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Natthani Meemon¹

Mahidol University, Salaya, Thailand

Ning J. Zhang

Seton Hall University, New Jersey, United States

Thomas T. H. Wan

University of Central Florida, Florida, United States

Seung Chun Paek

Mahidol University, Salaya, Thailand, seungchun.pak@mahidol.ac.th

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RESEARCH ARTICLE

Income Inequality in Thailand: A Relative Poverty Approach

Natthani Meemon¹, Ning J. Zhang², Thomas T. H. Wan³, & Seung Chun Paek^{1*}

¹Mahidol University, Salaya, Thailand

²Seton Hall University, New Jersey, United States

³University of Central Florida, Florida, United States

*seungchun.pak@mahidol.ac.th

Abstract: This study explored income inequality in Thailand using the OECD's relative poverty indicator. Based on 2013 and 2017 data from Thailand and the OECD, we compared trends in poverty between countries. Then, by selecting the working-age population in Thailand, we examined several socioeconomic determinants of poverty. The results indicate that the relative poverty rate in Thailand was relatively high compared to the OECD countries and was considerably higher for children and older adults. Among the working-age population, unemployed individuals and informal-sector employees had a persistently higher risk of relative poverty. These results imply that income inequality in Thailand depends largely on the country's employment situation. People who are not employed or engaged in any economic activity have a high chance of being impoverished, which can increase income inequality. From another viewpoint, the situation could indicate that the current welfare and social protection systems for people not directly related to employment in Thailand are inadequate compared to the systems in OECD countries. Based on the results, we recommend that the government should strengthen current welfare policies for these people. The child allowance for low-income workers and the employment benefit for retirement or termination, which are limited to formal-sector employees and their families, should be extended to workers in the informal employment sector. For older adults, the Old-Age Allowance should raise the currently inadequate pension amount to a realistic level that reflects the cost of living. In the long term, these fragmented policies should be integrated into a national pension policy that considers the country's economic situation and social consensus.

Keywords: poverty, income inequality, sense of relative deprivation, relative poverty, absolute poverty, OECD countries, Thailand

Whether the benefits of economic growth are divided fairly is a fundamental question for countries aiming to foster equal societies. Income inequality, as an indicator of equality, has been measured and continuously monitored in these countries through various tools such as the Gini and poverty index (Causa

& Hermansen, 2017; Rank & Hirschl, 2015). Thailand has also continued efforts to reduce income inequality for several decades. Since 1960, the government has set poverty and income inequality as critical agenda topics under the National Economic and Social Development Plan and implemented various welfare policies such as

the Old-Age Allowance, which is a universal pension for older adults aged over 60 years (Office of the Nation Economic and Social Development Board, 2016).

As a result, a severe level of income inequality has been substantially alleviated. Specifically, the national poverty rate, which the government utilizes to assess income inequality, has decreased from 42.3% in 2000 to 9.9% in 2018 (Figure 1; World Bank, 2020a; Yang, 2020). Nevertheless, it is unclear whether the indicator is still a valid measure to assess income inequality given the current scale of the country's economy.

Specifically, the government assesses the national poverty rate based on absolute poverty. Every year, the government sets the national poverty line and measures the poverty rate by estimating the proportion of individuals with monthly incomes below this line. Such an absolute poverty approach focuses primarily on whether the basic needs for livelihood (e.g., adequate food, shelter, and clothing) are satisfied. Thus, this approach can be appropriate for particular groups or societies with severely low economic levels, making basic needs hard to obtain, for example, older adults, children, and women (Iceland, 2013; Rasool et al., 2011; United Nations, 1995).

However, as the economic level of a society grows, people's basic needs increase and diversify according

to individuals' different social and economic statuses. Thus, the absolute poverty approach, which uniformly standardizes the basic needs for livelihood, may not adequately reflect the level of income inequality in societies that have exceeded a certain level of economic wellbeing (Duncan et al., 2014; Hastings, 2019; Marx & Van Den Bosch, 2007; Rank & Hirschl, 2015).

More importantly, the basic needs for livelihood tend to be relative and subjective because of the sense of relative deprivation (Hastings, 2019; Townsend, 2014). The expression "sense of relative deprivation" means that an individual, based on comparisons with other individuals, feels deprived of something they think they should have (e.g., specific rights or qualifications). An individual does not lose anything, but when other individuals have more, the individual feels like he or she has lost something in a relative sense (Adjaye-Gbewonyo & Kawachi, 2012; Davis, 1959; Hastings, 2019; Marx & Van Den Bosch, 2007; Ravallion, 2012; Townsend, 2014). This sense of relative deprivation can make people feel impoverished in a relative sense, even if this is not the case in an absolute sense (Hastings, 2019; Ravallion, 2012; Townsend, 2014).

For these reasons, countries with certain-scaled economies, such as the countries of the Organisation

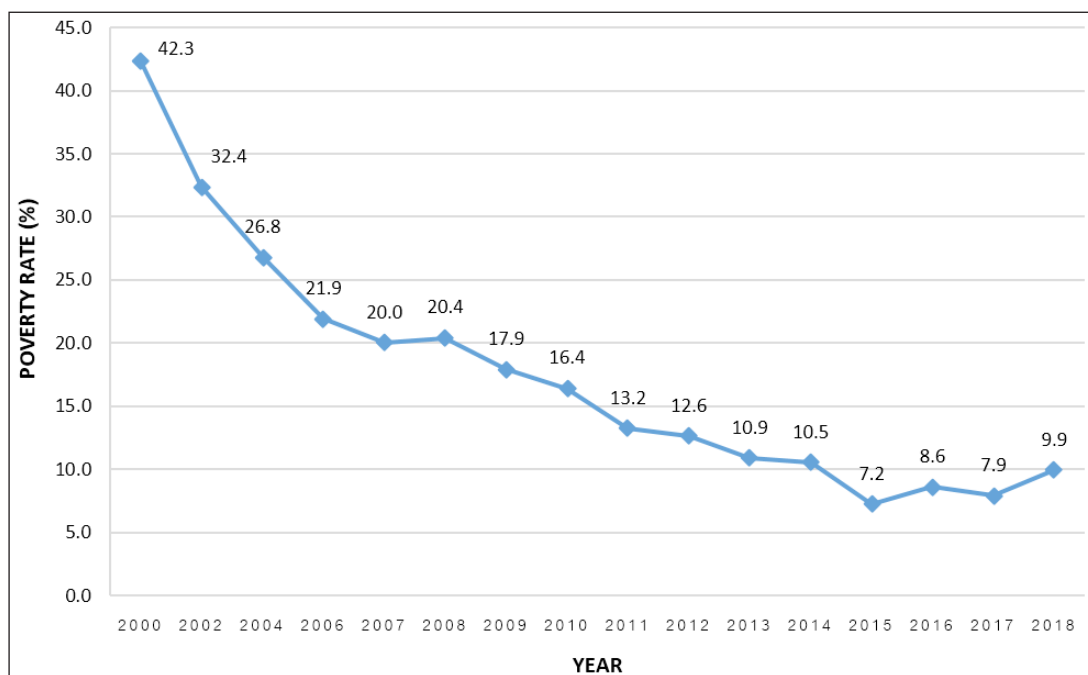


Figure 1. National Official Poverty Rates of Thailand, 2000–2018

for Economic Co-operation and Development (OECD) and European Union (EU), utilize a relative poverty approach rather than an absolute one (European Commission, 2004; Marx & Van Den Bosch, 2007; OECD, 2019; Rank & Hirschl, 2015). A relative poverty approach focuses on relative comparisons to determine the basic needs for livelihood. Similar to the sense of relative deprivation, this approach considers poverty as more than a lack of the economic resources needed to obtain essential goods and services. Rather, poverty is considered a condition that an individual feels that she or he is lacking based on comparisons with other individuals (Adjaye-Gbewonyo & Kawachi, 2012; Hastings, 2019; Ravallion, 2012; Townsend, 2014).

In general, the relative poverty approach used in OECD and EU countries sets a poverty threshold of 50% or 60% of the median income of the entire population (European Commission, 2004; Marx & Van Den Bosch, 2007; OECD, 2019). Specifically, OECD countries use 50% of the median income as the poverty line (i.e., threshold) and measure the poverty rate by estimating the proportion of individuals with monthly incomes below this line (OECD, 2019).

Thailand has accomplished economic and social developments for several decades, which enabled the country to considerably reduce severe income inequality and to become an upper-middle-income economy in 2011 (Jitsuchon, 2012; World Bank, 2020a). However, various recent news reports have indicated that more people perceived themselves as impoverished and financially unequal than before (Jitsuchon, 2020; Wangkiat, 2017; World Bank, 2020b; Yang, 2020). We believe that this phenomenon may be due to the sense of relative deprivation. We also believe this implies that the current absolute poverty indicator (i.e., the national poverty rate) may not accurately capture poverty and the level of income inequality.

Because previous studies in Thailand, to the best of our knowledge, used an absolute poverty approach (Fan et al., 2004, 2008; Jitsuchon, 2012; Warr, 2002; Yang, 2020), we believe that adopting a relative approach instead can offer another view and elucidate the situation of poverty and income inequality. Thus, this study employs the relative poverty indicator used by OECD countries to examine poverty in Thailand and its determinants to assess income inequality in Thailand.

Specifically, this study starts by exploring trends in relative poverty and compares them with the OECD countries to investigate the status of income inequality in Thailand. Then, by selecting the working-age population (25–65 years old) in Thailand who are the primary source of income for their households, we investigated factors associated with relative poverty to understand the socioeconomic pattern of poverty. We explored both cross-sectional and long-term patterns using two-year socioeconomic survey data (2013 and 2017).

Methods

Data Source

This study used Socio-Economic Survey (SES) data from 2013 and 2017 as the main data source for analysis. The SES, a national survey collected by the National Statistical Office of Thailand, consists of a wide range of demographic and socioeconomic characteristics of the country's entire population. The government and related public entities widely utilize this data to generate official statistics, including the national poverty rate (National Statistical Office of Thailand, 2021).

Also, this study used the OECD's Income Distribution Database 2012–2018 data (publicly available from the OECD statistics website) to compare Thailand's relative poverty with that of OECD countries (OECD, 2021). The base years for the study analysis were 2013 and 2017. However, some values were missing from some OECD countries in these base years, which we replaced with corresponding values from the years nearest to the base years. Specifically, missing values in 2013 were replaced with data from 2012 or 2014, and missing values from 2017 were replaced with data from 2015, 2016, or 2018.

Variable Measurement

Relative poverty (the dependent variable) was measured as a binary variable (yes or no). By following the method employed in OECD countries, the poverty line was set at an income equal to 50% of the median income of the entire population (European Commission, 2004; Marx & Van Den Bosch, 2007; OECD, 2019). If an individual's income was below or above the poverty line, they were categorized as "yes" (poverty) or "no" (non-poverty), respectively. We used

equivalent income, which is a standardized income per single-person household (i.e., individual-level income), to measure relative poverty. We estimated equivalent income was estimated by dividing total household income by the square root of the number of members in each household (OECD, 2009).

The independent variables comprised six socioeconomic factors: age, gender, marital status, education, employment, and region. Age (an individual's age in years) was measured as a continuous variable; all other remaining factors were measured as binary or categorical variables. Specifically, gender was measured as male or female. Meanwhile, marital status was measured as a categorical variable with three groups: single, married, and divorced. The divorced category included divorced people as well as widowed or separated people. Education also included three groups: low, middle, and high. The low category referred to people who had a primary level of education or lower. The categories middle and high referred to those who had a secondary level of education and those who had a university level of education or above, respectively. Employment was categorized into four groups: public, private, informal, and unemployed. Finally, region comprised three groups: Bangkok metropolitan, urban, and rural.

Statistical Analysis

Descriptive analysis was performed to explore trends in relative poverty in Thailand and compare them to the trends observed in OECD countries. The relative poverty rate in OECD countries (OECD, 2019) was estimated and compared according to three age groups: younger (under 18 years old), middle (18–65 years old), and older (over 65 years old). Then, we chose the working-age population in Thailand (25–65 years old) and conducted binary logistic regression (BLR) to examine how the selected socioeconomic factors were associated with relative poverty.

Because this study used two-year SES data (2013 and 2017), BLR and pooled BLR analyses were performed to analyze cross-sectional and long-term associations, respectively. Specifically, two separate BLR analyses were carried out for each year to investigate cross-sectional associations. Moreover, pooled BLR analysis was carried out to investigate how the associations found in the previous BLR analyses varied between 2013 and 2017 (Hosmer & Lemeshow, 2000; McAvay et al., 1996; Pallant,

2007). The statistical significance level was set at $p < 0.05$, and all analyses were performed using the IBM Statistics 20 software.

Results

Trends of Relative Poverty: Thailand and OECD Countries

Figure 2 illustrates the comparison of the relative poverty rates between Thailand and OECD countries in 2013 and 2017. The overall relative poverty rate in Thailand appeared to be almost twice as high as in the OECD countries in both years. In 2017, for example, the overall poverty rate in Thailand was 22.2% (versus 11.6% in OECD countries). Furthermore, although the poverty rate in the OECD countries was similar or slightly decreased when comparing 2013 data to 2017 data, the rate increased in Thailand. Specifically, the poverty rates in the OECD countries were 11.7% and 11.6%, whereas Thailand's were 20.6% and 22.2% in 2013 and 2017, respectively.

In both Thailand and OECD countries, the poverty rates in the middle-age group (18–65 years old) were lower than in the younger (under 18 years old) and older (over 65 years) groups. This is probably because most people in the middle-age group are employed or directly involved in economic activity. Meanwhile, the poverty rates of the younger- and older-age groups differed considerably between Thailand and the OECD countries. In the OECD countries, the poverty rates of both groups were similar, ranging from approximately 12–14%. However, in Thailand, the poverty rate of the older-age group in 2017 (38.6%) was higher than that of the younger-age group (26.3%).

In addition, even though the poverty rates differed by age group in the OECD countries, the differences were relatively small (2–3%). On the other hand, the difference was considerable (over 20%) in Thailand. For example, the OECD countries' poverty rate was slightly higher for the older-age group than for the middle-age group. Meanwhile, in Thailand, the poverty rate of the older-age group in 2017 (38.6%) was more than two times higher than that of the middle-age group (17.7%).

In summary, the results indicate that the relative poverty rate in Thailand was higher than in the OECD countries, both in 2013 and 2017. Furthermore, the poverty rate in the OECD countries remained similar

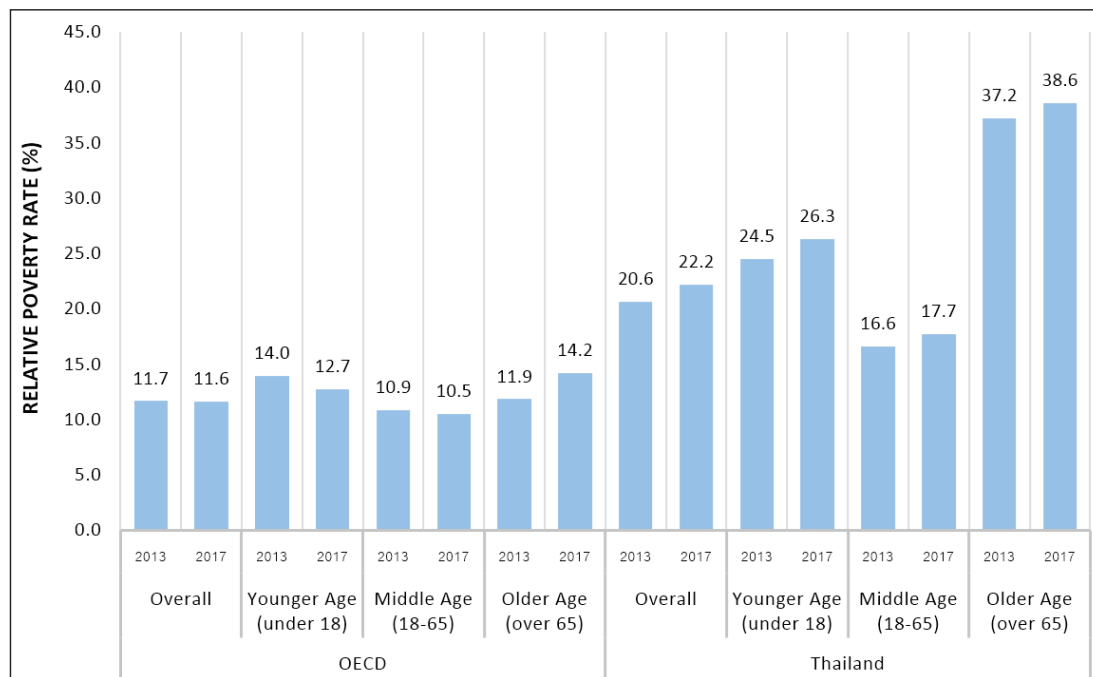


Figure 2. Relative Poverty Rates of Thailand and OECD Countries in 2013 and 2017

or improved slightly from 2013 to 2017, whereas it worsened in Thailand.

The poverty rate of the middle-age group in Thailand was not much lower than in the OECD countries. Based on a post hoc analysis (not presented in Figure 2), we found that, in both years, the poverty rates of the middle-age group in Thailand (16.6% in 2013 and 17.7% in 2017) were comparable to those of several OECD countries, such as Spain (14.6% in 2013 and 14.7% in 2017), Chile (14.8% in 2013 and 14.5% in 2017), and the United States (15.7% in 2013 and 15.4% in 2017).

However, the poverty rates of the other age groups, the younger- and older-age groups, were considerably higher in Thailand than in the OECD countries. These results indicate that Thailand's poverty and income inequality might be affected significantly by the country's employment situation. That is, people who are not employed or engaged in economic activity are more likely to be impoverished, which can increase income inequality in the country. Alternatively, it could mean that welfare or social protection systems for children and older adults who are not employed are inadequate in Thailand when compared to the OECD countries.

Determinants of Relative Poverty: Working-Age Population in Thailand

Table 1 presents the results of the descriptive statistics for the working-age group (25–65 years old). Similar to the results presented in Figure 2, these findings indicate that the relative poverty of the working-age group in Thailand increased from 17.10% in 2013 to 17.96% in 2017. The average gap in the actual incomes of people who are impoverished and people who are not was approximately 5–6 times. In 2017, for example, the average monthly income of impoverished people was 2,819.39 Thai baht (equivalent to approximately 92 US dollars); the average monthly income of those who were not impoverished was 14,486.45 Thai baht (equivalent to approximately 480 US dollars).

For the other socioeconomic factors, people with relatively low socioeconomic status were at a higher risk of experiencing relative poverty. Specifically, the results indicated that impoverished people included relatively high proportions of elderly, female, divorced, lower-educated, unemployed, informal-sector-employed (compared to private- and government-sector-employed), and rural- and urban-dwelling (compared to Bangkok metropolitan) individuals.

The patterns were pronounced in terms of education, employment, and region.

Specifically, for education, lower-educated people had a significantly higher poverty rate than middle- and high-educated individuals. In 2017, for example, only 2% of impoverished people had a college education or higher; those with a primary school level of education or below accounted for almost 80% of this group. For employment, more than 95% of all impoverished people were either unemployed or employed in the informal employment sector. Meanwhile, only 2–4% were employed in the government or private sectors. Lastly, regarding region, people living in rural or urban areas had a significantly higher poverty rate than those

living in the Bangkok metropolitan area. Specifically, the poverty rate was less than 1% for people living in the Bangkok metropolitan area. The poverty rates were much higher for those living in rural (56%) and urban (43%) areas.

Table 2 presents the associations between the independent factors and relative poverty based on the BLR model. For Model 1 (i.e., the BLR model for 2013), similar to the results of the descriptive statistics, it was found that people of lower socioeconomic status tended to have a higher risk of experiencing poverty. Specifically, relative poverty was significantly more common among older, single, divorced (compared to married), lower-educated,

Table 1

Results of Descriptive Statistics for the Working-Age Group (25–65 Years Old)

Variables	Year 2013 [n = 41,644]		Year 2017 [n = 38,667]	
	Relative Poverty		Relative Poverty	
	Yes [17.10%]	No [82.90%]	Yes [17.96%]	No [82.04%]
Income ^{a, b}	2,369.16	14,246.31	2,819.39	14,486.45
Age ^{a, b}	48.16	44.46	49.42	45.64
Gender ^{a, b}				
Male	43.86	47.04	45.41	47.01
Female	56.14	52.96	54.59	52.99
Marital Status ^{a, b}				
Single	10.17	14.93	12.13	14.96
Married	74.50	75.28	72.47	74.51
Divorced	15.33	9.79	15.41	10.53
Education ^{a, b}				
Low	84.20	52.20	79.03	49.15
Middle	14.83	31.53	19.25	34.13
High	0.97	16.27	1.71	16.73
Employment ^{a, b}				
Government	1.47	10.73	1.31	9.28
Private	0.98	17.88	2.52	19.08
Informal	79.92	59.35	74.52	57.70
Unemployed	17.62	12.04	21.64	13.95
Region ^{a, b}				
Bangkok	0.29	6.53	0.50	6.47
Urban Area	41.76	52.60	44.28	51.72
Rural Area	57.95	40.86	55.21	41.82

Note: a, b = statistically significant at 0.05 for the years 2013 and 2017.

Table 2*Results of BLR and Pooled BLR Analyses*

Variables	Model 1: BLR [Year 2013]		Model 2: BLR [Year 2017]		Model 3: Pooled BLR [Year 2013–2017]	
	OR	95% CI	OR	95% CI	OR	95% CI
Age		[1.00, 1.01]*	1.01	[1.00, 1.01]*	1.00	[1.00, 1.01]
Gender						
Female	1.02	[0.97, 1.08]	0.98	[0.93, 1.04]	0.96	[0.88, 1.04]
Male						
Marital Status						
Single	1.22	[1.11, 1.33]*	1.40	[1.28, 1.53]*	1.15	[1.01, 1.31]*
Divorced	1.34	[1.24, 1.46]*	1.26	[1.16, 1.37]*	0.94	[0.84, 1.05]
Married						
Education						
Low	10.96	[8.57, 14.03]*	7.45	[6.15, 9.03]*	0.68	[0.50, 0.93]*
Middle	4.57	[3.55, 5.87]*	3.59	[2.95, 4.37]*	0.79	[0.57, 1.08]
High						
Employment						
Private	0.32	[0.23, 0.43]*	0.79	[0.61, 1.03]	2.48	[1.65, 3.73]*
Informal	4.08	[3.33, 5.00]*	4.40	[3.54, 5.47]*	1.08	[0.80, 1.45]
Unemployed	5.11	[4.13, 6.31]*	5.89	[4.71, 7.36]*	1.15	[0.85, 1.57]
Government						
Region						
Urban	11.20	[7.25, 17.31]*	7.74	[5.51, 10.88]*	0.69	[0.40, 1.20]
Rural	16.45	[10.64, 25.42]*	10.24	[7.28, 14.39]*	0.62	[0.36, 1.08]
Bangkok						

Note: * = statistically significant at 0.05; OR = odds ratio; 95% CI = 95% confidence interval.

unemployed, informal-sector-employed (compared to private- and government-sector-employed), and rural- and urban-dwelling (compared to those living in the Bangkok metropolitan area) people.

The pattern was pronounced in terms of education, employment, and region, which, again, is similar to the results of the descriptive statistics. Specifically, for education, people with a primary level of education or below were 10.96 times more likely to encounter poverty than people with a university level of education or higher. Furthermore, those with a secondary level of education were 4.57 times more likely to encounter

relative poverty than those with a university level of education or higher.

Also, compared to government-sector employees, unemployed people or employed in the informal sector were 5.11 times and 4.07 times more likely to encounter poverty, respectively. Poverty rates did not differ significantly between private- and government-sector employees. Finally, in terms of region, compared to people living in the Bangkok metropolitan area, those living in rural and urban areas were 16.45 and 11.20 times more likely to experience poverty, respectively.

The results for Model 2 (BLR model for 2017) were similar to those for Model 1 (BLR model for 2013). Specifically, older, single, divorced (compared to married), lower-educated, unemployed, informal-sector-employed (compared to government-sector-employed), rural- and urban-dwelling (compared to those living in the Bangkok metropolitan area) people tended to have a significantly higher risk of experiencing poverty. Also similar to Model 1, the pattern was pronounced for education, employment, and region.

Specifically, compared to people with a college level of education or above, those with a primary level of education or lower and those with a secondary level of education were 7.45 times and 3.59 times more likely to face poverty, respectively. Also, compared to government-sector employees, unemployed individuals and informal-sector employees were 5.89 and 4.40 times more likely to face poverty, respectively. Lastly, compared to people living in the Bangkok metropolitan area, those living in rural and urban areas were 10.24 times and 7.74 times more likely to experience poverty, respectively.

For Model 3 (pooled BLR model between 2013 and 2017), significant associations were found for marital status, education, and employment. Regarding marital status, the odds ratio for the single category was 1.15. This finding indicates that the risk of a single person would experience relative poverty increased by approximately 15% from 2013–2017. Meanwhile, the odds ratio for education was 0.68 for the low category. This value indicates that a person with a primary level of education or lower was approximately 47% less likely to experience relative poverty in 2017 than in 2013.

Finally, the odds ratio of the risk that people in the private employment sector (compared to those in the government sector) would experience relative poverty was 2.48. This value indicates an increased risk from 2013–2017. That is, private-sector employees became more likely to encounter poverty over time, whereas government-sector employees became less likely to encounter poverty. In addition, there were no significant differences in poverty for the two factors (age and region) for Model 3. This means that older people and people living in rural and urban areas (compared to younger people and people in Bangkok metropolitan areas, respectively) faced an increased risk of relative poverty in both years.

In summary, people with lower socioeconomic status had a higher risk of experiencing relative poverty than those with a higher status. Specifically, older, single, divorced (compared to married), lower-educated, unemployed, informal-sector-employed (compared to formal-sector-employed), and rural- and urban-dwelling (compared to Bangkok metropolitan) people were more likely to encounter poverty. This pattern generally persisted from 2013–2017.

Interestingly, the risk of poverty for lower-educated people decreased significantly from 2013–2017. This could be because the change in the poverty risk from 2013–2017 was more prominent in higher-educated people than lower-educated people. As shown in the descriptive statistics (Table 1), the poverty rate decreased by only 6% from 2013 (84.20%) to 2017 (79.03%) for people with a primary level of education or below. Meanwhile, for those with a university level of education or above, the poverty rate increased by approximately 76% during the same period (from 0.97% in 2013 to 1.71% in 2017).

For this reason, it is difficult to conclude whether education mitigates the poverty risk of lower-educated people. Thus, an in-depth analysis of the lower-educated group while considering other factors (e.g., employment status and type) is necessary to gain a more precise understanding of education's impact on poverty.

Discussion

As a result of the government's effort, the national poverty rate has decreased substantially over the past decades. Nevertheless, various news outlets have reported that more people perceived themselves as impoverished and financially unequal than before. We believe that this phenomenon may be due to the sense of relative deprivation. Furthermore, the absolute indicator (i.e., the national poverty rate) may not be an appropriate measure for determining income inequality given the current scale of the country's economy. Thus, in this study, we used the OECD's relative poverty indicator to investigate trends and determinants of poverty to better understand income inequality in Thailand.

The results indicated a discrepancy between the absolute and relative poverty rates. Specifically, the absolute poverty rate (which the government utilizes

to measure poverty) decreased from 10.9% in 2013 to 7.9% in 2017 (Figure 1). Conversely, the relative poverty rate increased from 20.6% in 2013 to 22.2% in 2017 (Figure 2). This discrepancy suggests that the relative poverty indicator might more accurately capture the phenomenon of the sense of relative deprivation than the absolute poverty rate.

Indeed, people's actual feelings about poverty and income inequality tend to be subjective due to the sense of relative deprivation (Hastings, 2019; Townsend, 2014). This tendency appears stronger in societies with certain economies of scale. In this sense, if the government relies solely on the national poverty rate to establish welfare policies to reduce poverty and income inequality, it may create a gap between the policies and reality. This gap may widen as the economy of the country grows. Thus, the government should consider the relative poverty rate as a supplementary indicator to the national poverty rate to more precisely assess poverty and income inequality.

In addition, the results indicated that the risk of relative poverty was persistently higher for children and older adults who were not employed or directly engaged in economic activity (Figure 2). Similarly, for working-age people, unemployed individuals and informal-sector employees were found to have a persistently higher risk of experiencing poverty (Tables 1 and 2).

This finding may indicate that poverty and income inequality in Thailand largely depend on the country's employment situation. That is, people who are not engaged in employment or economic activity have a higher chance of being impoverished than other individuals. Accordingly, increase the level of income inequality increases. Alternatively, it may mean that welfare or social protection systems in place for the unemployed are insufficient in Thailand when compared to the OECD countries.

Although the government has implemented welfare policies for these groups, the policies' practicality and effectiveness need to be improved. Specifically, the government currently implements the child allowance for low-income workers and the employment benefit for retirement or termination, respectively, for children and the unemployed. However, because both policies are limited to employees in the formal employment sector (and their families), the policy's impacts may not be significant. This is because of the current employment structure, which consists of informal-

sector and unemployed people, who account for more than 70% of all employees. This is shown in the descriptive statistics (Table 1).

For older adults, the government also implements the Old-Age Allowance (i.e., universal pension for those aged over 60 years) to ensure their income protection and security. However, there is some concern regarding whether the pension amount (600–1,000 Thai baht monthly, which is equivalent to approximately 18–30 US dollars) can achieve such policy goals, as reported in previous studies (International Labour Organization, 2017; Meemon & Paek, 2019, 2020; Rose, 2016). Furthermore, considering the rapid increase in the proportion of older adults and single individuals in Thailand (Meemon & Paek, 2020), the poverty and income inequality faced by these groups are expected to become more serious if these concerns are not addressed.

Thus, we recommend that the government takes action to reinforce current policies. Specifically, the child allowance and employment benefit should be extended to cover people working in the informal employment sector. For example, the government should consider a legal registration system similar to those implemented to extend social protection policies to informal-sector workers in many other countries. For instance, Singapore requires legal registration and licensing to formalize informal-sector small enterprises and their employees. Through these procedures, employers are obliged to enroll their employees in its official social security protection system (OECD & International Labour Organization, 2019).

Regarding the Old-Age Allowance, the inadequate pension amount needs to be increased to a level that reflects the cost of basic needs (e.g., food, rent, transportation, communication). Specifically, the government should increase the current pension allowance (600–1,000 Thai baht) to at least until the national poverty line (2,686 Thai baht). Also, the allowance, which is paid equally to all older adults, needs to be adjusted according to each person's socioeconomic conditions (e.g., older adults who live alone without any support from their family should receive more). In the long term, these fragmented policies should be integrated into a comprehensive national pension policy. This integration process should consider the country's economic situation and social consensus.

Lastly, some limitations of the present study must be mentioned so they can be addressed in future studies. First, there is a large variation in welfare and social protection systems, as well as in population and socioeconomic structures across countries. However, this study considered only the average scores (without considering variations) when performing a simple comparison between Thailand and the OECD countries. For this reason, this study provides a limited understanding of specific reasons that poverty is higher in Thailand than in the OECD countries. Accordingly, country-by-country comparisons with more comprehensive country-level factors are recommended for future research.

Second, because this study considered the availability and comparability of both Thai SES and OECD data, a time gap of only four years was ultimately selected, which is relatively short. Accordingly, the trends and socioeconomic patterns reported in this study may not be sufficiently representative. In addition, for the OECD data, although the most recent data year from 2019, most of the information was from 2016 and 2017, making it somewhat outdated. Thus, a longer-period research setting with more up-to-date information is a methodological consideration for future research.

Lastly, after showing the increasing trends of the relative poverty rate, we concluded that the relative poverty indicator could more accurately capture the phenomenon of a sense of relative deprivation compared to the absolute indicator, at least to some degree. Nevertheless, the quantitative analysis with secondary data sources used in this study was limited in its capability to confirm a direct correlation between the increase in relative poverty and the phenomenon of a sense of relative deprivation. A qualitative research approach would be necessary to address this limitation. More importantly, although there are various quantitative indicators for assessing income inequality, such as the Gini and poverty index, there are not many qualitative assessment tools for the same purpose. Thus, future research could aim to develop a qualitative assessment indicator.

Conclusion

This study analyzed relative poverty and its determinants to explore income inequality in Thailand. The main results of the study indicated that the risk of

relative poverty was persistently high among children and older adults who are not employed. Among working-age people, those who were unemployed or informal-sector employees also had a persistently high risk of experiencing poverty. These results imply that poverty and income inequality in Thailand heavily rely on the country's employment conditions. Moreover, the welfare and social protection systems in place for these people are inadequate, according to a comparison with OECD countries.

Based on the results, we recommend that the government reinforce the current welfare policies for these people in the short term. Specifically, the child allowance and employment benefit provided to children, unemployed people, and informal-sector workers should be extended to the informal employment sector, as they are currently limited to formal-sector employees and their families. For older adults, the Old-Age Allowance should be increased in accordance with the cost of essential goods. In the long term, these isolated policies should be integrated into a comprehensive national pension policy that considers the country's economic conditions and social consensus.

Declaration of Ownership

This report is our original work.

Conflict of Interest

None.

Ethical Clearance

This study was approved by our institution.

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