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Is There an Industrial Land Discount in China? A Public Finance Perspective

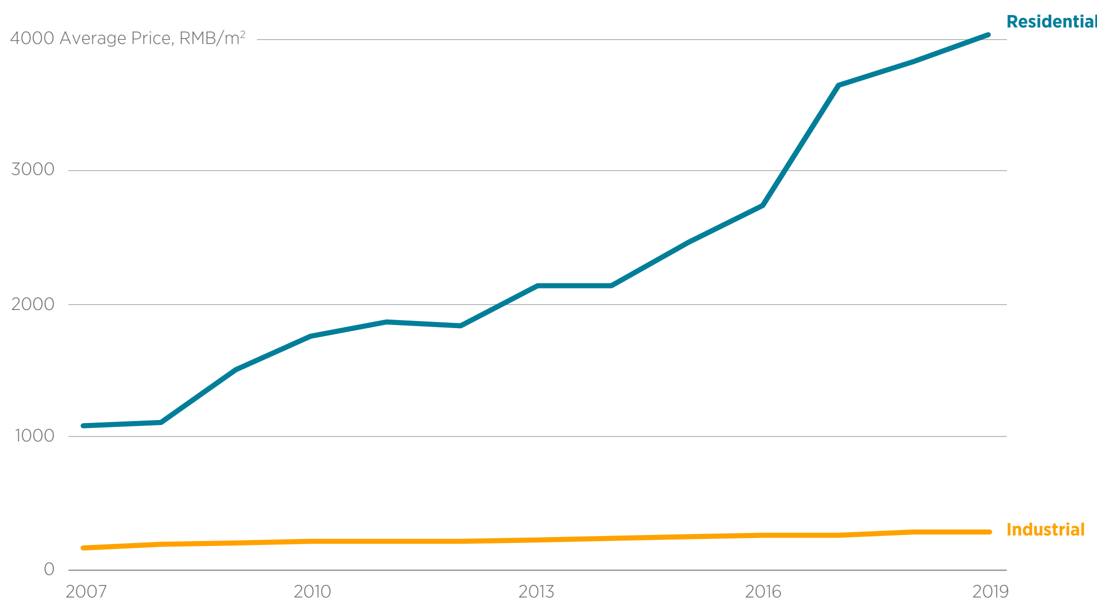
Based on BFI Working Paper 2022-24, "Is There an Industrial Land Discount in China? A Public Finance Perspective," by Zhiguo He, Chicago Booth; Scott Nelson, Chicago Booth; Yang Su, Chicago Booth; Anthony Lee Zhang, Chicago Booth; and Fudong Zhang, Tsinghua University

Local Chinese governments face a trade-off between supplying residential or industrial land, and this work reveals the importance of taxes and revenue streams over time in shaping those choices.

China's land market, a key driver of the country's extraordinary economic growth over the past 40 years, does not provide revenues to local governments via property taxes, as do most developed economies. Rather, local governments serve as monopolistic sellers who control land supply and who rely heavily on land sales for fiscal revenue.

Rigid zoning restrictions in China classify different land parcels for different uses, with land zoned for residential use selling at roughly a ten-fold higher price than land zoned as industrial, which the authors term an industrial land discount (or industrial discount). Local governments, it would seem, face a tradeoff between selling residential property to raise revenues or selling industrial property at a discount to spur local economic growth for non-pecuniary reasons. At least, that is how conventional wisdom describes the tradeoff. This paper offers a different explanation by focusing, instead, on public finance rather than industrial subsidies to explain the industrial discount.

Figure 1 • Average Land Prices Over Time by Land Use: Industrial vs. Residential



Note: This figure reports the average price of residential and industrial land weighted by land size that are sold through auctions for each year during 2007-2019.

The authors propose that the choice between residential and industrial land sales involves an intertemporal revenue tradeoff. Chinese local governments are predominately funded through a combination of corporate tax revenues and land sale revenues, which together account for roughly 60% of local government revenue. Industrial land generates future tax flows, since industrial firms pay value-added taxes and income taxes along with various fees; residential land does not. This simple fact leads to a new description of the tradeoff described above:

- Local governments face a choice between selling residential land, which pays larger upfront revenues from higher sale prices, versus selling industrial land, which pays smaller upfront revenues but comes with a stream of future cash flows from tax revenues over time.

This dynamic perspective suggests that local governments are not necessarily subsidizing industry through cheap land; in fact, the authors show that future tax revenues from industrial land more than compensate for the upfront discount on industrial land sales. This result has strong implications for understanding the drivers of land prices in China, and how they are linked to the tax sharing scheme with the central government, as well as local governments' intertemporal revenue tradeoffs. From the central government's perspective, the tax sharing scheme between the central and local governments can be carefully designed to counteract the effect of the local governments' differential market power in local land markets to achieve desired land allocation outcomes.

Taking stock, this paper shows that local governments' financing needs affect land supply to the whole industry sector in China, which implies that local public finance plays an underappreciated role in shaping the path of China's economic growth through the land allocation channel.

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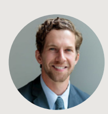

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