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Research Briefing
Emerging markets

China's provinces
Mapping the way forward

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This article introduces an update to our interactive macro chartbook for China's 31 provinces.[1] New series covering province-level snapshots on property markets, local government finances and regional competitiveness offer a meaningful extension to the existing macroeconomic toolbox.

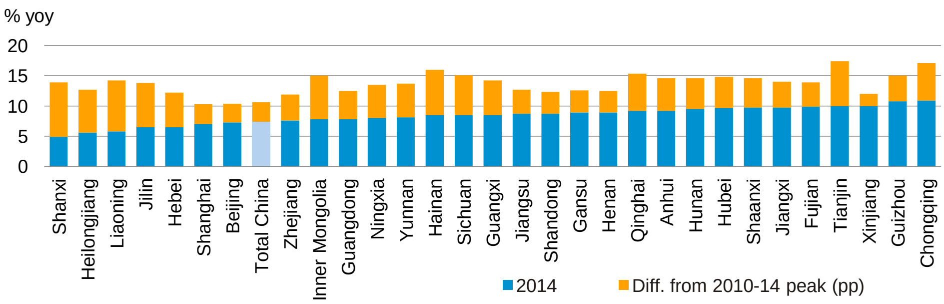
Five years have passed since our report "China's provinces: Digging one layer deeper", and much has happened: China has embarked on a path of economic rebalancing, away from the legacy of an investment boom and towards more sustainable growth. The changes that come with this shift hold implications for all provinces, but the challenges may look quite different in steel-producing Hebei than in real-estate-reliant Hainan. Perhaps not surprisingly, we find the provinces in the northeastern "rust belt" are most exposed to the current China slowdown.

Provincial finances are at the root of China's fiscal risks, stemming from an overreliance on local governments' income from land sales and a mismatch between local responsibilities for managing revenues and expenditures. Recent measures to expand local government bond financing are a positive step towards reducing fiscal risks and accumulation of debt at the local level.

Property markets are feeling the squeeze across China, as prices have come under pressure, and property sales and investment have slowed or declined, particularly in the northeastern provinces. But the diversity of local markets is huge and so are the chances to adequately respond to the sector's problems.

Finally, China's ambitions to expand cross-border trade and investment via the "new silk road" should benefit provinces at the western and southwestern borders more than others. However, convergence of the living standards in some of these provinces to those in the richer ones still has a long way to go.

Provincial real GDP growth has slowed to a fraction of its 2010-14 peak



Sources: National Bureau of Statistics, Deutsche Bank Research

*The author would like to thank Karolina Kuzminskyte for her valuable research assistance.

[1] Covering 22 provinces, 5 autonomous regions, 4 directly controlled municipalities, but excluding special administrative regions Hong Kong and Macao.

China's provinces: Mapping the way forward

Growth targets reduced across the board in China 1

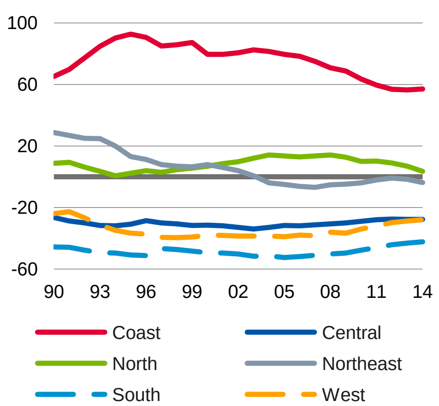
Real GDP growth, %

	2014, actual	2014, target	2015, target
Anhui	9.2	9.5	8.5
Beijing	7.3	7.5	7.0
Chongqing	10.9	11.0	10.0
Fujian	9.9	10.5	10.0
Gansu	8.9	11.0	8.0
Guangdong	7.8	8.5	7.5
Guangxi	8.5	10.0	8.0
Guizhou	10.8	12.5	10.0
Hainan	8.5	10.0	8.0
Hebei	6.5	11.0	10.0
Heilongjiang	5.6	8.5	6.0
Henan	8.9	8.0	7.0
Hubei	9.7	10.0	9.0
Hunan	9.5	10.0	8.5
Inner Mongolia	7.8	9.0	8.0
Jiangsu	8.7	9.0	8.0
Jiangxi	9.7	10.0	9.0
Jilin	6.5	8.0	6.5
Liaoning	5.8	9.0	6.0
Ningxia	8.0	10.0	8.0
Qinghai	9.2	10.5	8.0
Shaanxi	9.7	11.0	10.0
Shandong	8.7	9.0	8.5
Shanghai	7.0	7.5	no target
Shanxi	4.9	9.0	6.0
Sichuan	8.5	9.0	7.5
Tianjin	10.0	11.0	9.0
Tibet	12.0	12.0	12.0
Xinjiang	10.0	11.0	9.0
Yunnan	8.1	11.0	8.5
Zhejiang	7.6	8.0	7.5
China	7.4	7.5	7.0

Source: Various news reports

Moving closer to each other 3

GDP per capita, % deviation from nat. avg.



Sources: National Bureau of Statistics, Deutsche Bank Research

Slowdown most pronounced in previous provincial growth stars

Real GDP growth has moderated considerably across China's provinces. In 2014, growth rates were lower by 5.4 percentage points on average compared to their peak levels in 2010-14 (chart on page 1). Economic growth has proven relatively resilient in the coastal provinces such as Guangdong, Zhejiang and Shanghai. Growth rates slumped most in the Northeast's "rust belt" provinces of Jilin, Liaoning and energy-producing Heilongjiang (where one of China's largest oilfields is located), and in those reliant on bulk materials such as Shanxi and Inner Mongolia. The island province of Hainan also slowed from a peak of 16%, albeit less sharply than the commodity producers. Notably, inland provinces which experienced bumper growth rates during the global financial crisis (when export-dependent coastal provinces were hard hit) now face the largest loss in momentum. For the city-states Beijing and Shanghai, the slowdown has been much more orderly. Also, the poorer provinces of Xinjiang, Tibet and Guizhou continued to record high growth rates in 2014. All 31 provinces have slashed their growth targets for this year (chart 1). Shanghai abandoned a target altogether, in line with China's overall pursuit of more quality-driven growth.

China's provinces by region 2

Source: Deutsche Bank Research

Evident convergence in provincial incomes per capita

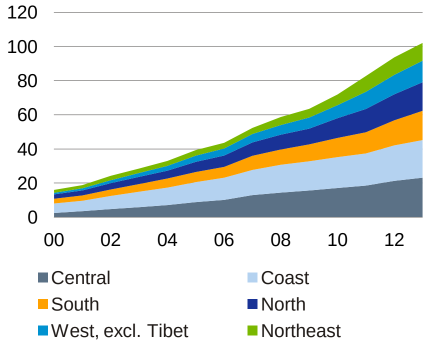
The big "Go West" infrastructure push has been successful in lifting per capita GDP in less wealthy provinces. As a result, discrepancies in provincial income have declined in recent years (chart 3). Yet, the gaps remain considerable, and the growth slowdown of recent years which has struck hardest in the resource-rich or heavy-polluting provinces but also affected the poorer South and West will put a (temporary) brake on GDP convergence.

Despite their large and diverse challenges, China's provinces have a few success stories to tell. Urbanisation has made rapid progress in underdeveloped regions. Transport infrastructure has expanded massively, with the result that China now boasts more than 100,000 km of expressways (chart 4) and the largest network of high-speed railways (chart 5).

Furthermore, foreign direct investment has been lured into inland regions, and third-tier cities such as Leshan located in Sichuan province or Yulin in Shaanxi are poised to account for the largest increase in China's upper middle-class

Crisis stimulus drove infrastructure expansion 4

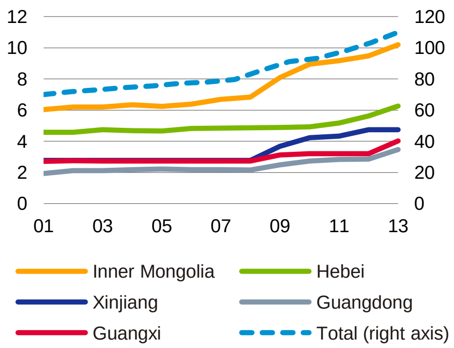
Expressways, km '000



Sources: National Bureau of Statistics, Deutsche Bank Research

Railways expanded in remote regions or strategic hubs 5

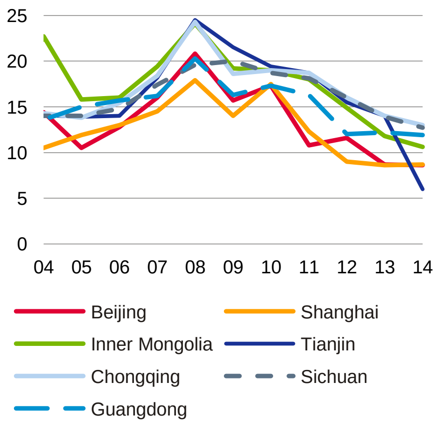
km, '000



Sources: Ministry of Transport, Deutsche Bank Research

Retail sales still grow at robust rates 6

% yoy



Sources: Provincial and municipal statistics bureaus, Deutsche Bank Research

population by 2022, reaching 30% of China's total middle class from just 15% in 2002.[2]

Manufacturing hubs have emerged outside the traditional powerhouses along the Pearl and Yangtze deltas. That is because unit labour costs in the manufacturing sector remain the highest along the coast.[3] But inland provinces are catching up fast. Nevertheless, some provinces like Jiangxi, Henan and Hebei have retained low unit labour costs that enable them to compete with countries such as Thailand, the Philippines and Vietnam.

Moreover, China's ambitious plans to expand investment and trade in Asia and globally via the "new silk road" economic belt importantly include China's domestic provinces in the Southwest and West (via the Chongqing-Xinjiang-Europe international railway) as well as coastal provinces for the maritime route connecting China and Europe. Provinces close to the national or sea border are well placed to benefit from expanding cross-border trade and investment thanks to existing infrastructure, new transport links and easing regulations.

Provincial growth remains dependent on investment

Most provinces continue to rely heavily on investment as the key engine of growth. Gross fixed capital formation, a proxy of investment, averaged 64% of GDP across the provinces in 2013 – the highest level in a decade. The rate of final consumption as a proportion of GDP by contrast averaged 34% and remained largely stable over the same period.

Retail sales, a higher-frequency indicator capturing private consumption dynamics, provide a mixed picture. Sales of consumer goods have slowed over the past years in all parts of the country but most provinces still record robust rates (chart 6). In particular inland provinces' sales were buoyed by demand for high-tech consumer goods. The slowdown in retail sales has been most pronounced in northern China, where real GDP growth moderated from more than 12% in 2011 to 7.3% in 2014. Retail sales growth notably decelerated in Tianjin, and remained subdued in Beijing and Shanghai, which can in part be attributed to restrictions imposed in the real estate sector.

By contrast, overreliance on investment is evidenced across China's provinces by the rapid growth in capital spending in recent years. Indeed, investment in fixed assets, which includes land purchases,[4] expanded by 24% p.a. on average in 2010-13. In 2014, by contrast, investment grew at a much slower rate in the majority of Chinese provinces (chart 7). But even then, all but four provinces continued to post double-digit expansion.

By sector,[5] the slowdown in fixed asset investment was led by manufacturing, which slackened across the country and declined sharply in coastal manufacturing hub Guangdong. Mining-related investment remained buoyant in Inner Mongolia, Shaanxi and Xinjiang but fell in other resource-rich provinces such as Shanxi and Liaoning. Real estate investment, which accounted for a quarter of total fixed investment on average across the provinces, rose moderately in most provinces, but dropped sharply in Jilin, Inner Mongolia and Xinjiang. Moreover, lower investment in upstream industries (cement, steel, construction materials) contributed to a slowdown in other areas of investment in the supplier provinces.

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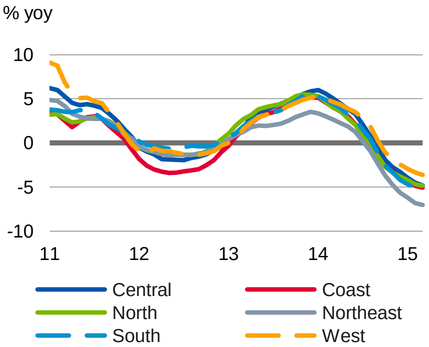
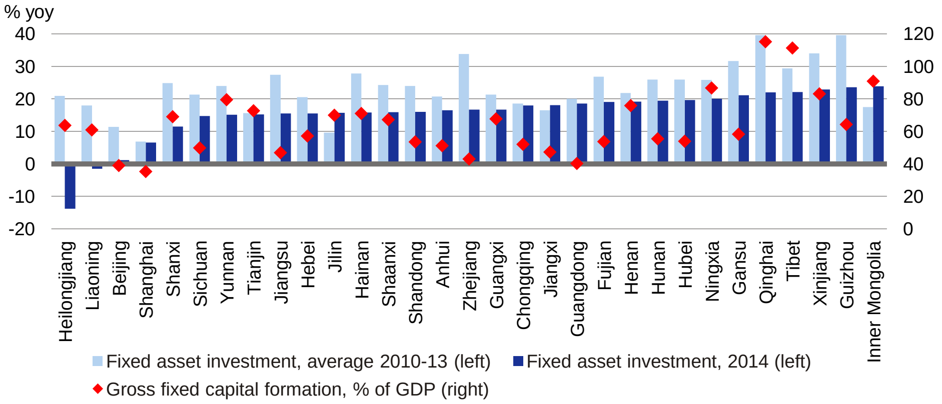
2 McKinsey (2013). Mapping China's middle class.
3 EIU (2014). Still making it – An analysis of manufacturing labour costs in China. Dec 2014.
4 Defined by NBS as construction projects and purchases of fixed assets (incl. fees) with planned investment totalling at least RMB 5 m in urban and rural areas but excluding rural households.
5 Data available until 2013 only.

Property price decline sharpest in the Northeast 8



Sources: National Bureau of Statistics, Deutsche Bank Research

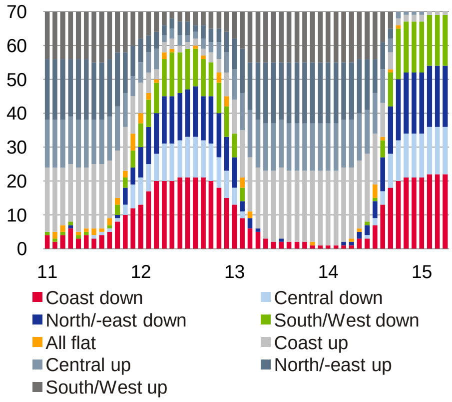
Fixed asset investment growth slowed in the majority of provinces 7



Sources: National Bureau of Statistics, Deutsche Bank Research

Property prices decline across regions 9

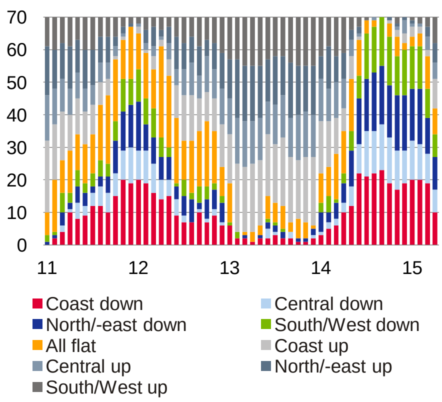
Residential property price index (70 cities), No. of cities experiencing change on yoy basis



Sources: National Bureau of Statistics, Deutsche Bank Research

Monthly dynamics hint at nascent recovery 10

Residential property price index (70 cities), No. of cities experiencing change on mom basis



Sources: National Bureau of Statistics, Deutsche Bank Research

At the same time, the central government moved ahead with cutting excess capacities in related industrial sectors, e.g. by shutting down unprofitable steel mills and aluminium smelters in Hebei, Guangxi and Guizhou.[6] These measures have served the double purpose of cutting inefficiencies and reducing air pollution. However, the aim to curb China's heavy reliance on fixed investment stands in sharp contrast to province-level fixed investment growth targets at around 20% that have been upheld for 2015 in a number of provinces, including Henan, Hubei and Shaanxi.[7]

Property markets: Different provinces, different challenges

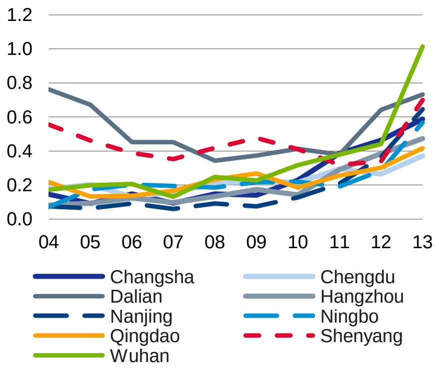
The property market has been at the forefront of China hard-landing concerns. Falling real estate prices and sales, slowing land sales and stalling urbanisation rates pose a drag to the real economy and bear risks for the financial sector, given the high linkages between local government finances and real estate developments. But China's ability to withstand a sustained correction in the property market comes down to the local level. Due to the sheer size of the country there are not one but many property markets that may face quite different supply and demand trends and require differentiated policy responses.

Given the highly diverse nature of urban and rural settlements within China, price trends are generally measured on a city level rather than by province. The widely used 70-city index encompasses the large municipalities as well as sub-provincial and prefecture-level cities. First-tier cities such as Beijing, Shanghai, Tianjin, Shenzhen and Guangzhou have generally witnessed above-average price increases while the correction has been orderly as demand held up well. By contrast, second-tier cities have faced much larger price variations. Despite considerable differences between local markets, the fall in property prices has been visible across regions (chart 9). Cities located in the Northeast, North and along the coast were among the first to experience year-on-year price declines. The drop has also been much sharper than, for example, in cities located in China's West. Since November 2014 no more than three cities included in the index recorded price increases on a year-on-year basis – two of which are located on China's coast and one being the fast growing capital of central Henan province, Zhengzhou, once famous for being home to China's largest ghost city.

[6] Various news reports.
[7] Financial Times. Chinese provinces turn to old investment and easing playbook. Feb 16, 2015.

Vacancy rates rose in second-tier cities 11

Ratio of vacant-to-completed floor space



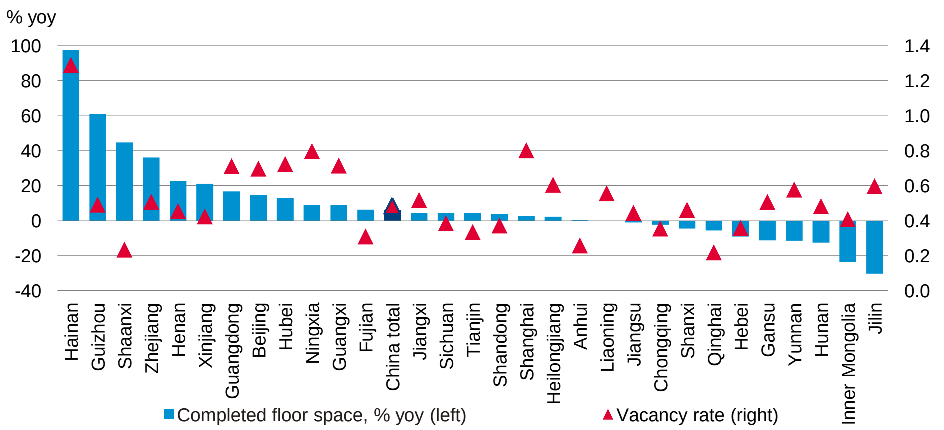
Sources: National Bureau of Statistics, Deutsche Bank Research

On a monthly basis, a turnaround in property prices has started to become visible in Beijing and Shenzhen after a series of measures to boost demand, as well as in southern provinces' cities (chart 10).

The downturn in the property market has brought about incremental relaxation of restrictions, not just in Beijing and Shanghai. Plans for nationwide residential property taxes were shelved and home-purchase restrictions reversed, some of which had been in place since 2010. Moreover, the government introduced financial incentives to boost sales; further easing of mortgage restrictions were rolled out in April 2015 and minimum down-payment ratios were slashed in several cities.

Vacancy rates (the ratio of vacant space relative to completed floor space) have risen across China's provinces over the past few years. In several provinces, vacancy rates[8] doubled between 2011 and 2013 (the last point for which vacant floor space data are available). Floor area waiting to be sold compared to completed property area surged notably in Hainan, Guangxi and Yunnan provinces. On a city level, the increase occurred most rapidly in second-tier cities (chart 11) but also several larger cities such as Tianjin and Shenzhen, while the trend for tier-3 cities is more divergent, ranging from skyrocketing vacancy rates in island city Haikou to declining rates in Hefei and Jinan. Vacancy rates have declined somewhat in Beijing as construction activity (measured by the completion of floor space) rebounded and homes were sold faster than elsewhere. Comparing completion across cities and provinces provides a more nuanced picture for 2014. It shows construction activity stalled or reversed in some provinces where vacancy rates were elevated (Yunnan, Jilin, Shanghai) but continued to flourish in others (Hainan, Guangdong, Beijing), implying different dynamics (chart 12).

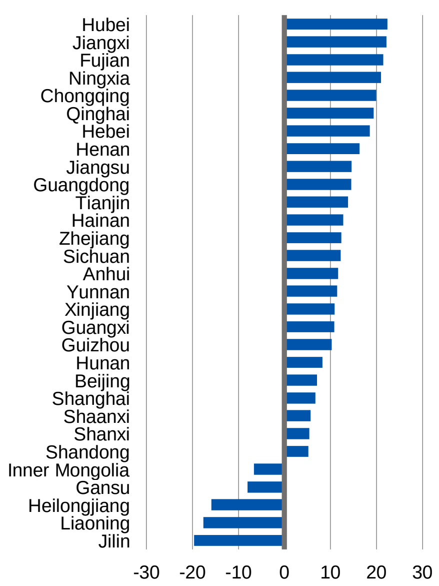
High vacancy rates not necessarily a sign of slowing construction activity 12



Note: Tibet is an outlier and excluded in the chart due to very high growth in completed floor area from a very low base. Completed floor space data refers to 2014 while vacancy rate refers to 2013.
Sources: National Bureau of Statistics, Deutsche Bank Research

Real estate investment dynamics differ 13

% yoy, (2014)



Note: Refers to investment in residential real estate. Tibet is excluded due to excessive growth from a very low base.

Sources: National Bureau of Statistics, Deutsche Bank Research

Real estate investment in residential buildings generally continued to grow on a year-on-year basis at end-2014, despite already declining prices and sales (chart 13). Where the gap between high investment and falling prices is large, future funding may be called into question. Exceptions are the three provinces in the Northeast (Jilin, Liaoning, and Heilongjiang) as well as resource-rich Gansu and Inner Mongolia, where property investment contracted sharply in line with the overall investment decline in the region. Strikingly these were among the provinces to still record year-on-year increases in residential home prices.

In sum, while the property market shows signs of sluggishness everywhere, the underlying dynamics can be very different as summarised in chart 14. For

[8] Refers to commodity buildings, i.e. housing for sale on private market in urban areas.

example, property sales tended to decline even where average provincial property prices still held up on a year-on-year basis in 2014. Property sales typically fell where vacancy rates were also high, such as in the Northeast and coastal provinces, but price-to-income ratios remained relatively low with the notable exceptions of Hainan and Shanghai. Accordingly, local property markets may require diverse policy responses. For example, the central government's move to relax property restrictions will benefit mostly those regions that have felt the squeeze from high down-payments before.

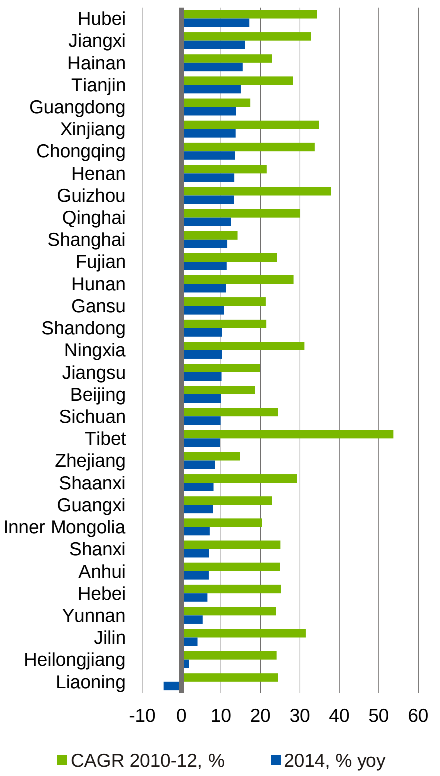
Property market heatmap 14

	Provinces	Vacancy rate (vacant to completed floor space)	Residential property sales	Property price per sqm, average residential	Afford-abilty ratio (price per sqm to per capita disposable income)	Memo item: construction sector value added	Key cities included in the 70-city index
		Ratio, 2013	% yoy, 2014	% yoy, 2014	%	RMB bn, 2013	
Central	Anhui	0.26	1.1	5.0	21	144	Anqing, Bengbu, Hefei
	Henan	0.46	8.9	1.9	17	127	Luoyang, Pingdingshan, Zhengzhou
	Hubei	0.72	10.1	4.9	21	119	Wuhan, Xiangyang, Yichang
	Hunan	0.48	-12.1	-2.0	17	82	Changsha, Yueyang
	Jiangxi	0.52	-1.2	1.3	22	69	Ganzhou, Jiujiang, Nanchang
Coast	Fujian	0.31	-13.8	2.6	28	152	Fuzhou, Quanzhou, Xiamen
	Guangdong	0.71	-6.9	0.7	26	209	Guangzhou, Huizhou, Shaoguan, Shenzhen, Zhanjiang
	Hainan	1.29	-12.4	7.3	38	19	Haikou, Sanya
	Jiangsu	0.45	-11.9	2.0	20	388	Nanjing, Wuxi, Xuzhou, Yangzhou
	Shandong	0.37	-10.1	4.8	17	204	Jinan, Jining, Qingdao, Yantai
	Shanghai	0.80	-10.4	1.4	37	71	Shanghai
	Zhejiang	0.51	-7.6	-3.9	29	239	Hangzhou, Jinhua, Ningbo, Wenzhou
North	Beijing	0.70	-13.6	3.6	44	53	Beijing
	Hebei	0.36	7.4	7.5	21	89	Chengde, Qinhuangdao, Shijazhuang, Tangshan
	Inner Mongolia	0.41	-12.5	-0.8	15	82	Baotou, Hohhot
	Shanxi	0.46	2.3	6.0	19	56	Taiyuan
	Tianjin	0.34	-10.3	4.4	26	57	Tianjin
North-east	Heilongjiang	0.61	-26.3	1.8	23	46	Harbin, Mudanjiang
	Jilin	0.60	-20.5	13.8	19	50	Changchun, Jilin
	Liaoning	0.56	-36.1	3.8	19	177	Dalian, Dandong, Jinzhou, Shenyang
South	Chongqing	0.36	-1.3	-2.8	21	93	Chongqing
	Guangxi	0.72	9.2	5.3	18	51	Beihai, Guilin, Nanning
	Guizhou	0.49	1.1	-1.1	18	54	Guiyang, Zunyi
	Sichuan	0.39	-4.9	0.1	23	139	Chengdu, Luzhou, Nanchong
	Yunnan	0.58	-2.3	6.6	18	63	Dali, Kunming
West	Gansu	0.51	22.8	14.9	19	43	Lanzhou
	Ningxia	0.80	-3.2	-4.3	18	22	Yinchuan
	Qinghai	0.22	6.5	8.5	20	21	Xining
	Shaanxi	0.24	-3.2	-3.4	22	71	Xi'an
	Tibet	1.63	222.8	37.1	19	7	-
	Xinjiang	0.42	-12.0	2.8	20	77	Urumqi

Note: Red implies higher vacancy rates, lower property sales growth, lower property price inflation and lower affordability as indicated by higher price-to-income ratios while green denotes the opposite.

Sources: Deutsche Bank Research, National Bureau Statistics

Budget revenue growth slowed everywhere 15

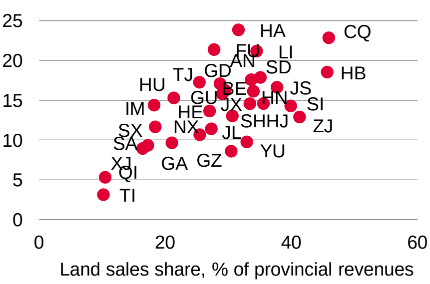


* Tibet: latest is 2013. Refers to budgetary revenues before transfers.

Sources: National Bureau of Statistics, Deutsche Bank Research

Double whammy: Some provinces rely on real estate for land sales revenue & taxes 16

Real estate related tax, % of total tax revenue



AN=Anhui, BE= Beijing, CQ=Chongqing, FU=Fujian, GA=Gansu, GD=Guangdong, GU=Guangxi, GZ=Guizhou, HA=Hainan, HE=Hebei, HJ=Heilongjiang, HN=Henan, HB=Hubei, HU=Hunan, IM=Inner Mongolia, JS=Jiangsu, JX=Jiangxi, JL=Jilin, LI=Liaoning, NX=Ningxia, QI=Qinghai, SA=Shaanxi, SD=Shandong, SH=Shanghai, SX=Shanxi, SI=Sichuan, TJ=Tianjin, TI=Tibet, XJ=Xinjiang, YU=Yunnan, ZJ=Zhejiang

Sources: National Bureau of Statistics, OECD, Deutsche Bank Research

Provincial finances: Fiscal risks related to high reliance on land sales

Tightly linked to the developments in the property market is the health of provinces' fiscal balance sheets. Local governments' finances are subject to an inherent mismatch between centralised revenue generation and local spending responsibilities.[9] This mismatch is illustrated by the fact that the share of local to total fiscal expenditures (71% at end-2014) far exceeds the share of local to total revenues (59% at end-2014), and is also much higher than in developed countries.[10] As a result, local governments have resorted to off-budget funds and land sales for propping up budget revenues, while expenditures remained highly localised, and often channelled through special purpose vehicles. This imbalance became more apparent in recent years as budgetary performance deteriorated. All provinces faced significantly slower growth in budget revenues in 2014, relative to previous years (chart 15). Among the provinces that saw the sharpest revenue drop are "rust belt" Liaoning and Jilin as well as coal producer Shaanxi and relatively poor provinces such as Guizhou and Tibet.

Besides their budgetary fiscal incomes, China's provincial governments draw on off-budget income from government-managed funds. Fund revenues account for 40% of total revenues at the local level, making them a key source for provincial spending. Crucially, 85% of government fund revenues are derived from the sale of state-owned land use rights. Land sales slowed significantly in 2014 as a result of lack of demand for land and sluggish real estate development. This trend continued into the first four months of 2015 when land sales revenues declined sharply from the previous year.

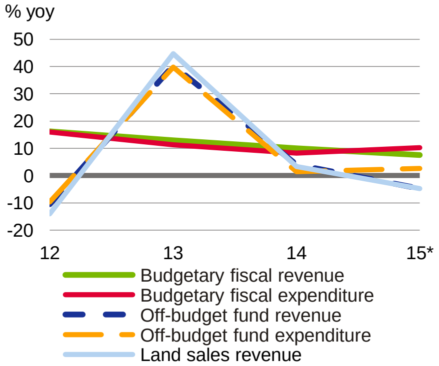
At the provincial level, fund income – as a proxy for land sales revenues – slowed or declined in the majority of provinces in 2014, though the magnitude differs widely.[11] Only a few provinces, including Beijing and Tianjin, continued to post year-on-year increases thanks to ongoing investment demand and targeted government efforts to boost sales. Concomitantly, total revenue growth slowed more sharply where land sales declined most.[12] Liaoning faced both the sharpest decline in land sales and negative budget revenue growth. Heilongjiang, Inner Mongolia and Yunnan saw double-digit contractions in land sales coupled with marked decelerations in budget revenue growth.

Moreover, budgetary income sources such as tax revenues may also depend quite strongly on the real estate market (e.g. through land appreciation tax, farmland occupation tax and deed tax) or are little diversified altogether, hence revealing provinces' sensitivity to a double-whammy effect from a property market downturn on local finances (chart 16). This includes, for example, Chongqing and Hubei, as well as primarily coastal provinces.

For 2015, China targets a wider fiscal deficit on both the central and local government levels so as to accommodate for more subdued economic activity. The budget estimates that local government revenues will grow at only 7.5% yoy from 10% yoy in 2014 and land sales income will fall by 4.7% yoy (chart 17).[13] At the same time, the central government's fiscal capacity to smooth shortfalls on the local level is substantial. Owing to the system of interregional transfers, local governments that run budget deficits receive net transfers and tax rebates from the central government while those with budget surpluses remit funds back to the centre. In recent years, operating budgets have diminished in many provinces, thus driving up reliance on transfers from the centre.

9 See also our Feb 2010 study "China's provinces: Digging one layer deeper" for more detailed background on the topic.
10 Lu and Sun (2013). Local government financing platforms in China. IMF WP/13/243.
11 Ministry of Finance, press release. 去年土地出让收入增幅回落 Mar 25, 2015.
12 Moody's (2015). Chinese regional and local land sales slowed sharply in 2014. Mar 2015.
13 National People's Congress. Report on the implementation of the central and local budgets for 2014 and on the central and local draft budgets for 2015.

Land sales' decline acts as a drag on local finances 17



* As per draft budget. Note that some fund items are reallocated to budgetary accounts from 2015 onwards

Sources: China Economic Monitoring and Analysis Centre, National People's Congress, Deutsche Bank Research

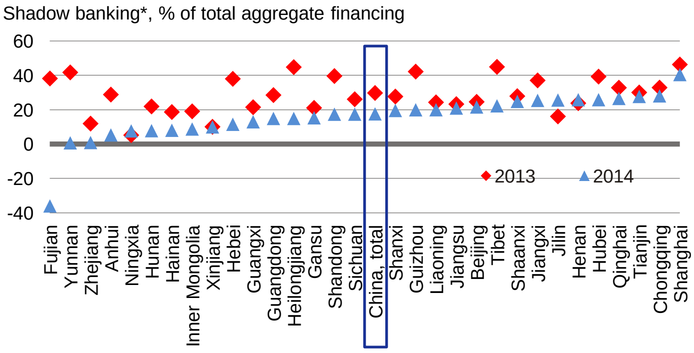
Provinces' ability to cope with these fiscal challenges differs, not just due to varying degrees of revenue diversification and reliance on land sales for funding. It also depends on their availability of (liquid) assets, for example in the form of stakes in state-owned enterprises which could be sold in case of financial distress. An S&P report shows that only a small share (less than 15%) of assets needed to be sold to generate an additional 20% of operating revenues in the coastal provinces, Beijing, Chongqing and Tianjin, whereas Jilin and Heilongjiang as well as the remote province of Ningxia would have to sell more than 70% of their assets.[14]

Shadow banking most prominent in richer provinces

Financing of real estate and infrastructure projects is a local responsibility. Confronted with the dilemma to fund centrally-induced investment increases while being banned from direct issuance of debt, local governments either relied on the central government to issue bonds on their behalf or resorted extensively to off-budget channels, i.e. special purpose local government financing vehicles (LGFVs), which in turn borrowed from banks, wealth management products (WMPs), trusts or the bond market.

With concerns about the lack of transparency and fiscal risks as well as the higher borrowing costs[15] associated with informal local financing mounting, regulations on LGFVs and WMPs tightened on a provincial and national level in the course of 2014. LGFVs in turn have faced deteriorating finances.[16] Shandong province imposed a ban on new debt issues by LGFVs altogether.[17] China's fiscal reform plans have followed the "open the front door, close the back door" approach to steer local government financing away from LGFVs and the shadow-banking sector and towards direct borrowing on the bond market. In the face of the growth slowdown, however, the "back door" will not (yet) shut completely. LGFVs remain a powerful funding tool, as the recent decision by the Chinese government to resurrect bank support to existing LGFV projects and prop up local governments' spending ability shows.[18]

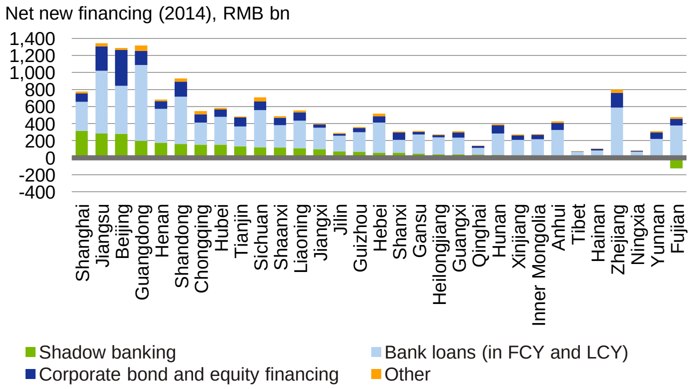
Shadow financing declined but not uniformly across provinces 18



*Includes bankers acceptance bills, trusts and entrusted loans.

Sources: People's Bank of China, Deutsche Bank Research

Richer provinces rely more on shadow products for financing 19



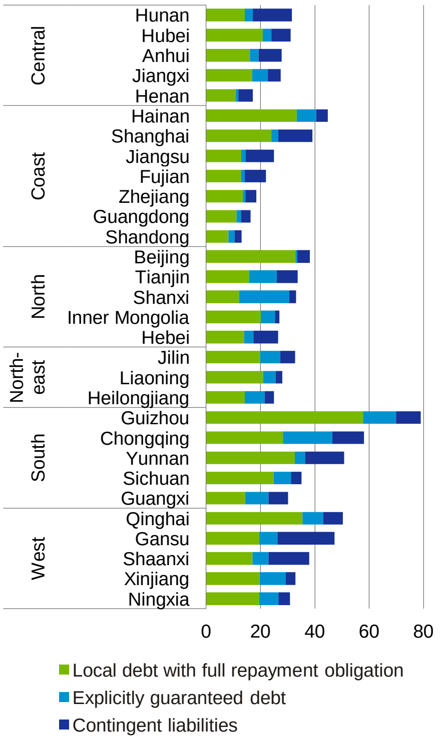
Sources: People's Bank of China, Deutsche Bank Research

Enforcement of stricter rules has already yielded results. On a national level, non-bank or "shadow" financing (via bankers' acceptance bills, trust products and entrusted loans) as a share of total credit flows declined from 30% in 2013

[14] S&P (2014). China credit spotlight: Speedy reforms of public finance are key to provincial governments' creditworthiness, Nov 19, 2014.
[15] LGFV borrowing costs are on average twice as high as government bond yields. See also Zhang and Barnett (2014). Fiscal vulnerabilities and risks from local government finance in China. IMF.
[16] See also Deutsche Bank Research (2015). China's unexpected fiscal slide, Jan 5, 2015.
[17] People's government of Shandong website.
[18] Deutsche Bank Research (2015). China: Another significant sign of fiscal policy easing, May 15, 2015.

Which are most highly indebted provinces? 20

% of provincial GDP (as of mid-2013)



Sources: OECD, Provincial audit offices, Deutsche Bank Research

Top 20 sub-national bond issuers 21

By amount outstanding, RMB bn (as of May 2015)

Note: Includes sub-national government and LGFV bond issuers by ultimate parent .

Sources: Bloomberg Finance LLP, Deutsche Bank Research

to 18% in 2014. The shadow-banking share has also fallen on the local level in the majority of provinces (charts 18 and 19), except in Ningxia and Xinjiang as well as Jilin (due to trust loans) and Henan, both of which had also accumulated high debt levels (see next section). Richer provinces, like Shanghai and Jiangsu, are the provinces with the largest shadow banking market in terms of value and share in total financing. While non-bank financing has been reined in to a negligible or even negative contribution to net new financing in a number of coastal provinces (e.g. in Zhejiang and Fujian), it remained largely stable in Jiangsu, Beijing and Chongqing.

A new market in the making: Local government bonds

Local governments have accumulated significant debt. At end-June 2013 – the most recent figure available – national audit results revealed a stock of RMB 10.9 tr of debt owed by regional and local governments directly plus explicit and indirect guarantees amounting to RMB 7 tr, in total around one-third of China's GDP. As a share of GDP, this figure does not strike one as particularly high, yet local debt rose by more than 60% between 2010 and mid-2013 to amount to more than half of China's total general government debt.[19] Broken down by province, the ratio of debt to provincial GDP reached as high as 80% in the case of Guizhou while central Henan and some coastal provinces boasted a debt share below 20% of provincial GDP as of mid-2013 (chart 20). In addition, there are provinces like Shaanxi and Chongqing that handed out extensive guarantees at an amount that matched actual local debt obligations. An update of provincial debt data, announced for spring 2015, is yet to be released. So far, only one province, Hainan, has disclosed more up-to-date numbers. They indicate a 22% increase in RMB terms between June 2013 and December 2014, reaching 49% of GDP.

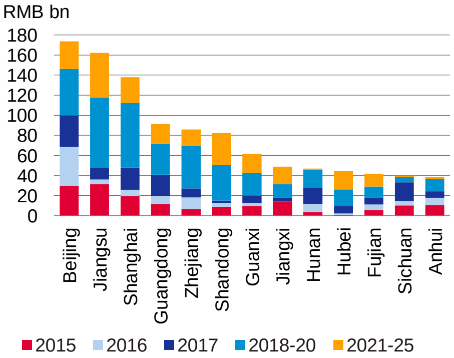
Owing to the massive borrowing for urban construction, transport and land acquisition, a substantial share of local governments' debt burden is linked to infrastructure development and the property sector. By mid-2013, LGFVs accounted for approx. 39% of the National Audit Office's RMB 17.9 tr debt estimate or 12% of GDP – obligations for which local governments bear ultimate payment responsibility given their arm's length borrowing through LGFV platforms.[20]

More than RMB 5 tr of bonds issued by LGFVs and local governments will mature up to 2025, as data compiled from Bloomberg Finance LLP show. Even though the provinces and municipalities are the largest issuers by volume of bonds outstanding (chart 21), direct issuance by provincial (and municipal) governments accounts for less than one-fifth of the total. The overwhelming majority of bond obligations is owed by government-managed investment and infrastructure companies. That is despite the fact that LGFVs' dominant borrowing method has been via short-term bank loans and trust products. Crucially, LGFVs' ability to refinance varies widely. According to a 2014 audit of local government finance, 20% of new loans taken out by local governments were used to repay older debt.[21]

The formal launch of the local government debt-for-bond swap programme in March 2015 marks a key step towards improving local government finances (see timeline in chart 23). Local governments received permission to convert RMB 1 tr of short-term debt (mostly LGFV bonds) into lower-interest and longer-term municipal or provincial bonds. In May 2015, Jiangsu became the first province to issue municipal bonds under the new debt-for-bond swap plan, at rates only slightly above the central government's Treasury bond rate.[22] In June 2015, the quota for local government swaps was doubled to RMB 2 tr. The

[19] Local debt includes obligations by provinces, prefectures, counties and townships.
[20] OECD Economic Survey. Mar 2015, p. 29.
[21] McKinsey Global Institute. Debt and (not much) deleveraging. Feb 2015.
[22] China Daily. Jiangsu issues USD 8 bn municipal bonds. May 19, 2015

Provincial bonds falling due up to 2025 — 22



Note: Includes bond debt where directly owed by issuing province as ultimate parent and outstanding bonds exceed RMB 30 bn.

Sources: Bloomberg Finance LLP, Deutsche Bank Research

Key steps towards a local bond market — 23

— Nov 11: Launch of pilot bond programme in Zhejiang, Guangdong, Shanghai and Shenzhen

— May 14: 10 provinces or municipal governments receive permission to issue bonds independently: Shanghai, Qingdao, Zhejiang, Guangdong, Shenzhen, Jiangxi, Jiangsu, Shandong, Beijing, and Ningxia.

— Jun/Jul 14: Guangdong province issues RMB 14.8 bn of local govt bonds in a 1.85 times oversubscribed auction. Shandong province issues its first bond.

— Aug 14: Amendment of budget law sets out legal framework for municipal bond issuance starting 2015.

— Oct 14: State Council publishes rules to strengthen local debt management and supervision. 32 provinces will be allowed to borrow within a quota.

— Mar 15: Launch of government debt-for-bond swap programme

— May 15: Local government bonds made eligible as collateral for central bank lending facilities and allowing direct placement of bonds with creditors.

— May 15: Jiangsu province issues RMB 52.2 bn of municipal bonds.

— Jun 15: Doubling of quota for local government debt swaps to RMB 2 tr.

Sources: Government websites, news reports

decision has wide-scale implications as it mitigates provinces' short-term refinancing risks and helps extend maturities, thus supporting the refinancing of infrastructure projects that are often long term in nature (chart 22). The extended swap plan will cover the local debt maturing in 2015 (based on outstanding debt as per the 2013 audit). All provinces are eligible for the swap. However, responsibilities with sub-provincial governments may need to be clarified. Cities and counties, for example, are excluded from the swap plan but may often be the first to encounter difficulties raising money as the case of Haikou city illustrates, which turned to Hainan province for repaying its debt.[23]

Notwithstanding the relevance of the swap programme, it will take time until a sufficiently deep municipal bond market develops, in sync with continued fiscal and financial sector reform. The local government bond market is still at an early stage of development, and rapid expansion of issuance could entail risks. The initial delay of the bond kick-off in various provinces highlighted some of the challenges. For example, Jiangsu and Anhui provinces initially had to postpone planned debt auctions amid weak investor demand and limited ability to use local government paper as collateral – until the central government determined their eligibility as collateral for central bank lending in mid-May 2015.[24] Provinces were also given the option of placing local bonds directly with existing creditors such as banks, trusts and insurance providers. If implemented correctly, the plan to develop the local government bond market can contribute significantly to improving transparency by shifting local borrowing onto the balance sheet.

Conclusion

As China embarks on a path of economic rebalancing, regional differences in coping with slowing growth, declining property prices and changing investment and consumption patterns have moved into focus. It is often local challenges – such as Zhengzhou's coping with a fading housing boom or Hainan's growing debt burden – that shape the perception of China's economic health. In fact, while all 31 provinces are affected by China's slowdown, regional differences remain substantial. Not only is there huge variation in provinces' ability to manage China's planned shift from investment-driven growth towards more sustainable and consumption-led development. Provincial risks are often at the root of China's current reform trends, too, notably with regard to fiscal reform and the recent push to establish a functioning local government bond market.

Across regions, we find that the provinces in the northeastern "rust belt" are most exposed to the China slowdown due to their role as suppliers of heavy industry. Moreover, the Northeast appears to be still stuck in the old model influenced by high reliance on fixed investment. Similarly, provinces located in the resource-rich North have felt the squeeze from weak commodity prices and waning demand while investment dynamics vary across the provinces. The coastal provinces are still among China's richest but their lead is diminishing. Although the shift to consumption-led growth is perhaps most observable along China's coast, local rebalancing is challenged by a sharp downturn in the housing market, low affordability and high labour costs, coupled with relatively strong reliance on the shadow banking sector for financing. Provinces in the South are among those that have accumulated the highest amount of debt. They are also at the lower end in terms of per capita income, thus raising questions about the financing of future development. But there are also opportunities. For instance, the provinces at the western and southwestern borders stand to benefit more than others from China's ambitions to expand cross-border trade and investment via the "new silk road".

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[23] South China Morning Post. Hainan downplays debt, capital calls for help. Mar 28, 2015.
[24] Financial Times. Chinese banks balk at local debt swap plan. Apr 24, 2015.

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