

Measuring Policy Impacts on Rural Regions

KONSTADINOS MATTAS*

Current global trends (globalization, environmental protection, consumer demand for food safety and quality) constitute major challenges for the European rural economy as more than 80% of EU territory is rural. Thus, EU policies are oriented towards rural economies aiming at greater integration and economic development.

Different rural development policies are devised to improve the socioeconomic structure of rural areas and enhance local economic activity. These actions encompass a vast number of interventions in public and private sector in order to facilitate income and employment enhancement. Both employment and income increase is the ultimate objective in a world that employment is shrinking and sequentially the entire rural economy may be brought at the edge of total disarrange.

Social and economic changes in rural areas are not only rest on the initiated CAP policies, but also on the linkages among different activities and the interdependence among economic sectors in the region. Studies concerning rural areas in various EU countries revealed that diversified local economies performed better than economies totally depended on agriculture. Most of these studies employ Input-Output (I-O) analysis, as I-O methodology offers the opportunity to examine in details the structure of the economy (either local or national), to assess interrelations among the various economic sectors, to measure direct and indirect economic impacts, and to evaluate the performance and effectiveness of applied policies.

I-O analysis, introduced and developed in the late 1930s by Wassily Leontief, is a general equilibrium approach that studies the interdependence among interrelated economic activities and sectors. In its basic form an I-O framework consists of a system of linear equations, which describes in detail the distribution of a sector's product sales and input purchases.

I-O analysis, as a quantitative tool, contributes substantially to the understanding of the nature of a national or a regional economy and the followed patterns in rural development. I-O analysis is perfectly suited for impact and structural studies, for projections of economic activity and for tracing technical change. Nevertheless, when I-O analysis

is applied, some basic assumptions must always be hold and these assumptions are: homogeneous products; absence of externalities; no constrains in the capacity of production factors and fixed coefficients of production. Thus, despite the advantages of an I-O analysis, the related to I-O assumptions may question its performance and suitability in certain cases.

I-O methodology, due to its sufficient performance in studying the whole structure of regional economies, was extensively used in identifying and evaluating policy impacts in rural economies, and its suitability for such studies is extensively mentioned in the international literature. Indirect impact assessment of support policies is of primary importance in I-O rural studies.

Direct and indirect impacts can be assessed by performing linkage analysis and specifically by calculating the well known I-O sectoral multipliers. Sectoral multipliers indicate total output, employment and household income changes in a regional economy due to an exogenous change in a particular sector's final demand. The computed sectoral multipliers and total effects are used in the impact analysis to estimate the direct and indirect impacts, and the induced impacts in the closed model case. Through linkage analysis, the main important-key economic sectors that can induce multiple impacts on the economy and accelerate economic development can be identified. Linkage indices and sectoral multipliers, apart from identifying and ranking the important sectors, are also used to assess the impacts on economy, due to various policies that stimulate a sector's final demand (e.g. through investments). This is a very powerful feature of the method since it facilitates the evaluation of various pursued policies. Nevertheless, the absolute magnitude of the multipliers and their interrelation should be seen with caution, as several factors influence their magnitude and relation to linkage indices. Underestimated or overestimated impacts may send wrong signals to policy makers and direct them to misleading decisions.

In general, I-O analysis offers a powerful tool in regional analysis, casting the entire regional economy in an integrating and consequential approach. In addition, I-O framework can be easily combined with various techniques in order to assess indirect impacts, economic interrelationships and provide reliable projections.

* Dept of Agricultural Economics, Aristotle University of Thessaloniki, Greece, mattas@auth.gr