



October 15, 2018

## **Key Takeaways**

- The extent of off-balance-sheet borrowings among local governments isn't known, but could be as high as Chinese renminbi (RMB) 30 trillion-RMB40 trillion (US\$4.5 trillion-US\$6.0 trillion).
- We estimate that when including hidden debts, the ratio of all government debt to GDP could have reached 60% in 2017, an alarming level.
- Most of these debts are attributable to local government financing vehicles (LGFVs) and earmarked for infrastructure development.
- We don't expect the central or local governments to have direct payment obligations for the hidden debt, and the use of government budgetary funds to address the debt levels is unlikely.
- We expect government support for LGFVs to weaken over time as they transition into normal state-owned enterprises; and the path will be long and difficult.
- Default risk of LGFVs is on the rise. China has opened up the possibility of insolvent LGFVs filing for bankruptcy, but managing the default aftermath is a formidable task for top leadership.

How much local government debt is currently outstanding in China? The country's top leadership is clearly anxious to get an answer to this important question. But gauging the scale of debts won't be easy, given that much of it is "hidden." S&P Global Ratings believes the amount of debt that local governments keep off their balance sheets may be multiples of the publicly disclosed amount and could be as high as Chinese renminbi (RMB) 40 trillion (or US\$6.0 trillion) or even more. And that's a debt iceberg with titanic credit risks.

The rampant growth of off-balance-sheet borrowings among local governments can't be reined in without knowing how much of the debt is outstanding and the governments' ability to service these obligations. Local government financing vehicles (LGFVs) have accumulated much of this hidden debt. While firm plans are needed to reduce these debts, progress has been limited so far. Both local governments and LGFVs are walking a tightrope between deleveraging and transforming their businesses into more typical state-owned enterprises (SOEs). But the recent

#### PRIMARY CREDIT ANALYSTS

#### Gloria Lu, CFA, FRM

Hong Kong (852) 2533-3596 gloria.lu @spglobal.com

#### Laura C Li, CFA

Hong Kong (852) 2533-3583 laura.li @spglobal.com

#### **SECONDARY CONTACTS**

#### Richard M Langberg

Hong Kong (852) 2533-3516 Richard.Langberg @spglobal.com

#### Yao Liu

Singapore (65) 6216-1145 angie.liu @spglobal.com

#### RESEARCH ASSISTANT

**Juyi Zhao** Hong Kong strain on the Chinese economy isn't helping.

Over time, we anticipate local government support to LGFVs will weaken. On Sept. 12, 2018, we lowered our long-term issuer credit ratings on seven vehicles to reflect such transitional risk. We believe the central government and the market have more tolerance for defaults by LGFVs, and more will be on horizon. And the first of these may be by LGFVs that operate under lax supervision of their local government owners.

**Negative Rating Actions On LGFVs In 2018** 

Table 1

	Ratings as of Aug. 21, 2018		Ratings as of Dec. 31, 2017	
Company	Rating	Outlook	Rating	Outlook
Changsha Pilot Investment Holdings Co. Ltd.	BB+	Stable	BBB-	Stable
Chongqing Nan'an Urban Construction & Development (Group) Co. Ltd.	BBB	Stable	BBB+	Stable
Qingdao China Prosperity State-owned Capital Operation (Group) Co. Ltd.*	NR		BBB-	Stable
Qingdao City Construction Investment (Group) Ltd.	BBB	Negative	BBB	Stable
Qingdao Conson Development (Group) Co. Ltd.	BBB	Negative	BBB	Stable
Tianjin Binhai New Area Construction & Investment Group Co. Ltd.	BBB	Stable	BBB+	Stable
Tianjin Infrastructure Construction & Investment Group Co. Ltd.	BBB+	Stable	Α-	Stable
Wuxi Construction and Development Investment Co. Ltd.	BBB	Stable	BBB+	Stable
Yangzhou Urban Construction State-owned Assets Holding (Group) Co. Ltd.	BBB-	Stable	BBB	Stable
Zhenjiang Transportation Industry Group Co. Ltd.	BB-	Negative	BB	Stable

<sup>\*</sup>Rated 'BB+/Stable/--' before rating withdrawn on Aug. 20, 2018. Source: S&P Global Ratings.

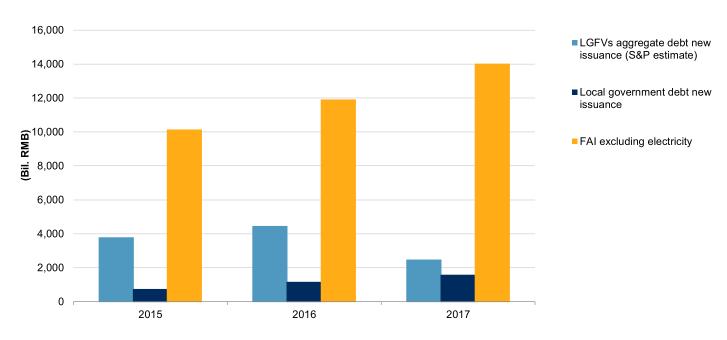
# **Just How Big Is Big?**

If we take the median of various estimates, RMB30 trillion-RMB40 trillion (US\$4.5 trillion-US\$6.0 trillion) in local government debt may be hidden. The true amount has been undisclosed either on purpose or because the debt has been loosely defined, which explains the varying estimates in the market. At the end of 2017, China's outstanding government debt on balance sheets amounted to RMB29.95 trillion, of which local authorities have raised RMB16.5 trillion through bond issuances since 2015. We estimate that when including hidden debts, the ratio of government debt to GDP could have reached 60% in 2017, an alarming level.

According to the State Council, all LGFV borrowings since 2015 are corporate debt and no level of government is a backstop for these. The Ministry of Finance's annual quota for the issuance of local government bonds falls far short of the infrastructure investments needed to support local GDP growth and improve social welfare. As a result, many local governments have continued to mandate LGFVs to finance a significant level of infrastructure or social projects. This trend was further fueled by easy credit from banks and "shadow banks" and the availability of alternative financing (such as financial lease) from mid 2015 to late 2017.

Chart 1

## Big Gap Between Infrastructure Investment Demand And Fund Supply



Bil.--billion. RMB--renminbi. FAI--fixed asset investment. Source: WIND, the National Bureau of Statistics of China, S&P Global Ratings.

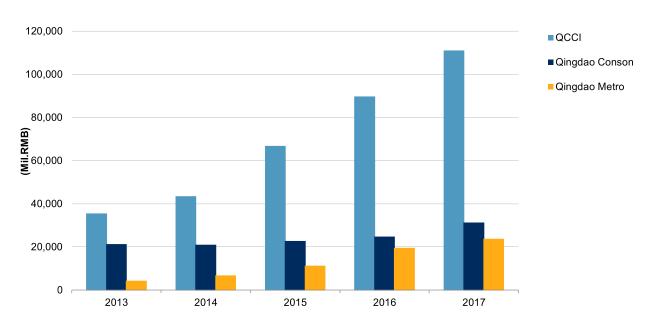
Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

Local governments have been largely quiet about this mountain of hidden debt. In many cases, instead of providing guarantees or other support in clear violation of regulations or laws, they used public-private partnerships (PPP) and investment funds to finance infrastructure projects. This was just another way to ratchet up the amount of hidden government debt for many projects. To entice non-public capital for these long-term low-return projects, local governments through LGFVs promised buyback or redemptions and guaranteed returns to equity investors, many of which are state-owned enterprises (SOEs) or financial institutions. In other cases, LGFV borrowings were backed by local governments' payments as part of the procurement process for new project construction.

S&P Global Ratings factors in the borrowings of major LGFVs in addition to the government debt on the balance sheet to gauge the hidden debt as much as possible when assessing the debt-servicing ability and credit profiles of local and regional governments. In January 2018, we revised the rating outlook to negative from stable on two Qingdao LGFVs: Qingdao City Construction Investment (Group) Ltd. (BBB/Negative/--) and Qingdao Conson Development (Group) Co. Ltd. (BBB/Negative/--). These actions reflected our view of Qingdao's weak budgetary performance and the sizable debts accumulated over time by the government and its SOEs that have policy roles. Much of this debt was urbanization-related investments.

Chart 2

## Fast-Growing Debt Of Major Qingdao LGFVs (2013-2017)



QCCI--Qingdao City Construction Investment (Group) Ltd. Qingdao Conson-- Qingdao Conson Development (Group) Co. Ltd. Qingdao Metro--Qingdao Metro Group Co. Ltd. Mil.--million. RMB--renminbi. Source: S&P Global Ratings.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

# China's De-risking Expedition Is A One-Way Trip

In our view, Beijing will maintain its strong resolve to bring discipline to the financing practices of local governments and their LGFVs. In various policy documents issued in recent years, regulators defined in detail the responsibilities and consequences of breaches of policies by LGFVs, local governments, and state-owned financial institutions. For PPP projects, regulators ordered:

- local governments to clean up and remove those projects not in compliance;
- local governments to limit their payments to PPP projects to no more than 10% of the current budget; and
- central SOEs to be restrained from investing in PPP if the investment could increase leverage and breach the threshold of 50% total net assets.

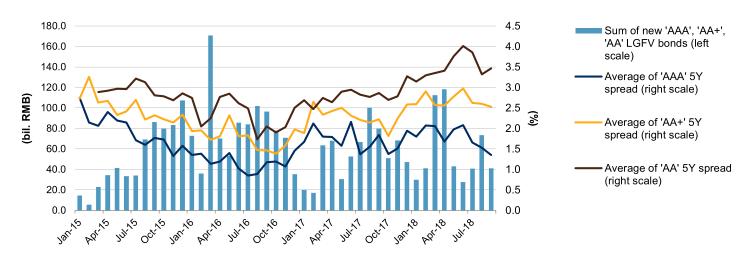
On top of that, policymakers reiterated that government officials will be held lifelong accountable for illicitly increasing government debt, and laws to this effect are currently being drafted.

The credit crunch and China's deleveraging campaign in 2018 compounded the impact of the central government's tough fiscal policies. Access to shadow-banking products such as trust loans, which many LGFVs used extensively, were essentially cut off. Credit facilities from local

banks also decreased as banks struggled to meet more stringent capital-adequacy requirements. Highly leveraged and lower-tier government-owned LGFVs found it challenging to refinance in the first half of 2018, as suggested by hefty financing costs. Consequently, the growth of infrastructure investments in the first eight months slumped to 4.7% on a year-to-year basis, the lowest for the past four years.

Chart 3

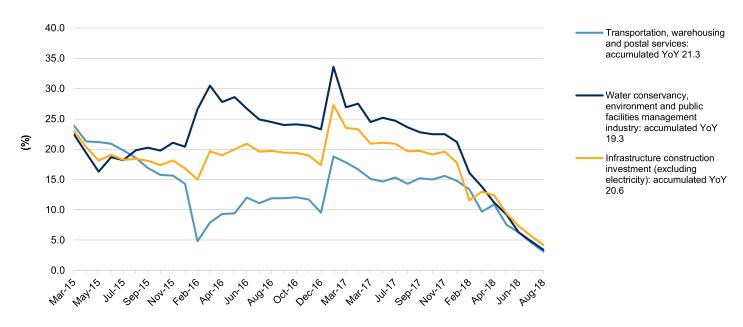
## LGFV Bond Funding Costs For New Issuance Kept Rising Since Late 2016



Bil.-billion. RMB-renminbi. Y-year. Source: WIND, S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

Chart 4

## Infrastructure Investment Is Decelerating In 2018



YoY-year on year. Source: WIND, the National Bureau of Statistics of China, S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

We believe China's recent measures to stabilize growth and boost liquidity in response to internal and external headwinds aren't necessarily a relaxation of its de-risking efforts. Defusing financial risks, including the hidden local government debt, is one of three overarching priorities of the country's top leadership. New measures include the approval of large infrastructure projects, such as subways (following a period when this wasn't happening), and the acceleration of local government special-purpose bond issuance. These are, however, still subject to existing conditions and criteria. The strain on the liquidity position of LGFVs has temporarily eased because of the relaxed monetary policy and government urging of financial institutions to meet the financing needs of projects under construction.

# **Budgetary Funds Won't Tackle Hidden Debt**

We don't expect the central or local governments to have direct payment obligations for the hidden debt. The central government frowns on the use of budgetary funds to directly bail out local government SOEs and would hold officials personally responsible for such actions. As such, there's little chance of another round of debt swaps as seen in 2015-2018 to convert the hidden debt into government bonds. Debt swaps would ramp up total government debt, which could shake market confidence in China and exacerbate the moral hazard of local governments continuing unchecked and risky off-balance-sheet financings. That said, the central government has ordered local governments to put forward plans to address the significant hidden debt stock, and take measures to curb the growth under an enhanced accountability system.

Given the sheer size of hidden debt, China probably needs a decade or more to address it. Most local governments today are financially constrained and have large fixed expenditure. There are limited resources available from the government land revenues, tax and non-tax income, as well as proceeds from asset disposals. Tools that might be available could include using the increased proceeds from general obligation government bonds or restructuring PPP contracts to convert that form of hidden government debt to corporate debt, supported by enhanced project cash flows.

In our view, the country's aim to address hidden debt and deleverage LGFVs is positive, even if the process will be prolonged. Eventually, the relationship between LGFVs and local governments should normalize. And this process would speed up with the issuance of local government special-purpose bonds under an upsized quota, increasing project cash flows, and the transformation of LGFV business models.

## Infrastructure Projects Will Have New Financing Models

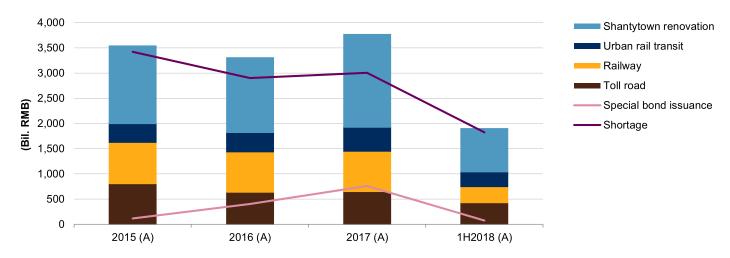
The ebb and flow of the LGFV sector is very closely tied to the scale and contribution of infrastructure investments for China's economy. Nowadays, the marginal contribution of new projects has been declining as the construction of backbone infrastructure, such as railway and expressway networks, has been largely completed and urbanization has slowed. We estimate the scale and intensity of infrastructure investments will slow after 2020.

In the meantime, China's economic rebalancing from investment-driven to consumption-led growth is strengthening. The authorities are now cautious about embarking on a massive economic stimulus package as seen in 2008-2009; however, the government does plan to increase investments in infrastructure projects to help soften the blow to the economy from the ongoing Sino-U.S. trade tensions. Although infrastructure investments are likely to pick up moderately toward the end of 2018 and early 2019, we expect the growth to be constrained by efforts to curb local government debt.

Over time, local government special-purpose bonds may become a mainstream way for financing public infrastructure projects. In mid-August 2018, China's Ministry of Finance--to maintain its growth target--ordered local governments to accelerate the issuance of special-purpose bonds in response to escalating trade tensions with the U.S. In September, new issuance of special-purpose bonds reached about RMB640 billion, more than total issuance of about RMB540 billion in the first eight months of 2018. While the amount of permitted special-purpose bond issuance is far short of what is needed to fund the targeted level of infrastructure investments by 2020, it has started to replace, at least partially, the financing functions of LGFVs.

Chart 5

## Special-Purpose Bond Issuances Are Far Short Of Infrastructure Investment Needs



Bil.-billion. RMB-renminbi. A-actual. E-estimate. Source: Ministry of Finance, Ministry of Transportation, Ministry of Housing and Urban-Rural Development, National Development and Reform Commission, China Urban Rail Transit Association, S&P Global Ratings.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

Under China's new policy framework, PPP projects are seen as a risk-sharing mechanism for all parties on a contractual basis, as seen in other countries. China has increased its scrutiny of PPP projects in the pipeline since 2017. From November 2017 to March 2018, the Ministry of Finance scrapped over 2,000 projects valued at more than RMB2 trillion as part of its effort to close financing loopholes. The ministry also elevated the approval thresholds for PPP projects and prohibited local governments from assuming additional risks that increase hidden debt obligations.

### **Business Transformation Won't Be Smooth For LGFVs**

We believe the transformation of LGFVs to engage in more economically variable businesses will be a bumpy and lengthy path. The vehicles are gradually transitioning from their traditional role of financing infrastructure for local governments and operating more like ordinary SOEs. Over time, we anticipate local governments will reduce their extraordinary support to LGFVs and treat them as ordinary SOEs, and differentiate supports based on their relative strategic importance.

The credit profile of some LGFVs may benefit from the stable cash flows from operating assets allocated by local governments, such as gas and water utilities, toll roads, and investment properties. They will also retain close links with local governments, given their operation of public sector assets, continued participation in social service procurement processes, and social infrastructure PPP projects. We expect these LGFVs would remain high in priority for government support.

In developing new market-based activities, LGFVs will no longer be in their comfort zone but exposed to the fluctuations of competitive markets. It is untested whether they can develop

competitiveness over a broader geographical coverage and against industry SOEs and private companies. For example, the slowdown in fixed-asset investments and financial deleveraging have negatively affected private companies engaged in district or industrial zone development, such as China Fortune Land Development Co. Ltd. and Yida China Holdings Ltd. Due to the considerable upfront capital investment and prolonged payback periods, the cash flow generation of both companies is weakening and leverage remains elevated.

We see heightened restructuring risks with LGFVs as their government owners may force consolidation among LGFV peers in the same city to increase scale and facilitate financing convenience. The effectiveness of any consolidation is subject to: (1) the manner in which the existing debt stock of LGFVs is addressed; (2) how effective the consolidation facilitates transformation and improves competitiveness; (3) how operational inefficiencies are reduced or eliminated; and (4) whether effective risk management is put in place. Without the introduction of at least some of these initiatives, any consolidation may just delay the eventual reckoning brought about by high leverage levels.

## The Bottom Line: More Defaults

Individual SOE defaults were on the rise in recent months, although the credit crunch this year hit private-owned companies hardest. Only three SOEs defaulted in the domestic bond market in 2018 until Oct. 11. However, the media reported more SOEs missing interest payments or repayment of principal on trust loans or financial leases in provinces, such as Yunnan, Tianjin, and Guizhou. This is partly attributed to the high proportion of short-term debt and poor refinancing capability of those highly leveraged SOE borrowers, and weak supervision from their government owners.

Xinjiang Production Construction 6th Shi State-owned Assets Management Co. Ltd. (6th Shi) defaulted on a RMB500 million, 270-day super short-term commercial paper (SCP) in August 2018, taking the market by surprise. The company has a close relationship with the local finance bureau, and is regarded by the market as a quasi-LGFV although it is primarily engaged in industrial businesses. Its default closed the door to capital for subsequent bond issues of other Xinjiang SOEs and highlighted the heightened refinancing risk for the LGFV sector. However, the company's full repayment two days after maturity and the investigation into its chairman following the default indicated that reputational risk still plays an important role in extraordinary support from local governments to LGFVs.

Table 2

#### 2018 New Onshore Corporate Defaults By Issuer

### (As of Oct. 11, 2018)

Company	Ownership	First default month	Total default amount (RMB mil.)	
State-owned enterprises (SOEs):	Ownership		(tun2 iiiu)	
China Huayang Economic and Trade Group Co. Ltd.	SOE	Sep-18	2,800	
Xinjiang Production Construction 6th Shi State-owned Assets Management Co. Ltd.	SOE	Aug-18	500	
Yunnan Real Estate Development (Group) Co. Ltd.	SOE	Jun-18	500	
Subtotal			3,800	
Privately owned enterprises (POEs):				
Anhui Shengyun Machinery Co. Ltd.	POE	Oct-18	700	

Table 2 2018 New Onshore Corporate Defaults By Issuer (cont.)

(As of Oct. 11, 2018)

Company	Ownership	First default month	Total default amount (RMB mil.)	
Feima Investment Holdings Co. Ltd.	POE	Sep-18	800	
Henan Zhongpin Food Industry Co. Ltd.	POE	Sep-18	500	
Gangtai Group Co. Ltd.	POE	Sep-18	1,000	
Henan Zhongpin Food Share Co. Ltd.	POE	Sep-18	150	
The Neoglory Holding Group Co. Ltd.	POE	Sep-18	3,000	
Jilin Liyuan Precision Manufacturing Co.,Ltd.	POE	Sep-18	740	
DMG Entertainment And Media Co. Ltd.	POE	Sep-18	400	
Haikou Meilan International Airport Co. Ltd.	POE	Aug-18	1,000	
Jinhong Holding Group Co. Ltd.	POE	Aug-18	800	
The 6th. Engineering Bureau Of CCIN Co. Ltd.	POE	Aug-18	1,050	
Leshi Internet Information & Technology Corp. Beijing	POE	Aug-18	73	
Yongtai Group	POE	Jul-18	1,000	
Wintime Energy Co. Ltd.	POE	Jul-18	11,430	
Great Wall Group Co. Ltd.	POE	Jun-18	1,200	
Sunshine Kaidi New Energy Group Co. Ltd.	POE	Jun-18	1,800	
Kaidi Ecological And Environmental Technology Co. Ltd.	POE	May-18	1,657	
CEFC Shanghai International Group Ltd.	POE	May-18	20,100	
China Security Co. Ltd.	POE	May-18	91	
Fuguiniao Co. Ltd.	POE	Apr-18	2,100	
Shenwu Technology Group Corp.	POE	Apr-18	1,749	
Shenwu Environmental Technology Co. Ltd.	POE	Mar-18	450	
Subtotal			51,790	

Source: WIND, S&P Global Ratings

The default risk of LGFVs is increasing. Although the willingness of local governments to keep their financing vehicles afloat may be still high, their ultimate capacity to provide timely support could be constrained. The governments are limited by their own fiscal power and ability to mobilize resources, market liquidity, and creditors' hesitation to lend amid the financial and corporate deleveraging campaigns. We foresee the weakest link may be from those LGFVs owned by weaker prefectural city-level or district-level governments with lax supervision over SOEs; those LGFVs engaged heavily in commercial activities, thus having diminishing importance to local governments; and those LGFVs having large short-term debt and shadow-banking borrowings or financial lease, hence bearing significant refinancing risks.

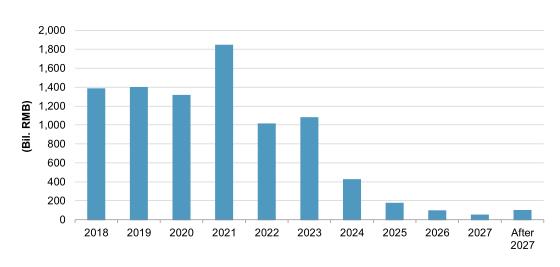
In the rebalancing to a consumption-based economy, China's top leadership has increased tolerance for moderately lower economic growth in exchange for improving the economic structure. Policymakers seem willing to accept defaults of small and less-important LGFVs in order to instill financial discipline, increase flexibility in the financial markets, and promote a

transparent default mechanism. The State Council in a recent policy document required all the highly leveraged SOEs to have clear targets and timing for deleveraging. The policy document opened up the possibility of insolvent LGFVs--even big ones--filing for bankruptcy reorganization or liquidation. The central government is clearly trying to avoid accumulation of systemic risk in the LGFV sector.

However, investor skepticism will return if policymakers take "one step forward and two steps back" when the contagion of LGFV defaults emerges. Clearly, the LGFV sector is a significant component of the Chinese corporate bond market and banking assets. On top of that, many shadow banking products related to LGFVs have been sold to retail investors. When financial and social stability is high on the agenda of China's top leadership, local governments and LGFVs are walking a tightrope.

Chart 6

## Refinancing Pressure On LGFVs Will Be Heavy In 2018 To 2021



Onshore LGFV bond maturity profile

Bil.-billion. RMB-renminbi. Source: WIND, S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

## Related Research

- Credit FAQ: Chinese Local Government Financing Vehicles In Transition: What's Behind Our Downgrades Of Some But Not All Rated LGFVs?, Sept. 13, 2018
- Seven LGFVs Downgraded Due To Changing Dynamics Between China's Local Governments And Their Financing Vehicles, Sept. 12, 2018
- Qingdao China Prosperity Rating Lowered To 'BB+' With Stable Outlook; Rating Then Withdrawn At The Company's Request, Aug. 20, 2018
- Zhenjiang Transportation 'BB' Rating Placed On CreditWatch Negative On Rising Refinancing Risk, Uncertain Support, June 12, 2018
- China's Latest Guidance Will Curb New Financing To Local Government Funding Platforms, April 6, 2018

- Qingdao City Construction Investment, Subsidiary Outlooks Revised To Negative; 'BBB' and 'BBB-' Ratings Affirmed, Jan. 31, 2018
- Qingdao Conson Development (Group) Outlook Revised To Negative; 'BBB' Rating Affirmed, Jan. 31, 2018
- Rising Profits Won't Rescue China's Riskiest Companies As Liquidity Tightens, Jan. 30, 2018

This report does not constitute a rating action.



Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.