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New infrastructure: China takes the lead, to mitigate slowdown and power future growth

Key takeaways

- China will invest in "new infrastructure" as part of fiscal stimulus to mitigate economic slowdown and boost growth.
- In absolute terms, there will be a near-fivefold increase in investment (USD 1800 billion) in new infrastructure spanning this decade.
- New infrastructure will accelerate growth of the digital economy, which will account for 50% of national output by 2030.
- Many commercial lines such as engineering and liability insurance, will benefit.
- Motor insurance will be materially impacted by digital transformation, with a likely declining share of total P&C premiums over time.

About Economic Insights
Analysis of key economic developments and their implications for the global re/insurance industry.

Managing Editor
Jérôme Haegeli
Swiss Re Group Chief Economist

Authors
Xin Dai
Julia Chen

We welcome your feedback. For any comments or questions, please contact: institute@swissre.com

In a nutshell

China's government will leverage "new infrastructure" to mitigate economic slowdown and power growth. This reflects an inward-looking strategy to boost domestic demand and also manage external headwinds. Investments in "new infrastructure" will drive further expansion of the digital economy, which will account for half of national output by 2030. This will also extend the boundaries of insurability and open new investment opportunities.

Of late, China highly emphased "new infrastructure" as part of fiscal support to manage the sharp economic slowdown resulting from the Covid-19 crisis. We believe this signals a more inward-looking approach to boost domestic demand and mitigate external headwinds including this year's global recession, lingering risk of trade war and supply-chain disruptions caused by the pandemic. A near-fivefold increase in investment in absolute terms in new infrastructure by 2030 will accelerate digital transformation and upgrade urbanisation (more smart cities) and will fuel growth potential.[1] The digital economy as a whole will account for an estimated 50% of gross domestic product by 2030, up from 35% today.[2] The expansion will present insurers with new risk pools and avenues for investment in infrastructure.

According to the official definition, "new infrastructure" includes 5G base stations, industrial Internet of Things, artificial intelligence (AI), data centres, Ultra High Voltage (UHV), intercity high-speed railways (HSR) and rail transit, and electric vehicle (EV) charging stations.[3] Some areas like AI and data centres are the very first stages of development and will further promote hi-tech development. Others will be investment in emerging sectors in which China already has a leading position, such as 5G and EV.

Current investment value in new infrastructure accounts for just a small proportion in total infrastructure investment, and spending in traditional infrastructure will remain the main destination for invesment funds. Using the share of new infrastructure in the Public-Private-Partnership pool as a reference for the proportion of new in total infrastructure[4] based on announced project plans from official sources[5], we estimate new infrastructure investment of CNY 2.6 trillion (USD 370 billion), or 2.4% of GDP in 2020 (see Figure 1).[6] External estimates see a cumulative increase in investment in new infrastructure of USD 1800 billion by 2030.[7]

[1] Most recently, new infra was referenced at various Politburo meetings.
2 China Academy of Information and Communications Technology (CAICT), see http://tradeinservices.mofcom.gov.cn/article/yanjiu/hangyezk/201906/85232.html
[3] "New infrastructure projects embrace huge development potential", *People's Daily*, 11 March 2020, http://en.people.cn/n3/2020/0311/c90000-9667057.html
[4] New infrastructure investment is derived by multiplying proportion of new infra among PPP projects by the total amount of estimated investment in infrastructure.
[5] *What's new about new infrastructure*, China Central Commission for Discipline Inspection, 2020
[6] Data from Wind, assuming China's nominal GDP will grow at 3% in 2020.
[7] Time frame is from 2020 to 2030. *New Infrastructure Opportunities Handbook*, Morgan Stanley, 2020.

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Figure 1: Estimation of broad-defined new infrastructure investment

New Infrastructure areas (broader defined)	Estimated value in 2020 (CNY bn)	As % of 2020 GDP	Insurance lines to be benefited
5G, IoT, AI, Big data, Cloud computing	435	0.41%	Engineering, Motor, Property, Liability, Cyber
Digital transformation of traditional infra	815	0.78%	Engineering, Liability, Credit & Surety
Intercity HSR & rail transit	800	0.76%	Engineering, Liability, Property
EV charging stations	10	0.01%	Motor, Liability, Property
Ultra-high voltage	500	0.48%	Engineering, Liability
Total	**2625**	**2.4%**[12]	

Source: Wind, China State Grid, China Academy of Information and Communications, Swiss Re Institute

In insurance, engineering, liability, credit and surety lines will benefit from the construction phase of new infrastructure projects, such as 5G stations, high-speed railways, and UHV grids. For instance, the total investment in 5G stations during 2020-2030 as announced by telecom operators will reach CNY 2.6 trillion,[8] yielding an estimated CNY 5.8 billion in insurance premiums. Over time, the growing digitisation of infrastructure facilities will generate increasing volumes of real-time data and also demand for innovative risk protection solutions in cyber, liability and specialty lines.

Green development and smart cities are among key aspects of upgrading urbanisation in China. This will boost demand for green insurance, in particular environmental and general liability insurance. There will also demand for innovative solutions in both personal and commercial lines, to cover new risks emanating from the increasing digitisation of life.

Motor, the largest sector in P&C with 63% of total premiums in 2019, faces transformative challenges and new opportunities, courtesy of the EV. China is the largest EV market in the world, accounting for 48% of global sales last year.[9] The authorities target an increase in the share of EV sales domestically from 5% of total in 2019 to 25% by 2025.[10] The construction of EV charging stations will boost market development: in 2019 there were 1.2 million EV charging stations, well short of estimated demand of 3.7 million.[11] In terms of opportunities, there will be an increasing demand for EV-specific insurance, and also covers for charging stations. On the other hand, the 5G network and driving sensors will enable real-time data collection from EV themselves and the road network infrastructure. This will lead to improvements in road safety and accident rates, weighing on motor insurance premium growth. Over the longer term, we expect to see a decline in the share of motor as a proportion of total non-life premiums.

[8] *New Infrastructure Opportunities Handbook*, Morgan Stanley, 2020
[9] "China accounts for half of global EV sales in 2019", *Yiou*, February 2020, *https://www.iyiou.com/p/122960.html*
[10] *New energy vehicle industry development plan*, Ministry of Industry and Information Technology of the PRC, 2019
[11] *2019 Annual Report of Charging Infrastructure Development in China*, State Grid Info & Telecom Group, 2020