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Health Care Convergence Analysis in Turkey on the Province Level: Spatial Quantile Method

Fatma Zeren[a*], Burcu Özcan[b], Emin Yahya Menteşe[a,b]

[a]*Inonu University, Faculty of Economics and Administrative Sciences, Department of Econometrics, Malatya, 44280, Turkey*
[b] *Firat University, Faculty of Economics and Administrative Sciences, Department of Economics, Elazig, 23200, Turkey*

Abstract

The purpose of this study is to investigate the imparity of health care service in Turkey on the province level. Generally, β convergence hypothesis is used for determining whether imparities are lowered. β-convergence refers to an inverse relation between the relative growth rate of macroeconomic variable and its initial level. As a proxy variable for health care service, the number of practicing physicians per 10,000 individuals is used. The convergence hypothesis for health care service during the period from 2002 until 2010 is investigated by using the spatial quantile method. The results confirmed that there is convergence on province-basis for the period studied. In other words, it can be concluded that the imparity in terms of health care services offered to people in Turkey has decreased on the province level. There is also spatial interaction between provinces in terms of health care services.

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Keywords: Health care services; convergence; spatial dependence; province level; spatial quantile approach

1. Introduction

Health means being able show one's skills and not merely the absence of a disease (World Health Organization, 1981: 20; Lusting, 2004:15). Thus, health is a fundamental human right, and health care should be provided when needed for any member of the community. If this requirement cannot be met, both human health and the country will bear immeasurable consequences because the health care service received is also an indicator of human capital,

* Corresponding author. Tel.: +90 422 377 30 00 ; fax: +90 422 341-0043.
E-mail address: fatma.zeren@inonu.edu.tr

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which includes all kinds of contributions to enhancing people's capabilities and skills. In this context, healthier individuals will be instrumental for human capital growth and hence economic growth. Accordingly, authorities aiming to provide for the fundamental rights of their citizens and to improve national welfare should initially offer health care services to all and ensure a fair distribution of the services offered (Kocak, 2009:1-4). In short, health care services are prerequisites to the happiness of individuals and welfare of the community. Thus, health care investments are considered "productive investments." Developed and developing countries try to overcome health care sector issues for the purpose of improving quality of the health care services offered (Tokgoz, 1981:503). Although Turkey intends to offer better health care services to its citizens, there are imparities in health care services offered and distribution of health care service resources. Accordingly, there are regional and provincial differences in terms of having access to health care services, which lead to disparities in regional health, and these differences are the focus points of health care sector discussions in Turkey (TTB, 1992).

The main reason underlying the imparity in health care service distribution between regions and provinces of Turkey is the significant differences in development level between regions and provinces. The regions on the west side of Turkey are the most developed in terms of trading, industry, and the service sector. Thus, they have highly advanced infrastructure, education, health care, communication, and transaction services. However, the east and southeast regions of Turkey are especially known for agriculture and stockbreeding. Income per capita in these regions is lower, and opportunities to benefit from services such as education and health are not as common as the opportunities in western regions.

The imparities and developmental differences between the different regions of Turkey are caused by geographical conditions and climate. Vast mountainsides on the east and northeast of Turkey, negative impacts of the continental climate on daily life, and insufficient transportation, restrict economic activities in these regions and lead to insufficient development. Terrorism, an ongoing, deeply rooted problem in the east and southeast Anatolia regions, has also prevented regional development. For instance, Hakkari, Sirnak, and the Tunceli provinces suffered most from the negative impacts of terrorism and disadvantageous geographical conditions. However, several provinces in the region have shown outstanding development thanks to the recent incentives offered. For example, Gaziantep, Diyarbakır, Malatya, and Sanliurfa have developed further than several other cities. Erzurum, Kars, and Van have likewise been shining out in Turkey in recent years. This situation implies that there is a significant difference between the provinces of a region in terms of development.

Taking into consideration all these conditions and bearing in mind that health care professionals, an indicator of health care services, prefer better social, cultural, geographical, and life conditions, we can observe the distinct differences between the regional and rural-urban areas in the number of doctors per capita. Private health care institutions located in developed regions and provinces play a role in this imparity (Akdur, 2008:17).

The Turkish Constitution of 1982 relieved the government from its liability to offer health care services and gave the government oversight of public and private institutions. This enabled health care institutions to offer centralized services, and Turkey implemented various policies for the purpose of offering better health care services (Pala, 2007:13). Prioritized health care goals and strategies enabling institutions to achieve these targets are determined in coordination with the Ministry of Health's "21 Policies of National Health", a report generated from a survey of health care services in 2001. The main goal of these policies is to improve health care indicators in Turkey, extend life expectancies, improve quality of life, and eliminate the level of health differences between regions and groups as much as possible. Accordingly, one of the most important strategies of future health policy in Turkey (until 2020) is "offering accessible health care service of quality to all segments of the community and generalizing service network in manner diminishing regional differences and ensuring sustainability." For example, it is agreed that the share of working capital granted to personnel will be increased for the purpose of encouraging people to work for health care institutions. Accordingly, establishing at least one working capital institution in each province is accepted. Working capital formalities started in 45 provinces on November 1, 2001, were completed on May 1,