

## Chapter 26

# The Dynamics of Demographic and Macroeconomic Variables in India

Sovik Mukherjee

*St. Xavier's University, India*

### ABSTRACT

*The theory of economic growth is one of the principal branches of macroeconomics that tries to highlight the factors that have influenced the long-run trend of the growth of an economy. One of the leading issues in the literature on India's economic growth has been the manifold effects of inflation and employment among many others. The present paper aims to examine the relationship between economic growth rates, inflation, employment, and population growth in a Simultaneous Equations System (SES) framework, with an exclusive focus on the experience since economic liberalization in 1991. The literature on this subject has up till now analyzed the determinants of these endogenous variables disconnectedly. Not only does this paper endeavour to ascertain the existence of endogeneity among these variables but also highlight a multitude of factors that are connected in this regard. This paper comes to a close by discussing the possibilities for developing strategies that are overtly concerned with productive employment generation.*

*"The difficulty lies not so much in developing new ideas as in escaping from old ones." – Keynes*

### INTRODUCTION

These words of Keynes are very much significant in the context of this paper. Several theoretical concepts like the Phillips curve had been ruling the charts for almost half of a century. But, the question is to what extent is this model relevant for a country like India, today. Growth theory had its beginning in the years following the World War II when war devastated economies had embarked on the programme

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of reconstruction and development. This had called for high savings (reduction in current consumption) so that resources could be employed for investment purposes. But, in an inflationary situation, the general tendency of prices is to go upwards which has been statistically captured by the persistent upward movement of some of the aggregate price indices, viz. Consumer Price Index (CPI) or GDP deflator. Studies have shown that inflation has a highly significant negative impact on growth. Apart from causing distress for the poorer sections of the populace, the rising and variable prices also hurt the long term growth prospects by knocking the macro environment off balance. As a result, price stability figures are positioned high among the policy priorities of the Government of India. To all intents and purposes, inflation control is now considered more important than the elimination of the output gap. It is therefore important for the policy makers to know the exact relation between economic growth and inflation.

## **BACKGROUND**

Coming to the issue of growth-employment linkage, the growth process in India shows evidence of the inability of high growth rates of output to stimulate sufficient employment opportunities. This phenomenon has been observed in India post-liberalization, since 1991. This indeed is what emerges from a more detailed consideration of the patterns of growth and employment dynamics in India. This absurdity has indeed haunted India's economy for at least half a century and has threatened the developmental policy of ensuring employment opportunities for the populace as a whole (Ghosh and Chandrasekhar, 2007). The conventional Phillips curve in essence shows the inflation-unemployment tradeoff but the question is whether the negative relation holds good for the Indian economy. Growth is incomplete in an economy where there is not enough generation of employment. Phillips (1958) in his seminal contribution had affirmed that to control inflation in an economy, employment needs to be relinquished. Subsequently, we come to the population-growth linkage and how it affects employment. Instinctively, it can be argued that impacts can be both favourable as well as unfavourable. If a country has larger amount of inoperative resources, the population can supply laborers which when efficiently utilized will result in a rise in the rate of per-capita GDP growth through the generation of employment. On the other hand, an increase in population can also negatively affect the growth rate of GDP through poverty, lack of capital formation as employment generation in the formal sector has been miserable. Hence, an increase in population tends to press hard on economic resources as well as job opportunities. This paper will be looking into the fact that whether population growth affects GDP positively or negatively in the Indian context. It is also clear that there is enough simultaneity among the focus variables.

The present paper analyzes this crucial issue by building up an empirical model which highlights the liaison between economic growth, inflation rate, employment and population growth in a Simultaneous Equation System (SES) framework. The spotlight then shifts to the theoretical foundations of this analysis. Precisely, our objective is to bring out the presence of simultaneity among the focus variables in our proposed model. This is followed by the issues pertaining to the empirical model and the methodology applied. Next, the econometric exercise has been carried out which helps us to pencil in the comprehensive policy implications of this research. The paper comes to a close by resolving the fusillade of questions.

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