Specifying the Sources of Output Growth in Iran with Emphasis on Agricultural Sub-Sectors: An Input-Output Approach

Topic: Structural change and dynamics 4

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This paper examines structural change and the sources of output growth of Iranian main economic sectors from a demand side perspective, with emphasis on agricultural sub-sectors. To this end, three comparable IO tables of 1986, 1991, and 2001 were deflated based on 1997 prices in which Iran's economy has been grouped into 20 sectors. Then, sources of output growth over periods 1986-1991 and 1991-2001, were determined using a decomposition method within the input-output (I-O) framework. Within this methodology, output growth is decomposed into three main components attributable to final demand effect, technological change effect and import substitution effect. Each of these components is further decomposed to specify the sources of growth in more details.

Results of the output growth decomposition revealed the changes in final demand as the main source of total output growth with a minor role for the technological change and a negative impact from imports components. The contribution of technological change in output growth has changed from negative in the first period to positive in second period, showing strengthened intersectoral linkages and more extended forward industries over time. Decomposition of changes in final demand indicated a high share of household consumptions and a low share of trade and investment in the growth of output which implies the necessity of movement away from a traditional toward a more commercialized economy. In addition, decomposition of final demand in various production sectors indicates that production of cropping and horticulture products as well as livestock and poultry are mostly reactive to household demand for food products and then to household demand for theses sectors' own products. Trade of agricultural and food industries products are in next place from this point of view. Accordingly, investment in food industries and promoting exports can be considered as important source of growth in agricultural products. Furthermore, extending export to the raw agricultural products can improve the role of export in growth of agricultural products. Results of the technological change decomposition revealed that growth of agricultural products is highly influenced by technological change in food industries which has been relatively livestock and poultry using and the other agricultural products saving. This result reemphasizes the necessity of developing food industries for processing cropping, horticulture and fisheries products.