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The significance of development sites in global real estate transactions

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ABSTRACT

This paper examines the significant contribution that development sites make to total real estate transaction activity at a global, regional and country-specific level over 2007–2014. By assessing over 216,000 major real estate transactions worth in excess of $6.35 trillion, development sites are shown to account for over $2.0 trillion or 31.6% of global real estate transaction activity. Regional and country differences are highlighted, particularly in the Asia-Pacific emerging real estate markets, with the significance of development sites in China specifically highlighted. The analysis shows that China accounted for $1.6 trillion in development site transactions or 80% of development site transaction activity globally over 2007–2014, with development sites in China being a key catalyst to providing the urban infrastructure and fabric for China's future economic growth.

1. Introduction

With increased urbanisation and economic growth, emerging real estate markets are playing a more significant role in the global context. In particular, the emerging markets in the Asia-Pacific region are expected to increase their market share of the investable real estate universe from 10% ($2.6 trillion) in 2011 to 23% ($12.8 trillion) in 2021 (Pramerica REI, 2012). Importantly, in this context, the development side of real estate provides the catalyst for the fabric of this economic growth through the delivery of office, retail, industrial, hotel and residential real estate. While the significance and role of capital flows to the income-producing commercial real estate sectors has been widely researched in the literature (Newell, Adair, & McGreal, 2010, 2013) equivalent research concerning transaction activity of development sites is not available and represents a significant gap in the literature base.

This paper in examining development site transaction activity over the period 2007–2014 seeks to address this knowledge gap and provides a global, regional and country-specific analysis. In this context, the paper seeks to set a strategic understanding of the scale of development activity by assessing over 216,000 major real estate transactions cumulatively amounting to $6.35 trillion in transaction value drawn from the Real Capital Analytics (RCA) database. Much of the existing real estate research has tended to focus on investment, in particular the size and scale of the investment universe including direct and indirect mechanisms in the private and public markets. Thus, the originality of this paper stems from its different focus, one orientated on the value of development sites and given its importance in this regard, specific attention is directed to China whose land policy may potentially act as a model for other emerging economies in seeking to lever growth.

The paper is structured as follows. In section 2, the underpinning literature is assessed. However, this is very sparse on the scale and value of development site transactions and is dominated by papers on the institutional context, brownfield development and re-use, sustainable development, property development risk management and property developer behaviour. Section 3 reviews the situation in China regarding development and underlying themes relevant to the property development process. Section 4 provides details on the underpinning data and methods used in the analysis. Section 5 highlights the significance of development sites globally and section 6 specifically relates to development sites in China. Conclusions and strategic implications for development sites in China and globally are drawn in Section 7.

2. Property development: a literature perspective

The literature on development, particularly from the UK and US perspectives, has focussed strongly on sustainability and the re-use

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of brownfield sites. For example, in relation to development sites, Adams, De Sousa, and Tiesdell (2010) have addressed the degree of urban change and deindustrialisation in advanced economies and the legacy of vacant and derelict land. Increasingly, such sites are seen as representing significant development opportunity, though highly contaminated sites bring significant additional costs. Referring to US evidence, Adams et al. (2010) indicated that in the first 10 years of its inception, the Brownfields Program had levered more than $6.5 billion in brownfield land cleanup, with redevelopment funding creating 25,000 new jobs. Importantly, Adams et al. (2010) argue that the strategic reconceptualization of brownfield land as a development opportunity occurs only if there is sufficient confidence for such development to be seen as a business opportunity.

While brownfield sites can yield significant returns, they also pose particular problems. In an earlier study of 80 large redevelopment sites in four British cities, Adams, Disberry, Hutchison, and Munjoma (2001a) found that ownership constraints disrupted plans to use, market, develop or purchase sites with significant impact in relation to land assembly, the speed and timing of development and frequently has required either state acquisition or intervention to bring the sites into commercial use. Furthermore, ownership constraints (Adams, Disberry, Hutchison, & Munjoma, 2001b) reflect the institutional context within which development has to be delivered, the distinctiveness of land as a commodity, the imperfect nature of the land market, behavioural characteristics of landowners and the complex bundle of the property rights in land. In addressing these complexities, Healey (1992) proposed an institutional model of the development process which recognised the variety of agencies, relations, activities and events that are involved in development projects. Similarly, Henneberry and Parris (2013) argue that the context within which development projects are identified, initiated and pursued embraces a mix of actors of differing character.

Other advocates of the institutional context, Guy and Henneberry (2000) argue that more attention needs to be given to interests of the production side of the development process, arguing that a key determinant is the relation between price-making and price-taking in the property market, with property developers basing their decisions on the market signals provided by prices. Drawing upon an earlier paper by Antwi and Henneberry (1995), the point was made that the crucial influence on developers' decisions was the way in which they formulate their expectations of development values, costs and profitability. Significantly and pertinent to this paper, Guy and Henneberry (2000) argue that culturally-based perceptions and evaluations of urban and regional risk and return influence the demand for and price of property. They also highlight the very different approaches to understanding the market taken by local property actors as they engage with the national economic frameworks set by investors.

Fisher and Robson (2006) also base arguments around Healey's institutional approach, with property development seen as a complex process that involves multiple drivers, stakeholders and contributions from many disciplines. The authors make the observation that the development process is not abstract, but relates to a real site with location and physical character and legal ownership of sites. Similarly, Lizieri and Pain (2014) refer to the complexities that arise in heavily developed markets including site assembly, infrastructure and planning issues arising from the demand for large technologically advanced buildings.

Property markets are seen as fundamental to development, though how this impacts on individual sites depends on the local, physical and institutional context. In this context, the work of Coleman, Crosby, McAllister, and Wyatt (2013), who argue that the techniques used to support decisions on pricing of real estate development opportunities have not been subject to detailed empirical investigation, examination and evaluation, is pertinent. Coleman et al. (2013) point out the absence of literature in development appraisal compared to that in the investment sector, with the value of a development site taken as the monetary residual or surplus available after the site has been developed.

Bryson and Lombardi (2009) argue that the property development industry is based on a business model constructed solely around profit maximization and that the need to integrate sustainability into the business models of development companies is promoting change. They maintain that proactive firms have the opportunity to target new markets based on the exploitation of various forms of sustainable products and processes and that deriving social benefits from private sector development has become an important element in public-private development negotiations. Incorporating sustainability into the property development process is seen to enhance product differentiation, attract tenants and investors who have incorporated corporate social responsibility into their business practices and reduce long-term running costs which, in turn, plays an important role in negotiations over sites and potentially enhance the long-term value of the development. However, Dixon (2006) suggests that the development industry seems ill at ease with precisely how sustainable development can be implemented in brownfield schemes and argues (Dixon, 2007) that innovation and the uptake of sustainability principles are characteristics encountered amongst developers who are looking beyond a profit motive.

In taking a more global perspective, Wood (2004) considers the extent to which a scalar transformation through, or as a consequence of, globalisation is taking place within the development industry. Wood (2004) argues that while real estate service providers and investment activity have become increasingly globalised, the same has not happened to property developers per se, though it is acknowledged that the relationship between financing and real estate development is more complex and may involve significant international activity as development firms operate in national and international markets for capital. Likewise, Wood (2004) with reference to the US argues that the property development industry is culturally linked to local networks which operate as conduits through which information is exchanged. Following a similar line of argument, Charney (2007) with reference to Toronto illustrates the fragmented but often local nature of development, drawing distinction between downtown core developments where, due to complexities of fragmented land ownership and higher costs, only larger developers were involved in bringing forward projects, whereas in suburban centres local and smaller developers would follow opportunistic sites and projects depending on their attitude to risk. Charney (2007) considers that maintaining and fostering relations to local agents including the municipality is of equal importance to the underlying economic fundamentals.

The complexities of development are further magnified in emerging markets, where less transparency and local interests need to mediate with those of international investors and global financial flows. In the case of India and the case study city of Bangalore, Halbert and Rouanet (2014) discuss how policy changes implemented in 2005 have reduced the minimum size of development projects to 50,000 m^2 for commercial developments, thereby increasing the number of development sites, while still supporting the potential for large scale property projects. The authors describe a complexity of actors in the development process with a multiplicity of local interests and in which foreign investors through transcalar territorial networks forge partnerships in bringing forward sites to achieve development objectives. Likewise, David and Halbert (2014) discuss how foreign investors in Mexico need to build coalitions and rely on other actors in an opaque