鵬元國際 PENGYUAN

A review of LGFVs' risk characteristics based on non-standard product defaults

Contents

Summary

Non-standard product defaults start with lower-level LGFVs. China's local government financing vehicles (LGFVs) have reported more cases of non-standard product defaults since 2018 after the government strengthened the regulatory efforts and oversight over the sector's financing. According to the statistics, China has seen 90 non-standard product defaults by LGFVs involving 117 entities (including both issuers and guarantors) from January 2018 to November 2020. A large number of default cases happened in provinces including Guizhou, Yunnan, Inner Mongolia and Sichuan, with higher proportion of defaults by county-level LGFVs and LGFVs with no bond issuance record. In addition, it is worth noting that when a prefecture-level LGFV reports defaults, it is typical that the lower-level LGFVs under its jurisdiction may have already reported defaults several times.

Weak economic strength and short-term debt servicing capability. From the perspective of regions, those with non-standard product defaults have relatively weak economic strength, high debt ratio, high exposure in non-standard products and weak financing capacity. Regarding the issuers' financials, short-term debt service ability of those LGFVs with non-standard product defaults declines rapidly and their short-term debt service pressure exacerbates substantially. The short-term debt as a percentage of total debt of LGFVs that have reported non-standard product defaults rose rapidly, from 13.58% at the end of 2016 to 24.34% at the end of 2019, while the cash to short-term debt ratio decreased from 5.73 in 2016 to 0.31 in 2019. In addition, the external guarantee as a percentage of net asset of bond-issuing entities with non-standard product defaults continues to grow in recent years.

Impact of non-standard product defaults in the region. LGFVs that have reported non-standard product defaults have a greater impact on themselves and other LGFV bonds in the same region, while these defaults influence less on LGFV bond issuance in their respective higher administrative level. The LGFVs in the default region subsequently turn to private placement with shorter maturity and higher interest rate for refinancing. LGFV bond issuance in non-standard product defaults regions will be greatly reduced if there are no remedial measures to boost market confidence. According to our observation, 70.27% of LGFV issuers stopped LGFV bond issuance following reports of their respective non-standard product defaults. In addition, 51.35% of the regions no longer issued LGFV bonds following their respective LGFVs' non-standard product defaults.

Non-standard debt products serve as the cushion of standard debt products. We believe identifying the risk of non-standard product defaults by LGFVs could help prevent risk contagion in a timely manner. The process involves the framework of analysing traditional LGFV risk through local economic and fiscal strength, LGFV status, operating profile, financial risk and external support. Special attention should be paid to regions with high debt ratios, high proportion of non-standard debt assets and weak financing capabilities. We should also stay vigilant of the rapid decline in the short-term debt service ability of LGFVs.

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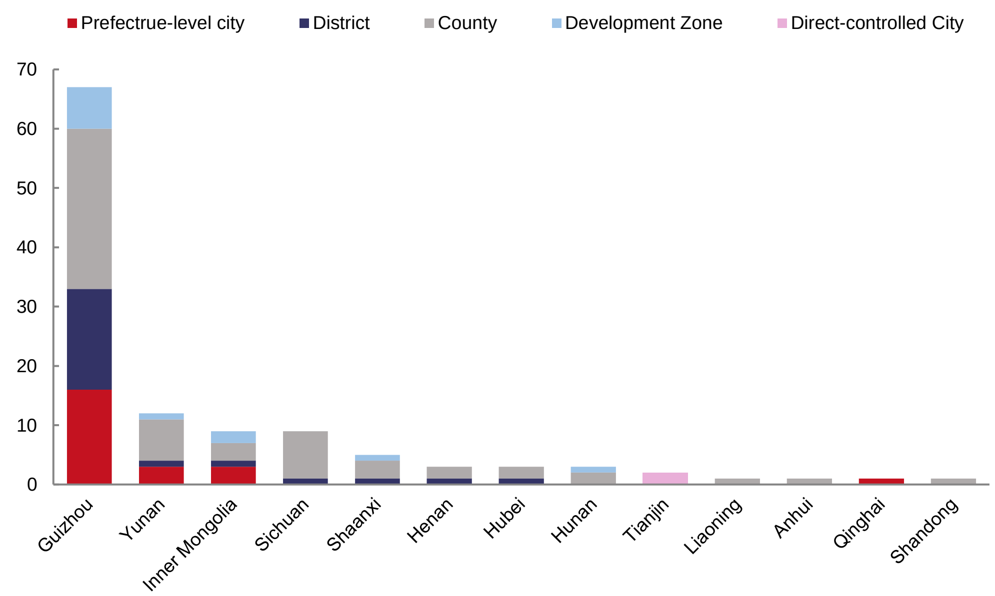
Non-standard product defaults in weak economic region

LGFVs have reported more cases of non-standard product defaults since 2018 after the government strengthened the regulatory efforts and oversight over the sector's financing. According to publicly available information, China has seen 90 non-standard product defaults by LGFVs involving 117 entities (including both issuers and guarantors) from January 2018 to November 2020. A large number of default cases happened in provinces including Guizhou, Yunnan, Inner Mongolia and Sichuan, which have relatively weak economic strength, high debt ratio, high exposure of non-standard debt assets and weak financing capacity. In addition, it is worth noting that when a prefecture-level LGFV defaults, it is typical that the lower-level LGFVs under its jurisdiction may have already reported defaults several times.

- In March 2018, the Ministry of Finance issued the Notice of Issues Concerning Regulating the Investment and Financing Behavior of Financial Enterprises for Local Governments and State-Owned Enterprises (No. 23 [2018] of the Ministry of Finance), which mentioned "the LGFVs shall not require or accept the local governments and their departments to provide guarantee in any form, undertake to repurchase the investment principal, guarantee principal and return or make other catch-all arrangements, or assume the repayment liability in violation of regulations by other means." Previously, LGFVs with relatively weak profile could enhance the creditworthiness of non-standard products through government's commitment. However, the promulgation of No. 23 [2018] put an end to such credit enhancement methods and led to a reduction in the supply of non-standard products.

- In April 2018, the People's Bank of China, the China Banking and Insurance Regulatory Commission, the China Securities Regulatory Commission, and the State Administration of Foreign Exchange jointly released the Guiding Opinions on Regulating the Asset Management Business of Financial Institutions, specifying that "asset management products issued by financial institutions invest in non-standard debt assets shall conform to quota administration, liquidity management and other regulatory standards as required by the financial regulatory authorities. " Only long-term close-end products can invest in non-standard products under the requirement. As a result, financial institutions can orderly lower the volume of investment in non-standard products, leading to declining demand for non-standard debts. It is increasingly difficult for new non-standard products to roll over to the preceding ones on maturity. When an LFGV has huge incoming debt service pressure and little government support, and fails to find alternative financing sources effectively, it is likely to have a capital chain rupture, which leads to occurrences of non-standard product defaults.

Exhibit 1 : A large number of non-standard product default cases happened in Guizhou, Yunnan, Inner Mongolia, Sichuan, etc.



Sources: Pengyuan International

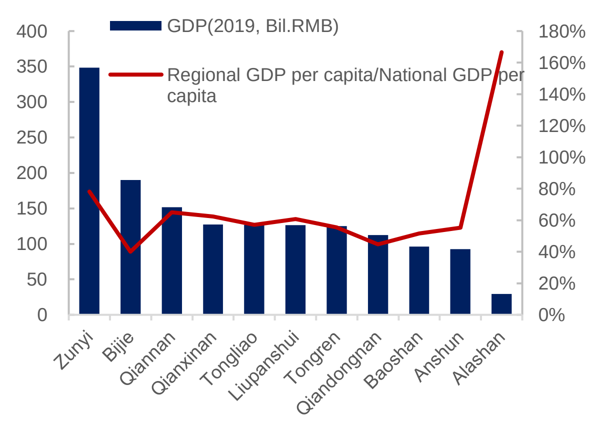
From a regional perspective of the distribution of LGFVs' non-standard product defaults, a large number of default cases happened in provinces including Guizhou, Yunnan, Inner Mongolia and Sichuan.

- **Guizhou:** Publicly available data show that LGFVs in all prefecture-level cities had reported cases of non-standard product defaults, except for Guiyang, the capital city of Guizhou. Non-standard product defaults were reported in the administrative level of the prefecture-level cities, such as Tongren, Anshun, Zunyi, Bijie, Qiannan, Qiandongnan and Qianxinan. In Liupanshui, the prefecture-level LGFVs had no cases of non-standard product defaults, but LGFVs managed by municipal districts, development zones and county-level cities reported such cases.
- **Yunnan:** Cases of non-standard product defaults reported by LGFVs mainly came from Baoshan city.
- **Inner Mongolia:** Cases of LGFVs' non-standard product defaults were reported in the prefecture-level cities of Tongliao and Alxa League, development zone in Hohot and the county-level cities of Ordos and Xilingol League.
- **Sichuan:** Cases of non-standard product defaults mainly came from the county-level LGFVs.
- The number of reported defaults was relatively small in other areas in China.

From the perspective of the administrative level, non-standard product defaults reported by LGFVs of counties and county-level cities, development zones, municipal districts and prefecture-level cities (including direct-administered districts) respectively represented 48.72%, 10.26%, 19.66%, and 21.37%. It is worth noting that when a prefecture-level LGFV reports cases of defaults, in general, lower-level LGFVs under its jurisdiction have already reported cases of defaults several times. From the perspective of the default issuers, LGFVs with no bond issuance record are in the majority, making up 62.39% of the total, followed by onshore AA-rated LGFVs with 29.91%.

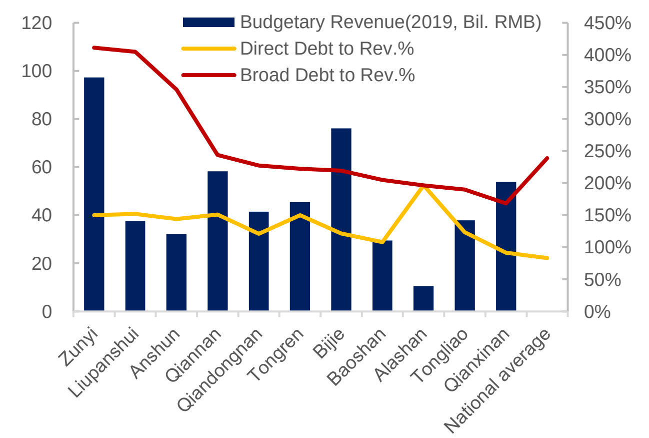
The economic growth rate of prefecture-level cities with reported non-standard product default cases was behind the national average. Among them, Alxa League's GDP per capita was high, mainly because of the relatively small population size, with only 251,000 people, but its real economic strength remained weak. Debt ratios of prefecture-level cities with reported LGFVs' default cases were higher than the national average. For example, the adjusted debt ratios of Zunyi, Liupanshui, Anshun and Qiannan autonomous prefecture were higher than the national average.

Exhibit 2 : Economic development in prefecture-level cities with occurrences of non-standard product defaults is lower than the national average



Sources: Statistics bulletins, Wind, Pengyuan International

Exhibit 3 : Debt ratios in prefecture-level cities with occurrences of LGFVs' non-standard product defaults are higher than the national average



Sources: Statistics bulletins, Wind, Pengyuan International

Note: Integrated financial capacity = general public budget revenue + subsidy from higher-level government + government fund revenue; debt ratio = local government debt balance/local integrated financial capacity; adjusted debt ratio = (local government debt balance + interest-bearing debt of LGFV issuers) / local integrated financial capacity. Dotted lines above are the national debt ratio and the average adjusted debt ratio.

We assess the default probability of local non-standard debt assets based on three perspectives: 1) adjusted debt ratio, 2) non-standard products exposure of LGFV issuers and 3) local loan balance.

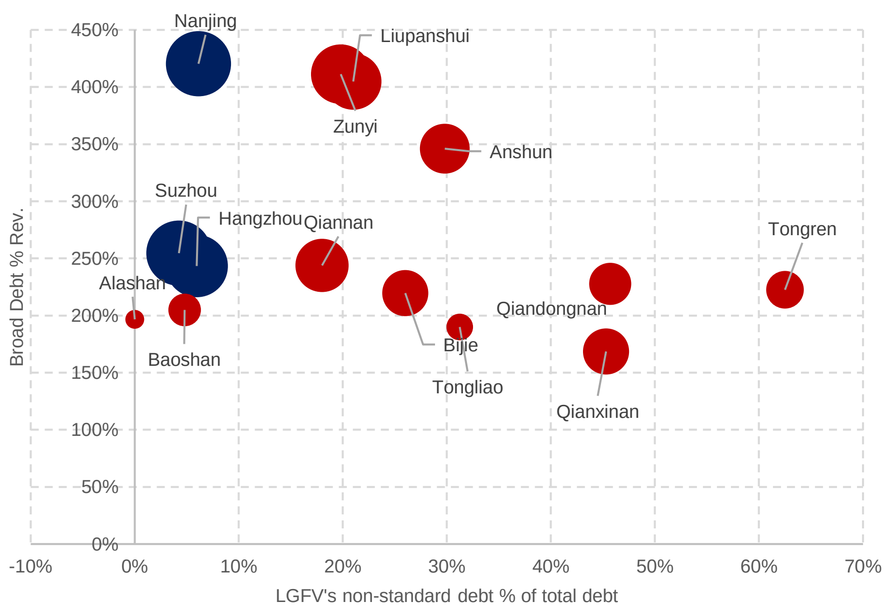
- Among them, the adjusted debt ratio reflects the coverage degree of local integrated financial capacity to local government debt and interest-bearing debt of LGFVs, and measures local comprehensive debt pressure.

- The share of non-standard products is used to study the financing structure of an LGFV bond issuer and its debt cost. Generally speaking, LGFVs that mainly use non-standard funding channels to issue bonds have relatively weak financing capabilities and high financing costs. With difficulty on non-standard debt renewal after 2018, they are more vulnerable to financial pressure.
- Loan balance is a measure of the overall financing capacity of a region.

Exhibit 4 (below) shows that the prefecture-level cities where non-standard product defaults have occurred are under relatively high debt pressure, with a high proportion of non-standard products and weak local government financing capabilities. Compared with cities widely accepted by China's bond market, including Nanjing, Suzhou and Hangzhou where debt ratios are high, they have strong financing capabilities and low dependence on non-standard debt with strong revolving capacities of debts at maturity, so the default risk is relatively low.

Generally speaking, the debt service funds of LGFVs mainly come from rolling debt renewed from financial institutions and local government financial funds. Local governments with weak financial strength provide less support to LGFVs, making them more dependent on debt rollover. In the case of unfavourable situations such as high local debt ratios and debt concentration, an early repayment required by financial institutions or failure of bond issuance could lead to a capital chain rupture, raising the likelihood of non-standard debt defaults in those regions.

Exhibit 4 : Prefecture-level cities where defaults occurred have high adjusted debt ratio, high proportion of non-standard debt assets and weak local government financing capabilities



Note: The bubble size represents the corresponding local financing capacity measured by the balance of local loans. The stronger the financing capacity, the larger the bubble. Non-standard debt assets are obtained through audit reports, prospectuses, and research reports of securities firms. Due to differences in the comprehensiveness of information disclosure, there may be deviations in the statistical results of the non-standard data.

Sources: Local statistical data, Statistics bulletins, Wind, Pengyuan International

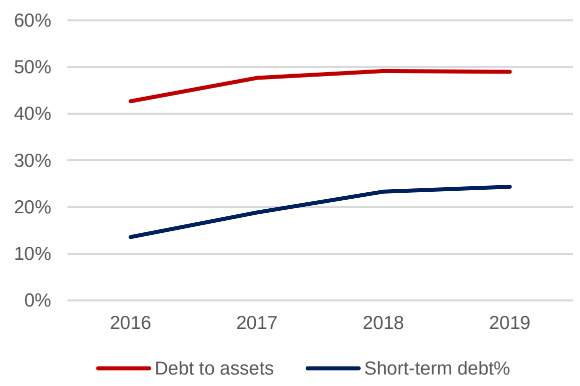
Impacts of non-standard product defaults

LGFVs with reported cases of non-standard product defaults saw increases in short-term debt funding cost and repayment pressures. We explore the financial characteristics of LGFVs with default cases through analysing the financial indicators of LGFVs with non-standard product defaults. Based on the known 117 LGFVs with cases of non-standard product defaults (including the issuers and guarantors) nationwide, a total of 37 non-standard product defaulters were selected after excluding those with no bond issuance record and samples with unavailable financial data. Financial indicators in the figure below are the average of 37 LGFV bond issuers with cases of non-standard product defaults and these defaults happened between 2019 and the first quarter of 2020.

The debt-to-asset ratio of LGFV issuers with non-standard product defaults reached 48.98% at the end of 2019. Regarding their short-term debt service ability, the short-term debt as a percentage of total debt of LGFVs with non-standard product defaults has grown rapidly, from 13.58% at the end of 2016 to 24.34% at the end of 2019, while the cash to short-term debt ratio decreased from 5.73 in 2016 to 0.31 in 2019.

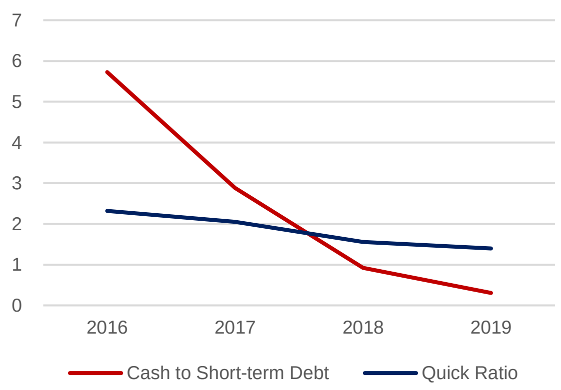
Short-term debt service pressure has increased significantly. Since 2016, the debt-to-EBITDA ratio of non-standard product defaulters had generally increased, the EBITDA coverage had also continued to decline. In addition, the external guarantee as a percentage of net asset of non-standard products defaulters continues to grow in recent years. As the external guarantee of LGFVs are mostly made to other local LGFVs, the risk caused by cross-guarantee within the region had increased.

Exhibit 5 : Increases in the overall debt level of non-standard products defaulters and continuous rise in the proportion of short-term interest-bearing debt



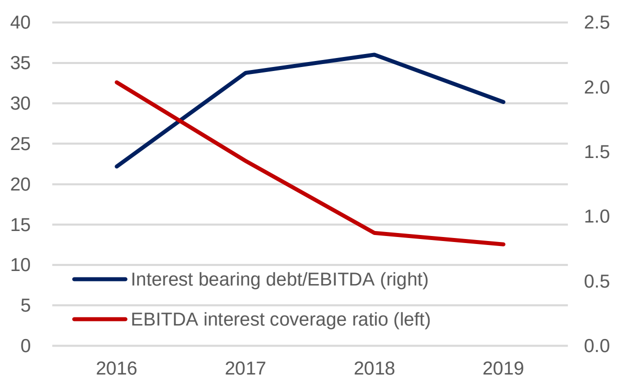
Sources: Wind, Pengyuan International

Exhibit 6 : Sharp decline in short-term debt service ability of non-standard products defaulters



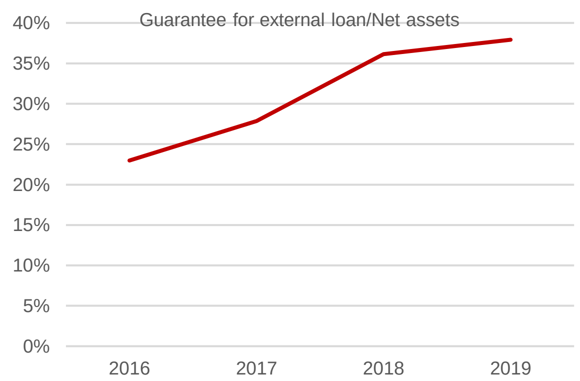
Sources: Wind, Pengyuan International

Exhibit 7 : Protection level of debt, interest by earnings of non-standard products defaulters on a downtrend



Sources: Wind, Pengyuan International

Exhibit 8 : Rising contingent liability risks of non-standard products defaulters

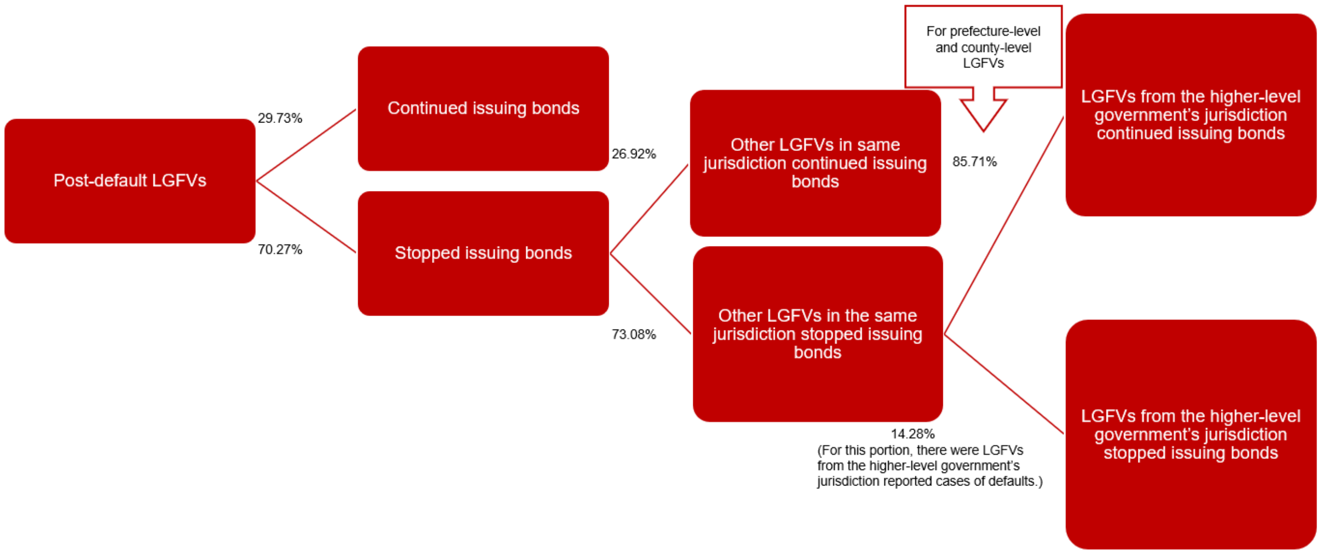


Sources: Wind, Pengyuan International

Non-standard product defaults have a greater impact on bonds issuance of these LGFVs and other LGFVs in the region and less impact on LGFV bond issuance in their respective higher administrative level. The affected region turns to private placement with a shorter-term maturity and higher issuing rate. We have reviewed the events of non-standard product defaults since 2018 with the conclusions as follows:

- 70.27% of post-default LGFV issuers no longer issued LGFV bonds;
- 51.35% of the post-default regions no longer issued LGFV bonds; and
- Non-standard product defaults of LGFVs had relatively small impact on their respective higher-administrative level's LGFV bond issuance.

Exhibit 9 : LGFVs' non-standard product defaults had a greater impact on themselves and other LGFV bonds in the region, while such defaults had a relatively small impact on LGFV bond issuance in their respective higher administrative level.



Sources: Wind, Pengyuan International

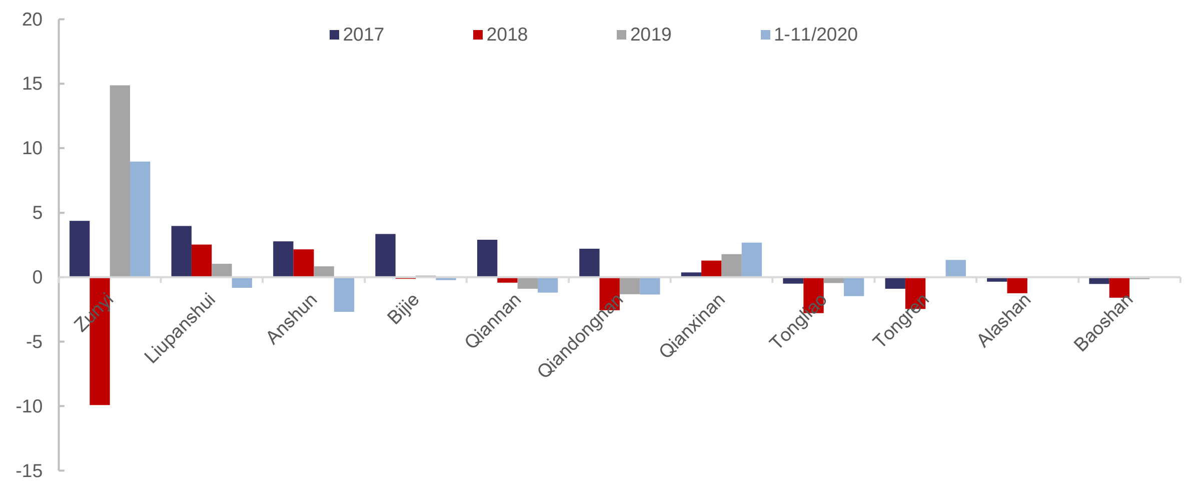
It is worth noting that 29.73% of the LGFVs continued to issue bonds after reporting cases of non-standard product defaults. Except for those post-default LGFVs had their first bond issuance with a time interval of more than six months, the other post-default LGFVs basically conducted refinancing only through private placement bonds. Regarding the situation where the post-default LGFVs did not issue bonds but other LGFVs in the respective region did, our analysis shows that such LGFVs typically had not issued bonds since 2017 and had not been serving as the core financing platform in the region.

Regarding the bond issuance status of the prefecture-level cities where LGFV defaults occurred, except for Zunyi city and Qianxinan autonomous prefecture, the net financing of LGFV bonds continuously declined or witnessed net outflows, indicating that non-standard product defaults had relatively a stronger impact on LGFVs in the region. The exceptions of Zunyi and Qianxinan could be due to the following reasons in our view:

- Firstly, the mayor of Zunyi paid a visit to the China Development Bank (Guizhou Branch) in early 2019 and they reached a consensus. It is believed that Zunyi, as an old revolutionary base area, is a region of particular concern from the Central Committee of the Communist Party of China and the State Council. In accordance with the guidance of the Head Office, China Development Bank (Guizhou Branch) would continue to promote the economic and social development, and reduce the debt level target of Zunyi by continuously introducing new financing models. Such measures have, to a certain extent, enhanced the confidence of market investors.
- Secondly, Zunyi's GDP and fiscal revenue ranked the second among prefectural cities in Guizhou province and it has relatively strong local economic strength in recent years. Compared with other regions with defaults, the provincial and local government may give more support to the LGFVs of Zunyi.
- Qianxinan's net financing was on the rise in recent years, which may be due to the relatively low debt ratio of Qianxinan among the major prefecture-level cities where default cases have occurred, in our view. The LGFV in

Qianxinan reported its first and the only non-standard product default case in March 2020. Such region overall has a relatively small net financing scale.

Exhibit 10 : Net financing of LGFV bonds in major regions with defaults continuously decline or witness net outflows (Unit: RMB100 million)



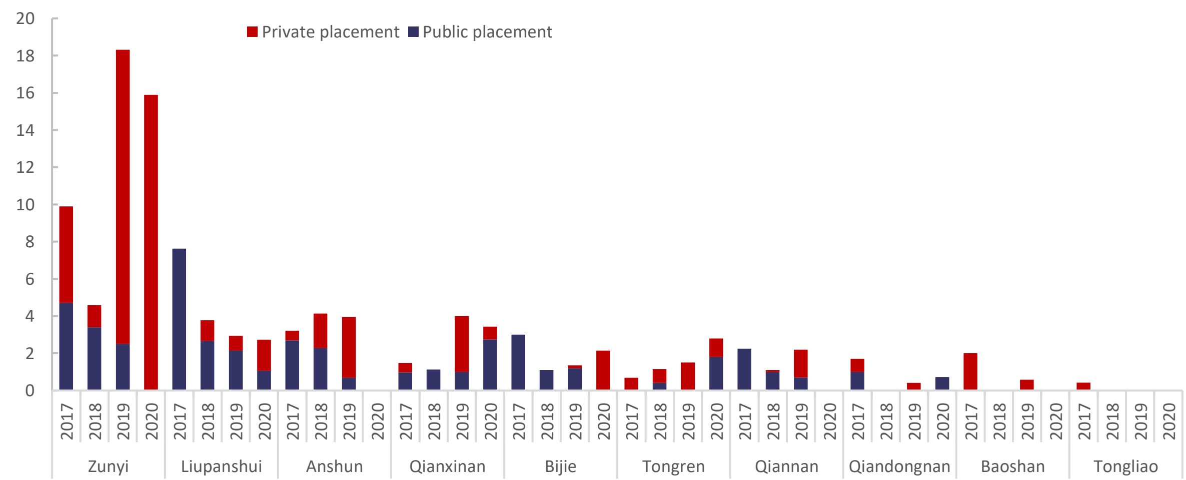
Sources: Wind, Pengyuan International

Post-default LGFV bond issuers turn to private placement with shorter-term of maturity for financing. In terms of LGFV bond issuance's characteristics in regions with reported cases of non-standard product defaults, a large majority of these LGFV bond issuers had been rated AA onshore since 2017.

As for bond maturity, it had been relatively shortened, and the proportion of LGFV bonds issued in 2019 with 2 to 5-year maturity in regions with defaults increased to 67.72%, from 41.84% in 2017 and higher than the average issuance scale in China in 2019. However, the proportion of LGFV bonds with 6 to 10-year maturity declined rapidly to 27.69% in 2019, from 72.51% in 2017.

In terms of issuance methods, LGFV bonds were gradually converted into private placement. Regarding credit enhancement measures, the proportion of bonds guaranteed by local state-owned enterprises increased from 22.89% in 2017 to 38.58% in 2019.

Exhibit 11 : LFGVs in major post-default regions gradually adopt private placement (Unit: RMB100 million)



Sources: Wind, Pengyuan International

From the perspective of the funding cost of LGFV in post-default regions, a higher level of fluctuation in the spread of LGFV bonds in Guizhou province over the national average was observed in 2019. The spread was at its historical peak at 262 basis points at the beginning of 2020. As Maotai transferred equity to defuse local government debt risk in Guizhou province in September 2020, the funding cost of LGFVs bonds in Guizhou retreated. LGFV bond interest rate in Yunnan had seen obvious increase since 2018, and the average spread of 3-year onshore AA-rated LGFV bonds in 2017, 2018, 2019 and first eleven months of 2020 was 2.53%, 3.96%, 4.36% and 3.79% respectively. The bond issuance maturity and onshore issuer credit ratings of LGFVs in Inner Mongolia were relatively dispersed, and no clear pattern of issuance rate was observed.

In summary, non-standard debt products serve as the cushion of standard debt products. Identifying the risk of LGFVs' non-standard product defaults helps prevent risk contagion in a timely manner. The process involves the framework of analysing traditional LGFV risk through local economic and fiscal strength, LGFV status, operating profile, financial risk and external support. Special attention should be paid to regions with high debt ratios, high proportion of non-standard debt assets and weak financing capabilities. We should also stay vigilant of the rapid decline in the short-term debt service ability of LGFVs.

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