

The Ratings Process Explained Credit Trends

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The Ratings Process

Moody's Investors Service – Market Coverage

Our depth of institutional knowledge covers industries throughout the world

\$72+ trillion
of Total Rated Debt



4,600
Rated Non-Financial
Corporates



3,600
Rated Financial Institutions



134
Rated Sovereigns



49
Rated Supranational
Institutions



430
Rated Sub-Sovereigns



18,400
Rated Public
Finance Issuers



11,300
Rated
Structured Deals



1,000
Rated Infrastructure &
Project Finance Issuers



224
Rating
Methodologies

11,500
MCO employees

1,225
Analysts

14 Years
Average Lead
Analyst Tenure

28*
Countries



Americas

33,500
Rated Companies

\$33 trillion
Total Debt Rated

19,600
Research Documents

EMEA

4,600
Rated Companies

\$21 trillion
Total Debt Rated

7,100
Research Documents

APAC

1,800
Rated Companies

\$15 trillion
Total Debt Rated

3,300
Research Documents

MOODY'S INVESTORS SERVICE OFFICES

United States
Canada
Argentina
Brazil
Mexico
Peru**
Panama**

Cyprus
Czech Rep.
DIFC
Egypt**
France
Germany
Israel**
UK

Italy
Poland
Russia
South Africa
Spain
Sweden
UK

Australia
China
Hong Kong
India
Japan
Korea
Singapore

EVENTS

44,000 Global Market Participants

13,000 Global Outreach Activities,
including:



Conferences



Teleconferences



Roundtables

RESEARCH



30,000
Research
Publications

26,100
Company Research
3,900
Industry Research

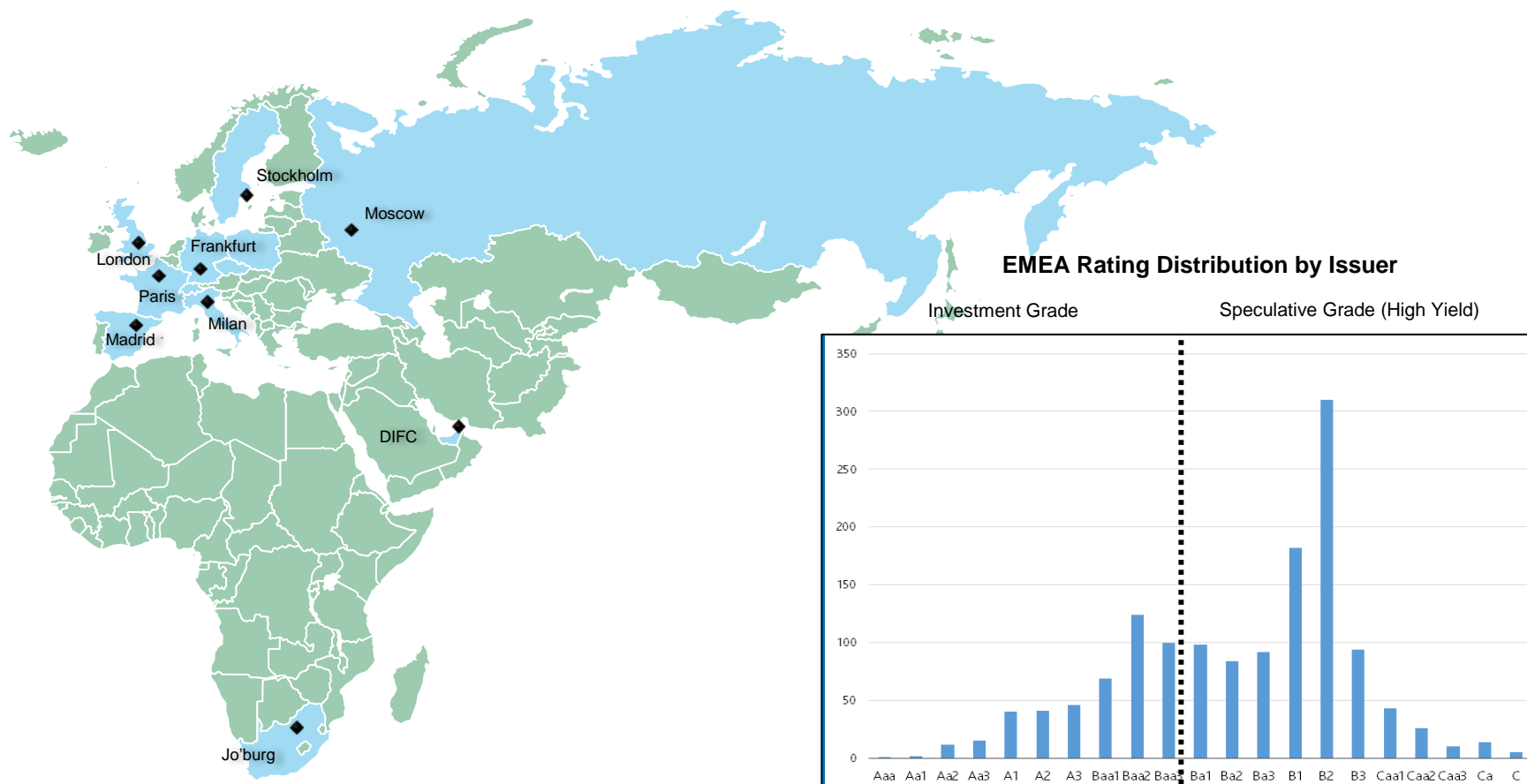
RESEARCH PUBLICATIONS BY SEGMENT

10,800 Non-Financial Corporates
6,000 Financial Institutions
1,800 Sovereign & Sub-Sovereign
6,600 U.S. Public Finance
2,200 Structured Finance
2,000 Infrastructure & Project Finance
600 Cross Sector

* Including affiliates of Moody's Investors Service. **MIS affiliate location.
Most data as of 31 December 2016. Infographic displays only publicly rated entities.

Corporate Finance Group Organization in EMEA

An experienced team across the region



Source: Moody's Investors Service – 30 June 2017

Moody's Investors Service (MIS) Issuer Charter

What you should expect from MIS in our day-to-day relationship. These are the standards to which we hold ourselves

An Experienced Team

- » Experienced, qualified analysts
- » Senior level engagement
- » Analytical continuity



A Proactive & Continuing Engagement

- » Proactive engagement – available to discuss issues
- » Efficient interactions and aim to meet with you where needed
- » Timely responses to your queries



A Clear Process

- » Explanation of our rating process
- » Updates on material developments in our analysis
- » Endeavour to meet your timing needs



A Transparent Assessment

- » Published methodologies and analysis
- » Explanation of your credit profile, relevant key financial metrics and quantitative measures
- » Endeavour to provide rating transparency presentations
- » Details on key metrics we use for quantitative analysis updates
- » Published analysis on credit 'events'



Timely Research

- » Regular, timely, independent and insightful research
- » Access to MIS research that may be of interest / relevance to you



Moody's Long-Term Ratings – An Overview

Long-Term Rating

- » An opinion, assigned to issuers or obligations with an original maturity of a year or more
 - Reflects likelihood of default; and
 - The expected financial loss in the event of default

Outlook

- » An opinion regarding the likely rating direction over the medium term
- » Generally assigned at issuer level

Investment Grade

Issuer Rating

- » An opinion on the ability of an issuer to honour its senior unsecured debt and debt-like obligations

Speculative Grade

CFR – Corporate Family Rating

- » An opinion, assigned to a corporate family as if it had a
 - Single class of debt; and
 - Single consolidated structure
- » Does not reference an obligation

Components of the Investment Grade Rating

Obligation or Instrument Rating

long-term rating assigned to a company or issuer's obligation

Components of the Speculative Grade Rating

Obligation or Instrument Rating

long-term rating assigned to a family entity's obligation

PDR – Probability of Default Rating

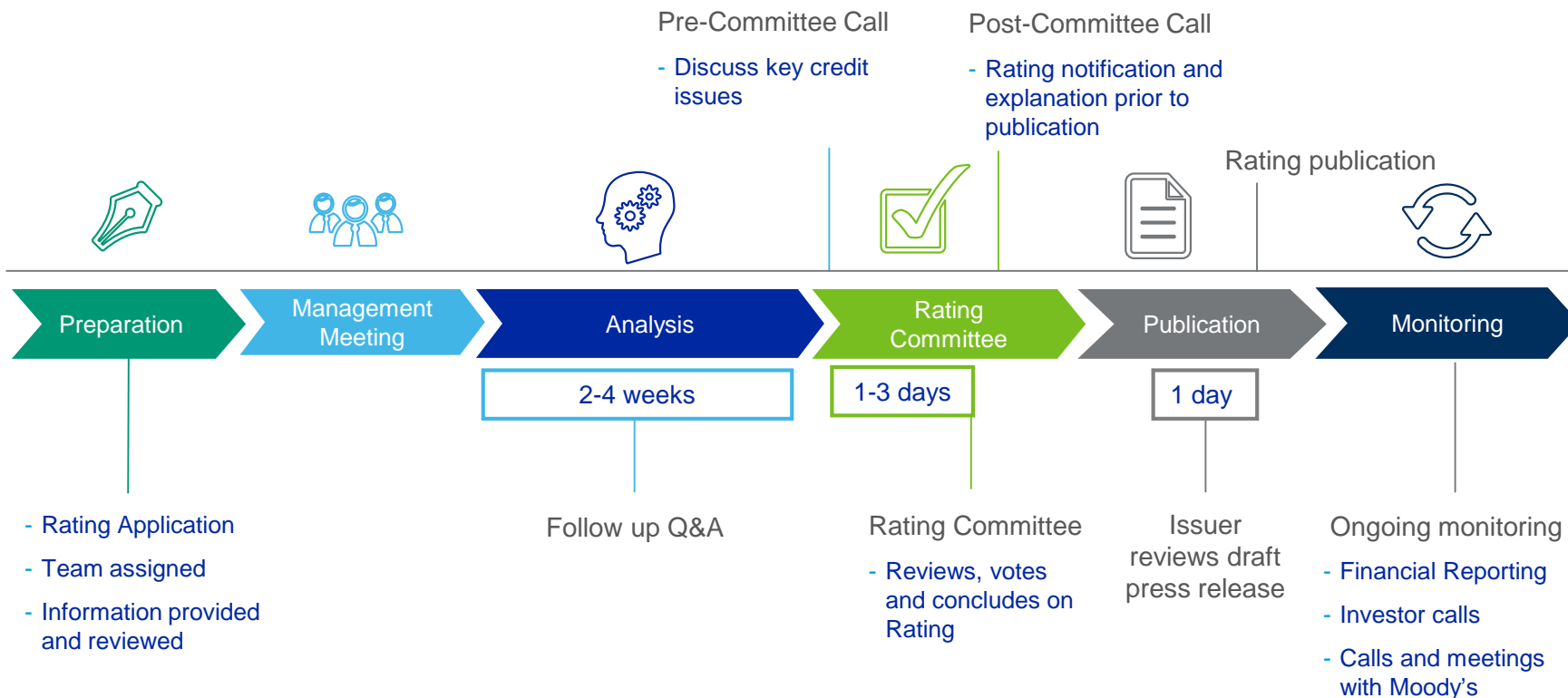
likelihood that a family entity will default on an obligation

LGD – Loss Given Default Assessment

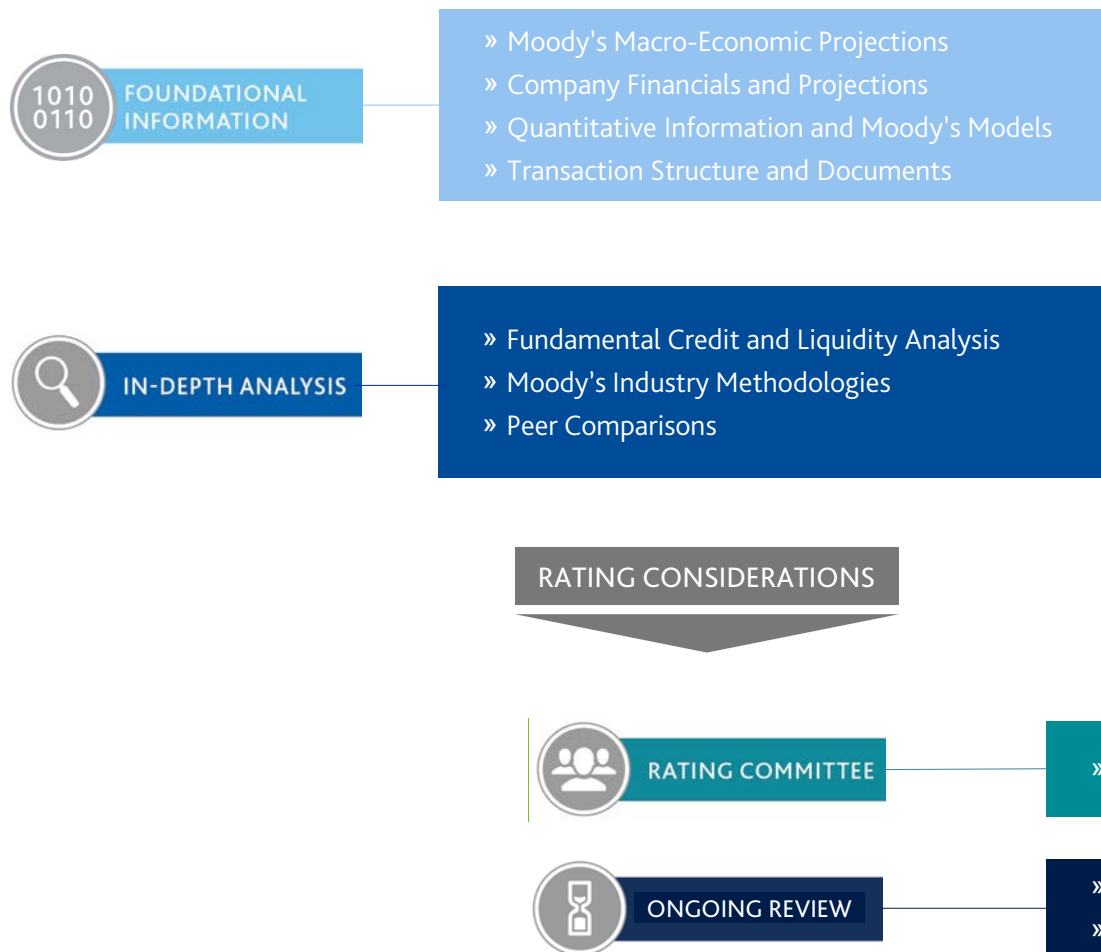
expected loss, given a default, of a family entity's obligation

Information Flow for Moody's Rating Process

Our process is efficient, timely and focused



Moody's Corporate Rating Process



The Rating Process

- » Moody's credit ratings are opinions of future relative creditworthiness, derived by fundamental credit analysis.
- » Moody's ratings are determined through the rating committee process.
- » The rating committee process is designed to foster consistency and efficiency across Moody's and to ensure that the integrity of the ratings process is maintained.
- » The committee focuses on the specific issuer and is not formulaic.

Moody's Research and Data

In-depth analysis and timely, insightful opinion in a range of formats

Moody's flagship publications



Press Release

Issued announcements for:

- » Public rating assignments and monitoring.
- » Credit outlook changes.

Credit Opinion

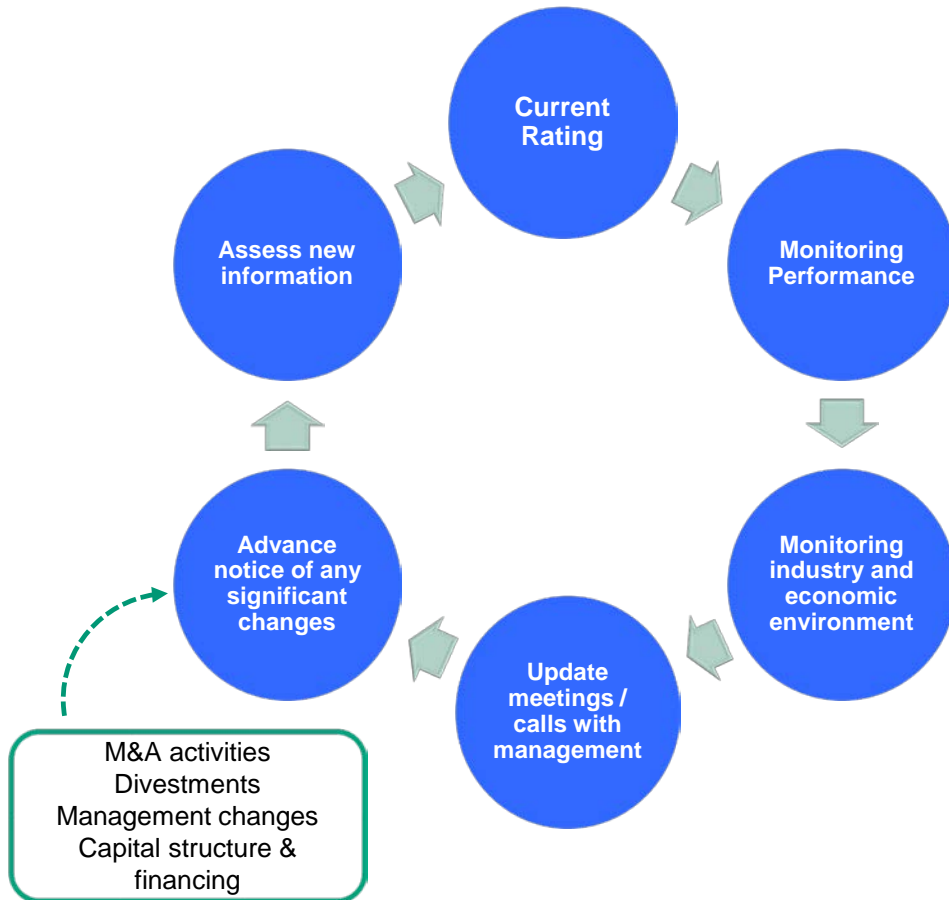
- » An explanation of our credit view of an issuer and our underlying credit assumptions.
- » Normally updated at least once a year.

Additional Moody's Research and Data

- » Issuer Financial Data – When not confidential, an issuers' financial data and Moody's-adjustments used by Moody's.
- » Issuer Comment – What today's news means for the credit quality of a company when it means no rating or outlook change.
- » Issuer & Sector In-Depth – Timely, forward-looking discussion of important credit issues affecting a company or sector.
- » Industry Outlook – Our detailed view of the fundamental business conditions for an industry for the next 12-18 months.
- » Moody's Credit Outlook – What recent news means for the credit quality of specific companies and sectors.

Ongoing Monitoring

Close dialogue maintained with issuers for timely and relevant ratings



Coordinated approach to monitoring:

- » Early notification of key changes
- » Moody's access to confidential information
- » Confidentiality preserved
- » Coordinated approach links to company announcements
- » Responsive to new events
- » Ensures timely and relevant ratings
- » Data sourcing team emails for private financial information

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Credit Trends

Six themes are shaping the global credit environment

Stable Macroeconomic Environment

Stabilizing Growth



- » Steady advanced economy growth, EM growth recovery
- » Stable commodity prices; upside limited

Unusual Monetary Conditions



- » Gradual US rate normalization
- » QE/ NIRP in other advanced economies

Elevated Policy Risks

Slow Trade Recovery



- » Subdued global trade growth
- » Rising protectionism

Political Risk



- » Impact of new US administration
- » Busy European election calendar
- » Brexit impact

Secular Trends Gaining Traction

Climate Change



- » Global climate policies
- » Carbon transition and physical risks
- » Green finance

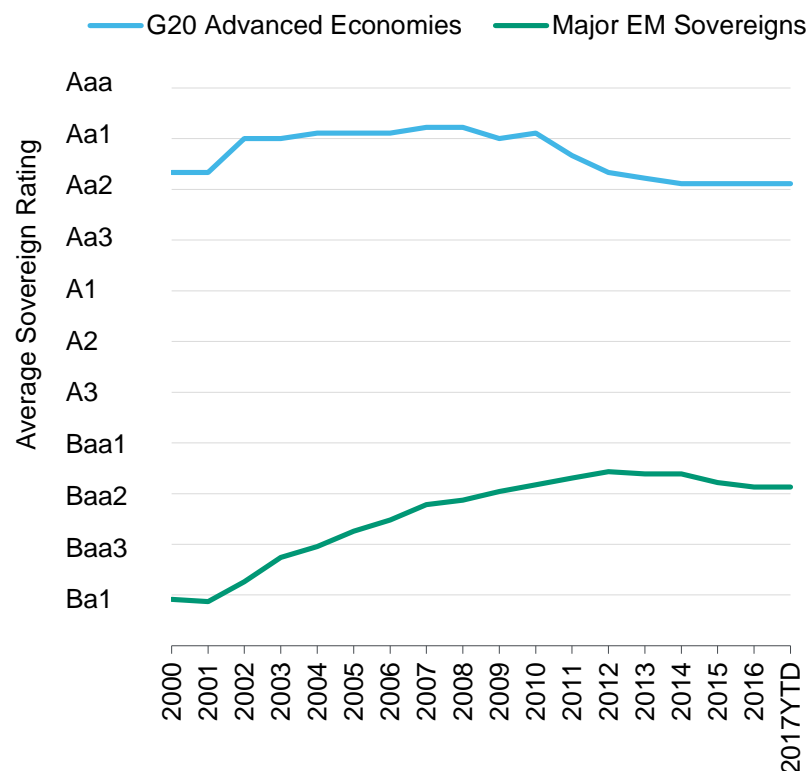
Technology



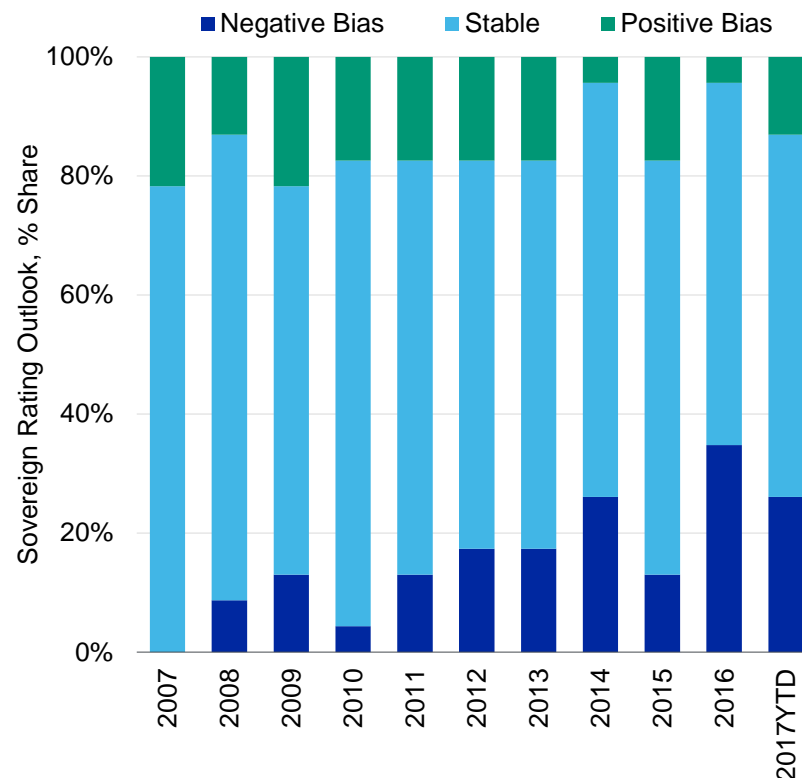
- » Disruption and innovation
- » New tech firms vs. mainstream industry

Emerging market credit environment showing signs of stabilisation after a challenging few years

Evolution of Average Sovereign Rating



Major EM Sovereign Rating Outlooks

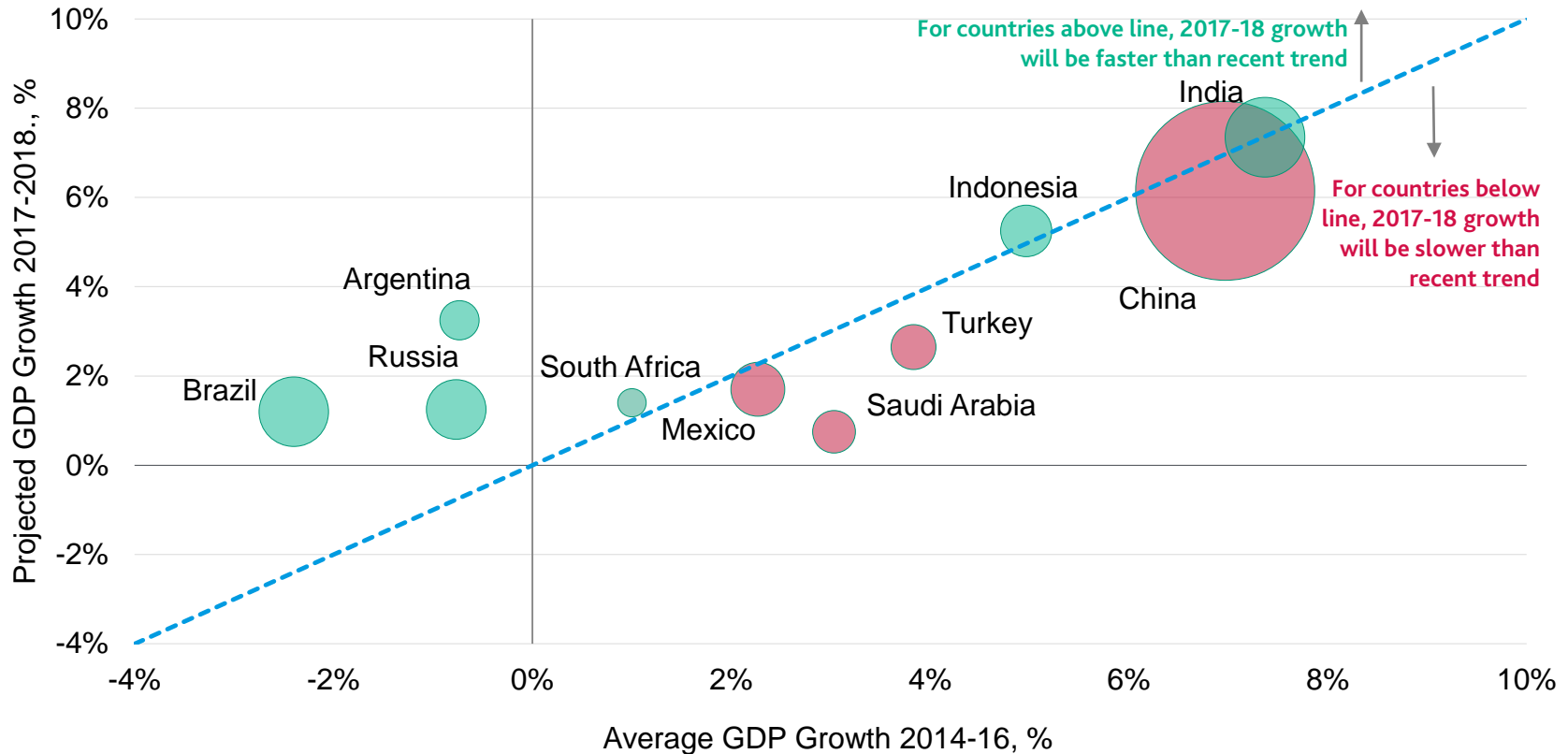


Note: EM aggregates include Argentina, Brazil, Chile, China, Colombia, Czech Republic, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Russia, Saudi Arabia, South Africa, Thailand, Turkey, Ukraine, UAE and Venezuela. Positive (negative) bias includes all sovereigns on positive (negative) outlook and review for upgrade (downgrade).

Source: Moody's Investors Service

All major emerging markets poised for positive growth in 2017-18, but economic cycles vary significantly

G-20 Emerging Market Real GDP Growth (%)

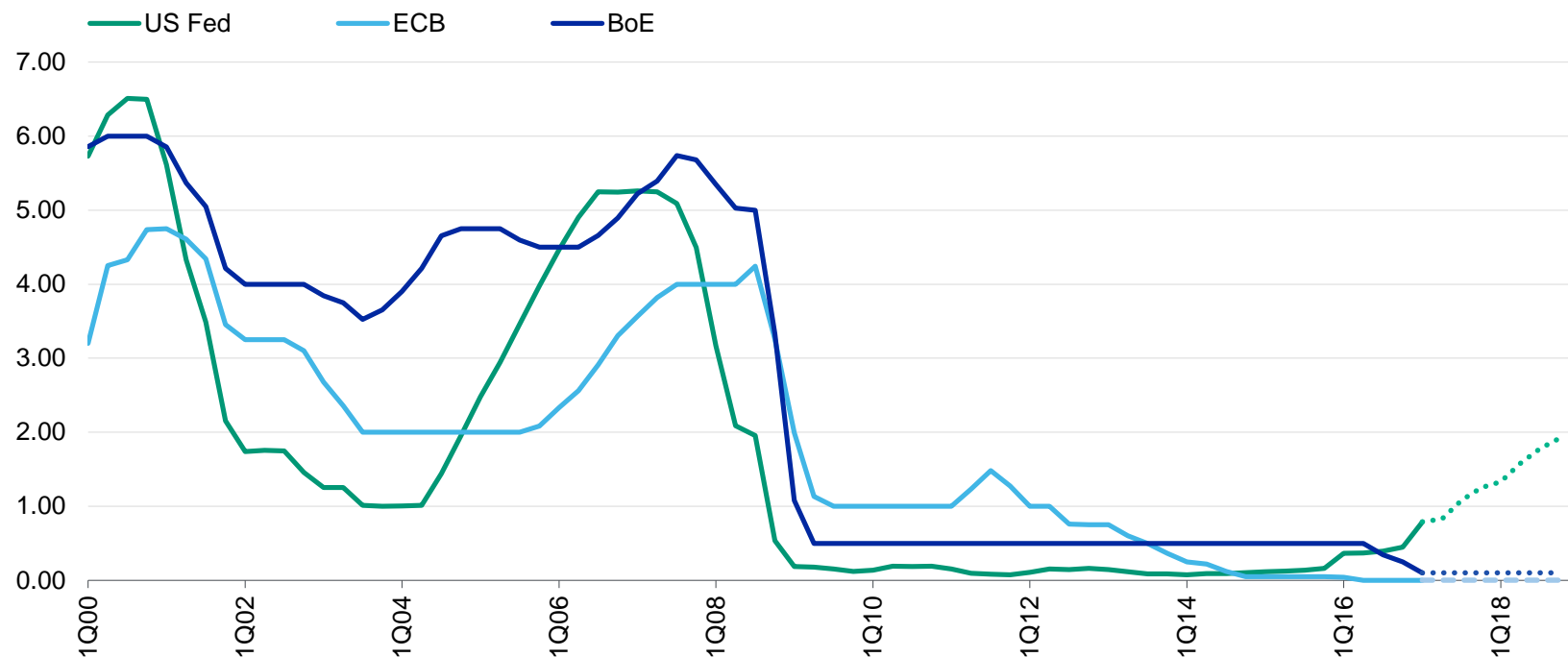


Note: Bubble Size is indicative of nominal GDP.

Source: Moody's Investors Service

Modest growth, low interest rates provide reasonably supportive backdrop for emerging market capital flows

Selected Advanced Economies Central Bank Policy Rates, %

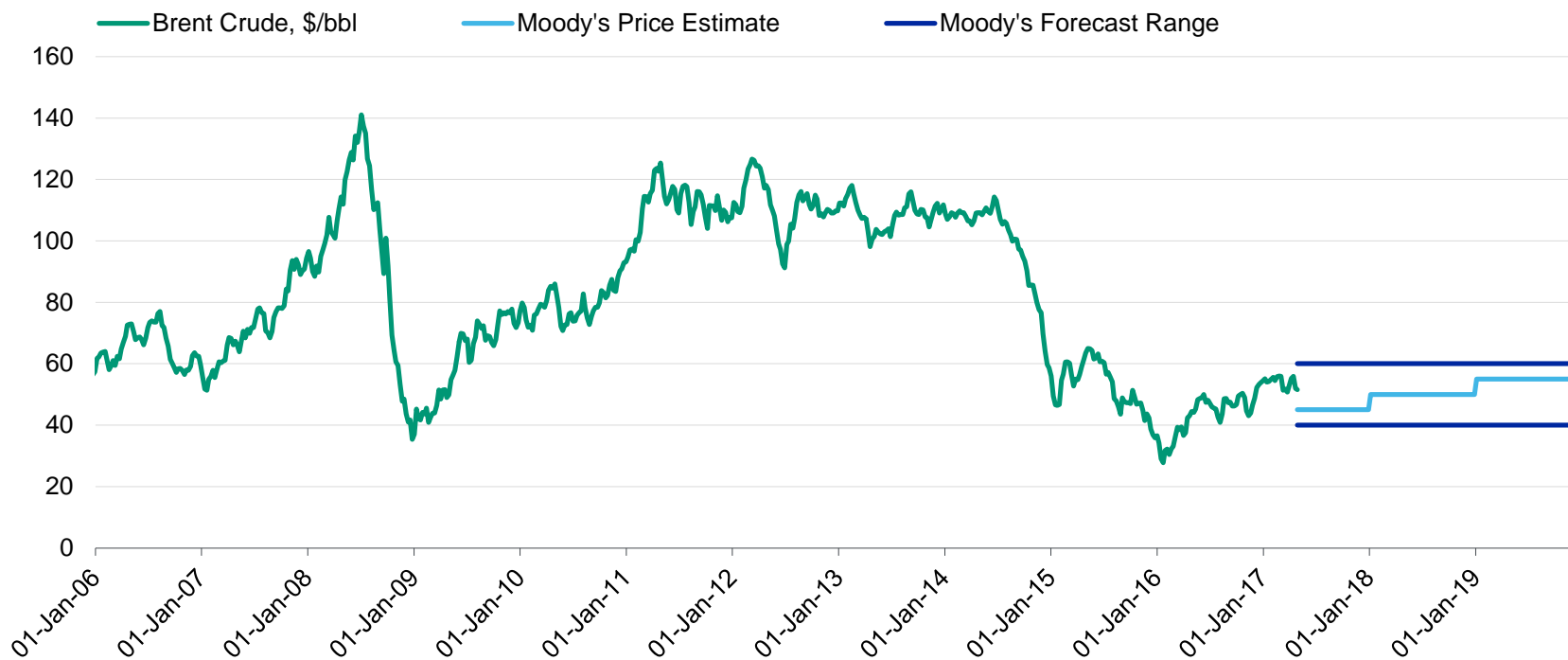


Note: Dotted lines reflect Moody's baseline scenario.

Sources: Central Banks, Moody's Analytics

Commodity prices will edge higher this year and next, providing support to growth, revenues and dollar liquidity

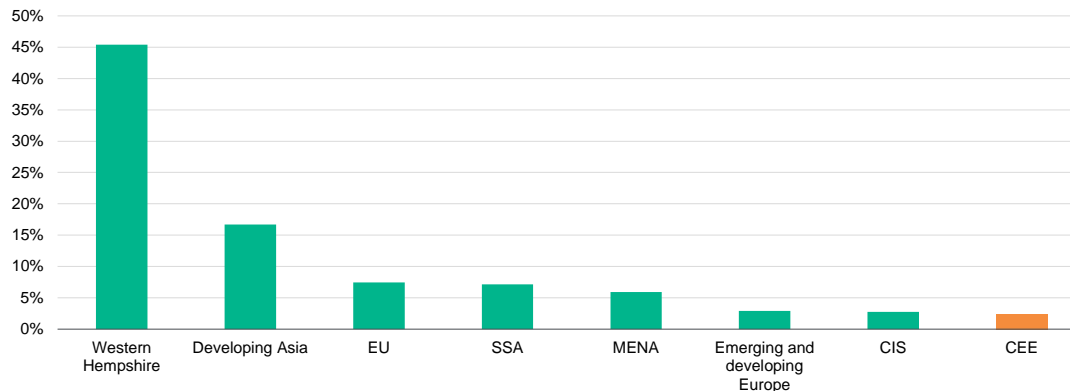
Brent Crude Price & Moody's Price Assumptions, \$ per bbl



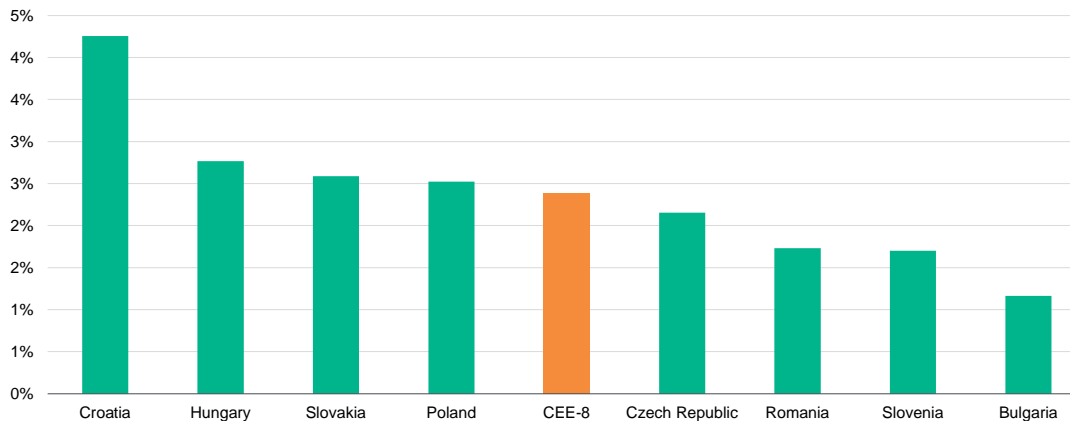
Sources: Moody's Investors Service, Haver Analytics

Adverse shifts in US policies would weaken trade and investment flows, amplify dollar liquidity challenges

Exports to the US as % of total exports (2016)



Exports to the US as % of total exports (2016)



Source: IMF Directory of Trade Statistics

Impact of dollar appreciation

Sovereigns with High US Dollar Debt

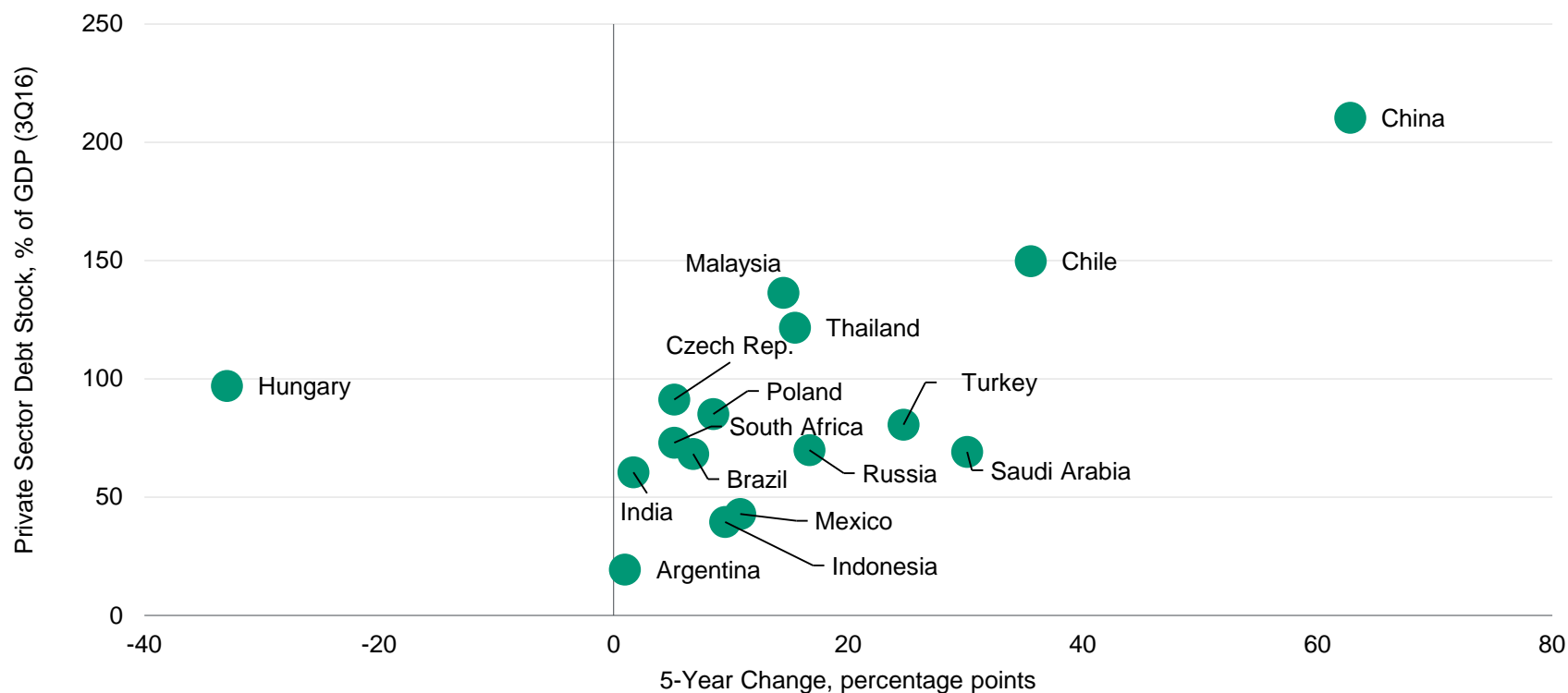
Dollarized Economies / Dollar Pegs

Capital Outflows

Dollar Exposure of Banks and Corporates

Rapid increase in EM household and corporate sector debt represents a risk to financial market stability

Emerging Market Household and Corporate Debt, % of GDP (Q316) and 5-Year Change (pp)



Note: Includes debt of households, non-financial corporates, government and financial companies.

Sources: Moody's Investors Service, Institute of International of Finance

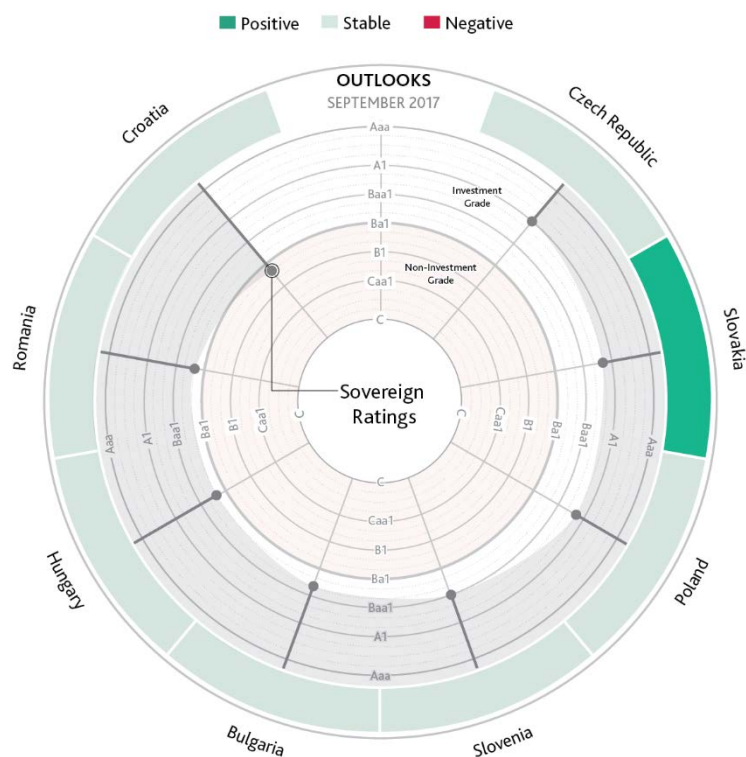
Key regional themes in the CEE region

Overall, outlook for CEE sovereign credit is mixed

- » Robust consumer spending and a recovery in EU funds will underpin growth rates between 2.5% and 3.5% for most countries in 2017-18, outperforming the EU average.
- » Coupled with the significant fiscal consolidation achieved between 2011 and 2015, this growth will help preserve broadly stable government debt trends.
- » But some residual political, and hence policy, uncertainty in some CEE countries...
- » ... a trend which risks slowing structural reform, impairing investment and reversing deficit reduction, and underpins our mixed outlook for the region.

Only stable and positive outlooks in the CEE region

Seven out of eight countries now investment grade Moody's ratings and outlooks for CEE sovereigns



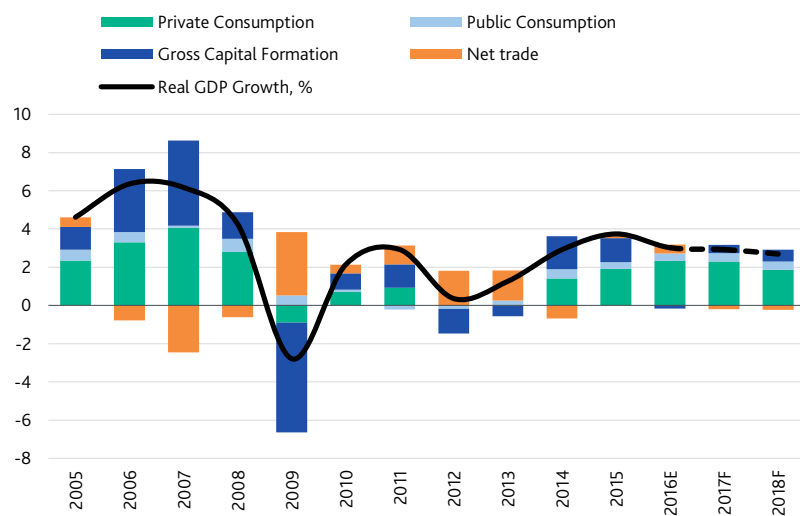
Source: Moody's Investors Service

- » Seven countries with stable outlooks, one with positive outlooks.
- » Resolution of positive outlook in Slovakia will be driven by fiscal and structural economic trends.

Robust consumption underpins solid growth

Private consumption, to remain the largest driver of CEE-8 growth...

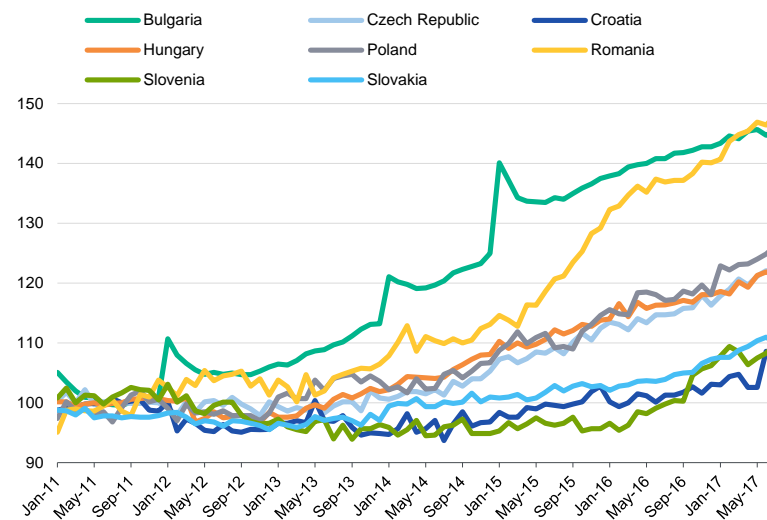
Contributions to real GDP growth, percentage points



Note: Averages are weighted by country's nominal GDP.
Sources: Haver Analytics, AMECO, Moody's Investors Service

...fuelled by labour market gains and robust consumer sentiment

Index of seasonally adjusted retail trade, 2010 = 100

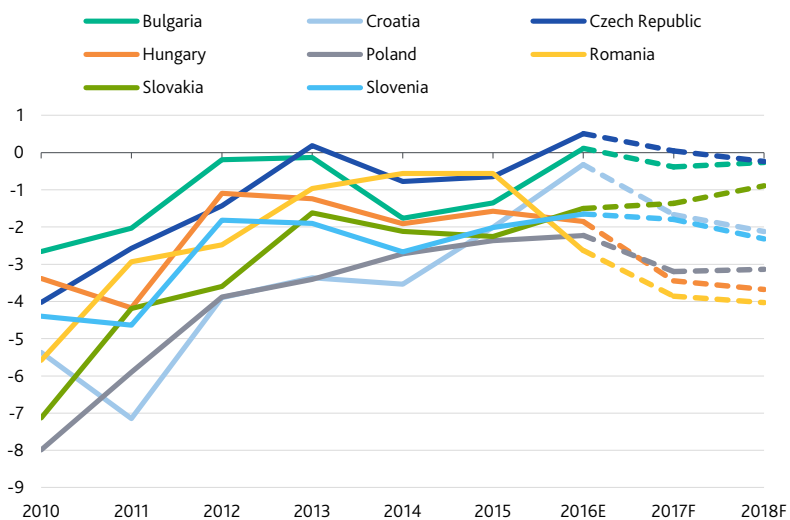


Sources: Eurostat, Moody's Investors Service

Fiscal strength is being preserved

CEE benefits from a strong starting position

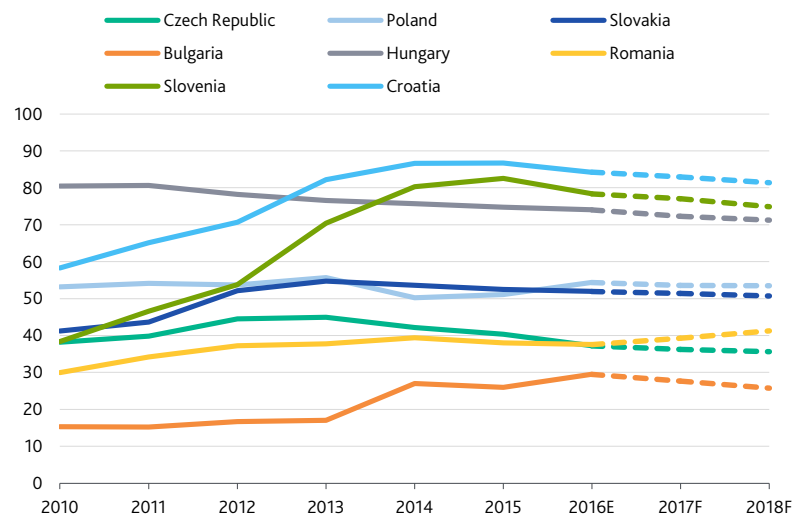
Structural balance as % of potential GDP



Sources: Haver Analytics, European Commission, Moody's Investors Service

Debt burden levels should remain stable overall

General government debt, % of GDP

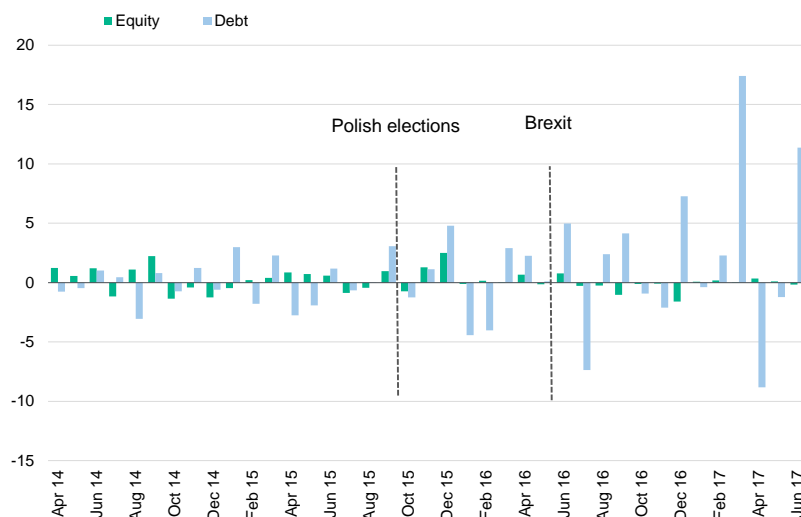


Sources: Haver Analytics, European Commission, Moody's Investors Service

CEE is resilient to shifts in investor sentiment

Portfolio flows were more volatile in 2016, while figures are positive in 2017

Portfolio flows, USD billion

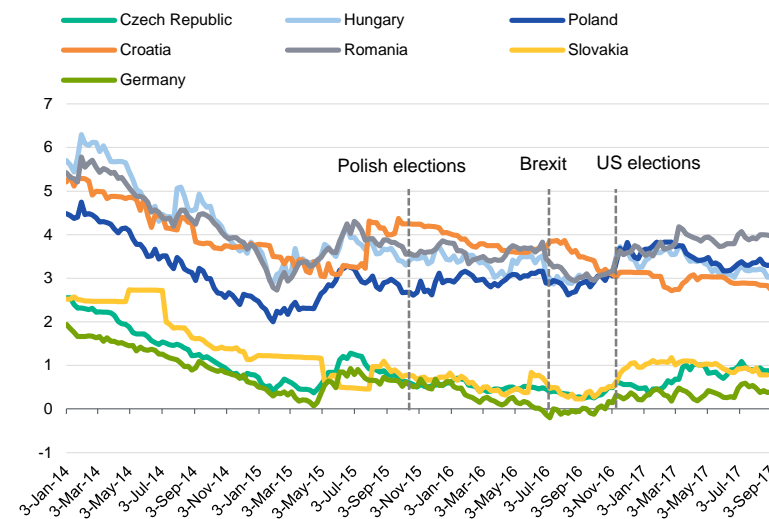


Note: Refers to CEE-4 (Bulgaria, Czech Republic, Hungary, Poland)

Sources: IIF, Moody's Investors Service

Yields on government bonds remain at historical lows

10-year government bond yields, %



Sources: Haver, Reuters, Moody's Investors Service

Key messages: CEE one of the most resilient EM regions

1

A stabilising macro environment will support emerging and frontier market credit in 2017

2

But significant variation in emerging and frontier market ability to weather global challenges

3

US trade policy, a renewed slowdown in China, rapid growth in EM debt are key downside risks

4

CEE's solid growth outlook and progress on fiscal consolidation will keep debt levels stable, but policy uncertainty risks reversing deficit reduction, impairing investment

Globally and locally acknowledged for award winning expertise in credit ratings, research and risk analysis.

AMERICAS



#1 US Credit
Rating Agency:
2012–2017



#1 US Rating Agency:
2015–2016

EMEA



Multi-award winner,
including best rating
agency categories:
2015–2017



Best Rating Agency:
2017

ASIA



Australia's Rating
Agency of the Year:
2014–2016



Best CLO Rating
Agency: 2016



Multi-Award
Winner, Including
Best Ratings
Agency: 2016–2017



Market Leadership Award,
Islamic Financial Intelligence &
Ratings: 2016
Best Islamic Finance Rating
Agency: 2015



Most Influential
Credit Rating
Agency:
2013–2016



#1 Asia Credit
Rating Agency:
2012–2016



Moody's

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