



| Special Report |

Asia Cross Asset Focus

China's infrastructure stimulus to the rescue; equity outperformance to continue



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The hope is high in China for an infrastructure stimulus to drive a V-shaped recovery. We expect infrastructure investment growth to accelerate to 10% this year from less than 4% previously, considering both the need to generate enough growth to cushion the pandemic shock and policymakers' concern over sustainability of debt levels.

In addition, policymakers have put the emphasis on stepping up high-tech "new infrastructure", covering 5G, data centres, AI, IoT and NEV chargers. However, given that it is relatively small in size, the resulting boost to GDP growth is likely to be limited this year, at just 0.3pp. on our estimates. Traditional infrastructure will still be required to do the heavy lifting.

Altogether, we expect the investment in traditional and "new" infrastructure to boost GDP growth by 1.3pp. China should be better placed thanks to effective containment of the COVID-19 outbreak and implementation of stimulus to rekindle growth. However, considering the severe shock in 1Q and the rising likelihood of a global recession, this may not be enough to restore China's growth to above 5%.

In infrastructure spending expectations have been one of the factors supporting China equities and their outperformance versus global peers. We think the outperformance will continue. The "new" infrastructure plan should support spending on technology and primarily benefit Chinese firms involved in the building of digital infrastructure.

Infrastructure investment is necessary in these unusual circumstances

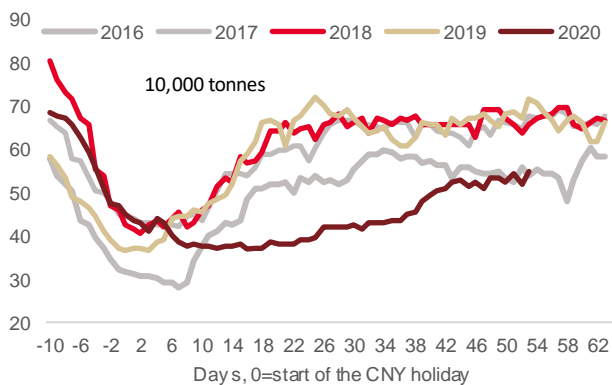
Supply problems should soon be behind us. China's activity growth fell off the cliff in the first two months of 2020, registering a 10-25% yoy contraction across the board. However, the work resumption rate has been improving steadily: nearly all the medium-to-large sized enterprises have resumed operations, while the rate among SMEs is up to 60%. If this trend continues, domestic supply chains should largely be able to run smoothly after March, even though the risk of supply disruptions caused by production halts elsewhere (e.g. Europe) is rising by the day.

Sluggish demand is increasingly a concern. There were already signs of a severe income shock to both corporates and households in China's February data. The surveyed unemployment rate surged to 6.2% in February from 5.3% in January; household deposits registered a contraction last month, which was very rare for the period following the Chinese New Year, while cash in circulation also declined; and possibly one-third of SMEs suffered fatal losses in revenues, profits and cash flows. The balance sheet damage to households and corporates simply does not bode well for a quick recovery in domestic demand, which probably explains why capacity utilisation, as reflected by energy consumption and traffic flows, remains 10-20% below the normal level (see charts below), despite the easing in supply disruptions. Adding to the challenge is the darkening prospects for external demand amid the global pandemic. Export-manufacturing sectors still directly hire 20 million workers or more, and the economies severely affected by COVID-19 now account for over half of the demand for Chinese exports.

A demand-reviving policy stimulus is therefore clearly necessary. Infrastructure investment is not the only option and we also expect to see some fiscal support for consumption, possibly in the form of subsidies¹. Yet, investing in infrastructure has always been the quickest and most powerful tool for lifting near-term growth, as the 2009 and 2016 experiences testify. However, the shortcomings of this tool are also clear: after two rounds of stimulus already, the debt pile now stands at a significant 30% of GDP, and is backed mostly by low-return assets. Policymakers have been painstakingly pushing for more and more restrictions on irregular quasi-government borrowing for two years now, and this has resulted in record-low growth in infrastructure investment (<5% in both 2018 and 2019). Understandably, there is much more cautiousness towards pursuing aggressive infrastructure stimulus due to debt sustainability concerns, even though recent signals also clearly suggest policymakers' willingness to go for more infrastructure.

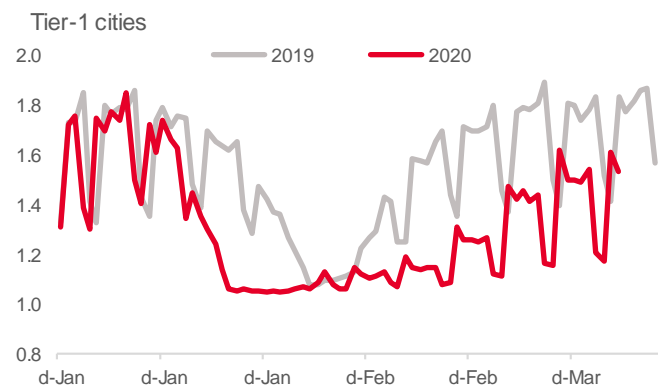
Hence, infrastructure stimulus seems inevitable, the question is really how much and in what manner will it be implemented. With regard to the magnitude, the honest answer is that we do not know and, if anything, we do not think policymakers have a concrete idea how much infrastructure stimulus to launch, because they, as well as everyone else, are assessing the progress of recovery in domestic demand and the losses in external demand. This may be why despite the horrendous February data, policymakers remained impressively restrained, still pledging not to flood the economy. Premier Li, on 12 March, even explicitly downplayed the importance of hitting a specific growth target and emphasised employment stability as the absolute top priority. While this is yet another clear statement of Chinese policymakers' limited appetite for the kind of at-all-costs stimulus unleashed in 2009 and 2016, it is probably also because the real damage to the labour market has not emerged yet, thus better to save the bullets for now.

Coal consumption of major electricity companies



Source: Wind, SG Cross Asset Research/Economics

Congestion index of Tier-1 cities



Source: Wind, SG Cross Asset Research/Economics

Funding is the key; 10% infrastructure growth is achievable

Once policymakers get a clearer picture of the extent of the demand problem, probably in early or mid-April when the hard data on China's demand and some soft data on the slump in the major economies from March become available, then we can expect more concrete measures for infrastructure. It is likely that the announcement will come out at the National People's Congress, which was originally scheduled for early March but now looks likely to be held in April, if not late March. The key policy to watch for is funding: 1) any material funding support

¹ In fact, a few local governments have already acted along this line and handed out consumption coupons to residents, including Nanjing (300mn yuan) and Ningbo (100mn yuan).

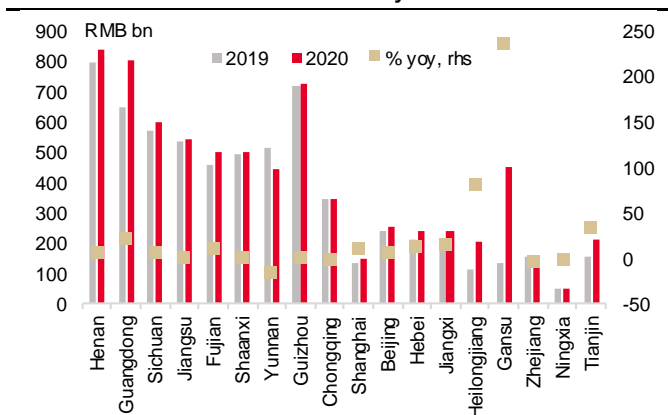
to infrastructure – including on-budget fiscal spending, the exact quota from special LGB, and any pledge of credit support from policy banks; and 2) any relaxation of the relatively restrictive stance on quasi-government borrowing and PPP project requirements.

Meanwhile, the massive headline figures on investment plans from the local governments should be read as investment intentions and no shortage of projects for investing. By now, 25 out of the 31 provincial governments in mainland China have come up with over 26,000 major projects worth over RMB50tn, of which nearly RMB8tn is planned for this year. Except for Hubei², the rest of the provinces will probably either announce the projects around mid-year or roll them out in several batches over the year, judging from the pattern in previous years. The current-year investment target figure from these provinces is c.12% larger than that set for 2019. This is at best only a starting point for forecasting the growth rate in infrastructure investment.

The wish lists announced by provincial governments cover projects in many more sectors than narrowly defined traditional infrastructure³, from manufacturing to services, and would be funded almost entirely by corporates themselves. In statistics, such spending should show up under fixed asset investment in manufacturing and services, rather than infrastructure. The breakdown in our sample is 50-60% investment in narrowly defined traditional infrastructure, about 15% in utilities, 10% each in manufacturing and services (including education), and 5-10% in high-tech new infrastructure (see next section).

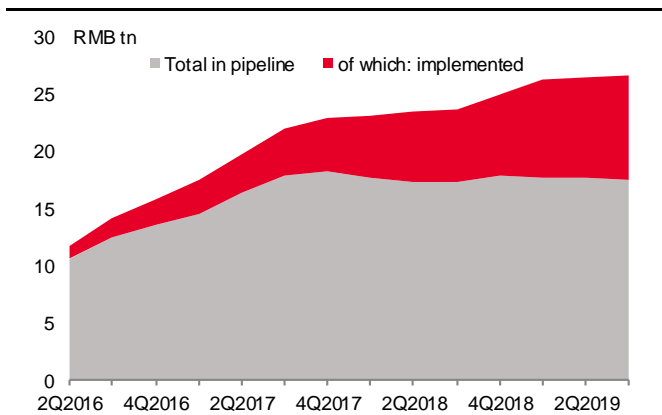
The eventual outcome could be higher (or lower) by accelerating (or undershooting) the existing plans, subject to funding availability, which is in turn up to top leadership's willingness. But there is scope for acceleration, if funding permits. While the total investment value (RMB50tn or more) includes the amount already spent on projects in progress, our detailed analysis of the announced project lists shows that 50-60%, if not more, of the headline figure has yet to be spent. Another piece of proof is that there are RMB17tn-worth of projects in the approved PPP pipeline, which has a small overlap with the provincial project lists, with RMB8tn yet to be implemented.

Planned investments for the current year



Source: MoF, SG Cross Asset Research/Economics

PPP investments



Source: CEIC, SG Cross Asset Research/Economics

So all in all, we can only guesstimate the magnitude of the investment push at this stage, based on our assessment of the labour-market damage from potential shortfall in private and external

² Hubei used to publish yearly investment plans, but has decided to keep it flexible this year, probably due to the uncertainty around recovery from the coronavirus outbreak.

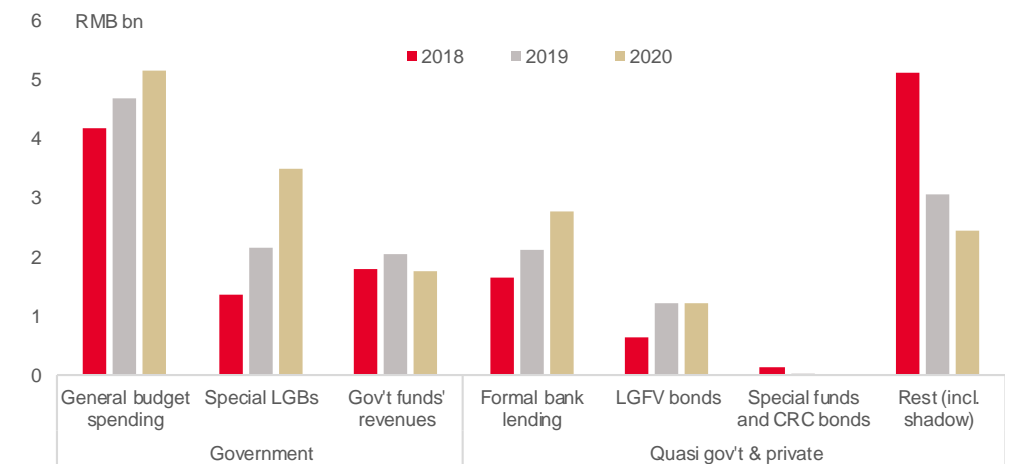
³ It includes "transportation, storage and postal services" and "water conservancy, environment and utility management".

demand as well as our judgement of policymakers' preferred balance between short-term growth and medium-term debt sustainability. For now, we think that growth in infrastructure investment, as it is narrowly defined, can and will accelerate to 10% this year from just 3.8% in 2019, which would boost GDP growth by about a full percentage point. That would also require about RMB16.8tn in funding, or RMB1.5tn more than in 2019. Despite all kinds of challenges, we think it is possible, with stepped-up support from the government and banks. We set out below our estimates of the funding and the breakdown thereof.

- **On-budget general government spending: RMB5tn (RMB0.5tn more than 2019)**, which includes that from the central government budget. The fiscal budget will be released at the NPC meeting. We estimate that this funding source grew by 12% in 2019. Despite the difficult fiscal situation, 10% growth should still be achievable in 2020, as we expect a 3.5% explicit budget deficit (up from 2.8% in 2019) funded by general government bonds and another 2.5-3% implicit deficit funded by past fiscal savings and dividend from 100% state-owned entities.
- **Special local government bonds (LGB): RMB3.5tn (RMB1.35tn more than 2019)**. The net issuance quota of RMB1.29tn has been granted for this year, compared with RMB2.15tn for the full-year 2019. Since RMB950bn was already issued in the first two months of 2020, the government should be announcing the full-year quota at the NPC meeting and we expect a big increase. Special LGB issuance this year should be better utilised to support infrastructure projects, as issuance so far has been heavily skewed to infrastructure projects rather than land development.
- **Government fund revenues: RMB1.6tn (RMB0.3tn less than in 2019)**. Sales of land use rights (or simply, land sales) formed a major part (86% of RMB8.4tn) of local governments' fund revenues last year. Given the potential slowdown in the housing market in low-tier cities, we are not optimistic about the support to infrastructure from land use sales this year, and expect a 20% drop.
- **Bank lending: RMB2.8tn (RMB0.6tn more than 2019)**. We expect strong support from bank lending, which is expected to rise 12%. Traditional manufacturing accounts for a quarter of corporate loans. China's Development Bank, the largest policy bank, is almost certain to step up its support. It can re-launch special investment funds like it did in 2015, when the policy banks issued special bonds to establish infrastructure-focused funds. Indeed, the regional branches of Hubei NDRC and CDB have already set up a RMB200bn special fund to support work resumption and infrastructure investment. Indirectly, the PBoC can also provide funding via pledged supplementary lending (PSL) to the CDB, which was the model used for shantytown redevelopment construction back in 2015.
- **LGFV bonds: RMB1.2tn, unchanged from 2019**. Increased infrastructure investments should boost the supply of LGFV bonds, and demand for them should be aided by falling interest rates. We do not, however, expect a strong uptick in net issuance, due to de-risking efforts.
- **Others, including mostly equities and nonbank lending**. The above funding estimates, leave us with a funding gap of RMB2.4tn, down from RMB3.0tn last year. The equity funding is, on one hand, likely to be supported by relaxed rules on IPOs, but on the other hand under pressure because of much dimmer growth prospects. As for non-bank credit channels, the continued clean-up of shadow-banking assets could remain a drag on these funding channels, albeit likely a smaller drag after the large contraction already seen over the past two years and amid probable and temporary regulatory forbearance.

In addition to stepping up funding from different channels, the government can also relax regulation. There are already some signs of this happening. In February, for instance, the government published policy guidelines on PPP projects in water and waste management to give additional clarification on their implementation. More recently it has lowered the minimum capital ratio requirement for eligible projects in Hubei, from 20% to 15%, to support work resumption and infrastructure investment.

Funding sources of infrastructure investment



New infrastructure as the new focus, albeit still limited in size

To improve investment efficiency, policymakers seem intent on pursuing more “new infrastructure”. “New infrastructure”, first mentioned in the 2018 Government Work Report, refers to modern infrastructure projects that promote technological advancement and generate long-term benefits for the wider economy. This term has been brought up extensively again this year. At several high-profile policy meetings since March, top policymakers pledged to expand effective domestic demand by accelerating the development of “new infrastructure” such as the 5G network and data centers.

Based on recent announcements, “new infrastructure” covers seven main areas: 5G, big data centers, industrial internet of things (IIOT), artificial intelligence (AI), electric vehicle charging stations, ultrahigh voltage power transmission (UVPT) and intercity rail lines⁴. UVPT will show up in the utility sector fixed asset investment (FAI); intercity rail lines fall under transport investments, thus are part of traditional infrastructure; most of the others should be reflected as investments in the industrial or services sectors.

Altogether, we estimate these projects will generate RMB1.8tn of investments in 2020, or close to RMB1tn excluding UVPT and city and intercity transportation. This would be equivalent to 6-11% of total traditional infrastructure investments, consistent with the share we observed in local governments’ project lists, but higher than the 3% share in the PPP database of healthcare and technology-related projects only. The boost from “new infrastructure” (excluding UVPT and city rail line) to total FAI growth would be 0.6pp:

⁴ Strictly speaking, the latter two should fall under traditional infrastructure projects. But we include them here since they are also mentioned in recent policy documents.

- **5G network: RMB300bn, up sharply from a low base.** China Telecom and China Unicom announced they will collaborate to build 250,000 5G base stations by September 2020, while China Mobile has plans to build 300,000 new 5G base stations and develop 5G network in all prefecture-level cities this year. These will add 550,000 base stations to the existing 130,000 stations in 2019. Assuming a unit cost of RMB50,000 per station, this will generate capital expenditure of RMB300bn this year. Moreover, the CAICT forecasts that from now on till 2025, the cumulative investment in the 5G network will reach RMB1.2tn.

Over time, 5G investment would accelerate investment in other sectors where the technology may be applied, such as in telecom (5G for home and mobile), manufacturing (smart factories), transportation (autonomous driving) and public services (telemedicine, education). The CAICT expects the cumulative 5G-related investment to exceed RMB3.5tn by 2025.
- **Industrial internet of things, AI and data centers: RMB500-600bn, up c.10%.** While these sectors are expected to benefit from 5G investment over time, initially the investment will be limited given that the development of 5G is at an early stage. We expect only RMB100-200bn investment in IIOT and AI. As for data centers, according to CCID Consulting, capital expenditure on data centers is expected to rise from RMB370bn in 2019 to RMB420bn in 2020. By 2025, the annual investment is projected to reach RMB700bn.
- **Electric vehicle charging stations: RMB20bn, up 10%.** EVCIPA, an industry group of EV charging infrastructure in China, estimates there will be 150,000 new public chargers and 300,000 new private chargers built in 2020. This compares with 410,000 new chargers built in 2019. These new additions are expected to generate an investment of RMB20bn. Over a longer horizon, according to McKinsey, China is expected to invest a total \$19bn (or RMB133bn) in chargers for EVs through 2030.
- **Ultrahigh voltage power transmission: RMB181bn.** The State Grid Corporation already has plans to accelerate project approval and research groundwork in the light of the government's infrastructure investment push and has revised up its 2020 investment target for UVPT. It aims to invest RMB181bn in UVPT this year, up from RMB33bn announced at the start of this year. It also expects the investments to stimulate an additional investment of RMB360bn in other areas. Altogether, the company plans to invest RMB400bn, with this estimated to induce additional investments of RMB800bn in other areas.
- **City and intercity transportation: RMB750bn.** In 2019 the NDRC approved 12 key rail transportation projects worth RMB1020bn. They cover city rail transit (RMB493bn), railway (RMB398bn) and special rail lines (RMB130bn). In addition, in the first two months of 2020, it approved 39 key projects for an investment amount of RMB470bn, covering roads (RMB80.4bn), railway (RMB120.6bn), city rail transit (RMB144bn) and airports (RMB94.4bn). Assuming it takes two years to complete these projects, that would translate to a RMB750bn investment this year.

In addition to the focus on the above sectors and in the light of the COVID-19 outbreak, the government also aims to accelerate investment projects related to the prevention or control of natural diseases and upgrading of the public healthcare system.

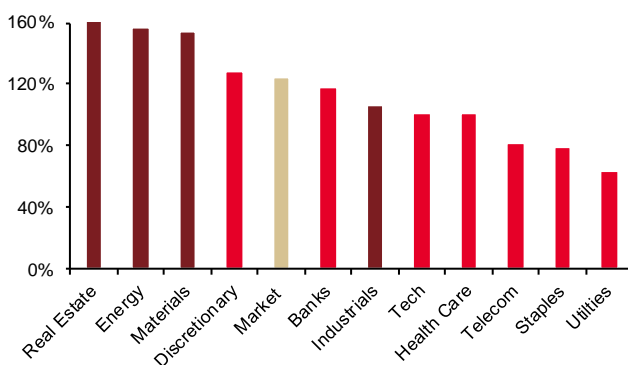
Equity strategy: a focus on “new infrastructure”

The 2009 and 2016 stimulus supported markets and construction-related sectors

The past two periods of fiscal stimulus, particularly the first in 2008/09, drove a sharp recovery in equity markets.

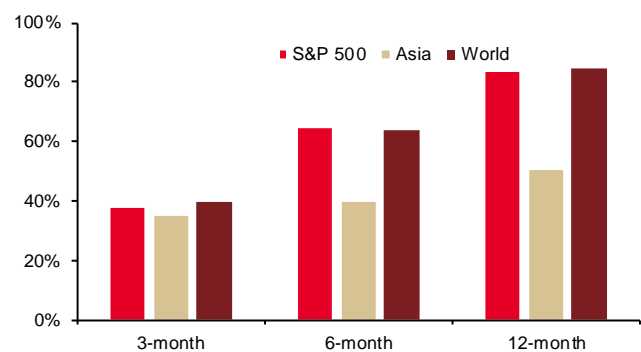
- In 2008, the market bottomed on 4 November, almost simultaneously with PM Wen Jiabao's announcement of a CNY4tr plan focused on seven priorities, including a vast programme of transport and power infrastructure investment. Between 5 November 2008 and 3 August 2009, the market rose 124%. Industrials performed in line with the market while energy and materials led the upturn. Also during this period, China equities strongly outperformed global markets.

2008/09 upturn led by infrastructure stocks (*)



Source: SG Cross Asset Research (*) China onshore equity returns from 4 Nov. 2008 to the August 2009 peak

First stimulus: China onshore equities outperform (*)



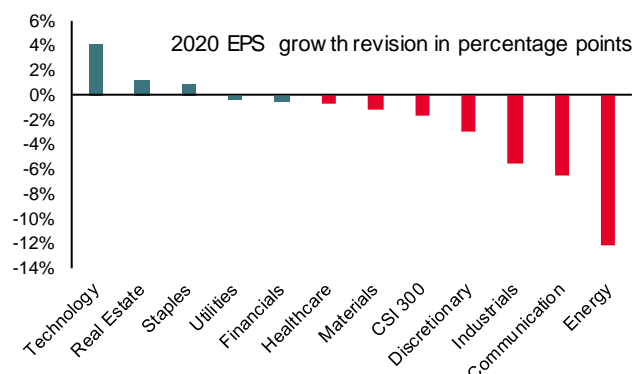
Source: SG Cross Asset Research (*) Relative returns versus CSI300 after 3-month, 6-month and 12-month since the start of the 2008 stimulus

- Onshore equities also benefited from the second large stimulus programme in 2016, which drove a recovery in equities after the 2015 equity bubble burst. This time round the stimulus measures focused more on property, with fiscal cash handouts under the shantytown resettlement program and credit easing leading to a reversal in the property slump. While we cannot link implementation of the second stimulus programme to a specific event, we observe that from 2Q16 to the end of Jan. 2018, onshore equities rose by 35%. Although it was a consumer-led staples rally, property and material stocks also outperformed the CSI300.

In our opinion, one of the reasons for China onshore equities not being part of the global equity meltdown relates to expectations of another large fiscal stimulus. This element, coupled with a successful containment of the coronavirus and the mostly domestic shareholding base, has contributed to the outperformance. We think China equities should be an overweight as we detail in our recent [2Q outlook](#).

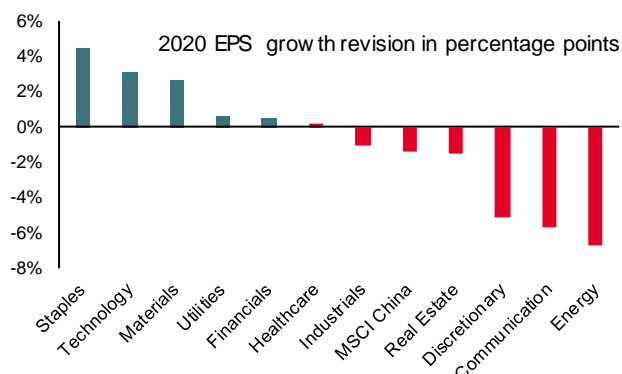
However, as we detail in the economic section, the magnitude of the investment spending is uncertain. One of the risks for China equities would be some disappointment on the policy front, as earnings have so far only been modestly downgraded in a context of an extremely challenging global demand shock. One section of the infrastructure plan on which the leadership has communicated in the recent weeks is the ‘new infrastructure’ component. More modest in size, this has also been flagged as a priority. We focus on this part of the plan.

2020 earnings revisions year-to-date (China onshore)



Source: SG Cross Asset Research (*) China onshore equity returns from 4 Nov. 2008 to the August 2009 peak

2020 earnings revisions year-to-date (China offshore)



Source: SG Cross Asset Research (*) Relative returns versus CSI300 after 3-month, 6-month and 12-month since the start of the 2008 stimulus

2020: from building physical to digital roads

Also highlighted in the economic section, the overall investment in new infrastructure is expected to generate CNY1.8tr, with the money going towards 5G network deployment, industrial internet and AI investment, data center development, electric vehicle charging stations and ultrahigh voltage power transmissions.

We list below 16 Chinese companies that are listed onshore or offshore, with a market capitalisation greater than USD1bn and, for onshore stocks, eligible for trading through Stock Connect. These stocks are exposed to one of the “new infrastructure” themes included in the stimulus programme.

Stocks exposed to a China new infrastructure

Ticker	Name	USD MktCap	Exchange	Total Return YTD (%)	12-month forward PE	Theme
BABA US Equity	ALIBABA	479.8	NYSE	-12.9	22.1	AI, II (*) & Data Center
700 HK Equity	TENCENT S	430.4	HK	-6.9	24.9	AI, II (*) & Data Center
601138 CH Equity	FOXCONN INDUSTRIAL INTERNET	39.4	Shanghai	-23.9	13.1	AI, II (*) & Data Center
788 HK Equity	CHINA TOWER	38.1	HK	-2.3	32.4	5G
000063 CH Equity	ZTE CORP	25.0	Shenzhen	17.4	27.5	5G
000725 CH Equity	BOE TECHNOLOGY	20.9	Shenzhen	-6.4	26.8	5G
1211 HK Equity	BYD	18.3	HK	0.0	40.8	EVH Station
600406 CH Equity	NARI TECHNOLOGY	14.1	Shanghai	0.6	17.5	UHV
000977 CH Equity	INSUR	8.0	Shenzhen	45.2	40.0	AI, II (*) & Data Center
601179 CH Equity	CHINA XD ELECTRIC	3.7	Shanghai	37.1	36.7	UHV
601869 CH Equity	YANGTZE OPTICAL FIBRE	3.0	Shanghai	19.6	29.0	5G
300001 CH Equity	QINGDAO TGOOD ELECTRIC	2.9	Shenzhen	17.2	31.8	EVH Station
000400 CH Equity	XUJI ELECTRIC	2.2	Shenzhen	43.1	22.2	UHV
600312 CH Equity	HENAN PINGGAO ELECTRIC	1.9	Shanghai	51.1	18.6	UHV
002063 CH Equity	YGSOFT INC	1.6	Shenzhen	7.5	34.1	UHV
300638 CH Equity	FIBOCOM WIRELESS	1.3	Shenzhen	6.4		5G
603556 CH Equity	HEXING ELECTRICAL	1.1	Shanghai	-5.3	11.6	UHV

Source: SG Cross Asset Research

We screen these stocks using our quantitative research tools including the following criteria: (1) Value, (2) Momentum (price and earnings), (3) Quality (corporate balance sheet and earnings), (4) Growth, (5) Profitability, (6) Earnings quality. The table below sets out the different scores for each of the six criteria. The stocks are ranked from 1 to 5, with 5 being the best score.

Previous quant research pieces show that value and earnings momentum are two factors that work well in China. That is good news for our baskets which, despite a resilient performance in very adverse market (the median return is +6.4% year-to-date), generally show a moderate valuation.

Stocks exposed to China new infrastructure through quants filters

Ticker	Name	Value	Momentum	Quality	Profitability	Growth	Earnings quality
BABA US	ALIBABA	4	2	5	3	4	4
700 HK	TENCENT S	5	3	5	5	4	5
601138 CH	FOXCONN INDUSTRIAL	5	3	2	5	2	2
788 HK	CHINA TOWER	5	3	5	3	5	5
000063 CH	ZTE CORP	3	5	2	5	3	3
000725 CH	BOE TECHNOLOGY	2	4	2	2	5	2
1211 HK	BYD	4	2	2	4	2	5
600406 CH	NARI TECHNOLOGY	4	2	3	4	3	4
000977 CH	INSPUR	4	5	3	3	5	5
601179 CH	CHINA XD ELECTRIC	4	n.a.	4	2	3	1
601869 CH	YANGTZE OPTICAL FIBRE	4	2	2	4	2	2
300001 CH	QINGDAO TGOOD ELECTRIC	1	n.a.	2	3	5	3
000400 CH	XUJI ELECTRIC	3	1	3	3	3	2
600312 CH	HENAN PINGGAO ELECTRIC	4	2	4	2	3	3
002063 CH	YGSOFT INC	3	n.a.	3	5	3	3
300638 CH	FIBOCOM WIRELESS	3	n.a.	1	5	5	2
603556 CH	HEXING ELECTRICAL	5	3	2	4	3	1

Source: SG Cross Asset Research/Quant; the value score is based on five value factors (PE, FY1 PE, PB, FCF Yield and EV to EBITDA) all taken relative to the sector median; the momentum means earnings momentum; quality is a combination of two screening methods, one based on Merton distance to default and the other to Piotroski analysis of balance sheets

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APPENDIX

ANALYST CERTIFICATION

The following named research analyst(s) hereby certifies or certify that (i) the views expressed in the research report accurately reflect his or her or their personal views about any and all of the subject securities or issuers and (ii) no part of his or her or their compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed in this report: **Wei Yao, Michelle Lam, Frank Benzimra, Rajat Agarwal, Makhdoom Muteeb Raina**

Frank Benzimra's historical MAD2MAR recommendations over the past 12 months.

The analyst(s) who author research are employed by SG and its affiliates in locations, including but not limited to, Paris, London, New York, Hong Kong, Tokyo, Bangalore, Frankfurt, Madrid, Milan, Geneva, Seoul, Warsaw and Moscow

SG EQUITY RESEARCH RATINGS on a 12 month period

BUY: absolute total shareholder return forecast of 15% or more over a 12 month period.

HOLD: absolute total shareholder return forecast between 0% and +15% over a 12 month period.

SELL: absolute total shareholder return forecast below 0% over a 12 month period.

Total shareholder return means forecast share price appreciation plus all forecast cash dividend income, including income from special dividends, paid during the 12 month period. Ratings are determined by the ranges described above at the time of the initiation of coverage or a change in rating (subject to limited management discretion). At other times, ratings may fall outside of these ranges because of market price movements and/or other short term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by research management.

Sector Weighting Definition on a 12 month period:

The sector weightings are assigned by the SG Equity Research Strategist and are distinct and separate from SG equity research analyst ratings. They are based on the relevant MSCI.

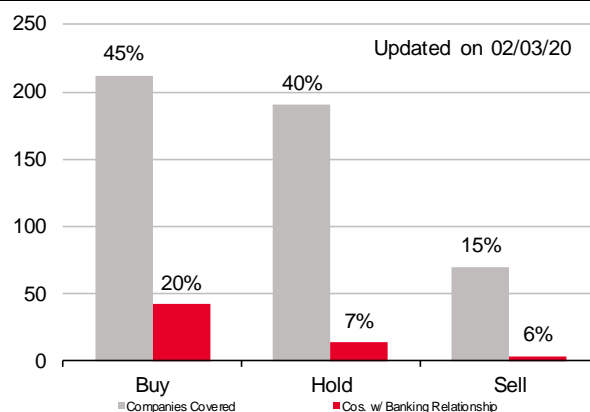
OVERWEIGHT: sector expected to outperform the relevant broad market benchmark over the next 12 months.

NEUTRAL: sector expected to perform in-line with the relevant broad market benchmark over the next 12 months.

UNDERWEIGHT: sector expected to underperform the relevant broad market benchmark over the next 12 months.

The Preferred and Least preferred stocks are selected by the covering analyst based on the individual analyst's coverage universe and not by the SG Equity Research Strategist.

Equity rating and dispersion relationship



Source: SG Cross Asset Research/Equity

All pricing information included in this report is as of market close, unless otherwise stated.

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