

Growth and Productivity in the Spanish and European economies.

Topic: Productivity and efficiency analysis II

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The crisis has made us rethink growth. There is a huge variety of factors that explain the modernization and the structural change in the Spanish economy, but the improvement of productivity is likely the most important, both at the sectoral and global level. However, the decrease in productivity has also been significant in explaining the current economic crisis. Different ways exist to estimate this productivity. This paper focuses on the comparison between traditional productivity measures (multi-factor productivity) and those derived from an input-output framework (direct and vertically integrated).

Through SDA methodology, we obtain some effects that reflect the evolution of salary, work, capital and technological productivity. However, it is difficult to match them with other multi factor productivity estimations, such as those based on neoclassical production functions (EUKLEMS). Differences appear in the use of demand as a driver, in the first case, and in the different meaning of the work and capital effects used to capture technological change.

To address this problem we use different approaches. An alternative SDA is developed using final demand as a unitary measure of goods. We can therefore obtain work and capital effects that include the expansion of the economies. Moreover, we will estimate other indicators such as the potential production growth rate.

The initial data comes from a series of annual Spanish input-output tables covering the period 1980-2007. We also use EUKLEMS output, capital and labour data for Spain, particularly regarding multi-factor productivity; together with other information provided by the Spanish Statistical Institute.

The analysis is extended to other European countries in order to compare their evolution with the Spanish case.