ASSESSING
POVERTY IN SOUTH KALIMANTAN USING PURCHASING POWER PARITY APPROACH[1]

PENGHITUNGAN KEMISKINAN DI KALIMANTAN SELATAN MENGGUNAKAN PENDEKATAN PARITAS DAYA BELI

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ABSTRACT
The rigorous and sustainable monitoring and evaluating the poverty rates are inevitable in measuring the efficacy of a nation's development. The poverty rate itself depends on many influential variables, one of which is the poverty threshold/line. Concerning its high impact on the poverty rate produced, it is essential to assess the poverty line measurement in order to yield a valid and robust poverty rate. This paper aims to investigate the poverty lines in Indonesia especially in South Kalimantan utilizing the Purchasing Power Parity approach. In the situation of a shortage of poverty line comparison literature, this paper tries to fill such gap. This paper utilizes data from the World Bank (The World Development Indicators and The International Comparison Program) and Statistics Indonesia's website. This paper obtains some findings; in a particular time, the South Kalimantan's poverty line was above the World Bank $1.90-a-day standard. However, most of the times, such domestic poverty lines were below the comparator. Therefore, this paper exists not only to contribute to enriching the previous literature but also presents the other perspective to improve the construction of the domestic poverty line.

Keyword: South Kalimantan, domestic poverty line, purchasing power parity, poverty calculation, poverty line conversion

ABSTRAK
Pemantauan dan evaluasi tingkat kemiskinan yang melekat dan berkelanjutan tidak bisa dihindari dalam mengukur keefektifan pembangunan suatu bangsa. Tingkat kemiskinan itu sendiri dipengaruhi banyak variabel, salah satunya adalah garis kemiskinan. Mengingat kontribusinya yang signifikan terhadap tingkat kemiskinan yang dihasilkan, dirasa penting untuk mengevaluasi suatu garis kemiskinan agar menghasilkan tingkat kemiskinan yang valid dan kuat. Penelitian ini bertujuan untuk mengevaluasi garis kemiskinan di Indonesia khusunya di Kalimantan Selatan dengan menggunakan pendekatan paritas daya beli. Dalam keterbatasan literatur tentang perbandingan garis kemiskinan, penelitian ini mencoba untuk mengisi kekosongan tersebut. Penelitian ini menggunakan data dari Bank Dunia (World Development Indicators dan The International Comparison Program) dan Badan Pusat Statistik Republik Indonesia. Ada beberapa temuan dalam penelitian ini; pada suatu waktu, garis kemiskinan Kalimantan Selatan berada di atas standar Bank Dunia ($ 1,90 per hari). Namun, untuk sebagian besar waktu, garis kemiskinan

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domestik berada di bawah standar Bank Dunia. Oleh karena itu, penelitian ini hadir bukan hanya menambah literatur sebelumnya tapi juga menghadirkan pandangan baru dalam rangka penyempurnaan pembentukan garis kemiskinan domestik.

***Kata Kunci**: Kalimantan Selatan, garis kemiskinan domestik, paritas daya beli, penghitungan kemiskinan, konversi garis kemiskinan*

A. INTRODUCTION

The lack of well-being is a term used by the World Bank to define poverty (Haughton and Khandker, 2009) although the meaning of well-being itself could invite more queries as well as explanations. Furthermore, the World Bank set some thresholds to measure poverty so-called dollar-a-day approach. People who possess the daily expenditure below the World Bank's thresholds will be considered as poor people. Recently, the World Bank's thresholds were set in $1.90, $3.20, and $5.50 purchasing power parity (World Development Indicators (WDI), 2017).

Indonesia, instead of using the World Bank's thresholds, has been using the threshold that comprises of food and non-food expenditure to classify the people into the poor or not. In addition, this threshold is set on a monthly basis instead of daily (Statistics Indonesia (BPS), 2009). Therefore, Indonesia utilizes a different approach with the World Bank in calculating poverty.

To which extent the poverty threshold is used explained by the World Bank; the countries are better to use the international poverty line in order to compare the poverty level internationally. On the other hand, the utilization of a domestic poverty line is advised in measuring the domestic poverty rate (World Bank, nd).

As a companion to the international poverty line attached to Indonesia by the World Bank, BPS measured the domestic poverty rate using food and non-food approach/basic needs approach (BPS, 2016). Regarding the approach utilized by BPS in assessing poverty, some research findings such as by Marbun and Suryahadi (2009), Susilowati (2010), as well as Khomsan et al. (2015) put some notes to the poverty rate produced by BPS. The main points of those concerns were about the reference of the population, the basket of commodities used in poverty line construction, equivalent scale in consumption for all family members (also mentioned by Susilowati (2010)), economic scale in the household, and equivalency in resource allocation in the household (Marbun and Suryahadi, 2009). Even more, BPS yielded a low poverty rate as it should (Khomsan et al., 2015).

Of course, the debate about picking the best method for assessing poverty is not a new issue; for example: defining the appropriate poverty concept itself and choosing the relative or absolute poverty lines. However, for the usage of expenditure approach to constructing a poverty line, Lanjouw (1999) mentioned that this approach is more commonly utilized by nations.

Although the poverty calculation method using expenditure approach is used by many countries as mentioned before, the poverty rate figure produced by BPS are essential to be concerned in particular for the low poverty line. Therefore, this paper tries to address some questions:

1. Is the poverty line set by BPS indeed too low? To answer the question, this paper utilizes the Purchasing Power Parity (PPP) approach to convert the provincial poverty line into $PPP.

Further, the converted poverty lines can be situated beside the international poverty line for comparison internationally.

2. How much the poverty rate using the PPP approach?

This paper uses the South Kalimantan's data to assess the poverty line comparison as well as poverty rate calculation. After revealing the answers to those questions, there will be some conclusions regarding the poverty calculation in Indonesia. Three sections are remaining for this paper: method, result, and conclusion.

Poverty Concept

1. Definition of Poverty

BPS (2016) explained that poverty based on the origin comprises two kinds. The first one is cultural poverty that caused by the consuetude or culture in a particular place. This kind of poverty maintains a person or people inside its environment so those people would be kept as poor people. The second kind of poverty is structural poverty. This poverty happens when a person or people trapped in a powerless situation regarding the unfair social system.

In the conceptual approach, poverty can be contrasted with relative poverty and absolute poverty (BPS, 2016). Relative poverty takes a focus on subjective assessment of the living standards in a particular place. On the other hand, the absolute poverty defines a strict value on how the poverty status is defined. The threshold could be the minimum living standard, either food or non-food (or both). This threshold is also known as the poverty line.

a) Relative Poverty

Relative poverty puts a value to determine the poverty status of a person or people. The value, as it is called a relative, is set differently across countries. The primary focus for the poverty assessment usually on the poorest people in a nation based on the lowest group of people's income/ expenditure, it might be the lowest 20% or 40% of the income group. In addition, the higher income countries have higher poverty lines than the lower income countries. Thus, the percentage of poor people in those higher income countries could be more than the lower because of higher poverty line set (BPS, 2016).

b) Absolute Poverty

In this poverty concept, the definition of a minimum standard of living takes a crucial role. BPS (2016) elaborated the minimum standard of living that covers food, clothing, health, housing, and education of which are used to live and work. This minimum standard of living is then translated into monetary expression, and it is set as a poverty line. People fall below the poverty line are considered as the poor. In the international approach, the World Bank utilizes the dollar-a-day approach to measure the poverty rate in countries around the world.

c) Other Terminologies of Poverty

Others expressed the poverty in some different ways. Suyanto (2001) defined poverty as not only lack income and belongings but also fragility, physical limitation, powerless, and isolated. World Bank, as cited in BPS (2016), mentioned that the poverty as a deprivation of well-being. Even the most straightforward notion about poverty by MacPherson and Silburn (1998); poverty is a basic lack in term of surviving. Additionally, there are many others definitions of poverty interpreted by researchers.

2. Poverty Indicators

Person or people will be considered as the poor when they cross underneath the poverty threshold. The poverty threshold, also known as the poverty line, can be expressed in some different measurements. The following measurements are usually used as references in the poverty assessment (as cited in BPS (2016)):

a. Hendra Esmara: Per capita per year consumption for rice (125 kilograms).
b. Sayogya: Per capita per year expenditure for rice (equivalency). The thresholds are 480 kilograms in the urban areas and 320 kilograms in the rural areas (poor), 360 kilograms in the urban areas and 240 kilograms in the rural areas (very poor), 270 kilograms in the urban areas and 180 kilograms in the rural areas (poorest). Expenditure per capita per month (Rp. 8,240 in the urban areas and Rp. 6,585 in the rural areas).
c. Ginneken: Minimum nutrition intake per capita per day (2000 calories and 50 grams protein).
d. Anne Booth: Minimum nutrition intake per capita per day (2000 calories and 40 grams protein).
e. Gupta: Minimum nutrition intake per capita per year (Rp. 24,000)
f. Hasan: Minimum income per capita per year (USD 125 in the urban areas and USD 95 in the rural areas).
g. World Bank: Expenditure per capita per month (Rp. 6,719 in the urban areas and Rp. 4,479 in the rural areas, 1984). Per capita per day expenditure ($1.25 PPP and revised to $1.90 PPP).
h. International Poverty Line in 1970: (USD 75 per capita per year income or around $200 PPP).
i. FAO dan WHO: Minimum calories intake for human to survive and to work (2,100-kilocalories).

Indonesia's Poverty Figure

Indonesia's poverty rate data are available both in the domestic measurement and international measurement. For the domestic measurement, BPS is the institution which provides the poverty rate measurements. On the other hand, for the global poverty rate calculation, the World Bank measures the poverty rate in Indonesia using its own approach.

1. Poverty Rate in Indonesia Using Domestic Approach

BPS consistently provides the poverty data since more than 30 years ago. The poverty data can be seen on the BPS' website particularly in the poverty section. However, the poverty data were not provided annually in the period 1970 to 1996. Based on the BPS explanation on its website, the poverty rate produced in the period 1970 to 1996 were using old standard. Starting from 1996 and beyond, BPS used a new standard which utilized the updated-basic-need approach. Eventually, in Figure 1, there are two poverty rate measurements for the year 1996.

Figure 1 provides a general trend in poverty rate's movement in Indonesia in the period 1970 to 2017. The trend itself can be differentiated into two parts. The first trend can be observed in the period 1970 to 1996 when BPS utilized the old standard in assessing poverty. It can be seen that the poverty reduction was fast, the slope of the poverty rate's curve is steep. However, in the period 1996 to 2017, using the updated-basic-need approach, the poverty rate's reduction was slower compared with the previous period, the slope of the poverty rate is flatter. BPS (2009) mentioned that the poverty calculation has been provided for a period since the households' consumption data can be obtained annually starting from

2003. Moreover, since 2011, the national poverty rate can be presented twice a year.

In Figure 2, the poverty rate reduction in the period 1984 to 2016 was in

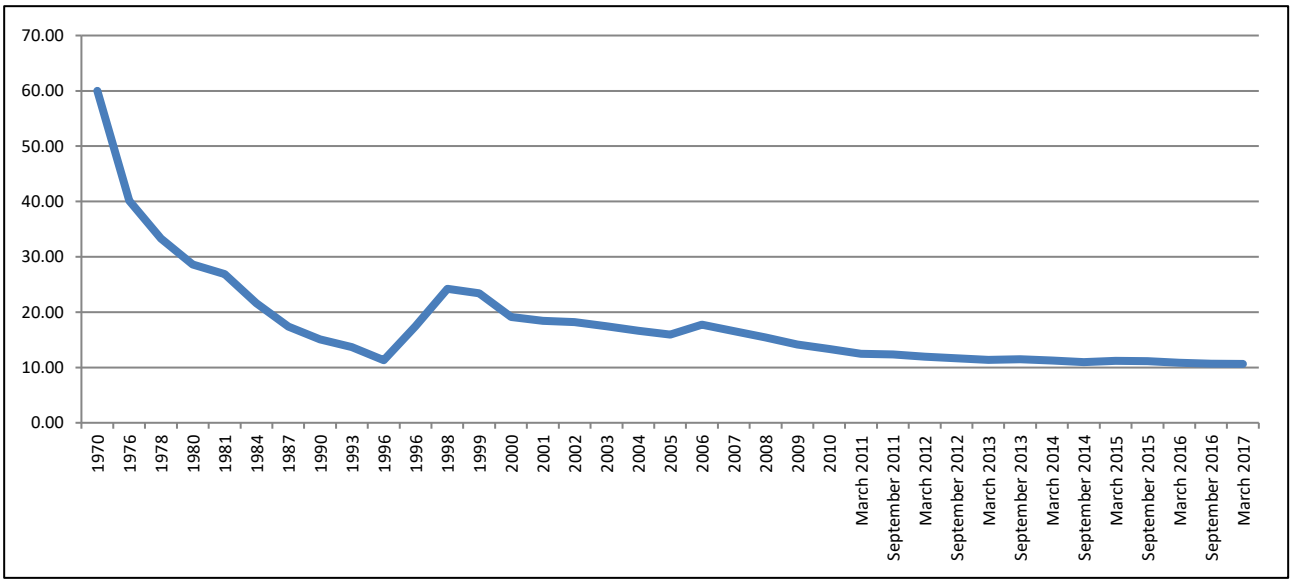

Figure 1. The Percentage of Poor People in Indonesia Using Domestic Poverty Lines, 1970 – 2017
Source: BPS

2. Poverty Rate in Indonesia Using the World Bank's Standards

The World Bank provides the poverty rate data for Indonesia using its standards, comprises $1.90, $3.20, and $5.50 thresholds. The data are available every three years particularly in 1984, 1987, 1990, 1993, and 1996. From 1998, the Indonesian poverty rate data were available annually in the World Bank's series.

To present the up-to-date data, the World Bank changes the base year for its poverty thresholds; the most recent was using 2011 as the base year (the previous base year was 2005). Of course, the base year used by the World Bank changed over the period with the adjustment with the current inflation. Referring to Lustig and Silber (2016), the World Bank has changed the based year since 2015 and recalculate the poverty rate; this included the change of the minimum thresholds; $1.25 to $1.90 per capita per day.

a declining trend. The lower the threshold used, the smaller the poverty rate. Although changes in the same manner regarding the shock, in 1998 for instance, the lower threshold gave a higher impact. It can be seen when in the 1998 crisis, the poverty rate that used $1.90-a-day threshold resulted in the higher poverty rate changes compared the others (the curve responded steeply).

Poverty Line Measurements: Indonesia and The World Bank

Poverty line measurement is a mandatory step in calculating the poverty rate because to be mentioned as the poor, per capita per day expenditure of a person should be compared with the poverty line (so-called absolute poverty measurement). Someone will be considered as a poor if the per capita per day expenditure is below the poverty threshold. In fact, there are various ways to produce a poverty line. BPS and the World Bank are not the exceptions since

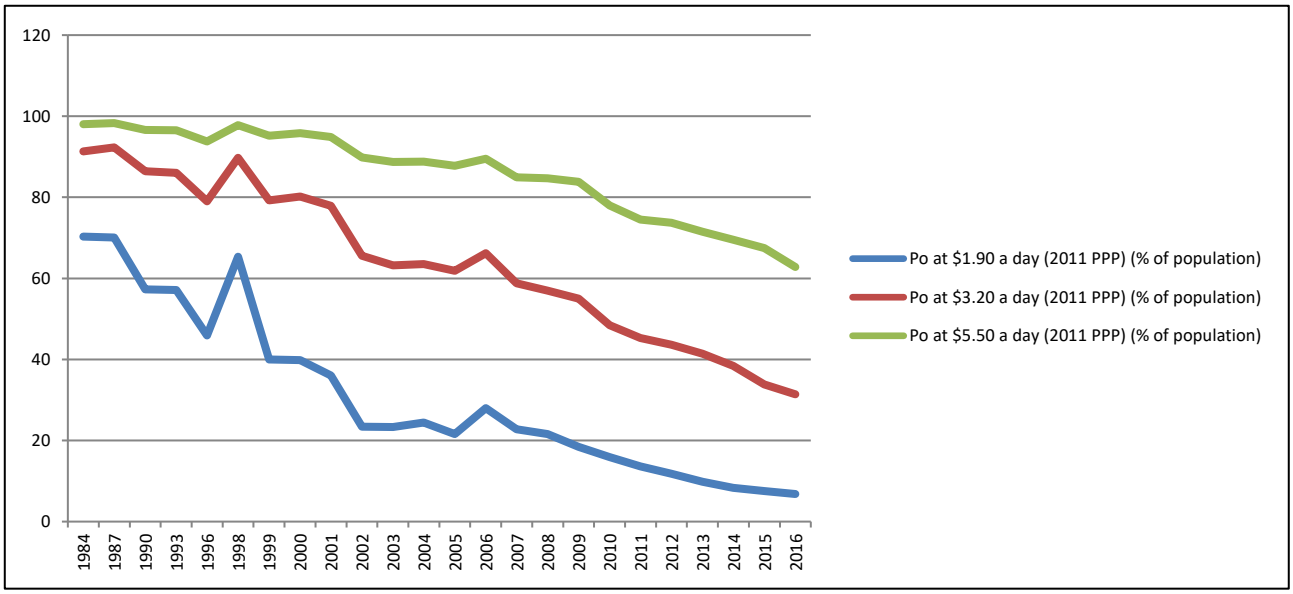

Figure 2. The Percentage of Poor People (Po) in Indonesia Using The World Bank's Poverty Lines, 1984 - 2016
Source: The World Bank

they are calculating the poverty lines in different ways.

1. Poverty Line Calculation in Indonesia

BPS (2009) started to measure the poverty rate in Indonesia in 1984. At that time, the calculation was in the scope of period 1976 to 1981 using the National Socio-Economic Survey (SUSENAS) data. Ever since, BPS provided the poverty data every three years for urban and rural areas. Starting from 2003, BPS has been presenting the poverty data annually.

In order to measure poverty rate, BPS used the basic-need approach. This approach considers that the poverty as a condition in which a person could not economically fulfill the basic need such as food and non-food. A poor person is a person who spends total expenditure that less than poverty line (per capita per month). The poverty line (PL) comprises of Food Poverty Line and Non-Food Poverty Line and can be expressed as:

$$PL = (Food\ PL) + (Non\text{-}Food\ PL) \quad (1)$$

where PL is the domestic poverty line calculated by BPS, FPL is the Food Poverty Line, and NPL is the Non-Food Poverty Line. The domestic poverty line calculation is provided in each province as well as urban and rural areas.

Food Poverty Line is the minimum monetary amount of food spent per day by a person and converted into 2,100 calories. The basket of foods is represented by 52 commodities such as grains, corns, fishes, eggs, etc.

The Non-Food Poverty Line is the minimum amount of expenditures per capita per day for clothing, housing, health, and education. The numbers of non-food commodities are 51 in the urban areas and 47 in the rural areas.

2. Poverty Line Calculation by the World Bank

Announced in October 2015, the $1.90-per capita-per-day expenditure threshold was introduced as a repair for the previous $1.25. The changes were not only for the threshold but also the reference

(base) year; from previously 2005 to 2011 (Lustig and Silber, 2016).

The calculation for the international poverty line in 2011 was using the same reference countries which were 15 poorest countries ranked by consumption per capita in 2005 based on the International Comparison Program (ICP). The international poverty line was derived from the mean of those 15 poorest countries' poverty lines (Fereira et al., 2015). Eventually, the international poverty line became $1.90.

The thresholds utilized by the World Bank that so-called dollar-a-day poverty line has been changing time to time; starting from $1.01 in 1990, and then $1.08 in 2001, $1.25 in 2008, and recently changed to $1.90 in 2015. In fact, the base years used was periodically shifting such as 1985, 1993, 2005, and 2011.

The $ sign or so-called $ Purchasing Power Parity ($PPP) is the amount of local currency to purchase the same number/amount of goods or services in the national market relative to purchase the same commodities in the US market. Therefore, before can be expressed in $PPP, the per capita per day expenditure in the domestic currency should be converted to $PPP. Further explanation regarding this conversion will be presented in the method section. Alongside the $1.90 threshold, the World Bank also provided other thresholds such as $3.20 (equivalent for PPP$2.0 in 2005 for middle-income countries (Fereira et al., 2015)) and $5.50 per capita per day.

Literature Review

There were some perspectives on how poverty line is constructed. The consideration for providing a better poverty measurement has pulled out some methods to calculate the poverty line. Each method provided poverty line in term of $PPP but in the slightly-different amount of monetary value.

Fereira et al. (2015) utilized the annual consumer's price index (CPI) from 104 countries to construct global poverty line. Their research yielded $1.90 per capita per day threshold using 2011 as the reference year. By taking the poorest 15 countries' poverty lines average, their result has been used by the World Bank as the newest threshold.

Different from Fereira et al., Kakwani and Son in 2016 held a global poverty line calculation using the different 101 countries as the reference group. This research produced a $1.93 per capita per day threshold as a base to examine poverty rate by utilizing the weighted-average of those 101 countries' poverty lines.

Jolliffe and Prydz (2015) tried to analyze the usage of different countries' reference group to produce a global poverty line. By using the bottom quartile of 129 reference countries, which were 29 countries, they found $1.86 per capita per day threshold as a global poverty line. On the other hand, using 32 low-income countries as a reference group, they found a higher poverty line threshold, $1.91 per capita per day.

Similar with some research that yielded the approximately similar figures with the World Bank standard (which was $1.90 per capita per day), the research conducted by Klasen et al. in 2016 criticized the previously-used poverty threshold by the World Bank ($1.25). By using the consistent World Development Indicators (WDI) and 15 countries as a reference group (minus outlier countries), they suggested that the poverty threshold that used 2011 reference year should be around $1.67 to $1.71 per capita per day or around $1.90 with inflation's adjustment in some countries. Indeed, that figure was almost

equal with the other thresholds suggested by other researchers.

Instead of addressing the poverty threshold, Gentilini and Sumner (2012) tried to compare the nature of the National Poverty Lines (NPL) and the International Poverty Lines (IPL) from 160 countries. They basically used the $1.25 per capita per day threshold in their research and obtained some findings. Briefly, their findings stated about the close correlation between NPL and IPL; however, yielding significantly different poverty estimation.

In Indonesia, Susilowati (2010) suggested the Equivalent Scale approach to calculate poverty rate in Indonesia and pointed the importance of the usage of an adult equivalency and the economic scale in households. The usage of this equivalency is important since a household could contain different level of necessities reflected from its household's members. The bottom line of this method is that the adult in a household would have a different level of expenditure compared with the non-adult household's member. This method has been adopted in some countries (such as India, Taiwan, Sri Lanka, and some European countries) to calculate poverty rate.

Khomsan et al. (2015) measured the poverty rate using the minimum living cost for household and individual. The minimum living cost for a household is defined as every necessity of household's members and should be used together with the others. In addition, the minimum living cost for an individual is differentiated based on the group of ages and genders. Their research was contrasting five different thresholds in Bogor regency. Eventually, they found that their calculated poverty line is about the same as the World Bank's $2.0-a-day threshold and much higher than BPS' poverty line.

Based on the previous research, the international poverty line seems around $1.90 a day. Furthermore, Khomsan et al. (2015) also provided research's result mentioning that their constructed domestic poverty line (so-called Gold Standard) was around $2.0 daily. While other research suggested the different approaches to measure the poverty line, this paper investigates the domestic poverty line from $PPP conversion approach and also calculates the poverty rate in South Kalimantan using the lowest World Bank's threshold ($1.90 PPP).

B. METHOD

Data Selection

This paper mainly employs the quantitative descriptive analysis regarding the results of the data processing stages. In order to present a base for data processing, this paper utilizes the data such as CPI (Indonesia and South Kalimantan), inflations (Indonesia and South Kalimantan), South Kalimantan's poverty lines (March Susenas period), and South Kalimantan's Susenas 2016 data. For South Kalimantan's inflation data, Banjarmasin is the reference city for 2010 to 2013, and Tanjung is included for 2014 to 2017 as an additional reference city. All of those data were gained from BPS. In addition, this paper also used Indonesia's poverty rate data from the World Bank's World Development Indicators and the 2011 International Conversion Program (ICP) in order to provide Indonesia's benchmark for $1 PPP conversion stage.

Analysis Formulation

The first part of analysis provides the conversion process for the domestic poverty lines, particularly South Kalimantan's poverty lines. The domestic poverty lines will be converted using $PPP conversion factor. The conversion factor is obtained

from the ICP data. The numbers of years used in this conversion are eight years of the period (from 2010 to 2017), it means there will be eight domestic poverty lines are converted which extracted from BPS of South Kalimantan's website. The conversion from South Kalimantan's poverty lines to $PPP follows the formula (Estudillo and Otsuka (2015))

$$L_t = PPP_{i,t}\, x\, (M_t) \frac{CPI_t}{CPI_{2011}} \qquad (2)$$

where L_t is the South Kalimantan's poverty line in year t, $PPP_{i,t}$ is the $1 equivalent to the local currency in 2011 base year in province i year t, M_t is monthly equivalency for $PPP, CPI_t is the South Kalimantan's CPI for year t, CPI_{2011} is the South Kalimantan's CPI in the base year 2011 (should be 100), and t is for the year 2010 to 2017. To find the value of M_t, the equation (2) can be expressed as

$$M_t = \frac{L_t}{PPP_{i,t}} x\, \frac{CPI_{2011}}{CPI_t} \qquad (3)$$

To express per capita per day threshold of $PPP, the value of M should be divided by 30.384 days, the approximate number of days in a month (Ravallion, Chen, and Sangraula, 2009). To proceed the calculation, South Kalimantan's CPI should be expressed in 2011 base year. Since BPS provides two base years for the recent Indonesian CPI (2007 and 2012), those CPI should be then extrapolated to 2011 base year. The extrapolation process will need the widely-known inflation formula

$$Inf_t = \left(\frac{CPI_t - CPI_{t-1}}{CPI_{t-1}}\right) x100\% \qquad (4)$$

where Inf_t is the inflation rate in the period (year) t, CPI_t is the consumer price index in period t, CPI_{t-1} is the consumer price index in period t-1. The inflation rate is expressed in percentage. Because equation (3) needs the CPI values, equation (4) can be rearranged into

$$CPI_{t-1} = \left(\frac{CPI_t\, x\, 100}{100 + Inf_t}\right) \qquad (5)$$

and

$$CPI_t = \left(\frac{CPI_{t-1}\, x\, (100 + Inf_t)}{100}\right) \qquad (6)$$

where CPI_t = CPI_{2011} = 100 in the base year. Thus, the value of CPI_{2010} and the years before can be extrapolated using equation (5). On the other hand, equation (6) can be employed to find the value of CPI_{2012} and beyond.

The main reason for using 2011 as the base year is because the most recent ICP provided the benchmark for conversion factor from $1 PPP to the local currency (Rupiah) in 2011. The data from ICP yielded that $1 PPP is equal to Rp. 4,091.94. However, the conversion value was addressed for Indonesia as a whole. To find $PPP_{i,t}$ for South Kalimantan, this paper includes the following equation (Estudillo, Sawada, and Otsuka (2008))

$$PPP_{i,t} = PPP_{2011} x \left(\frac{CPI_t^{INA}}{CPI_{2011}^{INA}}\right) x \left(\frac{CPI_{i,t}}{CPI_t^{INA}}\right) \qquad (7)$$

where $PPP_{i,t}$ is the $1 equivalent to the local currency in 2011 base year in province i year t, PPP_{2011} is the benchmark $1 PPP for Indonesia (Rp. 4,091.94), CPI_t^{INA} is the Indonesia's CPI in year t, CPI_{2011}^{INA} is the Indonesia's CPI in 2011 (100), and $CPI_{i,t}$ is the CPI in province i year t.

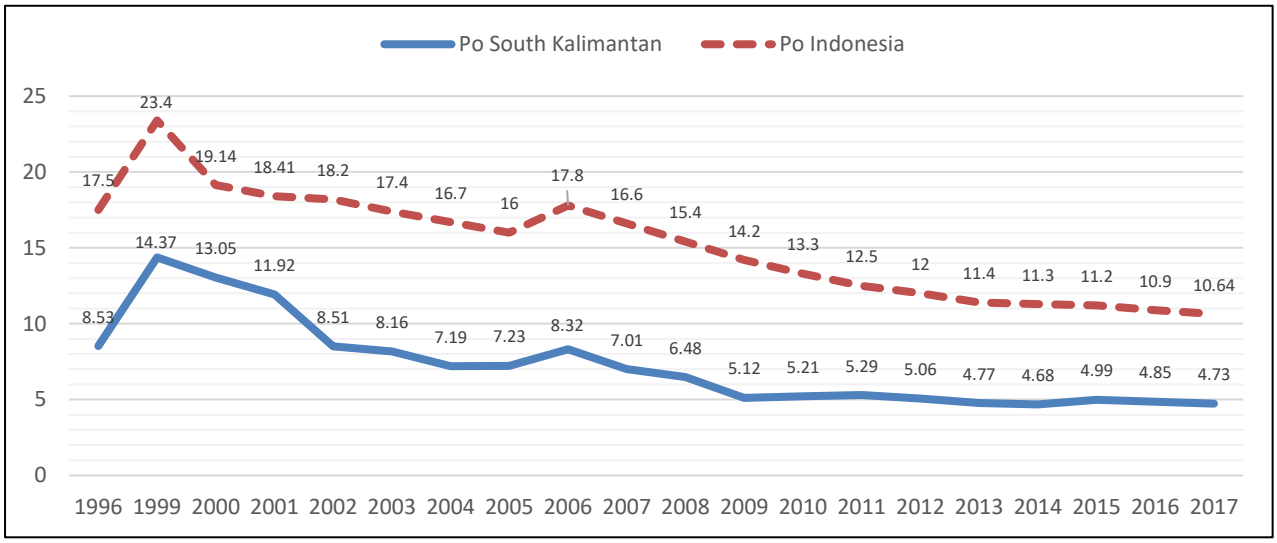

Figure 3. The Percentage of Poor People (Po) in Indonesia and South Kalimantan 1996-2017
Source: BPS

In the second part of the analysis, this paper calculates the poverty rate in South Kalimantan in 2016 using the lowest poverty line set by The World Bank which is the $1.90-a-day threshold. The calculation initially uses equation (2) as the formula to convert $1.90 PPP into South Kalimantan's (local) currency. Further, to calculate the poverty rate, this paper employs the *Foster–Greer–Thorbecke* (FGT) index expressed as

$$P_0 = \frac{1}{N} \sum_{y_i<z} \left(\frac{z - y_i}{z}\right)^0 \qquad (8)$$

where P_0 is the percentage of poor households, N is the total households, z is the new poverty line using $1.90 PPP conversion, y_i is the per capita per month expenditure of household i. Since *Susenas* also provides a weight for each household to estimate total people in households, by using such individual weight applied to each household, P_0 can be addressed as the percentage of poor people with N becomes total people.

C. RESULTS AND DISCUSSION

Poverty in South Kalimantan

South Kalimantan has a good performance in term of poverty reduction. Based on BPS' data, South Kalimantan possessed the highest poverty rate in 1999 (with the absence of 1997 and 1998 data) which was 14.37%, lower than Indonesia's poverty rate (23.4%). Ever since, the poverty rate in South Kalimantan declined to only 4.73% in 2017. Regardless the negligible fluctuations, South Kalimantan's poverty rate stood still below the national level all of the periods.

Figure 3 depicts the trends of Po in Indonesia and South Kalimantan side by side. At a glance, the trends are so similar, the differences only at the level of Po and the detail fluctuations. Furthermore, Indonesia and South Kalimantan also had the similar slope of Po trends that can be addressed as the similar growth of poverty reduction progress.

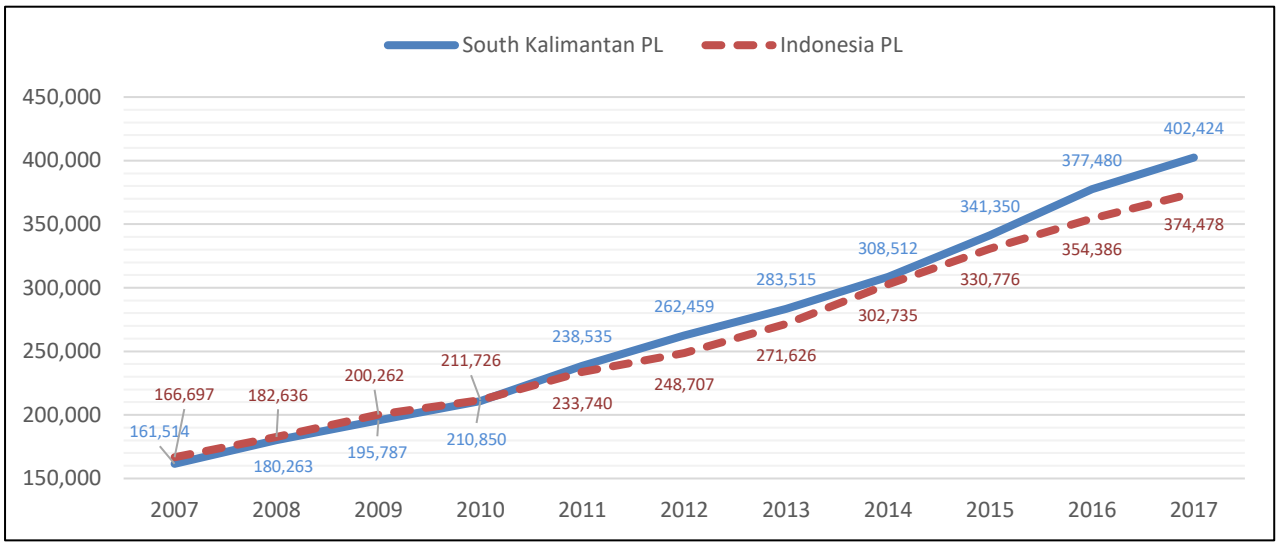

Figure 4. The Indonesia and South Kalimantan Poverty Line (PL) Trends 2007-2017 (Rupiah)
Source: BPS

In term of poverty line comparison, the figures were mixed. Regarding the available data, from 2007 to 2010, while having higher poverty rate, Indonesia used higher poverty threshold compared to South Kalimantan. In the remaining periods, South Kalimantan's poverty lines were always above the national lines.

In 2007, the poverty line in South Kalimantan was about Rp. 161,514, lower than Indonesia's poverty line which was about Rp. 166,697. At that time, the poverty line gap was only Rp. 5,183. Over the remaining periods, the gap increased into Rp. 27,946 with a note that starting from 2011, South Kalimantan utilized higher poverty lines than the national lines.

South Kalimantan PL vs. $PPP PL

Previously, Figure 4 depicts the domestic poverty lines have been increasing from 2007 to 2017. There was no sign that such lines are declining, the lines only showed either steeper or flatter increasing in the movement. Thus, this section presents the poverty line assessment from another perspective, the $PPP approach. This assessment formulates the suggested poverty line to fulfill the lowest World Bank Standard ($1.90) and consider whether the constructed domestic poverty lines are lower than the World Bank Standard or not.

The result of the conversion from South Kalimantan poverty lines into $PPP per capita per day can be observed in table 1.

Firstly, in the last eight years, South Kalimantan's poverty line increased from Rp. 210,850 in 2010 to Rp. 402,424 in 2017. In percentage, the rise of the South Kalimantan's poverty line from 2010 to 2017 was around 90.86% or almost double. On the other hand, using $PPP threshold, the converted-PL was ranging from $1.834 in 2010 to $1.712 in 2017. The minimum converted-PL was in 2014 amounted to

Table 1. Conversion of South Kalimantan's PL into $PPP per capita per day threshold, 2010-2017

Year	South Kalimantan's PL (Rp)	CPI (2011=100)	$PPP_{i,t}$ (Rp)	M ($PPP)	M per capita per day ($PPP)	Suggested Minimum Poverty Line (Rp)	Margin of Actual and Suggested PL (Rp)
2017	402,424	137.48	5,625.69	52.03	1.712	446,499	-44,075
2016	377,480	132.42	5,418.69	52.61	1.731	414,246	-36,766
2015	341,350	127.86	5,231.91	51.03	1.679	386,181	-44,831
2014	308,512	121.61	4,976.14	50.98	1.678	349,345	-40,833
2013	283,515	113.36	4,638.46	53.92	1.775	303,541	-20,026
2012	262,459	105.96	4,335.82	57.13	1.880	265,223	-2,764
2011	238,535	100.00	4,091.94	58.29	1.919	236,226	2,309
2010	210,850	96.17	3,935.31	55.71	1.834	218,488	-7,638

Source: Author's calculation

$1.678 PPP whereas the highest one was in 2011 ($1.919 PPP). It is clearly seen from table 1, in the PPP sense, South Kalimantan's poverty thresholds were fluctuated, mostly declined and below $1.90.

Secondly, South Kalimantan utilized the poverty line higher than the World Bank standard only in 2011. At that time, South Kalimantan poverty line was Rp. 2,309 higher than suggested minimum poverty line (converted $1.90 PPP). In the other periods, the margins were relatively big; thus, the converted-PL fell below the $1.90 PPP threshold.

Lastly, examining from the movement of the converted-PL relative to the World Bank's poverty thresholds in figure 5, South Kalimantan's converted poverty lines had four times declining incidents, in 2011 to 2012, 2012 to 2013, 2013 to 2014, and 2016 to 2017. Thus, despite the increasing domestic poverty line time to time, South Kalimantan set four declining converted poverty lines in periods mentioned above.

On the other hand, there was three times increase in the converted poverty lines. One line increased above the $1.90 PPP standard which was $1.919 PPP in 2010 to 2011. The other two periods (2014 to 2015 and 2015 to 2016), even though increased slightly, were smaller than $1.90 PPP (ranged $1.679 to $1.731 PPP).

South Kalimantan Poverty Rate: $PPP Approach

This stage provides a calculation on the South Kalimantan's Susenas 2016 data using suggested poverty line in 2016. Table 1 suggested the amount of domestic poverty line that equal to $1.90 PPP is about Rp. 414,246. It is evident that this line is higher than the domestic poverty line; thus, the poverty rate's calculation would produce a higher Headcount Index (Po). Further, as a consequence of a higher poverty line, as seen in table 2, Po increases from 4.85% to 7.20% (increases by 2.35% points).

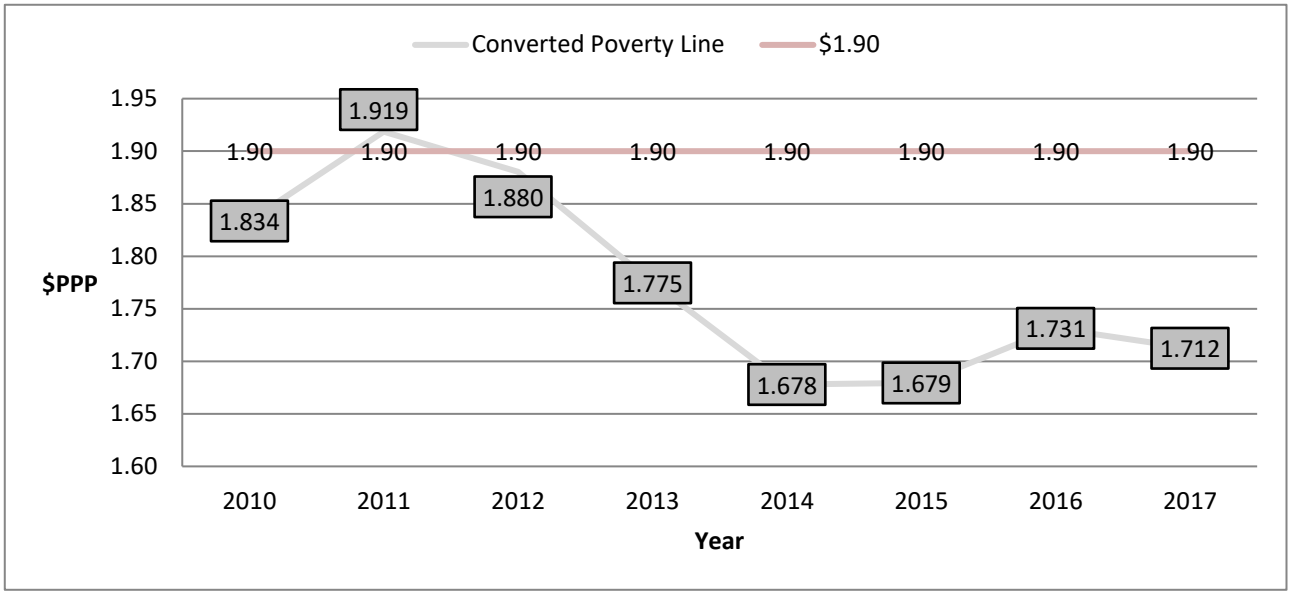

Figure 5. South Kalimantan's converted poverty lines and $1.90 threshold trends, 2010 to 2017

Source: Author's processing

Table 2. Poverty Rate Figures Using Domestic and $PPP Approach in South Kalimantan, 2016

Version	Poverty Line (Rp)	Percentage of Poor People (Po)
Domestic	377,480	4.85
$PPP	414,246	7.20
Margin	36,766	2.35

Source: Author's calculation from Susenas Data

D. CONCLUSION

This paper examines how Indonesia's poverty lines through South Kalimantan's poverty lines are assessed and converted into the World Bank's $PPP standard. After conversion, the converted poverty lines are then compared to the lowest poverty threshold suggested by the World Bank ($1.90 PPP). Following the conversion and comparison, there are some notes taken regarding the fluctuation of the converted poverty lines. Sequentially, the $1.90-a-day threshold is used and converted into domestic currency. This new domestic poverty line is employed as a threshold to calculate the poverty rate in South Kalimantan in 2016.

The conclusions of this paper comprise:

1. By using the South Kalimantan's case, Indonesia's poverty lines were not always too low compared with the World Bank standard ($PPP). In one year, the domestic poverty line was above $1.90 PPP; for other years of observation, the poverty lines were mostly below the World Bank's

threshold. Remembering that $1.90 is the average of 15 poorest countries' poverty lines based, there should be an awareness regarding these low poverty lines (even though the World Bank itself mentioned that the independence usage of the domestic and international poverty lines) particularly on how provincial poverty lines are constructed.

2. The main reason why the converted poverty lines were manly falling below the $1.90 PPP threshold is that the defined domestic poverty lines were too low. The existence of suggested minimum poverty lines that were converted from $1.90 PPP can be utilized as anchors to examine the preliminary domestic poverty line.
3. This paper exists not to judge whether the construction of the domestic poverty line is appropriate or not, it stands and emphasizes as an alternative to assess the domestic poverty line from the purchasing power parity's point of view.

There are limited papers that focused on the poverty threshold comparison and examination especially in Indonesia. So, this paper has a limitation in term of supporting literature and case comparison. Also, there should be another variable that better explains the relative price ratio between the national and the provincial level instead of a direct CPI ratio, remembering its high impact to the converted poverty line yielded. The poverty rate as one of the wealth indicators depends on how much the threshold is set; this paper exists as a comparable source for poverty threshold's conversion as well as enrichment to the existing literature.

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