

On the Pillars of Sustainable Development: A Sustainable Competitiveness Approach

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Sustainable Development emphasises environmental and social considerations of economic progress. Traditionally, however, researchers and policymakers failed to operationalise the concept as an integrated whole. More recently, a need for greater integration of the pillars of sustainable development is emphasised in both academic and policy spaces as locations seek the development of *smart* and *green economies* simultaneously targeting economic growth, environmental sustainability *and* societal development.

This paper operationalises the concept of Sustainable Competitiveness and its related metrics as proposed by the World Economic Forum (www.weforum.org). Sustainable Competitiveness is a sustainable development-related concept that enables bridging economic, environmental and social concerns with a comprehensive, yet synthetic, index metric. The focus on competitiveness as those factors that enable productivity improvements at the national level (i.e. Competitiveness Pillars) and the impact these pillars have on environmental and social sustainability enable the identification of areas where interventions can be most effective for guiding sustainable development efforts and identifying potential roadblocks.

This paper is empirical in nature. It leverages the WEF approach for the Sustainability Adjusted Global Competitiveness Index (SGCI) featured in its Global Competitiveness Report (GCR). We extend the approach to generate a data panel for 94 countries over a 10 year-period. The dataset includes twelve economic competitiveness pillars, one environmental and one social sustainability pillar. Each of these pillars is composed of a variety of main indicators derived from hard-statistical data and from perception based-surveys. Estimations of the impact of each pillar on Sustainable Competitiveness are obtained using the Arellano Bond dynamic panel data estimator.

Preliminary results suggest that the level of innovation and business sophistication, higher education and training are strong catalysts for national sustainable competitiveness. Results are varied for other national competitiveness pillars depending on nations' level of economic development. Basic requirements for competitiveness, such as macroeconomic stability, primary level literacy rates and the quality of institutions, are key drivers for sustainable competitiveness when the estimations are drawn from the whole sample but their impact is much reduced when only the most advanced economies are considered. The level of technology readiness appears to have a greater impact on promoting sustainable competitiveness in more advanced economies in comparison to less advanced ones. Differences between effects on environmental and social sustainability are also identified. Results are discussed in the context of national competitiveness and sustainable development more broadly and potential research avenues are highlighted.

Keywords:

Sustainable Competitiveness, Global Competitiveness Index, Sustainable Development, Environmental Sustainability, Social Sustainability.