*The systemic view of the SDGs indicators through a statistical model-based approach: an application on Eu countries*

Carlo Cavicchia, Filomena Maggino e Maurizio Vichi (Università degli Studi di Roma "La Sapienza")

The Sustainable Development Goals demonstrate the scale and ambition of the 2030 Agenda for Sustainable Development as a plan of action for people, planet and prosperity. So, the goals will stimulate action over the next 15 years in areas of critical importance for humanity and the planet. The 17 goals do not represent a theoretical framework which allows individual indicators to be selected, combined and weighted in a manner which reflects the dimensions or structure of the phenomena being measured. Consequently, the 17 goals are not dimensions and, at the same time, we cannot say that they are domains. In other words, SDGs indicators as a whole are not connected to a conceptual framework but they can be interpreted as extrapolated from a system of indicators pointing out particularly serious situations, urging ad-hoc policies (SDGs, exactly). However, since the indicators are too many, the need of having some synthetic views arises from many users.

In this perspective, this paper shows how important is to find the relationships between goals/domains and indicators and among goals/domains in order to synthesizing the information and have a response on the conduct of each country to achieve the goals. Identifying the relationships could be an extraordinary tool to understand where each country can focus the actions and what impacts each action could have. In this paper, we propose a theoretical framework based on a hierarchical reflective model for investigating the phenomenon of Sustainable Development for the 28 countries of EU in order to acquire new knowledge based on empirical evidence. At the top of the hierarchy, we propose a Composite Indicator to measure the Sustainable Development, which is a concept that can be measured only indirectly because of its complexity and multidimensionality.