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# Asian USD credit primer

## More bang for your buck?

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# Asian USD credit primer

## More bang for your buck?

**A guide to this unique and growing market**

## Introduction

Following the recent Asian economic rebound from COVID-19 lows, the global fixed income investment community has shown increased interest in Asian (ex-Japan) USD corporate credit. Supportive spread differentials and other risk-return attributes may make this hard currency asset class an attractive potential addition to fixed income and multi-asset portfolios.

Dollar bonds have become a major source of funding for corporate issuers across Asia ex-Japan. This article profiles the *iBoxx USD Asia ex-Japan Corporates* index to explore the Asian (ex-Japan) US dollar credit market's:

- Historical development
- Composition across geographies, maturity, sector, and rating
- Yields, spreads, and durations
- Historical returns, volatility, and other performance metrics
- Potential diversification benefits for global investors

Throughout, comparisons are made versus the global USD and EUR corporate credit markets to provide context for both global and regional investors.

Key observations indicate that the market can offer:

- Generally higher comparative yields and spreads
- Shorter relative duration
- Some portfolio diversification
- Significant exposure to China and emerging markets (EM) risk

We also glance at the wider iBoxx/iTraxx credit ecosystem in Asia that includes a nascent exchange traded fund (ETF) market and a developing derivatives landscape.

**All data presented is as of 31 August 2021.**

# Market development

## From banks to bonds

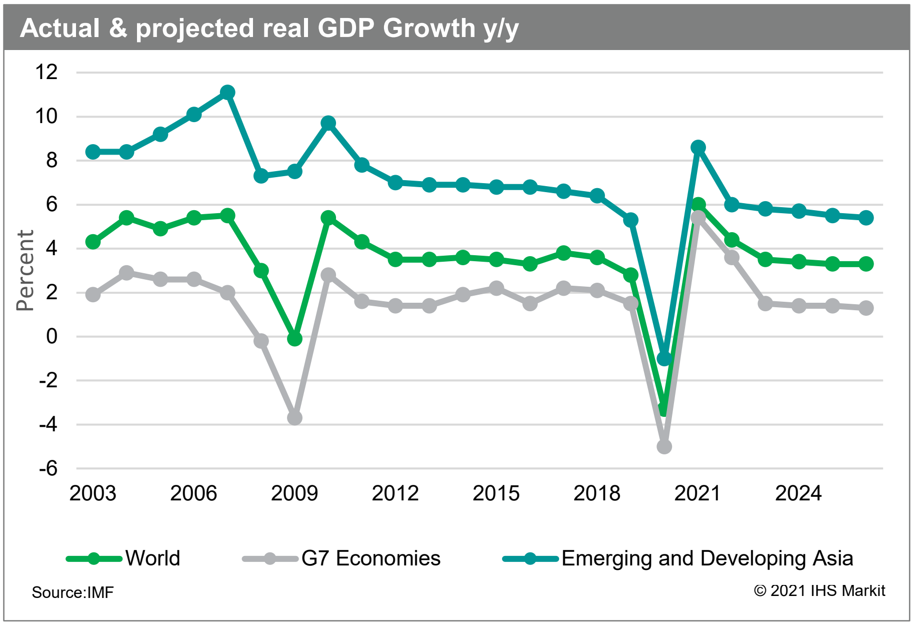
Until the late 1990s, Asian corporates had mostly relied on bank finance to fund business activities. This loan-based model undoubtedly helped fuel the 'Asian Miracle' that was driven by the 'Tiger' economies of South Korea, Taiwan, Hong Kong, and Singapore. However, by 1997, the Asian Financial Crisis (AFC) had exposed systemic risks in this concentrated, often short-term, form of financing.

A need for stronger regional bond markets was recognized in the aftermath of the AFC. Policy makers concluded that robust primary and secondary markets would mean less dependency on banking intermediaries and thus allow for the spreading of risk among a larger pool of investor-lenders.

In the early 2000s, two major schemes were established to promote regional bond market growth. These were the Asian Bond Market Initiative (ABMI) announced in December 2002 and the Asian Bond Fund (ABF) launched in 2003[1]. In addition, strong regional GDP growth, more explicit central bank inflation targeting, and a strong carry trade bid for EM risk helped channel local and external savings into regional bonds (onshore and offshore) over subsequent years. All this elevated bond markets in general.

However, the additional major catalysts behind the breakaway growth of the Asian USD[2] corporate credit market were lower USD funding costs after the global financial crisis (GFC), and the rapid economic liberalisation and ascent of China and its markets.

Chart 1




1. The ABMI was co-ordinated across the ASEAN+3 group of economies (ASEAN plus China, Japan, and Korea) and was instrumental in setting up the infrastructure required to foster efficient local currency bond markets. Another key aim of ABMI was to mitigate the region's vulnerability to capital outflows during times of crisis. The ABF was set up and promoted by the Executives' Meeting of the East Asia Pacific Central Banks (EMEAP) and in its first incarnation, "ABF1", sought to invest in USD denominated bonds issued by Asian sovereign and quasi-sovereigns. A second initiative, "ABF2", was launched in 2004 and references local currency bonds only: it comprises a Pan-Asian Index Fund (PAIF) as well as single market funds, all benchmarked against the iBoxx ABF indices.

2. From here onward 'Asian USD' refers to 'Asian ex-Japan USD'.

## USD funding costs attractive post GFC

Chart 2

Five-year US Treasury constant maturity rate


Source:FRED

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The Federal Reserve's (FED's) strong response to the GFC was the first catalyst to propel the Asian USD credit market. The FED's policy response included the slashing of short-term USD interest rates, domestic asset purchase programmes (i.e. quantitative easing) and increased 'forward guidance' that reduced the USD yield curve term premium. These all combined to depress USD yields for many years since the GFC.[3]

Asian corporate issuers could now borrow cheaply in USD and then either swap borrowing to their home currencies (thus running a currency mismatch between assets and liabilities) or leave the USD borrowing as is (say, to hedge foreign asset currency exposure). The enticing funding cost reduction and the potential to diversify their investor base, substantially increased the supply of USD bonds from corporates in the region.

## China's ascent and bond market share

Much economic reform has taken place in China over the last few decades. Liberalisation efforts, such as greater privatisation,[4] have enabled remarkable economic progress. In particular, considerable advances were made in the 1990s and 2000s – as exemplified by China's double-digit GDP annual growth rates often observed over that period. However, China's economic success was initially mostly powered by bank finance[5]—echoing the tale of other Asian countries, pre-AFC.

By 2010, its local currency corporate bond notional first surpassed USD500 billion.[6] That year, China also fully embraced USD and other hard currency debt to fuel its continued capacity for growth. The hard currency debt not only provided access to cheaper borrowing but also aided the funding of overseas acquisitions as Chinese companies grew in size and reach. By mid-2012 China had quickly emerged as the largest supplier of USD corporate debt in Asia ex-Japan.

3. USD yields have risen on multiple occasions – for example, during the Taper Tantrums of 2013, when the Fed first (post GFC) raised rates at the end of 2015, again when the Trump administration was elected and most recently on inflation concerns post the COVID-19 downturn.

4. A large topic beyond the scope of this article but some industries remained, and still remain, heavily state dependent – see SASAC for more.

5. Between 1990 and 2010, domestic credit to the private sector by banks as a % of China GDP grew from 84% to 127% according to IMF data.

6. The current size of the local currency corporate bond market in China is around USD6 trillion according to Asian Development Bank data. Please see Asia Bonds Online for more information.

## Tracking market growth with the iBoxx USD Asia ex-Japan index[7]

Looking at the historical diversity and growth in size of the iBoxx USD Asia ex-Japan Corporates overall index that contains both investment grade (IG) and high yield (HY) bonds:

- **Chart 3** plots the growth in bond market amount outstanding[8] which first exceeded USD1 trillion in October 2020 and now references more than 680 distinct issuers.
- **Chart 4** displays the 15-year (mostly upward) trajectory of annual new bond issuance in the Asian USD corporate credit market that now includes almost 1,900 bonds.
- **Chart 5** presents the market share of each major issuing region and exhibits the rapid rise of China's portion. With only a 10% market share in 2010, China now accounts for approximately 62% of it.

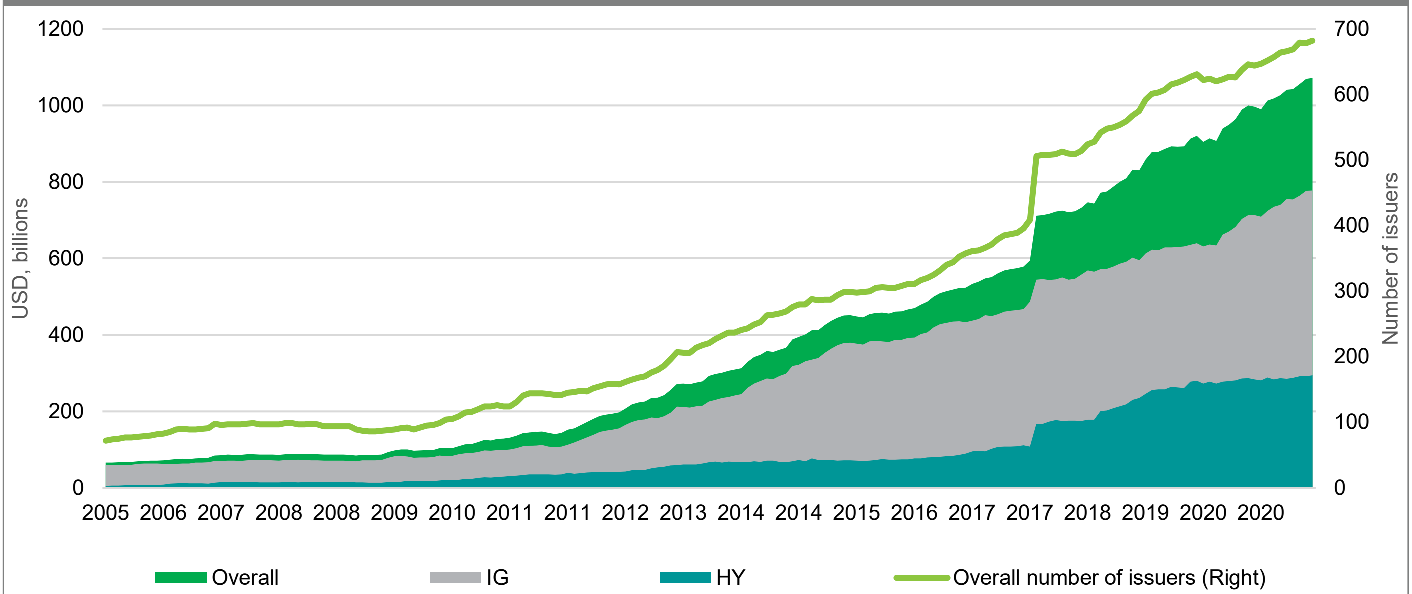
The notional of the overall corporates index currently stands at USD1.072 trillion, of which 660 billion is issued by mainland Chinese issuers. Close to 72% of the index is investment grade.

### The iBoxx USD Asia ex-Japan index

Launched in December 2014 and with history going back to December 2005, this flagship index reflects the performance of USD denominated bonds issued in the Asia ex-Japan region. The overall index is split into three major indices covering sovereign, sub-sovereign and corporate debt. In addition, breakdowns by market, rating and maturity are also available. The overall index contains both IG and HY bonds.

Chart 3

**Amount outstanding**




Source: IHS Markit

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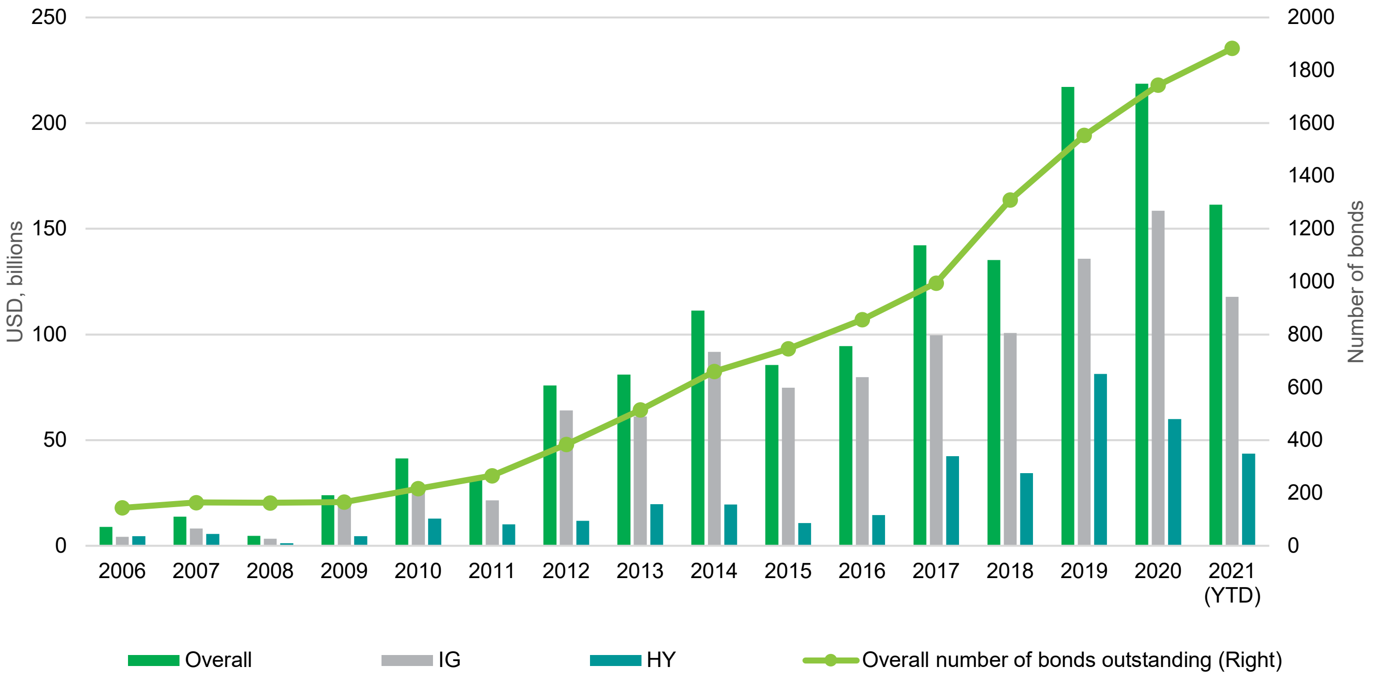
7. Index eligible markets are: Bangladesh, Cambodia, mainland China, Hong Kong, India, Indonesia, Macao, Malaysia, the Maldives, the Marshall Islands, Mongolia, Pakistan, Papua New Guinea, the Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, and Vietnam.

8. The apparent spike in annual notional in 2018 must be discounted somewhat as the index derived data point also reflects changes in index rules such as the inclusion of unrated bonds from January 2018. Unrated bonds are assigned an iBoxx implied rating based on their spreads. More information can be found in the iBoxx USD Asia ex-Japan index guide and in the iBoxx Implied Credit Quality Methodology available here.

Chart 4

New issuance & number of bonds outstanding




Source: IHS Markit

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For comparison:

- The size of United States based corporate bonds in the *iBoxx $ Corporates*[9] index is around 6.5 times larger and stands at USD4.9 trillion.
- The estimated total size of the Asian local currency corporate bond market is around 8.5 trillion USD according to the latest data from the Asian Development Bank and ICMA.[10]

Despite the economic impact of COVID-19, 2020 was a bumper year for new issuance, as was 2019 following a slight dip in 2018. Approximately 50–60% of recent annual new issuance has come from China. Also worth noting is the lull in issuance in 2015 and 2016 followed by a solid rebound in 2017, again driven by China. During the let-up, the FED was raising US interest rates and the US dollar was strengthening while the yuan was devalued. The ensuing rebound in offshore bond activity in 2017[11] was boosted by the tightening of local currency financing conditions and by CNY regaining lost ground against USD.

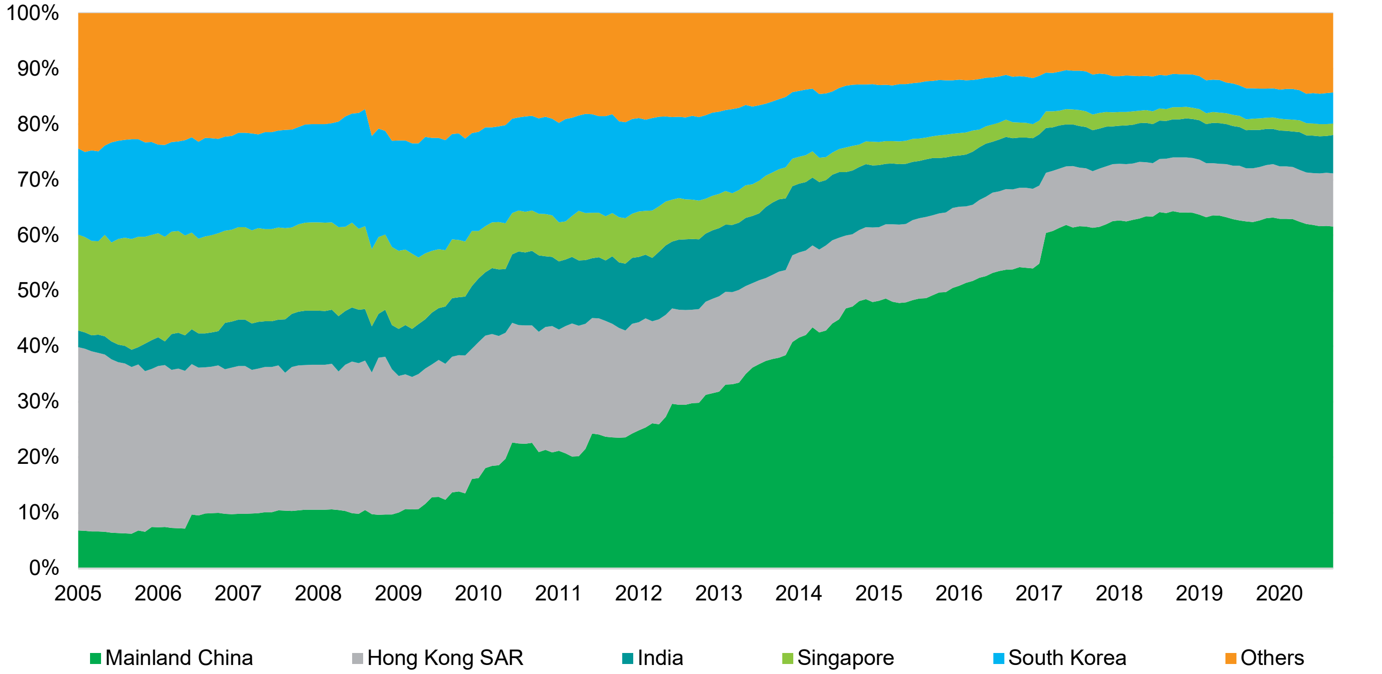
9. This index comprises USD denominated corporate investment grade bonds from issuers globally.

10. Please see Asia Bonds Online and ICMA for more information.

11. Incidentally, two other notable events took place in China in 2017. In May, the second Belt and Road Forum was held to discuss China's large-scale infrastructure, energy and cultural exchange project involving numerous countries across the globe. Then in July, the Bond Connect trading channel (focused on CNY bonds) was launched.

Chart 5

Share of index amount outstanding by market




Source:IHS Markit

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## What might drive the demand side?

Given their familiarity with regional issuer names,[12] many Asian investors have flocked to the Asian USD credit market. A growing number now regard it as the core market for corporate bonds in the region. Increasingly, global investors are also seeking these bonds given the allure of potentially higher yield (via spread carry) with low duration risk and without the requirement to manage complicated foreign exchange risks.

Later, we examine the empirical differences but conceptually, why might yields (or spreads) for Asian USD corporate bonds be higher than those of USD corporate bonds issued in the United States or elsewhere?

Explanatory factors often cited by market observers include:

1. Asian USD credit may embed a liquidity risk premium that demands a higher yield. After all, the Asia market is smaller and less mature than other developed markets.

2. Asian USD corporate bonds may price in an EM credit risk premium that inherently demands a higher spread buffer versus developed markets.

3. Asian corporates may run a currency mismatch when issuing USD bond liabilities against local currency revenue streams. This may add to the perceived riskiness of the issuer and hence widen their bond spreads.

Both global and local investors may also look favourably on the other risk-reward characteristics of the Asian USD credit market. Namely, robust historical risk-adjusted returns and less than perfect correlation versus other asset classes (see the 'Historical performance' section).

12. The top 10 issuers in the IG and HY indices are presented in the Appendix—in Tables 13 and 14, respectively.

**Why issue bonds in a foreign currency?**

In general, corporate issuers may consider doing so for a number of reasons including:

- To access cheaper funding given prevailing interest rate differentials.
- To hedge foreign asset currency exposure or to fund new foreign assets or projects.
- Local financing conditions may be difficult or the local market yield curve may not extend far enough.
- To diversify their investor base and raise their profile in international markets.

# Current market composition

## Investment grade corporates[13]

### Market exposure

From a market weight and spread exposure perspective and as seen in Table 1:

- The Asian USD IG credit index currently provides exposure to 11 markets across Asia, of which eight are classified as emerging.
- Mainland China exposure dominates by market value and by number of bonds in the index. Given its weight and average spread[14] of 150 basis points (bps), mainland China is by far the largest contributor to current index spread, accounting for almost 60% of it.
- Hong Kong, South Korea, Indonesia, and India are the next largest markets in the index by market value and each contribute significantly to index spread.
- Market average spreads range from around 75 (Taiwan) to over 200 bps (Indonesia). The median market average spread is 150 bps which is also close to the IG index average spread.

Table 1

**IG market exposure and contribution to index spread**
**iBoxx USD Asia ex-Japan Corporates IG 1+ index**

| Market | Weight | No. of bonds | Average spread | Contribution to index spread | IHS Markit GEDC^ |
|---|---|---|---|---|---|
| Mainland China | 57.66% | 642 | 150 | 59.33% | EM |
| Hong Kong SAR | 11.27% | 132 | 131 | 10.11% | DM |
| South Korea | 7.21% | 110 | 83 | 4.11% | EM |
| Indonesia | 6.19% | 50 | 211 | 8.93% | EM |
| India | 5.25% | 61 | 167 | 6.00% | EM |
| Malaysia | 3.32% | 20 | 127 | 2.89% | EM |
| Philippines | 2.24% | 36 | 174 | 2.67% | EM |
| Thailand | 2.23% | 30 | 172 | 2.63% | EM |
| Singapore | 2.12% | 23 | 94 | 1.36% | DM |
| Taiwan | 1.36% | 12 | 76 | 0.71% | EM |
| Macao SAR | 1.15% | 6 | 163 | 1.28% | DM |

^IHS Markit Global Economic Development Classification: DM means developed market and EM means emerging market

Source: IHS Markit



13. "Asian USD IG credit", based on the *iBoxx USD Asia ex-Japan Corporates IG 1+* index. This 1+ index does not include bonds with an expected remaining life of less than one year. This index is used because it allows for more direct comparison against flagship investment grade iBoxx indices in other markets.

14. Average spread is the 'duration times market value' weighted average iBoxx Spread to Benchmark Curve.

### Maturity and credit quality breakdown

From a maturity and credit rating viewpoint and as seen in Tables 2 and 3:

- Over 60% of the IG index market value currently sits in the one-to-five-year maturity bucket. In comparison, that bucket account for around 37% of the iBoxx $ Corporates IG index tracking global USD credit.
- Index exposure is concentrated in the BBB and A sectors (covering 97% of index market value weight).
- The one-to-five-year BBB segment contributes most to overall index spread.

Table 2

**IG MV% by rating & maturity**
**iBoxx USD Asia ex-Japan Corporates IG 1+ index**

| Rating | 1 to 5 yr. | 5 to 10 yr. | 10+ yr. |
|---|---|---|---|
| AAA | 0.11% | | |
| AA | 1.89% | 0.85% | 0.22% |
| A | 24.15% | 11.82% | 7.48% |
| BBB | 35.33% | 13.09% | 5.05% |

Source: IHS Markit © 2021 IHS Markit

Table 3

**IG average spread within each cell**
**iBoxx USD Asia ex-Japan Corporates IG 1+ index**

| Rating | 1 to 5 yr. | 5 to 10 yr. | 10+ yr. |
|---|---|---|---|
| AAA | 58 | | |
| AA | 47 | 69 | 92 |
| A | 94 | 105 | 133 |
| BBB | 179 | 186 | 216 |

Source: IHS Markit © 2021 IHS Markit

### Sector profile

Assessing sector exposures of the IG index according to Table 4, we see that:

- Financial Services and Core Financials are the largest sectors followed by Oil and Gas. In comparison to other markets, Core Financials (15.3%) has a much smaller weight than in both the global USD IG (26%) and EUR IG (32%) credit universes.
- Chinese Local Government Financing Vehicles (LGFVs) account for 5.04% of the IG index, with their bonds residing within the Financial Services sector.
- Sector average spreads in IG range from around 100 bps to around 200 bps.
- Real Estate currently offers the highest average spread closely followed by Financial Services.
- Healthcare is not currently represented in the index membership (as of September 2021 membership).

Table 4

**IG spreads and weight distribution by sector & rating**
**iBoxx USD Asia ex-Japan Corporates IG 1+ index**

| | | | Rating distribution | | | |
|---|---|---|---|---|---|---|
| Sector | Average spread | Weight | AAA | AA | A | BBB |
| Basic Materials | 174 | 5.28% | | | 0.39% | 4.89% |
| Consumer Goods | 149 | 2.76% | | | 0.31% | 2.45% |
| Consumer Services | 150 | 5.16% | | 0.04% | 2.60% | 2.52% |
| Core Financials | 104 | 15.25% | | 0.22% | 6.64% | 8.39% |
| Financial Services | 202 | 15.90% | | | 7.92% | 7.98% |
| Industrials | 138 | 9.44% | 0.11% | 0.09% | 3.93% | 5.31% |
| Oil & Gas | 145 | 14.42% | | | 9.34% | 5.07% |
| Real Estate | 203 | 10.51% | | | 1.85% | 8.65% |
| Technology | 127 | 7.76% | | 0.91% | 4.90% | 1.95% |
| Telecommunications | 108 | 2.21% | | | 0.91% | 1.29% |
| Utilities | 144 | 11.32% | | 1.70% | 4.67% | 4.96% |
| | | **Total** | **0.11%** | **2.96%** | **43.46%** | **53.47%** |

Source: IHS Markit © 2021 IHS Markit

## High yield corporates[15]

### Market exposure

From a market weight and spread exposure perspective and as seen in Table 5:

- The HY index currently provides exposure to 13 markets across Asia, of which 10 are classified as emerging.
- Mainland China exposure dominates by market value and by number of bonds in the index. Given its weight and average spread of over 880 bps, Mainland China is by far the largest contributor to current index spread, accounting for almost 80% of it.
- India, Macao, and Hong Kong are the next largest markets followed by Indonesia. Together with China the top five markets account for more than 95% of the index spread.
- The HY index average spread is currently around 750 bps and is much higher than the median market average spread of 390 bps. The distribution of market average spreads is positively skewed chiefly due to China and its Real Estate sector, in particular.
- Market average spreads range from 200 bps (South Korea) to over 1,000 bps (Mongolia).

Table 5

**HY market exposure and contribution to index spread**
iBoxx USD Asia ex-Japan Corporates HY 1+ index

| Market | Weight | No. of bonds | Average spread | Contribution to index spread | IHS Markit GEDC^ |
|---|---|---|---|---|---|
| Mainland China | 60.70% | 272 | 886 | 77.08% | EM |
| India | 14.43% | 59 | 410 | 8.48% | EM |
| Macao SAR | 6.96% | 20 | 378 | 3.77% | DM |
| Hong Kong SAR | 5.28% | 25 | 362 | 2.74% | DM |
| Indonesia | 4.78% | 23 | 502 | 3.44% | EM |
| Philippines | 2.56% | 10 | 442 | 1.62% | EM |
| Thailand | 2.17% | 7 | 267 | 0.83% | EM |
| Singapore | 1.40% | 5 | 377 | 0.76% | DM |
| South Korea | 0.50% | 2 | 200 | 0.14% | EM |
| Marshall Islands | 0.35% | 1 | 389 | 0.19% | EM |
| Vietnam | 0.31% | 1 | 391 | 0.18% | EM |
| Mongolia | 0.30% | 2 | 1166 | 0.50% | EM |
| Cambodia | 0.26% | 1 | 709 | 0.26% | EM |

^IHS Markit Global Economic Development Classification: DM means developed market and EM means emerging market

Source: IHS Markit



### Maturity and credit quality breakdown

From a maturity and credit rating viewpoint and as seen in Tables 6 and 7:

- Over 85% of the HY index market value currently sits in the 1 to 5yr. maturity bucket. In comparison, that bucket account for around 37% of the iBoxx $ Corporates HY index tracking global USD credit.
- Index exposure is concentrated in the BB and B sectors.
- The 1 to 5 yr. B segment contribute most to overall index spread.

15. "Asian USD HY credit", based on the *iBoxx USD Asia ex-Japan Corporates HY 1+* index. This 1+ index does not include bonds with an expected remaining life of less than 1 year. This index is used because it allows for more direct comparison against flagship high yield iBoxx indices in other markets.

Table 6

**HY MV% by rating & maturity**
**iBoxx USD Asia ex-Japan Corporates IG 1+ index**

| Rating | 1 to 5 yr. | 5 to 10 yr. | 10+ yr. |
|---|---|---|---|
| BB | 55.00% | 8.77% | 0.43% |
| B | 27.86% | 3.82% | |
| CCC | 3.93% | 0.06% | |
| CC | 0.14% | | |

Source: IHS Markit 

Table 7

**HY average spread within each cell**
**iBoxx USD Asia ex-Japan Corporates IG 1+ index**

| Rating | 1 to 5 yr. | 5 to 10 yr. | 10+ yr. |
|---|---|---|---|
| BB | 425 | 334 | 251 |
| B | 1074 | 487 | |
| CCC | 5158 | 2650 | |
| CC | 2540 | | |

Source: IHS Markit 

## Sector profile

Assessing sector market value weight exposures of the HY index according to Table 8, we see that:

- Real Estate clearly dominates with a weight of 41%, followed by Core Financials (17%). The latter includes Additional Tier 1 (AT1) bonds that make up around 8.5% of the HY index. LGFVs account for 5.07% of the HY index, with their bonds residing in Financial Services.
- Financials (Core Financials, Financial Services and Real Estate) make up two-thirds of the index whereas the weight of Financials in the global developed USD HY credit market is just under 30%.
- Oil and Gas, and Industrials weights are low, indicating that Asian USD HY credit is potentially less exposed to commodity market shocks.
- By comparison, in the global USD corporate bond universe, Oil and Gas, and Industrials each weigh over 13%; while Consumer Services (23%) is the largest sector. EUR HY credit exposure leads with Industrials (18%). Global USD HY and EUR HY credit are more dispersed across sectors compared with Asian USD HY credit.
- Real Estate has the highest spread. All other sector spreads range from around 300 bps to 500 bps.
- Health Care and Technology are not currently represented in the Asian USD HY credit index membership.

Table 8

**HY spreads and weight distribution by sector & rating**
**iBoxx USD Asia ex-Japan Corporates HY 1+ index**

| | | | Rating distribution | | | |
|---|---|---|---|---|---|---|
| Sector | Average spread | Weight | BB | B | CCC | CC |
| Basic Materials | 511 | 7.95% | 5.26% | 2.50% | 0.18% | |
| Consumer Goods | 491 | 1.68% | 0.67% | 0.71% | 0.30% | |
| Consumer Services | 439 | 8.70% | 3.44% | 5.13% | | 0.14% |
| Core Financials | 295 | 17.30% | 15.65% | 1.05% | 0.60% | |
| Financial Services | 474 | 8.66% | 7.93% | 0.73% | | |
| Industrials | 468 | 2.99% | 2.31% | 0.68% | | |
| Oil & Gas | 467 | 3.31% | 1.41% | 1.75% | 0.15% | |
| Real Estate | 1106 | 40.84% | 19.18% | 18.90% | 2.76% | |
| Telecommunications | 305 | 1.29% | 1.29% | | | |
| Utilities | 351 | 7.27% | 7.06% | 0.21% | | |
| | | **Total** | **64.20%** | **31.68%** | **3.99%** | **0.14%** |

Source: IHS Markit 

# Historical yields, spreads, and risk

## Investment grade corporates

Charts 6 to 9 compare the historical[16] index yield, option adjusted spread (OAS), and duration of the Asian USD IG credit market against the global USD and EUR IG credit markets using the *iBoxx USD Asia ex-Japan Corporates Investment Grade 1+* index, the *iBoxx $ Corporates* index and the *iBoxx € Corporates* index (the latter two also being IG 1+ indices).

We note the following key highlights on the IG market:

**Asian USD IG credit index yield is generally higher**

Asian and global USD market yields have tracked each other reasonably closely, ranging between 3% and 5% from 2013 to 2020 and between 2% and 3% since.

The sign of the yield difference has oscillated over the sample period. For example, between 2015 and 2017, the Asian USD yield was noticeably lower than the global yield. However, in more recent years, the Asian index yield has consistently been slightly higher. Over the whole sample period, the Asian yield is higher than global USD yield 54% of the time.

The yield pick-up of Asian USD corporate bonds over EUR corporate bonds averages to over 2.35%.

**Asian USD IG credit index spread is also higher**

Concentrating on credit risk and accounting for optionality more explicitly by comparing OAS, we see Asian USD spreads are often markedly higher than corresponding spreads in the other markets.

Asian USD OAS (close to 185 bps on average) exceeds global USD OAS

Chart 6

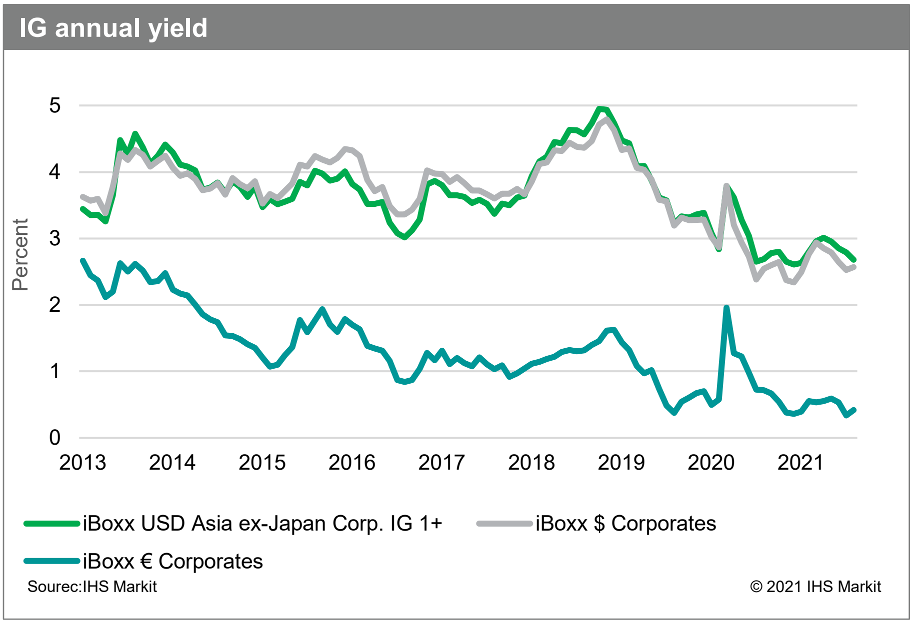
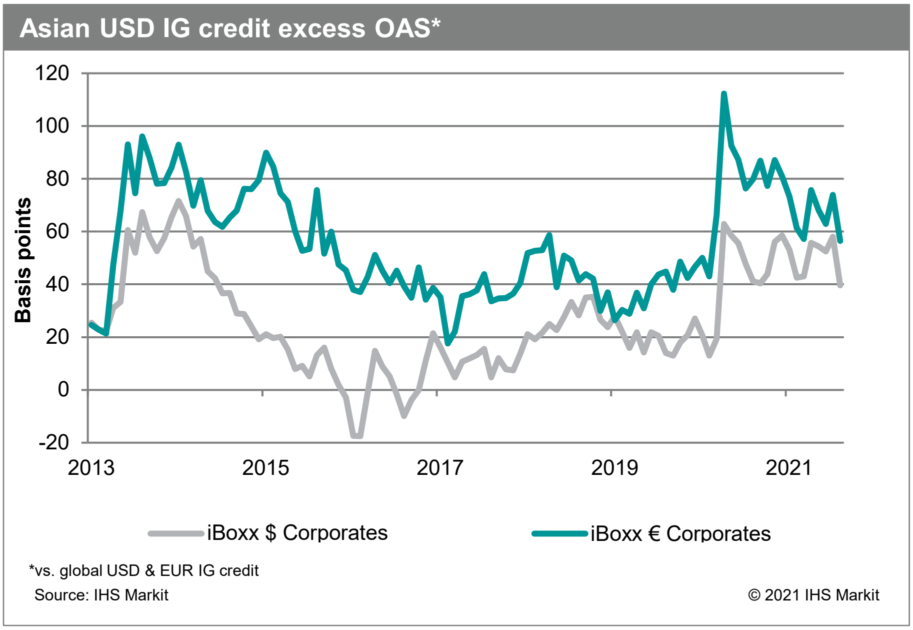



Chart 7




16. We start our analysis for IG and HY from January 2013 for data completeness across all the indices being compared. At earlier times, the iBoxx USD Asia ex-Japan Corporates index was also concentrated in a smaller number of bonds/issuers as the market was still developing at that time.

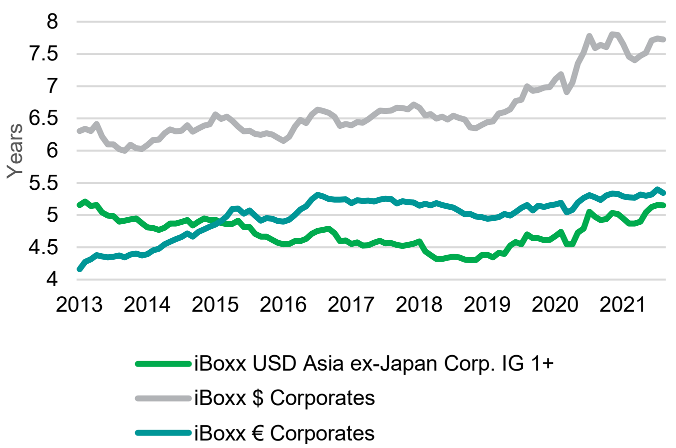
over 90% of the time. Asian USD credit provides an average excess spread of around 25 bps against global USD credit. Against EUR credit, the average increment is over 55 bps.

### Asian USD IG duration is low and duration-adjusted yield is high

Asian USD duration is much shorter than that of global USD credit. It is more comparable to the EUR duration (although it has been consistently lower than EUR duration over the last five years).

Chart 8

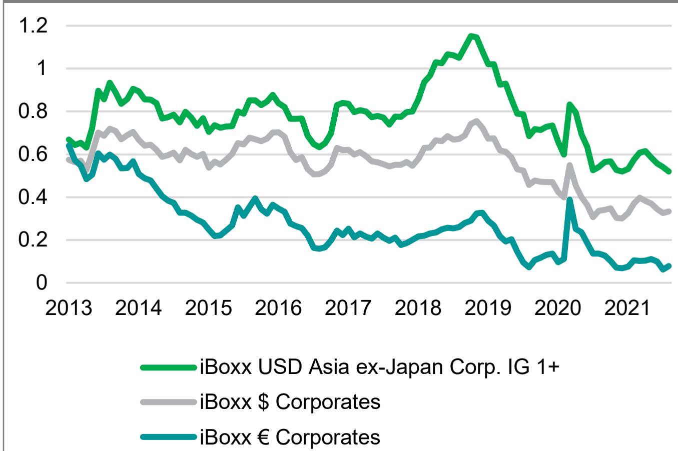
**IG annual modified duration**




Source:IHS Markit © 2021 IHS Markit

Chart 9

**IG annual yield over duration**




Source:IHS Markit © 2021 IHS Markit

Furthermore, Asian USD IG credit has consistently delivered the highest yield per unit duration.

## High yield corporates

Similarly, charts 10 to 13 compare historical index metrics of the *iBoxx USD Asia ex-Japan Corporates High Yield 1+* index versus the *iBoxx $ High Yield Developed Markets* index[17] and the *iBoxx EUR High Yield cum-crossover* index (the latter two are also HY 1+ indices).

### Asian USD HY credit index yield is often higher

The sample period average Asian USD HY index yield is 7.5%. Compared to IG, the HY segment of Asian USD credit more often generates excess yield over the other markets. Versus global USD, this happens 82% of the time over the sample period. The average yield pick-up of Asian USD HY credit over global USD and EUR credit markets is around 1.1% and 3.4%, respectively. Currently, Asian USD HY credit is yielding just over 8%.

17. This index has very small exposure to Asia.

Chart 10

HY annual yield

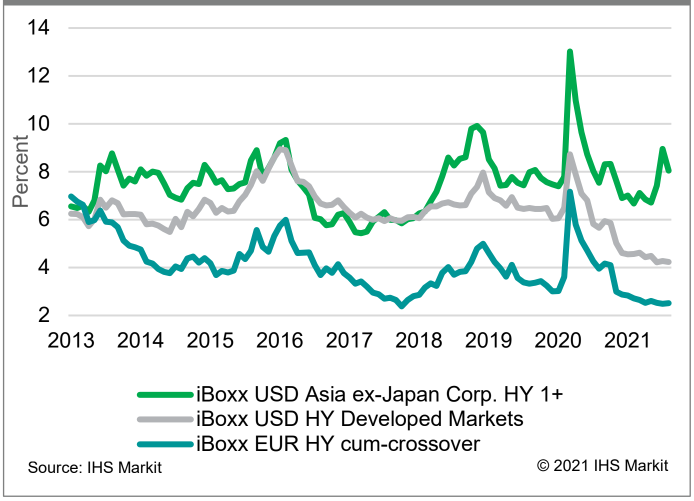
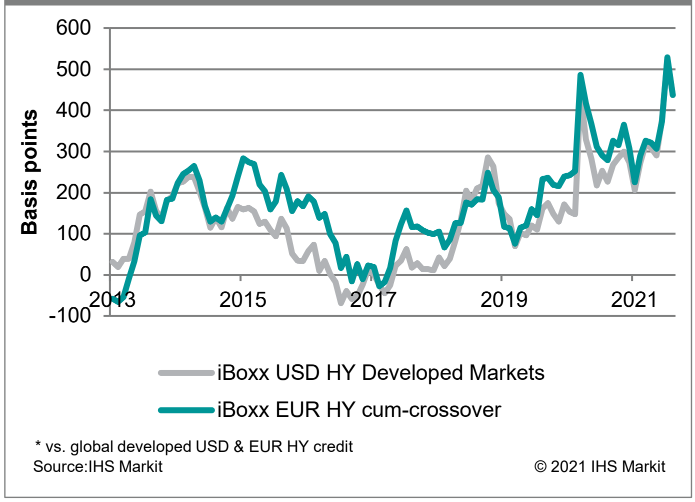



Chart 11

Asian USD HY credit excess OAS*




## Asian USD HY credit index spread is also higher

Prior to the outbreak of COVID-19, the Asian USD HY credit index OAS averaged around 550 bps. Since 2020, the average spread has been just over 750 bps. The Asian USD HY credit index OAS is often wider than the other market spreads by, on average, approximately 150 bps over the sample period. The excess OAS has been trending up over the last five years. Having peaked in March 2020, the average excess spread is currently around 437 bps. The high Asian USD HY credit index spread is primarily due to the China Real Estate sector.

## Asian USD HY duration is low and duration adjusted yield is high

The Asian USD HY credit index duration is lower than the other two markets most of the time. It has been trending lower since mid-2017. This low index duration can be attributed mainly to the profile of the China USD HY market (mostly a Real Estate exposure that is currently characterized by high yields and low duration). Hong Kong and India (after China, the next largest markets) also tend to have lower duration.

The ratio of Asian USD HY credit index yield over duration is very high (almost three times higher than the same ratio for the global developed USD HY market).

Chart 12

HY annual modified duration

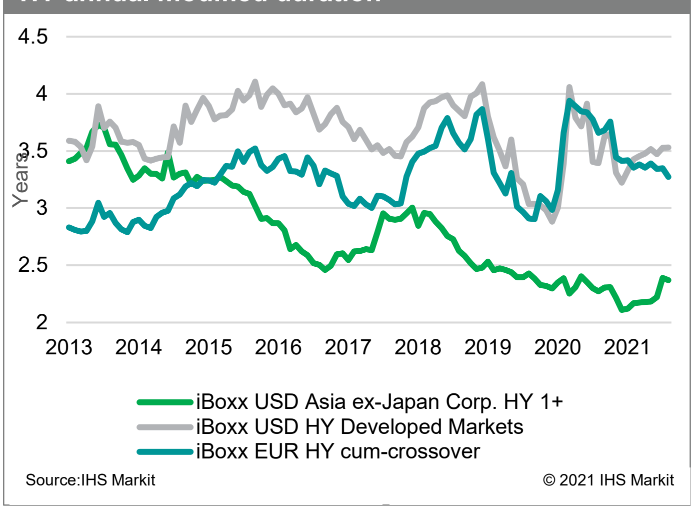
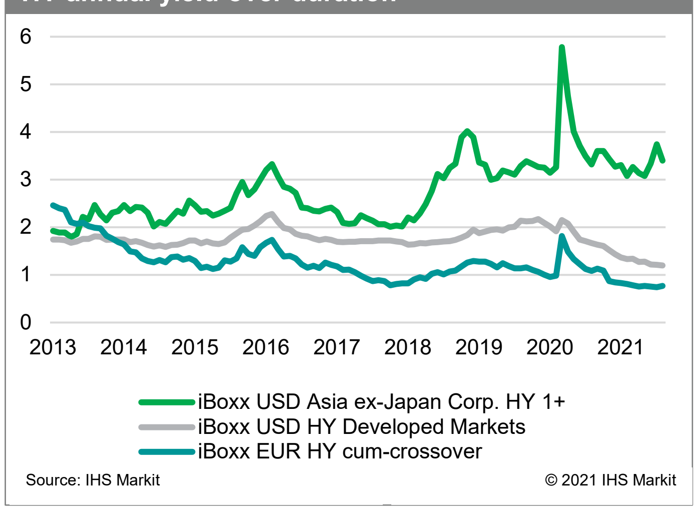



Chart 13

HY annual yield over duration



## Realised credit risk – recent downgrades and defaults

Having looked at yields and spread carry (which has tended to be relatively high) we now present the occurrence of downgrades and defaults, focusing on the last five years of overall index history.

### Downgrades

- In terms of absolute numbers, bond downgrades across Asian USD IG (81 downgrades), global USD IG (198) and global USD HY (396) peaked in 2020.
- In percentage terms, the frequency of Asian USD IG corporate bond downgrades is generally somewhat higher than for global USD IG credit.
- Interestingly, the percentage of downgrades in Asian USD HY was significantly high in 2017 (mostly Oil and Gas bonds) and 2018 (mostly Core Financials bonds), whereas the percentage of downgrades for developed USD HY credit peaked in 2020 (driven by Consumer Services, and Oil and Gas bonds).

Table 9

**Number of rating downgrades as a percentage of number of bonds* in each index and Asian USD fallen angels**
**Last 5 years**

| Year | Asian USD IG credit index | Global USD IG credit^ | Asian USD HY credit index | Global USD HY credit^ | Asian USD credit overall fallen angels |
|---|---|---|---|---|---|
| 2016 | 6.5% | 5.1% | 4.4% | 16.5% | 3.0% |
| 2017 | 8.6% | 2.1% | 25.5% | 7.8% | 0.7% |
| 2018 | 2.5% | 3.5% | 19.0% | 7.6% | 2.6% |
| 2019 | 8.0% | 1.8% | 12.2% | 8.2% | 1.6% |
| 2020 | 7.2% | 3.4% | 5.9% | 19.8% | 2.6% |
| 2021 YTD | 3.9% | 1.3% | 4.5% | 1.9% | 0.9% |

*Average number of bonds in each index for that year (based on month-end data)
^Excluding Asia ex-Japan markets
Source: IHS Markit © 2021 IHS Markit

Table 10

**Number of issuer defaults**
**Last 5 years**

| Year | Number of issuer defaults: Asian USD overall credit index | Number of issuer defaults: USD Corporates HY** | No. issuer defaults as a % of total issuers*: Asian USD overall credit index | No. issuer defaults as a % of total issuers*: USD Corporates HY |
|---|---|---|---|---|
| 2016 | 3 | 40 | 0.95% | 4.23% |
| 2017 | 2 | 30 | 0.54% | 3.29% |
| 2018 | 5 | 21 | 0.99% | 2.32% |
| 2019 | 5 | 25 | 0.86% | 2.86% |
| 2020 | 9 | 46 | 1.43% | 5.38% |
| 2021 YTD | 7 | 6 | 1.05% | 0.65% |

*Total issuers is the yearly average number of issuers using monthly data.
**Based on the the iBoxx USD High Yield Developed Markets index.
Source: IHS Markit © 2021 IHS Markit

### Defaults

- In the Asian USD credit market, most defaults over the last five years have taken place in the HY space. In general, the number (and proportion) of issuer defaults in the Asian USD credit market has been lower than the corresponding number (and proportion) in the global USD corporate HY universe
- The defaults in 2020 were across multiple issuers and sectors in the Asian USD credit market. In 2021 so far, four out of the seven issuer defaults so far in 2021 are from the China Real Estate market.

# Historical performance[18]

Based on our sample period that reaches back eight and a half years, we highlight the following:

### The Asian USD corporate bond market has delivered a high risk-adjusted return

Table 11 shows that the Asian USD credit overall 1+ index has provided an annualized return of 4.37% with a commensurate annualized volatility of returns. This has generated a return over vol. ratio of 1.06 that far exceeds US Treasuries, Global Government Bonds, Global Corporate Credit (defined below), Asia Local Currency Bonds and World Equities. Please see Chart 16 in the Appendix for yearly returns that have almost always been positive over the sample period.

Table 11

**Performance versus global asset classes**
**On monthly USD unhedged returns since Jan 2013**

| Index/market* | Annualised return | Annualised volatility | Return/vol. |
|---|---|---|---|
| **iBoxx USD Asia ex-Japan Corporates 1+** | 4.37% | 4.12% | 1.06 |
| US Treasuries | 2.54% | 3.97% | 0.64 |
| Global Government Bonds | 1.49% | 5.06% | 0.29 |
| Global Corporate Credit | 4.24% | 5.46% | 0.78 |
| Asia Local Currency Bonds | 2.63% | 5.93% | 0.44 |
| World Equities | 11.43% | 13.19% | 0.87 |
| **iBoxx USD Asia ex-Japan IG Corporates 1+** | 4.23% | 3.63% | 1.17 |
| USD Corporates IG | 4.38% | 4.99% | 0.88 |
| EUR Corporates IG | 1.33% | 8.15% | 0.16 |
| **iBoxx USD Asia ex-Japan HY Corporates 1+** | 5.34% | 7.13% | 0.75 |
| USD Corporates HY | 5.59% | 6.77% | 0.83 |
| EUR Corporates HY | 3.14% | 10.70% | 0.29 |

*US Treasuries is the iBoxx Treasuries index; Global Government Bonds is the iBoxx Global Government index in USD, unhedged; Global Corporate Credit is a hypothetical equal-weight portfolio comprising of iBoxx USD, EUR and GBP Corporates indices across IG and HY, in USD unhedged terms; Asian Local Currency Bonds is the iBoxx ALBI index in USD, unhedged; World Equities is the EMIX World index in gross levels, USD unhedged; USD Corporates IG is the iBoxx $ Corporates index; EUR Corporates IG is the iBoxx € Corporates index in USD; USD Corporates HY is the iBoxx USD High Yield Developed Markets index and EUR Corporates HY is the iBoxx EUR High Yield cum-crossover index in USD, unhedged

Source: IHS Markit



### The Asian USD IG credit index has a lower volatility and an even higher risk-adjusted return

With a return close to the overall index, the Asian USD IG credit index exhibits the highest return over volatility ratio of 1.17 that exceeds developed IG credit markets.

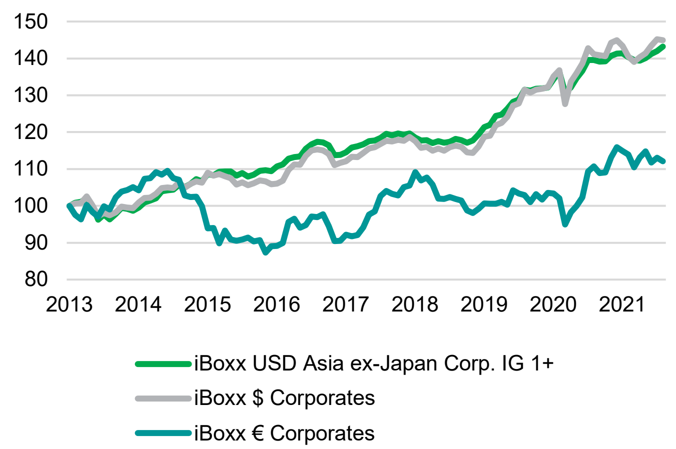
### The Asian USD HY credit index generates a higher return but with higher volatility

On a risk-adjusted basis, the Asian USD HY credit index greatly outperforms EUR HY corporates but it underperforms global USD HY corporates over the sample period. Even though its duration is lower, Asian USD HY spread change volatility has been higher than global USD and EUR HY over the sample period.

18. Please note that ongoing iBoxx USD Asia ex-Japan Monthly Updates are published here.

Chart 14

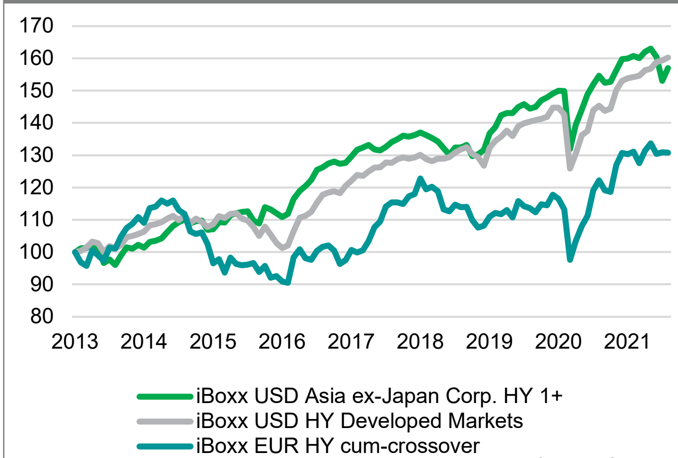
IG perfomance




Source: IHS Markit © 2021 IHS Markit

Chart 15

HY performance




Source:IHS Markit © 2021 IHS Markit

## The overall 1+ index is somewhat correlated to global corporate credit but less so to government bonds and equities

However, the correlation is still far from perfect. The index has low correlation to US Treasuries and moderate correlation to global government bonds and world equities.

Table 12

**Cross asset correlations**

**On monthly USD unhedged returns since Jan 2013**

| Index/market | iBoxx USD Asia ex-Japan Corporates 1+ | US Treasuries | Global Government Bonds | Global Corporate Credit | Asia Local Currency Bonds | World Equities |
|---|---|---|---|---|---|---|
| iBoxx USD Asia ex-Japan Corporates 1+ | 100% | | | | | |
| US Treasuries | 29% | 100% | | | | |
| Global Government Bonds | 50% | 63% | 100% | | | |
| Global Corporate Credit | 71% | -11% | 47% | 100% | | |
| Asia Local Currency Bonds | 71% | 28% | 66% | 64% | 100% | |
| World Equities | 55% | -31% | 16% | 82% | 54% | 100% |

Source: IHS Markit © 2021 IHS Markit

## Spread change correlations are fairly significant, though have varied over time

As seen in Table 15 in the Appendix, the sample correlation between Asian USD credit, global USD, and EUR credit ranges from around 80% to 90%, indicating a common risk factor driving global credit.

Not detailed in this article but the average correlation is lower (ranging between 65% and 75%) between 2015 and 2019 (and is particularly lower for HY) i.e. excluding 2020 – the year COVID-19 first spread far and wide.

## Conclusion

Returning first to the question that titles this primer: Does the Asian (ex-Japan) USD corporate credit market provide more bang for your buck? Based on the sample period studied in this article, there are number of arguments in favour of the view that it might:

- The market has provided a high ex-ante yield per unit duration risk.
- It has also offered high excess spread carry.
- And it has delivered high risk-adjusted returns with a decent amount of absolute return.

Next, from a diversification perspective, the Asian USD corporate credit market appears a reasonable diversifier to equity and government bond portfolios. It is somewhat correlated to other credit markets in terms of total return and spread changes. However, the correlation is not perfect and time varying.

Further to note is that even though term duration risk is lower, with higher spreads there is of course the risk of painful spread blowouts – even at the shorter-end. The effect of crisis and concomitant issuer distress have been observed in the market, especially of late since the onset of the COVID-19 pandemic. However, in general, recent downgrade and default occurrences have been lower in Asia versus the global USD corporate credit market.

Clearly, investing in the Asian USD credit market is also a strong play on China and on China real estate with regard to the high yield segment. Although, of course, more diversified portfolios can be constructed to mitigate concentration risks by way of capping at the issuer, sector or market level. Other market investment risk factors such as liquidity and idiosyncratic risk are expected to further abate over time as the market grows in size.

Indeed, interest in Asian USD corporate credit is on the rise as the market continues to establish itself. A recent trend that is emerging is the growth of innovative index-linked products that combine market access with specific investors considerations such as ESG and particular diversification needs.

### The wider iBoxx/iTraxx Asia ex-Japan credit ecosystem

As the Asian USD credit ETF market is poised for further development, so too are the following complimentary hedging/replication products:

- **iTraxx Asia ex-Japan** is a Credit Default Swap (CDS) index referencing five-year credit risk on 40 liquid investment grade Asian entities. This CDS index is sector aligned to the iBoxx USD Asia ex-Japan IG index but is equally weighted and subject to CDS-Bond basis versus the cash index.
- **Standardised iBoxx TRS** are index swaps on liquid versions of the main iBoxx corporate bond indices. These OTC contracts allow an investor to receive total return index performance from a licensed market maker against a funding rate. Index performance is paid out at maturity. Standard maturity terms are 3, 6, 9, and 12 months.

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# Appendix – supplementary data

Table 13

**IG top 10 issuers by market value**
**iBoxx USD Asia ex-Japan Corporates 1+ index**

| Issuer | Market | Weight | No. of Bonds |
|---|---|---|---|
| Sinopec Group | China | 3.81% | 30 |
| Tencent Holdings Ltd. | China | 3.14% | 16 |
| CNOOC Limited. | China | 2.28% | 15 |
| Alibaba Group Holding Limited. | China | 2.26% | 11 |
| PT Pertamina (Persero). | Indonesia | 2.17% | 14 |
| Petroliam Nasional Berhad (Petronas). | Malaysia | 2.08% | 8 |
| CK Hutchison Holdings Limited. | Hong Kong SAR | 1.66% | 14 |
| China Cinda Asset Management Co., Ltd. | China | 1.65% | 17 |
| PT Perusahaan Listrik Negara (Persero). | Indonesia | 1.64% | 14 |
| State Grid Corporation of China. | China | 1.62% | 11 |

Source: IHS Markit 

Table 14

**HY top 10 issuers by market value**
**iBoxx USD Asia ex-Japan Corporates 1+ index**

| Issuer | Market | Weight | No. of Bonds |
|---|---|---|---|
| Kaisa Group Holdings Ltd. | China | 3.86% | 11 |
| Postal Savings Bank of China. | China | 3.51% | 1 |
| Sunac China Holdings Limited. | China | 3.00% | 10 |
| Vedanta Resources Ltd. | China | 2.18% | 6 |
| Wynn Macau Ltd. | Macao SAR | 2.17% | 5 |
| Melco Resorts & Entertainment Limited. | Macao SAR | 1.93% | 5 |
| Yuzhou Group Holdings Company Limited. | China | 1.88% | 10 |
| China Evergrande Group. | China | 1.82% | 7 |
| Fosun International Limited. | China | 1.81% | 7 |
| CIFI Holdings Group Co Ltd. | China | 1.68% | 8 |

Source: IHS Markit 

Table 15

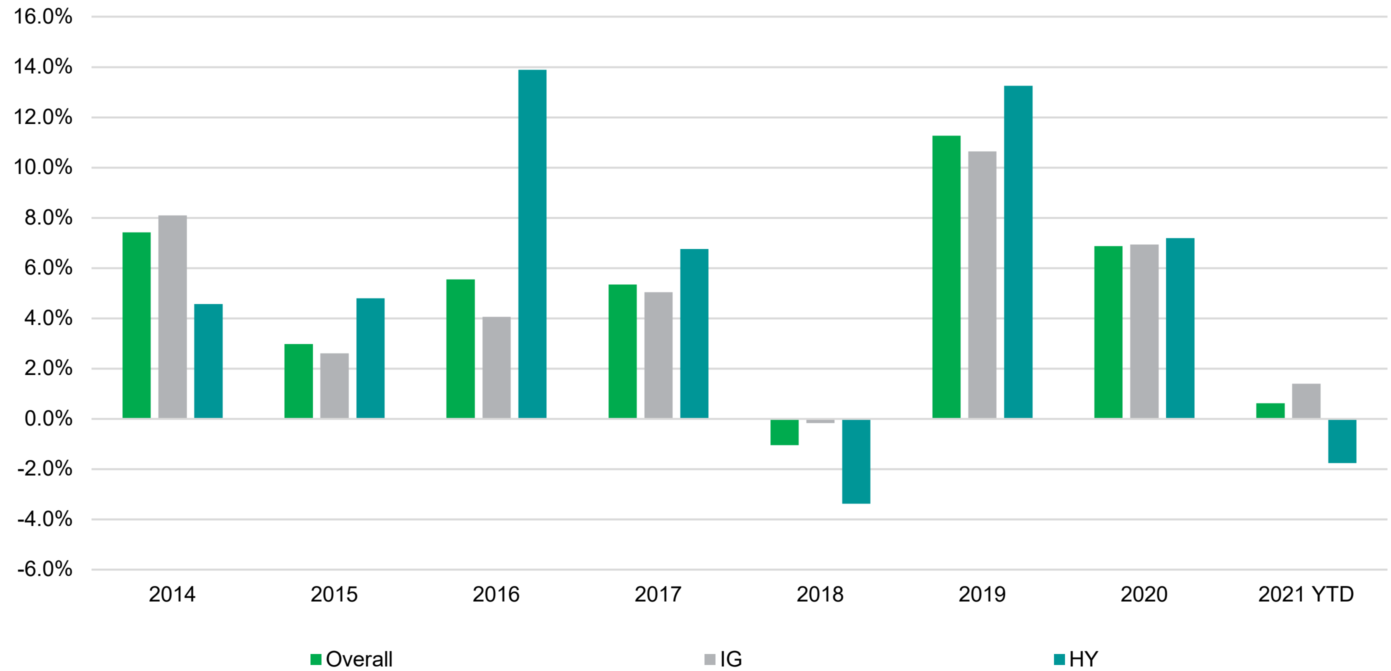
**Spread change correlations**
**On monthly index OAS changes since Jan 2013**

| Index/Market | iBoxx USD Asia ex-Japan Corporates Investment Grade 1+ | iBoxx $ Corporates | iBoxx € Corporates index | iBoxx USD Asia ex-Japan Corporates High Yield 1+ | iBoxx USD High Yield Developed Markets index | iBoxx EUR High Yield cum-crossover index |
|---|---|---|---|---|---|---|
| iBoxx USD Asia ex-Japan Corporates IG 1+ | 100% | | | | | |
| iBoxx $ Corporates | 91% | 100% | | | | |
| iBoxx € Corporates index | 83% | 91% | 100% | | | |
| iBoxx USD Asia ex-Japan Corporates High Yield 1+ | 89% | 89% | 84% | 100% | | |
| iBoxx USD High Yield Developed Markets index | 83% | 91% | 84% | 83% | 100% | |
| iBoxx EUR High Yield cum-crossover index | 84% | 92% | 95% | 83% | 89% | 100% |

Source: IHS Markit 

Chart 16

Recent yearly iBoxx USD Asia ex-Japan Corporates 1+ index returns




Source:IHS Markit

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