ABSTRACT

In India, predominantly, the labor force moved from primary to the tertiary sector McMillan et al. (2017), unlike other countries where the labor force moved first from primary to secondary and then to the tertiary sector. Bosworth and Collins (2008) studied the patterns of economic growth for China and India and found out that China gave importance to the industrial sector, and the sector developed enormously while in India, service-producing industries proliferated. The study explains India has a weak secondary sector. Verma (2012b) explores the reason for a services-led growth for the Indian economy and identifies TFP as the most significant and the major source for a tertiary sector-led growth. Lahiri and Yi (2009) computed the capital and labour allocation wedge for two Indian states, Maharashtra and West Bengal.

In the first essay titled "The Contribution of Structural Transformation in the Productivity Growth for India" I study the contribution of structural transformation in the productivity growth for India. The study focuses on the possible levels of disaggregation to understand the structural change that happened in the Indian context. The study conducts three sectors and ten sector levels of disaggregation to understand India's structural transformation. The informal sector also absorbs the labour force that moves away from the primary sector to other sectors. Despite that fact, the current study limits its scope to the structural transformation as a whole. In this paper, I study the long run evolution of aggregate labour productivity in India during the last four decades, in particular for 1983-2018. Though there are studies concentrating on the three sectoral disaggregation of the economy, the ten sectoral studies on Indian economy is quite scant. To address this gap the current study concentrates on the ten sectoral disaggregation and followed the GGDC (Groningen Growth and Development Centre)ten sectoral disaggregation.

I show that the contribution of structural change in the average annual labour productivity growth in India has been around 29% (31.67% in case of ten-sector disaggregation)during the period 1983-2018. While this contribution has declined since 2007, the remaining 71% (68.37% in case of ten-sector disaggregation) of the aggregate productivity growth is originating within the individual sectors, and especially within the tertiary sector, which alone explains about 30% (23.84)of this growth (see tables 2.20 and 2.21). From the shares of contribution by Structural Transformation and within-sector productivity growth, I can see that the contribution of ST is significant. ST has played a major role in contributing towards the productivity growth of the economy.

In the second essay titled "Structural Transformation and Productivity Growth: Heterogeneity Among the Indian states" I consider 29 Indian states and 7 union territories (administrative divisions governed directly by the central Government of India). I denoted 17 states as major states while presenting our results. Each of the major states has more than two crores (twenty million) as its population based on the 2011 census. I followed the six administrative zones defined for the Indian states by the States Reorganisation Act, 1956. The six zones were northern, western, eastern, southern, central, and north-eastern zones. The largest amount of structural change occurred in the main states of Assam, Karnataka, Maharashtra, Gujarat, and Rajasthan across the whole study period and in the ten-sector disaggregation. The greatest amount of structural change was seen in the northeastern zone. Results are consistent and reliable throughout both the three-sector and ten-sector analyses.

In the third essay titled "A General Equilibrium Model of Structural Transformation in India" I attempt to address the non-balanced growth that happened in India, using a three-sector model. Though studies are addressing the non-

balanced growth that happened in contexts like developed countries, the economic development that occurred in India has a peculiarity in itself. The uniqueness is contributed by the slightly developed secondary sector and massive growth of the tertiary sector at the expense of the secondary sector. This stunted structural transformation is another factor that contributed to the unbalanced growth of the economy. The three-sectors in the present study are agriculture (primary), manufacturing (secondary), and the service (tertiary) sectors. The secondary sector and the tertiary sector use labour and capital as the input, and the primary sector uses land in addition to the capital and labour inputs. Each of these sectors produces an output. The model contains a representative household which tries to maximise its utility by the consumption of the output within a budget constraint. An immature secondary sector is hampering a sustainable economic development in India. The present study is an attempt to understand the underlying factors causing the unbalanced growth of the Indian economy using a general equilibrium model for a period from 1983 to 2013. The three sector model simulates the output and employment share of the country to compute the labour productivity. The model output of employment share shows that the actual labour share of the secondary sector and the tertiary sector are relatively very less compared to the expected share. The actual labour share of the agriculture sector is much higher compared to the expected labour share of the sector. The labour productivity is computed using the model output on labour and output and then decomposes the productivity growth in to three components using canonical decomposition method ((Timmer et al., 2015) (De Vries et al., 2015)). Finally the three components are used to compute a measure called sturctural transformation index (Gangopdhyay et. al., 2020) to quantify the extent of structural transformation happened in the economy. The STI reveals that the maximum amount of structural transformation happened during 1998 - 2007 period. The economic reforms introduced in the

country during the year 1991 - 92 may have helped the economy to re-allocate the production factories across different sectors causing the country to achieve a better value for the STI.

In the fourth essay titled "Structural Transformation and Poverty Eradication in India" I study the relation between economic growth and poverty reduction. A potential gap of poverty-growth in Indian states for the time period 1983-2018 exists and I explore the gap. The Head Count Ratio (HCR) estimates for all India by the Tendulkar Committee (2009) is 50.1% (1993-94), 41.8% (2004-05), 33.8% (2009-10), 25.7% (2011-12) and I can see a decreasing pattern. In the essay I regress poverty on ST and control variables . As in Rifa'i and Listiono (2021) I used the three poverty measures, Percentage of poor people (HCI) or Headcount Ratio. I regressed the changes in total poverty on year-wise STI and its first, second, third, and fourth lags. The results show that the fourth lag of the year-wise STI is reducing total poverty significantly. For rural poverty, I regressed the changes in rural poverty on year-wise STI and its first, second, third, and fourth lags. The results show that the fourth lag of the year-wise STI is reducing rural poverty significantly. It implies that the contemporary structural transformation happening in the economy is not significant enough to reduce rural poverty in the economy. However, the structural transformation that happened four years back is helping rural poverty to decline significantly. It can be explained in the following way as the current structural transformation in the economy is helping the economy reduce rural poverty four years later. The result is significant at a 5 percent significance level. The rural poverty decline that is happening today is the result of the structural transformation that happened four years earlier. However, urban poverty reduction is much faster compared to rural poverty. The regression of the urban poverty on year-wise STI and its first and second lags shows that the second lag of the year-wise STI is reducing urban poverty significantly. It means that the

contemporary structural transformation happening in the economy is not significant enough to reduce urban poverty. However, the structural transformation that happened two years back is helping urban poverty to decline significantly. The structural transformation happening in the Indian economy has a significant bearing on reducing poverty in the country. The panel regression analysis of the panel data comprising the states from 1993 to 2013 shows that STI, the measure that quantifies the extent of structural transformation in an economy, reduces rural and urban poverty. The contemporary structural transformation in the economy fails to reduce poverty in the economy. However, today's structural transformation helps the economy reduce urban poverty two years later and reduce rural poverty four years later. In other words, poverty reduction happens due to the previous year's structural transformation of the economy. The current study is a pioneer attempt in this line of research by studying the impact of structural transformation on poverty alleviation in an economy.