Land Value Capture in Planned New Urban Centres
Insights from Shanghai Online Land Transaction Data 2001-2015

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What? To what extent have policy-induced land value increments been captured?

How? Recent online publication of urban land transactions has opened a new window into the geographical patterns of urban growth and market changes since the early 2000s.

Findings? Whilst the transaction volumes show the distinct patterns for residential, commercial and industrial development (below), the land prices suggest that Shanghai is far from a polycentric structure.

Contributions? There are many missed opportunities where long-term value uplift is in fact strong. However, the data suggests that there are promising signs in four satellite cities and one new town which are worth watching. The data thus provides a new way to pinpoint locations for further empirical studies to learn what has worked and what has not in Shanghai’s quest for poly-centricty.

Site areas and prices 2001-2015

- Residential sites: Rapid expansion of land areas in Satellite Cities vs fast rise in land prices in the Centre
- Commercial sites: Continued expansion in all areas vs polarisation of land values
- Industrial sites: From Expansion to Intensification beyond the Outer Ring

Limitations of existing data sources
- Annual official statistics on land transactions take at least a year to appear and are not available at the site level
- Satellite images require high levels of skill and local knowledge to process, and it is difficult to classify the purposes of use
- Aerial photos, land use maps and land use databases are classified official data and not scrutinised in academic research

The new source we have used for this paper is China Land Market, an online platform of the Natural Resources Ministry. The data includes:
- Land transactions, applicable to for-profit trades (35% of total sites) such as residential, commercial and industrial
- Land allocations, applicable to non-profit uses (65% of the sites) such as institutional and infrastructure uses
- In this paper we use the land transactions data only

Online, instantaneous publication of site-level transactions and allocations are now a legal requirement in China.

This means that continuous and timely monitoring of land development data by academic researchers is now feasible

Conclusions

(1) This new online land transaction data has significant and untapped potential for identifying patterns of urban land development and changes in the property markets
- Providing much greater spatial granularity (i.e., at the development site level) in a timely way; a critical supplement to existing sources on land use and land prices

(2) The land prices show that Shanghai is, strictly speaking, a one-centre metropolis
- This singular centre has inched outwards into a fringe area; expansion into the far suburbs has not engendered new centres

(3) Missed opportunities where long-term value uplift is in fact strong.
- Some promising signs are worth watching. These include 4 out of 7 satellite cities and one out of 13 new towns
- Satellite cities have a higher political and administrative status.

(4) Continuous monitoring of this data helps to inform planning and investment strategies that support Shanghai’s quest for poly-centricty.
- A recursive spatial equilibrium model for long-term prognoses of the land value uplifts.