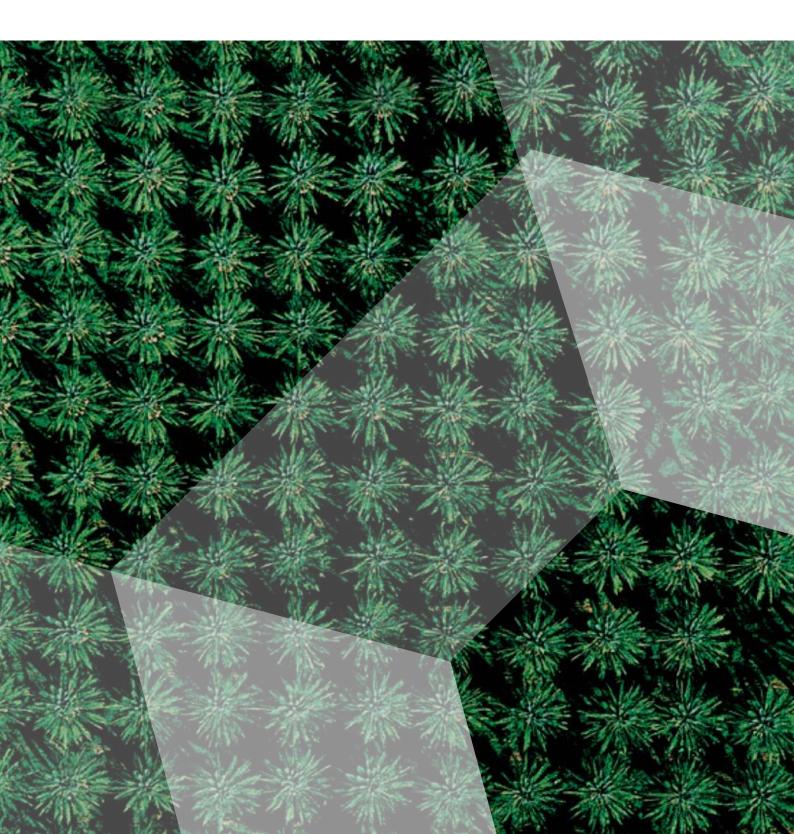
Research

FTSE Russell China Bond Research Report



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FTSE Russell China Bond Research Report

Highlights

- International bond investors poured into China bonds in 2020, hedging against a global volatile market in equities and declining U.S. Treasury yields. Foreign holdings of China's treasury debt surged to a record 1.88 trillion RMB (\$287 billion) as of end-December, according to data published by ChinaBond and Shanghai Clearing House.¹
- China issued its first bond with a variable interest rate tied to a key benchmark (dubbed "DR") in December, joining other major economies in reforming its benchmark rate framework as it tries to improve transparency on pricing. Previously in August, The People's Bank of China (PBOC) said it will make DR a key reference for monetary policy adjustment and market pricesetting.²
- Against this backdrop, defaults spiked with Chinese companies cancelling or delaying issuance of roughly 200 bonds worth 134.4 billion RMB (\$20.5 billion) between early November and late-December. Maturing bonds exceeded new debt sales in November by 48.5 billion RMB, with monthly net financing turning negative for the first time in 2020.³

¹ FTSE Russell. December 2020.

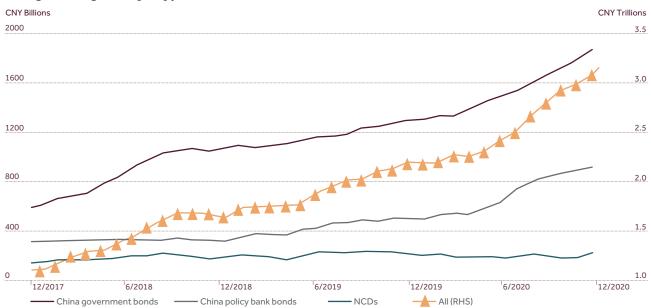
² Reuters. December 2020.

³ FTSE Russell, Wind. December 2020.

Chapter 1: Overview

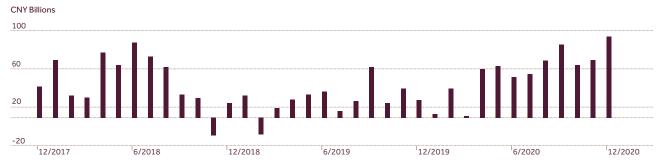
Aggressive foreign buying follows a challenging year as government bond issuance holds up

Interest in China's sovereign debt market surged in 2020 as international investors hedged against a global volatile market in equities and declining U.S. Treasury yields, with losses driven in part by the coronavirus crisis. Foreign holdings of Chinese government bonds surged to a record of 1.88 trillion RMB (\$287 billion) as of end-December, which brought foreign ownership to almost 10% of outstanding bonds. As illustrated in the chart below, foreign investors in a larger universe - owned Chinese bonds worth 3.2 trillion RMB (\$498 billion) at end-2020 – marking a historical high.



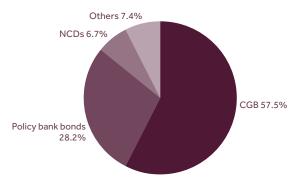
Foreign holdings in major types of Chinese bonds in RMB





Source: CCDC, Shanghai Clearing House; December 2020.

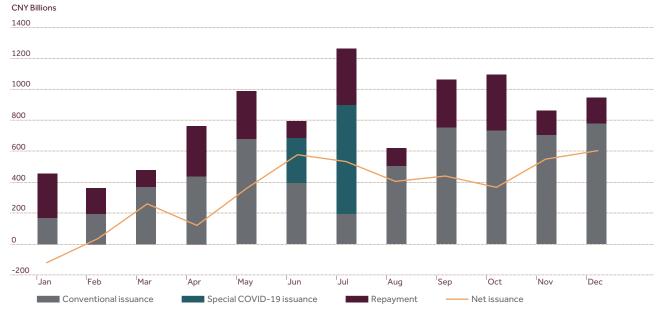
Breakdown of major types of Chinese bonds held by foreign investors



Source: CCDC, Shanghai Clearing House; December 2020.

Increasing foreign investment in Chinese government bonds rose in tandem with the rising volume of issuances by the Ministry of Finance throughout the year. As the following chart illustrates, total issuance of Chinese government bonds peaked in July 2020 at more than 900 billion RMB, among which 710 billion were dedicated to special anti-virus government bonds issued in an effort to balance COVID-19 control with economic development.

Special government bonds for COVID-19 control, auctioned in June and July, accounted for 14% of the overall issuance in 2020. In contrast, net issuance was the highest in June – about 577 billion RMB - with the fewest debts to repay during the year.



Chinese government bonds* issuance pattern in 2020

*Book-entry government bonds only – bond type eligible for FTSE Russell index inclusion Source: CCDC, Wind. January 2021.

Despite strong investor appetite for sovereign bonds, the appetite was not as strong for China's corporate bonds – and issuances were down across the board. On that note, corporate bond net issuance in Q4 lagged issuance in previous quarters by a wide margin (More details are discussed in Chapter 3). According to Refinitiv data, as of November Chinese high-yield bonds only accounted for 5.4% of the global high-yield market for the year – the lowest proportion and percentage since 2017.⁴

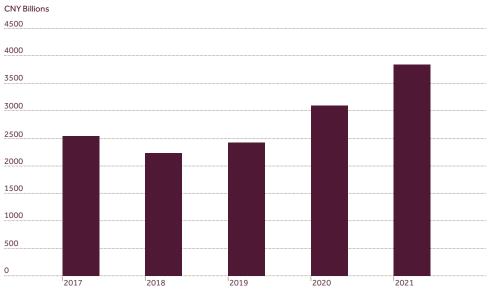
⁴ Reuters. November 2020.

Chapter 2: Reforming Benchmarks - Variable Rate Bonds

As appetite for China's sovereign debt surged, China's policymakers continued to issue market reforms – even despite the challenges posed by the pandemic. One such reform came in December when China issued its first bond with a variable interest rate tied to a key benchmark (dubbed "DR"), joining other major economies in reforming its benchmark rate framework as it tries to improve transparency on pricing. The move follows similar shifts in other major markets such as London, where regulators are phasing out the London Interbank Offered Rate (Libor) – a long standard benchmark.⁵

DR is defined as the weighted average interest rate of interest rate bond pledged repo transactions conducted among depository financial institutions. According to some analysts, floating-rate bonds could protect the market from volatility-induced risks. Previously in August, The People's Bank of China (PBOC) said it will make DR a key reference for monetary policy adjustment and market price-setting.⁶

Looking ahead into 2021, further policy adjustments are expected as the world's second largest economy recovers from the pandemic. At the same time, China treasury bond net issuance is expected to decline given the new high amount (measured at 3.8 trillion RMB) of bonds due to mature in 2021– assuming few, if any, special anti-virus bonds are sold during the year.⁷



Chinese government bonds' amounts due to mature in recent years

Source: FTSE Russell, Wind. February 2021.

⁵ Reuters. December 2020.

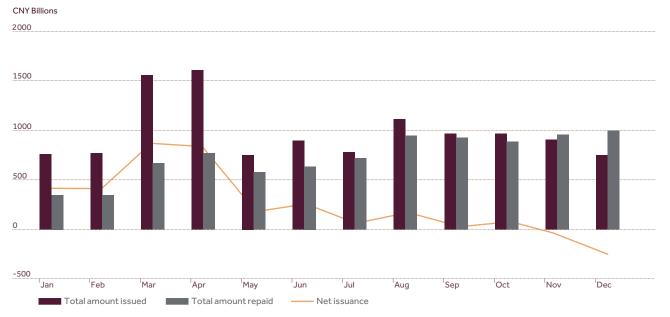
⁶ Reuters. December 2020.

⁷ FTSE Russell, Wind. February 2021.

Chapter 3: Defaults Making Headlines

As China's bond market continues to evolve in 2021, one issue has been increasingly grabbing headlines: a growing number of defaults by AAA-rated state-owned enterprises (SOE). Until recently, defaults by SOEs - firms believed to be supported by the government – were rarely seen. However, the market saw a number of missed payments in Q4, followed by a host of Chinese companies cancelling or delaying issuance of nearly 200 bonds worth 134.4 billion RMB (\$20.5 billion) in November and December. As a result, maturing credit bonds exceeded new debt sales in November by 48.5 billion RMB, with monthly net financing turning negative for the first time in 2020. The gap widened into December, culminating in a monthly net issuance of negative 246.3 billion RMB, versus positive figures earlier of the year, as shown in the chart below.

$\label{eq:credit} Credit \ bonds^* \ net \ issuance \ reduced \ to \ negative \ in \ Q4 \ amid \ bond \ sale \ cancellation$



*Including enterprise, corporate bonds, medium-term notes, commercial papers, private placement notes (PPN). Source: Wind, January 2021.

Following the surprise high-profile defaults by China's SOEs, vice premier Liu He said that the authorities would "severely" crack down on illegal behavior on bond financing, ranging from "malicious" transfer of assets to misuse of funds. Liu made the comments at a meeting for the committee that oversees China's financial sector in November.⁸

In early November, the Ministry of Finance also advised further on the enhancement of local government bond issuance mechanisms, following the guidance issued in April 2019 -- despite the fact that SOE defaults dampened investors' confidence in local government-backed bonds. Key measures related to general local government bonds⁹ include maintaining the average new-issue terms at a level of no longer than 10 years. In addition, the issuance amount of longer-than-10-year general bonds is suggested to be no more than 30% of the overall issuance throughout the year.

⁸ www.gov.cn/guowuyuan/2020-11/22/content_5563309.htm

⁹ Note: General local government bonds are bonds repaid from general fiscal revenue (as opposed to special-purpose local government bonds, which are backed by returns from the project being funded).

Chapter 4: Performance of the FTSE Russell China Bond Indexes

Onshore Report

Yield

Five major sectors are covered in FTSE Chinese (Onshore CNY) Broad Bond Index (CNYBBI). The yield of the CNYBBI as of end-December was 3.21%. Among the five major sectors, the Government Bond (CGB) sector was at 3.00%; the Policy Bank sector (issued by Agricultural Development Bank of China, China Development Bank and The Export-Import Bank of China) was at 3.24%; the Regional Government sector was at 3.30%; the Corporate sector was at 3.52%; the Government Sponsored (issued by China Central Huijin Ltd. and China Railway Co.) was at 3.40% as shown in the chart below.

For 2020 Q4, the yield of CNYBBI decreased by 12.12bps with corporate spread tightened by 6.13bps.

Chart 1. The historial yield of 5 sectors in CNYBBI sectors



Source: FTSE Russell, data as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures.

Total Return

The CNYBBI in USD unhedged terms finished up 5.64% while its return in CNY finished up just 1.44% during the last quarter. CNY appreciation was the main driver in the same period. The returns of some sectors are shown in Table 1.

| Table 1. Performance and volatilit | ty – total return % (USD) |
|------------------------------------|---------------------------|
|------------------------------------|---------------------------|

| | Cumulative Return (USD, unhedged) | | | | Annualized Volatility | | | |
|-------------|--------------------------------------|------|-------|-------|--------------------------|------|------|------|
| | 3M | 6M | 1YR | 3YR | 5YR | 1YR | 3YR | 5YR |
| CNYBBI | 5.64 | 8.63 | 9.65 | 16.96 | 17.28 | 4.39 | 4.38 | 4.07 |
| CGB | 5.30 | 8.04 | 9.28 | 14.94 | 15.44 | 4.56 | 4.57 | 4.25 |
| Policy Bank | 6.09 | 9.10 | 10.07 | 14.94 | 18.24 | 4.47 | 4.45 | 4.18 |
| Corporate | 5.35 | 9.18 | 9.83 | 14.94 | 19.85 | 4.33 | 4.25 | 3.94 |

Source: FTSE Russell - total return data in USD, as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures.

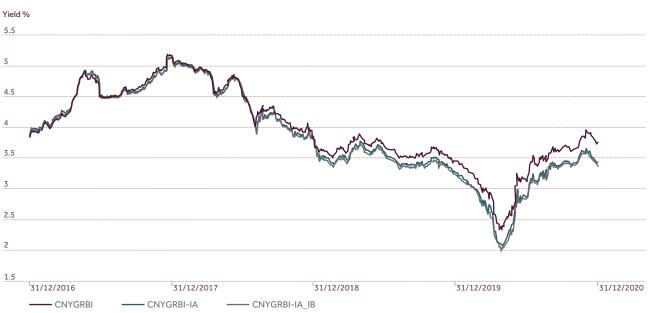
FTSE Chinese (Onshore CNY) Green Bond Index

Yield

There are three different versions of FTSE Chinese (Onshore CNY) Green Bond Index (CNYGRBI): CNYGRBI, FTSE Chinese (Onshore CNY) Internationally-Aligned Green Bond Index, and FTSE Chinese (Onshore CNY) Internationally-Aligned Green Bond Index – Interbank. The yield of the CNYGRBI as of end-December was 3.77%. Among the sub-indexes, FTSE Chinese (Onshore CNY) Internationally-Aligned Green Bond Index, was at 3.44%; FTSE Chinese (Onshore CNY) Internationally-Aligned Green Bond Index – Interbank was at 3.40%, as shown in the chart below.

For 2020 Q4, the yield of CNYGRBI increased by 11.76bps.

Chart 2. The historial yield of China Green Bond Index



Source: FTSE Russell, data as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures.

Total Return

The FTSE Chinese (Onshore CNY) Green Bond Index finished up 5.35% during the last quarter, with its Internationally-Aligned sub-index up 5.30% and its Internationally-Aligned – Interbank sub-index up 5.32%.

Table 2. Performance and volatility – total return % (USD)

| | | Cumulative Return (USD, unhedged) | | | | Annualized Volatility | | |
|--|------|--------------------------------------|-------|-------|------|--------------------------|--|--|
| | 3M | 6M | 1YR | 3YR | 1YR | 3YR | | |
| China Green Bond index | 5.35 | 9.33 | 10.21 | 17.31 | 4.28 | 4.24 | | |
| China Green Bond Index – International Align | 5.30 | 9.27 | 10.03 | 16.75 | 4.29 | 4.24 | | |
| China Green Bond Index – IA – Interbank | 5.32 | 9.26 | 10.01 | 16.68 | 4.29 | 4.25 | | |

Source: FTSE Russell - total return data in USD, as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures.

Chart 3. CNYBBI performance in USD vs in CNY for the past 5 years



Source: FTSE Russell - total return data in USD and CNY, as of December 31, 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Comparison of Offshore Sovereign Bonds and Onshore Sovereign Bonds

Yield

The yield of onshore 5-year Sovereign bonds was at 3.05% and the yield of offshore 5-year Sovereign bonds was at 2.69% as of end of Q4. The spread tightened by 4bps for Q4 of 2020 as shown in Chart 4.

Chart 4. Onshore 5 year yield vs offshore 5 year yield



Source: FTSE Russell as of December 31, 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

As of end of Q4 2020, the Offshore Chinese Treasury Yields were lower than the Onshore Chinese Treasury Yields over the entire curve. The short end curve 1-year spread was -1bps and the long end curve 10-year spread was -21bps.

Total Return

The FTSE Chinese Government Bond Index outperformed the FTSE Offshore counterpart during Q4 2020 as shown in Table 3.

Table 3. Performance and volatility – total return % (USD)

| | | Cumulative Return (USD, unhedged) | | | | | Annualized Volatility | | | |
|--|------|--------------------------------------|-------|-------|-------|------|--------------------------|------|--|--|
| | 3M | 6M | 1YR | 3YR | 5YR | 1YR | 3YR | 5YR | | |
| FTSE Chinese Government Bond Index (Onshore CNY) | 5.30 | 8.04 | 9.28 | 14.94 | 15.44 | 4.56 | 4.57 | 4.25 | | |
| FTSE Chinese Government Bond Index (Offshore CNY) | 5.24 | 9.90 | 10.84 | 15.82 | 23.74 | 4.99 | 4.96 | 4.64 | | |

Source: FTSE Russell, total return data in USD, as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures. FTSE Chinese Government Bond Index (Offshore CNY) is a sub-index in the FTSE Dim Sum (Offshore CNY) Bond Index.

USD Bonds Issued by Chinese Issuers

Yield

The yield of the FTSE Asian Broad Bond Index - China was at 3.39%. Among the two sub-indexes the FTSE Asian Broad Bond Index – China, Investment-Grade Index was at 2.08%; the FTSE Asian Broad Bond Index – China, High-Yield Index was at 8.45% as shown in the below chart.

Chart 5. The yield of FTSE Asian Broad Bond Index – China and sub-indexes



Source: FTSE Russell, data as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures.

Total Return

The FTSE Asian Broad Bond Index-China finished up 1.36% during the last quarter, with its Investment-Grade sub-index up 0.43% and its High-Yield sub-index up 5.10%.

Table 4. Performance and volatility – total return %

| | | Cumulative Return (USD, unhedged) | | | | Annualized Volatility | | |
|---|------|--------------------------------------|------|-------|-------|--------------------------|------|------|
| | 3M | 6M | 1YR | 3YR | 5YR | 1YR | 3YR | 5YR |
| FTSE Asian Broad Bond Index – China | 1.36 | 3.12 | 7.09 | 18.43 | 31.44 | 3.89 | 2.59 | 2.35 |
| FTSE Asian Broad Bond Index – China, IG | 0.43 | 2.13 | 6.70 | 18.24 | 29.27 | 3.29 | 2.43 | 2.33 |
| FTSE Asian Broad Bond Index – China, HY | 5.10 | 7.13 | 9.22 | 19.56 | 43.77 | 8.87 | 5.62 | 4.57 |

Source: FTSE Russell - total return data in USD, as of December 31, 2020. Past performance is no guarantee of future results. Returns shown prior to index launch reflect hypothetical historical performance. Please see the end for important legal disclosures.

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