

MANAGING YOUR RENMINBI CASH NEEDS AN EXPERT GUIDE

China's onshore credit market

Growing importance calls for rigorous analysis

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In brief

- China has undergone remarkable economic growth over the past two decades, helped by rapid industrialization and swiftly developing domestic markets. Underpinning this growth have been China's fixed income markets, which have seen a massive increase in size and scope, to such a degree that China now has the world's second-largest bond market, one difficult for investors to overlook—as a source of yield and diversification and because of its influence on global liquidity and interest rates.
- Particularly in the past several years, China's liberalization of both interest rates and financial markets has triggered a surge in credit issuers and in the range of debt instruments and structures being issued.
- With the increase in opportunities in Chinese fixed income markets, however, has come greater risk. The government's implicit guarantee on all debts outstanding has been largely eliminated. The credit fundamentals of some corporate issuers are weak. And domestic rating agencies' methodologies have limitations. Together, these issues are creating significant credit analysis challenges. Proper due diligence and rigorous analysis of issuers are critical for understanding the true risk characteristics of onshore credit investments, so that global and local investors may take advantage of the growing market opportunities while minimizing risk.

Introduction: A brief history of China's onshore bond market

For more than six decades, bank borrowing and lending were the principal sources of investment and financing for Chinese investors and borrowers. Large distortions existed throughout the financial system due to the People's Bank of China (PBoC) practice of setting official borrowing and lending rates for all commercial banks to charge their clients. Investors, having limited options, placed their excess cash in low yielding bank deposits; commercial banks enjoyed wide net interest margins while only lending to low risk state-owned borrowers; and private enterprises were typically unable to access bank funding at all.

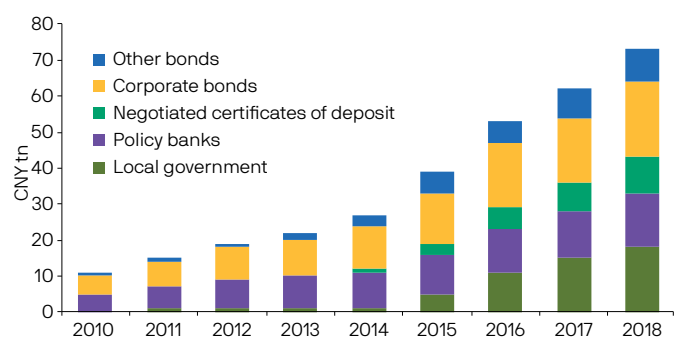
To address these problems and develop a more market-driven financial system, the authorities established the onshore bond market in 1996. Initially, its growth was slow. But with the introduction of corporate bonds in 2008—followed by local government bonds in 2009 and negotiated certificates of deposit in late 2013—the pace of bond issuance and trading quickened (**Exhibit 1**).

A period of interest rate liberalization, part of the fundamental financial reform undertaken during the past decade,¹ combined with rapid financial market

innovation, has increased the number of investors seeking market-driven yields, the range of Chinese corporate issuers seeking funding and the variety of instruments available (**Exhibit 2**). Together, these forces have precipitated a twelvefold surge in the size of China's onshore credit market, contributing to the depth, liquidity and vigor of the Chinese bond market today.

China's bond market has grown significantly over the past several years

Exhibit 1: Corporate and other Non-Government Chinese bond issuance



Source: AsianBondsOnline, China Central Depository & Clearing Co. Ltd. (CCDC), J.P. Morgan Asset Management; data as at June 30, 2019.

¹Aidan Shevlin and Lan Wu, "China: The path to interest rate liberalization," J.P. Morgan Asset Management, July 23, 2015, <https://blog.jporganinstitutional.com/2015/07/china-the-path-to-interest-rate-liberalization/>.

The Chinese corporate bond market's wide variety of instruments has contributed to its liquidity and vitality

Exhibit 2: Chinese credit instruments

Instrument	Investment platform	Tenor	Characteristics
Commercial paper (CP)	Interbank	≤1 year	Mainly issued by securities brokers and non-financial companies as a source of short-term funding
Negotiated certificates of deposit (NCD)	Interbank	≤1 year	Issued by commercial banks
Medium-term notes (MTN)	Interbank	≥1 year	Enable regular issuance by a wide variety of corporations without the need to seek regulatory approval for each issuance
Enterprise bonds	Interbank	≥1 year	Mainly issued by unlisted corporations; typically local government funding vehicles
Corporate bonds	Exchange	≥1 year	Mainly issued by listed corporations
Financial bonds	Interbank	≥1 year	Issued by policy banks, commercial banks, special purpose financial entities, securities brokers and other nonbank financial firms
Local government bonds	Interbank	≥1 year	Issued by approved provinces and cities
Asset-backed bonds	Interbank & Exchange	≥1 year	Typically backed by auto loans and mortgages

Source: J.P. Morgan Asset Management; information as at June 30, 2019.

Market structure

The Chinese onshore credit market shares many similarities with more developed bond markets around the world, but legacy regulations, uncommon issuer and investor characteristics, and unique local market practices make it distinctive.

Investment platforms

China's onshore bonds and other fixed income instruments are traded primarily on three platforms: the China interbank bond market, the exchange and the commercial bank over-the-counter market (see box, Chinese bond market investment platforms).

Issuers

Local governments are the largest issuers of bonds and make up the largest sector in China's onshore credit market mix (**Exhibit 3**). They have been a major contributor to the onshore corporate bond market's growth since 2015, when city and provincial governments were first allowed to directly fund infrastructure activities via the wholesale market without prior government approval.

Commercial bank issuers represent the second-largest sector. Historically, regulatory constraints limited smaller commercial banks' ability to grow their retail deposit franchises, presenting an obstacle

to higher profitability. The introduction of bank-issued negotiated certificates of deposit (NCDs) offered these banks unprecedented access to wholesale funding at attractive yields, allowing them to rapidly expand their lending and shadow banking activities.²

Other corporate bond issuers include state-owned enterprises (SOEs) and private companies, mainly in the construction, industrial, utilities and energy sectors (**Exhibit 3**).

Chinese bond market investment platforms

Interbank



- Accounts for 82% of outstanding issuance
- 48% of bonds trade exclusively on interbank
- One-to-one platform where each market-maker can make bids and offers
- Used by professional investors

Exchange



- Accounts for 45% of outstanding issuance
- 11% of bonds trade exclusively on exchange
- Centralized trade matching system with continuous price quotes
- Used by retail and those not trading on the interbank platform

Over-the-counter



- Commercial bank over-the-counter market
- For small retail investors

Private

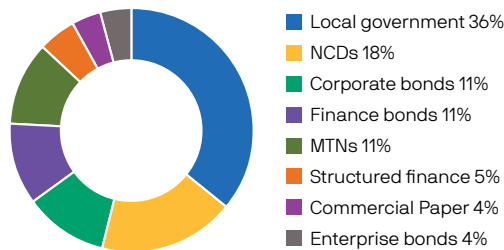


- One-to-one market
- 7% of bonds are traded privately

²Shadow banking is all borrowing and lending activities beyond traditional commercial bank deposits and lending, and is a byproduct of past financial regulation. Shadow banking activities sought to circumvent these restrictions and came in many different forms, including wealth management products, asset management plans and trust products. These have become a significant source of systemic risk for China because of their size, complexity, interconnection, opaqueness and moral hazard problem.

A diverse mix of issuers make up China's corporate bond market

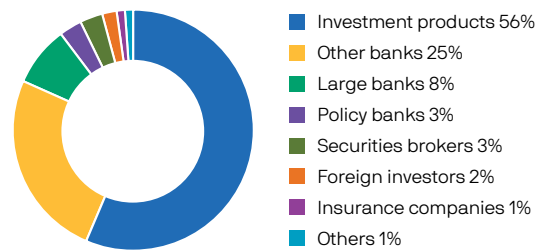
Exhibit 3: Chinese Credit Market Issuer Mix



Source: Shanghai Wind Information Co., ChinaBond.com, Shanghai Clearing House, J.P. Morgan Asset Management; data as at June 30, 2019.

Participation in China's corporate bond market is driven by investors' distinct risk tolerances

Exhibit 4: Chinese Credit Market Investor Mix



Source: Shanghai Wind Information Co., ChinaBond.com, Shanghai Clearing House, J.P. Morgan Asset Management; data as at June 30, 2019.

Investors

Domestic investors dominate the onshore corporate bond market (**Exhibit 4**).

Fund and asset management companies that structure and sell investment products, including asset management products and mutual funds, are the largest buyers of corporate bonds. The bonds' attractive yields and diversification benefits appeal to these buyers, which focus on maximizing investment returns.

The next-largest set of investors are commercial banks, insurance companies, policy banks and securities brokers. Due to the size of their investment portfolios, they collectively own a significant portion of corporate bonds; however, because of their low risk tolerance, they typically prefer the safety of government bonds.

China's credit markets are now open to foreign investors, but participation remains low, with international investors' ownership share only about 5% of government bonds and 2% of credit bonds outstanding—although the combination of Chinese bonds' inclusion in benchmark indices and improved accessibility are likely to increase foreign investor demand.

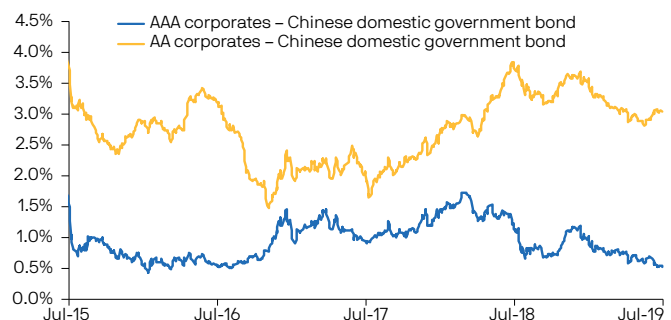
Characteristics and pricing

Chinese corporate bond market yields are more volatile than those of similar securities in developed markets. Macroeconomic and technical factors—including central bank monetary policy, government fiscal policy, frequent regulatory changes and interbank liquidity conditions—all contribute to this volatility (**Exhibit 5**).

Historically, credit ratings had a very low correlation with credit bond yields and spreads, especially for bonds rated between AAA and AA (**Exhibit 6**). Not until

Chinese corporate bond spreads relative to government bonds have been volatile

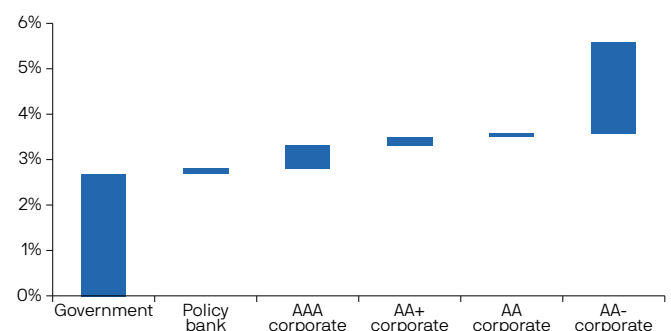
Exhibit 5: Chinese Corporate Bond Spreads By Rating



Source: China Bond, J.P. Morgan Asset Management; data as at June 30, 2019.

Chinese bond yields are little differentiated, except those rated AA- or lower

Exhibit 6: Chinese Bond Market Yields By Sector And Rating



Source: China Bond, J.P. Morgan Asset Management; data as at June 30, 2019.

ratings fall to AA- or lower do credit spreads widen significantly, suggesting insufficient compensation for onshore corporate bond investors, compared with credit spreads in offshore markets.

Rating agencies

In international bond markets, three nationally recognized statistical rating organizations (NRSRO)—Standard & Poor’s, Moody’s Investors Service and Fitch Ratings—dominate. Their long-established and rigorous rating methodologies are widely accepted by international fixed income investors. Historically, NRSRO ratings demonstrate a strong link to credit spreads, and defaults are closely tied to the strength of an issuer’s credit rating.

Until recently, none of these international rating agencies had a license to operate in China, limiting their coverage of Chinese issuers to those that required an international rating for foreign bond issues. Those that did receive a rating from international agencies were subject to the Chinese government’s sovereign credit rating—A1 (Moody’s), A+ (S&P) and A+ (Fitch) as at July 31, 2019—which for all three NRSROs serves as a ceiling on Chinese corporate issuers.

Instead of international agencies, nine local rating agencies dominate onshore ratings, with the three largest controlling about two-thirds of the market.³ The authorities regulate the number of rating agencies and rating nomenclature. By law, bond issuers are only required to have one rating, making competition among domestic agencies intense. Operating independently from international market standards and practices, local rating agencies have developed their own methodologies, limiting investors’ ability to map local ratings to international rating scales (**Exhibits 7A and 7B**).

All domestic rating agencies use the same rating scale (AAA, AA, A, etc.). While they do not explicitly rate the sovereign, it implicitly receives the highest credit rating. When determining a suitable rating, domestic rating agencies typically place considerable weight on the implicit presence of government support for bond issuers and rely less on organizations’ financial data. This use of a top-down methodology that factors in implicit government support implies that most local governments, state-owned enterprises and other government-connected organizations enjoy AAA ratings (**Exhibit 8**). Most private companies, by contrast, have significantly lower ratings.

Recently, some international rating agencies have received licenses to issue onshore credit ratings in China. While they will face the same regulatory and data quality challenges as their local peers, their entry marks a significant and positive development. Their

strong reputations and rigorous rating methodologies should increase international investors’ confidence while boosting the professionalism of the domestic credit rating industry.

Mapping local ratings to international ratings scale is difficult

Exhibit 7A: NRSRO vs. domestic ratings, selected Chinese banks

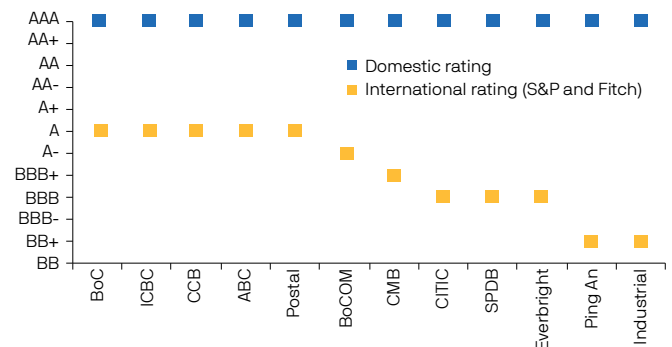
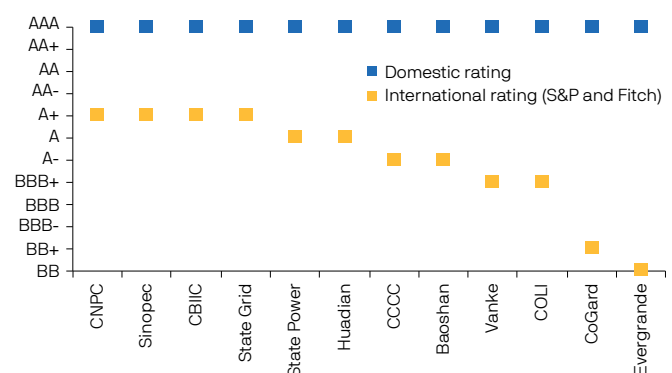


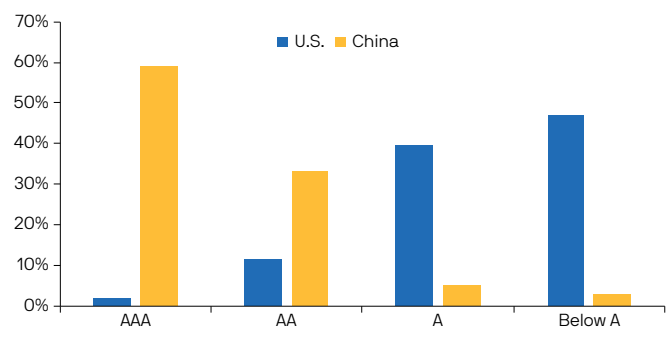
Exhibit 7B: NRSRO vs. domestic ratings, selected Chinese corporates



Source: S&P, Fitch Ratings, CCXI, Lianhe, Shanghai Wind Information Co., J.P. Morgan Asset Management; data as at June 30, 2019.

The preponderance of very high credit ratings suggests room for improvement in domestic rating agencies’ methodologies

Exhibit 8: Chinese vs. U.S. corporate bond ratings



Source: S&P, Bank of America Merrill Lynch, J.P. Morgan Asset Management; data as at June 30, 2019.

³ The top three local Chinese bond rating agencies are China Chengxin International Credit Rating Co. (CCXI), China Lianhe Credit Rating Co. and Dagong Global Credit Rating Co. At publication time, they were responsible, together, for 68% of total bond ratings.

Growing credit risk

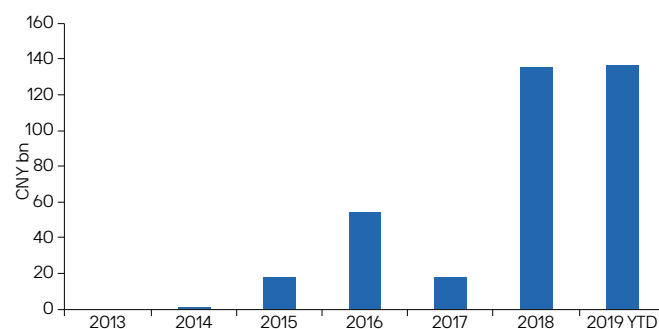
For the first 65 years after the founding of the People's Republic of China in 1949, the local financial markets never witnessed a default, nor did an investor suffer a loss due to the nonpayment of a loan. Loss-making organizations at risk of renegeing on their debts were either bailed out or taken over at the behest of the government. This practice reinforced the widespread belief that corporate debts in China are underwritten by an implicit government guarantee.

That changed in March 2014, when China's fixed income market suffered its first-ever bond default.⁴ Subsequently, the pace and size of bond defaults has increased—especially as tighter liquidity conditions, and new rules designed to curtail the shadow banking sector, placed additional financial pressure on lower quality corporate issuers and smaller regional banks (Exhibit 9). Meanwhile, in April 2015, the Chinese government introduced a deposit insurance scheme, limiting deposit protection to CNY 500,000 per bank account. Both these factors significantly eroded confidence in the implicit government guarantee and amplified the complexity of investing in the onshore credit market.

The challenges of investing in the onshore credit market are further magnified by a lack of experienced credit analysts, weaker corporate governance and limited financial disclosures. In addition, underdeveloped bankruptcy laws, opaque financial links, the scarcity of cross-default clauses and limited

Since the bond market's first-ever default in 2014, the pace and size of defaults' have risen dramatically

Exhibit 9: Chinese onshore corporate bond defaults



Source: S&P, Moody's, J.P. Morgan Asset Management; data as at June 30, 2019.

rating actions by domestic rating agencies constrain investors' ability to ascertain whether a default has actually occurred or what the likely recovery terms or ratios might be.

A new phenomenon: Commercial bank credit risks

Until 2019, domestic bond defaults were mainly concentrated in private company credits—companies that had few government links and whose defaults had limited market impact. Financial institutions were not involved. However, the weakness of smaller commercial banks was vividly highlighted by the sudden seizure of Baoshang Bank in May 2019 and the authorities' July 2019 injection of capital into Jinzhou Bank. While regulators took swift and decisive action



Baoshang Bank – Risk Implications



Headlines

- On May 24, 2019, Chinese regulators, citing severe credit irregularities, announced the seizure of Baoshang Bank for at least one year.
- The first distressed bank takeover in over two decades, it sent shock waves through the financial system.



Background

- Baoshang Bank, an unlisted city commercial bank, is the 36th-largest bank in China.
- With an AA+ domestic rating, the bank was a frequent borrower in the wholesale funding markets.



Impact

- Small retail deposits were fully guaranteed by China's deposit protection scheme.
- NCD and bond investors were not guaranteed and faced losses on their investments.



Fallout

- News of the takeover triggered a rise in credit risk and a widening of credit spreads and Shibor* yields.
- The PBoC intervened quickly, injecting liquidity to help stabilize financial markets and prevent a panic.
- Smaller banks experienced difficulties accessing wholesale funding as investors began demanding higher yields.



Warning signs

- Baoshang Bank's level of interbank liabilities exceeded the regulatory cap, and the sources of its loans were opaque.
- Delayed release of financial reports, poor liquidity levels and weak asset quality were key warning signs.



Lessons

- The takeover of Baoshang Bank highlighted the significant risks embedded in low quality, smaller banks.
- Losses by large investors have strengthened the link between risk and return, and reduced the perception of an implicit guarantee.

Source: J.P. Morgan Asset Management; as at June 30, 2019. * The Shanghai interbank offered rate.

⁴ Shanghai Chaori Solar Energy Science & Technology Co. failed to repay interest due on a CNY 1 billion bond domestic bond.

to rescue and stabilize these banks, the likelihood remains that investors could suffer capital losses on their investments, underscoring the potential financial and systemic risks that such small, at-risk commercial financial institutions pose.

Small commercial banks, of which China has approximately 4,000, are defined as all banks except the “Big Four plus two”⁵ and the joint-stock commercial banks. While each of the small banks is diminutive relative to the Big Four, they are large by international standards and represent, in total, one-quarter of China’s banking system assets, equivalent to approximately 70% of China’s 2018 GDP. These banks play a significant role in China’s financial system, especially in local and regional markets, and are an important conduit for private company borrowing and lending. However, they tend to have weaker asset quality and lower capital ratios.

Despite having limited retail deposit bases, small banks have expanded rapidly in recent years. Financing via NCDs and other types of corporate bonds has allowed these banks to boost their revenues and profits by expanding their lending programs—often by means of opaque shadow banking channels. By mid-2019, the vulnerabilities of this banking model were exposed as the combination of slower economic growth, tighter regulation and the escalating trade war, hurt smaller banks’ profitability, increased the number of nonperforming loans and magnified liquidity stresses.

Aware of the importance—and vulnerabilities—of small banks like Baoshang, the PBoC has enacted several measures to ensure the flow of liquidity to them. While these actions are helpful, smaller banks will likely face challenging conditions for the foreseeable future.

Managing Chinese credit risk

The complexity of China’s onshore corporate bond market and the recent escalation of credit risks highlight the importance of due diligence and rigorous, independent analysis to help balance the risks and returns.

A China-focused investment policy

A good investment policy provides a solid foundation for cash investment decisions, helps define short-term investment objectives and lays out strategies for



achieving them. It also outlines acceptable levels of risk, return requirements, permissible investments and other relevant constraints.

Multinational corporations operating in China should ensure that their global (or U.S.-centric) investment policy takes account of local market characteristics, instruments and practices. Local corporations should create or update their investment policies to prepare them to successfully navigate developing domestic markets, rapidly changing regulations and evolving business requirements.

The need for capital preservation should help limit the list of eligible securities. These may include instruments such as exchange-traded repurchase agreements, structured deposits and alternatives like money market funds and separately managed accounts. The investment policy should also help ensure adequate liquidity by outlining suitable concentration and tenor limits for various sectors, credit ratings and issuers while reflecting the size and availability of local investment options. Most investment policies will also require achieving competitive returns; this will determine the lowest acceptable credit rating and longest acceptable maturity. In China, that means considering the sovereign ceiling and both the international and domestic rating scales.

⁵ Industrial and Commercial Bank of China, Bank of China, China Construction Bank and Agricultural Bank of China are the Big Four. Postal Savings Bank and Bank of Communications are the “plus two.”

Independent credit research

Until recently, investors in China’s fixed income securities conducted little credit research beyond a basic screening of the sector, rating or credit spread to Chinese government bonds. The perception of an implicit government guarantee on all debt outstanding encouraged a myopic focus on returns and a disregard for issuers’ underlying financial position. However, the rapid proliferation of defaults has triggered a fundamental reassessment of onshore credit rating methodologies.

The ultimate goal of credit research is to ascertain the willingness and ability of a borrower to repay a debt. For cash investors focused on liquidity and security, avoiding rating downgrades and defaults is a key priority. Therefore, Chinese credit issuers should be assessed on their stand-alone capital, asset quality, management, earnings and liquidity. In addition, industry and operating trends provide valuable context, and an issuer’s access to collateral and alternative funding sources is important as well.

While the frequency of reporting and level of detail published by Chinese bond issuers has improved significantly, several credit research challenges remain. These include accounting practices that differ from international accounting standards and a lack of clarity around certain items on many company financial statements. These idiosyncrasies highlight the need for investors to create well-designed credit

guidelines and utilize independent and experienced credit analysts.

China Securities Regulatory Commission (CSRC) oversight of money market funds and asset management products is now more directed toward risk and liquidity issues, and provides a basic risk framework for these investments (**Exhibit 10**). Nevertheless, the limitations of domestic credit ratings can leave investors exposed to significantly more risk than expected. In contrast, onshore investment products with AAA ratings assigned by international rating agencies offer higher levels of security and liquidity, as they are based on international rating systems and methodologies.

Potential government support

Finally, assessing the potential level of government support is also important. State-owned entities should not be considered state-guaranteed. Organizations and corporations that are systemically important and linked to the central government are more likely to receive support during periods of financial stress than regional or city-owned entities—in those cases, the willingness and ability of the potential guarantor to offer support may be limited. Investors should assume that for private companies little or no government support is likely to be forthcoming.

Mutual fund guidelines have substantially more credit restrictions than asset management product (AMP) guidelines

Exhibit 10: Csrc and International Rating Agency Money Market Guidelines and Egulations

Guidelines	AAA rated money market funds	Local money market funds	Fixed income AMPs	Separately managed accounts
Rating	≥ A- (international rating)	≥ AA+ (domestic rating)	No minimum limit	Customizable
Issuer concentration	≤ 5% per issue (≥ 7 days to maturity) ≤ 15% per state-owned commercial bank	≤ 10% per corporate (AAA domestic rating) ≤ 20% per AAA rated custodian bank ≤ 10% in issuers rated ≤ AAA ≤ 2% per issuer rated ≤ AAA	No maximum limit	Customizable
Investment tenor	≤ 397 days	≤ 397 days	No maximum tenor	Customizable

Source: CSRC, Fitch Ratings, J.P. Morgan Asset Management; data as at June 30, 2019.



Conclusion: Seek to minimize downside risks with rigorous analysis to access new opportunities

- The Chinese corporate bond market continues to grow in size and importance, and is now too large for global cash investors to overlook. The rapid increase in the range of issuers and instruments offers investors significant diversification and yield benefits, yet also poses the significant challenge of understanding and identifying credit risks.
- Rigorous analysis of issuers and counterparties is critical to understanding the true underlying risk characteristics of onshore credit investments.
- A robust investment policy, combined with independent credit research and an objective analysis of the potential level of government support to issuers, are critical steps that can minimize downside risks while allowing cash investors to take advantage of this important new market opportunity.

Authors



Aidan Shevlin, CFA
Head of Asia Pacific Liquidity Management
J.P. Morgan Asset Management



Andy Chang, CFA
Credit Analyst, Asia Pacific Liquidity Management
J.P. Morgan Asset Management

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