## The influence of land ownership and private involvement on the use of Land Value Capture (LVC) instruments for infrastructure development in a global perspective

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## Abstract

Transport infrastructure development typically requires a significant number of public investments. Traditionally, transportation projects have been primarily government funded through conventional loan and subsidy-based public investments. However, these schemes in many cases cannot fully cover the required finances to satisfy infrastructure demand. One option to cover the limitation of government funding to finance transport infrastructure development is by utilizing direct private investment as an alternative source of funding for infrastructure development. Land value capture (LVC) has been introduced as an alternative funding approach to fill in the gap of infrastructure finance. This mechanism typically targets property owners who gain direct benefits from public investment, to pay infrastructure-development costs. Landowners, owners of property or business in an area where a station or road access point will be built, as well as those who invest for the development around the transportation infrastructures will gain financial benefits; and it is fair that they would contribute to the financing of the investment.

The utilization of LVC instruments has been implemented globally utilizing the similar basic concept, yet in different forms. For instance, Tax Increment Finance (TIF) was one of the LVC instruments originally implemented in California in the 1950s; a Community Infrastructure Levy (CIL) has offered an alternative LVC mechanism in England since 2010; and 'Rail plus Property' (R+P model) has been implemented in Hong Kong. While the implementation of LVC in developed countries seems promising, a critical question arises regarding whether the mechanism will also work globally, for instance in developing countries. In particular, urban development in Asia is significantly growing, while investments in public infrastructure lag behind.

This paper aims to investigate how the main condition necessary for the implementation of LVC instruments would be influenced by the land ownership and private involvement in the global context, and what lessons can be learnt for the Asian developing countries. The discussion of this paper is presented by conducting a comparative learning analysis, covering implementation practices from the global perspective. The comparative learning analysis is used to investigate the opportunity for utilizing LVC instruments in Asian developing countries through the learning from practical experiences. The study utilizes a

structured literature review method that is expected to provide a comprehensive overview, as part of the policy learning from the global varieties in practice, covering implementation practices in the U.S, England, Australia, Netherlands, Hong Kong, China, Singapore, and India.

Through the structured literature review process, several lessons learned have been identified from the practical use of LVC instruments in the global context. The highlighted important lessons include: (i) land value capturing would be appropriately implemented by creating local area benefit districts around transport infrastructure development and use the gained value to finance primarily local improvements, (ii) to minimize the risk of failure, and by seeing value capture as the outcome of negotiations between stakeholders, it would be necessary to make a careful assessment to measure impact of land value capture, (iii) in the countries where the private owners have full right of their own land and intervention of the public is limited, the government mainly uses taxes and fees as LVC instruments, (iv) when the land is owned by the government, "transfer development right" is utilized by giving the transit agencies or private parties executive land grants or long-term land-lease, (v) the success of value capture implementation depends on the stakeholder engagement and their willingness to contribute and participate in the process.

Asian developing countries that are dealing with massive infrastructure development might look at the LVC as a promising mechanism to fill in the infrastructure financing gap. However, the existing literature suggests that the circumstances to implement the mechanism in developed countries such as in the U.S and in England have significant differences with the conditions in China, India, and Singapore, particularly in terms of the land ownership management and also the private involvement.