SIGNIFICANCE OF NATIONAL SAVING IN THE SOCIO-ECONOMIC DEVELOPMENT OF PAKISTAN: 1974-2009

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ABSTRACT

Both saving and investment are crucial for the socio-economic development through capital accumulation. The data on foreign, domestic and national savings of Pakistan shows fluctuation during 1970 to 2009. Though, data on national saving shows downward trend in many developing countries during the last three decades including Pakistan. For examining the impact of per capita income, lagged saving and inflation rate on national saving, secondary annual data ranging from 1974-2009 has been utilized. Simple linear regression model and the method of least squares have been used. The empirical results shows positive impact of per capita income, and lagged saving rate on national saving of Pakistan and strongly supports the study hypothesis but the impact of inflation rate has been found negative on national saving of Pakistan. Thus, it has been concluded from these results that per capita income needs to be increase and inflation needs to be controlled in order to increase the level of national saving because the significance of saving is highly important for improving economic development. In addition, the management authority needs to formulate policies which are favorable and according to the present environment of the economy to enhance the level of national saving in order to boost national economic development of the country.

Key Words: Per capita income, Inflation, Saving, Economic development, Pakistan.


INTRODUCTION

National saving can be defined as it is the combination of public savings and private savings of an economy. Saving is vital for the economic development. Currently in Pakistan besides these problems such as unemployment, rapid growth of population, slow economic growth in the country the saving rate is also meager and undesirable for sustainable economic development. Both savings and investments play an important role in the development process. Low level of saving rates in any economy has been cited as one of the most serious constraints to sustainable economic growth. Lucas (1988) stated that higher savings and the related increase in capital formation can result in a permanent increase in economic growth rates. According to the economic development theories for economic development the required saving rate needs to be 22-25%, while, savings rates have been declined in many developing countries during the last almost three decades including Pakistan. In fact, Pakistan’s economy has been facing a number of challenges and shocks during almost from last two years.

Pakistan’s economy suffered from significant supply shock especially in food and energy due to which the general price level increased in the country. The external demand for export in the international market tremendously decreased and current account got deficit due to global financial market crises which emerged because of excessive sub-prime mortgage loans in the US in the mid of 2007. Security challenge faced by the economy has been considered another challenge which has exerted high costs on the economy and due to which investors lost their confidence to invest in the country. These challenges are not only responsible for the decline in global workers’ remittances by 5%, world economic growth by 1.3% but the low level of real GDP growth rate of Pakistan as estimated 2% for 2008-09, while it was 4.1% in the 2007-08 also due to these challenges. Though Pakistan’s per capita income was estimated US$ 1042 in 2007-08 and US$ 1046, hence it has been increased 2.5%. Private sector investment decreased since 2004-05 from 15.7% to 13.2% in 2008-09, while public sector investment to GDP ratio estimated 5.6% in 2006-07 and decreased to 4.9% in 2008-09. Pakistan’s national savings estimated 13.5 % of GDP
in 2007-08 which was the lowest ever level since 1999-2000. The current fiscal year has improved upon this performance and national savings as percentage of GDP stood at 14.3 %. Such as domestic savings has also been decreased continuously from 16.3 % of GDP in 2005-06 to 11.2 % of GDP in 2008-09 (Economic Survey of Pakistan, 2008-09).

As saving is indispensable for the encouragement of economic development, therefore, the low saving rate issue needs to be highlighted frequently and what factors determining saving in Pakistan should be studied thoroughly. A few studies conducted on the factors determining saving in different countries including Pakistan are narrated here in order to understand the problem comprehensively. Such as Qureshi (1981) found income and the rate of return on financial assets and inflation rate as key factors influencing household savings in Pakistan. Khan et al., (1992) used time-series data for the period 1959-60 to 1987-88 and found dependency ratio, per capita income, foreign capital inflows, real interest rate, openness, and term of trade statistically significant factors determining saving in Pakistan. Mauricio and Andrés (1997), analyzed the determinants of savings in Colombia using data from 1925-1994, and found that higher government expenditures (in relation to their permanent level) are associated with lower national saving, increases in urbanization and age dependency have had a significantly negative effect on private savings in Colombia, and the recent reduction in private savings can be accounted for by the increase in current government consumption, as well as by the effects of higher taxation. Likewise Prema (2001) and found income growth, per capita income, inflation rate, terms of trade, worker’s remittances were significant private saving determinates. Khattak and Azam (2006) used data from 1970-2000 and found dependency ratio, inflation rate, worker’s remittances, urbanization, and per capita income are strongly affecting the national saving rate in Pakistan. Charles and Junmin (2007) analyzed the determinants of the household saving rate in China using a life cycle model and panel data on Chinese provinces for the 1995-2004 periods from China’s household survey. The study found the main determinants of variations over time and over space therein are the lagged saving rate, the income growth rate, the real interest rate, and inflation rate.

Objectives of the Study

The broad objectives of this study are to highlight the significance of saving in the socio-economic development of Pakistan, to examine the effects of inflation rate, lagged saving rate and per capita income on national saving of Pakistan and to propose some appropriate measures in light of this study finding for saving encouragement in Pakistan.

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Source: Economic Survey of Pakistan (various issues)

Theories of Saving

What theories says about saving as the life cycle hypothesis (LCH) of Modigliani and Ando which actually is opposite of Keynesian function of consumption. The Keynesian consumption theory is basically based on the current income of the individuals while the LCH hypothesis consider that consumption of the individuals is based on the constant percentage of the life income's present value. According to the life cycle hypothesis, the individual consumption is governed by the individual tastes, preferences and income. Moreover, Modigliani and Ando explained that the average propensity to consume (APC) is larger in the old households and among young people. This is because the old people run their lives on their life savings while the young people are more into borrowing. The middle-aged people, on the other hand, bias to have higher incomes with lower consumption and higher saving. Examining the natural inclination of people regarding spending, hence, there may be two goals of the individuals...
i.e. people spend because they prefer to live a life with better standard of living and that most people also try to maintain more or less constant living standard throughout the life time. Thus, this is the human nature that explains the logic behind the LCH hypothesis.

According to the Harrod-Domar model savings amount are borrowed in order to invest or for investment purpose. In this model there is no place and no reason for balanced growth in the economy. Harrod-Domar growth model, stated that growth rate is dependent on two factors i.e., the savings level and capital-output ratio of the economy. The Harrod-Domar model of growth explains these three concepts of growth such as, Natural Rate of Growth, Warranted Growth and Actual Growth. By natural rate of growth, the Harrod-Domar model means the growth or increase of labour force, because in labour force and aggregate output positive relationship exist when the labour force are in abundant, certainly aggregate output would be increased. Warranted growth generally means the output/production growth rate. Such as actual growth refer to the actual change of the aggregate output/production. Meanwhile this model deals with the relationship between the natural growth rate and actual growth rate and as the natural growth rate is determined by the factors such as culture, and birth rate while the propensity to consume or propensity to save affects the actual growth rate.

Likewise according to the paradox of thrift when people desire to save for more difficult times then that will have a bad impact on the overall savings of all the people who live in that area. Because it is assumed that aggregate demands of the people diminish and therefore consumption would reduce and it will make sluggish economic growth of the country. The concept of improved savings in an economy is vital in the context of paradox of thrift. The theme of this theory is that the amount of investment made by people is similar to the amount of money saved by people. If the savings continue to grow at a faster rate, being function of income, than the relationship existing between the output and the entire amount of investment, then even the slight increase in the marginal propensity to save will shift the point of equilibrium to a point, which represents the equalities between income and output and between income and investment at the lower levels of income.

**MATERIALS AND METHODS**

**Model Specification**

The national savings in this study is derived from the following basic national income identity:

\[ Y = C + I + G \]  

(1)

Usually, according to the basic closed economy model, the Gross Domestic Product (GDP) or the final market value of all commodities and services produced within the geographical boundaries of a country in one year) can be utilized for three purposes.

\[ Y = C + I + G \]

Where

\[ Y \text{ denoted GDP, } I \text{ is the total (private and public) domestic capital formation or Investment, } C \text{ is the total (private and public) Consumption, and } G \text{ is Government purchases.} \]

While in open economy the model can be written as:

\[ Y = C + I + G + (X - M) \]  

(2)

where

\[ \text{Net Exports } = NX = (X - M) \]

\[ Y - C - G = S = I + NX \]  

(3)

\[ S = I + NX \]  

(4)

Based on the basic national income identity national savings have been defined and the saving function can be expressed as under in Equation (5) and this equation shows that national saving function is depend on inflation, lagged saving and per capita income.

\[ \frac{NS}{GDP} = \beta_0 + \beta_1 \frac{PCI}{GDP} + \beta_2 \frac{LGDNS}{GDP} + \beta_3 INF + \mu \]  

(5)
Where NS/GDP is national saving as % of gross domestic product, PCI/GDP is per capita income as % of gross domestic product, LGDNS is one year lagged national saving as a % of GDP, INF is inflation rate in percentage and \( \mu \) is error term used for other factors effect.

In equation (5), it is assumed that the inflation rate has a negative impact on savings. Because of the anticipation of a higher inflation rate in future, people substitute their future consumption for present consumption, consequently saving less. However, higher inflation may also lower saving through increased uncertainty (Ipumbu and Kadhikwa, 1999). Likewise according to the permanent income hypothesis and Keynesian approach, it is hypothesized that the saving rate is positively related to the growth in national income because more surplus income means a higher saving rate in the economy. Therefore, per capita income is used as a growth rate variable in the saving function in this study, Bosworth (1991) and Deaton (1995) have also provided evidence that higher income growth may produce higher saving. Using lagged saving rate and expects that there are positive relationship between this variable and national saving.

**Data and Estimation Techniques**

This present study is based on secondary annual data ranging from 1974-2009. For analysis the data have been taken from Economic Survey of Pakistan (various issues). The method of percentages and averages has been used. In addition, for empirical analysis the Ordinary Least Squares (OLS) method as a statistical tool has been applied. For computation E. View statistical computer would be utilized.

**RESULTS AND DISCUSSION**

Data on foreign domestic and national savings shows fluctuation over the period from 1970 to 2009. As the national saving was estimated 11.2%, foreign saving was 5.8% and domestic saving was 3.9 %. The highest national saving rate was 20.8 % in 2003 and the lowest was estimated 11.2% in 1970s and in 2009.

Empirical results of the present study are presented in Table II. All the explanatory variables are statistically significant and found correct according to the study hypothesis. The impact of per capita income found significant at 1% level of significance and the coefficient size is 9.37 it mean this that one unit change in per capita income will bring 9.37 unit change in the national saving. Another explanatory variable that is inflation has been found statistically significant at 5% level of significance and the coefficient is -0.54. Such as lagged saving has also been found positively statistically significant at 5% level of significance. It is concluded from these results that per capita income and one period previous saving encourages saving rate, while inflation rate discourages saving in Pakistan during the study period.

**CONCLUSION AND RECOMMENDATIONS**

This study was conducted with the broad objectives to highlight the importance of saving in the process of economic development, and to examine the effects of per capita income, lagged saving and inflation rate on national saving of Pakistan, with some adequate suggestions for saving promotion. Both saving and investment are crucial
for the economic development. Obviously, economic growth can be accelerated through capital accumulation. It has been observed that saving rates have been declining in many developing countries during the last three decades including Pakistan. As the data on national, foreign and domestic savings of Pakistan shows fluctuation from 1970 to 2009.

Empirical results found are statistically significant. Per capita income found significant at 1% level of significance and lagged saving has also been found positively statistically significant at 5% level of significance. Explanatory variable inflation has been found statistically significant at 5% level of significance. It has been concluded from these results that the increases in per capita income and lagged saving are important for the increasing of saving rate, because there are positive relationship. Controlled inflation rate would encourage saving in Pakistan because of negative relation relationship between inflation and national saving. As mentioned and found a declining trend in national saving and on the basis of significance of saving for economic development the management authority needs to chalk out such type of policy which are conducive in the current environment for encouragement of national saving in Pakistan. This study also suggests that saving must be invested effectively to improve economic development and achieve maximal welfare of the society.

REFERENCES