

WORLD BOND MARKET GROWTH TRENDS

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World bond market growth rate holds steady at low end of range

In 2019, the world bond market growth rate held steady at 4.6%, matching the prior year level and just 0.1% off the 23 year low of 4.5% set in 2014. In the 15 years following 1998, the year the Euro was adopted, the growth rate had never dipped below 6%. But the growth rate contracted to just 4.5% in 2014 – a 26% drop-off from 2013's 6.1% reading – and it has held steady in the 4.5% to 4.8% range ever since. (p 2)

U.S. accounts for more than half of sovereign growth in 2019

Among the developed markets countries, the U.S. added the most to its outstanding debt, by far, with \$952bn in net additions. That accounts for 72% of the \$1.3tn in growth across all developed markets issuers, and 57% of the total growth across all sovereigns combined. Among EM countries, China accounted for more than half of net additions as it added \$177bn to its outstanding local sovereign debt. That is more than triple the amount added by each of the next largest contributors: India (\$53bn) and Indonesia (\$51bn). (p 4)

U.S. agency market is just a quarter of its size 10 years ago

The U.S. agency debt market continued to shrink at a double-digit rate as it contracted by 12.2% in 2019. Outstanding debt in this market has collapsed to just a quarter of its size at the beginning of the decade, and its share of the USD Quasi-Government sector is down to less than 10% from 34% 10 years ago. (p 5)

Record Corporate issuance in 2019

New issue additions to the Corporate indices hit a record \$2.6tn for the year, up almost \$500bn versus the prior year and \$150bn higher than the previous record set in 2017. But the record setting pace of new issuance was not realized equally across the markets as high yield new issuance was 12% below its 2013 high. (p 6)

High grade and high yield Corporates head in opposite directions

The magnitude of the gap between the relative growth of the high grade and high yield corporate markets comes more into focus when the numbers are adjusted for rating migrations. On that basis, the high grade corporate growth rate increases to 7.7%, while the high yield rate drops to -1.5% – its fourth straight year of contraction. (p 6)

After flat growth in 2018, EM external non- sovereigns came back to life

In 2018 EM external non-sovereigns lagged the rest of the field with flat growth for the year. But in 2019 they expanded at an 8.6% rate that was a percent higher than the overall EM market. At the same time, local non-sovereigns went the other way as that market segment contracted by 0.4% in 2019. (p 8)

Overview

The world bond market growth rate held steady at the low end of its historical range.

In 2019, the world bond market growth rate held steady at 4.6%, matching the prior year level and just 0.1% off the 23 year low of 4.5% set in 2014. In the 15 years following 1998, the year the Euro was adopted, the growth rate had never dipped below 6%. But the growth rate contracted to just 4.5% in 2014 – a 26% drop-off from 2013's 6.1% reading – and it has held steady in the 4.5% to 4.8% range ever since (Exhibit A). That is more than a percent below the 5.7% 10-year annualized growth rate and less than two-thirds of the annualized growth rate since 1997 (7.8%). This year's sluggish growth came as bond yields reversed course and the Global Fixed Income Markets Index – a blend of broad investment grade, high yield and Emerging Markets debt – ended 2019 with its lowest year-end yield on record (1.55% vs. 2.25% a year ago).

Over the last decade, local sovereigns and corporates have seen annualized growth of about 7%, while other sectors are in the 2% vicinity.

The rate of growth has been comparatively slow over the past five years but the markets continue to expand. In 2019, the global bond markets, as represented by the ICE Data Indices bond index family, saw \$3.0tn in net additions to close the year with \$68.6tn in outstanding debt. To put that number in better context, at the end of 2009, as the bond markets were regaining their footing in the aftermath of the financial crisis, they had \$39.6tn in outstanding debt. Over the course of the decade various sectors have taken their turns leading the market growth. But cumulatively there is a distinct split between local sovereigns and high grade/high yield corporates on the one side, each of which has seen a cumulative annualized growth rate (CAGR) in the vicinity of 7%, and Securitized/Collateralized and External/Quasi Government sectors, both of which are close to a 2% CAGR. Interestingly, local sovereigns are toward the top of the range in terms of 10-year CAGRs, but never ranked first in any one of the last ten years. In each of the last ten years local sovereigns had the second or third highest growth rate, never lower. Conversely, high yield Corporates ranked first in five out of the last ten years, but they also ranked dead last four times, the most recent year included.

Exhibit A: Annual growth in the world fixed income markets

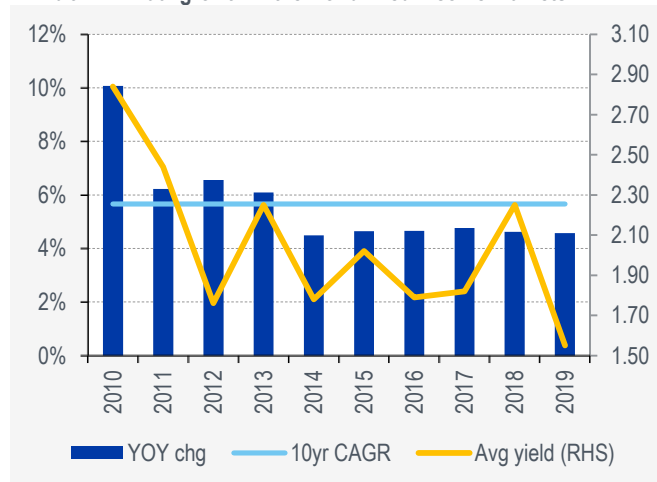
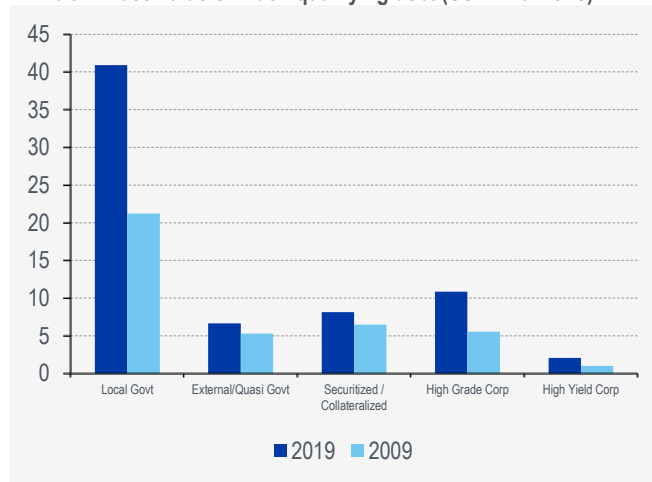


Exhibit B: Face value of index-qualifying debt (USD in billions)



Corporates saw the fastest rate of growth but it was all concentrated in high grade.

Ignoring high grade/high yield segmentations within the various sectors, in 2019 Corporates expanded the most, with high grade and high yield outstanding debt up a combined 6.0% versus a year ago. That is also a larger growth rate than any sector saw in 2018. The high grade component drove Corporate growth in 2019 as it expanded at a 6.7% rate, which is just shy of its 6.9% 10-year CAGR and up 1.7% versus the prior year. Meanwhile, high yield Corporate growth was only about a third that of their high grade peers, though that was a significant uptick from the prior year in which they contracted by more than 4%. The disparity between the high grade and high yield components becomes even larger when the results are adjusted for rating migrations. On that basis, outstanding high grade Corporate debt expanded 7.7% in 2019, while outstanding high yield debt contract 1.5%, which is still an improvement over its prior year experience (-6.3% adjusted for rating migrations).

Though it slipped a little from its market-leading 5.7% growth rate in 2018, the Securitized/Collateralized sector saw the second largest growth in 2019 as it expanded 5.0%, or more than double its 10-year CAGR. And while it previously had the lowest 10-year CAGR by a wide margin, it is now tied for last place having caught up to the External Sovereign/Quasi-Government sector with a 2.3% 10-year CAGR. With growth rates in the 4-6% range in each of the last three years, the Securitized/Collateralized sector has shown some signs of life lately as it fights back from its post-financial crisis malaise. In the seven years from 2010 to 2016, it experienced a paltry annualized growth rate of just 1.2%. In the 13 years leading up to 2010, the sector had been running at an 11.7% annualized rate. That is significantly higher than the 7.5% rate for local sovereigns over that same period, and only a little behind Corporates (12.9%).

Local Sovereigns fell a little short of the overall global bond market growth rate (4.2% vs. 4.6%). They have alternately landed above and below the overall growth rate for six straight years but in each case they did not stray too far from that mark with the gap never exceeding +/-0.8%. Not surprisingly, given that fact, local sovereigns also come closest to the overall 10-year CAGR, topping the overall market by 1.1% (6.8% vs. 5.7%). As they have in each of the last 10 years, Emerging Markets made the largest contribution to the local sovereign growth. Last year, EM local sovereigns nearly doubled the growth rate of their DM peers (7.0% vs. 3.8%). In fact, they have expanded at roughly 2-3 times the rate of developed market local sovereigns in each of the last 8 years.

External sovereigns and Quasi-Governments together more than tripled their prior year growth rate but that still left them more than a percent behind the overall market growth rate for 2019 (3.4% vs. 4.6%). In the post financial crisis era this is about as good as it gets for this sector as it has only seen a higher growth rate three time in the last 10 years, and not by much: 4.2% in 2016; 6.6% in 2012 and 4.8% in 2010. Only the Securitized/Collateralized sector saw equally weak growth over the last decade. Unlike what we saw in the Corporate sector, in the combined External sovereign and Quasi-Government sector it was the high yield component that had robust growth only to be held back by slower growth in high grade (8.4% vs. 3.1%).

Exhibit C: Growth rates by Sector

Sector	2019	2018	2019 vs 2018	10yr CAGR	2019 vs 10yr CAGR
Local Sovereign	4.2%	5.4%	-1.2%	6.8%	-2.5%
Securitized / Collateralized	5.0%	5.7%	-0.8%	2.3%	2.7%
High Grade Ext Sov/Quasi Govt	3.1%	0.9%	2.1%	1.8%	1.2%
High Yield Ext Sov/Quasi Govt	8.4%	3.3%	5.1%	10.1%	-1.7%
Combined IG+HY ExtSov/Quasi-Govt	3.4%	1.1%	2.4%	2.3%	1.2%
High Grade Corporate	6.7%	5.0%	1.7%	6.9%	-0.2%
High Yield Corporate	2.4%	-4.3%	6.7%	7.4%	-5.0%
Combined IG+HY Corporate	6.0%	3.3%	2.6%	7.0%	-1.0%
Total	4.6%	4.6%	0.0%	5.7%	-1.1%

Local Currency Sovereigns

Twenty sovereigns saw double digit growth in their local debt in 2019, up from 15 in the prior year.

In 2019, 20 out of 50 local sovereign issuers represented in the global index universe saw double-digit growth rates, up from 15 in the prior year. This year, developed market sovereigns accounted for a greater share of the double-digit growth countries, but they were still outnumbered by a 3:1 margin (15 EM countries vs. 5 DM countries). At the other end of the spectrum, 14 countries saw a contraction in their outstanding debt in 2019, up from 13 in the prior year. But whereas two-thirds of the countries that saw shrinkage in 2018 were from the developed markets, this year only half of the 14 contracting countries were developed markets issuers.

Among the developed markets countries, the U.S. added the most to its outstanding debt, by far, with \$952bn in net additions. That accounts for 72% of the \$1.3tn in growth across all developed markets issuers, and 57% of the total growth across all sovereigns combined. As large as that number is, it is a retrenchment from the more than one trillion in debt that the U.S. Treasury added to the global markets in 2018. Consequently, its growth rate declined to 6.6% in 2019 versus 8.1% in the prior year, though its share of the local sovereign markets increases to 37.7% from 36.8% a year ago.

While the U.S. continues to expand at a faster rate than the global sovereign markets, other large developed markets issuers have been tapping the brakes. Euro sovereigns collectively expanded at less than a 3% rate for a second straight year and for the third time in the last four years. Similarly, Japan has been at or under a 2% growth rate for the last two years and the U.K. was almost unchanged in 2019 (+0.3%). Japan's comparatively slow growth rates have helped to shrink the gap between its market cap and GDP share of the global markets to 16.2% from 16.4% a year ago. But it remains at the top of the list (Exhibit E).

Among Emerging Markets countries, China accounted for more than half of total net additions as it added \$177bn to its outstanding local sovereign debt. That is more than triple the amount added by each of the next largest contributors: India (\$53bn) and Indonesia (\$51bn). China's additions expanded its outstanding debt by 11.4%, down modestly from the 12.4% prior year growth rate, while India's grow rate dropped sharply to 7.5% from 10.3% in the prior year. Both pale in comparison to the 48% expansion registered by Indonesia. Indonesia is now the ninth largest EM local sovereign issuer, up from eleventh a year ago and fifteenth largest at the beginning of the decade. At the other end of the spectrum, Korea saw an \$85bn net reduction in its outstanding debt – a 15% decrease that dropped its share of the global sovereign markets to 1.2% from 1.5% at the end of 2018. However, it remains the seventh largest local sovereign issuer globally.

Exhibit D: Emerging vs Developed Market local sovereign growth rates

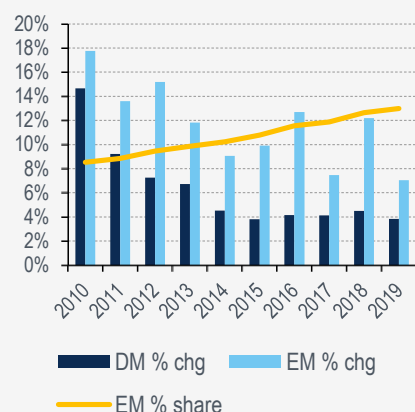
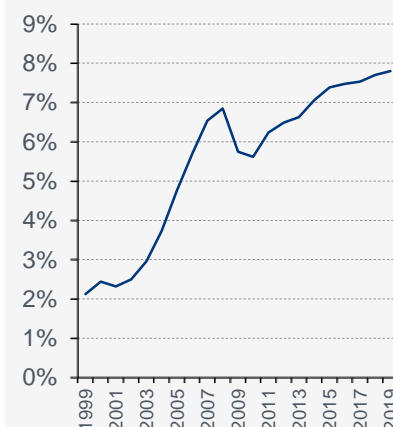


Exhibit E: Mkt% vs GDP% 10 largest local currency sovereigns

Country	Cap weight	GDP wgt (5yr avg)	Difference
United States	37.7%	24.0%	13.7%
Japan	22.3%	6.1%	16.2%
United Kingdom	5.1%	3.6%	1.5%
France	4.9%	3.3%	1.6%
Italy	4.9%	2.5%	2.3%
China	4.2%	14.8%	-10.6%
Germany	3.1%	4.7%	-1.6%
Spain	2.7%	1.7%	1.0%
India	1.8%	3.0%	-1.2%
Korea	1.2%	1.9%	-0.7%

Exhibit F: Inflation-linked share of local currency sovereign debt markets



External Sovereigns and Quasi-Governments

The U.S. agency market is just a quarter of its size 10 years ago.

For a third straight year, the External Sovereign/Quasi-Government sector expanded at a slower pace than any other sector in the global debt markets. In fact, this sector ranked last in seven of the last ten years and would appear to be the segment most affected by the aftermath of the financial crisis. In the 10 years since the financial crisis, the sector has grown at a 2.3% annualized rate versus a 5.7% rate for the overall global debt markets. But in the 13 years leading up to and including the financial crisis, it measurably outpaced the global growth rate (14.0% vs. 9.5%).

For only the second time in the last nine years, net additions in the Euro component of the External Sovereign/Quasi-Government sector lagged the rest of the sector (\$75bn net additions for EUR vs. \$145bn for non-EUR). The other occurrence was in 2016, but the differential then was only about half as much as in 2019 (\$39bn in 2016 vs. \$70bn in 2019). Last year's largest issuer of EUR denominated debt was this year's as well as KfW added \$22.7bn to its outstanding debt (vs. \$20.8bn in 2018), making it the second largest issuer in the sector up from third a year ago. But of the three issuers who added the most EUR debt after KfW in 2018, two reduced their debt in 2019: EFSF (-\$1.1bn vs. +\$13.5bn in 2018) and EIB (-\$2.8bn vs. +\$5.7bn in 2018). Offsetting some of those reductions, NRW added \$14.2bn to its outstanding EUR debt, a 20% YOY increase that makes it the fourth largest issuer in the sector up from fifth largest a year ago.

In the U.S., the growth trends that we have seen all decade long continued in 2019. The U.S. agency debt market continued to shrink at a double digit rate as it contracted by 12.2% in 2019. Outstanding debt in this market has collapsed to just a quarter of its size at the beginning of the decade, and its share of the USD Quasi-Government sector is down to less than 10% from 34% 10 years ago. For the first time in four years, and only the second time in the last ten, Muni issuers saw a higher growth rate than Foreign Government issuers. But at 3.4% (vs. 3.0% for Foreign Governments) that did not move the needle very much and for the decade the Muni component has a much lower CAGR (1.3% vs. 6.4% for Foreign Governments).

After four straight years of net reductions in outstanding debt, and five out of the last six years, JPY External sovereigns and Quasi-Governments saw a net increase of \$35bn in 2019. Nonetheless, for the decade the JPY component of the sector is down \$29bn. Last year would have been a fifth straight year of contraction were it not for JAPEXP, the JPY component's largest issuer, which added \$39bn to its outstanding debt as it grew to \$172bn from \$133bn a year ago. JAPEXP has \$75bn more outstanding debt than the next largest issuer and claims a 36% share of the JPY component of the sector.

Exhibit G: EUR external sovereign and quasi-government net additions vs. all other currencies

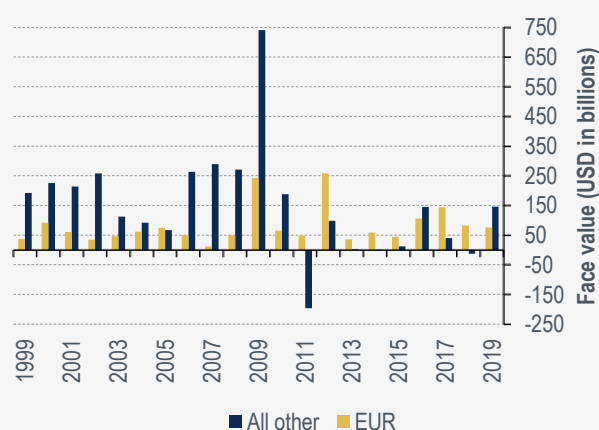
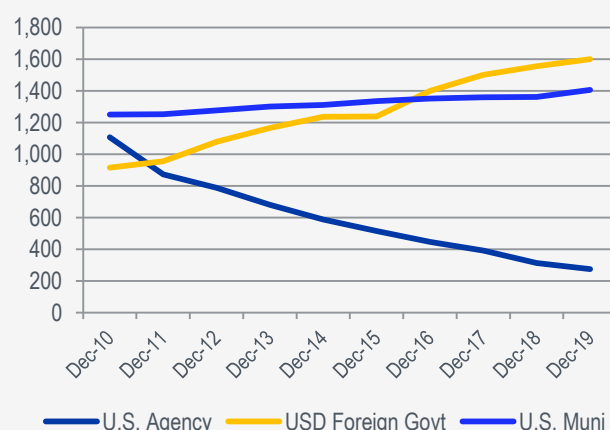


Exhibit H: U.S. Agency vs. USD Foreign Government outstanding debt (USD face value in billions)



Corporates

A record \$2.6tn in new issuance entered the global Corporate indices in 2019.

After recording its slowest growth rate since before the financial crisis in 2018 (3.3%), the combined global investment grade and high yield corporate indices came back to life in 2019, adding 6.0% to their outstanding debt versus a year ago. That growth rate exactly matches the Corporate 5-year CAGR but is 1% lower than the sector's annualized expansion rate for the decade. However, growth has slowed across the global bond markets and Corporates posted the highest growth rate of any sector for 2019 (6.0% vs. 4.6% overall) and for the decade (7.0% vs. 5.7% 10-year CAGR). New issue additions to the Corporate indices hit a record \$2.6tn for the year (Exhibit J), up almost \$500bn versus the prior year and \$150bn higher than the previous record set in 2017.

Adjusted for rating migrations, for a fourth straight year high grade Corporate growth outpaced high yield by more than 9%.

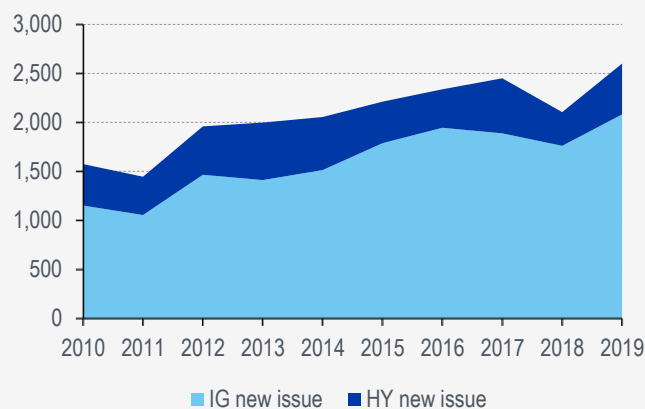
The record-setting pace of new issuance was not realized equally across the markets. At \$2.08tn, high grade Corporate new issue additions set a new high that was 7% above the previous record of \$1.95tn reached in 2016. But at the same time high yield issuance, while not as weak at 2018's \$344bn tally, was 12% below the 2013 high (\$519bn vs. \$586bn). Nonetheless, high yield new issue additions for the year were 11% above the annual average for the decade (\$467bn).

The magnitude of the gap between the relative growth of the high grade and high yield corporate markets comes more into focus when the numbers are adjusted for rating migrations. Fallen angel transitions out of high grade and into yield year surged to \$197bn – the highest reading since 2013. Rising star transitions from high yield to high grade also surged, reaching their highest level of the decade. But at \$88bn, rising stars did not come close to matching the fallen angel volume. Adjusted for transitions, the high grade corporate growth rate increases to 7.7%, while the high yield rate drops to -1.5% – the fourth straight year of contraction in this market when measured on this basis. The 9.2% gap between those two adjusted growth rates represents the fourth straight year that high grade Corporate growth has outpaced high yield by more than 9%.

Exhibit I: Corporate IG vs HY YoY percentage change in outstanding debt



Exhibit J: Global corporate index new issue additions (USD in billions)



Bristol-Myers Squibb added the most to its outstanding debt, while General Electric managed to shrink its debt burden by almost \$20bn.

In the Corporate arena, high grade issuer Bristol-Myers Squibb added the most to its outstanding debt in 2019 (\$33.3bn) as it took on more debt to fund the acquisition of Celgene Corporation. The increase moved Bristol-Myers Squibb up to 49th largest from 503 in the combined high grade and high yield issuer size rankings. Offsetting that was nearly \$20bn in Celgene debt that was retired when the acquisition was completed, for a net increase for the two companies of just over \$13bn. Abbvie added \$25.6bn to its outstanding debt as it acquired Allergan. The additions moved Abbvie up to 18 from 47 in the global rankings. For now Allergan remains in the index, though its outstanding debt declined to \$17.7bn from \$21.6bn a year ago. Last among the three big M&A fueled growth spurts was Occidental Petroleum, which saw its outstanding debt increase by \$20.3bn, while \$8.4bn in debt from acquired company Anadarko was retired. There was one notable change that was not M&A related. General Electric managed to pare its outstanding debt by \$19.9bn with the funding generated through asset sales, including BioPharma.

Securitized/Collateralized

The Securitized/Collateralized growth rate slowed a little but was still more than double its 10-year CAGR.

The Securitized/Collateralized growth rate slipped a little from the prior year (5.0% vs. 5.7%) but was still more than double its 10-year CAGR (2.3%). For a third straight year, the rate of growth in the EUR component of the sector was a little larger than in the USD component (5.4% for EUR in 2019 vs. 5.0% for USD). But the USD portion continues to dominate the sector with an 86.3% share that is unchanged versus a year ago. The rate of growth in the sector has picked up a bit over the last few years, but the Securitized/Collateralized sector still has the lowest 10-year CAGR in the global bond markets, though it now shares that distinction with the External Sovereign/Quasi-Government sector.

CMBS saw its largest expansion since just prior to the financial crisis.

In the U.S., mortgages lagged growth rates in the ABS and CMBS markets for a second straight year. Both ABS and CMBS saw double-digit growth in 2019, but for ABS a 10.8% expansion was its slowest in three years, while the CMBS 11.0% expansion in 2019 was the largest it has seen since 2007, just prior to the financial crisis. To get a better sense of how different life is in the CMBS market now versus the pre-financial crisis days, in the 8 years leading up to the financial crisis the CMBS index was increasing its size by an average of 27% a year. That culminated with a \$102bn net inflow in 2007 that increased the index's outstanding debt by 29%. By comparison, the 2019 net inflow of \$48bn was less than half that of 2007.

Emerging Markets

The analyses in the preceding sections are inclusive of both developed markets and emerging markets debt. Exhibit K focuses solely on the four components of the emerging markets: local currency sovereigns; external sovereigns; external non-sovereigns (corporate and quasi-government) and the international, or Euroclearable, portion of local currency non-sovereign debt. For purposes of this segmentation, we use our standard index definition of the emerging markets, which includes all issuers with countries of risk other than the FX G10, Western Europe and Western Europe/US territories.

EM growth slowed for a third straight year but remains ahead of the global average.

Collectively, the Emerging Markets saw their rate of growth slow for a third straight year and the decline in 2019 was the largest of the three. The rate of growth in outstanding EM debt slowed by 0.5% in 2017 (to 10.1% from 10.6% in 2016). The drop-off then doubled to 1.0% in 2018 as the rate of growth fell to 9.1%. And last year it slowed another 1.5%. But at 7.6% the EM growth rate in 2019 was still 3.0% higher than that of the overall global bond markets and the EM 10-year CAGR is more than double that of the global markets (12.2% vs. 5.7%).

After flat growth in 2018, external sovereigns came back to life in 2019.

In 2018, local sovereigns outpaced all other EM segments with a 12.2% rate of growth, but they fell back to the pack in 2019 with a 7.0% growth rate that was a little slower than the overall EM rate. Meanwhile, external sovereigns stood in for their local peers at the top of the list, posting a 10.7% rate of growth. That marks the third time in the last four years that external sovereigns led the EM field. More noteworthy than the return of external sovereigns to the top of the growth ranks was the revival of the external non-sovereign markets. In 2018 external non-sovereigns lagged the rest of the field with flat growth for the year. But in 2019 they expanded at an 8.6% rate that was a percent higher than the overall EM market. At the same time, local non-sovereigns went the other way as that market segment contracted by 0.4% in 2019.

Exhibit K: Emerging Market growth trends

	Outstanding debt (USD face value in millions)					YOY growth rate				
	Local Sovereign	External Sovereign	External Non-Sov	Local Non-Sov	Total	Local Sovereign	External Sovereign	External Non-Sov	Local Non-Sov	Total
2009	1,768,819	426,125	418,504	na	2,613,448					
2010	2,083,156	478,632	560,086	na	3,121,875	17.8%	12.3%	33.8%	na	19.5%
2011	2,366,489	514,505	674,234	na	3,555,228	13.6%	7.5%	20.4%	na	13.9%
2012	2,726,105	566,651	883,180	na	4,175,935	15.2%	10.1%	31.0%	na	17.5%
2013	3,048,555	600,553	1,092,973	141,632	4,883,713	11.8%	6.0%	23.8%	na	16.9%
2014	3,324,969	595,318	1,244,068	183,890	5,348,245	9.1%	-0.9%	13.8%	na	9.5%
2015	3,654,856	638,224	1,290,231	183,358	5,766,669	9.9%	7.2%	3.7%	na	7.8%
2016	4,118,847	765,497	1,334,772	159,471	6,378,587	12.7%	19.9%	3.5%	-13.0%	10.6%
2017	4,426,797	887,533	1,461,617	245,880	7,021,827	7.5%	15.9%	9.5%	54.2%	10.1%
2018	4,966,513	969,134	1,462,142	262,100	7,659,889	12.2%	9.2%	0.0%	6.6%	9.1%
2019	5,316,461	1,072,647	1,588,249	261,024	8,238,381	7.0%	10.7%	8.6%	-0.4%	7.6%

At 4.6%, the overall global bond market growth rate in 2019 exactly matched that of 2018. However, there were notable variances at the sector level with growth in the Local Sovereign and Securitized/Collateralized sectors slowing in 2019 while other sectors picked up the pace.

Table 1: Total face value of index-qualifying fixed income securities by currency and sector

Currency	Local Sovereign	High Grade External Sov/ Quasi Govt	Securitized / Collateralized	High Grade Corporate	High Yield Corporate	High Yield External Sov/ Quasi Govt	2019 Total	2018 Total	% Chg
US Dollar	15,413,482	2,812,241	7,021,664	7,078,462	1,689,786	442,201	34,457,836	32,793,755	5.1%
Euro	7,860,765	1,803,769	1,011,042	2,761,919	328,019	56,956	13,822,471	13,122,282	5.3%
Japanese Yen	9,133,562	476,497		143,173			9,753,232	9,587,002	1.7%
British Pound Sterling	2,085,622	162,659	95,974	469,295	44,040		2,857,591	2,794,073	2.3%
Chinese Renminbi	1,724,471						1,724,471	1,547,742	11.4%
Canadian Dollar	458,149	634,661	5,140	341,243	7,179		1,446,371	1,389,584	4.1%
Indian Rupee	751,447						751,447	698,872	7.5%
Australian Dollar	357,431	248,419	4,909	71,654			682,413	673,745	1.3%
South Korean Won	489,572						489,572	574,425	-14.8%
Mexican Peso	267,078						267,078	230,880	15.7%
Brazilian Real	265,019						265,019	288,013	-8.0%
South African Rand	172,362						172,362	155,296	11.0%
Malaysian Ringgit	167,783						167,783	157,446	6.6%
Taiwanese Dollar	163,107						163,107	169,239	-3.6%
Indonesian Rupiah	157,249						157,249	105,953	48.4%
Thailand Baht	153,522						153,522	137,512	11.6%
Polish Zloty	110,629						110,629	106,056	4.3%
Russian Ruble	103,423						103,423	72,280	43.1%
Israeli Shekel	97,646						97,646	69,104	41.3%
Turkish Lira	86,311						86,311	87,454	-1.3%
Colombian Peso	85,989						85,989	85,211	0.9%
Singapore Dollar	82,103						82,103	73,551	11.6%
Philippine Peso	77,247						77,247	73,167	5.6%
Danish Krone	73,277						73,277	75,994	-3.6%
Swedish Krona	68,688						68,688	77,272	-11.1%
Swiss Franc	62,357						62,357	66,156	-5.7%
New Zealand Dollar	49,623						49,623	48,166	3.0%
Czech Koruna	48,751						48,751	43,722	11.5%
Norwegian Krone	44,382						44,382	38,237	16.1%
Egyptian Pound	39,845						39,845	35,740	11.5%
Hungarian Forint	38,566						38,566	36,939	4.4%
Chilean Peso	38,202						38,202	37,961	0.6%
Peruvian New Sol	35,395						35,395	26,416	34.0%
Vietnamese Dong	34,614						34,614	30,294	14.3%
Romanian Leu	32,717						32,717	28,093	16.5%
Moroccan Dirham	28,468						28,468	28,190	1.0%
Sri Lankan Rupee	22,462						22,462	19,629	14.4%
Nigerian Naira	14,885						14,885	12,880	15.6%
Hong Kong Dollar	9,446						9,446	11,127	-15.1%
Pakistan Rupee	8,789						8,789	12,414	-29.2%
Argentine Peso	5,633						5,633	5,194	8.5%
Argentine Peso	3,728						3,728	5,715	-34.8%
Total	40,923,798	6,138,246	8,138,730	10,865,746	2,069,024	499,158	68,634,700	65,632,779	4.6%
2018	39,256,319	5,956,005	7,754,011	10,184,790	2,020,987	460,667	65,632,779		
\$ Change	1,667,479	182,241	384,719	680,956	48,036	38,491	3,001,922		
% Change	4.2%	3.1%	5.0%	6.7%	2.4%	8.4%	4.6%		

After dropping five places in the global rankings in 2018, Israel jumped six places higher in 2019 and is now the 19th largest market in our index universe. However, that is still below Israel's highest ranking (14th largest in 2014). Russia also climbed six notches higher in the rankings and is now just ahead of Israel as the 18th largest market. Unlike Israel, this is new territory for Russia, whose highest prior ranking was 23rd in 2012.

Table 2: Total face value of index-qualifying fixed income securities by year (USD terms in millions)

Currency	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
US Dollar	34,457,836	32,793,755	31,180,859	29,861,977	28,522,273	27,252,351	26,117,961	24,443,236	22,637,707	21,321,079	19,135,792
Euro	13,822,471	13,122,282	12,646,946	12,001,669	11,544,740	11,056,092	10,670,380	10,369,976	10,203,588	9,762,106	9,077,016
Japanese Yen	9,753,232	9,587,002	9,430,407	9,112,113	8,888,199	8,595,253	8,194,805	7,778,175	7,383,576	7,030,092	6,558,217
British Pound Sterling	2,857,591	2,794,073	2,717,252	2,589,258	2,510,315	2,467,558	2,407,294	2,250,864	2,048,269	1,863,491	1,697,713
Chinese Renminbi	1,724,471	1,547,742	1,377,425	1,182,458	1,018,929	912,232	824,346	745,344	648,144	550,787	475,412
Canadian Dollar	1,446,371	1,389,584	1,353,057	1,288,420	1,219,628	1,157,202	1,108,420	1,031,066	971,109	905,439	821,862
Indian Rupee	751,447	698,872	633,596	605,702	566,924	493,272	443,255	393,488	316,291	269,113	214,066
Australian Dollar	682,413	673,745	649,612	596,771	559,631	511,991	466,912	429,693	390,724	337,325	263,668
South Korean Won	489,572	574,425	384,665	401,538	372,959	327,266	301,327	277,903	257,401	243,896	214,268
Mexican Peso	267,078	230,880	206,388	176,813	176,133	164,966	134,815	112,175	100,791	88,310	78,471
Brazilian Real	265,019	288,013	305,946	279,382	214,553	218,804	200,633	192,292	166,259	157,268	126,037
South African Rand	172,362	155,296	121,186	118,220	101,738	91,328	81,287	71,230	56,596	44,594	35,406
Malaysian Ringgit	167,783	157,446	137,574	135,209	117,336	117,336	130,310	114,919	90,123	72,610	69,036
Taiwanese Dollar	163,107	169,239	172,174	173,292	166,086	162,574	155,558	147,657	137,149	129,751	119,410
Indonesian Rupiah	157,249	105,953	114,214	106,349	80,741	65,933	51,343	39,581	31,042	25,324	22,391
Thailand Baht	153,522	137,512	133,385	117,970	111,930	97,439	91,271	81,466	71,627	63,177	59,024
Polish Zloty	110,629	106,056	102,766	100,197	85,376	84,981	107,108	93,034	90,286	96,237	77,587
Russian Ruble	103,423	72,280	66,958	51,626	46,654	49,099	50,674	41,617	34,998	29,932	15,872
Israeli Shekel	97,646	69,104	81,466	102,290	96,949	100,264	94,842	89,886	80,560	72,021	66,492
Turkish Lira	86,311	87,454	76,318	64,455	55,911	50,714	40,691	34,204	33,315	27,369	15,258
Colombian Peso	85,989	85,211	72,586	66,680	46,681	48,890	46,175	35,758	27,556	24,662	27,346
Singapore Dollar	82,103	73,551	69,163	67,676	61,131	60,164	53,025	52,951	49,232	47,373	45,960
Philippine Peso	77,247	73,167	70,990	65,118	63,996	65,574	61,681	47,601	38,574	35,097	18,862
Danish Krone	73,277	75,994	82,728	80,891	79,741	82,944	83,411	82,939	82,056	77,409	68,391
Swedish Krona	68,688	77,272	84,384	79,180	76,866	74,563	74,018	74,537	70,380	73,103	71,354
Swiss Franc	62,357	66,156	69,440	72,417	73,172	80,550	78,569	78,444	77,290	79,672	83,082
New Zealand Dollar	49,623	48,166	49,316	45,795	49,987	45,274	47,145	39,176	37,338	23,971	22,020
Czech Koruna	48,751	43,722	43,468	43,883	38,885	36,209	37,109	33,958	34,717	32,600	30,306
Norwegian Krone	44,382	38,237	44,382	37,782	38,435	32,289	32,873	23,655	23,944	21,668	22,232
Egyptian Pound	39,845	35,740	34,301	36,273	34,568	22,981	16,673	12,425	10,347	8,241	4,098
Hungarian Forint	38,566	36,939	33,231	33,126	30,275	27,110	24,450	24,806	22,731	23,697	21,417
Chilean Peso	38,202	37,961	37,210	42,403	38,327	32,392	31,092	27,276	24,000	13,689	11,308
Peruvian New Sol	35,395	26,416	24,416	16,693	12,059	11,883	9,798	7,739	7,738	0	0
Vietnamese Dong	34,614	30,294	28,361	25,231	17,422	13,995	0	0	0	0	0
Romanian Leu	32,717	28,093	19,576	19,039	15,789	15,528	13,656	8,678	0	0	0
Moroccan Dirham	28,468	28,190	24,746	26,164	28,458	24,812	26,371	21,386	19,768	13,841	13,219
Sri Lankan Rupee	22,462	19,629	17,153	17,682	11,359	0	0	0	0	0	0
Nigerian Naira	14,885	12,880	12,235	16,311	14,700	11,063	8,435	7,451	6,682	4,149	0
Hong Kong Dollar	9,446	11,127	11,089	11,076	12,231	13,129	12,629	11,281	10,562	9,420	7,572
Pakistan Rupee	8,789	12,414	9,170	12,111	0	0	0	0	0	0	0
Uruguay Peso	5,633	5,194	5,040	3,883	3,590	5,030	0	0	0	0	0
Argentine Peso	3,728	5,715	0	0	0	0	0	0	0	0	0
Sector	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Local Sovereign	40,923,798	39,256,319	37,240,934	35,632,388	33,914,326	32,473,324	30,934,914	28,853,180	26,723,152	24,382,158	21,216,323
High Grade External Sov/Quasi Govt	6,138,246	5,956,005	5,901,813	5,768,322	5,617,024	5,673,974	5,611,709	5,533,649	5,166,667	5,342,827	5,113,098
Securitized / Collateralized	8,138,730	7,754,011	7,334,388	7,044,601	6,861,781	6,674,972	6,554,072	6,456,674	6,569,288	6,475,137	6,489,021
High Grade Corporate	10,865,746	10,184,790	9,700,657	8,967,738	8,378,216	7,636,015	7,180,266	6,673,272	6,232,893	5,947,305	5,563,104
High Yield Corporate	2,069,024	2,020,987	2,111,336	2,075,721	2,149,431	2,038,918	1,858,839	1,579,741	1,358,348	1,217,719	1,017,641
High Yield External Sov/Quasi Govt	499,158	460,667	446,053	396,349	297,066	183,833	190,542	231,351	242,122	213,365	190,978
Total	68,634,700	65,632,779	62,735,181	59,885,119	57,217,843	54,681,036	52,330,342	49,327,865	46,292,469	43,578,511	39,590,165

The local sovereign growth rate dropped to 4.2% from 5.4% in 2018. That is the slowest rate of growth this sector has seen in 19 years (1.6%, 2000). The U.S. alone accounted for 57% of the net growth in the global local sovereign markets in 2019 and 72% of the growth in developed markets sovereigns.

Table 3: Outstanding local currency government debt (USD terms in millions)

Currency	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	10-year change		Current year change	
												\$ Chg	% Chg	\$ Chg	% Chg
United States	15,413,482	14,461,024	13,382,636	12,922,500	12,273,073	11,852,804	11,346,161	10,523,547	9,382,480	8,289,479	6,667,662	8,745,820	131.2%	952,458	6.6%
Japan	9,133,562	8,996,563	8,816,151	8,413,817	8,149,624	7,818,005	7,393,184	6,949,495	6,546,278	6,128,404	5,698,551	3,435,011	60.3%	136,999	1.5%
Euro	7,860,765	7,649,240	7,488,687	7,225,525	7,035,350	6,776,535	6,538,200	6,248,675	6,222,281	5,928,793	5,413,316	2,447,449	45.2%	211,525	2.8%
United Kingdom	2,085,622	2,079,666	2,014,340	1,919,109	1,837,555	1,793,980	1,741,358	1,602,607	1,443,784	1,265,076	1,066,422	1,019,200	95.6%	5,955	0.3%
China	1,724,471	1,547,742	1,377,425	1,182,458	1,018,929	912,232	824,346	745,344	648,144	550,787	475,412	1,249,059	262.7%	176,729	11.4%
India	751,447	698,872	633,596	605,702	566,924	493,272	443,255	393,488	316,291	269,113	214,066	537,380	251.0%	52,574	7.5%
South Korea	489,572	574,425	384,665	401,538	372,959	327,266	301,327	277,903	257,401	243,896	214,268	275,304	128.5%	-84,852	-14.8%
Canada	458,149	440,822	437,925	410,798	382,576	371,058	367,049	353,380	339,138	309,055	265,573	192,575	72.5%	17,327	3.9%
Australia	357,431	356,666	344,147	305,727	263,091	220,353	184,390	150,620	131,694	102,371	68,902	288,528	418.8%	765	0.2%
Mexico	267,078	230,880	206,388	176,813	176,133	164,966	134,815	112,175	100,791	88,310	78,471	188,607	240.4%	36,198	15.7%
Brazil	265,019	288,013	305,946	279,382	214,553	218,804	200,633	192,292	166,259	157,268	126,037	138,983	110.3%	-22,993	-8.0%
South Africa	172,362	155,296	121,186	118,220	101,738	91,328	81,287	71,230	56,596	44,594	35,406	136,956	386.8%	17,067	11.0%
Malaysia	167,783	157,446	137,574	135,209	130,503	117,336	130,310	114,919	90,123	72,610	69,036	98,747	143.0%	10,337	6.6%
Taiwan	163,107	169,239	172,174	173,292	166,086	162,574	155,558	147,657	137,149	129,751	119,410	43,697	36.6%	-6,131	-3.6%
Indonesia	157,249	105,953	114,214	106,349	80,741	65,933	51,343	39,581	31,042	25,324	22,391	134,857	602.3%	51,296	48.4%
Thailand	153,522	137,512	133,385	117,970	111,930	97,439	91,271	81,466	71,627	63,177	59,024	94,498	160.1%	16,010	11.6%
Poland	110,629	106,056	102,766	100,197	85,376	84,981	107,108	93,034	90,286	96,237	77,587	33,042	42.6%	4,573	4.3%
Russia	103,423	72,280	66,958	51,626	46,654	49,099	50,674	41,617	34,998	29,932	15,872	87,551	551.6%	31,143	43.1%
Israel	97,646	69,104	81,466	102,290	96,949	100,264	94,842	89,886	80,560	72,021	66,492	31,154	46.9%	28,542	41.3%
Turkey	86,311	87,454	76,318	64,455	55,911	50,714	40,691	34,204	33,315	27,369	15,258	71,053	465.7%	-1,143	-1.3%
Colombia	85,989	85,211	72,586	66,680	46,681	48,890	46,175	35,758	27,556	24,662	27,346	58,644	214.5%	778	0.9%
Singapore	82,103	73,551	69,163	67,676	61,131	60,164	53,025	52,951	49,232	47,373	45,960	36,143	78.6%	8,552	11.6%
Philippines	77,247	73,167	70,990	65,118	63,996	65,574	61,681	47,601	38,574	35,097	18,862	58,385	309.5%	4,081	5.6%
Denmark	73,277	75,994	82,728	80,891	79,741	82,944	83,411	82,939	82,056	77,409	68,391	4,886	7.1%	-2,717	-3.6%
Sweden	68,688	77,272	84,384	79,180	76,866	74,563	74,018	74,537	70,380	73,103	71,354	-2,666	-3.7%	-8,584	-11.1%
Switzerland	62,357	66,156	69,440	72,417	73,172	80,550	78,569	78,444	77,290	79,672	83,082	-20,725	-24.9%	-3,799	-5.7%
New Zealand	49,623	48,166	49,316	45,795	49,987	45,274	47,145	39,176	37,338	23,971	22,020	27,603	125.4%	1,457	3.0%
Czech Republic	48,751	43,722	43,468	43,883	38,885	36,209	37,109	33,958	34,717	32,600	30,306	18,444	60.9%	5,028	11.5%
Norway	44,382	38,237	44,382	37,782	38,435	32,289	32,873	23,655	23,944	21,668	22,232	22,151	99.6%	6,145	16.1%
Egypt	39,845	35,740	34,301	36,273	34,568	22,981	16,673	12,425	10,347	8,241	4,098	35,747	872.4%	4,105	11.5%
Hungary	38,566	36,939	33,231	33,126	30,275	27,110	24,450	24,806	22,731	23,697	21,417	17,149	80.1%	1,627	4.4%
Chile	38,202	37,961	37,210	42,403	38,327	32,392	31,092	27,276	24,000	13,689	11,308	26,894	237.8%	241	0.6%
Peru	35,395	26,416	24,416	16,693	12,059	11,883	9,798	7,739	7,738	0	0	35,395	na	8,979	34.0%
Vietnamese Dong	34,614	30,294	28,361	25,231	17,422	13,995	0	0	0	0	0	34,614	na	4,320	14.3%
Romania	32,717	28,093	19,576	19,039	15,789	15,528	13,656	8,678	0	0	0	32,717	na	4,624	16.5%
Morocco	28,468	28,190	24,746	26,164	28,458	24,812	26,371	21,386	19,768	13,841	13,219	15,249	115.4%	278	1.0%
Sri Lanka	22,462	19,629	17,153	17,682	11,359	0	0	0	0	0	0	22,462	na	2,833	14.4%
Nigeria	14,885	12,880	12,235	16,311	14,700	11,063	8,435	7,451	6,682	4,149	0	14,885	na	2,005	15.6%
Hong Kong	9,446	11,127	11,089	11,076	12,231	13,129	12,629	11,281	10,562	9,420	7,572	1,874	24.7%	-1,681	-15.1%
Pakistan	8,789	12,414	9,170	12,111	0	0	0	0	0	0	0	8,789	na	-3,625	-29.2%
Uruguay Peso	5,633	5,194	5,040	3,883	3,590	5,030	0	0	0	0	0	5,633	na	439	8.5%
Argentine Peso	3,728	5,715	0	0	0	0	0	0	0	0	0	3,728	na	-1,986	-34.8%
Total	40,923,798	39,256,319	37,240,934	35,632,388	33,914,326	32,473,324	30,934,914	28,853,180	26,723,152	24,382,158	21,216,323	19,707,475	92.9%	1,667,479	4.2%
Annual \$ Change	1,667,479	2,015,385	1,608,546	1,718,062	1,441,002	1,538,409	2,081,734	2,130,028	2,340,994	3,165,835					
Annual % Change	4.2%	5.4%	4.5%	5.1%	4.4%	5.0%	7.2%	8.0%	9.6%	14.9%					

Korea saw an \$85bn net reduction in its outstanding debt in 2019 – an amount almost four times that of the next largest outflow (Brazil, \$23bn). That is its second contraction in the last three years for Korea but in between the 2019 and 2017 reductions it saw \$190bn in net additions in 2018. Taken together, the average annual net addition over the last three years is right in line with the average over the first seven years of the decade (\$29bn and \$27bn, respectively).

Table 4: Annual change in the total face value of index-qualifying fixed income securities (USD terms in millions)

Currency	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
US Dollar	1,664,081	1,612,895	1,318,883	1,339,703	1,269,922	1,134,390	1,674,725	1,805,529	1,316,628	2,185,287
Euro	700,189	475,336	645,277	456,929	488,648	385,713	300,404	166,388	441,481	685,091
Japanese Yen	166,230	156,595	318,294	223,914	292,946	400,447	416,631	394,599	353,484	471,874
British Pound Sterling	63,518	76,821	127,994	78,943	42,756	60,264	156,430	202,595	184,779	165,777
Chinese Renminbi	176,729	170,317	194,967	163,529	106,697	87,886	79,001	97,201	97,357	75,375
Canadian Dollar	56,787	36,527	64,637	68,792	62,426	48,782	77,353	59,958	65,670	83,576
Indian Rupee	52,574	65,276	27,894	38,778	73,652	50,017	49,767	77,197	47,179	55,046
Australian Dollar	8,667	24,134	52,841	37,140	47,641	45,079	37,219	38,969	53,398	73,658
South Korean Won	(84,852)	189,760	(16,873)	28,579	45,693	25,939	23,424	20,502	13,505	29,628
Mexican Peso	36,198	24,492	29,575	680	11,167	30,151	22,640	11,384	12,481	9,840
Brazilian Real	(22,993)	(17,933)	26,564	64,828	(4,250)	18,171	8,341	26,033	8,991	31,231
South African Rand	17,067	34,109	2,966	16,483	10,409	10,041	10,058	14,633	12,003	9,187
Malaysian Ringgit	10,337	19,872	2,365	4,706	13,167	(12,974)	15,391	24,795	17,513	3,574
Taiwanese Dollar	(6,131)	(2,936)	(1,118)	7,206	3,513	7,016	7,901	10,508	7,397	10,341
Indonesian Rupiah	51,296	(8,261)	7,866	25,607	14,809	14,590	11,763	8,538	5,719	2,932
Thailand Baht	16,010	4,127	15,416	6,040	14,491	6,168	9,805	9,839	8,450	4,153
Polish Zloty	4,573	3,290	2,569	14,821	395	(22,126)	14,074	2,748	(5,951)	18,650
Russian Ruble	31,143	5,322	15,332	4,972	(2,445)	(1,576)	9,057	6,619	5,066	14,060
Israeli Shekel	28,542	(12,362)	(20,824)	5,342	(3,316)	5,422	4,956	9,326	8,539	5,528
Turkish Lira	(1,143)	11,136	11,863	8,544	5,197	10,023	6,487	889	5,947	12,111
Colombian Peso	778	12,626	5,906	19,999	(2,210)	2,715	10,417	8,203	2,894	(2,684)
Singapore Dollar	8,552	4,388	1,487	6,544	967	7,139	74	3,718	1,859	1,413
Philippine Peso	4,081	2,176	5,872	1,122	(1,578)	3,893	14,079	9,027	3,477	16,235
Danish Krone	(2,717)	(6,734)	1,837	1,150	(3,203)	(467)	472	883	4,647	9,018
Swedish Krona	(8,584)	(7,112)	5,204	2,314	2,303	545	(519)	4,157	(2,723)	1,749
Swiss Franc	(3,799)	(3,285)	(2,976)	(755)	(7,378)	1,981	125	1,154	(2,382)	(3,409)
New Zealand Dollar	1,457	(1,150)	3,522	(4,192)	4,712	(1,870)	7,968	1,838	13,367	1,951
Czech Koruna	5,028	254	(415)	4,998	2,675	(900)	3,152	(760)	2,118	2,293
Norwegian Krone	6,145	(6,145)	6,600	(653)	6,145	(583)	9,218	(290)	2,276	(563)
Egyptian Pound	4,105	1,439	(1,972)	1,705	11,587	6,307	4,249	2,078	2,106	4,143
Hungarian Forint	1,627	3,708	105	2,850	3,165	2,660	(356)	2,075	(966)	2,280
Chilean Peso	241	751	(5,193)	4,076	5,935	1,299	3,816	3,277	10,311	2,380
Peruvian New Sol	8,979	2,000	7,723	4,634	176	2,085	2,059	1	7,738	0
Vietnamese Dong	4,320	1,932	3,130	7,809	3,427	13,995	0	0	0	0
Romanian Leu	4,624	8,517	537	3,250	261	1,872	4,978	8,678	0	0
Moroccan Dirham	278	3,443	(1,417)	(2,294)	3,645	(1,559)	4,986	1,617	5,927	623
Sri Lankan Rupee	2,833	2,476	(529)	6,323	11,359	0	0	0	0	0
Nigerian Naira	2,005	646	(4,076)	1,611	3,638	2,627	984	770	2,533	4,149
Hong Kong Dollar	(1,681)	39	13	(1,155)	(898)	501	1,348	719	1,142	1,848
Pakistan Rupee	(3,625)	3,244	(2,940)	12,111	0	0	0	0	0	0
Uruguay Peso	439	154	1,157	293	(1,440)	5,030	0	0	0	0
Argentine Peso	(1,986)	5,715	0	0	0	0	0	0	0	0
Sector	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Local Sovereign	1,667,479	2,015,385	1,608,546	1,718,062	1,441,002	1,538,409	2,081,734	2,130,028	2,340,994	3,165,835
High Grade External Sov/Quasi Govt	182,241	54,192	133,490	151,298	-56,949	62,265	78,060	366,982	-176,160	229,729
Securitized / Collateralized	384,719	419,623	289,788	182,820	186,809	120,900	97,398	-112,614	94,150	-13,883
High Grade Corporate	680,956	484,133	732,919	589,522	742,201	455,749	506,994	440,379	285,588	384,201
High Yield Corporate	48,036	-90,348	35,614	-73,709	110,512	180,079	279,098	221,393	140,630	200,078
High Yield External Sov/Quasi Govt	38,491	14,614	49,704	99,283	113,233	-6,709	-40,809	-10,771	28,757	22,387
Total	3,001,922	2,897,598	2,850,062	2,667,276	2,536,807	2,350,694	3,002,477	3,035,396	2,713,958	3,988,347

ICE Data Indices, LLC

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Outstanding Indonesian rupiah denominated debt increased by almost half Last year (+48.4%) – the largest percentage increase across the global markets. Typically, large percentage increases of that magnitude are found in the smaller markets. But, as with Korea in 2018 (+49.3%), Indonesia is among the larger markets in the index universe, currently ranked 15th.

Table 5: Annual percentage change in the total face value of index-qualifying fixed income securities (USD terms in millions)

Currency	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
US Dollar	5.1%	5.2%	4.4%	4.7%	4.7%	4.3%	6.9%	8.0%	6.2%	11.4%
Euro	5.3%	3.8%	5.4%	4.0%	4.4%	3.6%	2.9%	1.6%	4.5%	7.5%
Japanese Yen	1.7%	1.7%	3.5%	2.5%	3.4%	4.9%	5.4%	5.3%	5.0%	7.2%
British Pound Sterling	2.3%	2.8%	4.9%	3.1%	1.7%	2.5%	6.9%	9.9%	9.9%	9.8%
Chinese Renminbi	11.4%	12.4%	16.5%	16.0%	11.7%	10.7%	10.6%	15.0%	17.7%	15.9%
Canadian Dollar	4.1%	2.7%	5.0%	5.6%	5.4%	4.4%	7.5%	6.2%	7.3%	10.2%
Indian Rupee	7.5%	10.3%	4.6%	6.8%	14.9%	11.3%	12.6%	24.4%	17.5%	25.7%
Australian Dollar	1.3%	3.7%	8.9%	6.6%	9.3%	9.7%	8.7%	10.0%	15.8%	27.9%
South Korean Won	-14.8%	49.3%	-4.2%	7.7%	14.0%	8.6%	8.4%	8.0%	5.5%	13.8%
Mexican Peso	15.7%	11.9%	16.7%	0.4%	6.8%	22.4%	20.2%	11.3%	14.1%	12.5%
Brazilian Real	-8.0%	-5.9%	9.5%	30.2%	-1.9%	9.1%	4.3%	15.7%	5.7%	24.8%
South African Rand	11.0%	28.1%	2.5%	16.2%	11.4%	12.4%	14.1%	25.9%	26.9%	25.9%
Malaysian Ringgit	6.6%	14.4%	1.7%	3.6%	11.2%	-10.0%	13.4%	27.5%	24.1%	5.2%
Taiwanese Dollar	-3.6%	-1.7%	-0.6%	4.3%	2.2%	4.5%	5.4%	7.7%	5.7%	8.7%
Indonesian Rupiah	48.4%	-7.2%	7.4%	31.7%	22.5%	28.4%	29.7%	27.5%	22.6%	13.1%
Thailand Baht	11.6%	3.1%	13.1%	5.4%	14.9%	6.8%	12.0%	13.7%	13.4%	7.0%
Polish Zloty	4.3%	3.2%	2.6%	17.4%	0.5%	-20.7%	15.1%	3.0%	-6.2%	24.0%
Russian Ruble	43.1%	7.9%	29.7%	10.7%	-5.0%	-3.1%	21.8%	18.9%	16.9%	88.6%
Israeli Shekel	41.3%	-15.2%	-20.4%	5.5%	-3.3%	5.7%	5.5%	11.6%	11.9%	8.3%
Turkish Lira	-1.3%	14.6%	18.4%	15.3%	10.2%	24.6%	19.0%	2.7%	21.7%	79.4%
Colombian Peso	0.9%	17.4%	8.9%	42.8%	-4.5%	5.9%	29.1%	29.8%	11.7%	-9.8%
Singapore Dollar	11.6%	6.3%	2.2%	10.7%	1.6%	13.5%	0.1%	7.6%	3.9%	3.1%
Philippine Peso	5.6%	3.1%	9.0%	1.8%	-2.4%	6.3%	29.6%	23.4%	9.9%	86.1%
Danish Krone	-3.6%	-8.1%	2.3%	1.4%	-3.9%	-0.6%	0.6%	1.1%	6.0%	13.2%
Swedish Krona	-11.1%	-8.4%	6.6%	3.0%	3.1%	0.7%	-0.7%	5.9%	-3.7%	2.5%
Swiss Franc	-5.7%	-4.7%	-4.1%	-1.0%	-9.2%	2.5%	0.2%	1.5%	-3.0%	-4.1%
New Zealand Dollar	3.0%	-2.3%	7.7%	-8.4%	10.4%	-4.0%	20.3%	4.9%	55.8%	8.9%
Czech Koruna	11.5%	0.6%	-0.9%	12.9%	7.4%	-2.4%	9.3%	-2.2%	6.5%	7.6%
Norwegian Krone	16.1%	-13.8%	17.5%	-1.7%	19.0%	-1.8%	39.0%	-1.2%	10.5%	-2.5%
Egyptian Pound	11.5%	4.2%	-5.4%	4.9%	50.4%	37.8%	34.2%	20.1%	25.6%	101.1%
Hungarian Forint	4.4%	11.2%	0.3%	9.4%	11.7%	10.9%	-1.4%	9.1%	-4.1%	10.6%
Chilean Peso	0.6%	2.0%	-12.2%	10.6%	18.3%	4.2%	14.0%	13.7%	75.3%	21.0%
Peruvian New Sol	34.0%	8.2%	46.3%	38.4%	1.5%	21.3%	26.6%	0.0%	na	na
Vietnamese Dong	14.3%	6.8%	12.4%	44.8%	24.5%	na	na	na	na	na
Romanian Leu	16.5%	43.5%	2.8%	20.6%	1.7%	13.7%	57.4%	na	na	na
Moroccan Dirham	1.0%	13.9%	-5.4%	-8.1%	14.7%	-5.9%	23.3%	8.2%	42.8%	4.7%
Sri Lankan Rupee	14.4%	14.4%	-3.0%	55.7%	na	na	na	na	na	na
Nigerian Naira	15.6%	5.3%	-25.0%	11.0%	32.9%	31.1%	13.2%	11.5%	61.0%	na
Hong Kong Dollar	-15.1%	0.3%	0.1%	-9.4%	-6.8%	4.0%	11.9%	6.8%	12.1%	24.4%
Pakistan Rupee	-29.2%	35.4%	-24.3%	na	na	na	na	na	na	na
Uruguay Peso	8.5%	3.1%	29.8%	8.2%	-28.6%	na	na	na	na	na
Argentine Peso	-34.8%	na	na	na	na	na	na	na	na	na
Sector	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Local Sovereign	4.2%	5.4%	4.5%	5.1%	4.4%	5.0%	7.2%	8.0%	9.6%	14.9%
High Grade External Sov/Quasi Govt	3.1%	0.9%	2.3%	2.7%	-1.0%	1.1%	1.4%	7.1%	-3.3%	4.5%
Securitized / Collateralized	5.0%	5.7%	4.1%	2.7%	2.8%	1.8%	1.5%	-1.7%	1.5%	-0.2%
High Grade Corporate	6.7%	5.0%	8.2%	7.0%	9.7%	6.3%	7.6%	7.1%	4.8%	6.9%
High Yield Corporate	2.4%	-4.3%	1.7%	-3.4%	5.4%	9.7%	17.7%	16.3%	11.5%	19.7%
High Yield External Sov/Quasi Govt	8.4%	3.3%	12.5%	33.4%	61.6%	-3.5%	-17.6%	-4.4%	13.5%	11.7%
Total	4.6%	4.6%	4.8%	4.7%	4.6%	4.5%	6.1%	6.6%	6.2%	10.1%

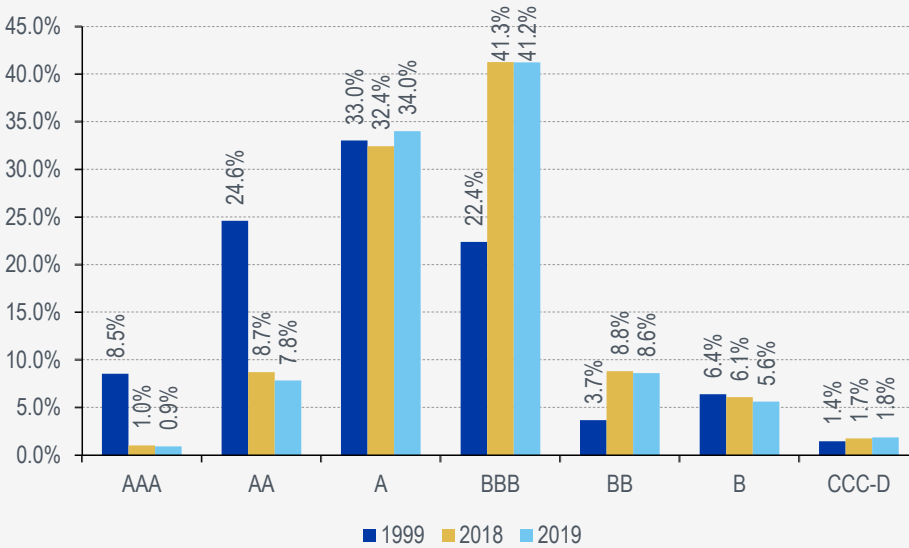
Only six currencies have seen their share of the global debt markets change by more than +/-0.2% over the last 10 years and of those only four moved by more than 1% in either direction versus where they stood 10 years ago. The two largest movers both registered declines: EUR (-2.8%); JPY (-2.4%). The two largest increases were USD (+1.9%) and CNY (+1.3%).

Table 6: Percentage distribution of index-qualifying fixed income securities by currency and sector (USD terms in millions)

Currency	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	10-yr Chg	CY Chg
US Dollar	50.20%	49.97%	49.70%	49.87%	49.85%	49.84%	49.91%	49.55%	48.90%	48.93%	48.33%	1.9%	0.24%
Euro	20.14%	19.99%	20.16%	20.04%	20.18%	20.22%	20.39%	21.02%	22.04%	22.40%	22.93%	-2.8%	0.15%
Japanese Yen	14.21%	14.61%	15.03%	15.22%	15.53%	15.72%	15.66%	15.77%	15.95%	16.13%	16.57%	-2.4%	-0.40%
British Pound Sterling	4.16%	4.26%	4.33%	4.32%	4.39%	4.51%	4.60%	4.56%	4.42%	4.28%	4.29%	-0.1%	-0.09%
Chinese Renminbi	2.51%	2.36%	2.20%	1.97%	1.78%	1.67%	1.58%	1.51%	1.40%	1.26%	1.20%	1.3%	0.15%
Canadian Dollar	2.11%	2.12%	2.16%	2.15%	2.13%	2.12%	2.12%	2.09%	2.10%	2.08%	2.08%	0.0%	-0.01%
Indian Rupee	1.09%	1.06%	1.01%	1.01%	0.99%	0.90%	0.85%	0.80%	0.68%	0.62%	0.54%	0.6%	0.03%
Australian Dollar	0.99%	1.03%	1.04%	1.00%	0.98%	0.94%	0.89%	0.87%	0.84%	0.77%	0.67%	0.3%	-0.03%
South Korean Won	0.71%	0.88%	0.61%	0.67%	0.65%	0.60%	0.58%	0.56%	0.56%	0.56%	0.54%	0.2%	-0.16%
Mexican Peso	0.39%	0.35%	0.33%	0.30%	0.31%	0.30%	0.26%	0.23%	0.22%	0.20%	0.20%	0.2%	0.04%
Brazilian Real	0.39%	0.44%	0.49%	0.47%	0.37%	0.40%	0.38%	0.39%	0.36%	0.36%	0.32%	0.1%	-0.05%
South African Rand	0.25%	0.24%	0.19%	0.20%	0.18%	0.17%	0.16%	0.14%	0.12%	0.10%	0.09%	0.2%	0.01%
Malaysian Ringgit	0.24%	0.24%	0.22%	0.23%	0.23%	0.21%	0.25%	0.23%	0.19%	0.17%	0.17%	0.1%	0.00%
Taiwanese Dollar	0.24%	0.26%	0.27%	0.29%	0.29%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	-0.1%	-0.02%
Indonesian Rupiah	0.23%	0.16%	0.18%	0.18%	0.14%	0.12%	0.10%	0.08%	0.07%	0.06%	0.06%	0.2%	0.07%
Thailand Baht	0.22%	0.21%	0.21%	0.20%	0.20%	0.18%	0.17%	0.17%	0.15%	0.14%	0.15%	0.1%	0.01%
Polish Zloty	0.16%	0.16%	0.16%	0.17%	0.15%	0.16%	0.20%	0.19%	0.20%	0.22%	0.20%	0.0%	0.00%
Russian Ruble	0.15%	0.11%	0.11%	0.09%	0.08%	0.09%	0.10%	0.08%	0.08%	0.07%	0.04%	0.1%	0.04%
Israeli Shekel	0.14%	0.11%	0.13%	0.17%	0.17%	0.18%	0.18%	0.18%	0.17%	0.17%	0.17%	0.0%	0.04%
Turkish Lira	0.13%	0.13%	0.12%	0.11%	0.10%	0.09%	0.08%	0.07%	0.07%	0.06%	0.04%	0.1%	-0.01%
Colombian Peso	0.13%	0.13%	0.12%	0.11%	0.08%	0.09%	0.09%	0.07%	0.06%	0.06%	0.07%	0.1%	0.00%
Singapore Dollar	0.12%	0.11%	0.11%	0.11%	0.11%	0.11%	0.10%	0.11%	0.11%	0.11%	0.12%	0.0%	0.01%
Philippine Peso	0.11%	0.11%	0.11%	0.11%	0.11%	0.12%	0.12%	0.10%	0.08%	0.08%	0.05%	0.1%	0.00%
Danish Krone	0.11%	0.12%	0.13%	0.14%	0.14%	0.15%	0.16%	0.17%	0.18%	0.18%	0.17%	-0.1%	-0.01%
Swedish Krona	0.10%	0.12%	0.13%	0.13%	0.13%	0.14%	0.14%	0.15%	0.15%	0.17%	0.18%	-0.1%	-0.02%
Swiss Franc	0.09%	0.10%	0.11%	0.12%	0.13%	0.15%	0.15%	0.16%	0.17%	0.18%	0.21%	-0.1%	-0.01%
New Zealand Dollar	0.07%	0.07%	0.08%	0.08%	0.09%	0.08%	0.09%	0.08%	0.08%	0.06%	0.06%	0.0%	0.00%
Czech Koruna	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.08%	0.0%	0.00%
Norwegian Krone	0.06%	0.06%	0.07%	0.06%	0.07%	0.06%	0.06%	0.05%	0.05%	0.05%	0.06%	0.0%	0.01%
Egyptian Pound	0.06%	0.05%	0.05%	0.06%	0.06%	0.04%	0.03%	0.03%	0.02%	0.02%	0.01%	0.0%	0.00%
Hungarian Forint	0.06%	0.06%	0.05%	0.06%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.0%	0.00%
Chilean Peso	0.06%	0.06%	0.06%	0.07%	0.07%	0.06%	0.06%	0.06%	0.05%	0.03%	0.03%	0.0%	0.00%
Peruvian New Sol	0.05%	0.04%	0.04%	0.03%	0.02%	0.02%	0.02%	0.02%	0.02%	0.00%	0.00%	0.1%	0.01%
Vietnamese Dong	0.05%	0.05%	0.05%	0.04%	0.03%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.1%	0.00%
Romanian Leu	0.05%	0.04%	0.03%	0.03%	0.03%	0.03%	0.03%	0.02%	0.00%	0.00%	0.00%	0.0%	0.00%
Moroccan Dirham	0.04%	0.04%	0.04%	0.04%	0.05%	0.05%	0.05%	0.04%	0.04%	0.03%	0.03%	0.0%	0.00%
Sri Lankan Rupee	0.03%	0.03%	0.03%	0.03%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Nigerian Naira	0.02%	0.02%	0.02%	0.03%	0.03%	0.02%	0.02%	0.02%	0.01%	0.01%	0.00%	0.0%	0.00%
Hong Kong Dollar	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.0%	0.00%
Pakistan Rupee	0.01%	0.02%	0.01%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	-0.01%
Uruguay Peso	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Argentine Peso	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.00%
Sector	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	10-yr Chg	CY Chg
Local Sovereign	59.63%	59.81%	59.36%	59.50%	59.27%	59.39%	59.11%	58.49%	57.73%	55.95%	53.59%	6.0%	-0.19%
HiGrd Ext/Quasi Govt	8.94%	9.07%	9.41%	9.63%	9.82%	10.38%	10.72%	11.22%	11.16%	12.26%	12.92%	-4.0%	-0.13%
Securitized / Collateral	11.86%	11.81%	11.69%	11.76%	11.99%	12.21%	12.52%	13.09%	14.19%	14.86%	16.39%	-4.5%	0.04%
High Grade Corporate	15.83%	15.52%	15.46%	14.97%	14.64%	13.96%	13.72%	13.53%	13.46%	13.65%	14.05%	1.8%	0.31%
High Yield Corporate	3.01%	3.08%	3.37%	3.47%	3.76%	3.73%	3.55%	3.20%	2.93%	2.79%	2.57%	0.4%	-0.06%
HiYld Ext/Quasi Govt	0.73%	0.70%	0.71%	0.66%	0.52%	0.34%	0.36%	0.47%	0.52%	0.49%	0.48%	0.2%	0.03%

For a fifth straight year, the global corporate market allocations shifted in favor of investment grade rated debt. But at 0.6%, 2019's increased allocation to investment grade was roughly half the average increase over the prior four years (1.1%). Prior to 2015, high yield had seen six straight years of increasing allocations that averaged 1.1% a year.

Chart 1: Rating distribution of global high grade and high yield corporate indices



After a one year stay above the 1.0 mark, the global Corporate 12-month upgrade/downgrade ratio fell back to 0.84 at the end of 2019. The downward bias began in June and continued through much of the second half.

Chart 2: Yearly high grade and high yield corporate rating migrations (USD in billions)

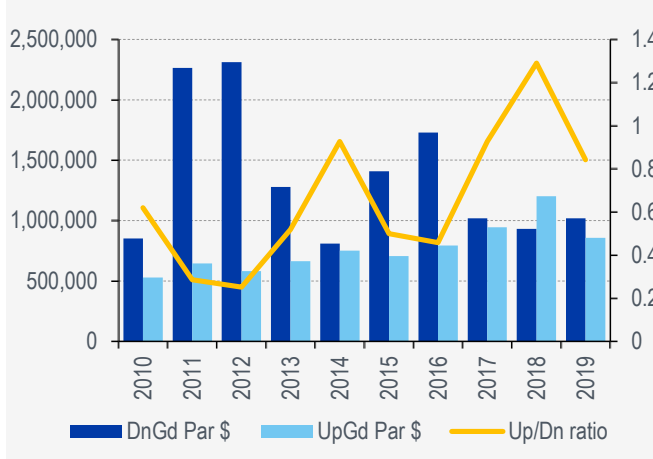


Chart 3: Monthly high grade and high yield corporate rating migrations (USD in billions)

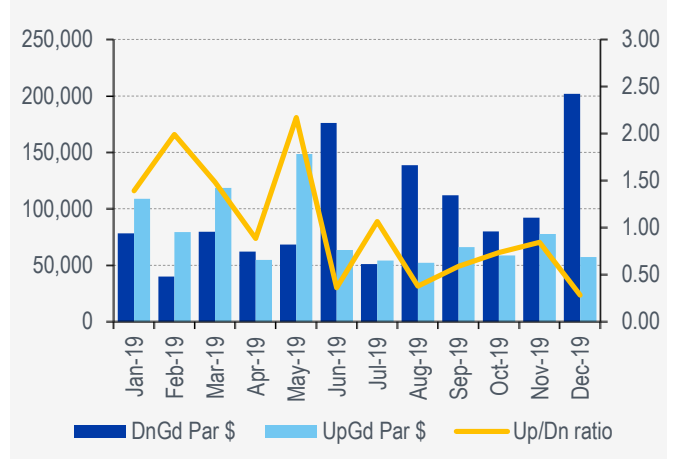


Table 7: Outstanding index-qualifying high grade and high yield corporate bonds by rating (USD terms in millions)

Global	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	162,443	283,293	503,360	245,250	1,194,346	83,940	98,633	16,049	198,623	1,392,969
1997	232,360	413,821	613,333	329,816	1,589,331	89,871	102,723	20,158	212,752	1,802,083
1998	214,583	530,775	759,760	425,689	1,930,807	88,035	129,425	37,429	254,889	2,185,696
1999	217,074	625,659	840,317	569,504	2,252,554	93,139	162,686	36,571	292,397	2,544,952
2000	258,163	652,791	1,134,825	530,684	2,576,461	106,275	205,824	54,598	366,697	2,943,158
2001	309,427	737,197	1,218,502	928,691	3,193,817	146,443	155,262	105,894	407,600	3,601,417
2002	376,703	606,266	1,296,189	1,132,065	3,411,223	223,948	215,357	114,263	553,567	3,964,790
2003	348,803	564,533	1,509,500	1,291,105	3,713,941	220,471	288,454	121,413	630,338	4,344,279
2004	338,281	758,848	1,451,808	1,094,571	3,643,508	258,073	287,250	112,100	657,423	4,300,931
2005	310,156	850,574	1,552,857	920,510	3,634,097	327,211	302,641	103,795	733,647	4,367,744
2006	327,879	996,157	1,624,402	1,040,752	3,989,191	294,218	351,054	123,025	768,297	4,757,488
2007	336,093	1,379,406	1,597,732	1,139,495	4,452,726	314,902	341,074	154,033	810,008	5,262,734
2008	313,825	1,223,969	2,092,380	1,298,361	4,928,536	306,528	261,476	255,653	823,658	5,752,194
2009	186,061	1,338,646	2,415,080	1,623,317	5,563,104	421,665	321,782	238,534	981,982	6,545,085
2010	203,037	1,384,145	2,536,004	1,824,120	5,947,305	521,375	453,429	191,000	1,165,804	7,113,109
2011	142,866	984,902	2,953,644	2,151,480	6,232,893	646,280	511,532	200,537	1,358,348	7,591,241
2012	48,624	894,788	3,020,199	2,709,185	6,672,797	734,708	612,270	233,237	1,580,216	8,253,012
2013	56,928	946,908	3,114,001	3,021,529	7,139,367	933,080	649,190	277,692	1,859,962	8,999,328
2014	58,567	1,001,678	3,331,152	3,205,809	7,597,206	1,014,612	722,209	302,097	2,038,918	9,636,124
2015	87,023	1,063,200	3,508,129	3,675,557	8,333,908	1,104,049	731,319	314,062	2,149,431	10,483,339
2016	103,413	1,099,898	3,634,259	4,084,260	8,921,830	1,095,719	694,676	285,326	2,075,721	10,997,551
2017	129,453	935,298	4,060,399	4,529,308	9,654,458	1,160,333	709,763	241,240	2,111,336	11,765,794
2018	121,727	1,055,985	3,945,044	5,019,476	10,142,231	1,069,703	740,187	211,097	2,020,987	12,163,219
2019	116,260	1,008,674	4,382,883	5,318,002	10,825,819	1,107,219	723,406	238,399	2,069,024	12,894,843
US Dollar	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	38,248	131,832	377,392	201,276	748,748	83,940	98,633	16,049	198,623	947,371
1997	71,529	192,702	449,951	274,221	988,402	88,818	100,376	19,828	209,022	1,197,424
1998	74,884	201,267	505,242	364,879	1,146,271	86,327	123,173	37,018	246,518	1,392,789
1999	83,215	204,633	555,314	369,343	1,212,504	89,748	149,619	34,824	274,191	1,486,696
2000	86,448	229,085	644,059	405,684	1,365,277	99,911	187,210	50,519	337,641	1,702,918
2001	108,802	260,736	667,019	669,085	1,705,642	136,406	140,820	95,388	372,614	2,078,256
2002	138,116	205,406	685,664	769,078	1,798,264	194,878	194,067	106,827	495,772	2,294,036
2003	164,033	186,207	775,222	857,288	1,982,750	192,463	256,884	112,544	561,892	2,544,642
2004	161,013	327,389	716,145	732,505	1,937,052	223,940	261,364	103,473	588,777	2,525,829
2005	150,075	361,583	765,777	638,776	1,916,210	276,996	271,243	94,731	642,969	2,559,180
2006	146,591	417,494	827,397	709,495	2,100,976	253,610	308,383	113,041	675,033	2,776,009
2007	142,169	525,933	895,188	802,156	2,365,446	263,964	299,550	145,798	709,312	3,074,758
2008	129,239	372,753	1,168,944	916,510	2,587,446	262,185	233,432	232,016	727,632	3,315,078
2009	53,361	505,463	1,259,918	1,112,724	2,931,466	337,093	275,745	212,237	825,075	3,756,540
2010	66,932	576,797	1,396,308	1,252,591	3,292,628	408,656	403,086	171,298	983,040	4,275,668
2011	59,532	456,395	1,660,008	1,466,975	3,642,911	508,321	452,360	179,711	1,140,392	4,783,303
2012	33,717	464,283	1,780,434	1,832,260	4,110,694	545,620	550,904	209,295	1,305,819	5,416,513
2013	40,110	519,987	1,925,852	2,074,726	4,560,674	705,996	563,155	251,456	1,520,608	6,081,282
2014	44,130	580,701	2,127,235	2,200,871	4,952,937	763,181	607,022	272,659	1,642,862	6,595,799
2015	75,560	629,371	2,297,915	2,538,342	5,541,188	836,592	604,497	287,493	1,728,581	7,269,769
2016	89,034	679,569	2,404,133	2,804,969	5,977,704	828,483	595,517	263,174	1,687,175	7,664,879
2017	112,707	576,847	2,711,624	3,062,939	6,464,116	882,381	618,299	224,912	1,725,591	8,189,707
2018	105,057	617,734	2,608,584	3,417,753	6,749,127	822,593	649,241	188,293	1,660,127	8,409,255
2019	97,807	568,801	2,838,143	3,540,760	7,045,511	849,894	628,701	211,190	1,689,786	8,735,297
Euro	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	37,901	48,171	24,716	5,925	116,714	0	0	0	0	116,714
1997	63,603	84,724	26,524	5,776	180,628	0	811	71	882	181,510
1998	87,785	112,887	58,348	6,479	265,500	0	2,312	339	2,651	268,151
1999	107,525	152,814	106,273	23,056	389,668	1,139	7,805	1,608	10,553	400,221
2000	136,875	159,570	182,444	42,666	521,555	2,962	13,693	3,692	20,347	541,902
2001	162,295	189,411	233,623	153,638	738,967	6,597	9,854	8,374	24,826	763,792
2002	190,755	171,053	261,262	224,299	847,369	23,523	17,239	5,409	46,171	893,540
2003	121,697	184,403	356,181	263,471	925,752	22,675	27,595	5,374	55,643	981,395
2004	101,469	203,633	354,177	239,505	898,784	27,637	21,474	7,276	56,387	955,171
2005	81,970	238,867	403,004	174,580	898,420	40,586	27,836	8,276	76,697	975,117
2006	91,118	295,236	405,802	207,536	999,692	33,080	39,373	8,769	81,221	1,080,914
2007	103,634	400,761	428,194	211,774	1,144,364	40,148	37,395	7,071	84,614	1,228,978
2008	110,532	403,420	595,308	239,604	1,348,863	35,086	25,548	18,214	78,848	1,427,711
2009	97,081	441,766	777,814	344,612	1,661,272	64,973	39,738	20,743	125,455	1,786,727
2010	98,629	430,020	760,223	385,068	1,673,940	93,350	44,370	15,193	152,913	1,826,853
2011	58,400	307,197	821,546	458,472	1,645,616	118,688	48,024	17,677	184,388	1,830,004

2012	7,016	224,302	759,879	613,184	1,604,381	161,340	48,866	21,744	231,950	1,836,331
2013	9,036	222,301	724,563	661,189	1,617,089	189,136	64,884	23,156	277,177	1,894,265
2014	6,342	224,462	748,575	712,321	1,691,700	206,915	92,879	25,180	324,974	2,016,674
2015	6,791	233,755	797,209	811,678	1,849,433	219,833	105,099	22,880	347,812	2,197,245
2016	10,608	237,112	833,674	949,649	2,031,043	225,054	78,329	18,450	321,833	2,352,876
2017	11,506	225,097	902,242	1,092,502	2,231,346	235,628	70,320	12,320	318,268	2,549,614
2018	9,485	261,965	945,039	1,203,686	2,420,175	215,270	72,533	19,351	307,154	2,727,329
2019	9,766	291,262	1,098,778	1,361,552	2,761,358	226,245	78,937	22,837	328,019	3,089,377

Pound Sterling	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	6,485	21,461	21,094	2,159	51,199	0	0	0	0	51,199
1997	8,942	28,180	24,373	5,202	66,697	0	268	0	268	66,965
1998	10,743	30,654	28,240	7,255	76,893	0	2,305	73	2,378	79,270
1999	13,326	36,241	35,912	10,819	96,298	775	3,374	139	4,288	100,586
2000	18,249	35,165	49,850	14,371	117,636	1,573	4,183	310	6,066	123,701
2001	20,060	46,962	51,520	29,222	147,764	2,156	3,414	1,727	7,297	155,061
2002	22,352	42,289	71,172	33,878	169,691	3,587	2,787	1,700	8,074	177,765
2003	25,286	46,748	85,372	44,340	201,746	2,908	3,609	2,955	9,472	211,218
2004	32,355	67,845	86,537	46,448	233,185	3,577	4,131	1,081	8,789	241,974
2005	29,837	79,377	100,481	45,687	255,381	5,994	3,159	788	9,940	265,321
2006	35,198	90,441	123,690	61,318	310,647	5,147	3,048	1,119	9,314	319,960
2007	35,545	113,279	131,748	61,150	341,722	7,664	3,897	1,164	12,725	354,446
2008	27,232	93,441	177,110	64,548	362,332	8,004	2,361	5,096	15,462	377,793
2009	13,323	74,071	190,014	92,060	369,469	17,614	6,184	5,091	28,889	398,358
2010	14,641	65,966	179,347	104,386	364,340	16,884	4,720	4,261	25,866	390,205
2011	10,402	54,236	167,516	140,730	372,884	14,260	8,549	2,902	25,711	398,595
2012	2,616	52,925	173,171	151,713	380,425	24,841	8,268	1,792	34,902	415,327
2013	2,616	52,842	159,525	164,557	379,540	33,639	16,221	2,168	52,027	431,567
2014	2,749	49,792	163,553	166,590	382,683	39,214	18,102	3,217	60,534	443,217
2015	2,749	56,727	145,379	181,297	386,153	42,252	18,246	3,323	63,821	449,974
2016	2,749	48,358	148,292	182,743	382,142	36,879	18,844	3,131	58,854	440,996
2017	4,272	41,148	152,968	211,694	410,082	36,764	19,263	3,796	59,823	469,905
2018	6,326	48,373	145,542	227,261	427,502	25,609	16,651	3,453	45,713	473,215
2019	7,849	47,376	170,491	237,472	463,189	24,848	15,059	4,134	44,040	507,229

Japanese Yen	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	74,172	64,189	63,628	34,687	236,676					
1997	81,488	87,772	96,313	42,135	307,707					
1998	34,816	160,164	138,990	42,926	376,897					
1999	2,761	206,311	101,565	160,776	471,413					
2000	6,203	204,623	205,818	59,148	475,791					
2001	7,261	218,134	206,272	58,884	490,551					
2002	10,333	169,880	215,283	81,978	477,473					
2003	18,001	125,770	221,208	100,187	465,167					
2004	20,325	124,735	217,907	53,614	416,581					
2005	19,749	129,346	198,681	37,722	385,498					
2006	23,318	132,388	184,143	35,059	374,908					
2007	21,036	250,817	73,785	32,372	378,010					
2008	15,978	260,253	69,523	43,560	389,314					
2009	5,711	217,019	96,706	28,296	347,732					
2010	4,783	212,007	94,121	28,645	339,556					
2011	2,945	68,547	188,253	23,665	283,410					
2012	0	66,657	179,266	24,788	270,710					
2013	0	66,233	160,204	18,978	245,416					
2014	0	55,736	149,308	14,812	219,855					
2015	0	47,440	132,979	17,411	197,830					
2016	0	40,743	117,444	12,398	170,584					
2017	0	37,772	106,851	13,921	158,544					
2018	0	30,767	103,568	14,415	148,750					
2019	0	23,428	106,000	13,746	143,173					

Canadian Dollar	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	5,040	13,969	15,774	1,203	35,986	0	0	0	0	35,986
1997	5,464	14,893	14,938	1,955	37,249	1,053	1,269	259	2,580	39,830
1998	5,124	20,867	26,687	3,622	56,300	1,708	1,634	0	3,343	59,643
1999	5,221	19,391	35,879	4,457	64,948	1,477	1,888	0	3,365	68,313
2000	4,527	17,188	46,275	7,771	75,761	1,828	738	77	2,643	78,404
2001	5,202	13,403	53,152	16,086	87,843	1,284	1,175	404	2,863	90,706
2002	6,848	10,072	54,661	20,824	92,405	1,959	1,264	327	3,550	95,955
2003	9,738	10,959	61,014	24,095	105,806	2,425	366	540	3,331	109,137
2004	10,911	20,298	64,294	20,816	116,318	2,919	281	270	3,470	119,788

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2005	11,545	23,158	73,132	20,766	128,602	3,636	404	0	4,040	132,642
2006	12,799	39,972	70,921	23,715	147,407	2,381	251	96	2,728	150,135
2007	14,926	65,748	61,414	27,931	170,019	3,126	231	0	3,357	173,377
2008	15,239	70,990	70,897	30,951	188,077	1,253	135	328	1,716	189,793
2009	7,265	72,469	80,720	41,362	201,815	1,985	116	463	2,563	204,378
2010	7,474	68,790	94,543	48,617	219,424	2,485	1,253	247	3,985	223,410
2011	7,440	69,014	96,988	56,872	230,314	5,011	2,599	247	7,857	238,171
2012	5,275	61,902	102,275	81,175	250,627	2,907	4,233	405	7,545	258,172
2013	5,166	63,480	116,819	92,658	278,122	4,308	4,930	912	10,150	288,272
2014	5,346	68,473	113,552	99,586	286,957	5,302	4,206	1,041	10,549	297,506
2015	1,923	73,239	103,987	114,587	293,736	5,372	3,477	366	9,216	302,952
2016	1,023	72,209	101,993	122,280	297,505	5,303	1,986	571	7,859	305,364
2017	969	33,952	152,374	131,797	319,092	5,560	1,882	212	7,654	326,745
2018	859	75,908	112,238	135,622	324,627	6,231	1,762	0	7,993	332,620
2019	839	58,656	140,290	141,149	340,935	6,232	709	237	7,179	348,113
Australian Dollar	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield	Total
1996	598	3,670	756	0	5,023					
1997	1,336	5,551	1,234	527	8,647					
1998	1,230	4,936	2,253	527	8,946					
1999	5,026	6,269	5,374	1,054	17,723					
2000	5,860	7,159	6,379	1,044	20,442					
2001	5,808	8,551	6,917	1,775	23,050					
2002	8,300	7,567	8,147	2,007	26,020					
2003	10,046	10,445	10,504	1,725	32,720					
2004	12,208	14,948	12,748	1,683	41,587					
2005	16,981	18,244	11,782	2,980	49,986					
2006	18,855	20,626	12,451	3,630	55,562					
2007	18,784	22,867	7,402	4,112	53,166					
2008	15,605	23,112	10,599	3,187	52,504					
2009	9,320	27,859	9,908	4,263	51,350					
2010	10,577	30,565	11,462	4,812	57,417					
2011	4,147	29,512	19,334	4,765	57,758					
2012	0	24,720	25,175	6,065	55,960					
2013	0	22,066	27,038	9,421	58,525					
2014	0	22,514	28,930	11,629	63,074					
2015	0	22,669	30,659	12,241	65,569					
2016	0	21,908	28,723	12,221	62,852					
2017	0	20,482	34,340	16,456	71,278					
2018	0	21,239	30,074	20,738	72,050					
2019	0	19,151	29,180	23,322	71,654					

Table 8: Percentage distribution of index-qualifying high grade and high yield corporate bonds by rating (USD terms in millions)

Global	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	11.7%	20.3%	36.1%	17.6%	85.7%	6.0%	7.1%	1.2%	14.3%
1997	12.9%	23.0%	34.0%	18.3%	88.2%	5.0%	5.7%	1.1%	11.8%
1998	9.8%	24.3%	34.8%	19.5%	88.3%	4.0%	5.9%	1.7%	11.7%
1999	8.5%	24.6%	33.0%	22.4%	88.5%	3.7%	6.4%	1.4%	11.5%
2000	8.8%	22.2%	38.6%	18.0%	87.5%	3.6%	7.0%	1.9%	12.5%
2001	8.6%	20.5%	33.8%	25.8%	88.7%	4.1%	4.3%	2.9%	11.3%
2002	9.5%	15.3%	32.7%	28.6%	86.0%	5.6%	5.4%	2.9%	14.0%
2003	8.0%	13.0%	34.7%	29.7%	85.5%	5.1%	6.6%	2.8%	14.5%
2004	7.9%	17.6%	33.8%	25.4%	84.7%	6.0%	6.7%	2.6%	15.3%
2005	7.1%	19.5%	35.6%	21.1%	83.2%	7.5%	6.9%	2.4%	16.8%
2006	6.9%	20.9%	34.1%	21.9%	83.9%	6.2%	7.4%	2.6%	16.1%
2007	6.4%	26.2%	30.4%	21.7%	84.6%	6.0%	6.5%	2.9%	15.4%
2008	5.5%	21.3%	36.4%	22.6%	85.7%	5.3%	4.5%	4.4%	14.3%
2009	2.8%	20.5%	36.9%	24.8%	85.0%	6.4%	4.9%	3.6%	15.0%
2010	2.9%	19.5%	35.7%	25.6%	83.6%	7.3%	6.4%	2.7%	16.4%
2011	1.9%	13.0%	38.9%	28.3%	82.1%	8.5%	6.7%	2.6%	17.9%
2012	0.6%	10.8%	36.6%	32.8%	80.9%	8.9%	7.4%	2.8%	19.1%
2013	0.6%	10.5%	34.6%	33.6%	79.3%	10.4%	7.2%	3.1%	20.7%
2014	0.6%	10.4%	34.6%	33.3%	78.8%	10.5%	7.5%	3.1%	21.2%
2015	0.8%	10.1%	33.5%	35.1%	79.5%	10.5%	7.0%	3.0%	20.5%
2016	0.9%	10.0%	33.0%	37.1%	81.1%	10.0%	6.3%	2.6%	18.9%
2017	1.1%	7.9%	34.5%	38.5%	82.1%	9.9%	6.0%	2.1%	17.9%
2018	1.0%	8.7%	32.4%	41.3%	83.4%	8.8%	6.1%	1.7%	16.6%
2019	0.9%	7.8%	34.0%	41.2%	84.0%	8.6%	5.6%	1.8%	16.0%
US Dollar	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	4.0%	13.9%	39.8%	21.2%	79.0%	8.9%	10.4%	1.7%	21.0%
1997	6.0%	16.1%	37.6%	22.9%	82.5%	7.4%	8.4%	1.7%	17.5%
1998	5.4%	14.5%	36.3%	26.2%	82.3%	6.2%	8.8%	2.7%	17.7%
1999	5.6%	13.8%	37.4%	24.8%	81.6%	6.0%	10.1%	2.3%	18.4%
2000	5.1%	13.5%	37.8%	23.8%	80.2%	5.9%	11.0%	3.0%	19.8%
2001	5.2%	12.5%	32.1%	32.2%	82.1%	6.6%	6.8%	4.6%	17.9%
2002	6.0%	9.0%	29.9%	33.5%	78.4%	8.5%	8.5%	4.7%	21.6%
2003	6.4%	7.3%	30.5%	33.7%	77.9%	7.6%	10.1%	4.4%	22.1%
2004	6.4%	13.0%	28.4%	29.0%	76.7%	8.9%	10.3%	4.1%	23.3%
2005	5.9%	14.1%	29.9%	25.0%	74.9%	10.8%	10.6%	3.7%	25.1%
2006	5.3%	15.0%	29.8%	25.6%	75.7%	9.1%	11.1%	4.1%	24.3%
2007	4.6%	17.1%	29.1%	26.1%	76.9%	8.6%	9.7%	4.7%	23.1%
2008	3.9%	11.2%	35.3%	27.6%	78.1%	7.9%	7.0%	7.0%	21.9%
2009	1.4%	13.5%	33.5%	29.6%	78.0%	9.0%	7.3%	5.6%	22.0%
2010	1.6%	13.5%	32.7%	29.3%	77.0%	9.6%	9.4%	4.0%	23.0%
2011	1.2%	9.5%	34.7%	30.7%	76.2%	10.6%	9.5%	3.8%	23.8%
2012	0.6%	8.6%	32.9%	33.8%	75.9%	10.1%	10.2%	3.9%	24.1%
2013	0.7%	8.6%	31.7%	34.1%	75.0%	11.6%	9.3%	4.1%	25.0%
2014	0.7%	8.8%	32.3%	33.4%	75.1%	11.6%	9.2%	4.1%	24.9%
2015	1.0%	8.7%	31.6%	34.9%	76.2%	11.5%	8.3%	4.0%	23.8%
2016	1.2%	8.9%	31.4%	36.6%	78.0%	10.8%	7.8%	3.4%	22.0%
2017	1.4%	7.0%	33.1%	37.4%	78.9%	10.8%	7.5%	2.7%	21.1%
2018	1.2%	7.3%	31.0%	40.6%	80.3%	9.8%	7.7%	2.2%	19.7%
2019	1.1%	6.5%	32.5%	40.5%	80.7%	9.7%	7.2%	2.4%	19.3%
Euro	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	32.5%	41.3%	21.2%	5.1%	100.0%	0.0%	0.0%	0.0%	0.0%
1997	35.0%	46.7%	14.6%	3.2%	99.5%	0.0%	0.4%	0.0%	0.5%
1998	32.7%	42.1%	21.8%	2.4%	99.0%	0.0%	0.9%	0.1%	1.0%
1999	26.9%	38.2%	26.6%	5.8%	97.4%	0.3%	2.0%	0.4%	2.6%
2000	25.3%	29.4%	33.7%	7.9%	96.2%	0.5%	2.5%	0.7%	3.8%
2001	21.2%	24.8%	30.6%	20.1%	96.7%	0.9%	1.3%	1.1%	3.3%
2002	21.3%	19.1%	29.2%	25.1%	94.8%	2.6%	1.9%	0.6%	5.2%
2003	12.4%	18.8%	36.3%	26.8%	94.3%	2.3%	2.8%	0.5%	5.7%
2004	10.6%	21.3%	37.1%	25.1%	94.1%	2.9%	2.2%	0.8%	5.9%
2005	8.4%	24.5%	41.3%	17.9%	92.1%	4.2%	2.9%	0.8%	7.9%
2006	8.4%	27.3%	37.5%	19.2%	92.5%	3.1%	3.6%	0.8%	7.5%
2007	8.4%	32.6%	34.8%	17.2%	93.1%	3.3%	3.0%	0.6%	6.9%
2008	7.7%	28.3%	41.7%	16.8%	94.5%	2.5%	1.8%	1.3%	5.5%
2009	5.4%	24.7%	43.5%	19.3%	93.0%	3.6%	2.2%	1.2%	7.0%
2010	5.4%	23.5%	41.6%	21.1%	91.6%	5.1%	2.4%	0.8%	8.4%
2011	3.2%	16.8%	44.9%	25.1%	89.9%	6.5%	2.6%	1.0%	10.1%

2012	0.4%	12.2%	41.4%	33.4%	87.4%	8.8%	2.7%	1.2%	12.6%
2013	0.5%	11.7%	38.3%	34.9%	85.4%	10.0%	3.4%	1.2%	14.6%
2014	0.3%	11.1%	37.1%	35.3%	83.9%	10.3%	4.6%	1.2%	16.1%
2015	0.3%	10.6%	36.3%	36.9%	84.2%	10.0%	4.8%	1.0%	15.8%
2016	0.5%	10.1%	35.4%	40.4%	86.3%	9.6%	3.3%	0.8%	13.7%
2017	0.5%	8.8%	35.4%	42.8%	87.5%	9.2%	2.8%	0.5%	12.5%
2018	0.3%	9.6%	34.7%	44.1%	88.7%	7.9%	2.7%	0.7%	11.3%
2019	0.3%	9.4%	35.6%	44.1%	89.4%	7.3%	2.6%	0.7%	10.6%
Pound Sterling	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	12.7%	41.9%	41.2%	4.2%	100.0%	0.0%	0.0%	0.0%	0.0%
1997	13.4%	42.1%	36.4%	7.8%	99.6%	0.0%	0.4%	0.0%	0.4%
1998	13.6%	38.7%	35.6%	9.2%	97.0%	0.0%	2.9%	0.1%	3.0%
1999	13.2%	36.0%	35.7%	10.8%	95.7%	0.8%	3.4%	0.1%	4.3%
2000	14.8%	28.4%	40.3%	11.6%	95.1%	1.3%	3.4%	0.3%	4.9%
2001	12.9%	30.3%	33.2%	18.8%	95.3%	1.4%	2.2%	1.1%	4.7%
2002	12.6%	23.8%	40.0%	19.1%	95.5%	2.0%	1.6%	1.0%	4.5%
2003	12.0%	22.1%	40.4%	21.0%	95.5%	1.4%	1.7%	1.4%	4.5%
2004	13.4%	28.0%	35.8%	19.2%	96.4%	1.5%	1.7%	0.4%	3.6%
2005	11.2%	29.9%	37.9%	17.2%	96.3%	2.3%	1.2%	0.3%	3.7%
2006	11.0%	28.3%	38.7%	19.2%	97.1%	1.6%	1.0%	0.3%	2.9%
2007	10.0%	32.0%	37.2%	17.3%	96.4%	2.2%	1.1%	0.3%	3.6%
2008	7.2%	24.7%	46.9%	17.1%	95.9%	2.1%	0.6%	1.3%	4.1%
2009	3.3%	18.6%	47.7%	23.1%	92.7%	4.4%	1.6%	1.3%	7.3%
2010	3.8%	16.9%	46.0%	26.8%	93.4%	4.3%	1.2%	1.1%	6.6%
2011	2.6%	13.6%	42.0%	35.3%	93.5%	3.6%	2.1%	0.7%	6.5%
2012	0.6%	12.7%	41.7%	36.5%	91.6%	6.0%	2.0%	0.4%	8.4%
2013	0.6%	12.2%	37.0%	38.1%	87.9%	7.8%	3.8%	0.5%	12.1%
2014	0.6%	11.2%	36.9%	37.6%	86.3%	8.8%	4.1%	0.7%	13.7%
2015	0.6%	12.6%	32.3%	40.3%	85.8%	9.4%	4.1%	0.7%	14.2%
2016	0.6%	11.0%	33.6%	41.4%	86.7%	8.4%	4.3%	0.7%	13.3%
2017	0.9%	8.8%	32.6%	45.1%	87.3%	7.8%	4.1%	0.8%	12.7%
2018	1.3%	10.2%	30.8%	48.0%	90.3%	5.4%	3.5%	0.7%	9.7%
2019	1.5%	9.3%	33.6%	46.8%	91.3%	4.9%	3.0%	0.8%	8.7%
Japanese Yen	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	31.3%	27.1%	26.9%	14.7%					
1997	26.5%	28.5%	31.3%	13.7%					
1998	9.2%	42.5%	36.9%	11.4%					
1999	0.6%	43.8%	21.5%	34.1%					
2000	1.3%	43.0%	43.3%	12.4%					
2001	1.5%	44.5%	42.0%	12.0%					
2002	2.2%	35.6%	45.1%	17.2%					
2003	3.9%	27.0%	47.6%	21.5%					
2004	4.9%	29.9%	52.3%	12.9%					
2005	5.1%	33.6%	51.5%	9.8%					
2006	6.2%	35.3%	49.1%	9.4%					
2007	5.6%	66.4%	19.5%	8.6%					
2008	4.1%	66.8%	17.9%	11.2%					
2009	1.6%	62.4%	27.8%	8.1%					
2010	1.4%	62.4%	27.7%	8.4%					
2011	1.0%	24.2%	66.4%	8.4%					
2012	0.0%	24.6%	66.2%	9.2%					
2013	0.0%	27.0%	65.3%	7.7%					
2014	0.0%	25.4%	67.9%	6.7%					
2015	0.0%	24.0%	67.2%	8.8%					
2016	0.0%	23.9%	68.8%	7.3%					
2017	0.0%	23.8%	67.4%	8.8%					
2018	0.0%	20.7%	69.6%	9.7%					
2019	0.0%	16.4%	74.0%	9.6%					
Canadian Dollar	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	14.0%	38.8%	43.8%	3.3%	100.0%	0.0%	0.0%	0.0%	0.0%
1997	13.7%	37.4%	37.5%	4.9%	93.5%	2.6%	3.2%	0.7%	6.5%
1998	8.6%	35.0%	44.7%	6.1%	94.4%	2.9%	2.7%	0.0%	5.6%
1999	7.6%	28.4%	52.5%	6.5%	95.1%	2.2%	2.8%	0.0%	4.9%
2000	5.8%	21.9%	59.0%	9.9%	96.6%	2.3%	0.9%	0.1%	3.4%
2001	5.7%	14.8%	58.6%	17.7%	96.8%	1.4%	1.3%	0.4%	3.2%
2002	7.1%	10.5%	57.0%	21.7%	96.3%	2.0%	1.3%	0.3%	3.7%
2003	8.9%	10.0%	55.9%	22.1%	96.9%	2.2%	0.3%	0.5%	3.1%
2004	9.1%	16.9%	53.7%	17.4%	97.1%	2.4%	0.2%	0.2%	2.9%

2005	8.7%	17.5%	55.1%	15.7%	97.0%	2.7%	0.3%	0.0%	3.0%
2006	8.5%	26.6%	47.2%	15.8%	98.2%	1.6%	0.2%	0.1%	1.8%
2007	8.6%	37.9%	35.4%	16.1%	98.1%	1.8%	0.1%	0.0%	1.9%
2008	8.0%	37.4%	37.4%	16.3%	99.1%	0.7%	0.1%	0.2%	0.9%
2009	3.6%	35.5%	39.5%	20.2%	98.7%	1.0%	0.1%	0.2%	1.3%
2010	3.3%	30.8%	42.3%	21.8%	98.2%	1.1%	0.6%	0.1%	1.8%
2011	3.1%	29.0%	40.7%	23.9%	96.7%	2.1%	1.1%	0.1%	3.3%
2012	2.0%	24.0%	39.6%	31.4%	97.1%	1.1%	1.6%	0.2%	2.9%
2013	1.8%	22.0%	40.5%	32.1%	96.5%	1.5%	1.7%	0.3%	3.5%
2014	1.8%	23.0%	38.2%	33.5%	96.5%	1.8%	1.4%	0.3%	3.5%
2015	0.6%	24.2%	34.3%	37.8%	97.0%	1.8%	1.1%	0.1%	3.0%
2016	0.3%	23.6%	33.4%	40.0%	97.4%	1.7%	0.7%	0.2%	2.6%
2017	0.3%	10.4%	46.6%	40.3%	97.7%	1.7%	0.6%	0.1%	2.3%
2018	0.3%	22.8%	33.7%	40.8%	97.6%	1.9%	0.5%	0.0%	2.4%
2019	0.2%	16.8%	40.3%	40.5%	97.9%	1.8%	0.2%	0.1%	2.1%
Australian Dollar	AAA	AA	A	BBB	InvGrade	BB	B	CCC-C	High Yield
1996	11.9%	73.1%	15.0%	0.0%					
1997	15.4%	64.2%	14.3%	6.1%					
1998	13.8%	55.2%	25.2%	5.9%					
1999	28.4%	35.4%	30.3%	5.9%					
2000	28.7%	35.0%	31.2%	5.1%					
2001	25.2%	37.1%	30.0%	7.7%					
2002	31.9%	29.1%	31.3%	7.7%					
2003	30.7%	31.9%	32.1%	5.3%					
2004	29.4%	35.9%	30.7%	4.0%					
2005	34.0%	36.5%	23.6%	6.0%					
2006	33.9%	37.1%	22.4%	6.5%					
2007	35.3%	43.0%	13.9%	7.7%					
2008	29.7%	44.0%	20.2%	6.1%					
2009	18.2%	54.3%	19.3%	8.3%					
2010	18.4%	53.2%	20.0%	8.4%					
2011	7.2%	51.1%	33.5%	8.3%					
2012	0.0%	44.2%	45.0%	10.8%					
2013	0.0%	37.7%	46.2%	16.1%					
2014	0.0%	35.7%	45.9%	18.4%					
2015	0.0%	34.6%	46.8%	18.7%					
2016	0.0%	34.9%	45.7%	19.4%					
2017	0.0%	28.7%	48.2%	23.1%					
2018	0.0%	29.5%	41.7%	28.8%					
2019	0.0%	26.7%	40.7%	32.5%					

Methodology

The data presented in the preceding analyses has been culled from the ICE family of Bond Indices – a broad-based universe currently spanning well over 100,000 fixed income securities denominated in 43 currencies. Together, they cover the global high grade, high yield and emerging markets. In those cases where index rule changes significantly affect index constituencies we have retroactively applied the new rules, when possible, so as to allow for meaningful historical comparisons.

Index constituencies are, by definition, a filtered universe and as such do not provide an all-encompassing representation of the total outstanding debt markets. For example, the indices used in this analysis do not include any floating rate or variable coupon securities, nor do they include any non-rated bonds. We have also chosen to exclude U.S. tax-exempt municipal securities from this analysis. In addition, each index has minimum size filters that eliminate smaller, less liquid issues. Nonetheless, the indices capture a significant portion of the total fixed income universe and therefore provide a useful basis for analyzing growth trends in the fixed income markets.

Notes:

1. All current and prior year outstanding face values presented in this report have been converted into US dollars at December 31, 2019 exchange rates.
2. Investment grade rated foreign currency denominated sovereign debt is classified in the “High Grade External Sovereign/Quasi Government” sector
3. Below investment grade rated foreign currency denominated sovereign debt is classified in the “High Yield External Sovereign/Quasi Government” sector.

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