



High-speed rail in the People's Republic of China boosts market access and income

The fast growth of a high-speed rail network in the People's Republic of China has widened market access and boosted incomes. Expanding access to high-speed rail even further would help solve some of the country's toughest problems.

Extending the network and improving access to it would benefit poorer parts of the country. The high-speed rail system has already helped offset some of the sharp divisions between rich and poor in China, a situation that often equates to an urban-rural divide.

High-speed rail expansion has also taken some of the pressure off cities that are struggling with overpopulation and pollution, by making it easier for those cities to spread to less congested areas and for other centers to grow.

Those are some of the conclusions of research done for the Asian Development Bank Institute that looked at the effects of the high-speed rail network on 110 cities in China.

The first high-speed railway line in China was launched in 2007. By 2015, China had 19,000 kilometers of high-speed railway lines. By 2025, that total is expected to double.

All cities studied were connected to the high-speed rail network between 2006 and 2015, and the result was significantly positive for their growth and for China as a whole.

The benefits from high-speed rail networks are many. Apart from the obvious direct effect of spending on construction, the completed network improves access to markets for goods and people.

If access to the network had been withdrawn in 2015, market access would have fallen by 76.2% and real incomes would have declined by up to 9.4%.

Most cities benefitted from being connected to the network. Those that didn't and saw little or even negative growth had poor transport systems surrounding the high-speed rail network.

The largest benefits were seen in the most developed areas of the country, along the eastern coasts and in the south. In the central and western parts of China, several cities didn't see much of a benefit, if any, because of poor roads.

High-speed rail systems are primarily aimed at passenger travel, so their benefits are mostly seen in services. Moving people around faster is good for tourism and for companies that cater to commuters.

There are other effects as well. Even though most manufactured goods are sent by cheaper modes of transport such as trucks or regular trains, high-speed rail means that workers can more easily travel to areas where companies can build their factories on cheaper land.

As well as improving the transport infrastructure surrounding the high-speed networks in areas that haven't benefited much, China's policymakers could change how they view those networks. The high-speed rail network can be extended, especially in poorer and less-serviced areas. In areas such as eastern China, where the networks are already extensive, expansion should aim to improve connections to other regions.

High-speed railways should be considered the center of all future transport networks. Connections to the high-speed network should be the focus for all other networks, whether they are highways, waterways, airlines, or the existing rail networks.

This episode was based on [research](#) done for the Asian Development Bank Institute by Wei Zou, professor and director of the Institute for Advanced Study in Wuhan University in the People's Republic of China, and Liangheng Chen and JunkeXiong, associate researchers at the institute.

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