

AN ANALYSIS OF THE IMPACT OF WEALTH ON CONSUMPTION IN PAKISTAN (1976-2009)

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ABSTRACT

This current study is going to examine the impact of wealth on consumption. Wealth is a determined from Gross national expenditure, Gross savings, Total Reserves, Agricultural land Foreign direct investment and Gross fixed capital formation. Annual data for Pakistan is taken for the period of 1976-2009 from the website of World Development Index. Linear regression was used for the analysis. The results of the regression analysis show that most of the variables are highly significant at 1% level of significance. Consumption explanation due to independent variables is very high and the model is best fitted model. This study revealed that explanatory variables enlighten the variation in dependent variable. These determinants are superlative for the variables explanation.

Keywords: Consumption, Wealth, Linear Regression, Pakistan.

INTRODUCTION

In 1936 John Maynard Keynes introduced modern consumption theory, in which current real disposable income plays a vital role in the determination of consumption in short run, on average consumers increase their consumption as their income increases, but not as much as the increase in their income. In 1955, Franco Modigliani presented a theory of "life cycle Hypothesis" in which he describe that people are having different income in different phases of life and only with saving they can achieve smooth consumption over their entire life time. Modigliani proposed that average propensity to consume is larger in early age, and then at the middle age people are having higher incomes with lower propensity to consume so they try to save something for their retirement in the era when their consumption is more than income.

Milton Friedman an American economist is one of the dominant leaders of economics from last fifty years, one of the most prominent and landmark work is "Permanent Income hypothesis" in 1957. Friedman challenged the Keynesian function which include disposable income (income after tax) had argued that consumption is not only the function of current income but also a function of expected income in future so the transitory changes in income will have a small impact on consumer spending behavior.

Consumption is believed to be the quantitatively measurable corresponding item of economic growth. Inequality is increasing speedily between the wealthy and poor people. Some people are becoming the dominating part of economy but most of the inhabitants are becoming poorer. Like other developing countries, Pakistan has also been fronting excessive challenges to attain a long-lasting economic growth. There is unequal distribution of wealth in Pakistan because of which maximum individuals have not been able to gain the least living Standard. This research work will help to determine the major factors of wealth which effects the consumption most.

(G. S. Laumas and Rati Ram, 2012) Friedman's theory of consumption has Following main point, that consumption is a rationale with human and non-human wealth. He describes wealth in term of

permanent income which is commonly un-observable. He also has not defined critically all human and nonhuman effect of wealth. Kendrick also describes these factors among on the gross stock. He also describes these factors in human and nonhuman categories, in which every component consist of two broader parts tangible and intangible. Tangible components consist of land, Natural resources, assets (machinery, building etc) and inventory related stock. Intangible consist of Research and Development.

(Carole Shammas 2012) In early societies, business status has a great impact on wealth. Education is the key determinant for good profession through which different classes are established like professionals, merchants, laborer etc which is a main determinants of the working societies. It is also observed that age is a main factor which has a dynamic effect on wealth. The wealth trend is established by the different age stages of a person. (Monika Butler 2012) define the neoclassical life-cycle in which the main point is described are family way of consumption, earning profile, endogenous labor supply and non prescribed time. (Carroll 1997) attributes the relation between consumption and income as a parallel and saving as a key agent to minimize the uncertainty.

(Carroll and Summers 1991) define income and consumption in different learning and career sub groups and define a strong correlation between them. In there point of view, the define it that these factor growth indicating liquidity and borrowing constraints which also stop to get the perfect and effective line of consumption. (Biswas Diener and Diener, 2001; Diener and Lucas, 2000; Schyns, 1998) describe need theory in which income is highly depended on SWB which is commonly fulfill human physiological need like water, shelter etc. they also describe that this theory also define the diminishing marginal utility of wealth between different socio- economic groups which are previously define in research of happiness and lower level of income.

(Hildegart A. Ahumada (UTDT) Maria Lorena Garegnani (UNLP-BCRA) AGOSTO 2002) define the consumer expenditure due to wealth and the consumer perception. (Hall 1978) A specific research is conducted and enhance by Hall's work (1978) that he took a different way to explain the life cycle – permanent income hypothesis. In his different type of hypothesis no variable is taken as a element of consumption lagged one period should be the identifying value of any forecasting value of consumption. (Keynes) define APC (average propensity to consume) falls with the increase in income and the ratio of saving in rich is more then the poor people. Income is the key factor that effect consumption and interest rate play the secondary role. Heymann and Sanguinetti (1998) have recommended that human response toward the wealth forecasting which is normally based on incomplete information and leave a question behind that how it was happen. In this way and different type of unique shock have a exclusive and time-invariant determinant of the wealth, which will be used as consumption instruments may not sustain. Inflation, debt default risk premium and real exchange rate are considered as different “outline” measures of adjusting “wealth”.

Wealth is the basic necessity for any individual to meet its basic consumption requirements. Mostly researchers estimate consumption through disposable income, Gross National Saving and household income. In this research work Gross national expenditure, Gross savings, Total Reserves, Agricultural land, Foreign direct investment and Gross fixed capital formation were checked empirically as the determinants of wealth, and the overall impact of wealth on consumption. All these variables were measured in Current U.S \$ as determinants of wealth in Pakistan to check the relation of wealth with consumption.

OBJECTIVE OF THE STUDY

The main objective of our present study is to examine the impact of determinants of wealth on consumption.

DATA AND METHODOLOGY

The secondary data related to this paper is taken from World Development Indicators (WDI), all the variables are measured in Current US \$. Range of time series data is from 1976-2009. Most of the wealth determinants in our study contribute consumption function at a large extent. For time series analysis first step is to check stationarity of each variable by using unit root test, An Augmented

Dickey-Fuller (ADF) testis applied for this. Linear regression model is applied to predict the value of dependent variable from the value of six independent variables. The Model of our study is

$$\text{CONS} = f(\text{GNE}, \text{TR}, \text{GSV}, \text{AED}, \text{FDIN}, \text{GFCF})$$

Where dependent variable is CONS=consumption and independent variables are GNE=Gross National Expenditure, TR=Total Reserves, GSV=Gross Savings, AED=Agricultural Land, FDIN=Foreign direct investment, GFCF=Gross Fixed Capital Formation.

RESULTS AND DISCUSSIONS

ADF Statistics for stationary of data

The results of stationary test shown in Table 1 among all the variables Foreign Direct Investment is stationary at level. While Total reserves, Agricultural land become stationary at 1st difference g 2nd and Gross Fixed Capital Formation become stationary at 1st difference with lag-2 and On 2nd difference Consumption, Gross National Expenditure and Gross National saving are stationary.

Table 1: ADF Test for Stationarity of Data

Variable	ADF statistics	Critical Value at 1%	Stationary at
Consumption	-4.152024	-3.6661	2 nd difference
Gross National Expenditure	-4.083594	-3.6660	2 nd difference
Agricultural Land	-3.667725	-3.6576	1 st difference
Total Reserves	-4.058438	-3.6576	1 st difference
Gross National Savings	-8.296653	-3.6661	2 nd difference
Foreign Direct Investment	-7.319317	-3.6496	Level
Gross Fixed Capital Formation	-3.858137	-3.6661	1 st difference

Regression Analysis

In order to analyze the factors influencing consumption regression is to be applied. The value of R-Square is very large which shows the contribution of GNE, TR, GNE, GSV, AED,FDIN and GFCF on consumption is 99.843%.The closeness of Adj-R² and R² shows the Goodness of fit of data. The value of F statistics shows the joint significance of the model at 1% level of significance. So we reject the null hypothesis and accept the alternate hypothesis. The value of Durbin Watson 1.96 is near 2 which show that there is no problem of auto correlation, which is also significant for the research study.

Table 2: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.06E+09	3.21E+08	3.292209	0.003
GNE(-2)	0.817691	0.033084	24.71574	0.000
TR(-1)	-0.03939	0.079226	-0.49717	0.6234
GSV(-2)	0.181746	0.092999	1.954287	0.0619
AED(-1)	2.053464	0.986692	2.081161	0.0478
FDIN	0.777177	0.243211	3.195488	0.0038
GFCF(-1)	-0.61589	0.102927	-5.98374	0.000

R-squared	0.999496	Mean dependent var	4.60E+10
Adjusted R-squared	0.999375	S.D. dependent var	2.64E+10
S.E. of regression	6.60E+08	Akaike info criterion	43.64438
Sum squared resid	1.09E+19	Schwarz criterion	43.96501
Log likelihood	-691.31	F-statistic	8264.101
Durbin-Watson stat	1.969997	Prob(F-statistic)	0.000

All the variables are individually significant at 1%.Gross national expenditure has a positive and significant relationship with consumption. Government development expenditure increases productivity of the country and has a significant impact on the disposable income of the individual leads to increase in consumption of the individual and country. Total Reserves has a significant negative impact on consumption, if government increases its reserves, it will have less to consume so relationship is inverse. Gross National Savings has a positive impact on consumption because of your past savings are now utilized for the development projects that have a positive impact on consumption. Agricultural land and consumption are positively correlated, that ultimately increases production of the economy. If trend of Investment is inward that shows a positive impact on consumption, the more the production and employment opportunity and more the consumption underlying. Gross fixed capital formation is negatively correlated with consumption because of your investment is in risk free securities is more in Pakistan.

CONCLUSION

The present study revealed that the factors that are affecting the consumption are gross National expenditure, total reserves, gross national savings agricultural land, foreign direct investment and gross fixed capital formation are factors that define the impact of wealth on consumption in Pakistan. Gross national expenditure, Gross National Savings has a positive impact on consumption. Agricultural land and consumption are positively correlated, that ultimately increases production of the economy. Total Reserves has a significant negative impact on consumption, Agricultural land and consumption are positively correlated and that ultimately increases production of the economy.

Future extensions of research include searching the robustness of the specified model and the other factor that impact directly and indirectly on consumption with respect to wealth from corner to corner in different time span's. An investigation of the correlate and Predictors of these factors may demonstrate useful in planning of policy and increase overall well-being from first to last a more competent and reasonable allocation of scarce go.

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