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Understanding Child Deprivation in Indonesia: The Multiple Overlapping Deprivation Analysis (MODA) Approach

Ending poverty in all its form everywhere is the first goal of Sustainable Development Goals (SDGs) in which Indonesian government has committed to achieve. In a developing country like Indonesia, children are particularly vulnerable to deprivation of their specific needs. They cannot be regarded as full economic agents exercising consumer sovereignty: they are not able to secure their own income/resources until a certain age and they are not sovereign in making consumption decisions (White et al 2002). The use of the single-dimensional income approach as the sole poverty measurement indicator has its limitations. Thus, to give a broader and better picture of poverty condition, the multidimensional framework is required. Multidimensional measures provide an alternative lens through which poverty may be viewed and understood (Alkire and Foster, 2011). Multiple deprivation analysis looks beyond household income because it focuses directly at the household's ability to access and benefit of these goods and services (Bima, L and Marlina, C., 2017). In the context of children's well-being, the basic needs of children comprise both monetary and non-monetary dimensions. This paper presents the findings from a study on poverty and multidimensional deprivation among children in Indonesia. By adopting the Multiple Overlapping Deprivation Analysis (MODA) methodology developed by UNICEF Office of Research, this paper analyzes children's conditions and their deprivation against various dimensions based on children's life cycle.

The data used to analyze the child deprivation is taken from The 2015 National Social and Economic Survey (SUSENAS) conducted by BPS Statistics Indonesia. The survey covered both rural and urban populations. The survey collected information relating to demographic and detailed information on household's consumption on food and non-food. Taking into account the availability of the data, the analysis uses 6 dimensions which involve 15 indicators. The indicators selection in each dimension is based on the indicators of SDGs and with consideration of some principles on The Convention on the Rights of the Child (CRC). The deprivation analysis is applied to the age group 0-4 years and 5-17 years. The indicator selection is adjusted to every age group, in which focuses on the reference age. The dimensions are housing, facility, food and nutrition, education, child protection, and health. In housing dimension, the indicators are house area and kind of floor. In facility dimension, the indicators are drinking water, sanitation, and cooking fuel. Indicators in food and nutrition dimension are calorie consumption, fat proportion, and consumption of breast milk. Indicators in education dimension are formal school participation and school participation by age. Indicators in child protection are birth certificate, child marriage, and child labor. Lastly, indicators in health

dimension are health insurance and immunization. It is noted that a child whose age is not in the reference age in an indicator is considered as not deprived in the indicator. For example, 0-2 year-old children are considered not deprived in indicator participation of formal education. The result shows that there's an overlap between consumption and multidimensional poverty. Even though, a child is not defined poor, they still have a probability to be deprived. Based on the consumption approach, 13 of 100 children in Indonesia are poor. On the other hand, based on the MODA approach, 78 of 100 children aged 0-17 years in Indonesia are multi-dimensionally deprived. In 0-4 year-old children, most frequent deprivation happens in health dimension. Having no health insurance and never given a complete immunization causes children to be deprived. According to the analysis of deprived children based on the number of deprived dimensions, 0-4 year-old children are mostly deprived in two dimensions. In 5-17 year-old children, most frequent deprivation happens in facility dimension. Lack access to decent drinking water, sanitation, and cooking fuel cause children to be deprived. According to the analysis of deprived children based on the number of deprived dimensions, children aged 5-17 are mostly deprived in four dimensions. This means that children aged 5-17 tend to be deprived in more dimension than children aged 0-4.

To ensure an inclusive growth on children, children's development in Indonesia should consider the characteristic of children's type of residence. In both age group, the percentage of deprived children in rural are more than the percentage of deprived children living in urban, specifically deprivation in at least two dimensions. This paper also suggests that poverty reduction programs in Indonesia should provide different kinds of assistance to the poor in different dimensions of poverty. Indonesia needs to use both monetary and multidimensional poverty indices to understand the extent, diversity and dynamics of the children's welfare. Thus the analysis of poverty policy should be more focused on fundamentally important capability deprivations, rather than only on a convenient proxy such as income or consumption.