INVESTIGATING OF THE INCLUSIVENESS IN THE ECONOMIC GROWTH OF PAKISTAN

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Abstract: Inclusive growth is a type of economic growth which is sustained over decades and provides benefits to the entire society. The main objective of the paper is to examine the relationship between economic and inclusive growth. For this purpose, inclusive growth index is constructed by four variables inequality, poverty, employment rate, and enrolment rate. To explore the relationship between economic growth with inclusive growth in Pakistan, time series data from 1971 to 2014 is used. Stationarity of the data is checked through augmented Dickey-Fuller test and on the basis of the different order of integration. Autoregressive distributed lag model is employed. The results of the study show that the growth in Pakistan is not fully inclusive. There is a half-portion of the growth share in the society. Other control variables such as investment have a positive impact, whereas inflation has a negative impact on inclusive growth.

Keywords: inclusive growth, economic growth, sustainable growth, ARDL.

JEL classification: 01

INTRODUCTION

Inclusive growth is a sustained long-term economic growth that is often used interchangeably with ‘broad-based growth’, ‘shared growth’ and ‘pro-poor growth’. The term inclusive growth means broad base growth that causes the reduction of poverty, inequality. Inclusive growth allows majority of the people to contribute in the growth process of the country. Due to reduction of poverty, inequality and ensured sustainability of growth, inclusive growth draws a considerable attention of the researcher and economic experts from all over the world. There is no unified definition of inclusive growth. According to Rauniyar and Kanbur (2010),
inclusive growth is a process that is accompanied by declining income inequalities. A growth with equal access to opportunities is inclusive growth, according to Zhuang (2008). Inclusive growth is a process that gives benefits for the lower segments of the society that are facing the lack of physical and human assets.

Inclusive growth is different from pro-poor growth. According to Kakwani and Pernia (2008) pro-poor growth is economic growth that causes the decrease in the level of poverty in the country. Growth that reduce poverty does not always mean to reduce inequality and improve the living standard of the people. Inclusive growth is a broader concept and pro-poor growth is one of its component.

Growth itself is not a goal but it is an instrument to achieve the goals of equal distribution of income and employment which ultimately results in welfare and wellbeing of the society. If it provides better job opportunities and ensures the equal distribution of income, then it can be regarded as beneficial for a the country (Mickey and Sumner, 2008). The study of Krongkaew et al. (2006) also shows that growth creates productive employment for the poor is critical to achieve goal of poverty reduction and income equality.

In spite of the increase in the economic growth, inequalities are increasing worldwide. According to the report of FA01 (2015), 795 million people are undernourished in the world, 3.5 billion people are living in the below poverty line. Despite the fast growth in China the gap between the urban and rural people is increasing. Conditions are not different in other developing countries (Oxfam, 2014). According to the World Bank, about 200 million people are unemployed and unemployment is increasing in both developed and developing countries.

The facts mentioned above draw the attention of the researchers towards the need of growth that not only ensures equality and fair distribution of income but also provides opportunities of job for the vulnerable group of the society. Such type of growth is called inclusive growth. Although it is a new concept, its value is recognized by both domestic and international institutions as they design their policies and projects accordingly. It is also included as a proposed goal in United Nations development agenda. Most of the developing countries have recognized the importance of inclusive growth and are taking measure for inclusive growth.

Pakistan growth experience present a complex picture. Burki (1996) found a structural rigidities in economic growth of Pakistan. Growth pattern of Pakistan shows fluctuations throughout its history. GDP growth remains low, poverty
and inequality are widely spread in Pakistan. Considerable reduction in poverty seemed very difficult in Pakistan because economic policymakers have dealt with long run problems on a day-to-day basis. Pakistan had to face crises frequently on economic, social, political, and religious grounds. For self-sufficiency and sustained economic growth, inclusive growth is required.

The above discussion shows that the fast economic growth is not only the solution to overcome the problem of poverty, inequality, and better health and education facilities. The inclusive growth is necessary. Inclusive growth is different from the economic growth by its deterrents. In this paper, the relationship of inclusive growth with economic growth in the context of Pakistan is investigated.

**Objective of the study**
1: To understand the concept of inclusive growth.
2: To discover the empirical impact of inclusive growth index on economic growth in Pakistan
3: To give policy recommendation to policy makers.

Hypothesis
H0 = There is no relationship between inclusive growth and economic growth in Pakistan.
H1 = There is no relationship between inclusive growth and economic growth in Pakistan.

**Organization of study**
The study has been organized within five chapters. The first chapter is introduction of thesis. In the second chapter we have presented review of literature. The third chapter consists of methodology and discussion about data source. Chapter four consists of empirical finding and results discussion. A conclusion is presented in the final chapter.

**REVIEW OF LITERATURE**
In this chapter we have presented a comprehensive review of literature based on national and international sources, regarding inclusive growth.

Inclusive growth is an emerging field in economics which incorporates all dimension of welfare such as income inequality, poverty, employment level, health facilities, economic growth, and gender inequality. By eradicating constraints on economic growth, the target of inclusive growth can be achieved. Two main
dimension of inclusive growth are the benefit sharing and participation. Participation is shown through equal opportunity to work and employment rate of the country represent it. The second is the benefit sharing and it is measured through poverty and inequality of the country (Ramos et al., 2013).

The importance of the inclusive growth is discussed by many researchers economics experts such as Ali and Zong (2009), Samanas et al. (2015), McKinley (2011). In develop countries, the shift focuses from growth to inclusive growth. In developing countries governments also realize the importance and need of inclusive growth but do not make enough efforts for inclusive growth. There are many indicators identified by the Asian Development Bank and World Bank also include it in MDG, but still very little literature is available on inclusive growth. Now the researcher are moving their attention towards this important concept.

Anwar et al. (2017) examined the inclusive growth in the economic growth of Pakistan. In this study employment growth, social sector growth, poverty, inequality and social sector growth are included as the indicators of inclusive growth. By using OLS method from the period of 1974 to 2014, they investigated the impact of inclusive growth on GDP growth. The result of the study showed that the inclusive growth had positively associated with economic growth but the relationship of the indicators of inclusive growth is very weak with GDP growth in Pakistan. The study suggest that the Pakistan should not only focus on GDP growth, but also on inclusive growth.

Asghar and Javid (2008) investigated the inclusiveness in economic growth of Pakistan. To measure the inclusiveness, opportunity and equity index was used over the period of 1998 to 2008. Education and health facilities were used to capture the inclusiveness. The results showed that with time education facilities had increased. More people had access to these facilities. But it was unevenly distributed among the society. The case was same with health indicators. Rich people had better access to quality of health and education facilities when compared to poor. The study showed the inclusiveness in growth in Pakistan was low.

Osmani (2008) investigated the growth progress in Asia which reduced the poverty through cross country analysis. He found interesting result that there was a tradeoff between poverty and inequality in this region. The economic progress in Asia open a door of welfare for the people but some group of the societies failed to take benefit due to policy or some other reasons. This difference exists among the countries and within the countries.
Ali and Son (2007) investigated the inclusive growth in Philippines. Equity and opportunity index was used with health and education facilities as proxy of inclusive growth over the period of 1998 to 2004. The result of the study showed education facilities were satisfactory at primary level but at secondary level it was not enough. The health facilities were also unequal in the Philippines. Rich people had access to high quality of health and education facilities but the poor people were at bottom edge. Poverty and inequality also exist among the different regions within the Philippines.

Min and Xialone (2010) investigated the inclusiveness in the economic growth of China by applying the inclusive growth index over the period of 1990 to 2009. The results of the study showed the Chinese economic growth was not fully inclusive. It has improved over the period of time. Employment rate in territory industry was low. Inequalities were also present in ruler and urban parts. Employment rate in ruler areas were low. Ruler people did not have the same access to health and education facilities when compared to urban areas.

**METHODOLOGY AND DATA**

In this paper, the impact of GDP is estimated on inclusive growth. Inclusive growth mainly concerns two things: firstly reduce poverty and inequality, and secondly increase the participation level in growth process. Inclusive growth index constricted on this basis. Four variables are used to construct the inclusive growth index (1): people below national poverty line 1.25$, (2) value of Gini coefficient, (3) overall employment rate of the country, (4) enrollment rate in primary school. GDP growth rate, inflation and investment are taken as independent variables.

**Data Collection**

In the present study annual time series data used over the period 1971-2014. Data were collected from different secondary resources such as World Development Indicators (WDI), International Financial Statistics (IFS), Economic Survey, Federal Bureau of Statistics (FBS).

**Estimation Methods**

In the first stage, for testing the time series data, Augmented Dickey-Fuller (ADF) test was applied. In the second stage, F test was applied to check the co-integration among the variables. In the third stage, in order to investigate the long run relationship between the variables, ARDL bound testing approach proposed by Pesaran et al. (2001) was used. Using ARDL testing technique has certain advantages
over the other approaches like Johansson approach. Firstly, it is the most appropriate method to test co-integration for small sample data set (Ghatak and Siddiki, 2001). Secondly it does not require all variables to be integrated in the same order. Thirdly, it does not depend upon the unit root properties of data set.

**Econometric Models**

ARDL model for health is expressed as,

\[
\Delta \ln(ING) = \alpha_0 + \sum_{i=1}^{p} \theta_i \Delta \ln(GDP)_{t-i} + \sum_{i=1}^{p} \gamma_i \Delta \ln(INF)_{t-i} + \delta_1 \ln(ING)_{t-1} + \delta_2 \ln(GDP)_{t-1} + \delta_3 \ln(INF)_{t-1} + \delta_4 \ln(INV)_{t-1} + V_t
\]

Where

\(\text{ING} = \text{Its represent inclusive growth Index, GDP = Average growth rate of the country. INF = Inflation rate of the country, INV = Investment, It is calculated by taking the ratio of GFCF (Gross Fixed Capital Formation) to GDP. Moreover, } \Delta \text{ING}_{t-1}, \Delta \text{GDP}_{t-1}, \Delta \text{INF}_{t-1}, \Delta \text{INV}_{t-1} \text{ is used to express change.}\)

**RESULTS AND DISCUSSION**

It is important to decide whether the time series are in level or in difference. The data are stationary when their means and variance are constant over the time (Dickey, 1979).

The Augmented Dickey-Fuller Test is used for the purpose of testing the stationarity. The results of Augmented Dickey-Fuller (ADF) tests are given in table below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF at Level</th>
<th>ADF at First Difference</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGI</td>
<td>-1.87</td>
<td>-12.61</td>
<td>1(1)</td>
</tr>
<tr>
<td>GDP</td>
<td>-4.41</td>
<td>-2.03</td>
<td>1(0)</td>
</tr>
<tr>
<td>INF</td>
<td>-2.60</td>
<td>-6.38</td>
<td>1(1)</td>
</tr>
<tr>
<td>INV</td>
<td>-4.8531</td>
<td>-1.0076</td>
<td>1(1)</td>
</tr>
</tbody>
</table>

**Source:** authors

The results show that Inclusive growth (IGI) is non-stationary at level but stationary at first difference. Further, the two variables including GDP and investment (INV) are non-stationary at level while become stationary when taken their
first difference and inflation (INF) is stationary at level. The order if integration is mixed.

In the next step, a wall test is used for co-integration. The below results show that the calculated value of the F test 7.64 is greater than the upper bound critical value of 5.73, which confirms the co-integration among the variables.

Table 2: F-Statistics

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>F-Statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGI</td>
<td>7.64</td>
<td>0.0092</td>
</tr>
</tbody>
</table>

Source: authors

Short run impact of GDP on Inclusive growth
In the third stage, due to the mixed order of integration, Auto Regressive Distributed Lag (ARDL) model for Pakistan over the period 1971-2014 is applied. The results reported in the table below show that in short run the value of the coefficient of GDP is positive and significant for inclusive growth. In short-run, the value of the coefficient of inflation for inclusive growth is negative and insignificant. The value of the coefficient of the investment is positive and significant.

Table 3: Results of ARDL

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient values</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.25(0.0036)</td>
</tr>
<tr>
<td>D(GDP)</td>
<td>0.66(0.0015)</td>
</tr>
<tr>
<td>D(INF)</td>
<td>-0.03(0.0114)</td>
</tr>
<tr>
<td>D(INV)</td>
<td>0.06(0.0924)</td>
</tr>
<tr>
<td>IGI(-1)</td>
<td>0.01209(0.0046)</td>
</tr>
<tr>
<td>GDP(-1)</td>
<td>0.53(0.0159)</td>
</tr>
<tr>
<td>INF(-1)</td>
<td>-0.013(0.0002)</td>
</tr>
<tr>
<td>INV(-1)</td>
<td>0.004(0.0867)</td>
</tr>
<tr>
<td>R²</td>
<td>0.68</td>
</tr>
<tr>
<td>R² adj</td>
<td>0.56</td>
</tr>
<tr>
<td>DW stat</td>
<td>2.345</td>
</tr>
</tbody>
</table>

Source: authors
The long run impact of GDP on inclusive growth

To estimate the long run relationship, the coefficients of the independent variable are normalized by dividing on the coefficient of IGI, taking all other zero coefficients and hence obtaining the long run relationship. A normalized equation is given below.

\[ \text{IGI} = -29.44 - 48.80 \text{GDP} - 1.255 \text{INF} + 2.013 \text{INV} \ldots \]

The result shows that in the long run GDP growth has a positive impact on inclusive growth. The value of the coefficient of the variable GDP is 48.80. It shows 1 percent increase in GDP and causes a 48 percent change in inclusive growth. This is a major impact of GDP on inclusive growth. According to Pasha (2007), Pakistan needs rapid growth to overcome the challenge of poverty and inequality. Inflation has a negative, but investment has a positive impact on inclusive growth in the long run.

Inclusive growth has close relationship with economic growth in both short run and long run. However, the result shows that the growth in Pakistan is not fully inclusive. The pace of inclusive growth is almost half slower when compared to economic growth. This is the main reason of the inequality in Pakistan not only among the people but also among the provinces. Some groups of people are taking benefits of economic growth but the others remain the same. Same case is with provinces. In Pakistan, policy makers are mostly focused on how to increase the pace of growth that sometimes causes problems rather than benefits by creating regional differences. Inflation causes negative impact on inclusive growth. In the past few decade, Pakistan has faced high inflation. On the other hand, investments create positive impact on inclusive growth, but Pakistan always faces the problem of investments which are much lower that the required level of investments.

CONCLUSION

Inclusive growth is a broad concept, while economic growth is an important determinant of inclusive growth. Economic growth is necessary, but not sufficient for inclusive growth. Pakistan faces the problem on both sides. Firstly, throughout the history of Pakistan economic growth has remained low and highly unattainable. The average growth rate in Pakistan is 5 percent, whereas in the other countries in the region (South-Asian Countries), the growth rate is 7.5 percent. On the other hand, inclusiveness in economic growth remain low. It is almost half of the economic growth. It creates poverty and inequality in the country.
The rich become richer and the poor become poorer. Half of the population from the total population is below the international poverty limit. Differences among the provinces are increasing and regions are developing unequally. Urban areas have better health and education facilities in comparison to rural areas. Rich people have better access to facilities in comparison to poor. It has bred deprivation, political instability and crime in Pakistan. To eradicate these problems, Pakistan need to increase the pace of economic growth and formulate policies for increasing the inclusiveness in growth. Consistent policies are required for inclusive growth. Pakistan needs to make policies with the consent of all stakeholders. Pakistan should redesign the structure of its economic growth. Long-term policies are required in Pakistan. To boost the investment rate, Pakistan should make suitable environment for investments that creates trust for the investors. Pakistan also needs to formulate policies for the control of inflation and make some steps to handle the external economic shocks.

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