



**15TH NATIONAL
CONVENTION
ON STATISTICS**

03-05 OCTOBER 2022

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Spearheaded by the Philippine Statistics Authority*



WAS THE RECENT EXPANSION OF THE FILIPINO MIDDLE-INCOME CLASS SUSTAINED DESPITE THE PANDEMIC

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Income and Poverty Statistics
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Was the recent expansion of the Filipino middle-income class sustained despite the pandemic?



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INTRODUCTION

- “The middle class is the source of economic growth...”
- How much does the middle class contribute to national development?
- Prior to the Tax Reform for Acceleration and Inclusion (TRAIN) Act, the middle class was estimated to contribute 18.63% of tax collections, which goes up to 53.16% when the contributions of the lower and upper middle classes are added.
- With TRAIN, the share of the middle class alone becomes 22.36%; combined with the share of the lower and upper middle classes, the share becomes 63.62 %...

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DATA SOURCES

Recognizing the important role of the middle class in national development, this paper defines the middle class using CLUSTER ANALYSIS at the national level using the

- ✓ Family Income and Expenditure Survey (FIES), the
- ✓ Labor Force Survey (LFS), and the
- ✓ Consumer Price Index (CPI) of the PSA.

Specifically, the FIES microdata merged with the January round of the LFS and the 2018-based CPI are used. The 2021 FIES was also used to assess the impact of the pandemic on the size of the middle-income class.

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METHODOLOGY OF THE STUDY

- i. Defining the middle-income class in 2018, 2021, and 2022
- ii. Profiling the middle-income class in 2015, 2018 and 2021 (vs middle income class in 2015)
- iii. Assessing the robustness of the methodology and the impact of the COVID 19 pandemic on the middle-income class
- iv. Income gap, decomposition analysis on the drivers of change in the size of the middle-income class, and correlation analysis between the size of the middle-income class and poverty incidence/Gini coefficient

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RESULTS

Defining the middle-income class in 2018, 2021, and 2022

Cluster	Summary Statistics of Annual Per Capita Income using 2018 FIES as base				
	mean	median	min	max	Income Class
1	51,569	43,177	4,501	114,193	Low
2	178,616	160,275	114,200	368,812	(Low) Middle
3	560,883	489,049	369,103	1,470,567	(Upper) Middle
4	2,282,143	2,092,847	1,483,800	5,637,447	High
5	11,983,378	11,563,664	7,858,025	14,365,991	High

Source: Special computations made on the 2018 Family Income and Expenditure Survey of the Philippine Statistics Authority

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RESULTS

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Annual Per Capita Income of Middle-Income Class: 2006 - 2021

Year	Summary Statistics of Annual Per Capita Income using 2018 FIES as base					
	Low	Middle				High
		Low-Middle		Upper-Middle		
		Minimum	Maximum	Minimum	Maximum	
2015	<104,150	104,150	336,621	336,622	1,341,157	>1,341,157
2018	<114,200	114,200	369,102	369,103	1,470,567	>1,470,567
2019	<116,912	116,912	377,868	377,869	1,505,493	>1,505,493
2020	<122,553	122,553	396,100	396,101	1,578,133	>1,578,133
2021	<133,512	133,512	431,518	431,519	1,719,244	>1,719,244
2022	<151,936	151,936	491,068	491,069	1,956,500	>1,956,500

Source: Special computations made on the 2018 Family Income and Expenditure Survey of the PSA

2015, 2019, 2020, 2021, Average of January to August 2022 CPI

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RESULTS

Structure of the Distribution of Families by Per Capita Income Class, 2015, 2018 and 2021

	Estimate			Standard Error			Difference	
	2015	2018	2021	2015	2018	2021	2018-2015	2021-2018
LOW	83.8	81.4	83.1	0.2	0.151	0.1348	-2.42*	1.69*
LOW-MIDDLE	14.7	17.1	15.7	0.2	0.146	0.1314	2.34*	-1.36*
UPPER-MIDDLE	1.4	1.5	1.2	0.1	0.048	0.0375	0.1	-0.31*
HIGH	0.0496	0.0499	0.0343	0.0170	0.007	0.0056	0.0	(0.02)

Source: Special computations made on the 2015, 2018 and 2021 Family Income and Expenditure Survey of the Philippine Statistics Authority

* Significantly different at alpha = 5%

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RESULTS

Profiling the middle-income class in 2015, 2018 and 2021 (vs middle income class in 2015)



Among the regions, NCR consistently has the highest proportion of middle-income class for 2015, 2018 and 2021, followed by Regions IV-A and III.



Examining the share of regions to the total middle-income class, consistent with our previous studies, among the regions, it is only in the National Capital Region (NCR) where more than 50% of the families belong to the middle-income class.



Specifically, 23.9% of families in NCR belong to low middle-income families, while 26.3% belong to upper middle-income families in 2021

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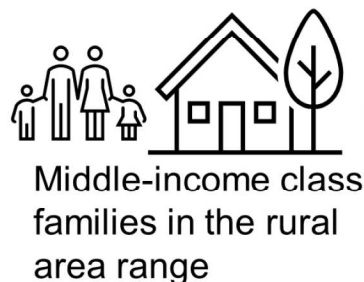
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RESULTS

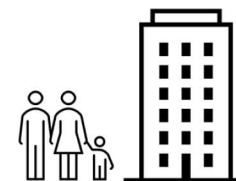
Profiling the middle-income class in 2015, 2018 and 2021 (vs middle income class in 2015)



4-5%

More than
10%

families in the urban area were classified as middle-income class for years 2015, 2018, and 2021



In 2015 to 2021, the proportion of low-middle income and upper-middle income class living in a single house was decreasing



While the proportion of low-middle income and upper-middle income class living in apartment, condominium or townhouse increases



From 2018 to 2021, there was an observed increase in the proportion of low-middle and upper-middle income families that owns or with owner-like possession of house and lot, which can be attributed to easier acquisition of property in recent years

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RESULTS

Profiling the middle- income class in 2015, 2018 and 2021 (vs middle income class in 2015)



In 2021, there were decreases in in the percentage of employed of household heads in the low and low-middle income families.



From 2015 to 2021, there was an increase among those who worked in the private establishment by 7.4% from 41.4 to 48.8 in the low-middle income class.

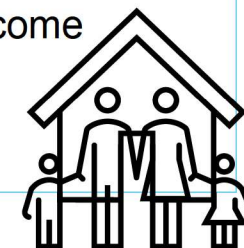


Meanwhile, there was a decrease among those who worked as self employed by 12.5% from 30% to 17.5% in the low-middle income class.



Among the upper-middle income class, there was an 8.5% increase in those who worked in the private household from 2018 and 2021.

For years 2015, 2018 and 2021, the average family size has ranged from 4 to 5 for low-income families, for low middle-income families; 3 for upper middle-income families and 3 for high-income families.



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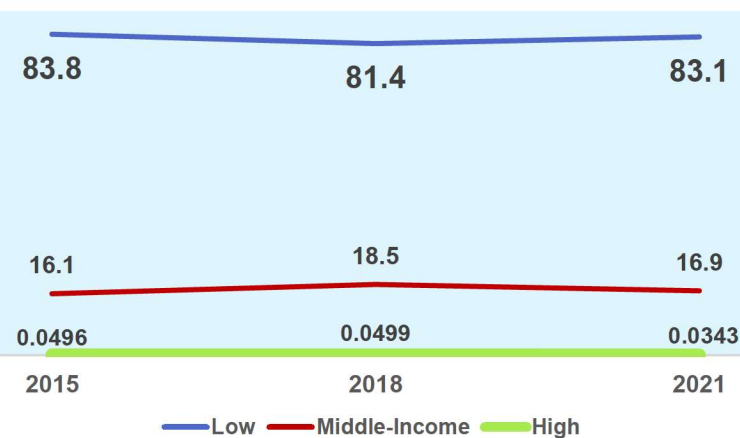
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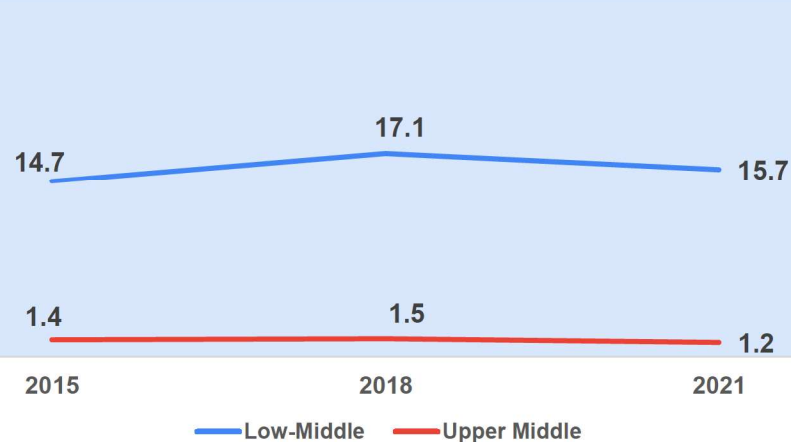
RESULTS

Assessing the robustness of the methodology and the impact of the COVID 19 pandemic on the middle-income class

Structure of the Middle Income Class: 2015, 2018, 2021



Structure of the Middle Income Class: 2015, 2018, 2021



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Income gap

In 2021, on the average, incomes of low middle-income persons were short by 52.2 percent of the minimum income cut off of the upper middle-income class. This means that on the average, an additional annual per capita income of Php 225,196 is needed by low middle-income in order to be upgraded as upper-middle income class.

Income gap: 2015, 2018 and 2021

	Income Gap	Upper Middle Income Cut-off	Annual Income Needed to be Classified as Upper Middle Class
2015	62.3	₱336,621.94	₱209,815.24
2018	51.6	₱377,869.20	₱195,011.38
2021	52.2	₱431,519.45	₱225,196.06

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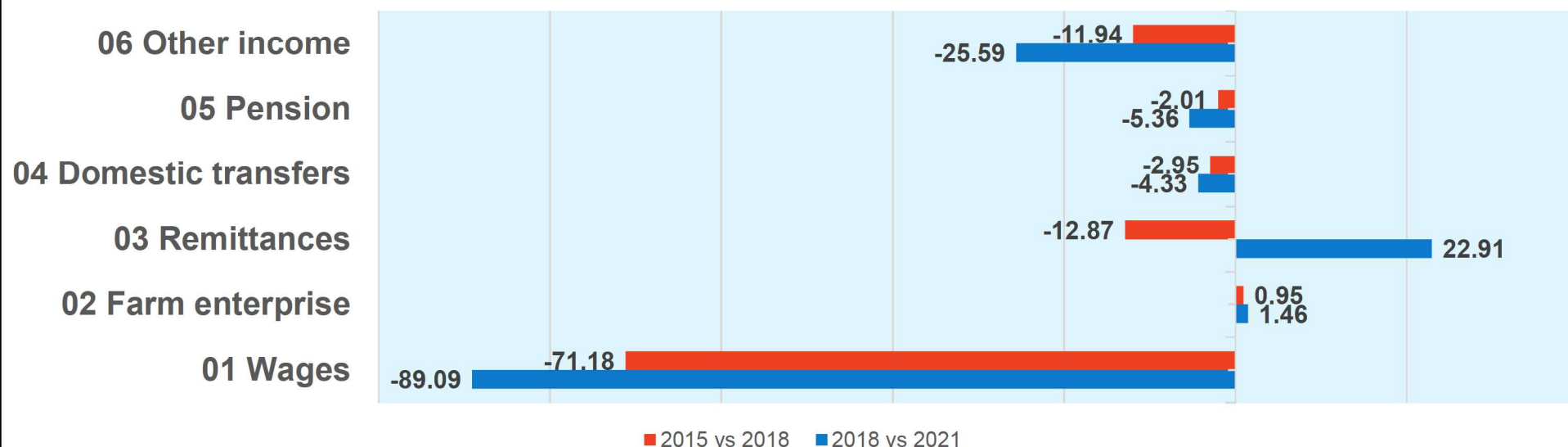
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RESULTS

Decomposition analysis on the drivers of change in the size of the middle-income class

Share Effect of the Middle Income



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RESULTS

- NCR consistently has the highest proportion of middle-income class followed by Regions IV-A.
- Consistently, these belonged in the least poor cluster in terms of poverty incidence.
- However, in terms of economic growth from 2020 to 2021, NCR and Region IV-A were the hardly hit by COVID-19, these did not belonged to the top five regions with the highest growth.

Region	Income Class (2021)			
	Low	Low-Middle	Upper Middle	High
Philippines	83.1	15.7	1.2	0.0
NCR	69.4	28.2	2.3	0.1
CAR	77.6	20.5	1.8	0.1
Region I	84.0	14.9	1.0	0.1
Region II	86.5	12.1	1.3	0.0
Region III	81.9	17.3	0.8	0.0
Region IV-A	77.7	21.0	1.3	0.0
MIMAROPA	87.5	11.2	1.2	0.1
Region V	90.3	9.1	0.6	0.0
Region VI	86.7	12.3	1.0	0.0
Region VII	86.4	12.5	1.0	0.0
Region VIII	90.1	8.9	0.9	0.0
Region IX	90.5	8.8	0.7	0.1
Region X	87.0	11.8	1.2	0.0
Region XI	85.3	13.5	1.1	0.1
Region XII	90.0	9.4	0.6	0.0
BARMM	98.4	1.5	0.0	0.0
Caraga	90.0	9.0	1.0	0.0

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Limitations

- We have been using cluster analysis as the first step towards identifying the middle-income class. Maybe, other statistical tools could be considered;
- Projecting income limits of the different income classes using the 2018 based CPI may have produced inaccurate income cut-offs for the low-income class, the low middle-income class, the upper middle-income class and the high-income class, thereby producing inaccurate estimates of the size of the middle-income class; with the planned biennial conduct of the FIES starting 2023, an FIES-based, probably better way of updating the definition of the middle-income class would be possible.
- The extent of non-response or underestimated/undervalued income from rich respondents to the FIES introduces bias may produce lower income estimates of the boundaries of the income classes including the middle income-class;
- The paper used the merged 2018 FIES and 2019 LFS January round datasets which may not be the best combination of surveys to merge for the cluster analysis.

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Conclusion

- Based on the structure of the income class, it was observed that there was a decrease in the middle income class and an increase in the low income class from 2018 to 2021 which is also consistent with the increase in the national poverty incidence from 2018 to 2021.
- The PSA and the former NSCB/NSO have generated a sufficiently rich trove of statistics on the poor and the basic sectors of our society but some of these initiatives have not been regularized. It is about time the PSA gave greater priority to and institutionalized the generation of granular data on the middle class.
- While the PDP has articulated the key role of the middle-income class in our national development agenda, the importance of the generation of statistics on the middle class has not received the corresponding recognition and appreciation enough to guarantee the financial support needed, particularly for its manpower resource requirements.



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Way Forward

- Review/reformulation of the PSS household and establishment/enterprise survey programs to ensure sufficient flexibility of the PSS censuses and surveys to allow development planners, and the research community to do high-quality data analysis needed to support an evidence-based culture of policy-and decision making in government as well as the private sector;
- Regular compilation of the CPI for the middle class and the elderly;
- Adoption of an official statistical definition of the middle class and the socio-economic classes and inclusion of middle class statistics in the PSS System of Designated Statistics; the PSA should also consider the possibility of using a non-income based definition of the middle class as was mentioned in our 10th (2007), and 11th NCS (2010) papers [] & [], respectively;
- Sustained and improved generation of panel data useful in tracking movements across income groups including the monitoring of transient poor and transient middle class; and
- Considering financial and human resource constraints, study whether an FIES every two years and a monthly LFS are what data users urgently need.

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Thank you!



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