

Fundamental Economic Structure of Andalusian Economy over Social Accounting Matrices

Topic: Structural Comparisons

Author: Jorge M. LÁPEZ ÁLVAREZ

Co-Authors: Manuel A. CARDENETE

Over the last 60 years, regional economic analysis has been interested in identifying common patterns and regularities of regional economic structure. The identification of such patterns suggests that there predictable relationships between different levels of structural regional development. Since Social Accounting Matrices (SAM) are database containing the total transactions in an economy, to have several composed uniformly enable comparisons over both space and time. By "comparison" we mean of the economic structure embedded in them. This paper identifies those structural components and similarities in economic relationships within the regional economy (Andalusia) from 1990 to 2010, specifying the Fundamental Economic Structure (FES) while quantifying and classifying its components in both an unified and holistic sense. The FES methodology applied in this paper is a set of complementary techniques, focused on revealing key components in the overall economy. Quantifying the features of each component will allow us ranking the core and the periphery of the economic structure. The FES approach provide us those elements of the economy categorized like predictable, stable and important. And the features combination let us to classify the core components of the economy.

The results show us that the elements of partitions related to tertiary activities have more probabilities to be predicted using a proxy of the size of the economy, specially in Commercial Services, Retail sales, Transport and Communications and Other Services. Besides, the structure of Andalusian economy is quite stable in comparison with other regional analysis and the stability is focused in tertiary sector and some industrial activities like Electric energy, Chemical and Machinery, Refining or Mining and Steel. In terms of importance, the connectivity analysis provide that the principal interactions are brought about Retail sales, Transport and Communications and Other Services located in tertiary-tertiary, secondary-tertiary and primary-tertiary partitions of the economy. There are also important cells in the secondary sector in this sense like Construction, Vehicles, Refining and Wood manufactures. This type of interactions between secondary and tertiary sectors, and absence of primary activities are the main characteristics of the Andalusian economy structure, with no appreciable change over period of analysis, and the behavioral pattern of FES for the Andalusian economy are far away from those observed in former analysis for Indonesian, Indian or Chilean economy where the presence of agricultural activities is higher. It can be concluded that there is a temporal FES for the regional economy in Andalusia in the period of analysis and under this methodology it is possible to identify not just relevant activities but key flows of interactions in the economy and let to estimate and forecast the cell values of the core of the economy determining the degree of development of the economy.