

An Ethnography of Measurement Innovation by Numbers, Metrics and Indices in the Arab Gulf

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Summary

Purpose and importance of study for the UAE

This project is about innovation and its measurement. The goal of this study is to first examine the logics of innovation metrics and how these fit into GCC policies and the region's future-focused developmental models. The most prominent and widely used instrument for measuring innovation currently – both internationally and regionally in the GCC – is the Global Innovation Index (GII), a composite index. This research takes a critical look at innovation indices like the GII to see if they can actually serve as reliable benchmarks for development policy in the GCC. This means departing from conventions that take these indices at face value in order to examine the underlying theoretical assumptions, weightings and calibrations of these instruments.

This research project targets the following UAE priority areas: (2) Innovation and R&D, smart cities, smart economy, smart communities, innovation, drivers of innovations, impact of innovation on economic growth, innovation case studies. (11) Macroeconomic policies and determinants of growth, knowledge-based economy, sustainable economic development, economic diversification, economic risk.

Methods

This project identifies and analyzes key components of innovation indices with particular attention given to the GII due to its widespread adoption as a valid measure of innovation by governments and international organizations like the United Nations. The analysis focuses on how the theoretical assumptions of the indices shapes their ability to measure innovation and how the construction of the measuring instruments – their weightings and calibrations – effects the results and rankings they produce. For the GII, this project will analyze the data from the technical notes published in its the annual reports published from 2007 to 2021.

Study Key Points

- Highlights that there is still no theoretical link between private sector innovation changes and economic performance at the national level.
- Provides evidence for the assumption that indices for measuring national innovation performance are at best subjective instruments and should be recognized as such.
- Emphasizes the fact that yearly methodological adjustments to an index like the GII are enough to shape rankings from one year to the next and, therefore, movement up or down the rankings should not be solely attributed to policy outcomes.

Findings

Innovation is a moving target and it should be expected that trying to measure it on an annual basis will require some adjustments of the measurement instruments. However, annual calibrations of the measurement instruments – like the GII – must figure more prominently into policy decision making because year-to-year dips in rises in the rankings are as likely to result from year-on-year methodological changes as they are to be from policy outcomes. Lastly, it is critical to emphasize that there is no agreed upon recipe for generating innovation that will positively affect any national economy, and for this reason along with those mentioned above, composite indices and scorecards should be viewed as reports but not necessarily as prescriptions.

Recommendations

The extent to which universal rankings and indices can serve as policy targets should be approached with caution due to a combination of theoretical and methodological factors. Consequently, given the unique historical development of the GCC economies, it would not be unreasonable to explore the potential for building an innovation measurement instrument attuned to the needs and specificities of the member states of the GCC.