Guide to the Chinese Fixed Income Markets

December 5, 2019

Characteristics of Chinese bonds

In brief:

- China's onshore bonds, out of all the segments of the Chinese fixed income universe, are drawing the most attention from international investors and prompting the most questions as many consider adding an allocation to Chinese fixed income.
- Understanding the onshore market requires a nuanced consideration of the difference between government, quasi-sovereign (policy bank and local government) and corporate bonds. The government and quasi-sovereign bonds are the only segments with enough consistent liquidity to satisfy international investors. Chinese government bonds with maturities of three years or less are the most liquid parts of the market.
- China's domestic ratings agencies offer comprehensive evaluations of onshore issues, but international investors need to read their ratings slightly differently than those given by global agencies. One of the major global ratings agencies was recently granted access to the Chinese market, and others may be close behind.
- Chinese government bonds, given their low correlation to other government bonds, may add diversification to a portfolio, though this relationship is likely to evolve as more investors enter the space.
- To better assist investors in understanding the onshore market, we discuss each of the following characteristics: liquidity, interest rates, ratings & defaults, return & volatility and currency dynamics.

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DO CHINESE BONDS BELONG IN A PORTFOLIO? IF SO, WHERE?

China's fixed income market is too large to ignore. And recent improvements to accessibility have prompted international investors to increasingly consider adding an allocation to Chinese bonds.

The Chinese fixed income market is essentially three different markets: offshore USD corporate debt, dim sum (offshore renminbi) corporate debt and onshore RMB government and corporate debt. While these markets share a macroeconomic outlook, they trade differently and can play different roles in a portfolio.

Many investors already have some exposure to USD-denominated Chinese bonds as Chinese issuers make up a significant portion of the Asian hard currency corporate debt market. This is also true, to a significantly lesser degree, of the offshore RMB market. The USD-issued Chinese bond market is almost 2.4 times the size (measured by market cap of listed indices) of the offshore RMB (CNH) market, while the onshore RMB (CNY) market is another 106 times the size of the USD market (258 times the CNH market)[1].

Allocating to the onshore market is a top consideration for many investors right now. Some will automatically see their portfolios incorporate onshore Chinese bonds as index-tracking funds adjust to the inclusion of CNY bonds in global benchmarks. Others could do so actively as portfolio managers tap the Bond Connect program. (*Refer to upcoming Guide to the Chinese Fixed Income Markets Paper #4: Chinese bonds go global for details of this scheme.)*

So how should the individual investor think about onshore bonds' place in his or her portfolio? The answer to this question varies widely depending on the type of investor and individual return goals.

Herein we focus on the CNY market as it is by far the largest segment of Chinese fixed income. Onshore bonds have also drawn the most interest among investors. Previously, investors outside China had little exposure to this market, but now can take advantage of improved access channels. Incorporating these bonds into a portfolio means understanding the dynamics of the onshore market, including the ways in which Chinese bonds are similar to other countries' debt and the ways in which they represent a unique set of investments.

Pricing a Chinese bond:

The Chinese bond market has some way to go before it represents a deep, liquid and highly tradable bond market. An essential element in any bond investing strategy is access to current market-driven pricing information. This information in China is distorted in two major ways:

- A large portion of this USD 13.5trillion market is not actively traded. Only about 30% of market value changes hands on a regular enough basis to be considered "liquid," hence often enough for market-wide pricing to be established[2]. Instead, most bonds are bought at issue and held to maturity by a handful of financial institutions. This is particularly true of the onshore corporate bond market, which currently is largely illiquid.
- Borrowing rates for all lending in China are distorted by artificially cheap capital as a result of government policy, lowering the base interest rate for fixed income instruments across the market.

To give a more complete overview of the onshore market, particularly the Chinese government and government-linked segment, we discuss each of the following characteristics in greater detail: liquidity, interest rates, ratings & defaults, return & volatility and the currency component. We then consider what adding Chinese bonds to a portfolio could mean.

1. Liquidity

Tradability is a key consideration for any investor. Being able to purchase a desired instrument at a market-set price and offload that instrument at the desired price is essential to investment management. The illiquidity of the Chinese bond market interferes with this tradability in certain segments. Improving liquidity is one of the most rapid changes onshore in recent years and is a high priority goal for Chinese authorities.

Shorter-maturity government bonds and cash management vehicles are relatively easy to trade in and out of, but maturities beyond five years are mostly not traded. Primary dealers frequently buy new issues to hold until maturity to maintain regulatory-mandated levels of capital. Quasi-sovereign bonds, those issued by local governments and policy banks, are similar to central government bonds in market liquidity and depth. Local government bonds are a slightly more complicated case as the liquidity and investability of these instruments varies across localities.

[1] Source: FTSE Russell, J.P. Morgan Economics Research, WIND, J.P. Morgan Asset Management. FTSE Chinese (Onshore CNY) Broad Bond Index is used as a proxy for CNY bonds, FTSE Dim Sum Bond Index is used as a proxy for CNH bonds, J.P. Morgan Asia Credit Index (JACI) China is used as a proxy for foreign currency-issued bonds.
[2] Authors' calculations based on data from: Bloomberg Finance L.P., CEIC, WIND.

Over the last couple of years, trading volumes have grown in line with the growth of the market cap. China has consistently ranked among the top five of emerging market (EM) local currency government bond markets by trading volume, according to the EMTA Debt Trading Volume Survey—a ranking certainly influenced by the sheer size of China compared to other emerging markets[3].

Corporate debt is the least liquid portion of the market and, generally speaking, has a long way to go before it presents attractive opportunities to retail investors.

2. Interest rates

To fuel China's rapid development, the banking system was designed to offer loans to key projects at rates below what economic fundamentals would dictate. As the financial system evolved beyond banks over the past 30 years, these low rates, enforced by tiered interest rates and monetary policy, filtered out beyond the necessary infrastructure projects to the broader economy.

Chinese authorities aim to change this dynamic, and have been pursuing financial sector reforms. Most recently, the authorities established the loan prime rate mechanism for setting benchmark lending rates. This tool aims to introduce more market forces to the allocation of capital. These are all positive steps. An in-depth discussion of Chinese monetary reforms is beyond the scope of this paper[4]. Further reforms along this track are likely to allow rates to structurally rise, even as slowing global growth drags interest rates lower around the world over the long run.

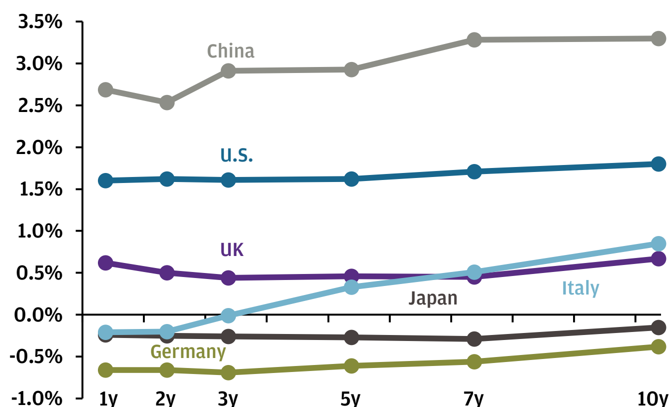
China's 3-year sovereign bond yield is currently 2.92%, which is relatively low among EM countries. However, when this yield is adjusted for risks (quantified by credit ratings), China's yields are generally higher than its peers with the same (for example, Japan) or a lower (for example, Italy) credit rating.

This positive spread is true all along the yield curve (see **Exhibit 1**). China issues bonds with maturities ranging from 1 year to 50 years. As discussed earlier, the 3-year and shorter maturities part of the curve is the most liquid market in China, and the gap between China's and other countries' yields is generally narrower the shorter the maturity compared. As liquidity increases in long-dated Chinese bonds, there may be some narrowing of the spread between China and comparably rated treasuries, but the structural rise in Chinese interest rates will likely keep yields well above the country's ratings peers.

China's government bonds offer relatively attractive yields all along the curve

EXHIBIT 1: SOVEREIGN BOND YIELD CURVES

YIELD AT EACH MATURITY, %



Source: FactSet, Tullett Prebon, J.P. Morgan Asset Management.
Data are as of October 31, 2019.

Policy bank bonds offer a yield pick-up above government bonds. These quasi-sovereign institutions are behind a large portion of the onshore issuance and are similarly highly rated to Chinese central government bonds. A large number of these bonds are also set for inclusion into global benchmarks this year. (*Refer to upcoming Paper #4 Chinese bonds go global.)*

3. Ratings & defaults

Currently, Chinese bonds are rated by one or several of the four main domestic ratings agencies, and some are also evaluated by Standard & Poor's, a recent market entrant. Overwhelmingly, Chinese bonds rated by the domestic agencies receive one of three ratings: AAA, AA+, AA.

While a ratings cluster like this may seem odd, these ratings can be indicative of quality if interpreted properly. Studies do show a high degree of correlation between yields and ratings (and ratings changes) from domestic Chinese agencies, enhancing our confidence in onshore bond ratings[5]. But international investors should be mindful when comparing these ratings to those awarded by international agencies.

The ratings for Chinese bonds by domestic agencies change by much smaller increments than do the ratings awarded by international agencies. While Chinese ratings agencies use the same alphanumeric classification, they do not differentiate between different riskiness levels to the same degree. Academic literature suggests that a one notch change (moving from AA+ to AAA) from a Chinese rating agency is roughly equivalent to a one letter change (three notches) from an international agency[6].

[3] EMTA Debt Trading Volume Survey. 1Q19.
[4] See Market Bulletin: *The PBoC will not cause a hard landing in 2018 (Jan 2018)* and *China's economy and policies: A mid-year review (Aug 2019), J.P. Morgan Asset Management.*
[5, 6] Livingston, Miles et. al. "Are Chinese credit ratings relevant? A study of the Chinese bond market and credit rating industry."Journal of Banking and Finance. 2017.

On the corporate side, establishing a current price requires knowing not only the discounted value of future cash streams, but also incorporates some assumption of default risk, recovery rate and some trust in the financial accounts. Understandably, investors often approach this space with a great deal of wariness. In particular, determining the appropriate default assumption is a common question. Concerns about accurate reporting of solvency have arisen with several recent accounting scandals.

China's process for recognizing bankruptcy and resolving liabilities is not exactly robust. Additionally, this area is evolving. Therefore, there is little consistent indication as to what a realistic recovery rate might be. Because of the liquidity concerns in the corporate portion of the secondary market discussed earlier, a firm number on the expected default rate is a moot point because many investors will likely not be holding these bonds in the near term.

Chinese authorities are moving rapidly to develop such elements. This year, a distressed debt exchange was established, with the goal of creating a market mechanism by which companies entering into a newly revamped bankruptcy process (bankruptcy in the traditional sense is almost impossible for companies in China) could seek to compensate investors. While this exchange has not been widely used, its existence is an important step in creating a corporate debt market that functions in the way international investors have become accustomed to.

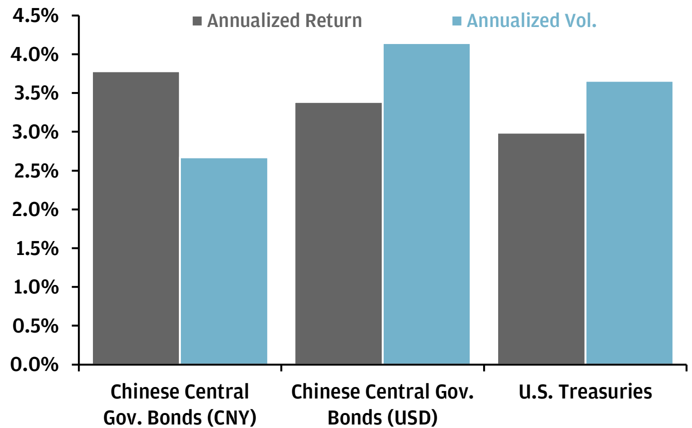
4. Return & volatility

The risk/return profile of Chinese government bonds has been relatively attractive as Chinese bond prices have proven to be less volatile compared with U.S. Treasuries of similar maturities while generating a similar total return (**Exhibit 2**). Of course, introducing a currency element complicates the picture. As China has moved toward more market-determined pricing for its currency, the volatility of the RMB has risen. As a consequence, the annualized volatility of Chinese bond returns translated into another currency has risen (**Exhibit 2**). Though volatile compared to its own history, recent CNY moves are relatively tame compared to the swings often seen in other emerging market currencies. How this consideration applies to individual investors will depend on which currency investors plan to bring their returns home in and whether or not they have access to currency hedging strategies.

Chinese central government bonds offer higher returns; volatility depends on currency

EXHIBIT 2: GOVERNMENT BONDS ANNUALIZED RETURN AND VOLATILITY

CHINESE CENTRAL GOVERNMENT BONDS, U.S. TREASURY BONDS, TOTAL RETURN INDEX



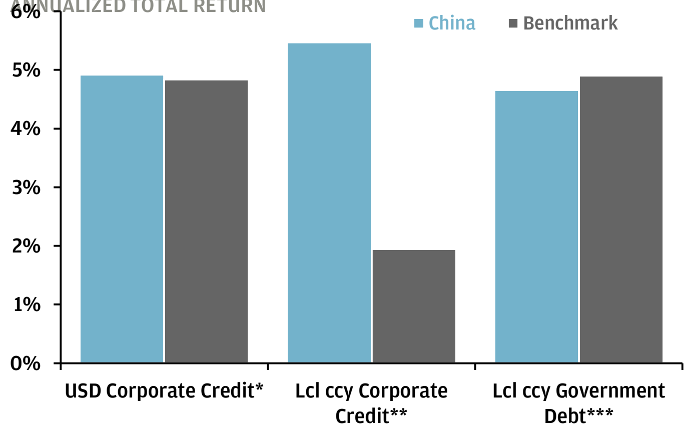
Source: Bloomberg Finance L.P., J.P. Morgan Asset Management. Total return indices are unhedged. Returns shown are 01/01/10 to 31/10/19. Past performance is not a reliable indicator of current and future results. Data reflect most recently available as of 31/10/19.

When compared to emerging market debt and global bond benchmarks, Chinese bonds have also performed respectably, although this sample over-relies on offshore Chinese listings. Offshore Chinese corporates make up 51% of the Asian corporate credit world as measured by the J.P. Morgan Asia Credit Index (JACI). RMB-denominated corporate debt, best represented by the ChinaBond Corporate Aggregate, offers a much different return profile. Compared to the globally accessible government world, these types of credit do offer attractive returns, but investors must keep in mind the liquidity concerns discussed earlier.

Chinese bond returns versus benchmarks vary depending on the type of bond

EXHIBIT 3: RETURNS FROM CHINESE BONDS VERSUS BENCHMARKS

ANNUALIZED TOTAL RETURN



Source: Bloomberg Finance L.P., FactSet, J.P. Morgan Economics Research, WIND, J.P. Morgan Asset Management. Returns shown are 31/10/14 to 31/10/19. Annualized percent return of China versus market aggregate benchmark. Indices used are: *JACI (Asia USD Credit). **ChinaBond Corporate Bond Index 3-5 Year & Bloomberg Barclays Aggregate Corporate 3-5 Year. ***JADE (Asia Local Ccy Gov. Debt). Data are as of October 31, 2019.

Measures of volatility in Chinese bonds are likely to be distorted to some degree by the illiberality present in the Chinese financial system. The controls on how companies approach bankruptcy and artificially cheap credit, plus the strong implicit guarantee system, depress volatility in the Chinese fixed income market compared to other major markets. For an investor in the more liquid and higher rated portion of the market, such as government bonds, this can be a boon. For those exploring the corporate segment, the appropriate volatility tolerance is a more difficult assumption to set, given the concerns around default and recovery assumptions.

5. The currency component

In addition to volatility in the corporate and local government sectors, the currency may also create volatility for international investors. Investors need to take into account what their potential returns will look like when eventually paid out in their home currency. In this context, investors need to evaluate how the CNY will evolve versus their home currency. Nowhere is the common economics adage, "forecasting is a difficult task, especially about the future," more true than in foreign exchange markets.

While precisely anticipating short-term swings in exchange rates is immensely difficult, wagering on the direction in the medium term is an easier exercise as exchange rates respond to shifts in allocation of capital across borders. In the long run, FX dynamics follow a more predictable pattern driven by broad macroeconomic developments.

In this context, the purchasing power parity approach – how much one unit of currency could purchase in another market, adjusted for living standards and inflation – gives some indication of the current valuation of currency versus another, and hence provides a guide for the general direction of its long-term movement. Taking this approach to the RMB versus the U.S. dollar, all fundamentals (present and future) suggest long-term investors will benefit from RMB appreciation over their investment horizon as the Chinese currency looks undervalued at present, especially after its recent depreciation.

Moreover, the addition of the RMB into the International Monetary Fund's (IMF) Special Drawing Rights basket, together with the inclusions of Chinese A-shares and onshore bonds into global benchmarks, could attract substantial portfolio flows that should support the RMB in the medium term.

The role of Chinese bonds in global portfolios: Diversification & risk-adjusted returns

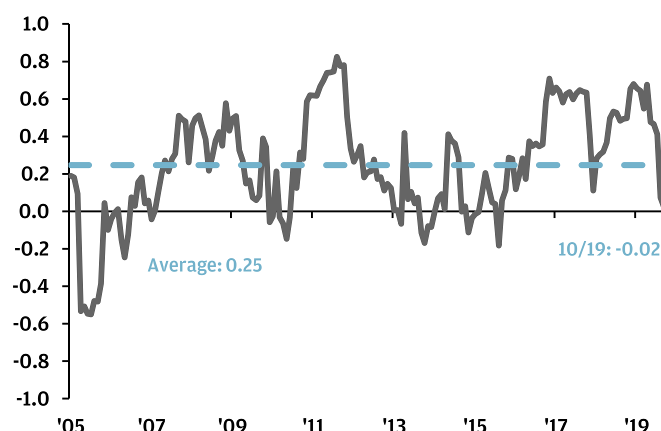
As Chinese bonds are gradually added into global fixed income benchmarks, they will find their way into well-diversified portfolios. Their defensive risk/return profile and their low correlations to other government bonds could provide some additional defensive cushion to portfolios. The relatively low volatility of Chinese fixed income assets in CNY, plus their attractive yield spread over developed market government bonds, certainly justifies exploring additions to portfolios, provided investors are content to remain within the liquid part of the market for the time being.

Perhaps the most attractive characteristic of Chinese bonds right now is their low correlation to other government bonds (**Exhibit 4**). The diversification benefit within fixed income offers an additional cushion to portfolios at this point in the global business cycle. This relationship is likely to change over time as the market becomes more heavily traded, although different macroeconomic dynamics will keep China's government bonds from syncing fully with the movements of other bond markets.

Diversification is an attractive element of Chinese government bonds

EXHIBIT 4: CORRELATION BETWEEN CHINESE AND GLOBAL GOVERNMENT BONDS

UNHEDGED USD TOTAL RETURN INDEX*, 12-MONTH ROLLING CORRELATIONS



Source: Bloomberg Finance L.P., J.P. Morgan Asset Management.
*Indexes are Bloomberg Barclays Global Government Bond Index and Bloomberg Barclays China Onshore Government Bond Index. Past performance is not a reliable indicator of current and future results. Diversification does not guarantee investment returns and does not eliminate the risk of loss. Data reflect most recently available as of 31/10/19.

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