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What do the Chinese and Russian bond markets have in common? And how do they differ?

An attempt at a meaningful comparison

- **Making a direct comparison between the Chinese and Russian bond markets is a very challenging task.** One should understand that bond types, economic environments, and financial systems are different. The difference in the size of the markets is staggering, both in absolute value and in terms of economic scale. Nevertheless, the bond markets may share similar problems stemming from comparable age, significant government influence, and destabilized risk assessment.
- **In both countries, external financial markets play an important role in borrowing.** For Russia, it is somewhat more important because cross-border flows are more open. In China, special measures are introduced toward "opening-up" to external investors and creditors. In Russia, the problem of de-offshorization and excessive capital flows (generated by sanctions) is more relevant.
- **The Chinese and Russian bond markets share a high degree of government influence.** Most outstanding bonds are either directly issued by different levels of government or known to have explicit or implicit government guarantees (issued by state-owned or systemically important enterprises). This is true for around 80% of bonds. An important part of government's big influence is the regulation of bond issuance, exchange, and holding. Regulators of both countries try to find a reasonable balance between boosting market development and preventing excessive risk concentration.
- **Both China and Russia have the problem of relative short-termism of bond markets and overall credit.** For China, the reason is that with the downward pressure of economic growth, corporates' willingness in making long-term investment declines, and the risk appetite of commercial banks goes down. For Russia, the scarcity of long-term papers is possibly caused by less predictable interest rates and exchange rate environment, as well as the overall low trust of households in financial institutions and investments. A common influencing factor is that, in recent years, commercial banks have started to issue short-term bonds for liquidity management, which has amplified the importance of a short market segment.
- **There is a persistent difference in market yields to maturity for bonds of different macro-sectors,** but this cannot be totally attributed to the risk perception. The factors of bond prices in addition to credit quality (like taxation, liquidity, and government policies) are at least as influential. In China, differences in taxation generate possibly at least half of the g-spread of high-quality corporate bonds, which is not as important for Russia as the taxation is more unified.

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Structural features of Chinese and Russian bond markets

For the last 5 years, the Chinese and Russian bond markets have been growing relatively quickly, organically, and with government support. And as they are both young, it is possible that there are some similar problems in regulation and credit risk assessment. Table 1 below is aimed at summarizing features of both markets in the most comparable manner possible. Some of the most interesting features are discussed in greater detail throughout this text.

China's bond market is much larger than the Russian bond market in absolute and relative size. Considering that both bond markets have comparably short histories, the main possible reason for this disparity is that China has experienced an uninterrupted period of economic growth over the past two decades, which is not the case for Russia.

In China, the interbank bond market, which is an over-the-counter market, occupies a dominant position in terms of bond stock, issuance, trading volume, etc., while the exchange market accounts for a smaller share. In Russia, trade is 95% concentrated on the exchange market (technically speaking), but a sufficient part of issuances are conducted within closed lists of investors.

China's bond market has far more bond varieties than the Russian bond market, including innovative products such as green bonds and innovative and entrepreneurial corporate bonds. This, on one hand, meets the financing demands of different issuers, but on the other may be excessively hard to analyze and regulate. Russia's market has two basic types, which may not be flexible enough for a developed market.

As for market structure, the bond markets of China and Russia share some similarities. The structures of issuers are more or less the same, with governments (and governmental institutions) playing a major role and commercial banks being the main holders in both markets. National currencies dominate in the structure of issued securities.

Compared to developed markets, both the Chinese and Russian bond markets have relatively low liquidity. A possible common reason is that commercial banks dominate in the investor structure, and they are usually prone to hold bonds to maturity instead of trading. The Russian bond market possibly has lower average liquidity due to the overall low trust of households in financial institutions and financial investments. In China, households and individuals are more active in private financial investments - bond funds have become one of the main tools for households to make savings, which encourages the amount of trading activity in the secondary market.

Both in Russia and in China, bonds in total financing of the non-financial sector account for a minor share. This as well can be explained by the presence of very large banks, which alone are able to meet the financing needs of basically any potential creditor. In these circumstances, the need for many creditors (and a public credit history) is not so pronounced.

Table 1. Similarities and differences between Russian and Chinese internal bond markets

	China	Russia
Absolute size (volume of outstanding bonds)	RMB 86 trln ≈ RUB 840 trln (3rd in the World)	RMB 2.2 trln ≈ RUB 21 trln (20-30th in the world)
Total volume of bond issuance in 2018 (without maturities < 1 week)	RMB 44 trln ≈ RUB 428 trln	RMB 0.6 trln ≈ RUB 5.6 trln
Relative size (outstanding bonds % of GDP) and its estimated sustainable potential	95%/NA	22%/70-75%
Average growth pace in 2013-2018	9.1% of GDP/year	1.7% of GDP/year
Average share of bonds in the composition of financing (bonds/bank credit/shares)	12/84/4 %	7/39/54 %
Currencies of issuance	RMB (100%)	RUB (85-90%) and USD (10-15%)
Average YTM of a 5-year government bond in national currency	3-4%	7-8%
Typical maturity of a bond issued by a non-financial company	<=1 year and 3-5 years	4-6 years
Typical maturity of a bond issued by a financial company	<=1 year, 2-3 years and 9-10 years	3-6 years and <1 month
Proportion of outstanding bonds that will mature within 1 year	1/4	1/5
Dominant holders	Commercial banks - 56%	Commercial banks - 67%
Turnover rate (trading volume/outstanding bonds at the end of year) in 2014-2017	1.4	0.7
De-facto openness in holding: share of bonds held by non-residents	2-3%	10-15%
De-facto openness in holding: share of central government bonds in national currency held by non-residents	8%	20-25%
Issuers (government/financials/NFCs)	57/20/23%	50/20/30%
De-facto openness in issuing internally: issued by non-residents	0.3%	0.5%
Dominating primary market	Interbank bond market	Moscow Exchange (MOEX)
Dominating secondary market		
Regulation of issuance	People's Bank of China, China Banking and Insurance Regulatory Commission, China Securities Regulatory Commission, National Development and Reform Commission	Bank of Russia
Regulation of exchange	People's Bank of China, China Securities Regulatory Commission	
Special segments	Green bond, Belt & Road bond, innovative and entrepreneurial corporate bond	-

Source: Golden Credit, ACRA.

Opening up and de-offshorization

Borrowing on an international market is an obvious alternative to borrowing internally. The overall features of a company raising funds abroad are usually the following:

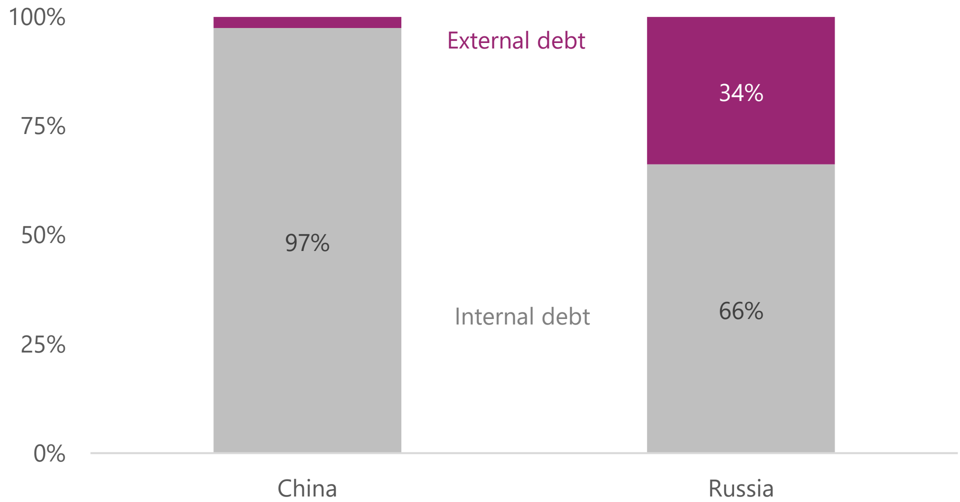
- Sufficient share of foreign currency costs and revenues;
- Bigger sizes on a national scale.

The first feature provides a natural hedge to the currency risk, which may be seen as less significant if the country's central bank employs a fixed exchange rate regime. The second feature provides recognizability and justifies the larger need for public credit history as the large size lowers the probability that there is a single bank big enough to lend.

Generally speaking, the bigger the share of such companies, the higher the internal bond market's responsiveness to the external environment. Both in China and in Russia, there is a considerable number of large companies relying primarily on international business. But it seems that Russian non-financial companies are more willing to take external debt (see Fig. 1). This is partly explained by the fact that the difference in internal and external interest rates is sufficiently bigger in Russia than in China (5-6% compared to 2-3%). Less regulation on the international activities of companies is probably important as well.

In China, special administrative regions like Hong Kong, Taiwan, and Macao are referred to as offshore jurisdictions, similar to foreign countries. Statistics include bonds issued in offshores in the external debt figure.

Figure 1. Russian non-financial companies borrow abroad relatively more actively than Chinese ones (outstanding bonds and loan composition as of June 30, 2018)



Source: WIND, Bloomberg, Bank of Russia, Golden Credit, ACRA

For Chinese companies, offshore bond issuance is not only a way to get financing abroad, but it serves the important function of attracting other means of foreign investment and establishing international reputation. Since 2015, regulators introduced a series of measures to promote the offshore bond issuance of Chinese companies, including the relaxation of restrictions on approval, quotas, and settlements of exchange. On November 13, 2018, the outstanding offshore bonds issued by Chinese companies (including both commercial financial institutions and non-financial corporates) stood at around RMB 2 trillion, among which, USD denominated bonds accounted for 89%.

An SPV is a subsidiary, whereas a "Red chip" company typically owns shares in a local company.

There are three universal approaches for companies to issue bonds overseas. The first is direct issuance, that is, Chinese companies issue bonds overseas by themselves. The second is indirect issuance, meaning that the issuers are overseas subsidiaries or branches of Chinese companies (SPVs) provided with offer guarantees or keepwell agreements. The third approach is called a "red chip" pattern. "Red chips" are companies which are registered and incorporated overseas (mainly in The Cayman Islands, Bermuda, or The British Virgin Islands) and get listed in overseas exchanges (usually in Hong Kong SAR, New York, London, Frankfurt, or Singapore), but their operational assets and businesses are mostly in mainland China. Listings on overseas exchanges may be attractive both because of lower interest rates and because the listing requirements there could be more flexible.

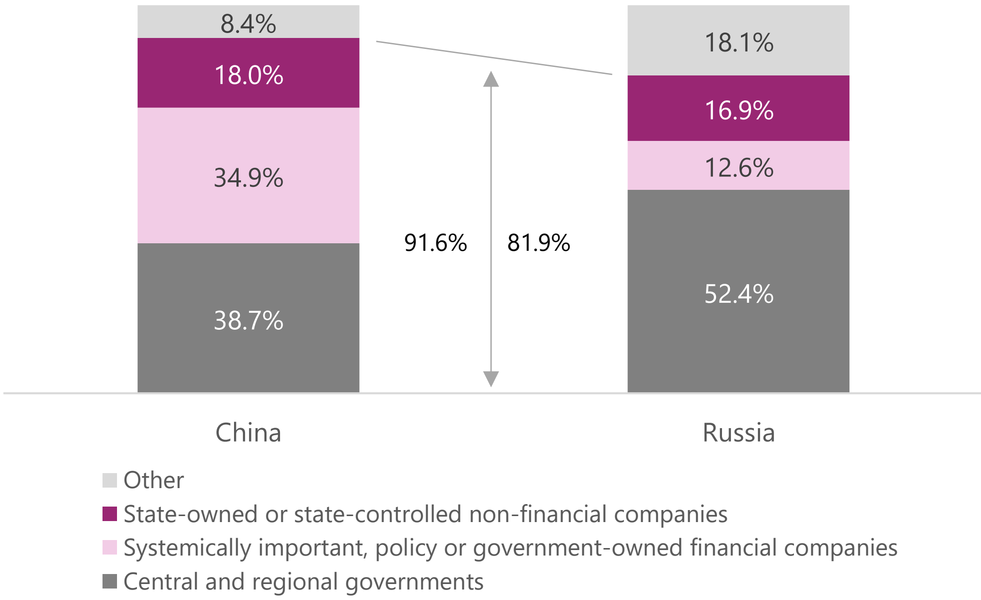
In contrast to China, Russian offshore subsidiaries and parent companies are often discussed in the context of taxation. The Russian equivalent of a "red chip" pattern is perceived as a means of ownership protection or tax avoidance more often than as a financing-aimed structure. Since 2015, the Russian government has changed legislation to correctly identify the final beneficiaries of those companies and encourage them to register companies domestically. For now, these changes have little effect on their choice to borrow abroad or internally. Nevertheless, it could change the future composition of outstanding debt (external vs. internal). The ongoing "de-offshorization" regulatory process includes plans to organize special territories inside Russia with the relaxed tax legislation, which are usually referred to as "internal offshores."

The other side of bond market openness, the non-residents' investments, is another material difference between the Russian and Chinese markets. In China, cross-border capital flows are controlled within a framework of monetary policy and therefore the regulation of holdings is considerably heavy and approval-based, which is why only 2.3% of outstanding bonds are held by non-residents. In Russia, this figure is close to 10% and is more affected by external factors like debt-aimed sanctions from the US and EU and interest rate spreads.

The crucial role of government

The bond markets in Russia and China are both under a high degree of government influence. Most outstanding bonds are either directly issued by different levels of government or known to have explicit or implicit government guarantees (issued by state-owned or systemically important enterprises). This is true for around 80% of bonds (see Fig. 2) and 60-70% of bonds issued by non-financial companies (sufficiently higher than in developed bond markets). This is, to a large extent, a consequence of governments' overall influence on economic activity, and particularly its deliberate control over the largest businesses.

Figure 2. Most outstanding bonds are government-related both in China and in Russia (as of mid-2018)[1]



Source: Golden Credit, ACRA

The concept of soft budget constraints describes the situation when, even in a profit-maximizing environment, the chronic loss-makers are not allowed to fail. They are always bailed out with financial subsidies or other instruments (either by government or by powerful private interests). The expectation of guaranteed support makes them less willing to achieve financial sustainability, and aiming more at other features, which usually leads to bigger expenses and debt burden.

This overall influence may be attributed to the soft budget constraints, which have possibly affected regional governments and some of the state-owned companies of China (especially after the 2009 fiscal stimulus package). Both for Russia and China, at least since 2014, this effect is less likely to be important as the central governments of these countries have sufficiently increased control over the debt burden of regional governments and regulate them to have more self-sufficient budget planning, which was not the case before.

An important part of the government's strong influence is the regulation of bond issuance, exchange, and holding. Regulators of both countries try to find a reasonable balance between boosting market development and preventing excessive risk concentration.

[1] Bonds of Local Government Financing Vehicles (LGFVs) are not included in the regional government debt category. Since 2014, the Chinese government has directly prohibited backing their debt. For this graph, a non-financial company is meant to have a certain degree of government guarantee if the corresponding support factor is used in its credit rating assessment (Russia) or if it is government-owned (China).

China's regulatory framework has been playing a positive role in curbing risks while the bond market experienced its highest growth since 2006. However, in the context of promoting the opening-up of the market, the existing regulatory system has obviously reached its limits. It is experiencing a lack of integrity: multiple regulatory bodies and legal systems are based on different morals, mechanisms, and logics and justify the existence of different trading floors with insufficient liquidity. These factors could possibly hinder the efficiency of internal financial resource allocation and the unified monitoring of market risk, as well as prevent the opening-up of the bond market.

China's regulators highlight this problem themselves, which probably means that a more unified framework is going to emerge. As a part of this process, in September 2018, the People's Bank of China and the China Securities Regulatory Commission announced a gradual unification of rating qualifications in different parts of the bond market. In contrast to the Chinese bond market, the Russian market essentially has a single regulator, the Bank of Russia, which provides legislation and controls the issuance and risk assessment of bond investments by financial institutions. It delegates operational control of the registration and exchange to the Moscow Exchange.

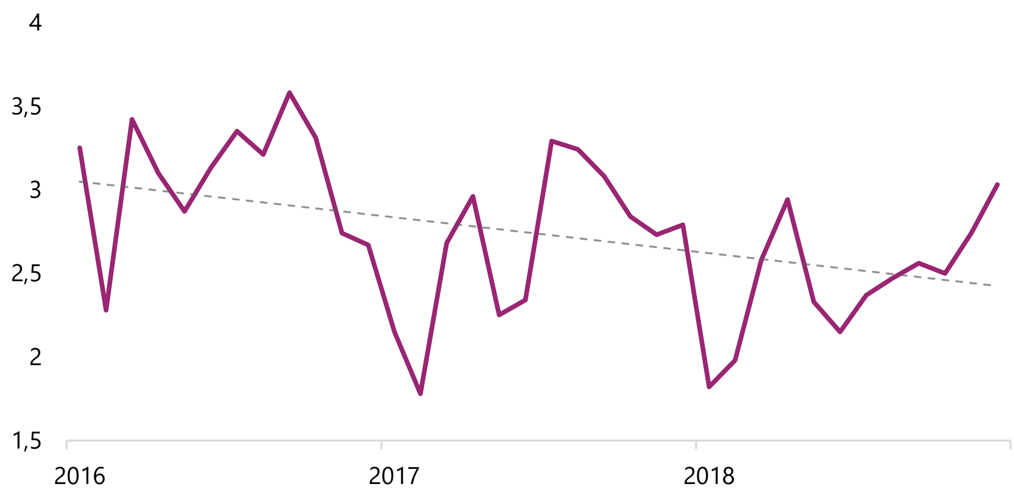
Bond markets are highly susceptible to macroprudential policies. For example, in 2018, the performance of China's bond market was divergent. On one hand, due to the easing of monetary policy and abundant liquidity in the money market, the bond market was overall a bull market as YTM on Treasury bonds kept declining. On the other hand, with the introduction of financial deleveraging regulations, it became difficult for low-rated private enterprises to get financing (or refinance existing debt), which causes the frequent occurrence of bond defaults. This, in turn, accelerated the downward trend of investors' risk appetite. Therefore, in 2018, the issuance and trading of rate securities and high-rated credit bonds recovered, while the issuance and trading of low-rated credit bonds became much more difficult.

Short-termism of bond issuance

A common challenge for both China and Russia is the relative short-termism of bond markets and overall credit. Half of the outstanding bonds are scheduled to be repaid in three and five years in China and Russia, respectively. In developed countries, about half of the outstanding bonds are typically scheduled to be repaid in 7-8 years.

For China's bond market, there has been an obvious tendency in increasing short-termism in bond issuance since 2016. The willingness of issuers in making long-term investment declines with the slowdown of China's economic growth, so the issuance of short-term bonds is more suitable for issuers' needs. Investors are more inclined to hold short-term bonds due to the gradual rising exposure to credit risk. The issuance of the interbank negotiable certificates of deposits has also aggravated the shortening trend of bond issuance, as their maturity is not allowed to exceed one year. Recently, bank credit also demonstrates an increasingly high proportion of new short-term credit contracts. There are two possible reasons. One is that the risk appetite of commercial banks has decreased, and the other is that the regulation of the real estate market leads to the deceleration of long-term loans of households, while some funds flow into the real estate market via short-term loans of households (consumer loans).

Figure 3. Weighted average maturity of corporate credit bonds in China, years



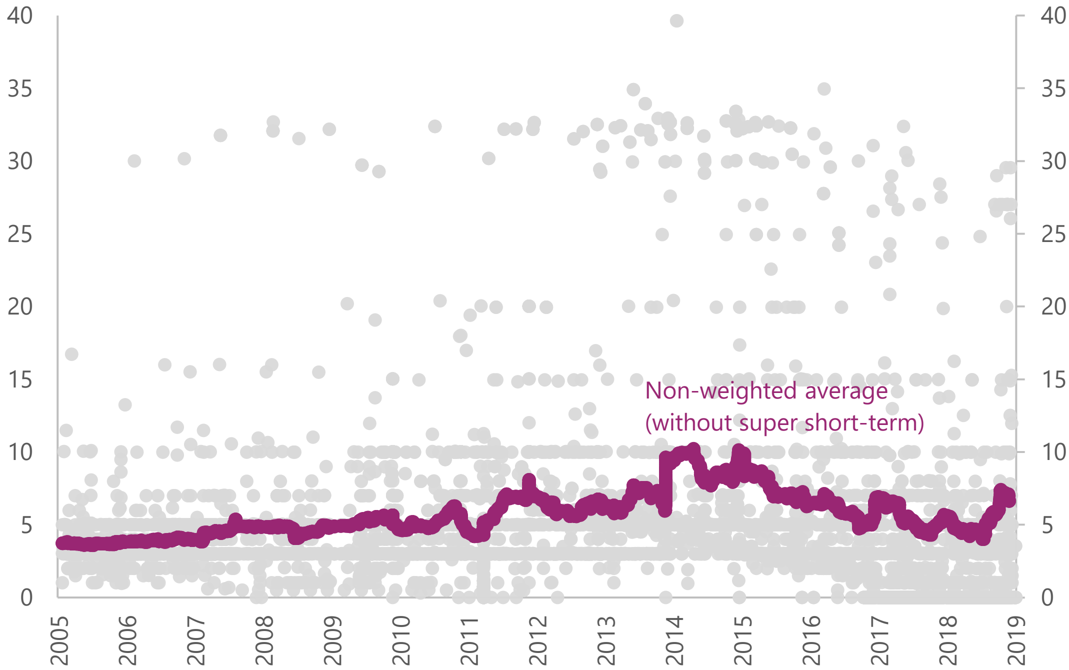
Source: WIND, Golden Credit

China, in contrast, is more inclined to move in the opposite direction – towards consumption-oriented growth.

In Russia, this problem of short credit is believed to be one that prevents economic growth from being more investment-oriented and closer to the world average. The general way of solving this consists of two basic components. The first aims at providing a more predictable interest and exchange rate environment through the composition of inflation targeting and the Ministry of Finance's interventions on the foreign exchange market (sterilizing oil and gas revenues generated by overly high commodity prices). Predictability theoretically leads to longer planning horizons. The second is growing local non-banking institutional investors who demand longer investments because they provide longer saving horizons to households. This is still not common in Russia, because the government pension system traditionally is mostly re-distributional and insurance companies and non-government pension funds suffer from the overall low trust in the financial system. It is low mostly because at least half of the active population witnessed two relatively recent episodes of total monetary circulation disruption, which led to the total depreciation of non-physical savings.

Real estate is perceived to be the most trustworthy means of savings. Regulation is aimed at raising trust through the stricter supervision of those institutions (which sometimes, unfortunately, contradicts their longer-term orientation).

Figure 4. Maturity of the issued bonds in Russia, years



Source: Cbonds, ACRA

Corporate bonds in this chapter refer to bonds issued by non-financial companies, not the corporate bonds in China's bond market which refer to bonds issued by NFCs only in the exchange bond market, and which are just a proportion of all NFC bonds in China. Therefore, in this chapter, yield to maturity of 3-year medium-term notes is selected to represent the yield to maturity of China's corporate bond.

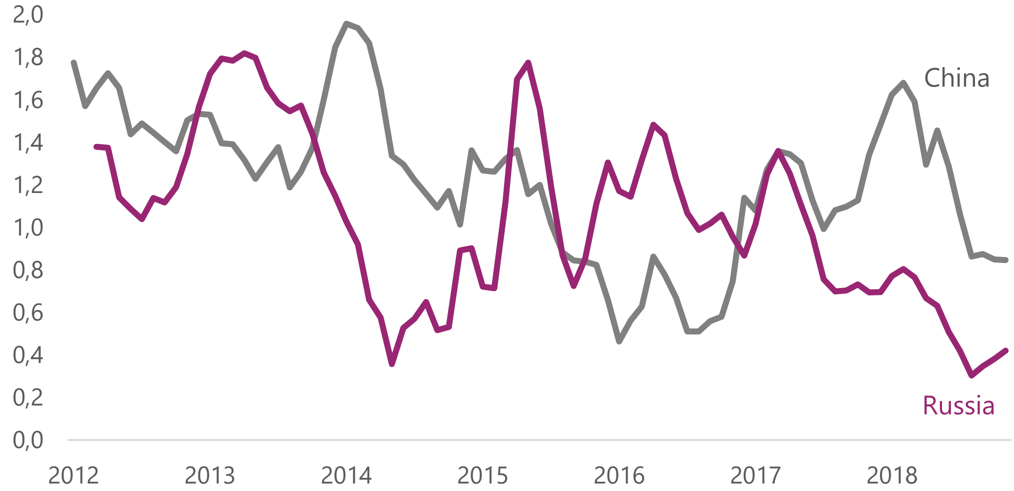
G-spread is the difference between the yield to maturity of a given bond and a central government bond with the same duration.

Bond pricing factors

Both Chinese and Russian markets have, on average, reasonable liquidity, which makes market prices on bonds more or less informative about entities' perceived credit risk, but the direct comparison of yields may be misleading.

There is a persistent difference in market yields to maturity for bonds of different macrosectors. Central governments tend to borrow more cheaply than regional governments, as regional governments usually enjoy smaller or comparable interest rates with a policy bank and private companies on average pay even more in interest. And even inside the same credit rating category one will usually see the same ordering of yields to maturity and a sufficient spread (see, for example the highest rated corporate g-spread in Fig. 5).

Figure 5. G-spreads for bonds issued by the highest rated corporate[2] with a 2-3 year duration are sufficiently positive



Source: Golden Credit, ACRA

This price and interest difference occurs not only because both markets seem to use the concept of government support (or implied government guarantee) as an important piece of information to differentiate borrowers by credit quality. The factors of bond prices in addition to credit quality (like taxation, liquidity, and government policies) may be as influential.

Table 2. Taxation differences for bond holders in Russia and China (companies)

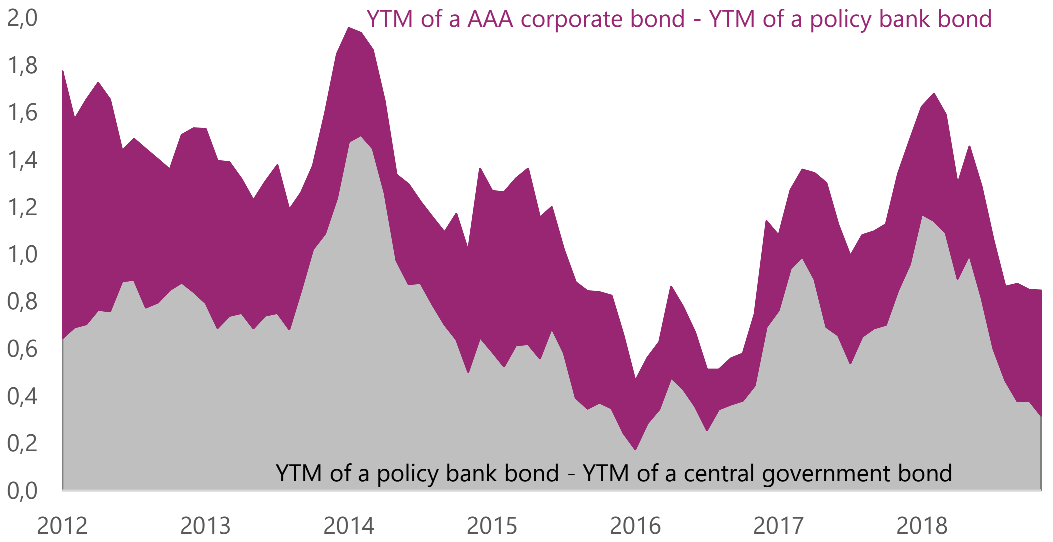
	Capital gains		Coupons	
	China (VAT+IncTax)	Russia (IncTax)	China (VAT+IncTax)	Russia (IncTax)
Central government bonds	6%+25%	15%	-	15%
Regional government bonds	6%+25%	15%	-	15%
Policy bank's bonds	6%+25%	15%	6%+25%	15%
Resident corporate bonds	6%+25%	15%	6%+25%	15%

Source: The Tax Code of China, The Tax Code of Russia

[2] For China, only AAA corporates are taken. Whereas for Russia, we take national scale ratings of AA and AAA categories. This accounts for roughly 20-25% of the highest rated corporates. For extensive commentary on rating distribution, see the "Brief introduction..." parts for Russia and China.

In China, differences in taxation possibly generate at least half of the g-spread of a high-quality corporate bond. It can be illustrated, for example, by the fact that the YTM g-spread for a policy bank bond is around 50% of that of a AAA-rated corporate (see Fig. 4 and Table 2). The biggest difference between policy bank bonds and treasury bonds is taxation (the taxation on policy bank bonds is similar to the taxation on corporate bonds) because both of them are perceived as sovereign debt and are of a comparable liquidity on average. The difference also incorporates liquidity premium. The liquidity of policy bank bonds is somewhat more susceptible to market conditions, which leads to its g-spread narrowing down in the bull market and widening in the bear market. Currently in Russia, the income taxation is unified for most bond types.

Figure 6. In China, around half of the g-spread of the highest rated corporates can be accounted for by differences in taxation, which is not the case for Russia



Source: WIND, Golden Credit.

In both markets, yield differences may be to some extent generated by stimulating or risk-oriented government policies, e.g. lowering coupon tax rates for corporate bonds in Russia in 2017, or exempting non-residents from paying taxes on coupon income for 3 years in China.

Since commercial banks hold a large share of the total outstanding bonds, Central bank policies normally affect the prices of bonds through the risk-appetite of banks. Risk-asset ratios both in Russia and in China can be used to decrease the relative attractiveness of the bonds, which regulators see as potentially too risky. For example, the spread in China between the yields of local government debt and treasury bonds comes from the non-zero risk ratio (see Table 3) as well as from credit risk and liquidity premiums. This is true for Russia as well.

Table 3. Risk ratios for bond holdings of commercial banks as of January 31, 2019

	China	Russia
Central government bonds	0%	0%
Regional government bonds	20%	20%
Policy bank's bonds	0%	20%/100%
Resident corporate bonds	100%	100%

Source: People's bank of China, Bank of Russia.

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