

# Middle-Class Millennials in Indonesia: Concept, Measurement, and Determinants

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## Abstrak

Penelitian ini bertujuan untuk mengkaji konsep, pengukuran, dan determinan rumah tangga millennials berada pada kelas menengah, dengan studi kasus Indonesia. Penelitian ini menggunakan model logit dan menetapkan objek penelitian pada level rumah tangga di tiga kohort generasi yang berbeda, yaitu rumah tangga yang dikepalai oleh Millennials, Gen X, dan Baby Boomer. Dengan melakukan komparasi determinan pada kohort generasi yang berbeda, maka penelitian ini dapat memastikan estimasi yang tepat sesuai karakteristik masing-masing generasi. Hasil penelitian menunjukkan bahwa penentu utama rumah tangga millennials berada pada kelas menengah adalah: (i) pendidikan (setidaknya lulus pendidikan sekolah menengah atas), (ii) pekerjaan (memiliki pekerjaan penuh waktu, bekerja pada sektor sekunder atau tersier, serta memiliki status sebagai wirausahawan atau karyawan formal), dan (iii) memiliki akses terhadap fasilitas dan layanan (akses terhadap sanitasi, akses terhadap internet, dan akses terhadap keuangan). Hasil estimasi juga menunjukkan bahwa terdapat beberapa perbedaan determinan kelas menengah antara rumah tangga millennials dengan generasi pendahulunya yang dibahas lebih lanjut pada paper ini.

Kata Kunci : kelas menengah, millennials, kohort generasi, komparasi determinan.

JEL Classifications : A14, D31, O15, Z13

## Abstract

This study aims to examine the concept, measurement, and determinants of millennials households in the middle class, a case study of Indonesia. This study uses a logit model and sets the object of research at the household level in three different generation cohorts, namely households headed by Millennials, Gen X, and Baby Boomers. By comparing the determinants of different generations, this study can ensure the precise estimation that match the unique characteristics of each generation. The results show that the main determinants of millennials households in the middle class are: (i) education (at least graduating from high school), (ii) employment (having a full-time job, working in the secondary or tertiary sector, having an entrepreneur or a formal employee status), and (iii) having the access to amenities and services (access to sanitation, access to internet, and access to finance). The estimation results also show that there are several differences in the determinants of staying in the middle class between millennials households and their predecessors which are discussed further in this paper.

Keywords : middle class, millennials, cross-generations, determinant comparisons.

JEL Classifications : A14, D31, O15, Z13

## I. INTRODUCTION

In the past decade, the topic of the middle class is being studied, especially in emerging market countries (EMs), this is an implication of a significant reduction in poverty rates accompanied by the shifting of society towards a new social class, the middle class, it is estimated that by 2030 around 80 percent of the middle class population is in EMs (Brunke, Van Dongen, & Downey, 2013). As the other EMs, Indonesia has also experienced a transition in social classes structure, in the past two decades there has been a significant decline in poverty levels in Indonesia, even now the poverty rate in Indonesia has reached a new level of under 10 percent, besides currently around 20 percent or one in five people are in the middle class (World Bank, 2017).

The growing size of the middle class is becoming increasingly interesting to study because the middle class is proven as a trigger on economic growth. Empirical studies Birdsall et al. (2000), Easterly (2001), Sridharan (2004) and Banerjee & Duflo (2008) showed that a large proportion of the middle class will be able to encourage sustainable economic growth through several factors, including: i) adequate purchasing power; ii) encourage accumulation of human capital; and iii) encourage the creation of good governance. The important role of the middle class provides clear consequences for policy makers to increase the proportion of the middle class. Especially for Indonesia, as a country with a consumption led growth (56 percent of national growth comes from consumption) (Ministry of Finance, 2018), then enlarging the middle classes will further spur Indonesia's economic growth.

Besides, the opportunity for Indonesia to increase the number of its middle class is wide open because currently there are around 45 percent of the population categorized as aspiring class, they are no longer vulnerable to falling into poverty but their purchasing power is still very low (World Bank, 2017). If the government is unable to create a good environment and implement the right strategy, it is feared that the class fails to become a middle class. Policy makers are expected to be able to lift the lower social class, and ensure that aspiring-class people are in the middle class. For this reason, the information about the determinants of the middle class, and how they differ from other classes are the key success for the government to formulate appropriate policies.

During this time, several studies on the middle class such as those conducted by Luhby (2012), Kramer (2013), Uner, MM, & Gungordu, A. (2016), and Song, J., and Cavusgil, E ., Li, J., & Luo, R. (2016), did not discuss much about the determinants of the middle class. The discussion in general was still focused on middle class consumption behavior in each country. On the one hand, knowing middle class consumption behavior is important, it is able to optimize the potential of the middle class. However, on the other hand the studies has not been provided clear information for policy makers to develop the right strategy to increase the size of middle class. Moreover, the object of previous studies has not been classified to certain generation cohorts. In fact, the research that does not classify these important elements will lead to produce biased results in explaining the unique characteristics of each particular cohort

(Strauss and Howe, 1991). Thus, it is very important to include the generation analysis in assessing the characteristics of a particular cohort so that the right pattern can be found.

This study will fill the gap of previous studies by examining the determinants of the households in the middle class with the classification of generation cohorts, where the generation of Millennials is the main focus. There are at least two reasons why this study focuses on the Millennials generation. First, Millennials constitute the majority of Indonesia's population age group, where in 2020 the generation of Millennials is predicted to reach 83 million or 34 percent of Indonesia's total population (BPS, 2018). In addition, the Millennials generation is also a young generation that has entered a productive age. The productive period of Millennials who tend to be new and still have a long productive time will greatly determine Indonesia's economic development. Raising the Millennials generation into a good expenditure class (being in the middle class) can be a booster of current and future economic growth.

Finally, this study will also compare the determinants of staying in the middle class between Millennials and previous generations (Generation X and Baby Boomers). This is to see whether there are differences in characteristics between these generations, so the government can evaluate the policies that have been carried out and set the relevant policies to create more middle class in Indonesia.

## **II. METHODS**

### **2.1 Data Sources**

This study uses data from the Indonesian National Socio-Economic Survey (Susenas) 2016 collected by the Indonesian Central Bureau of Statistics. The survey covers all regions of 34 provinces in Indonesia, providing extensive information about education, health, employment, housing, and other social information. Susenas surveyed 291,414 households and 1,109,749 individuals.

### **2.2 Sample and Unit Analysis**

The unit of analysis of this study uses a household level. This study uses three samples to see middle-class determinants. The differences in samples are adjusted for generation cohorts (Millennials, Gen X, and Baby Boomers) based on the year of birth.

Referring to Strauss and Howe (1991) states that the cutoffs between generations will vary depending on where the cohort of that generation is. According to them, the character formed from life experiences and historical events of each generation cohort is strongly influenced by political, economic and social factors in certain territorial spheres. Thus, we can adjust the cutoffs of generation cohorts according to the order of historical and emotional events during the formative years or coming-of-age period of the particular age group in the place where the study was conducted. This study uses the cutoff proposed by Lancaster & Stillman (2002) because it is relevant to the historical event in Indonesia. For the Y generation sample (Millennials) is the generation born between 1981-1999, or who is currently 17 years to 35 years old. Gen X is a generation born between 1965-1980, or currently 36 to 51 years old. While Baby Boomer is a generation born between 1946-1964, or currently 52 to 70 years

old. However, to homogenize the age status of each sample in the working age range, this study only used a baby boomer generation cohort of up to 65 years of age.

In order for each sample to be mutually exclusive, the sample of this study was the head of the household in each generation cohort described. Based on the determination of the sample, the sample of this study based on Susenas data (2016) is as follows: (i) Millennials numbered 52,002 household heads (17 percent of total individuals), (ii) Gen X numbered 125,563 household heads (49 percent of total individuals), and (iii) Baby Boomers totaling 81,340 household heads (61 percent of total individuals).

## **2.3 Operational Definition of Variables**

### *2.3.1 Dependent Variable*

The dependent variable is the middle class dummy, where 1 if the households have per capita expenditure with a middle class range, 0 is others.

There is no general consensus regarding the definition and measurement of the middle class, the definition and measurement of the middle class is still debated, the lower and upper bounds of the middle class are determined in a diverse and ad hoc manner (Wheary, 2009). Most of the studies that examine the middle class have defined middle class society through their expenditure indicators. There are two main approaches used to define the middle class through expenditure indicators, namely relative approaches and absolute approaches.

The relative approach defined by Birdsall, Graham & Pettinato (2000) that the middle class is those with expenditures between 75% and 125% of the median per capita expenditure of society. Furthermore, Easterly (2001) defines the middle class as residents in middle 60%. Relative approach, both 75% -125% median and middle 60% will tend to lean towards the lower classes if applied to developing countries including Indonesia, then this study does not use a relative approach but an absolute approach.

On the initial foundation, this study refers to a measurement developed by Ravallion (2010) to develop a more relevant measure in Indonesia, the assumption being built is that the middle class for developing countries are those who are not considered poor according to developing countries standards but are still poorly developed countries. This study uses \$ 3.2 as the starting point for the poverty line for developing countries.

Referring to Atkinson and Brandolini (2013), the middle class is defined as a group that no longer worries about falling into the poverty line, so the lower bound of \$ 3.2 is also not enough to guarantee a person regardless of the risk of poverty. This is also in line with Dartanto's research, T., et al. (forthcoming) who conducted social mobility research in Indonesia, they explained that \$ 3.2 was not yet categorized as a middle class in Indonesia. This opinion is further strengthened because the expenditure of \$ 3.2 is still in 40% of Indonesia's lower class, according to the Central Statistics Agency's version, the group is still classified as poor and is the basis for calculation to get subsidies.

As Dartanto, T., et al. (forthcoming), this research sets the upper bound of the middle class as the US poverty line, there is a slight difference because the reference year used is different in 2016, so the value is \$ 16.8 with Indonesia's PPP consumption in 2016 amounted

to Rp. 4,985.66 per US\$. However, for the lower bound, this research is different from Dartanto, T., et al. (forthcoming), to determine a representative middle class, this study divides three quintiles from \$ 3.2 to \$ 16.8. The study did not include the first (lowest) quintile (\$ 3.2 to \$ 7.7) as the middle class threshold, in this expenditure range they are still classified as vulnerable-classes (\$ 3.2 to \$ 5.5) and aspiring-calss (\$ 5.5 to 7.7). Thus, the second and third quintiles (\$ 7.7 to \$ 16.8) are representative measures for the middle class in Indonesia. These cutoffs have met the important criteria for the strong middle class, which is at least having expenditures that are above twice the poverty line (Horrigan & Haugen, 1988).

To capture variations in regional characteristics in Indonesia with highly diversified socio-economic conditions, this study made adjustments to the middle class indicators. This study develops measurements of the middle class based on regional variations following Dartanto, T., et al. (forthcoming), in the study, the expenditure class threshold was determined based on the provincial classification and classification of urban and rural areas. The method used is explained as follows.

a) *First step,*

$$MC\_IDR_z^N = \$MC_z^N \times PPP2016^N \quad (1)$$

where:

- $\$MC$  : Middle-Class Threshold (USD);
- $PPP2016$  : PPP 2016 Rp4.985,66 per USD;
- $MC\_IDR$  : Rupiah Value of Middle-Class *threshold*;
- $z$  : \$7.7 and \$16.8;
- $N$  : national level.

b) *Second step,*

$$\widehat{PL\_BPS}^N = \frac{\sum_{j=1}^2 PL\_BPS_j^N}{2} \quad (2)$$

where:

- $\widehat{PL\_BPS}$  : The average of national poverty line published by the Central Statistics Agency (Badan Pusat Statistik) (BPS);
- $j$  : Location, 1 is urban and 2 is rural.

c) *Third step,*

$$R\_PL_j^i = \frac{PL\_BPS_j^i}{\widehat{PL\_BPS}^N} \quad (3)$$

where:

- $R\_PL$  : The ratio between the provincial poverty line and the national poverty line average;
- $i$  : Provincial ID

d) *Fourth step,*

$$MC\_PROV_{zj}^i = R\_PL_j^i \times MC\_IDR_z^N \quad (4)$$

where:

- $MC\_PROV$  : Rupiah provincial Middle-Calss *Thresholds*

### 2.3.2 Independent Variables

The independent variables in this study are explained as follows.

**Figure 2.1. Independent Variables**

Variables	Description
<b>Life Chances</b>	
A. Education	
• Compulsary	(dummy) 1 = individual with the highest education of primary and junior high school, 0 = other
• High School	(dummy) 1 = individual with the highest ducation of senior high school, 0 = others
• Diploma	(dummy) 1 = individual with the highest education D1 to D4, 0 = other
• University	(dummy) 1 = individual with the highest education of S1 to S3, 0 = other
B. Employment	
• Full-time job	(dummy) 1 = individual with a minimum of working hours is 35 hours during a week, 0 = other
• Business Field	
○ Secondary	(dummy) 1 = Processing Industry, Electricity / Gas, Construction / Building; 0 = other
○ Tertiary	(dummy) 1 = Trade, Hotel, Restaurant / Transportation, Warehouse, IT / Finance, Insurance / Services; 0 = other
• Status in Employment	
○ Entrepreneur	(dummy) 1 = Self-employed / assisted by workers (paid / not paid)
○ Formal Employee	(dummy) 1 = formal employee; 0 = other
<b>Amenities &amp; Services</b>	
A. Sanitation	(dummy) 1 = having defecation facilities; 0 = other
B. Internet	(dummy) 1 = in the last 3 months accessing the internet, 0 = other
C. Financial Acces	1 = accepting business credit; 0 = other
<b>Demografis</b>	
A. Area Classification	(dummy) 1 = urban; 0 = rural
B. Gender	(dummy) 1 = male; 0 = female
C. Marital Status	(dummy) 1 = ever married; 0 = other
D. Family Size	
• Number of family	number of family members
• Member under 5 years	number of family members under 5 years
E. Migration	(dummy) 1 = moving province in the last 5 years, 0 = other
F. Regional	
• Central	(dummy) 1 = Central Indonesia region, 0 = other
• Eastern	(dummy) 1 = Eastern Indonesia Region, 0 = other

Source: Author's illustration, Susenas (2016).

## 2.4 Model Specifications

This study uses a logit model to test middle class determinants, namely the determinants of why individuals in each generation cohort (Millennials, Gen X, Baby Boomers) can enter the middle class, while others do not. The logit model equation in this study is shown in equation 5.

$$y_i^{Mns, Xer, Brs} = LC_i\beta + AS_i\chi + Demo_i\varphi + e_i \quad (5)$$

Where:

- $y_i^{Mns, Xer, Brs}$  is a middle class individual category in each generation cohort (Millennials, Gen X, Baby Boomer), 1 = middle-class; 0 = other;

- $LC_i$  is a life chances vector, including education and work;
- $AS_i$  is a vector of Amenities & Services, including sanitation, access to information and technology, and financial access;
- $Demo_i$  is Demographic vectors, including the classification of regions, gender, marital status, family size, victims of crime;
- $e_i$  is error term;
- $i$  is the identification of individuals in each generation cohort
- Equation 5 is a binary model with an outcome  $y = \{0,1\}$ .

The model parameters in equation 5 can be estimated using maximum likelihood. The sign of the estimated logit coefficient has exactly the same meaning as that obtained from the estimation of ordinary-least-square (OLS). A negative sign implies that the probability will shift to a lower category when the independent variable increases. The magnitude of the estimated coefficient, however, cannot be interpreted directly as in the case of the OLS estimation. This research will see a lot of the marginal effect of the logit model to explain existing phenomena (for more details, see Wooldridge, 2010).

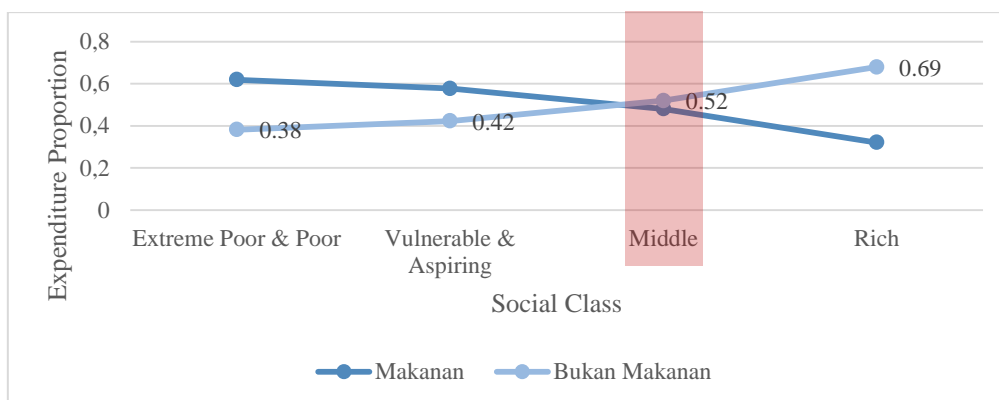
### III. RESULTS AND DISCUSSION

#### 3.1 General Overviews and Facts of Middle-Class in Indonesia

Based on the measurement method used in this study, the ratio of the middle class in Indonesia is quite moderate in the proportion to households in other expenditure classes, which is 21 percent, the third highest after the vulnerable (30 percent) and Poor (22 percent). The proportion of the middle class is very potential to increase because aspiring classes that are in only one class under the middle class are quite large at 17 percent. Meanwhile, Rich as an exclusive group has a proportion of only 6 percent of the total population.

Figure 3.1 can support the hypothesis why the middle class is able to encourage economic growth through demand driven.

**Figure 3.1. The Proportion of Household Expenditures by Economic Class**



Source: Author's Calculation, Susenas Data (2016).

Through Figure 3.1, it can be seen that the increasing level of economic class, the proportion of expenditure for food decreases and conversely non-food consumption will

increase. In Figure 3.1 it explains that the proportion of food expenditure in the extreme poor & poor and vulnerable & aspiring is still greater than non-food items. After being in the middle class, then the proportion of non-food (52 percent) is greater than food expenditure. The increasing proportion of spending on non-food items is very important for the economy because it creates demand beyond basic needs, this provides an incentive for entrepreneurs to meet existing market demand by investing, so that it will eventually spur growth.

Middle class has more discretionary income than (Extreme Poor & Poor) and (Vulnerable & Aspiring), hence it makes them able to spend more money on the non-basic needs, such as recreation or buying certain assets. Table 3.1 shows the proportion of households traveling for recreation and ownership of assets for selected goods in each class.

**Table 3.1. Households Recreating and Owning Assets (percentage)**

Recreation and Owning Assets	Ratio of Recreating and Owning Assets			Delta ( $\Delta$ )		
	<i>Extreme Poor &amp; Poor</i> (1)	<i>Vulnerable &amp; Aspiring</i> (2)	<i>Middle</i> (3)	(2-1)	(3-2)	(3-1)
Recreation	1.92	4.91	12.73	2.99	7.82	10.81
Car	1.02	5.87	26.60	4.85	20.73	25.58
Computer	4.10	15.52	46.54	11.42	31.02	42.44
Air Conditioner	0.43	2.84	20.36	2.41	17.52	19.93
Flat TV	2.62	8.44	28.81	5.83	20.36	26.19
Jewelry	5.89	16.25	40.22	10.36	23.96	34.32
<b>Average</b>				<b>6.31</b>	<b>20.24</b>	<b>26.54</b>

*Source: Author's Calculation, Susenas Data (2016).*

Table 3.1 provide information that the ratio of middle-class households to leisure activities and owning assets is far greater than that of the extreme poor & poor class and vulnerable & aspiring, the difference in the average ratio between the extreme poor & poor and vulnerable & aspiring is relatively smaller (6.31), compared to the middle difference between the average ratio of vulnerable & aspiring (20.24), and middle to extreme poor & poor (26.54).

The next question is why not Rich? If the economy needs a large market demand, then the Rich class has the highest income so that it has the highest purchasing power. The larger proportion of middle class and the higher marginal propensity to consume (MPC) make the middle class more influential in driving economic growth (Easterly, 2001). It is thus clear that to increase the proportion of the middle class (not the upper class) is a way to increase economic growth, including in Indonesia.

### 3.2 Descriptive Statistics

It can be seen through Table 3.2, the total observations for Millennials households are the smallest compared to other generations, where the total of Millennials households are 12,370 observations for middle class and 39,632 observations for other classes, Gen X households are 28,244 observations for middle class and 97,319 observations for other classes, and Baby Boomer households are 20,110 observations for middle class and 61,230 observations for other classes.

Based on these observations, Millennials households accounted for 4.24 percent of the middle class in Indonesia, the ratio was below Gen X and Baby Boomer households, which each contributed 9.69 percent and 6.90 percent to the total middle class in Indonesia. Furthermore, the detailed information can be seen on Table 3.2.



**Table 3.2. Deskriptive Statistics (percentage)<sup>1</sup>**

VARIABLES	Millennials		Gen X		Baby Boomer	
	Middle Mean	Others Mean	Middle Mean	Others Mean	Middle Mean	Others Mean
<b>LIFE CHANCES</b>						
a. Education						
• Compulsary	29.40	49.85	37.49	52.04	47.36	49.55
• Highschool	51.70	34.19	38.69	27.42	18.64	8.85
• Diploma	4.33	1.66	3.59	1.37	3.09	1.24
• University	10.72	5.50	13.37	5.44	10.35	4.07
b. Employment						
• Full-time job	86.82	78.71	82.96	75.94	77.52	69.34
• Business Fields						
○ Primary	13.05	32.62	16.72	35.94	23.56	45.51
○ Secunday	24.18	23.42	22.39	21.49	11.64	11.09
○ Tertiary	52.90	37.83	55.07	37.29	41.88	25.59
• Status in Employment						
• Entrepreneur	24.26	35.61	37.23	44.20	41.80	50.74
• Formal Employee	60.94	44.34	51.03	36.07	28.80	18.52
<b>AMENITIES &amp; SERVICES</b>						
a. Sanitation	75.14	64.62	88.69	75.54	89.29	76.16
b. Internet	63.85	29.07	36.20	14.16	12.83	5.42
c. Finance	13.02	12.74	18.67	16.28	15.28	12.86
<b>DEMOGRAPHIC CHARACTERISTICS</b>						
a. Area Classification	70.49	47.31	67.33	46.73	67.15	44.94
b. Gender	89.34	92.80	90.25	90.73	79.00	79.54
c. Marital Status	80.67	92.38	97.81	99.01	99.05	99.27
d. Number of Family	2.87	3.50	3.72	4.32	3.46	3.96
e. Member under 5 years	0.45	0.66	0.22	0.35	0.13	0.22
f. Migration	26.25	15.16	23.53	14.65	20.60	12.41
g. Regional						
• Central	20.53	20.84	18.93	18.08	17.65	16.13
• Eastern	3.24	3.4	2.32	2.74	1.74	2.05
<b>Number of Observation</b>	12,370	39,632	28,244	97,319	20,110	61,230
<b>Weight of Observation</b>	3,7 juta	10,4 juta	6,8 juta	21,8 juta	4,5 juta	13,4 juta
<b>Ratio to Total Population</b>	4.24	13.60	9.69	33.40	6.90	21.01

Source: Author's Calculation, Susenas Data (2016).

### 3.3 Estimation Results

The logit model in this study was estimated through maximum likelihood with robust standard errors. The estimation results of the logit model and the marginal effect ( $dy / dx$ ) are shown in Table 3.3. It shows the results of estimation of household determinants in the middle class for each generation. Dependent variable is a dummy variable with value 1 is middle class and 0 is others. Explanatory variables are variables on life chances, amenities & services, and demographic characteristics.

<sup>1</sup> All variables in percent, except the number of family members and the number of family members under 5 years is the average number.

**Table 3.3. Results of Logistic Regression and Marginal Effect (dy / dx):  
Middle Class Determinants**

NO	Dependent Variable: Middle-Class (1=Middle-Class, 0=others)	MILLENNIALS (1)			GEN X (2)			BABY BOOMER (3)		
		Coef. (S.E.)	Coef. (S.E.)	M.Effect (dy/dx) (%)	Coef. (S.E.)	Coef. (S.E.)	M.Effect (dy/dx) (%)	Coef. (S.E.)	Coef. (S.E.)	M.Effect (dy/dx) (%)
		(1.1)	(1.2)	(1.3)	(2.1)	(2.2)	(2.3)	(3.1)	(3.2)	(3.3)
<b>1. LIFE CHANCES</b>										
a. Education										
	• Compulsary	0.122 (0.080)	0.027 (0.080)	0.47	0.252*** (0.037)	0.154*** (0.038)	2.47***	0.470*** (0.030)	0.384*** (0.030)	6.7***
	• Highschool	0.736*** (0.081)	0.369*** (0.083)	6.51***	0.724*** (0.039)	0.446*** (0.040)	7.55***	1.076*** (0.044)	0.961*** (0.045)	19.8***
	• Diploma	1.361*** (0.121)	0.681*** (0.123)	13.74***	1.158*** (0.074)	0.604*** (0.078)	11.36***	1.194*** (0.085)	1.052*** (0.087)	27.7***
	• University	0.907*** (0.098)	0.201*** (0.101)	3.63**	1.103*** (0.049)	0.483*** (0.054)	8.71***	1.107*** (0.057)	0.974*** (0.064)	20.5***
b. Employment										
	• Fulltime job	0.244*** (0.045)	0.232*** (0.044)	3.84***	0.236*** (0.025)	0.217*** (0.025)	3.37***	0.251*** (0.028)	0.236*** (0.028)	4.0***
	• Business Fields									
	• Secondary	0.347*** (0.053)	0.245*** (0.051)	4.38***	0.319*** (0.032)	0.292*** (0.032)	4.93***	0.093** (0.042)	0.076* (0.043)	1.3*
	• Tertiary	0.538*** (0.046)	0.384*** (0.044)	6.74***	0.507*** (0.026)	0.428*** (0.027)	7.02***	0.393*** (0.031)	0.366*** (0.031)	6.6***
	• Status in Employment									
	○ Entrepreneur	0.334*** (0.058)	0.186*** (0.053)	3.27***	0.336*** (0.033)	0.294*** (0.033)	4.79***	-0.009 (0.031)	-0.028 (0.031)	-0.5
	○ Formal Employee	0.452*** (0.056)	0.242*** (0.051)	4.18***	0.382*** (0.033)	0.300* (0.034)	4.91*	0.086** (0.039)	0.087** (0.039)	1.5**
<b>2. AMENITIES &amp; SERVICES</b>										
	a. Sanitation		0.342*** (0.038)	5.71***		0.652*** (0.030)	9.34***		0.683*** (0.035)	10.6***
	b. Internet		0.932*** (0.041)	17.00***		0.672*** (0.029)	12.12***		-0.023 (0.055)	-0.4
	c. Finance		0.276*** (0.049)	5.04***		0.283*** (0.026)	4.81***		0.297*** (0.034)	5.5***
<b>3. DEMOGRAFIS</b>										
	a. Area Classification	0.394*** (0.038)	0.303*** (0.038)	5.21***	0.473*** (0.022)	0.410*** (0.023)	6.58***	0.618*** (0.027)	0.595*** (0.027)	10.3***
	b. Gender	0.316*** (0.074)	0.182*** (0.063)	3.00***	0.156*** (0.038)	0.113*** (0.038)	1.76***	0.017 (0.033)	0.004 (0.033)	0.1
	c. Marital Status	0.119 (0.076)	0.181*** (0.069)	3.00***	0.048 (0.080)	0.043 (0.085)	0.69	0.277** (0.108)	0.219** (0.112)	3.6**
	d. Number of Family members	-0.389*** (0.022)	-0.350*** (0.023)	-6.03***	-0.349*** (0.009)	-0.363*** (0.010)	-5.84***	-0.231*** (0.010)	-0.245*** (0.010)	-4.2***
	e. Members of under 5 years	-0.282*** (0.033)	-0.322*** (0.034)	-5.55***	-0.244*** (0.023)	-0.252*** (0.024)	-4.05***	-0.020 (0.038)	-0.021 (0.038)	-0.4
	f. Migration	0.274*** (0.045)	0.137*** (0.043)	2.42***	0.240*** (0.026)	0.171*** (0.027)	2.85***	0.270*** (0.033)	0.253*** (0.033)	4.6***
	g. Regional									
	d. Central	0.163*** (0.033)	0.207*** (0.033)	3.70***	0.230*** (0.020)	0.275*** (0.021)	4.65***	0.324*** (0.025)	0.350*** (0.025)	6.5***
	e. Eastern	0.248*** (0.051)	0.477*** (0.050)	9.23***	0.094*** (0.036)	0.253*** (0.037)	4.36***	0.106** (0.050)	0.205*** (0.052)	3.8***
	<b>Constant</b>	-1.744*** (0.127)	-1.859*** (0.113)		-1.528*** (0.091)	-1.823*** (0.096)		-1.778*** (0.113)	-2.826*** (0.090)	
	<b>Number of obs</b>	52,002	52,002		125,563	125,563		81,340	81,340	
	<b>Wald chi2(12)</b>	2,552.69	3,367.12		5,975.64	6,724.69		3,623.71	4,017.51	
	<b>Prob &gt; chi2</b>	0.000	0.000		0.000	0.000		0.000	0.000	
	<b>Pseudo R2</b>	0.118	0.140		0.102	0.120		0.090	0.098	

Note: \*, \*\*, \*\*\* shows significance at the levels of 10%, 5% and 1%, respectively. Coef. (S.E.) 1.1, 2.1, 3.1 is robustness check.  
Source: Author's calculation.

### 3.3.1 Determinants of Staying in The Middle Class: Comparisons between Millennials Households and Their Predecessors

As explained earlier that different generations are allowed to have different characteristics, this study will try to see the differences in middle class determinants based on different generations.

a) *Life Chances*

- *Education*

The findings (Table 3.3) show that in all cross-generational households, education is one of the important determinants of the middle class. The important role of education in increasing competence and expertise will be the formal credentials for a person so that there is a greater chance of getting better jobs and greater income (Otar, E., 2014).

Every level of education has a significant and positive correlation for each generation cohort in the middle class, except compulsory education for Millennials households. This indicates that Millennials household heads (compulsary educated) do not sufficiently guarantee that their households are in the middle class. This can be happened because Gen X and Baby Boomer household heads have the difficulty of accessing to basic education, so those who only graduate at the basic education have formal credentials to access decent work and get better income. But for Millennials, basic education is not exclusive anymore.

Furthermore, based on the results of the marginal effect, it can be seen that the biggest percentage change in probability if there is a change in the education variables occurs in the Baby Boomer. For example, in Baby Boomer, household heads who passed high school education had a greater probability of being in the middle class at 19.8 percent, while Gen X was only 7.55 percent, and Millennials was only 6.51 percent.

- *Employment*

In terms of employment, there is no significant difference between the determinants of Millennials and Gen X households in the middle class. All variables that become employment indicators have a significant and positive correlation. The heads of households who have full-time jobs indicate that they allocate their time to productive activities in their daily activities so that they have a greater chance of getting more decent income (Banerjee and Duflo, 2008). The difference is in the status of entrepreneurs in the Baby Boomer household, different from other generations who have a significant and positive correlation, the correlation of status as an entrepreneur is not significant as the determinants to stay in the middle class at Baby Boomer. In addition, the results of the marginal effect show that the largest percentage change in probability if there are changes in employment variables occurs in Gen X. For example, in Millennials, household heads with status as formal employees have a greater probability of being in the middle class at 4.18 percent, while Baby Boomers only 1.5 percent, while Gen X can reach 4.91 percent.

b) *Amenities and Services*

For access to amenities and services, access to sanitation and access to financial have the same correlation for all generations, which is significant and positive towards middle class determinants. The access to sanitation is an initial guarantee for households to maintain environmental cleanliness, this then affects their health which is also an important condition for someone who can be productive. This is in line with the research of Pittau & Zelli (2018) who found similar results.

The difference is in access to the internet. For Millennials and Gen X, internet access has the same correlation that is significant and positive. Dong, J., Blommaert, J. (2016)

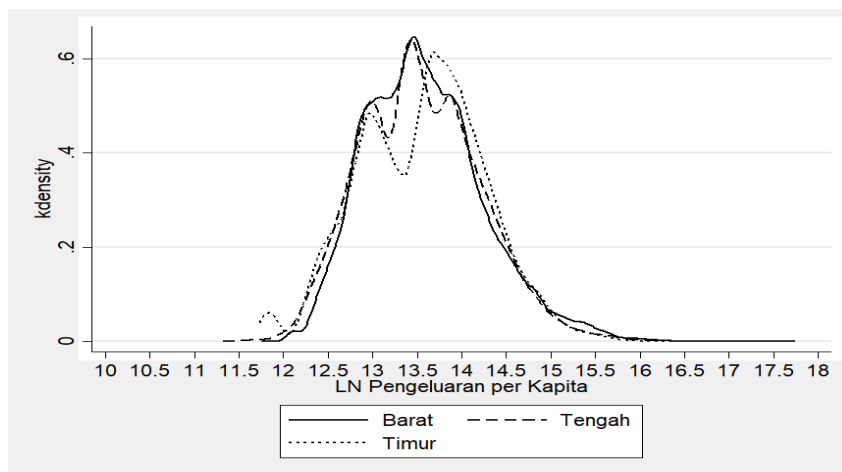
explain that access to the internet is related to the access of informal global learning environments. This will ultimately make it easier for them to get knowledge and skills and then getting good jobs with the higher income. Whereas in Baby Boomers, access to the internet does not have a significant correlation as a determinant of the middle class. This is reasonable because based on descriptive statistics, Baby Boomers don't access the internet much compared to other generations, they don't really need the internet because they have accumulated capital before the internet was in a very sophisticated phase in the past decade. Meanwhile, Millennials who are known as tech savvy / natives are very dependent on internet access to find information about anything.

*c) Demographic Characteristics*

For demographic characteristics there is also no significant difference between Millennials and Gen X. All variables have a significant and positive correlation with households in the middle class, except for the number of family members and the number of family members under the age of five, both of whom have significant and negative correlation. The difference between Millennials and Baby Boomers in gender variables and the number of household members under five years old, these two variables did not have a significant correlation for Baby Boomer in the middle class.

Finally, even though the western region nationally accounts for more than 50 percent of the total middle class in Indonesia, it turns out that Millennials households in the central and eastern Indonesia have a greater probability of being in the middle class, where each of the central and eastern regions of Indonesia the probability is 3.70 percent and 9.23 percent greater. Figure 3.2 can explain this phenomenon where the expenditure density per capita of the population of the central and eastern part of Indonesia in the range of natural logarithms 14 to 14.5 is greater than the western part of Indonesia. Range 14 to 14.5 is the middle class income range, which is equal to Rp1,156,253 per capita per month to Rp2,512,944 per capita per month, or equal to Rp4,625,012 to Rp10,051,776 for households with four family members.

**Figure 3.2 Expenditure Density in Three Regions in Indonesia**



Source: Author's Calculation, Susenas (2016)

## **4. CONCLUSIONS AND POLICY IMPLICATIONS**

### **4.1 Conclusions**

The estimation results in this study indicate that the main determinants of Millennials households in the middle class are: (i) education (must at least complete high school education), (ii) employment (has a full-time jobs working in the secondary or tertiary business field, has a status as an entrepreneur or a formal employee), and (iii) access to amenities and services (access to sanitation, access to internet, and access to financial).

There are several differences of determinants to staying in the middle class between Millennials households and their predecessors (Gen X and Baby Boomer). First, Millennials' household heads who only completed the compulsory education are not sufficient to guarantee that their households are in the middle class. This does not apply to the predecessor generation, where all levels of education including compulsory have a significant and positive correlation as a determinant of the middle class. In terms of work, there is no significant difference between the determinants of the Millennials and Gen X middle class households. All variables that are employment indicators have a significant and positive correlation. The difference is in the employment variable (has a status as an entrepreneur) in the Baby Boomer household, different from other generations who have a significant and positive correlation, the status as an entrepreneur is not a significant determinant of Baby Boomer in the middle class. For the access to amenities and services, differences exist in the internet access variable, for Millennials and Gen X, internet access has the same correlation that is significant and positive, whereas in Baby Boomers, access to the internet does not have a significant correlation as a determinant of the middle class.

### **4.2 Policy Implications**

The dominance of the population in the Millennials generation places Millennials very important for the economy, especially today they have reached the productive age. Ensuring that Millennials are in the middle class will certainly spur economic growth. Through the results of this study, the government can raise the proportion of Millennials and future generations to stay in middle class in several ways. Ensuring the inclusiveness of education access at least reaching the senior high school is a requirement to increase the probability of the Millennials middle class and future generations, even better if they can reach the diploma education it is because this level of education turns out to produce a middle class with the highest probability. The internet's attachment to Millennials, known as native technology, has caused them to be very dependent on the internet as the means to increase the probability of being in the middle class compared to the previous generation. Therefore, ensuring internet access to all over of Indonesia will increase the probability of the middle class in Indonesia. If the internet can be accessed to rural areas, it will be increased the chances of creating more middle class in rural areas, so that the middle class is not only concentrated in urban areas. The current focus of the government in building infrastructure is aligned in an effort to increase the probability of the next middle class, this corresponds to the estimation results which show that people who migrate have a greater chance of being in the middle class. Transportation and road access will facilitate the mobilization of people who want to migrate.

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