

A Study of Health Expenditure Efficiency in India: A Data Envelopment Analysis

Sinimole K.R.

Health being a state subject in India, it depends much on the ability of the state to allocate higher budgetary support to health sector. Hence, an analysis of public expenditure on health by states assumes significance. Simply increasing the expenditure on health may not significantly improve the health outputs and outcomes if it is not effective. This paper examines the relative efficiency of the states in handling the health expenditure and health inputs to increase the coverage of health service.

Applying an output oriented DEA model to a sample of states, it examines health expenditure efficiency in India in terms of health service coverage. Out of 29 states which are considered for analysis, 20 (70 per cent) are found to be technically efficient with a technical efficiency score of 100 per cent. The overall scale efficiency average is 0.935 and the standard deviation is 0.131. The findings suggest that not all states are successful in managing the health inputs to achieve optimal output. It is necessary for the inefficient states to benchmark with peers and learn from them. This paper provides evidence of the health expenditure efficiency of the states. The analysis of public expenditure on health by states assumes greater significance because improving the efficiency of public expenditure on health is a priority across them.

I Introduction

Expenditure on health sector is one of the important items of public expenditure and there are variations in what the countries spend on health. High income countries spend more on health while developing countries spend less. India spends only about 1.4 per cent of its GDP on public health despite rapid economic growth over the past two decades. Health outputs and outcomes of developing economies need to be substantially improved. However, simply increasing the expenditure on health may not significantly improve the health outputs and outcomes if it is not effective. Therefore, improving the efficiency of public expenditure on health is a priority across the globe. According to literature, significant inefficiencies exist in the health expenditure in advanced and emerging economies (Herrera and Pang 2005, Gupta, *et. al.* 2007, Verhoeven, *et. al.* 2007, Afonso Schuknecht and Tanzi 2010, and Joumard, *et. al.* 2010). This inefficiency

Sinimole K.R., Assistant Professor, St. Francis Institute of Management and Research, Borivali, Mumbai 400103, Maharashtra, Email: skp_radhas@yahoo.com