



# The credit cycle turns: key risks

**Jorge R. Valez**  
Senior Vice President, Credit Strategy & Research

25 November 2022

# Agenda

1. Inflation and monetary policy
2. Debt
3. Issuance: the refinancing wall
4. Banking sector
5. Real estate
6. Ratings and defaults

# The credit cycle has turned

Pandemic legacy and Russia-Ukraine conflict have set in motion a sharp turn in the cycle

## Global pandemic

### LOCKDOWNS

- Supply chain disruptions
- Lost income

### MONETARY & FISCAL SUPPORT

- Supported demand
- Added liquidity

## Russia invades Ukraine

### COMMODITY SHOCK

- Energy, metals & minerals
- Food and agri-products

### GEOPOLITICAL UNCERTAINTY

- Sanctions
- Security concerns



Source: Moody's Investors Service

## Looking ahead to 2023

### BASELINE SCENARIO

- Inflation slowly subsides
- Policy tightening pauses in 2H 2023
- Some countries will fall into recession

### DOWNSIDE SCENARIO

- Sticky inflation, continued tightening
- Europe's energy crisis deepens or severe shock elsewhere
- Deep recession

Interest rate hikes  
amid high inflation

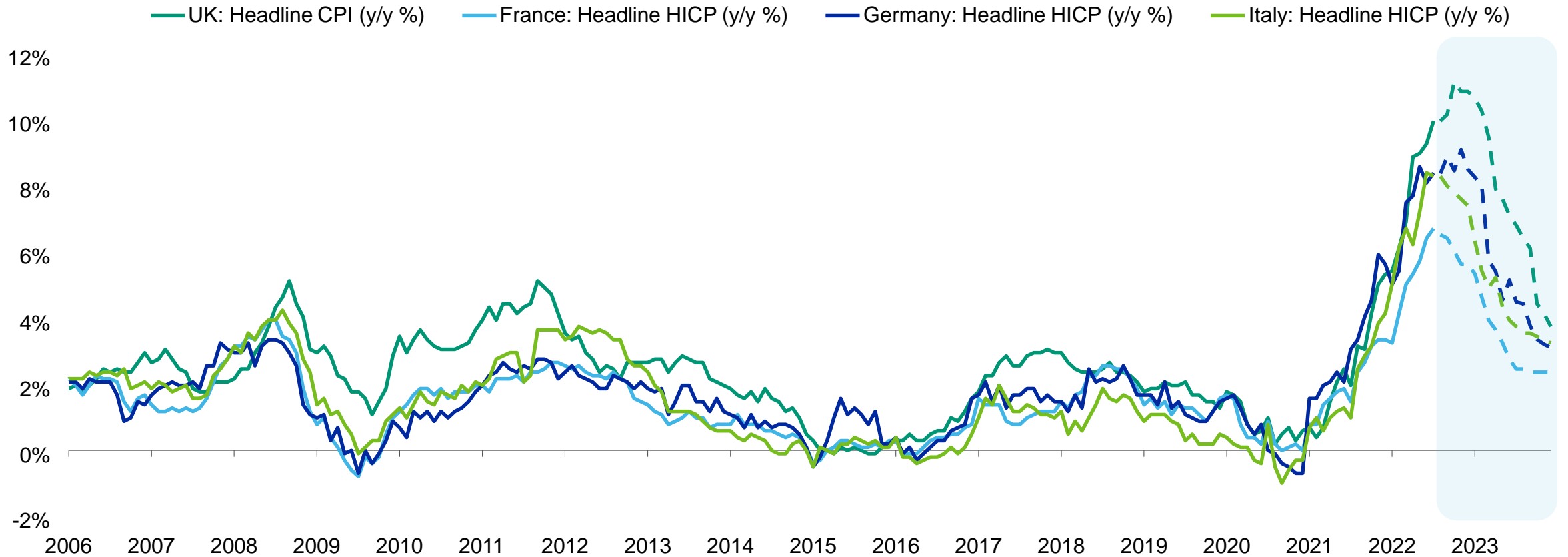
Tightening  
liquidity

Asset price  
volatility

Slowing  
growth

# Inflation

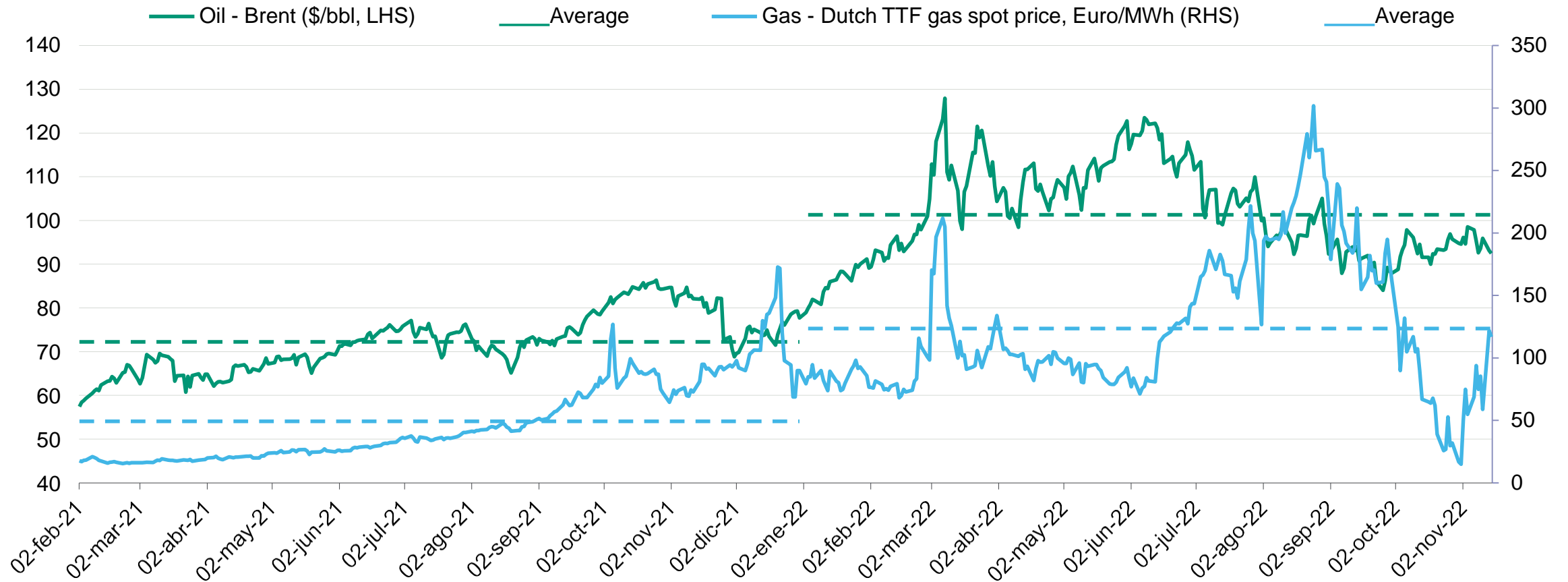
## Inflation forecasts for selected European countries



Source: Moody's Investors Service

# Inflation

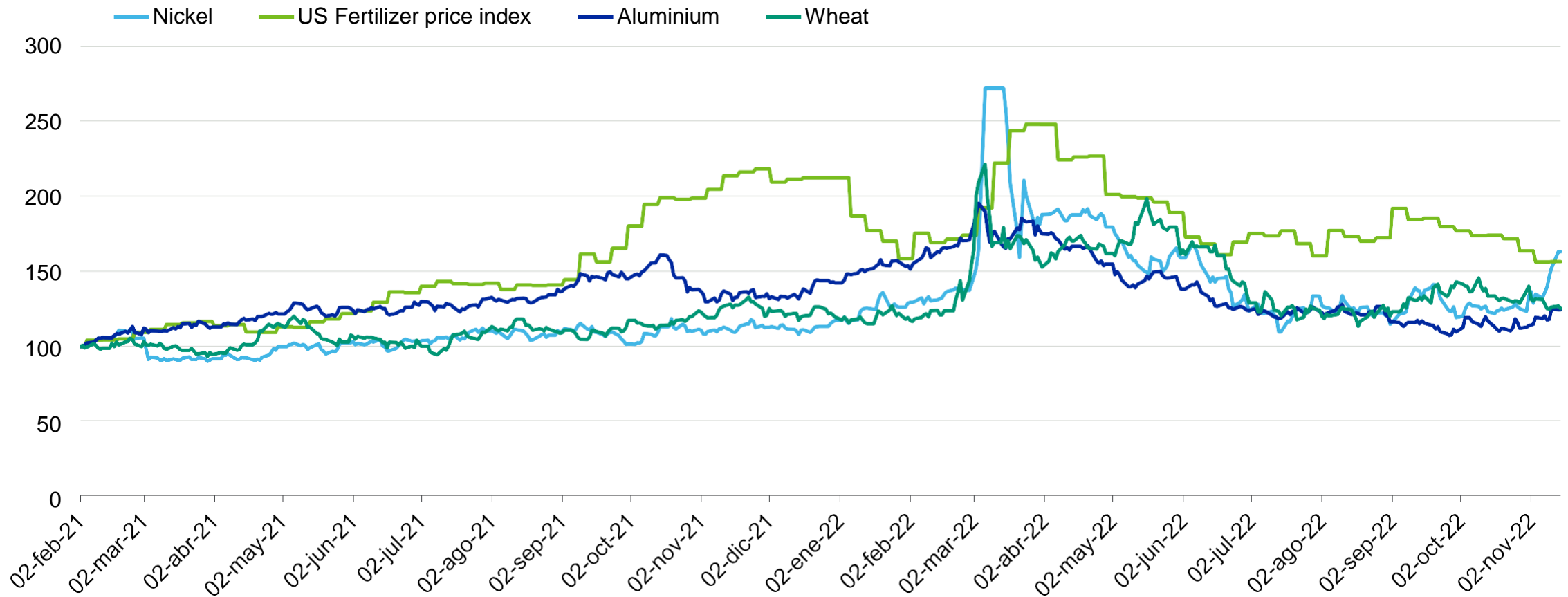
## Commodity prices – energy



Source: Moody's Investors Service, Bloomberg

# Inflation

Commodity prices – food and metals (USD index Feb-21=100)



Source: Moody's Investors Service, Bloomberg

# Supply chain disruption

Lockdown constraints and post-lockdown pent-up demand

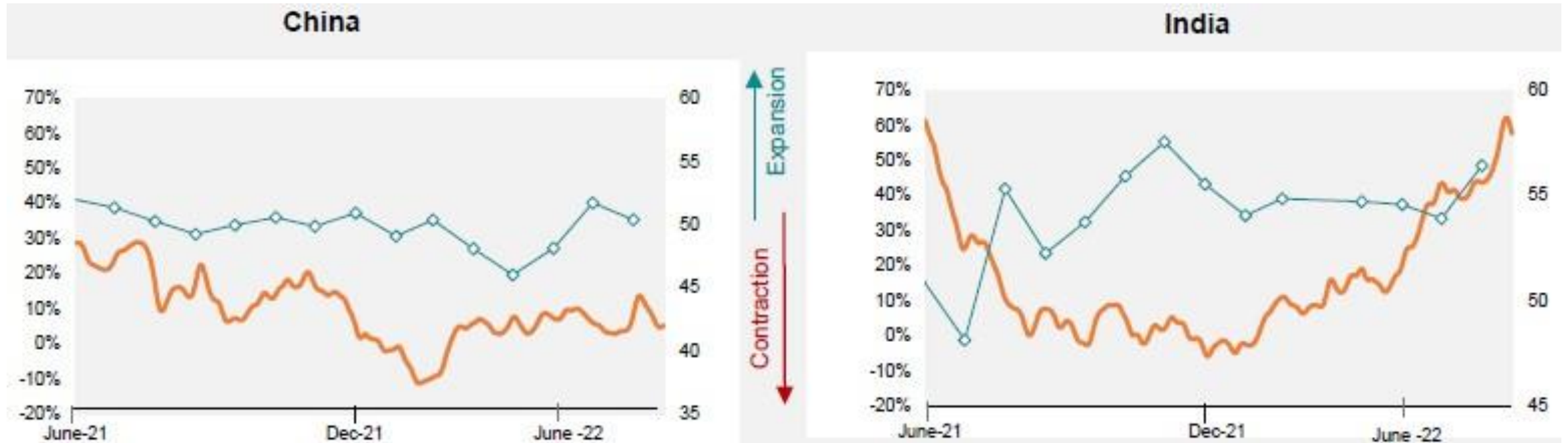
- » Transportation bottlenecks
- » Capacity constraints
- » Labour shortages/wage pressure
- » Raw material shortages
- » ...

Source: Moody's Investors Service



# Supply chain disruption

Trade index (QuantCube International trade index, y/y change)



Source: Moody's Investors Service, QuantCube, IHS Market

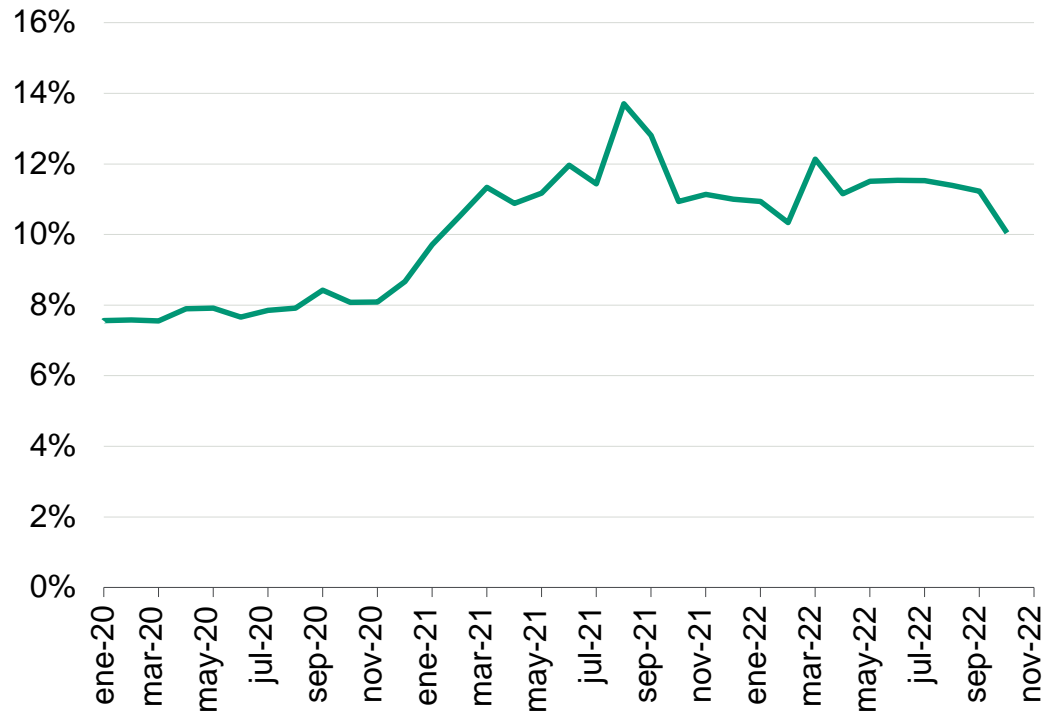


# Supply chain disruption

Goods blocked and containership traffic

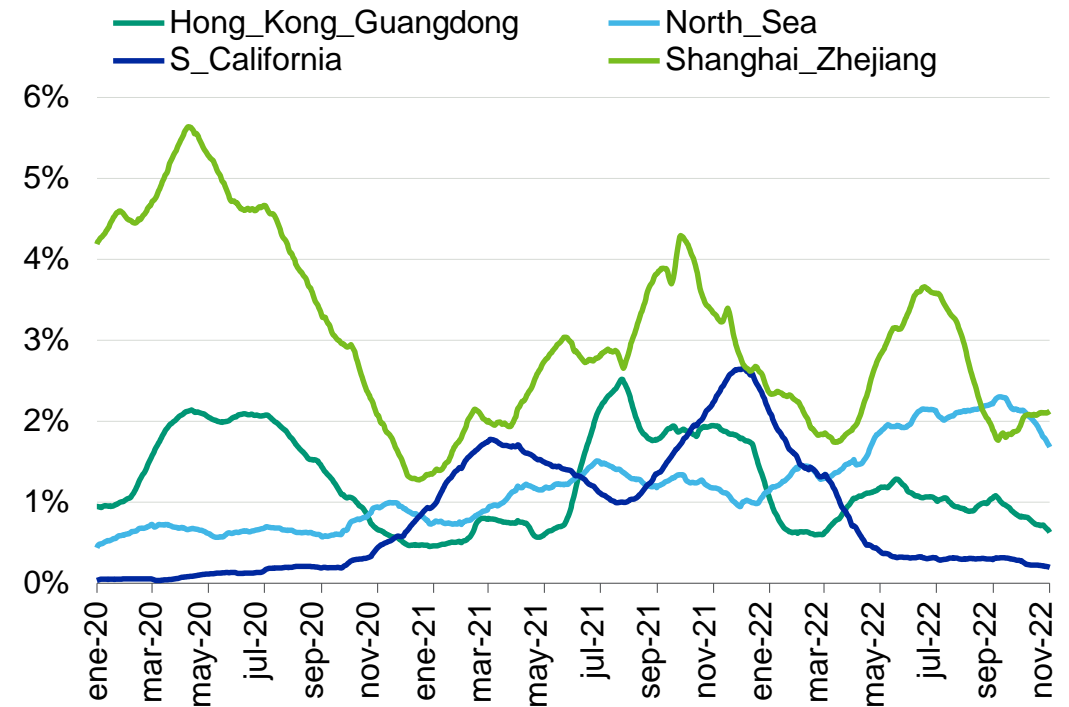
## Goods blocked due to congestion

(% of goods that are waiting on stationary ships)



## Containership traffic at major ports

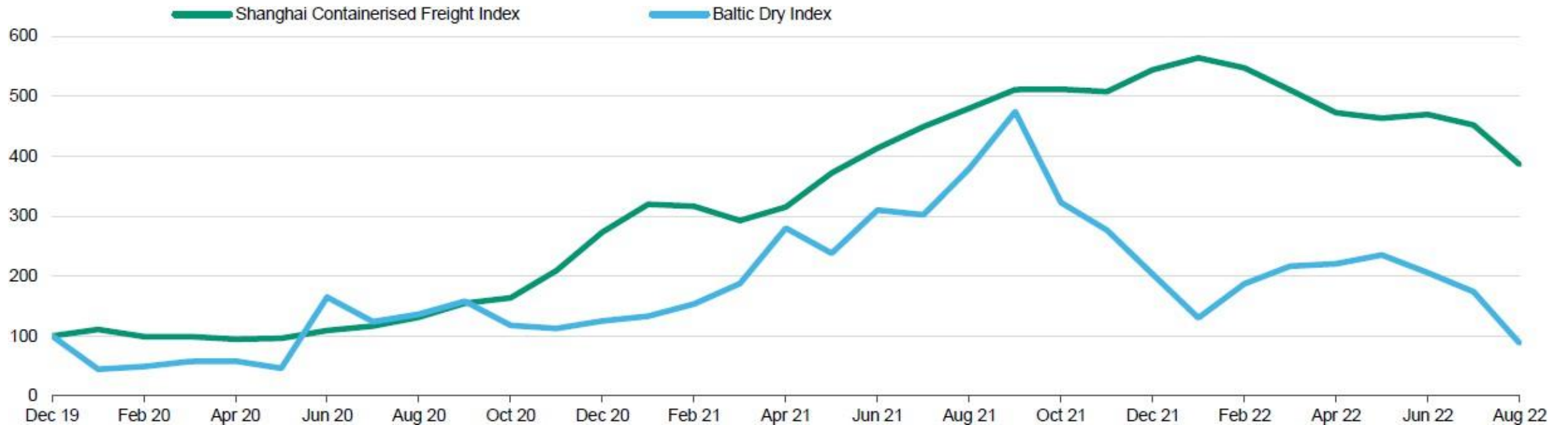
(% of global cargo tied up and unable to be loaded or unloaded due to congestion)



Source: Moody's Investors Service, Fleetmon, Haver Analytics

# Supply chain disruption

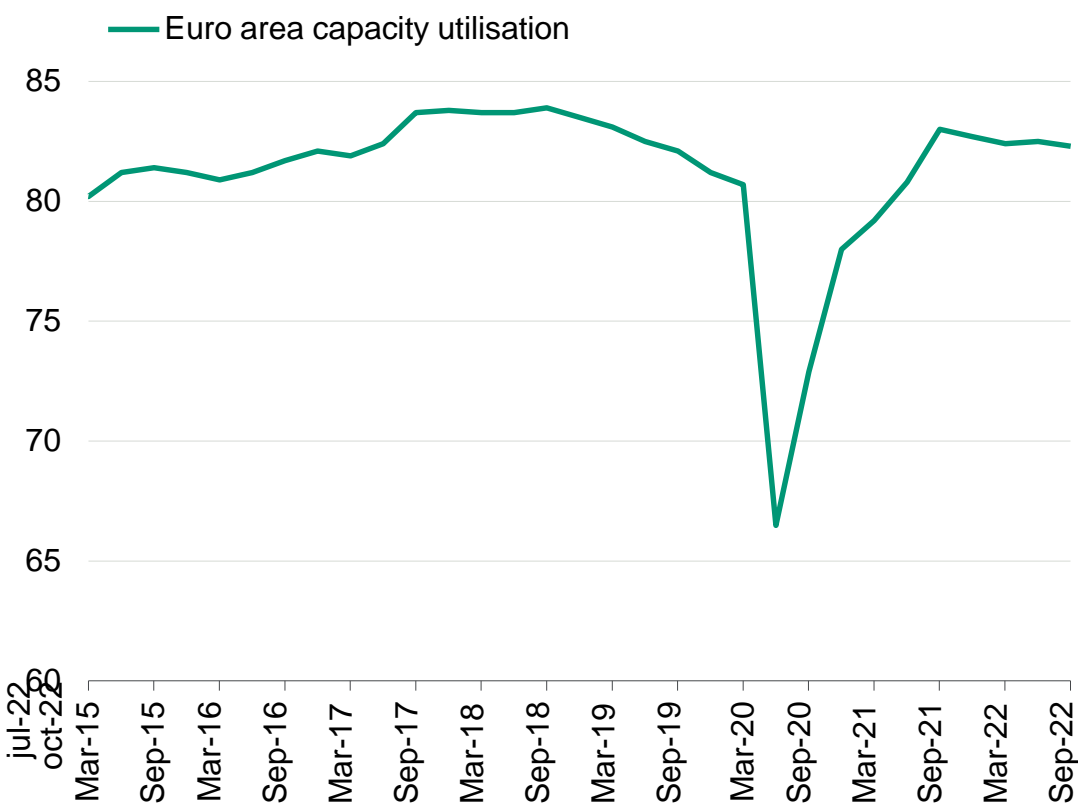
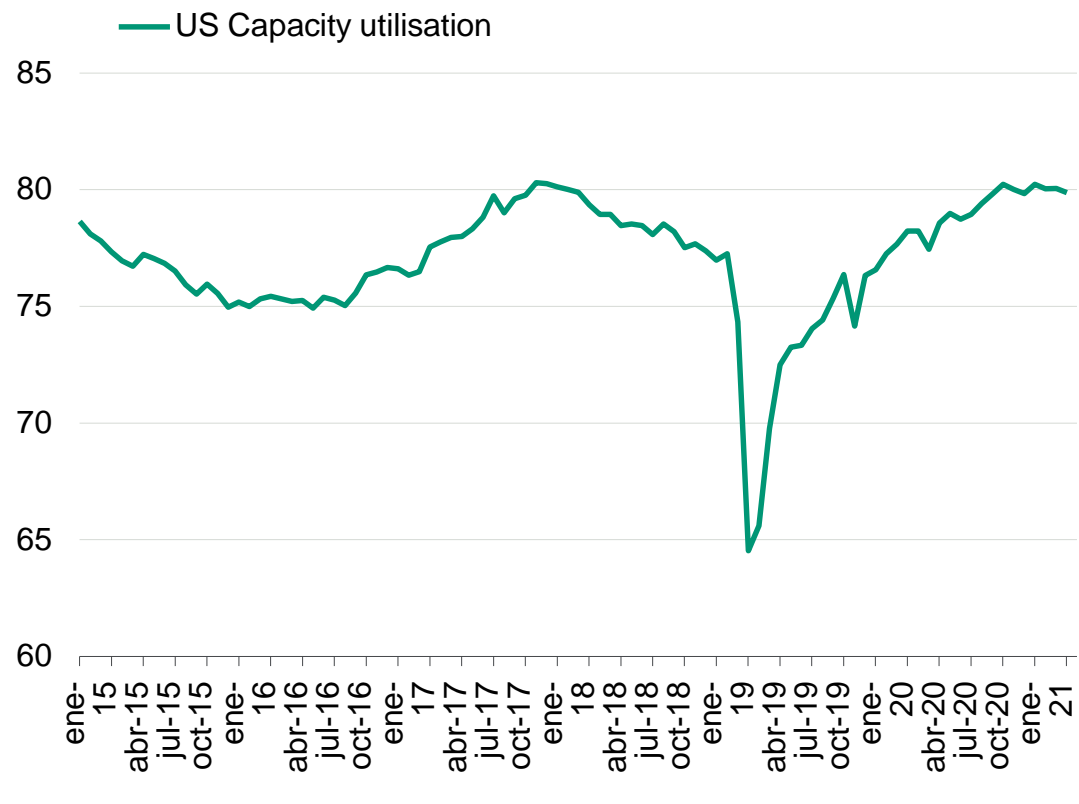
Spot rates for shipping containers



Source: Moody's Investors Service, Fleetmon, Haver Analytics

# Supply chain disruption

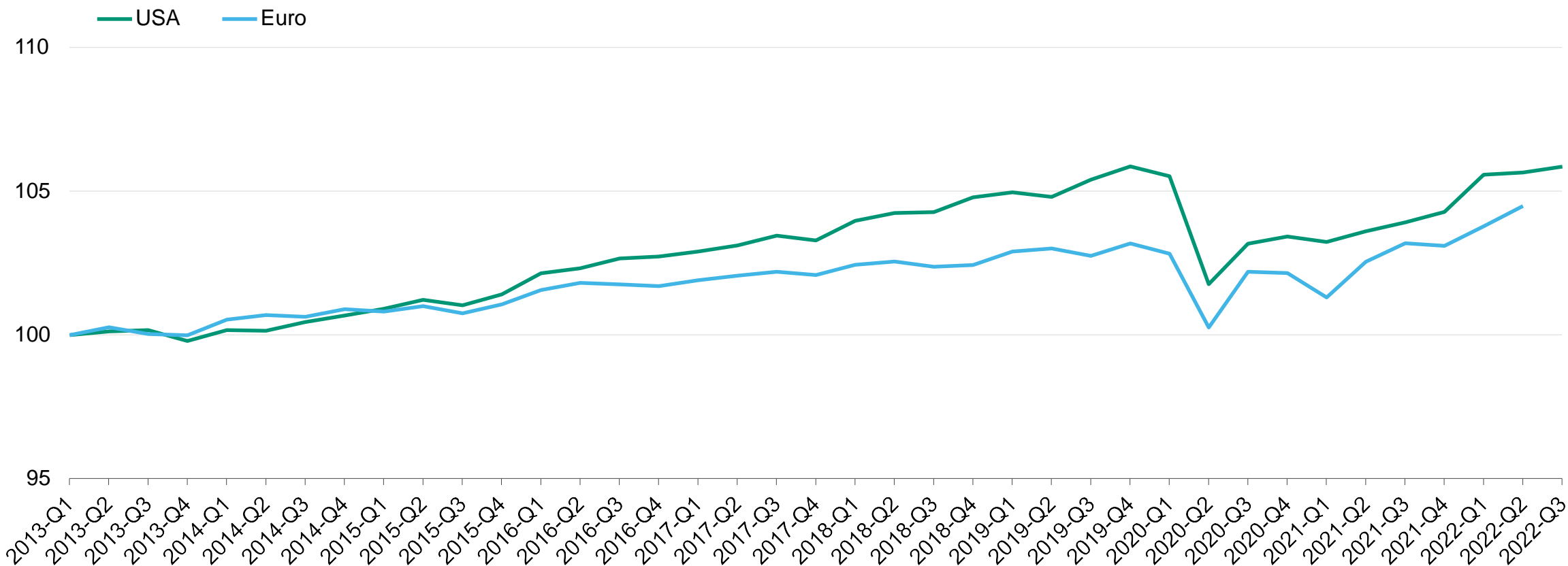
## Capacity constraints



Source: Moody's Investors Service, Fed, OECD

# Supply chain disruption

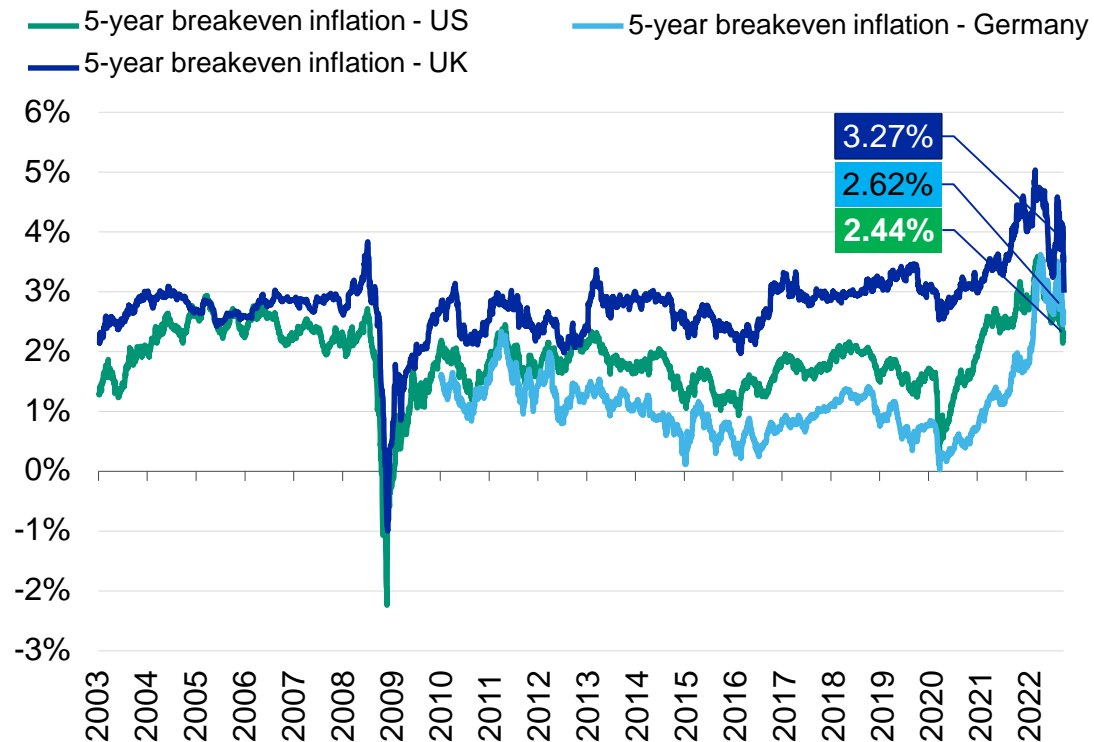
Labour force (index, 2013 Q1 =100)



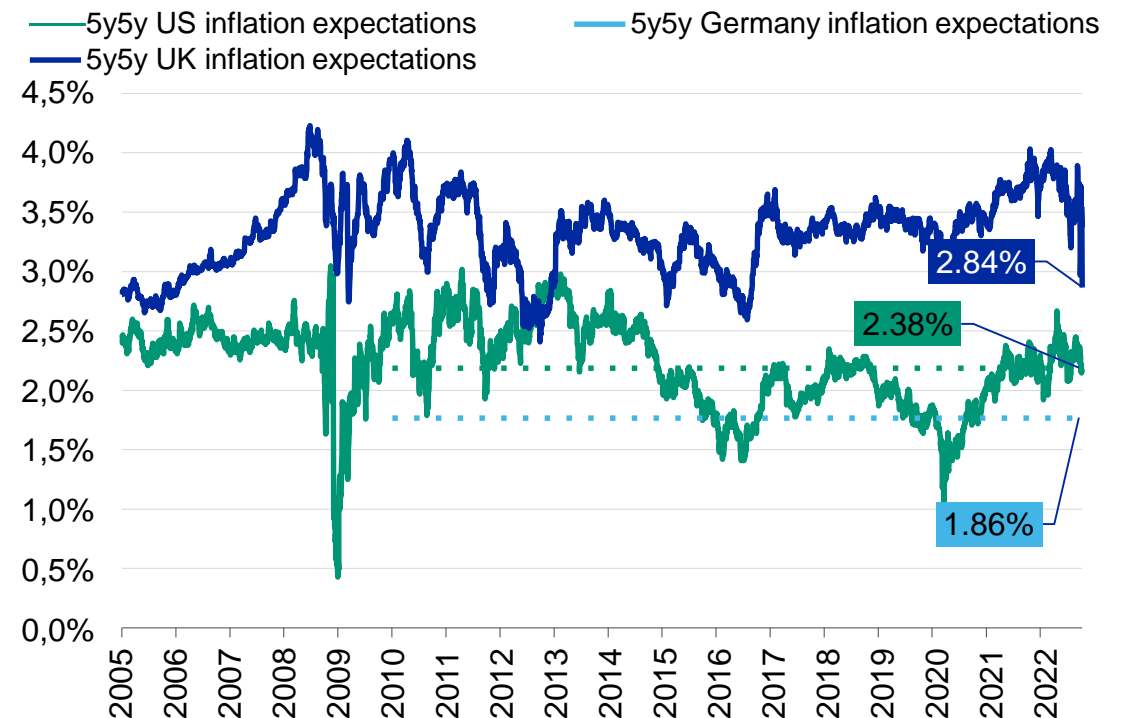
Source: Moody's Investors Service, OECD

# Inflation expectations

## Market-implied inflation expectations



Source: Moody's Investors Service, Haver Analytics



Dotted lines indicate 10-year average 5y5y inflation expectations.

# Monetary policy

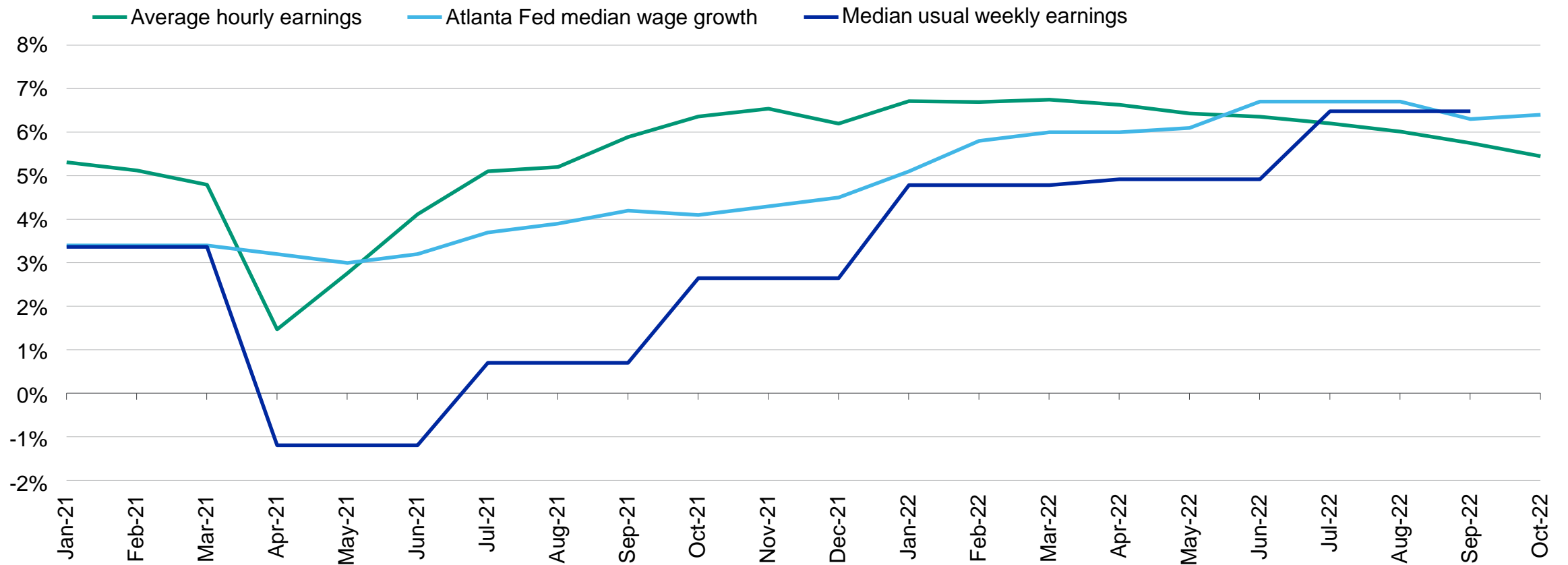
How much tightening is enough?

- » Full impact from global financial tightening to be realized only in 2023 because of policy lags.
- » Synchronized tightening could amplify existing vulnerabilities; growth and financial stability at risk.
- » Challenge: to avoid an overly sharp downturn; What is the post-Covid “neutral” rate? And NAIRU?
- » US
  - Rates at 4.25%-4.50% by the end of 2022. Tightening to end in March 2023 at 4.75%-5.25%.
  - Fed to continue to reduce the size of its balance sheet. Liquidity conditions to worsen?
  - Softening of policy stance (forward guidance); cuts as early as November 2023. Neutral stance in 2025.
  - Fiscal policy also becoming contractionary.
- » Euro area
  - Deposit rate to 2.0% and the Refi rate to 2.5% by the end of this year; terminal Refi and deposit rate at 3.25% and 2.75%, respectively in Q1 2023, holding through 2023 and much of 2024.
  - Quantitative tightening to begin in Q1 2023



# Labour market and inflation

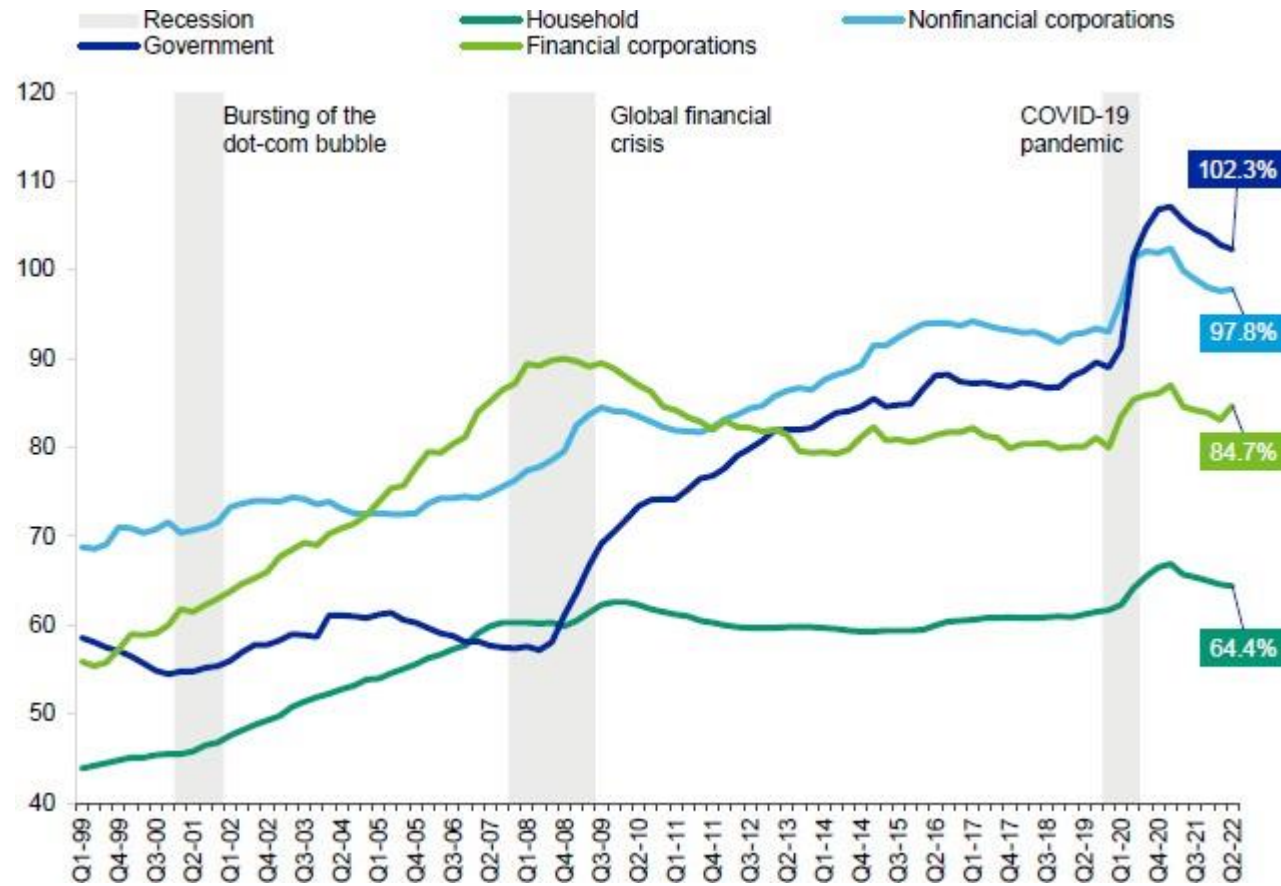
Mixed signals from US labour market



Source: Moody's Investors Service, Haver Analytics

# Debt

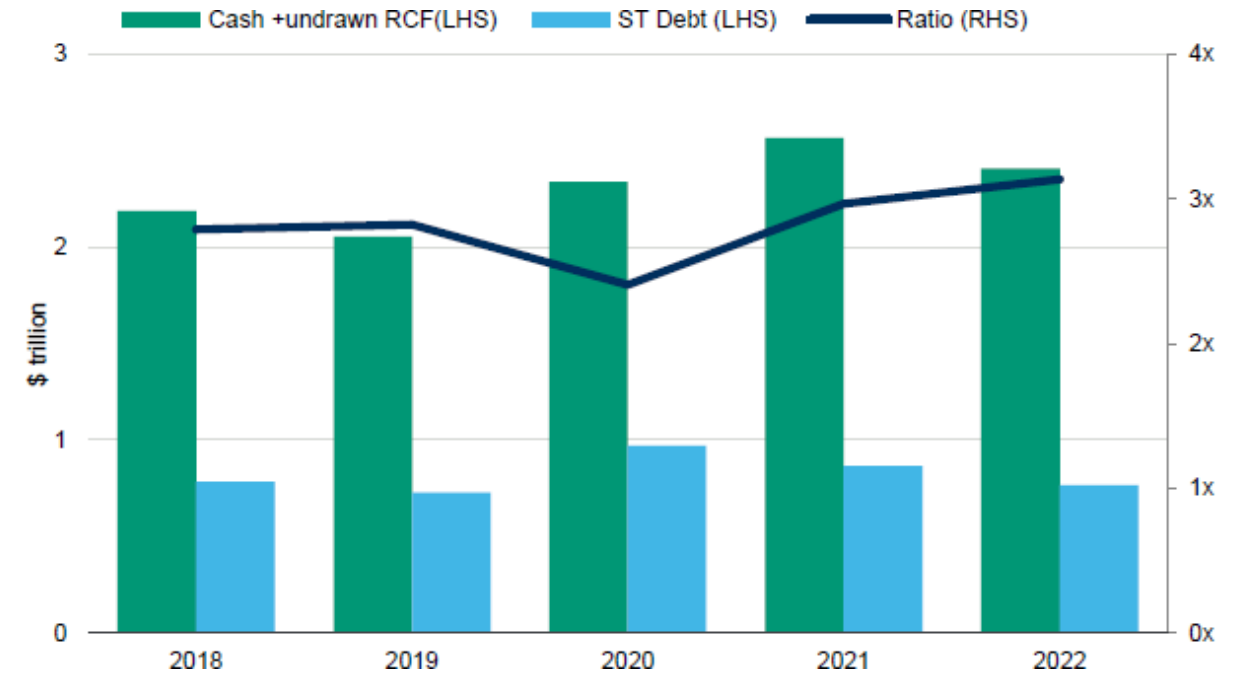
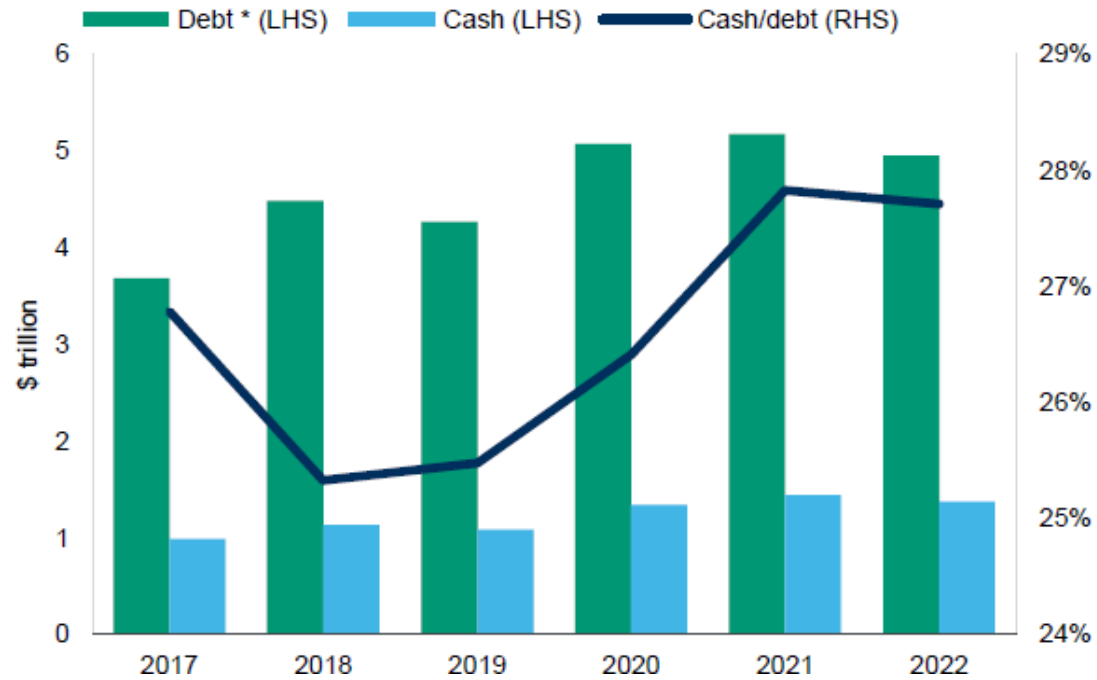
## Global debt as percentage of GDP



Source: Moody's Investors Service, IIF

# Debt

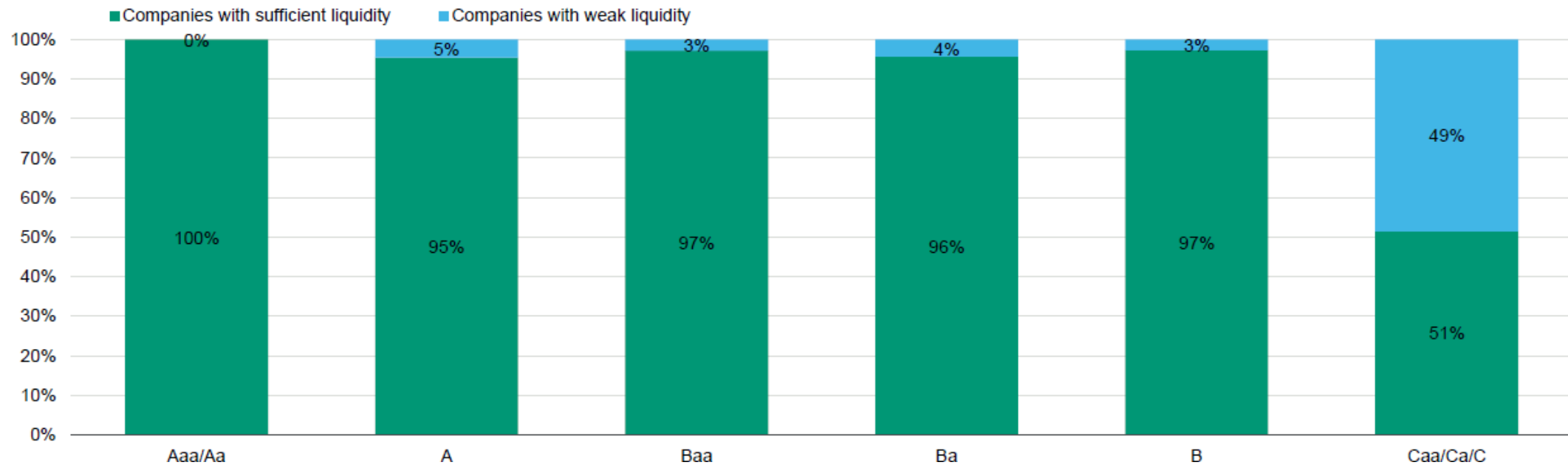
## Corporate liquidity in EMEA (rated companies)



Source: Moody's Investors Service, (\* Bonds and bank debt)

# Debt

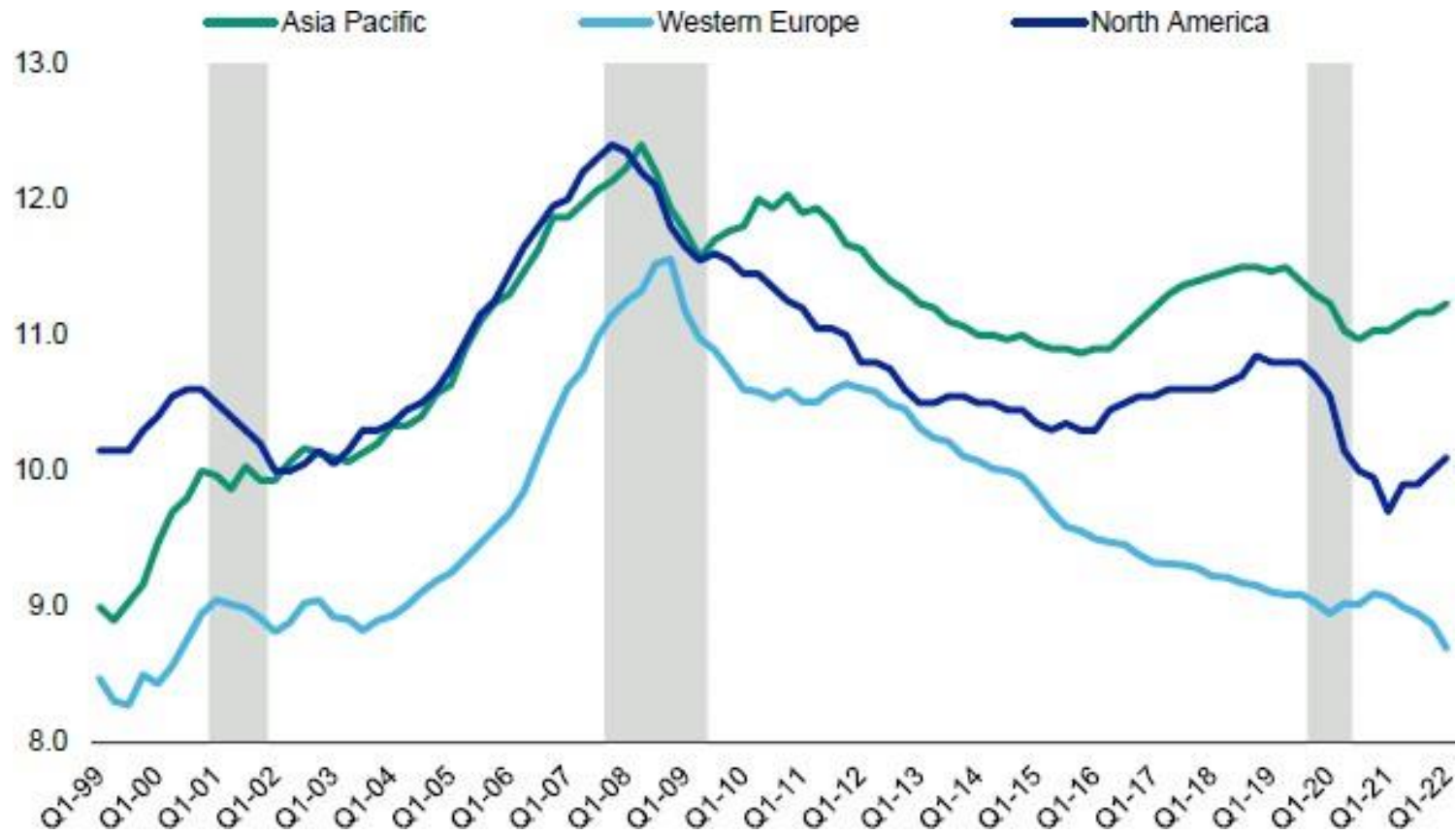
## Corporate liquidity (liquidity strength by rating category)



Source: Moody's Investors Service,

# Debt

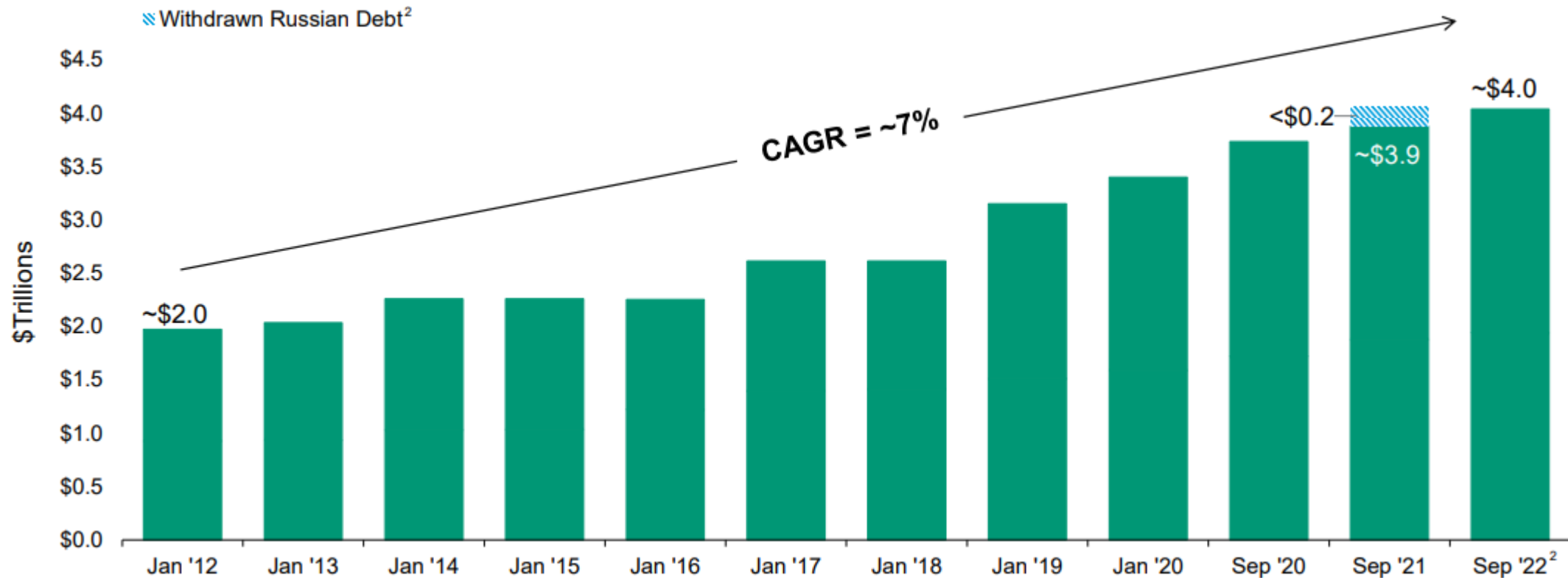
## Household debt service ratio



Source: Moody's Investors Service, IIF, BIS (ratio of interest payments + amortization to income)

# Issuance: the refinance wall

Next four years US and EMEA rated NFC total refunding needs as of:

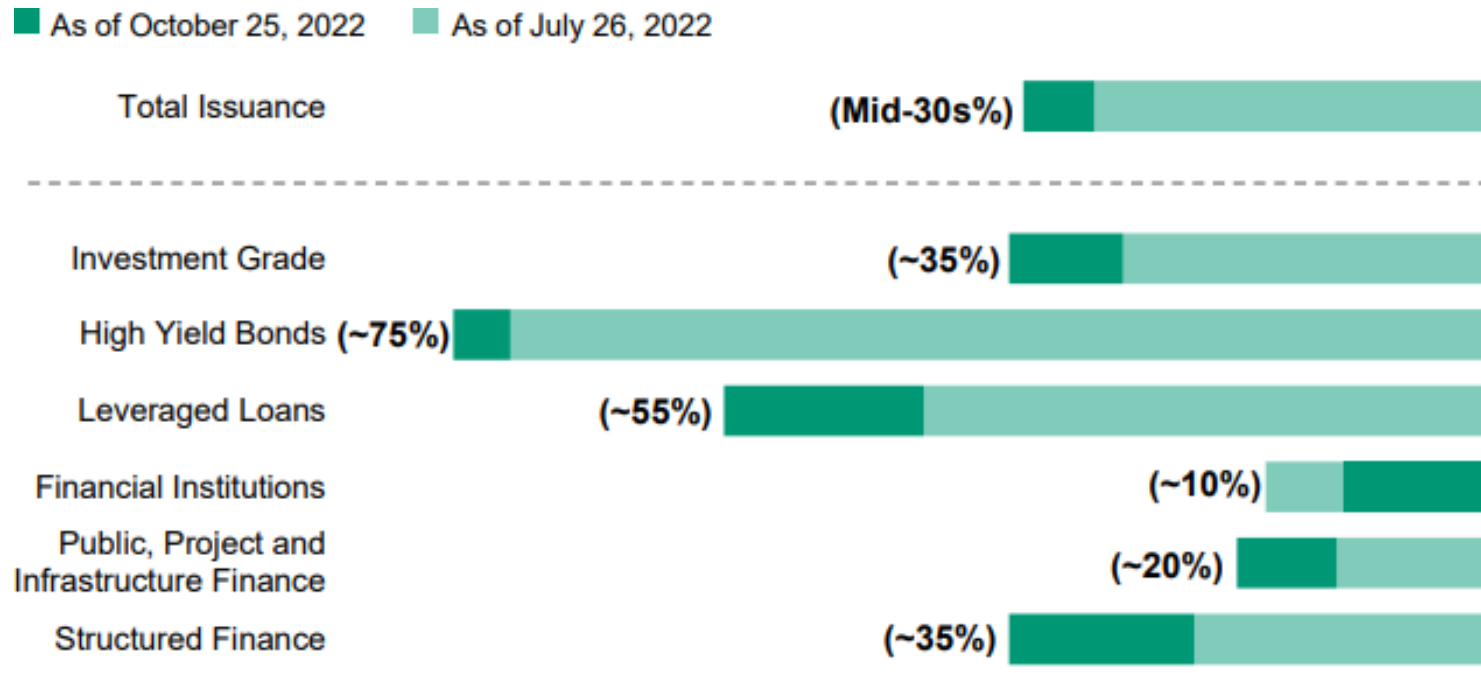


Source: Moody's Investors Service (US NFC bond and loan; EMEA NFC and infra bond and loan maturity)



# Issuance: the refinance wall

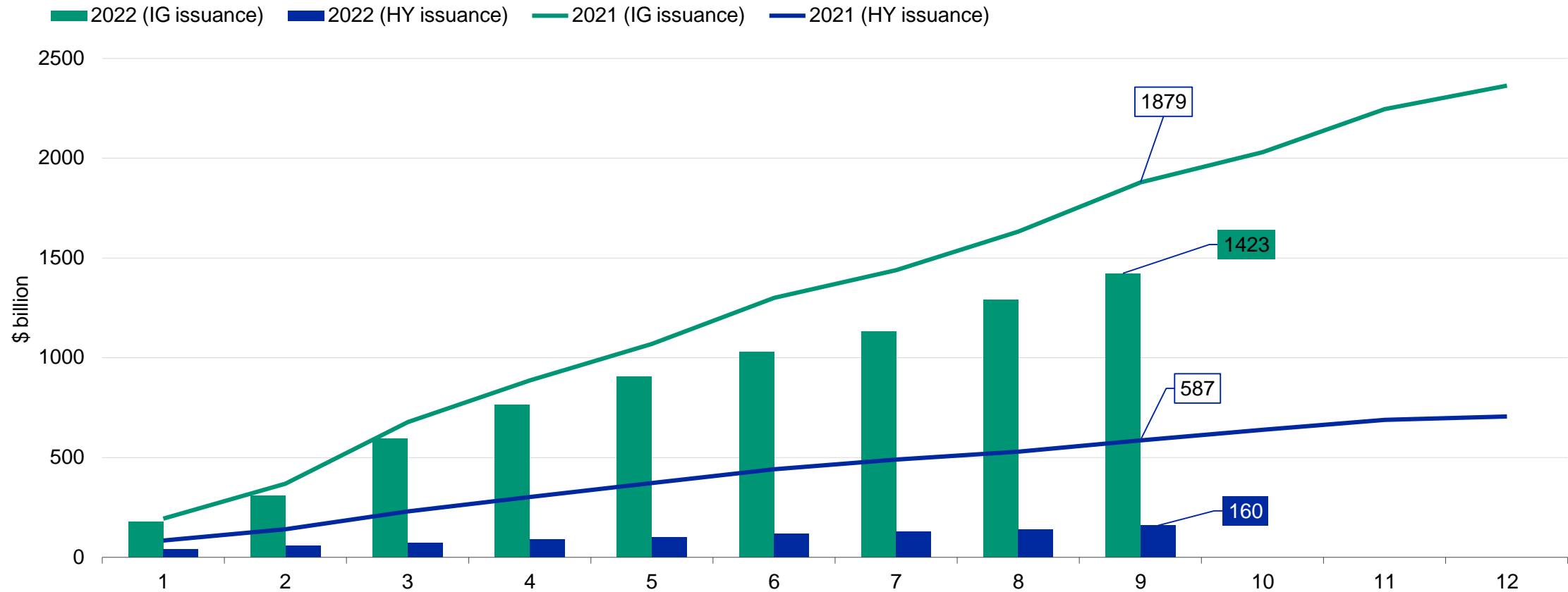
FY 2022 issuance



Source: Moody's Investors Service

# Issuance: the refinance wall

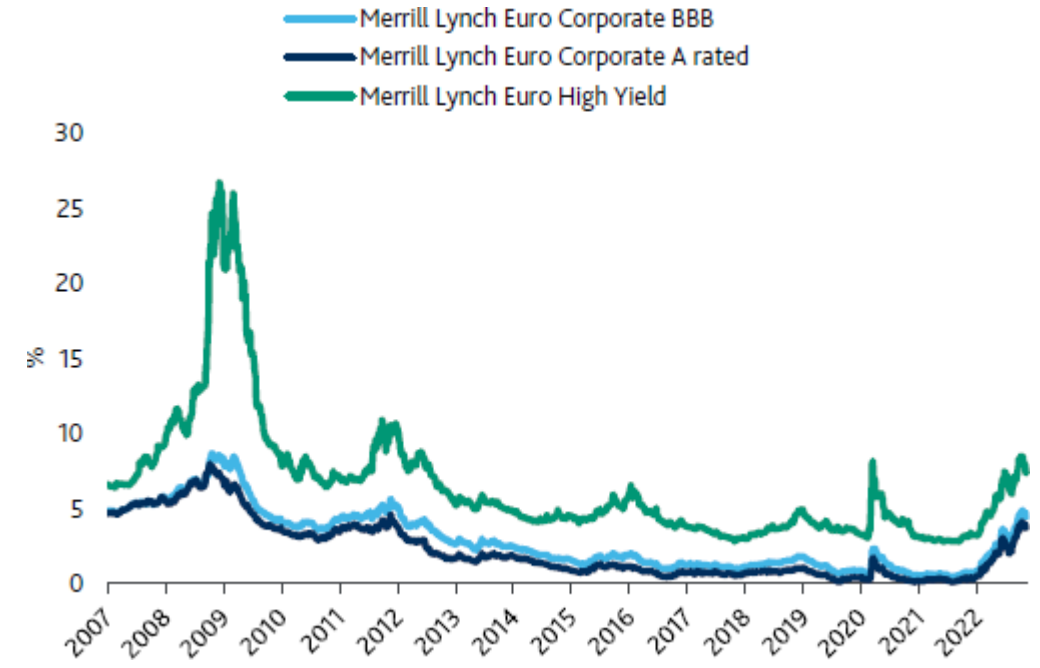
## Global non-financial corporate bond issuance



Source: Moody's Investors Service, Dealogic

# Issuance: the refinance wall

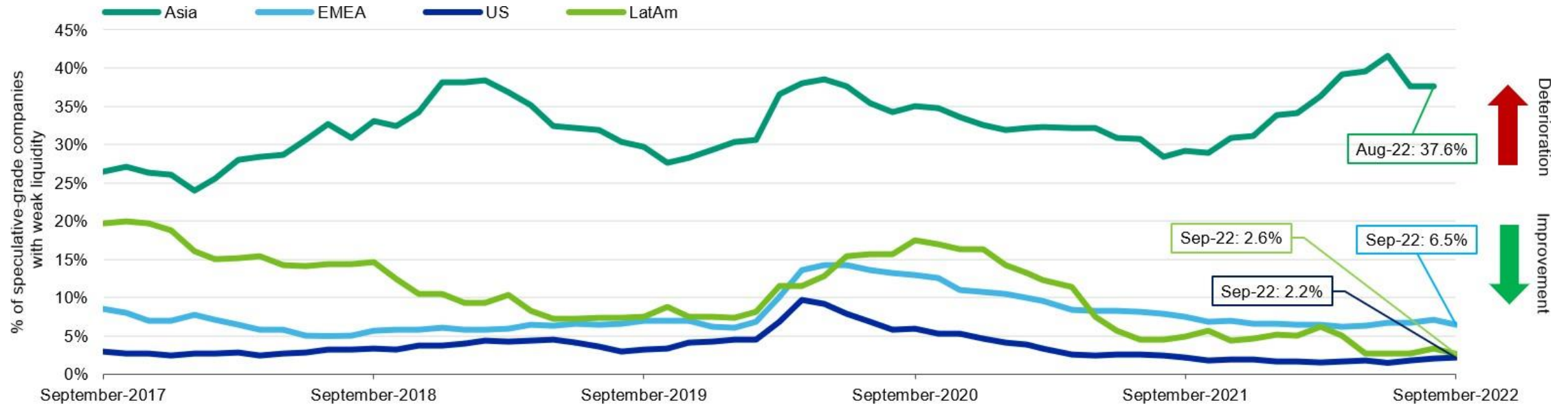
Corporate yields by region and rating category



Source: Moody's Investors Service

# Corporate liquidity

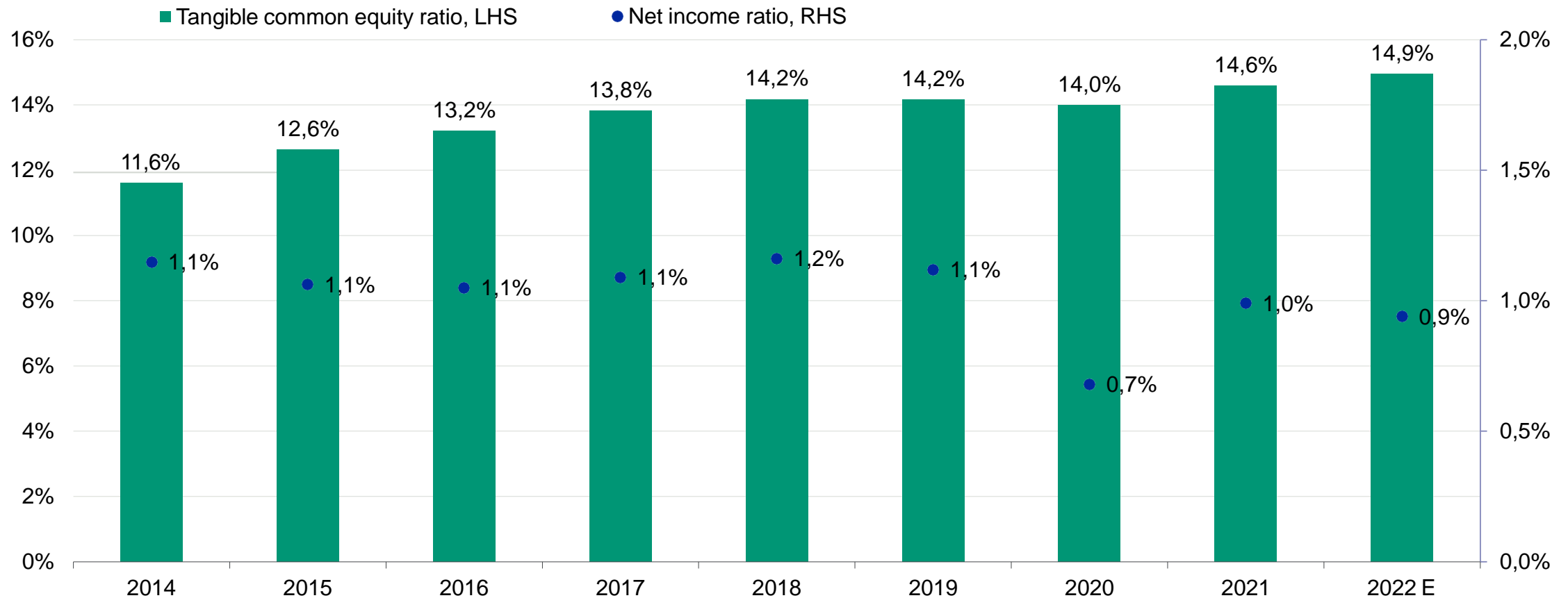
Ample liquidity in the US and EMEA, but poised to deteriorate



Source: Moody's Investors Service (percentage of high-yield companies with our weakest speculative-grade liquidity score)

# Banking sector

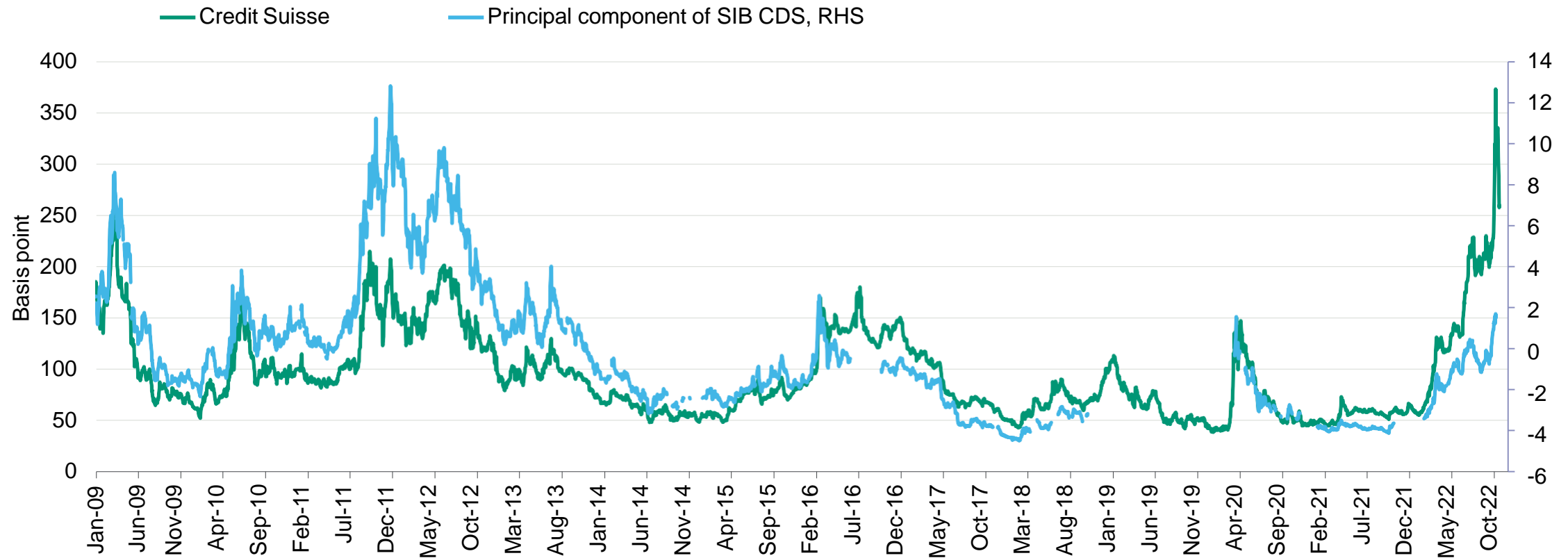
## Capital and profitability



Source: Moody's Investors Service

# Banking sector

## Capital and profitability

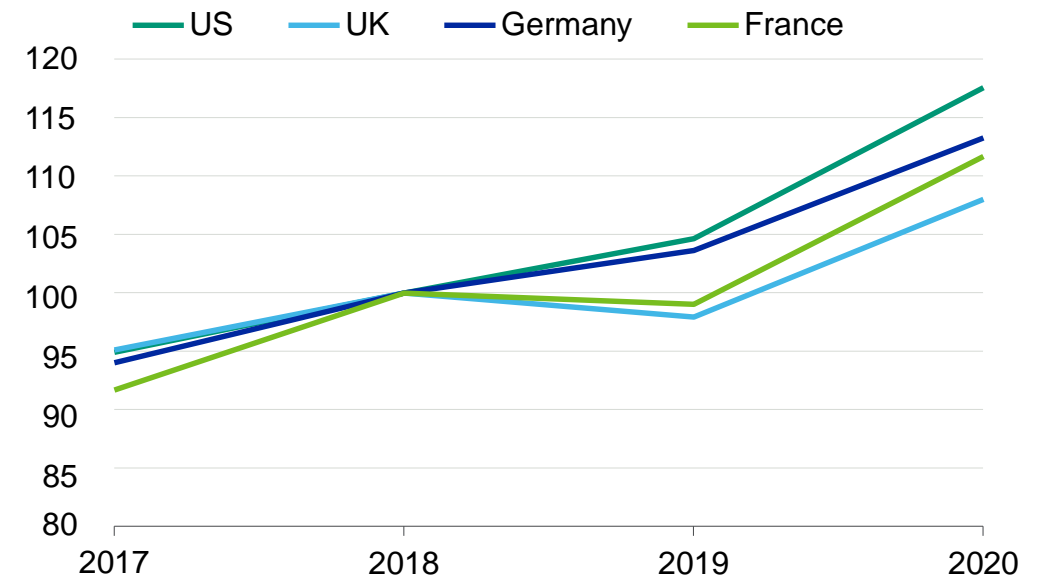
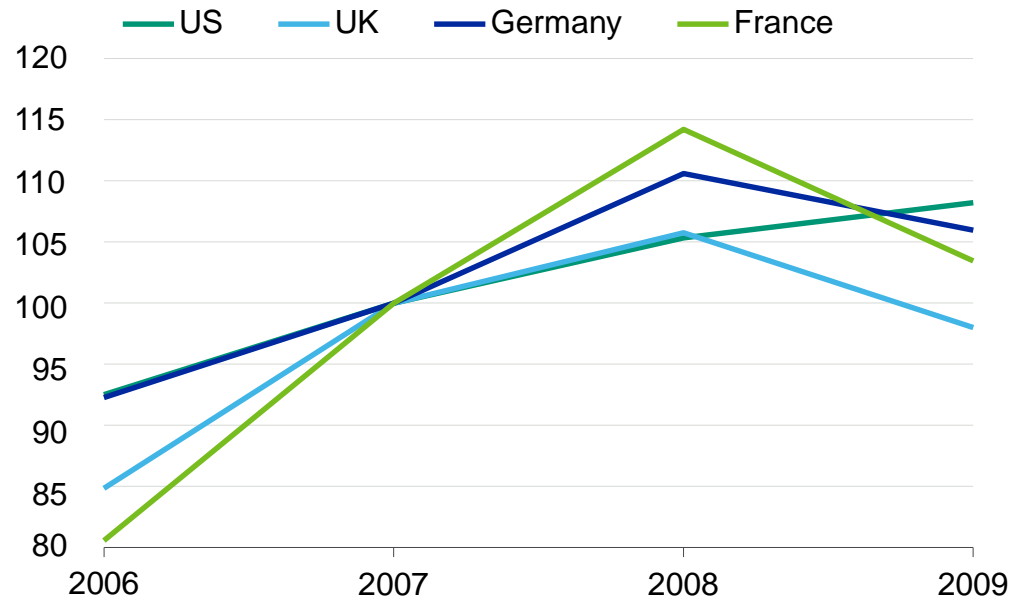


Source: Moody's Investors Service



# Banking sector

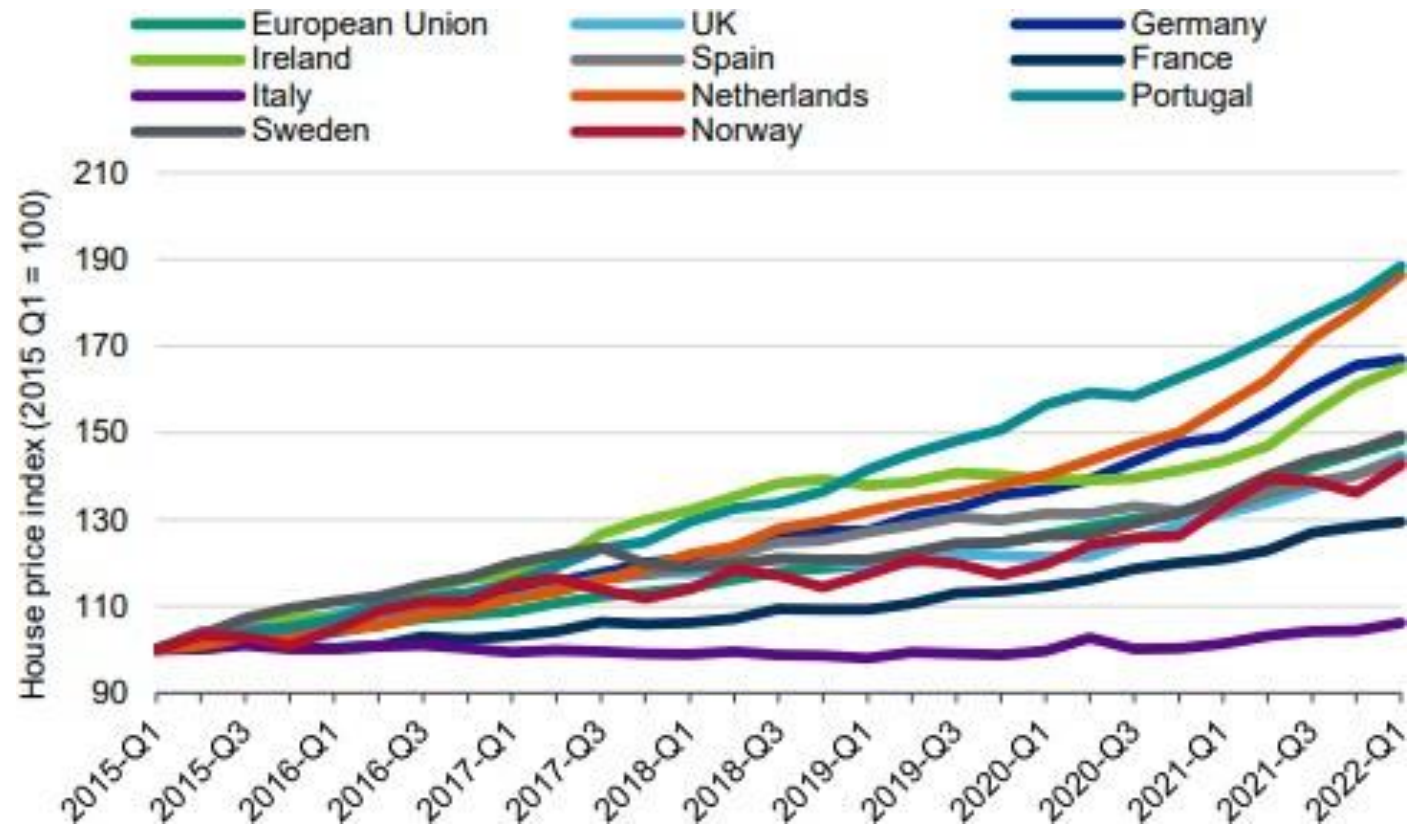
Domestic credit levels, 2007 and 2018=100 respectively



Source: Moody's Investors Service

# Real Estate

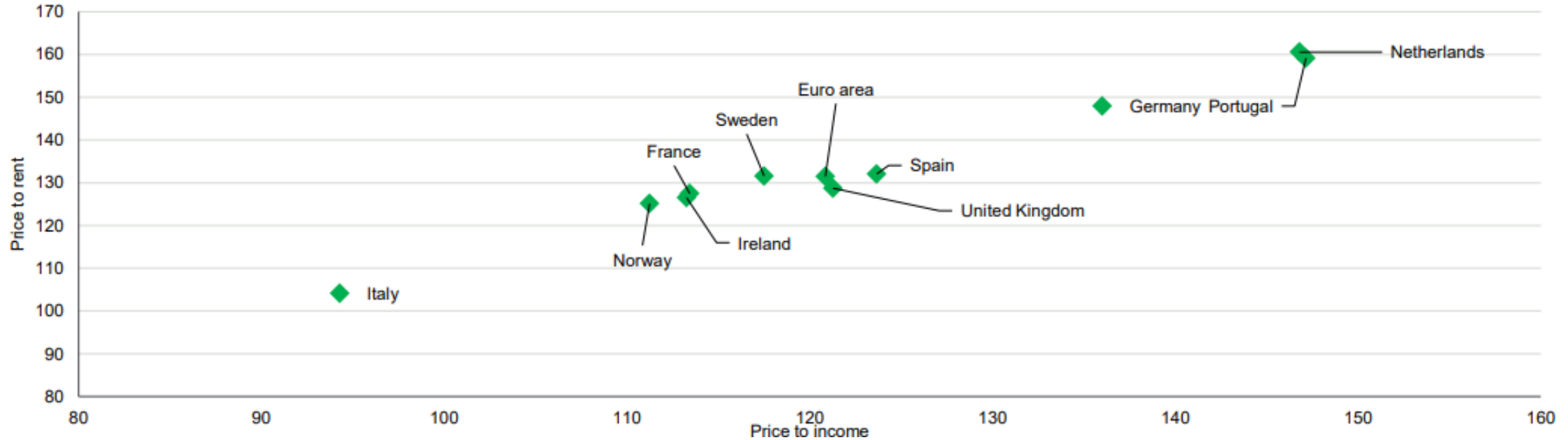
Affordability and rising interest rates



Source: Moody's Investors Service, OECD

# Real Estate

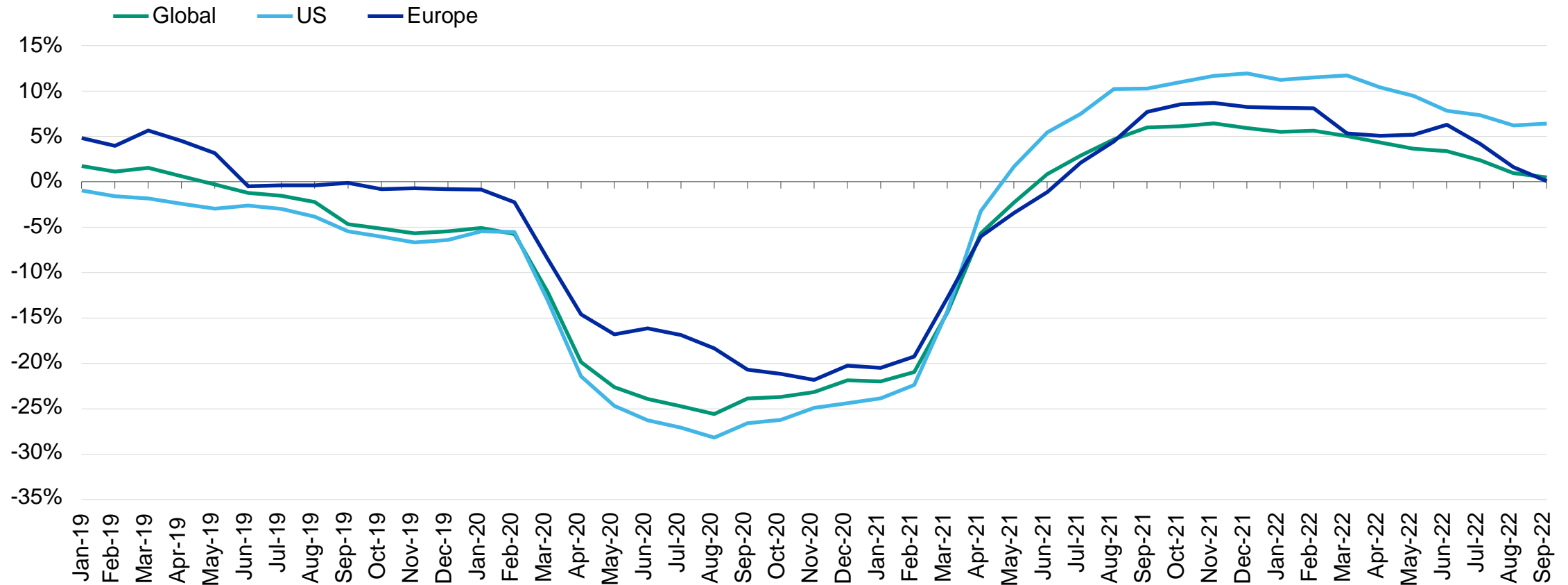
## Affordability and rising interest rates



Source: Moody's Investors Service, OECD

# Ratings and defaults

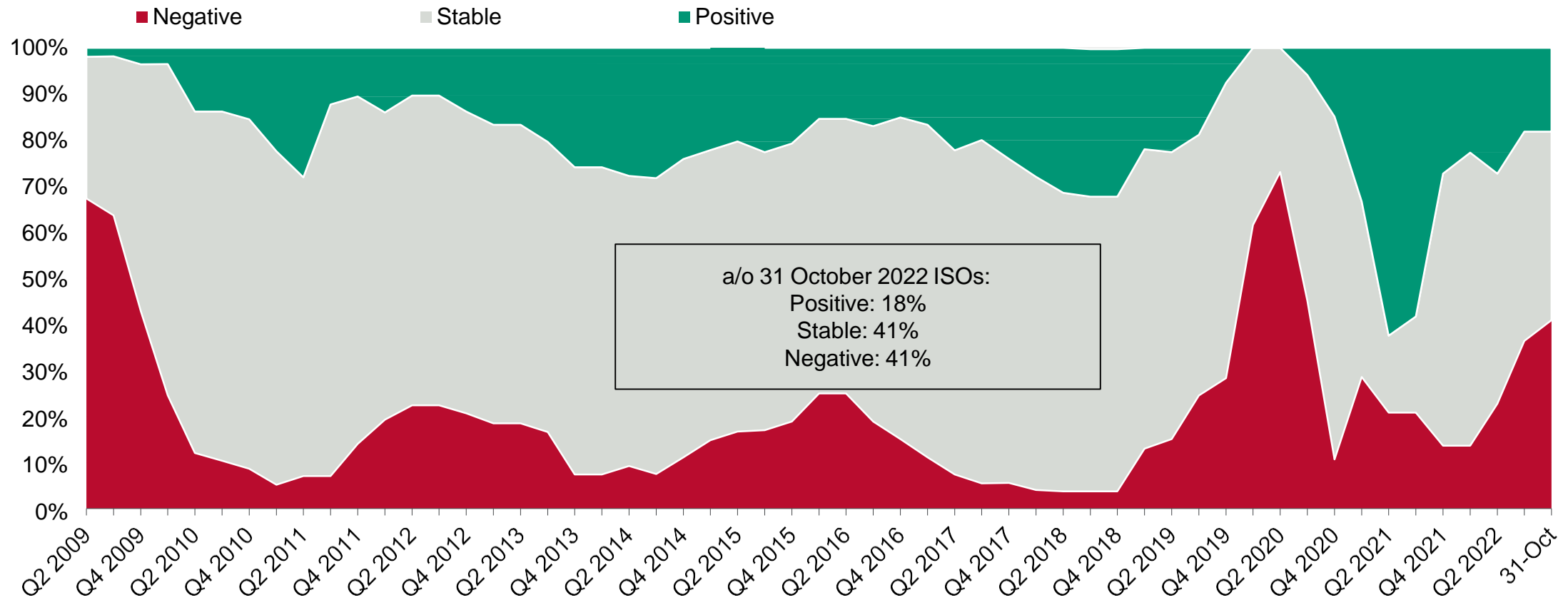
Rating activity - Trailing 12-month rating drift



Source: Moody's Investors Service; Rating Drift = (notch upgrades - notch downgrades)/rated issuers)

# Ratings and defaults

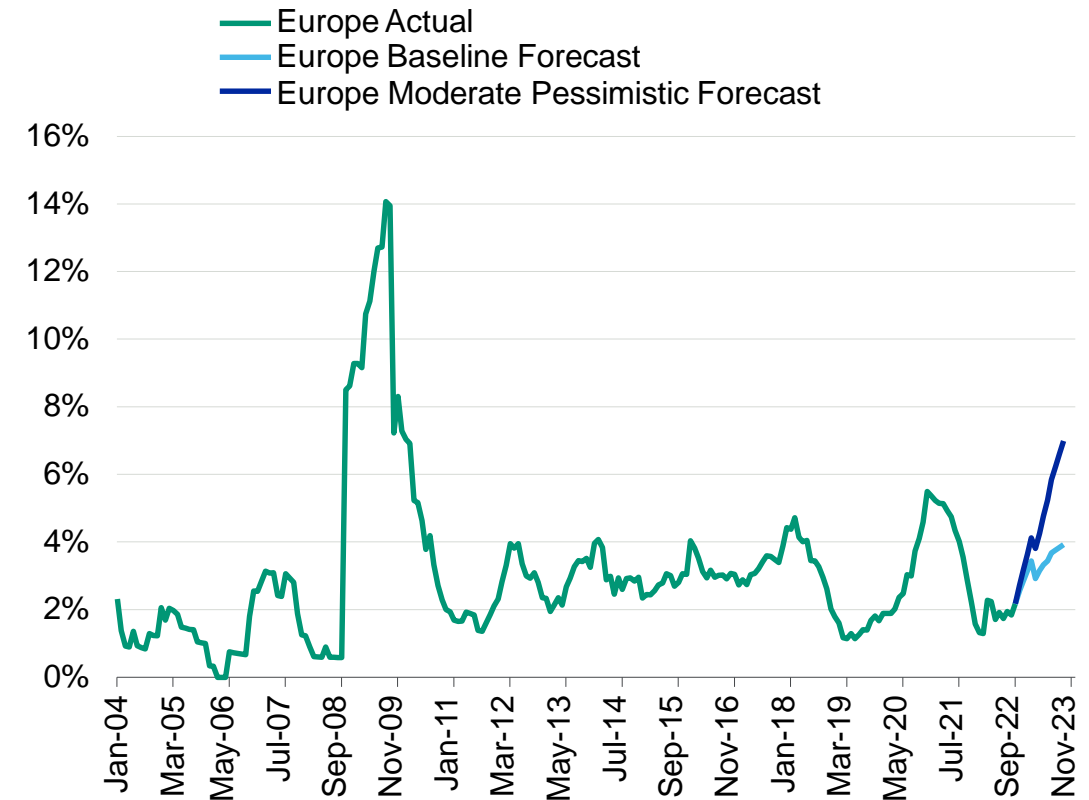
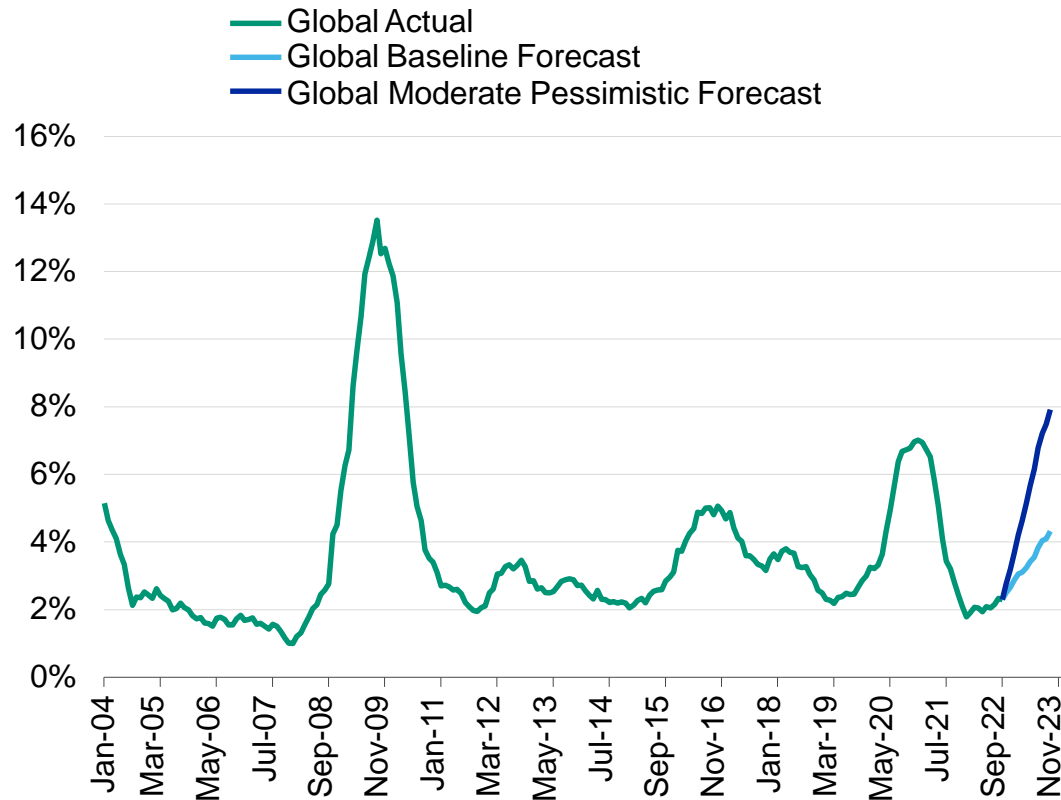
## Rating activity – industry sector outlooks



Source: Moody's Investors Service

# Ratings and defaults

## Defaults – speculative grade default rates

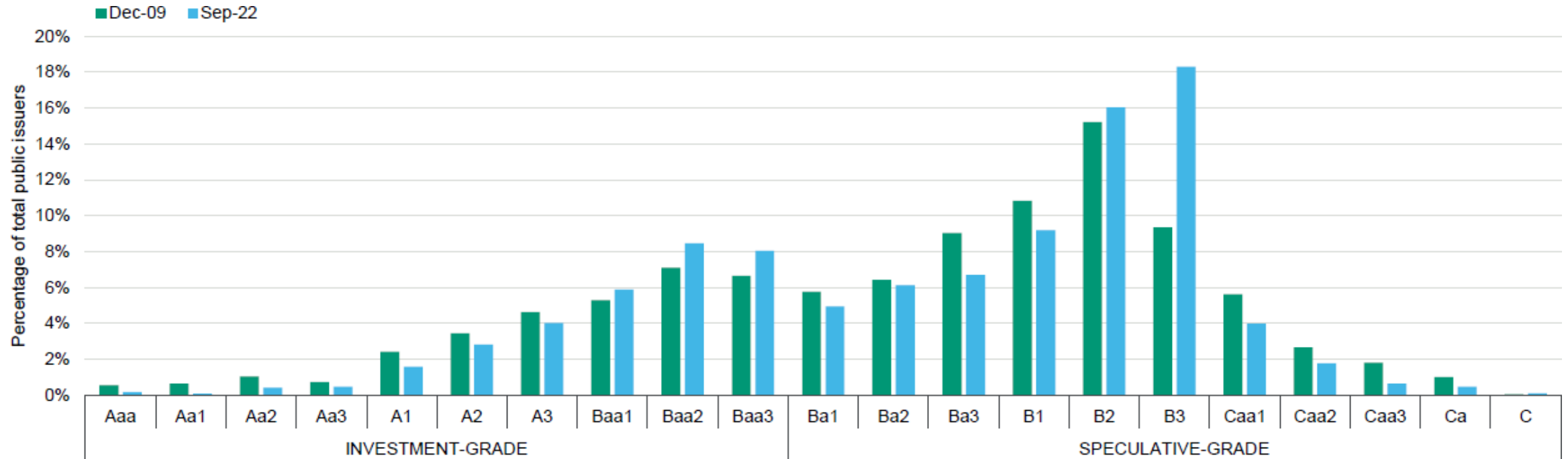


Source: Moody's Investors Service



# Ratings and defaults

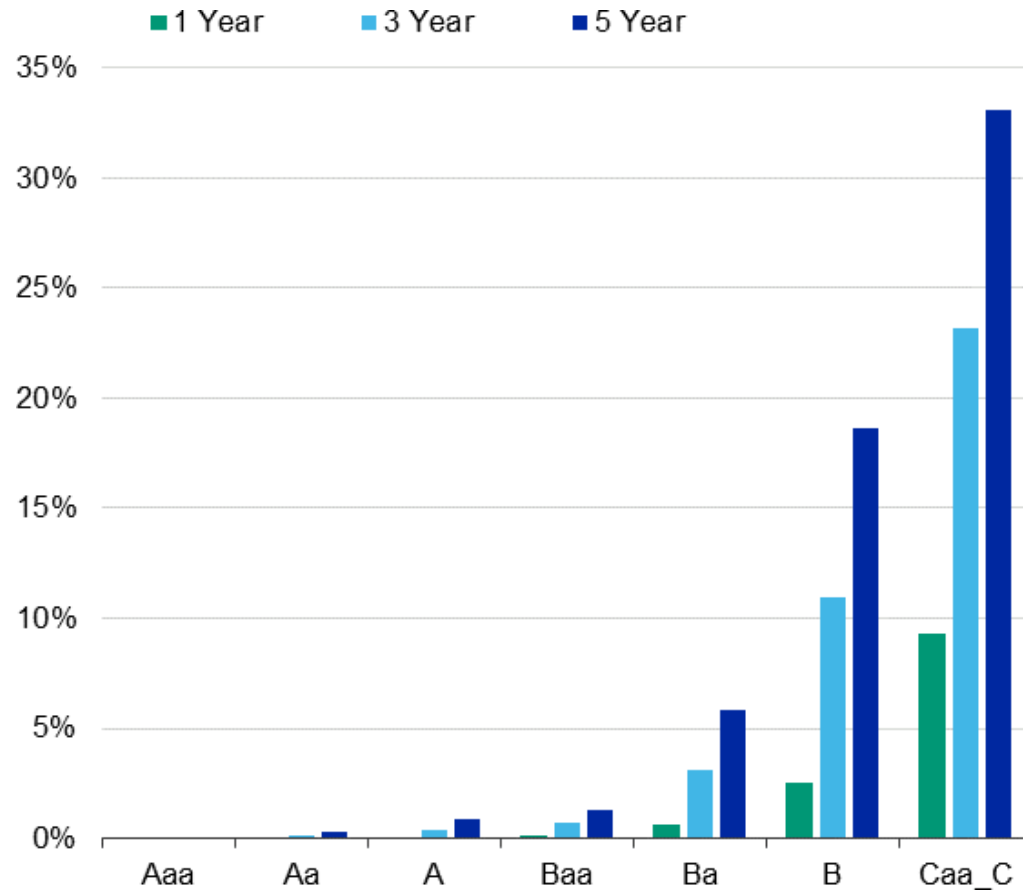
Rating distribution (global nonfinancial companies; senior unsecured or corporate family ratings)



Source: Moody's Investors Service

# Ratings and defaults

Global cumulative default rates at different time horizons



Source: Moody's Investors Service

# Questions and Answers

---

THE CREDIT CYCLE TURNS: KEY RISKS

Jorge R. Valez  
Senior Vice President

[jorge.rodriquez-valez@moodys.com](mailto:jorge.rodriquez-valez@moodys.com)

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

**CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.**

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moodys.com](http://www.moodys.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.