

Quality Matters: The Changing Composition of India's Labor Force and its Effect on Productivity Growth

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Changes in the composition of labor force is of great interest in understanding economic growth and development, as these changes, particularly in a period of rapid economic growth, may be implied in the structural transformation of the economy. Structural transformation is considered as a key in economic growth in the conventional Lewis type literature. This view has gained renewed attention in the recent literature giving ample importance to the role of government as a facilitator of structural transformation (Lin, 2011, Roderik, 2011). Therefore, it is imperative to understand the changes in the composition of labor force. This paper examines the changes in the composition of labor force in Indian industries, over the last three decades. We examine the heterogeneity of labor in terms of degree of educational qualification, gender, and age. Indian economy has witnessed a drastic change in the composition of its labor force during the last three decades. In addition, the industrial structure has changed in favor of the service sector. In particular, India has emerged as a country with high potential for information and communication technology related services, which demands educated labor force. We examine how these changes have been facilitated by the changes in the composition of India's work force. The first question that is addressed in this paper is what the changes in labor composition in Indian industries are and whether the observed changes in the composition has translated to the quality of labor. We provide a quantitative appraisal of the changes in labor quality, due to the changes in the composition of labor force, across 31 industrial sectors. Improving quality of labor is an essential, though not sufficient, condition for attaining higher economic growth. The second question we address is the implication of this change in the composition for labor productivity growth. We examine the contribution of labor input, in terms of number of worker hours and labor quality to labor productivity growth. While doing this, the paper also makes another important contribution, which is the estimation of labor income share in value added. We estimate the wages of different types of workers, including self-employed workers, using available information on the characteristics of workers. Our final estimates ensures complete consistency with National Accounts and are then used in the growth accounting, in order to understand the contribution of labor quality to labor productivity growth in various industrial sectors during the period 1980-2009.