|  |  |  |  |
| --- | --- | --- | --- |
| Title | *A PLS-SEM Approach to Connect Fertility, GDP, and Childhood Mortality with Female life Expectancy (FLE) in Bangladesh* | | |
| Author(s) Name | Md. Mortuza Ahmmed, Md. Ashraful Babu, Mohammad Abdul Hoque, M. Mostafizur Rahman | | |
| Contact Email(s) | mortuza@aiub.edu | | |
| Published Journal Name | AIUB Journal of Science and Engineering (AJSE) | | |
| Type of Publication | Journal | | |
| Volume | 20 | Issue | 4 |
| Publisher | American International University-Bangladesh (AIUB) | | |
| Publication Date | Dec 30, 2021 | | |
| ISSN | 2520 – 4890 | | |
| DOI | <https://doi.org/10.53799/ajse.v20i4.210> | | |
| URL | https://ajse.aiub.edu/index.php/ajse/article/view/150 | | |
| Other Related Info. | Page 151 - 157 | | |
|  | | | |

|  |  |
| --- | --- |
| Abstract |  |
| A reasonable number of studies on the effect of Female life expectancy (FLE) upon the quality of women's lives in developed countries have been done. Bangladesh lacks such a study. We explore the effect of decreasing fertility and childhood mortality rates on FLE in Bangladesh and evaluate the potential impact of the demographic transition on GDP. Also, we investigate the trends and patterns of different factors from 1995 to 2018. Partial Least Squares-Structural Equation Modeling (PLS-SEM) is functioned to fit an appropriate model to link fertility, GDP, and childhood mortality with FLE. The significance of the relationships has also been assessed. Results indicate that declines in fertility and childhood mortality have made significant improvements in FLE. The prospects of demographic transition due to fertility decline have been analyzed, and challenges to achieve it are highlighted. | |