THE EFFECTS OF THE RISE OF CONSUMPTION ON INCOME POLARIZATION IN MALAYSIA

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Abstract- There are occur situation regarding rising of development theory that were viewed as unbalance and incline to external influences that produce outcome which not focus on a domestic unit consuming. The process of urbanization produces big enhances in the real and the maximum activity of consuming nevertheless take place a lowering in effectiveness of power usage. This study utilized survey questionnaire for data collection. Data collection and analysis employed quantitative approach. The numbers of respondents involved in survey were 434 samples that gave agreement for participation in the study. Findings imply that Spearman's correlation coefficient was statistically significant. There is positive relationship among the rise of consumption and income polarization. Ordinal regression indicates that the model gives better assumptions than if guessed centered on the marginal probabilities for the outcome variables. However, the data and the model assumptions are do not have a good model.

Index Terms- Consumption, income, Malaysia, polarization.

I. INTRODUCTION

Greater publications undertook throughout the last twenty years to suggest assesses of polarization and to implement to the earning data of different states [1]. The inequality in consuming and buying trends among greater earning and smaller earning customers, as well as the current downturn and early consuming psychology situation in China, emerge main questions for current business central, and the growth of the sales sector completely [2].

The increasing development theory is regarded as unbalance and incline to exogenous impacts which consequence of not depend on a domestic unit consuming. There is raising attention regarding poor household consuming. Founded on the formulated question of a rural urban inequality, expected be beneficial to assessment the way of this occurrence impacts domestic consuming. Nevertheless, the domestic earning is merely explained as domestic earning, causing freely considers as the expandable earning or overall earning before paying taxes. Merely geographical differentiation can be produced on the foundation of urban and rural investigations. There occur inequalities in earning and spending among the seashore regions and the back country. Merely real spending is considering [3]. Although the great numbers of disparity study concentrates on earning metrics to assess transitions in disparity, an increasing amount of scholars consider that consuming is a preferable metric for assessing inequalities in an individual's contemporary welfare [4].

The process of urbanization contributes to large rises in the real and the maximal power consuming however a reduction in effectiveness of power usage. The degree to which power incompetence relates with urbanization is larger in states with greater gross domestic product per capita [5]. Increased concern has been paid to examine the active association among electricity consuming and economic development has contributed significant concern and disagreement in both academics and industry currently. At the present time, the important context at question is that assuming that electricity consuming Granger effects economic development or in the reverse approach. The conclusions differ on distinct states or areas at distinct times. This is due to dissimilar states have distinct economic growth strategies, possibly the similar state would have distinct economic strategies at distinct times [6]. The meaning of income polarization is a process in which earning focuses into two isolated poles or clusters, one group is rich, and another group is poor. Frequently this means that there are smaller populations in the moderate earning cluster and more in the upper earning and poor earning clusters [7]. The definition of consuming is the action of consumption commodities that having an transferable value [8].

Eckerstorfer [9] studies on the maximum tax combine taxes on earning and goods within unbalance knowledge in a two kind theory during people make comparative consuming contrasted. The model consists of ranked and nonranked commodities, considering the idea that comparative attentions question for numerous goods however not for each goods. Weisbach and Bankman [10] indicated an amount of vital difficulties concerning the option among an income tax and a consuming tax that are connected to the way capital markets operate and the way individuals select consuming trends. These difficulties produce the effectiveness and allocating case for a consuming tax adequately distinction and reliant on empirical notions that the option of tax fundamental is improved made on administrative

base.

Andorfer and Liebe [11] signified various questions in latest study are limited theoretical centre, possible hypothetical and social desirableness tendency of traditional census data, and a deficiency of generalizability of empirical results. Study could enhance well being from a numerous incentives and a different approaches viewpoint. Taking into account contrasting models can assist to separate important behavioral predictors of individual consuming. The coalition of distinct approaches for instance traditional censuses and site experiments brings to revealing respondents' correct responds and enhances generalizability of findings. Researchers in the domain of ethical consuming study should usage experiments to determine causation associations suggested by models and perform cross nation censuses to collect viewpoints as to the way dissimilarities in market arrangements, cultural traits, and other path dependencies impact trends of individual consuming.

II. LITERATURE REVIEW

Asad and Ahmad [12] evaluate consuming disparity in Pakistan, the association among development and consuming disparity. Every evaluations of disparity reduced from the year 1990 until 1991 to the year 1996 until 1997 and subsequently rose constantly up to the year 2004 until 2005. The Gini weighting, Theil indication, Mean Log Deviation, Atkinson indication, weighting of Variation and Docile Dispersion Ration enhanced by 12.41 percent, 20.00 percent, 16.36 percent, 21.43 percent, 10.28 percent respectively throughout the year 1992 until 1993 to the year 2004 until 2005. The consuming disparity in urban Pakistan reduced from the year 1990 until 1991 to the year 1996 until 1997 exclude Gini weighting which raised by 0.66 percent in the year 1992 until 1993 and subsequently each evaluations raised constantly up to the year 2004 until 2005. The Gini weighting, Theil indication, Mean Log Deviation, Atkinson indication, weighting of Variation and Docile Dispersion Ration enhanced by 5.26 percent, 7.19 percent, 8.11 percent, 2.04 percent and 10.06 percent respectively from the year 1992 until 1993 to the year 2004 until 2005. The finding reported that disparity unstable displaying fluctuation throughout the year from 1990 until 1991 to 2004 until 2005.

Disparities in consuming nearly look to have decreased from the year 1990 until 1991 to 1996 until 1997 however this decreased is not constant throughout the whole term, particularly disparities enhanced from the year 1998 until 1999 to the year 2004 until 2005 in the whole Pakistan in rural and urban sectors. Disparity in urban sector has reduced from the year 1992 until 1993 to the year 1998 until 1999 and following this disparity constantly rose until 2004 until 2005. The Gini weighting in entire Pakistan shows that disparity has enhanced by 5.70 and 12.41 percent respectively from the year 1990 until 1991 to the year 2004 until 2005. The Gini weighting in rural sectors exhibits that disparity has reduced by 8.27 percent from the year 1992 until 1993 to the year 1996 until 1997 and from the year 1996 until 1997 to the year 2004 until 2005 it has risen by 8.15 percent. The regression analysis of development and disparity has demonstrated that the development elasticity of disparity is negative for the whole sample. The evaluations also imply that a consuming disparity in urban Pakistan is greater than in rural Pakistan. The greater urban disparity possibly ascribed to the fact that urban manpower is more varied with reference to skill and education. The fast economic growth and technological development affected the unavoidable economic and social disparity among urban and rural inhabitants as well as between the populations in distinct areas of China [2].

Meyer and Sullivan [13] examined disparity in the United States from the year 1960 until the year 2011. Findings on earning or consuming incline to represent a lower stage and smaller rise in disparity however the dissimilarities diverge throughout time. After tax earning disparity drops throughout the 1960s, continues moderately unchanging in the 1970s, increases greatly in the 1980s, drops moderately throughout the 1990s, and subsequently increases gradually beginning in the initial period of 2000s. In most cases, accounting for taxes substantially decreases the grow in earning disparity throughout the past 45 years, whereas accounting for noncash advantages has merely a limited impact on shifts in earning disparity. Consuming disparity is slightly expressed than earning disparity and transitions in consuming disparity varied extensively from modifications in earning disparity. Whereas earning disparity drops in the 1960s, consuming disparity increases in a small degree. Both consuming and earning signify increasing disparity throughout the 1980s, however the growth is more observably for earning. During the midyear of 2000s, earning disparity has raised whereas consuming disparity has dropped [13].

Throughout the last three decades, both earning and consuming disparity enhanced, however the increase is much more observable for earning (45 percent) than for consuming (19 percent). Dissimilarities among earning and consuming are also apparent for distinct components of the dispersion. Earning disparity in the upper fifty percent of the dispersion increased steadily among the year 1980 and the year 2011, whereas consuming disparity for the upper fifty percent of the dispersion increased among the year 1980 and the year 2005, however subsequently drop visibly. Nevertheless shifting demographics can report for several of the shifts in consuming disparity, merely

does not calculate for modifications in earning disparity. Comparisons of census data to administrative statistics and national earning calculate data signify underreporting of both earning and consuming. There is proof of substantial underreporting of country moves in earning censuses, and the degree of underreporting has developed overtime. Especially underreporting could cause to remarkable tendency in the stage and trend of earning disparity. There is also proof of underreporting of consuming data, however main aspects of consuming for instance food at dwelling and accommodation are recorded at a great and balance ratio comparative to accumulate data. The dissimilarities among earning and consuming disparity shifts around the year 2005 are about solely in the lower fifty percent of the dispersion, implying that the underreporting of consuming by the affluent is not a description for the dissimilarities [13].

Garcia-Lizana and Perez-Moreno [14] reviews the development of the theoretical model and associated empirical proof subsequent Keynes's idea of accumulate consuming expenditure, concentrating on the essential of the effect of earning dispersion on consuming. Recent reading of Keynes' model suggested for the purpose of measure the way the publications enhance knowledge concerning economic achievement and resolve several present restrictions and incompatible in the publication. Earlier Keynes' is more common and broad in scope than other following contributions.

Johnson, Smeeding and Torrey [15] indicated that throughout the year 1981 and 2001, economic disparity between clusters in the common inhabitant has enhanced in the United States; two assessments of earning and consuming are utilized to estimate comparative welfare. Children are more possibly to reside in families with adult that are younger than the common adult inhabitant and are not so far in greatest earning years. During the living cycle, these families should increase earning and consuming statuses. Children in single mother families have certain stages of consuming greater than earning in the year 1981 and 2001, however if both are at comparatively below stages in every term. Due to the living cycle trend of both earning and consuming, children possibly not inevitably are degenerate for the whole lifespan. The patterns across the year 1981 until 2001 term, nevertheless, propose that subsequent cohorts of children are downward the comparative consuming dispersion of the common inhabitant.

The mean of welfare of children had started to increase moderately in the subsequent 1990s, the raises possibly being inequitably divided. Consuming spending for accommodation, transports and health check demands rose as partake of each consuming spending during the year 1981 and 2001 for each household kind. Partake was 29 percent for pairs with children and 35 percent for single elderly and nonelderly. By the year 2001, partake had increased to 39 percent for pairs with children and 42 percent for single elderly and nonelderly. Earning and consuming is obviously dissimilar perspective with which to consider welfare. In many cases, produce a distinct which viewpoint is utilized. The viewpoint of earning stimulates adults expect comparatively more benefited than the common inhabitant. The perspective of consuming stimulates the elderly emerge more benefited than the common inhabitant. The choice of an assessment of welfare possibly has actual effects for the way government strategies are assessed particularly for the elderly [15].

III. RESEARCH METHODOLOGY

This study utilized survey questionnaire for data collection. Data collection and analysis employed quantitative approach. Data collection performed in the year 2016 by cross sectional method. This is a basic and explanatory research that explains the association among the rise of consumption and income polarization. The numbers of respondents involved in survey were 434 samples that gave agreement to participate in the study. The study areas involved cities in Northern Corridor Economic Region (NCER) regional development of north regions of Malaysia. The location in NCER involved Sungai Petani City in Kedah and Georgetown City in Penang. Ipoh city in Perak also selected as a study location as subregion of NCER. The location of Ipoh city is near to NCER.

Questions in questionnaire employed Likert scale for answer options including 1. Do Not Know, 2. Strongly Disagree, 3. Disagree, 4. Agree and 5. Strongly Agree. Distribution of questionnaires employed self administered technique that is respondents filled the questionnaire and another method is filled by researcher. The independent variable is the rise of consumption and dependent variable is income polarization. The objective of this study is to determine the relationship between the rise of consumption and income polarization. The research question is why the rise of consumption effects income polarization? The Null hypothesis is there is no relationship between the rise of consumption and income polarization. Fig. 1 shows relationship between independent variable that is the rise of consumption and dependent variable that is income polarization.

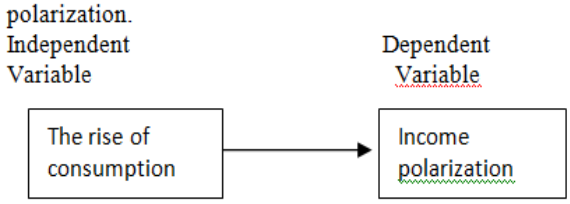


Fig. 1: Relationship between the rise of consumption and income polarization

IV. RESULT AND DISCSUSSON

Scatterplot diagram (Fig. 1) shows that zero correlation between the rise of consumption and income polarization. This means that there is no relationship between the variables and reject Null hypothesis [16].

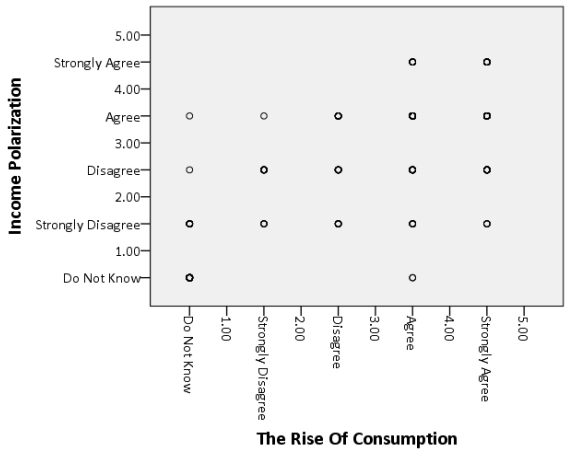


Fig. 1: Scatterplot of the rise of consumption and income polarization

Table 1: Spearman's Correlation

	r_s	P	N
Spearman's correlation	0.591**	0.000	434

Spearman's correlation coefficient value (Table 1) is r_s = 0.591**, p = 0.000 (p < 0.05) and n = 434 was statistically significant. This implies that there is positive relationship between the rise of consumption and income polarization, reject Null hypothesis. The increase in the rise of consumption will lead to an increase in income polarization. However, the lower the rise of consumption, the income polarization becomes low [17]. Table 2, 3 and 4 shows the results of ordinal regression analyses. Table 2 shows that the significant chi square statistic (p < 0.05) indicates that the Final model gives a significant improvement over the baseline intercept only model, reject Null hypothesis. This tells you that the model gives better predictions than if guessed based on the marginal probabilities for the outcome categories [18].

Tables 3 signify Pearson and deviance chi square statistics intended to test the inconsistency of data with the fitted model. The significance values of Pearson and deviance are small (p < 0.05) and can conclude that the data and the model predictions are do not have a good model, reject Null hypothesis [19]. Table 4 shows that the pseudo R_2 Nagelkerke value is 60.8 percent indicates that the rise of consumption explains a relatively moderate proportion of the variation between cities populations in income polarization [18]. Parameter estimates of do not know, strongly disagree and disagree are statistically significant, however agree and strongly agree are not significant. For every one unit increase of do not know in the rise of consumption predict a 7.22 decrease in the ordered log odds of being in a greater stage of income polarization. For each one unit enhance of strongly disagree in the rise of consumption forecast a 2.82 decrease in the ordered log odds of being in a greater stage of income polarization. For each one unit rise of strongly disagree in the rise of consumption project a 2.82 decrease in the ordered log odds of being in a greater stage of income polarization. For each one unit enhance of disagree in the rise of consumption forecast a 2.02 decrease in the ordered log odds of being in a greater stage of income polarization [20].

Table 2: Model Fitting Information of Ordinal Regression

Model	-2 Log Likelihood	Chi Square	df	Sig.
Intercept only	425.412			
Final	78.124994	347.286740	4	0.000

Table 3: Goodness of fit of Ordinal Regression

	Chi square	Degree of freedom	Significance
Pearson	31.460632	12	0.002
Deviance	30.612525	12	0.002

Table 4: Parameter estimates and Pseudo R square value of Ordinal Regression

Item	Significance	Value
Pseudo R Square Nagelkerke		0.608
Parameter Estimates – Estimate		
Do Not Know	0.000	-7.22
Strongly Disagree	0.000	-2.82
Disagree	0.000	-2.02
Strongly Agree	-	-
Agree	-	-

Findings similar with Razzaq, Ahmed and Razzaq [21] that investigated on family and state consuming with income separately both in short and long term. The data is collected from the year 1960 to 2010 of Spain. Analysis is conducted by employing the co integration method and error correction model. The findings of the research indicated that family consuming is greater than earning in short term however in long term with the modification levels of 7 percent the consuming is smaller than earning. By contrast, the spending of state and consuming are greater than earning in long period and conversely. The cause for the more spending in long period is because of the debt financing. On the other hand a

state spending in the long period are more than earning and due to state finances the spending by debt aggregation accordance with earning. For economic balance, state should reduce spending to earning rate or should search techniques of producing earning other than debt. However, results differs with Palley [22] that indicated the important characteristic is that the share of durable earning concerned to consuming is a negative role of family relative durable earning. The model produces trends of consuming expenditure compatible with both long term period series data and modern empirical results that high earning families have a greater tendency of save. This also explains that the reason of consuming disparity is smaller than earning disparity.

CONCLUSION

Results indicate that Spearman's correlation coefficient was statistically significant. There is positive relationship between the rise of consumption and income polarization. Ordinal regression indicates that the model gives better predictions than if guessed based on the marginal probabilities for the outcome categories. However, the data and the model predictions are do not have a good model. The government can reduce consumption inequality if there is sufficient economic development. When the institutional environment and strategy are accurate, development can be specific. The labor intensive technologies should be encouraged in the state. The little scale industry should establish in the areas. The inhabitants in the areas should be educated and should be encouraged to enhance earning. The industries that are generating import substitutions must be stimulated. Therefore, on the one side, the occupation will increase and on the other side, the goods, services and earnings will be produced. The developmental spending in the state should be raised. The unproductive spending should be remained small. The market shortcoming should be corrected. In these techniques the gap of disparities possibly decreased [12].

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REFERENCES

[1] Deutsch, Fusco and Silber, 2012, The BIP trilogy (bipolarization, inequality and polarization); one saga but three different stories, Economics, Discussion Paper, October 1, pp. 2-28, 2012.

[2] G. K. Wong and L. Yu, 2002, Income and social inequality in China: impact on consumption and shopping patterns, International Journal of Social Aconomics, vol. 29, no. 5, pp. 370-384, 2002.

[3] C. Nicklaus, "The effect of household income on household consumption in China," 2015, http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=7374177&fileOId=7374180, Accessed 17 November 2017.

[4] H. Lee and G. D. Painter, "Consumption inequality in the Great Recession," Journal of Economic and Social Measurement, vol. 41, no. 2, pp. 145-166, 2016.

[5] P. Sheng, Y. He and X. Guo', "The impact of urbanization on energy consumption and efficiency," Energy & Environment, vol. 28, issue 7, pp. 673-686, 2017.

[6] Q. Luo, "The short-run and dynamic relationship between urbanization, electricity consumption and economic growth," Journal of Chemical and Pharmaceutical Research, vol. 6, no. 7, pp. 2726-2732, 2014.

[7] M. Dinca-Panaitescu and A. Walks, "Income inequality, income polarization, and poverty: how are they different? How are they measured?", Toronto, The Neighbourhood Change research Partnership, 2015.

[8] Dictionary.com, "Consumption," 2017, http://www.dictionary.com/browse/consumption, Accessed 26 November 2017.

[9] Eckerstorfer, P. (2014), Relative Consumption Concerns and the Optimal Tax Mix. Journal of Public Economic Theory, 16: 936–958. doi:10.1111/jpet.12086.

[10] David A. Weisbach & Joseph Bankman, "Consumption Taxation Is Still Superior to Income Taxation," 60 Stanford Law Review 789, 2007.

[11] V. A. Andorfer and U. Liebe," Research on fair trade consumption – a review," Journal of Business Ethics, vol. 106, issue 4, pp. 415-435, 2012.

[12] M. A. Asad and M. Ahmad, "Growth and consumption inequality in Pakistan," Pakistan Economic and Social Review, vol. 49, no. 1, pp. 69-89, 2011.

[13] Bruce D. Meyer and James X. Sullivan (2013) Consumption and income inequality in the U.S. since the 1960s, https://www3.nd.edu/~jsulliv4/Inequality3.6.pdf, Accessed 12 November 2017.

[14] A. Garcia-Lizana and S Perez-Moreno, "Consumption and income distribution: a proposal for a new reading of Keynes' thinking," The European Journal of the History of Economic Thought, vol. 19, Issue. 1, 2012, 2010.

[15] D. S. Johnson, T. M. Smeeding and B. B. Torrey, "Economic inequality through the prisms of income and consumption," Monthly Labor Review, April, 2005, pp. 11-24, 2005.

[16] Statistics Canada, "Scatterplots," 2013, https://www.statcan.gc.ca/edu/power-pouvoir/ch9/scatter-nuages/5214827-eng.htm, Accessed 21 November 2017.

[17] The Pennsylvania State University, "1.9 – Hypothesis test for the population correlation coefficient," 2017, https://onlinecourses.science.psu.edu/stat501/node/259, Accessed 22 November 2017.

[18] www.restore.ac.uk, "Module 5 – ordinal regression," http://www.restore.ac.uk/srme/www/fac/soc/wie/research-new/srme/modules/mod5/module_5_-_ordinal_regression.pdf, Accessed 24 November 2017.

[19] International Business Machines Knowledge Center, "Ordinal regression - using ordinal regression to build a credit scoring model – evaluating the model," 2011, https://www.ibm.com/support/knowledgecenter/en/SSLVMB_20.0.0/com.ibm.spss.statistics.cs/plum_germcr_chisquare.htm, Accessed 24 November 2017.

[20] Scalelive.com, "proportional odds regression," 2017, http://www.scalelive.com/proportional-odds-regression. html, Accessed 2 October 2017.

[21] A. Razzaq, F. Ahmed and A. Razzaq, "Dynamic relationship between income and consumption: a time series analysis of Spain," Management and Administrative Sciences Review, vol. 4, issue 2, pp. 404-411, 2015.

[22] T. I. Palley, "The relative income theory of consumption: a synthetic Keynes-Duesenberry-Friedman Model," Political Economy Research Institute, Working Paper Series, no. 170, Massachusetts, University of Massachusets Amherst, pp.1-26, 2008.

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