

Exploring the Correlation Between Net Migration Rates and Birth Rates Overtime: A Cross-National Study*

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Abstract. An Abstract

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Introduction

In today's society, both the demographic and economic implications of migration have become an extremely critical issue in regards to global development. Throughout this project, my goal is to investigate the relationship between net migration rates and total fertility rates (TFR) within host countries overtime, where I ask the question: How do changes in net migration rates correlate with subsequent changes in total fertility rates (TFR) within host countries over time, and what socioeconomic factors might mediate this relationship? When it comes to prior research, the relationship between fertility and socioeconomic development has been widely studied, but net migration in particular, especially at the national level, has not been given as much attention. Most of the existing literature focuses on the fertility behaviors of the migrants themselves, such as how they adapt to host-country culture and norms or how they maintain their own cultural practices. However, there are ample studies that have investigated how net migration flows impact the overall fertility rates of host countries over time. By utilizing a comprehensive data set taken from the World Bank's World Development Indicators, spanning over 60 years and including 217 countries, this project aims to provide a longitudinal, cross-national perspective on a topic that has been very country-specific in past research. Also, by incorporating socioeconomic controls such as GDP per capita, urbanization, and female employment rates, the project will offer better understanding of the factors that could possible mediate the relationship between migration and fertility rate. This will not only help with understanding transitions regarding demographics, but could also aid discussions on policy as well.

*Thanks to everyone for checking this out.

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Data and Methods

The data used for this project were sourced from the World Bank's World Development Indicators (WDI), a publicly accessible database that consists of globally comparable statistics on different developmental metrics throughout different countries. The primary indicators that were chosen for the project are:

- Net Migration (SM.POP.NETM): the difference between number of immigrants and emigrants in a given year
- Total Fertility Rate (SP.DYN.TFRT.IN): the average number of children a woman would bear in her lifetime based on current age-specific rates
- GDP (constant 2015 US\$) (NY.GDP.MKTP.KD): a country's inflation-adjusted economic output
- Urban Population (% of total) (SP.URB.TOTL.IN.ZS): the share of a countries population residing in urban areas
- Employment to Population Ratio, 15+, Female (%) (modeled ILO estimate) (SL.EMP.TOTL.SP.FE.ZS): the percentage of working-age females (15 and older) who are employed

The primary outcome variable (dependent variable) is the Total Fertility Rate (TFR), while the explanatory variable (independent variable) is the Net Migration Rate. To better understand the context and possible confounding factors, socioeconomic indicators including GDP, urban population percentage, and female employment percentages were also included.

This data was both collected and aggregated by the World Bank from international organizations and national statistical agencies, spanning from the years 1960 to 2024 (64 years). The raw data set contains data from 217 countries thus yielding thousands of individual data points. This data set is broadly generalizable as it spans across a wide range of national contexts and has an internationally standardized collection methodology.

Results

Conclusions