INVESTIGATING THE INCLUSIVENESS IN THE ECONOMIC GROWTH OF PAKISTAN

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ABSTRACT

In this thesis an attempt has been made to analyze the inclusiveness of growth in Pakistan. We have seen the effect of variables (employment growth, income growth, social sector growth, inequality and poverty) on economic growth of Pakistan. To perform the statistical analysis, the study uses time series data. Ordinary Least Square (OLS) Econometric method is used to estimate the model parameters. The analysis concludes that there is a weak relationship exists between GDP growth and proposed variables. Further the results indicate that there is not proper relationship between GDP growth and change in employment, and there is also not proper relationship between GDP growth and poverty, inequality. Income growth and social sector growth properly related to GDP growth. The results also indicate that the growth process has very little effects on social sector growth. From the analysis we have found that three variables, inequality, poverty and change in employment are not properly related to GDP growth and the results of inequality are closer to significant. The variable social sector growth and income growth are properly related to GDP growth but results of the variable social sector growth are highly insignificant while results of the variable income growth are closer to significant. The analysis suggests that by reducing poverty and inequality in the Pakistan, the growth process in Pakistan can be categorized as inclusive growth.

Key words: Inclusive Growth, Economic Growth, Poverty
INTRODUCTION

Background and definition
The term ‘inclusive growth’ often used interchangeably with a suite of other terms, including ‘broad-based growth’, ‘shared growth’ and ‘pro-poor growth’. As growth is defined as an increase in the total output that an economy produces over a period of one year. Inclusive growth is a growth that accompanied with equitable distribution, this means that all the people of the country have equal chances to get benefits from economic growth. Decline in income inequality and reduction in poverty are essentials for inclusive growth.

Very little work has been done in the past for the study that growth in Pakistan, inclusive or not, the most notable among these is an early study of Zunia Saif Tirmazee and Mariam Haroon (2013) that analyze the growth in Pakistan, inclusive or not, using the microeconomic concept of social welfare function at microeconomic level. The methodology adopted is developed by Anand et al. (2013) and analyze inclusive growth by decomposing it into two components equity and efficiency. Their findings, that the growth in Pakistan is not inclusive since growth has been achieved at the expense of equity. The benefits of growth are unevenly distributed where the poor benefit less as compared to the rich. Thus, there is a need for the government to play its role by formulating policies that distributes the benefits of growth equally and reduces inequality.

Importance
If there is Inclusive growth in an economy, then economy will develop fast, inclusive growth is essential for developed countries. In fact, if growth is inclusive in an economy, this means that all the people of the economy equally enjoying the fruits of growth. In other words, benefits of growth are equally going across all the sectors of the economy and poor people are getting benefits in absolute term, as a result inequality gap between rich and poor decline and poverty reduce. Rapid and sustained poverty reduction requires inclusive growth that allows people to contribute to and benefit from economic growth. Rapid pace of growth is unquestionably necessary for substantial poverty reduction, but for this growth to be sustainable in the long run, it should be broad-based across sectors and inclusive of the large part of the country’s labor force.

In this thesis, an attempt has been made to test inclusiveness of the growth process in Pakistan, using time series data. The definition, which is used in this study to analyze the growth process of Pakistan has inclusiveness or not, is that the GDP growth is a function of change in employment, inequality, poverty, social sector growth and income growth.

Objective of study
The main objective of this study is.
To see the process of inclusive growth in Pakistan.

Hypothesis
We want to test a hypothesis that growth process in Pakistan is on the bases of inclusiveness or not.
H0 = Not inclusiveness
H1 = Inclusiveness
Organization
The chapters of the thesis are organized as after this chapter, second chapter is the reviews of the studies done (References) about the inclusive growth at national and international level, these studies are very helpful to develop econometric framework of the thesis. Third chapter is about the methodology and data where an economic model developed and presented econometric framework.

REVIEW OF LITERATURE
In this chapter we have presented a comprehensive review of literature based on national and international sources, regarding an analysis of inclusive growth in Pakistan. Inclusive growth strategy is an integration of two strands of analyses i.e. Poverty and growth, which implies relationship between the macro and micro determinants of growth. The Paradigm of Inclusive growth can be defined as to reduce poverty substantially, rapid pace of Growth is not only necessary, but it should be sustainable in the long run and broad-based across sectors, nonetheless, inclusive of country’s labor force at large. “This broad based and inclusive growth does not imply a return to Government-sponsored industrial policies, but instead puts the emphasis on policies that remove constraints to growth and create a level playing field for investment.”

The usage of the term “inclusive” in the characterization of growth episodes can be traced back at least to the turn of the century when Kakwani and Pernia (2000) employed it to highlight the contents of pro-poor growth as that one enables the poor to actively participate in it and benefit from the growth process. Inclusive growth involved both poverty and inequality reduction.

Ali and Son (2007) defines inclusive growth as the growth process that increases the social opportunity function which depends upon the average opportunities available to the population and how these opportunities are shared among the population.

According to Ali (2008) the key elements in inclusive growth are employment and productivity, development in human capabilities and social safety nets and the targeted intervention. Habitat (2009) defines inclusiveness of economic growth as gross domestic product growth that leads to significant poverty reduction.

Elena and Susana (2010) defined inclusive growth as that growth which can reduce poverty and allow people to contribute to economic growth and benefit from the growth process. They pointed out that rapid pace of growth is unquestionable necessary for substantial poverty reduction but for growth to be sustainable in the long run should be broad based across the sectors and inclusive of the large part of the country’s labor force. This definition of inclusive growth has a direct link between the micro and macro determinants of growth. Inclusive growth is disadvantage reducing growth (Klasen, 2010). Growth Report (2010) notes that inclusiveness is a concept that encompass equity, equality of opportunity and protection in market and employment transitions.

Elena and Susana (2011) of World Bank focused on both the pace and pattern of growth and have identified the employability of the poor and the cost of capital, geography and infrastructure as building blocks of inclusive growth analytical framework.
World Bank (2009) stated that inclusive growth can be achieved by focusing on expanding the regional scope of economic growth, expanding access to assets and thriving markets and expanding equity in the opportunities for next generations.

Inclusive growth implies growth that is broad-based across sectors and inclusive of a large proportion of a country’s labor force (World Bank, 2010). One of the major tenets of inclusive growth is that it focuses on productive employment rather than on income redistribution, and that there should be an equality of opportunity for individuals and firms within an economy. The idea is that broad based, inclusive growth will lead to rapid and sustained poverty reduction. Therefore, programs or policies designed to promote inclusive growth must not neglect sectors of the economy in which the poor are more likely to work.

McKinley (2010) identifies that inclusive growth entails achieving sustainable growth that will create and expand economic opportunities and ensuring broader access to these opportunities so that members of society can participate in and benefit from growth. In reviewing the ADB literature Raumiyar and Kanbur (2010) point out that while there is no agreed and common definition of inclusive growth or inclusive development, the term is understood to refer to “growth coupled with equal opportunities and consisting of economic, social and institutional dimensions. They further pointed out that inclusive growth is accompanied by lower income inequality so that the increment of income accrues disproportionately to those with lower incomes.

Chakraborty, (2009) comments that Inclusive Growth cannot come without FI and enabling people to get credit from small money lenders and the like is not FI but the access has to be through mainstream institutional player and only then such access will be fair, transparent and cost effective.

Ali (2009a) pointed out that rising income inequalities pose a danger to social and political stability and the sustainability of the growth process itself. The pursuit of equal opportunities stems from the belief that it is a basic human right to be treated equally in terms of access to opportunities. He argues that equal access to opportunities increases growth potential; conversely, inequality in opportunities diminishes growth and makes it unsustainable. He further observed that the last scenario could lead to inefficient use of human and physical resources, lower the quality of institutions and policies, erode social cohesion, and foster social conflict. These inequalities are often reflected in social exclusion, which public policy interventions should address.

Ali and Yao (2004) argued that the quality of infrastructure is an enabling factor that drives inclusive growth and sustainable poverty reduction. They noted that inadequate infrastructure raised the cost of doing business and discouraged domestic and foreign private investment. In India, for example, they found how dynamic small and medium-sized enterprises (smes) contribute to inclusive growth through direct and indirect linkages of infrastructure. For example, SMES that acquired their own power generators because of the unreliability of the Public power supply grid created opportunities for multinational firms to develop local suppliers of parts. The scenario in turn encouraged foreign direct investment and employed local labor from the poor in the rural and urban areas. Quality infrastructure provided the enabling business and investment climate important for catalyzing domestic and foreign investments, adopting new technologies,
and raising productivity. They are crucial in achieving, for example, efforts to modernize agriculture and to scale up the development of rural economies. Agricultural growth may be driven by technological change, technical extension services, and increased demand for agricultural outputs, and rural employment. Ali and Yao (2004) explained that developing rural economies through developments in SME industry and rural markets requires the support of infrastructure such as rural electrification, transport, communications, and water supply.

In another study, Ali and Yao (2005) elaborated on the imperative of inclusive growth in the context of globalization, structural transformation, and the need for balanced regional growth within a country. Globalization creates opportunities for larger markets, new technologies, and Foreign direct investments. However, countries have different abilities to seize and capitalize on these opportunities. Generally, experience has shown that the reasons depend on whether the Countries have supportive domestic policies (e.g., right mix of incentives), institutions, and adequate infrastructure.

Another dimension of inclusive growth cited in studies is institutional. Yao and Dong (2007) referred to this dimension under the concepts of “social inclusion” and “empowerment.” Social inclusion is the removal of institutional and policy barriers that constrain economic growth. Empowerment means access to productive assets, capacities, and resources that will enable every person to participate in the growth process. For Fernando (2008), the political dimension refers to broadening citizen participation in the political processes.

More specifically, Fernando (2008) suggested that rural infrastructure contributes in (i) providing rural people with access to markets and basic services, and (ii) influencing rural economic growth and employment opportunities and incomes. Feeder roads, for example, allow the supply of perishable foods to high-value urban markets, and the income generated can be invested in health and education to improve the productivity of eventual migrants to the cities. Physical infrastructure deficiencies in the rural areas need to be addressed, not only to create economic opportunities for rural people in general, but also to make economic growth and development inclusive and ensure that the rural poor have better access to basic services that profoundly impact on their household welfare. Setting priorities for infrastructure investment may be complex and should be guided by several factors such as population density, potential for agricultural and rural nonfarm economic development, potential for market integration, and capacity to have a positive impact on the excluded people.

Fernando (2009) noted that this dimension covers supporting the social development of poor and low-income households and disadvantaged groups, eliminating inequalities in social Indicators, empowering women, and providing for social safety nets for the vulnerable groups.

Fernando (2011) concluded that community-based organizations, civil society organizations, and nongovernment organizations (NGO) significantly contribute to promote equity and inclusiveness, e.g., by participating in the allocation of resources for rural development, through vigilance in the misuse of funds to prevent corruption and promote accountability and transparency, and by providing access to public services in the remote areas. Ngos were observed to operate efficiently in the rural areas to promote inclusive rural development.
In another study, Bolt (2004) recognized the role of agriculture and the rural economy at the core of inclusive growth, considering that about a third of the population in Asia’s developing countries are rural-based and depend on agriculture for a living. The study found compelling evidence that accelerating agriculture and rural development has the potential for regenerating the rural economy and, hence, is a critical component of an inclusive growth strategy. Some of the important factors that could drive agricultural and rural-based opportunities include yield improving technology, high-value commodities and nonfarm goods, and services that provide value addition. Lessons from past experience highlight the importance of a policy environment that provides for the right incentives; well-functioning markets to increase productivity, employment, incomes, and demand; public and private institutions that ensure product and markets work; and infrastructure connectivity to expand markets. Particular attention should be given to land rights, access to finance, and provision of public goods and services such as irrigation, research, and extension.

The social dimension is an important dimension of inclusive growth cited in ADB Studies. Ping and Roger (2007) touched on the social dimension in the concept of “security” and elaborated on the social risks arising out of development interventions. They suggested that Social risks may be addressed by social protection measures that are targeted to the poor.

Mcmillan and Rodrik (2011) show that there are large differences in productivity across more detailed sectors within economies, and a reallocation of workers from agriculture to more productive sectors than agriculture would raise income in any of those countries dramatically.

In a related paper, Gollin, Lagakos and Waugh (2011) show that the gap between agricultural and non-agricultural productivity cannot be explained by differences in hours worked, human capital, educational quality, cost-of-living differences, or factor shares. In both cases, the gap between agriculture and the rest of the economy implies that relatively low labor productivity in agriculture is important to address in promoting inclusive growth.

Several studies (Ali 2007b, Ali and Son 2007, and Ali and Zhuang 2007) affirm the important role of promoting efficient and sustained environmental growth to achieve inclusive growth. Ali and Son (2007) stated that providing job opportunities and promoting productivity will help achieve inclusive growth.

In another study, Ali and Zhuang (2008) argued that high and sustainable growth to create productive and decent employment opportunities should at least be one of the anchors for an effective inclusive growth strategy. High and sustainable growth focuses on broad-based and market-oriented productive approaches involving the private sector in creating decent employment opportunities.

Nag (2007) emphasized the role of partnerships to address the issue of inclusive development. The government needs to foster an enabling environment for all people, including the poor, to contribute to and benefit from the growth process. He cited the role of development institutions like ADB in working with government, e.g., to restructure and strengthen the rural cooperative system in five states in India. The role of civil society is also important to reach the poorest people and those isolated from the mainstream of society. In the same way, ngos have been
found to be in the best position to facilitate the delivery of services to the poor and excluded because they can break through the cultural challenges. The private sector can tremendously help as an alternative source of financing and expertise and can provide targeted and quality information.

Jacoby and Minten (2007) find that formalizing titles to untitled land would not be cost effective given the small estimated impacts on land productivity. Therefore, designing innovations to alleviate land constraints does not appear to be a cost effective way to promote inclusive growth. Labor market constraints affecting smallholder agriculture seem quite intractable, as dealing with labor shortages involves hiring labor if it is available. Hired labor always involves monitoring costs, and as a result it is inferior to family labor. I discuss seasonal labor surpluses in the final section, on reducing the amount of labor available for agriculture without affecting production.

METHODOLOGY AND DATA
Following chapter explains the methodology, which adapted to analysis; growth pattern of Pakistan has inclusiveness.

Methodology
Hence, we use Ordinary Least Square (OLS), method to estimate economic model parameters. To check the significance of the parameters, we have use t-statistics and to check explanatory power of independent variables, we have goodness of fit test. Estimation has been carried out in computer software “SPSS”. Time series data has been used for the analysis.

Theoretical model
Gross Domestic Product = f (Change in Employment, Income Growth, Poverty Head Count Ratio, Gini Index, Social Sector Growth).

Mathematical model
\[ Y_t = \beta_0 + \beta_1 \text{CIE} + \beta_2 \text{IG} + \beta_3 \text{PHCR} + \beta_4 \text{GI} + \beta_5 \text{SSG} \]

Econometric model
\[ Y_t = \beta_0 + \beta_1 \text{CIE} + \beta_2 \text{IG} + \beta_3 \text{PHCR} + \beta_4 \text{GI} + \beta_5 \text{SSG} + \text{Ui} \]

Where,
\[ Y_t = \text{GDP at constant prices} \]
\[ \text{CIE} = \text{Change in Employment} \]
\[ \text{IG} = \text{Income Growth} \]
\[ \text{PHCR} = \text{Poverty Head Count Ratio} \]
\[ \text{GI} = \text{Gini Index} \]
\[ \text{SSG} = \text{Social Sector Growth} \]
\[ \beta_1 \text{ to } \beta_5 = \text{Parameters} \]
\[ \beta_0 = \text{intercept} \]
\[ \text{Ui} = \text{Error term} \]
\[ t = \text{Time (1974-2014)} \]
Data
Time series data from 1974 to 2014 has been taken for:
1 Gross Domestic Product at constant prices
2 Change in Employment
3 Income Growth
4 Poverty Head Count Ratio
5 Gini Index
6 Social Sector Growth

Data source

EMPIRICAL FINDINGS
To see the importance of inclusiveness of growth in Pakistan economy, we have formulated a growth inclusiveness model, which is presented in the chapter three, where GDP growth as dependent variable and change in employment, poverty head count ratio, inequality, income growth and social sector growth as explanatory variables. To estimate the results, we have used an econometric technique known as Ordinary Least Square (OLS), in some extend, which provides good results and satisfied our objective.

In this chapter, firstly we have presented the importance of inclusive growth, secondly the interpretation of results is being presented, and thirdly our estimated results are presented into two forms e.i macro and micro level. At macro level we have presented the econometric results (R square, adjusted R square and F statistics) and micro level we have presented the coefficient and tests statistic of individuals variable.

Importance of inclusive growth
Inclusive growth is a buzz-word in policy circles nowadays, among developed and developing countries alike, as well as in international institutions. If there is inclusive growth in an economy, then economy will develop fast, inclusive growth is also essential for developed countries. In fact, if growth is inclusive in an economy, this means that all the people of the country are equally enjoying the fruits of growth. In other words, benefits of growth are equally going across all the sectors of the economy and poor people are getting benefits in absolute term, as a result inequality gap between rich and poor decline and poverty reduces. Rapid and sustained poverty reduction requires inclusive growth that allows people to contribute in opportunities and benefit from economic growth. Rapid pace of growth is unquestionably necessary for substantial poverty reduction, but for this growth requirement to be sustainable in the long run, it should be broad-based across sectors and inclusive of the large part of the country’s labor force.

Regression results
The section presents the estimated model results, which is specified in the previous chapter three. To get the regression results, Statistical Package for Social Sciences, (SPSS) has been used. To check the significance of the parameters of the estimated model, F statistics and T statistics are used.

\[ Y_t = \beta_0 + \beta_1 \text{CIE} + \beta_2 \text{IG} + \beta_3 \text{PHCR} + \beta_4 \text{GI} + \beta_5 \text{SSG} + U_i \]
Model Summary:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.574</td>
<td>.329</td>
<td>.233</td>
<td>1.55355</td>
</tr>
</tbody>
</table>

(a) Goodness of fit

Above results show that the value of R square is (0.329). It shows the goodness of fit of the model. The regression estimates indicates that the model is not good fitted because the value of R square is near to 33 percent. The model R square also explains that incisiveness of growth in Pakistan’s economy is one third percentages is explained by our selected indicators.

(b) Adjusted R square

Adjusted R square is used to adjust R square, when its value is adjusted with degree of freedom. Its value is (Adjusted R square = 0.233).

Anova Table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>41.431</td>
<td>5</td>
<td>8.286</td>
<td>3.433</td>
<td>.013</td>
</tr>
<tr>
<td>Residual</td>
<td>84.473</td>
<td>35</td>
<td>2.414</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>125.904</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F test

The result of F test shows the overall significance and the simultaneous significance of the dependent with independent variables. It represents the relationship between explained variation and unexplained variation in dependent variable. The simultaneous significance level, which we have assessed from F statistics, is (F = 3.433) also has a low level of significance (F significance = 0.013).

Degree of freedom

The term degree of freedom represents the number of independent variables and number of observation (Sample size). It means more and more observations leads to the perfection of the results. It is calculated by the formula (N-K).

Variable coefficient and Statistical Test:
The model is regressed by taking GDP growth as a dependent variable and change in employment, poverty head count ratio, gini index, income growth and social sector growth as independent variables.

First explanatory variable is change in employment (CIE), and its coefficient value \( B_1 = -0.213 \), which is statistical insignificant (T statistics = -1.189 and T significance = 0.242 ) that shows change in employment is negatively related to GDP growth. The value of B1 shows that 1 unit change in change in employment will leads to -0.213 unit change in GDP growth. This indicator results even not significant but contrast to the economic theory.

Our second explanatory variable is poverty head count ratio (PHCR), and its coefficient value \( B_2 = 0.009 \), which is statistical insignificant (T = 0.687 and T significance = 0.497), that shows poverty head count ratio is positively related to GDP growth. The value of B2 shows that 1 unit change in poverty head count ratio will leads to 0.009 units change in GDP growth.

Our third explanatory variable is gini index (GI), its coefficient value \( B_3 = 0.322 \), which is near to statistical significance level (T statistics = 1.966 and T significance = 0.057), that shows inequality is positively related to GDP growth. The value of B3 shows that 1unit change in gini index will leads to 0.322 units change in GDP growth. The result explains that more and more inequalities influences the growth level, this result is also contrast with the economic theory on the ground that reduction of inequalities should be the source of inclusive growth in Pakistan.

The forth explanatory variable is income growth (IG), its coefficient value \( B_4 = 0.214 \), which is near to statistically significance level (T statistics= 1.953 and T significance = 0.059), that shows income growth is positive significantly related to GDP growth. The value of B4 shows that 1 unit change in income growth will leads to 0.214 units change in GDP growth. The result is according to economic theory that growth in income has been a source of inclusive growth in Pakistan over the period.

Social sector growth plays a very important role to influence the growth inclusiveness. Our fifth explanatory variable is social sector growth (SSG), its coefficient value \( B_5= 0.003 \), which is statistical insignificant (T statistics = 0.004 and T significance = 0.997), that shows Social Sector Growth is positively related to GDP growth. The value of B5 shows that 1 unit change in social sector growth will leads to 0.009 units change in GDP growth. So on the basis of sign we can interpret the result that social sector development is a positive force to influence the growth inclusiveness in Pakistan.

CONCLUSION AND RECOMMENDATION

Conclusion
The thesis generally focuses on the process of inclusive growth in Pakistan by using annually time series data from1974 to 2014, applying Ordinary least squired method to find out the inclusiveness of growth in the country. The regression results indicate that the growth process in Pakistan has a weak inclusiveness as in the developing countries.

The analysis concludes that in Pakistan there is not proper relationship between change in employment and GDP growth, results are not significant and contrast to economic theory. There
is not proper relationship between poverty head count ratio and GDP growth results are not significant. The results of gini index also contrast to economic theory but near to significance. There is proper relationship between GDP growth and income growth and also proper relationship between GDP growth and social sector growth, The results of income growth are near to significance and the results of social sector growth are insignificant.

Pakistan historically has seen episodes of high growth but this growth unfortunately is not coupled with such macroeconomic conditions that are required to achieve lower poverty and inequality levels, which are essentials for inclusive growth. The growth can be categorized as inclusive in nature if it simultaneously leads to reduction in poverty. This study concludes that Pakistan has experienced tremendous economic growth rate over the last decades. However, this growth is not inclusive because it is not accompanied with equitable distribution and there is also not proper relationship between inequality, poverty and economic growth.

**Recommendations**

On the basis of conclusion, we are able to suggest some recommendations about Pakistan economy regarding inclusive growth which are as follows.

- In Pakistan economy there is a need to peer review of literature to find out the factors affecting inclusive growth.
- To eradicate inequality level and reduce poverty level in country, govt. has to take many steps at various levels.
- In Pakistan efforts should be to increase GDP growth to uplift the economy.
- Government should create employment opportunities so that poverty is decline and inequality is eradicated.
- There should be social security schemes to ensure social care and protection, which is necessary to reduce long run poverty from Pakistan.
- Government should take steps for the provision of basic services such as education, health, sanitation and housing for all the country and all segments of population in Pakistan.

**References**


