# Privatization of the Outskirts: The Trends of 'Post-Suburbanization' in Jabodetabek (Jakarta Extended Metropolitan Region), Indonesia

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This study will discuss the extent to which the recent development of Jabodetabek Extended Metropolitan Region shows a trend of 'Post-Suburban' phenomenon, broadly defined as a change in the structures of the urban periphery, in which some new areas are much more independent than the former suburbs, but they are not as multifunctional as the traditional city centers (Borsdorf, 2004, p.13). There are several factors which might have contributed to the post-suburban development in the Jabodetabek, including, new-town and industrial-estate development in the outskirts.

#### Introduction

In many Asian countries urban development has been characterized by a mixture of number different economic activities and land uses in the fringes areas of large cities, including agricultural activities , industrial estates, and large new town projects, meanwhile the built-up areas are expanding from urban centers in all directions, forming Extended Metropolitan Regions (McGee & Robinson, 1995; Jones, 2006; Firman, 2009). This phenomenon has taken place most notably in metropolitan cities in the Southeast Asian countries, including Jakarta, Bangkok, Ho-Chi-Min City, Kuala Lumpur and Manila, which basically indicates the trend of shifting from mono-centric to multi-centric metropolitan region (Douglass and Jones, 2008). The private sectors have played a key role in this process.

As Douglass (2000) maintain that metropolitan development in Pacific Asia has been characterized by urban spatial restructuring, including: (1) the polarization of few urban centers; (2) formation of large mega-urban around the centers; and (3) slowed down the urbanization rate in inland regions (p.237). Nevertheless, Dick and Rimmer (1998) argue that metropolitan development in Pacific Asia is not a unique phenomenon, as many big cities in both developing and developed countries world have experienced a similar process. In fact, as Soja (2000) argues the development of Los Angeles in the US basically shows the generality of the process of urban development in the developing world (p. xvii; see also Webster, 1995).

For Soja (2000) and Borsdorf (2004) the recent metropolitan development in developed world is often associated with the phenomenon of 'Post-Suburbia' characterized by

population decline in the former city district and polycentric structures. This phenomenon is also known as 'Edgeless City' (Lang, 2003; Lang and Knox, 2007), and 'Technoburb', that is, favored location for the technologically advanced industries which have made the new city possible and has lost its dependence on older urban core (Fishman, 2002; see also Phelps, 2012). It now exists in a multi-core region formed by the growth corridors which could extend more than hundred miles, while the suburb became part of a complex 'outer city', included jobs as well as residences (Fishman, 2002, p.29 and 30). Although the term 'Post-Suburbia' is often associated with urban development in Western countries, it also takes place in developing world, as shown in the recent Chinese urban development which to some extent reflects an early stage of the 'Post-suburbia' phenomenon in western countries (Wu and Phelps, 2008; and Wu and Lu, 2008).

Against the above backdrop, this study is aimed to examine the extent to which the 'the recent development of Jabodetabek Metropolitan Region reflects a phenomenon of 'Post-suburban' in developed world, driven by privatization of the fringes areas, most notably by private new town and industrial estate development in the region. The author has conducted a preliminary analysis to address this research question (Firman, 2011), but this study will go beyond it by updating the more recent situation. It will examine the changes and continuity which have occurred in the recent Jabodetabek fringes for about the last four decades, whereas the focus will be on the development of large scale housing and industrial activities in the fringes of the region.

Jakarta Metropolitan Region (JMR) which is also called Jabodetabek, an acronym which stands for Jakarta-Bogor-Depok-Tangerang-Bekasi, is located in the northern area of West Java (Figure), covering a total area of more than 9,000 square kilometers (Hudalah et al, 2013). This region plays an important role in the national economy, producing about 25 per cent of the Indonesia's non-oil and gas GDP (Firman, 2014b).

Jabodetabek comprises of several administrative units at different level: First, the Jakarta Special Region (DKI Jakarta) having provincial government status; second, eight municipalities (kota) and Districts (Kabupaten), namely the Municipalities of Bogor, Depok, Tangerang, South Tangerang and Bekasi, and the Districts of Bogor, Tangerang, and Bekasi.



Apart from the introduction, this paper will divided into three parts. Part One will discuss the post suburbanization as a global phenomenon of urban development; Part two will describe the recent urban development in Jabodetabek focusing on population growth and land use conversion to provide the local context; Part three will examine the processs of post sub-urbanization in Jabodetabek, focusing on new town and industrial estate development, and transportation and mobility; and Part four will conclude the discussion.

## Post-Suburbanization as a Global Phenomenon of Urban Development:

'Post-suburbia' is basically refered to a change in the current process of 'suburbanization' in developed world from the concentric radial patterns of earlier decades towards new spatial patterns of 'patchwork structure' (Kraemer, 2005 p.4, cited in Wu and Phelps, 2008, p. 465-466). The post-suburbia in the US, for instance, is characterized by 'what was once central is becoming peripheral and what was periphery is becoming central' (Soja, 2000, p. 152; see also Phelps et al, 2006, p.10).

According to Borsdorf (2004), the post-suburbia in the western countries is clearly reflected in the reality that 'some new areas are much more independent than the former suburbs, but they are not as multifunctional as the traditional center, resulted in an emerging fragmented structure of specialized outskirts (p.13). The fact is that the suburbs have loosened their ties to their mother city, transformed into 'independence outer cities' having many functions, including shopping centers and high-tech industrial centers, not only residential areas, while the centrality of the mother city is weakened (Muller, 1982, cited in Hudalah and Firman, 2013, p.41). The exodus of shopping, offices and manufacturing has resulted in a multi-centered pattern of suburban, which in turn has made the distinction between urban and suburban areas become blurred (Feng, Zhou and Wu, 2008). This process has greatly been facilitated by the government both directly, like the UKs new town programs since the 1940s, and indirectly, such as the US public sector highway development (p.85; see also Cochrane, 2011; and Phelps and Wood, 2011).

Residential development in the outskirts and population redistribution from the urban center to the peripheral areas has been the characteristics of suburbanization in developed world, which was then intensified by decentralization of several economic activities, including commerce, retail especially large shopping centers, manufacturing, and offices to the fringes in the 1980s, as the peripheral locations became attractive. Meanwhile, the central cities increasingly became unattractive for industry (see Champion, 2001; see also Bontje and Burdack, 2011).

'Post-suburbia' should be differentiated from traditional suburban phenomenon in several ways (Wu and Phelps, 2008). First, 'Post-suburbia' is socio-economically characterized by suburbs population losing, declining in suburbs resident income

relative to regional income, and greater employment-residential balance, and decentralization of service employment from the urban centers; Second, 'Post-suburbia' is characterized by mixing of land uses and polycentric development, Third, post-suburbia phenomenon has been induced by government and business interests which play important 'entrepreneurial' role in it (pp.465-467).

Although the 'Post-suburbia' process is often associated with metropolitan development in developed countries, Wu and Phelps (2008) maintain that the term 'Post-suburbia' may also capture important elements of new trends of suburbanization in developing world, as shown in Beijing and Shanghai Global City Regions (p. 467). The suburbanization in those Chinese cities have now become more market oriented due to the growing role of market forces in the economy (Wu, 2008, pp. 91-97; and Wu and Phelps, 2008).

The recent urban development in Beijing and Shanghai city-regions are marked by: First, residential suburbanization, triggering by the private developers who promoted housing development since the 1990s; Second, industrial suburbanization, resulted from the moving and renovation of polluting industrial enterprises, establishment of land leasing system, and providing more space for industrial enterprises; Third, retail suburbanization, as many big shopping centers have been growing in the suburbs due to cheaper prices and much more variety of goods offered; cheaper and more sizeable land; and development of residential areas in the suburbs (Feng, Zhou, and Wu, 2008, p.92-94).

The strategic investment and infrastructures in the economic development zones has triggered the formation of the polycentric metropolitan and suburban economy development in China (Wu and Lu, 2008, p. 390). Moreover, as Wu and Phelps (2008) maintain the 'very rapid economic growth and urbanization in China has in turn produced the coexistence of different types of suburbs and developments that correspond more closely to post-suburbia closely defined...'(p.477).

The process of suburbanization in Beijing has resulted in the dispersal of population in the metropolitan area and changing population density. Moreover, as enterprises move out from the city center to the outskirts, whereas most of the employees remain to live in the city center, this process has also created more pressure on the traffics and resulted in more commuters in the city, and extended commuting distance (see Wu and Phelps, 2011b).

The recent development of large cities in China indicates that there are some similarities between Beijing's suburbanization and North American suburbanization, but those are not an identical process, in which Beijing's urban development is still at an early phase of 'Post-suburbanization', and the government is still play a dominant role in the process (Feng, Zhou, and Wu, 2008). A similar phenomenon has also taken place in Latin America (see Heinrichs, D., Lukas, and Nuissi, 2011; Roitman and Phelps, 2011).

In short, 'Post-suburbanization' is very complex phenomenon. It has has taken place in both developed and developing world. Nevertheless, there are several things in common in both though not identical process, due to great difference in the socioeconomic and political setting, as Wu and Phelps (2011a) point out:

...we are in a post-suburban world, different from the process of suburban development as we knew it decades ago. This world registers itself in multiple ways, reflecting aspects of change in these different places. In some instances post-suburbia can embody qualitative changes in the nature and degree of self-containment of particular suburban settlements, in other it is signaled by new form of politics and governance driving urban development at the urban edge, while in others it encompasses the complex assemblages of governmental power that weave suburbs together into post-suburban metropolitan regions (p.255).

#### Population Growth and Land Conversion in Jabodetabek:

The population of Jabodetabek was 27.9 million in 2010, with the annual rate of growth of 3.6 per cent between 2000 and 2010. By 2010 in Indonesia there were 11 cities with population of at least 1 million, but five of them are located in Jabodetabek, namely Jakarta, Bekasi, Tangerang, South Tangerang and Depok, indicating the primacy of Jabodetabek. The City of Jakarta – the core of Jabodetabek, had a population of 9.6 million in 2010. Moreover, approximately another 2 million commuted from the surrounding areas to work in Jakarta (see Hatta, 2003)..

The Jakarta's share of the population of Jabodetabek decreased significantly from 54.6 per cent in 1990 to only 35.5 per cent in 2010, indicating the process of rapid spill over of Jakarta City to the surrounding areas as well as suburbanization of the peripheral areas. The annual population growth of Jakarta City is slowing down from 3.1 per cent in 1980-1990 to only 0.4 per cent in 1990-2000, although then rose to 1.5 per cent in 2000-2010. In contrast, the fringe areas of Jabodetabek are experiencing much more rapid population growth (Firman, 2014a and 2014b; see also Firman, Kombaitan and Pradono, 2008). In fact, many former residents in neighborhood within the Jakarta City have moved to the fringe areas of Jabodetabek, which reflects a functional and spatial integration of areas into the metropolitan economy (Bowder, Bohlan, and Scarpaci, 1995).

The Central Bureau of Statistics (2001) estimates that during the years from 1995 to 2000 alone there were about 160 thousands of Jakarta residents moved to the City and District of Bogor in the fringes of Jakarta City. Moreover, about 190 thousands and 192 thousands of Jakarta City residents moved to the District and City of Bekasi and District and and the City of Tangerang in the fringe areas respectively.

Jabodetabek urban transformation is also shown in the change of number and percentage of urban localities in the region. The number of urban localities, which are

mostly located in the fringe areas, added by more than 40 per cent, that is, from 730 to 1035 over the period of 1999-2005, which made the proportion of urban localities over the total localities added from about two-fifths to nearly three-fifths over the same period of time. This situation reflects a transformation of the fringes to become an urban area (Gardiner and Gardiner, 2006).

Over the past fourty years, the development of economic activities in the fringes of Jabodetabek has resulted in the extensive and uncontrolled conversion of prime farmland into non-agricultural land, including industrial estates, new towns and large-scale residential areas, and golf courses and recreational areas, driven by both foreign direct and domestic investments (Dharmapatni and Firman, 1995; Firman, 2000; Firman, 2014). Meanwhile, in the urban centers many former residential areas have been converted into business spaces, offices, entertainment, and condominium. (see Suryadjaja, 2012).

In Bogor area in the southern Jakarta the area of primary and secondary forests, garden, estates and paddy field are declined substantially over the period, but the land area for settlements and agricultural activities increased significantly (Firman, 2011 and 2014a). Even worse, the land conversion also occur in the area of South Bogor (Bogor-Puncak-Cianjur), the upstream of Jakarta City, which has been designated as a conservation area, due to its function as a water recharge zone. This has been suspected as one of the main causes of floods in Jakarta City, the downstream areas in almost every rainy season.

The land conversion in Jabodetabek has also resulted from several violations of land-use plans (Rencana Tata Ruang) by the local government and private sectors in the region, motivated by political pressures and interests in placing what are perceived to be profitable economic activities (see Firman, 2004a). The enforcement of spatial land development plan have been so weak that the plans are ineffective in controlling physical development in the Jabodetabek. Another constraint is that the local government capacity to cope with land conversion is inadequate, while pressure from investors are so strong.

#### The Trends of Jabodetabek Post-Suburbanization:

Jabodetabek metropolitan region experiences a rapid urban transformation basically due to the rapid spill over of the Jakarta city to the fringe areas and the attractiveness of the Jabodetabek peripheral areas for development of new socioeconomic activities.

#### **New Town Development:**

Many new towns in the fringe of Jabodetabek areas have been developed from merely a traditional dormitory towns, which are largely dependent on Jakarta City to become a more independent towns with a strong economic-base, including Lippo City (see Hogan and Houston, 2001) and Jababeka City which is the largest manufacturing concentration in Indonesia with area of 5,600 hectares and population of nearly one million (Hudalah

and Firman, 2013). There are more than 1,500 companies, including Medical City Health Care and Movie land film industry and more than 24.000 houses in the city (Kartajaya and Taufik, 2009).

Bogor City which was an old satellite town with population of about a million, in the south of Jakarta City has now becomes a center of agricultural higher education and research center, where Bogor Agricultural University, one of the largest state universities in Indonesia, is housed. The city has also become an international and national meeting, convention and congress venue. Another Jakarta satellite town, Depok City, where the main campus of the University of Indonesia is located, is now growing rapidly in the south of Jakarta as one of the largest center of centers of higher educations in Indonesia. In addition, Serpong City in Tangerang in west Jakarta has been designated as A research and technology development center (Puspitek) in Indonesia.

The fast development of Jabodetabek fringes has been driven and greatly facilitated by the government and private sectors which play a very important role in it since the .1970s until present. Government sponsored low-cost housing projects in the peripheral areas have resulted in moving of large number of low-income and low-middle income groups in Jakarta City to the fringe areas to live in large-scale low cost housing developed by many private developers. It has been one of the driving forces for development in the region. In the same time the government with pro-growth economic policy reason also invite the private developers to build new towns with luxury houses in the Jabodetabek fringes.

Modern new town development is actually not a new phenomenon in Jabodetabek, as in the early 19th century the Dutch colonial government developed new town in Batavia (now the Jakarta City) which were different from the congested setting of the old town, by applying a new pattern of towns with airy large estates. In the 1950s the government followed by development of Kebayoran Baru new dormitory town, in south of Jakarta City. Twenty years later, a developer successfully developed 'Pondok Indah', a new residential areas in southern Jakarta (Firman, 2004b). There followed by another developer in the early 1980s who has successfully developed Bumi Serpong Damai New Town on the previously neglected rubber plantation estate land in the east Jakarta.

For about two decades, from the early 1970s until late 1990s, the private developers were greatly facilitated by the National Land Agency (BPN) in land acquisition by granting them location permits (ijin lokasi), that is, exclusive right to acquire a sizeable land for large-scale housing and new town development projects, by which the land owners were only allowed to sell the land to the granted land acquisition developers, not to others (Firman, 2011). However, many private developers keep the land idle for a long period of time for speculator purposes expecting a substantial gains from land prices skyrocketing.

It is estimated about one-third to one-half of the total area under land development permits in Jabodetabek was being held off the market by developers in the mid-1990s, not actively under development (Leaf, 1994 and 1996). This ended up with the situation,

in which the permit holders and developers were not able to develop fully the sizeable land area that they acquired, as there were too many land development permit given to the developers, while many of them were constrained with financial and technical capability to develop the land. This was considered as one of main trigger to Indonesia's financial crises in 1997-1998. Nevertheless, most of property developer as present believe the property sector will not repeat the situation of 1997-1998 (Grazela, 2013).

The recent large-scale residential areas and new town development in the outskirts of Jabodetabek are characterized by low density, single-family houses, and exclusive residential for middle and upper income groups (Leaf, 1994). The developers and the companies are only concerned with how to maintain the good quality of life in the new town, because it is one of the most attractive factors for the residents. The development management in several new towns is implemented by the private sector exclusively, instead of by the city government, not allowing residents from outside the new town to use the facilities and amenities.

For most large developers, development of new towns in Jabodetabek is basically a response to demand for secure, modern and quite living environment of many middle and upper-income Indonesians (Leisch, 2000), in which they expect to get quick and large financial returns. Some of the new town development in Jabodetabek are specifically designed as 'Gated Communities' (Leisch, 2000; Firman, 2004b and 2013b). As Douglass (2000) argues the new town development in Jabodetabek also manifests changes in the global economy environment which enable capital to more freely move across sectors of economy and across border, including the property sector. In addition to the real estate development, large shopping centers are developed not only in Jakarta City, but also in the outskirts of Jabodetabek, like Bekasi Square in Bekasi, and Teraskota in Tangerang.

#### **Industrial Estate Development:**

Industrial estates are massively developed in Jabodetabek fringes by many big devepores due to a strong market demand and easy access and proximity to Jakarta City. Some large industrial estate in the fringes of Jabodetabek include Cikarang Industrial estates, Lippo City Industrial Park, MM 2100 Industrial Estate, Jababeka Town and Industrial Estate, and Bekasi International Industrial Estates, which cover total area of 18,000 hectares (Hudalah, 2013), greatly increased from only 11,000 hectares in 2005 (Collier International, 2005). The development industrial estate In Indonesia is greatly supported by Presidential Decree 41/199 which stipulates industrial estates as centers for development of industrial activities supported by provision of infrastructure and other facilities operated by licensed companies (Hudalah et al, 2013).

At present there are more than 1,500 multinational and national companies from more than 35 countries operated in Jababeka industrial estate alone, including from U.S., U.K.,

France, Germany, Australia, the Netherlands, Japan, South Korea, Taiwan and China (PT Jababeka, 2010 cited in Hudalah et al, 2013).

By 2013 there were 35 industrial estates in Jabodetabek fringes, ranging from 50 to 1,800 hectares in size (Hudalah, 2013), about one-fourth of which located in Bekasi District. Yet, another 400 hectares industrial estates is to be added in 2013-2014 in this region, mainly for automotive industries (Firman 2014b).

Most of the industrial estates in Bekasi District are concentrated in Cikarang City, some established as a joint venture with foreign investors. The Hyundai Industrial Estate for example is a cooperation between Korean Hyundai company with Lippo Cikarang, a national corporation, whereas the MM2100 Industrial Estates is a joint venture with Marubeni Group, a Japanese investor (Hudalah and Firman, 2014, forthcoming). As a result of these joint ventures, there are more than 9,000 expatriates working and living in Bekasi City and District. The industrial estates in Cikarang had a potential export value US \$ 30.56 billion by mid 2000s, which was almost half of the national non-oil gas export of US \$ 66.43 billion at the same time (Hudalah and Firman, 2011).

Jababeka has been developed to become a self-contained city and a center of manufacturing activities in Indonesia. The company has allocated nearly US 434.7 million, which is about 46.5 per cent of its capital expenditure for land acquisition alone in 2011. Most of the industrial land buyers are foreign companies form Japan, Korea, Malaysia and Europe which expand their business in automotive, pharmaceuticals, electronics and consumer good (Yulisman, 2011). The Jababeka Industrial Estate company has also developed a power plant of US \$30 million to generate electricity for manufacturing industries developed in the area.

The Jababeka developer is now building an island port, named Cikarang Dry Port on a 200 hectares area designed to accommodate up to 2 million twenty-foot equivalent unit (TEUs) container until 2020, with total investment of US \$20 million (Yulisman, 2011). There are houses hotels and apartment, higher education institutions, malls and shopping centers have been built in the area. Nearly one million people including about 2,500 expatriates lived in the area by end of 2000s (Hudalah and Firman, 2013, p.45).

The demand for industrial land in Jabodetabek has greatly increased as a result of the development of both domestic and foreign direct investment in the region. The fact is that the cumulative approved direct foreign investment in Jabodetabek reached US \$37,112.8 million in the mid 2000s, which is nearly 60 per cent of the total non oil foreign direct investment in Indonesia of US \$64,803.5 million at the same time (Central Board of Statistics, 2006). Meanwhile, the cumulative approved domestic investment in Jabodetabek amounted to Rp. 82,342 million, which is approximately 33 per cent of total Indonesia's domestic investment of Rp. 265,176.1 (Central Board of Statistics, 2006).

The massive industrial development in the Jabodetabek fringes has resulted in high increase land price for industrial estate in the region, ranged from US \$106 per square

meter in Bogor to US \$ 175 per square meter in Bekasi (Colliers International, 2012). The most recent development shows that the development of industrial estates in Jabodetabek has expanded not only in the region, but also has included the adjacent districts, most notably District of Serang in the west and District of Karawang in the west. At present, industrial centers in Jabodetabek are increasingly becoming specialized and diversified, resulting in trend of Jabodetabek to become a more polycentric and a fragmented industrial region (Hudalah et al, 2013).

#### Transportation and Mobility:

The development of large-scale residential areas, new towns and industrial estates, shopping centers and retails in the fringes of Jabodetabek has been largely induced by toll road development, built by private companies and coordinated by Toll-Road State-owned Company (PT Jasamarga), including the toll roads connecting Jakarta City with Tangerang and beyond in the west, Bogor in the south, and Bekasi and beyond in the west (see also Mamas and Komalasari, 2008, p. 123). The government has also developed the integrated Transportation Master Plan for Jabodetabek which is expected to build a road and rail transport system with the assistance of the Japanese International Cooperation Agency (JICA) (Hatta, 2003, see also Umezaki, n.d.). Moreover, another toll road connecting Jakarta International Seaport (Tanjung Priok) with Cikarang City, about 34 kilometers long, is now being planned with Rp. 2.4 trillion investment, also with the assistance from the JICA.

As a result of new town and industrial development in the fringe areas, commuting is also evident in Jabodetabek, in which millions of people commute between the Jakarta City and the peripheral areas daily by trains, buses and personal cars. Likewise, a number of the Jakarta City inhabitants also commute between the city and small and new towns in the outskirts, including Bogor, Tangerang, Bekasi, Depok and Jababeka, as they work there but live in Jakarta (Firman, 2011).

A study of population mobility from and to Cikarang city in Jakarta Metropolitan Region (Permatasari and Hudalah, 2011) shows that the city attracted daily commuters from Jakarta, the core of the region, not only from other smaller cities in Jabodetabek. This has clearly indicates the deconcentration of socioeconomic activities from Jakarta to the others centers in the region, most notably Cikarang city as a center of industrial manufacturing activities not only in the region, but in Indonesia.

### Conclusions: Privatization of the Fringes and the Trends of Jabodetabek 'Post-Suburbanization'

In many developed countries western countries, the development of fringes of metropolitan areas is referred to 'Post-suburbia', that is, the process in which urban development phase away from the concentric radial pattern towards polycentric structure. This phenomenon is characterized by population redistribution from the urban centers to the fringes, followed by decentralization of various economic activities, including

manufacturing, commerce, retail, and offices. Nevertheless, the term 'Post-suburbia' may also characterize the new trend urban development in Asia, such as in China's large city-region, although it is not an identical process as in western countries. The suburbanization in China is physically characterized by a mixed of pattern of both traditional and new suburban residential development, but it unlikely reaches the extent of western cities (Feng, Zhou, and Wu, 2008).

In short, the development of Jabodetabek has been due to market forces, especially large-scale residential areas, new towns, and industrial estates. This phenomenon reveals a process of 'post-suburbanization' although it might be in an very early stage, compared to the process in developed world.

The recent Jabodetabek development shows some trends of post-suburban, despite it might be still in early phase of 'Post suburbia' as has taken place in developed world. The development is marked by mix of some increasingly independent towns with various different economic activities , including manufacturing activities in Jababeka City and education and convention in Depok and Bogor, with traditional 'dormitory towns' in the peripheral areas. What has happed in Jabodetbek is only a very early process of post-suburbanization, just as in large Chinese cities, namely Beijing and Shanghai.

The current development of the Jabodetabek region has been greatly facilitated by the government pro-growth economic policy which encourage industrial estate and real estate development in the fringe areas, whereas the private sectors play important role as developers in this development. As Shatkin (2008) indicates that in Southeast Asian large cities, the relocation of industrial and residential activities from the city core to the fringe areas might reflect a shifting from public to private controlled land. Moreover, the dynamics of fringe areas in Jabodetabek, as reflected in the new town and industrial estates development, is greatly affected by the globalization of economy, in which capital can move freely across countries and sectors, including the property sectors.

More specifically, the trends of post-suburbanization in Jabodetabek region are characterized as follows: First, the region experiences an uncontrolled and massive prime agricultural land conversion into urban land use in the fringe areas, most notably into industrial estates and new towns and large-scale residential area, and shopping centers, meanwhile in Jakarta City, the core of Jabodetabek region, many previous residential areas have been converted into super malls, condominium, offices and business spaces.

Second, Jabodetabek experiences a rapid urban transformation, which is reflected in rapid population growth and the great increase of number and percentage of urban localities in the peripheral areas, whereas the Jakarta City - the core of the region - experiences low population growth, which indicates a rapid spillover of the Jakarta City to the fringe areas. Third, Industrial estates are growing rapidly in the outskirts of Jabodetabek resulted from development of domestic and foreign direct investment due to proximity and easy access to Jakarta City, and rising land prices in the city.

Fourth, some old and new towns in Jabodetabek fringe areas have been developed from merely dormitory towns to become independent towns and small cities with a strong economic-base, most notably Jababeka, which now becomes one of the largest manufacturing centers in Indonesia; Bogor City, where center of agricultural research and Bogor Agricultural University is located; Depok City, where the University of Indonesia which is one of the largest higher education institution in Indonesia is housed; and serpong, a center of research and high-tech development (Puspitek) in Indonesia. The development of old and new towns in Jabodetabek has been greatly facilitated by toll-road development built by government and private sectors.

Fifth, As a result of new town and economic activity development in the fringes of Jabodetabek, million people commute between the Jakarta City and the fringe areas using several means of transportation, including public buses, trains, and personal cars, which make the commuting distance increasing. Meanwhile, a number of the Jakarta residents also commute between Jakarta and small towns in the outskirts, because they work there.

There are two main actors in the process of post-suburbanization in Jabodetabek, i.e., the government and private developers. The government policy on sponsored low-cost housing development and facilitating private sectors to develop large-scale housing projects for medium and high income groups, most notably by granting exclusive location permits for private developers have been drivers for development of new towns and large-scale residential areas in the Jabodetabek peripheral areas since the 1980s until present.

Moreover, government policy to encourage the private sectors to invest in industrial estate development in the fringes of Jabodetabek under the pro-growth economic policy has also been an engine to the process of post-suburbanization, by which many towns are developing to become an independent centers of socioeconomic activities, resulted in a transformation of Jabodetabek from a single to multi-core urban region. The development of Jabodetabek is now becoming more market oriented, because of the growing role of market forces in the economy.

In overall, the trends of post-suburbanization in Jabodetabek greatly reflect the recent privatization of the fringes, as shown in the development of new towns and industrial estates, which is built by private developers and greatly facilitated by the government.

#### **References:**

Bontje, M. and J. Burdack (2011), 'Post-Suburbia in Continental Europe, in N.A. Phelps and F. Wu (eds.), **International Perspectives on Suburbanization: A Post-Suburban World**, pp.143-162, Palgrave Macmillan, New York

Browder, J., J. Bohlan, and J. Scarpaci (1995), 'Patterns of Development on the Metropolitan Fringes: Urban Fringe Expansion in Bangkok, Jakarta, and Santiago', **Journal of the American Planning Association**, 61(3), pp.310-327.

Borsdorf, A. (2004). 'On the way to post-suburbia?: changing structures in the outskirts of European cities. In A Borsdorf & P. Zembri (eds.), **European cities structures: Insight on outskirts**, pp.7-30, Blanchard Printing.

Central Board of Statistics (CBS, 2001), 'Population of Indonesia: Results of the 2000 Population Census, Jakarta, Indonesia.

Central Board of Statistics (CBS, 2006), 'Economic Indicators: Monthly Statistical Bulletin', February, Jakarta, Indonesia.

Champion, T. (2001), 'Urbanization, suburbanization, counterurbanization and reurbanization', in R. Paddison (ed), **Handbook of Urban Studies**, pp.143-161, London: Sage Publications.

Cohrane, A. (2011), 'Post-Suburbia in the Context of Urban Containment: The Case of the South East of England', in N.A. Phelps and F. Wu (eds.), **International Perspectives on Suburbanization: A Post-Suburban World**, pp.163-176, Palgrave Macmillan, New York.

Collier International (2005), 'Jakarta Property Market Overview', Jakarta, September.

Collier International (2012), 'Jakarta Property Market', Collier International, Jakarta, September.

Dharmapatni, I. and T. Firman (1995), 'Problems and Challenges of Mega-Urban Regions in Indonesia' in T.G. McGee and I. Robinson (eds.), **The Mega-Urban Regions of Southeast Asia,** The University of British Columbia Press, Vancouver, pp.296-314.

Dick, H.W. and P. Rimmer (1998), 'Beyond the Mind World City: the New urban Geography of Southeast Asia', **Urban Studies**, 35, pp.2303-2321.

Douglass, M. (2000), 'Mega-Urban Regions and World City Formation: Globalization, the Economic Crisis and Urban Policy Issues in Asia Pacific', **Urban Studies**, 37, pp.2315-2336.

- Douglass, M. and G. Jones (2008), 'The Morphology of Mega-Urban Regions Expansion' in Douglass, M. and G. Jones (eds.), **Mega-Urban Regions in Pacific Asia: Urban Dynamics in a Global Area,** pp. 19-37, National University of Singapore Press: Singapore.
- Feng, J., Y. Zhou, and F. Wu (2008), 'New trends of suburbanization in Beijing since 1990: from government-led to market-oriented', **Regional Studies** 42(1), pp.83-99. Firman, T. (1998), 'The Restructuring of Jakarta Metropolitan Area: a "Global City" in Asia, **Cities**, 15(4), pp.229-243.
- Firman, T. (2000), 'Rural to Urban Land Conversion in Indonesia during Boom and Bust Periods, **Land Use Policy**, 17(1), pp.13-20.
- Firman, T. (2004a), 'Major Issues in Indonesia's Urban Land Development' **Land Use Policy** 21, pp. 347-355.
- Firman, T. (2004b), 'New town development in Jakarta Metropolitan Region: a perspective of spatial segregation', **Habitat International** 28, pp.349-368.
- Firman, T. (2009), 'The continuity and change in mega-urbanization in Indonesia: a survey of Jakarta-Bandung Region (JBR) development', **Habitat International** 33, pp. 327-339.
- Firman, T. (2011), 'Post-Suburban Elements in an Asian Extended Metropolitan Region: The Case of Jabodetabek (Jakarta Metropolitan Area)' in N.A. Phelps and F. Wu (eds.), **International Perspectives on Suburbanization: A Post-Suburban World**, pp.195-209, Palgrave Macmillan, New York.
- Firman, T. (2014a), 'Demographic patterns of Indonesia's Urbanization, 2000-2010: Continuity and Change at the Macro Level', unpublished paper, School of Architecture, Planning and Policy Development, Institute of Technology, Bandung, Indonesia.
- Firman, T. (2014b), 'The Dynamics of Jabodeetabek Development: The Challenge of Urban Governance', unpublished paper, School of Architecture, Planning, and Policy Development, Institute of Technology, Bandung, Indonesia.
- Firman, T., B. Kombaitan, and P.Pradono (2008), 'The Dynamics of Indonesia's Urbanization, 1980-2006', **Urban Policy and Research.**
- Fishman, R. (2002), 'Bourgeois Utopias: Vision of Suburbia', in Fainstein, S. and S. Campbell (eds.), **Readings in Urban Theory**, pp. 21-31, 2<sup>nd</sup> edition, Malden: Blackwell Publishing.
- Gardiner, P. and M.O. Gardiner (2006), 'Ecology of population dynamics in Indonesian metropolitan areas', unpublished paper.

Grazela, M. (2013), 'House, Apartment Prices Continue to Rise but Bubble Unlikely', Jakarta Post daily, 22 July.

Hatta, T. (2003), 'Improvement of Railway System in Jakarta Metropolitan Area', **Japan Railway & Transportation** 35, July 2003, pp. 36-44).

Heinrichs, M. Lukas, and H. Nuissi (2011), 'Privatization of the Fringes – a latin American Version of Post-Suburbia? The Case of Santiago de Chile', in in N.A. Phelps and F. Wu (eds.), **International Perspectives on Suburbanization: A Post-Suburban World**, pp. 81-100, Palgrave Macmillan, New York.

Hogan, T. and C. Houston (2001), 'Corporate Cities – Urban gateways or gated communities against the city? The case of Lippo, Jakarta. Research Bulletin 47. Globalization and World Cities Study Group and Network.

Hudalah , D. (2013), 'Industrial Boom in Greater Jakarta and Inclusive Development'. Jakarta Post daily, 9 March.

Hudalah, D. and T. Firman (2013), 'Beyond Property: Industrial Estates and Post-Suburban Transformation in Jakarta Metropolitan Region', Cities, 29, pp. 40-48.

Hudalah, D. and T. Firman (2014, forthcoming), 'Suburban Politics and the Building of Industrial Town in Jakarta Mega-Urban Region', unpublished paper, School of Architecture, Planning, and Policy Development – Institute of Technology, Bandung, Indonesia.

Hudalah, D., D. Viantari, T. Firman, J. Woltjer (2013), 'Industrial Land Development and Manufacturing Deconcentration in Greater Jakarta', **Urban Geography** 34(7), pp. 950-971.

Jones, G. (2002), 'Southeast Asian Urbanization and the Growth of Mega Urban Regions', **Journal of Population Research**, 19, pp.119-136.

Jones, G. (2006), 'Urbanization in Southeast Asia', in T. Wong, B.J. Shaw, and K. Goh, Challenge Sustainability: Urban Development and Change in Southeast Asia, Marshal Cavendish Academic, Singapore, pp.247-267.

Kartajaya, H., and T. Taufik (2009), 'Jababeka Industrial Estate: a Transforming City Developer (in Indonesia), Kompas Daily, 25 April, p. i.

Kraemer, C. (2005), 'Commuter belt turbulence in a dynamic region: the case of the Munich city-region', in Hogart, K. (ed.) **The City's Hinterland: Dynamism and Divergence in Europe's Peri-Urban Territories**. Aldershot: Ashgate, pp. 41-68.

Lang, R. (2003), 'Edgless Cities': Exploring the Elusive Metropolis', Washington, DC, Brooking Institution Press.

Lang, R., and P.K. Knox (2008), 'The new metropolis: Rethinking Megalopolis' **Regional Studies**, pp.1-14.

Leaf, M. (1994), 'The Suburbanization of Jakarta: a Concurence of Economics and Ideology', **Third World Planning Review**, 16, pp.341-356.

Leaf, M. (1996), 'Building for the Road for BMW: Culture, Vision, and Extended Metropolitan Region', **Environment and Planning A,** 28, pp.1617-1635.

Leisch, H.(2000), 'Structures and Functions of New Towns in Jabotabek', Paper Presented to the Workshop of Indonesian Town Revisited, The University of Leiden, 6-8 Desember.

Mamas, S.G.M. and R. Komalasari (2008), 'The Growth of Jakarta Mega Urban Region: an Analysis of Demographic, Educational and Employment Change', Conference on Growth Dynamic of Mega Urban Regions in Asia, Singapore, 24-25 June.

McGee, T. and I. Robinson (1995), **The Mega-Urban Region of Southeast Asia**, the University of British Columbia Press: Vancouver.

Muller, P.O. (1982), Everyday Life in Suburbia: A Review of Changing Social and Economic Forces That Shape daily Rhythms within the Outer City: **American Quarterly** 34(3), pp 262-277

Permatasari, P. and D. Hudalah (2013), 'Patterns of Population Mobility and Job Deconcentration in Metropolitan Area: The Case of Industrial Workers in Cikarang, Bekasi' **Jurnal Teknik Sipil**, pp. 97-106.

Phelps, N.A. (2012), 'The Growth Machine Stops? Urban Politics and the Making and Remaking of an Edge City', **Urban Affairs Review** 48 (5), pp 670-700.

Phelps, N. A., N. Parsons, D. Ballas, and A. Dowling (2006) **Post-suburban Europe: Planning and Politics at the Margins of Europe's Capital Cities**, Basingstoke: palgrave Macmillan.

Phelps, N.A., and A.M. Wood (2010), 'The New Post-Suburban Politics?', **Urban Studies** 48 (12), pp. 2591-2610.

PT, Jababeka, (2010), 'Annual Report: Ready to Capitalize, Ready to Growth', Jakarta, Indonesia, PT Jababeka.

Roitman, S. and N.A. Phelps (2011), 'From Country Club to Edge City' Gated Residential Communities and the Transformation of Pilar, Argentina' in N.A. Phelps and F. Wu (eds.), **International Perspectives on Suburbanization: A Post-Suburban World**, pp.122-140, Palgrave Macmillan, New York.

Shatkin, G. (2008), 'The City and the Bottom Line: Urban Megaprojects and the Privatization of Planning in Southeast Asia', **Environment and Planning** A 40, pp. 383-401.

Soja, E. (2000), '**Postmetropolis**', Oxford: Oxford University Press. Suryadjaja, R. (2012), 'Jakarta Tourism Evolution: Shopping Center as Urban Tourism', Powerpoint Presentation to the 5<sup>th</sup> International Forum on Urbanism, Barcelona, 25-27 February.

Suryadjaja, R. (2012), 'Jakarta's Tourism Evolution: Shopping Center as Urban Tourism', Powerponit Presentation to the 5<sup>th</sup> International Forum on Urbanism, Barcelona, 25-27 February.

Umezaki, s. (n.d.), 'Infrastructure Development in Indonesia and The way Forward', Economic Research Institute for ASEAN and East Asia, Jakarta.

Webster, D. (1995), 'Mega-Urbanization in ASEAN: New Phenomenon or Transitional Phase to the 'Los Angeles World City', in T.G. McGee and I. Robinson (eds.) **The Mega-Urban Regions of Southeast Asia**, pp.27-44. Vancouver: University of British Columbia Press.

Wu, F. (2001), 'China's recent urban development in the process of land and housing marketization and economic globalization' **Habitat International** 25(3), pp.273-289.

Wu, F. and D. Lu (2008), 'The transition of Chinese Cities' **Built Environment** 34 (4), pp. 385-391.

Wu, F. and N.A. Phelps (2008), 'From Suburbia to Post-Suburbia in China? Aspects of the transformation of the Beijing and Shanghai global city regions', **Built Environment** 34 (4), pp.464-481.

Wu, F. and N.A. Phelps (2011a), 'Conclusions: Post-suburban Worlds', in in N.A. Phelps and F. Wu (eds.), **International Perspectives on Suburbanization: A Post-Suburban World**, pp. 245-257, Palgrave Macmillan, New York.

Wu, F. and N.A. Phelps (2011b), '(Post-)-Suburban Development and State Entrepreneurialism in Beijing's Outer Suburbs', **Environment and Planning A** 42(2), pp. 366-383.

Yulisman, L. (2011), 'Jababeka Plans Expansion as Demand Surges', Jakarta Post daily, 24 June.