Unmasking the middle-class: profile and determinants

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Why should we be concerned about the middle-class?



GNI per capita of \$3,660 (2017) Sec. Pernia: *PH to be upper middle-income by 2019* "Filipinos live in a prosperous, predominantly middle class society where no one is poor."

Outline

- 1. Who is in the middle- (income) class?
- 2. How do middle-income people live?
- 3. Determinants of middle- class
- 4. How long until the poor and low-income become middle-income?
- 5. Summary and Ways Forward



1. Who is in middle-(income) class?

Economists tend to define the middle-class either through absolute thresholds for income or consumption at purchasing power parity (PPP) prices

Absolute definition	Income range
Milanovic and Yitzhaki (2002)	\$12 - \$50
Banerjee and Duflo (2008)	\$2 - \$10
Ravallion (2009)	\$2 - \$13
ADB (2010)	\$2 - \$20

or relative thresholds based on the average or median income (Easterly 2001; Foster and Wolfson 2009; Birdsall 2010)

- Definitions using non-monetary metrics vary in sociology (McEwan et al. 2015; Southall 2016; Neubert and Stoll 2018) & other social sciences (Spronk 2012; Melber 2013).
- In PH, Virola et al. (2013) use cluster analysis on income distribution to define the middle-class, while market researchers group households into five socio economic classifications based on a scoring system of the quality of consumers, household assets, amenities, and facilities (Bersales et al. 2013)

1.1. Income classes, Indicative monthly family income and size of classes (families & persons)

Incomo	Income	Definition: Per capita	Indicative Range of Monthly Family Incomes (for a Family Size of 5 members) at 2015	Estimated Size in thousands (andn % of Total)	
Income class	cluster	income	prices	Families	Persons
Low	Poor	less than official poverty threshold	Less than PHP 9,100	3,749 (16.5)	22,429 (21.4)
income	Low income (but not poor)	between the poverty line and twice the poverty line	Between PHP 9,100 to PHP 18,200	7,826 (34.4)	38,509 (36.7)
Middle income	Lower middle income	between two- and four- times the poverty line	Between PHP 18,200 to PHP 36,400	6,625 (29.2)	27,861 (26.5)
	Middle middle income class	between four- and seven- times the poverty line	Between PHP 36,400 to PHP 63,700	2,890 (12.7)	10,790 (10.3)
	Upper middle income	between seven- and twelve- times the poverty line	Between PHP 63,700 to PHP 109,200	1,117 (4.9)	3,873 (3.7)
High income	Upper income (but not rich)	between twelve- and twenty times the poverty line	Between PHP 109,200 to PHP 182,000	381 (1.7)	1,139 (1.1)
	Rich	at least equal to twenty times the poverty line	At least PHP 182,000	139 (0.6)	374 (0.4)



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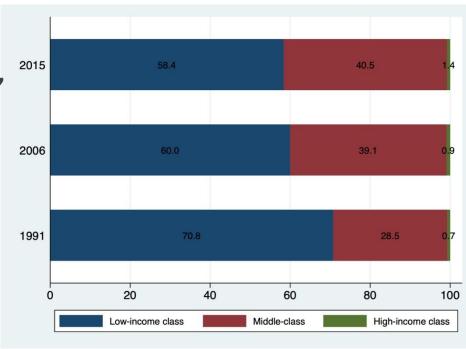
1.2. Middle class is growing

•In size:

 As of 2015, 47% of Filipino HHs or 40.5% of Pinoys or are middle-income (compared to 28.5%, and 39.1% of persons, respectively in 1991 and in 2006)

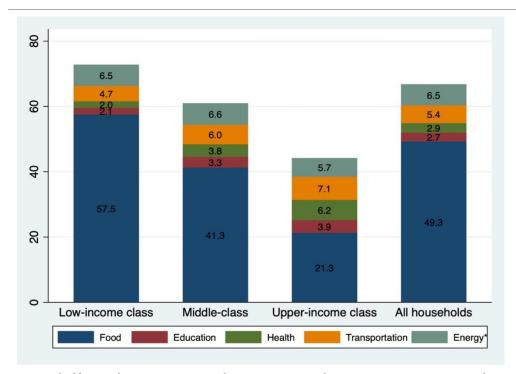
•In political strength:

- Gov't has been shifting targeted social protection (benefiting poor and low-income) toward universal programs (Curato 2016)
- Two major legislations, TRAIN 1 and Universal Access to Quality Tertiary Education Act of 2017, both benefit the middle-class more than lower-income class.
- Interest group for NGOs, such as mega-churches (Lang 2018; Curato 2016)



CAVEAT: there is undercoverage and underreporting by wealthy households in household surveys. (Albert and Vizmanos, 2017) These estimates underestimate the size of rich households.

2. How do Middle-(Income) Class Live and Spend?



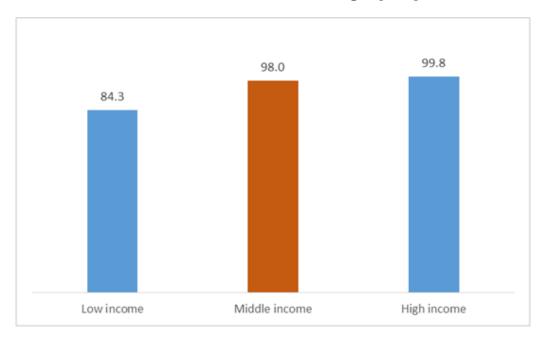
 Middle-class spending on education is similar (4.1%) to the upper-income class (4.7%); this is 63 percent more than spending (2.5%) by lowincome counterparts

PROFILE OF THE MIDDLE CLASS



2.1. Access to electricity and safe water

Access to electricity (%)



	Low	Middle	High
Main sources of water supply	income	income	income
Own use, faucet, community water system	25.0%	62.7%	85.0%
Shared, faucet, community water system	14.1%	8.6%	2.3%
Own use, tubed/piped deep well	10.3%	11.0%	8.0%
Shared, tubed/piped deep well	20.3%	7.7%	1.2%
Tubed/piped shallow well	3.8%	2.2%	1.0%
Dug well	12.6%	3.1%	1.0%
Protected spring, river, stream, etc	7.6%	2.2%	0.5%
Unprotected spring, river, stream, etc	2.1%	0.2%	0.1%
Lake, river, rain and others	1.2%	0.2%	0.1%
Peddler	2.6%	1.8%	0.2%
Others	0.3%	0.2%	0.5%

3. Determinants of middle-income class

Household characteristics

- Family size
- Square of family size
- · Age of household head
- Squared age of household head
- Proportion of members aged 0 14
- Whether household head is married
- Whether household head is male
- Whether the household is in an urban area
 - Regional dummies
- Household head education

Housing characteristics

- Strong roof and walls
- Tenure status: squatter
- Tenure status: own house or owner-like possession
 - With faucet
 - · With electricity

Asset ownership

- With television
- With refrigerator
- With airconditioner
 - With car
 - With cellphone

Community characteristics

- Agricultural workers constitute more than half of population aged 10 and above
 - Living in the town proper/poblacion
- With high school in the barangay
- With market place in the barangay
 - Number of financial establishments in the barangay
- Number of manufacturing establishments within 2 kilometers from barangay



3. Determinants of middle-income class

Positive

- Higher education of household head
- House with strong roof and walls
- Ownership or owner-like possession of house
- Ownership of household assets
- Water supplied through faucet
- With electricity
- Larger number of financial establishments in the barangay
- With market place in the barangay

Negative

- Larger family size
- Larger proportion of school-aged children
- Residence outside Metro Manila
- Household head is married
- Living in an agricultural barangay

Results of the multinomial logistic regression



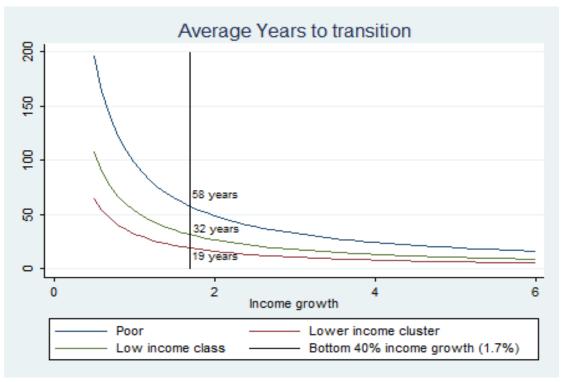
4. How long until the poor and low-income become middle-income?

If z is lower threshold for middle-income class and if per capita income of a low-income person, y_i , grows at a constant rate g per year, then the number of years it will take him or her to reach the threshold is:



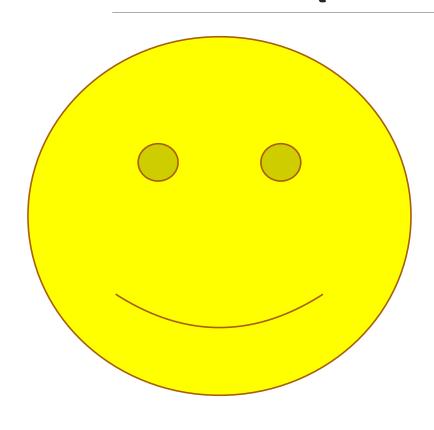
$$t_i^g = \frac{\ln(\frac{z}{y_i})}{g}$$

"Filipinos live in a prosperous, predominantly middle class society where no one is poor."



At a growth of 1.7%, low income (but not poor) can transition to middle income by 2040, but not the poor (who need annual growth rate of 3.9%)

5. Summary and Ways Forward: Profile of Middle- (income) class





Household composition and place of residence

- Live in Greater Metro Manila and urban areas
- Have smaller families
- Access to utilities and community establishments



Jobs and human capital

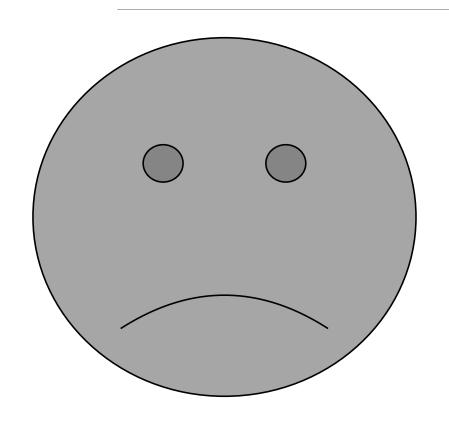
- Have non-agricultural, permanent jobs
- Majority are, at least, HS graduate
- Place value on children's human capital



Expenditures

- Spend less on food
- More or children's human capital development
- Accumulation of household durables

5. Summary and Ways Forward (cont'd): vulnerabilities of middle- class





OFW households may be vulnerable to falling into poverty



Lack of affordable housing may be driving middle-income informal settlement



Access to quality water remain low, especially in disadvantaged areas

5. Summary and Ways Forward (cont'd)

- Growth of private car ownership (esp. among middle class) vs public transport
- Need behavioral insights about carbon consumption of growing middle class
- Should monitor middle class relative to progress on long-term development aspirations





 Make use of income classifications to assess impact of government programs and policies on various groups