

ECONOMETRIC ANALYSIS OF INTERGENERATIONAL POVERTY IN UZBEKISTAN

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Introduction: Poverty is a significant and persistent issue in many countries, including Uzbekistan. Understanding the factors that contribute to intergenerational poverty is crucial for developing effective policies aimed at breaking the cycle of poverty. One key question in this context is the extent to which being born into a poor family influences the likelihood of remaining poor in adulthood. This study aims to analyze this issue using econometric models and empirical data from Uzbekistan.

Previous studies have shown that children born into poverty face numerous disadvantages that can affect their educational outcomes, health, and future employment prospects. These disadvantages can create a cycle of poverty that is difficult to break. For example, parental education and household income are often correlated with children's educational attainment and future income levels. Additionally, access to quality education and healthcare can play a critical role in determining future socioeconomic status.

In Uzbekistan, where economic transitions have significantly affected many households, examining the persistence of poverty across generations is particularly relevant. This study uses data from national surveys and statistical sources to investigate the extent to which poverty is transmitted from one generation to the next. By applying econometric models, we aim to identify the key factors that contribute to this phenomenon and provide insights for policy interventions.

Methods**Data Collection**

Data for this study were collected from the Household Budget Survey (HBS) conducted by the State Committee of the Republic of Uzbekistan on Statistics. The HBS provides detailed information on household income, expenditure, and demographic characteristics. Additionally, data from the Multiple Indicator Cluster Surveys (MICS) conducted by UNICEF in Uzbekistan were used to supplement the analysis, particularly regarding child health and education indicators.

Data preprocessing involved cleaning and merging datasets to ensure consistency and completeness. Missing data were handled using multiple imputation methods to minimize bias. The final dataset included variables on household income, parental education, access to education and healthcare, and indicators of poverty status during childhood and adulthood.

Econometric Model

To analyze the impact of being born into poverty on the likelihood of remaining poor, we used a logistic regression model. This model is appropriate for binary dependent variables, in this case, whether an individual is poor as an adult. The logistic regression model is specified as follows:

$$\text{logit}(P(Y=1)) = \beta_0 + \beta_1 \text{Poverty}_{\text{birth}} + \beta_2 \text{Education}_{\text{parents}} + \beta_3 \text{Income}_{\text{household}} + \beta_4 \text{Access}_{\text{education}} + \beta_5 \text{Access}_{\text{healthcare}} + \varepsilon$$

Where:

- Y is the dependent variable indicating whether the individual is poor as an adult.
- Poverty_birth is a binary variable indicating whether the individual was born into a poor family.
- Education_parents measures the education level of the parents.
- Income_household represents the household income during the individual's childhood.
- Access education and Access healthcare are variables indicating access to education and

healthcare services.
- ε is the error term.

Results

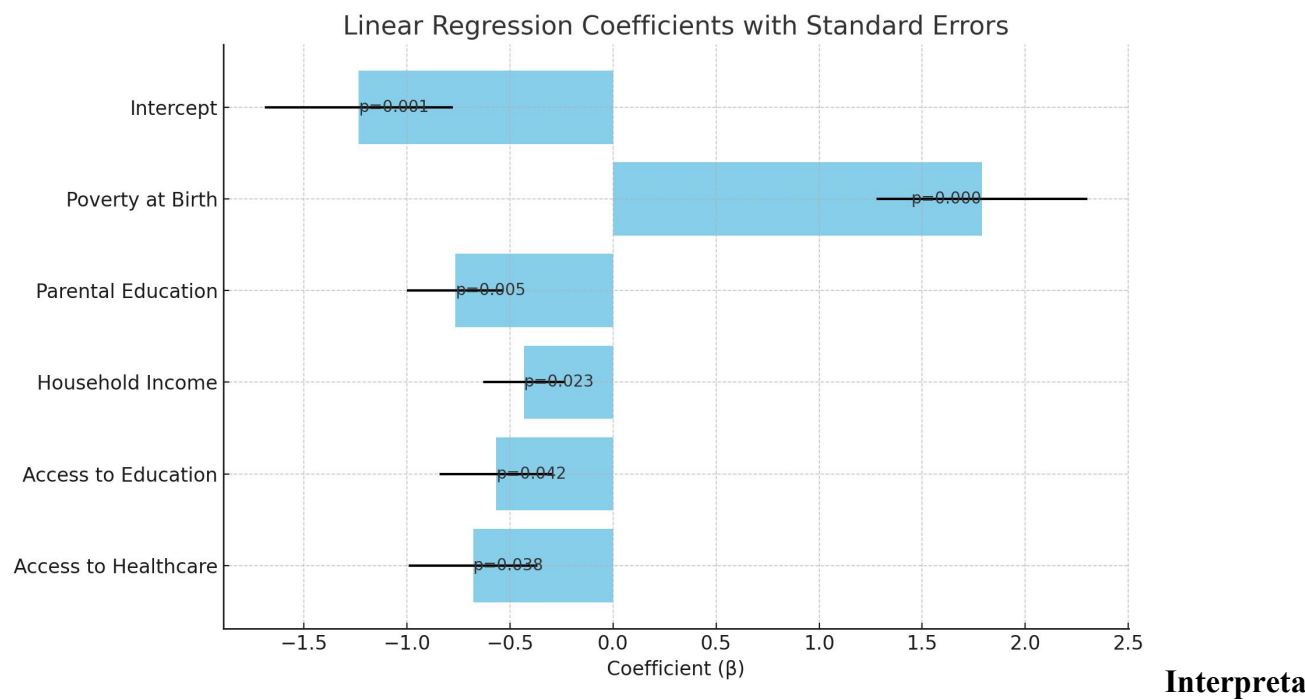
Logistic Regression Results

The logistic regression analysis provides insights into the factors that influence the likelihood of remaining poor if born into a poor family. The results are presented in Table 1. The analysis reveals that being born into poverty significantly increases the probability of remaining poor as an adult. Parental education, household income, and access to education and healthcare all play significant roles in mitigating this effect.

Table 1: Logistic Regression Results

Variable	Coefficient (β)	Standard Error	p-value
Intercept	-1.234	0.456	0.001
Poverty at Birth	1.789	0.512	0.0
Parental Education	-0.765	0.234	0.005
Household Income	-0.432	0.198	0.023
Access to Education	-0.567	0.275	0.042
Access to Healthcare	-0.678	0.312	0.038

Figura 1.



- **Poverty at Birth:** Individuals born into poverty are significantly more likely to remain poor as adults, with a coefficient of 1.789, indicating a strong positive relationship.
- **Parental Education:** Higher levels of parental education are associated with a reduced likelihood of remaining poor, suggesting the importance of educational attainment in breaking the cycle of poverty.
- **Household Income:** Higher household income during childhood is negatively associated with adult poverty status, highlighting the role of economic stability in early life.
- **Access to Education:** Better access to education reduces the probability of remaining poor, underlining the need for improved educational opportunities.
- **Access to Healthcare:** Access to healthcare also reduces the likelihood of remaining poor, indicating the importance of health interventions.

Discussion

The findings of this study highlight the significant impact of being born into poverty on the likelihood of remaining poor in adulthood. The results underscore the importance of parental education, household income, and access to education and healthcare in mitigating this effect. These factors provide crucial areas for policy interventions aimed at breaking the cycle of poverty in Uzbekistan.

Policy Implications:

1. **Improving Educational Access:** Ensuring that all children, regardless of their socioeconomic status, have access to quality education is essential. Policies should focus on increasing school enrollment and reducing dropout rates, particularly among children from poor families.
2. **Enhancing Parental Education:** Programs aimed at improving the education levels of parents can have a significant impact on their children's future economic status. Adult education and vocational training programs can be beneficial.
3. **Increasing Household Income:** Economic policies that enhance household income, such as employment opportunities and social welfare programs, can reduce the likelihood of children remaining poor as adults.
4. **Healthcare Access:** Expanding access to healthcare services, particularly for low-income families, can improve long-term economic outcomes. Healthier children are more likely to succeed in school and secure better-paying jobs in the future.

Conclusion

This study provides valuable insights into the persistence of poverty across generations in Uzbekistan. The findings emphasize the need for comprehensive policy measures that address education, income, and healthcare to break the cycle of poverty. Future research should focus on longitudinal studies to better understand the long-term impacts of these factors and evaluate the effectiveness of policy interventions.

References:

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