1st International Conference on Economics and
Sustainable Development Conference 2021

CBER Conference

Apr 4th, 10:30 AM - 12:30 PM

Measuring the trend of consumption expenditure inequality in Pakistan

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1st International Conference, CBER IBA
Title: (Measuring The Trend Of Consumption Expenditure Inequality in Pakistan)
Session: (Insert Session)
Date: (04/04/2021 11:15AM)
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Introduction

➢ Poverty and income inequality are one of the main issues in developing countries.

➢ Along side Poverty, Inequality one of the major problems faced by households in Pakistan.

➢ Consumption expenditure is considered as one of the best indicators of household welfare.(Cutler & Katz 1992).

Rational of the study

➢ The research intend to find out inequalities in Consumption expenditures among the households of Pakistan.

➢ The inequalities in consumption expenditures among households may differ across region and provinces.

➢ This study decomposes inequalities in consumption expenditures into Food and Non-Food at Household.

➢ The significance of Food and Non-Food consumption expenditure inequalities are useful to understand disparities among households based on their region and Province.

➢ This research contributes to examine the patterns of consumption expenditures portfolios at household level.

S, No.	Article	Author	Journal & Year	Methodology	Result
1.	Trends in consumption-based poverty and inequality in the European Union during the 1980s	M. Asghar Zaidi & Klaas de Vos	Journal of Population Economics. Published by Springer, June. 2001	Decile ratio, Gini coefficient, Theil index	During the 1980s, both poverty and inequality increased in Italy, France, the United Kingdom, Germany and Belgium, while decreases in both poverty and inequality are observed for Spain and Portugal. In Greece only inequality increased.
2.	Trends in Inequality in Pakistan between 1998-99 and 2001-02	Talat Anwar & Faiz Bilquees	Pakistan Institute of Development Economics, Islamabad, J Stor. PDR, 2003	Gini Coefficient	Inequality increased in overall Pakistan during the time period.
3.	Growth and Sectorial Inequality in Pakistan	Talat Anwar	Pakistan Economic and Social Review. 2007	Gini Coefficient	Household head employed in Financing, Electricity, Manufacturing, and Community services faced high inequality
4.	Income and Consumption Inequality in Urban China: 1992–2003	Hongbin Cai, Yuyu Chen & Li-An Zhou	The University of Chicago Press. 2010	Gini Coefficient	Consumption inequality among urban households in China increased rapidly during 1992–2003. The Gini index of per capita consumption increased from 0.25 in 1992 to 0.33 in 2003
5.					

S, No.	Article	Author	Journal & Year	Methodology	Result
5.	Measurement and Decomposition of Consumption Inequality in Pakistan	Muhammad Idress & Eatzaz Ahmad	Lahore Journal Of Economics. 2010	Gini Coefficient	Inequality in consumption expenditure in Pakistan improved slightly between 1992/93 and 2004/05, and that the extent of inequality in food consumption has remained substantially lower than in nonfood consumption.
6.	Income Inequality measurement in Pakistan and its four provinces by Lorenz curve	Hina Amir & Kanwal Bilal	Journal of Asian Scientific Research. August. 2011	Lorenz Curve, Gini Coefficient	There is also inequality among the per capita income of different provinces. Overall inequality in Pakistan appears to be almost exclusively due to inequalities within provinces
7.	Growth and Consumption Inequality in Pakistan	MUHAMMAD Ali Asad & Mehboob Ahmad	Pakistan Economic and Social Review 2011	Gini Coefficient, Thiel index Quintiles	Consumption inequality was not stable, The poorest 20 percent and the middle 60 percent lost their consumption share, whereas the richest 20 percent gained their consumption share significantly in urban and rural sectors.
8.	Poverty, Income Inequality, and Growth in Pakistan: A Pooled Regression Analysis	Ahmed Raza Cheema & Maqbool H. Sial	Lahore Journal of Economics 2012	Gini Coefficient	The results show that growth and inequality play significant roles in affecting poverty, and that the effect of the former is substantially larger than that of the latter. Furthermore, growth has a significant

Model

➢ Gini coefficient, defined as the ratio of the area between the diagonal and the Lorenz curve to the total area of the half-square in which the curve lies (Todaro & Smith, 2002).

➢ Rao(1969) provided formula to calculate Gini coefficient which is also useful for measurement of consumption inequality.

$$G = \sum_{i=1}^{n-1} (P_i q_{i+1} - P_{i+1} q_i)$$

➢ Pi is the cumulative population share and Qi is the cumulative consumption share corresponding to the ith household when all households are arranged in ascending order of consumption. (Rao,1969)

➢ Sharrock (1982) provides the following source-decomposition of the Gini coefficient of income. The same procedure can be adopted for the allocation-wise decomposition of consumption inequality
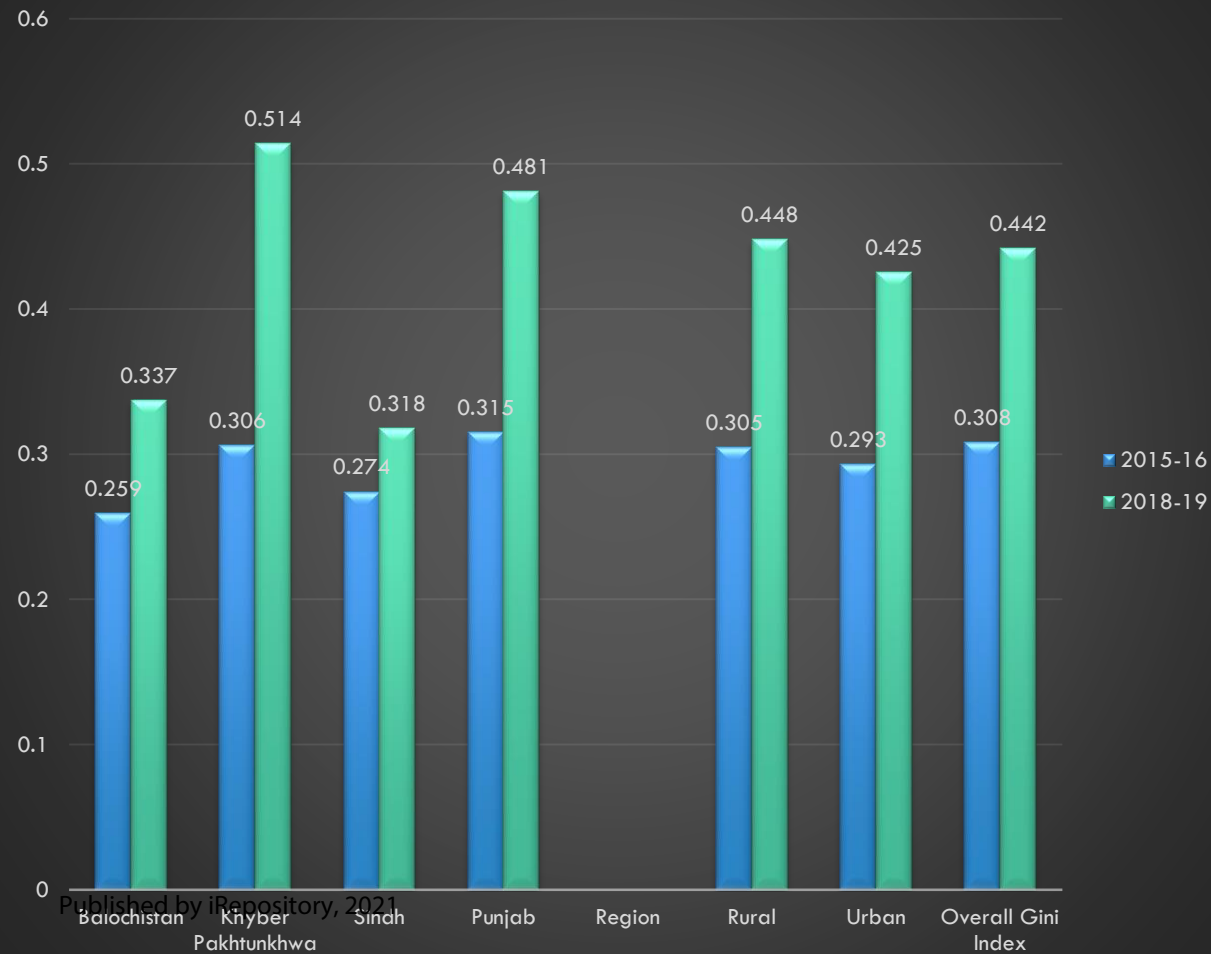
$$G = \sum_{k=1}^{K} (S_K (C_K)]$$

➢ Here s_k is the consumption share of the component k in total consumption and C_k is the concentration ratio of the *kth* consumption component. The concentration ratio is the same as that of the Gini coefficient except that the ranking of households is by total consumption and not the *kth* consumption component.
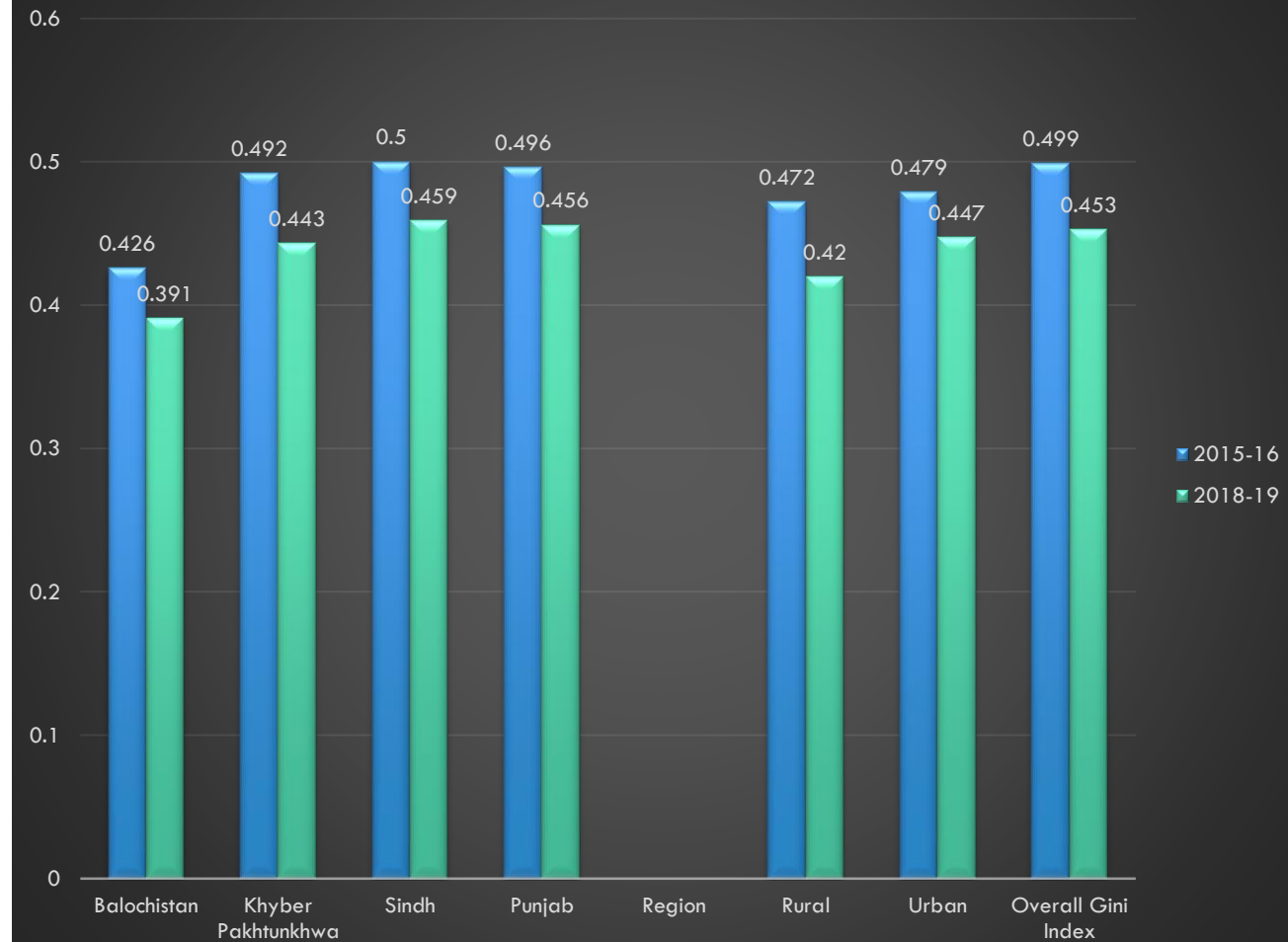
Model & Data

➢ A good inequality measure usually has the following properties: (i) the Pigou-Dalton transfer principle, (ii) income scale independence, (iii) the population principle, (iv) decomposability, (v) well defined and interpretable limits, and (vi) symmetry. The Gini coefficient is one measure that fulfills all these conditions and is the most widely used measure of inequality. (Idrees & Ahmad, 2010)

➢ The data for this study has been taken from PBS which collects HIES data from households.

➢ We have utilized the latest available surveys of 2015-16 and 2018-19.

➢ These data sets comprises information on consumption expenditures for the households. This includes data on food and non-food expenditures of households and households are divided on basis of region and Province.

➢ The data is decomposed into food and non-food expenditures available in consumed quantity and value paid for it.

Data Visualization

Food Consumption Inequality Gini Values

Province	2015-16	2018-19
Balochistan	0.259	0.337
Sindh	0.274	0.318
Khyber Pakhtunkhwa	0.306	0.514
Punjab	0.315	0.481
Region		
Rural	0.305	0.448
Urban	0.293	0.425
Overall Gini	0.308	0.442

Non-Food Consumption Inequality Gini Values

Province	2015-16	2018-19
Balochistan	0.426	0.391
Sindh	0.500	0.443
Khyber Pakhtunkhwa	0.492	0.459
Punjab	0.496	0.456
Region		
Rural	0.472	0.420
Urban	0.479	0.447
Overall Gini	0.499	0.453

Findings

➢ This research shows the existence of consumption expenditure inequalities among the households of Pakistan.

➢ The Results show that overall food consumption expenditure inequality increased over the course of last two surveys.

➢ Food Consumption expenditure inequality in Rural areas was higher compared to urban areas.

➢ Punjab faced the highest level of food Consumption expenditure inequality in 2015-16 and KPK in 2018-19.

➢ The Overall non-food consumption expenditure inequality decreased over the course of last two surveys.

➢ Non-Food Consumption expenditure inequality in Urban areas dominated inequality in Rural areas.

➢ Sindh observed the highest level of Non-food consumption expenditure inequality in 2015-16 and KPK in 2018-19.

Conclusion & Recommendations

➢ This research shows the existence of consumption expenditure inequalities among the households of Pakistan.

➢ It was observed consumption expenditure inequality was high in non-food consumption expenditure than food

consumption.

➢ To reduce Consumption inequality Government needs to provide subsidies on food items and reduce inflation.

➢ Progressive Tax rates and redistribution of resources towards poor households can decrease consumption inequality.

➢ Government need to include more households through Ehsaas Program or through the network of utility stores to start

new Food programs to support the poor as it will reduce the gap between rich and poor.

Limitations of the study

➢ Further decomposition of inequalities can be done/conducted by further dividing each groups in sub-groups like Apparels, Fuel & Lightening house rent etc.

➢ One can find consumption inequality by looking at household head's employment sector.