PUBLIC INTEREST, PRIVATE RIGHTS AND SUSTAINABLE USE OF URBAN SPACE

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ABSTRACT

Cities are urban spaces which are shared, used and misused by the community. Property rights delineation and privatization have long been suggested by economists as some possible solutions to the depletion of common-pool resources and the inefficient provision of public goods such as urban infrastructure. This paper illustrates how these ideas work in the integration of metro railway and real estate development (the so-called “rail + property” development model) in Hong Kong, which has contributed not only to its urban growth during the past three decades but has also made the railway company a high achiever by world standards. Drawing upon the theoretical perspective of new institutional economics, it elucidates why this model is more than simply using real estate incomes to subsidize railway development. Instead, the model embodies an institutional arrangement that properly aligns the different interests with the incentives and capabilities of market players in the use and development of urban space. The paper finally argues that the model should not be interpreted narrowly as an achievement attributed to the privatization of urban space. Alternatively, it suggests that as urban sustainability is built upon an inter-dependency of activities and a common destiny of the community, privatization of urban space is a piecemeal solution which works against the public interest unless it is concurrently accompanied with the development of public space.

KEYWORDS

Institutions; Land-use Planning; Transit-oriented Development; Real Estate; Public Space

INTRODUCTION

According to UN-HABITAT (2008), improvement in transport and communication infrastructure not only contributes to the growth of cities especially in the developing world, but it can also help promote balanced urban and regional development. Increasing evidence has shown that compact urban form, well-planned and properly regulated land use pattern, and environmentally-friendly public transport system help reduce the negative environmental impacts of urbanization and make cities more sustainable. It is a common sense to all development professionals that public transport and urban land uses should be integrated to enhance efficiency, convenience and welfare of the urban population. However, there is a lack of consensus about how this integration could be implemented.

Take metro railway as an example. As a high-capacity passenger carrier, metro railway is considered not only as the most efficient public transport mode in terms of consumption of energy and land space, but also as an “integration leader” in possibly creating an integrated, user-friendly and bustling urban form (UITP, 2003). While there are obvious advantages in the integration between metro railway and land uses, relatively more attention has been put on the project design of transit-oriented development (Bemnick and Cervero, 1997; Bertolini and Spit, 1998; Cervero, 1998; Zhang, 2007; Cervero and Murakami, 2008) rather than on the institutional arrangement that makes it happen (Tang et al. 2004; UITP, 2009). One of the main difficulties in developing a metro railway system is its high construction cost. How to finance its construction and sustain its operational viability after completion presents major challenges to urban managers. This paper elucidates the experience of the Hong Kong metro system (or the MTR in short) in addressing these problems and achieving a reasonably successful integration between land use and railway development. The emphasis is about how the Hong Kong MTR model embodies an appropriate implementation mechanism in organizing a sustainable use of urban space, rather than as a simple funding model for the construction of metro railway.
MTR: BACKGROUND AND PERFORMANCE

The Hong Kong metro railway system is operated by the MTR Corporation (MTRC). Established since the mid-1970s by the Hong Kong government, the MTRC has carried out the missions of constructing and managing, on prudent commercial principles, a mass transit railway service, which now constitutes an integral part of the public transport system in Hong Kong. The Hong Kong government was the sole owner of the MTRC until October 2000, when about 23% of its shares have been privatized and traded in the Hong Kong Stock Exchange. As the majority shareholder, the Hong Kong government has committed to maintaining not less than 50% shareholding in the company for at least 20 years from the date of the initial public offering in October 2000. In December 2007, the railway network of another public railway organization, the Kowloon-Canton Railway Corporation (KCRC), was formally merged with the MTRC, making it a “railway monopoly” in the territory (Yeung, 2008).

This paper focuses its analysis only on the mass transit railway system because the KCRC railway development was operated under different principles. Before the merger, the MTR system had a total route length of about 91 km, connecting the airport and the densely populated corridors in the urban area (Figure 1). In 2006, it carried over 2.5 million passengers during an average weekday, accounting for about 25% (second to public bus services) of the total market share of franchised public transport services in Hong Kong (MTRC, 2006). Apart from railway operations, the MTRC has also engaged actively in real estate development. In joint venture with private developers, the MTRC has developed over 65,000 housing units in high-density residential estates and over 1.4 million sq. m. of up-market commercial and office projects at 25 MTR stations in Hong Kong (2008 data). Property development has contributed positively to its business in two ways. First, it provides a major income source to finance construction of the railway projects. Second, property development projects built near railway stations assembles a critical mass of railway riders that can possibly enhance railway patronage.

The Hong Kong MTR network is one of the most successfully built-and-operated infrastructure projects by the world standards. It provides safe, reliable, efficient and affordable transport services to the Hong Kong community. Unlike many of its railway counterparts, the MTRC is a profitable company that requires no operational subsidies from the government on its daily operations (Figure 2). Furthermore, it has contributed over HK$103 billion of financial gains to the Hong Kong government in terms of land revenue, cash dividend, proceeds from public listing, in addition to over HK$73 billion worth (as of 31 October 2008) of company assets (Chow, 2008). These achievements are attributed to the business model of the MTRC, which is often described as the “Rail + Property (R+P) model”. As the name clearly suggests, the model entails a combination of both railway and property development. Indeed, property development and investment have made significant financial contributions to MTRC’s profits (Figure 3). It is not suitable to describe the company as a railway operator only. The company has also established itself as a prominent player in the local property market.
INSTITUTIONAL ARRANGEMENT

Land use planning has long recognized a synergistic relationship between transport and land development. Railway infrastructure can substantially improve transport accessibility and hence the value of the land serviced by the railway system. The rise in land values and property prices can help finance railway construction and sustain its operational viability. But this synergy does not come out naturally. It requires conscious effort in organizing the use and transformation of urban space. The R+P model of the MTRC is more than just a juxtaposition of railway and property development. It is equally not the same as the many above-station landmark property development projects of the MTRC, which are only the physical outcomes of the model. Nor is it simply the use of real estate incomes to subsidize and finance railway development. Instead, the R+P model represents a unique approach in handling the relationship between land use and railway infrastructure (Tang et al., 2004). It embodies an institutional framework that can effectively coordinate the action of numerous players in transforming the urban built environment and accomplishing a desirable and efficient outcome.
Under the perspective of new institutional economics (NIE), institutions refer to the “rules of the game” that cover the formal rules, informal norms and their enforcement characteristics (North, 1981; 1997; 2000). Institutions are constructed by the human society to govern the social relationship and structure the pattern of social interaction in daily life. The institutional arrangement provides the systems of incentives and constraints that influence individual and organizational behaviour. Depending on circumstances, such behaviour may take the form of “cooperative exchanges” that enhance benefits of all the contracting parties and improve overall economic efficiency, or, conversely, of “exploitative appropriation” of the others resulting in welfare reduction (Hirshleifer, 2001). In the long run, collective outcomes of these strategic behavioral interactions can either reinforce or transform the prevailing institutions (Aoki 2000; Campbell, 2004).

Transformation of the urban built environment, as in the case of railway and property development, involves numerous exchanges of resources, information, assets of economic values, promises and actions between many parties in the process. Whether benefits can be generated and captured through a sensible use and development of the land resources depends on the underlying institutions, especially in connection with the property rights system. Urban land resources, like many common-pool resources, are vulnerable to competitive, free-riding opportunistic actions that can quickly deplete their economic values. Privatization is a possible means to resolve this problem. Given clear delineation of property rights in land asset, individual owner will have an incentive to protect it, enhance its value through deliberate improvements and capture its benefit through voluntary transacting with others. However, the NIE perspective recognizes that market transaction and its enforcement are not cost-free. High transaction costs are “frictions” that can stifle beneficial exchanges and adversely affect the efficient use and allocation of resources. The policy implication, therefore, is to devise an appropriate institutional arrangement that works towards reducing the transaction costs.

To integrate railway and property development in an urban context involves extremely high transaction costs. Railway and property involve different business knowledge and expertise. Furthermore, the task of combining railway and above-station property development involves numerous interdependent decisions, assets and resources which may not be easily divisible. Imperfect knowledge about the conditions of the development sites will increase the monitoring and search costs. Many stakeholders such as the government, railway operator, land developers, contractors and the general public are involved in the development scene. Opportunism, cheating and non-compliance of the involved parties tend to increase the negotiation and enforcement costs in the process. This is especially imminent when real estate objectives and transport considerations become incompatible and when these two aspects are pursued by separate organizations. Business objective of the outside party is “external” to its own. It may not be possible for them to resolve the conflicts through private negotiations in order to allow the synergy of property and transport to take full effect.

There are many possible institutional forms of governing the production of urban built environment (see e.g. Alexander, 2001a; 2001b). Below are two possible institutional models in organizing and coordinating the transformation of urban space for railway and adjoining land development (Figure 4).

Model A assigns separate roles and functions to the railway company and land developers respectively. The government provides land or development rights, through competitive sale or direct allocation, to these companies separately. The railway company is primarily responsible for constructing and operating the railway infrastructure while the land developers implement their own real estate projects within the railway catchment areas. Under this model, public-sector decision making, statutory town plans, government policies and regulations are the principal coordinating mechanisms in bringing together all the key players in developing the sites. The degree of railway and property integration at the project level relies mainly on the quality of interactions between these market players, their interpretations of the government regulatory framework and their compliance with the conditions imposed upon them.

Model B presents the R+P business model implemented by the MTRC. This model puts the railway company at the centre in planning, coordinating and managing the use and development of space around the station sites. While the railway company is assigned with the mission of constructing and operating the railway infrastructure, it also receives government grant of exclusive development rights for the land above and around railway stations. The MTRC has to pay land premium, in full market value, to the government on the basis of greenfield site without a railway. It builds the railway and develops the property in partnership with some qualified land developers, which are required to shoulder the land premium and share property development profits with the railway company. Project planning and development particulars are determined by this consortium in consultation with the government and other public authorities. The railway company supervises implementation of both railway and property development projects and provides the platform for resolving all possible conflicts of the relevant parties in connection with site development at the project level.
Both models can involve a subsidy of land development incomes to support railway development. In Model A, this is undertaken through the government by channeling land sale revenues to the railway company in terms of capital injection and/or providing fare subsidy to support daily operations of the railway after completion. In Model B, however, the subsidy is more subtle and is primarily in the form of exclusive land grant to the MTRC at the stage of project commissioning. The company is required to pay land revenues to the government and also fulfill its missions of building the railway. The MTRC has to make the best use of its land resources in order to generate and capture the additional values generated from integrating railway and property development together. Both Models A and B can achieve some forms of integration between railway and property development. Nonetheless, under the theoretical NIE perspective and based upon empirical evidence, Model B is definitely more capable of generating a better integration and more positive development outcome, primarily because it generates comparatively lower transaction costs than in Model A. The merit of the R+P model is that it not only provides an incentive and constraint structure for the MTRC to maximize the returns from its land resources by means of comprehensive planning, good design and right project timing, but it also provides a proper alignment of the interests, resources, expertise and decision-making capabilities of different involved parties including primarily the government, property developers and the MTRC.

First, the government operates at a strategic level by creating a favorable regulatory environment and setting supportive strategic land use and transport policies that take into account the public interest of the territory. The government gives autonomy to the MTRC in its corporate management such that business efficiency can prevail in its daily operations. In addition to exclusive land grant to the MTRC, complementary urban growth management policy that encourages higher development density around railway stations, and public transport policy that restricts competition from other transport modes are crucial. Second, the property developers in pursuing their private interests operate at the project level, and they are required to implement the development projects subject to site-specific requirements and the deals agreed with the MTRC. Private developers have to compete through tender by offering the best bid to the MTRC in order to get the property development contracts. Finally, the MTRC operates at the intermediary level responsible for monitoring and coordinating the implementation of joint development projects, converting strategic objectives into site-specific requirements, transforming policies into deals and balancing possible conflicts between public and private interests. In the process, the company performance is also closely disciplined by the financial market because it has an impact on its credit ratings, costs of borrowing and financial returns to investors. This creates additional incentive as well as constraint to the MTRC towards maximizing the values of all development projects and “internalizing” all possible external benefits generated from railway and property development.
CONCLUDING REMARKS

Sustainable urbanization requires a more efficient and intensive use of land space to accommodate the needs of a fast-growing urban population. Metro railway provides a high-capacity, energy-efficient and land-saving mode of urban transport and can therefore bring enormous benefits to many rapidly growing cities in the developing countries, which are plagued by problems such as traffic congestion, environmental pollution and urban sprawl. The MTR of Hong Kong is internationally famous because it does not only carry the above benefits, but it is also a profitable business venture that relieves the government of operational subsidy. This paper explains the underlying institutional arrangement that has generated these positive outcomes. The essence of the R+P model does not lie in the straightforward use of land and property revenues to subsidize railway development. Nor is it replicable simply by the allocation of property development sites to a railway operator. The paper illustrates that the model embodies an institutional and regulatory framework that comprises supportive government land use and transport strategy, complementary project planning and development process, and competent and responsible organizations that strive towards making the best use of urban space and producing high-quality urban infrastructure and land development in meeting private needs and public interest (Tang et al., 2004).

No model is perfect. While the R+P model is remarkably successful, it also carries some limitations. The success of the model relies heavily on a healthy growing urban economy and a strong real estate market. These provide a favourable setting for the generation of adequate property incomes and fare revenues to support railway development. As the current Hong Kong population is not increasing as quickly as in the previous decades and its property market has recently lost some vibrancy, the opportunity of expanding the R+P model into other new areas may be hampered. Furthermore, the reception of the community to the use of metro railway and the form of high-rise, high-density living is another critical success factor. This is probably a major hurdle in applying the R+P model in many western cities in which low-rise development and auto-dependency are widely accepted by the people. In recent years, rising environmental movement and community participation in Hong Kong have heightened the public concerns about the undesirable impacts of high-rise development at strategic locations such as the waterfront and above railway stations. These development projects are described by some environmentalists as “walled buildings” which are said to be out-of-proportion to their neighbouring buildings, visually intrusive, blocking the sun and wind to the neighbourhood, and eliminating street-level activities (Figure 5). The public demand for reducing development density may adversely affect the property returns under the R+P model and thus retard further expansion of the metro system.

Another closely related issue is about the privatization of urban space. The R+P model requires government allocation and assignment of exclusive development rights of land to the MTRC. This approach allows the company to privatize the land and exploit fully the use of space in partnership with private property developers. It can impose a strong redistributive impact on the urban form by relocating economic opportunities across territory and concentrating development impetus along railway corridors. Redistribution and concentration of geographical advantages, unless mitigated by counteracting spatial strategy, may lead to increasing territorial inequality, fragmentation of urban space, “splintering urbanism” and social exclusion (Harvey, 1973; Graham and Marvin, 2001). All these contravene the goal of building harmony in a city which is essentially a place for community sharing, interaction and exchange especially in the public space. Privatization of public open space land is a worrying phenomenon in Hong Kong because it tends to be disintegrating and discriminating (Tang and Wong, 2008). Like sustainability, public space or open space is a multi-faceted concept that serves multiple...
functions in an urban society. As urban sustainability is built upon an inter-dependency of human activities and a common destiny of the community, the R+P model may not be truly integrative if the development projects are socially exclusive rather than inclusive, and spatial segregating rather than assimilative. Privatization of urban space, while contributing to efficiency, cannot be a total solution. Pushing it to an extreme would endanger the public interest in an urban society unless it is concurrently accompanied with the development of public space.

REFERENCES


