

Combing through the creditworthiness of prefecture-level governments in China

Contents

Summary	1
Outline of Prefecture-level Governments in China	2
Our Rating Framework.....	2
Credit Overview of 327 Prefecture-level Governments	3
Economic Growth Is More Divergent Among Poorer Prefecture-level Regions.....	4
Fiscal Pressure Is Mounting on Prefecture-level Governments	5
Debt Burden is Increasing but Manageable	7
Prefecture-level Governments Generally Have Adequate Liquidity....	8

Summary

The institutional framework of prefecture-level governments is overall solid and largely predictable and stable. The prefecture-level governments typically have most of their service expenditures defined and receive predictable and stable fiscal support from their higher-level governments. The five cities (Shenzhen, Xiamen, Qingdao, Dalian and Ningbo) under state planning are exceptional in that they have economic and fiscal management authorities at the province level. As a result, they have a more robust institutional framework than other prefecture-level governments. Additionally, the central government has designated a few prefecture-level cities as sub-provincial cities, giving them more political power and financial resources than their peers.

The creditworthiness of prefecture-level governments is generally sound. To have a credit overview on the prefecture-level governments in China, we examined the credit profiles of the majority (327 out of 333) of prefecture-level governments based on publicly available data and our rating framework. The prefecture-level governments' indicative standalone credit profiles (SACP) are generally good, with around 79% rated between {BBB-} and {BBB+}. On top of that, the indicative credit estimates of prefecture-level governments are substantially enhanced by the support of their higher-level governments, with 65% of them being {BBB+} or above.

Significant economic imbalance continues to exist across prefecture-level regions. There are only a few dozens of prefecture-level regions with their GDP value exceeding RMB1 trillion (USD155 billion), and most of them are in eastern China. The majority of prefecture-level regions have their GDP value of less than RMB500 billion and their economic growth varies enormously. While some prefecture-level regions in western China have experienced rapid economic growth over the past few years, many prefecture-level regions in northeastern China have seen sluggish economic growth.

Fiscal pressure is mounting on prefecture-level governments with widening disparities. The constant fiscal stimulus to boost the slowing economy and counter the COVID-19 pandemic has been weighing on prefecture-level governments' financial profiles. By the end of 2020, we estimate that over 63% of prefecture-level governments' budgetary balance-to-revenue ratio were below -15%, and gaps among them had widened significantly.

In most prefecture-level governments, debt burden is increasing but remains manageable, and liquidity is generally sufficient. We estimate that the average debt-to-revenue ratio of prefecture-level governments increased from 122% to 143% between 2018 and 2020, showing a relatively moderate debt growth and manageable debt level. Although we estimate that 76% of prefecture-level governments have liquidity coverage ratios above 100%, considerable proportion of governments have liquidity coverage ratios below 100%, meaning that they may have to walk a fine line in order to balance their cash flow and meet their liquidity needs.

Indicative credit estimates expressed in this report are Pengyuan International's view of credit quality derived from desktop analysis based on public information. This research involves utilising public information to generate a potential opinion on the creditworthiness of prefecture-level governments in China. It is critical to stress that the credit opinions presented in this report are not a credit rating and should not be construed as such, nor should they be construed as an indicator of a final credit rating on any particular issuer, but rather are preliminary opinions of possible creditworthiness based on the research performed.

Contacts

Name Jameson Zuo
Title Associate
Direct +852 3615 8341
Email jameson.zuo@pyrating.com

Name Ke Chen, PHD
Title Chief Analytics Officer
Direct +852 3615 8316
Email ke.chen@pyrating.com

Outline of Prefecture-level Governments in China

China's administrative regions are classified into four levels: provincial, prefecture, county and township. Provincial-level regions include provinces, autonomous regions and direct-controlled municipalities, that are directly governed by the central government. Provincial-level governments are considered high-level governments since they carry out the central government's directives and strategies in their administrative regions and also oversee and manage their subordinate governments. Prefecture-level governments are regarded as middle-level governments that are responsible for administering specific affairs under their jurisdiction, such as economy, education and public security. There are currently 333 prefecture-level regions in mainland China, including 293 prefecture-level cities, seven prefectures, thirty autonomous prefectures and three leagues (Table 1).

Table 1: Administrative regionalisation of mainland China (2019)

Administrative Level	Number	Region
Provincial-level	31	Province, autonomous region, direct-controlled municipality
Prefecture-level	333	City, league, autonomous prefecture, etc.
County-level	2846	District, county, county-level city, etc.
Township-level	38755	Town, village, sub-district, etc.

Source: Ministry of Civil Affairs of the People's Republic of China

The institutional framework under which a local government (LG) operates is the legal and practical environment that shapes the LG's responsibilities and authority. We evaluate the strength of an LG's institutional framework by investigating its relationship with higher-level governments and the framework's sustainability.

In China, prefecture-level governments mostly have a similar taxation system, level of responsibilities, and intergovernmental relations. We see them as middle-level governments in China's governmental system, with an institutional framework that is overall solid, largely predictable and stable. At this administrative level, the governments typically have most of their service expenditures defined and budgeted. While their ability to control fiscal revenue and expenditure is restricted, the fiscal support from the higher-level governments is generally predictable and stable.

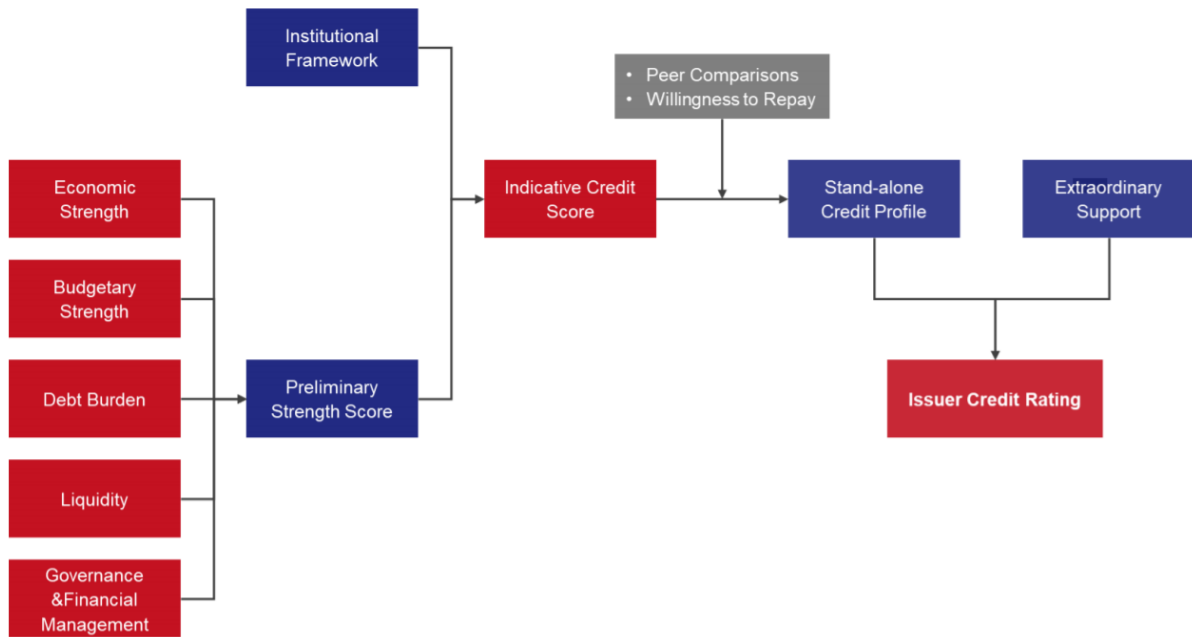
Among prefecture-level governments, the five cities under state planning (i.e., Shenzhen, Xiamen, Qingdao, Dalian and Ningbo) are special in that they have economic and fiscal management authorities at the province level. As a result, they typically have more robust fiscal sustainability and institutional framework than other prefecture-level governments. In addition, the central government has designated a few prefecture-level cities as sub-provincial cities which enjoy greater political power and financial resources compared to their peers. These cities are considered to be strategically important and carry greater responsibilities for regional development.

Apart from the five cities under state planning, prefecture-level cities are not allowed to issue bonds directly. The provincial-level governments' on-lend is one of the major financing sources for them. However, the central government has set debt-ceiling for provincial-level governments which, in turn, set debt-ceiling for their subordinate prefecture-level governments. As the limited direct debt source contradicts the need of economic expansion in many prefecture-level regions, the LGFVs have played crucial roles in facilitating the governmental financing and investment. There are more than 3000 LGFVs in China, with over 1000 being directly or indirectly controlled by prefecture-level governments. These LGFVs are active participants in both the onshore and offshore bond markets. Since we believe LGFVs' creditworthiness is typically linked to the governments' creditworthiness, the study on the prefecture-level governments' creditworthiness is crucial.

Our Rating Framework

Our analytical approach to rating Chinese local governments begins with assessing the institutional framework and five key rating factors, namely economic strength, budgetary strength, debt burden, liquidity, and governance and financial management (Exhibit 1). The indicative credit score (ICS) is generated from the combination of institutional framework score and preliminary strength score, which should be equal to SACP if there are no adjustments in the Peer Comparisons and Willingness to Repay sections. The SACP reflects the LGs' creditworthiness in absence of extraordinary support or burden, while the issuer credit rating (ICR) incorporates the extraordinary intervention from higher-level governments.

Exhibit 1: Chinese local government rating framework

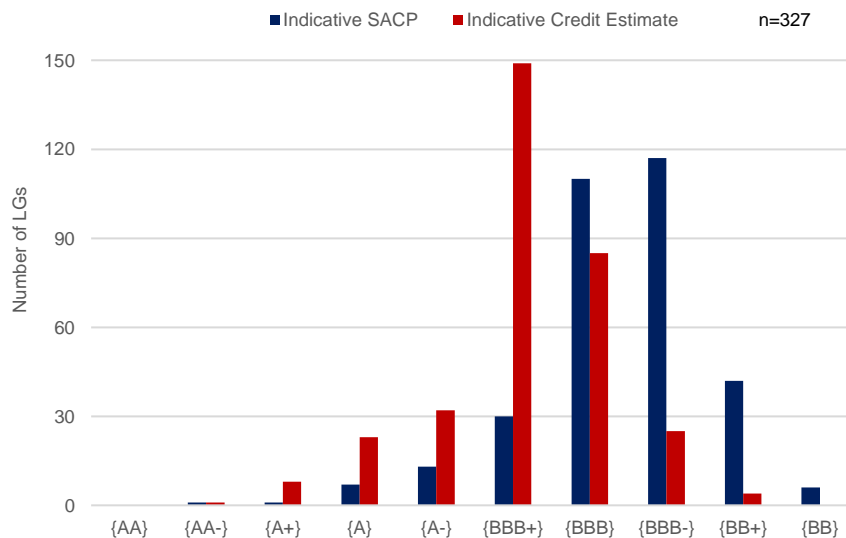


Source: Pengyuan International

Credit Overview of 327 Prefecture-level Governments

We assess the creditworthiness of 327 out of 333 prefecture-level governments in China for which sufficient data are available. The indicative SACPs of prefecture-level governments are generally good, with around 79% of them falling between {BBB-} and {BBB+} (Exhibit 2). When we factor in the extraordinary support, the creditworthiness of prefecture-level governments improves significantly and becomes more concentrated than the indicative SACP, with 45% of the indicative credit estimates being {BBB+}. This is because the creditworthiness disparities among the prefecture-level governments' higher-level governments (i.e., the provincial level) are relatively narrow, and a higher-level government in China would generally keep the creditworthiness of LGs in its jurisdiction within a closer distance to its own creditworthiness, as the latter administrations perform important economic, political and social functions for the former.

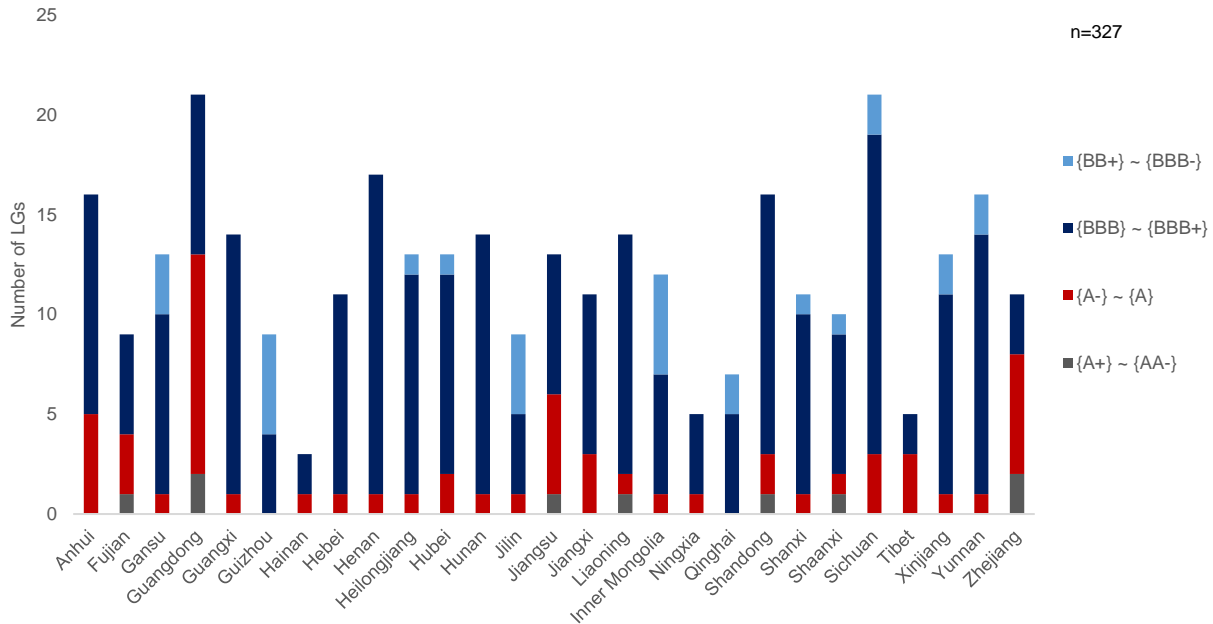
Exhibit 2: Rating distribution of prefecture-level governments



Source: Pengyuan International

The prefecture-level governments' creditworthiness varies significantly across different provincial-level regions (Exhibit 3). The prefecture-level governments in a higher-rated provincial-level region tend to have a better credit profile. For instance, Guangdong (AA-) and Zhejiang (AA-) province both have a high proportion of subordinate prefecture-level governments with indicative credit estimates ranging from {A-} to {A}.

Exhibit 3: Prefecture-level governments' credit position in every provincial-level region

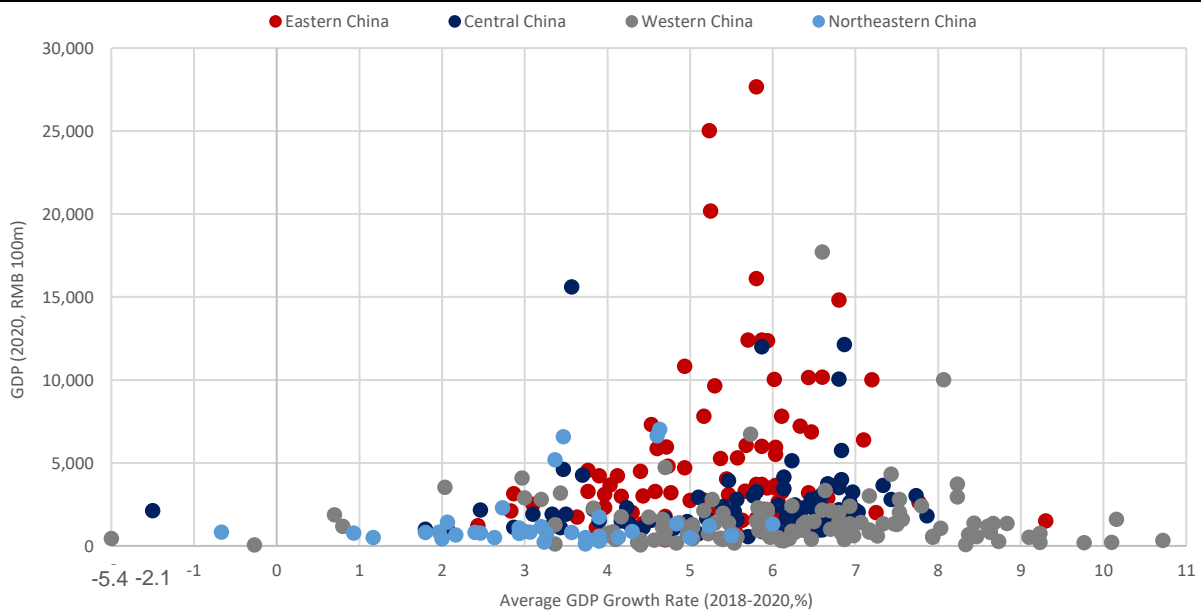


Source: Pengyuan International

Economic Growth Is More Divergent Among Poorer Prefecture-level Regions

We typically assess a region's economic strength based on their economic scale, GDP per capita, economic growth and a variety of other additional considerations. GDP value and GDP growth are two major factors in our approach. Only a few prefecture-level regions have their GDP value exceeding RMB1 trillion while most are below RMB500 billion, indicating massive economic gaps among prefecture-level regions in China (Exhibit 4).

Exhibit 4: Overview of economic strength of prefecture-level regions



Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

The smaller the GDP value of the prefecture-level regions, the greater divergence among their economic growth. The wealthier regions typically have developed more advanced development patterns, with relatively stable and moderate GDP growth. For the regions whose GDP value surpassed RMB1 trillion in 2020, their average economic growth rates are generally in the range of 5-7% over the past three years. Poorer regions, however, have dispersed economic growth, with some outperformers reporting GDP growth rates of over 10%, while others have suffered from recession over the last three years.

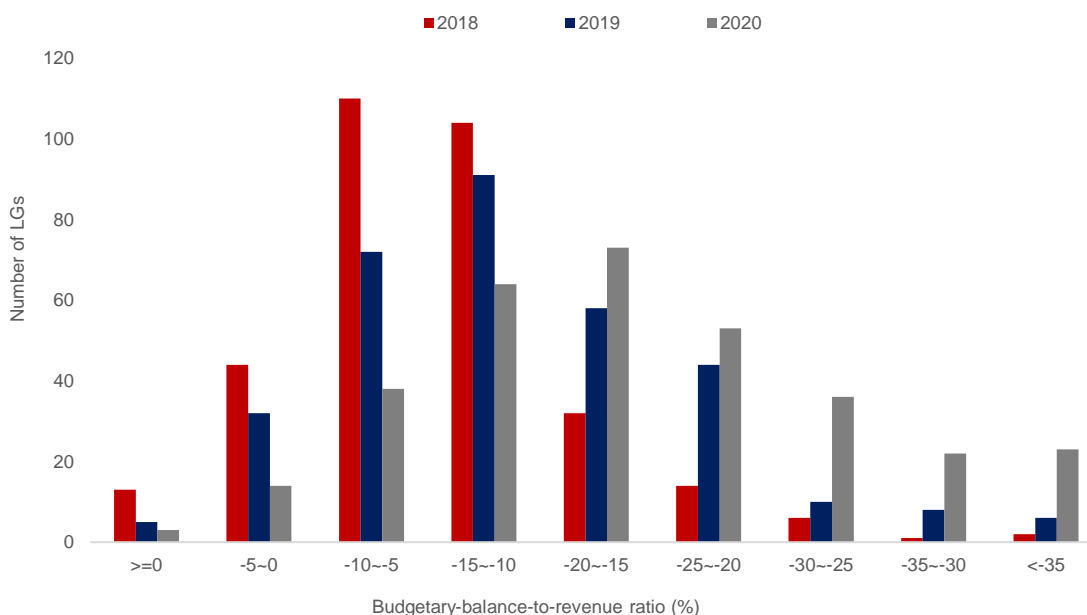
The regional divergence of economic development is substantial. The prefecture-level regions in eastern China typically possess a higher GDP value and a more concentrated economic growth rate, whereas those in western China generally have a faster economic growth rate but a lower GDP value. The prefecture-level regions in northeastern China have seen quite lacklustre economic status, characterised by a low GDP value and a sluggish growth rate.

Fiscal Pressure Is Mounting on Prefecture-level Governments

Since the rollout of the New Budget Law in 2014, LGs have continually leveraged on debt to close their ballooning fiscal revenue-to-expenditure gaps. As a result, the deficit pressure has been increasingly weighing on LGs. In addition, the central government's persistent and proactive fiscal policies have reined in the LGs' revenue growth while concurrently increasing their expenses over the past few years. The pressure of boosting the slowing economic growth to meet the GDP targets is huge for many prefecture-level governments. The coronavirus pandemic has worsened the situation by hindering the revenue collection of the LGs and entailing an extensive range of fiscal stimulus.

The budgetary balance-to-revenue ratio is the key indicator we use to assess an LG's fiscal deficit or surplus status. In the past three years, only a few prefecture-level governments have managed to keep a fiscal surplus (Exhibit 5). In 2018, most prefecture-level governments were under mild or moderate fiscal pressure, with over 65% of them having a budgetary balance-to-revenue ratio ranging from -5% to -15%. However, the distribution quickly shifted to the right from 2018 to 2020. By the end of 2020, according to our estimates, there were over 63% of prefecture-level governments' ratios below -15%, indicating a significant deficit burden on most prefecture-level governments.

Exhibit 5: Budgetary balance-to-revenue ratio distribution of prefecture-level governments



Note: Budgetary revenue includes the general public budget revenue and government fund budget revenue.

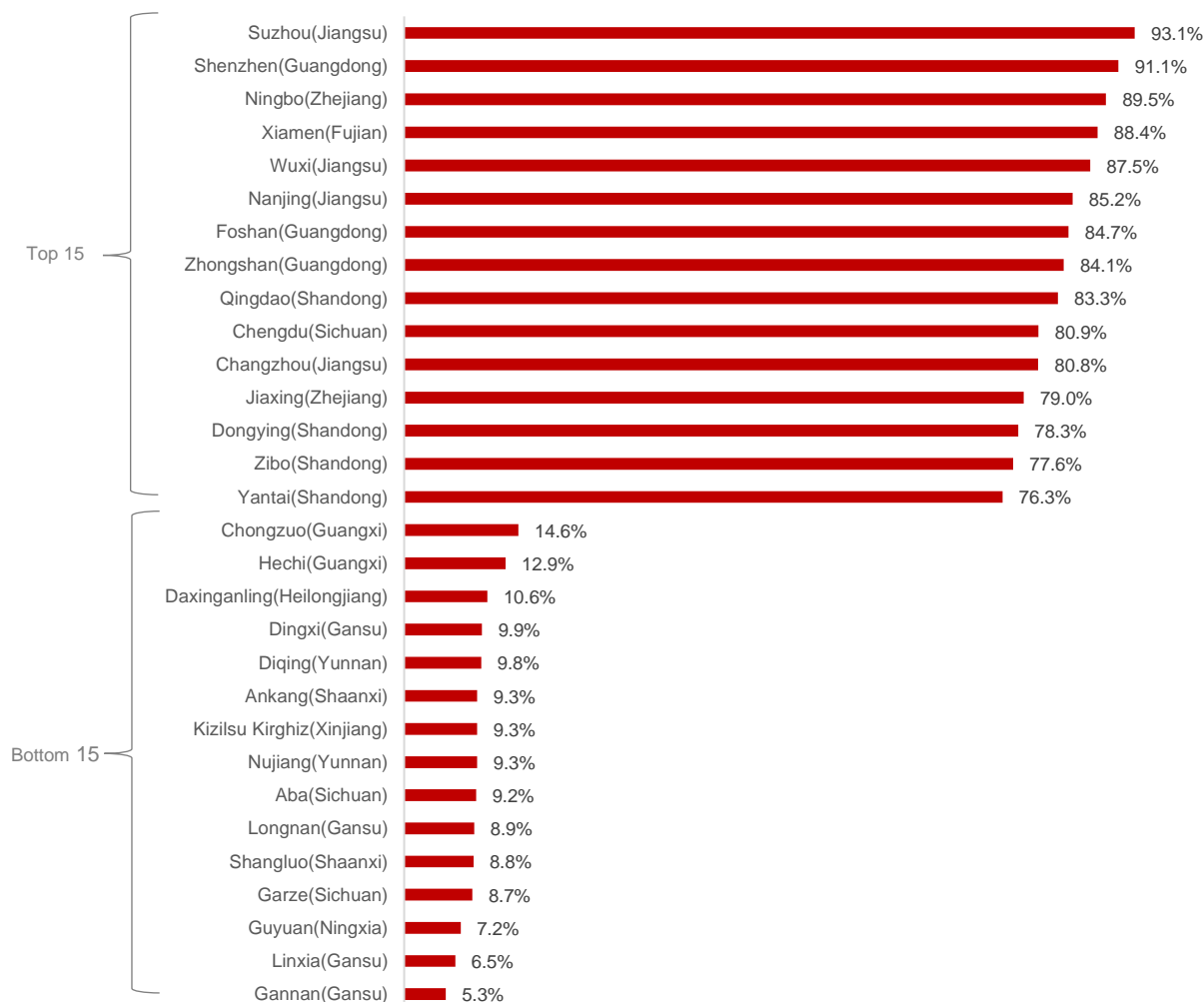
Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

On the other hand, there is a greater disparity in the deficit levels of prefecture-level governments than in previous years. From 2018 to 2020, the distribution of the budgetary balance-to-revenue ratios of prefecture-level governments became more dispersed, indicating that the fiscal pressure varied to a great extent across prefecture-level governments. The wealthy regions have benefited on their sound and diverse economic structure and vibrant land market to maintain a moderate deficit, while the poor regions have suffered from precipitous fiscal imbalances. It is worth noting that there were more governments' budgetary balance-to-revenue ratios below -30% by the end of 2020 than in previous years.

The budgetary sufficiency (the proportion of general public expenditure financed by the general public revenue of the government itself) can shed some light on the budgetary flexibility and discretion of different prefecture-level governments.

We listed the top 15 and the bottom 15 prefecture-level governments in terms of their self-sufficiency ratios (Exhibit 6). The highest self-sufficiency ratios are seen in some of the country's wealthiest cities (e.g., Suzhou and Shenzhen). At the lower end of the list, some prefecture-level governments have self-sufficiency ratios of less than 10%, implying that their higher-level governments fund 90% of their fiscal expenditure. Due to the limited fiscal flexibility and discretion available to these LGs, fiscal stimulus can easily exacerbate their deficit.

Exhibit 6: Budgetary sufficiency of some prefecture-level governments in 2020



Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

Along with budgetary balance-to-revenue ratio, we assessed LG's budgetary strength using a variety of other indicators including revenue scale, revenue per capita and revenue growth. We estimated the budgetary strength of 327 prefecture-level governments based on our framework and highlighted some of the outperformers (Table 2). The prefecture-level governments with the superior budgetary strength are primarily the wealthy regions or the provincial capitals, which have either strong economic fundamentals or critical political and regional positions.

Table 2: Some prefecture-level governments with outperforming budgetary strength

LG	HLG	Rev. (RMB 100m)		Average Balance % Rev.		Rev. Per Capita(RMB)		Average Rev. Growth	
		2020	2019-2023F	2020	2019-2023F	2020	2019-2023F	2020	2019-2023F
Ningbo	Zhejiang	3518	-0.01	41186	0.11				
Xi'an	Shaanxi	2417	-0.06	23685	0.11				
Suzhou	Jiangsu	4461	-0.04	41500	0.06				
Nantong	Jiangsu	2227	-0.09	30426	0.11				
Nanjing	Jiangsu	4147	-0.11	48790	0.09				
Changsha	Hunan	2579	-0.12	30723	0.13				
Guangzhou	Guangdong	4786	-0.11	31266	0.10				
Huizhou	Guangdong	1115	-0.08	22840	0.10				
Foshan	Guangdong	2017	-0.09	24727	0.09				
Shaoxing	Zhejiang	1516	-0.07	29969	0.11				
Zhuhai	Guangdong	1071	-0.07	52927	0.10				
Shenzhen	Guangdong	5466	-0.04	40673	0.05				
Hangzhou	Zhejiang	5567	-0.06	53734	0.06				
Wuxi	Jiangsu	2223	-0.14	33723	0.08				
Changzhou	Jiangsu	1933	-0.13	40817	0.08				
Hefei	Anhui	1857	-0.13	22680	0.07				
Fuzhou	Fujian	2251	-0.14	28857	0.07				
Taiyuan	Shanxi	1047	-0.10	23454	0.09				
Guiyang	Guizhou	1305	-0.13	26258	0.10				
Wenzhou	Zhejiang	2269	-0.17	24401	0.14				
Zhengzhou	Henan	2763	-0.07	26695	0.03				
Shenyang	Liaoning	1729	-0.05	20774	0.07				
Nanchang	Jiangxi	1361	-0.11	24299	0.07				
Yantai	Shandong	1448	-0.08	20279	0.10				
Qingdao	Shandong	2692	-0.17	28342	0.07				

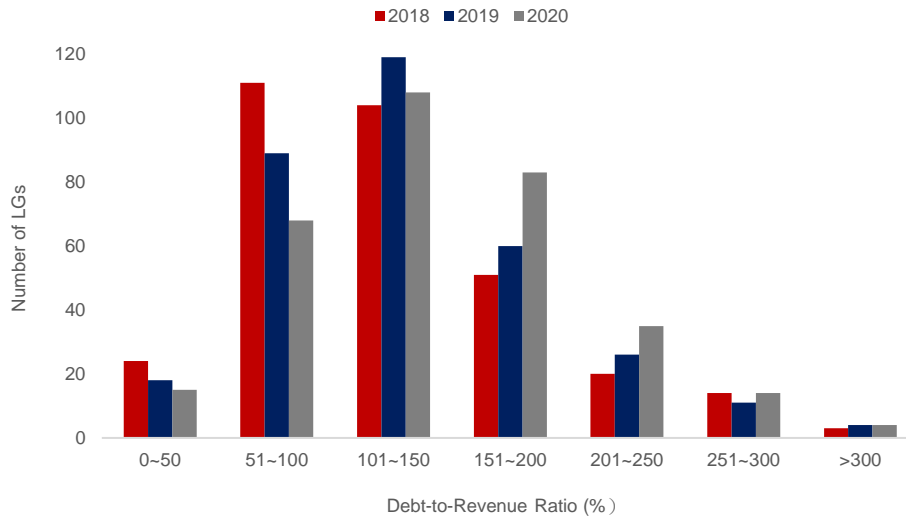
Note: Budgetary revenue includes the general public budget revenue and government fund budget revenue.

Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

Debt Burden is Increasing but Manageable

When calculating the LGs' debt, we aggregate the direct debt and hidden debt and use debt-to-revenue ratio as a key indicator to reflect the LGs' debt burden. As shown in Exhibit 7, the distribution of prefecture-level governments' debt-to-revenue ratios has gradually shifted to the right over the past three years, indicating the debt pressure is ratcheting up on prefecture-level governments. In order to stimulate the slowing economy, governments have relied on borrowing to fund their fiscal expenditure and investment. Nevertheless, we believe that the current debt levels of most prefecture-level governments are reasonable and moderate, with 59% of prefecture-level governments' debt-to-revenue ratios falling below 150% by the end of 2020. Most prefecture-level regions have sound economic growth and fiscal expansion over the past few years, which have significantly bolstered the rising debts. However, 16% of prefecture-level governments had debt-to-revenue ratios exceeding 200% in 2020, pointing to a stressful debt pressure.

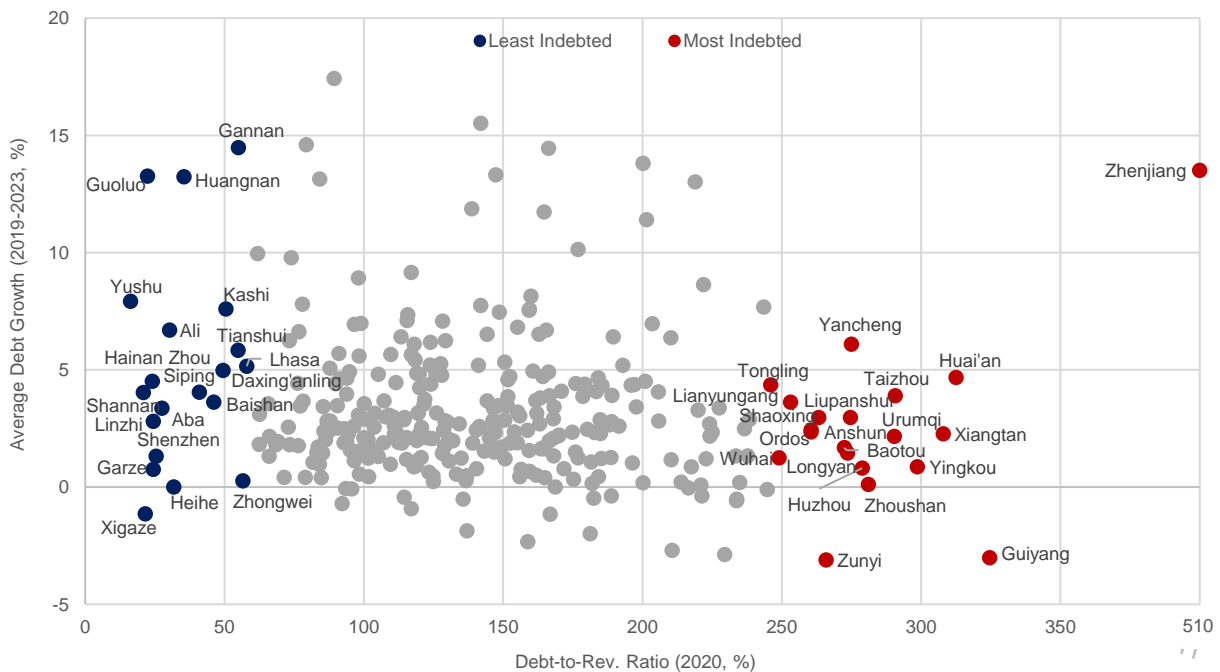
Exhibit 7: Debt level distribution of prefecture-level governments



Note: 1, The data provided are based on our estimates. 2, The debt includes direct debt and hidden debt. Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

By combining the debt growth and debt-to-revenue ratio, we are able to obtain a comprehensive view of the debt burden on prefecture-level governments (Exhibit 8). The blue spots represent some of the least indebted prefecture-level governments, while the red spots represent the most indebted. The governments with the least debt are mainly regions in poverty, especially some minority ethnic regions and border regions in Tibet, provinces of Qinghai, Gansu, and Heilongjiang, among others. These prefecture-level regions typically face unfavourable local financing conditions and have relied heavily on their higher-level governments for fiscal support. Hence, incurring excessive debts is neither necessary nor practical for them. In contrary, the prefecture-level governments with highest debt burden are mostly from wealthy or fast-growing regions such as Zhejiang, Jiangsu and Guizhou. These prefecture-level regions typically have a stronger borrowing capability and easier access to regional financing markets. For these governments, utilizing external finance to boost the local economy is a viable option. We also ascribe these LGs' heavy debt burden to their ambitious economic targets and aggressive development plans.

Exhibit 8: Debt burden on prefecture-level governments



Note: 1, The data provided are based on our estimates. 2, The debt includes direct debt and hidden debt. 3, Debt growth is calculated based on the change in debt-to-GDP ratio. Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

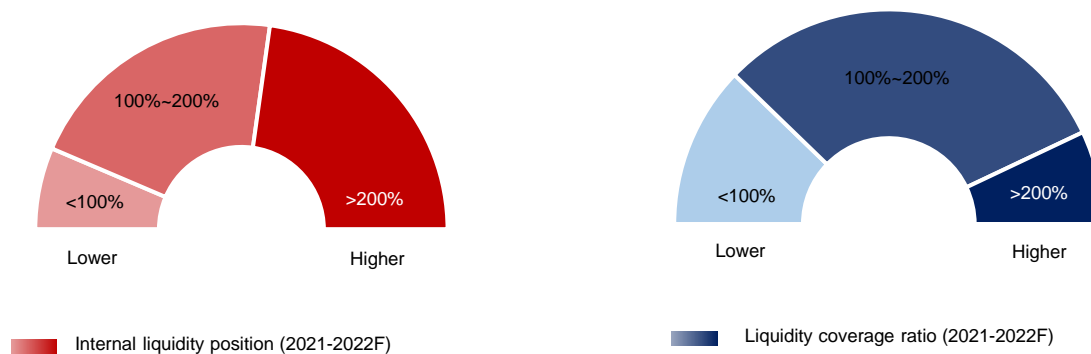
Prefecture-level Governments Generally Have Adequate Liquidity

We consider both the endogenous and exogenous liquidity sources to measure an LG's liquidity conditions. Bank deposits, in fact, are the LG's most direct and immediate endogenous liquidity source, as they are highly flexible and responsive to any liquidity needs.

We use the fiscal deposit to debt interest payment ratio to measure the LG's internal liquidity position. The liquidity coverage ratio is a useful indicator that reflects an LGs' overall liquidity position, taking into account its capability to access the external finance and potential liquidity outlay. This ratio provides a comprehensive view of the LGs' cash inflows and outflows.

Over 87% of prefecture-level governments have an internal liquidity ratio above 100%, while 46% of which exceed 200%, indicating that the cash positions of most prefecture-level governments are sufficient to cover their interest obligations (Exhibit 9). As for the liquidity coverage ratio, about 76% of prefecture-level governments have liquidity coverage ratios above 100%, pointing to a generally acceptable liquidity condition in prefecture-level governments. Still, there are considerable proportion of LGs with their liquidity coverage ratios below 100%. These prefecture-level governments may have to walk a fine line when it comes to balancing their cash flow in order to meet their liquidity needs. Any unexpected cash outflow or shortfall in cash inflow could jeopardize their liquidity.

Exhibit 9: Liquidity condition of prefecture-level governments



Note: The data provided are based on our projections.

Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

We listed some of the prefecture-level governments with the most favourable liquidity conditions (Table 3). The majority of them fall into one of two categories. The first one listed several wealthy regions such as Shenzhen, Hangzhou and Ningbo, which had accumulated substantial fiscal deposit over the past decades when their economy was burgeoning. Moreover, they usually possessed a strong capacity to generate liquidity from their solid economic fundamentals and ample external financing options, that should help them to cope with any liquidity challenges. The second category featured a number of minority ethnic prefecture-level regions in Tibet, Yunnan, Gansu and others. While these regions are not very wealthy, they receive massive fiscal support from the upper-level governments. Additionally, these regions tend to have less expending pressure due to their relatively small population base. The infrastructure construction and public welfare investment, for example, do not pose a heavy fiscal burden for them. As a result, these regions have few outstanding debts hence less liquidity obligations.

Table 3: Some prefecture-level governments with the most solid liquidity conditions

LG	HLG	Average Internal Liquidity Position 2021-2022F	Average Liquidity Coverage Ratio 2021-2022F
Shenzhen	Guangdong	40.9x	9.6x
Xining	Qinghai	25.4x	3.7x
Nanchang	Jiangxi	15.2x	3.9x
Lhasa	Tibet	29.4x	3.1x
Yinchuan	Ningxia	13.6x	3.9x
Hangzhou	Zhejiang	20.0x	3.3x
Xishuangbanna	Yunnan	30.8x	2.9x
Xigaze	Tibet	45.2x	2.7x
Hainan Zhou	Qinghai	12.6x	2.7x
Hefei	Anhui	13.7x	2.5x
Kunming	Yunnan	10.6x	2.8x
Zhuhai	Guangdong	6.1x	3.2x
Linzhi	Tibet	28.0x	2.2x
Ali	Tibet	28.5x	2.0x
Guangzhou	Guangdong	8.9x	2.4x
Guoluo	Qinghai	9.0x	2.2x
Ningbo	Zhejiang	5.3x	2.5x
Chengdu	Sichuan	10.2x	2.2x
Nanjing	Jiangsu	10.7x	1.9x
Daxing'anling	Heilongjiang	13.4x	1.9x
Huizhou	Guangdong	5.5x	2.2x
Haixi	Qinghai	5.2x	2.2x
Guiyang	Guizhou	8.3x	1.9x
Maoming	Guangdong	6.3x	1.9x
Nanning	Guangxi	8.1x	1.7x
Gannan	Gansu	3.4x	2.1x
Harbin	Heilongjiang	6.1x	1.7x
Foshan	Guangdong	3.7x	1.9x
Jingdezhen	Jiangxi	3.5x	1.8x
Yushu	Qinghai	16.0x	1.4x

Note: The data provided are based on our forecast.

Sources: Local governments' bureaus, Wind, Pengyuan International's estimates

DISCLAIMER

Pengyuan Credit Rating (Hong Kong) Company Ltd (“Pengyuan International”, “Pengyuan”, “the Company”) prepares various credit research and related commentary (collectively “research”) in compliance with the established internal process. The Company reserves the right to amend, change, remove, publish any information on its website without prior notice and at its sole discretion.

The research is subject to disclaimers and limitations. RESEARCH AND CREDIT RATINGS ARE NOT FINANCIAL OR INVESTMENT ADVICE AND MUST NOT BE CONSIDERED AS A RECOMMENDATION TO BUY, SELL OR HOLD ANY SECURITIES AND DO NOT ADDRESS/REFLECT MARKET VALUE OF ANY SECURITIES. USERS OF RESEARCH AND CREDIT RATINGS ARE EXPECTED TO BE TRAINED FOR INDEPENDENT ASSESSMENT OF INVESTMENT AND BUSINESS DECISIONS.

This research is based solely on the public data and information available to the authors at the time of publication of this research. For the purpose of this research, the Company obtains sufficient quality factual information from public sources believed by the Company to be reliable and accurate. The Company does not perform an audit and undertakes no duty of due diligence or third-party verification of any information it uses in the research. The Company is not responsible for any omissions, errors or inconsistencies of the public information used in the research.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS OR COMPLETENESS OF ANY INFORMATION GIVEN OR MADE BY THE COMPANY IN ANY FORM OR MANNER. In no event shall the Company, its directors, shareholders, employees, representatives be liable to any party for any damages, expenses, fees, or losses in connection with any use of the information published by the Company.

This research focuses on observing trends from the credit markets. This research has not been made available to any issuer prior its distribution to the public. The Company does not receive compensation for its research.

The Company reserves the right to disseminate its research through its website, the Company’s social media pages and authorised third parties. No content published by the Company may be modified, reproduced, transferred, distributed or reverse engineered in any form by any means without the prior written consent of the Company.

The Company’s research is not indented for distribution to, or use by, any person in a jurisdiction where such usage would infringe the law. If in doubt, please consult the relevant regulatory body or professional advisor and ensure compliance with applicable laws and regulations.

In the event of any dispute arising out of or in relation to our research, the Company shall have absolute discretion in all matters relating to resolving the dispute, including but not limited to the interpretation of disclaimers and policies.

Copyright © 2021 by Pengyuan Credit Rating (Hong Kong) Company Ltd. All rights reserved.