

### Evidence-based public policies for SMEs

Co-funded Action "Adaptation of the National Observatory for SMEs to the needs of the new Development/Industrial Policy 2020-2030 and SME policy - Development of monitoring and information services and tools", ESPA - ΕΠΑΝΕΚ 2014-2020.

The subject of Subproject 4 concerns the research on "Development of econometric models for the prediction of the contribution of all size categories of enterprises to the economy, with particular emphasis on the contribution of SMEs" and the mapping of the results in 3 main categories.

1. Development of econometric models for forecasting the contribution of all size categories of enterprises to the economy, with particular emphasis on the contribution of SMEs (Deliverable 1).
2. Development of econometric models to predict the contribution of the manufacturing sector. (Deliverable 2).
3. Development of models to investigate the interdependence of the manufacturing sector with other sectors. (Deliverable 3).

### SUBPROJECT 4

DEVELOPMENT OF ECONOMETRIC MODELS FOR THE  
CONTRIBUTION OF SMEs AND MANUFACTURING  
TO THE MAIN MACROECONOMIC INDICATORS  
OF THE GREEK ECONOMY

**Deliverable 1 - Development of econometric models to predict the contribution of all size categories of enterprises to the economy, with particular emphasis on the contribution of SMEs.**

**The scope of Deliverable 2, for Subproject 4, includes the following:**

1. A bibliographic review of the role of SMEs in the formation of macroeconomic variables (indicative but not restrictive: GDP, employment, investment). Presentation of academic articles, literature and emphasis on recent research output to delineate the issues related to the effects of firm size on the economy.
2. Description of the demographic and economic characteristics of enterprises by size class and by sector (industry, construction, trade, services). Division of enterprises into micro (0-9 employees), small I (10-19 employees), small II (20-49 employees), medium (50-249) and large (more than 250 employees); in particular,

- data on the number of enterprises, turnover, gross value added, number of employees by employment category, productivity, etc. (depending on data availability). Comparisons with other European Union countries, where possible.
3. Formulation of an econometric model and selection of appropriate variables to investigate the behavior of firms by size class to macroeconomic, fiscal, or other exogenous disturbances.
  4. Examination of alternative models for the contribution and impact of SMEs on key macroeconomic variables.
  5. Formulating policy suggestions on the development of small and medium-sized enterprises. How to enhance the competitiveness of enterprises? What is the role of policies to enhance the skills of employees and the development of clusters in them?

**Deliverable 2 - Results of research on "Development of econometric models for forecasting the contribution of the manufacturing sector to the economy".**

**The scope of Deliverable 2, for Subproject 4, includes the following:**

1. Bibliographic review of the role of manufacturing in shaping macroeconomic variables. Examination of the theoretical framework on the nature of investment and employment multipliers, and an investigation of the existing research literature on the magnitude of investment and employment multipliers.
2. Description of the demographic and economic characteristics of enterprises at a two-digit or higher sectoral breakdown of manufacturing. In particular, data on the number of enterprises, turnover, gross value added, wages, profits, number of employees by employment category, productivity, exports and imports.
3. Formulation of an econometric model to examine the behaviour of manufacturing firms to macroeconomic and fiscal external shocks. More specifically, starting from the literature, carry out econometric investigation and formulation of appropriate behavioral equations, as well as carry out appropriate tests. Consequently solving the model in the form of a system of simultaneous equations.
4. Examination of alternative models for the contribution of manufacturing. In particular, consider models that place specific emphasis on the demand side or the external sector.
5. Formulating policy proposals and scenarios on how to achieve the EU's 2030 targets

**Deliverable 3 - Summary of the results of the research on "Development of models to investigate the interdependence of the manufacturing sector with other sectors"**

**The scope of Deliverable 3, for Subproject 4, includes the following:**

1. Bibliographic review of Input-Output Analysis. Review of traditional, alternative and modern methods of estimating cross-sectoral linkages.
2. Description of the available and most recent data for the measurement and experiential illustration of the intersectoral linkages of manufacturing in Greece.
3. Experiential investigation of intersectoral linkages in the sectors of the Greek economy: links between manufacturing and other sectors. Examination of horizontal and vertical multipliers. Examination of forward linkages and backward linkages. Empirical application of modern models.

## GENERAL CONCLUSIONS

The aim of this deliverable is not only to examine the contribution of manufacturing to aggregate macroeconomic aggregates, but to the intersectoral relationships of the Greek economy. Since in an economic system the goods and services produced are used not only as final products but also as intermediate inputs for the production of other goods and services, the importance of a sector for the economic system lies not only in its final contribution to output and employment, but also in the intersectoral linkages that govern the sector under consideration.

The examination of the intersectoral linkages of an industry seeks to contribute to the assessment of, on the one hand, the relative contribution of the industry to the production process of the other industries and, on the other hand, the relative importance of the other industries in the production process of the industry under consideration. This analysis can provide useful conclusions for economic policy authorities, as the (non-)existence of strong intersectoral linkages in an industry implies, for example, that the industry is (not) suitable for the implementation of a growth policy by stimulating demand for the product of that industry.