Decision support system for Saudi labor market

Mohammed A. Alahmed, Ali M. Aljumaah, Ibrahim A. Aljasser

King Saud University, Riyadh, KSA

The Saudi population nearly doubled during the last two decades, rising from 15.2 million in 1990 to 29.2 million in 2012, with an average growth rate around 3%. The Saudi labor market has undergone tremendous change in the first decade of the 21st century. High youth participation and high levels of expatriate workers lead to a depressing of levels of average wages, lower productivity and potentially high unemployment levels years to come. With national population increase and unemployment among Saudis hovering around 12% (largely among youth and women), the labor Ministry faces various challenges. In cooperation with the private sector and governmental agencies, the Ministry of Labor formulated the Saudi Employment Strategy, as well as introducing special programs such as Nitagat, Tagat and Hafiz. The purpose of this paper is to propose and develop a decision support system that addresses labor market dynamics in Saudi Arabia and assess how successful is the implementation of the Saudi Employment Strategy. This will done by creating an integrated and powerful modeling environment that can analyze the present situation of the Saudi labor market and predict future trends. The proposed modeling system combines different types of and levels of analysis including statistical analysis, econometrics, system dynamics and scenario analysis.

Keywords: Labor market, decision support system, statistical analysis, econometrics, system dynamics, scenario analysis.