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Defensive Strategies for the Asian USD High Yield Credit Market

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Market Overview (2021-Present)

International investors have long viewed the Asian USD high yield credit bond market as an alternative investment universe to the traditional U.S. high yield market. As a result, the junk bond market has undergone considerable growth, with the total issuance increasing almost sixfold between 2012 and 2020.[1]

However, the market has seen some turbulence in the past 12 to 18 months, largely due to its high exposure to the Chinese real estate market. In the past decade, Chinese real estate companies have issued large amounts of debt at a low borrowing cost to fund their operations. This changed when Chinese regulators imposed new rules to deleverage the financial system. Meanwhile, companies were unable to turn over their inventory effectively for cash, and a liquidity crisis in the sector began to emerge.

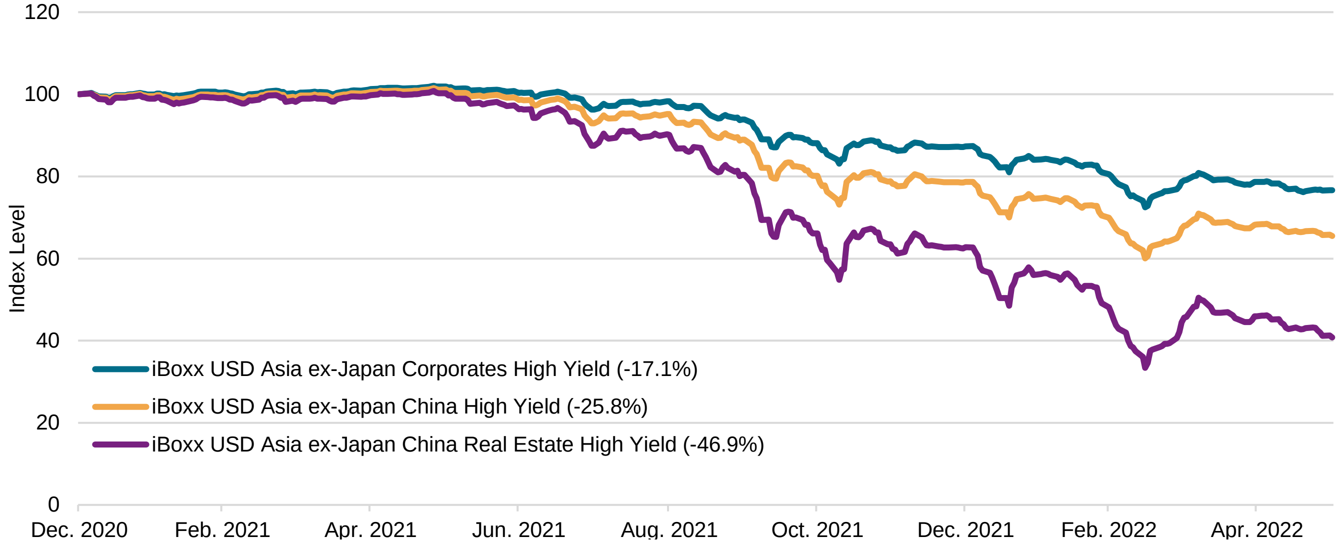
In September 2021, China Evergrande Group, the second-largest property developer in China by sales, missed coupon payments on its U.S. debt obligation. Since then, there has been a growing list of prominent names involved in the Chinese real estate sector crisis. The top five issuers by market value as of April 2021 in the iBoxx USD Asia ex-Japan China High Yield Real Estate[2] have defaulted on their USD debt obligations in the past 12 months.

[1] Using the iBoxx USD Asia ex-Japan Corporates High Yield as a proxy for the high yield market, the aggregated notional size of the index grew from USD 47 billion at the end of 2012 to USD 281 by the end of 2020.

[2] The top 5 issuers were China Evergrande Group, Kaisa Group Holdings Ltd, Sunac China Holdings Ltd, Scenery Journey Ltd and Yuzhou Properties Co., Ltd.

As of May 31, 2022, more than 12 distinct Chinese property issuers in the iBoxx USD Asia ex-Japan Corporates High Yield had missed payments on their U.S. debt, and the total amount of issuance removed from the index exceeded USD 35 billion.

Exhibit 1: Index Performance



Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2020, to May 31, 2022. Indices rebased to 100 on Dec. 31, 2020. Index performance based on daily total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Once dominating the Asian USD high yield credit bond market, the Chinese property sector has shrunk significantly after the spate of defaults and sell-offs. On Dec. 31, 2020, China's real estate issuance accounted for 47.0% of the iBoxx USD Asia ex-Japan Corporates High Yield. By the end of May 2022, its share had dwindled to 18.6%. As expected, the index characteristics between the two dates are also significantly different, as illustrated in Exhibit 2.

Exhibit 2: Characteristics of iBoxx USD Asia ex-Japan Corporates High Yield

Characteristic	Dec. 31, 2020	May 31, 2022
Number of Bonds	548	419
Number of Issuers	254	221
Total Market Value (USD Billions)	284.0	180.4
China Real Estate Exposure (%)	47.0	18.6
Yield (%)	6.8	11.4
Spread (bps)	656	866
Duration (Years)	1.9	2.1

Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2020, and May 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

The widespread media coverage of the China real estate crisis likely brought the Asian USD high yield credit asset class to the attention of many investors, including value investors who may perceive price level (and yield) to be attractive at this juncture. However, many might be sitting on the fence due to the ongoing volatility in the market.

In the following sections, we discuss two indexing strategies that seek to retain the benefits of Asian USD high yield corporate bonds, while offering potential protection against defaults and high volatility in the associated underlying market.

A Defensive Indexing Approach to the Asian USD High Yield Market

Before we proceed, let us first define the base index and strategies in the comparison analysis.

Reference Index

The reference index is a hypothetical liquid version of the iBoxx USD Asia ex-Japan Corporates High Yield with a minimum combined issuer (ticker) size of USD 500 million and a minimum remaining time to maturity of six months.[3] This index is market value weighted and rebalanced monthly.

Credit Rating Strategy (CRS)

This strategy screens out risky bonds based on credit ratings and bond prices. It applies the following rules in sequential order.

1. Bonds must share the same liquidity constraints and rebalance schedule as the reference index.
2. Only bonds with iBoxx ratings of BB and B qualify.
3. The strategy adopts a bond price floor of USD 60 (per USD 100 par value) to exclude distressed issuances.[4]

Defensive Yield Select (DYS)

This strategy builds on the assumption that the credit quality of a bond is fully reflected by its credit spread. It excludes bonds with the highest credit spreads in an attempt to reduce risk and applies the following rules in sequential order:

1. Rank all bonds by credit spreads in descending order;

[3] The iBoxx USD Asia ex-Japan Corporates High Yield has a minimum requirement of USD 250 million bond notional and no minimum time to maturity.

[4] Historically, Asian USD credit high yield bonds that dropped below USD 60 often deteriorated further in price and seldom recovered.

2. Filter out bonds with spreads greater than the 66th percentile every quarter;[5]
3. Apply the same liquidity constraints as the reference index every month.

Exhibit 3 shows the characteristics of the three hypothetical strategies as of May 31, 2022.

Exhibit 3: Strategy Profiles

Strategy	Number of Bonds	Number of Issuers	Market Value (USD Billions)	Yield (%)	Duration (Years)	China Weight (%)	China Real Estate Weight (%)
Reference Index	278	115	125.6	10.2	2.7	45.5	19.3
CRS	200	98	115.7	8.0	2.8	40.9	13.0
DYS	180	91	109.8	7.6	2.9	38.6	9.1

All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data as of May 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

As discussed previously, the China real estate sector has been the primary driver of losses for corporate Asian USD high yield bonds in recent months. As of May 31, 2022, CRS and DYS had lower weights in this sector than the reference index by 6.3% and 10.2%, respectively. Unsurprisingly, the lower credit risk exposure was accompanied by a lower yield.

Hypothetical Historical Performance

Exhibit 4 shows the hypothetical historical results from Dec. 31, 2016, to May 31, 2022.

Exhibit 4: Hypothetical Historical Gross Returns

Strategy	Annualized Return (%)	Annualized Volatility (%)	Risk-Adjusted Return	Tracking Error (%)	Beta
Reference Index	-2.2	9.2	-0.2	-	1
CRC	-1.1	8.7	-0.1	1.5	0.9
DYS	2.4	6.1	0.4	4.0	0.6

All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May. 31, 2022. Past performance is no guarantee of future results. Index performance based on monthly gross return in USD. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

The results suggested that both defensive strategies outperformed the reference index. While both CRS and DYS offered higher annualized returns and lower annualized volatility than the reference index, only DYS delivered a positive return (in annualized and risk-adjusted terms) over the period studied. However, it exhibited higher tracking error and lower beta (as compared with CRS) against the reference index over this period.

[5] Index is rebalanced monthly to include bonds that fulfill the criteria as per reference index, but the spread-based exclusion is only applied quarterly.

Exhibit 5: Hypothetical Historical Net Returns

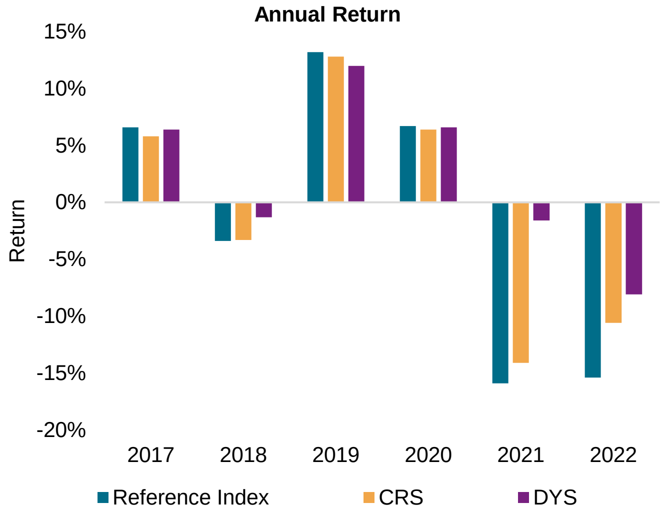
Strategy	Annualized Return (%)	Annualized Volatility (%)	Risk-Adjusted Return	Average Monthly Turnover (%)	Average Bid-Ask Spread (bps)
Reference Index	-2.6	9.2	-0.3	5.0	57
CRS	-1.5	8.7	-0.2	5.6	52
DYS	1.8	6.1	0.3	7.3	48

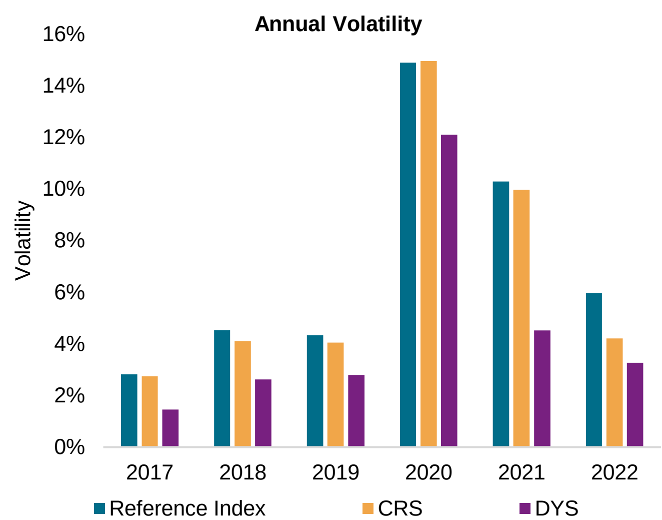
All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May. 31, 2022. Past performance is no guarantee of future results. Index performance based on monthly net return in USD. Turnover is estimated as the market value weight changes of constituents in the index portfolio, from either buying or selling, at month-end rebalance. Bid-ask spread is estimated as the market value-weighted bid-ask spreads of constituents in the index portfolio at month-end rebalance. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

Taking into account transaction costs, DYS still outperformed both CRS and the reference index. CRS had a much lower average monthly turnover compared to DYS. This was expected since credit ratings tend to be much more stable than credit spreads. Interestingly, even though DYS had the highest turnover rate, it had a lower estimated average bid-ask spread compared with the reference index and CRS.

On an annual basis, the return and volatility profile of CRS tracked the reference index closer than DYS. In regular market conditions (2017, 2019, 2020), the performance of DYS was either consistent or slightly muted compared to the reference index (see Exhibit 6). In contrast, the strength of the DYS approach was shown in volatile market conditions (2018, 2021-present), as it significantly outperformed CRS and the reference index (see Exhibit 7). Volatility in DYS was also distinctly lower compared with the other approaches in the period studied.

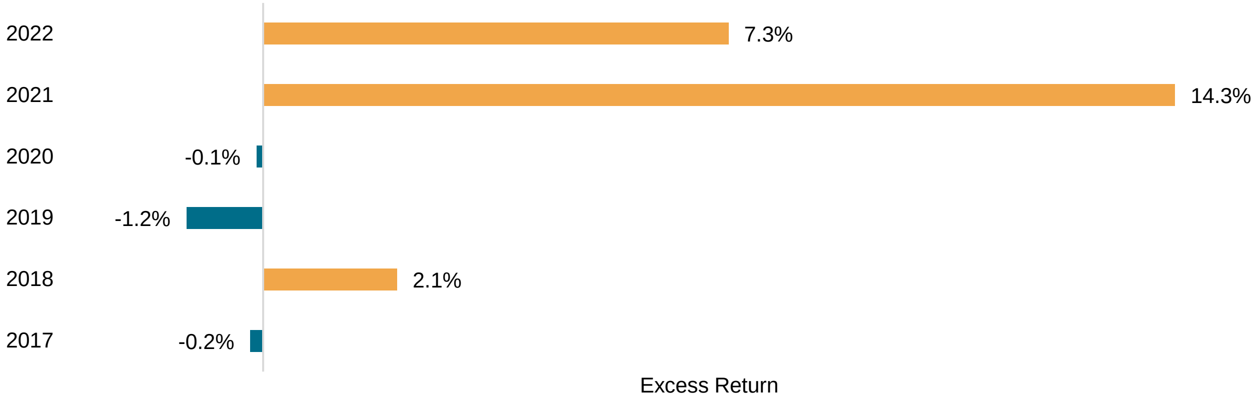
Exhibit 6: Annual Return and Volatility





All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May 31, 2022. Past performance is no guarantee of future results. Index performance based on monthly total return in USD. Year 2022 includes data through May 31, 2022. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

Exhibit 7: DYS versus Reference Index – Excess Return



All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May. 31, 2022. Past performance is no guarantee of future results. Index performance based on monthly total return in USD. Year 2022 includes data through May 31, 2022. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

A Closer Look at Distressed Issuers

In general, to have effective downside risk control, it would be advantageous to remove potential troubled issuers from the index as early as possible before their drop in price brings about a material negative impact on performance. Exhibit 8 shows that defaulted Chinese property issuers were removed from the defensive strategies much earlier than the reference index. Notably, the issuers were typically removed from the DYS earlier than the CRS as well, which brought about lower volatility, drawdown and enhanced risk-adjusted returns in the period studied.

Exhibit 8: Downside Risk Metrics

Strategy	Downside Risk Volatility (%)	Maximum Drawdown (%)	Bond Downgrades	Bond Defaults
Reference Index	2.3	30.1	291	101
CRS	2.1	24.1	184	9
DYS	1.4	11.9	46	0

All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May 31, 2022. Past performance is no guarantee of future results. Index performance based on monthly total return in USD. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

Exhibit 9: Removal Dates of Prominent Chinese Real Estate Issuers in the Strategies

Issuer	Reference Index	CRS	DYS
China Evergrande Group	September 2021	July 2021	September 2019
Scenery Journey Ltd	September 2021	July 2021	Never included
Kaisa Group Holdings Ltd	November 2021	October 2021	August 2021
Yuzhou Properties Co Ltd	March 2022	October 2021	July 2021
Sunac China Holdings Ltd	May 2022	February 2022	November 2021

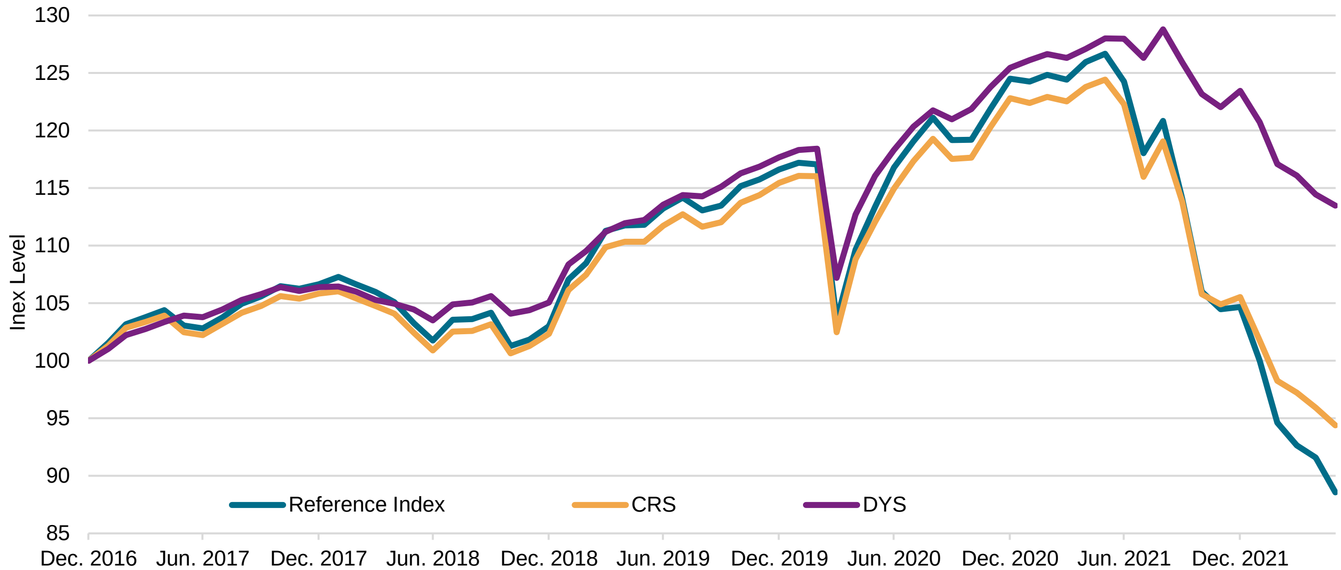
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May 31, 2022. Table is provided for illustrative purposes.

Conclusion

Given the impossibility of accurately predicting market events, it may be important to consider the benefits of downside protection in times of market volatility. Defensive yield select specifically targets the downside risk from defaulting and distressed issuers. It may not provide superior returns during benign market environments, but our results suggest that the strategy could be effective during market turmoil, which may, in the long run, deliver outperformance on a risk-adjusted basis. This is largely achieved through a proactive approach of removing troubled securities from the index before their values decline. The resulting index will likely exhibit a significantly lower volatility profile, which can potentially soften the impact of distressed market conditions.

Appendix

Exhibit 10: Hypothetical Historical Performance



All portfolios are hypothetical.
Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2016, to May. 31, 2022. Past performance is no guarantee of future results. Index performance based on monthly total return in USD. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of the document for more information regarding the inherent limitations associated with back-tested data.

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