

# **Health and Economic Growth: A Study of India**

Thesis submitted for the award of the degree of  
**Doctor of Philosophy**  
in  
**Economics**

By

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Under the supervision of  
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## **DECLARATION**

I do hereby affirm that the thesis entitled “**Health and Economic Growth: A Study of India**” submitted to the Gokhale Institute of Politics and Economics, Pune, for the award of the Degree of Doctor of Philosophy in Economics, is a record of original and independent research work done by me under the supervision and guidance of Dr. R. Nagarajan, Associate Professor, Gokhale Institute of Politics and Economics, Pune and has not previously formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or other similar title to any candidate of any University.

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This is to certify that the thesis entitled “**Health and Economic Growth: A Study of India**” is a record of original research work done by **Ms. Ziba Asl Ghorbani** as a Full-Time Research Scholar under my guidance and supervision for the award of the Degree of Doctor of Philosophy in **Economics** at Gokhale Institute of Politics and Economics, Pune. I further certify that this research work has not previously formed the basis for the award of any other Degree or Diploma or Associateship or Fellowship or other similar title to any candidate of this or any other University.

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Pune,  
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**Ziba Asl Ghorbani**



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## LIST OF ABBREVIATIONS

|        |  |
|--------|--|
| ADRL   | Auto Regressive Distributed Lags                       |
| ADF    | Augmented Dickey Fuller                                |
| AIC    | Akaike Information Criterion                           |
| AIDS   | Acquired Immune Deficiency Syndrome                    |
| ASR    | Adult Survival Rate                                    |
| CES    | Coverage Evaluation Survey                             |
| CMH    | Commission on Macroeconomics and Health                |
| CRS    | Civil Registration System                              |
| DF     | Dickey- Fuller   |
| DW     | Durbin–Watson  |
| ECM    | Error Correction Model                                 |
| FGLS   | Feasible Generalized Least-Squares                     |
| FLR    | Female Literacy Rate                                   |
| GDP    | Gross Domestic Product                                 |
| HDI    | Human Development Index                                |
| HIV    | Human Immunodeficiency Virus                           |
| IAS    | Indian Administrative Service                          |
| IMF    | International Monetary Fund                            |
| IMM    | Immunization   |
| IMR    | Infant Mortality Rate                                  |
| LM     | Lagrange Multiplier                                    |
| LMIC   | Low- and Middle- Income Countries                      |
| MDG    | Millennium Development Goals                           |
| MMR    | Maternal Mortality Rate                                |
| NFHS   | National Family Health Survey                          |
| NRHM   | National Rural Health Mission                          |
| NSDP   | Net State Domestic Product                             |
| NSS    | National Sample Survey                                 |
| PCNSDP | Per Capita Net State Domestic Product                  |
| PPP    | Purchasing Power Parity                                |
| LE     | Life Expectancy  |
| LEB    | Life Expectancy at Birth                               |
| OECD   | Organization for Economic Co-operation and Development |
| OLS    | Ordinary Least Squares                                 |
| SBC    | Schwartz Bayesian Criterion                            |
| SRS    | Sample Registration Survey                             |
| TFR    | Total Fertility Rate                                   |
| UFMR   | Under Five Mortality Rate                              |
| UIP    | Universal Immunization Program                         |
| UN     | United Nations   |
| UNDP   | United Nations Development Program                     |
| VPD    | Vaccine Preventable Diseases                           |
| WDI    | World Development Index                                |
| WHO    | World Health Organization                              |

