DO HOUSEHOLD SOCIOECONOMIC STATUS AND CHARACTERISTICS CHANGE OVER A 3 YEAR PERIOD IN INDONESIA? EVIDENCE FROM SUSENAS PANEL 2008-2010

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Do Household Socioeconomic Status and Characteristics Change Over a 3 Year Period in Indonesia? Evidence From SUSENAS Panel 2008-2010

Luisa Fernandez and Gracia Hadiwidjaja¹

ABSTRACT

Database used to target social programs in Indonesia was updated every three years. Exclusion error and poverty dynamics in Indonesia have raised the question whether updating is required within that three year period. In this paper, we assess this issue by employing Susenas panel data to track changes in household characteristics and consumption mobility within three years. We find that household characteristics that were used to estimate household consumption in Proxy Means Test (PMT) remained stable for most households over a three year period. About 28 percent of households in the bottom three deciles moved up to higher deciles while about 13 percent of households in the top six deciles moved down to lower deciles.

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I. Introduction

The Government of Indonesia has made significant efforts to improve the way poor and vulnerable households are targeted to access social programs. By 2016, Indonesia had conducted four major data collections of poor households. The first data collection was conducted in 2005 and was repeated every 3 years with no updates in between². Based on the national poverty rate, which ranges from 16 to 10.7 percent between 2005 and 2016, the four data collection cover not only poor households but also vulnerable households (up to the bottom 30 percent households in 2005 and 2005 and 2008, and the bottom 40 percent in 2011 and 2015). Data collected became the basis for social program distribution and was known as Unified Database of Social Protection Programs (UDB). This paper provides evidence that assess the need to regularly update the UDB within a 3 year period.

UDB was built by using a Proxy Means Test (PMT) methodology that uses socioeconomic conditions as proxies of welfare to predict consumption. Socioeconomic information was gathered through household survey. The UDB intends to be the registry of basic information of the bottom 40 percent of households in Indonesia. The UDB has being used to select poor households for social programs including the Conditional Cash transfer program (PKH), Scholarships (BSM) and will be used for enrolling poor households under the health insurance (Jamkesmas).

The three data collections share some similarities, as follows; 1) the final output of names and addresses of the bottom 30-40 percent households in Indonesia, 2) the general method of using household characteristics as proxies to determine the socioeconomic status of households, and 3) the use of SUSENAS from which survey variables were selected. The data collections nonetheless improved over the years in their methodological approach and coverage.

The first data collection, known as the 2005 Socioeconomic Data Collection –*Pendataan Sosial Ekonomi 2005 (PSE-2005)*, was conducted by Statistics Indonesia (BPS) in 2005. The purpose was to have a registry of poor and vulnerable households to implement a cash transfer program (Bantuan Langsung Tunai-BLT) as a compensation program to mitigate effects of fuel subsidies increase. PSE-2005 applied the household characteristic (non-monetary) approach using 14 household characteristics from which the household poverty status was decided from.

² Exception was found in 2014 when data collection was conducted in 2015 instead.

Out of the 14 questions asked during the survey, some were taken from SUSENAS while others were more ad hoc in nature. Due to the lack of pre-existing data at that time, the first phase registry lists (pre-lists) of households to be surveyed were created through subjective consultations with community leaders. The final output of PSE-2005 was the names and addresses of 19 million household heads intending to cover approximately the three bottom deciles of all households in Indonesia.

With no updates between 2005 and 2008, the second census of poor households known as the 2008 Social Protection Program Data Collection - *Pendataan Program Perlindungan Sosial 2008 (PPLS-2008)* was conducted in 2008. This time BPS shifted to a monetary approach and applied the PMT scoring method using indicators from SUSENAS and Podes to estimate household per capita expenditures. One consequence of applying the new approach is that all questions included in the survey were then taken out and selected from SUSENAS. From the pre-lists that were constructed from the PSE-2005 data, the same households were revisited in 2008 while at the same time, excluding those whom were viewed to no longer be poor and adding new households that were found through sweeping. In total, there were 19 million households surveyed in 2008 which are approximately equal to the bottom three deciles of all households in Indonesia.

	PSE 2005	PPLS 2008	PPLS 2011
Method used	Non-monetary scoring using household characteristics	Monetary approach using consumption- based PMT	Monetary approach using consumption- based PMT
Main pre-listing	Nominations from village leaders	PSE'05 revisited	Poverty mapping using 2010 Census
Questions in the questionnaire	14 questions (SUSENAS + non- SUSENAS). Some subjective, hard to verify	>40 indicators, selected and tested from SUSENAS/Podes	>40 indicators, selected and tested from SUSENAS/Podes
Coverage of households	19m	19m	25m

Table 1. Comparison of three data collections of poor households in Indonesia

The third data collection, known as the 2011 Social Protection Program Data Collection -Pendataan Program Perlindungan Sosial 2011 (PPLS-2011), was conducted in 2011. In addition to a bigger coverage, the bottom 40 percent as to 30 percent in 2008, some methodological improvements were made. Using PMT method the pre-lists of households that were previously subject to village leaders were now generated from the 2010 Demographic census (SP 2010) by using poverty mapping that constructs rough proxies of household poverty status. Sweeping and community consultations were also performed during the field survey with the purpose of capturing households that were still excluded from the lists. In the end PPLS 2011 reaches the four bottom deciles of Indonesian households covering 25 million households.

In 2012, the discussion on the need to improve the UDB expanded to the issue of updating. Updates are important because no data collection is perfect. Most still suffer from exclusion and inclusion errors that come not only from the statistical model but also from situations in the field. Through repeated data collections over the years, people may have gradually learned ways to manipulate their real socioeconomic conditions thus inclusion errors sometimes are inevitable. Meanwhile community's local perception of poverty may also create bias thus reduces/increases the chance of a given household to be included in the UDB. At the same time, potential community tensions and riots when UDB was associated with social programs increase the pressure to have information that is as accurate as possible.

The objective of having an updating mechanism in place therefore is to ensure that UDB has included information on all individuals/households in the bottom three/four deciles depending on the target set at the beginning. The main information to be collected will be the change in the composition of the bottom three/four deciles households. In other words, an update aims to find out whether households in the first three deciles (D_{1-3}) group have moved up or whether households not yet recorded in the UDB have now fallen down to the group. As each social program obtains its own verification system filtering recipients among those who exist in the UDB, the movement within the deciles 1-3 group (D_{1-3}) will not be as crucial to be captured in an update.

An updating exercise nonetheless is expensive, time consuming, and depending on the way it will later be conducted, may still not escape from household manipulations. The main argument

for regular updates has been that households will experience dynamic changes in their characteristics as well as socioeconomic status within a 3-year period. As PMT method predicts the socioeconomic status based on household characteristics, changes in characteristics may be followed by the change in socioeconomic status in which some poor households become no longer poor while some non-poor households become poor. Other than the perception that regular updates are needed, however, no analysis has been done to provide evidence as a ground for conducting updates.

Determining the best policy on updates requires further analytic support to examine the dynamics of household socioeconomic status and characteristics over a certain period. This note intends to provide such evidence using SUSENAS panel data from 2008 to 2010. Since SUSENAS was used to determine the proxy variables in the PMT model to assess households' welfare, then it was also used to analyze the changes in household socioeconomic status and characteristics within a 3 years period. From this analysis, we aim to answer the following questions:

- i. What is the dynamic of household socioeconomic status within a period of 3 years?
- ii. What is the dynamic of household characteristics within a period of 3 years?
- iii. When household characteristics change, what are the types of changes?
- iv. How is the dynamic of the bottom three deciles households compared to the overall households?

The note has 4 sections. The first includes this introduction. The second includes description of data and methodology. The third describes the main findings. The fourth includes summary and policy options.

II. Data and Methodology

A. Data

This analysis uses the National Socioeconomic Survey - Survei Sosial Ekonomi Nasional (SUSENAS) Panel of 2008, 2009 and 2010. Every February since 2002, Statistics Indonesia (BPS) conducts a panel survey in addition to the regular SUSENAS to estimate poverty numbers in years where the SUSENAS July consumption module was absence. Panel analysis unfortunately can only be applied for 3 years as BPS surveys new samples every four years. Compared to approximately 285,000 households surveyed in the July SUSENAS, SUSENAS panel surveyed approximately 65,000 households.

Due to cases in which households moved or refused to be resurveyed, SUSENAS Panel obtains an attrition rate of 12.7 percent from 2008 to 2009, and 21.2 percent from 2008 to 2010. In order to obtain a balanced panel data (households appear in all 3 years), we obtain a sample of 52,552 households consisted of 212,729 individuals, out of the initial 66,724 households sampled in 2008. In addition to SUSENAS, we apply the poverty line numbers calculated by the World Bank poverty team to estimate the average expenditure of households as proxies of the socioeconomic status.

B. Methodology

PPLS determines socioeconomic status of households using a Proxy Means Test (PMT) methodology, which seeks to predict welfare through prediction of household per capita consumption based on a set of multi dimensions such as education, household demographics, housing conditions, etc. The analysis of proxy variables for PPLS was done using Susenas data 2010 and 2011. The selection of variables was done through modeling using econometrics to find the best proxies of consumption. Final variables included were those with high prediction power and less estimation errors in the PMT model. Main categories include: household head characteristics, household demographics, education of household members, housing ownership and housing conditions, access to basic services, sanitation and assets. The variable to be estimated using the selected variables is the household per capita consumption.

The PMT model can be represented as follows:

$$Ln Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + \dots + b_k X_l + \mu$$

Where:

Ln Y = Natural logarithm of consumption per capita

 $b_0...b_k$ = Magnitude of the effect of the explanatory variables over the estimated variable Y

- $X_1...X_l$ = Explanatory variables (proxies)
- μ = Error of the model

In accordance with its purpose, the methodology used in this analysis is closely related to how the household socioeconomic status was determined in PPLS 2011. As socioeconomic status determinants, PPLS 2011 applied the PMT on 74 variables that appear in both questionnaires of PPLS 2011 and SUSENAS July 2010. In following the dynamics of characteristics therefore we replicate the same indicators using SUSENAS Panel and examine how each characteristic changes within the 3 year period. The 74 variables are found in SUSENAS Panel 2008, 2009, 2010 with the exception of 4 variables on assets that only appear in SUSENAS Panel 2010 and therefore must be excluded from our analysis.

We adjust most of the indicators to be on the household level with the exception of dependency ratio, gross enrollment rates, and net enrollment rates which due to their definitions are calculated at individual level. The remaining are 64 indicators which can be categorized into nine categories; household head characteristics, households demographics, education, work sector, work status, housing ownership, housing condition, access to basic services, and sanitation.

Combining SUSENAS samples of three years requires us to make a choice on weights of which year to be applied. Assuming the change in weighting is insignificant in a 3 year period, we use the 2008 weights as sample multipliers and the base for deciles division.

In answering questions raised in this report, our analysis will be divided into three parts; each will be explained in details as follows.

B.1 Changes in the socioeconomic status of households

The first part of our analysis looks into the dynamics of household socioeconomic status, specifically the mobility of households in the deciles 1-3 group to move up to higher deciles, and vice versa. We use the average household per capita expenditure as a proxy for socioeconomic status and record to which deciles each household falls to for year 2008, 2009, and 2010. To simplify our analysis, we grouped households into 4 deciles groups instead of having the complete ten; those belong to deciles 1-3, deciles 4, deciles 5, and deciles 6–above as described below.

(D₁₋₃): household is in deciles 1 or 2 or 3
household is in decile 4
household is in decile 5
household is in decile 6 or above

For each year, we create a sequence describing to which group household belongs in 2008, 2009, 2010. In this case, 114 means that households belongs to the deciles1-3 group in 2008, the deciles 1-3 group in 2009, and the deciles 4 group in 2010.

B.2 Changes in the Household Characteristics (Change vs. No Change)

The second part of the analysis deals with the changes in household characteristics specifically whether or not household characteristics change within the 3 year period. In doing the analysis, we created dummy variables of 0 and 1 from all of the 64 household level variables used in PMT. In this case, 1 means that household obtains the associated characteristic, while 0 means that household does not have it. We come up with one number of either 0 or 1 for each characteristic of each household for year 2008, 2009, and 2010. For every characteristic, we sum up the total values of the 3 years resulting in four possible values for each household, as follows:

Description	Group Category
"0", means household does not have the associated characteristic in all	No change
3 years	
"1", means household has the associated characteristic in 1 of 3 years	Change
"2", means household has the associated characteristic in 2 of 3 years	Change
"3", means household has the associated characteristic in all 3 years	No change

Our objective in this section is simply to see whether or not certain characteristics change within 3 years, thus patterns of changes are not yet of our interest. We treat the "0" and "3" as the "no-change" group, and "1" and "2" as the "change group".

B.3 Sequences of the Change in Household Characteristics

While patterns/sequences do not matter in the previous section, the third part of the analysis looks at the types of changes in household characteristics. Using the same dummies as created in the previous section, there are eight possible patterns of household characteristic dynamics.

"110"; "100"; "001"; "011" "010"; "101"; "111"; "000"

"110" in this case means that household has the associated characteristic in 2008 and 2009, yet does not have it anymore in 2010. Out of the eight combinations, the 110 and 100 groups are similar in the sense that households in both groups lose the associated characteristic during 2008 to 2010. Similar patterns happen for households in group 001 and 011 though this time; households are obtaining the associated characteristic. 101 and 010 meanwhile are rather unique as households are flipping in their possession of a certain characteristic. Hence we group the eight initial groups to three groups.

Losing:	the total of households 110 + 100
Obtaining:	the total of households 011 + 001
Flipping:	the total of households $101 + 010$

III. Findings

The findings are presented by categories of variables covering both sides of the PMT model equation as presented in section B above. The left side corresponds to the dependent variable: the household per capita consumption. The right side corresponds to the categories of variables used as proxies to estimate welfare through consumption.

A. Dependent Variable: Household per capita consumption

This analysis looks at changes of households across the Deciles 1 to 3 (D_{1-3}) over the three year period. Mobility is analyzed as the households leaving from the group to higher deciles (upwards), households coming to the group from higher deciles (downwards) and mobility within deciles 1 to 3. Tables 2 and 3 present the number of households and the shares are calculated using two different groups. One group is the number of households that were in D_{1-3} in 2008, the first year of the panel data. The purpose of this is to compare it with the baseline and see how movements occurred over the 3 year period. The other group is the number of total households in the panel data. Main findings are as follows:

Mobility upwards: About 6 percent of households experience mobility from deciles 1-3 to the 4th decile (4) in the third year. Only 2 percent of households move to 4th decile in the second year. Mobility to the 5th decile is about 5 percent in the third year and 1 percent in the second year. Those that move to the 6th decile and above are 7 percent in the second and third year as well.

Movement	Number of	% of D ₁₋₃	% of Total
	Households	Households	Households
$D_{1-3}D_{1-3}4$	860,101	6	2
$D_{1-3}44$	280,988	2	1
$D_{1-3}D_{1-3}5$	626,622	5	1
$D_{1-3}55$	199,913	1	0
$D_{1-3}D_{1-3}6^+$	907,430	7	2
$D_{1-3}6^+6^+$	1,017,458	7	2
Total		28	8

Table 2. Mobility of Households across Deciles: Upwards

Mobility downwards: About 3 percent of households move down from 4th decile to the group D_{1-3} in the second year and 1 percent goes down from 4th to D_{1-3} in the third year. About 2 percent of households move down from 5th to the D_{1-3} group in the second year; while only 1 percent move down in the third year. Households moving down from 6th to the D_{1-3} group in either second or third year are about 3 percent of households in deciles D_{4-10} .

Movement	Number of Households	% of D4-D10 Households	% of Total Households
$4D_{1-3}D_{1-3}$	995,426	3	2
$44D_{1-3}$	259,695	1	1
$5D_{1-3}D_{1-3}$	637,703	2	1
$55D_{1-3}$	177,097	1	0
$6^+ D_{1-3} D_{1-3}$	962,632	3	2
$6^+6^+D_{1-3}$	965,943	3	2
Total		13	8

Table 3. Mobility of Households across Deciles: Downwards

The tables 2 and 3 show the mobility of households by comparing the number of households moving out and coming in to deciles 1 to 3 as a share of both total households and respective groups. When the analysis is done over the total number of households, the results show symmetry between the number of households going out of the D_{1-3} group and coming in as a share of total households. However when analysis is done using the initial groups as comparable either D_{1-3} or D_{4-10} , the results differ because the comparison group is different. About 28 percent of those who were in the D_{1-3} group in 2008 moved to higher deciles in the years after. About 13 percent who were in the D_{4-10} group in 2008 went down to D_{1-3} group.

Chart 1 compares the two groups: the share of households going out of D_{1-3} group and those households from D_{4-10} coming to the D_{1-3} group.



Chart 1. Households going out of D1-3 vs. households going into D1-3

Chart 2 compares the two groups: the share of households going out of D_{1-3} group and those D_{4-10} households coming to the D_{1-3} group as share of total households. This chart shows symmetry of numbers when compared to the total households in the panel.





Mobility within D₁₋₃: There is a high mobility within the first 3 bottom deciles group and there are multiple possible combinations, all with very small percentages. Households go up and down during the three years period. However it is important to note that those that remain in the first decile over the three years period represent one of the highest shares (8.3 percent) for

possible combinations. That means that extreme chronic poverty is very static and those households face many difficulties to move out of extreme poverty.

Table 4. Mobility of Households within D ₁₋₃ group		
Movement	Number of	% of D1, D2, D3
	Households	Households
111	1,153,324	8.3
222	258,117	1.9
333	178,856	1.3



Chart 3. Mobility within D1-3 group

Mobility within D₄₋₁₀: There is a high mobility within 4 to 8 deciles. This is reflected by the fact that only less than 1 percent of households remain in the same deciles over the three years period. However is important to note that the share of households that remain in the 10th deciles over the three years period represent one of the highest shares (5.4 percent) for possible combinations. That means that richest group is very static.

Table 5. Woolinty of Households within D4-10 group			
Movement	Number of	% of D4 to D10	
	Households	Households	
444	132,784	0.4	
555	105,560	0.3	
666	108,809	0.3	
777	158,164	0.5	
888	207,417	0.6	
999	420,329	1.3	
101010	1,740,128	5.4	

Table 5 Mability of Households within Deers group



Chart 4. Mobility within D₄₋₁₀ group

B. Independent Socioeconomic variables: Proxies

Characteristics of most households **remain the same** within the period of 2008-2010. Averaging 64 household characteristics, 80 percent of total households in deciles 1-3 obtain the same characteristics within the period of 3 years.

- Characteristics of HH Head, Education of HH Members, and Housing are the most stable characteristics. Compared to other characteristics, over 90 percent of households retain these characteristics within the 3 year period.
- When household characteristics change, changes rarely reverse directions within the 3 years. Most households swift from having a certain characteristic or vice versa yet rarely losing a characteristic and have it back in the next year.
- The dynamic of households in deciles 1-3 compared to the overall households is similar. For every variable, the change for households in deciles 1-3 is similar to the change for the overall households.
- Meanwhile, household demography, work sector, and work status are more dynamic. Household size and the fact that kids grow up and people grow older might cause household demography to become less static. Changes in the working sector also appear to be quite dynamic especially for agriculture and services. Work status is also quite dynamic with the exception of those households having business with paid labors, most likely due to the fact that this status reflects the economic stability of the household.

Household head characteristics

In general the gender, marital status, and education level of household heads remain static over the three years period. About 96 percent of households from D_{1-3} do not present any changes in these variables while only 4 percent change their marital and education status over the three years period. There is a slight mobility in the status of household heads with SMP and SMA education indicating that a small number of household heads might still in the process of pursuing educations.



Chart 5. Household Head Characteristics

Work sector of household heads remains static for 69 percent of households in D_{1-3} over the three years period while the status of whether or not household head is working remains unchanged for more than 80 percent of households. Across sectors, the status of household head working in agriculture is the most dynamic while the status of those working in the industrial sector is the most stable as shown in Chart 5. The share of household members working in industry is also the most stable compared to the share of household members working in the agriculture and services sectors. This might reflect the higher difficulties faced by workers to enter the industrial sector as well as the informal tendency of the services and uncertainty of the agriculture sectors.



Chart 6. Work Sector of HH Head



Chart 7. Work Status of HH Head

Household demographics

Demographic composition of households is one of the most dynamic variables. On average, about 43 percent households in D_{1-3} experience changes in this category. Household size and the composition of children age 0 to 14 years old are the most dynamic variables. Meanwhile, the group of those aged 65 years and above is very static. The high mobility of children age 0-

14 in which households tend to no longer have a child of this age might be caused by the fact that children get older or move out from the household. It is quite common for poor households to ask their relatives to "temporarily" take care of their children. High infant mortality might also cause households to lose their infants in the period of 3 years.



Chart 8. Household Demographics

Education

Education variables are expressed as dummies with a value of 1 if at least one household member has graduated from junior secondary education (smp), senior secondary education (sma) and tertiary education (s3). About 81 percent of households remain unchanged for the three levels of education. The last four columns refer to the number of kids in primary, junior secondary, senior secondary and tertiary education. The number of kids reaching senior secondary education and tertiary is very low and changes are almost negligible.



Chart 9. Education of Household Members & Children

Housing Ownership

The type of housing ownership remains static for about 94 percent of households from D_{1-3} . 15 percent of households living in a self-owned or family-owned house experience changes in the 3 years period. In the two groups, the biggest type of changes is for households to move from not having to having their own houses. Meanwhile the ownership status of households who contract or rent their house remains static.

³ Measured as members in age $(0-14 + \ge 65)$ /members in age 15-64 years old.



Chart 10. Housing Ownership

Housing Conditions

Housing characteristics including floor, roof and wall materials remain statistic for 91 percent of D_{1-3} households. This might be understood by the fact households do not often change or improve their housing materials in a short period of time.



Chart 11. Housing Conditions



Access to Basic Services

Access to basic services remains static for about 82 percent of D₁₋₃ households. Mobility is found mainly for households having PLN electricity. Within 3 years, about 17 percent of households having PLN electricity with gauge move to not having the gauge anymore. Changes are also quite noticeable for 38 percent of D₁₋₃ households who are benefiting from protected well as source of drinking water.



Chart 12. Access to Basic Services

Sanitation

Sanitation conditions remain static for about 78 percent of households. For households that experience changes, the trend tends to show that more households are obtaining private toilets over the years.

Chart 13. Sanitation



C. Summary and Policy Options

- When households lose a given characteristic, they rarely recover the following year. This has important implications for social policy. Unless an adequate safety net is developed to prevent households from deteriorating in their socioeconomic conditions, further interventions will be required to restore them to previous welfare levels.
- The analysis shows that there is a high share of extreme poor households that remain in the lowest decile 1 for a period of 3 years. Targeted interventions to this group with a convergence strategy or a safety net are needed to help them to meet very basic needs. With little education or access to basic services, the majority of these households will see little improvement in household characteristics and are likely to remain in poverty, if no help is provided. This evidence makes a good case for the expansion of interventions such as the Conditional Cash Transfer Program (PKH), which helps very poor households to meet their basic needs for education, health and food consumption.
- There is a degree of consumption mobility in and out of the poorest three deciles over time. About 28 percent of households moved up from the D₁₋₃ household consumption

group to higher deciles from 2008 to 2010, while about 13 percent of households move down from the D_{4-10} group to the D_{1-3} group. Whether this degree of movement in and out of the target group for many social assistance programs warrants updating in between three year recertification is a policy decision.

- **PMT variables are stable for most households over a three year period.** When we look at the socioeconomic variables used as welfare proxies in the PMT of PPLS 2011, we find that the majority of households (about 80 percent) retain the same socioeconomic characteristics (over 64 variables in the analysis). This suggests that a regular updates will collect changed PMT data for only 20% of households. Of course, it remains important that households who have not been assessed with PMT before continue to be surveyed and included in the database.
- A range of policy options need further analysis. Are the households with changing PMT characteristics the same ones who are moving in and out of the target group? If they are the same households, then frequent PMT updates will be expensive but effective in capturing consumption mobility. If resurveying the same households with PMT is not an effective way of capturing consumption mobility, then using PMT to survey new households might be a better use of resources, and more likely to reduce exclusion error. Other alternatives can be explored. For example, programs could manage updates of PMT characteristics directly, with a standard process for validating information, and feed this into the Unified Database. The use of social workers or communities to verify changes in economic status can also be considered, either as an alternative or check on PMT updating, or if PMT updating is not effectively identifying transient changes in consumption. However, the financial, institutional and political feasibility of different options will need to be explored.

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Appendix

Annex 1. 64 Household Variables Used in the Analysis

Household head age	HH Head Age
Household head male	male
Household head female	female
Household head married	married
Household head single	single
Household head divorced	divorced
Have household member 0-14 years	age 0-14
Have household member above 65 years	age65 above
Have household member 15-64 years	h_nage1564
Dependency ratio	h_depratio
Household head finished junior secondary education	smp_grad
Household head finished senior secondary education	sma_grad
Household head finished tertiary education	dip1_s3
At least one of HH member finished junior secondary education	m-smp
At least one of HH member finished senior secondary education	m-sma
At least one of HH member finished tertiary education	m-s3
Have children school in primary education	ch-sd
Have children school in junior secondary education	ch-smp
Have children school in senior secondary education	ch-sma
Have children school in tertiary education	ch-s3
Net enrollment rate – primary education	h_nersd
Gross enrollment rate – primary education	h_gersd
Net enrollment rate – junior secondary education	h_nersmp
Gross enrollment rate – junior secondary education	h_gersmp
Have HH between 0-4 years	age 0-4
Have HH between 5-12 years	age5-12
Have HH between 13-15 years	age13-15
Have HH between 16-18 years	age16-18
Have HH between 19-24 years	age19-24

Household head working status	working
Household head works at agricultural sector	agriculture
Household head works at industrial sector	industrial
Household head works at services sector	services
Proportion of household member works at agricultural sector	share_agri
Proportion of household member works at industrial sector	share_industrial
Proportion of household member works at service sector	share_services
Household head status/position in major work: Self employed	self_employed
HH head status/position in major work: Business assisted by	bus_paidlab
temporary labor/unpaid labor	
HH head status/position in major work: Business assisted by	bus_unpaidlab
permanent labor/paid labor	
Household head status/position in major work:	employees
Labor/employees/personnel	
Household size	h_hhsize
Household size squared	h_hhsize2
Ownership status of house: self-owned	self_owned
Ownership status of house: contract	contract
Ownership status of house: rent	rent
Ownership status of house: official government owned	govt_owned
Ownership status of house: family-owned	fam_owned
Health criteria per capita floor size	h_healthpcfloor
Type of floor	h_tfloor
Type of widest wall: brick	wall_brick
Type of widest wall: wooden	wall_wooden
Type of widest roof: concrete	roof_concrete
Type of widest roof: roofing	roof_roofing
Type of widest roof: asbestos	roof_asbestos
Type of widest roof: shingle	roof_shingle
Source of drinking water: bottled water	bottled
Source of drinking water: tab water	tap
Source of drinking water: well pump	well_pump

Source of drinking water: protected well	protected_well
Source of drinking water: unprotected well	unprotected_well
How obtaining water: Buying water	buy_water
Source of lighting: official PLN with gauge	PLN_withgauge
Source of lighting: official PLN without gauge	PLN_withoutgauge
Source of lighting: non official PLN electricity	non_PLN
Source of lighting: oil lamp	oil_lamp
Toilet facility: private	private
Toilet facility: public	public
Excreta disposal type: septic tank	septic_tank
Excreta disposal type: river/lake/sea	river/lake/sea
Excreta disposal type: ground hole	ground_hole
Excreta disposal type: beach/field/garden	beach/field/garden

Database used to target social programs in Indonesia was updated every three years. Exclusion error and poverty dynamics in Indonesia have raised the question whether updating is required within that three year period. In this paper, we assess this issue by employing Susenas panel data to track changes in household characteristics and consumption mobility within three years. We find that household characteristics that were used to estimate household consumption in Proxy Means Test (PMT) remained stable for most households over a three year period. About 28 percent of households in the bottom three deciles moved up to higher deciles while about 13 percent of households in the top six deciles moved down to lower deciles.

THE NATIONAL TEAM FOR THE ACCELERATION OF POVERTY REDUCTION

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