



What's next? A macro view of 2018

Hong Kong
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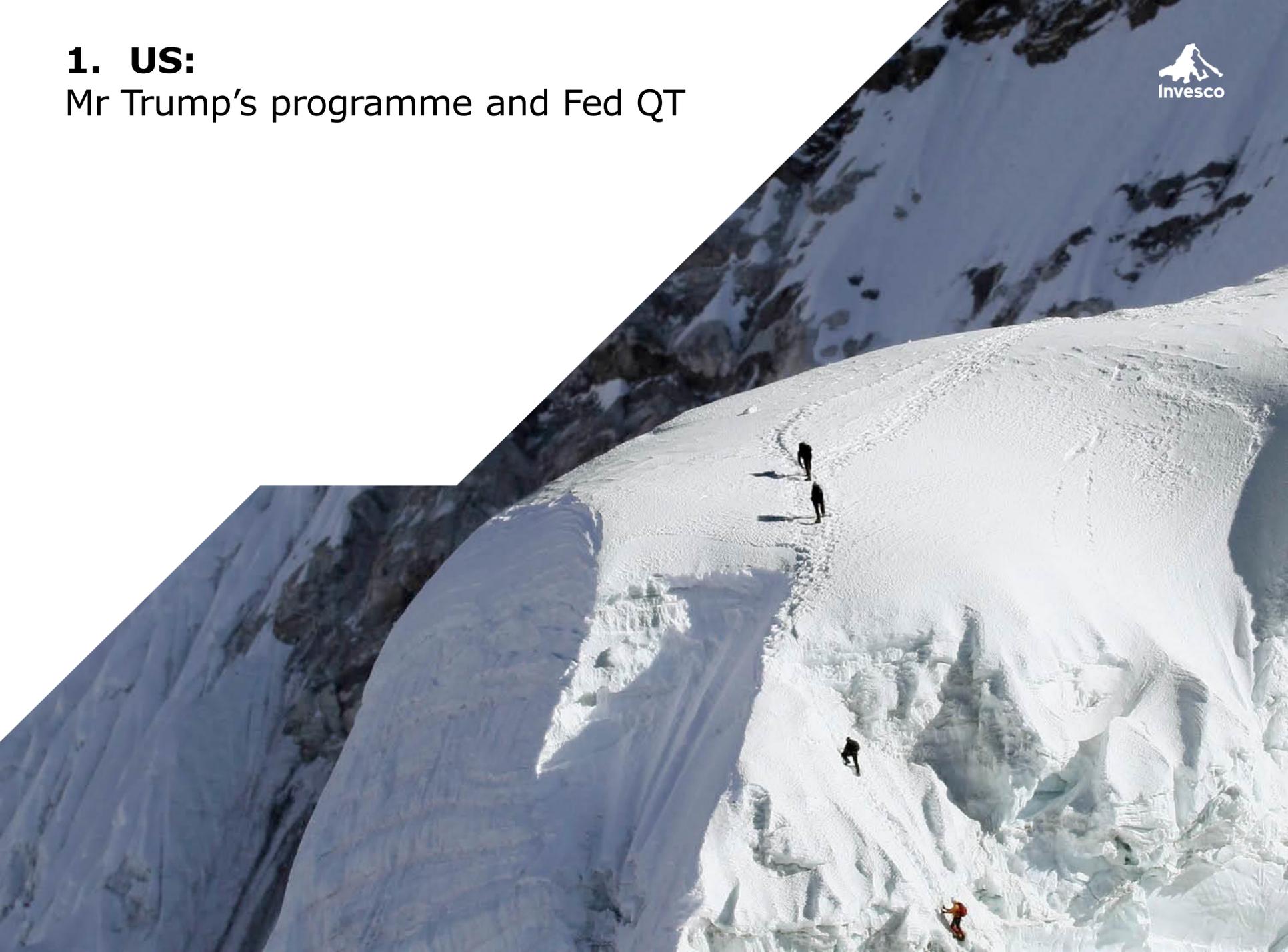
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Economic & investment outlook

- 1 US: Mr Trump's programme and Fed QT**
- 2 Europe: Recovery gaining momentum, except UK**
- 3 Why is inflation below target in so many countries?**
- 4 Bubbles and the Business Cycle**

1. US: Mr Trump's programme and Fed QT



Donald Trump's economic programme



Trump's "Contract with the American Voter"

| | |
|----------------------------|--|
| Tax reforms | Cut Personal and Corporate Income Tax to boost growth and repatriate capital from abroad. |
| Trade reforms | Withdrawn from TPP; renegotiate NAFTA? Limit Offshoring; stop currency "manipulation"; stop below-market, subsidized steel imports. |
| Regulatory reforms | Reduce regulatory burden (currently \$2 trillion); reduce restrictions on US business. |
| Energy reforms | Lift restrictions on shale, oil, natural gas and clean coal. Allow Keystone & XL pipelines to go ahead to lower energy prices. |
| Infrastructure | PPPs & private investment to spur \$1 trillion over 10 years → thousands of jobs in construction, steel, water, energy etc. Plan relies on private sector financing with tax credits, not government debt. Trump will cancel contributions to UN climate change. |
| Immigration reforms | End funding to sanctuary cities and corporate-driven immigration system; enforce deportation. |
| Health care reforms | Repeal/Repair/Replace Obamacare to reduce part-time jobs. |

Source: Real Clear Policy, 30 October 2016, updated to 22 February 2017. \$ = US.

TPP = Trans-Pacific Partnership; NAFTA = North American Free Trade Agreement; PPPs = Public-Private Partnership.

Initial optimism of Trump victory has faded



Index of US "soft" data

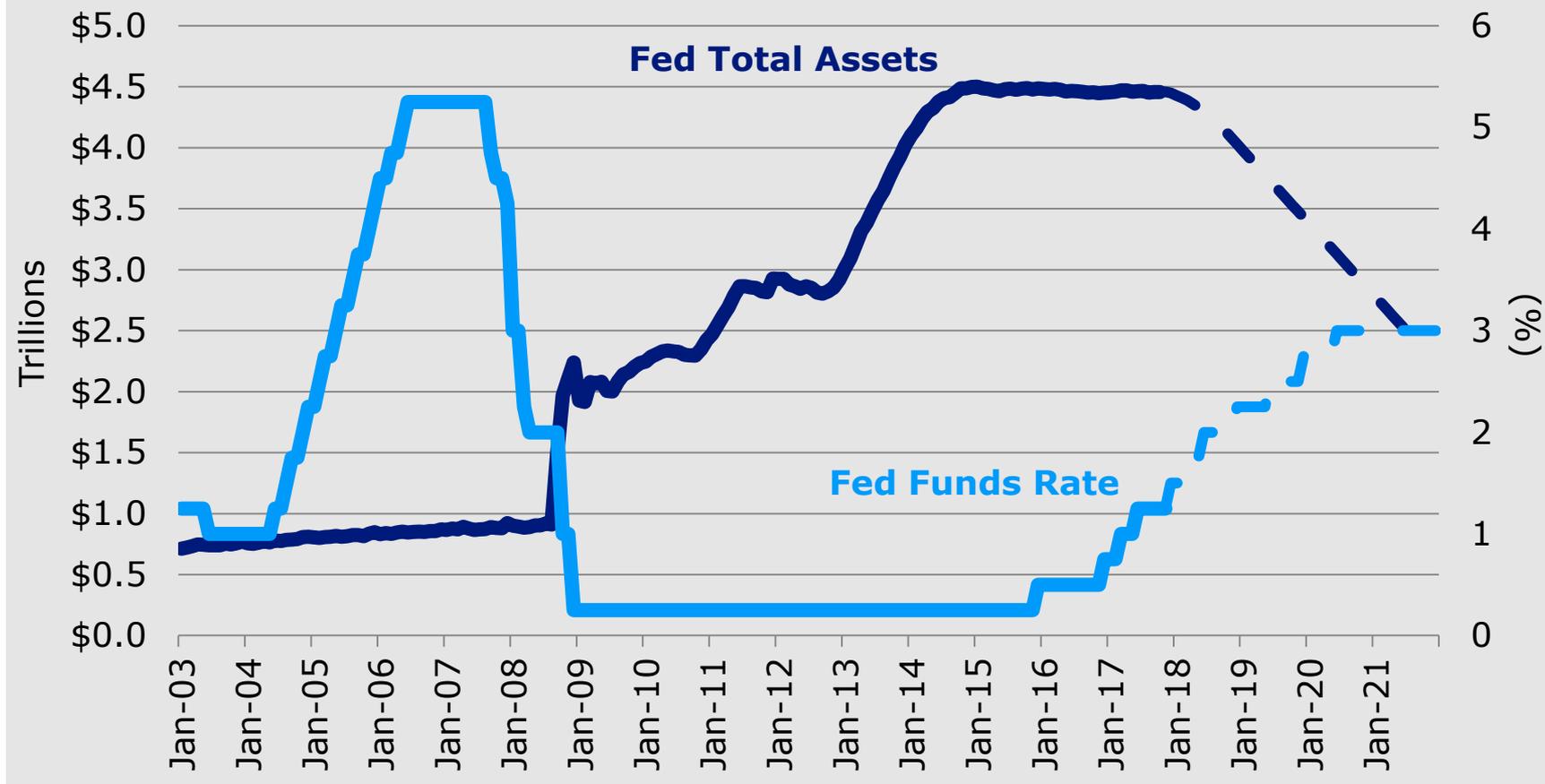


Source: Macrobond as at 21 November 2017.

US Monetary Policy Normalization



Fed Funds Rate Increases and Balance Sheet Shrinkage



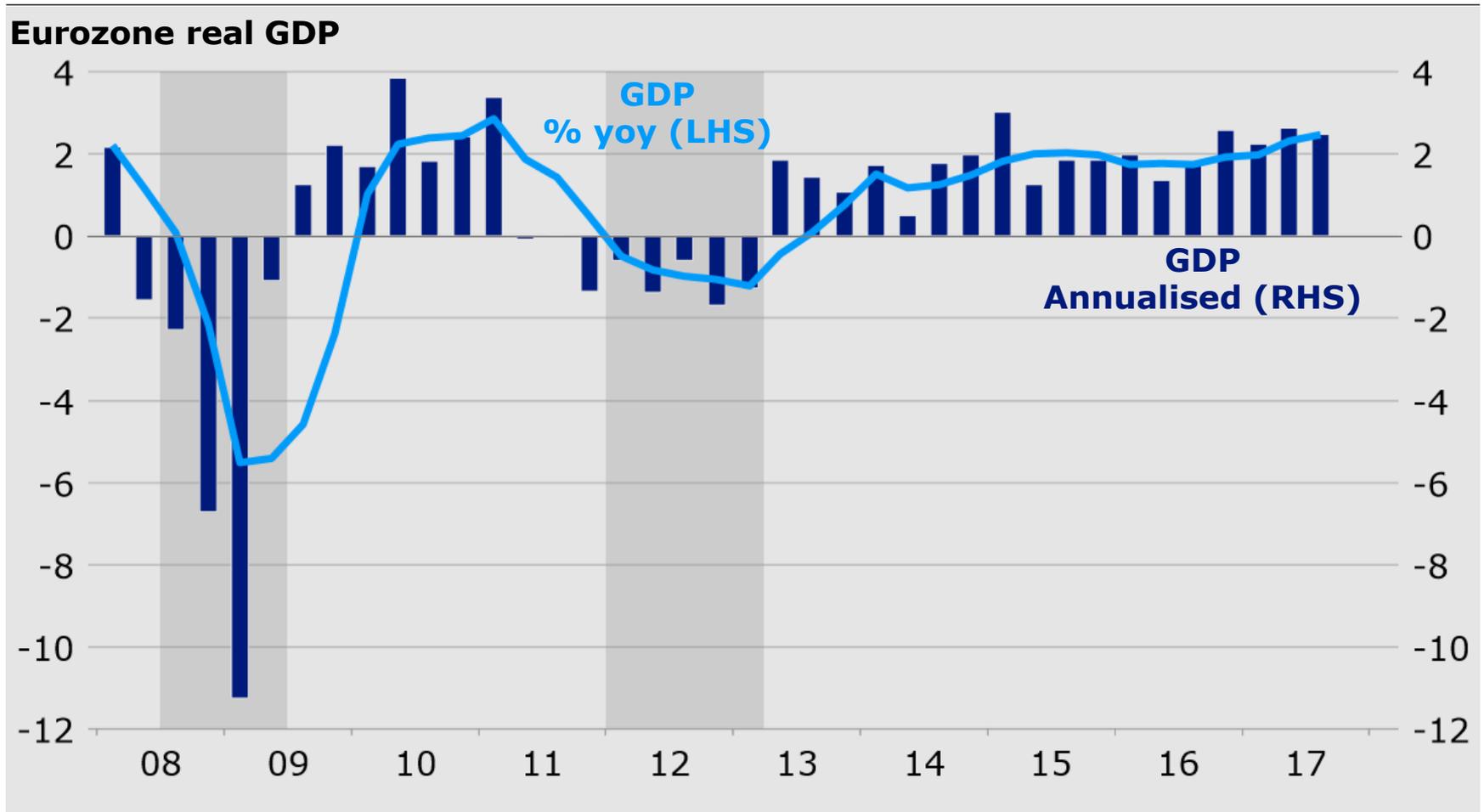
Source: Macrobond; Federal Reserve 14 June 2017 and Invesco calculations; interest rates from the Fed's Summary of Economic Projections, 20 September 2017.

2. Eurozone:

Recovering momentum, except UK

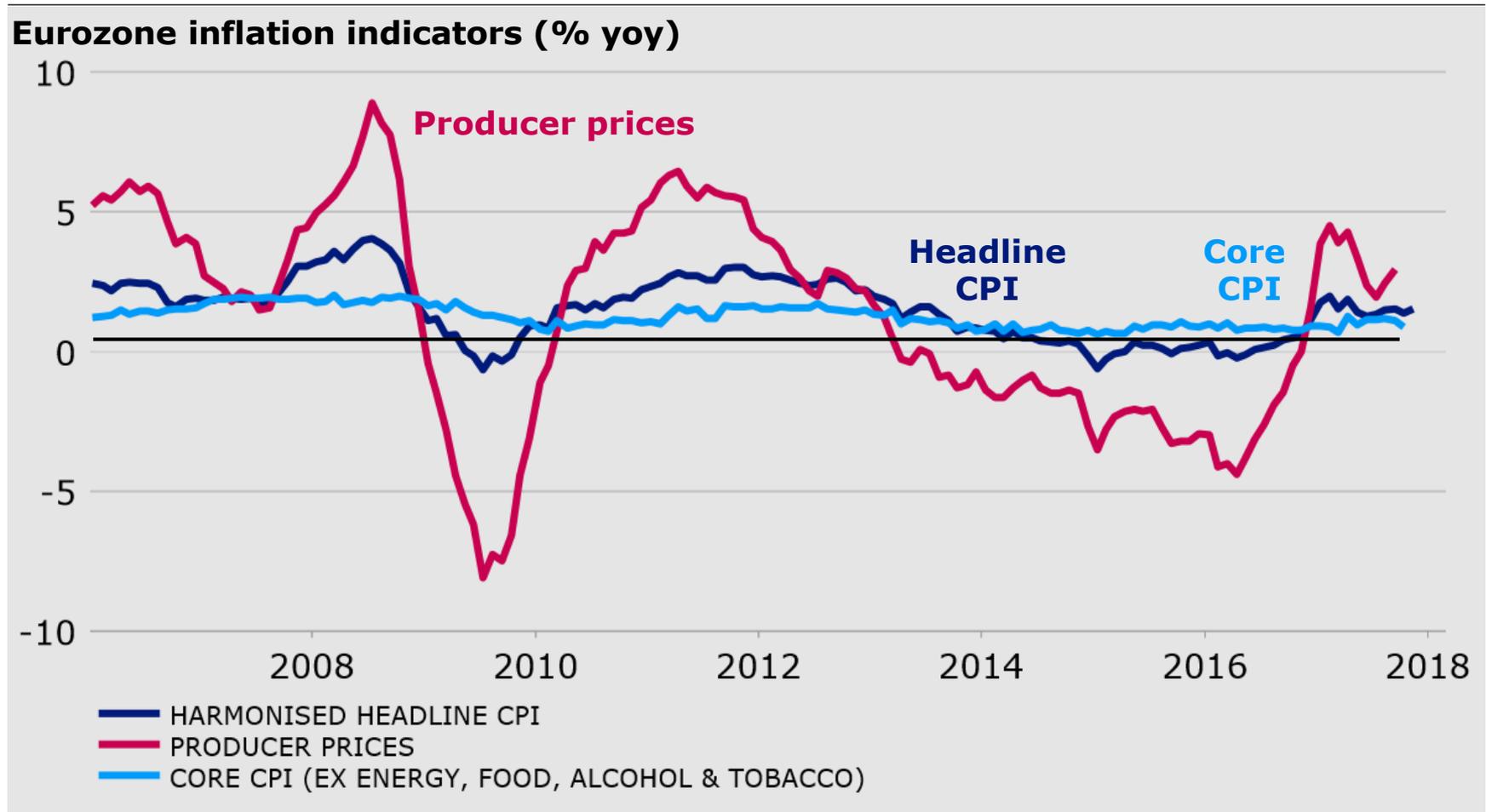


Eurozone real GDP growth rising to 2.0% level



Source: Thomson Datastream as at 4 December 2017. Shaded areas = recessions.

Increase in Eurozone headline inflation was due mainly to commodity prices

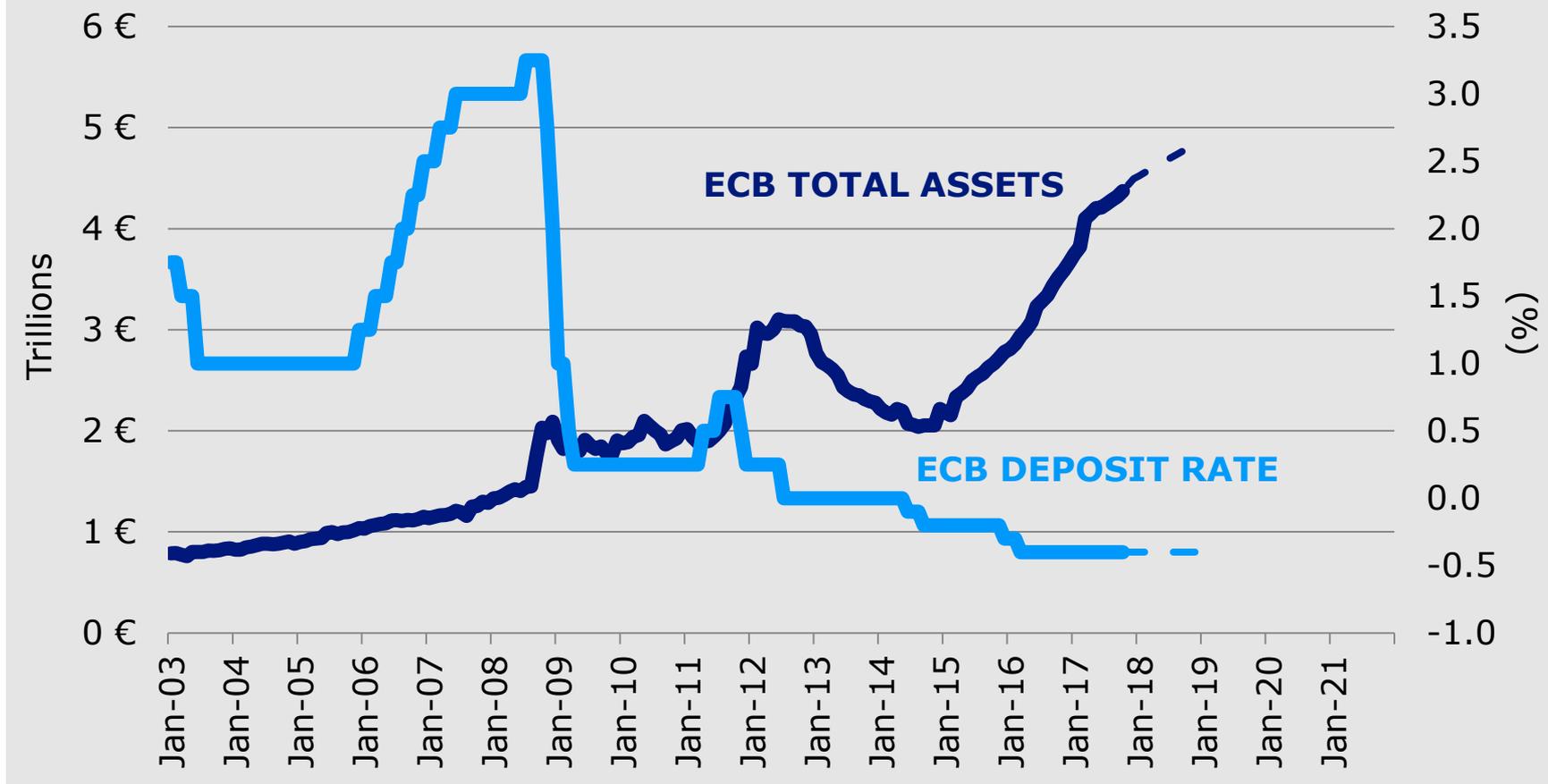


Source: Thomson Datastream as at 4 December 2017.

European Monetary Policy Normalization

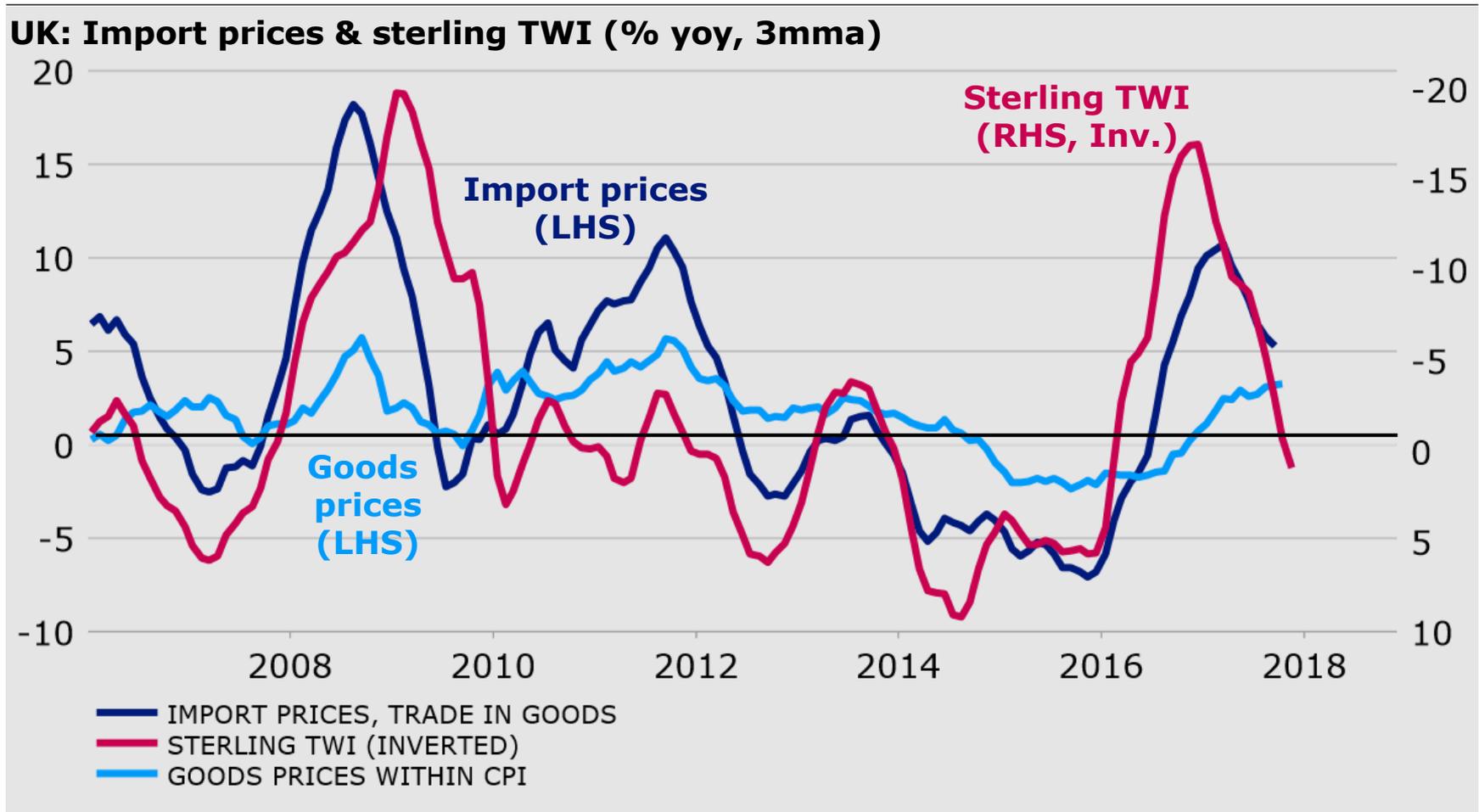


ECB Deposit Rate and Balance Sheet Tapering



Source: Macrobond; ECB Monetary Policy Decision 26 October 2017 and Invesco calculations.

UK's rising import prices impacting goods prices in CPI

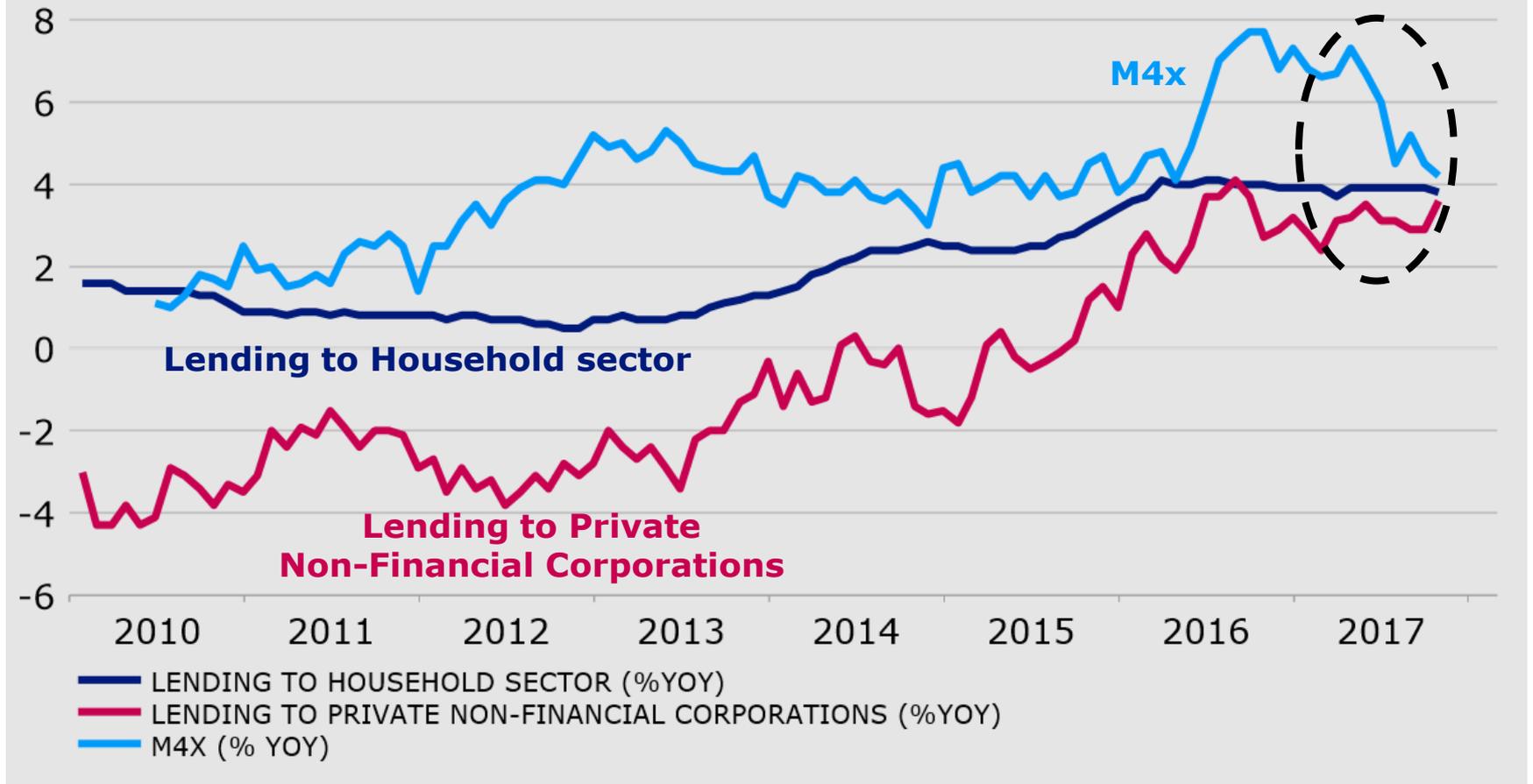


Source: Thomson Datastream as at 4 December 2017. TWI = Trade-weighted Index.

UK: Money & Credit growth had surged before the Brexit vote



UK: M4x and lending to households and private non-financial corporations (% yoy)



Source: Thomson Datastream as at 4 December 2017.

3. Why is inflation below target in so many economies?

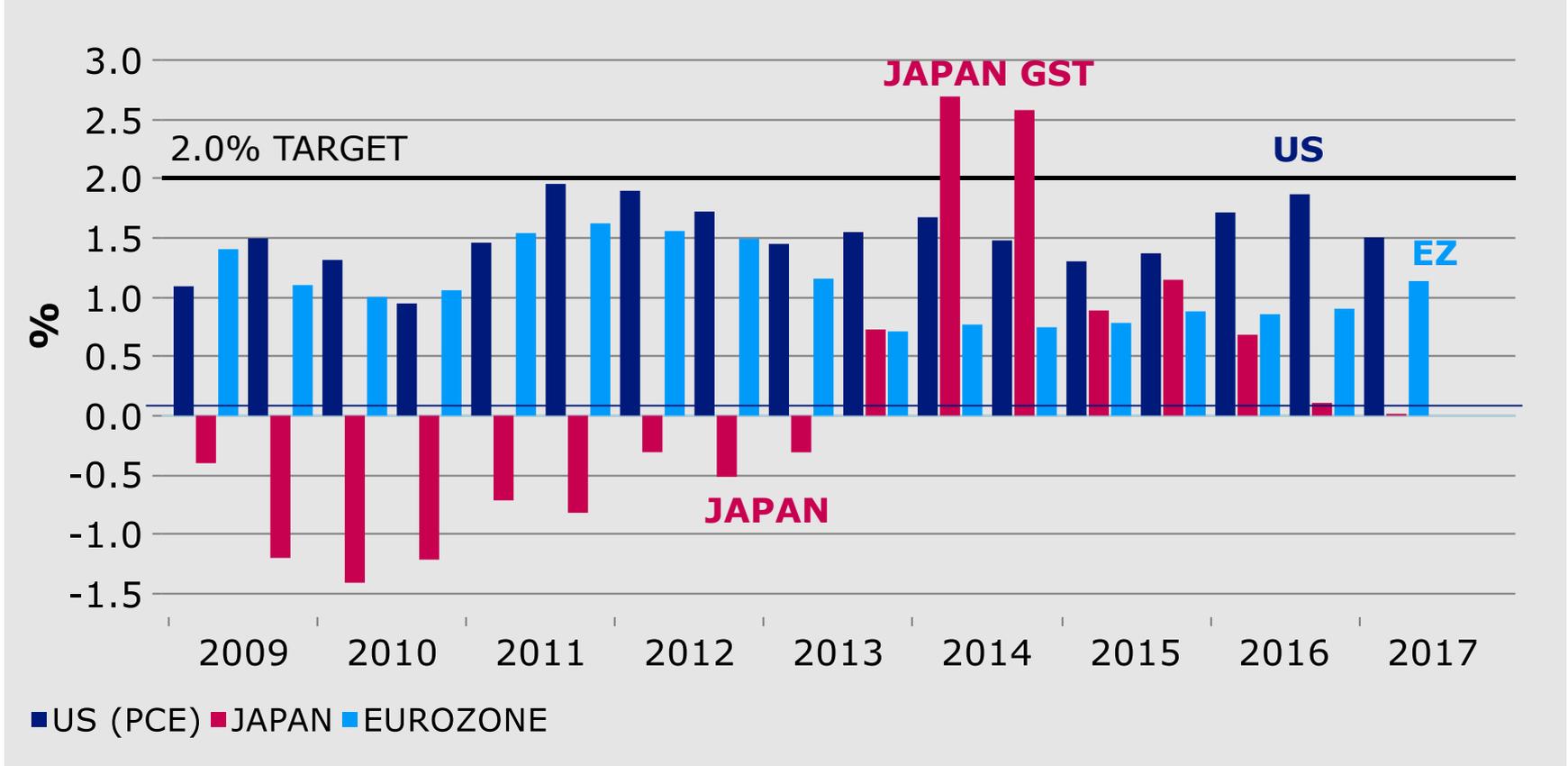


Core inflation of major economies falling well below 2% target



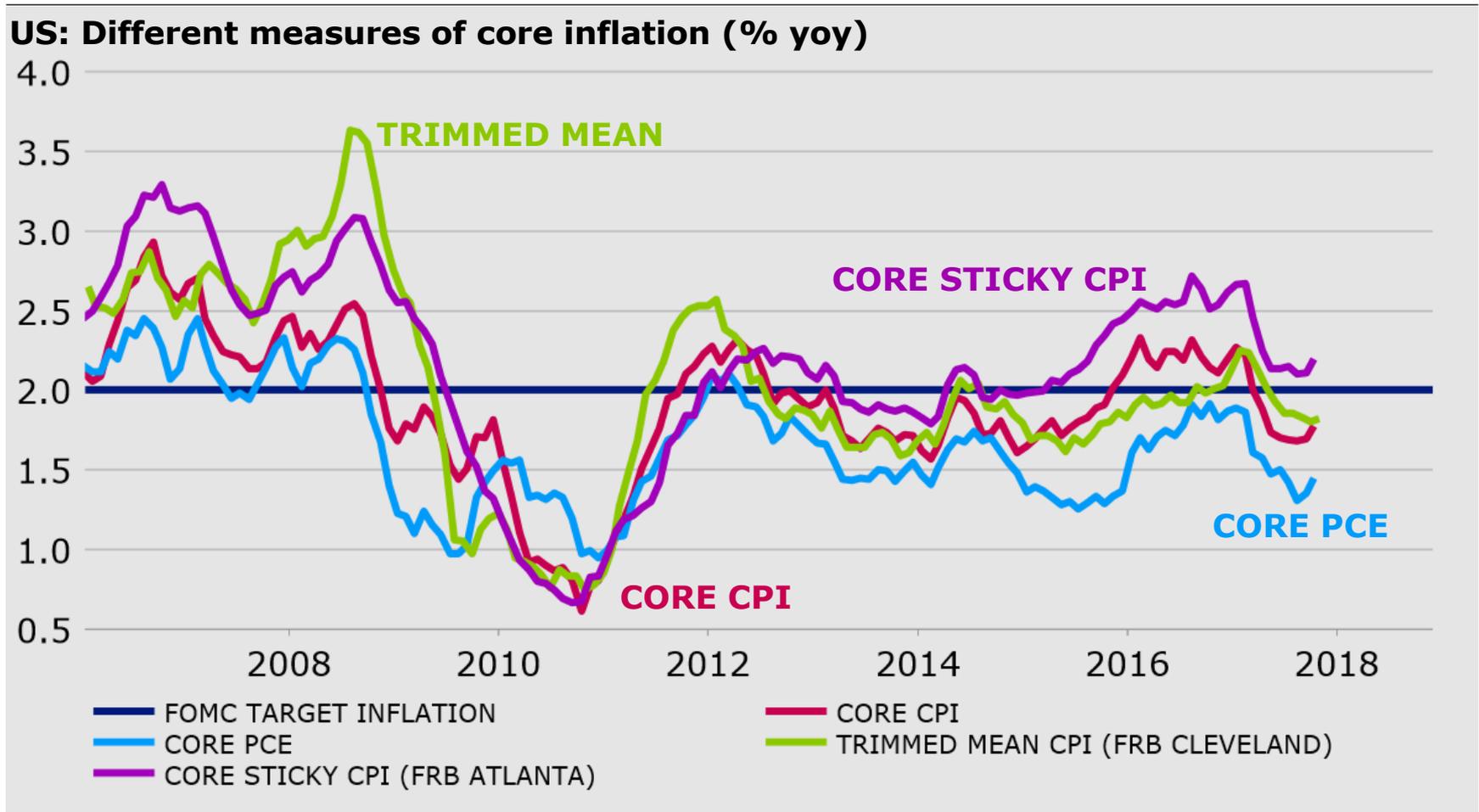
Major economies' core CPI inflation (% yoy)

Semi-annual data



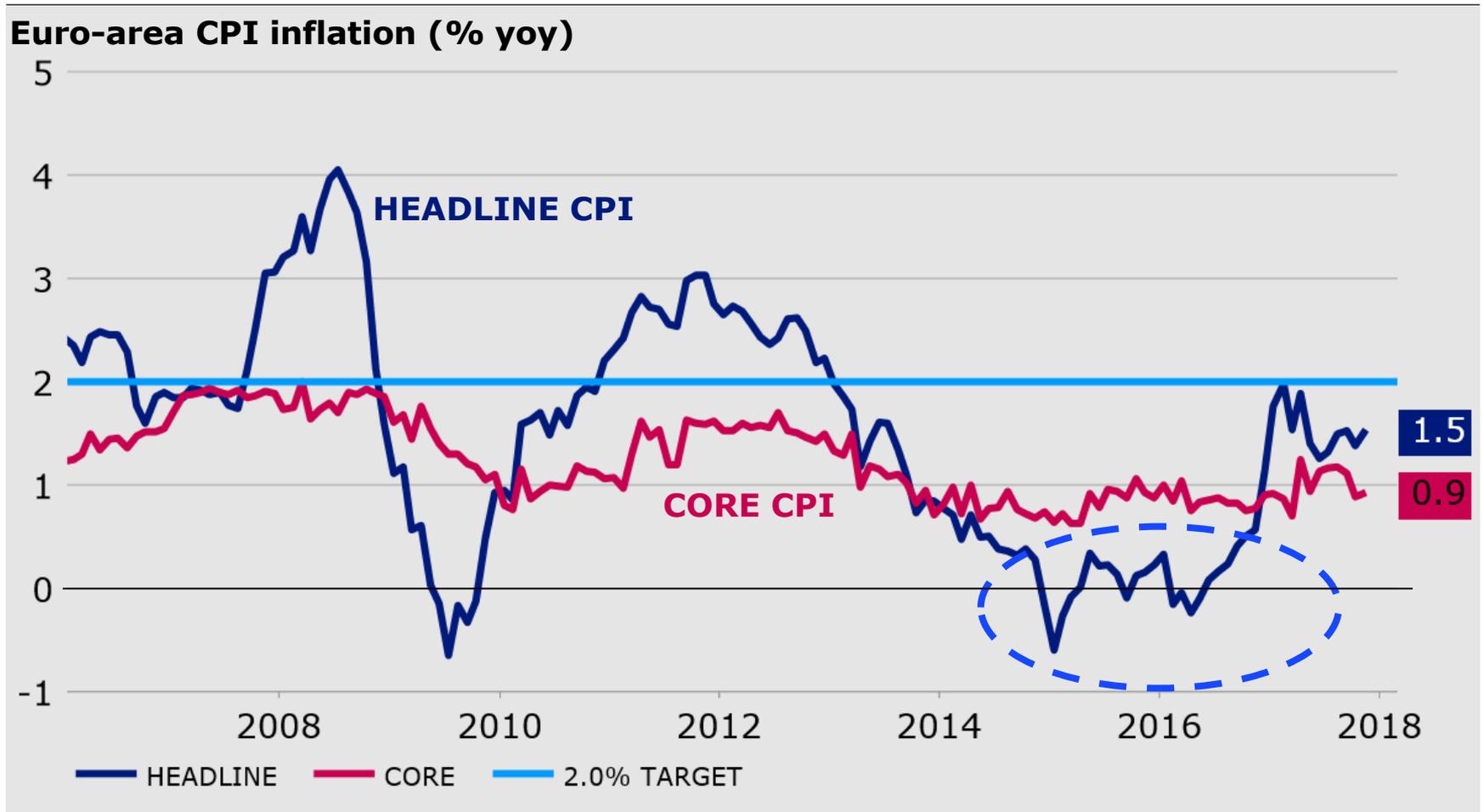
Source: Macrobond as at 4 December 2017.

US measures of core inflation – mostly below target



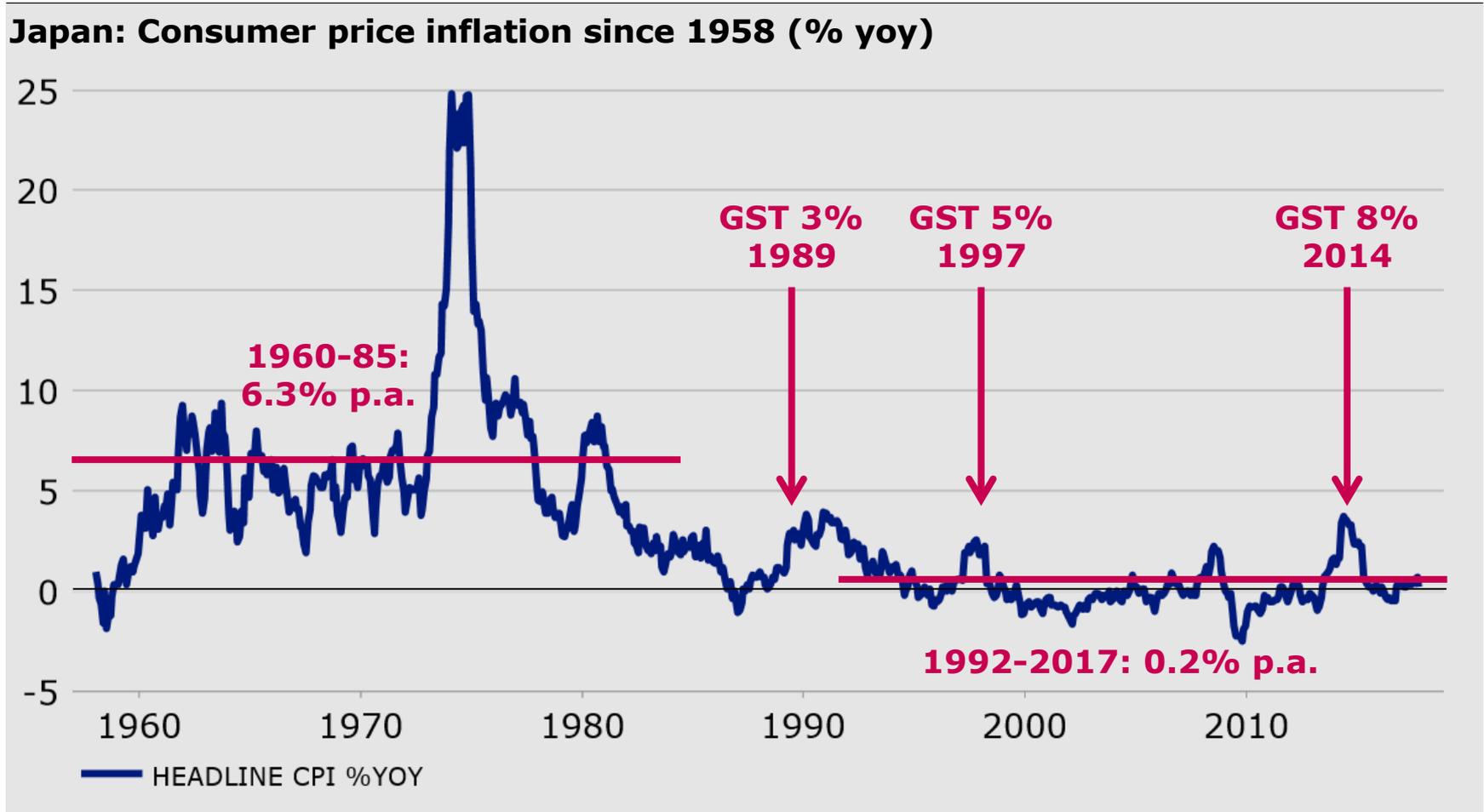
Source: Thomson Datastream as at 4 December 2017.

Eurozone has escaped from deflation, but CPI inflation is still below target



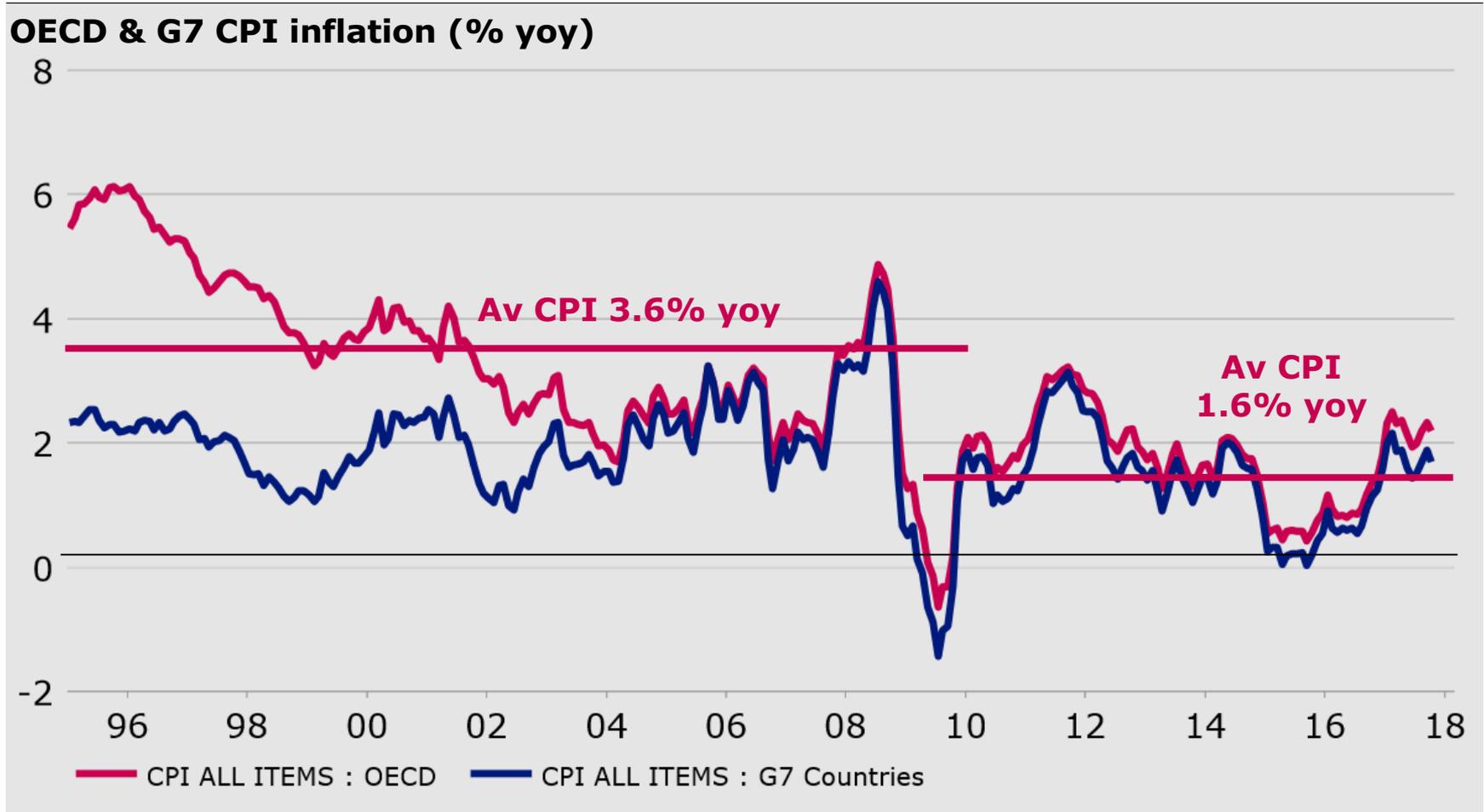
Source: Thomson Datastream as at 4 December 2017.

Japanese history based on consumer prices



Source: Thomson Datastream as at 4 December 2017.

Since the 2008 crisis, inflation has slowed across the entire OECD & G7



Source: Thomson Datastream as at 4 December 2017.

1. Does fiscal spending cause inflation?



A lesson from Ronald Reagan

| Federal Budget Balance as % GDP | | Consumer Price Inflation % yoy | |
|---------------------------------|--------------|--------------------------------|--------------|
| 1980 | -1.3% | Mar-80 | 14.8% |
| 1981 | -2.8% | Jan-81 | 11.8% |
| 1986 | -5.9% | Dec-86 | 1.1% |

Source: Thomson Datastream 22 February 2017. Deficits calculated as Federal outlays less expenditures as % GDP.

Can fiscal policy be expansionary?

Only three ways to finance government spending:



1. Taxation

2. Borrowing

3. Printing Money (= financing through the banking system)

- If taxes are increased, this will adversely affect private sector spending
- If the government borrows, this will – at some point – crowd out private sector borrowing and spending
- However, if the increased government spending is financed through the printing of money, then it will have some prospect of boosting nominal and real GDP

Example:

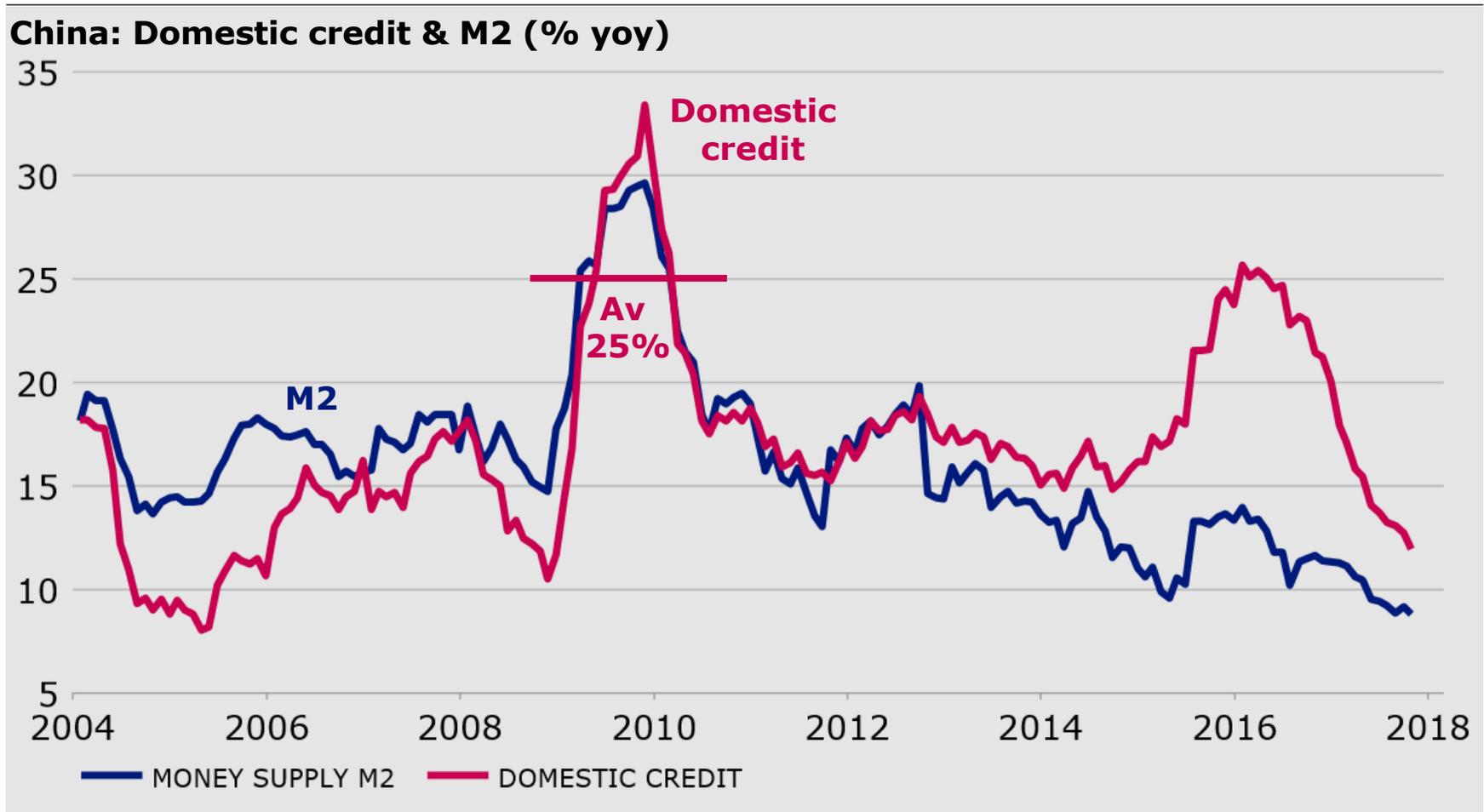
- China's CNY 4 trillion fiscal stimulus, 2008–09 (\$586 billion), aided by 25% M2 growth

Counter-example:

- Japan's fiscal stimulus programs since 1990, not accompanied by monetary upswings

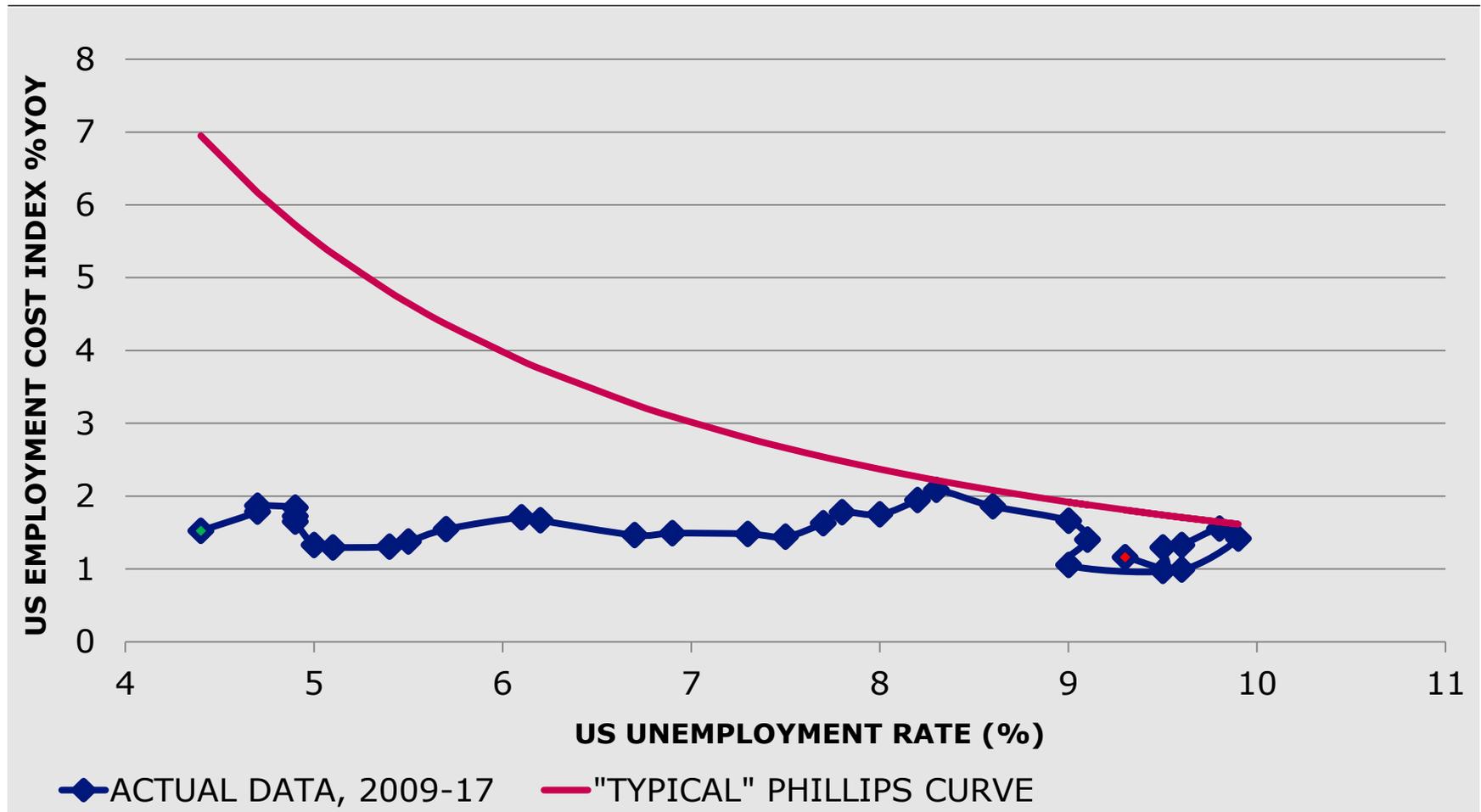
Source: Invesco Research, September 2016.

China's "Fiscal Stimulus" of 2008–09: RMB 4.0 trillion



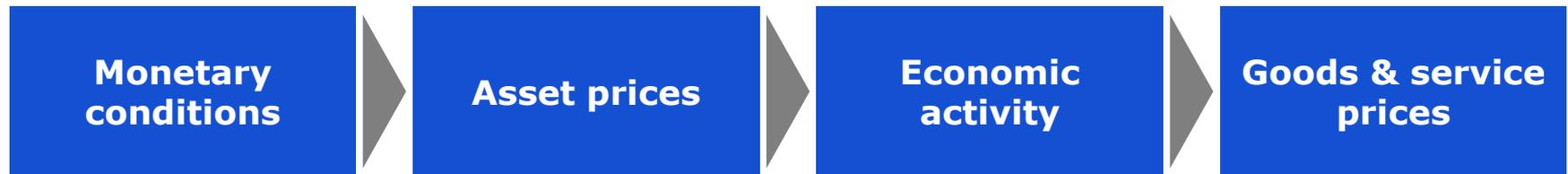
Source: Thomson Datastream as at 4 December 2017.

2. The US Phillips Curve is not working: Tight labour market not pushing up wages



Source: Invesco as at 14 December 2017.

Inflation is part of the Business Cycle

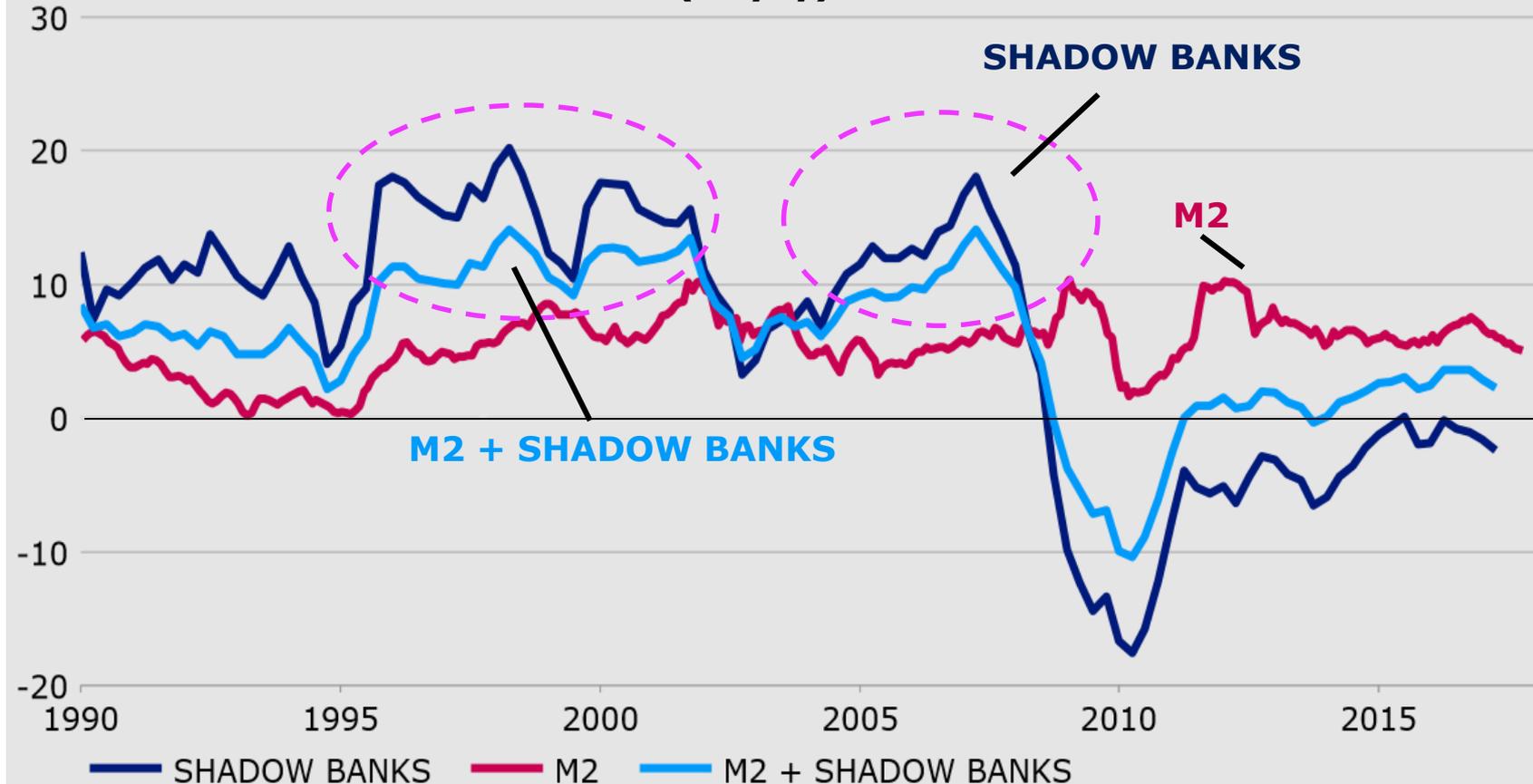


Inflation is a monetary phenomenon

US money & credit growth remain subdued



US: Growth of shadow banks & M2 (% yoy)

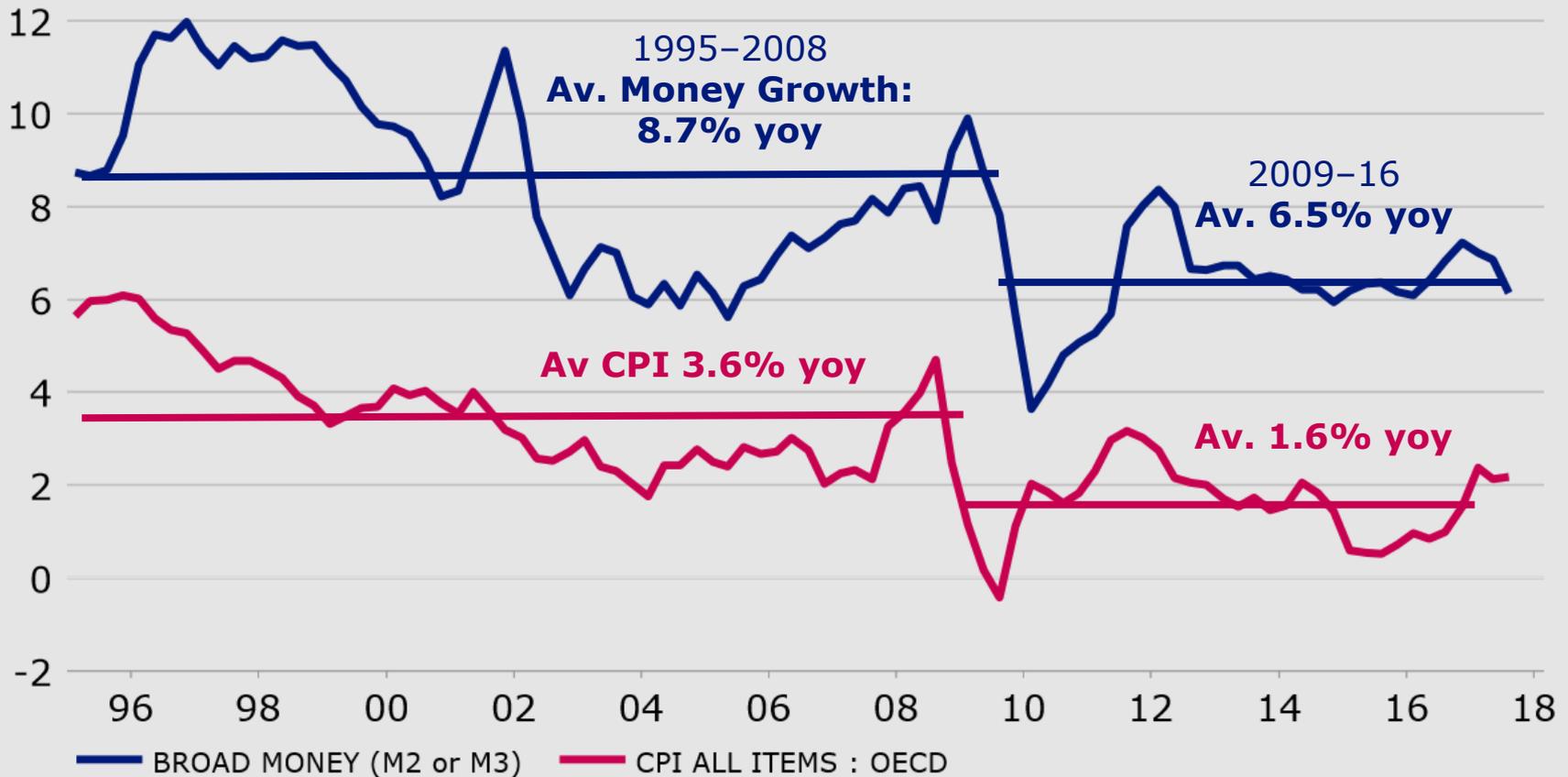


Source: Thomson Datastream as at 4 December 2017.

Across the OECD since 2008, money and credit growth have slowed, so has inflation

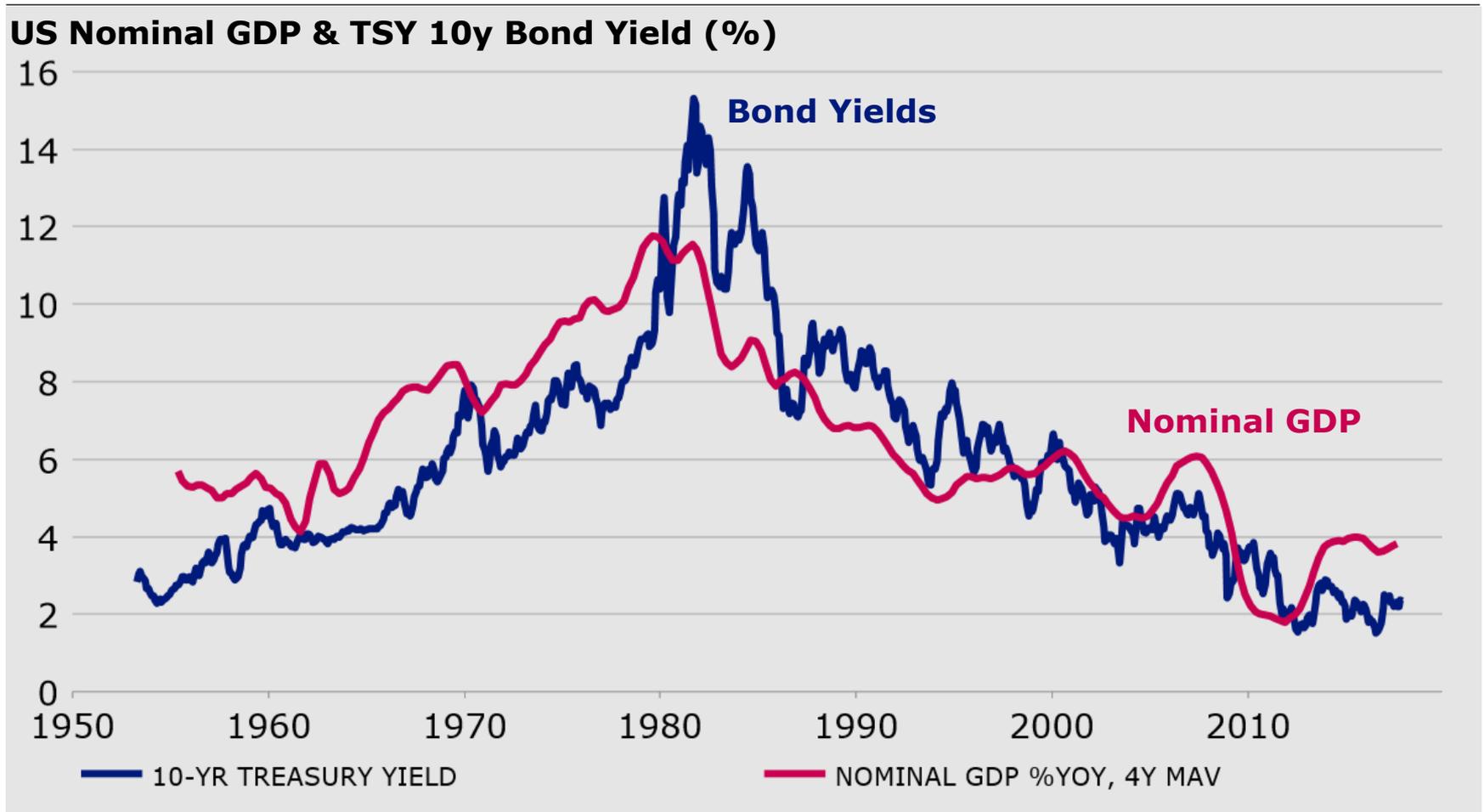


OECD* Money Growth & Inflation (YoY change %, 1995–2016)



Source: Thomson Datastream as at 4 December 2017. *The OECD comprises 35 member countries across North and South America, Europe and Asia-Pacific.

Bond yields constrained by low nominal GDP growth



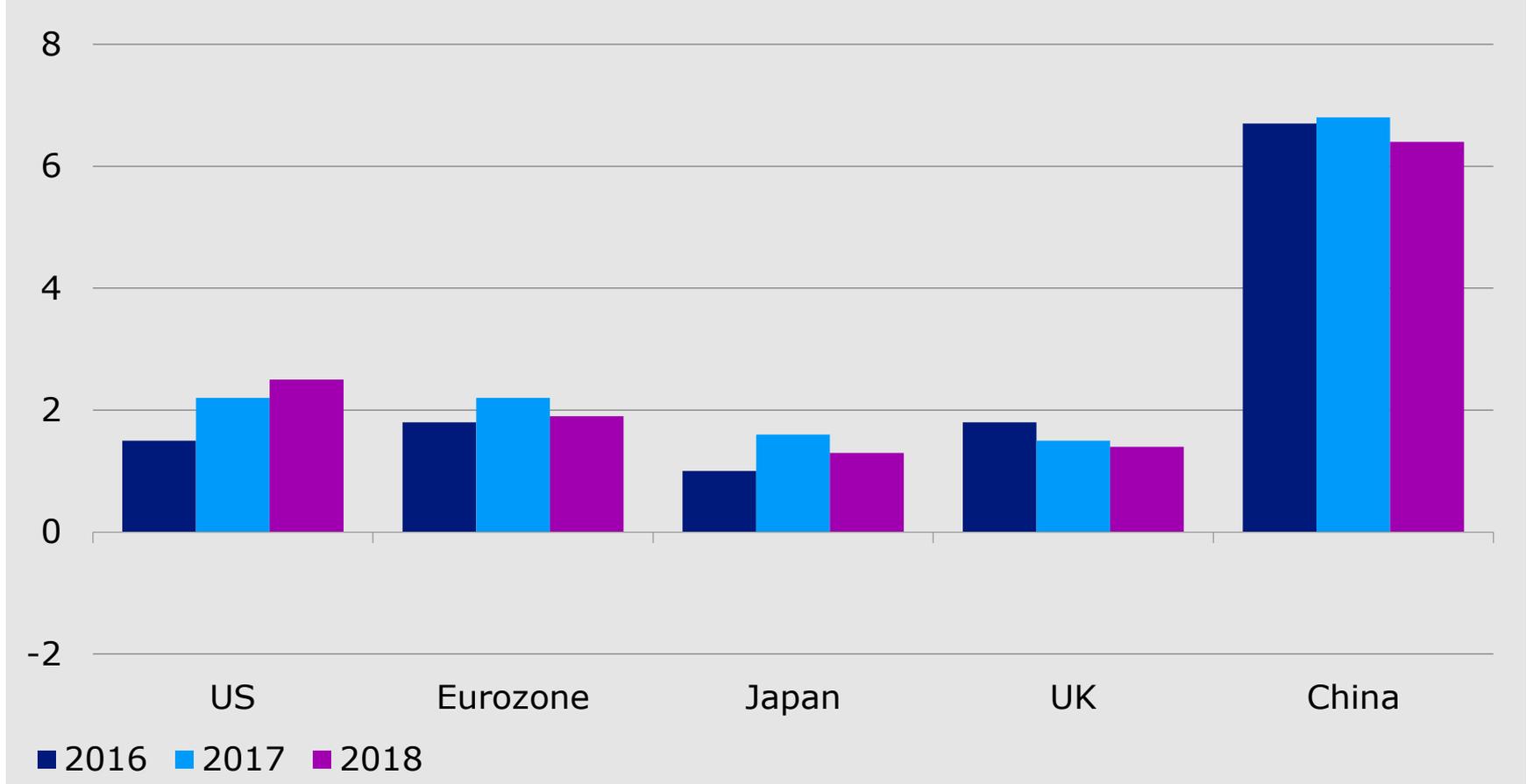
Source: Thomson Datastream as at 4 December 2017. TSY = Treasury; MAV = Moving Average.

Economic growth expectations

The lacklustre outlook continues ...



Major economies – Real GDP growth forecasts (%)



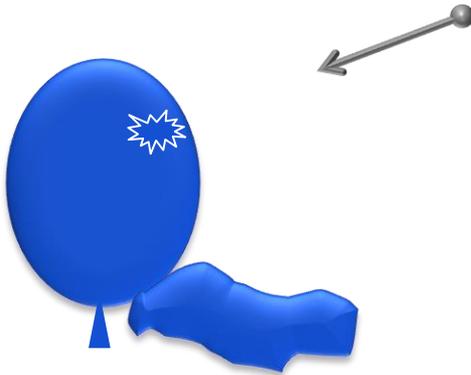
Source: Consensus Economics as at 6 November 2017.

4. Bubbles and the business cycle



Two types of bubble

1. Rapid credit growth with high leverage

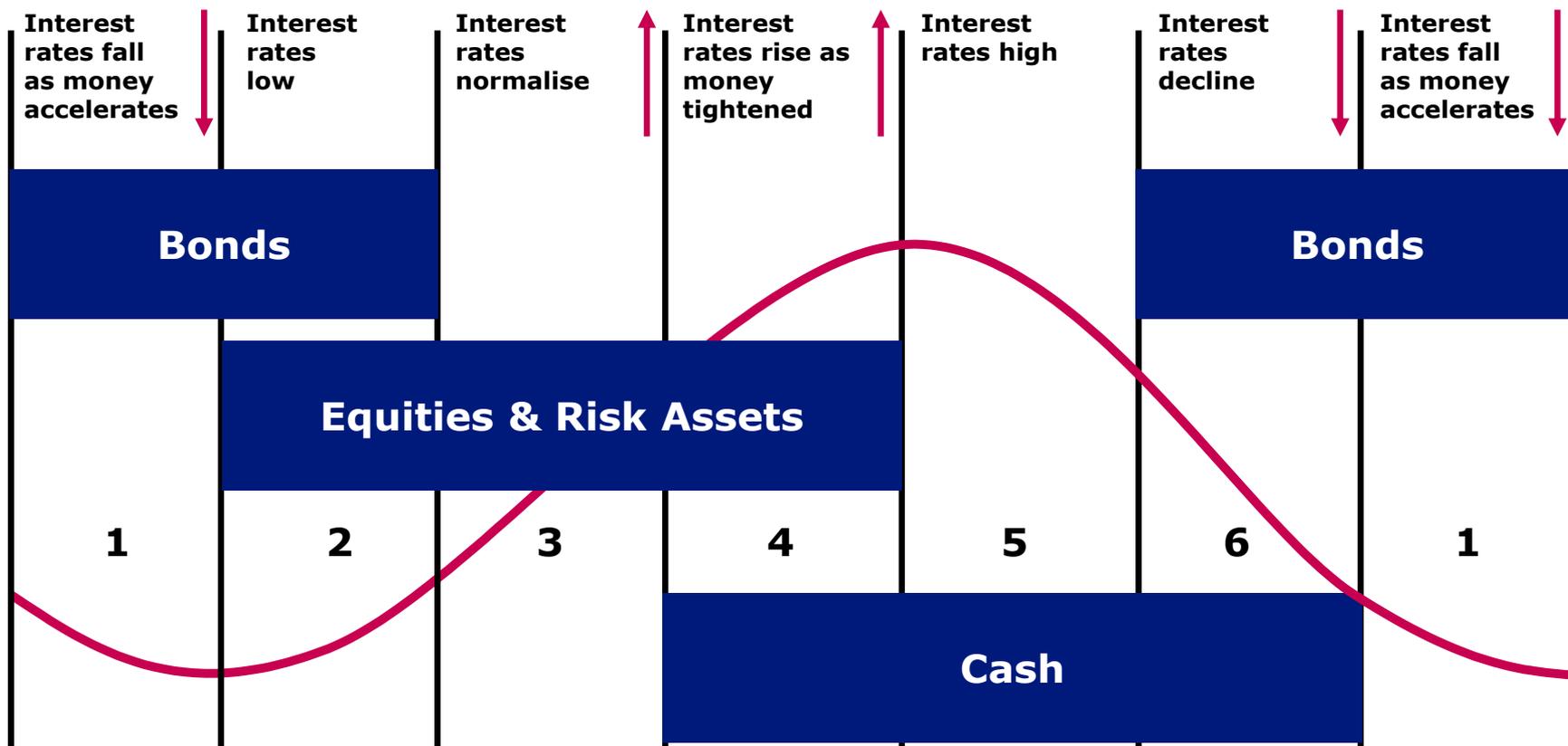


2. Low interest rates → high asset prices, and ... high interest rates → low asset prices



For illustrative purposes only.

Prospects for the Business Cycle in the developed economies



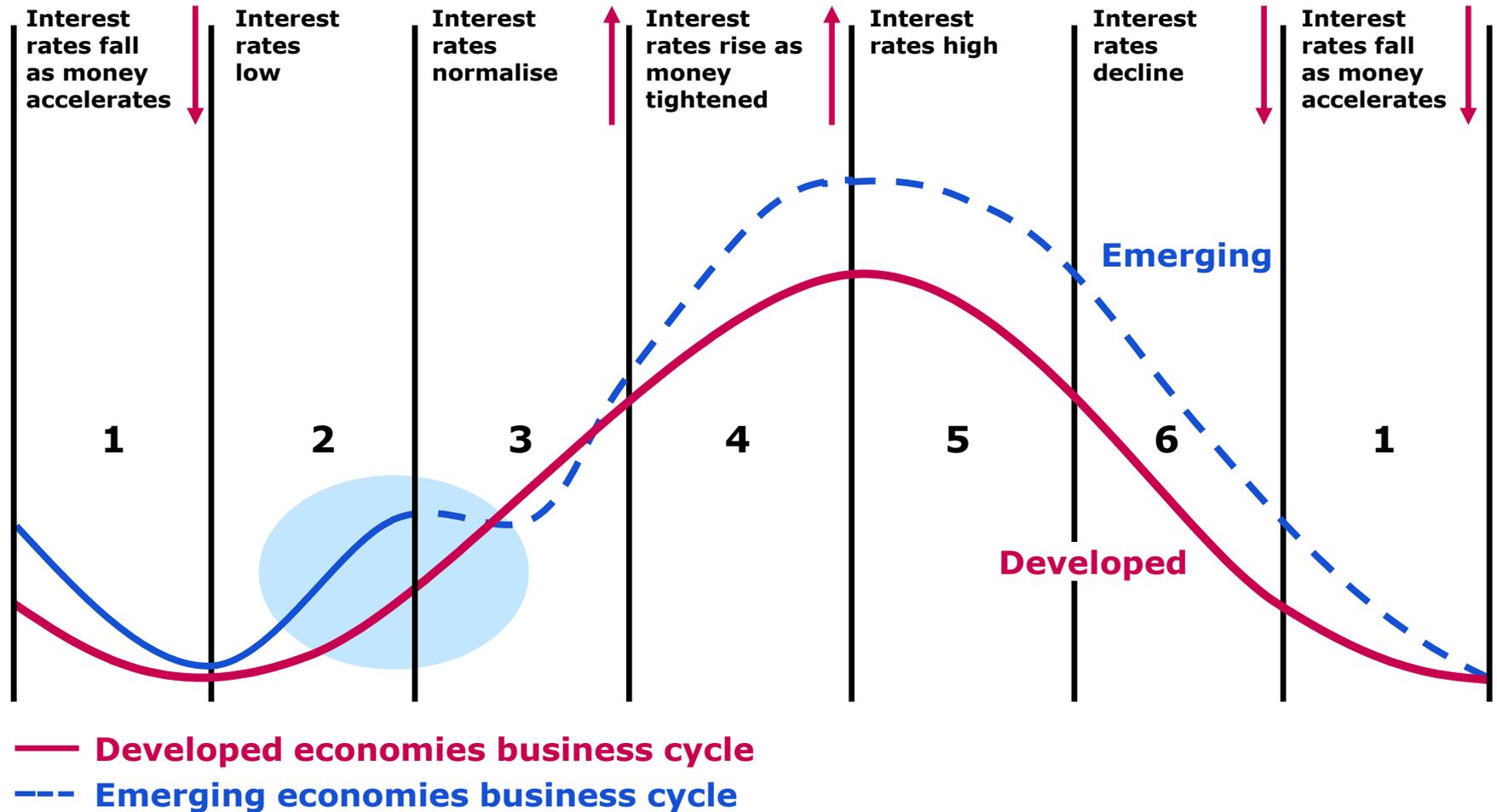
— The business cycle

Source: Invesco. For illustrative purposes only.

Emerging markets business cycle superimposed on developed markets



Developed Markets Interest Rate Cycle



Source: Invesco. For illustrative purposes only.

Summary & conclusion



- **INFLATION RATES LOW** – for a reason
- **FALSE THEORIES OF INFLATION** – Fiscal policy and budget deficits do not cause inflation; nor do wages (the Phillips Curve)
- **A BETTER THEORY OF INFLATION** – “Inflation is always and everywhere a monetary phenomenon”
- **MONEY GROWTH & THE BUSINESS CYCLE** – Money drives asset prices, economic activity, and inflation
- **LOW MONEY & CREDIT GROWTH** – In most developed economies money growth rates have been low.
NB it is broad money that drives nominal GDP, not the monetary base, or central bank’s balance sheet

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