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# Emerging Markets Credit

## A Primer

7 May 2019

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PLEASE SEE ANALYST CERTIFICATIONS AND IMPORTANT DISCLOSURES BEGINNING ON PAGE 56.

# Emerging Markets Credit primer: Executive summary

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In this publication, Barclays EM credit strategy provides an overview of the EM hard currency market:

## Definition and size of the EM credit asset class

EM credit has grown rapidly over the past decade and is now larger than US HY. EM sovereign credit has almost tripled in size since 2009, while EM corporate credit is now just below 6x the size it was back then.

## The regional/sectoral breakdown of the EM credit asset class

EM Credit faced a wave of downgrades during the commodity rout in 2016. However, a growing share of GCC and African issuers in sovereign and Asia in corporates has led to a greater dispersion in credit quality.

## Historical performance, correlations to other assets and pricing patterns within EM Credit

EM credit returns are correlated to those of several risky assets. Oil and FX play a role in EM credit performance during periods of volatility. EM sovereign are a key driver for EM Corporate performance.

## The evolving financial landscape and technical idiosyncrasies

Index technical are particularly important for EM fallen angels credit. The climbing share of ETFs is also playing a growing role in the technical picture of EM credit market.

# Barclays Emerging Markets Credit Research

Economists, strategists and fundamental analysts covering 40+ countries, 28 corporate sectors and 210 companies globally issuing hard-currency debt

## Fundamental, Strategic and Thematic Research

### The Global Emerging Markets Quasi-Sovereign Monitor

We monitor the performance of EM quasi-sovereigns against their maturity-matched swaps. Swap out of Kazak 2025s into KMG 2030s: Although not entirely unexpected given his age, by surprise. The key concern has always been that the lack of a clear successor with the

EM Corporate Credit Top Picks  
Rotate to differentiate

Global Metals & Mining  
China environmental regulations:  
blue skies, cloudy growth

Update: This replaces the version published 4-Feb-19, 05:00 GMT, clarifying that our rating on ArcelorMittal is Underweight.

Rotate to differentiate

Emerging market corporates face global tailwinds. During this rally with only 2% of the EM corp believe that this trend is set to source of beta in the coming incorporates both relative value trades by region:

The downside risks to Chinese growth in 2019 require a nuanced investment approach in metals and mining. We are generally cautious on growth and commodity prices, but also see several areas of opportunity. In this note our Economics and Commodities teams examine China's environmental and fiscal policies to determine whether these could again provide support to growth and the commodities outlook as in past years. We also highlight key themes and top trade ideas across the global Metals & Mining universe from Fundamental Credit and Equity Research teams.

The Emerging Markets Quarterly  
Green light, for now

The macro backdrop we expect for Q2 should provide a fertile ground for EM assets to accumulate further returns. However, amid idiosyncratic risks, richer valuations and crowded positioning, careful asset selection is advisable. We believe conditions favour EM fixed income (credit and local) versus the more cyclical EM FX.

ely caught many observers tult in a disorderly political nced ally in the presidential wever, concerns have risen akhstan sovereign credit to IMG 2030s.

**Publications featuring top trade ideas, relative value opportunities, sector ratings, company ratings, and top down thematic frameworks**

Barclays #themes, a deep dive into the most relevant topics in the market, bringing together views from economists, strategists, and fundamental analysts

#bbbubble

#raceto5g

#chinadebt

#tradepolicy

#venezuelaspillover

#creditsupply

## Listen to Barclays Content with Audio Files

LatAm Oil & Gas

**AUDIO: PEMEX - Top Investor Questions about a Possible Downgrade**

In this audio file, Andrew De Luca, Badr El Moutawakil, and Marco Oviedo discuss their recent note on top investor questions about a possible downgrade to PEMEX. Topics include the viability of the company in case of a downgrade to high yield, from constrained access to, and higher cost of, capital.

#### Summary

In this audio file, Andrew De Luca, Badr El Moutawakil, and Marco Oviedo discuss their recent note on top investor questions about a possible downgrade to PEMEX. Topics include the viability of the company in case of a downgrade to high yield, from constrained access to, and higher cost of, capital.

For the full report, please see PEMEX: Top Investor Questions about a Possible Downgrade, March 14, 2019.

PEMEX Audio File.mp3

**Get the latest Barclays research on the go, with audio files highlighting the key takeaways and top questions off the back of our published research products**

## Barclays Premier Events

**Research led interactions with policymakers, external experts, and corporate management teams**

**Recent events have included:**

China Property Field Trip

Turkey Macro and Corporate Investor Trip

UNIFIN Management Roundtable

Ukraine's Reform Path Roundtable with Former Governor of the National Bank of Ukraine

South Africa Macro and Corporate Investor Trip

Field Trip: Indonesia HY & SOE Investor Trip

Argentina & Brazil Investor Trip

# Emerging Markets Credit: A primer

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Defining EM

Size, supply &  
redemption

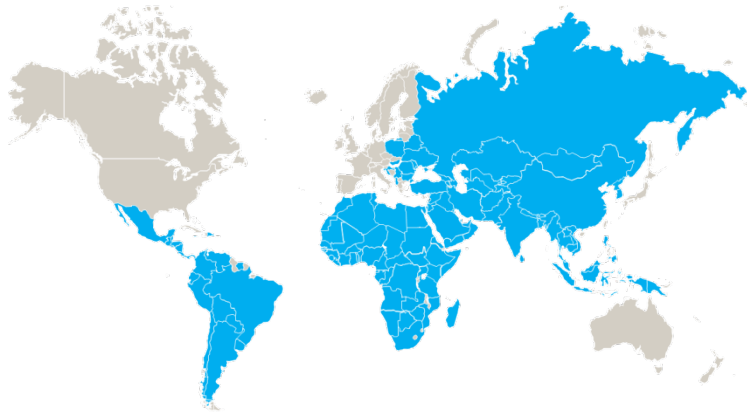
Composition  
of EM credit

Historical  
performance  
and valuation  
characteristics

EM  
idiosyncrasies  
and risk  
factors

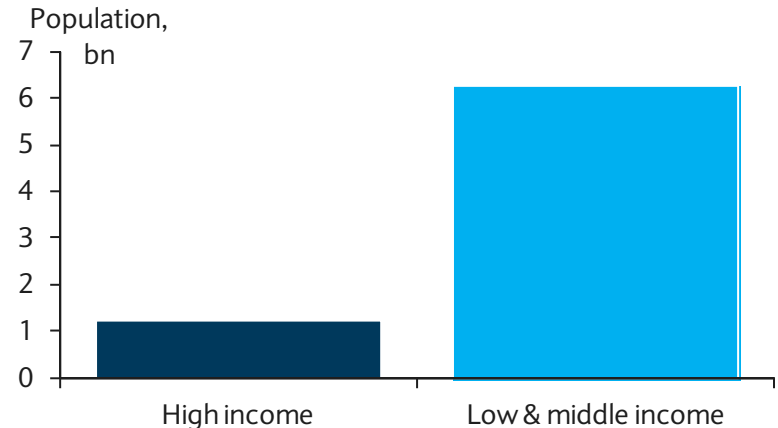
# In emerging markets, financial development has lagged

EM comprises most of the earth's surface...



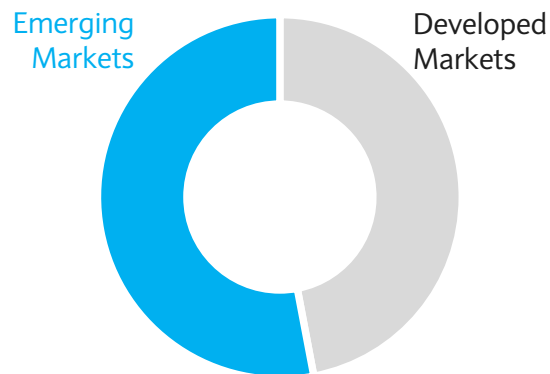
Source: Barclays Research

...most of its population...



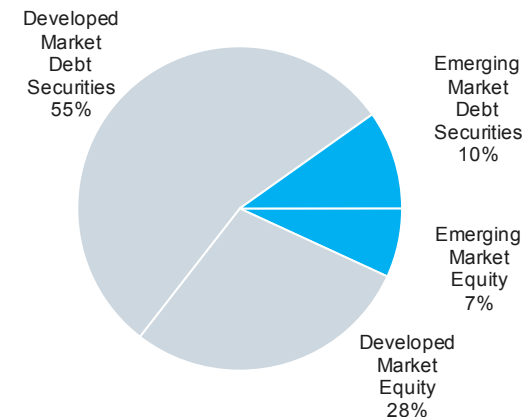
Note: Using 2017 data (high income defined as GNI/capita > \$12,235).  
Source: Barclays Research, World Bank

... close to 60% of its economy...



Note: Using 2017 data, GDP measured in PPP terms in international \$.  
Source: Barclays Research, IMF.

...but just 17% of its financial market\*



Note:\* As of Q1-18. MSCI World used as proxy for DM equity and the MSCI EM & Frontier Market for EM equity. For debt securities, we use the BIS total debt securities statistics where we have excluded offshore centres. Source: Barclays Research, Bloomberg, BIS, MSCI

# What is an emerging market country?

## Several definitions based on different criteria

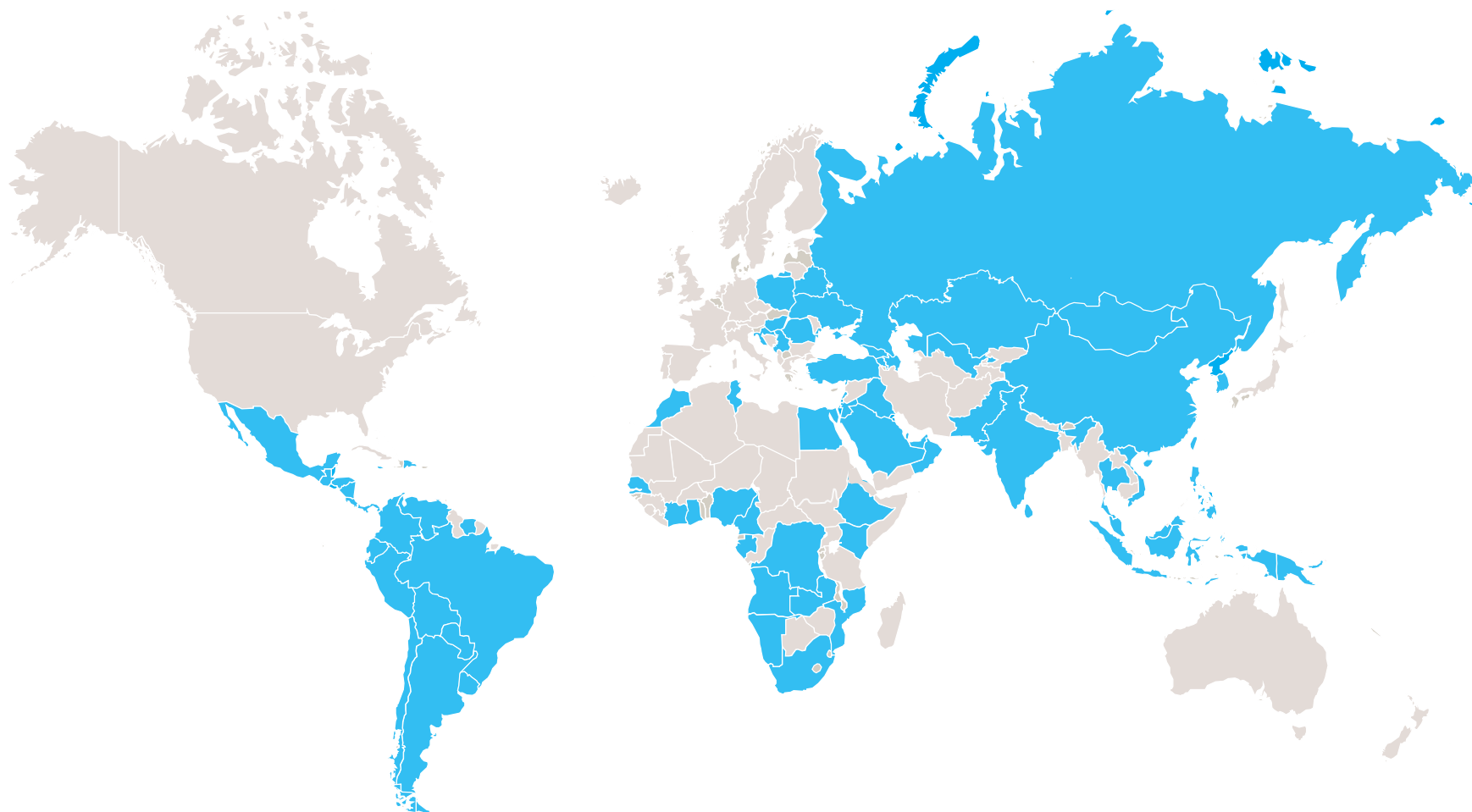
| Source                            | Definition   |
|-----------------------------------|--|
| <b>World Bank</b>                 | “Middle Income” countries: per capita GNI \$996-\$12,055 (2018 thresholds, reviewed annually)  |
| <b>Competitor Indices</b>         | GNI per capita below Index Income Ceiling or PPP IPR below EM threshold for three consecutive years  |
| <b>MSCI EM</b>                    | Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates  |
| <b>Bloomberg Barclays Indices</b> | <p>The Bloomberg Barclays indices use a fixed list of emerging market countries that is reviewed annually to define country eligibility in dedicated EM hard currency, local currency, and inflation-linked benchmarks. Criteria for inclusion in the EM country list are rules-based and include:</p> <p>Countries that meet one of the following two criteria:</p> <ul style="list-style-type: none"><li>• World Bank Income group classifications of low/middle income OR</li><li>• International Monetary Fund (IMF) classification as a non-advanced country.</li></ul> <p>Additional countries that bond investors classify as EM due to factors such as investability concerns, the presence of capital controls, and/or geographic considerations may also be included on the list and are also reviewed on an annual basis (currently Czech Republic, Israel, South Korea, and Taiwan).</p> |

Note: In EM, the most followed indices are the JP Morgan EMBI and CEMBI. Source: World Bank 2018, JP Morgan, MSCI, Barclays Research



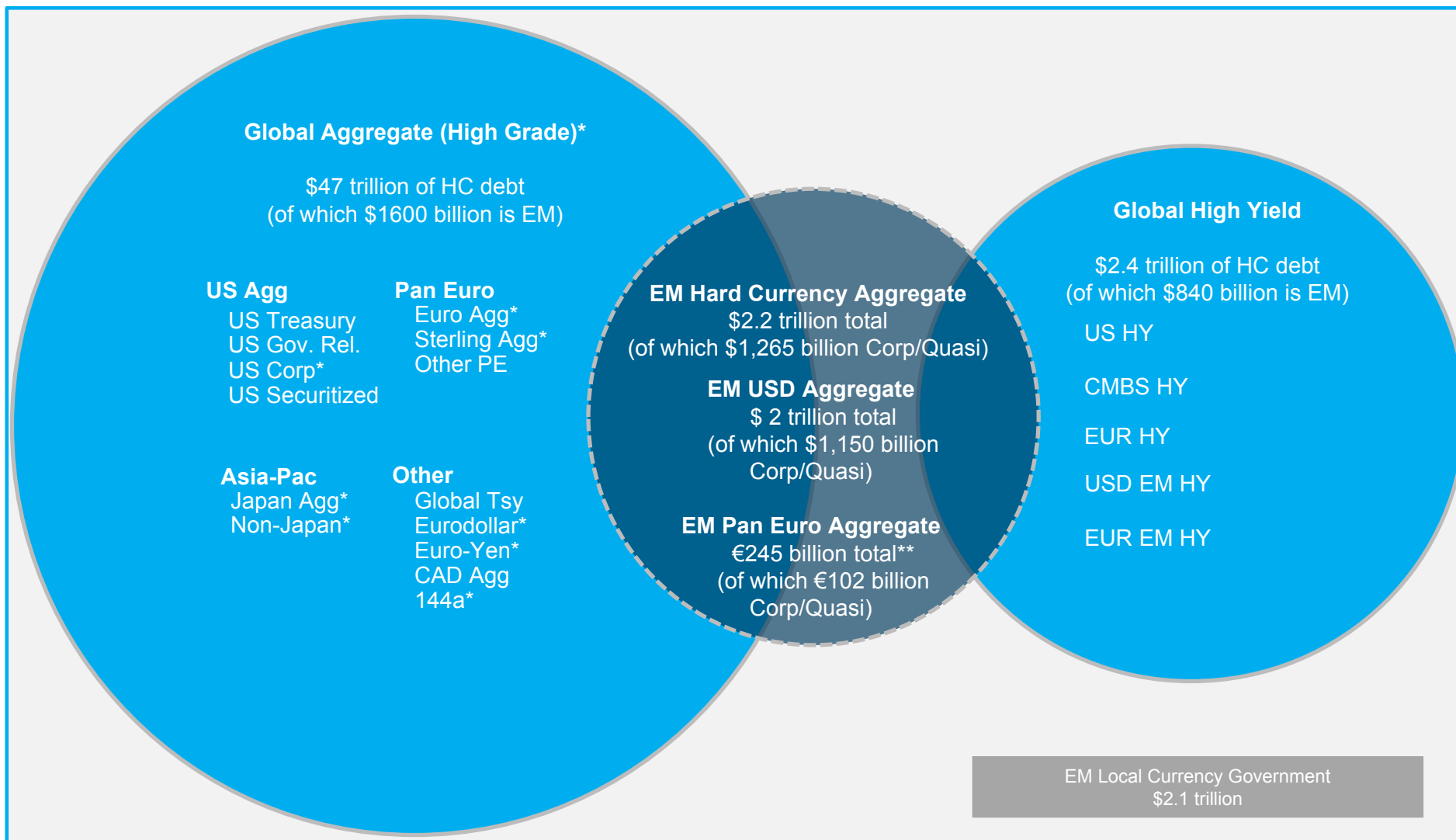
# Countries included in the Bloomberg Barclays EM Index

~80 different countries have bonds in the Bloomberg Barclays EM USD Index



# EM Hard Currency bonds in the Bloomberg Barclays Indices

**Hard currency multiverse:** \$49 trillion total (of which **\$2.4** trillion are EM HC bonds)

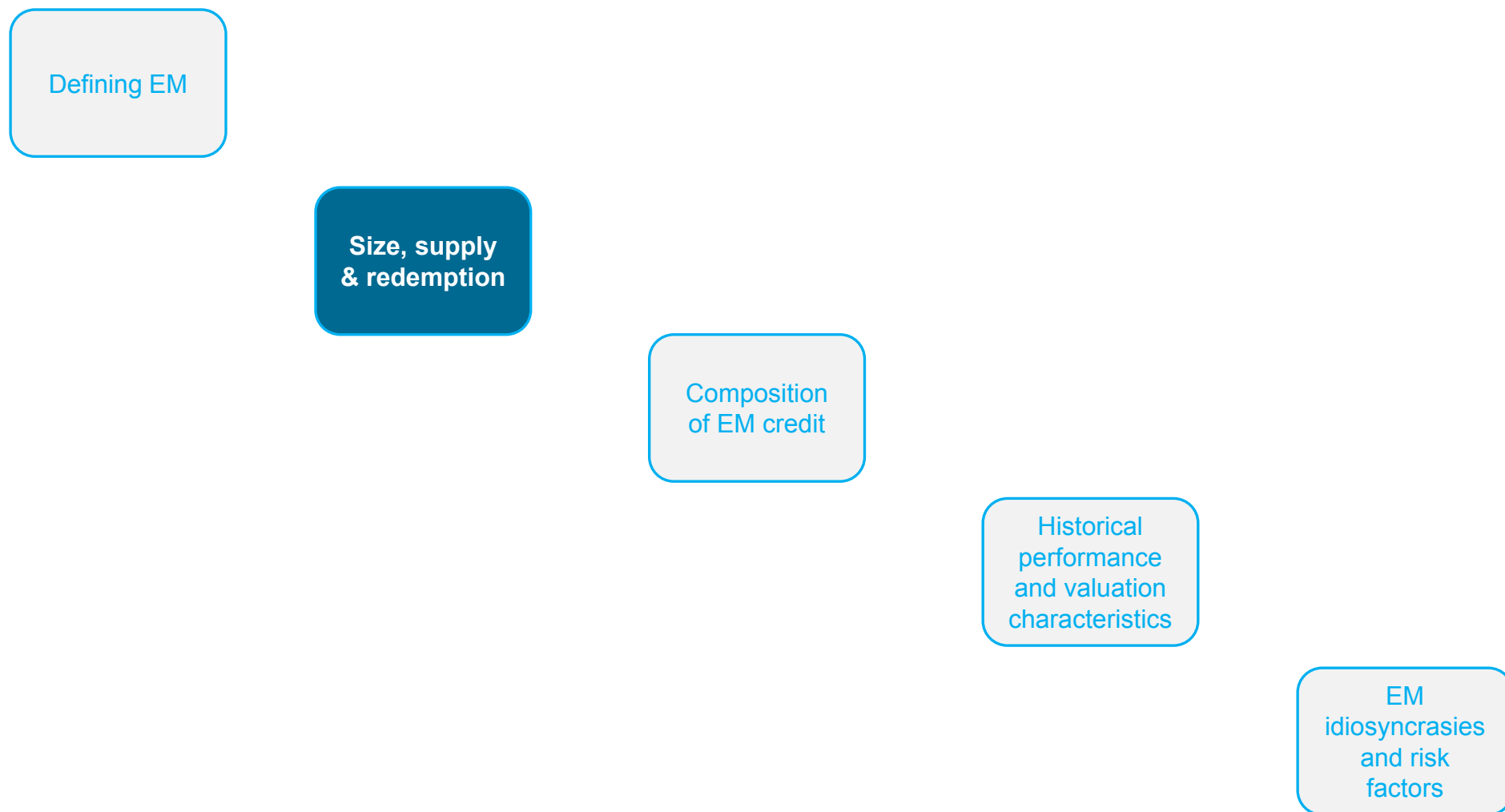


Note: (\*) Global Agg index includes EM hard currency and local currency bonds. Figures show only hard currency debt outstanding. (\*\*) Includes a small amount of c. € 9bn of GBP denominated bonds. Amount outstanding, as of 11 March 2019. Source: Bloomberg, Barclays Research



# Emerging Markets Credit: A primer

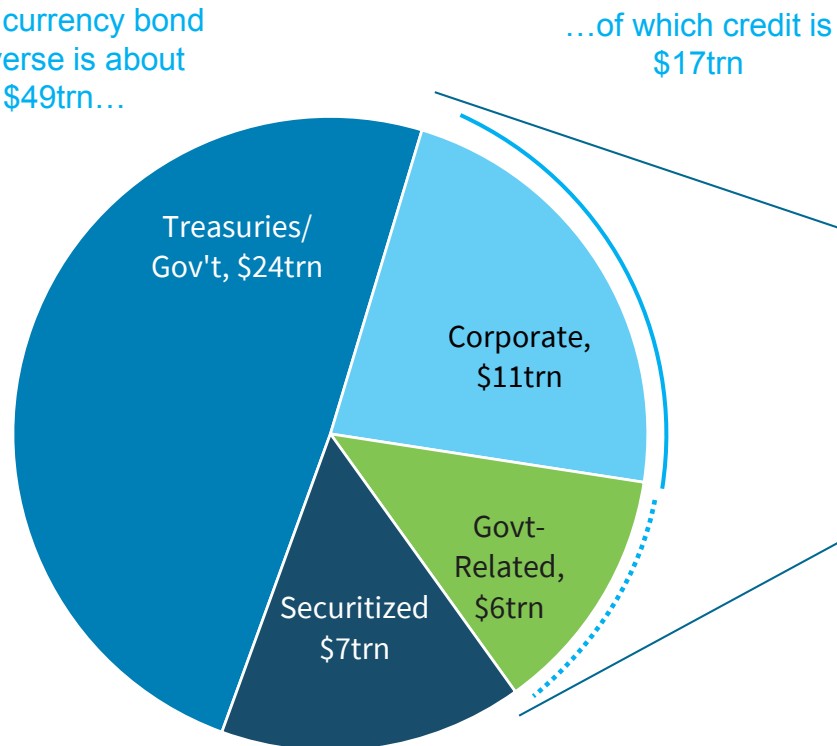
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# Emerging market credit accounts for only about 5% of global hard currency debt

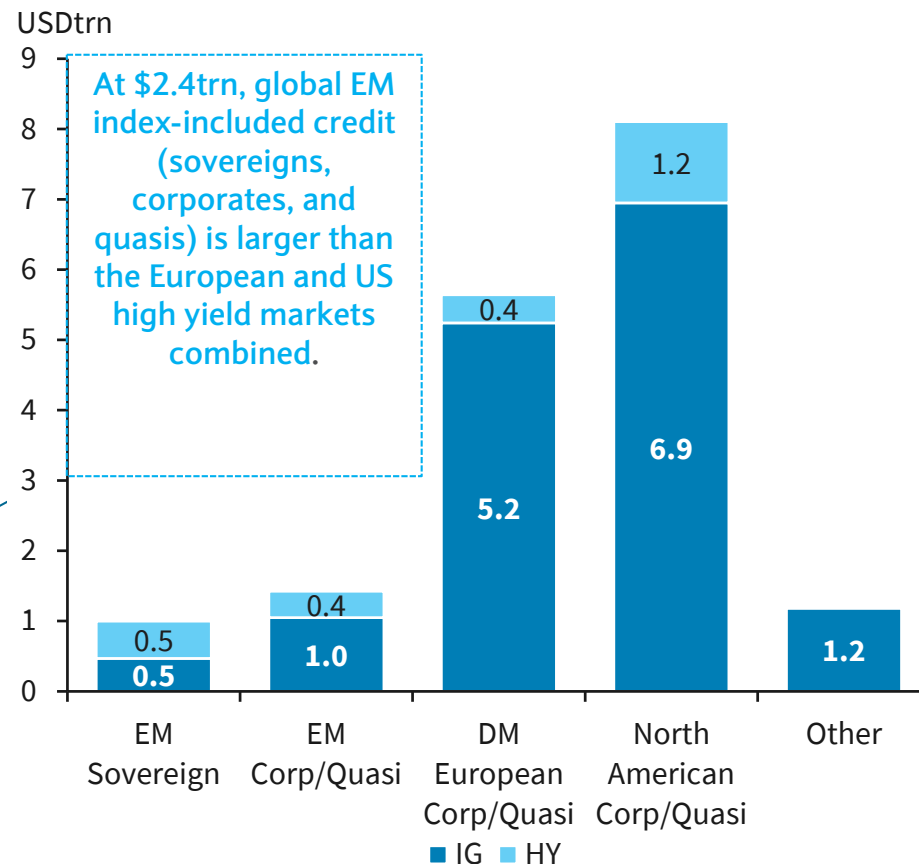
**Credit is about a third of the global hard currency bond market**

Hard currency bond universe is about \$49trn...



**Within credit, EM is about 14% of the market**

...of which EM HC credit is \$2.4trn

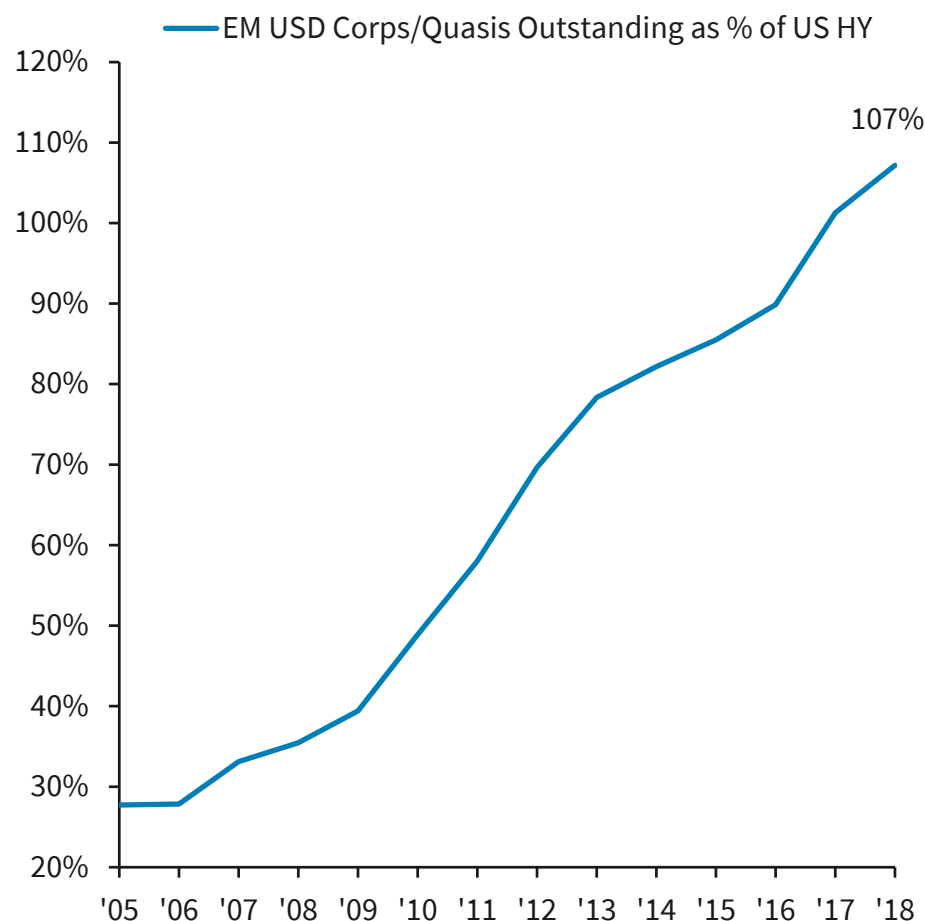
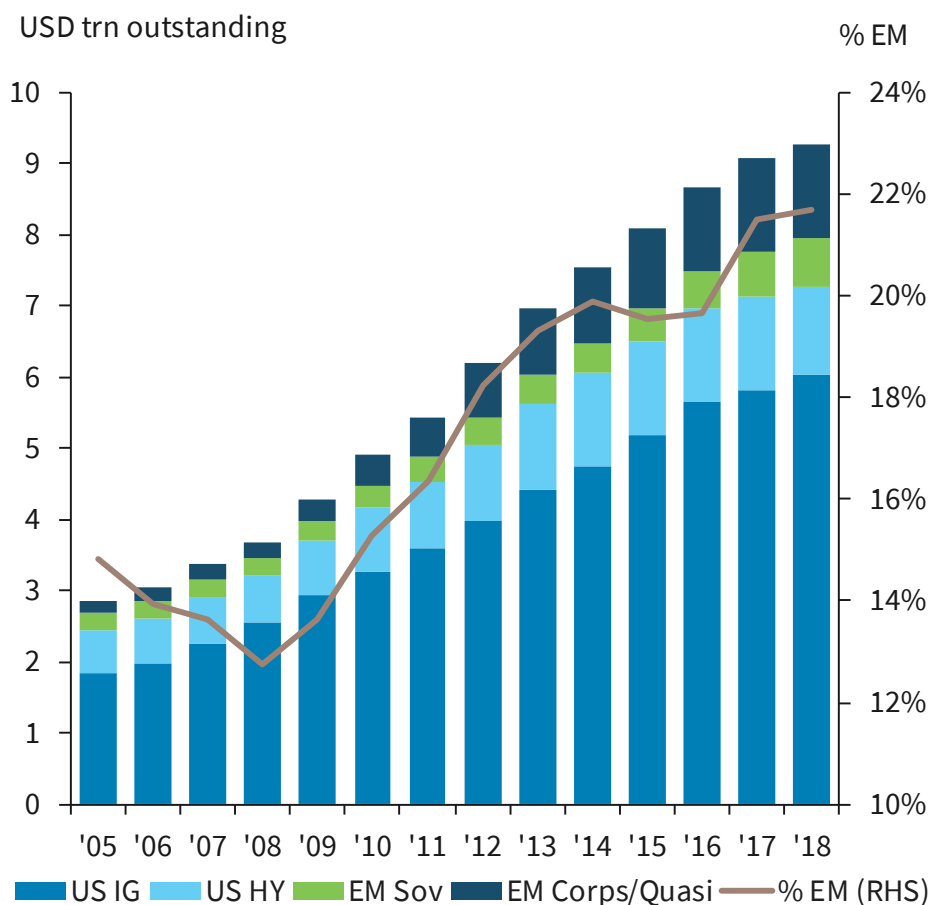


Note: All calculations based on Bloomberg Barclays indices. Hard currency universe comprises all bonds included in the Global Agg and Global HY. All data as of 19 March 2019.  
Source: Bloomberg, Barclays Research

# EM debt has increased relative to other asset classes...

**EM USD debt represents 22% of USD credit**

**EM USD Corporate/Quasi bond market is larger than US HY in terms of size**

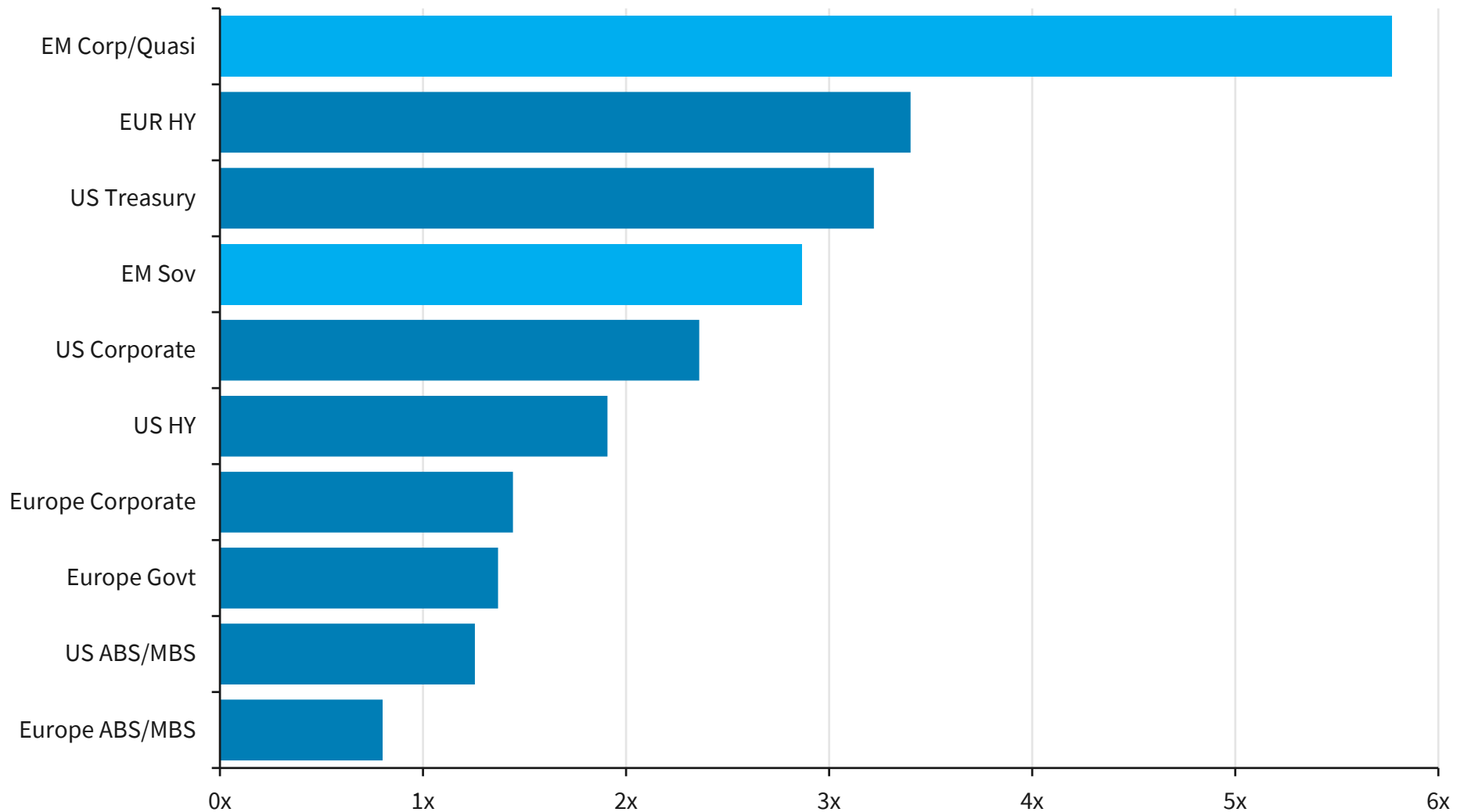


Note: Based on Bloomberg Barclays indices. Reflects changes in the index definition in 2013. As of 8 December 2018. Amount outstanding. Source: Bloomberg, Barclays Research

Note: Including index-eligible debt only. As of 8 December 2018. Amount outstanding used. Source: Bloomberg, Barclays Research

...thanks to its growth over the past 10 years...

**The EM corporate asset class is almost 6x the size it was at end-2008**

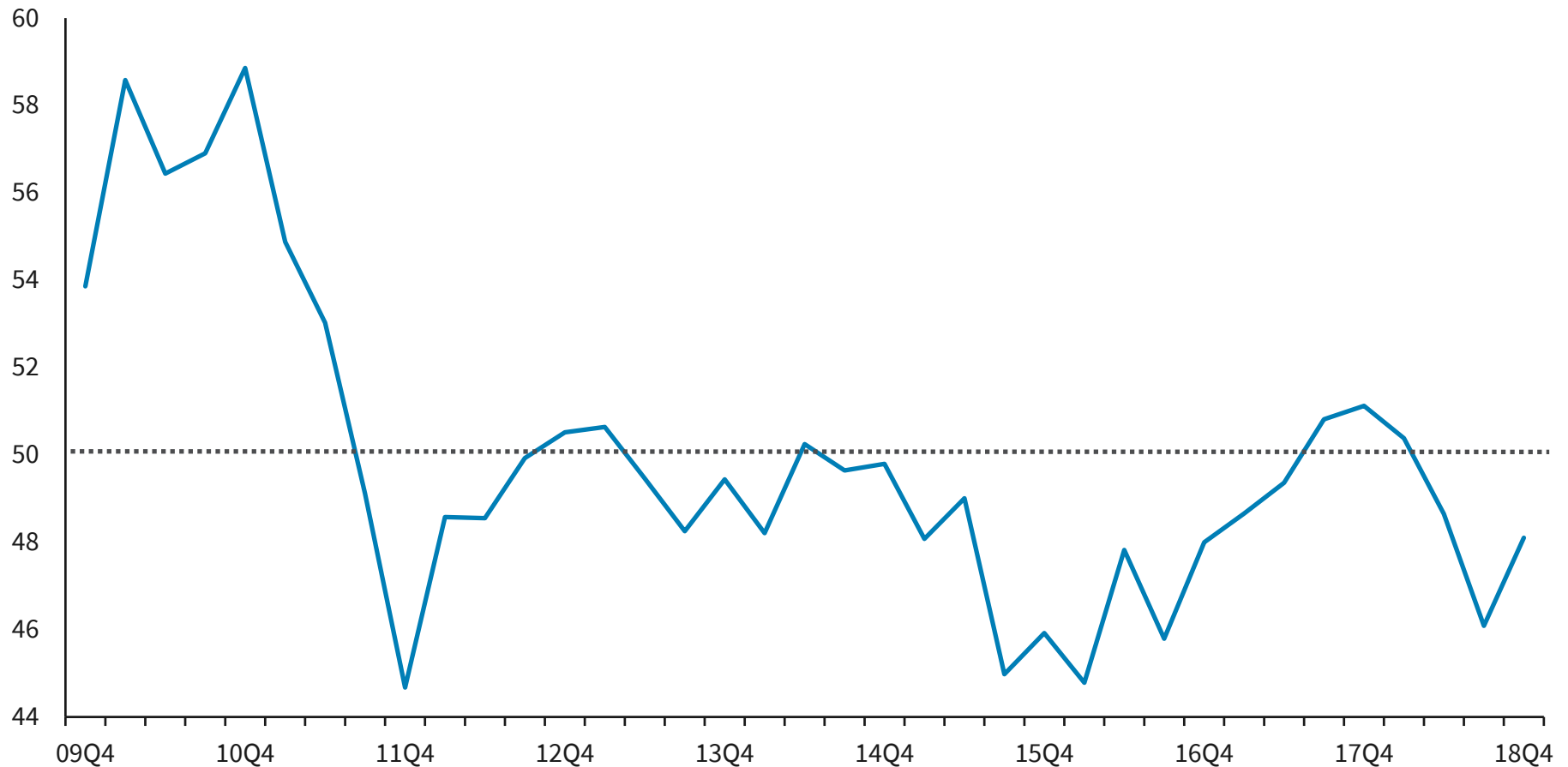


Note: Par outstanding as of December 2018 divided by as of December 2008 Source: Bloomberg, Barclays Research

## ... partly due to tighter credit conditions from EM banks

### EM banks scaled back lending

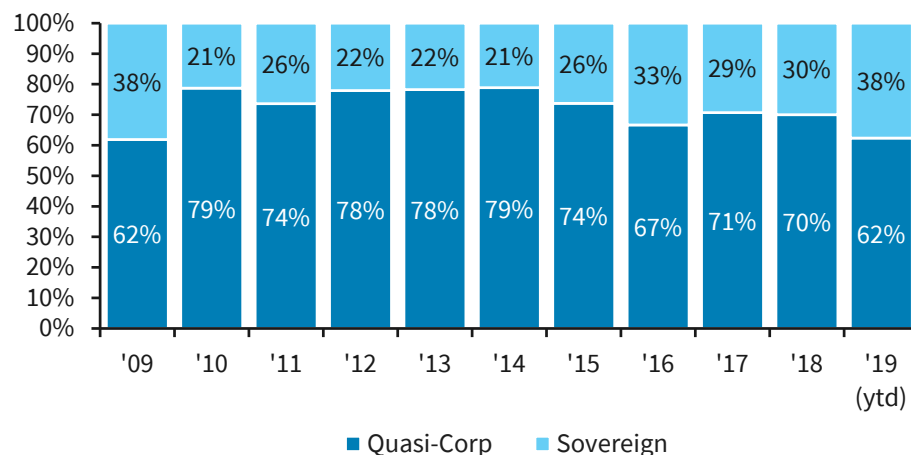
Bank lending conditions survey, Index (>50 expansion, <50 contraction)



Note: Survey asks banks based in EMs 14 multiple choice questions that address topics relating to lending conditions such as: Credit standards for business, consumer, and real estate loans; demand for loans; domestic/international funding conditions, etc. Source: IIF Emerging Markets Bank Lending Survey, Barclays Research

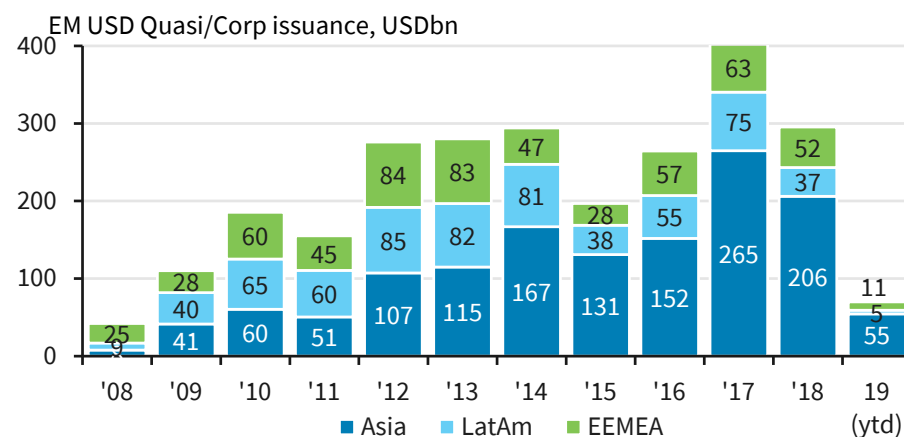
# EM USD Corporate/Quasi supply breakdown

## A high share of corp/quasi supply ...



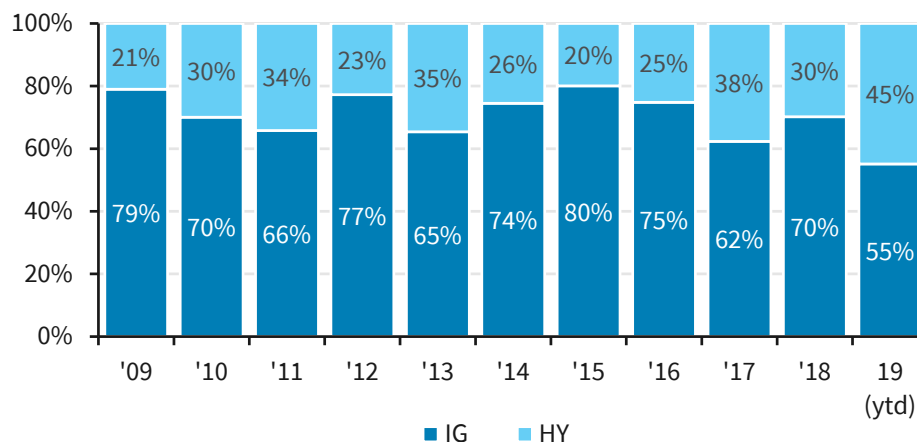
Note: As of 11 March 2019. Source: Bondradar, Barclays Research

## ...driving EM issuance, especially out of Asia



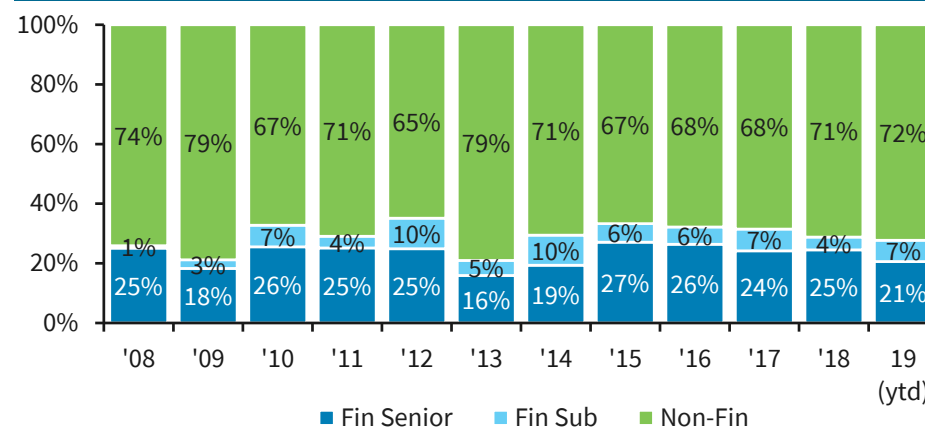
Note: As of 11 March 2019. Includes agencies, financial and non-financial corporates. Source: Bondradar, Barclays Research

## Supply is dominated by IG issuers...



Note: As of 11 March 2019. Includes agencies, financial and non-financial corporates. Excludes non-rated and crossover issuance. Source: Bondradar, Barclays Research

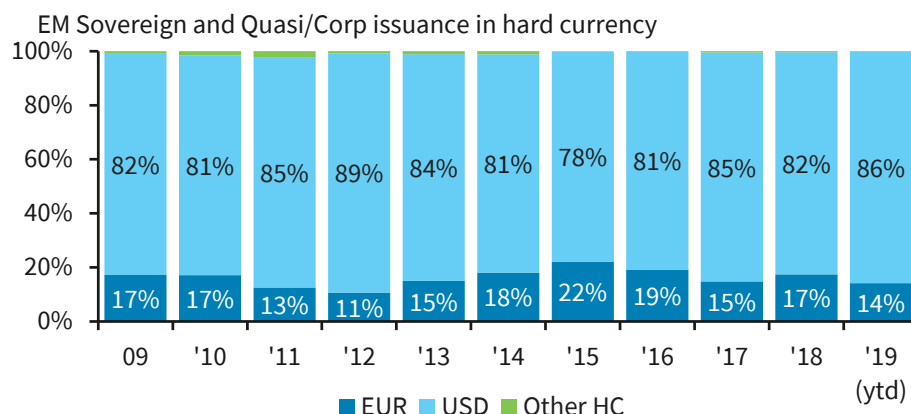
## ... while financials account for c.30% in IG and HY



Note: As of 11 March 2019. Non-Fin includes agencies. Source: Bondradar, Barclays Research

# 10-20% of EM hard currency supply is issued in EUR

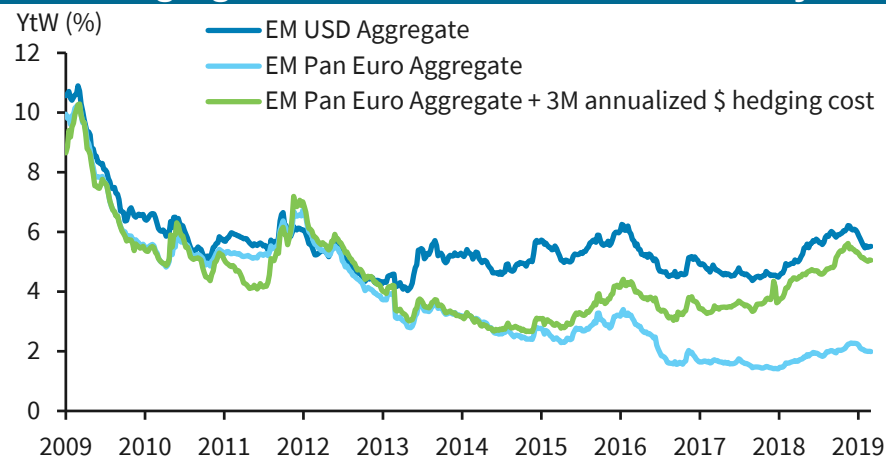
## EUR share increased again in 2018 after falling in previous years



Note: As of 11 March 2019. Euro and other HC (includes JPY and GBP) supply converted to USD at 2009 average exchange rate for long-term comparison.

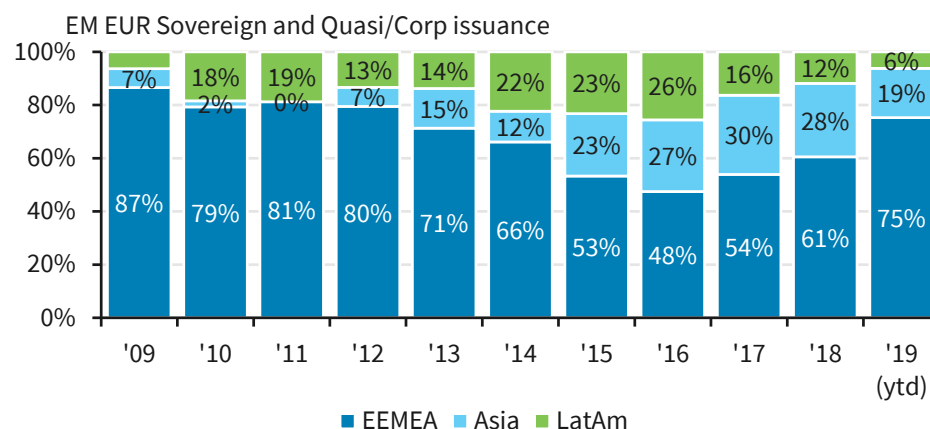
Source: Bondradar, Bloomberg, Barclays Research

## Wide yield gap to USD supports issuance, though hedging costs have increased in recent years



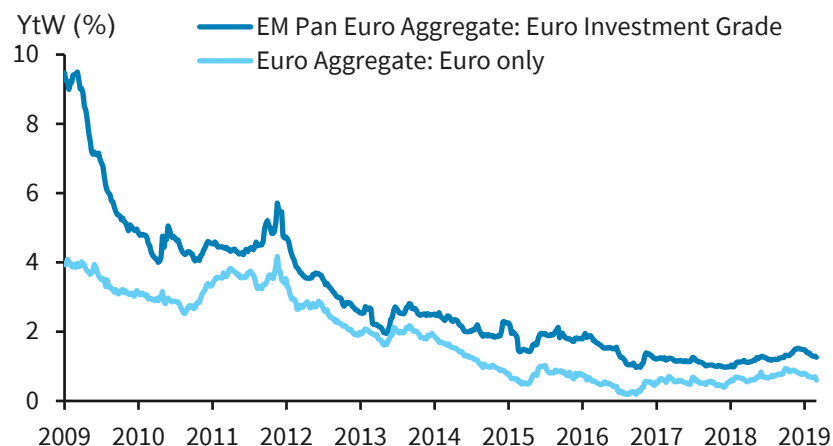
Source: Bloomberg, Barclays Research

## EEMEA dominates EUR primary markets, LatAm share continues to decline



Note: As of 11 March 2019. Source: Bondradar, Bloomberg, Barclays Research

## Spread compression to DM EUR also has been conducive for issuance

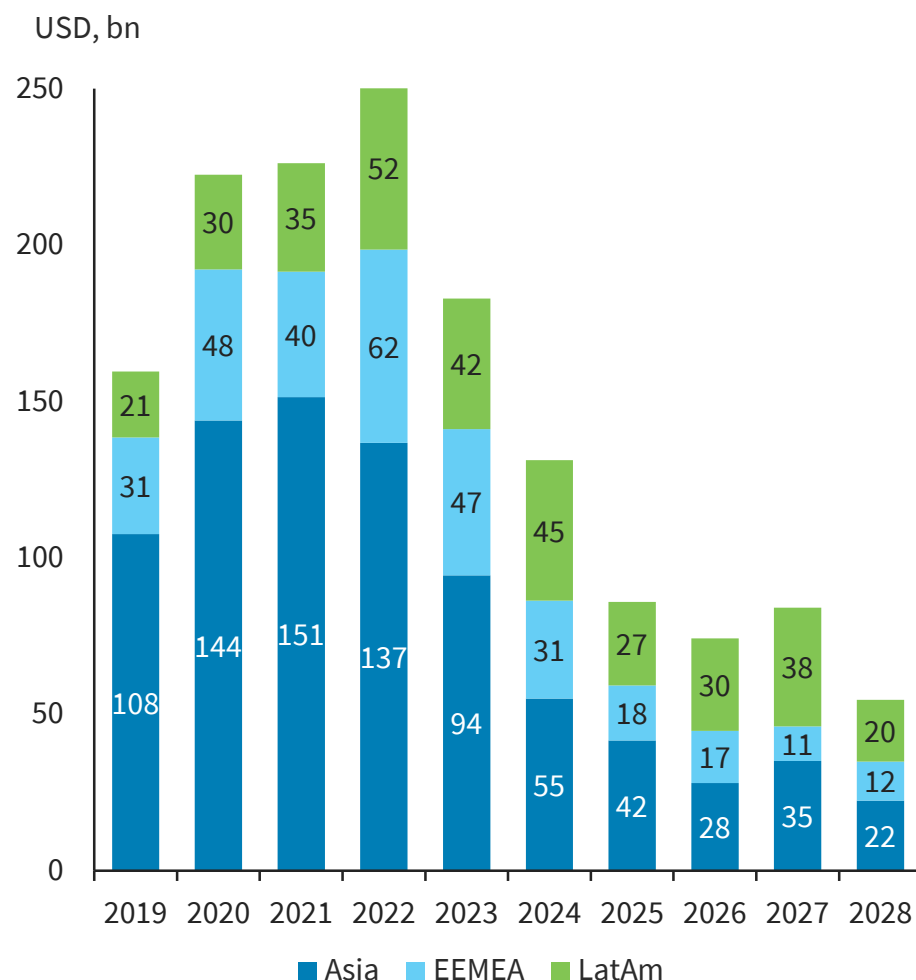


Source: Bloomberg, Barclays Research



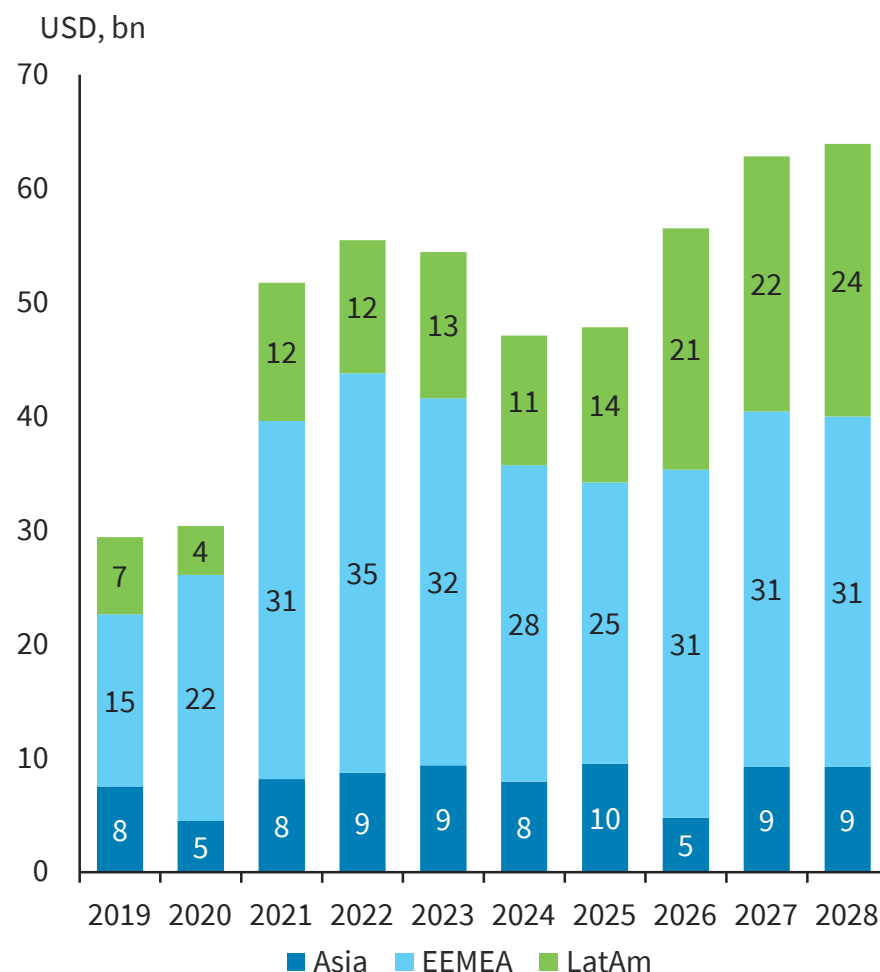
# EM USD credit redemptions will climb over the coming years

**EM USD corporate redemptions will climb for Asia in the coming years**



Note: Asia redemptions based on index-eligible debt only. 2019 is full year.  
Source: Bloomberg, Barclays Research

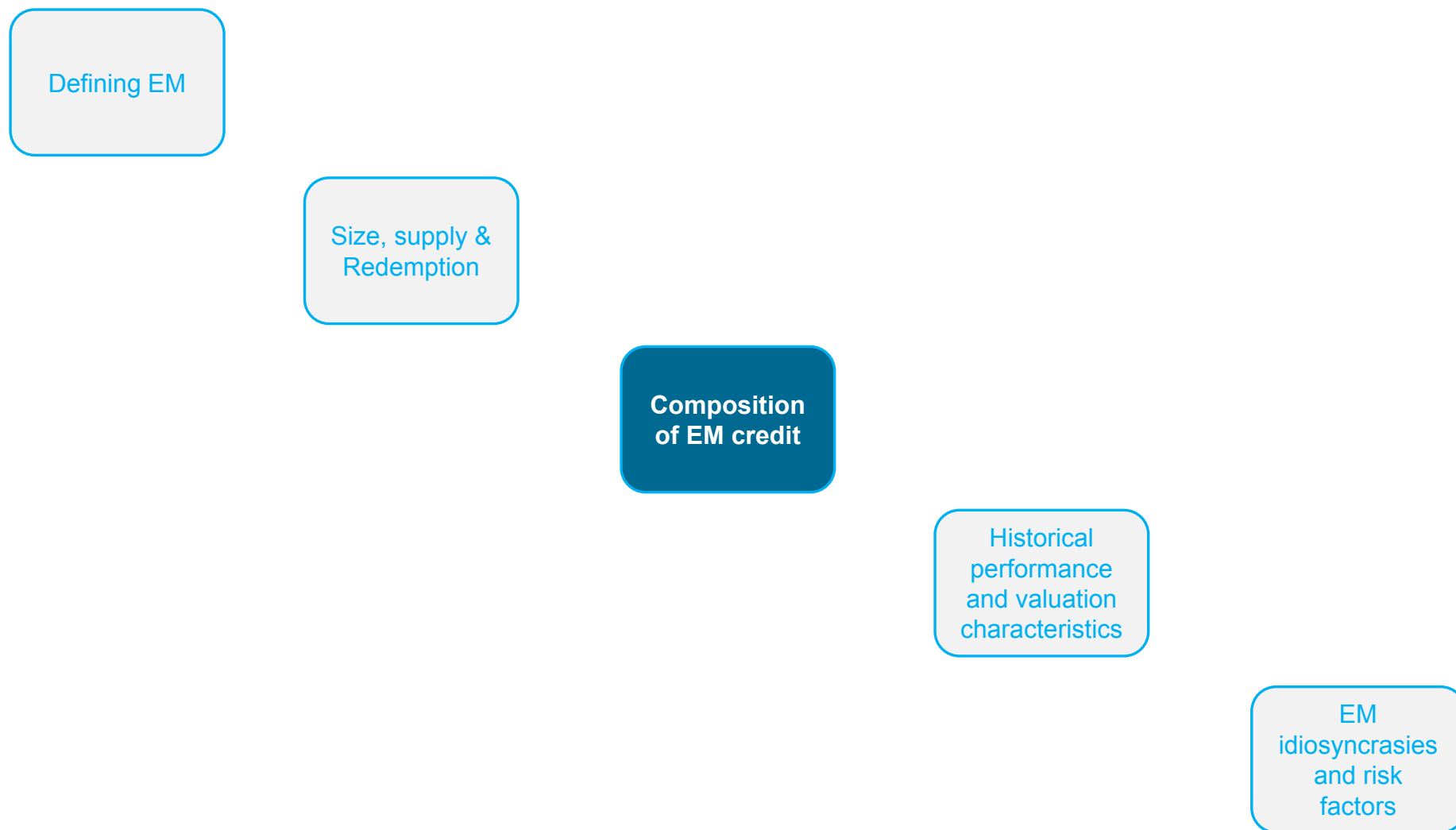
**The large part of EM sovereign redemptions will be driven by EEMEA**



Note: Sovereign redemptions exclude Venezuela. 2019 is full year.  
Source: Bloomberg, Barclays Research

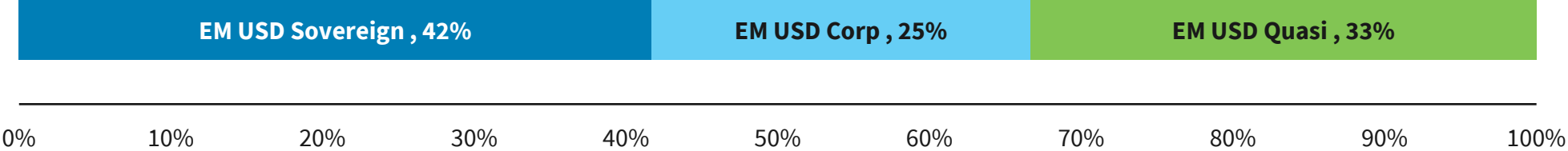
# Emerging Markets Credit: A primer

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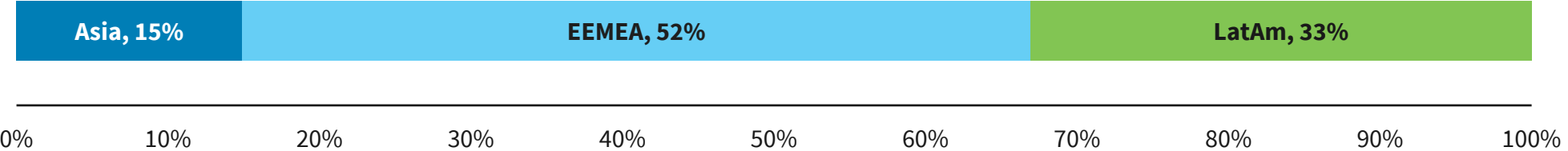


# Breaking down EM USD credit by region

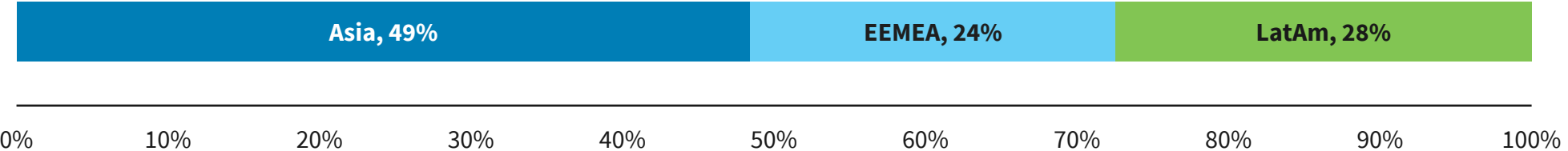
Close to 60 % of the Bloomberg Barclays EM USD Aggregate is composed of corporates/quasi-sovereigns



EEMEA issuers dominate Bloomberg Barclays EM USD Sovereign Index



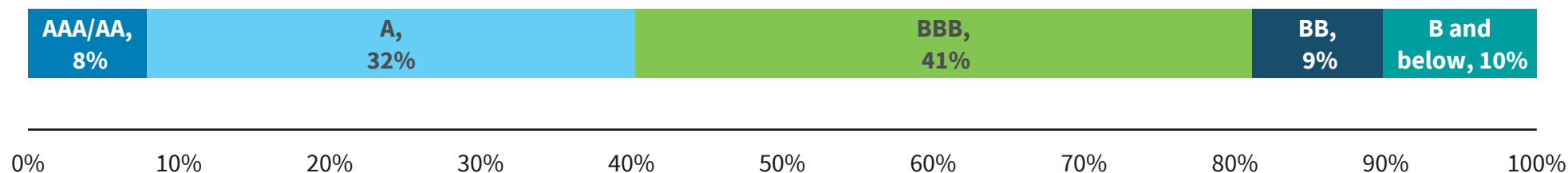
Asian issuers dominate Bloomberg Barclays EM USD Corporate and Quasi Index



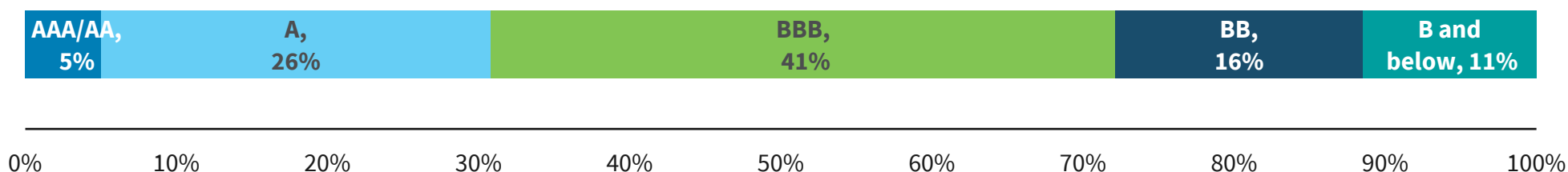
Note: Weighted by market value. As of 11 March 2019. Source: Bloomberg, Barclays Research

# EM and US Credit (IG + HY) breakdown by rating bucket

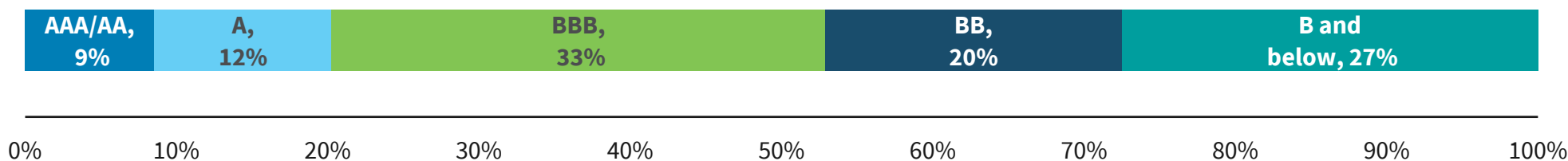
**US Credit (IG + HY) has the highest average credit quality...**



**...followed by EM USD Corp/Quasis**



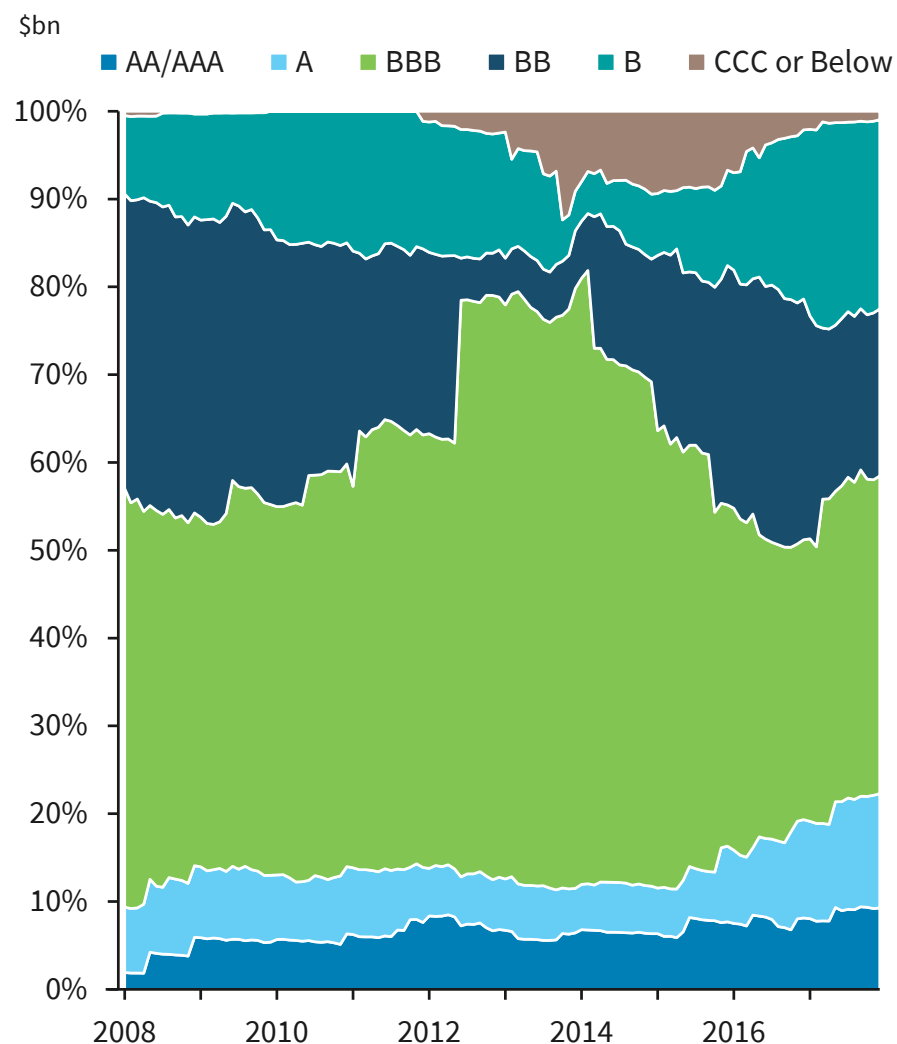
**EM USD Sovereign has the lowest average credit quality**



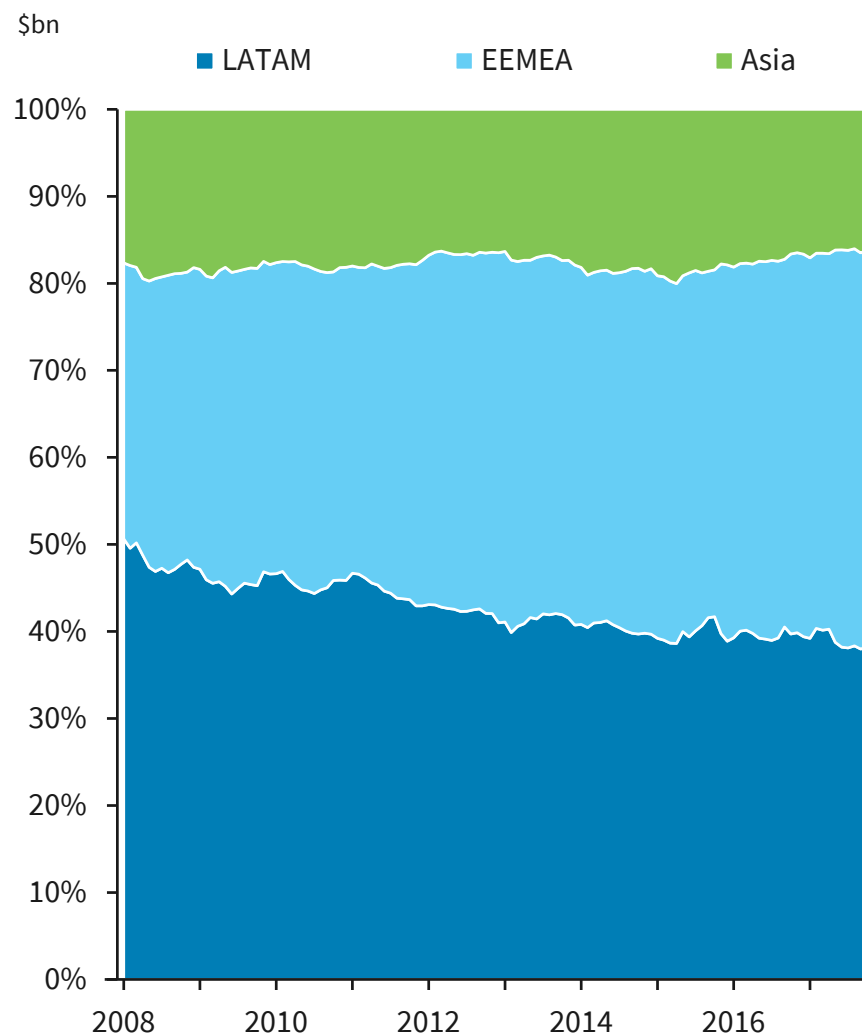
Note: Weighted by market value. As of 11 March 2019. Source: Bloomberg, Barclays Research

# EM Sovereign: Credit quality is dispersing

**Credit quality is fragmenting with a rise in B as well as AA and A-rated issues**



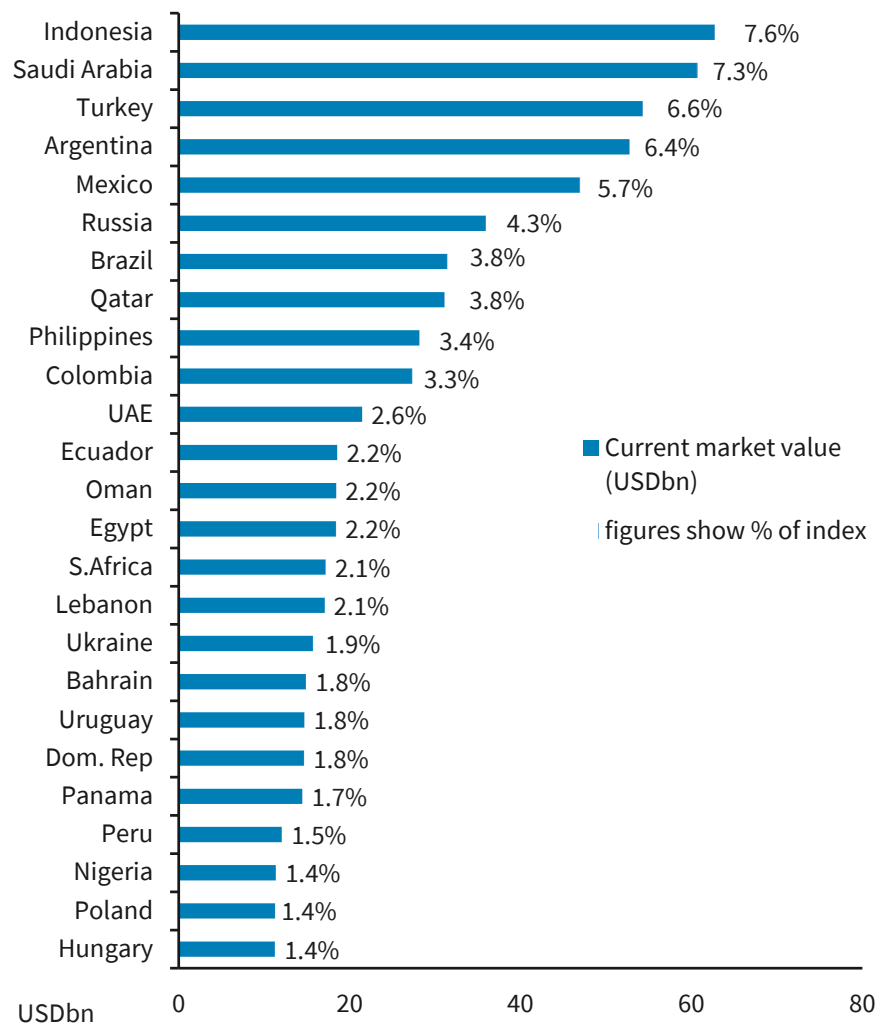
**Growth of sovereign universe is driven by EEMEA**



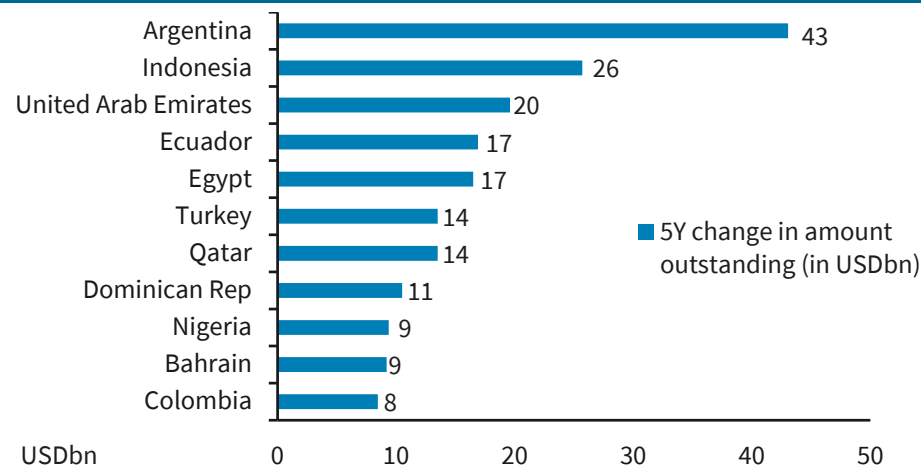
Note: Based on Bloomberg Barclays index. As of 8 December. Index was reshuffled in 2013. Based on market value. Excludes not rated issues.  
Source: Barclays Research

# EM USD Sovereign by country; Argentina, Indonesia, MENA issuers leading asset class growth, CEE universe is shrinking

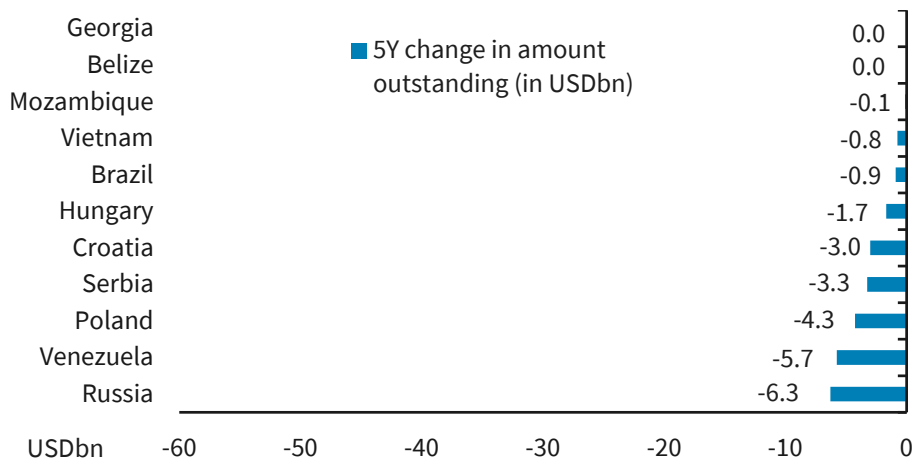
**Top 25 countries by current market value  
(in USDbn, % of index)**



**5Y growth in amount outstanding (in USDbn):  
Top 10 countries\***



**5Y growth in amount outstanding (in USDbn):  
Bottom 10 countries**

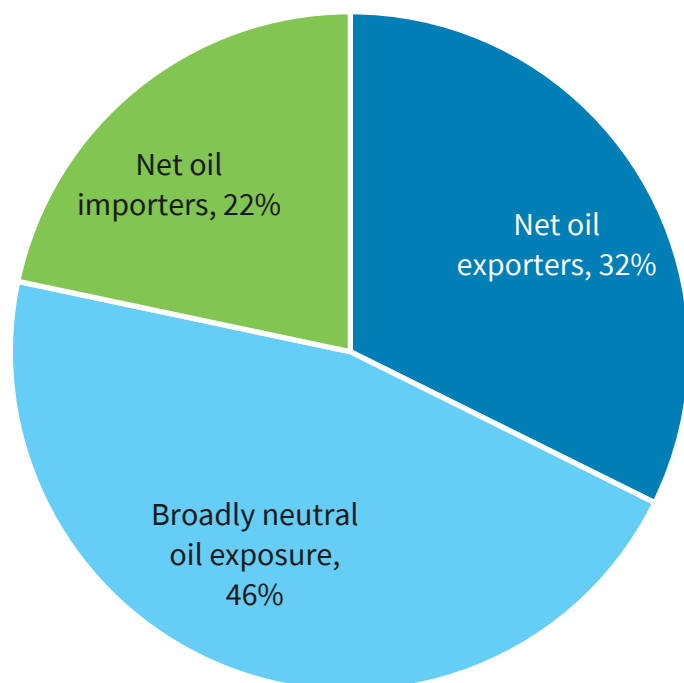


Note: As of 31 March 2019. Venezuela omitted. Based on Bloomberg Barclays Index. Source: Bloomberg, Barclays Research

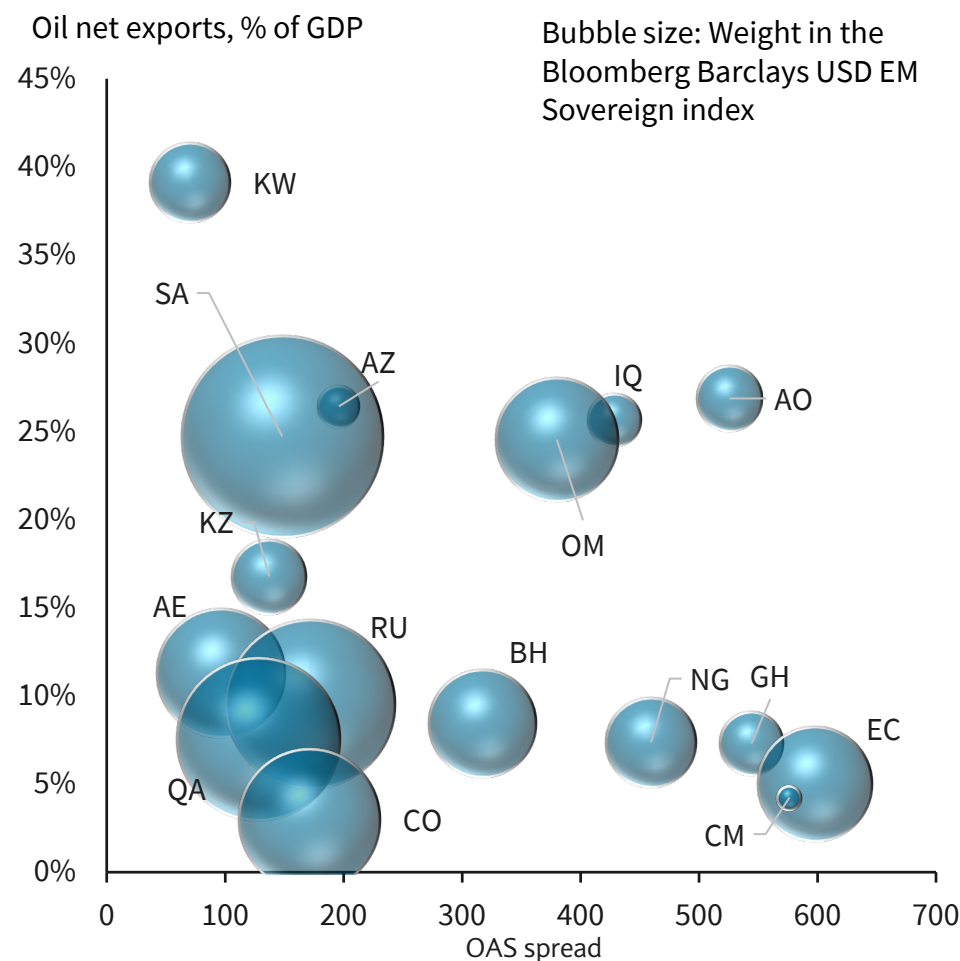
Note to both charts: \*Oman and S. Arabia had not been in the index in 2014 and therefore are omitted. Based on Bloomberg Barclays Index. As of 31 March 2019. Source to both charts: Bloomberg, Barclays Research

# EM Sovereign credit has a net positive oil exposure

## Split by oil exposure\*



## Universe of net oil exporters\*



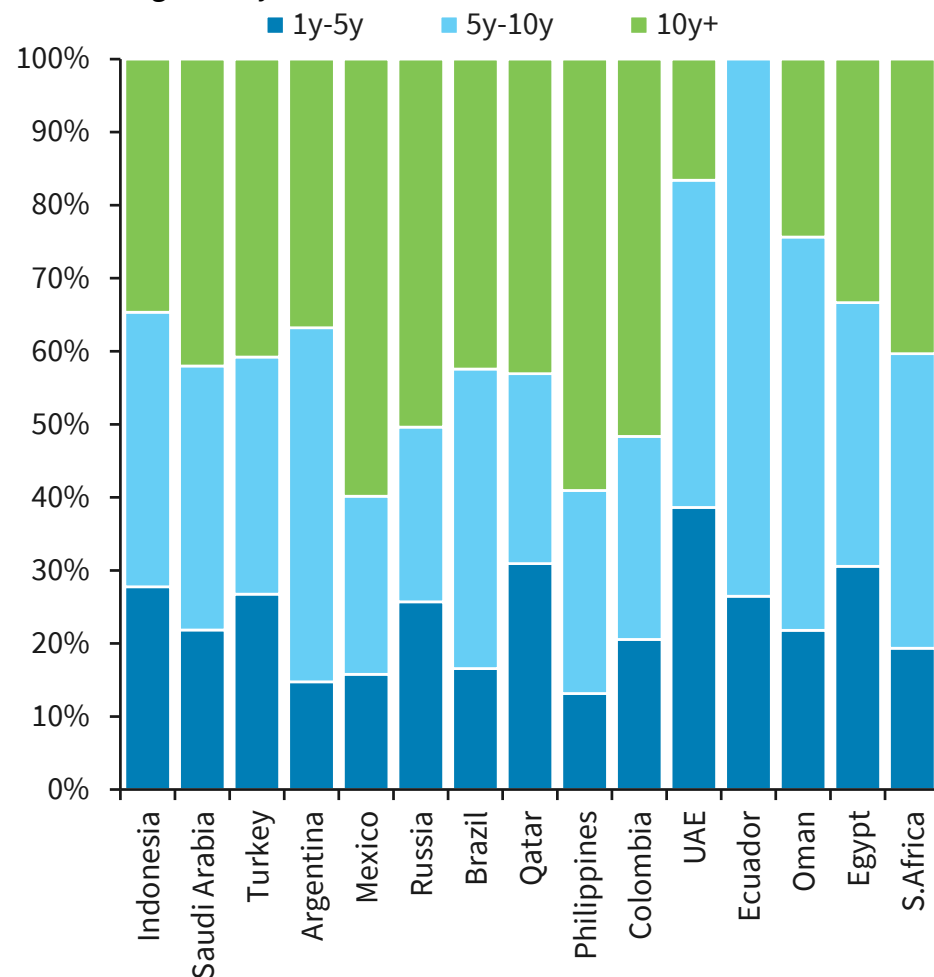
Note: Based on Bloomberg Barclays Indices. \*Oil exposure defined according to a country's net exports/imports exceeding 2%/ -2% of GDP in 2017. Definition used includes crude and non-crude oil from petroleum and bituminous minerals. Left chart as of 8 December 2018, right chart as of 11 March 2019. Weights on market value. SA refers to Saudi Arabia.  
Source: UNCTAD, IMF, Bloomberg, Barclays Research



# Breakdown of EM USD Sovereign by maturity

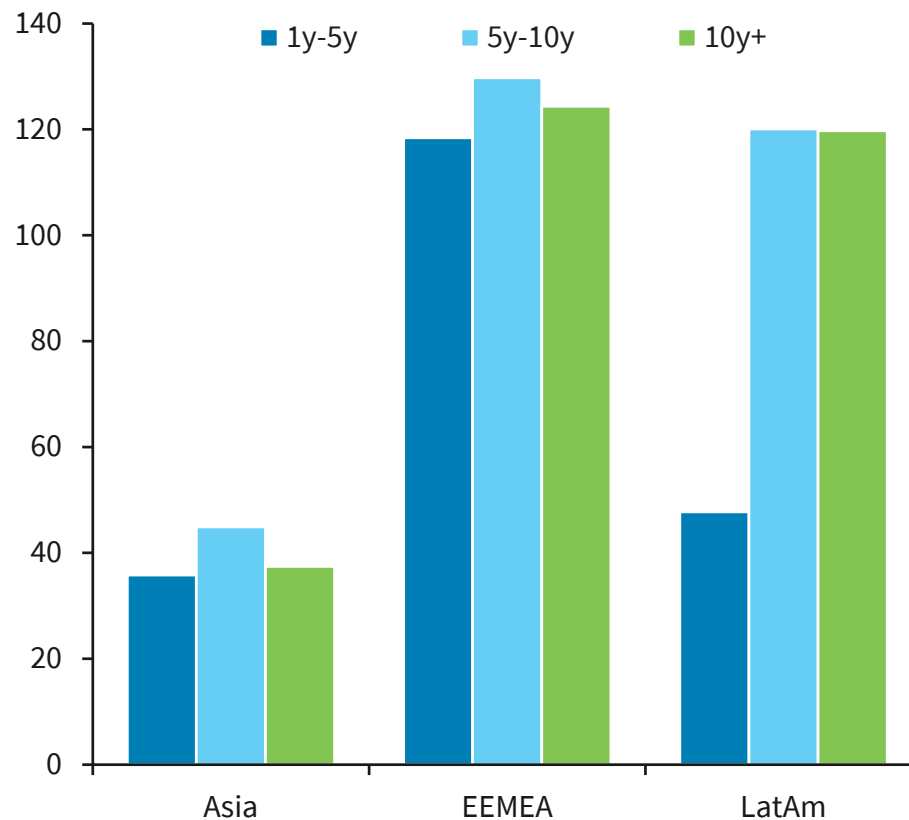
## Top 15 countries: breakdown by maturity

Maturity bucket share (%), based on amount outstanding in Bloomberg Barclays Index



## Region breakdown by maturity

Amount outstanding (\$, bn), based on Bloomberg Barclays Index

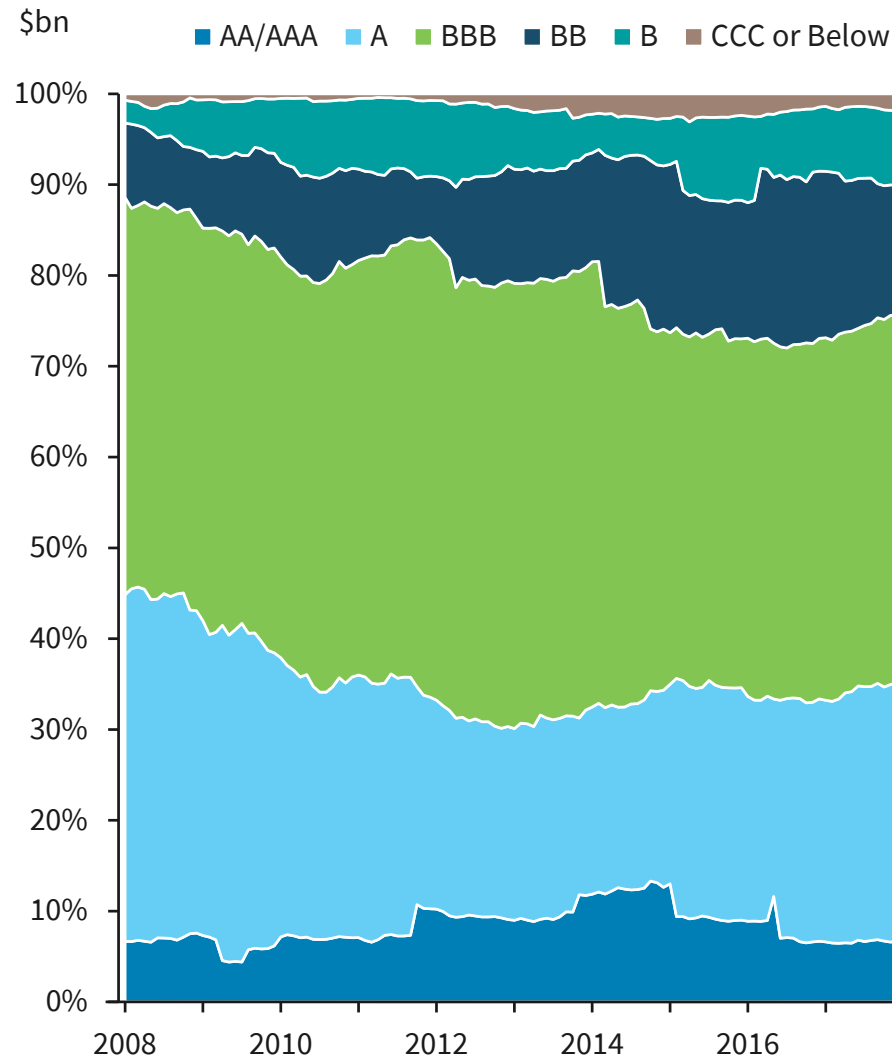


Note: Ranked after market value. Shares calculated based on amount outstanding. As of 11 March 2019. Source: Bloomberg, Barclays Research

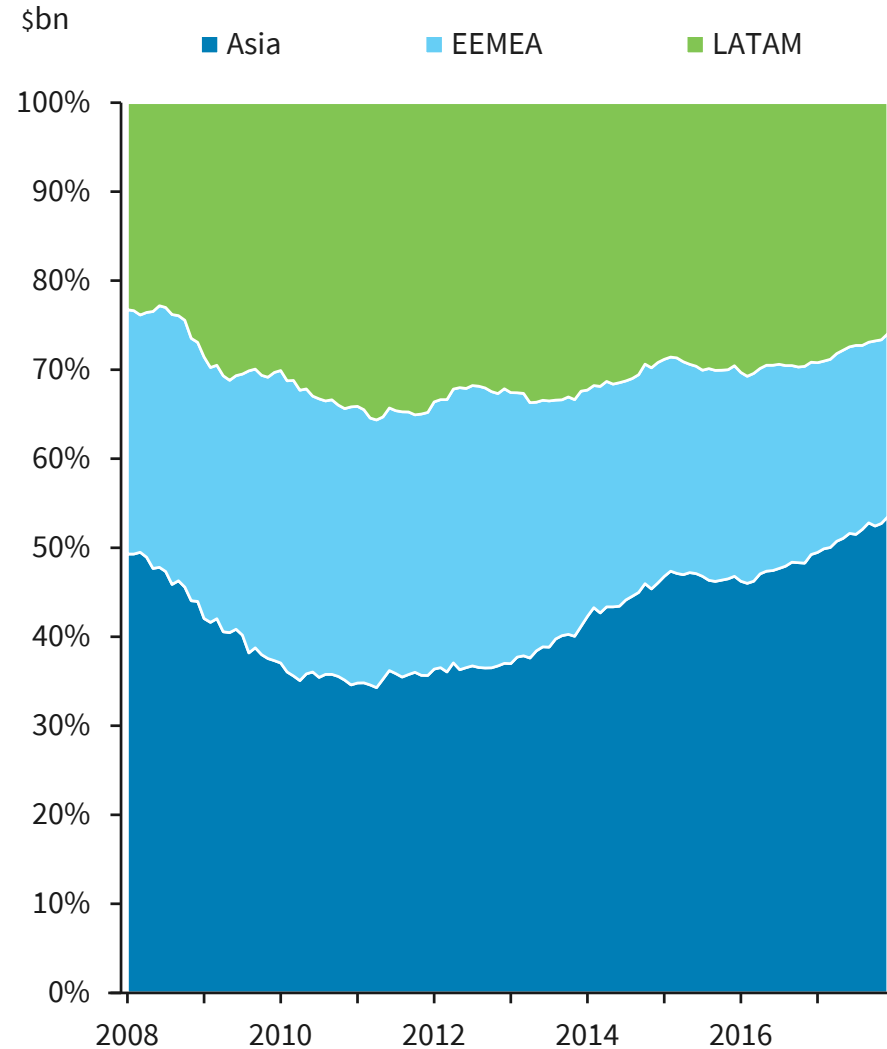
Note: As of 11 March 2019. Source: Bloomberg, Barclays Research

# EM USD Corp/Quasi: Continued growth in high-grade Asian supply is supporting reversal of multi-year decline in IG share

## Historical EM USD Corp/Quasi Ratings Breakdown\*



## Breakdown by Region: Asia share growing

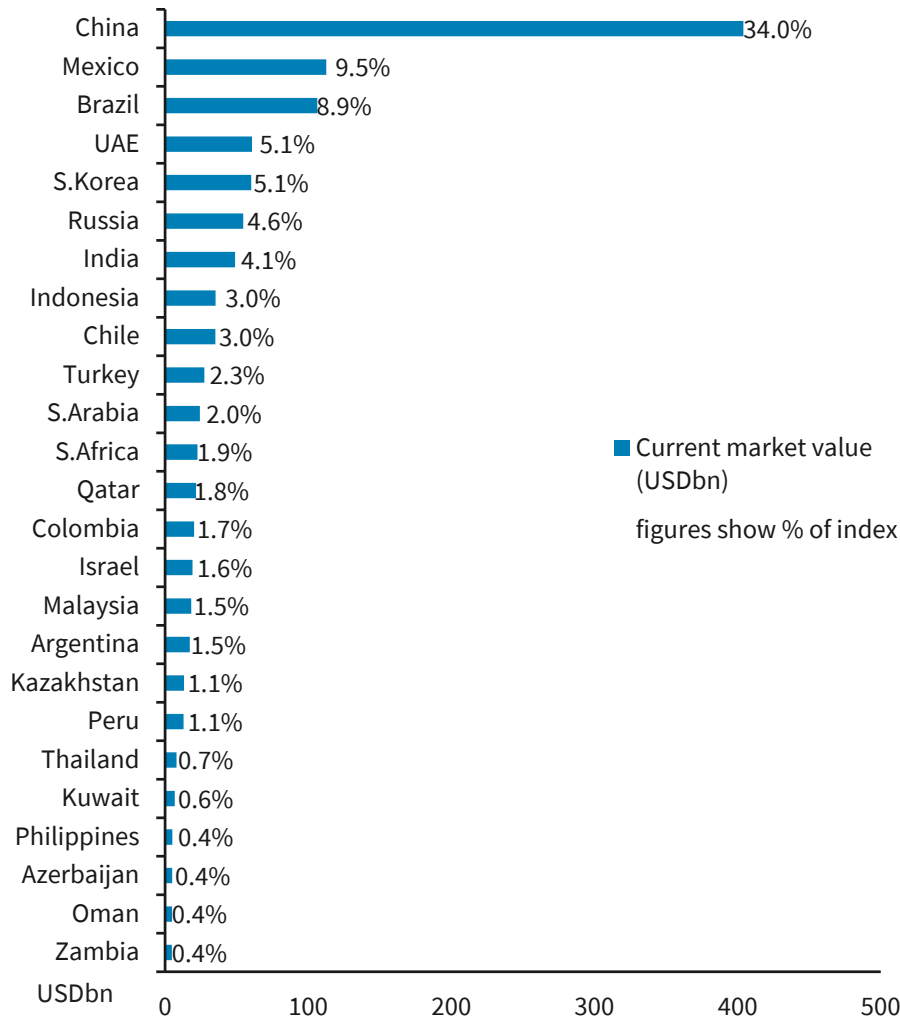


Note: \*Using current index definitions and moving backwards (index universe country criteria was reshuffled in 2013). Based on market value. As of 8 December 2018.

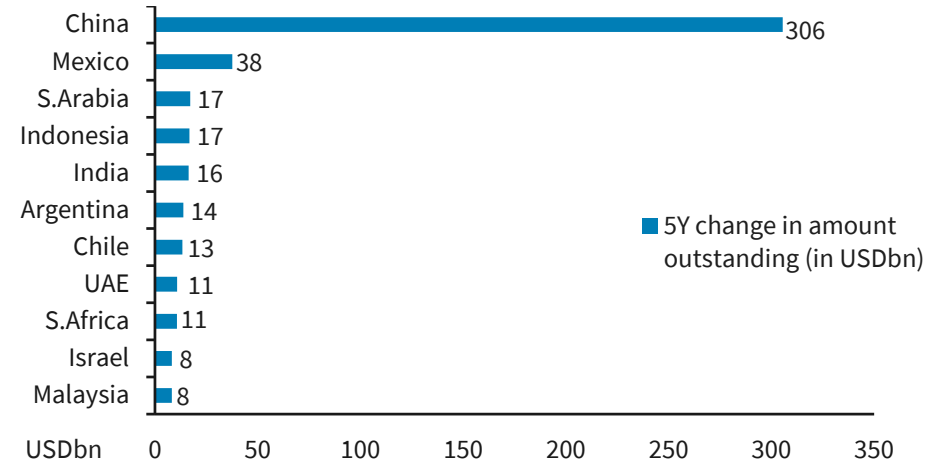
Source: Bloomberg, Barclays Research

# EM USD Corp/Quasis by country; China dominates growth, Russian universe is shrinking

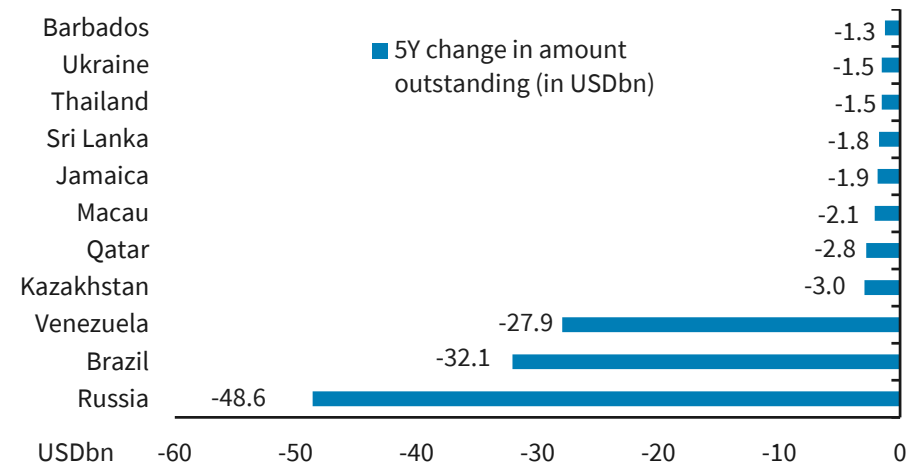
## Top 25 countries by market value: China, Brazil and Mexico account for 53% of index



## 5Y Growth in amount outstanding (USDbn): Top 10 countries



## 5Y Growth in amount outstanding (USDbn): Bottom 10 countries



Note: As of 30 April 2019. Source: Bloomberg, Barclays Research

Note to both charts: As of 30 April 2019. Source to both charts: Bloomberg, Barclays Research

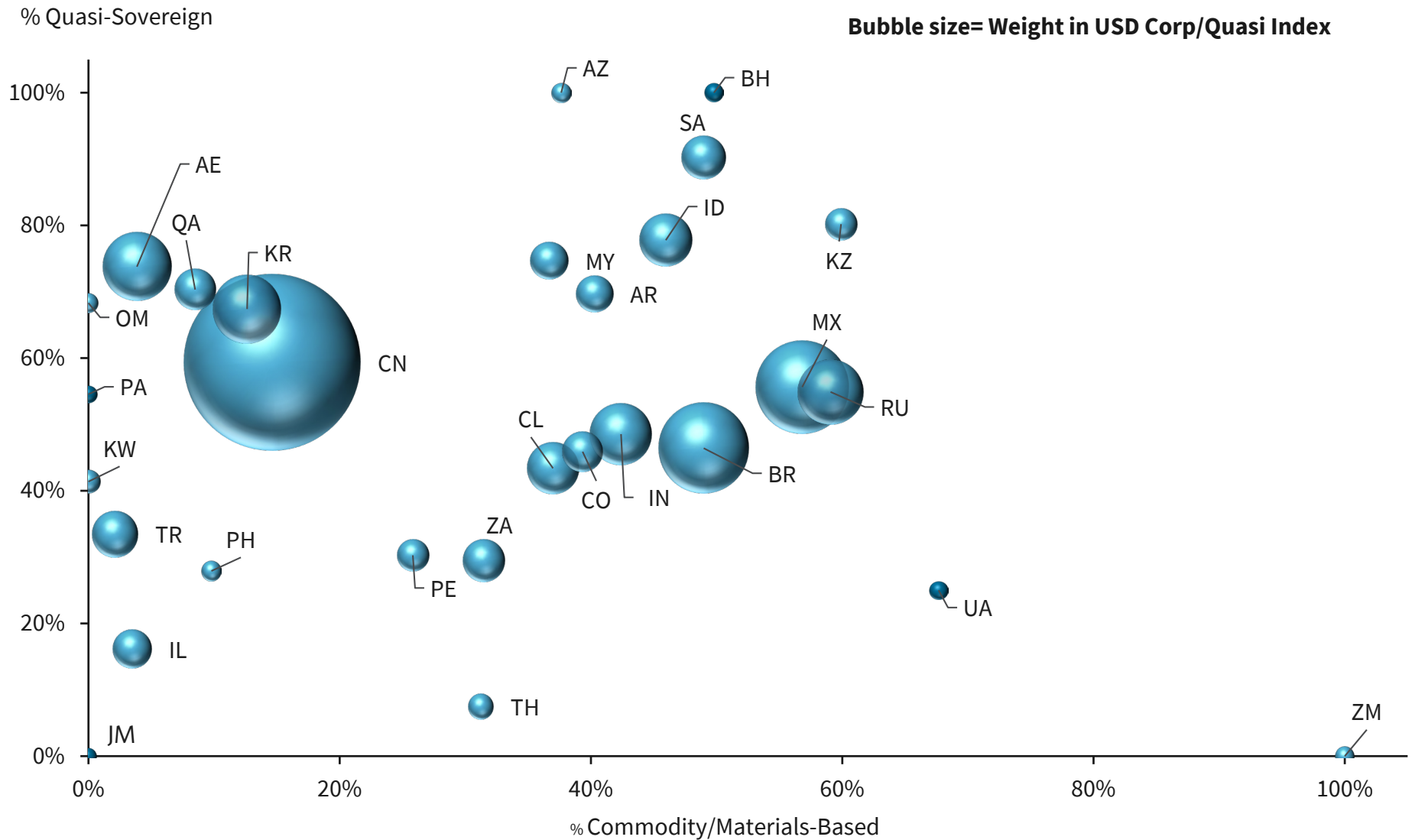
# Breakdown of the EM USD Corp/Quasi Index by issuer

## Top 25 issuers in Bloomberg Barclays EM USD Corp/Quasi Index (~30% of the index)

| Ticker | Amount Outstanding (USD bn) | Maturity (Yrs) | OAS | Yield to Worst | Price | Index Rating | Country      |
|--------|-----------------------------|----------------|-----|----------------|-------|--------------|--------------|
| PEMEX  | 53                          | 13.0           | 363 | 6.2            | 97    | BAA3         | Mexico       |
| PETBRA | 33                          | 17.1           | 301 | 5.6            | 107   | BA3          | Brazil       |
| SINOPE | 19                          | 7.4            | 101 | 3.4            | 102   | A1           | China        |
| CNOOC  | 18                          | 9.2            | 109 | 3.5            | 111   | A1           | China        |
| ICBCAS | 17                          | 3.3            | 94  | 3.3            | 101   | A2/A3        | China        |
| TEVA   | 17                          | 7.5            | 290 | 5.3            | 93    | BA2          | Israel       |
| EIBKOR | 16                          | 3.9            | 61  | 3.0            | 102   | AA2          | S.Korea      |
| BCHINA | 15                          | 3.4            | 97  | 3.3            | 102   | A2/A3        | China        |
| HRAM   | 15                          | 5.7            | 182 | 4.2            | 102   | BAA1         | China        |
| ARAMCO | 12                          | 16.0           | 130 | 3.9            | 99    | A1           | Saudi Arabia |
| TENCNT | 12                          | 9.2            | 120 | 3.7            | 100   | A1           | China        |
| EVERRE | 12                          | 4.4            | 778 | 10.1           | 96    | B2           | China        |
| CHGRID | 12                          | 8.3            | 95  | 3.4            | 103   | A1           | China        |
| BABA   | 11                          | 13.9           | 111 | 3.7            | 101   | A1           | China        |
| HAOHUA | 10                          | 4.3            | 143 | 3.8            | 104   | BAA2         | China        |
| CCB    | 10                          | 2.4            | 104 | 3.4            | 101   | A2/A3        | China        |
| CDEL   | 9                           | 19.1           | 134 | 4.0            | 108   | A3           | Chile        |
| PERTIJ | 9                           | 16.2           | 202 | 4.6            | 111   | BAA2         | Indonesia    |
| KDB    | 9                           | 3.8            | 61  | 3.0            | 101   | AA2          | S.Korea      |
| EXIMCH | 9                           | 6.9            | 86  | 3.3            | 100   | A1           | China        |
| SDBC   | 9                           | 4.0            | 72  | 3.1            | 100   | A1           | China        |
| GAZPRU | 8                           | 9.0            | 215 | 4.6            | 113   | BAA3         | Russia       |
| BANBRA | 8                           | 3.4            | 182 | 4.1            | 104   | BA3/B1       | Brazil       |
| CCAMCL | 8                           | 6.8            | 152 | 3.9            | 103   | A3           | China        |

Note: A slash means the median rating of bonds in the index falls in between those two ratings. Price includes accrued interest. Rating is median across Moody's, S&P, Fitch. As of 30 April 2019.  
Source: Bloomberg, Barclays Research

# Breakdown of EM USD Corp/Quasi Index by country, % of quasi-sovereign issuers and % of commodity credits

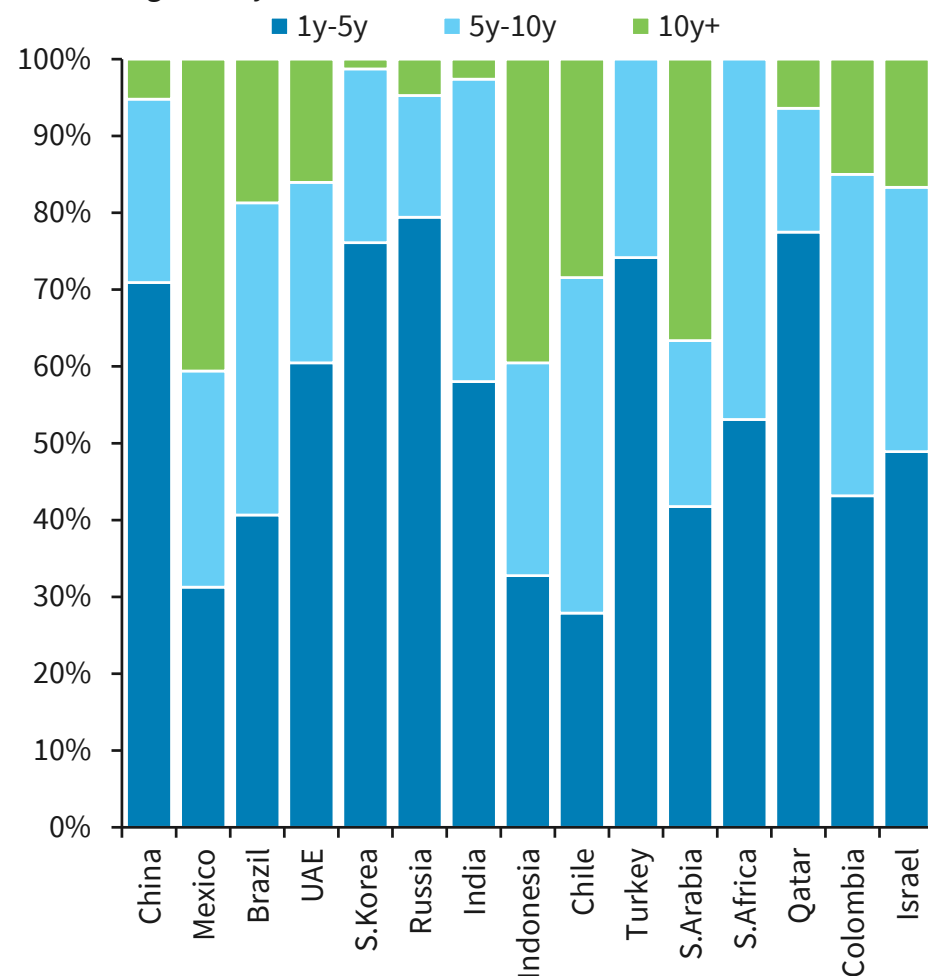


Note: Based on Bloomberg index classifications. Commodity/Materials definition includes Iron/Steel, Oil & Gas, Mining, Building Materials, Basic Materials, Oil & Gas Services, Coal, Agriculture, Energy-Alternate Sources, Machinery-Constr & Mining. SA refers to Saudi Arabia, ZA to South Africa. Countries shown with an index share >0.25%. Data as of 29 April 2019.  
Source: Bloomberg, Barclays Research

# Breakdown of EM USD Corp/Quasis by maturity

## Top 15 countries: breakdown by maturity

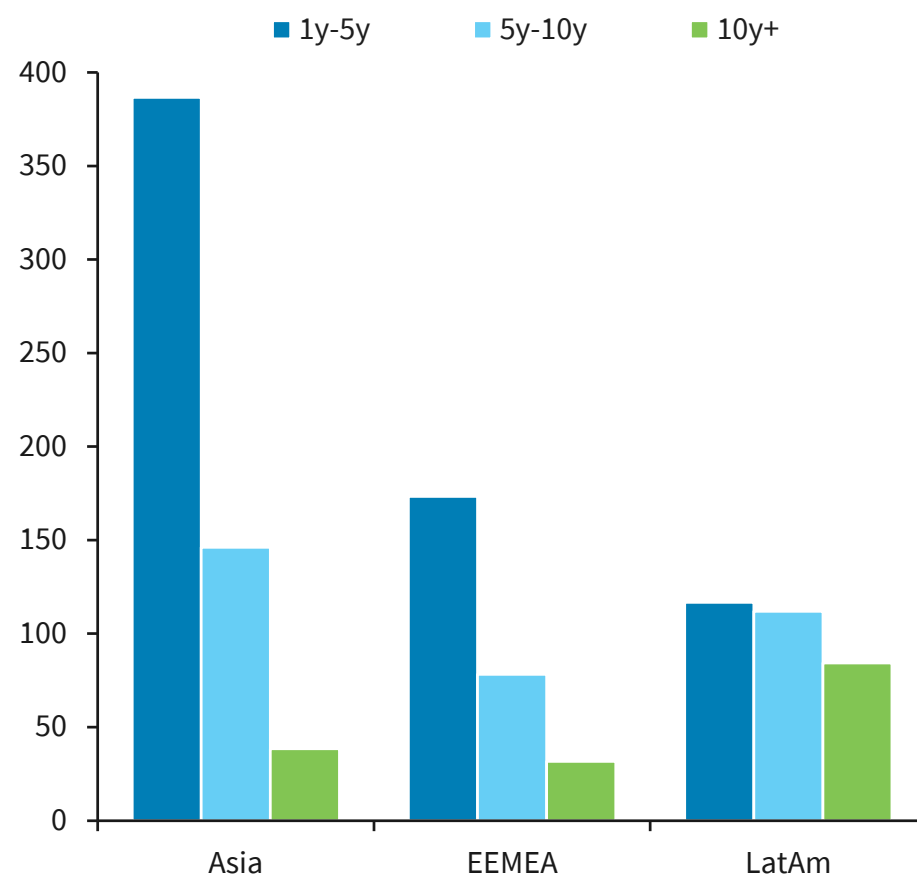
Maturity bucket share (%) based on amount outstanding in Bloomberg Barclays Index



Note: Ranked after market value. Shares calculated based on amount outstanding. As of 30 April 2019. Source: Bloomberg, Barclays Research

## Region breakdown by maturity

Amount outstanding (\$, bn)



Note: As of 30 April 2019. Source: Bloomberg, Barclays Research

# Breakdown of EM USD Corp/Quasis by region and class\*

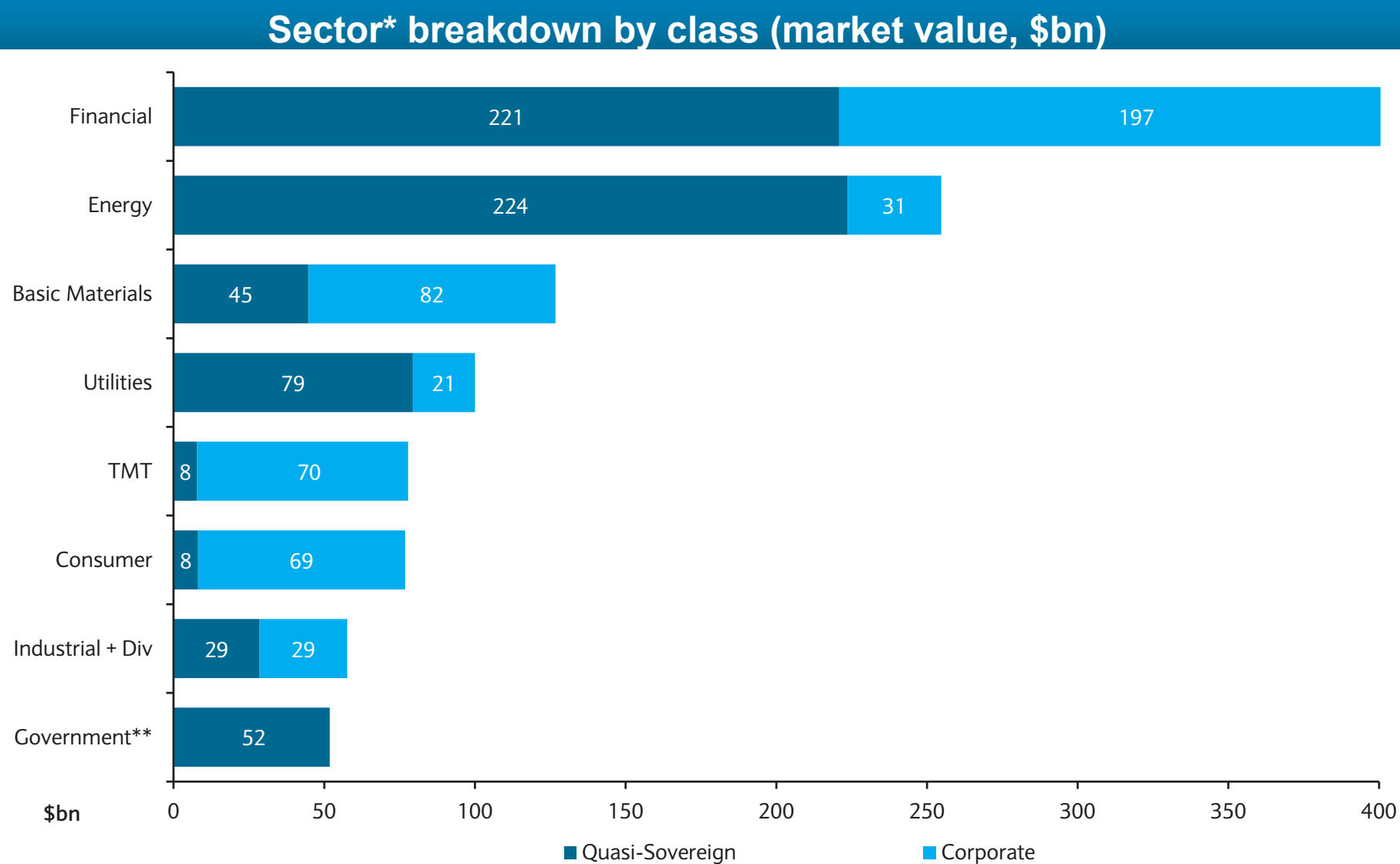
**Asia is significantly bigger than LatAm and EEMEA. Quasis dominates by class.**

|                             | Region  |          |          | Class     |            |          |           |
|-----------------------------|---------|----------|----------|-----------|------------|----------|-----------|
|                             | Asia    | LatAm    | EEMEA    | Quasi     | Industrial | Utility  | Financial |
| Market Value (\$, bn)       | 575     | 316      | 272      | 665       | 340        | 23       | 136       |
| Amount outstanding (\$, bn) | 567     | 313      | 268      | 652       | 340        | 23       | 134       |
| Rating                      | A3/BAA1 | BAA3/BA1 | BAA3/BA1 | BAA1/BAA2 | BAA3/BA1   | BAA3/BA1 | BAA3/BA1  |
| Maturity                    | 5.4     | 10.6     | 5.9      | 7.7       | 6.5        | 8.8      | 3.6       |
| Spread (OAS, bp)            | 191     | 319      | 267      | 202       | 325        | 386      | 222       |
| Yield (%)                   | 4.4     | 5.8      | 5.2      | 4.6       | 5.8        | 6.4      | 4.7       |
| Price (\$)                  | 100.4   | 99.4     | 100.1    | 100.8     | 98.8       | 96.3     | 100.0     |
| IG Share                    | 88%     | 57%      | 58%      | 82%       | 54%        | 69%      | 62%       |
| HY Share                    | 12%     | 43%      | 42%      | 18%       | 46%        | 31%      | 38%       |

Note: \* classification is based on Bloomberg Barclays indices. IG and HY share are calculated on set of rated issuance only. As of 11 March 2019.  
Source: Bloomberg, Barclays Research



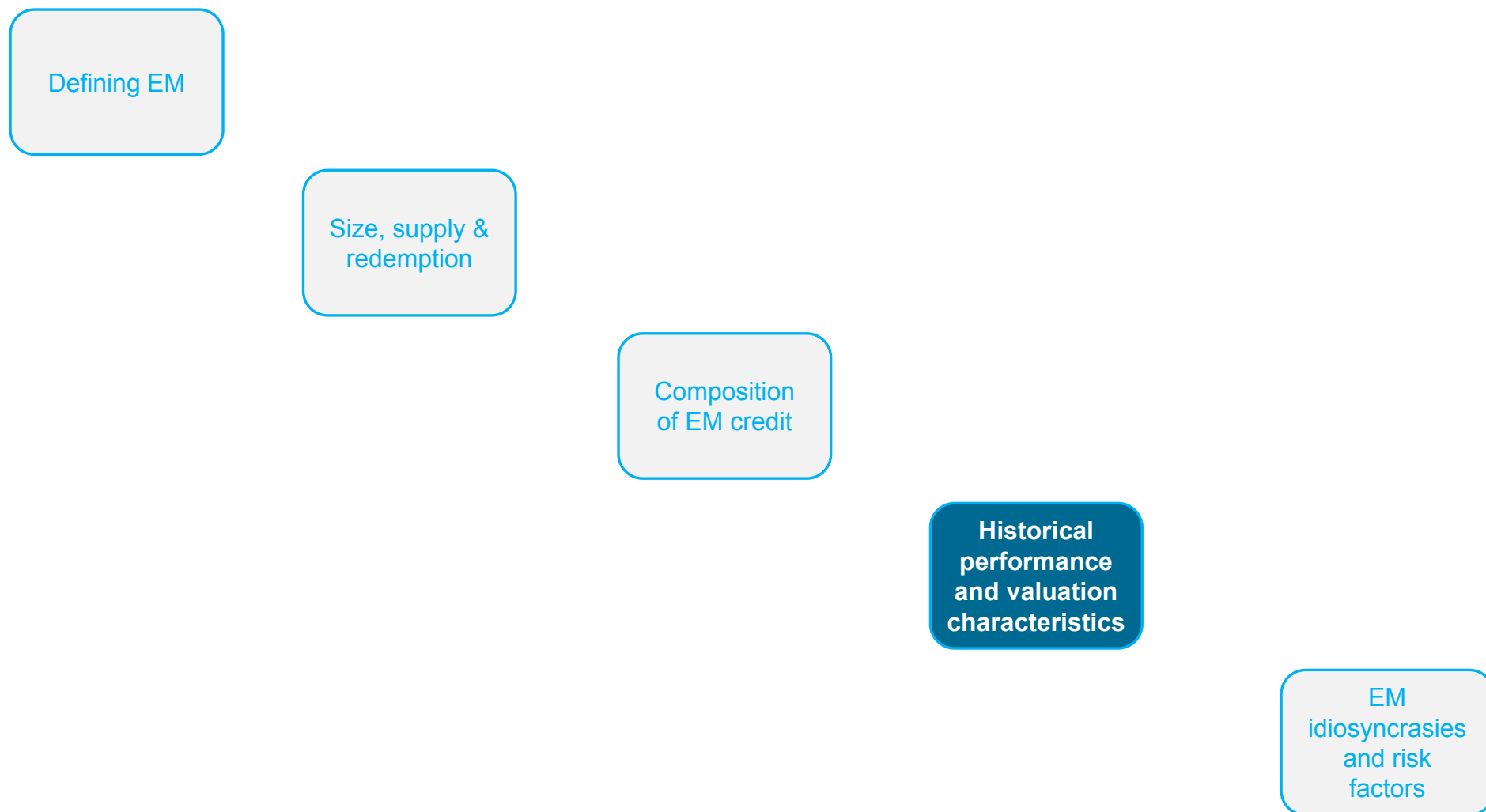
# Financial and Energy are the major corp/quasi sectors



Note: Based on Bloomberg Barclays Index. \*Sector refers to Bloomberg Industry sector, class to Barclays classification. \*\*Government refers primarily to govt-owned development banks and provinces. As of 11 March 2019.  
Source: Bloomberg, Barclays Research

# Emerging Markets Credit: A primer

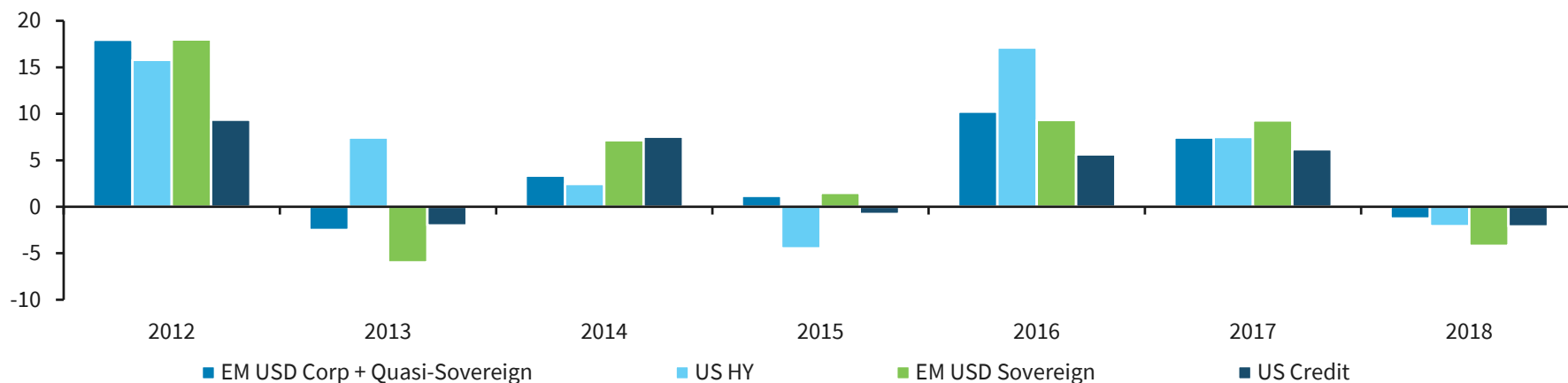
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# Historical EM credit performance relative to US credit

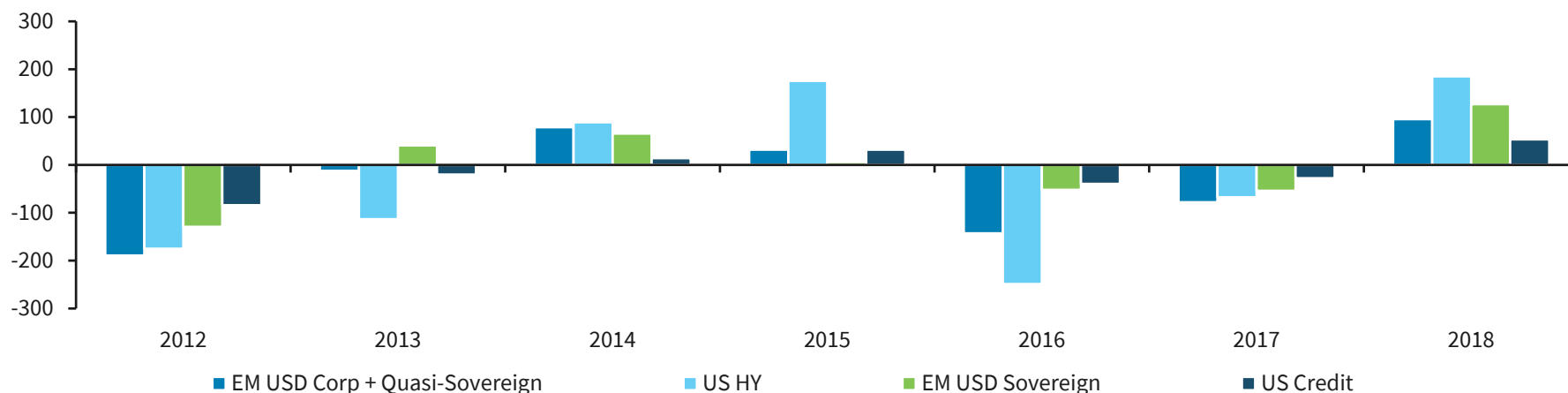
## Historical annual total return

Total Returns (%)



## Historical annual spread change

OAS spread change (bp)



Note: Based on Bloomberg Barclays Indices. Data as of 11 March 2019. Source: Bloomberg, Barclays Research

# EM credit and US credit returns are highly correlated

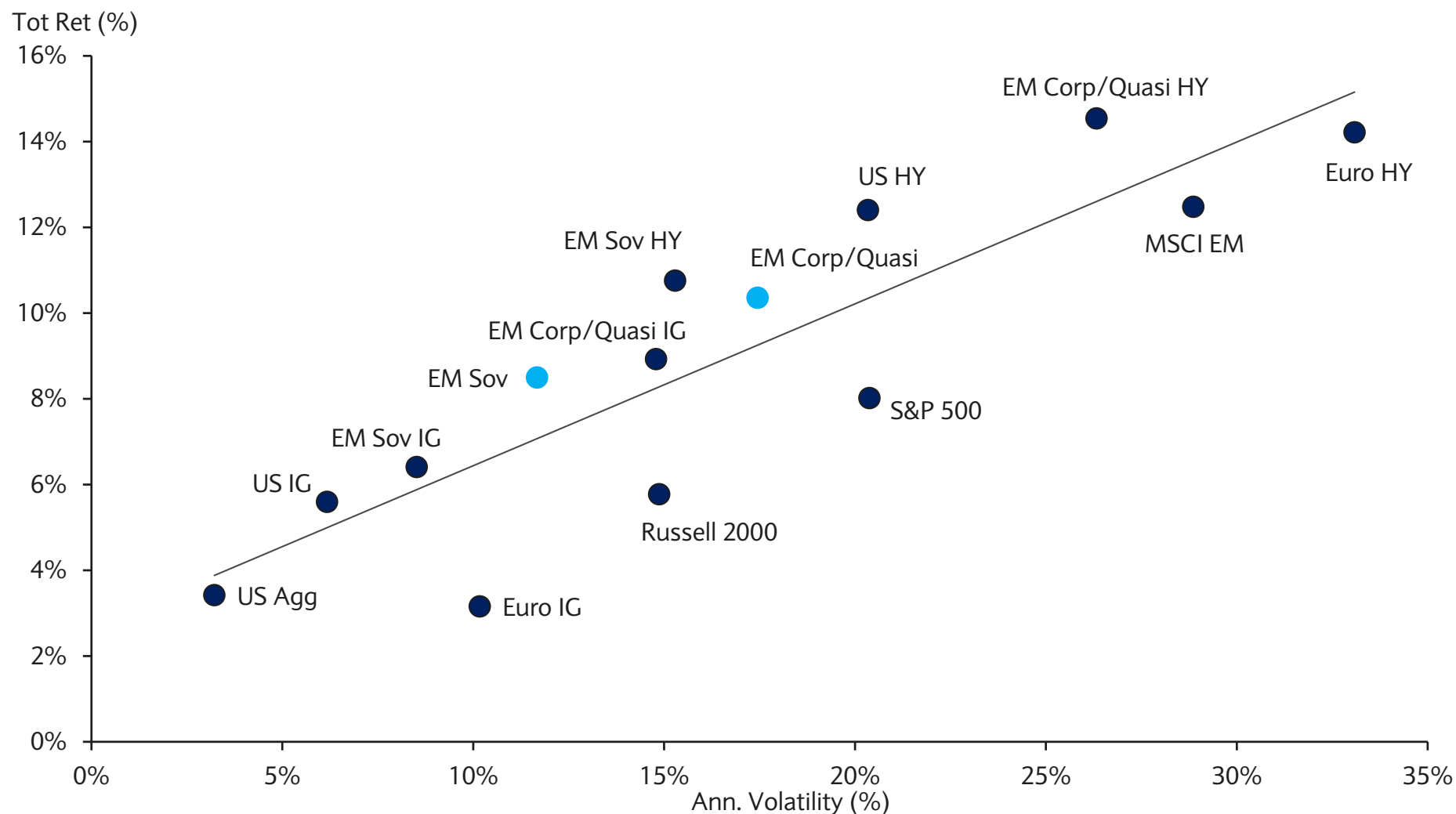
## Monthly total return correlation

|              | EM Corp* | EM Corp* IG | EM Corp* HY | EM Sov | US HY | EM Sov HY | EM Sov IG | Euro HY | MSCI EM | US IG | Euro IG | S&P 500 | Russell 2000 | US Agg | LMEX Index | Oil, Brent |
|--------------|----------|-------------|-------------|--------|-------|-----------|-----------|---------|---------|-------|---------|---------|--------------|--------|------------|------------|
| EM Corp*     | 100%     | 98%         | 94%         | 87%    | 87%   | 84%       | 78%       | 77%     | 76%     | 68%   | 63%     | 53%     | 45%          | 44%    | 42%        | 34%        |
| EM Corp* IG  | 98%      | 100%        | 85%         | 88%    | 82%   | 80%       | 84%       | 72%     | 71%     | 75%   | 62%     | 46%     | 37%          | 55%    | 35%        | 27%        |
| EM Corp* HY  | 94%      | 85%         | 100%        | 77%    | 87%   | 84%       | 59%       | 78%     | 77%     | 51%   | 58%     | 59%     | 51%          | 21%    | 50%        | 43%        |
| EM Sov       | 87%      | 88%         | 77%         | 100%   | 72%   | 92%       | 94%       | 63%     | 68%     | 76%   | 64%     | 42%     | 33%          | 60%    | 29%        | 18%        |
| US HY        | 87%      | 82%         | 87%         | 72%    | 100%  | 71%       | 60%       | 77%     | 74%     | 60%   | 54%     | 60%     | 59%          | 26%    | 41%        | 39%        |
| EM Sov HY    | 84%      | 80%         | 84%         | 92%    | 71%   | 100%      | 75%       | 67%     | 69%     | 58%   | 62%     | 44%     | 34%          | 35%    | 39%        | 31%        |
| EM Sov IG    | 78%      | 84%         | 59%         | 94%    | 60%   | 75%       | 100%      | 49%     | 57%     | 82%   | 58%     | 35%     | 26%          | 75%    | 14%        | 5%         |
| Euro HY      | 77%      | 72%         | 78%         | 63%    | 77%   | 67%       | 49%       | 100%    | 79%     | 45%   | 87%     | 63%     | 51%          | 13%    | 52%        | 48%        |
| MSCI EM      | 76%      | 71%         | 77%         | 68%    | 74%   | 69%       | 57%       | 79%     | 100%    | 43%   | 72%     | 76%     | 67%          | 17%    | 63%        | 41%        |
| US IG        | 68%      | 75%         | 51%         | 76%    | 60%   | 58%       | 82%       | 45%     | 43%     | 100%  | 47%     | 22%     | 17%          | 87%    | 6%         | 1%         |
| Euro IG      | 63%      | 62%         | 58%         | 64%    | 54%   | 62%       | 58%       | 87%     | 72%     | 47%   | 100%    | 57%     | 44%          | 30%    | 44%        | 35%        |
| S&P 500      | 53%      | 46%         | 59%         | 42%    | 60%   | 44%       | 35%       | 63%     | 76%     | 22%   | 57%     | 100%    | 89%          | -2%    | 54%        | 36%        |
| Russell 2000 | 45%      | 37%         | 51%         | 33%    | 59%   | 34%       | 26%       | 51%     | 67%     | 17%   | 44%     | 89%     | 100%         | -7%    | 49%        | 31%        |
| US Agg       | 44%      | 55%         | 21%         | 60%    | 26%   | 35%       | 75%       | 13%     | 17%     | 87%   | 30%     | -2%     | -7%          | 100%   | -12%       | -20%       |
| LMEX Index   | 42%      | 35%         | 50%         | 29%    | 41%   | 39%       | 14%       | 52%     | 63%     | 6%    | 44%     | 54%     | 49%          | -12%   | 100%       | 45%        |
| Oil, Brent   | 34%      | 27%         | 43%         | 18%    | 39%   | 31%       | 5%        | 48%     | 41%     | 1%    | 35%     | 36%     | 31%          | -20%   | 45%        | 100%       |

Note: \* EM Corp includes Quasi. EM indices USD only. Data from December 2008 to December 2018. Total return index taken for MSCI EM and S&P 500 Indices. Green=high correlation; red=low correlation. Source: Bloomberg, Barclays Research

# EM credit returns and volatility versus other asset classes

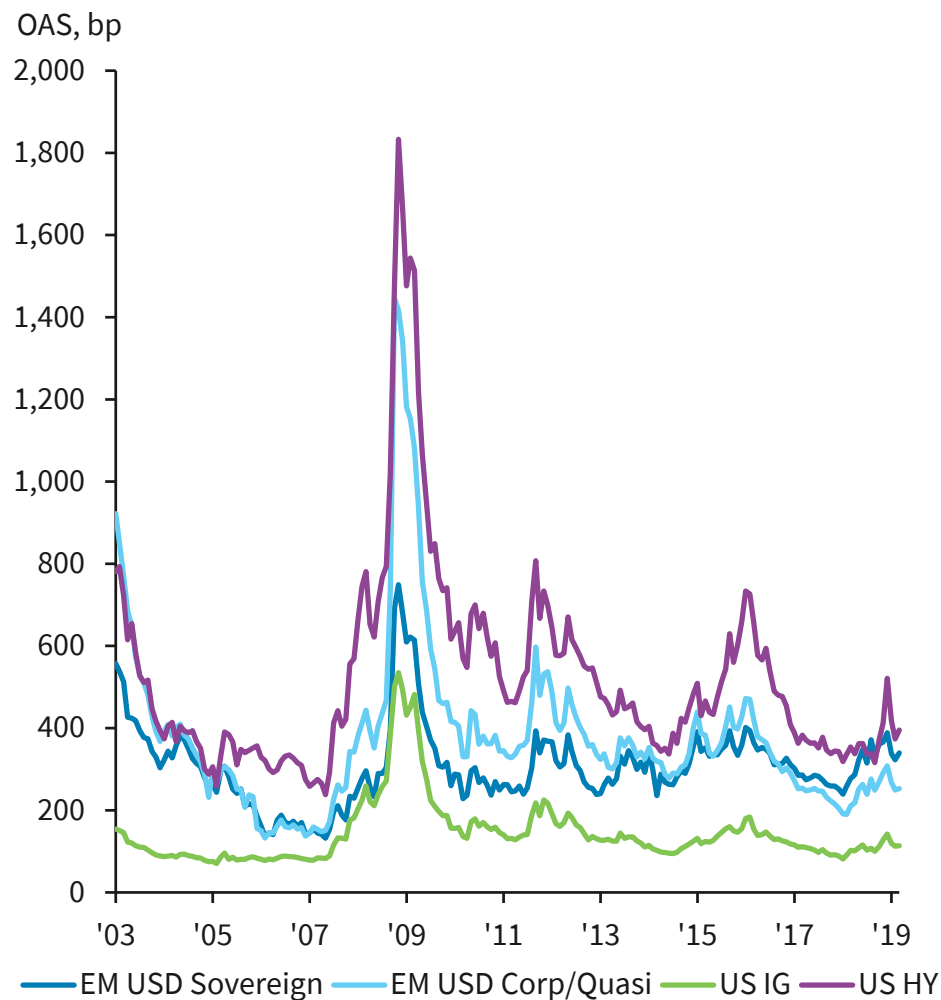
## Average annual total return versus volatility (2009-2018)



Note: Annual data from 2009 to 2018. EM and US statistics based on Bloomberg Barclays Index. Total return index taken for MSCI EM and S&P 500 Indices. Returns are in USD for all indices.  
Source: Bloomberg, Barclays Research

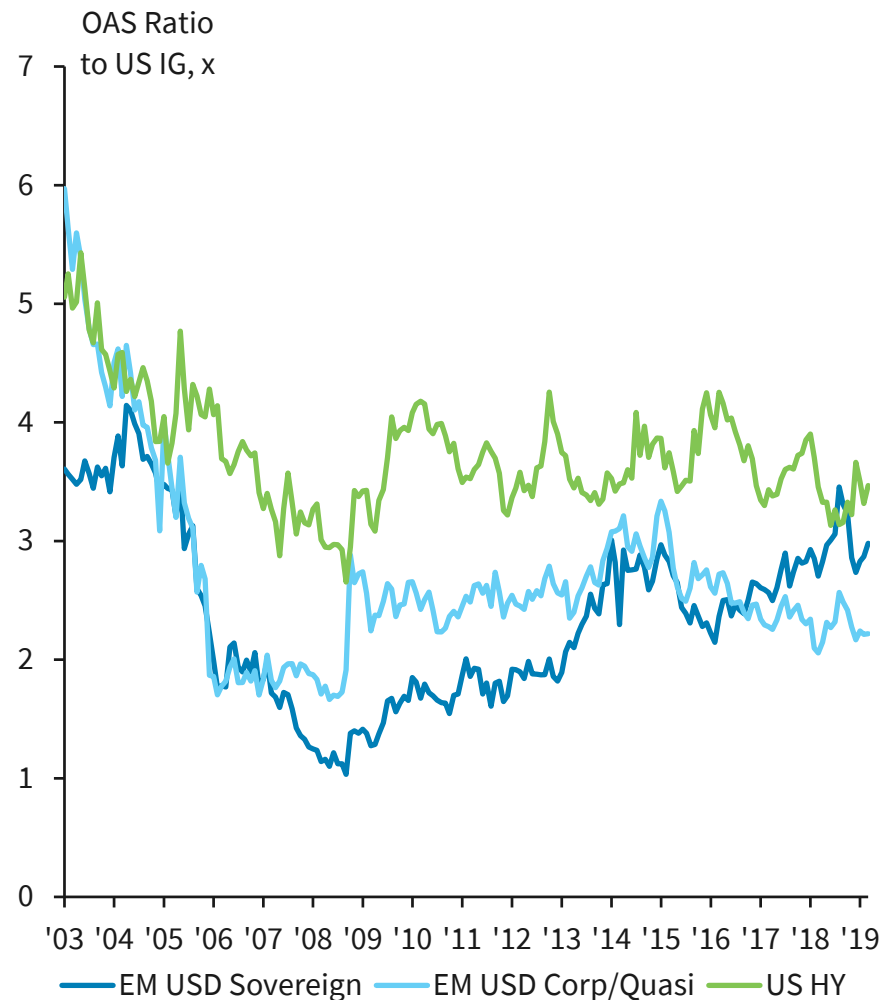
# EM credit has credit cycles similar to US credit, and historically traded between US IG and US HY

## Historical OAS: EM versus US Credit



Source: Bloomberg, Barclays Research

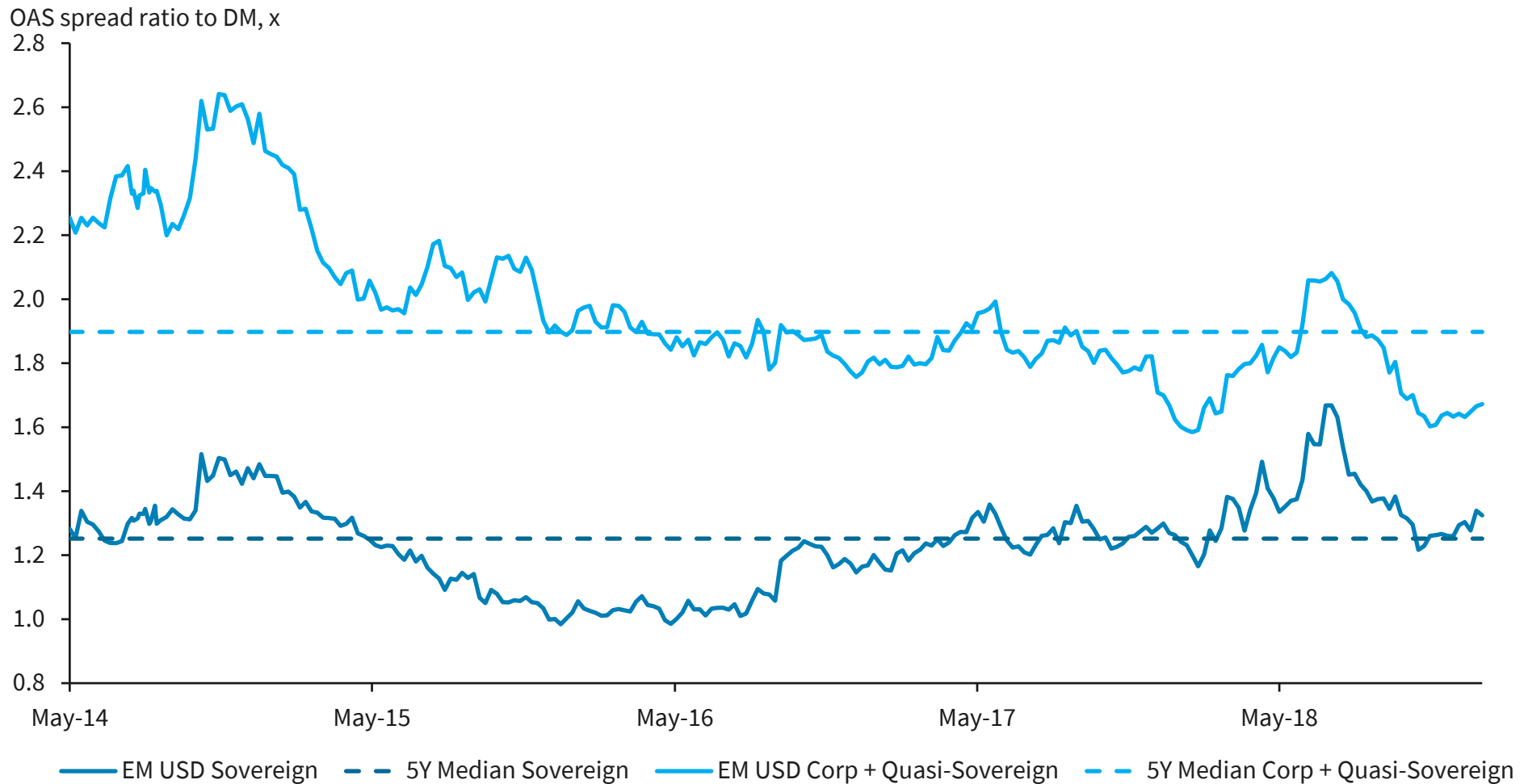
## Spread ratio to US IG



Note: Spread ratios not adjusted for rating changes and maturity differences.  
Source: Bloomberg, Barclays Research

# EM corporates/quasis and sovereigns trade with a spread premium to maturity- and rating-matched US credit

## EM/DM spread ratio (maturity- and rating-matched)

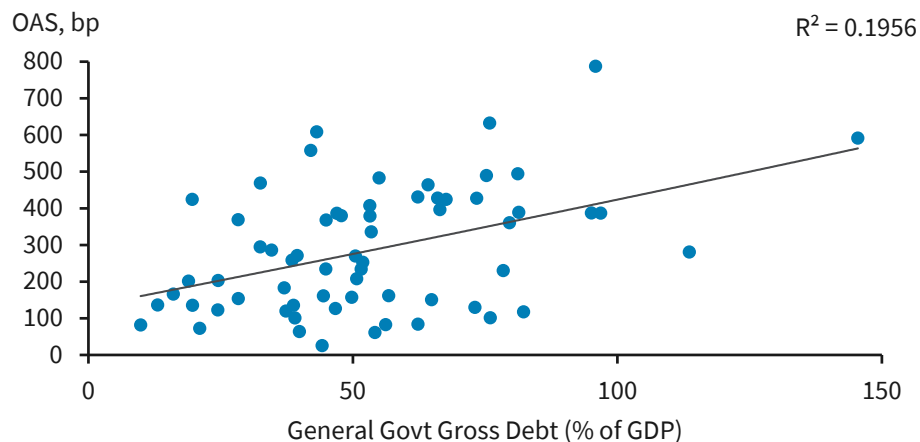


Note: Dynamically adjusted over time. Maturity- and rating-matched. As of 11 March.  
Source: Bloomberg, Barclays Research



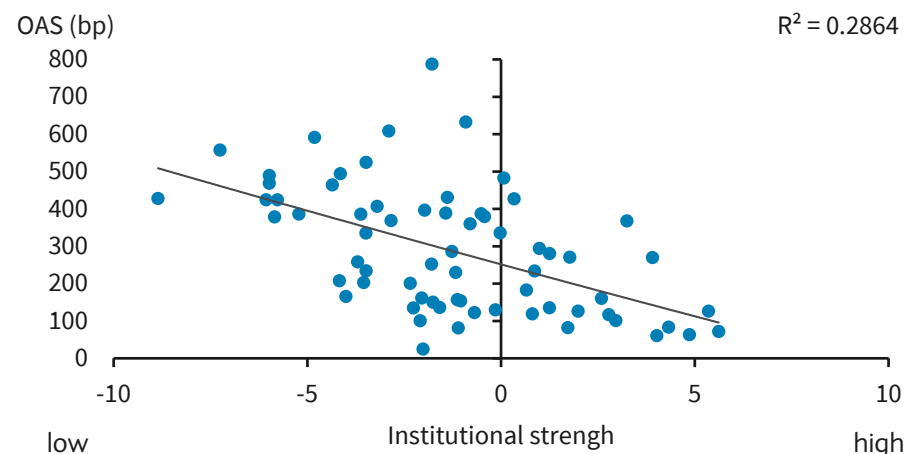
# Some relevant economic indicators for EM sovereign credit

## Spreads are correlated with public debt levels ...



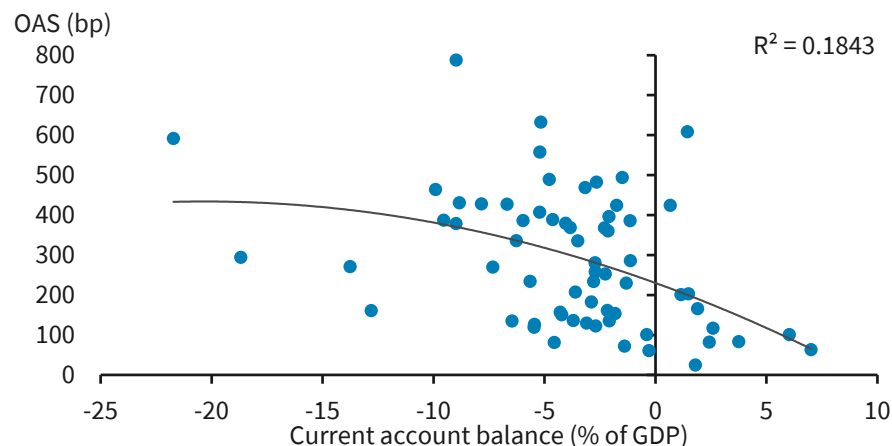
Note: Chart shows 2018 average of spreads (thru 6 December) and IMF's debt to GDP ratio projections. Source: IMF, Bloomberg, Barclays Research

## ...as well as institutional strength,...



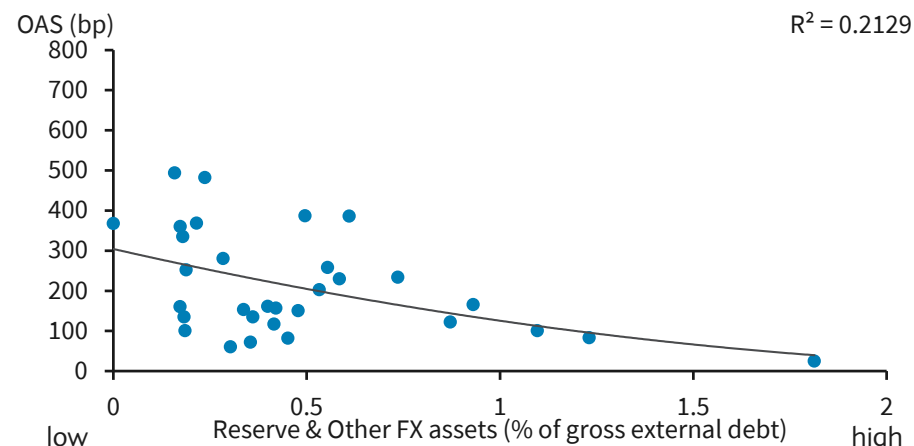
Note: Chart shows 2018 average spreads (thru 6 December) and aggregate score of World Bank's six governance indicators of 2017. Source: World Bank, Bloomberg, Barclays Research

## ...current account balances,...



Note: Chart shows 2018 average spreads (thru 6 December) and IMF's current account to GDP ratio projections. Source: IMF, Bloomberg, Barclays Research

## ...and reserves (as % of external debt)



Note: Econ data as of Q2 18 and OAS as of 6 December 2018. Source: Haver, Bloomberg, Barclays Research

# EM Sovereigns by their beta to the index

## EM Sovereigns grouped by betas to Bloomberg Barclays EM USD Sovereign index

| Beta*                   | Top Countries per segment on market value   |
|-------------------------|---|
| Low<br>(<0.4)           | Saudi Arabia, Qatar, Philippines, United Arab Emirates, Peru, Poland, Hungary                     |
| Low-to-mid<br>(0.4-0.8) | Indonesia, Mexico, Russia, Brazil, Colombia, Dominican Rep, Uruguay, Panama, Kazakhstan, Paraguay |
| Mid<br>(0.8-1.2)        | Oman, South Africa, Sri Lanka, El Salvador, Pakistan, Costa Rica, Jordan, Azerbaijan, Bolivia     |
| Mid-high<br>(1.2-1.6)   | Egypt, Nigeria, Kenya, Senegal, Belarus, Ethiopia   |
| High<br>(>1.6)          | Turkey, Argentina, Ecuador, Ukraine, Angola, Ghana, Ivory Coast, Iraq, Zambia, Gabon              |

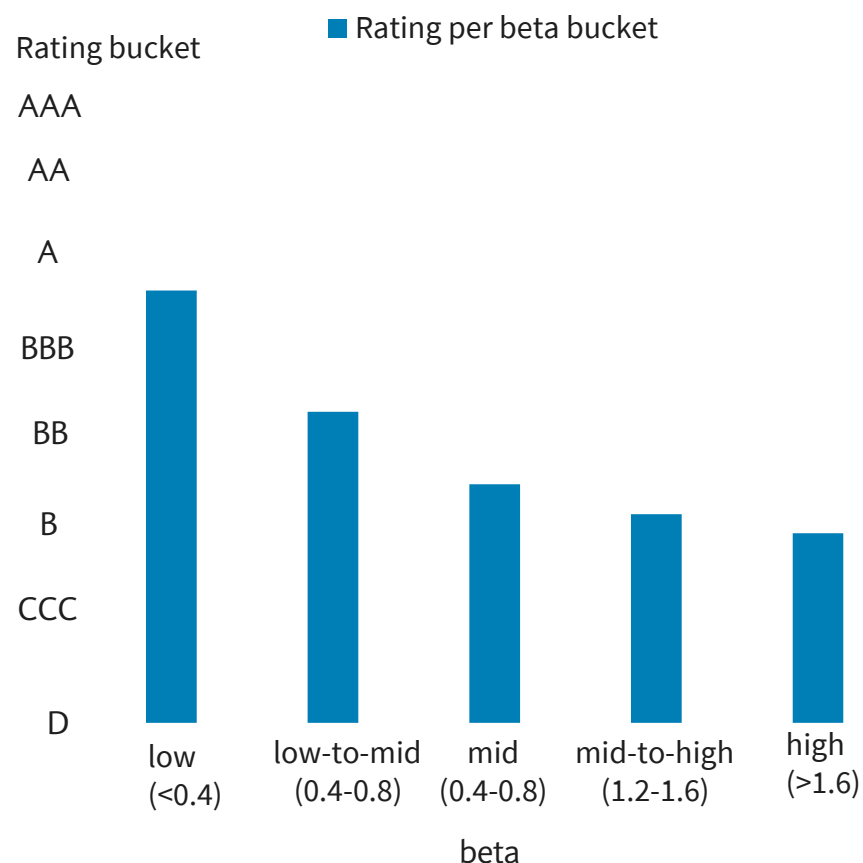
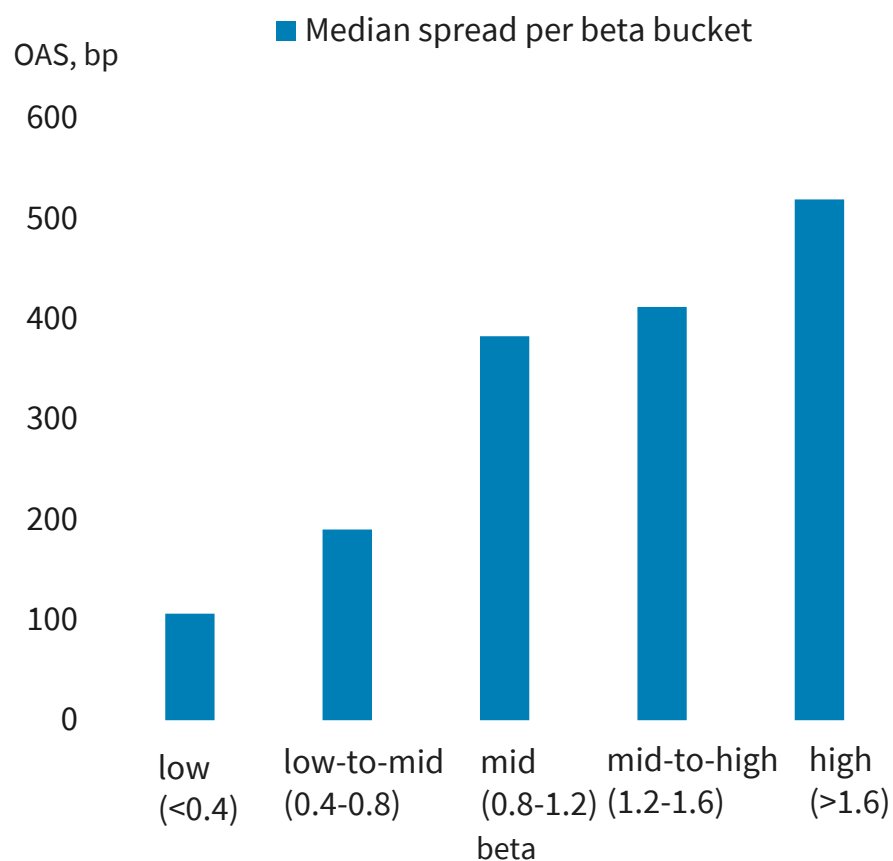
Note: \*Countries are grouped into beta ranges according to their 52 week beta to the index within the universe (Bloomberg Barclays EM USD Sovereign). We calculated a countries' beta on weekly spread changes of the country and the index from April 2018 till mid-March 2019. Select countries were excluded if they had been undergoing important idiosyncratic developments during the estimation period, which we found to have introduced bias to calculations. Market value as of 11 March.

Source: Bloomberg, Barclays Research

# Sovereign betas are correlated with spread and rating levels

Higher beta sovereigns tend to have higher spread...

... and a lower rating

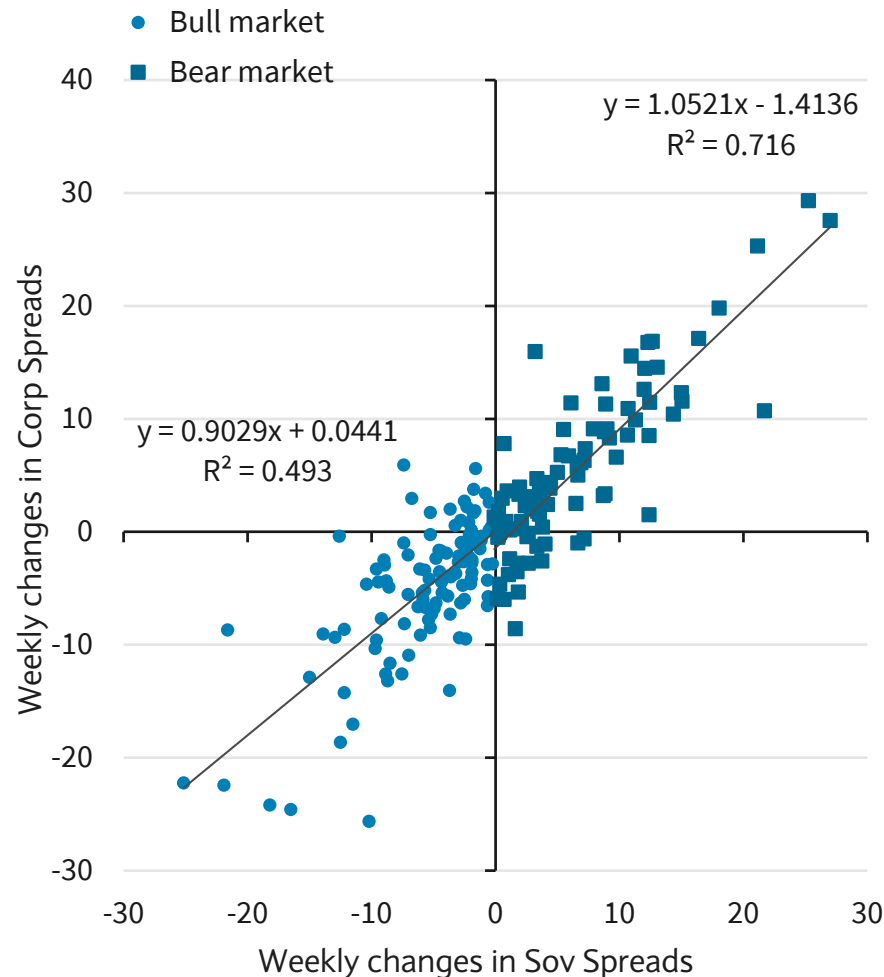


Note to both charts: Countries are grouped into beta ranges according to their 52 week beta to the index within the universe (Bloomberg Barclays EM USD Sovereigns). We calculated a countries' beta on weekly spread changes of the country and the index from April 2018 till mid-March 2019. Select countries were excluded if they had been undergoing important idiosyncratic developments during the estimation period, which we found to have introduced bias to calculations. Market value and ratings as of 11 March.

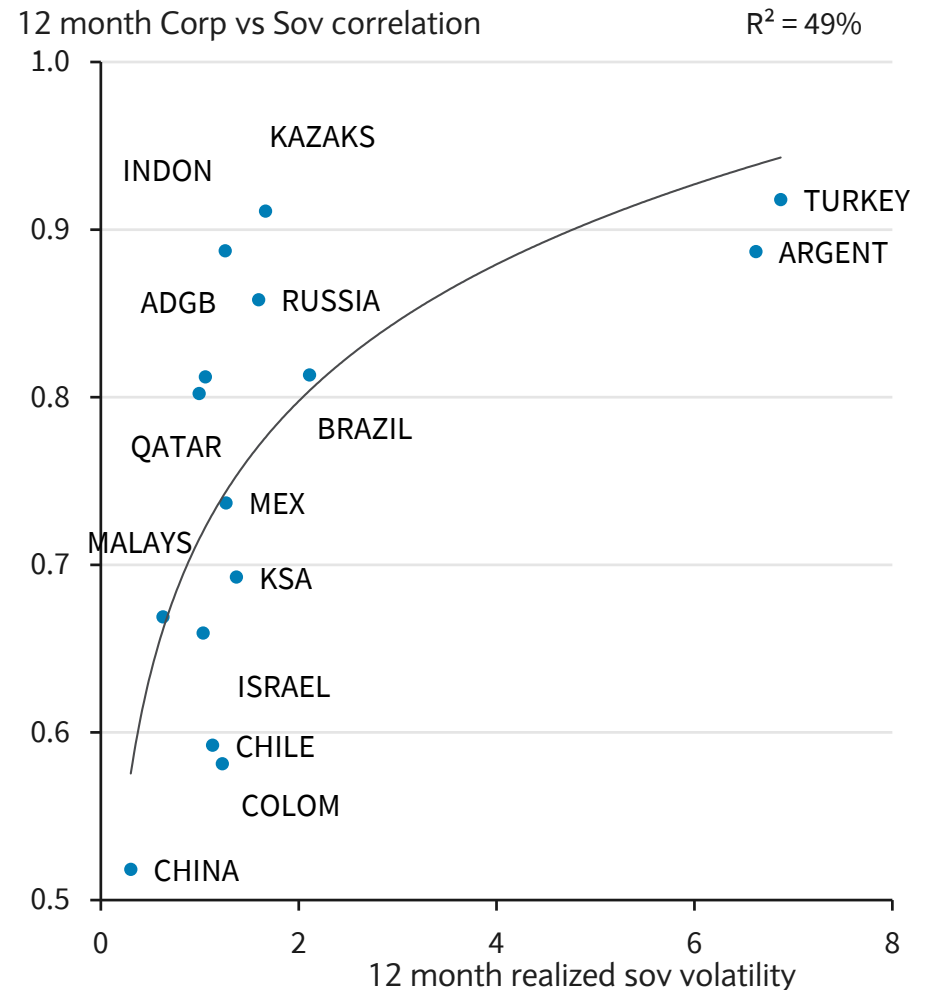
Source: Bloomberg, Barclays Research

# EM Corporate/Quasi spreads are strongly correlated with their sovereign...

EM Corporates have a high correlation to their sovereign that increases in bear markets...



...and in times of heightened volatility



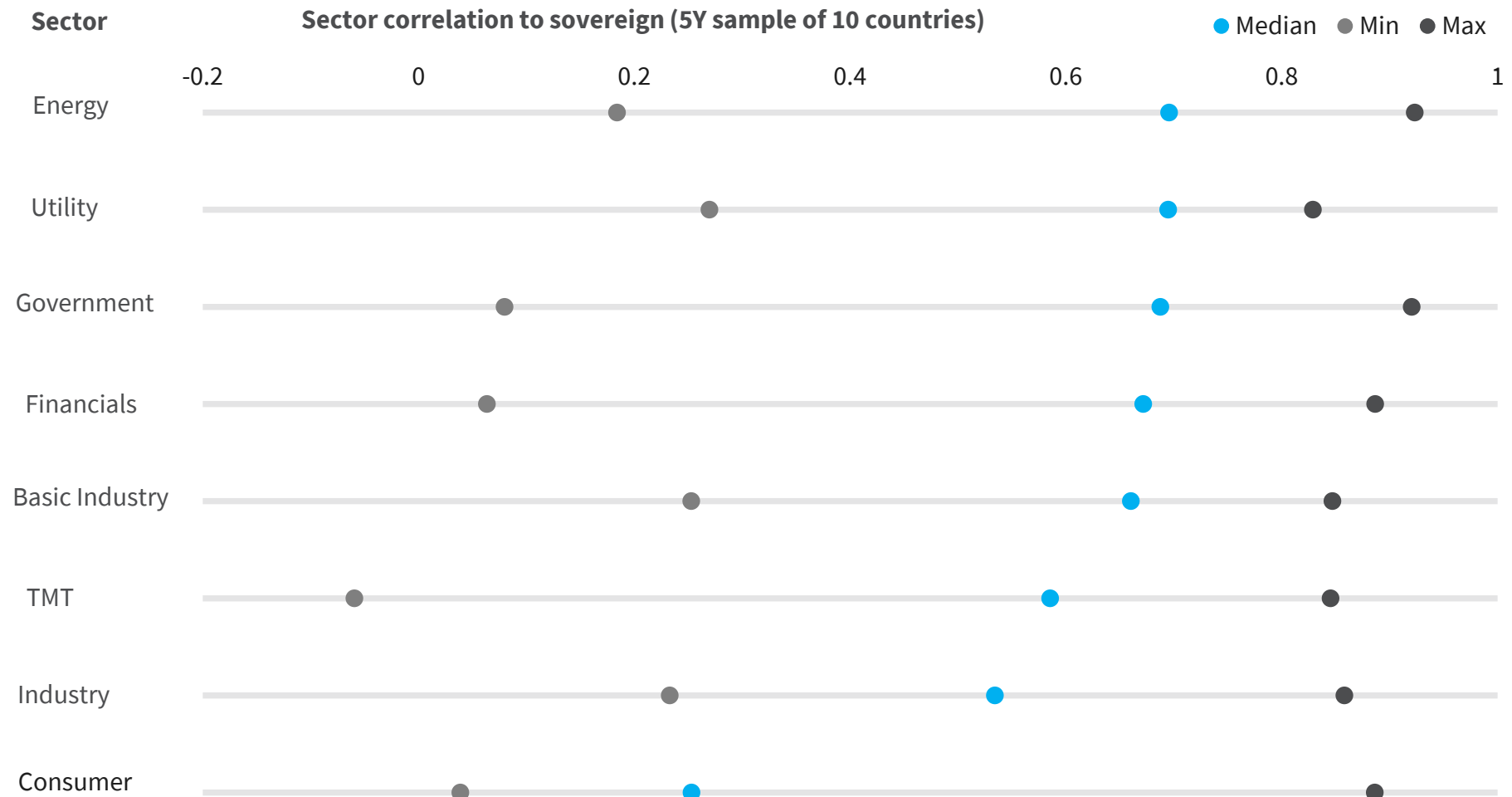
Note: Chart shows weekly changes of countries' corporate and sovereign spreads. Light blue denotes weeks with sovereign spread tightening and dark blue with sovereign spread widening.

Source: Bloomberg, Barclays Research

Source: Bloomberg, Barclays Research

# ..., but correlations of corporate sectors with the sovereign can vary widely across countries

Energy, Utility and Financials tend to have the highest correlation to the sovereign, but there is large variation across countries

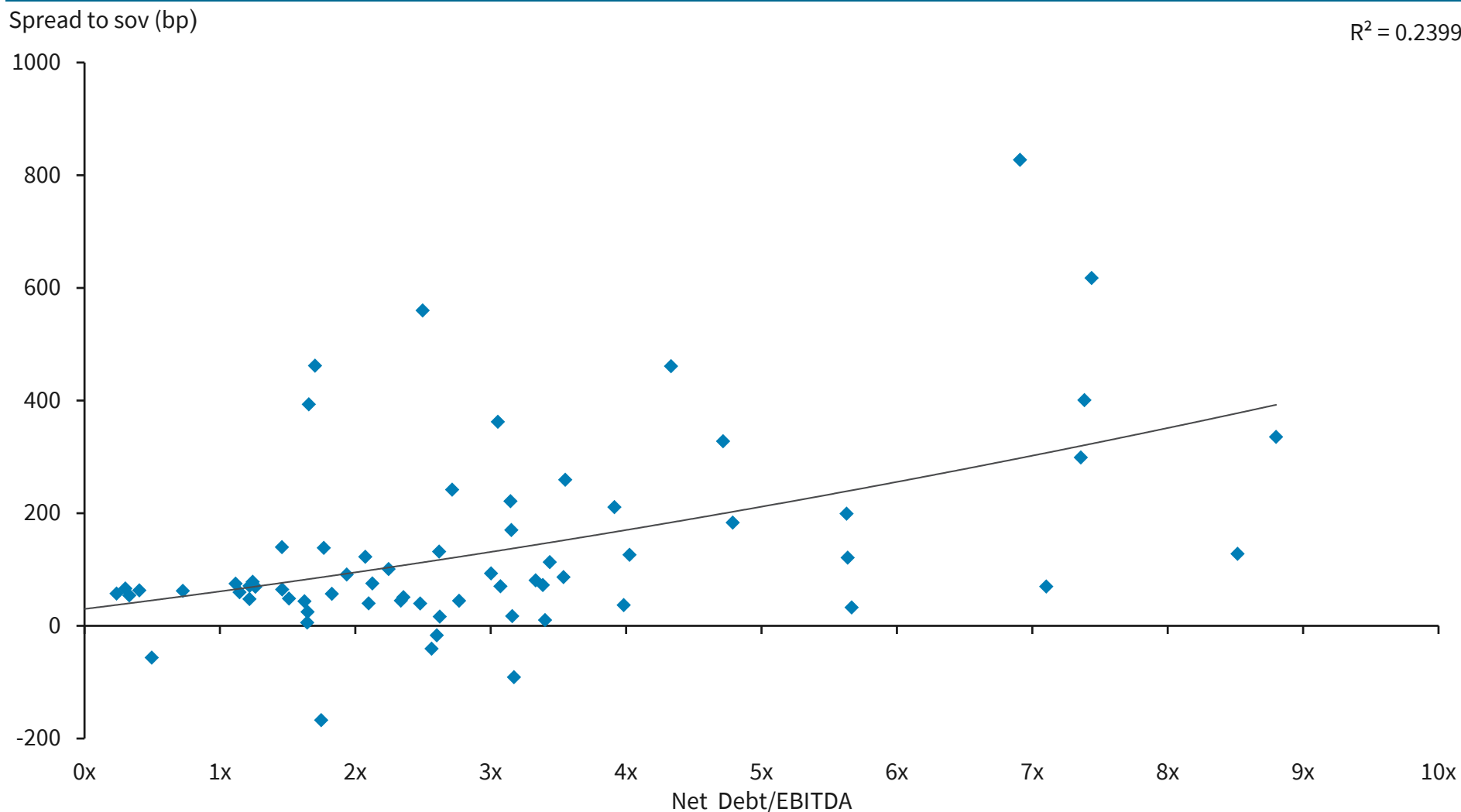


Note: Chart shows median/min/max of correlations of weekly changes in sector spreads and maturity-matched sovereign spreads from June 2014 till March 2019 across the following countries: Turkey, S.Africa, Russia, Qatar, Peru, Mexico, Malaysia, Indonesia, Colombia, Chile, Brazil

Source: Bloomberg, Barclays Research

# Net leverage is an important fundamental indicator for EM Corporates/Quasis, but doesn't tell the whole story

## Spread to sovereign and net leverage



Note: Includes 68 corporates and quasis (where data available) with at least an index weight of 0.25% in the Bloomberg Barclays Corporate or Bloomberg Barclays Quasi-Sovereign Index. Leverage data as of FY 2017, to allow for a wider comparison. Spread to sov data obtained as of 6 Dec 2018 by calculating the market-weighted average spread and duration of bonds per ticker and subtracting the duration-matched sovereign spread. Source: Moody's, Bloomberg, Barclays Research

# EM corporate not always exposed to depreciating currency

## The effect of local currency depreciation varies by sector and region

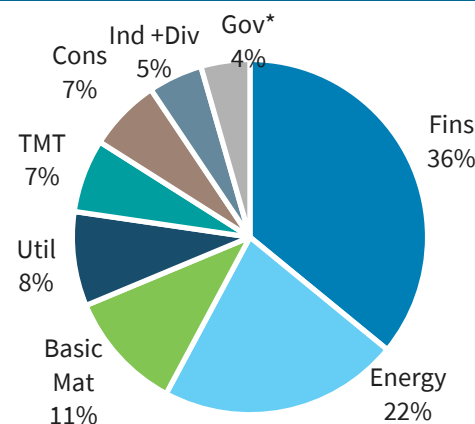
- The effect of local currency depreciation versus the USD on a company's fundamentals depends on the denomination of the company's revenues, costs and debt.
- Some of the largest sectors, such as Energy and Basic materials mostly benefit from weaker local FX.
- Other consideration such as cash holding or hedges also play an important role
- Banks could be affected via two different channels:
  - Balance sheet mismatches: EM banks are generally highly regulated in terms of FX exposure on balance sheets
  - FX credit risk

## Impact of EM FX depreciation

|       |       | REVENUES  |  |
|-------|-------|---|--|
|       |       | USD   | Local  |
| COSTS | USD   | <b>NO IMPACT</b><br>Some Oil & Gas<br>Margins: no effect<br>Credit metrics: no effect   | <b>VERY NEGATIVE</b><br>Telecom & Media, Airlines<br>Margins: worsened<br>Credit metrics: worsened                       |
|       | Local | <b>POSITIVE IMPACT</b><br>Mining, Pulp/Paper, Agricul.,<br>Steel, Infra, Oil<br>Margins: improved<br>Credit metrics: improved | <b>SLIGHTLY NEGATIVE</b><br>Consumer & Retail,<br>some Telecom & Media<br>Margins: no effect<br>Credit metrics: worsened |

Note: Credit metric impact will be determined by currency composition of debt; table here assumes mostly FX debt. Source: Barclays Research

## Energy and basic materials benefit from weaker FX



Note: Bloomberg Barclays USD EM corporate + quasi sovereign index shown (Bloomberg sectors; Communications, Tech, aggregated to TMT). \* primarily govt-owned development banks and provinces. 11 March 2019. Source: Bloomberg, Barclays Research

# Corporates may trade inside sovereign for different reasons

Characteristics of corporate issuers trading inside their respective sovereign are diverse. However, many reside in countries with a weak sovereign. Some of them generate a large share of their revenue in foreign currency or abroad, while their costs are linked to the domestic currency (f.e. MHP, METINV) which insulates them from adverse FX moves. Others have domestically geared business models, but low leverage and limited near-term refinancing needs as well as operate under some form of exchange rate controls (such as ARCOR and TASFT). Shareholder anchors in DM (f.e. AEFES, CCOLAT, KOF) or in higher-rated sovereigns (GULINT) may also lead to corporates trading inside the sovereign, sometimes even if the financial profile of the sovereign is relatively sound.

## Corporates trading inside the sovereign are generally rated at or above the sovereign level

| Ticker | Issuer                                    | Country   | Sector                 | Industry           | Rating notches above sovereign |
|--------|---|-----------|------------------------|--------------------|--------------------------------|
| AGRO   | Adecoagro SA                              | Argentina | Consumer, Non-cyclical | Agriculture        | 3/3/-                          |
| ARCOR  | Arcor SAIC                                | Argentina | Consumer, Non-cyclical | Food               | 2/-/2                          |
| PAMPAR | Pampa Energia SA                          | Argentina | Utilities              | Electric           | 0/0/-                          |
| PANAME | Pan American Energy LLC/Argentina         | Argentina | Energy                 | Oil&Gas            | 2/-/2                          |
| TASFT  | Cablevision SA                            | Argentina | Communications         | Media              | 1/-/1                          |
| TECPET | Tecpetrol SA                              | Argentina | Energy                 | Oil&Gas            | 2/-/4                          |
| TRAGAS | Transportadora de Gas del Sur SA          | Argentina | Energy                 | Pipelines          | 1/0/-                          |
| YPFDAR | YPF SA                                    | Argentina | Energy                 | Oil&Gas            | 0/-/0                          |
| GULINT | Gulf International Bank BSC               | Bahrain   | Financial              | Banks              | 7/-/5                          |
| AMXLMM | America Movil SAB de CV                   | Mexico    | Communications         | Telecommunications | 0/1/1                          |
| KOF    | Coca-Cola Femsa SAB de CV                 | Mexico    | Consumer, Non-cyclical | Beverages          | 1/1/1                          |
| NPNSJ  | Myriad International Holdings BV          | S.Africa  | Communications         | Media              | 0/2/-                          |
| AEFES  | Anadolu Efes Biracilik Ve Malt Sanayii AS | Turkey    | Consumer, Non-cyclical | Beverages          | 1/4/-                          |
| CCOLAT | Coca-Cola Icecek AS                       | Turkey    | Consumer, Non-cyclical | Beverages          | 1/-/2                          |
| KERPW  | Kernel Holding SA                         | Ukraine   | Consumer, Non-cyclical | Agriculture        | -1/2                           |
| METINV | Metinvest BV                              | Ukraine   | Basic Materials        | Iron/Steel         | -0/1                           |
| MHP SA | MHP SE                                    | Ukraine   | Consumer, Non-cyclical | Agriculture        | -1/1                           |
| FMCN   | First Quantum Minerals Ltd                | Zambia    | Basic Materials        | Mining             | 1/1/1                          |

Note: Includes corporates whose simple average of spread to sovereign across outstanding bonds is negative by a margin. Rating column shows rating above the sovereign at Moody's/S&P/Fitch. As of 19 March 2019.

Source: Bloomberg, Barclays Research



# Emerging Markets Credit: A primer

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Defining EM

Size, supply &  
redemption

Composition  
of EM credit

Historical  
performance  
and valuation  
characteristics

**EM  
idiosyncrasies  
and risk factors**

# Where does EM credit fit in the Bloomberg Barclays index universe?

| Global Index                    | Sub Index    | Sov + Corp + Quasi Sov in Index? |
|---------------------------------|--------------|----------------------------------|
| <b>Global Agg</b><br>(IG index) | US Agg       | In Gov. Related and Corp         |
|                                 | Pan Euro     | In Euro Agg and Sterling Agg     |
|                                 | Asia-Pac     | In Non-Japan Asia                |
|                                 | Other        | In EM IG Agg                     |
| <b>Global HY</b>                | US HY        | EM issuers not eligible          |
|                                 | Pan EUR HY   | EM issuers not eligible          |
|                                 | USD EM HY    | ~\$750bn                         |
|                                 | EUR EM HY    | ~€55bn                           |
| <b>Global EM Index</b>          | EM USD Sov   | ~\$825bn                         |
|                                 | EM USD Quasi | ~\$650bn                         |
|                                 | EM USD Corp  | ~\$500bn                         |
|                                 | EUR EM       | ~€250bn                          |

Note: As of 19 March 2019. Market value. Source: Bloomberg, Barclays Research

# Bloomberg Barclays indices: eligibility criteria

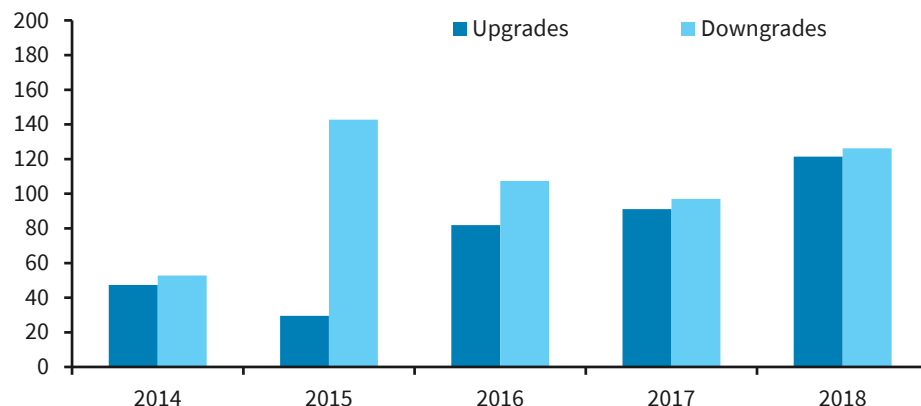
| Index Description | Currencies                                  | Min Bond Size  | Corp Ratings        | Maturity | Registration  | Exclusion                                     |
|-------------------|---|--|---------------------|----------|---|---|
| Global Agg        | Eligible currencies*                        | Varies, \$300mn for USD and EUR, £200mn for GBP                                | IG                  | Min 1y   | None  | --  |
| US Agg            | USD   | \$300mn  | IG                  | Min 1y   | Sec Registered or 144a with registration right          | --  |
| Pan EUR Agg       | EUR, GBP, NOK, SEK, DEK, HUF, PLN, SKK, CZK | Varies: EUR300mn, £200mn   | IG                  | Min 1y   | None  | --  |
| Asia Pacific Agg  | JPY, AUD, HKD, KRW, NZD, SGD, MYR, THB      | Varies: JPY35bn  | IG                  | Min 1y   | None  | --  |
| Global HY         | USD, EUR, GBP, DKK, NOK, SEK, CHF           | Varies: \$150mn for DM USD, EUR100mn for DM EUR, for EM, at least \$500mn      | HY or non-rated     | Min 1y   | None  | --  |
| US HY             | USD   | \$150mn  | HY or non-rated     | Min 1y   | SEC-registered or 144a                                  | EM issuers excluded                           |
| Euro HY           | EUR   | Varies: EUR100mn   | HY or non-rated     | Min 1y   | None  | EM issuers excluded                           |
| US Universal      | USD   | Varies: \$300mn for IG USD, \$150mn IG, HY or non-rated for HY, \$500mn for EM | IG, HY or non-rated | Min 1y   | Sec registered, 144a with or without registration right | --  |
| EM HC             | USD, EUR, GBP                               | USD 500mn/ EUR500mn/GBP350mn   | IG, HY or non-rated | Min 1y   | None  | Non EM countries based on Barclays definition |

Note: \*eligible currencies to the Global Agg index are: AUD, CNY, HKD, IDR, JPY, KRW, MYR, NZD, THB, SGD, CHF, CZK, DKK, EUR, GBP, HUF, ILS, NOK, PLN, RUB, SEK, CAD, CLP, USD. US Agg is not 100% part of the Global Agg (and also part of the US Universal). Source: Barclays Research

# EM Fallen Angels: Beware of the index technical

## Rating trend for EM Sovereigns stabilized in 2017/18 from an index perspective

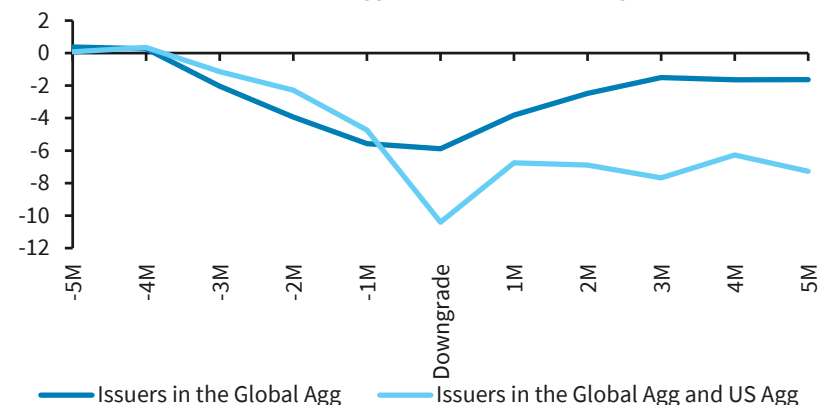
USDbn, Market value of index debt with index rating change



Note: Based on the Bloomberg Barclays USD EM sovereign index, calculated by comparing a country's index rating at year-end with the rating at the previous year-end, multiplied by the average market value of their index debt between the two dates. Data as of end-November 2018. Source: Bloomberg, Barclays Research

## Fallen angels since 2009: Issuers underperform prior to downgrade, but then outperform

Cumulative total return vs EM USD Agg 5Months prior to downgrade (%)



Note: Based on a sample of EM fallen angels (corporates and sovereigns) since 2009. Based on Bloomberg Barclays Indices. Source: Bloomberg, Barclays Research

## Largest EM credit fallen angels in recent years\*

| Ticker | Exclusion date | Relative performance (Total return, %) |                    | Relative performance (vs EM Agg, %) |                    |
|--------|----------------|--|--------------------|-------------------------------------|--------------------|
|        |                | 3M into downgrade                      | 3M after downgrade | 3M into downgrade                   | 3M after downgrade |
| BRAZIL | Dec-15         | -11                                    | 8                  | -12                                 | 5                  |
| GAZPRU | Feb-15         | -7                                     | 17                 | -6                                  | 13                 |
| ITAU   | Aug-15         | -6                                     | -2                 | -4                                  | -2                 |
| PETBRA | Sep-15         | -21                                    | -11                | -19                                 | -10                |
| REPHUN | Nov-11         | -10                                    | 0                  | -8                                  | -6                 |
| RUSSIA | Feb-15         | -6                                     | 18                 | -5                                  | 14                 |
| SBERRU | Feb-15         | -10                                    | 23                 | -9                                  | 20                 |
| SOAF   | May-17         | 3                                      | 2                  | 0                                   | 0                  |
| TURKEY | Sep-16         | 2                                      | -8                 | -1                                  | -6                 |
| VTB    | Feb-15         | -11                                    | 28                 | -10                                 | 25                 |
| TEVA   | Jan-18         | -6                                     | -3                 | -7                                  | 0                  |

Note: Cumulative performance into the downgrade. \*Some of these fallen angels, such as GAZPRU, VTB, SBERRU, RUSSIA, REPHUN have regained investment-grade status. Source: Bloomberg, Barclays Research

# EM Quasi-sovereign corporate debt

## Government ownership and/or support is more prevalent in emerging markets

### What is a Quasi-sovereign?

- For Bloomberg Barclays indices, they are classified as Agencies under Government Related
- The Bloomberg Barclays indices system defines Quasi-sovereigns as either “government-owned, no guarantee,” or “government sponsored”**
  - “Owned, no guarantee” indicates >50% ownership (including indirect ownership through other owned entities), with no explicit guarantee
  - “Government sponsored” entities carry out government policies and benefit from proximity to central governments, i.e., Fannie/Freddie pre-2008
- However, the true defining factor of a Quasi-sovereign is the degree of implicit support from the sovereign**
  - Often coincides with a large equity stake, but ownership is not necessary for an implied backstop to exist
  - Similarly, equity ownership does not automatically imply a sovereign backstop
- For example, MARFRIG does not meet the Bloomberg Barclays definition of a quasi-sovereign, yet is partially owned by BNDES (government owned) and is a large Brazilian employer and thus politically sensitive and could be supported by the sovereign if deemed necessary

### Major Quasi-Sovereigns

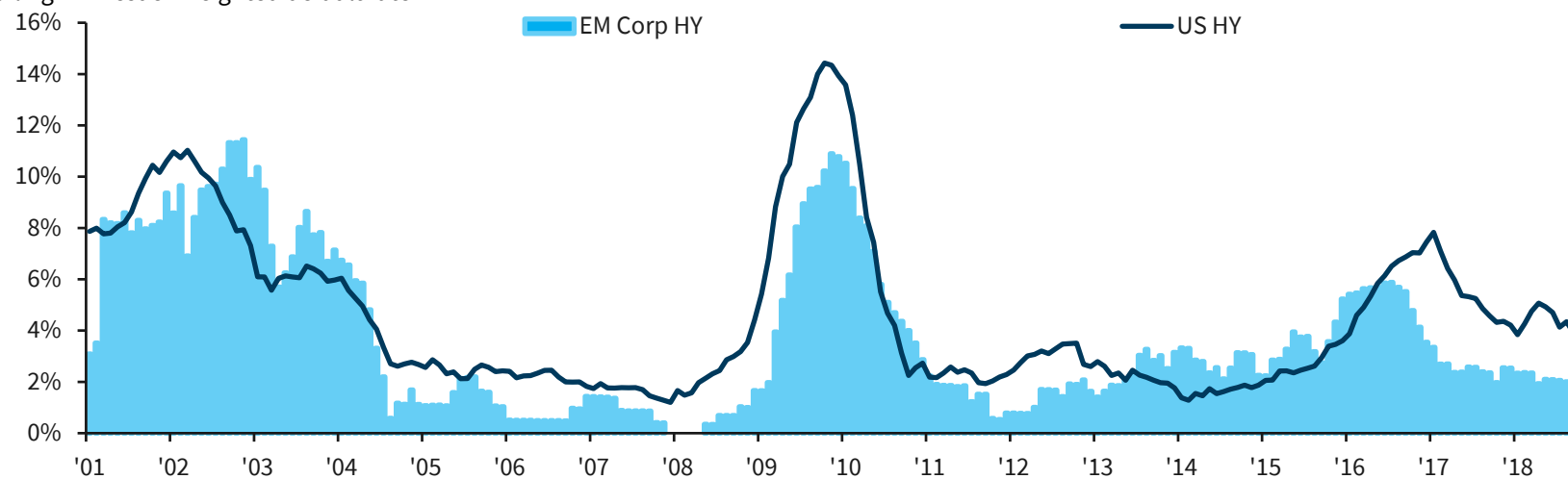
| 100% government owned |              |                          | <100% government owned |              |                          |
|-----------------------|--------------|--------------------------|------------------------|--------------|--------------------------|
| Ticker                | Country      | Amt outstanding (USD bn) | Ticker                 | Country      | Amt outstanding (USD bn) |
| PEMEX                 | Mexico       | 53.0                     | PETBRA                 | Brazil       | 32.9                     |
| SINOPE                | China        | 18.7                     | ICBCAS                 | China        | 17.4                     |
| CNOOC                 | China        | 18.3                     | BCHINA                 | China        | 14.8                     |
| EIBKOR                | S.Korea      | 16.3                     | HRAM                   | China        | 14.6                     |
| ARAMCO                | Saudi Arabia | 12.0                     | CCB                    | China        | 10.2                     |
| CHGRID                | China        | 11.5                     | GAZPRU                 | Russia       | 8.3                      |
| HAOHUA                | China        | 10.5                     | BANBRA                 | Brazil       | 8.1                      |
| CDEL                  | Chile        | 9.3                      | CCAMCL                 | China        | 8.0                      |
| PERTIJ                | Indonesia    | 9.3                      | SECO                   | Saudi Arabia | 7.8                      |
| KDB                   | S.Korea      | 9.2                      | ECOPET                 | Colombia     | 7.4                      |
| EXIMCH                | China        | 8.9                      | TAQAUH                 | UAE          | 7.2                      |
| SDBC                  | China        | 8.8                      | ICBCIL                 | China        | 6.5                      |
| MUBAUH                | UAE          | 7.3                      | YPFDAR                 | Argentina    | 5.6                      |
| PLNIJ                 | Indonesia    | 7.0                      | BOCAVI                 | China        | 5.5                      |
| KZOKZ                 | Kazakhstan   | 6.0                      | DPWDU                  | UAE          | 5.5                      |
| ESKOM                 | S.Africa     | 5.5                      | CHIOLI                 | China        | 5.4                      |
| PETMK                 | Malaysia     | 5.3                      | CITLTD                 | China        | 5.2                      |
| VEBBNK                | Russia       | 4.8                      | SYNNVX                 | China        | 4.5                      |
| CFELEC                | Mexico       | 4.7                      | SBERRU                 | Russia       | 4.5                      |
| EXIMBK                | India        | 4.3                      | QTELQD                 | Qatar        | 4.3                      |

Note: As of 30 April 2019. Values based on Bloomberg Barclays EM Corp/Quasi-Sovereign Index. Source: Bloomberg, Barclays Research

# EM default overview: a similar cycle to US HY

## EM HY corporate default rate is historically lower than US HY

Trailing 12M Issuer-weighted default rate



Note: Chart as of 8 December. Source: Moody's, Barclays Research.

## Largest CCC or below rated issuers in Bloomberg Barclays EM USD Aggregate

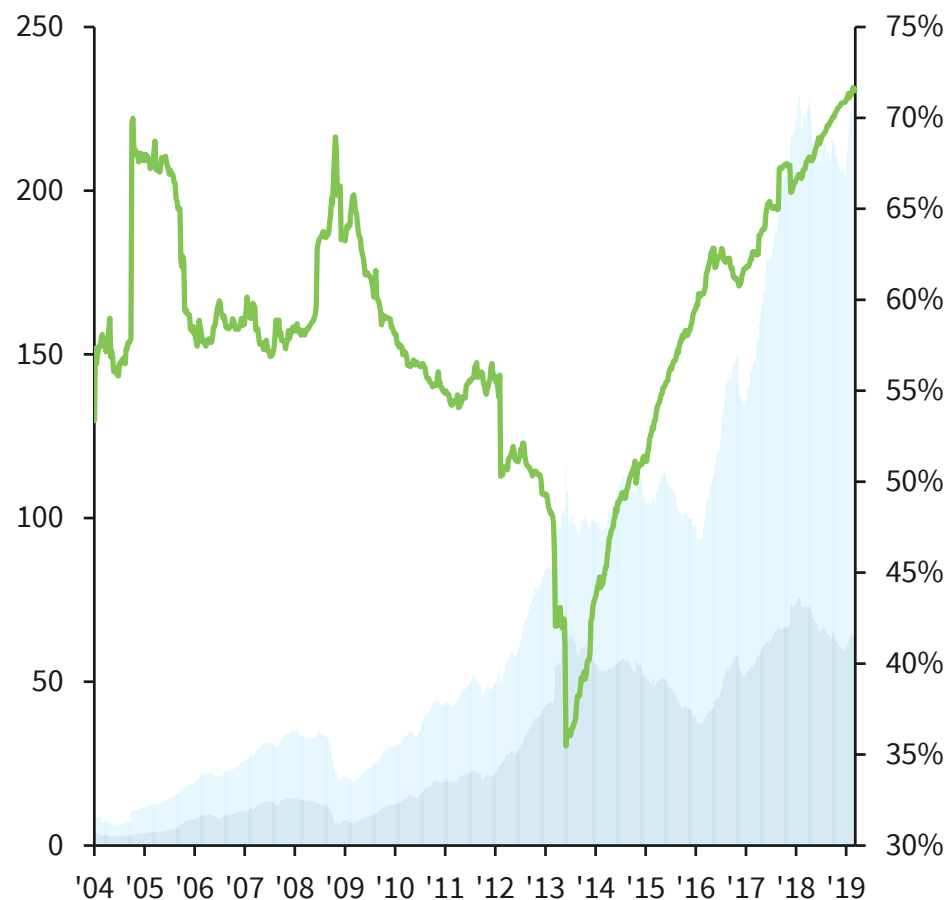
| Ticker | Moody's Rating | S&P Rating | Fitch Rating | Index Rating | Amount Outstanding (USDbn) | Country              | Class     |
|--------|----------------|------------|--------------|--------------|----------------------------|----------------------|-----------|
| MOZAM  | CAA3           | NR         | NR           | CAA3         | 0.7                        | Mozambique           | Sovereign |
| POGLN  | NR             | B-         | CCC          | CAA2         | 0.5                        | Russia               | Corporate |
| BCGBK  | NR             | CCC+       | NR           | CAA1         | 0.5                        | Chile                | Corporate |
| ESKOM  | B3             | CCC+       | NR           | CAA1         | 4.5                        | S.Africa             | Quasi     |
| GABON  | CAA1           | NR         | B            | CAA1         | 0.7                        | Gabon                | Sovereign |
| EXIMUK | CAA1           | NR         | B-           | CAA1         | 1.4                        | Ukraine              | Quasi     |
| OSCHAD | CAA1           | NR         | B-           | CAA1         | 0.8                        | Ukraine              | Quasi     |
| RAILUA | NR             | CCC+       | B-           | CAA1         | 0.4                        | Ukraine              | Quasi     |
| THHTGP | CAA1           | NR         | CCC+         | CAA1         | 0.5                        | China                | Corporate |
| ODHGPR | NR             | CCC-       | CC           | CA           | 1.0                        | Mexico               | Corporate |
| HCELEC | CA             | NR         | NR           | CA           | 0.5                        | China                | Corporate |
| DLLTD  | CAA3           | NR         | CC           | CA           | 0.9                        | Jamaica              | Corporate |
| ODBR   | C              | D          | C            | C            | 1.9                        | Brazil               | Corporate |
| EAPART | NR             | NR         | C            | C            | 0.5                        | United Arab Emirates | Corporate |

Note: As of 18 March. Only senior debt included. For ESKOM, government-guaranteed bond is excluded due to higher rating level. Source: Bloomberg, Barclays Research.

# Characteristics of EM funds

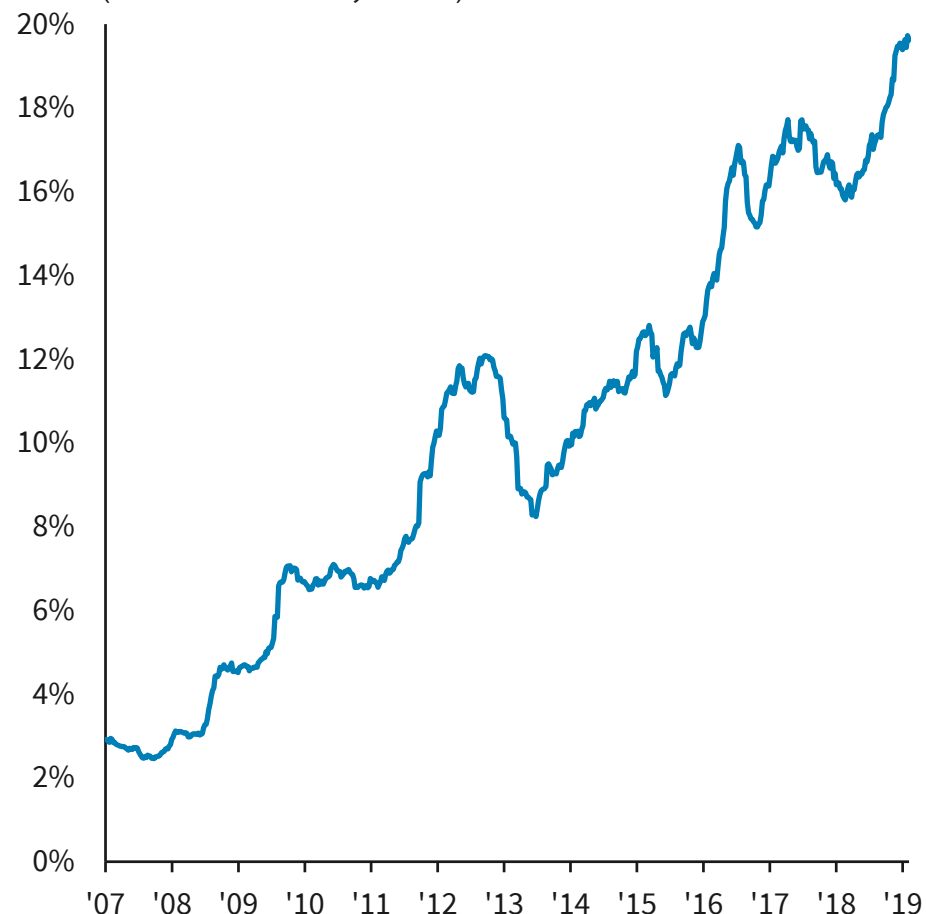
## The bulk of HC mutual fund money is from institutional investors

USDbn Institutional Retail Institutional (% of total, rhs)



## Passive funds have gained importance in the EM funds landscape

AuM of EM dedicated passive as % of active funds (incl. local currency funds)



Note: Categorisation into retail and institutional based on how the fund is marketed by the fund manager. A fund with a minimum investment amount > USD100,000 is classified as institutional, except if explicitly marketed only to "qualified" institutional or "sophisticated" investors. As of 18 March. Source: EPFR Global, Barclays Research

# Select Emerging Markets ETFs by AUM

## EM Corporate and Sovereign ETFs

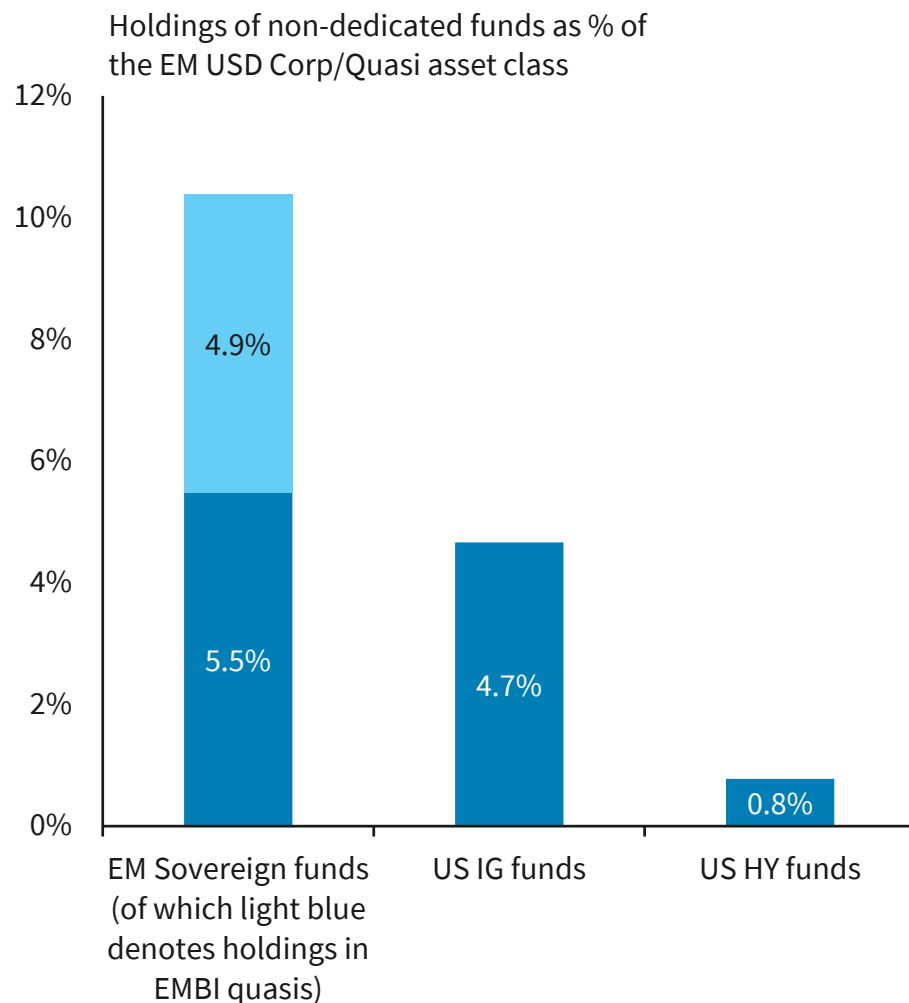
| Ticker    | Name  | Fund Assets (USDbn) | # of Holdings | Allocation to Sov (%) | 12M Yield | Local currency |
|-----------|---|---------------------|---------------|-----------------------|-----------|----------------|
| EMB US    | iShares J.P. Morgan USD Emerging Markets Bond                     | 14.3                | 469           | 84.9                  | 5.6       |                |
| IEML LN   | iShares JP Morgan EM Local Gov                                    | 7.1                 | 217           | 99.4                  | 5.7       | Y              |
| IEMB LN   | iShares J.P. Morgan USD EM Bond UCITS                             | 6.7                 | 422           | 84.2                  | 4.8       |                |
| EMLC US   | VanEck Vectors J.P Morgan EM Local Currency Bond                  | 4.6                 | 273           | 99.0                  | 6.5       | Y              |
| PCY US    | Invesco Emerging Markets Sovereign Debt                           | 3.6                 | 108           | 99.9                  | 4.9       |                |
| EMBE LN   | iShares J.P. Morgan USD EM Bond EUR Hedged UCITS                  | 3.5                 | 425           | 83.8                  | 5.7       |                |
| EMDD LN   | SPDR Bloomberg Barclays Emerging Markets Local Bond UCITS         | 3.3                 | 308           | 97.4                  | 4.3       | Y              |
| VWOB US   | Vanguard Emerging Markets Government Bond                         | 1.1                 | 1065          | 59.1                  | 4.5       |                |
| XEMB GR   | Xtrackers II USD Emerging Markets Bond UCITS                      | 1.0                 | 332           | 87.6                  | --        |                |
| EBND US   | SPDR Bloomberg Barclays Emerging Markets Local Bond               | 0.6                 | 360           | 95.6                  | 4.7       | Y              |
| LEMB US   | iShares J.P. Morgan EM Local Currency Bond                        | 0.4                 | 201           | 99.5                  | 3.4       | Y              |
| EMCR LN   | iShares JP Morgan USD EM Corp Bond UCITS                          | 0.4                 | 733           | 0.5                   | 4.7       |                |
| LEMB FP   | Lyxor iBoxx \$ Liquid Emerging Markets Sovereigns UCITS           | 0.4                 | 36            | --                    | 5.2       |                |
| UEFS GR   | UBS ETF - Bloomberg Barclays USD Emerging Markets Sovereign UCITS | 0.3                 | 596           | 74.8                  | 4.5       |                |
| EMLB LN   | PIMCO EM Advantage Local Bond Index Source UCITS                  | 0.3                 | 135           | 98.8                  | --        | Y              |
| HYEM US   | VanEck Vectors Emerging Markets High Yield Bond                   | 0.3                 | 485           | 6.7                   | 5.7       |                |
| EMHY US   | iShares Emerging Markets High Yield Bond                          | 0.3                 | 453           | 58.4                  | 6.8       |                |
| VENT LN   | Vanguard USD Emerging Markets Government Bond UCITS               | 0.2                 | 793           | 58.9                  | 4.4       |                |
| 00760B TT | Fuh Hwa Emerging Market Credit Bond                               | 0.2                 | --            | --                    | --        |                |
| ELD US    | WisdomTree Emerging Markets Local Debt                            | 0.2                 | 137           | 91.3                  | 6.3       | Y              |
| SEAA GR   | UBS ETF - J.P. Morgan USD EM Diversified Bond 1-5 UCITS           | 0.2                 | 461           | 42.3                  | 2.0       |                |
| ZEF CN    | BMO Emerging Markets Bond Hedged to CAD Index                     | 0.2                 | 58            | 96.9                  | 4.9       |                |
| 00711B TT | Fuh Hwa Emerging Market 10+ Yr Bond                               | 0.2                 | 47            | 57.7                  | 5.0       |                |

Note: Y indicates 'Yes'. Data as of 3 January 2019, allocation based on the last reporting date on Bloomberg. Source: Bloomberg, Barclays Research

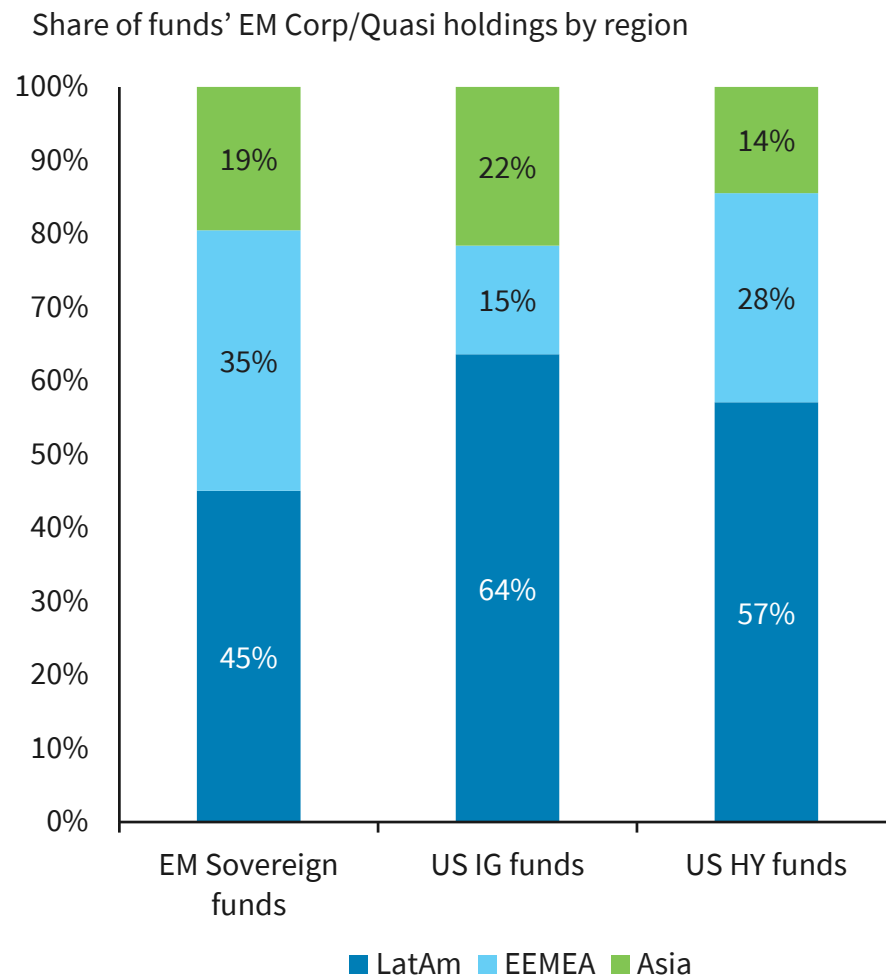


# Non-dedicated funds also own EM Corporates and Quasis, partly for benchmark reasons

## Cross-sponsorship of EM Corp/Quasis by non-dedicated funds is material



## LatAm Corp/Quasis see the highest level of cross-sponsorship

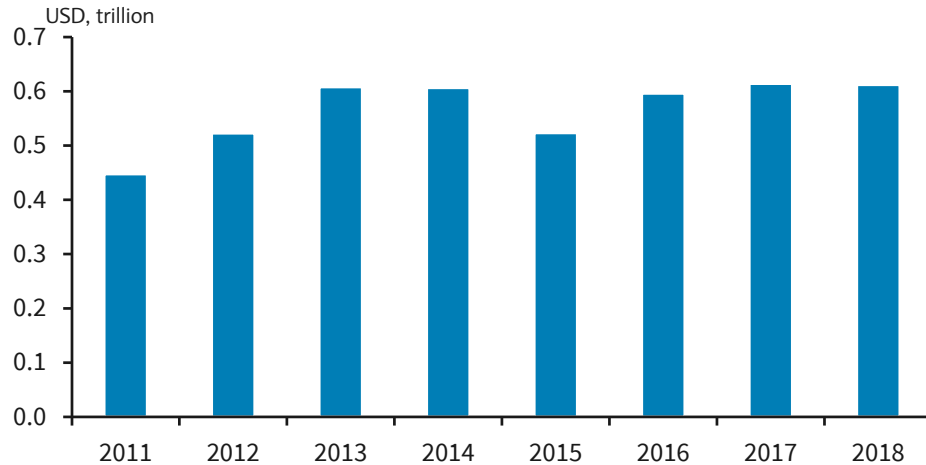


Note: Sample of EM Sovereign funds includes 20 reporting, active managed funds. Sample of US funds includes 18 US HY and 17 US IG funds. Size of Bloomberg Barclays Corp/Quasi used as proxy for size of the asset class. Holdings used as of February for left chart, Holdings used as of December for right chart.

Source: Bloomberg, Barclays Research

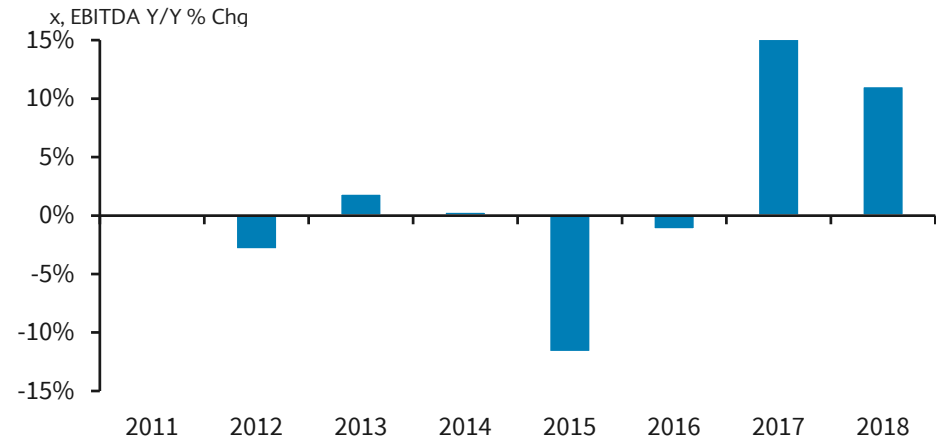
# EM corps have improved net leverage due to profit growth, balance sheet liquidity remains on historical average

**Net debt has been rising over the years, but has stabilized lately,...**



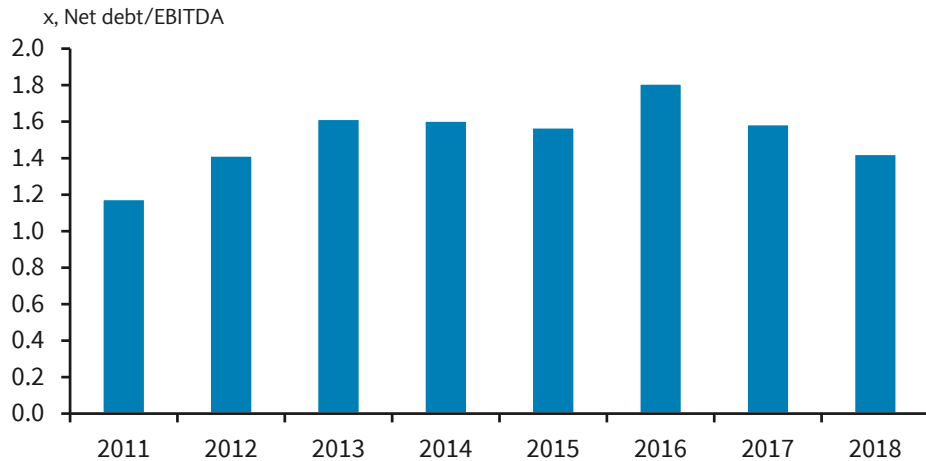
Source: Moody's, Barclays Research

**... while a material rebound in EBITDA growth...**



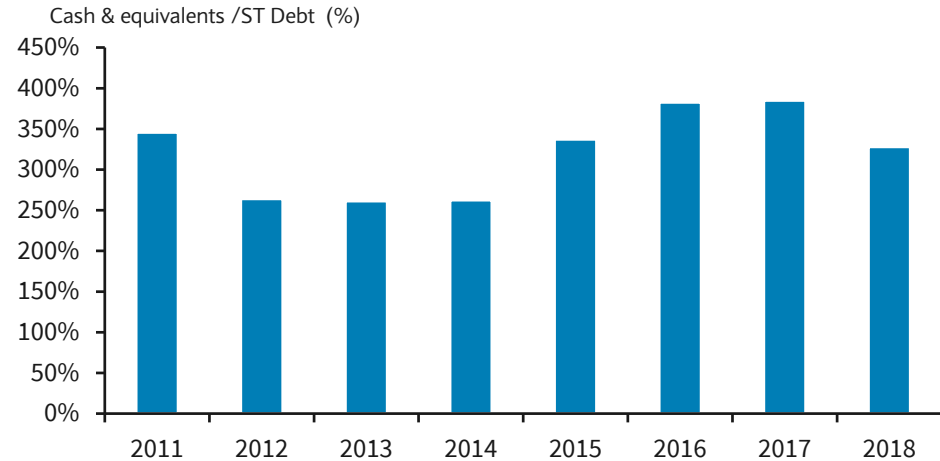
Source: Moody's, Barclays Research

**...has led net leverage to decline**



Source: Moody's, Barclays Research

**Liquidity remains on historical average**



Source: Moody's, Barclays Research

Note to charts: Based on sample of 156 annually-reporting EM Corporates and Quasis. As such, levels may not be representative of the population. As adjusted.

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# Analyst Certifications and Important Disclosures

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## Analyst Certification(s)

We, Badr El Moutawakil, Fabian Herold, Andreas Kolbe, and Sebastian Vargas, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

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### Overweight (OW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to exceed the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to exceed the six-month total return of the relevant index.

### Market Weight (MW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be in line with the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be in line with the six-month total return of the relevant index.

# Important Disclosures (continued)

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## **Underweight (UW):**

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be less than the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be less than the six-month total return of the relevant index.

## **Sector definitions:**

Sectors in U.S. High Grade Research are defined using the sector definitions of the Bloomberg Barclays U.S. Credit Index and are rated against the Bloomberg Barclays U.S. Credit Index.

Sectors in U.S. High Yield Research are defined using the sector definitions of the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index and are rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index.

Sectors in European High Grade Research are defined using the sector definitions of the Bloomberg Barclays Pan-European Credit Index and are rated against the Bloomberg Barclays Pan-European Credit Index.

Sectors in Industrials and Utilities in European High Yield Research are defined using the sector definitions of the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials and are rated against the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials.

Sectors in Financials in European High Yield Research are defined using the sector definitions of the Bloomberg Barclays Pan-European High Yield Finance Index and are rated against the Bloomberg Barclays Pan-European High Yield Finance Index.

Sectors in Asia High Grade Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM Asia USD High Grade Credit Index.

Sectors in Asia High Yield Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index.

Sectors in EEMEA and Latin America Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM USD Corporate and Quasi Sovereign Index. These sectors may contain both High Grade and High Yield issuers.

To view sector definitions and monthly sector returns for Asia, EEMEA and Latin America Research, go to <https://live.barcap.com/go/research/EMSectorReturns> on Barclays Live.

## **Explanation of the Barclays Research Corporate Credit Rating System**

For all High Grade issuers covered in the US, Europe or Asia, and for all issuers in Latin America and EEMEA, the credit rating system is based on the analyst's view of the expected excess return over a six-month period of the issuer's index-eligible corporate debt securities\* relative to the expected excess return of the relevant sector, as specified on the report.

**Overweight (OW):** The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to exceed the six-month expected excess return of the relevant sector.

**Market Weight (MW):** The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be in line with the six-month expected excess return of the relevant sector.

**Underweight (UW):** The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be less than the six-month expected excess return of the relevant sector.

**Rating Suspended (RS):** The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.

**Coverage Suspended (CS):** Coverage of this issuer has been temporarily suspended.

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For all High Yield issuers (excluding those covered in EEMEA or Latin America), the credit rating system is based on the analyst's view of the expected total returns over a six-month period of the rated debt security relative to the expected total return of the relevant sector, as specified on the report.

**Overweight (OW):** The analyst expects the six-month total return of the debt security subject to this rating to exceed the six-month expected total return of the relevant sector.

**Market Weight (MW):** The analyst expects the six-month total return of the debt security subject to this rating to be in line with the six-month expected total return of the relevant sector.

**Underweight (UW):** The analyst expects the six-month total return of the rated debt security subject to this rating to be less than the six-month expected total return of the relevant sector.

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51% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 66% of issuers with this rating category are investment banking clients of the Firm; 81% of the issuers with this rating have received financial services from the Firm.

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56% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 52% of bonds with this rating category are investment banking clients of the Firm; 78% of the issuers with this rating have received financial services from the Firm.

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## **Explanation of the Barclays EM Sovereign Credit Issuer Rating System**

### **Overweight (OW):**

The analyst expects the three-month excess return of the country's index eligible bonds to exceed the three-month excess return of the Bloomberg Barclays EM USD Sovereign Index.

### **Market Weight (MW):**

The analyst expects the three-month excess return of the country's index eligible bonds to be in line with the three-month excess return of the Bloomberg Barclays EM USD Sovereign Index.

### **Underweight (UW):**

The analyst expects the three-month excess return of the country's index eligible bonds to be less than the three-month excess return of the Bloomberg Barclays EM USD Sovereign Index.

### **Rating Suspended (RS):**

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