

## **Literature Review**

Across disciplines such as economics, sociology, and public policy, a substantial body of research has explored the relationship between socioeconomic factors and individual income levels. Numerous studies have identified key variables that are strongly associated with income. Abdullah (2015) found an increase in income levels as education increases; Rothwell and Massey (2014) found a strong link between growing up in a poor neighborhood and lower income levels; and Akee et al. (2019) observed differences in income between races, with Blacks, American Indians, and Hispanics all having lower income levels than Whites and Asians on average. These factors are often interrelated and have been shown to significantly influence an individual's earning potential. Given these correlations, it is reasonable to explore whether socioeconomic factors can be used to predict income levels.

Modeling techniques such as logistic regression provide a framework to assess the influence of multiple factors on a target variable. For example, Rahman (2013) utilized logistic regression to estimate the likelihood of poverty in Bangladeshi households. Through his regression analysis, he was able to draw a link between gender makeup of the household, age of household head, occupations of the household, and education of the head of the household. Moreover, Bhushan and Narta (2014) employed a logistic regression model to link financial literacy and the socioeconomic conditions of individuals. Notably, women tended to have lower levels of financial literacy compared to men; an increase in education was associated with higher financial literacy; and one's occupation played a role in determining an individual's financial literacy. These results show logistic regression's ability to model binary socioeconomic factors, highlighting its relevance in classifying income levels based on socioeconomic variables.

## Works Cited

Abdullah, A., Doucouliagos, H. and Manning, E. (2015), Does Education Reduce Income Inequality? A Meta-Regression Analysis. *Journal of Economic Surveys*, 29: 301-316. <https://doi.org/10.1111/joes.12056>

Akee, R., Jones, M.R. & Porter, S.R. (2019), Race Matters: Income Shares, Income Inequality, and Income Mobility for All U.S. Races. *Demography* 56, 999–1021. <https://doi.org/10.1007/s13524-019-00773-7>

Bushan, P., & Narta, S.S. (2014), Logistic Regression Model for Predicting Financial Literacy

Rothwell, J. T., & Massey, D. S. (2015). Geographic Effects on Intergenerational Income Mobility. *Economic Geography*, 91(1), 83–106. <https://doi.org/10.1111/ecge.12072>