

Global Interest Rate Highlights

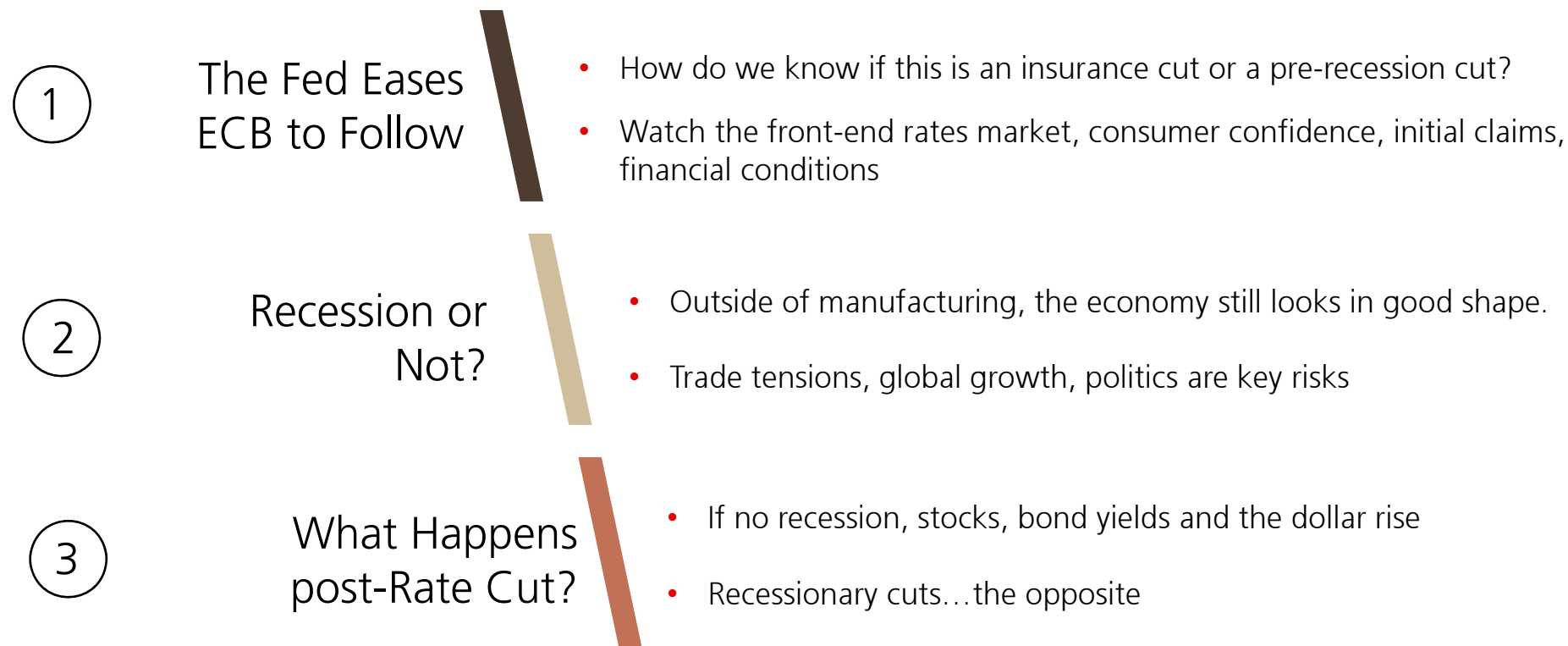
James Law, CFA
Head of US Enhanced Cash and Short Duration



Section 1

Fixed income themes and risks

What Happens When the Fed Cuts Rates?



**Resilient economy + Fed easing is a good combo for risk assets;
Keep an eye on the front-end rates market**

Section 2

Current interest rate environment

Almost \$17 trillion in negative yielding debt

Barclays Global Aggregate Index

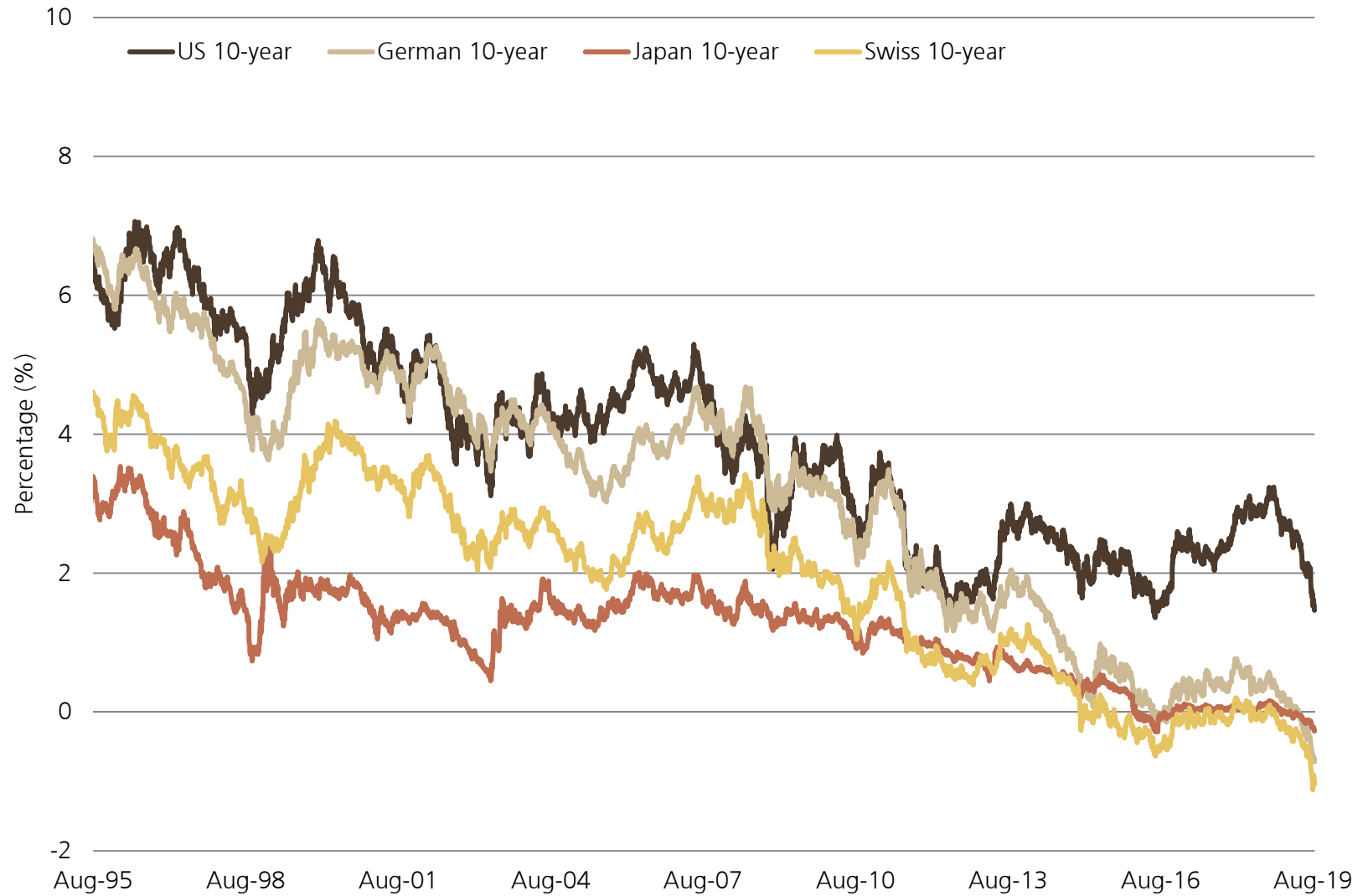


Source: Bloomberg
As of August 28, 2019



Global bond yields

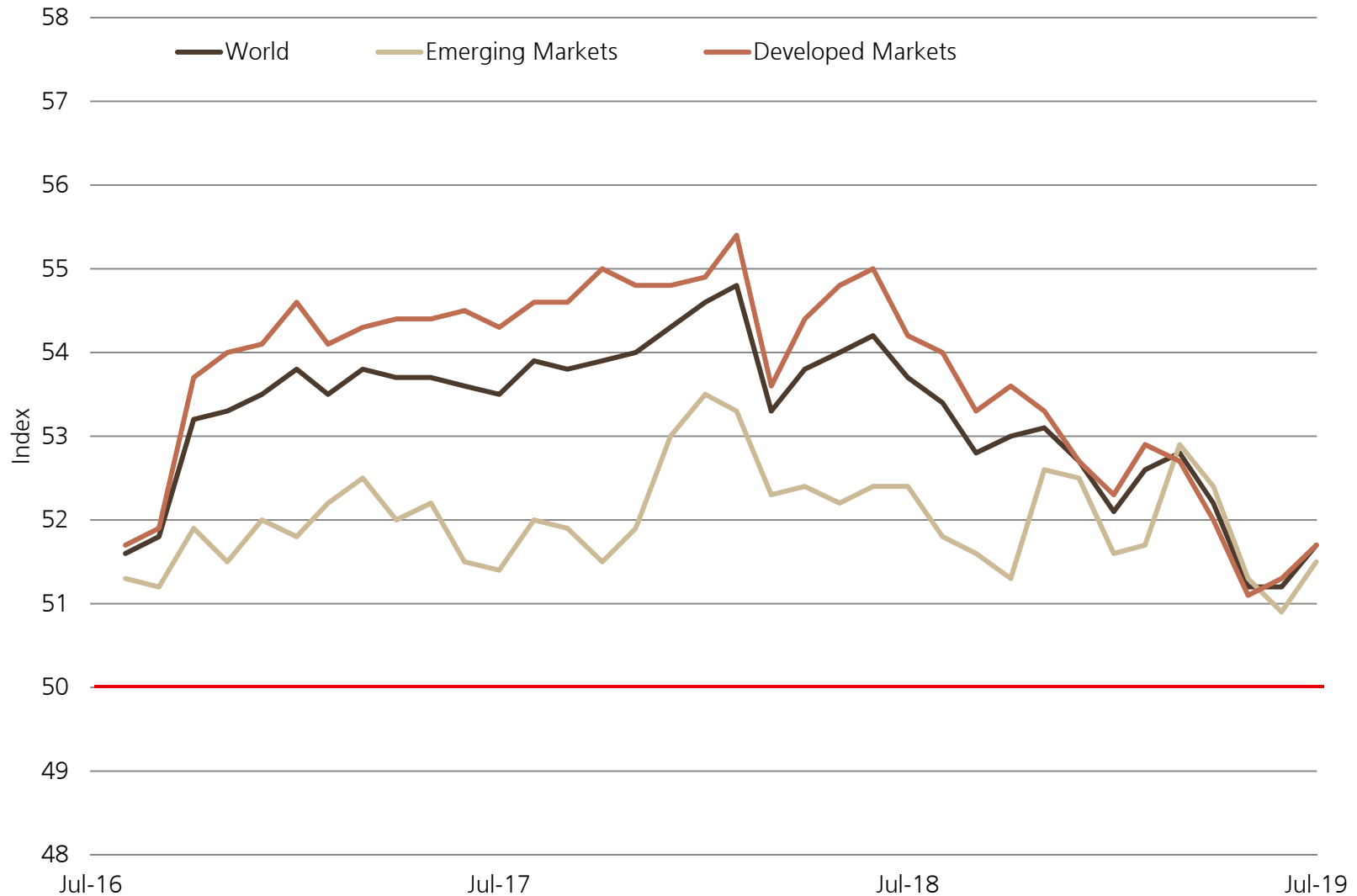
10-year government yields



Source: Bloomberg
As of August 28, 2019

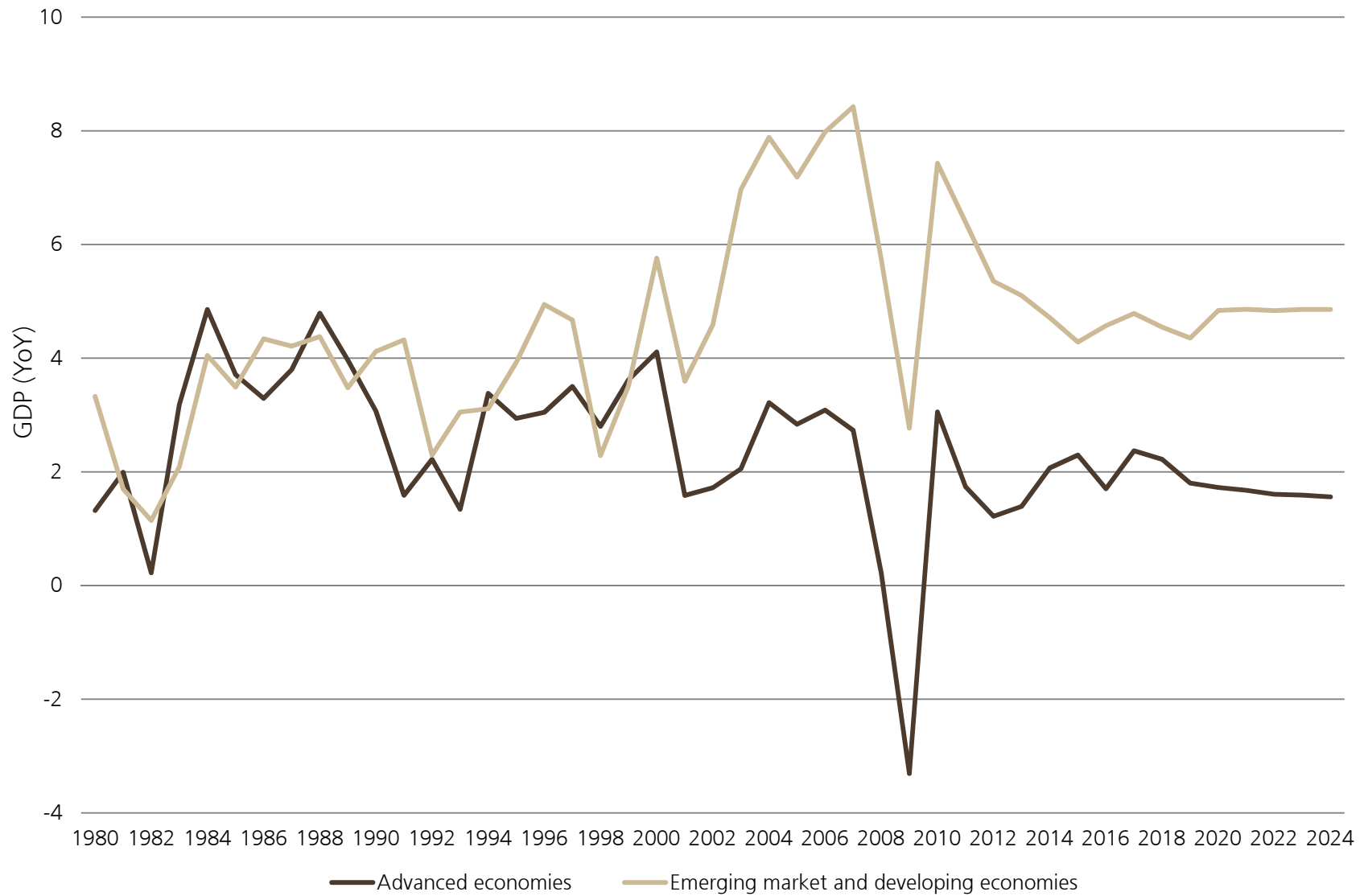
Global growth is stabilizing just above trend

Global PMIs are now consistent with trend growth (~52) & in expansionary territory (>50)



Source: UBS Asset Management, Bloomberg as of July 31, 2019

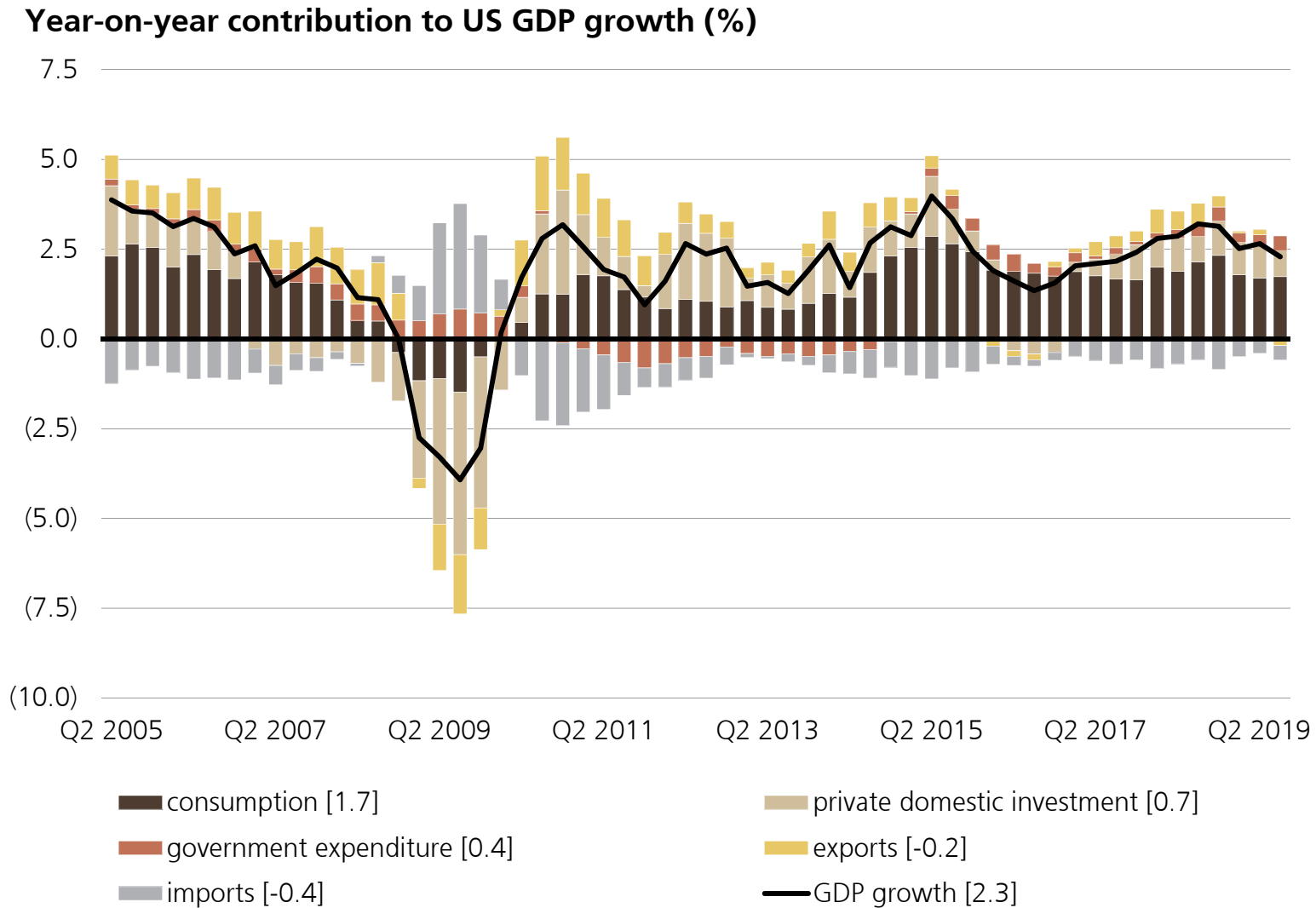
IMF advanced vs. emerging market growth



Source: International Monetary Fund, World Economic Outlook Database
As of April 2019

US GDP supportive of higher U.S. rates relative to many developed market rates

US economic growth

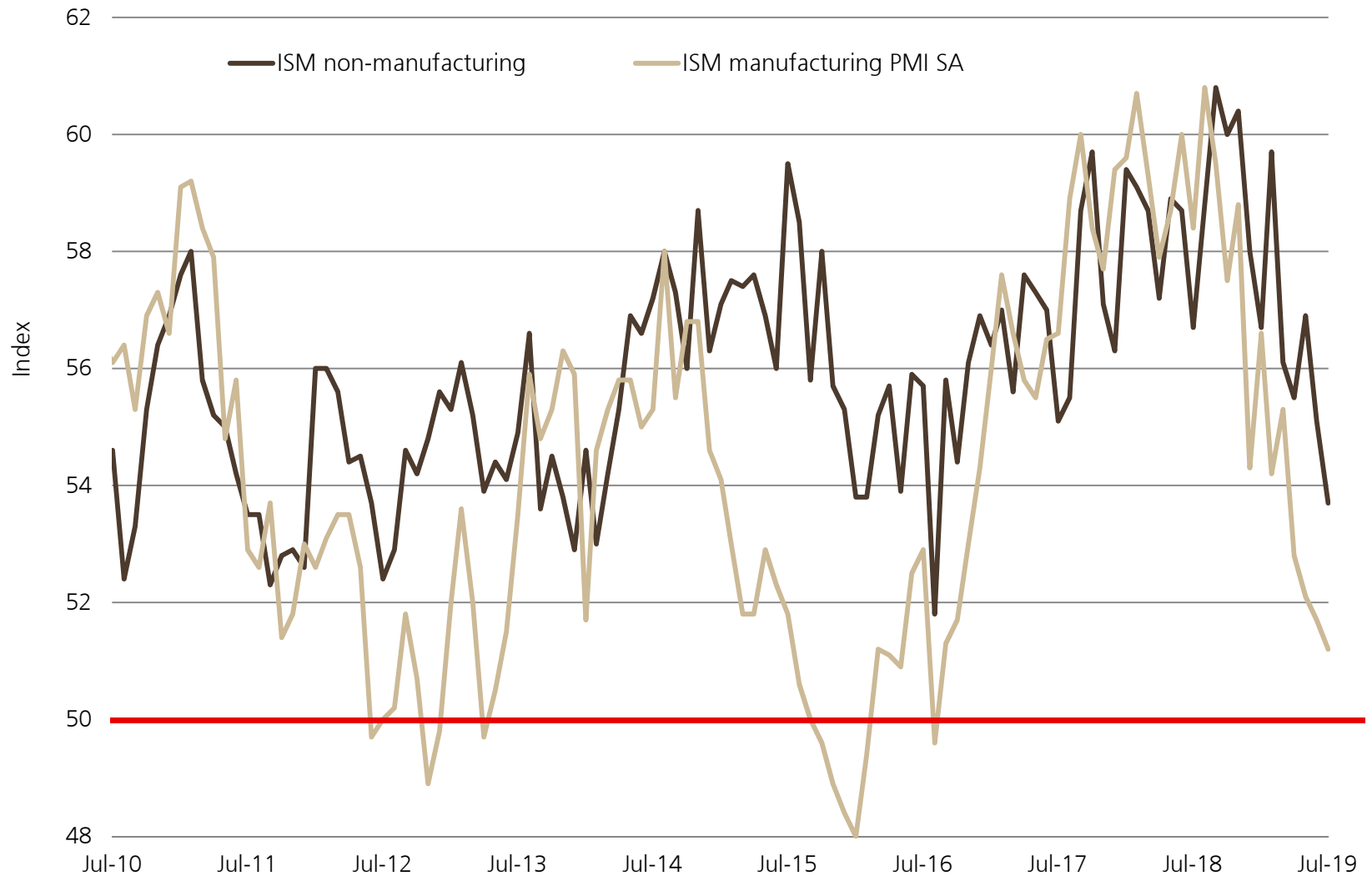


Source: Bloomberg
As of July 31, 2019



Slowdown in manufacturing, but watch non-manufacturing closely

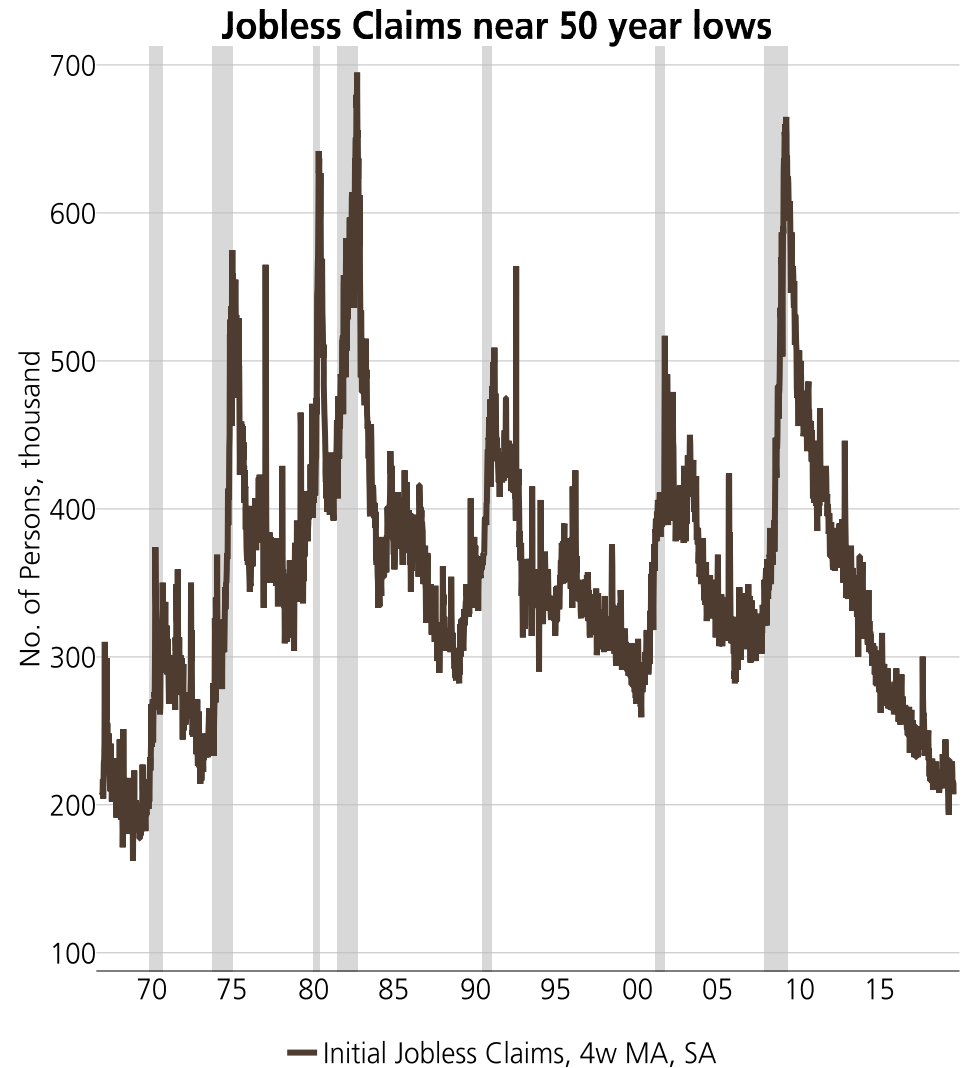
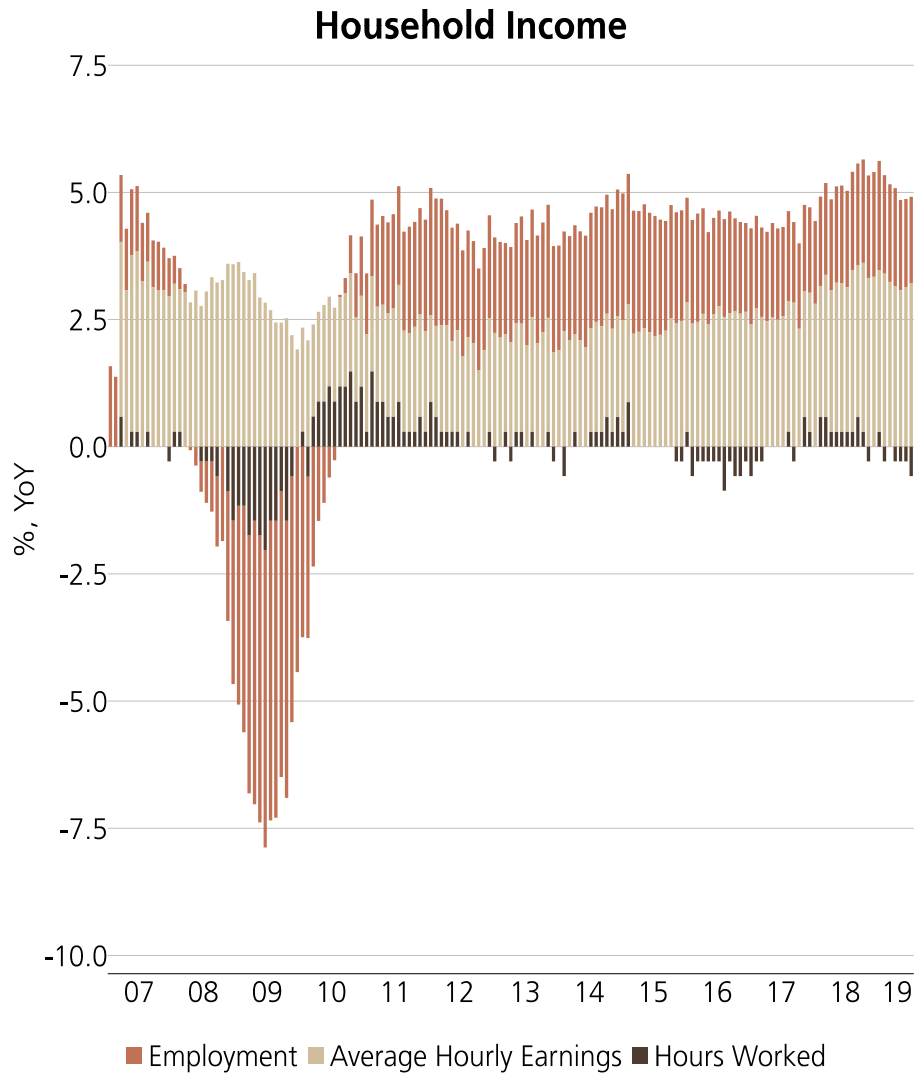
Service sector has remained resilient so far



Source: UBS Asset Management, Bloomberg as of July 31, 2019

Household incomes moderating but remain solid

The consumer, primary driver of the economy, remains strong

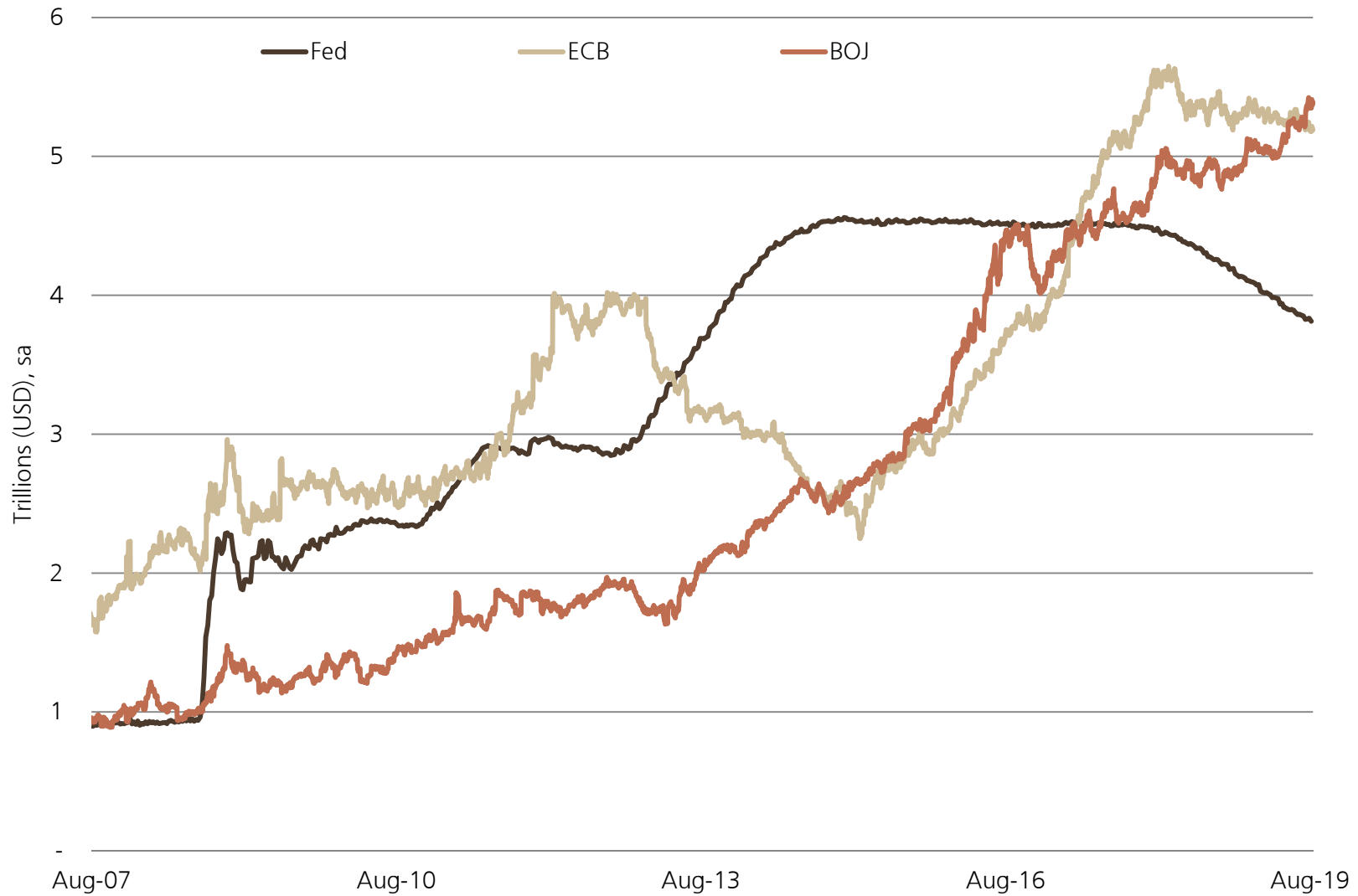


Source: UBS Asset Management, Macrobond. Data up to July, 2019

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Central bank balance sheets

Major central banks: total assets

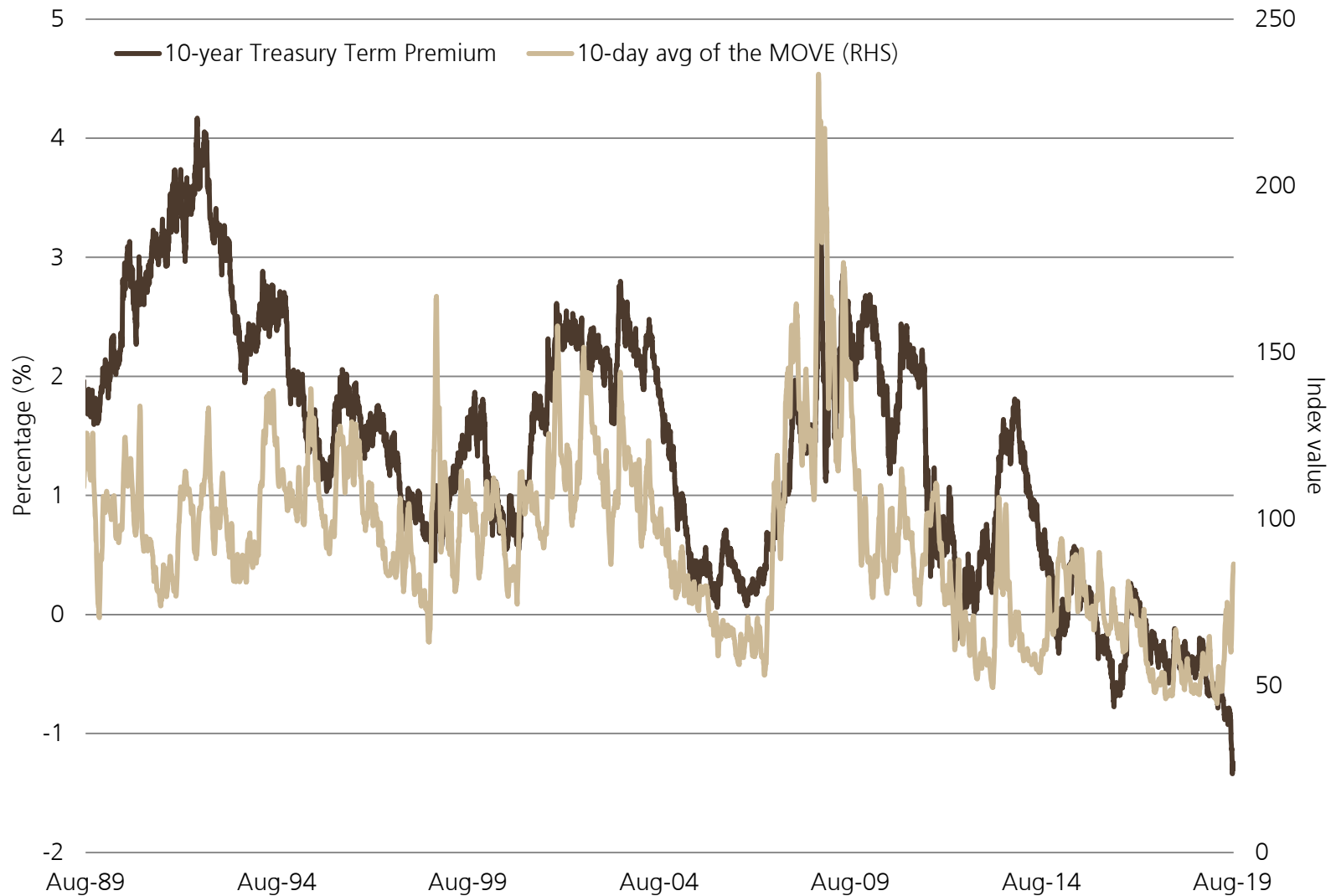


Source: Bloomberg
As of August 28, 2019



Less compensation demanded to hold longer term bonds

US Treasury 10-year term premium & MOVE index – Is the US curve distorted?

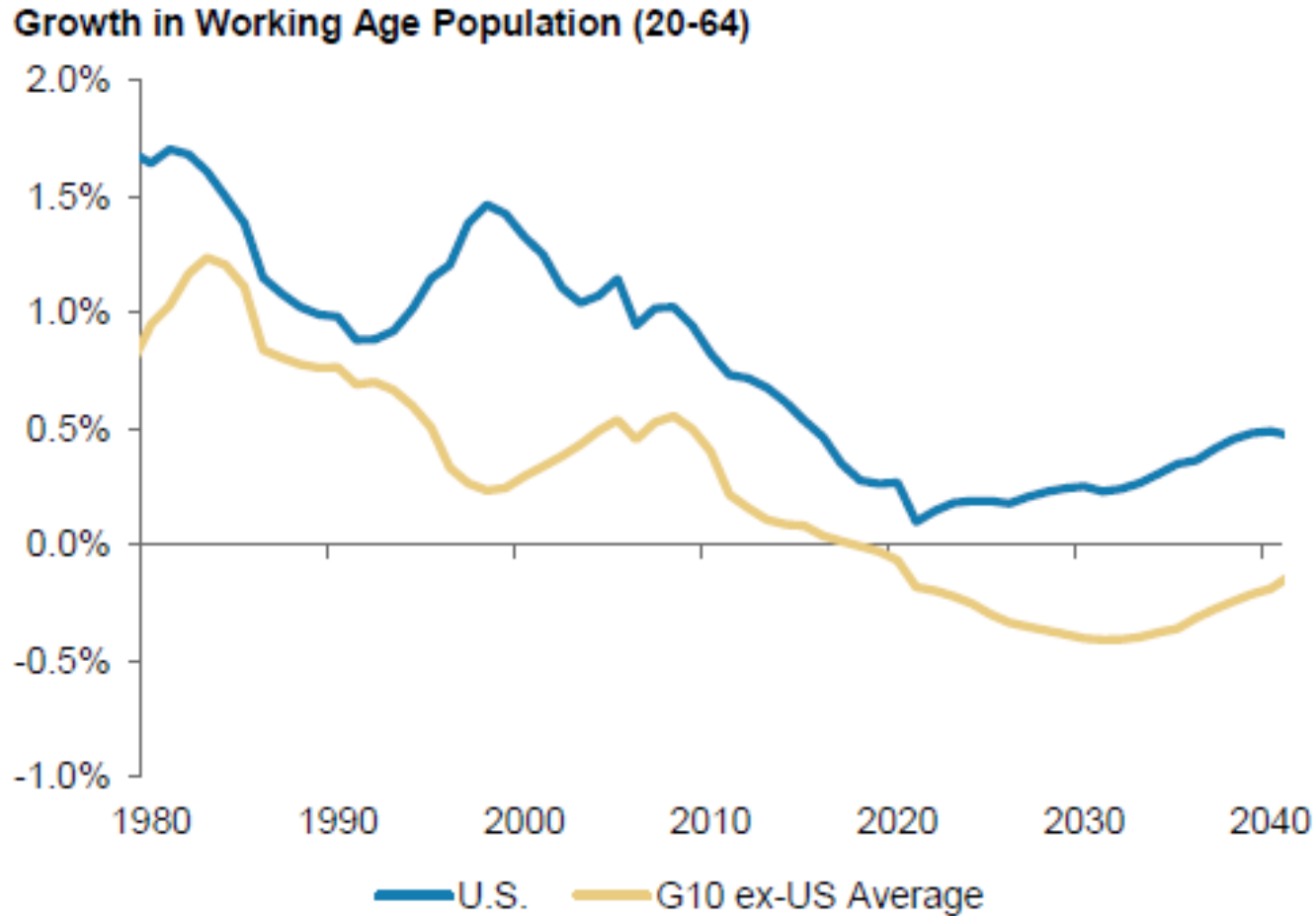


Source: Bloomberg
As of August 28, 2019



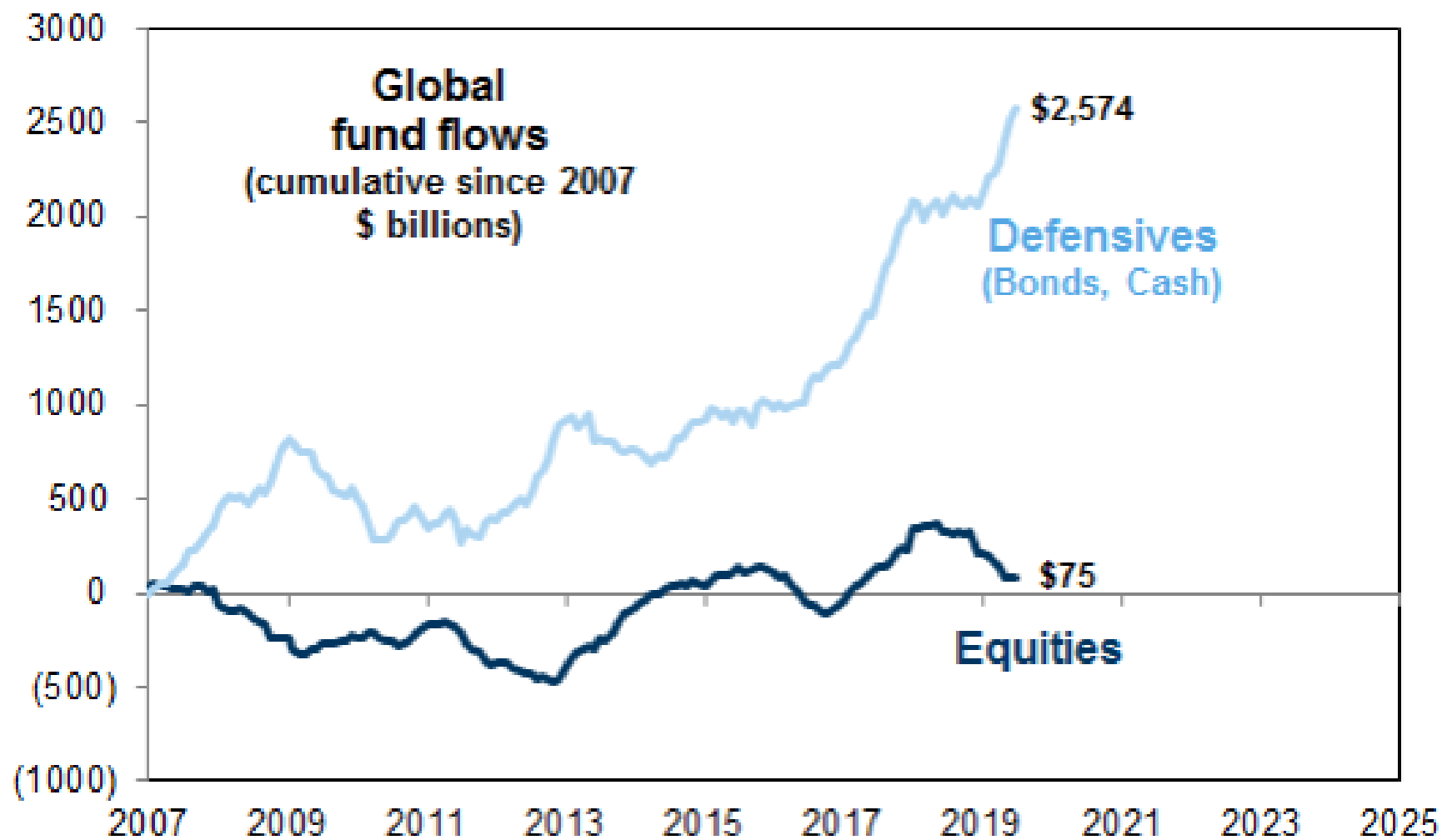
Demographics

Working-age population



Source: United Nations, Morgan Stanley Research

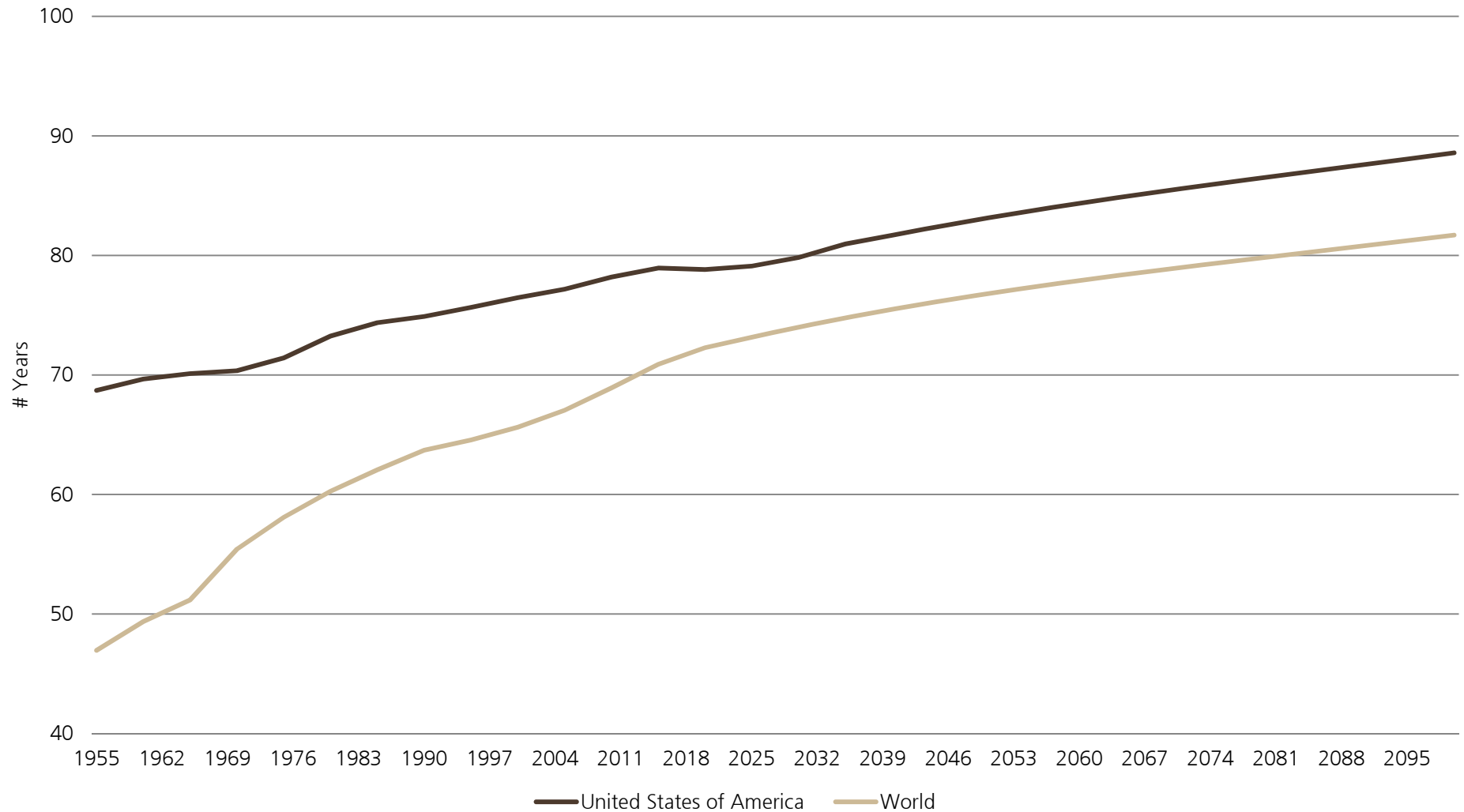
Strong flows into fixed income & cash funds



Source: Goldman Sachs
As of June 30, 2019

Longer life expectancy likely leads to higher savings rates

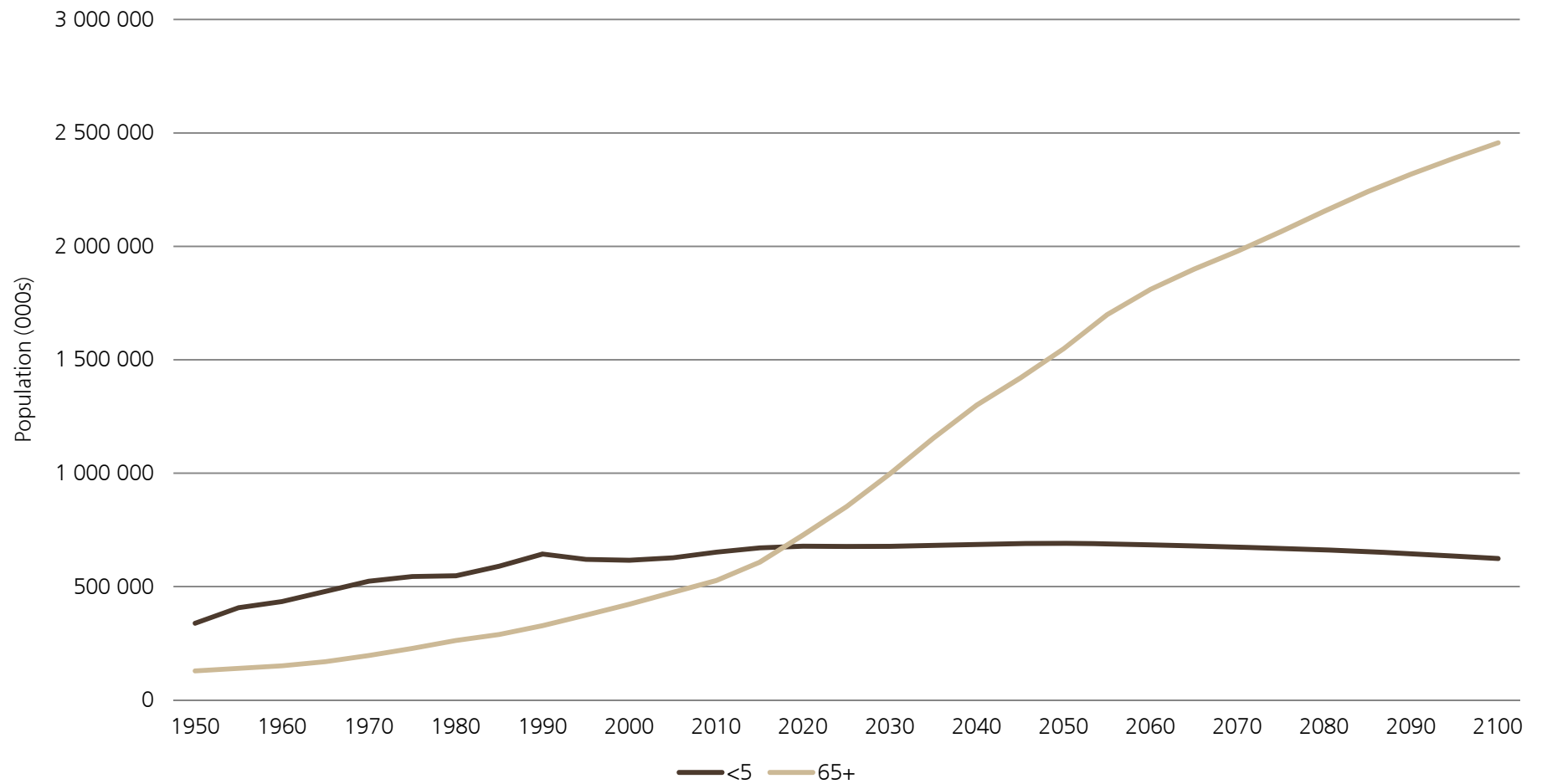
Life expectancy at birth for the US and World from UN plus projections going forward



Source: Bloomberg
As of June 30, 2019

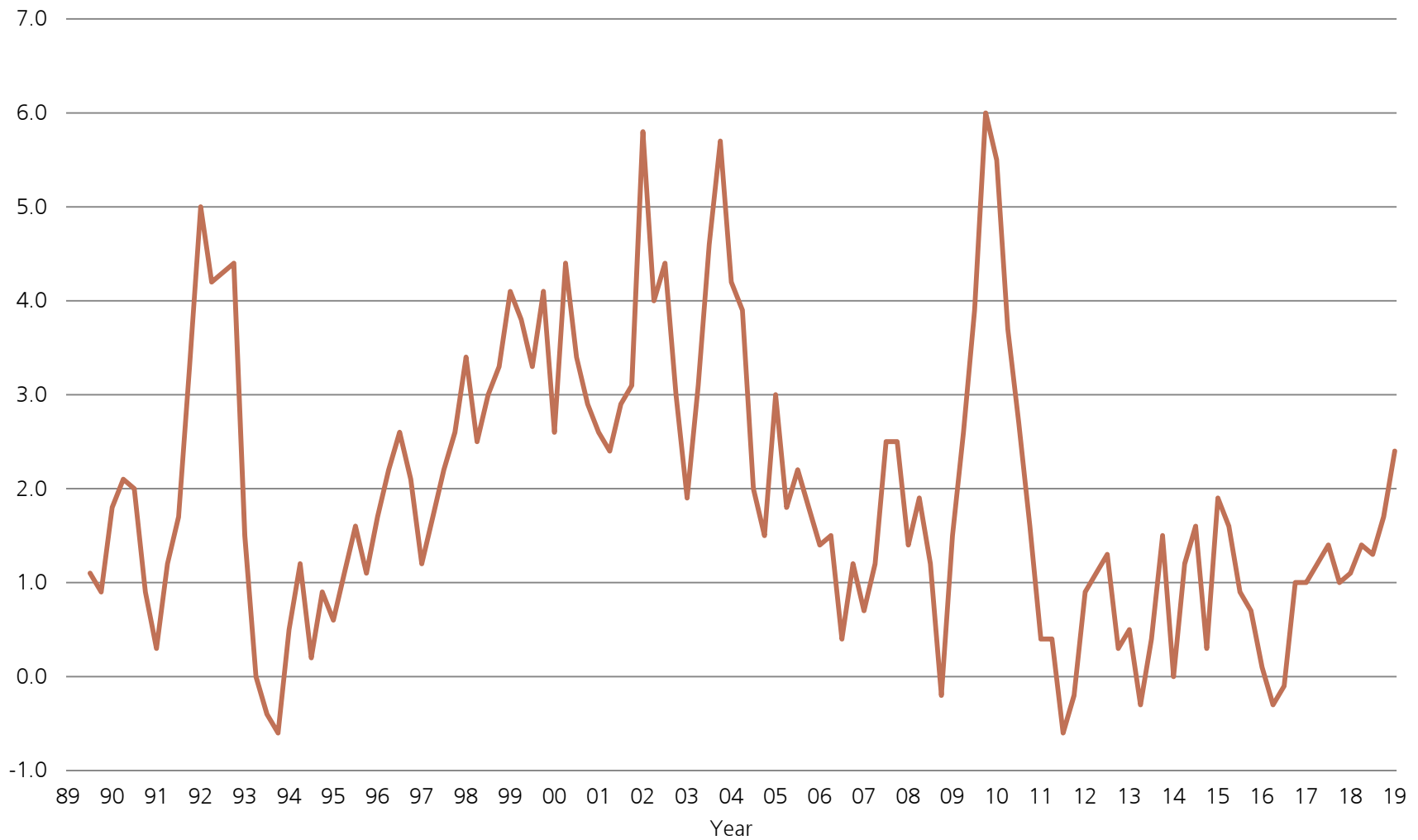


World population is aging



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, custom data acquired via website

Productivity improving



Source: Bureau of labor statistics, Bloomberg



Section 3

Inflation status

Structural factors likely keep inflation in check for a while



- Global excess supply



- Global working age population



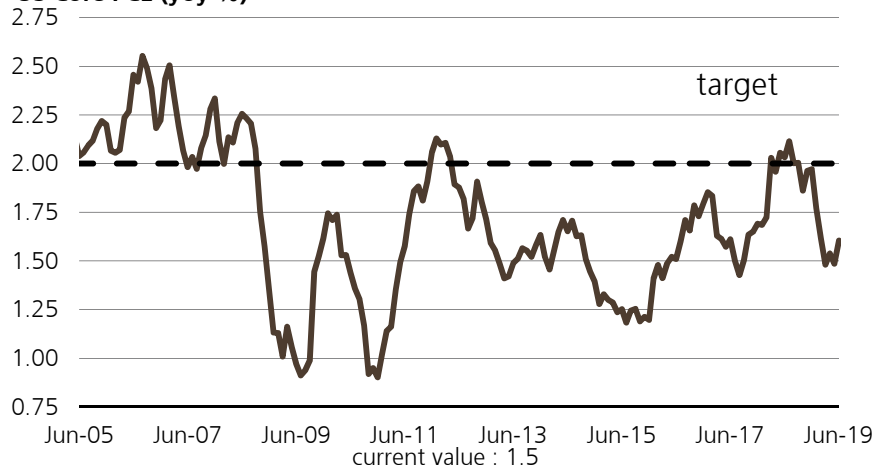
- Developed market demographics



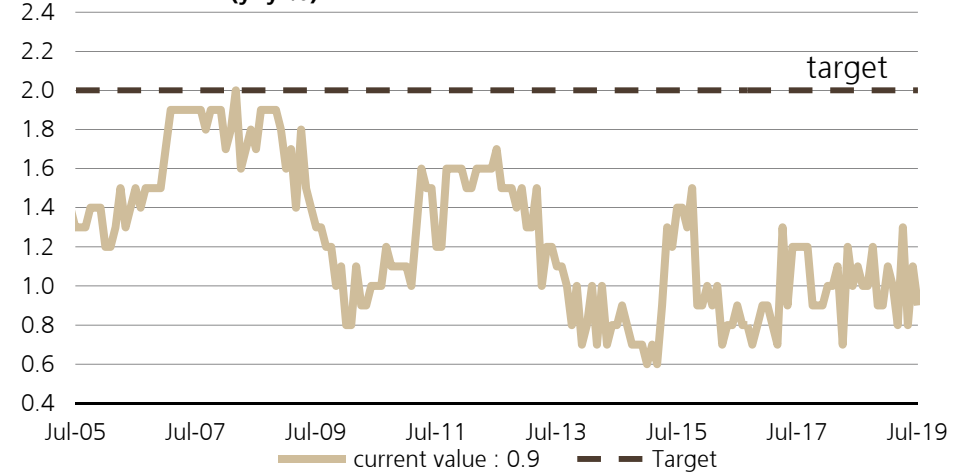
- Technology
-

US, EUR, Swiss & JPY Inflation

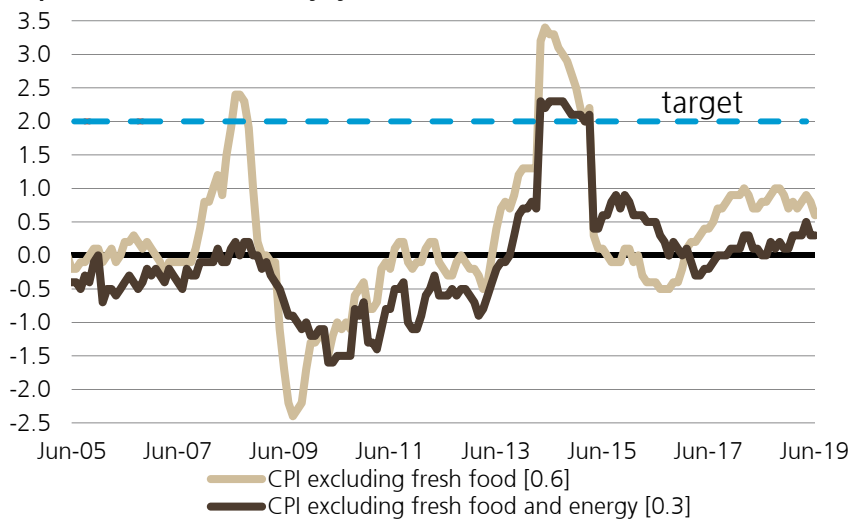
US Core PCE (yoy %)



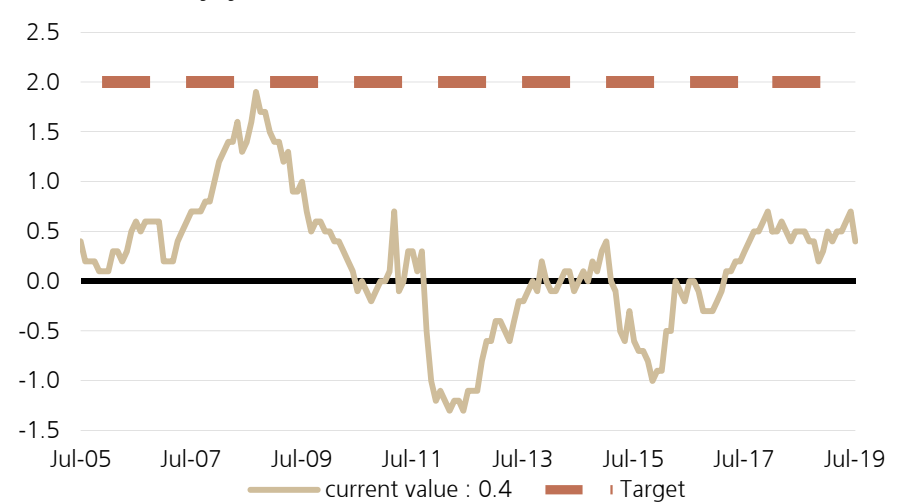
Eurozone Core CPI (yoy %)



Japan Core CPI measures (yoy %)

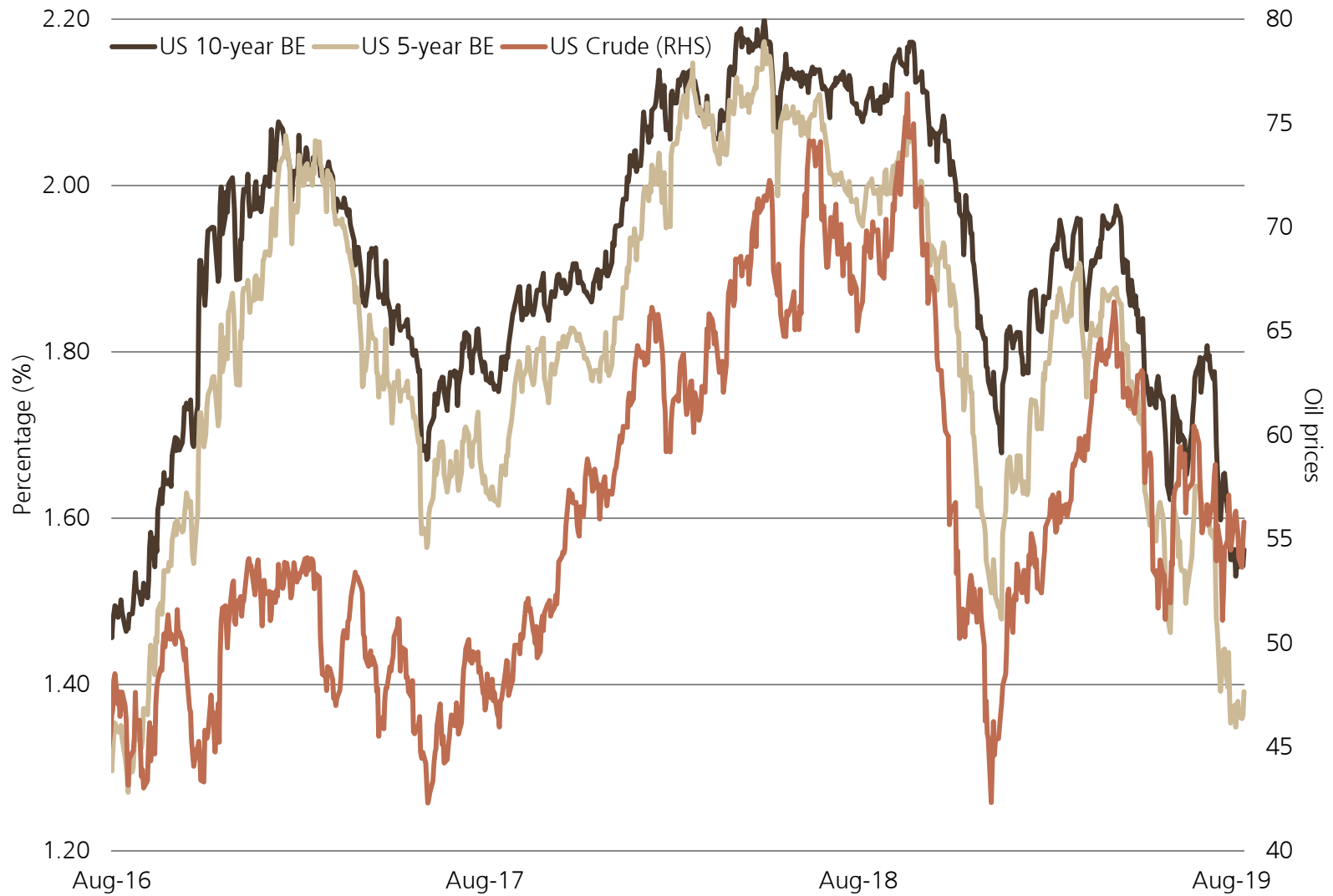


Swiss Core CPI (yoy %)



Source: Bloomberg
As of August 28, 2019

US TIPS inflation breakeven rates have come down



Source: Bloomberg
As of August 28, 2019

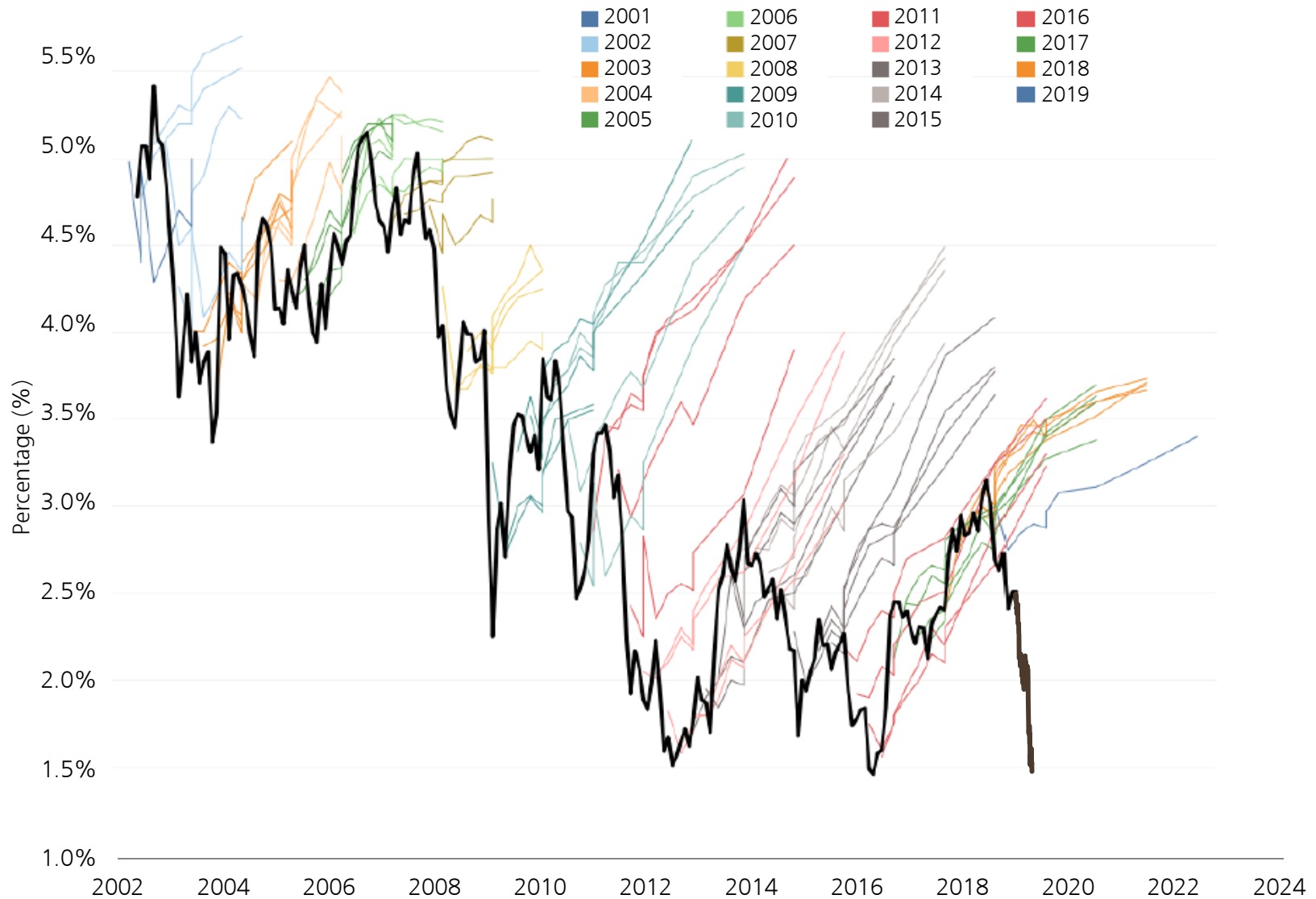


Section 4

Interest rate outlook

Expectations for higher rates has been common theme

Survey of professional forecasters - 10yr US Treasury yield

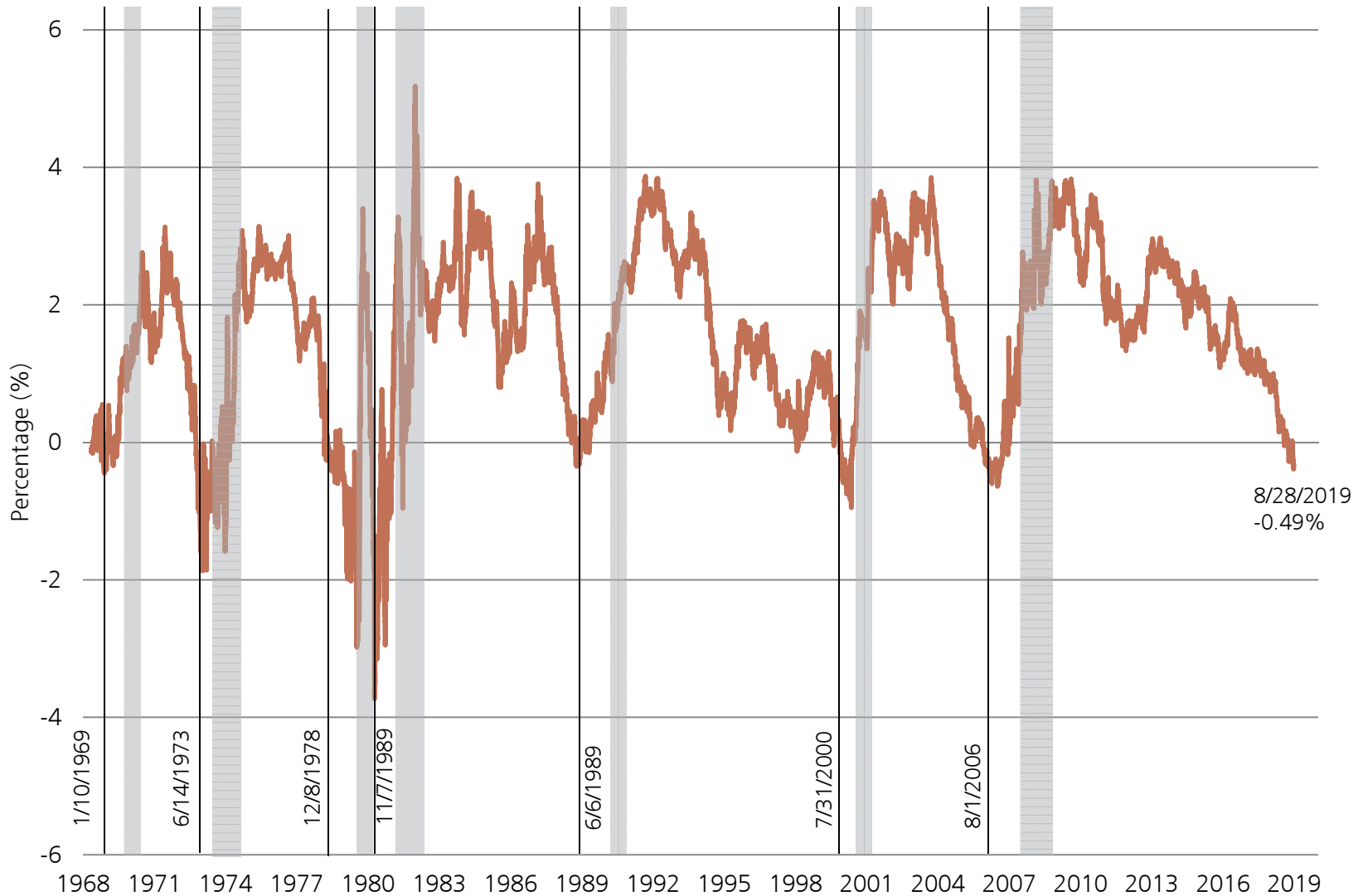


Source: Federal Reserve Bank of Philadelphia, Bianco Research LLC
As of August 28, 2019



Yield curve inversions lead recessions

10yr less 3mo yield curve



Source: Bianco Research LLC
As of August 28, 2019



How long until the next recession?

When the 3 month/10 year yield curve inverts for 10 straight days

Is this signal diluted by lower term premium and global search for yield?

Date of Inversion	Date of Next Recession	Days to Next Recession
1/10/1969	Dec-69	325
6/14/1973	Nov-73	140
12/8/1978	Jan-80	389
11/7/1980	Jul-81	236
6/6/1989	Jul-90	390
7/31/2000	Mar-01	213
8/1/2006	Dec-07	487
6/6/2019	?	?
Average		311

Source: Bianco Research LLC
As of August 28, 2019

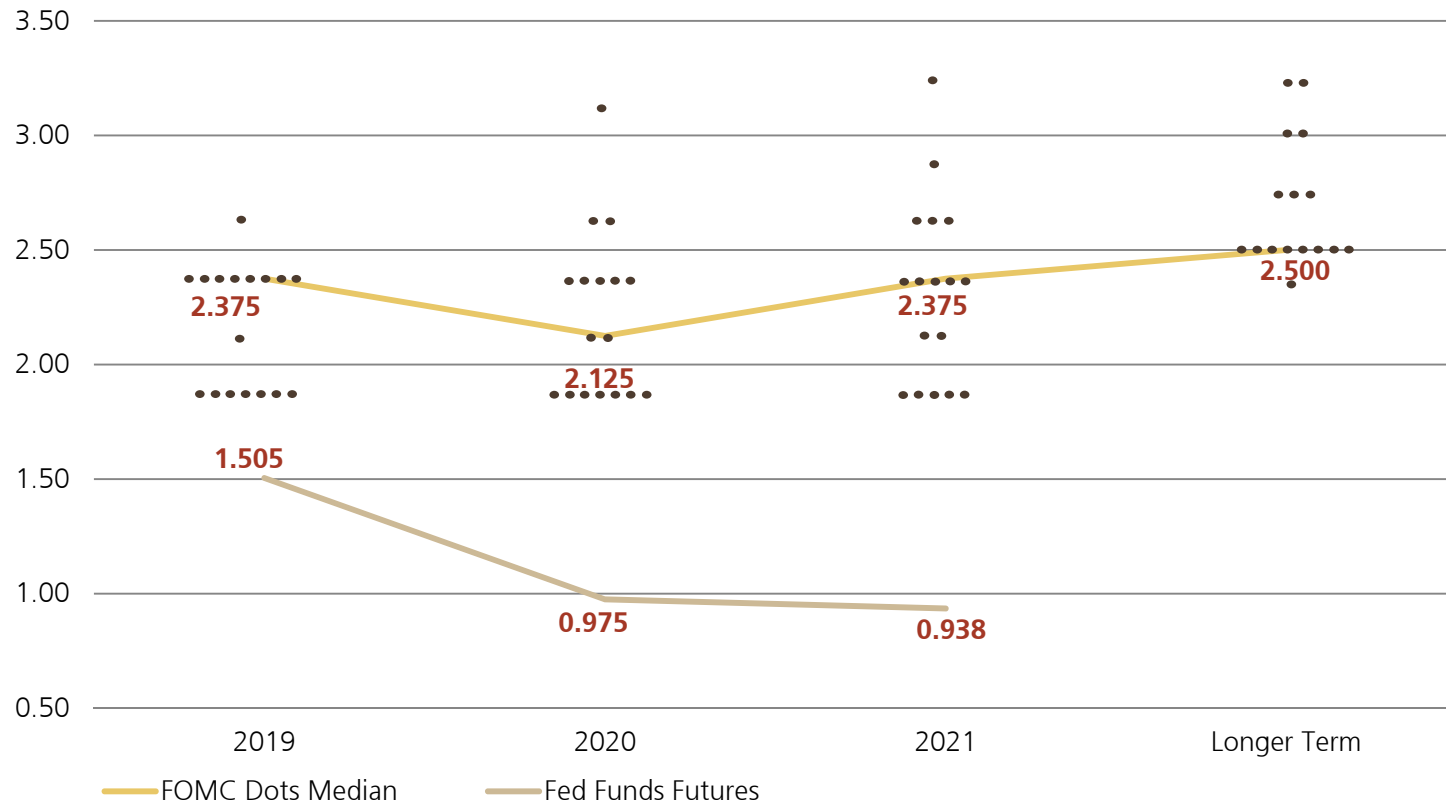


FOMC dot projections

Distribution of FOMC members projections for Fed Funds rate

Meeting date 6/19/2019

- 2 easings in 2019
- 2 easings in 2020



Source: Federal Reserve
As of August 28, 2019

Overnight Index Swap (OIS) is an interest rate swap involving the overnight rate being exchanged for a fixed interest rate. An overnight index swap uses an overnight rate index, such as the Federal Funds Rate, as the underlying for its floating leg, while the fixed leg would be set at an assumed rate. Overnight index swaps are popular amongst financial institutions for the reason that the overnight index is considered to be a good indicator of the interbank credit markets, and less risky than other traditional interest rate spreads.

US interest rate movements going forward

The FOMC is data dependent and focused on risk management of cross currents ("mid cycle adjustment to policy")

Rates Up

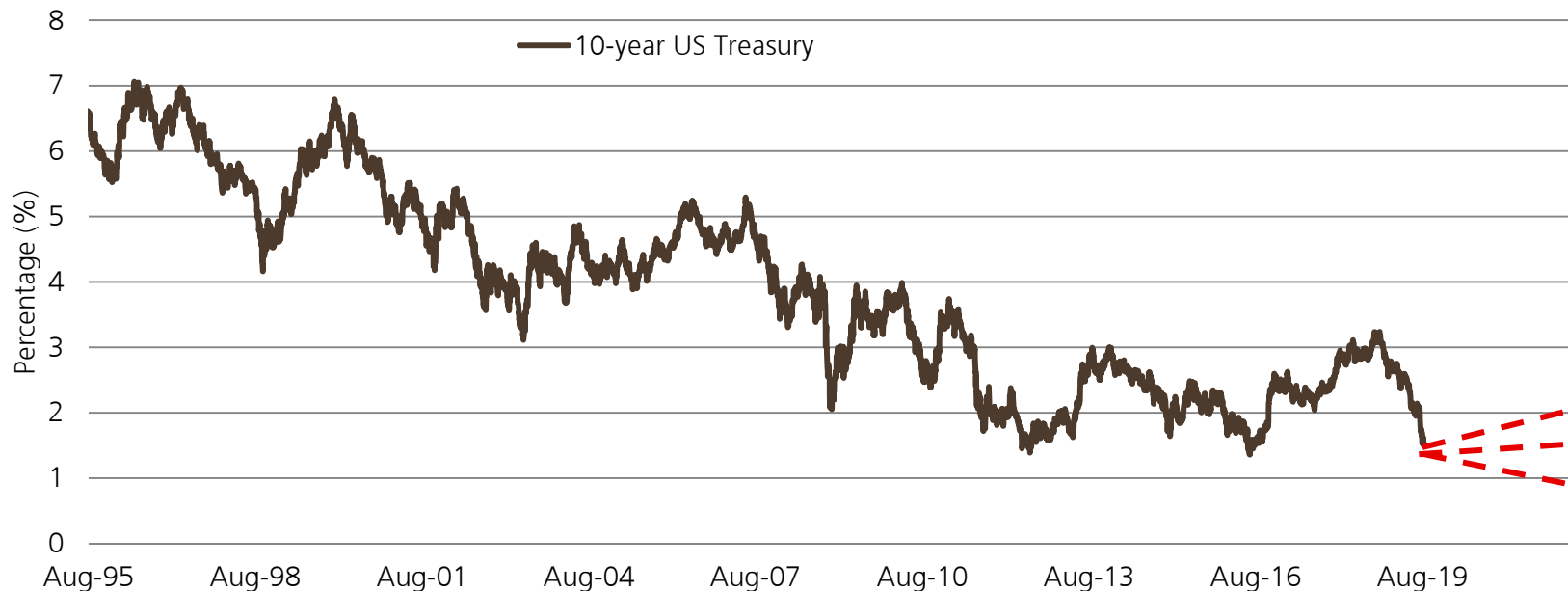
- Inflation accelerates above 2%
- US – China trade deal completed
- Sustained pick-up in global growth

Rates range bound

- Economic and geopolitical uncertainties continue
- 2% US GDP with inflation 1.75% to 2.25%
- Expected range 1.25% - 2.00%

Rates down

- Financial conditions tighten too much against Fed's forecast
- US economy sustainably slows below 2% GDP with low inflation
- Global growth slows systematically



Source: UBS Asset Management
As of August 28, 2019



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