Chapter 5
Measuring Governance: The Application of Grey Relational Analysis on World Governance Indicators

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ABSTRACT

The governance concept has become very popular in recent decades and in this regard has increased interest in measuring its quality. The most widely used measures of governance are World Governance Indicators, which represent composite perceptions-based indicators, published by World Bank Institute. There are six composite indicators and the data for constructing those indicators are obtained from 32 individual data sources. The objective of this chapter is to highlight the applicability of Grey Relational Analysis in the ranking of EU countries according to the governance quality. The Grey Relational Analysis entails calculation of Grey relational grade for governance quality. The final stage of the Grey Relational Analysis procedure involves ranking of EU countries according to Grey relational grade and their comparison with ranks obtained from World Bank Institute. The full contribution of Grey Relational Analysis arises on this stage, where ranks of countries have been changed.

INTRODUCTION

In recent years, we have witnessed a growing interest of both academics and policy-makers in defining "good governance" and measuring the quality of governance, which especially accounts for developing countries. Since the mid-1990's, a large number of quantitative governance indicators have been developed for the purpose of decision-making and policy recommendations.

Significant effort has been invested in defining the concept of governance. Broadly speaking, governance could be defined as group decision-making about resolving shared problems. Governance reflects how governments make important decisions, how they relate to the citizens and determine whom to

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involve in the decision-making process, as well as how the governments render account (Graham et al, 2003). World Bank's definition of good governance accentuates the manner in which power is exercised in the management of a country's economic and social resources for development (World Bank, 1992). Kaufman, Kraay, & Mastruzzi (2010), offer a definition between too broad and too narrow explanations, defining governance as the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced, the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

There are several reasons for the popularity of governance concept in recent decades and for the growing interest in measuring its quality: the increase of international investment flows to developing and "emerging" economies (in other words, the increase of risk exposure of the investors' assets); end of the Cold War, followed by a growing interest of developed countries' governments and aid agencies to promote economic and social development in developing countries; failed policy reform (the so-called "Washington Consensus"), promoted through conditional lending by financial organizations to developing countries; and the recognition of the importance of formal and informal institutions for economic growth and development, as suggested by new institutional economics (Oman & Arndt, 2010).

The most widely used measures of governance are World Governance Indicators (hereafter WGI), which represent composite perceptions-based indicators, published by World Bank Institute[1]. The aggregate indicators are based on several hundreds of cross-country indices that measure different aspects of governance. There are six composite indicators covering 215 economies for the period 1996-2013 (Kaufmann, Kraay, & Mastruzzi, 2010):

- **Voice and Accountability:** The indicator that captures the extent to which citizens participate in selecting governments, as well as basic citizen rights and freedoms – freedom of association, expression and media;
- **Political Stability and Absence of Violence:** Includes measures of likelihood that governments will be violently overthrown;
- **Government Effectiveness:** A dimension that reflects the quality of public services as well as government credibility in public policy implementation;
- **Regulatory Quality:** Relates to the ability of governments to create and implement sound policies;
- **Rule of Law:** Indicates the quality of contract enforcement, property rights and formal institutions in a country; and
- **Control of Corruption:** Captures the agents' perceptions of different forms of corruption and state-capture.

The data for constructing the aggregate indicators are obtained from 32 individual data sources - survey respondents, private firms and households, public and non-government organizations. These variables are organized into six broad dimensions, using the Unobserved Components Model. The main advantage of this model is that it can quantify the precision of both individual sources of data and country specific aggregate indicators, by constructing the margins of error. The size of the standard errors of estimates of governance implies that the precise rankings of countries based on governance data cannot be offered, but the aggregate indicators allow sorting the countries into broad groups according to the level of governance quality.