Balancing Factor Endowment and Composition of Indian Exports

Topic: Indian Trade
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The Heckscher-Ohlin theory of international trade envisages that a country specialises in the production and export of such goods as confirm to its factor endowment. While it may import goods for the production of which its does not co form to its factor endowment. Among others, an assumption of the theory is that the factor endowment does not change, and therefore, the pattern and composition of its export and import trade remains stable. It is thus obvious that the theory relates to the static framework of analysis. Classical and neo classical theories also assumed that such factors of production as land, labour and capital are immobile between countries but mobile within countries. Goods are however, assumed to be totally mobile both within and between countries. Economic growth leads to the transformation of not only the pattern and structure of production but it also transforms factor endowment. It also brings about drastic changes in the quantum, pattern and structure of international trade of an economy. Even if the pattern of trade and factor endowment were consistent with each other, these will diverge with each other as a consequence of growth if factor endowment do not change with growth. Indian economy is no exception to this. The rapid growth of the economy has transformed production structure as well as trade. Leontief paradox inspired economists to examine the validity factor endowment theory with country data. Bharadwaj (1953), Bharadwaj and Bhagwati (1969) found no evidence to support Leontief-paradox for Indian economy. Prasad extended the theme to include natural resources also as a factor in addition to labour and capital. Prakash (1976) also did not found India’s factor endowment and trade to differ from each other.

Technological base of production and supply of labour per unit of capital have also change in the course of development. In 1951, saving rate was around 3 to 3.5% of GDP, which has increased to slightly more than 32.5% (economic survey) of GDP in 2009. This has raised the capital base of production. Besides, less than 5% of total population have had an access to education and .01% of the people had an access to higher education in 1951. Consequently, Indian workforce was largely dominated by illiterate and uneducated workers. Thus, the human capital base of the economy was also low. But in 2008-09, more than 20% population had an access to higher education, including professional and technical education. This has transformed the human capital base of the country.
Long term growth at an average annual rate of 3.5% of GDP was also dominated by agriculture and related activities which accounted for 59% of GDP and absorbed more than 80% work force. Agriculture continued to dominate growth of Indian economy till seventies rapid industrialisation notwithstanding. If growth of agriculture accelerated, entire economy was buoyant and vibrant. In agriculture also, growth of output of food grains dominated growth of the economy, while food prices dominated prices (Prakash, S. and Rajan, P., 1977, Prakash, S. 1987).

Eighties, nineties and first decade of the millennium witnessed rapid industrialisation and tartarisation of Indian economy. Technological upgradation of production has also taken place. Higher, technical and professional education also expanded extremely. Nearly 20% of senior secondary graduates go for higher education. As a consequence of economic growth and educational development, there is economy wide substitution of educated/literate (studied upto primary) for uneducated/illiterate, secondary and above for below secondary/matriculation, graduate for under graduate, and technical and professional for general education graduate manpower in Indian economy (Sharma, Amit, 2010).

In 2009, tertiary sector accounts for 59% of GDP, while agriculture and allied activities produced around 20% of GDP, and employed 55% of the total workforce. Manufacturing activities accounted for remaining 21% of GDP.

Besides, education, including higher professional and technical education, has grown exponentially during last 60 years. The New Economic Policy of liberalisation and globalisation has converted the semi closed Indian economy in to an open economy. Thus, structure of production, capital base and human capital have grown concurrently.

India has emerged as an important destination for foreign investment, including, FDI, though, foreign investment still accounts for about 0.5% of total investment, it is large in absolute terms. . The absolute and relative share of trade in GDP, an indicator of openness of an economy has also increased several times from 1951 to 2009-10. As a consequence of growth and changes accompanying it a radical transformation in factor endowment has taken place.

Conventional natural resources, especially minerals, have been used more extensively both for exports in order to earn foreign exchange and also to feed the growth of minerals