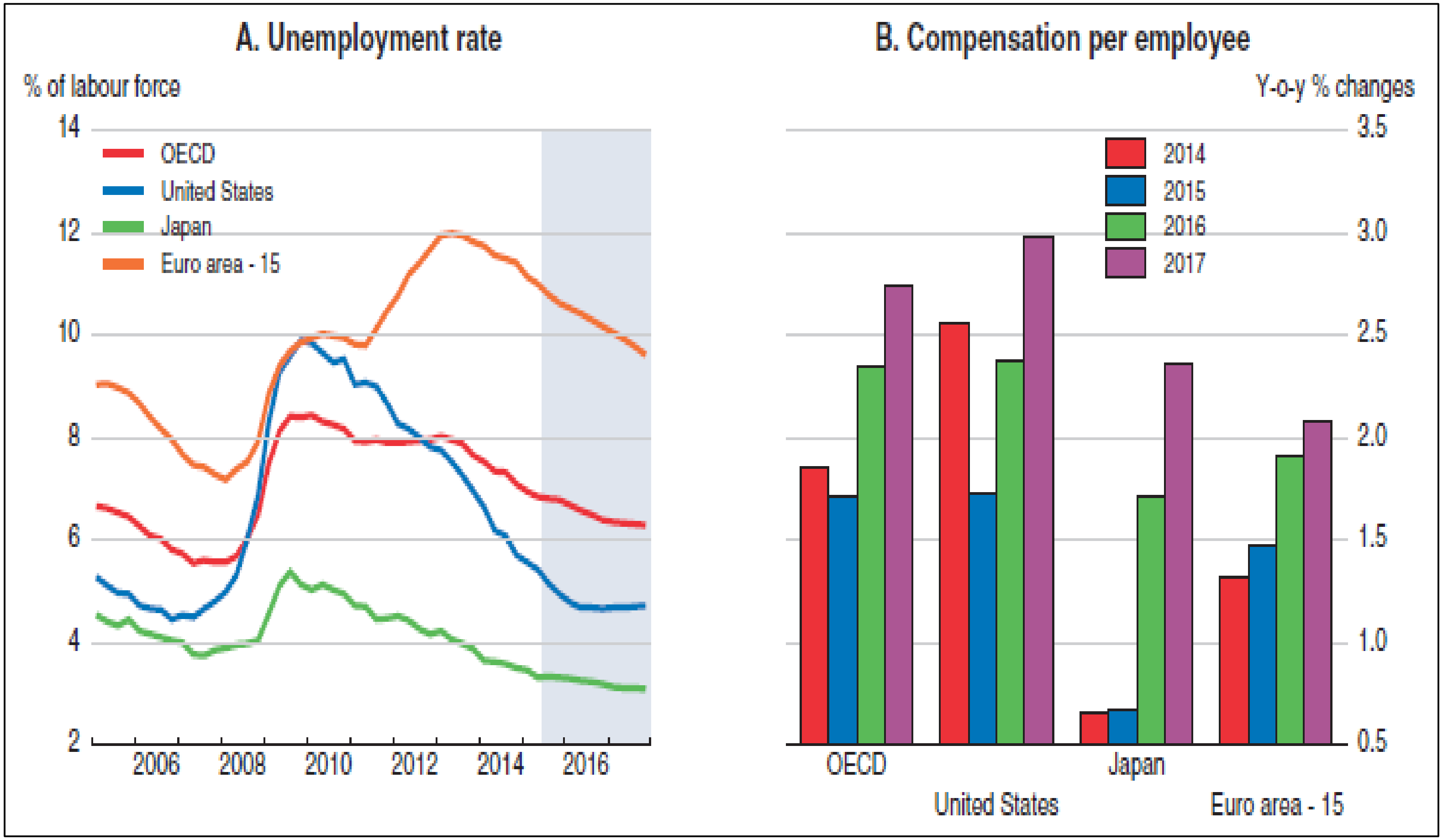


Note: 1. Expectations are based on federal funds rate futures in the US.

2. Key interest rates are 10-year government bond rates, unless noted otherwise.

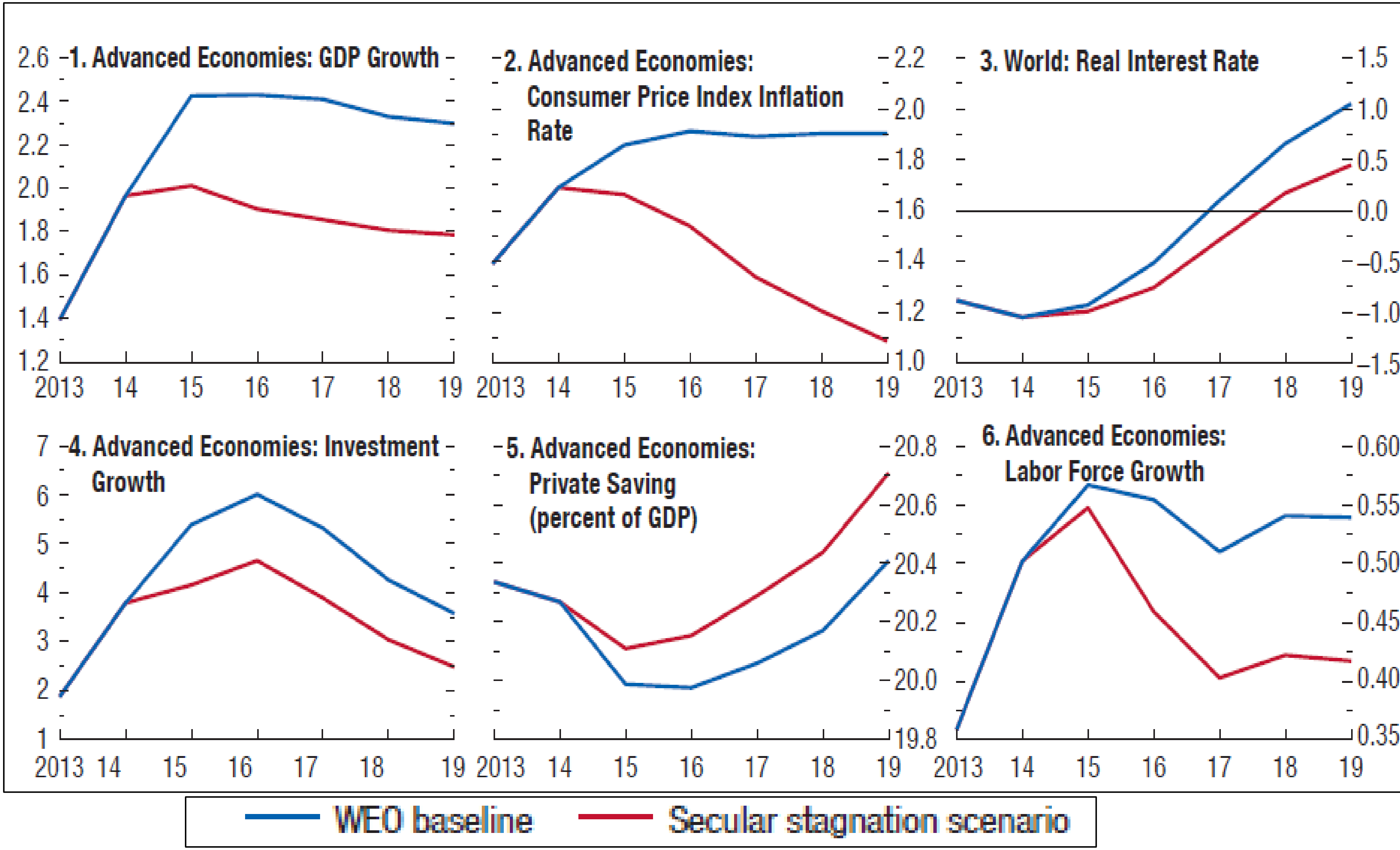
Source: IMF, *World Economic Outlook (WEO)*, October 2015

Labor market conditions in developed economies



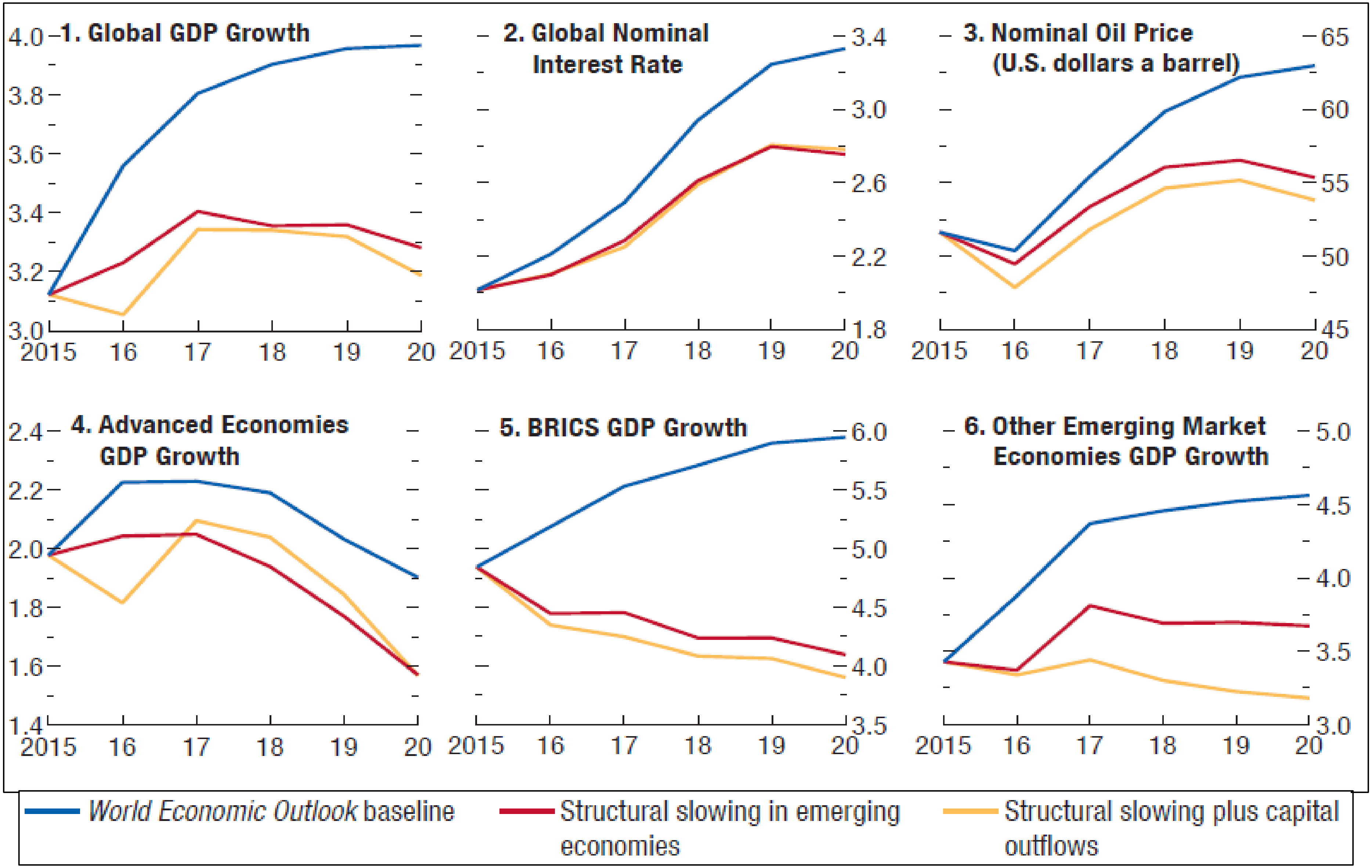
Source: OECD, Economic Outlook, No. 98, November 2015.

IMF's secular stagnation scenario



Source: IMF, *World Economic Outlook (WEO)*, October 2014

IMF's emerging-economy slowdown scenario



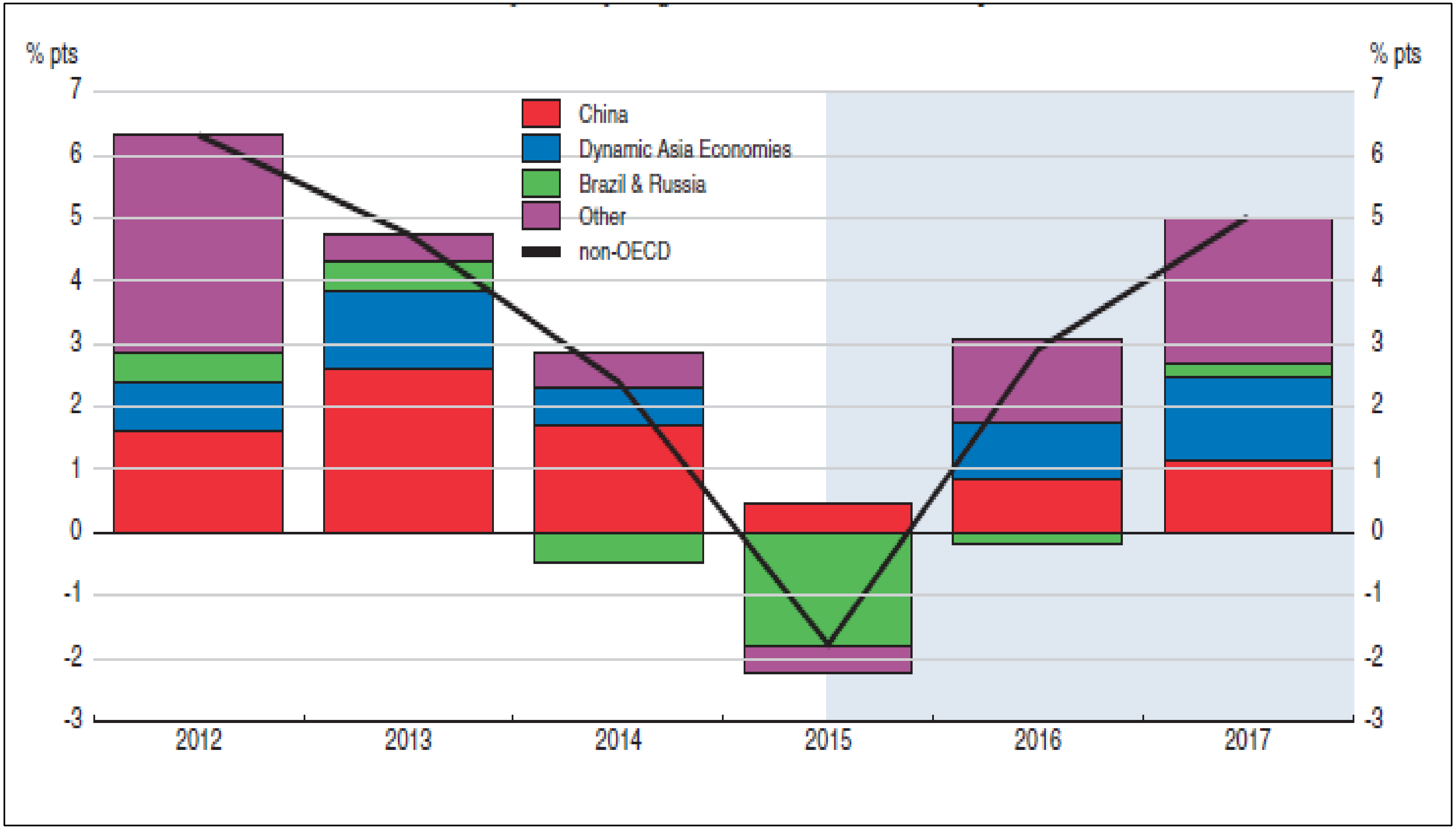
Source: IMF, *World Economic Outlook (WEO)*, October 2015

Possible impact of US interest rate hikes on emerging economies

- The Fed seems to be on its way toward the beginning of policy normalization in December 2015
- However, the US rate hike can have a significant negative impact on emerging economies (fragile five and commodity exporting countries), particularly given the weakening growth prospects of China, and feedback impact on the US.
- This can delay US economic recovery and make it hard for the Fed to achieve the 2% inflation target, as nominal wages have been rising only slowly

Non-OECD members' import volume growth

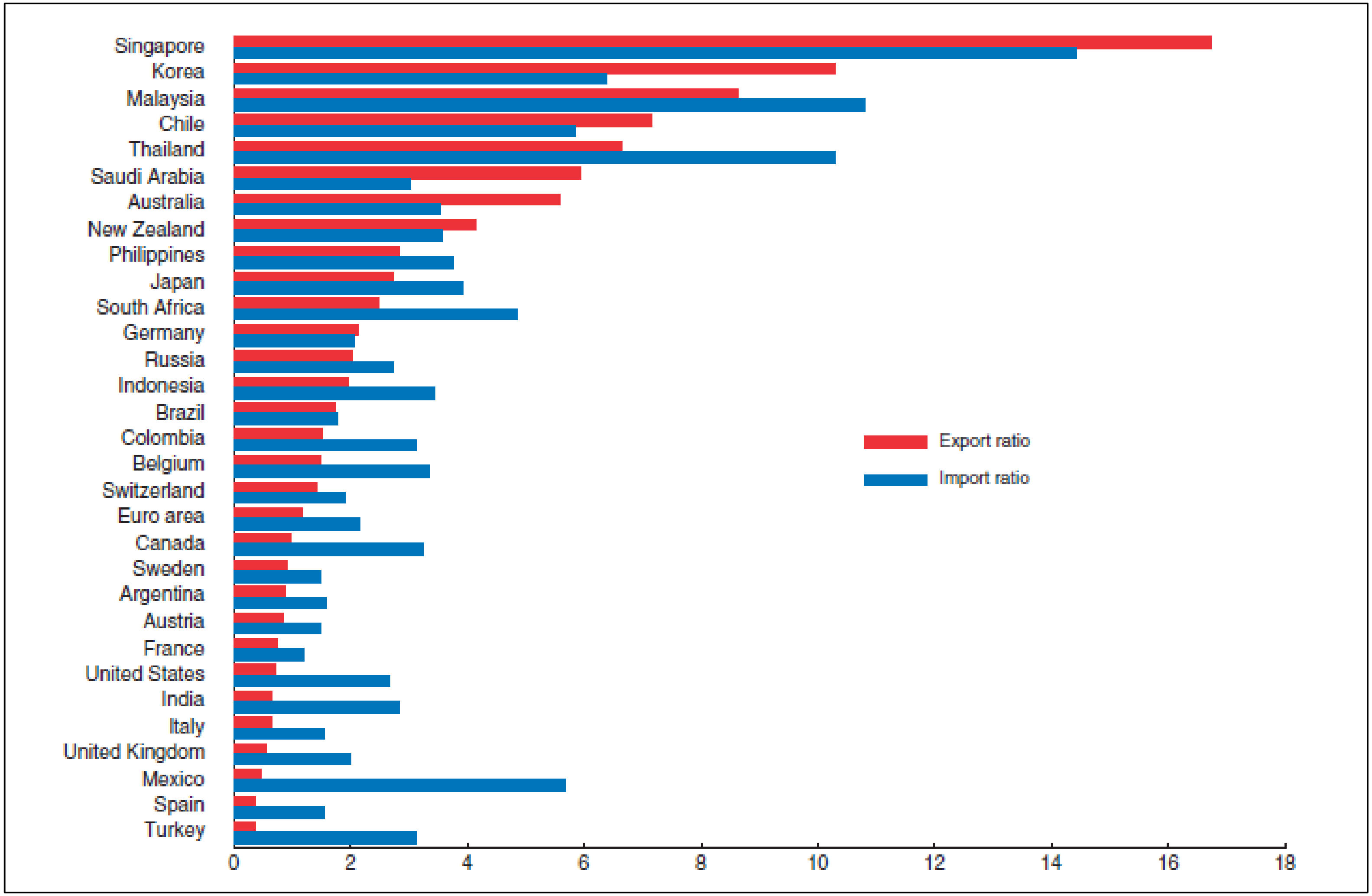
Contributions to growth of non-OECD import volumes



Source: OECD, Economic Outlook, No. 98, November 2015.

Trade linkages with China, 2014

Merchandize trade with China as % of GDP



Source: OECD, Economic Outlook, No. 98, November 2015.

Questions

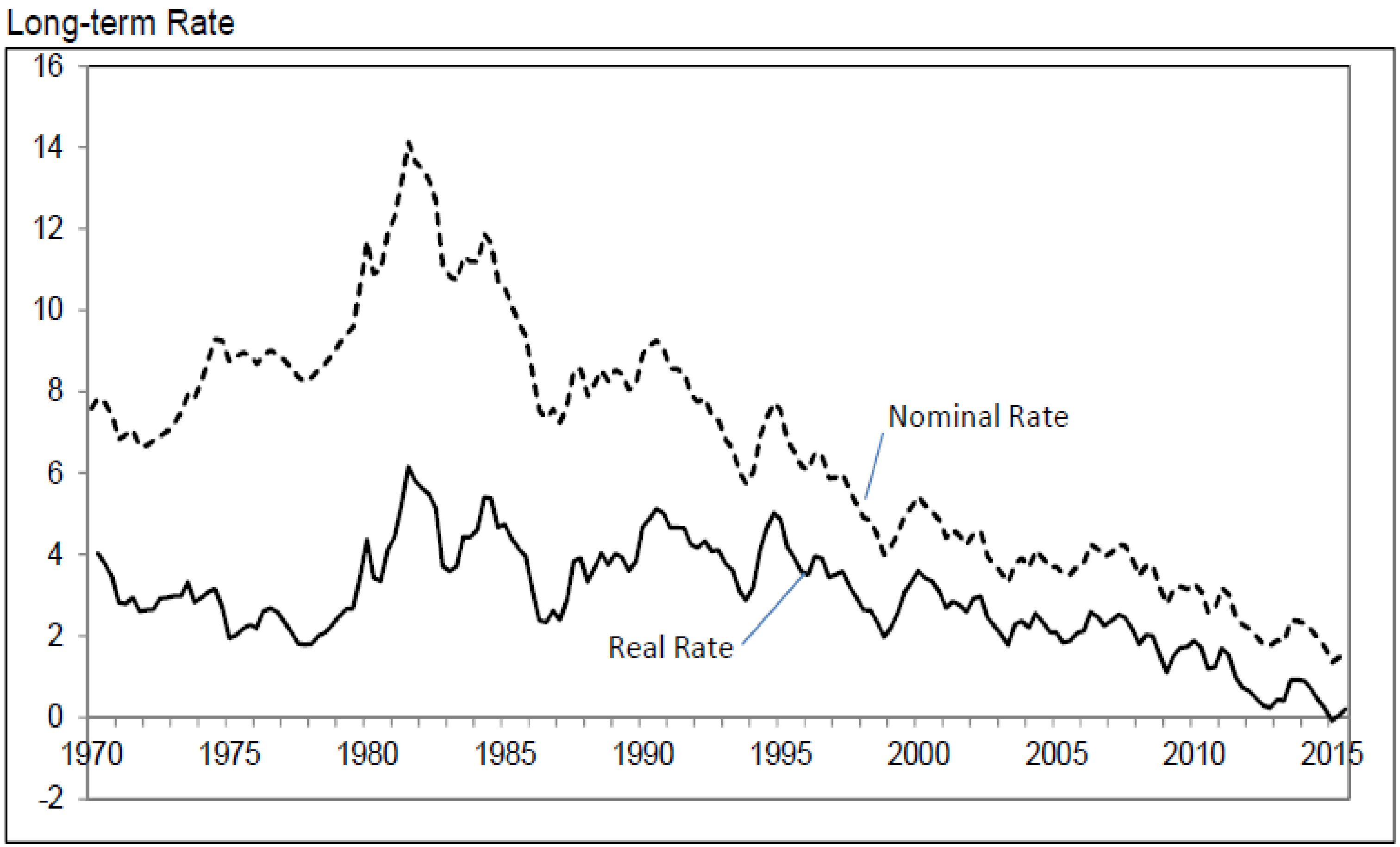
- Why is the nominal wage response to the tightening labor market conditions so slow in the US (as well as in Japan and Germany)?
- Is the US economic recovery strong enough to withstand the rate hike's possible negative spillover impacts on emerging economies and its feedback impact on the US?
- Following the rate hike, will the US CPI inflation rate approach the 2% target or will it decline without approaching 2% (through negative impacts on commodity prices and further US dollar appreciation)?

Lessons from the QE taper tantrum of 2013

- Following Ben Bernanke's indication of QE tapering made in May 2013, several emerging economies experienced capital outflows, exchange rate depreciations and stock price declines
- The US rate hike, possibly in December, could cause financial stress in some emerging economies
- Some coordinated policy action useful:
  - US cautious approach to policy normalization
  - Emerging economies focus on stronger macroeconomic policy framework and structural reforms
  - Strengthening of global financial safety nets (bilateral currency swaps, regional safety nets, IMF), including the US Fed's bilateral currency swaps to major EMEs

3. Why is the global long-term real interest rate low?

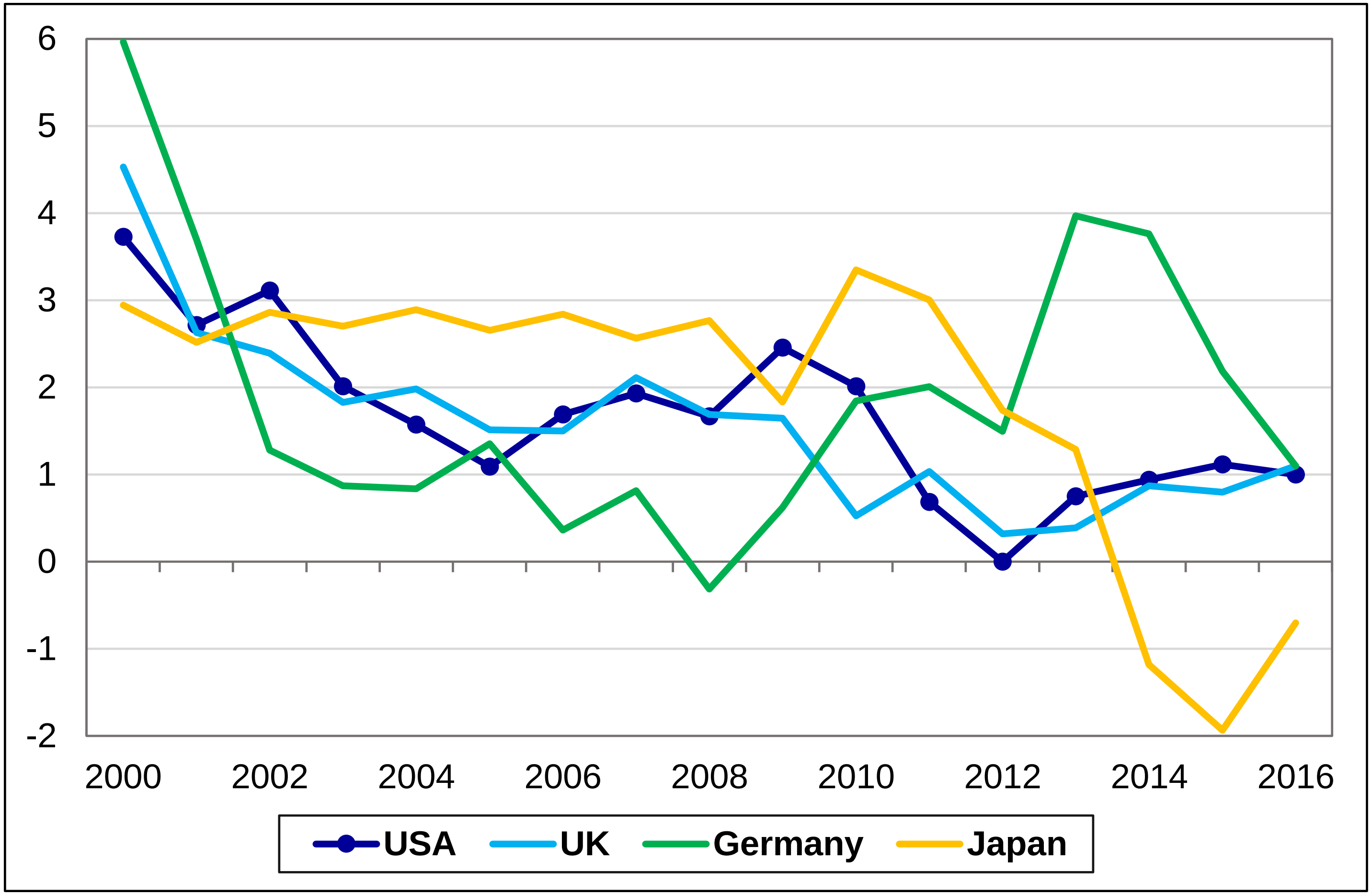
Global long-term interest rate



Source: Author's calculations as described in Bosworth (2013). The gobal interest rate is a GDP-weighted average of the rates in the G7 countries. The short and long-run iterest rates are those reported in the datafile for the OECD Economic Outlook, and adjusted for inflation as described in the text.

Source: Bosworth (2015)

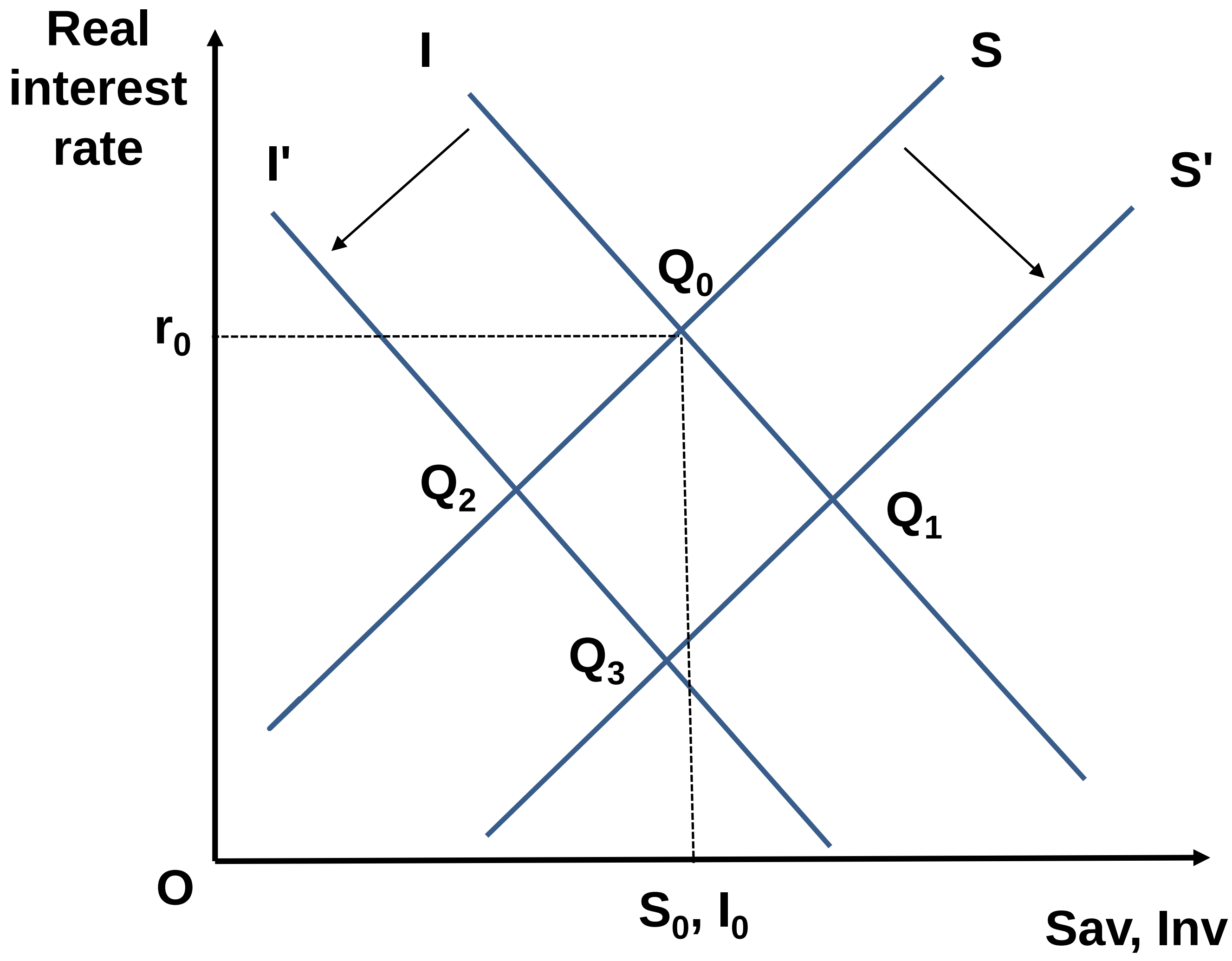
Long-term real interest rate for the US, UK, Germany and Japan



Note: The long-term interest rate is for 10-year government bonds and price deflator is nominal GDP deflator.

Source: OECD, *Economic Outlook*, No. 98, November 2015.

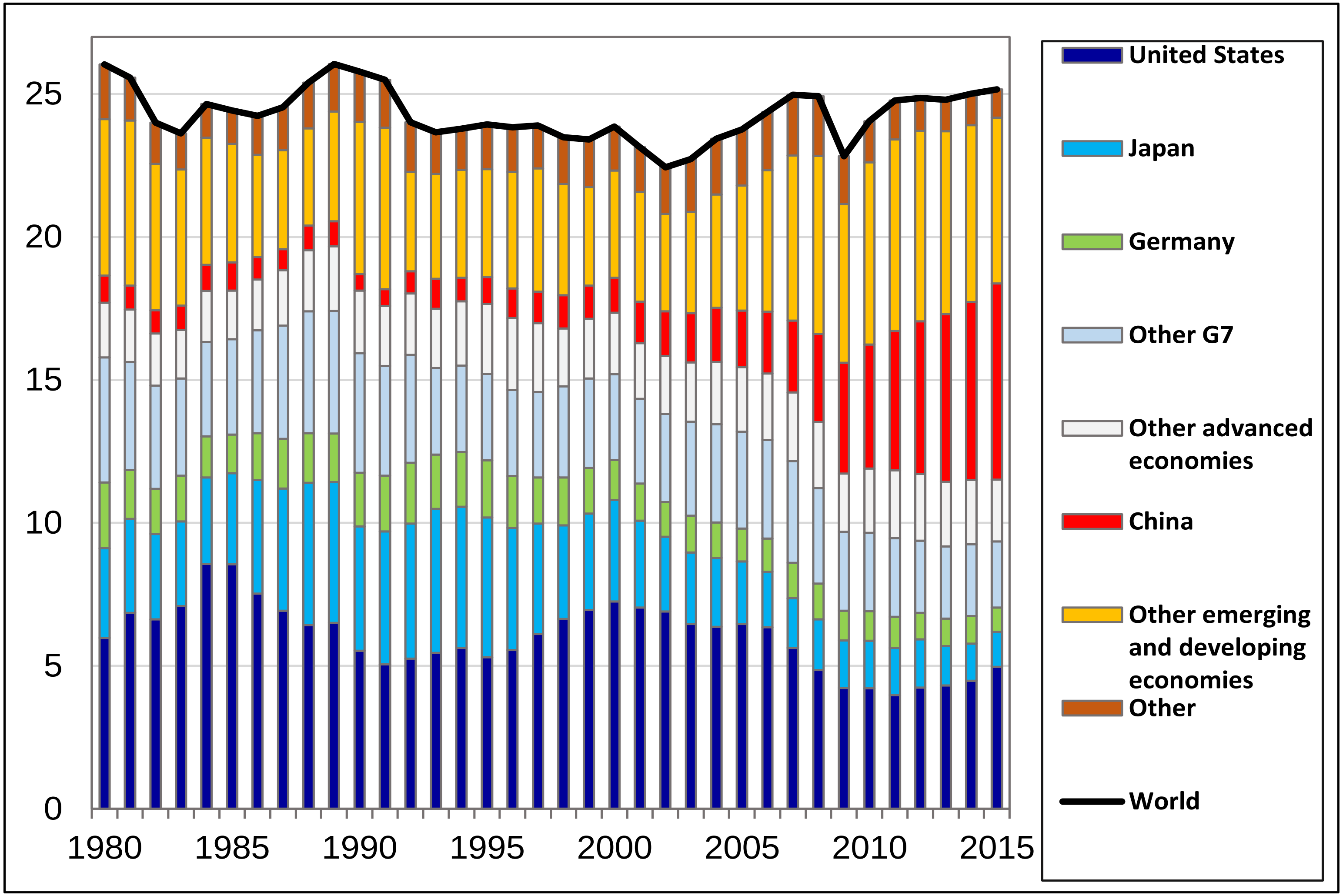
Real interest rate determination



Factors behind the declining long-term real interest rate

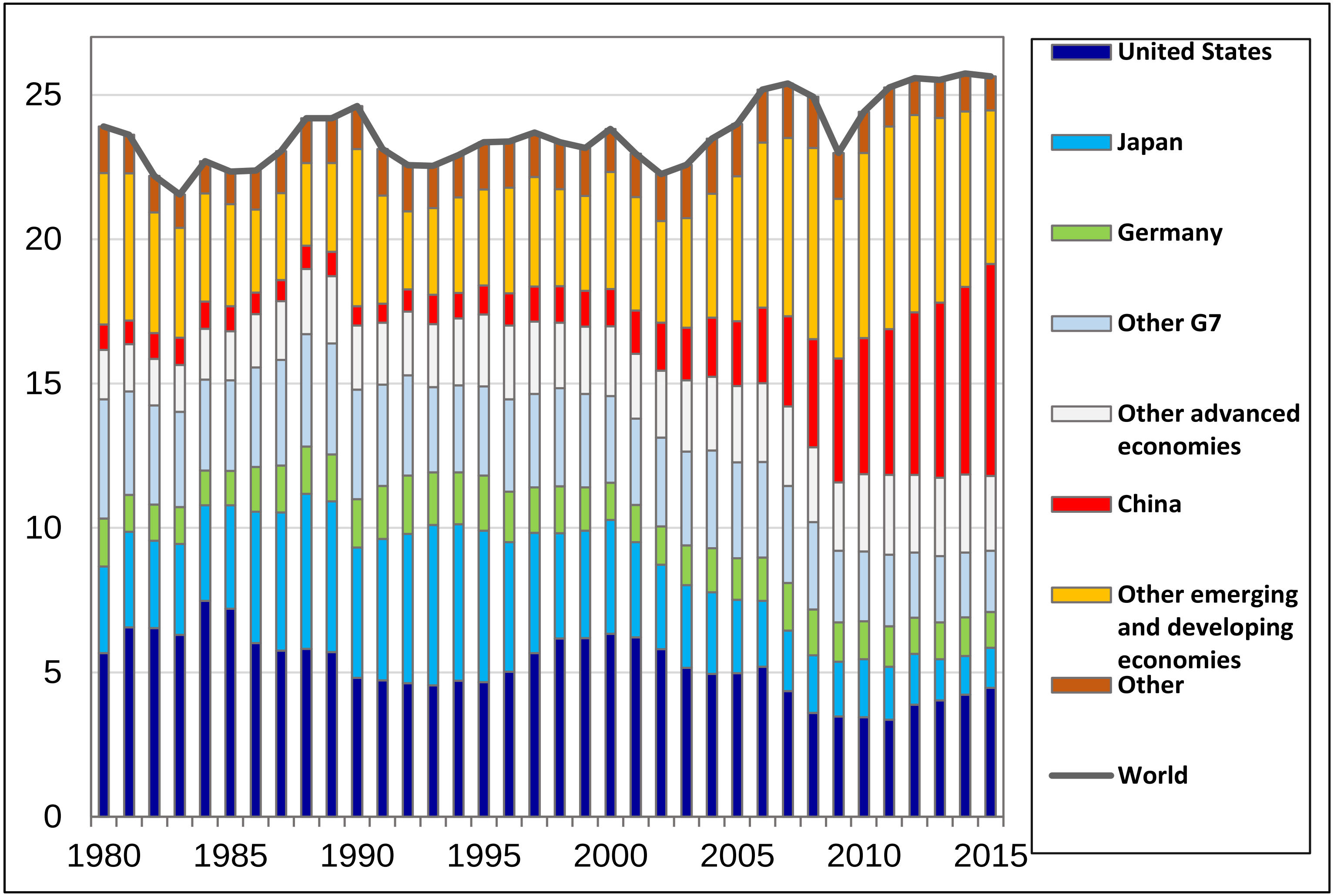
- The equilibrium interest rate is the one that equates savings and investment: The change in the interest rate is caused by shifts in the savings and/or investment schedule
- There has been no clear upward or downward trend of world investment and savings over the past 35 years (see the next two figures)
- This suggests that the equilibrium has shifted from Q_0 to a point close to Q_3, which implies that the investment schedule has likely shifted leftward (or downward) and the savings schedule has likely shifted rightward (or outward)

World investment as % of world GDP



Source: Constructed from IMF, *WEO database*, October 2015

World savings as % of world GDP



Source: Constructed from IMF, *WEO database*, October 2015

Decline in investment, rise in savings, and slower potential GDP growth

- Thus the global long-term interest rate has likely declined due to a downward shift of investment and an outward shift of savings
- **Natural rate of interest**:
  $r = \rho + g/\sigma$
  where ρ is the rate of time preference, g is the potential growth rate and σ the intertemporal substitution of consumption
- The potential growth rate (g) has likely slowed down, pushing investment down and savings up thereby leading to a lower real interest rate (r)

4. Summary

- The US Fed seems ready for the initial rate hike in December 2015
- But utmost caution is needed, considering the potentially negative spillover impacts of the beginning of policy normalization on the global economy and its feedback impact on the US
- If the Fed is to begin policy normalization in December, then it may:
  - begin with a 10-15bp increase rather than a 25bp increase
  - continue next rate hikes as cautiously as it has been
  - provide bilateral currency swaps for fragile emerging economies
- The long-term real interest rate has declined most likely due to a downward shift in investment and an outward shift in savings, reflecting a slowdown in potential growth