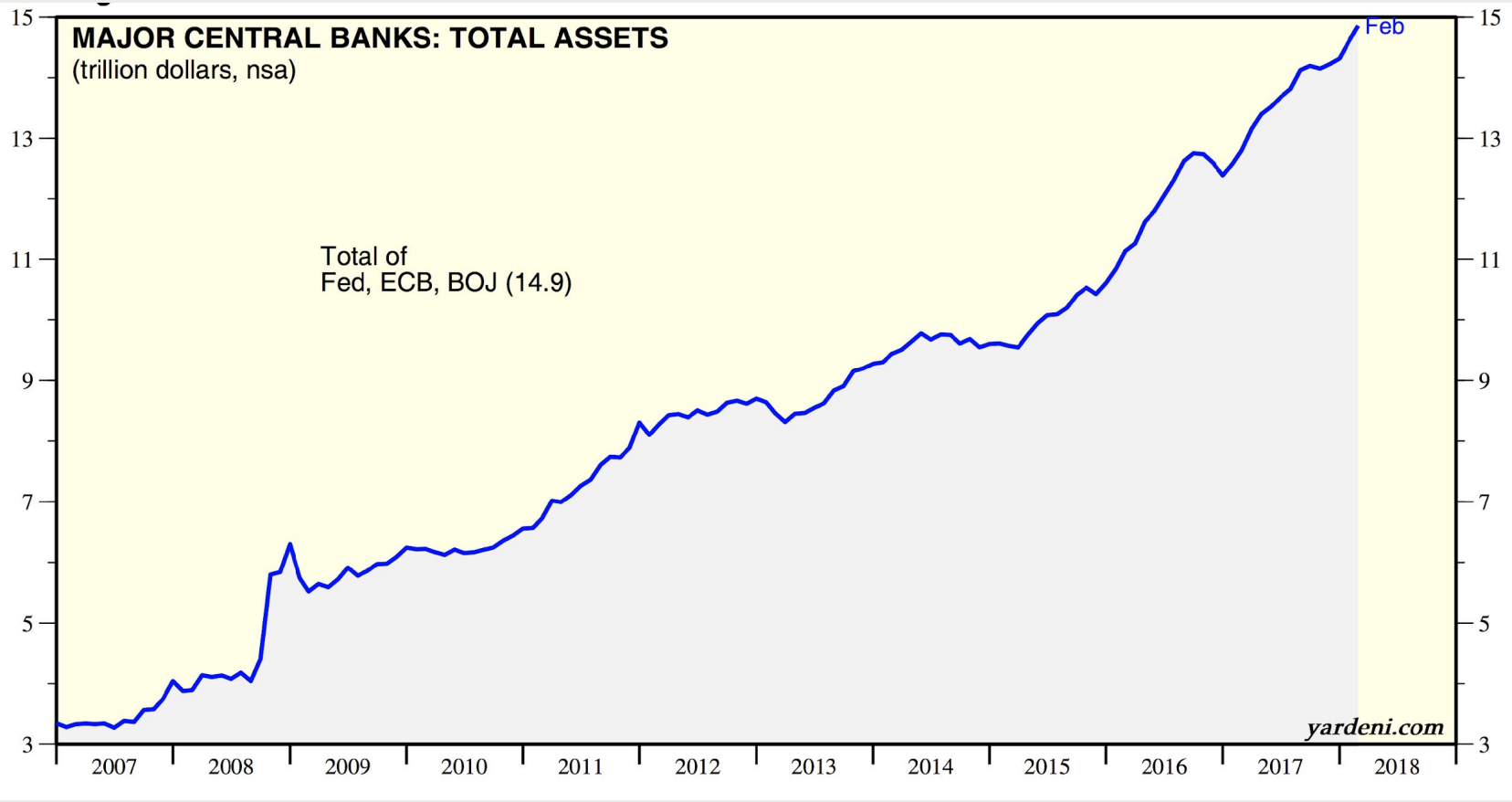
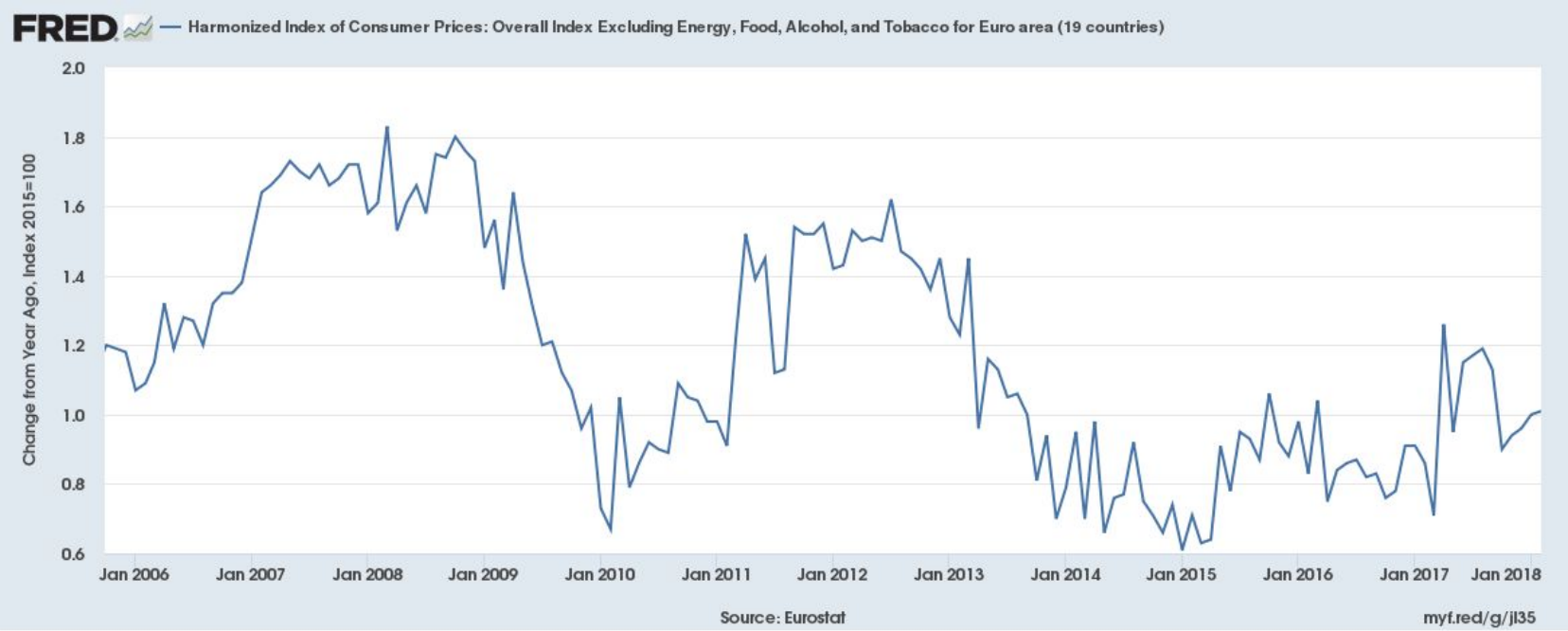
Intended and unintended consequences of unconventional Monetary Policies

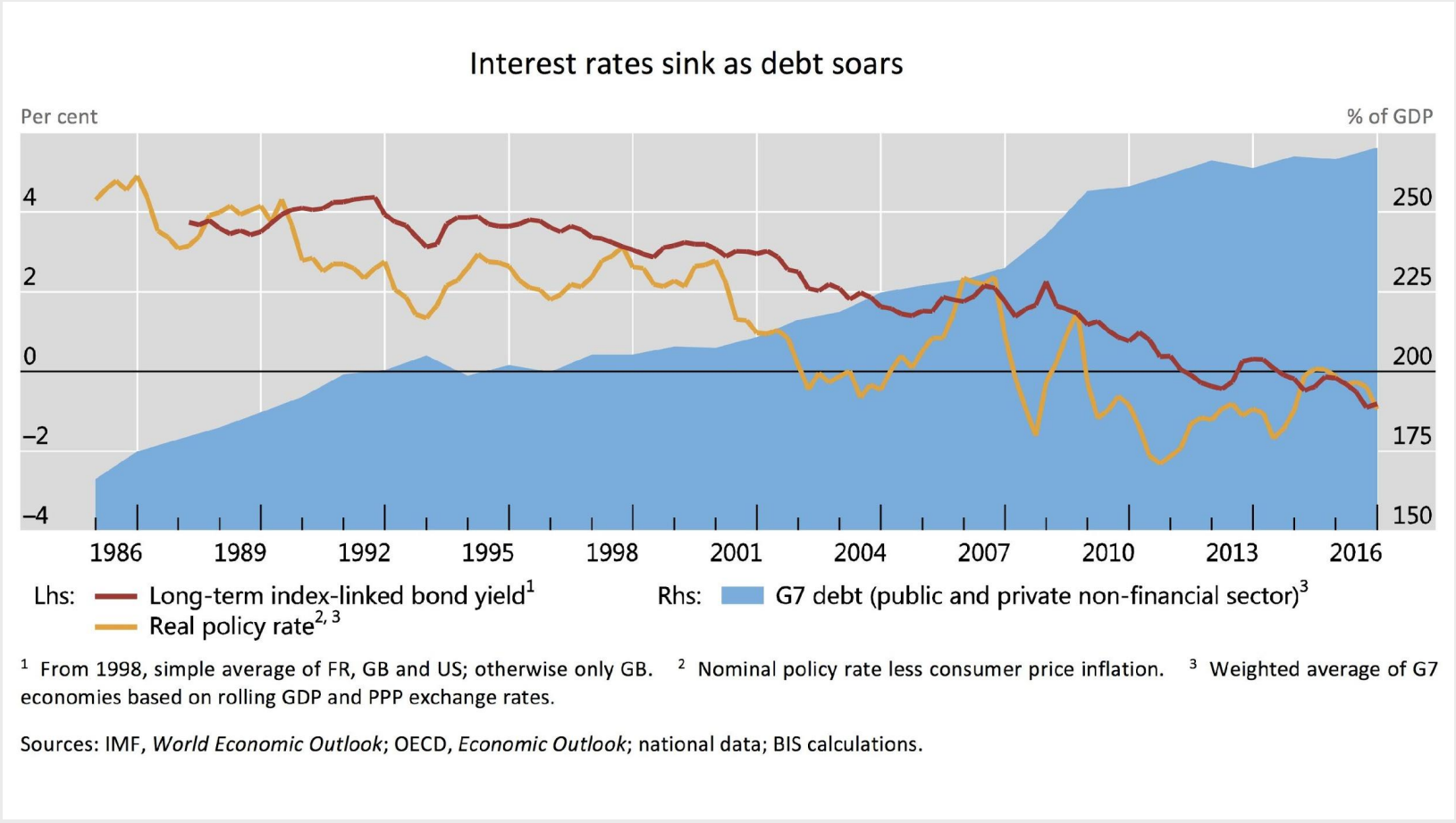
Central bank assets



Why negative rates since 2014?



Unintended consequences I: debt increased



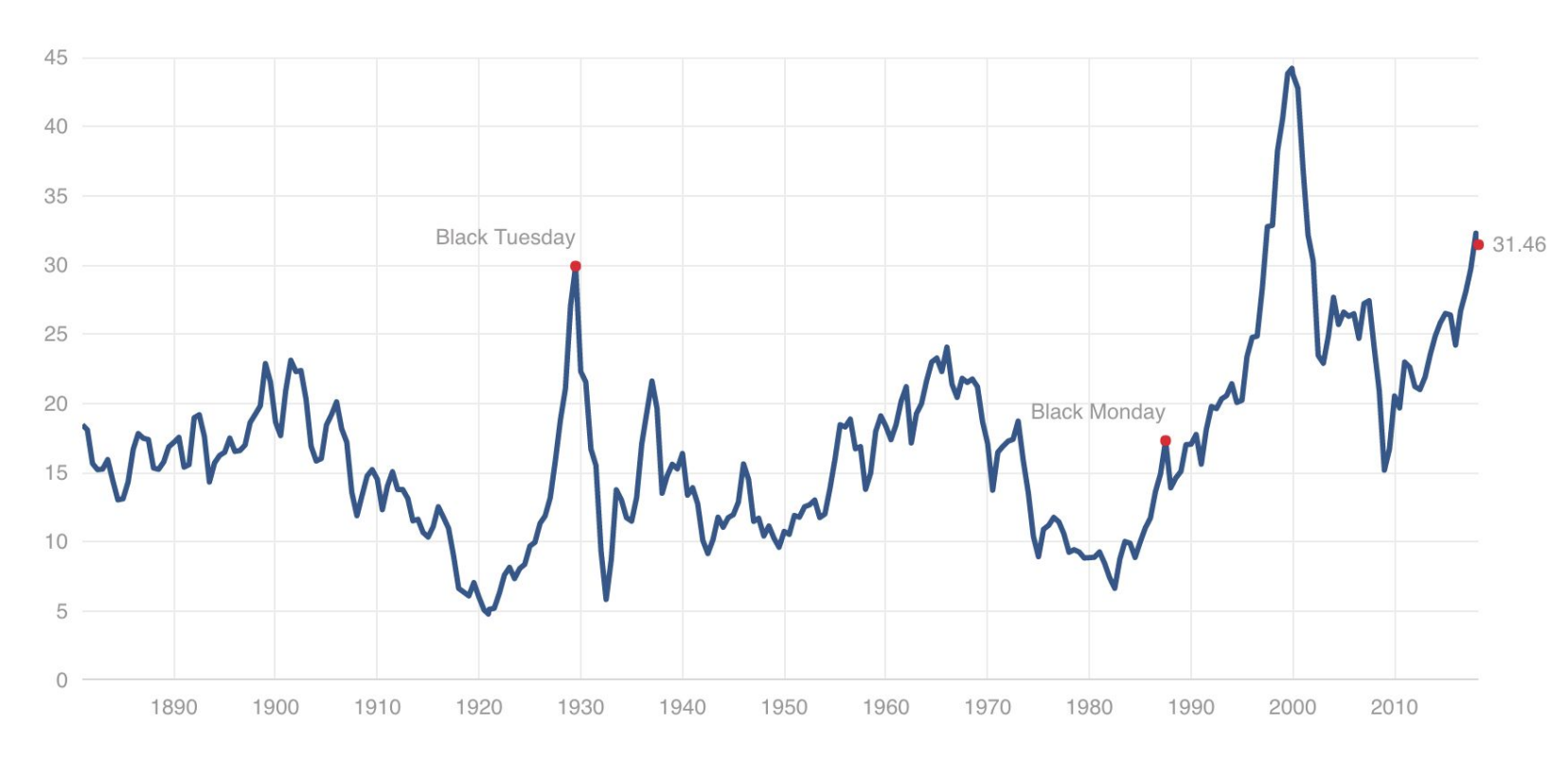
[1] From 1998, simple average of FR, GB and US; otherwise only GB. [2] Nominal policy rate less consumer price inflation. [3] Weighted average of G7 economies based on rolling GDP and PPP exchange rates.

Sources: IMF, *World Economic Outlook*; OECD, *Economic Outlook*; national data; BIS calculations.

Unintended consequences II: confidence eroded

- People are perhaps not rational according to simple economic models, but they are not stupid
- They understand what is happening to their pensions, and that in the end it will be the “normal people” who will pay the bill.
- Recent tax breaks for the ultra-rich in the USA and France only underscore that point.
- And business understand also the effect on households. Witness the lack of business investment, the large cash piles of major companies, and their use of share buy-backs.

Unintended consequences III: asset price bubble (Shiller PE ratio)



Unintended consequences IV: hidden, huge interest rate risk

- **Mechanism for pro-cyclical increase in duration?** Buy longer-dated paper to maintain yield; react to expectations of even lower future yields; rise in the PDV of long-dated liabilities.
- **Increased stock + longer average maturity**

  = Portfolios more sensitive to changes in the LT rate
- Many estimates from issuance side (e.g. Goldman Sachs: 100 bp rise in interest rates causes a loss of $2.4 trillion on $40 trillion US bonds)
- Where would losses fall? Not known!
- With bond markets more illiquid, could price movements be large, discontinuous and overshoot equilibrium?

Unintended consequences IV continued: risks made worse by regulations

- Basel III allows government bonds of any maturity to count as a liquid asset (previously, only short-term government bills counted);
- No Pillar 1 capital charge for interest rate risk on the Banking Book
- In the Eurozone, zero risk weight for government bonds regardless of country

Unintended consequences IV: wrap up

- Average yield on bond portfolios has declined as the outstanding stock has increased.
- Knowing that other investors also hold – and worry about – large duration risk, an investor will sell quickly when interest rate expectations change
- Because bond markets have become more illiquid, price movements could be large, discontinuous and overshoot equilibrium

Conclusion

Central banks saved the world from another great depression. Great!

But then they failed to normalize their policies. Poor!

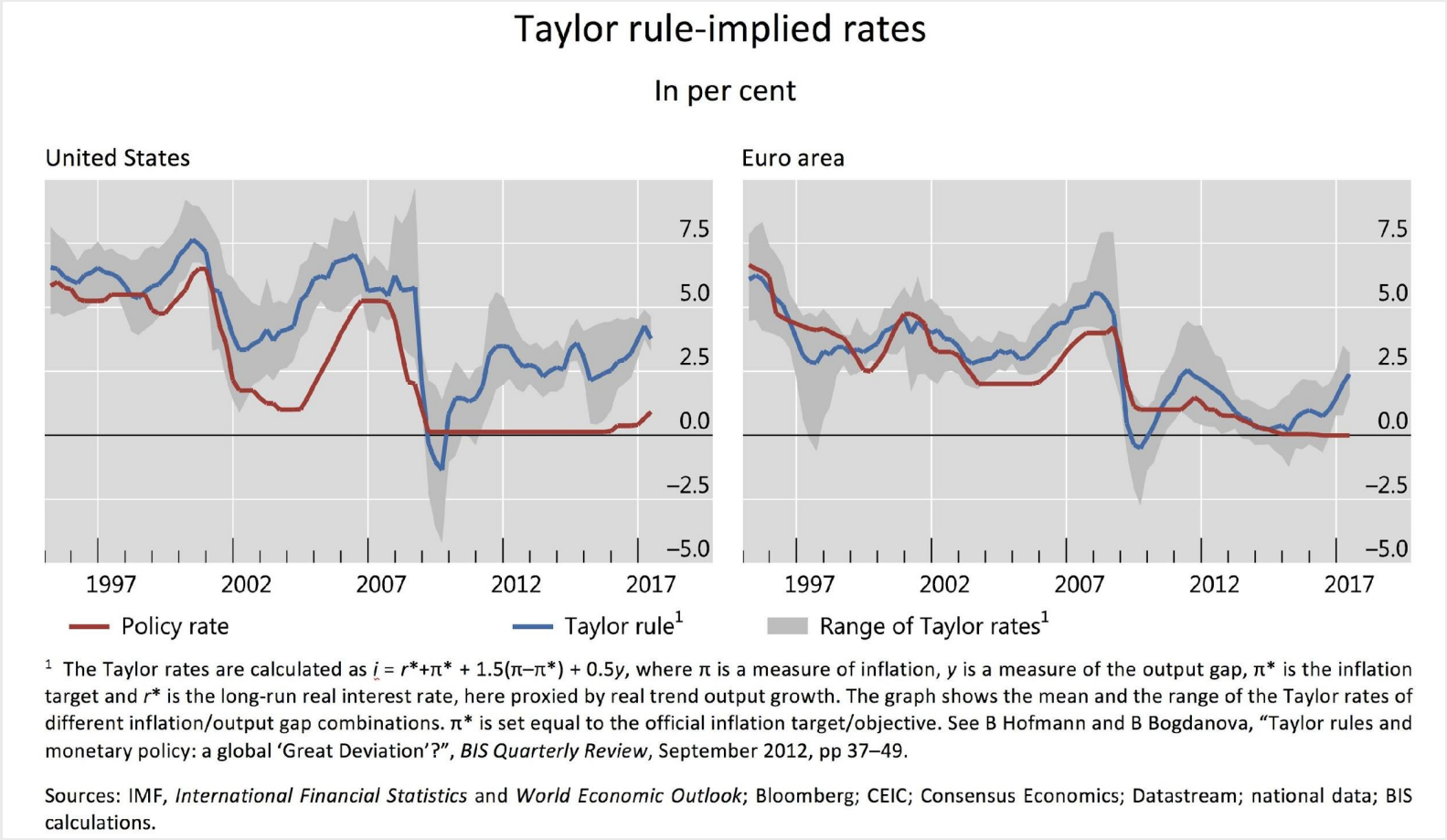
They have set up an artificial world of debt accumulation (in the public sector mostly); a large asset price bubble; and huge interest rate risk that is largely hidden.

Debt service will be crippling once rates rise, and governments will not have much room for manoeuvre.

Asset prices will come down to earth.

But not normalizing monetary policy in good time, central banks have sowed the seeds for the next crisis.

Addendum: time to tie central banks hands? Rules versus discretion again…



[1] The Taylor rates are calculated as $i = r^* + \pi^* + 1.5(\pi - \pi^*) + 0.5y$, where π is a measure of inflation, y is a measure of the output gap, π^* is the inflation target and r^* is the long-run real interest rate, here proxied by real trend output growth. The graph shows the mean and the range of the Taylor rates of different inflation/output gap combinations. π^* is set equal to the official inflation target/objective. See B Hofmann and B Bogdanova, "Taylor rules and monetary policy: a global 'Great Deviation'?", *BIS Quarterly Review*, September 2012, pp 37–49.

Sources: IMF, *International Financial Statistics* and *World Economic Outlook*; Bloomberg; CEIC; Consensus Economics; Datastream; national data; BIS calculations.