

Emerging Market Debt in Charts — 2020 Outlook

Antoine Lesne

Head of SPDR EMEA Strategy & Research

Low yield in developed market bonds remains a key issue for investors. In this environment, we see the potential for stronger relative returns in emerging market debt, particularly local currency bonds. Heading into 2020, a mix of supportive factors could drive this asset class.

Economic Growth Differential

We believe US economic outperformance will continue, although the outperformance gap between the US and other regions may start to shrink. Europe continues to lag due to cyclical and structural problems, but a catalyst could trigger improvement, especially in the second half of 2020. Emerging markets (EM) will be critical contributors to global growth; that said, we expect economic performance in EM to be highly variable.

Meanwhile, the growth differential in aggregate remains and, at 4.6% in 2020 versus 1.9% for developed markets, is expected to widen versus 2019. This growth differential is helping foster higher yields in these regions, which is helpful for carry and potentially calls for an appreciation in the overall EM currency basket.

Figure 1
State Street
Global Advisors
Economic Projections

Real GDP Growth	2018 (%)	2019 (% , projected)	2020 (% , projected)
World	3.6	3.2	3.5
Advanced Economies	2.2	1.9	1.9
US	2.9	2.3	2.1
Eurozone	1.8	1.2	1.3
Japan	0.8	1.1	0.9
UK	1.4	1.4	1.6
Australia	2.8	1.8	2.5
Canada	1.8	1.6	1.7
Developing Economies	4.5	4.0	4.6
China	6.6	6.1	5.9

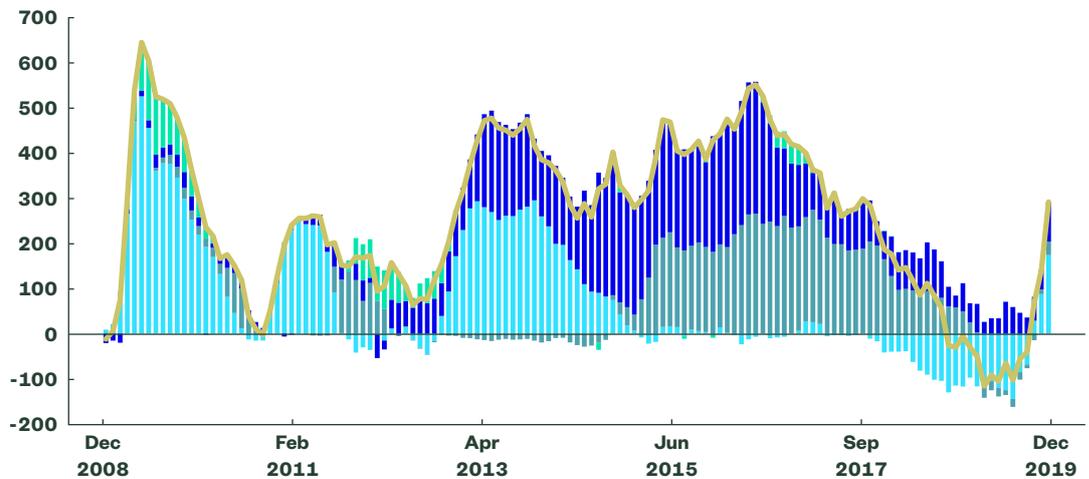
Source: 2018=national databases. 2019 and 2020 projections=State Street Global Advisors Economics Estimates/ Projections, as of 20 December 2019. Actual results may differ from these projections.

Accommodative Central Bank Policies in Developed and Emerging Markets

As announced by the US Federal Reserve and the European Central Bank, balance sheet expansion is resuming in an effort to prop up and expand the cycle further. Against this backdrop, the lower inflation environment in EM has allowed many EM central banks to ease financial conditions by cutting rates.

Figure 2
G4 Central Banks Balance Sheets Evolutions — Rising Liquidity Tide
 Global Central Bank Balance Sheets (3mma, bn USD)

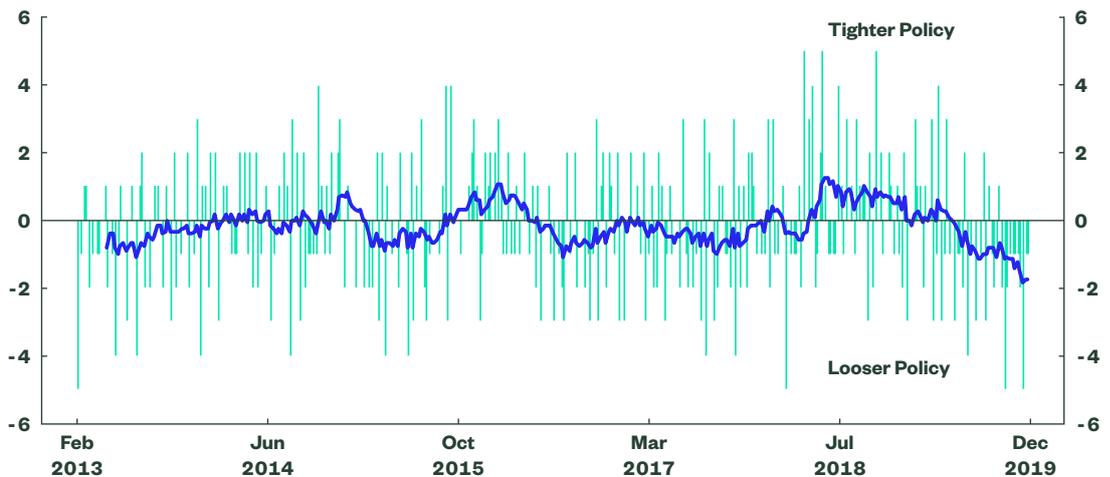
■ BoJ
 ■ BoE
 ■ ECB
 ■ US Fed
 ■ Total



Source: Bloomberg Finance L.P., as of 31 December 2019.
 BoJ=Bank of Japan, BoE=Bank of England, ECB=European Central Bank, Fed=US Federal Reserve Bank, 3mma=3-month moving average.

Figure 3
Emerging Market Central Banks Policy Diffusion Index

■ 12w Rolling Average
 ■ Cut vs. Hikes



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 27 December 2019. EM Central Bank policy diffusion index — weekly, based on the central banks of the 20 markets included in the Bloomberg Barclays Emerging Market Local Currency Liquid Government Index (this includes Argentina, which left the index at end August 2019).

Weaker Inflation Leads to Increased Real Yield Differential and Supports Investor Flows

Investor flows into EM debt often trail the change in real yield differential between emerging and developed markets. We have seen recent falls in inflation in EM, from a peak of close to 10% in October 2018 to close to 6%, based on PriceStats data. This has greatly helped the real yield differential versus developed markets. What's more, the differential has continued to increase over the past few months, and flows have started to return to the asset class (through both mutual funds and ETFs). However, the recent increase in inflation globally could affect this real yield differential, in which case we may see a slowdown of these flows.

Figure 4
EM Debt Flows and Real Yield

■ EMD Fund Flows (12m Monthly Average) — LHS
 ■ EMD DM Real Yield Differential — 12m Lead — RHS



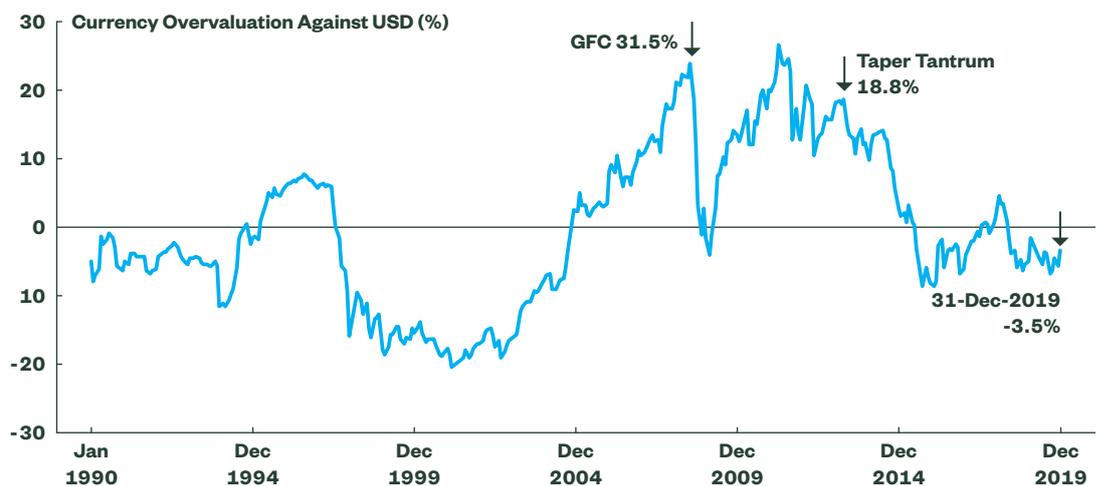
Source: State Street Global Advisors, Morningstar Direct, Bloomberg Finance L.P., as of 31 October 2019.

Currency Undervaluation vs. Long Term

Currency performance has been a drag in some countries in the index over the past 12 months. Whether it is due to idiosyncrasies, such as Argentinian peso devaluation or social upheaval in Chile, or even as a reaction to the trade war with China, many currencies now appear undervalued versus the US dollar (USD).

The below graphs highlight the return decomposition (Figure 6) of the various countries in the Bloomberg Barclays Emerging Market Local Currency Liquid Government Bond Index. Meanwhile, we can see that the basket remains 3.5% undervalued versus the USD, based on fair value models from State Street Global Advisors. Should the growth differential rebound as China dynamises its economy and brings with it some EM countries, or if the reign of the greenback supercycle fades, then the currency appreciation potential becomes a key performance tailwind.

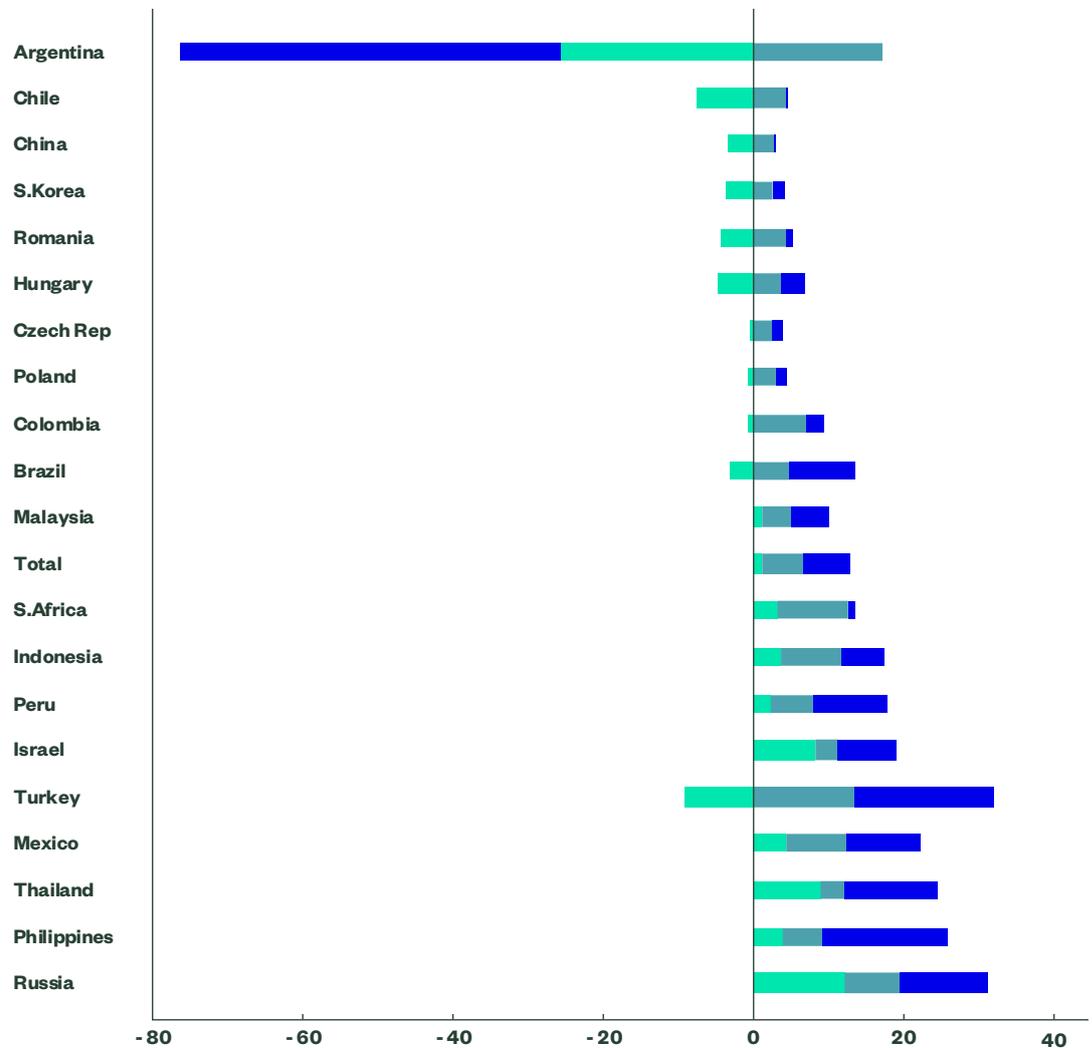
Figure 5
State Street Global Advisors Currency Valuation Model



Source: State Street Global Advisors, as of 31 December 2019. Data shown is as of the date indicated and subject to change. Past performance is not a guarantee of future results.

Figure 6
**Bloomberg Barclays
 Emerging Market
 Local Currency
 Liquid Government
 Bond Index (12M to
 31 December 2019)**

■ Price Return
 ■ Currency Return
 ■ Coupon Return



Source: State Street Global Advisors, as of 31 December 2019. Data shown is as of the date indicated and subject to change. Past performance is not a guarantee of future results.

Time to Start Hedging the EUR/USD on Your EMD Local Currency Exposure?

The cost of hedging EM currencies has often been considered too onerous and a potential negation of the mere concept of investing in such strategies. If rates have been cut across many markets (Turkey serving as a poster child with close to 900bps of cuts in 12 months), the rates differential versus negative rates, in EUR in particular, remains quite high. Hedging the Bloomberg Barclays Emerging Markets Local Currency Liquid Government Index back to EUR would cost circa 3.7% (as of 2 January 2020) on an annual basis. In other words, close to the yield to worst of the index (4.4%).

Meanwhile, from a logistical standpoint, a number of these markets are only accessible via non-deliverable forwards (NDFs), which need to be collateralised under EMIR regulation. This would create a drag on a fund that hedges all EM currencies directly via a share class and would further eat into return potential. Based on the currency distribution of the index, close to 50% of the index would be hedged using NDFs.

Figure 7

Bloomberg Barclays
Emerging Markets
Local Currency Liquid
Government Index
 Currency Weights and
 Annualised Hedging Costs
 Back to EUR

Local Currency	Weight (%)	Spot	Outright 1 Month	Days	Annualised (%)	Weighted Cost (%)
BRL	10.00	4.50	4.52	31	3.42	-0.34
KRW	10.00	1297.54	1299.65	31	1.89	-0.19
IDR	9.00	15551.83	15616.35	31	4.82	-0.43
MYR	8.24	4.58	4.58	31	1.41	-0.12
THB	8.66	33.76	33.78	31	0.59	-0.05
MXN	8.95	21.13	21.28	31	7.82	-0.70
ZAR	6.22	15.67	15.76	31	7.05	-0.44
PLN	5.88	4.26	4.26	31	2.09	-0.12
RUB	5.40	69.09	69.50	32	6.58	-0.36
COP	3.20	3679.99	3691.05	31	3.49	-0.11
ILS	3.88	3.86	3.87	31	0.52	-0.02
PHP	2.98	56.82	57.02	31	4.03	-0.12
CZK	2.56	25.41	25.46	31	2.19	-0.06
TRY	2.44	6.67	6.73	31	10.90	-0.27
PEN	2.10	3.71	3.72	31	3.44	-0.07
HUF	2.13	330.02	330.16	31	0.49	-0.01
CNY	5.00	7.79	7.82	31	3.17	-0.16
CLP	1.67	843.51	845.06	31	2.14	-0.04
RON	1.70	4.78	4.80	31	3.84	-0.07
ARS	0.00	67.03	69.74	31	46.91	0.00

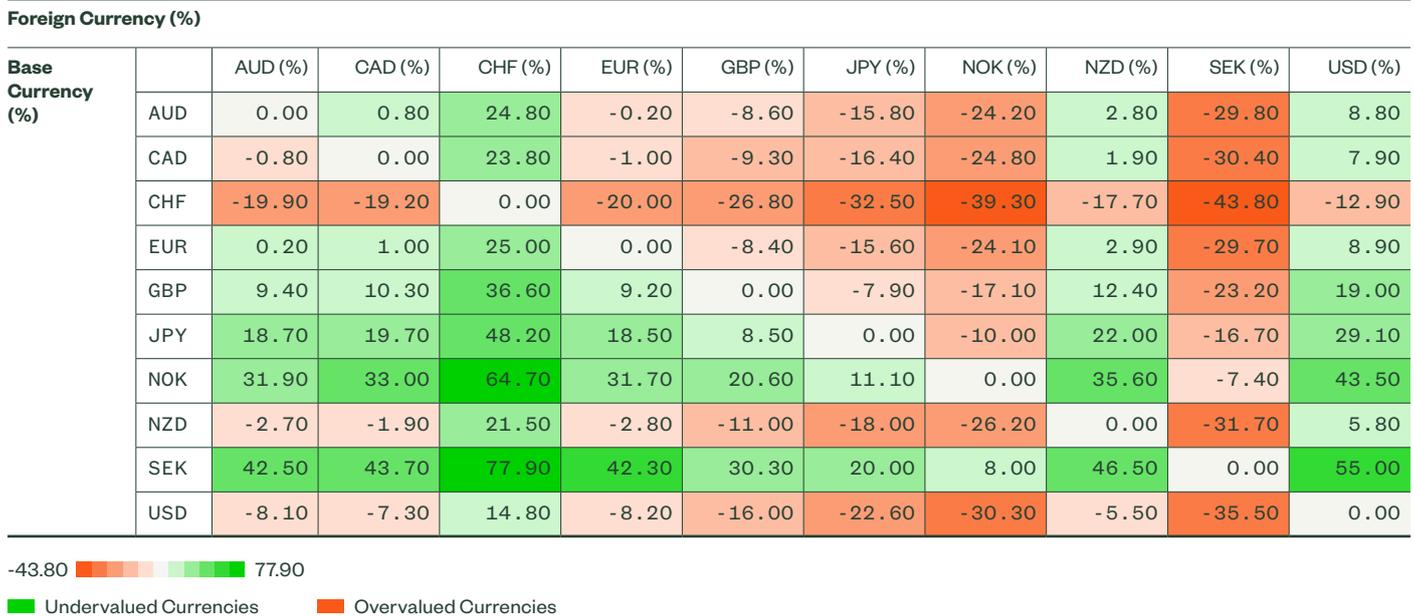
Source: State Street Global Advisors, Bloomberg Finance L.P., as of 2 January 2020. Characteristics are as of the date indicated and should not be relied upon as current thereafter.

However, one of the key reasons for investing in local currency EM debt, in the current environment, is for the currencies to appreciate versus USD. Historically, a weakening USD has often led to flows into EM FX and EM bond exposures. In such situations, a EUR-based investor may not benefit from the full performance potential of the asset class. For this reason, we believe investors stand to benefit from hedging against a potential weakening of USD versus EUR while capturing the EM currency appreciation versus USD.

The short rate differential is around 2.2% currently. However, the cost of hedging has receded as the Fed cut rates in 2019 and may simply be taking a pause before cutting further in the race to the bottom launched by developed central banks (ECB, SNB, BoJ). Thinking in terms of insurance costs, this equates to a 0.2% premium to hedge against a potential move of more than 5% in the EUR/USD pair.

Indeed, based on the State Street Global Advisors currency valuation model, at 1.11 the EUR was circa 9% undervalued versus USD on a long-term basis. It is hard to predict a return to fair value within a certain horizon, but the risk appears skewed to the downside, and hedging that risk may be necessary in order to enjoy the full potential of an EM local bond allocation.

Figure 8
**Currency
Valuation Heatmap**



Source: State Street Global Advisors, as of 31 December 2019.

What are the Risks to this Outlook?

There remain idiosyncratic challenges. The risk of a Moody's downgrade of South Africa could limit the attractiveness of ZAR-denominated sovereign bonds on an FX-unhedged basis. Meanwhile, Asian debt remains exposed to the trade war. Social upheavals in Chile and Latin America are also potential threats that could further weaken their currencies. But so far, we have seen that the overall EM local currency complex has remained resilient, posting a 1.13% currency return in USD terms in 2019 based on the Bloomberg Barclays EM Local Currency Liquid Index.

Beyond trade, elevated EM debt levels and the path of US real rates will also be important. Past instances of US real rates rising in excess of 20 basis points have historically driven EM FX sell-offs of 1.5% or more.¹ While this is not the current base case, it has the potential to be one of the grey swans in 2020.

Nevertheless, these risks may be partly mitigated by abundant global central bank liquidity, as highlighted in this document. Advanced economies are already set to maintain accommodative policy, and easing in developing nations will add to a supportive environment for EM debt. There have been rate cuts in Brazil, Mexico and Turkey given contained inflation, and relatively high real rates could allow further easing to support growth.

When it comes to implementation, State Street Global Advisors and the SPDR Strategy & Research team have highlighted the need to consider the risk of a strengthening base currency versus USD. The other key element is to know your index and its evolution, as discussed in the next section of this paper.

Know Your Index

Index rules vary from one provider to the other. In some cases this variance could lead to differences in the interpretation or definition of certain regions. In the fixed income space, and EM debt in particular, there are different approaches to country inclusion rules.

For investment vehicles like ETFs, understanding this difference can in turn present opportunities when using a fund that follows one index or another. Bond indices aim to include and weight the appropriate markets, instruments and issues that reflect the opportunities available to investors. Indices typically only include securities that investors can trade — into or out of — at short notice and for which firm prices exist.

Figure 9

EM Debt Indices — Country Breakdowns

	Bloomberg Barclays EM Local Currency Liquid Government Bond Index		JP Morgan EM-GBI Global Diversified 10% Cap 1% Floor		JP Morgan EM-GBI Global Diversified Index	
	Market Value (%)	# Constituents	Market Value (%)	# Constituents	Market Value (%)	# Constituents
Total	100.00	533	100.00	214	100.00	220
Israel	3.88	14	—	—	—	—
South Africa	6.22	13	10.00	13	9.47	13
China	5.00	151	—	—	—	—
Indonesia	9.00	38	10.00	28	10.00	28
Malaysia	8.24	62	5.73	23	6.15	23
Philippines	2.98	25	—	—	0.19	2
South Korea	10.00	50	—	—	—	—
Thailand	8.66	26	9.44	15	9.50	15
Czech Republic	2.56	13	3.77	10	3.69	10
Hungary	2.13	12	3.89	11	3.85	11
Poland	5.88	16	9.08	14	8.97	14
Romania	1.70	15	2.97	12	2.69	12
Russia	5.40	21	8.80	20	8.85	20
Turkey	2.44	20	3.83	16	3.77	16
Dominican Republic	—	—	—	—	0.17	2
Mexico	8.95	16	10.01	16	10.00	16
Brazil	10.00	14	10.01	11	10.00	11
Chile	1.67	8	3.03	6	2.77	6
Colombia	3.20	9	5.81	11	6.24	11
Peru	2.10	10	3.63	8	3.53	8
Uruguay	—	—	—	—	0.16	2

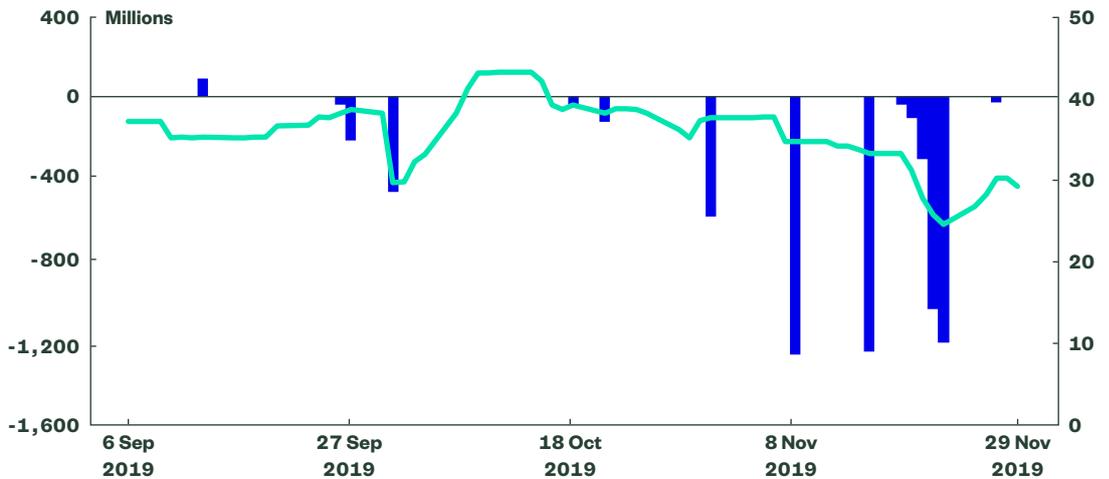
Source: State Street Global Advisors, Bloomberg, JP Morgan, as of 31 December 2019. Data are as of the date indicated, subject to change, and should not be relied upon as current thereafter.

Indices can differ from each other, however, and sometimes significantly. As a recent example, Argentina local currency sovereign bonds were excluded from the Bloomberg Barclays indices at August month-end rebalancing following the S&P rating downgrade to selected default. In the meantime, ARS-denominated bonds (2021, 2023, 2026) left the JP Morgan indices at steep losses (average trading on these bonds was around 25–30 cents) through the end of November.

This meant that ETFs, and other indexed and active vehicles, had to find an exit strategy in a more challenged market. Having set quality rules can help to partially protect against such events. That’s a real-world example of why the index rules matter.

The below charts show the bond-by-bond trading activity of the two largest ETFs tracking JP Morgan indices with floored indices. These floored indices resulted in higher weight for Argentina than in the parent index. We can see the impact of ETF selling activity on each bond price going into the exit from the JP Morgan indices.

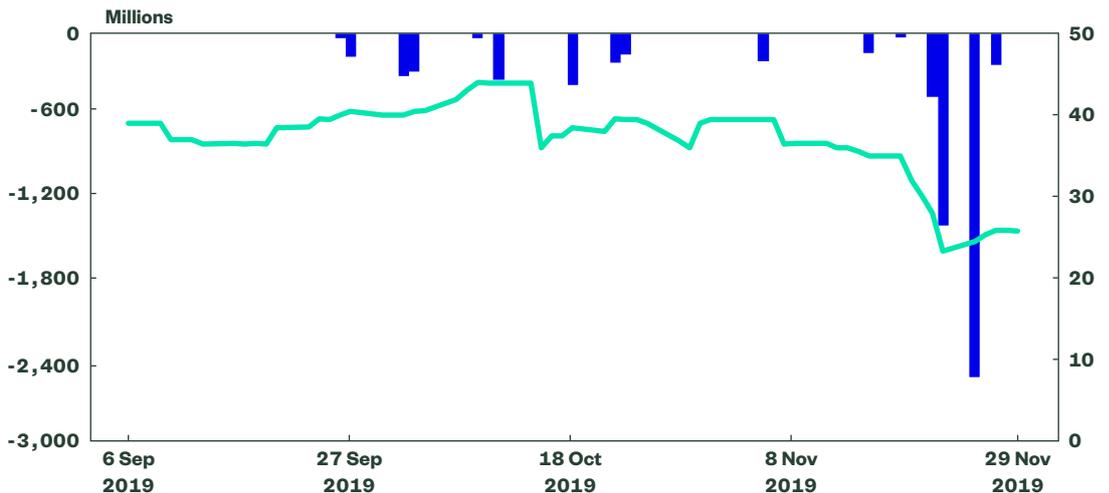
Figure 10a
**Argentina ARS
 Sovereign Bonds
 Trading Volumes
 and Prices Evolution
 Since August 2019
 Downgrade**



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 29 November 2019.

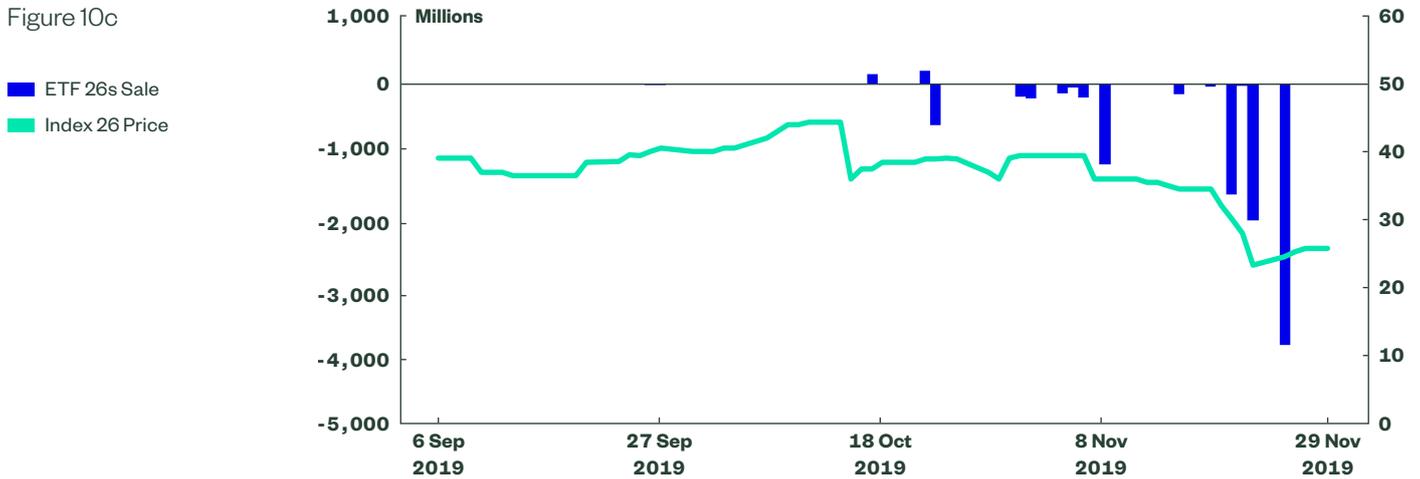
Figure 10b

ETF 23s Sale
 Index 23 Price



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 29 November 2019.

Figure 10c



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 29 November 2019.

Playing China's Inclusion

Since the March 2019 rebalancing, Chinese bonds have entered the Bloomberg Barclays Index family. In the meantime, JP Morgan announced in Q3 2019 the entry of Chinese bonds starting in Q1 2020. Once fully integrated into the indices, Chinese local currency sovereign bond weights will reach 10% of the Bloomberg Barclays EM Local Currency Liquid Government Bond Index. As at the end of December 2019, Chinese bonds amounted to 5.0% of the index. Inclusion is being staged over a 20-month period.

While US-China trade tensions continue, in the last few weeks China has moved to ease lending rates, and some strategists (e.g. Citi) expect further policy actions in 2020. When China nominal policy rate easing starts feeding through to M2 (money supply) growth, we may see a more pronounced inflection point for improved EM risk-taking.

In summary, index rules are the first element investors should understand when considering indexed strategies via ETFs. Indeed, when comparing the Bloomberg Barclays index with the various JP Morgan indices with 10% caps and 1% or 3% floors, the long-term performance has been better and has lower volatility, as per the table below.

Figure 11
Risk-Adjusted Returns
— Select Emerging Market Debt Local Currency Indices

12/31/2019	Annualised Return (%)			Annualised Volatility (%)			Sharpe Ratio		
	Barclays EM Local Currency Liquid Government Index (%)	JPM EM GBI Global Diversified 10% Cap 1% Floor (%)	JPM EM GBI Global Diversified (%)	Barclays EM Local Currency Liquid Government Index (%)	JPM EM GBI Global Diversified 10% Cap 1% Floor (%)	JPM EM GBI Global Diversified (%)	Barclays EM Local Currency Liquid Government Index	JPM EM GBI Global Diversified 10% Cap 1% Floor	JPM EM GBI Global Diversified
Last 12 months	13.15	12.56	13.47	7.97	10.04	9.71	1.36	1.02	1.15
Last 3 years	7.42	6.70	7.03	7.73	9.52	9.33	0.73	0.52	0.56
Last 5 years	3.16	2.73	2.78	9.44	10.84	10.84	0.21	0.14	0.15
Since May 2011	1.51	0.75	0.54	10.32	11.50	11.53	0.07	0.00	-0.02

Source: Bloomberg Finance L.P., Bloomberg Finance L.P., as of 31 December 2019. Past performance is no guarantee of future results. **It is not possible to invest directly in an index. Index performance does not reflect charges and expenses associated with the fund or brokerage commissions associated with buying and selling a fund. Index performance is not meant to represent that of any particular fund.**

Conclusion

We believe EM local currency debt is set to extend gains in early 2020, as contained trade war fears and ample liquidity sustain investors' hunt for yield. A number of accommodative elements, from long-term growth to carry, real yield and currency appreciation, provide an environment that EUR investors should consider. However, investors looking to invest in this space may want to hedge the EUR/USD cross, as any upside surprise could limit the potential of EM debt local currency returns.

Fund Details

	SPDR Bloomberg Barclays Emerging Markets Local Bond UCITS ETF (Dist)	SPDR Bloomberg Barclays Emerging Markets Local Bond UCITS ETF (Acc)	SPDR Bloomberg Barclays Emerging Markets Local Bond USD Base CCY Hdg to EUR UCITS ETF (Acc)
ISIN	IE00B4613386	IE00BFWFPY67	IE00BK8JH525
Share Class Currency	USD	USD	EUR
Primary Ticker (Xetra)	SYBM GY	SPFA GY	SPFD GY
Other Tickers	LSE: EMDD LN (USD), EMDL LN (GBP) Borsa Italiana: EMLD IM SIX Swiss Exchange: EMDL SE Euronext Paris: EMLD FP	SIX Swiss Exchange: EMDA SE	Borsa Italiana: EMDE IM SIX: EMDA SE
TER (%)	0.55	0.55	0.60
Index Name	Bloomberg Barclays EM Local Currency Liquid Government Bond Index	Bloomberg Barclays EM Local Currency Liquid Government Bond Index	Bloomberg Barclays Emerging Markets Local Currency Liquid Government Bond Index Unhedged USD Base Hedged Into EUR
Index Tickers	BECLTRUU	BECLTRUU	I34429US
No. Index Constituents	533	533	533
Portfolio Construction	Physical — Sampled	Physical — Sampled	Physical — Sampled
Income Treatment	Distributing (in or around January/July)	Accumulating	Accumulating
Dealing Models Available	Cash/In-Kind	Cash/In-Kind	Cash/In-Kind
Cash Subscription	Yes	Yes	Yes

Source: State Street Global Advisors, as of 31 December 2019. **Some of the products are not available to investors in certain jurisdictions. Please contact your relationship manager in regards to availability.**

Endnotes

1 Source: Bloomberg News, as of 5 December 2019.

ssga.com

spdrs.com

Marketing Communication.

For Professional Client Use Only.

For regulated qualified investors according to Art. 10 (3) lit. a and b of the Swiss Capital Investment Schemes Act only.

The SPDR Bloomberg Barclays Emerging Markets Local Bond UCITS ETF (Acc) is new and therefore does not have a performance history of its own.

State Street Global Advisors Entities

Austria: The offering of SPDR ETFs by the Company has been notified to the Financial Markets Authority (FMA) in accordance with section 139 of the Austrian Investment Funds Act. Prospective investors may obtain the current sales Prospectus, the articles of incorporation, the KIID as well as the latest annual and semi-annual report free of charge from State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. T: +49 (0)89-55878-400. F+49 (0)89-55878-440.

Finland: The offering of funds by the Companies has been notified to the Financial Supervision Authority in accordance with Section 127 of the Act on Common Funds (29.1.1999/48) and by virtue of confirmation from the Financial Supervision Authority the Companies may publicly distribute their Shares in Finland. Certain information and documents that the Companies must publish in Ireland pursuant to applicable Irish

law are translated into Finnish and are available for Finnish investors by contacting State Street Custodial Services (Ireland) Limited, 78 Sir John Rogerson's Quay, Dublin 2, Ireland.

France: This document does not constitute an offer or request to purchase shares in the Companies. Any subscription for shares shall be made in accordance with the terms and conditions specified in the complete Prospectuses, the KIID, the addenda as well as the Companies' Supplements. These documents are available from the Company centralising correspondent: State Street Banque S.A., 23-25 rue Delariviere- Lefoullon, 92064 Paris La Defense Cedex or on the French part of the site spdrs.com. The Companies re undertakings for collective investment in transferable securities (UCITS) governed by Irish law and accredited by the Central Bank of Ireland as a UCITS n accordance with European Regulations. European Directive no. 2014/91/ EU dated 23 July 2014 on UCITS, as amended, established common rules pursuant to the cross-border marketing of UCITS with which they duly comply. This common base does not exclude differentiated implementation. This is why a European UCITS can be sold in France even though its activity does not comply with rules identical to those governing the approval of this type of product in France. The offering of these compartments has been notified to the Autorité des Marchés Financiers (AMF) in accordance with article L214- 2-2 of the French Monetary and Financial Code. **Germany:** The offering of SPDR ETFs by the Companies has been notified to the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) in

accordance with section 312 of the German Investment Act. Prospective investors may obtain the current sales Prospectuses, the articles of incorporation, the KIIDs as well as the latest annual and semiannual report free of charge from State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. T: +49 (0)89-55878-400.

Hong Kong: State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200.

The Funds mentioned are not registered in Hong Kong and may not be sold, issued or offered in Hong Kong in circumstances which amount to an offer to the public. This document is issued for informational purposes only. It has not been reviewed or approved by the Hong Kong Securities and Futures Commission. State Street Global Advisors accepts no liability whatsoever for any direct, indirect or consequential loss arising from or in connection with any use of, or reliance on, this document which does not have any regard to the particular needs of any person. State Street Global Advisors takes no responsibility whatsoever for any use, reliance or reference by persons other than the intended recipient of this document.

Ireland: State Street Global Advisors Ireland Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered number 145221. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300.

Italy: State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorised and regulated by the Central Bank of Ireland, and

whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2, with a capital of GBP 62'350'000, and whose registered office is at 20 Churchill Place, London E14 5HJ. State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 06353340968 - R.E.A. 1887090 and VAT number 06353340968 and whose office is at Via dei Bossi, 4 - 20121 Milano, Italy. T: 39 02 32066 100. F: 39 02 32066 155.

Luxembourg: The Companies have been notified to the Commission de Surveillance du Secteur Financier in Luxembourg in order to market its shares for sale to the public in Luxembourg and the Companies are notified Undertakings in Collective Investment for Transferable Securities (UCITS).

Netherlands: This communication is directed at qualified investors within the meaning of Section 2:72 of the Dutch Financial Markets Supervision Act (Wet op het financieel toezicht) as amended. The products and services to which this communication relates are only available to such persons and persons of any other description should not rely on this communication. Distribution of this document does not trigger a licence requirement for the Companies or SSGA in the Netherlands and consequently no prudential and conduct of business supervision will be exercised over the Companies or SSGA by the Dutch Central Bank (De Nederlandsche Bank N.V.) and the Dutch Authority for the Financial Markets (Stichting Autoriteit Financiële Markten). The Companies have completed their notification to the Authority Financial Markets in the Netherlands in order to market their shares for sale to the public in

the Netherlands and the Companies are, accordingly, investment institutions (beleggingsinstellingen) according to Section 2:72 Dutch Financial Markets Supervision Act of Investment Institutions. **Norway:** The offering of SPDR ETFs by the Companies has been notified to the Financial Supervisory Authority of Norway (Finanstilsynet) in accordance with applicable Norwegian Securities Funds legislation. By virtue of a confirmation letter from the Financial Supervisory Authority dated 28 March 2013 (16 October 2013 for umbrella II) the Companies may market and sell their shares in Norway.

For use in Singapore: The offer or invitation of the Funds mentioned, which is the subject of this document, does not relate to a collective investment scheme which is authorised under section 286 of the Securities and Futures Act, Chapter 289 of Singapore (SFA) or recognised under section 287 of the SFA. The Funds mentioned are not authorised or recognised by the Monetary Authority of Singapore (MAS) and the Funds mentioned are not allowed to be offered to the retail public. Each of this document and any other document or material issued in connection with the offer or sale is not a prospectus as defined in the SFA.

Accordingly, statutory liability under the SFA in relation to the content of prospectuses would not apply. A potential investor should consider carefully whether the investment is suitable for it. The MAS assumes no responsibility for the contents of this document. This document has not been registered as a prospectus with the MAS. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Funds mentioned may not be circulated or distributed, offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than to an institutional investor under Section 304 of the SFA or otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. Any subsequent sale of [Units] acquired pursuant to an offer made in reliance on an exemption under section 305 of the SFA may only be made pursuant to the requirements of sections 304A.

Spain: State Street Global Advisors SPDR ETFs Europe I and II plc have been authorised for public distribution in Spain and are registered with the Spanish Securities Market Commission (Comisión Nacional del Mercado de Valores) under no.1244 and no.1242. Before investing, investors may obtain a copy of the Prospectus and Key Investor Information Documents, the Marketing Memoranda, the fund rules or instruments of incorporation as well as the annual and semi-annual reports of State Street Global Advisors SPDR ETFs Europe I and II plc from Cecabank, S.A. Alcalá 27, 28014 Madrid (Spain) who is the Spanish Representative, Paying Agent and distributor in Spain or at spdrs.com. The authorised Spanish distributor of State Street Global Advisors SPDR ETFs is available on the

website of the Securities Market Commission (Comisión Nacional del Mercado de Valores).

Switzerland: This document is directed at regulated qualified investors only, as defined by Article 10(3) lit. a and b. of the Swiss Act on Collective Investment Schemes (CISA). Certain of the funds may not be registered for public sale with the Swiss Financial Market Supervisory Authority (FINMA) which acts as supervisory authority in investment fund matters and might not qualify as foreign Collective Investment Schemes under Article 120 of the Collective Investment Schemes Act. Accordingly, the shares of those funds may only be offered to regulated qualified investors and not be offered to any other investor in or from Switzerland unless they are placed without public solicitation as such term is defined by FINMA from time to time. Before investing please read the prospectus and the KIID. In relation to those funds which are registered with FINMA, prospective investors may obtain the current sales prospectus, the articles of incorporation, the KIIDs as well as the latest annual and semi-annual reports free of charge from the Swiss Representative and Paying Agent, State Street Bank International GmbH, Munich, Zurich Branch, Beethovenstrasse 19, 8027 Zurich, or at spdrs.com, as well as from the main distributor in Switzerland, State Street Global Advisors AG ("SSGA AG"), Beethovenstrasse 19, 8027 Zurich. For additional documentation regarding those funds not registered for public sale, please contact SSGA AG.

United Kingdom: The Companies are recognised schemes under Section 264 of the Financial Services and Markets Act 2000 ("the Act") and are directed at 'professional clients' in the UK (within the meaning of the rules of the Act) who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to such persons and persons of any other description should not rely on this communication. Many of the protections provided by the UK regulatory system do not apply to the operation of the Companies, and compensation will not be available under the UK Financial Services Compensation Scheme.

Important information

This document has been issued by State Street Global Advisors Ireland ("SSGA"), regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered number 145221. T: +353 (0)1 776 3000. Fax: +353 (0)1 776 3300. SPDR ETFs is the exchange traded funds ("ETF") platform of State Street Global Advisors and is comprised of funds that have been authorised by Central Bank of Ireland as open-ended UCITS investment companies. State Street Global Advisors SPDR ETFs Europe I & SPDR ETFs Europe II plc issue

SPDR ETFs, and is an open-ended investment company with variable capital having segregated liability between its sub-funds. The Company is organised as an Undertaking for Collective Investments in Transferable Securities (UCITS) under the laws of Ireland and authorised as a UCITS by the Central Bank of Ireland.

The information provided does not constitute investment advice as such term is defined under the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss Regulator and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell any investment. It does not take into account any investor's or potential investor's particular investment objectives, strategies, tax status, risk appetite or investment horizon. If you require investment advice you should consult your tax and financial or other professional advisor. All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

ETFs trade like stocks, are subject to investment risk and will fluctuate in market value. The investment return and principal value of an investment will fluctuate in value, so that when shares are sold or redeemed, they may be worth more or less than when they were purchased. Although shares may be bought or sold on an exchange through any brokerage account, shares are not individually redeemable from the fund. Investors may acquire shares and tender them for redemption through the fund in large aggregations known as "creation units." Please see the fund's prospectus for more details.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

The views expressed in this material are the views of SPDR EMEA Strategy & Research through the period ending 31 December 2019 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected. Past performance is not a guarantee of future results.

Investing involves risk including the risk of loss of principal. Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which

have less stability than those of more developed countries.

Investing in foreign domiciled securities may involve risk of capital loss from unfavourable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations. Standard & Poor's, S&P and SPDR are registered trademarks of Standard & Poor's Financial Services LLC (S&P); Dow Jones is a registered trademark of Dow Jones Trademark Holdings LLC (Dow Jones); and these trademarks have been licensed for use by S&P Dow Jones Indices LLC (SPDJI) and sublicensed for certain purposes by State Street Corporation. State Street Corporation's financial products are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates and third party licensors and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability in relation thereto, including for any errors, omissions, or interruptions of any index. The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent. Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates raise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss. Government bonds generally have more moderate short-term price fluctuations than stocks, but provide lower potential long-term returns.

The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss Regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

You should obtain and read the SPDR prospectus and relevant Key Investor Information Document (KIID) prior to investing, which may be obtained from spdrs.com. These include further details relating to the SPDR funds, including information relating to costs, risks and where the funds are authorised for sale.

© 2019 State Street Corporation. All Rights Reserved. ID123607-2907126.2.1.GBL.INST 1219 Exp. Date: 31/12/2020