

Understanding Metropolitan Poverty: The Profile of Poverty in Jabodetabek Area



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ABSTRACT

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Asep Suryahadi and Cecilia Marlina

Jabodetabek refers to the metropolitan area which consists of Jakarta, the capital of Indonesia, and its surrounding areas Bodetabek (Bogor, Depok, Tangerang, South Tangerang, and Bekasi). The rapid economic development in Jabodetabek has caused an influx of inhabitants to the region, subsequently leading to the highest urban concentration in Indonesia. Since many of the migrants were poor, despite the rapid development, the poverty rate in this area has been relatively stagnant at around six percent since early 2000s. There is a possibility that the poverty reduction programs are not effective in Jabodetabek because these programs were developed based on the national poverty profile. Therefore, it is important to assess whether the poverty profile in Jabodetabek is different from the national poverty profile. Hence, this study analyzes the correlates of poverty in Jabodetabek and Indonesia using data from the National Socio-Economic Survey (SUSENAS).

The results indeed indicate that poverty profile in Jabodetabek area is significantly different from the national level, especially in regard to education level, access to drinking water, employment sector, and status of employment. In terms of education attainment, it is found out that the completion of only up to elementary school is not significant in reducing the probability of being poor in Jabodetabek area, but it is still significant at the national level. Basic necessities like clean water shows no correlation with poverty in Jabodetabek, while it remains significant at the national level. Type of employment sector is also highly correlated with poverty. Industrial sector with its capabilities to absorb a great number of labors appears to have significant contribution in minimizing the probability to become poor in Jabodetabek. In regard to the status of employment, people who work for the family as an unpaid worker have lower probability to fall into poverty in Jabodetabek, while at the national level it works in opposite direction. These findings imply that socio-economic policy in Jabodetabek should be tailored at aiming for a higher education attainment for its people and at the same time fostering the productivity and growth of the industrial sector.

Keywords: Poverty, metropolitan, Jabodetabek, Indonesia

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I. INTRODUCTION

The growth of cities and the surrounded areas are linked closely to changes in the economy, especially since it creates opportunity for more productive jobs which can contribute to attract foreign trade and investment (World Bank, 2009). Through economies of scale and agglomeration process, a spiral economic growth is expected to occurred (Christiaensen & Yasuyuki, 2014). It works well provided the work generated in urban area is also taking into account the marginalized people, in particular maximizing employment generation, especially for the unskilled poor.

With a careful planning, urbanization can become a key tool for accelerating development and the engine of growth through the expected higher levels of productivity (Becker, 2008; Duranton and Puga, 2004). In addition, a well-managed metropolitan area could encourage the growth of secondary city through a spill-over effect. However, policy makers need to be concerned about the poverty situation in the metropolitan areas. Empirical studies have found that mega city agglomeration resulted not only in faster income growth, but also a higher income inequality (Christiaensen & Yasuyuki, 2014).

In addition, as more urban population earns higher incomes, they demand a greater need for living space and entertainment (Almeida et al. 2015). Therefore, the growth at the core city needs support from the region nearby. Those supports include, but not limited to, providing a cheaper housing option or opening up new employment opportunities.

To prevent the negative effect of the agglomeration process to occur, a better understanding on poverty condition in metropolitan area is necessary. Developing countries often institute programs to tackle poverty problems uniformly across country, including in their metropolitan areas. These programs are usually developed based on the national poverty profile. If the poverty profile in metropolitan areas are significantly different from the national profile, these programs may not be suitable and effective in addressing the poverty problems in metropolitan areas.

This paper aims to contribute to a better understanding of poverty condition in metropolitan areas, focusing on the Greater Jakarta metropolitan area, commonly known as Jabodetabek area. Jabodetabek refers to the inner part of the metropolitan region, Jakarta, the capital of Indonesia, and the outer part of the region, Bodetabek, which consists of five municipalities (Bogor, Depok, Tangerang, South Tangerang, and Bekasi) and also three districts (Bogor, Tangerang, and Bekasi) (Jones et al., 2016). Hence, Jabodetabek covers areas in three provinces: Jakarta, West Java, and Banten. The total area of Jabodetabek is around 7,000 km² (Rustiandi et al., 2015). Figure 1 shows the map of Jabodetabek metropolitan area.



Figure 1. Map of Jabodetabek Metropolitan Area

Source: Rustiandi et al., 2015

The remaining of the paper is organized as follows. Section two reviews the literature on poverty in metropolitan areas. Section three discusses the trend and distribution of poverty in Jabodetabek. Section four describes the method and data used in the analysis. Section five presents and discusses the results of the analysis. Finally, section six concludes and offers some policy implications.

II. POVERTY IN METROPOLITAN AREAS IN SOUTHEAST ASIA

Poverty in metropolitan areas in developing countries is expected to continue become a challenge as the total number of poor people who are attracted to find more opportunities in cities is expected to grow. The growing number of migrants, when not accommodated by land and infrastructure, leads to increasing poverty. Metropolitan poverty has a different set of characteristics and challenges which are different from rural poverty, including health and sanitation problems in slums, unemployment, and violent crimes (Ferré, Ferreira, & Lanjouw, 2012). It affect the costs of providing other basic services such as the improvement of road, water, and sanitation (Joassart-Marcelli, Musso, & Wolch, 2005).

For example, metropolitan city of Manila, which consisted of 17 cities and municipalities, faces a constant problem of congestion that costs USD 70 million a day. Around 11 percent of Manila’s population are living in slum areas due to lack of affordable housing. The economic growth, which is led by manufacturing sector in the city, has been stagnant in recent years, adding pressure for people with a low skill job (World Bank, 2017).

Bangkok also has an issue with segregation between the middle class and the poor. Little urban planning and regulation of the city, coupled with the influx of rural people to the cities, has made the problem worse. There is an invisible boundary in different parts of Bangkok which makes inequalities

become more apparent. Outer Bangkok is well known for its production sector, while commercial and financial sector is more concentrated in the inner Bangkok. Rattanakosin (also known as the early settlement of Bangkok) located in the inner area is considered the most congested area of Bangkok where many slums live in. Furthermore, many slums also found at the Central Business District (CBD) area of Bangkok where many offices and government operate (World Bank, 2017).

Like other metropolitan areas in developing countries, most of slum dwellers in Bangkok have primary level of education with low skill. Hence, most of them work as street vendors or labor in the informal sector. They have to live near their employment location to save them the traveling cost. Bangkok is expected to have a population surpassing 10 million people by 2030. As a consequence, the problem of slums in the metropolitan area will become more pressing (Choiejit and Teungfung, 2005).

A study found that one third of Hanoi residents living in a very crowded condition in slums (Minnery et al., 2013). The Vietnamese government has a strict regulation on the urban property ownership. Despite the high migration of people from rural to the city, the government only provides right to own the property to people with urban residency status. This exacerbates the situation because poor people are settling in illegal premises in the city (World Bank, 2017).

People in rural Vietnam perceived rural-urban migration as a support strategy in facing an agricultural and economic shock such as flood or failing crop in their village (Nguyen, Raabe, and Grote, 2013). While for the more better off household, migration is deemed important in order to obtain a higher education which are not easily accessible in their village.

Case studies conducted in the three South East Asian metropolitan areas found that centralised planning aimed to tackle the slum problem in the city area is not successful because there is not enough support from the local community. Furthermore, overly complex institutional and administrative arrangement hinders the effort to improve the slum condition (Minnery et al., 2013).

III. POVERTY IN JABODETABEK

The term 'urban sprawl' is commonly used to refer to a peripheral area which support the growth of the city (Struyk et al.1990; Aksoro 1994 as cited in Henderson & Kuncoro, 1996). In this context, Bodetabek is one example of the 'urban sprawl' phenomena because this area acts as the support system of the main capital, Jakarta. It provides people a more affordable space compared to Jakarta for a living area or even a commercial use. Hence, it is common in Jabodetabek to find land for residential and commercial use side by side and also the low or middle income housing occupied in a small area of the high income residences (Henderson & Kuncoro, 1996).

The population of Jakarta rose 17%, from 8.2 million to 9.6 million between the last two population censuses in 1990 and 2010. Meanwhile, the population of Bodetabek doubled in the same period, from 8.9 million to 18.3 million. Thus, the population of Jabodetabek as a whole increased by 63% from 17.1 million to 27.9 million (Jones et al., 2016), leading Jabodetabek to become one of the largest metropolitan areas in the world.

Jabodetabek is an area with the lowest but stagnant poverty rate in Indonesia. Figure 2 shows the trends in poverty rates in Jabodetabek metropolitan area, the whole urban areas, and Indonesia as a whole. During the period, the Indonesian poverty rate has significantly declined from 16.7 percent

in 2004 to 11 percent in 2014. Similarly, the poverty rate in urban areas has declined from 12.1 percent to 8.3 percent during the same period. Meanwhile, in Jabodetabek the poverty rate only very slightly declined from 6 percent in 2004 to 5.3 percent in 2014. In particular, during the last three years from 2012 to 2014, the poverty rate in Jabodetabek did not change at all. This shows that despite high economic growth in Jabodetabek area, poverty remains stagnant in this area.

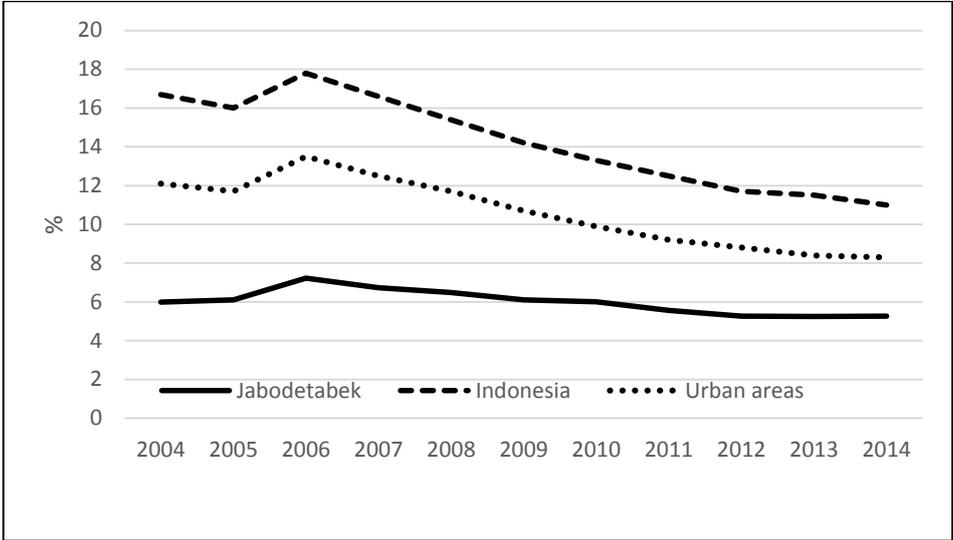


Figure 2. Poverty Rate in Jabodetabek, Urban Areas, and Indonesia, 2004-2014

Source: BPS

The poverty rates in the cities and districts within Jabodetabek area are shown in Table 1. The table shows that, in general, the poverty rates in the areas within Jakarta are lower than those in the areas with Bodetabek. However, the area with the lowest poverty rate is found is South Tangerang City, which is located in Bodetabek, with a 1.7 percent poverty rate. On the other hand, the area with the highest poverty rate is Seribu Islands District, which is located in Jakarta, with a poverty rate of 11.6 percent.

Table 1. The poverty rates in the cities and districts in Jabodetabek, 2014

City/District	Poverty rate (%)
Jakarta:	
- South Jakarta City	3.72
- East Jakarta City	3.43
- Central Jakarta City	4.12
- West Jakarta City	3.72
- North Jakarta City	6.00
- Seribu Islands District	11.56
West Java Province:	
- Bogor City	7.74
- Bekasi City	5.25
- Depok City	2.32
- Bogor District	8.91
- Bekasi District	4.97
Banten Province:	
- Tangerang City	4.91
- South Tangerang City	1.68
- Tangerang District	5.26

Source: BPS, 2015

Going down further to village level, Figure 3 shows the poverty map of Jabodetabek. In this map, darker areas indicate higher poverty rates. The map confirms that Bodetabek areas in general have higher poverty rates than Jakarta areas. However, there are poverty pockets found in the northern parts of West Jakarta and North Jakarta areas.

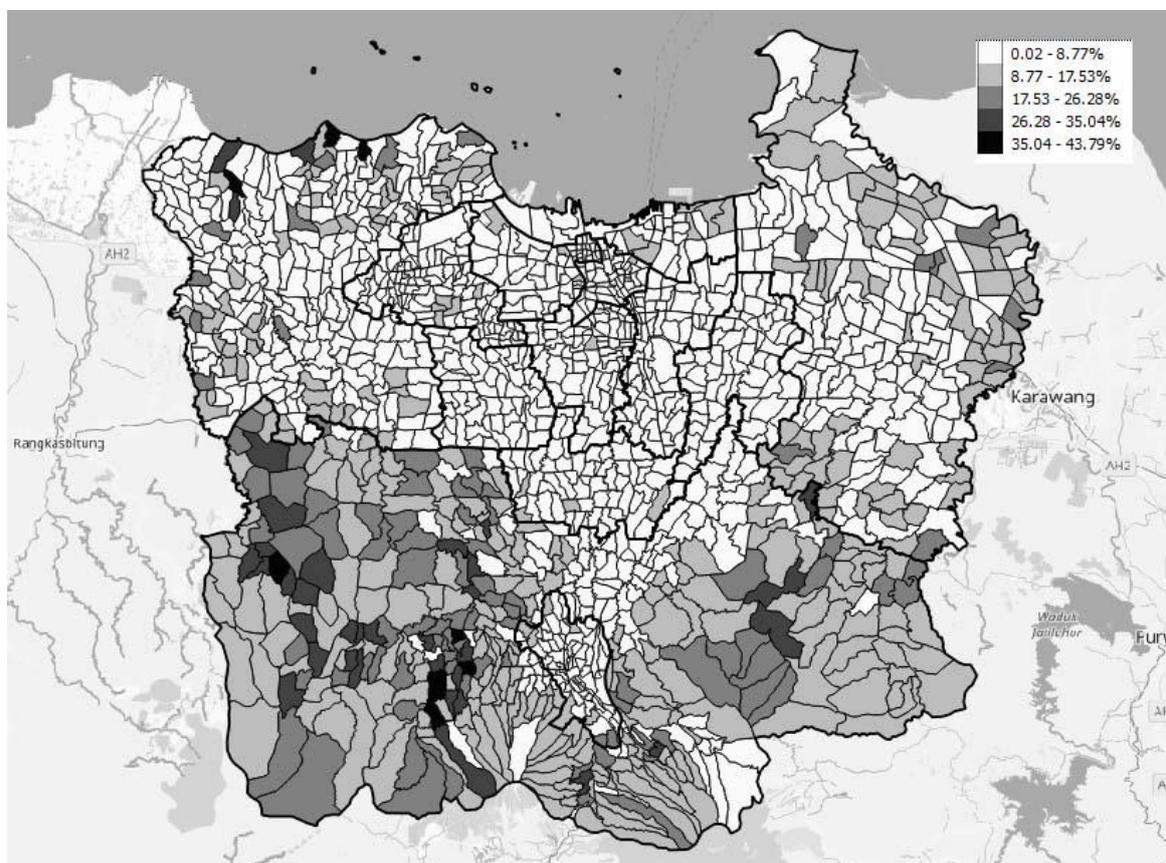


Figure 3. Poverty Map of Jabodetabek at Village Level, 2015

Source: Poverty & Livelihood Map Indonesia (povertymap.smeru.or.id)

IV. POVERTY PROFILE: METHOD AND DATA

4.1 The Model

The analysis of poverty profile in this paper uses a binomial logistic (logit) regression model of household poverty status on its correlates. The correlates selected to be included in the model are based on findings from previous studies on correlates or determinants of poverty.

An assessment using Malawi Integrated Household Survey in 1998 found that increasing educational attainment, especially for woman, and reallocating of labor from agricultural sector into trade and services sectors are proved to be significant in reducing poverty rate (Mukherjee & Benson, 2003). Meanwhile, a broader assessment on the metropolitan cities across Asia cites land of housing, access to basic urban services like water, sanitation, and solid waste management as the key features on assessing the inclusiveness of cities (Dahiya, 2012).

One study focusing on urban poor in Malaysia looks at the link between housing condition (types of dwelling, surrounding environments, and the house tenure) and quality of life (health, safety and social support) and found that the housing condition is significant in determining the quality of life, therefore should be taken into a consideration when assessing the determinant of urban poverty (Zainal, Kaur, Ahmad, & Khalili, 2012).

Furthermore, poverty is often attributable to the demographic characteristics of the household, which include family size, education level of the household head, sex of the household head, and the age composition. A greater family size, especially the one which consist of many young children is positively linked to the cause of chronic poverty since it adds burden given the limited resources owned by the poor family (Bayudan-Dacuycuy & Lim, 2013).

Based on these studies, the correlates included in the model are household size, house size per capita, household head education, age of the household head, gender of the household head, household head employment sector, and household access to several necessities like safe drinking water, internet accessibility, and toilet.

4.2 Data

This study uses data from 2014 National Socio-Economic Survey (Susenas) from Statistics Indonesia (BPS), which has a sample of around 300,000 households across Indonesia. This household survey contains information on basic demographic and socio-economic condition of household, including access to basic facilities, education attainment, household expenditure and types of employment. To determine household poverty status, the 2014 national poverty lines at the *kabupaten* (district) level is used as the threshold.

V. RESULTS AND DISCUSSION

5.1 Results

The model is estimated using data of Jabodetabek metropolitan area as well as Indonesia nationally. Comparing the results of both estimations will show whether the poverty profile of Jabodetabek metropolitan area is significantly different from the national poverty profile. The estimation results for both Jabodetabek metropolitan area and Indonesia as a whole are shown in Table 2.

**Table 2. The correlates of poverty in Jabodetabek area and Indonesia
(in marginal effects after logit)**

Variable	Jabodetabek		Indonesia	
	dy/dx	p-value	dy/dx	p-value
Household size	0.0191**	0.00	0.0357**	0.00
Household size square	-0.0010**	0.00	-0.0015**	0.00
House size per capita	-0.0011**	0.00	-0.0031**	0.00
Education level: (base: unfinished primary)				
- Primary education	-0.0016	0.12	-0.0176**	0.00
- Junior secondary education	-0.0086**	0.00	-0.0330**	0.00
- Senior secondary education	-0.0173**	0.00	-0.0495**	0.00
- Tertiary education	-0.0278**	0.00	-0.0671**	0.00
Access to clean drinking water	0.0020	0.47	-0.0128**	0.00
Access to internet	-0.0149**	0.00	-0.0485**	0.00
Access to improved sanitation	-0.0044**	0.00	-0.0321**	0.00
Age of household head	-0.0015**	0.00	-0.0037**	0.00
Age of household head square	0.0000**	0.00	0.0000**	0.00
Gender of household head	0.0034*	0.05	0.0184**	0.00
Urban	0.0068**	0.00	0.0042**	0.00
Job sector: (base: agriculture/unemployed)				
- Services	-0.0071**	0.00	-0.0229**	0.00
- Trade	-0.0060**	0.00	-0.0310**	0.00
- Industry	-0.0132**	0.00	-0.0152**	0.00
- Other sectors	-0.0060**	0.00	-0.0175**	0.00
Status of employment: (base: labor/unemployed)				
- Own a business	0.0013	0.24	-0.0009	0.13
- Own a business with the help of laborer	-0.0089**	0.00	-0.0001	0.90
- Work in a family business/unpaid worker	-0.0158**	0.00	0.0256**	0.00

Note: ** significant at 1 percent, * significant at 5 percent

5.2 Discussion

5.2.1 Household Size

The correlation of household size with household poverty status appears to be similar both in Jabodetabek metropolitan area and Indonesia as a whole. The correlation is positive with decreasing rate, indicated by the positive coefficient of the household size variable and the negative coefficient of the household size squared variable, which all are statistically significant. This means that as household size getting bigger, the probability of a household to be poor becomes larger. But the effect is getting smaller as household size increases further. The magnitudes of the coefficients indicate that the correlation between household size and poverty in metropolitan area is much smaller, only around one half, compared to the national figure.

This finding is aligned with study in the Philippines which look at the relation between household size, poverty and vulnerability (Orbeta, 2005). It is found out that a greater number of family member have a negative impact on household saving, increase the probability of children drop out from school, and discourage mother to take a paid employment.

5.2.2 House Size per Capita

The correlation of house size per capita with household poverty status again is similar in Jabodetabek and Indonesia nationally. The coefficient is negative and statistically significant, indicating that the smaller the size per capita of a house, the higher the probability that its inhabitant is a poor household. The magnitudes of the coefficients again indicate that the correlation in metropolitan area is much smaller, only one third, than nationally.

5.2.3 Education Level

The correlations between education level of household head and household poverty status indicate that in general higher education level is associated with lower probability of being poor. This is indicated by the negative and statistically significant coefficients with larger magnitude as education level increases. However, there are important differences on the correlation between education and poverty in Jabodetabek and Indonesia as a whole.

First, in Jabodetabek, there is no added value on having only a primary education in levelling up the probability of not being poor compared to those who did not accomplish primary school. At the national level, however, the coefficient is statistically significant, indicating that the effect of primary education on lowering the probability of being poor is already significant. Second, the magnitudes of the coefficients in Jabodetabek is much smaller, only around one half, compared to those for Indonesia nationally. For example, nationally a university graduate has a 6.7 percent lower probability of being poor compared to those who did not finish primary education. In Jabodetabek, however, the probability is lowered by only 2.8 percent. This implies that to escape poverty, poor people in Jabodetabek need a higher education qualification than their fellow countrymen.

To look at this issue further, Table 3 compares the educational attainment of the poor in Jabodetabek and Indonesia. As expected, the poor have relatively low education levels. Only around one percent of them have tertiary education both in Jabodetabek and all over Indonesia. However, the table clearly indicates that, in general, the poor in Jabodetabek have higher education levels than their counterparts in the country. While around a quarter of the poor in Indonesia did not finish primary education, only around 19 percent of the poor in Jabodetabek did not finished primary education. On the other hand, around 16 percent of the poor in Indonesia have senior secondary education level, while in Jabodetabek around 24 percent of the poor completed senior secondary education. This confirms that indeed higher education qualification is needed in order to escape from poverty in Jabodetabek.

Table 3. Education Level of the Poor Population in Jabodetabek and Indonesia, 2014 (%)

Education Level	Jabodetabek	Indonesia
Unfinished primary education	18.63	24.66
Primary education	34.91	38.66
Junior secondary education	21.62	19.46
Senior secondary education	23.91	16.14
Tertiary education	0.93	1.08

Source: Authors' calculation using Susenas 2014

5.2.4 Access to Clean Drinking Water

Nationally, access to clean drinking water is significantly associated with poverty, indicated by a negative and statistically significant coefficient. In Jabodetabek, however, drinking water appears to have an insignificant correlation with household poverty status as indicated by the insignificant coefficient. This implies that while nationally the poor still face problem in accessing clean drinking water, in Jabodetabek even the poor already have sufficient access to clean drinking water. This finding further support an earlier study by World Health Organization and Unicef (2006) which postulates that urban area has a significantly better coverage in terms of drinking water from an improved source than the rural area.

This seems to be related the phenomenon of mushrooming kiosks selling refillable water in urban areas with the convenient and affordable price they offer. With the availability of kiosks selling drinkable water, now people living in the slum parts of the city do not have to rely solely on the access to the water companies (PDAM) for clean water. However, it should be noted that Susenas only provides data about access to clean water, without further assessment on the water's quality. There is an argument that peri-urban poor is more frequently exposed to harmful water compare to their peers in urban or rural area because the location of surface and household drainage system which often located close to each other (Allen, Davila, & Hofmann, 2006). Therefore, there is a need for the local government to conduct regular inspection on the quality of drinking water that are commonly sold at the kiosk to ensure that it is suitable for consumption.

5.2.5 Access to Internet

Access to internet appears to have significant correlation with poverty in both Jabodetabek and Indonesia nationally. The negative and statistically significant coefficients indicate that lack of access to internet is a good indicator of poverty. The magnitude of the coefficient in Jabodetabek is much smaller, only around a quarter, of the coefficient at the national level, indicating much worse access of the poor to internet in areas outside Jabodetabek.

The vast development of communication technology such as internet have the ability to reach the marginalized people which otherwise left behind, provided there is a reliable infrastructure like a good connectivity and electricity (Pralhad & Hammond, 2002). In addition, providing a skill to access the information and knowledge to understand information gathered from the internet is deemed necessary to improve individual's productivity. Thus, it is hope that they can utilize the knowledge to work in a better paying job and subsequently move out from poverty.

5.2.6 Access to Sanitation

Another access to basic facilities analyzed in this study is access to a proper sanitation. It turns out that both in Jabodetabek and at the national level, this variable has a significant correlation with poverty condition. The coefficients are negative and statistically significant, indicating that people who do not have access to proper sanitation are more likely to be in poverty. However, the magnitude of the coefficient for the national level is almost eight times the coefficient for Jabodetabek, indicating a much worse sanitation problem for the poor outside the metropolitan area.

The priority to build a proper sanitation is often comes after household could have access to drinking water. It is also found out that poor people who reside in the slum area of the city are reluctant to invest on sanitation in their individual house because they fear that they will lose their investment "due to the land and housing tenure insecurity"(Allen et al., 2006). One research conducted in Jakarta about the solid waste management system conclude that one of the barrier

to improve the sanitation condition in Jakarta is the limited availability of land (Aprilia, Tezuka, & Spaargaren, 2012). Since there are many poor people in the metropolitan area who live in the compact or slum area of the city, there is an urgent need to build at least a communal sanitation to accommodate the needed access to sanitation for poor society.

5.2.7 Age

Household head is significantly correlated with poverty both in Jabodetabek and at the national level. The coefficients of household age are negative and the coefficients of household age squared are positive, all are statistically significant, indicating that as people getting older, the probability of being poor decreases but at decreasing rate. However, the correlation between age and poverty is much smaller in Jabodetabek than nationally, indicated by the magnitude of the coefficient in Jabodetabek which is only around one half of the coefficient at the national level.

5.2.8 Gender

Gender of household head is also significantly correlated with household poverty status. The coefficients are positive and statistically significant, indicating that households headed by women have a higher probability to be in poverty compared to households headed by men. However, the magnitude of the coefficient at the national level is much higher, around six times, of the coefficient in Jabodetabek. This indicates that women household head outside Jabodetabek face higher difficulties in their livelihood compared to women household head in Jabodetabek.

The majority of household both in Jabodetabek and at the national level are headed by a man. Household headed by a woman means that the bread winner of the family is a woman instead of a man. At least, there are two reasons on why household headed by woman has higher possibility to fall into poverty. First, woman has a higher chance to face discrimination in the labor market both in terms of employment opportunities and wages. Second, because woman household head is most likely a single parent, they face the double burden of having to work and take care of the family at the same time.

5.2.9 Urban Area

Although Jabodetabek is a metropolitan area, because it includes three districts, it still has areas classified as rural. This is a specific feature within Asian megacities, where extending urbanization has penetrated the dense agricultural area and caused chaotic urban-rural land use as well as mixed urban-rural livelihoods (Rustiandi et al., 2015). Therefore, it is still possible to examine the correlation between urban status of the areas with household poverty. The estimation results indicate that the correlation is positive and significant, indicating that living in urban areas is associated with higher probability of being poor. The coefficient is greater for Jabodetabek compared to the national level. It means that the probability is even higher if they reside in the urban area of Jabodetabek.

The location on where the people being born have a very big impact in determining whether they will be living in a poverty or not. Being born in urban area with all the public facilities available might give an advantage starting point for people to live a better life compared to people being born in rural area. However, living in urban area also comes with a heavy price tag which makes people become more prone to fall into poverty (Dahiya, 2012). The price of goods in urban area is more prone to fluctuation and therefore putting vulnerable people at risk of falling into poverty if their wage is not sufficient to cover the cost of living. Moreover, the urban needs are more complex compared to living in rural area in terms of goods and services needed to survive like transportation and entertainment costs. In rural area, at the time of rising food price, the people there have the

resilience to grow their own crops to survive. While in urban area, due to the limited land available, such opportunities are more limited.

5.2.10 Employment Sector

Services, trade, industry and others are all significant in both Jabodetabek and at the national level. It means that compared to people who are unemployed or working in the agricultural sector, people who work in these sectors have a lower probability of being poor. In Jabodetabek, the type of job sector which has the highest probability to lower the poverty rate is industry sector, followed by services and trade. Meanwhile at the national level, the sector which has the greatest coefficient is trade sector, followed by services sector. Table 4 shows that while most of the poor people in Indonesia have a livelihood in the agricultural sector, most of the poor in Jabodetabek work in the services sector.

Table 4. Sector of Occupation of the Poor Population in Jabodetabek and Indonesia, 2014 (%)

Jabodetabek		Indonesia	
Sector of Occupation	%	Sector of Occupation	%
Public services	24.34	Food crop agriculture	29.16
Trade	22.99	Trade	12.43
Manufacturing	17.96	Plantation	11.17
Construction	8.35	Manufacturing	10.85
Food crop agriculture	6.56	Public services	8.51
Others	19.80	Others	27.88

Source: Authors' calculation using Susenas 2014

A closer look on the coefficient shows a high difference between industry sector and the other two sectors, which implies that industry sector is a dominant sector that is able to reduce the probability of people living in Jabodetabek on falling into poverty. The importance of industry sector in Jabodetabek can be trace back to the 1980s, the period which marks the growing of manufacturing industries in Jakarta and surrounded region. In the mid-1980s, due to a rising cost of land in Jakarta and the toll road extension to Bekasi and Tangerang, many manufacturing firms started to look for setting up a plan in the peripheral areas of Jakarta to lower the production cost (Henderson & Kuncoro, 1996). Hence, up to this date Jabodetabek area has many well-known industrial zone like Jababeka and Pulogadung. The ability of industry sector to absorb a large number of workers may contribute to its high significance on lowering the probability of people falling into poverty.

5.2.11 Status of Employment

Both in Jabodetabek and Indonesia, the variable which refer to owning a business appears to be insignificant. Hence, it means that compared to people who are unemployed or working as a laborer, people who own a business do not show any significant difference in terms of the probability of being poor. There are two types of employment status that are correlated with poverty situation in Jabodetabek, i.e. people who operate a business with the help of laborer and people who work for their family or also commonly known as an unpaid family worker. Both of these employment statuses have a lower probability to fall into poverty. On the other hand, at the national level, those who work for their family or unpaid family workers have a higher probability to fall into poverty.

People who work for their family as unpaid family workers have a significant correlation with poverty condition both in Jabodetabek and at the national level. However, it is interesting that the coefficient is negative in Jabodetabek, while it is positive at the national level. It indicates that in Jabodetabek, people who work for their family are more financially secured compare to people who work as a labor. The opposite happened at the national level, compared to a laborer, people who work as an unpaid labor for their family are more vulnerable to fall into poverty. One underlying difference can be explained by the characteristic of job sector on which people are working for. Table 5 shows that in Jabodetabek around 78 percent of those who work for their family are working on the trade or hotel/restaurant sector. Meanwhile, in Indonesia as a whole, 35 percent of people who work as the unpaid worker for the family are working in the trade sector and 32% are working in the agriculture sector.

Table 5. Job sector of people who work in a family business and not getting paid

Job sector	Indonesia		Living outside Jabodetabek		Living in Jabodetabek	
	Freq	Percent	Freq	Percent	Freq	Percent
Agriculture (Paddy & Palawija)	120,299	22.37	118,352	23.36	1,947	6.27
Horticulture	21,644	4.02	21,011	4.15	633	2.04
Plantation	37,743	7.02	37,743	7.45		
Fisheries	4,963	0.92	4,963	0.98		
Farm	30,149	5.61	30,149	5.95		
Forestry and other agriculture	4,680	0.87	4,225	0.83	455	1.46
Mining and quarrying	1,222	0.23	1,222	0.24		
Processing industry	39,510	7.35	37,417	7.38	2,093	6.74
Construction	15,545	2.89	15,545	3.07		
Trade	199,332	37.07	180,131	35.55	19,201	61.81
Restaurant and accommodation services	32,486	6.04	27,162	5.36	5,324	17.14
Transportation, warehousing	2,058	0.38	2,058	0.41		
Information and communication	528	0.1	528	0.1		
Financial agency, insurance	102	0.02	102	0.02		
Education services	1,186	0.22	382	0.08	804	2.59
Health services	1,612	0.3	1,612	0.32		
Public, social and individual services	16,477	3.06	15,870	3.13	607	1.95
Other	8,225	1.53	8,225	1.62		
Total	537,761	100	506,697	100	31,064	100

Source: Authors' calculation using Susenas 2014

VI. CONCLUSION AND POLICY IMPLICATIONS

Despite rapid economic development, the poverty rate in Jabodetabek metropolitan area has been relatively stagnant at around six percent since early 2000s. There is a possibility that the poverty reduction programs are not effective in Jabodetabek because these programs were developed

based on the national poverty profile. If the poverty profile in metropolitan areas are significantly different from the national profile, these programs may not be suitable and effective in addressing the poverty problems in metropolitan areas. This study indeed finds that poverty profile in Jabodetabek area is significantly different from the national level, especially in regard to education level, access to drinking water, employment sector, and status of employment. Therefore, to tackle the poverty problem in the Jabodetabek metropolitan area requires a distinct policy from the national poverty policy.

Basic necessities like water shows no correlation with poverty in Jabodetabek, while it remains significant at the national level. In terms of education attainment, it is found out that the completion of only up to elementary school is no longer sufficient to support a decent living in Jabodetabek area, even though it still appears significant at the national level. Tertiary education level has the highest impact in lowering the chance of people falling into poverty. Type of employment sectors also highly correlate with poverty status. Industrial sector with its capabilities to absorb a great number of labors appears to have significant contribution in minimizing the probability to become poor in Jabodetabek area. Meanwhile, at the national level, the impact of trade sector is more prevalent than the industrial sector. In addition, this study also finds an interesting finding regarding the status of employment, whereby people who work for the family as an unpaid worker have lower probability on falling into poverty in Jabodetabek, at the national level that type of work seems to increase the probability of people to become poor. This seems to be related to the difference in sectors of occupation of the majority of unpaid family workers in Jabodetabek and nationally.

Based on this study, it is found out that socio-economic policy in Jabodetabek should be tailored at aiming for a higher education attainment for its people and at the same time fostering the productivity and growth of the industrial sector. Improvement on the basic facilities like sanitation is also still found relevant. In addition, scaling up the internet access for all is deemed necessary to broaden the scope of knowledge and information especially for poor people.

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