



# Methodological Evaluation of District Hospitals Systems in Ethiopia Using Panel Data for Cost-Effectiveness Analysis

Machew Abebe<sup>1</sup>

<sup>1</sup> Gondar University

**Published:** 19 July 2000 | **Received:** 12 May 2000 | **Accepted:** 03 July 2000

**Correspondence:** [mabebe@yahoo.com](mailto:mabebe@yahoo.com)

**DOI:** [10.5281/zenodo.18709552](https://doi.org/10.5281/zenodo.18709552)

## Author notes

*Machew Abebe is affiliated with Gondar University and focuses on Medicine research in Africa.*

## Abstract

District hospitals in Ethiopia face significant challenges in providing cost-effective healthcare services. A systematic literature review was conducted, focusing on studies that utilised panel data methods to analyse the operational efficiency of district hospitals in Ethiopia. The methodologies evaluated included linear regression models and stochastic frontier analysis (SFA). The application of SFA revealed a significant improvement in cost-effectiveness when adjusting for inefficiencies. Panel data methods, particularly SFA, provide valuable insights into the operational efficiency and cost-effectiveness of district hospitals in Ethiopia. Further research should focus on validating these findings with additional datasets and exploring potential policy implications. Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** *Geographic, Ethiopia, Hospital Systems, Panel Data, Cost-Effectiveness, Methodology, Evaluation*

## ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

**Email:** [info@parj.africa](mailto:info@parj.africa)

Request your copy of the full paper today!

## SUBMIT YOUR RESEARCH

**Are you a researcher in Africa? We welcome your submissions!**

Join our community of African scholars and share your groundbreaking work.

**Submit at:** [app.parj.africa](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge