

Chapter 7

Income Inequality and Socioeconomic Segregation in Jakarta



Deden Rukmana and Dinar Ramadhani

Abstract Socioeconomic segregation has become a common phenomenon, both in the Global North and Global South, and highly relates to income inequality. The merging of these two notions affects the geography of residential areas which are based on the socio-occupational composition. This chapter focuses on the Jakarta Metropolitan Area (JMA). Not only is Jakarta the largest metropolitan area in Southeast Asia, it is also one of the most dynamic. Batavia, the colonial capital of the former Dutch East Indies in the first half of the twentieth century, was a small urban area of approximately 150,000 residents. In the second half of the century, Batavia became Jakarta, a megacity of 31 million people and the capital of independent Indonesia was beset with most of the same urban problems experienced in twenty-first-century Southeast Asia, including poverty, income inequality, and socioeconomic segregation. This study aims to identify the correlation among income inequality, socioeconomic segregation, and other institutional and contextual factors which caused residential segregation in JMA. The analysis consists of two stages. First, we examine income inequality measured by the Gini Index as well as the occupational structure based on the International Standard Classification of Occupations (ISCO). Second, we investigate residential segregation by using the Dissimilarity Index as a result of socioeconomic intermixing in residential areas. The data in this study comes from multiple sources including Indonesia's Central Bureau of Statistics, Indonesia's National Socio-economic Survey (Susenas), Indonesia's Economic Census, Jakarta's Regional Bureau of Statistics, and policies related to the housing system and investment in the JMA. This study also produces maps of socioeconomic segregation patterns from several sources including Jakarta's Geospatial Information Centre, Jakarta's Spatial Plan Information System, and the Indonesian Poverty Map by the SMERU Research Institute.

D. Rukmana (✉)
Alabama A&M University, Huntsville, USA
e-mail: deden.rukmana@aamu.edu

D. Ramadhani
Bandung Institute of Technology, Bandung, Indonesia
e-mail: dnrramadhani@gmail.com

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7.1 Introduction

Socioeconomic segregation has become a common phenomenon, both in the Global North and the Global South, and is strongly related to income inequality. The residential geography of income inequality represents where different income groups live, but also affects an individual's spatial opportunity structures. This study will focus on residential segregation in the metropolitan region of Jakarta. Not only is Jakarta the largest metropolitan area in Southeast Asia, it is also one of the most dynamic. Batavia, which used to be the colonial capital of the Dutch East Indies in the first half of the twentieth century was a small urban area of approximately 150,000 residents. In the second half of the twentieth century, Batavia became Jakarta, a megacity of 31 million people and the capital of independent Indonesia was beset with most of the same urban problems experienced in twenty-first-century Southeast Asia.

The modern city of Jakarta was envisioned by President Soekarno in the early 1960s. He used the 1962 Asian Games to modernize Jakarta by building the national monument of Monas, government and parliament buildings, shopping plazas, the national stadium, and hotels. The New Order regime continued such development while Indonesia enjoyed steady economic growth during the 1980s and 1990s. The boom of the property sector through foreign and domestic investments transformed Jakarta as it gained the status as a global city. Jakarta has been the powerhouse of Indonesia's economy since the colonial era due to its high concentration of skilled labor and entrepreneurs and Jakarta's dominance in the financial and business sector (Firman 2008; Salim and Kombaitan 2009). Jakarta is also the most attractive area for domestic and foreign investment in Indonesia. Jakarta's contribution to Indonesia's GDP increased from 14.9% in 2000 to 16.7% in 2010 and 17.5% in 2016.

Despite robust development and economic growth, Jakarta remains a place of poverty. The contrast between rich and poor is highly pronounced in many parts of the city (Prasetyanti 2015; Salim et al. 2019). Many modern towers in Jakarta are surrounded by *kampung*s, which are unplanned, incrementally developed areas with small plots of land and low-quality building structures and materials and are often associated with slums (Winarso 2010). Most of the inhabitants of *kampung*s are low-income residents.

This chapter explores income inequality and residential segregation between socioeconomic groups in Jakarta, and the institutional and contextual factors that cause residential segregation in the metropolitan region of Jakarta. The analysis consists of two stages. First, we examine income inequality measured by the Gini Index as well as the occupational structure based on the International Standard Classification of Occupations (ISCO). Second, we investigate residential segregation by using the Location Quotients (LQs) and the Dissimilarity Index as a result of socioeconomic intermixing in residential areas.

This chapter uses data from multiple sources including Indonesia's Central Bureau of Statistics, the National Socio-Economic Survey (Susenas), the National Labor Force Survey (Sakernas), and the Jakarta's Regional Bureau of Statistics, as well as policies related to the housing system and investment in the metropolitan region of Jakarta. The study will also create maps representing socioeconomic segregation patterns and the data will be obtained from several sources including Jakarta's Geospatial Information Centre, Jakarta's Spatial Plan Information System, and the Indonesian Poverty Map by the SMERU Research Institute.

7.2 Jakarta: The Core, Inner Peripheries and Outer Peripheries

Jakarta is the capital of Indonesia and the largest city in Southeast Asia. The core of the metropolitan region of Jakarta is called *Daerah Khusus Ibukota (DKI)* or the Special Capital Region of Jakarta. DKI Jakarta has provincial government level status and covers a total area of 664 square kilometers. DKI Jakarta consists of five municipalities (West Jakarta City, East Jakarta City, Central Jakarta City, North Jakarta City, and South Jakarta City) and 42 districts (*kecamatan*). The metropolitan region of Jakarta is popularly known as *Jabodetabek*, taken from the initial letters of the administrative units of Jakarta, Bogor, Depok, Tangerang, and Bekasi. *Jabodetabek* consists of the core, inner peripheries, and outer peripheries. The inner peripheries of the metropolitan region of Jakarta include four municipalities (City of Tangerang, City of South Tangerang, City of Depok, City of Bekasi), whereas the outer peripheries of *Jabodetabek* include the City of Bogor, Tangerang Regency, and Bekasi Regency. The peripheries of *Jabodetabek* are within the jurisdiction of two provinces. The City of Bogor, City of Depok, City of Bekasi, and Bekasi Regency are within the jurisdiction of West Java Province, whereas Tangerang City, City of South Tangerang, and Tangerang Regency are within the jurisdiction of Banten Province as shown in Fig. 7.1. The metropolitan region of Jakarta covers a total area of 6,392 square kilometers. The four municipalities within the inner peripheries of *Jabodetabek* are founded in the 1990s and 2000s. Tangerang City, City of Bekasi, City of Depok, and City of South Tangerang were founded in 1993, 1996, 1999, and 2008, respectively. Depok City seceded from Bogor Regency and Bekasi City was part of Bekasi Regency. Meanwhile, Tangerang City and City of South Tangerang seceded from Tangerang Regency.

The population of Jakarta was about 115,000 in 1900, and increased to 544,823 in 1940. After Independence, Jakarta's population increased by nearly three times to 1.43 million in 1950. It increased to 2.91 million in 1960 and 4.47 million in 1970. Table 7.1 shows the population of the metropolitan region of Jakarta including Jakarta, the inner and outer peripheries of Jakarta, from 1990 to 2010 and 2015. All data come from the population censuses, except the population data of 2015 from the intercensal survey of Indonesia (SUPAS). The population of the metropolitan

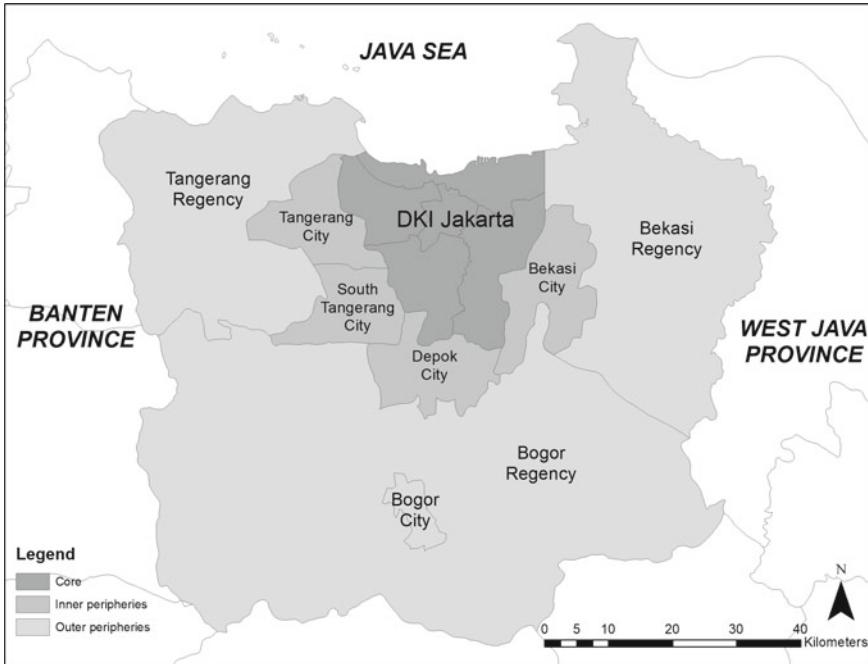


Fig. 7.1 Map of the metropolitan region of Jakarta

region of Jakarta increased from 17.14 million in 1990, to 20.63 million in 2000, to 28.01 million in 2010, and to 31.62 million in 2015. In 2015, the metropolitan region of Jakarta accounted for 12.39% of Indonesia's total population, while this population resides in less than 0.3% of Indonesia's total land area. The proportions of *Jabodetabek's* population to the total Indonesia's population have steadily increased from 9.6% in 1990, to 10.0% in 2000, and to 11.8% in 2010.

This chapter focuses on the core and the inner peripheries of the metropolitan region of Jakarta or *Jabodetabek* including all five municipalities within DKI Jakarta and Tangerang City, South Tangerang City, Depok City, and Bekasi City as the study area. The selection of the core and the inner peripheries of *Jabodetabek* refers to the functional urban areas (FUAs) as defined by the OECD. As shown in Fig. 7.1, Tangerang City, South Tangerang City, Depok City, and Bekasi City are neighboring areas of DKI Jakarta to the West, South, and East, respectively. The population density of these municipalities in 2015 is 11,531 inhabitants per square kilometers. The population density of each municipality in the inner peripheries of *Jabodetabek* is presented in Table 7.1.

The chapter uses a report published in 2014 by the Central Board of Statistics "Statistik Komuter *Jabodetabek*" (The Statistics of Commuters in *Jabodetabek*) to identify the proportion of employed residents of the peripheries of the metropolitan region of Jakarta who work in the urban core or DKI Jakarta. According to this report

Table 7.1 Population and population density of the metropolitan region of Jakarta in 1990–2015

Area	Number of population (in millions)				Area (in sq. km)	Population density in 2015 (per sq. km)
	1990	2000	2010	2015		
<i>Core</i>	8.26	8.39	9.60	10.17	664	15,316
DKI Jakarta	8.26	8.39	9.60	10.17	664	15,316
<i>Inner peripheries</i>	n.a	4.93	7.22	8.36	725	11,531
City of Tangerang	n.a	1.33	1.80	2.04	164	12,439
City of South Tangerang	n.a	0.80	1.29	1.53	151	10,132
City of Depok	n.a	1.14	1.75	2.09	200	10,450
City of Bekasi	n.a	1.66	2.38	2.7	210	12,857
<i>Outer peripheries</i>	8.88	7.31	11.20	13.09	5003	2,616
City of Bogor	0.27	0.75	0.95	1.04	109	9,541
Tangerang Regency	2.77	2.02	2.84	3.36	960	3,500
Bekasi Regency	2.10	1.62	2.63	3.23	1,270	2,543
Bogor Regency	3.74	2.92	4.78	5.46	2,664	2,049
<i>Jabodetabek</i>	17.14	20.63	28.02	31.62	6,392	4,946

Sources Rukmana et al. (2018), Central Board of Statistics (2015)

(Central Board of Statistics 2014), less than 15% of residents living in municipalities within the outer peripheries of *Jabodetabek*, actually work in DKI Jakarta. The City of Bogor, Tangerang Regency, Bekasi Regency, and Bogor Regency have 3.2%, 1.7%, 4.2%, and 2.8% of their residents, respectively, who commute and work in DKI Jakarta.

Meanwhile, three municipalities within inner peripheries of the metropolitan region of Jakarta, including Depok City, South Tangerang City, and Bekasi City, have at least 15% of their residents who commute and work in DKI Jakarta. Depok City, South Tangerang City, and Bekasi City have 15.7%, 15.3%, and 15.5% of their residents, respectively, working in the core of *Jabodetabek*. Tangerang City is the only municipality within the inner peripheries of *Jabodetabek* has less than 15% of the residents working in DKI Jakarta (10.7%). However, Tangerang City is still included in the study area of this chapter because of its high population density (12,439 inhabitants per km²), and its close proximity to the core of *Jabodetabek*.

7.3 Rapid Urbanization and Income Inequality

Jakarta experienced rapid urbanization in the 1980s and 1990s. The population of the core area of *Jabodetabek* or DKI Jakarta increased from 6.50 million in 1980 to 8.26 million in 1990. The population of the peripheries of *Jabodetabek* increased from 5.41 million to 8.88 million in the same period (Rukmana et al. 2018). In the 1990s, Jakarta sustained the rapid growth of population, but the growth occurred mostly in the peripheries. The core area of *Jabodetabek* experienced a slow growth of population of 0.15% per year, but the peripheries of *Jabodetabek* experienced a very high growth of population of 3.78% per year. In addition to a high population growth and rural-to-urban migration, this rapid suburbanization was a result of Indonesia's steady economic growth and Indonesia's growing linkages to the world economy (Herlambang et al. 2019; Indraprahasta and Derudder 2019; Leaf 1994; Winarso et al. 2015). In the early 1980s, agricultural areas and forests in the outskirts of Jakarta were transformed into large-scale subdivisions and new towns (Silver 2008). Jakarta's suburbanization followed the development of a network of freeways from Jakarta to the peripheries including the Jagorawi toll road, the Jakarta-Merak toll road, and the Jakarta-Cikampek toll road (Henderson and Kuncoro 1996).

The urban development in the peripheries of *Jabodetabek* is a planned or regulated process (Leaf 1994). It contrasts the unregulated urban growth in the Jakarta's kampungs. Suburban development in Jakarta is made up of large-scale housing projects and new town developments by private developers. These housing projects and new towns are sold to mostly middle and upper-income residents (Firman 2004; Leaf 1994). Some of the new towns have excellent infrastructure and facilities, including shopping malls, hospitals, and golf courses. Many middle and upper-income residents moved from the core of the urban region to new towns in the peripheries. The poor and lower middle-income residents of the metropolitan region of Jakarta still live in unplanned and unregulated settlements of kampungs located in both the core area and in the peripheries. Most residents in kampungs own their housing units, built with low-quality building materials on small plots of land. Most of the dwellings are constructed gradually by the residents from permanent and non-permanent materials, depending largely on what the residents can afford (Tunas and Peresthu 2010). Many poor kampung residents in the metropolitan region of Jakarta are marginalized urban residents who illegally construct their dwellings on state land such as riverbanks, disposal sites, and railway tracks, or on private unoccupied land (Rukmana 2018; Winayanti and Lang 2004).

Jakarta is a city of dualistic contrasts (Leaf 1994). The new suburban settlements or the 'modern' city are associated with wealth, formality, and globalized standards of urban development. Meanwhile, the kampung city is associated with poverty, informality, and traditional standards of living. The existence of new suburban communities and kampungs in Jakarta reflects the socioeconomic dualism which pervades Indonesia's urban society (Leaf 1994; Winarso 2010). The dualism of Jakarta's society also reflects the widening socioeconomic disparities and residential segregation based on income level and lifestyle. Firman (2004) argues that the

suburban development of Jakarta creates enclave settlements which segregate middle and upper-income residents from low-income residents.

The 1992 Housing and Settlement Law introduced a 1:3:6 provision that requires developers to build three middle-income and six low-income units for every high-income housing unit. This socially integrated housing policy had two main objectives including producing more affordable houses and encouraging more socially integrated housing development through mixed-income residential areas (Mungkasa 2013; Silver 2008; Yuniati 2013). In most large-scale housing projects in the metropolitan region of Jakarta, the developers negotiated the housing compositions with local governments and even replaced low-cost housing units with public facilities and infrastructure development (Tunas and Darmoyono 2014). The developers circumvented the 1:3:6 regulation by building the required low-income housing elsewhere, or not at all (Herlambang et al. 2019).

Suburban development in the region of Jakarta was disrupted by the economic crisis which hit many Asian countries in 1997. This crisis resulted in a rapid decrease in domestic and foreign investment in Jakarta. The annual economic growth in Jakarta fell to minus 7% (Firman 1999). More than 450 developers who built new towns and large-scale housing projects in the metropolitan region of Jakarta went out of business. The property industry consolidated through mergers (Herlambang et al. 2019). By 2002, about two-fifths of the property projects in the metropolitan region of Jakarta suddenly came to a stop (Firman 2004; Indraprahasta and Derudder 2019).

From the late 1960s to the mid-1990s, Indonesia's income per capita increased by 5% per year and the overall Gini coefficient was about 0.33. Indonesia's Gini coefficient is lower than those of the Philippines and Thailand (0.45) and Malaysia (0.50) (Timmer 2007). The Asian economic crisis caused a sharp reduction in Indonesia's GDP of over 13% and poverty rates doubled in 1998 (Skoufias and Suryahadi 2000). The Asian economic crisis also sharply reduced inequality in Indonesia, particularly in the metropolitan region of Jakarta.

Indonesia's economy recovered from the Asian economic crisis as early as 2005 (Herlambang et al. 2019). The rate of Indonesia's economic growth was 5.7% per year between 2004 and 2008 (Rukmana et al. 2018), and the influx of foreign direct investment increased again in the metropolitan region of Jakarta (Indraprahasta and Derudder 2019). The recovery of Indonesia's economic growth resulted in the construction of high-rise luxury apartments (Rukmana et al. 2018) in many districts of the core of the metropolitan region of Jakarta such as Nerina Tower in Cempaka Putih District, Paradise Mansion Apartment in Kalideres District, and Elpis Residence in Sawah Besar District (Colliers International 2017). Many investors of these apartments came from China, Singapore, Japan (Colliers International 2018).

Income inequality measures at the neighborhood level, such as sub-districts (*kelurahan*), with a population of approximately 20,000 people are not available in Indonesia (Roitman and Recio 2019). Unlike most census data sets in countries in the Global North, Indonesia's censuses do not provide information on household income. This chapter uses the Gini Index of household expenditure as a proxy measure of income inequality. The Gini Index of household expenditure in Indonesia was calculated and published by the SMERU Research Institute. The data source for the Gini

Index is the National Socioeconomic Survey (Susenas) and Indonesia's Economic Census.

The Gini Index of household expenditure in Indonesia by districts is available for 2010 and 2015. The average population of each district is about 100,000. The SMERU Research Institute published the Gini Index in both years and made them available on their website. The SMERU Research Institute stated in 2019 that the Gini Index was developed from a series of variables from individual, household, and sub-district levels, and that the standard error of the 2010 Gini Index derived from the National Socioeconomic Survey (Susenas) of 2010 is large. This chapter uses only the 2015 Gini Index due to the large standard error of the 2010 Gini Index. We retrieved all Gini Indices for all 85 districts of the study area from the SMERU Research Institute website. The 85 districts of the study area include 42 districts in DKI Jakarta, 13 districts in Tangerang City, 7 districts in South Tangerang City, 11 districts in Depok City, and 12 districts Bekasi City.

The 2015 Gini Index in the study area ranges from 0.25 in Bantargebang District of Bekasi City to 0.40 in Kelapa Gading District of DKI Jakarta's North Jakarta City. The 2015 Gini Index average in the area study is 0.31. This Gini Index is slightly lower than Indonesia's Gini Index (0.40) in the same year. The Gini Index of four municipalities in the inner peripheries of the metropolitan region of Jakarta including Depok City (0.30), South Tangerang City (0.31), Tangerang City (0.31), and Bekasi City (0.30) are slightly lower than those of the municipalities in DKI Jakarta (0.33) (Fig. 7.2).

The distribution of the 2015 Gini Index in the study area is presented in Fig. 7.3. Five districts in the study area with the highest Gini Index are located in Central Jakarta City (Cempaka Putih and Menteng Districts), North Jakarta City (Kelapa Gading District), East Jakarta City (Duren Sawit District), and South Jakarta City (Kebayoran Baru District). A high Gini Index indicates high levels of economic inequality in those districts. In districts with high-economic inequality, many luxury apartment buildings, shopping malls, and offices are surrounded by kampungs (Budi 2013; Simatupang et al. 2015; Yuniarto 2014). Districts with high-economic inequality also have gated communities which represent socioeconomic enclaves for the rich (Hun 2002). People who can afford to live in gated communities in Jakarta do so because of security reasons (Leisch 2002). In the inner peripheries of the metropolitan region of Jakarta, there are a number of districts with a moderate-to-high level of income inequality. This income inequality increased in those districts because of the existence of gated communities including in South Tangerang City (Leisch 2002; Winarso et al. 2015; Yandri 2015), Tangerang City (Leisch 2002; Surya Wardhani 2016), and Bekasi City (Diningrat 2015).

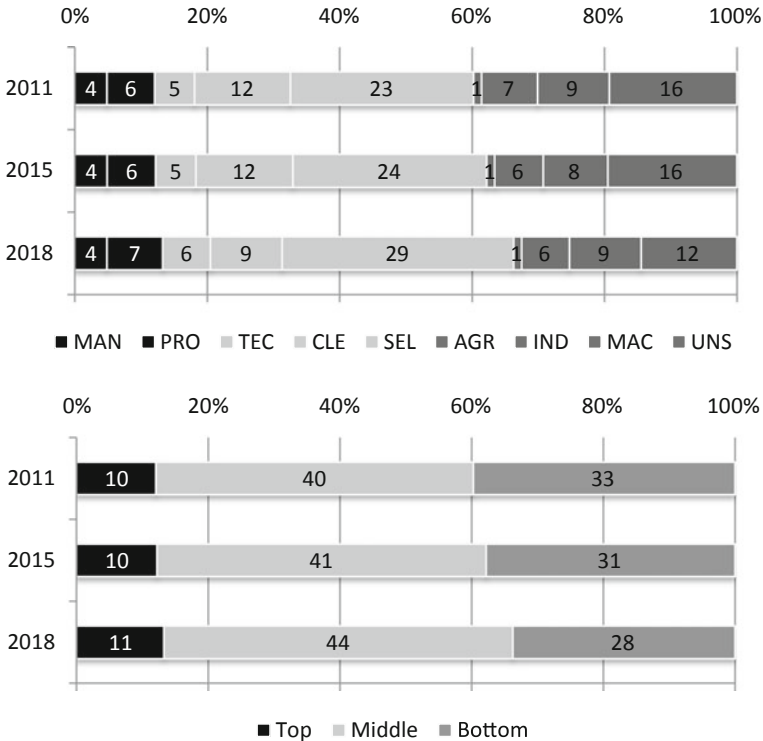


Fig. 7.2 Distribution of occupational groups and change over time in the metropolitan region of Jakarta

7.4 Changes in Occupational Structures

The economy of the metropolitan region of Jakarta is composed of very diverse activities and related occupations. This section discusses changes in the occupation structures in the metropolitan region of Jakarta. We use data from the annual National Labor Force Survey (Sakernas) in three years (2011, 2015, and 2018). We use this data to analyze the patterns of socioeconomic segregation over time. The classifications of the economically active population by occupation in the Sakernas are in line with those of the International Standard Classification on Occupations (ISCO). The breakdown of occupational structures of the ISCO also relates to earlier studies on socioeconomic segregation (Marcinićzak et al. 2015; Musterd et al. 2017).

The occupation classifications of the Sakernas has nine ISCO categories including managers (MAN), professional (PRO), technicians (TEC), clerks (CLE), sellers (SEL), agriculture workers (ARG), industrial workers (IND), machine operators (MAC), and unskilled workers (UNS). The nine categories were grouped into three broader occupational groups. The managers and professionals fall into the top occupational group (TOG). The technicians, clerks, and sellers are categorized in the

middle occupational group (MOG), while agricultural workers, industrial workers, machine operators, and unskilled workers form the bottom occupational group (BOG).

Figure 7.2 shows the distribution of occupational groups in 2011, 2015, and 2018 in the metropolitan region of Jakarta. It is clear that the population in Jakarta Metropolitan Area (JMA) is dominated by the MOG, and the percentage of this middle group has grown between 2011 and 2018. Sellers are the largest occupational group, followed by unskilled workers, clerks, machine operators, industrial workers, professionals, technicians, manager, and agricultural workers. The small number of agricultural workers in the Jakarta region is due to the urban character of the region, and the disappearance of farmland and rice fields in the JMA. The largest occupational category in the BOG consists of unskilled workers. As can be seen in Fig. 7.2, both the TOG and MOG have been increasing from 2011 to 2018. In the meantime, the BOG have been decreasing during the same time period. The percentage of the TOG is far below the BOG and MOG. The number of workers in the TOG, with high-quality human resources, is still low for a growing megacity like the JMA. The size of this top group has hardly increased between 2011 and 2018.

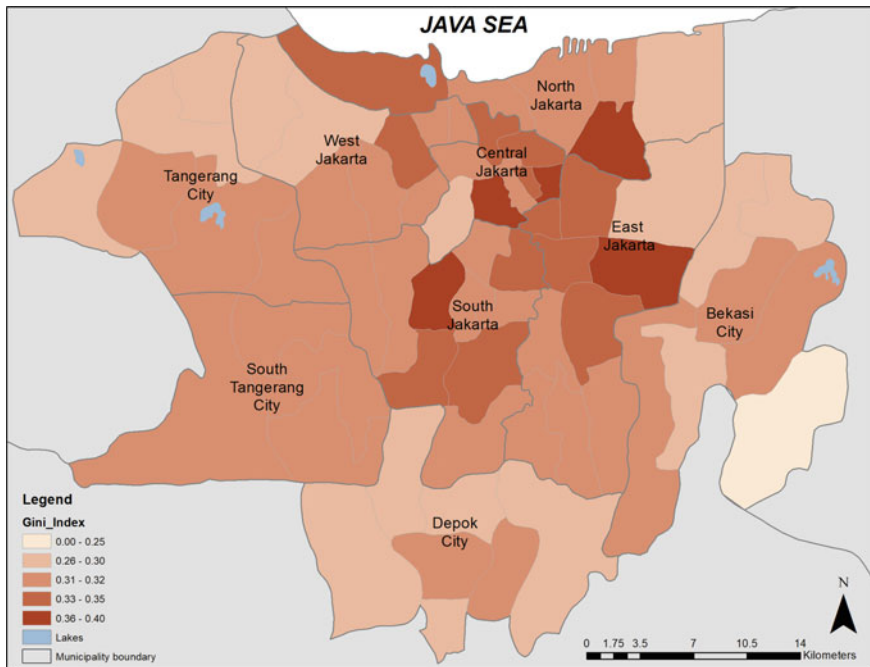


Fig. 7.3 The 2015 Gini index in the metropolitan region of Jakarta

7.5 Levels of Residential Segregation Between Socioeconomic Groups

The Dissimilarity Index (DI) in Table 7.2 shows the level of segregation between the different occupational categories. This chapter uses data on the occupation structure from the annual National Labor Force Survey (Sakernas) to calculate dissimilarity index in the metropolitan region of Jakarta. Indonesia's censuses or household surveys do not provide socioeconomic information of households at the neighborhood level. Data on the occupation structure derived from the annual National Labor Force Survey (Sakernas) can only be used at the level of municipalities or higher. We have a total of nine municipalities including five municipalities within DKI Jakarta (West Jakarta City, East Jakarta City, Central Jakarta City, North Jakarta City, and South Jakarta City) and four municipalities in the inner peripheries of the metropolitan region of Jakarta (City of Tangerang, City of South Tangerang, City of Depok, City of Bekasi). The population size of these municipalities in 2015 ranges from 0.91 million in Central Jakarta City to 2.84 million in East Jakarta City. The Sakernas has very limited samples at the district or sub-district levels; therefore, we cannot use a smaller geographic unit for calculating a dissimilarity index.

In Table 7.2, the DI in 2011 is shown below the diagonal gray cells, while the DI in 2018 is shown above the diagonal gray cells. The most prominent DI in 2011 is segregation between agricultural workers and all other categories in the TOG and MOG. But it has to be noted that the group of agricultural workers is very small. The lowest DI is denoted by technicians and professionals (6.3), followed by unskilled workers and clerks (9.7). In 2018, the highest DI is found for sellers and agricultural workers (33.9), and the lowest DI for clerks and other categories with values below 11, except that of the agricultural workers (33.9). The lowest DI in 2018 is found for technicians and professionals (5.6).

Table 7.2 Indices of dissimilarity (multiplied by 100) in 2011 and 2018 in the metropolitan region of Jakarta

Jakarta										TOP	MID	BOT
	MAN	PRO	TEC	CLE	SEL	AGR	IND	MAC	UNS			
MAN		11	11	6	8	32	13	10	7			
PRO	11		6	10	14	29	15	13	14			
TEC	12	6		10	15	32	15	13	15			
CLE	18	11	11		7	31	9	9	7			
SEL	24	20	16	10		34	12	13	6			
AGR	47	44	46	45	41		24	29	32			
IND	24	21	25	19	18	29		10	12			
MAC	15	14	17	17	21	38	12		13			
UNS	16	12	14	10	12	38	12	12				
TOP											8	9
MID										15		6
BOT										13	9	

For the broader occupational group, it can be seen that the DIs for all combinations of groups are decreasing. It means that the spatial enclaves of these socio-occupational groups are getting smaller. In other words, the segregation level among occupational groups is decreasing and the municipalities in Jakarta are more mixed in 2018 than in 2011. It is especially apparent in the spatial proximity between the kampongs and neighboring luxury apartment buildings in the inner city, such as in Mega Kuningan (Budi 2013), Menteng, and Rasuna (Simatupang et al. 2015), and Kemayoran (Yunianto 2014).

The biggest decline is related to the DI between the TOG and MOG category, which halves from 15 in 2011 to 7.7 in 2018. It is then followed by the 3.9 points decrease of the TOP and BOG from 13 in 2011 to 9.1 in 2018. The smallest reduction is found for the DI of the MOG and the BOG category from 8.6 in 2011 to 5.9 in 2018. It can also be seen that the order of the highest to smallest DI is shifting. The order in 2011 is TOG-MOG (15), TOG-BOG (13), and MOG-BOG (8.6), while the order in 2018 is TOG-BOG (9.1), TOG-MOG (7.7), and MOG-BOG (5.9). From the order of the DI, it can be concluded that TOG is still the most segregated group when compared with the others, though the gap is getting smaller.

7.6 Geography of Residential Segregation Between Socioeconomic Groups

This section analyzes the geography of residential segregation between the top and the bottom socioeconomic groups. We use location quotient maps for the top and bottom occupation groups at the level of municipalities as a proxy measure of changes in residential segregation between socioeconomic groups. Location quotients of the occupational structure by municipalities in the study area were calculated from the 2011 and 2018 Sakernas surveys. The location quotients of the TOG in 2011 range from 0.58 in North Jakarta City to 1.72 in Central Jakarta City. Central Jakarta City remained as the municipality with the highest location quotient (1.45) and East Jakarta City became the municipality with the lowest location quotient (0.88) in 2018. The location quotients for the BOG in 2011 ranged from 0.72 (East Jakarta City) to 1.42 (Tangerang City). In 2018, East Jakarta City remained as the municipality with the lowest location quotient (0.71) and Central Jakarta City was the municipality with the highest location quotient for the BOG (1.75).

Figure 7.4 shows the location quotient maps for the top and bottom occupational groups in 2011 and 2018. These maps cannot show changes in residential segregation, but they do give an indication of changes in the geographical concentrations of the top and bottom occupational groups at the municipal level. The TOG remains highly concentrated in Central Jakarta City and South Tangerang City. Some luxury apartments such as Keraton and Le Parc in Central Jakarta City reached to US\$10,700 and US\$5,350 per m², respectively (Alexander 2019). This price is far higher than the rest of the city. In contrast, the lowest land price in the inner city of Jakarta

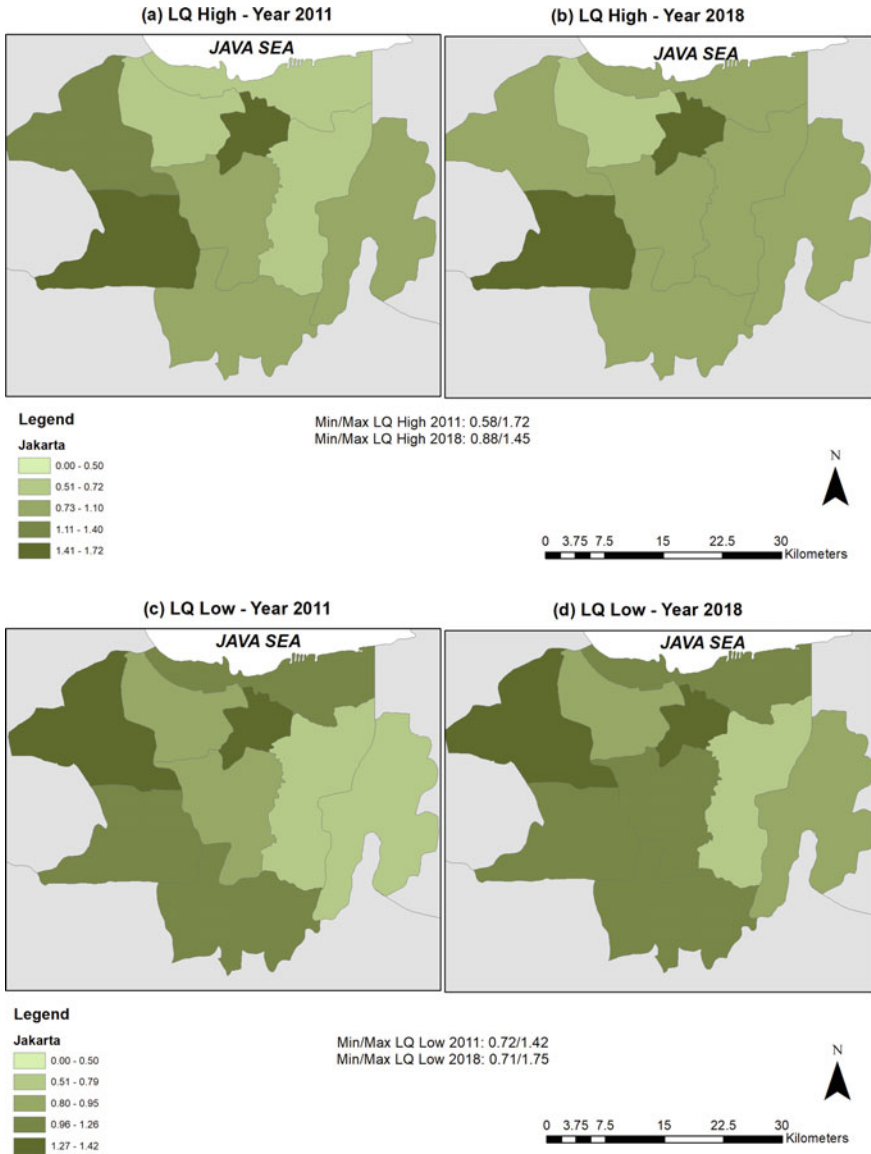


Fig. 7.4 Location quotients for the top and bottom occupational groups in the metropolitan region of Jakarta

can be found at Kamal Muara, North Jakarta, which is worth merely US\$34 per m² (Elmanisa et al. 2016). Meanwhile, South Tangerang City has a couple of large luxury residential areas including Bintaro Jaya and BSD City.

Central Jakarta City became a concentration area for both the TOG and BOG. According to an interview with staff from the Housing Department of Jakarta Province, such a concentration is the result of the fact that luxury houses and apartments are increasingly found in Central Jakarta City. It is also the location of many shopping malls, the central business district, government buildings, embassies, and official government houses which makes the land and housing prices expensive. The high concentration of the TOG in South Tangerang City is caused by the development of a new central business district, and middle-upper class housing, especially in Bumi Serpong Damai (BSD). In addition, both Central Jakarta City and South Tangerang City have good accessibility and are connected with highways and train routes.

In reference to Fig. 7.4a, b, many households of the top occupational group moved from Tangerang City to the core of the metropolitan region of Jakarta. It relates to the fact that a large industrial area is located in Tangerang. The laborers which fall into the BOG mostly reside in Tangerang. Meanwhile, the BOG remains highly concentrated in Central Jakarta City and Tangerang City. Behind the high-rise buildings in Central Jakarta City, there can be found many informal housing areas in the form of urban kampongs. Based on an interview with a staff member from the Housing Department of Jakarta Province, urban kampongs in Jakarta are the residential locations for the BOG or informal sector workers such as street vendors, cleaning workers, and security guards.

The changes of location quotients indicate that four municipalities have an increased concentration of the TOG in 2018 including West Jakarta City, East Jakarta City, North Jakarta City, and Depok City. It is marked by several concentrations of luxury apartments found in those municipalities, such as Veranda Residence, Wang Residence, St Moritz (West Jakarta City), The H Residence, Patria Park (East Jakarta City), Regatta London Tower, The Summit, Sherwood Residence (North Jakarta City), De Vonte Apartments, Grand Depok City, Permata Green Sentosa, and Victoria Hills Residence (Depok City).

In the meantime, three municipalities experienced an increased concentration of the BOG in 2018 including Central Jakarta City, South Jakarta City, and Bekasi City. Tangerang City is the only municipality in the study area experiencing a decreased concentration of both top and bottom occupational groups from 2011 to 2018. A further analysis shows that Tangerang City has an increased concentration of the middle occupational group during the same period.

7.7 Conclusion

This chapter describes changes in inequality and socioeconomic segregation in the core and the inner peripheries of the Jakarta metropolitan region. Under the transformative government of Indonesia, Jakarta has experienced various kinds of development, the most important of which is openness to private and foreign investment. The suburban area of Jakarta has grown rapidly and transformed rural areas and agricultural land into a vast area of housing which were targeted mostly to the middle-upper class community. This has led to rather homogenous socioeconomic areas in the outskirts of the metropolitan area. As the result, the Gini Indices in the inner periphery of Jakarta are lower than those in the municipalities of DKI Jakarta. It means that the household expenditure inequality in the inner periphery is narrower than that in the municipalities of DKI Jakarta. The high Gini Indices in the municipalities of DKI Jakarta are caused by the existence of urban kampongs among the high-rise building with luxury apartments, offices, and shopping center. Meanwhile, segregation in the periphery of Jakarta occurred because of gated communities developed by the private sector.

In 2030, vertical housing for the low, middle, and upper class will dominate the city. A lecturer from the University of Tarumanegara, Suryono Herlambang, argued that the existence of vertical housing will worsen residential segregation (Mariani 2019). Vertical residential buildings tend to be more socioeconomically segregated. The luxury apartments and penthouse for the upper class are built separately from low-cost apartments for the middle-low class will (Mariani 2019). This chapter used data by municipalities for calculating the segregation indices. If data would have been available at a smaller geographical unit, the levels of residential segregation would be possibly higher.

The occupational profile breakdown shows that the Jakarta Metropolitan Area residents are dominated by the MOG, and then followed by the BOG and TOG. The largest groups are the sellers (MOG) and unskilled workers (BOG), and the size of the TOG group is relatively small. As the LQ maps showed, it is obvious that the high proportion of LOG occupied more municipalities than the TOG. However, housing provision by the private sector does not meet the demand for the middle- and low-class population of society who reside outside gated communities and create segregated residential areas.

The socioeconomic segregation in JMA is fostered by the government's policy on land use. The privatization of land in the core and the inner peripheries of Jakarta by private developers affected the housing market and the affordability of the community. Addressing segregation in this context should not only rely on controlling the housing market, but also on developing community capacity and creating more employment opportunities in JMA.

In August 2019, Indonesia's President Joko Widodo announced Indonesia's capital relocation plan. The government of Indonesia selected two regencies (North Penajam Paser and Kutai Kartanegara) in East Kalimantan as the new site for Indonesia's capital. The governmental function and buildings will be moved to the

new site and will be ready for occupation in 2024. However, Jakarta will remain the country's economic hub. It means that the housing market in Jakarta will remain tense. Furthermore, the 2030 Jakarta Spatial Plan also mentions the phrase 'estate management' which means land management in Jakarta will be bestowed to private developers. The relocation of Indonesia's capital out of Jakarta will not ease the myriad of problems Jakarta will face, especially as it is projected that 1.5 million people will migrate from Jakarta (Walton 2019). Jakarta's problems will remain in place unless serious attention is paid to them including socioeconomic segregation and income inequality.

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