



September Economic Chart Book (Snapshot)

September 2019

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Enclosed are select charts from Torsten's September Economic Chart Book discussing:

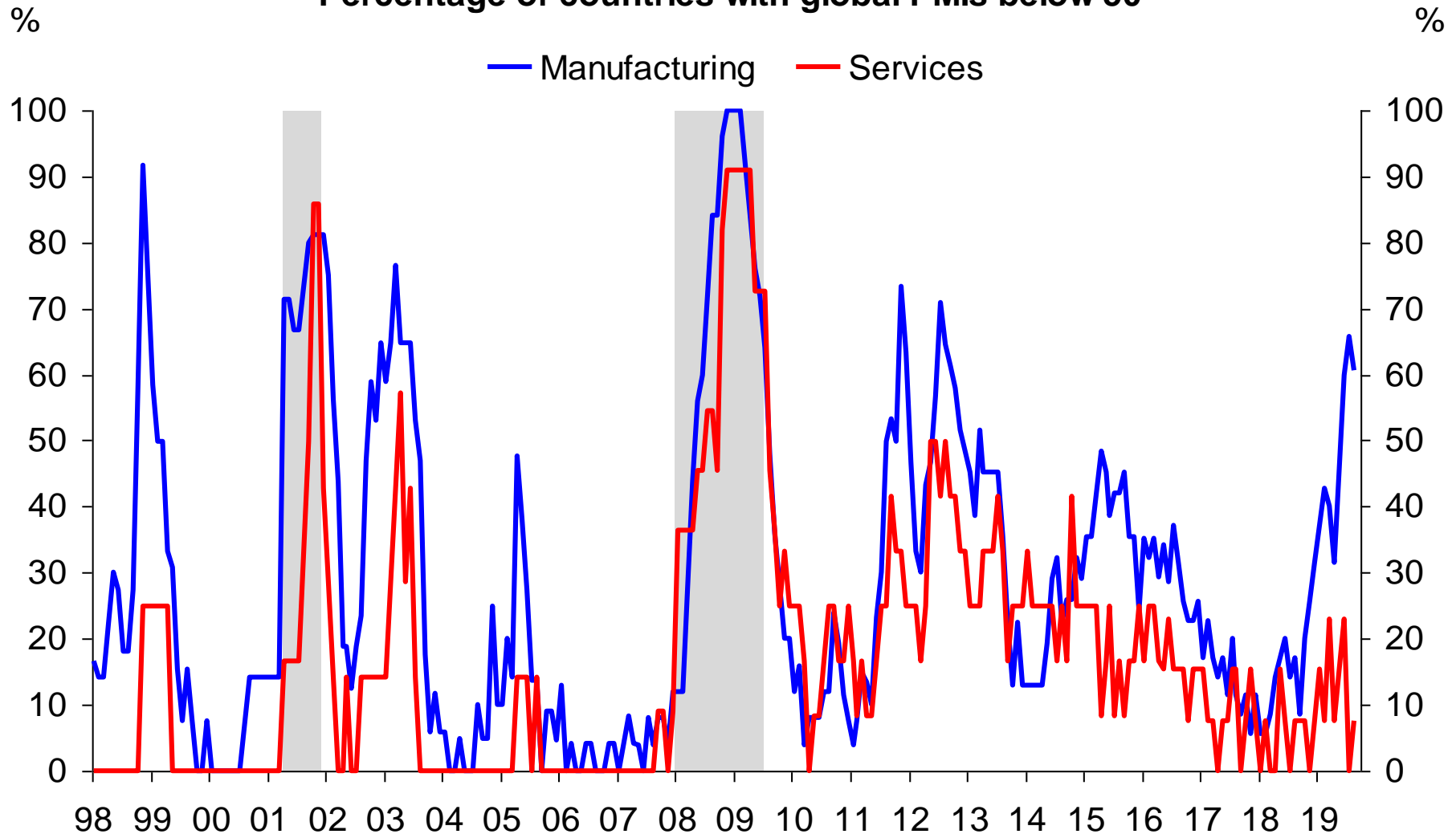
- Trade Ware escalation and how its impacting the major economic centers
- The collapse in global bond yields and what it could mean for recession risks
- Reaction functions by the FOMC and other major Central Banks
- Current State of the Consumer

[Link to Torsten Slok's full September Economic Chart Book can be found here.](#)

Highly unusual disconnect: Global manufacturing in deep recession. Service sector doing fine



Percentage of countries with global PMIs below 50

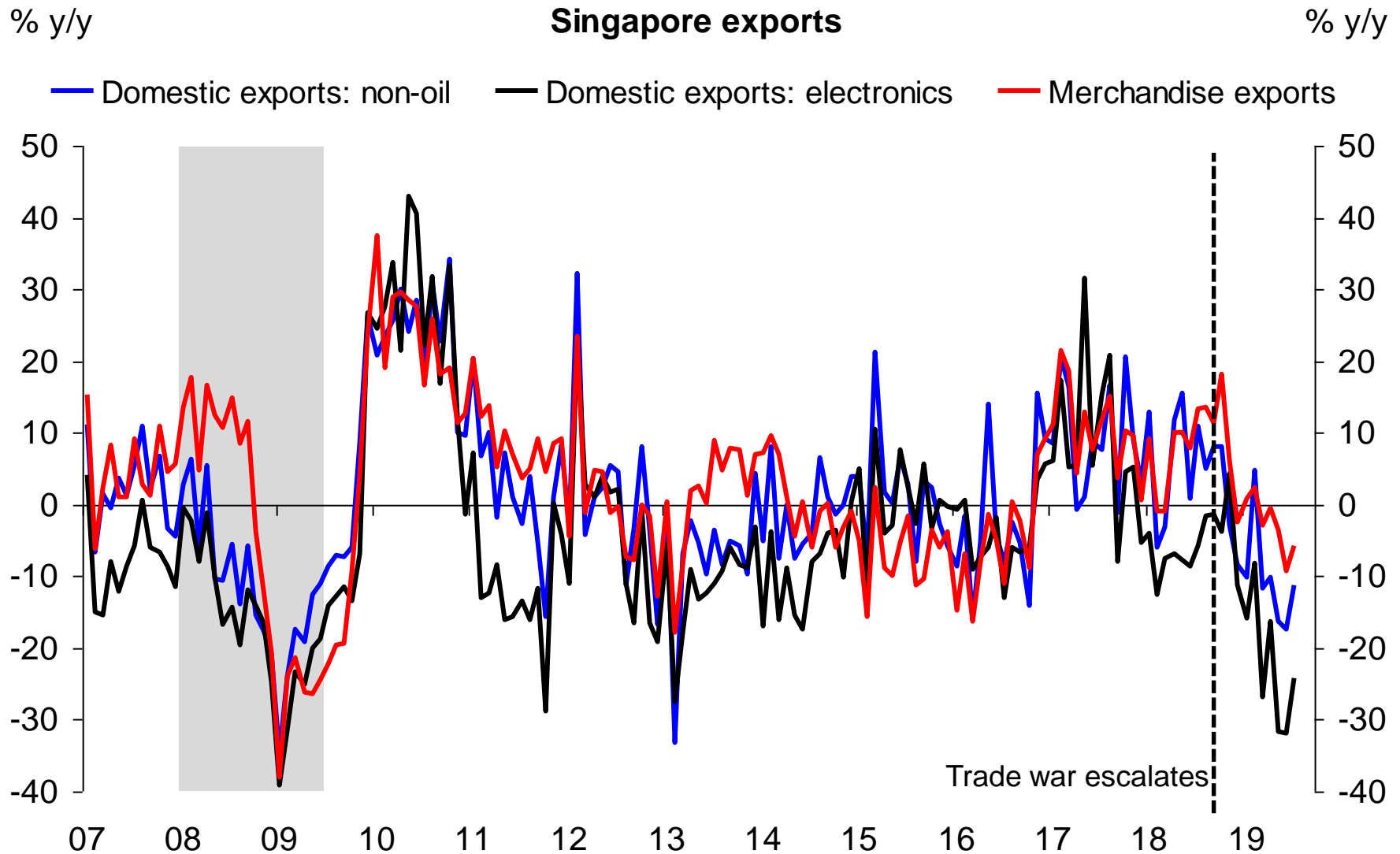


Countries included are Austria, UK, US, Denmark, France, Germany, Italy, Netherlands, Switzerland, Canada, Japan, Greece, Ireland, Spain, Turkey, Istanbul, Australia, New Zealand, Brazil, Colombia, Mexico, Israel, Myanmar, Taiwan, India, Indonesia, Korea, Malaysia, Philippines, Thailand, Vietnam, Russia, China, Czech Republic and Poland

Source: IHSM, Haver Analytics, DB Global Research



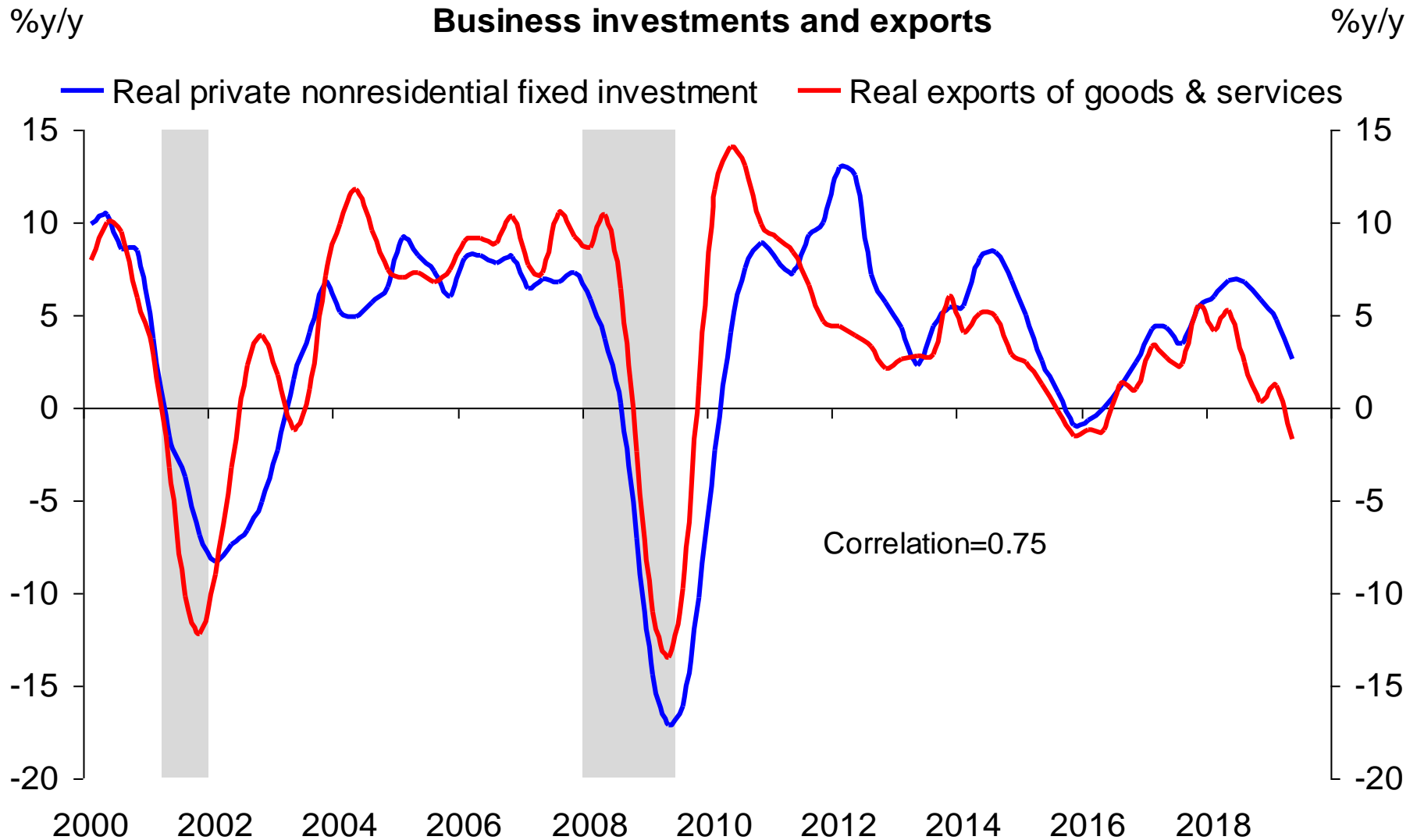
Trade war hitting global trade hard



Source: International Enterprise Singapore, Haver Analytics, DB Global Research



US: Capex and exports not doing well

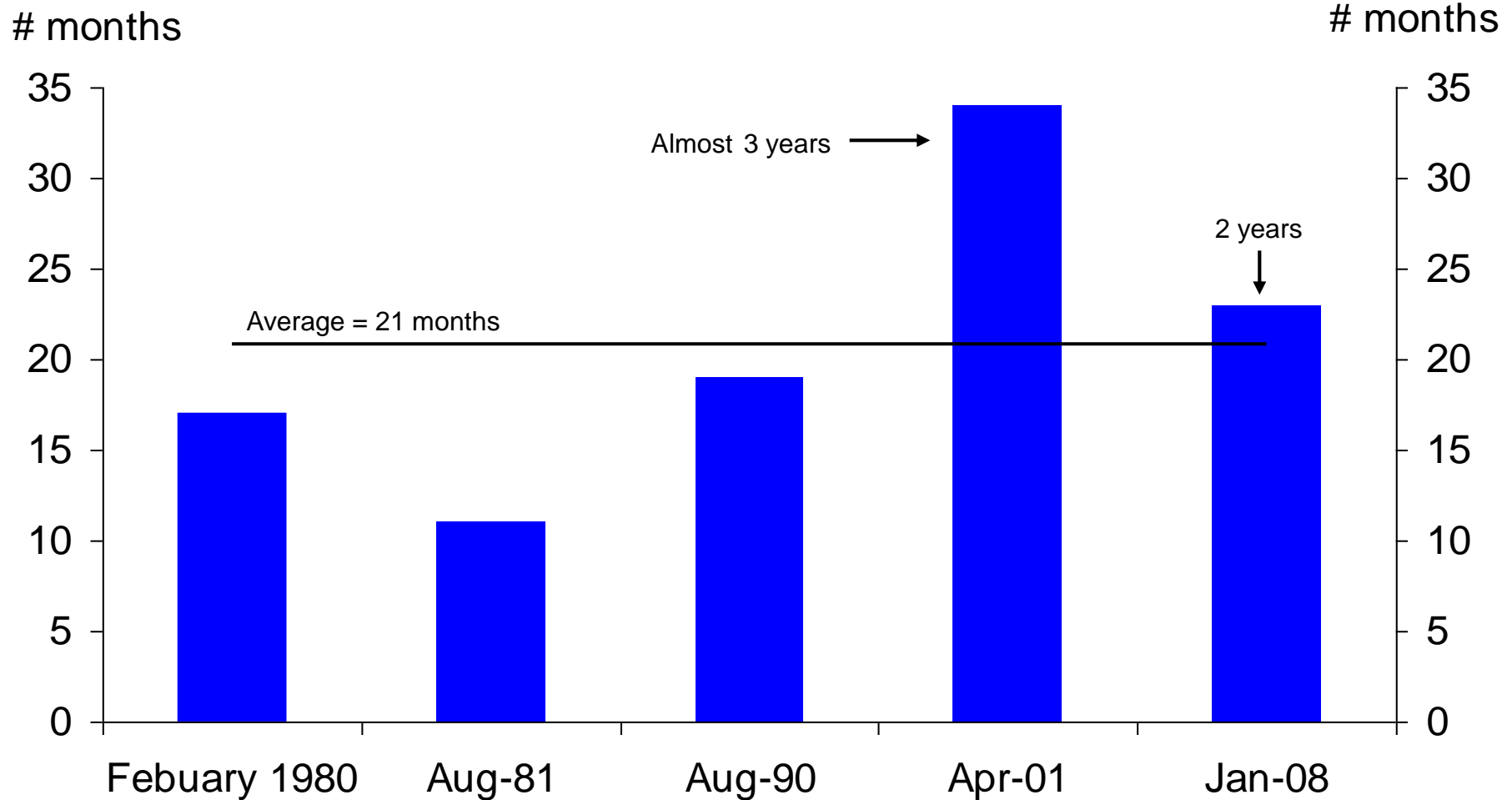


Source: BEA, Haver Analytics, DB Global Research



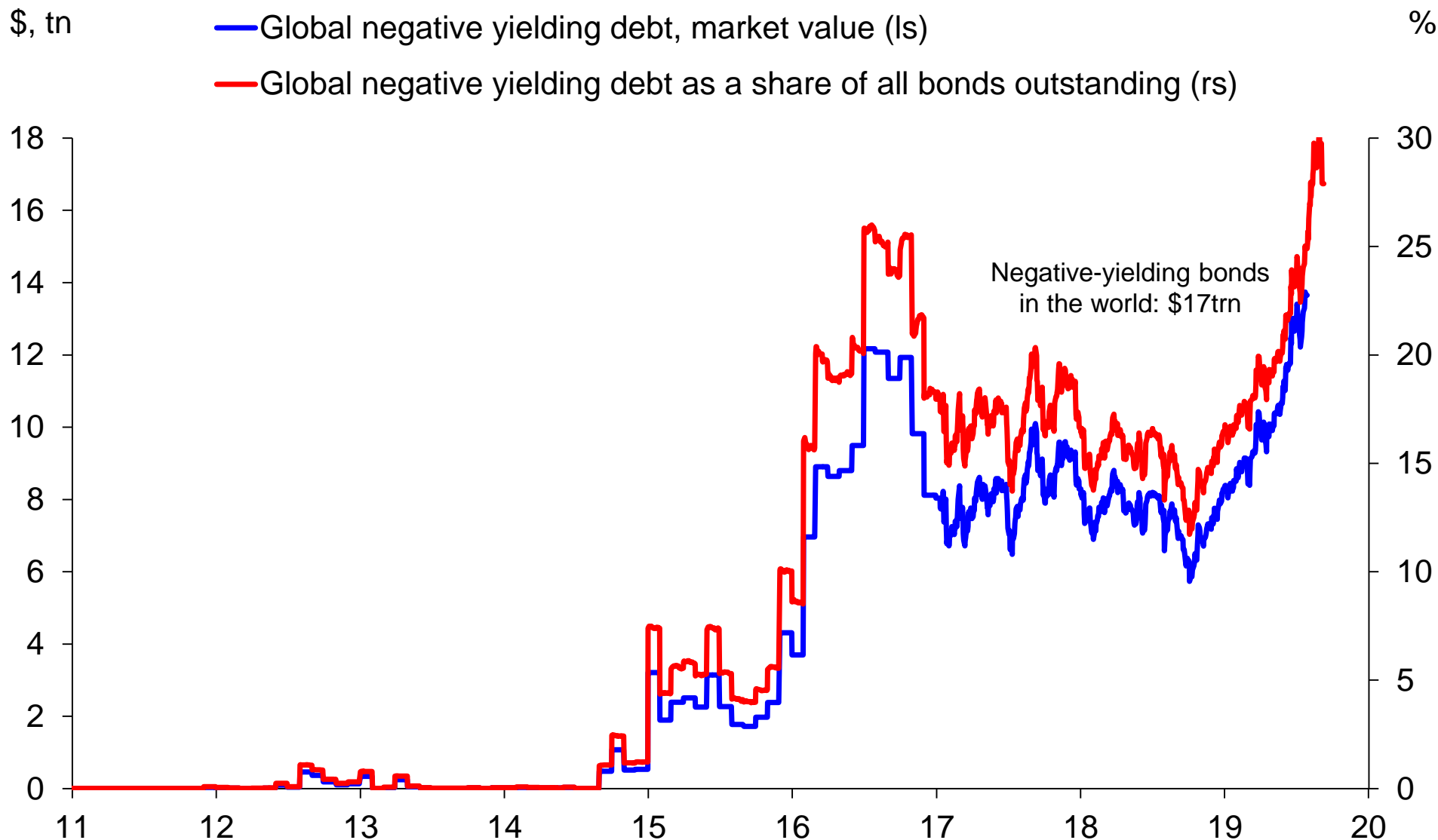
It takes one to three years from 2s-10s yield curve inversion until recession begins

Time from 2s-10s yield curve inversion until recession starts



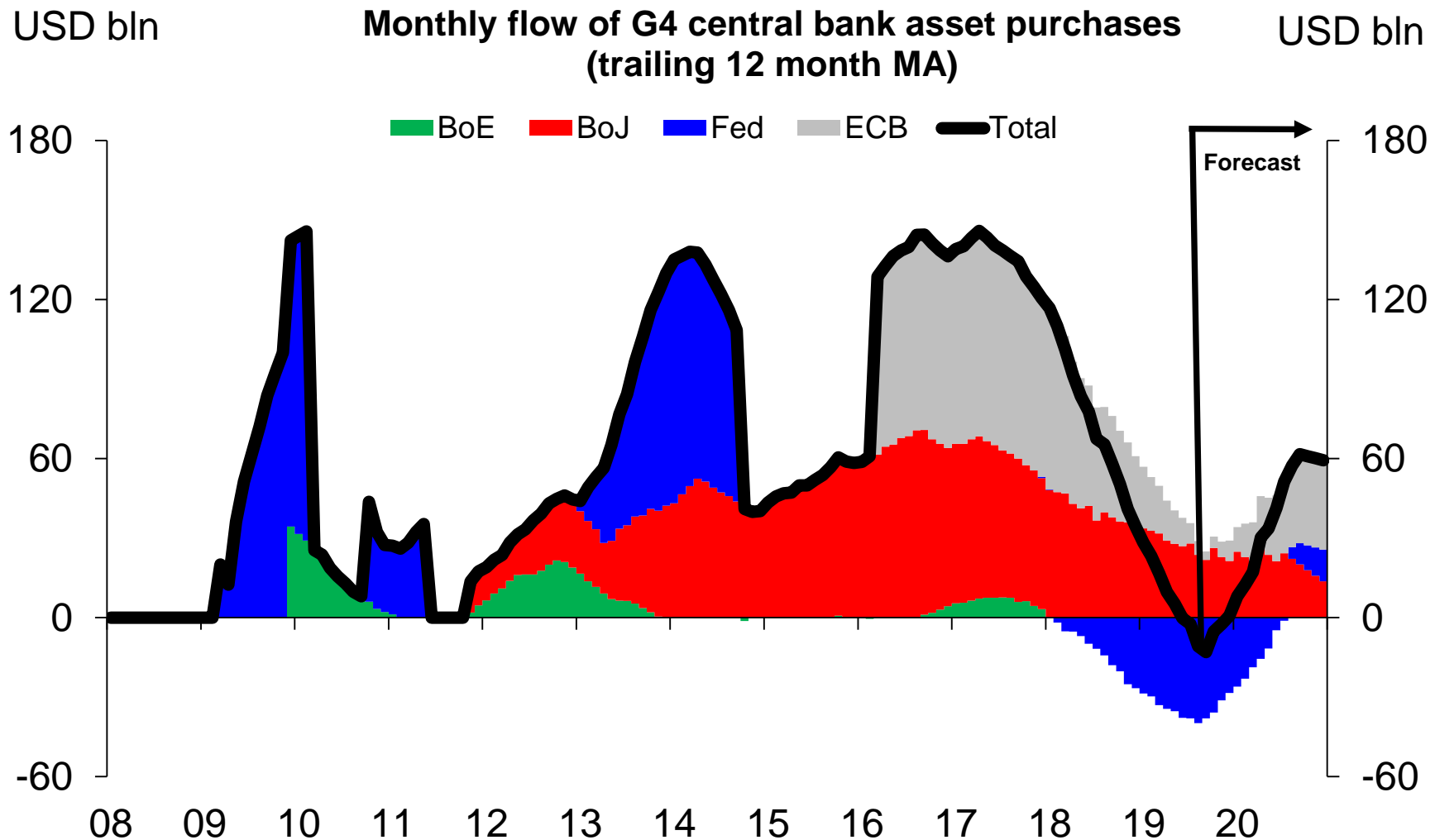
Source: FRB, Haver Analytics, DB Global Research

30% of all bonds in the world trade at negative interest rates



Source: Bloomberg Finance LP, DB Global Research

Central bank asset purchases coming back



Assumptions: Fed to purchase \$ 16 bn assets monthly from March 2020 through December 2020; ECB to purchase EUR 30 bn assets monthly from September 2019 through December 2020; BoE to maintain assets as is through December 2020; BoJ to stealth taper asset purchases such that monthly purchases to become zero by December 2020 from July 2019. All FX forecasts assumed to be the same as July 2019.

Source: Fed, ECB, BoJ, BoE, Haver Analytics, DB Global Research

Overview: Policy options for US, Europe, and Japan when the next recession hits



United States:

Monetary policy: Rate cuts, forward guidance, average inflation targeting, QE, yield curve control, and CCyB. Negative interest rates unlikely, changing inflation target unlikely.

Fiscal policy: Automatic stabilizers, active countercyclical policies, infrastructure spending

Europe:

Monetary policy: Forward guidance, TLTRO, credit easing, depo tiering, QE, increase the 33% issuer-limit, add more asset classes to the eligible QE list.

Fiscal policy: Automatic stabilizers, German fiscal stimulus package, Italian structural reforms, complete banking union and capital markets union, more fiscal risk sharing.

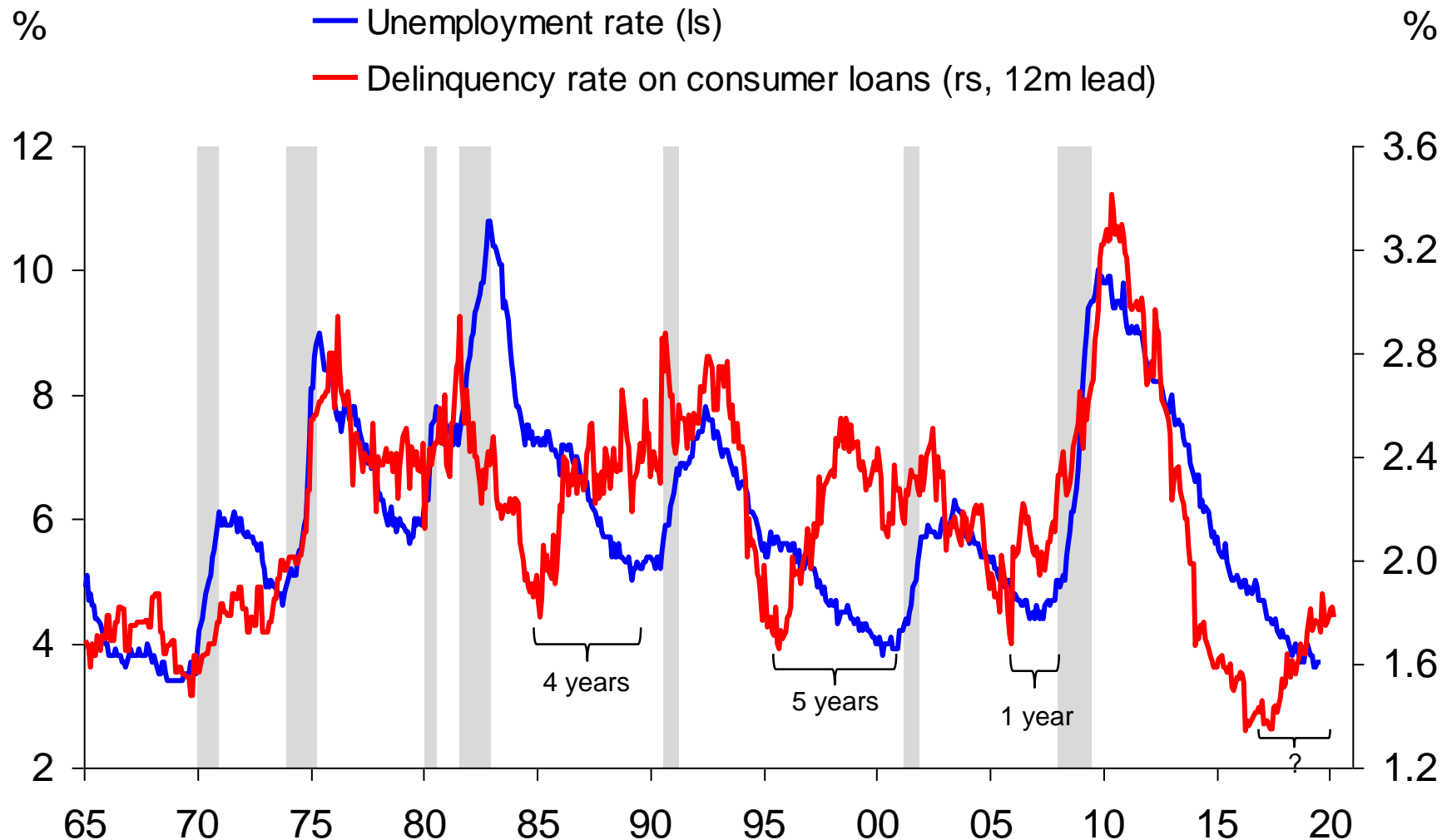
Japan:

Monetary policy: Rate cuts, forward guidance, lower 10y yield target, increase ETF purchase volume, increase JGB purchase volume, purchase other assets such as mortgages or munis. Impact of these initiatives would likely be minimal. TLTRO expected to harm bank earnings.

Fiscal policy: Postpone October's consumption tax hike, increase infrastructure spending



The credit cycle is leading the economic cycle. Economic slowdown risk is rising

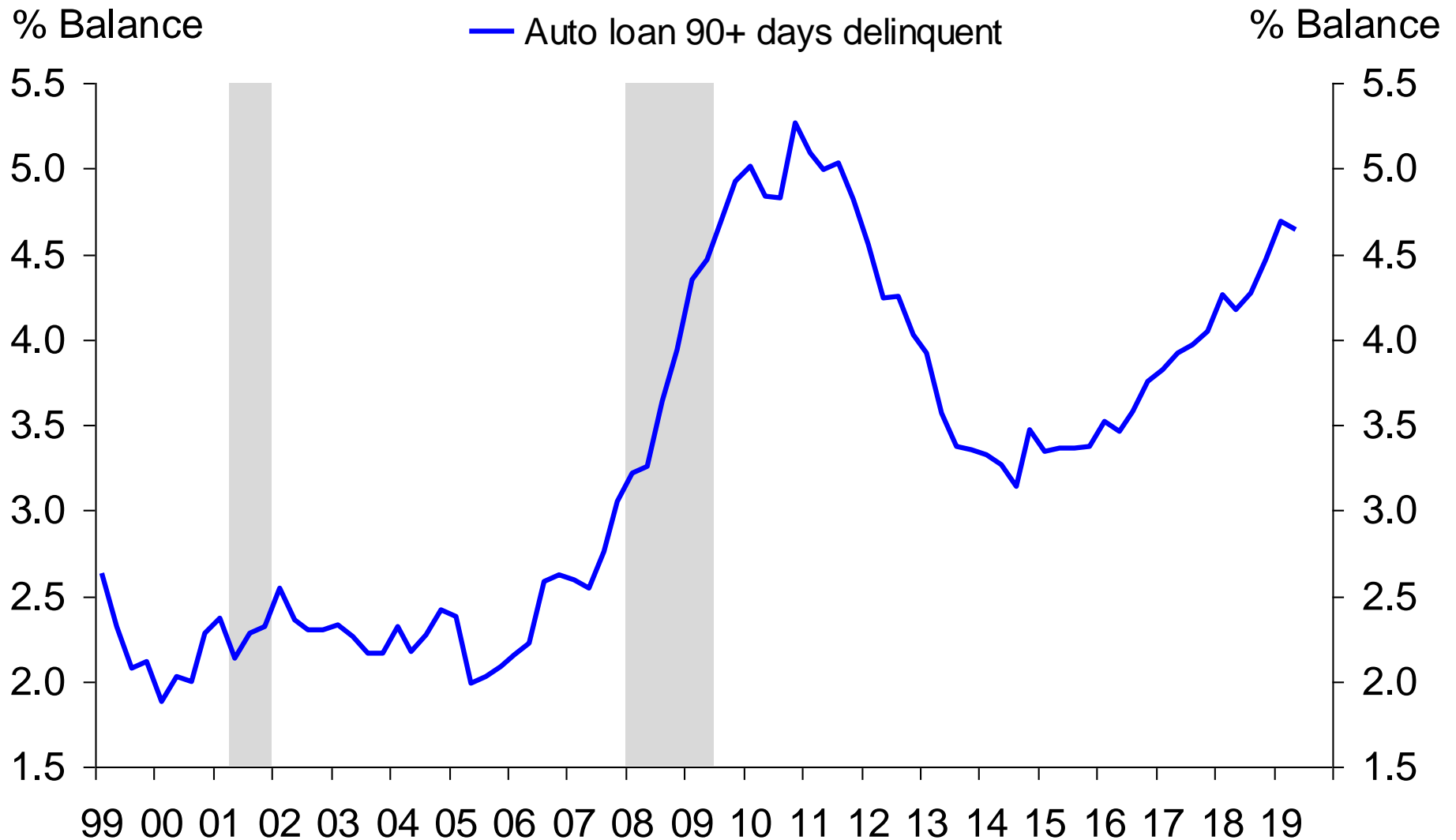


Note: Composite consumer loans consists of eight loan types: personal, automobile direct & indirect, mobile homes, recreational vehicles, marine financing loans, property improvement and home equity and second mortgage loans.

Source: BLS, ABA, Haver Analytics, DB Global Research



Auto loan delinquency rate moving higher



Source: FRBNY Consumer Credit Panel, Equifax, Haver Analytics, DB Global Research



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-
- Torsten Slok joined Deutsche Bank Securities in the fall of 2005.
 - Mr. Slok's Economics team has been top-ranked by Institutional Investor in fixed income and equities since 2010. Slok currently serves as a member of the Economic Club of New York
 - Prior to joining the firm, Mr. Slok worked at the OECD in Paris in the Money and Finance Division and the Structural Policy Analysis Division. Before joining the OECD he worked for four years at the IMF in the Division responsible for writing the World Economic Outlook and the Division responsible for China, Hong Kong, and Mongolia.
 - Mr. Slok studied at University of Copenhagen and Princeton University. He has published numerous journal articles and reviews on economics and policy analysis, including in Journal of International Economics, Journal of International Money and Finance, and The Econometric Journal.



Appendix 1

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