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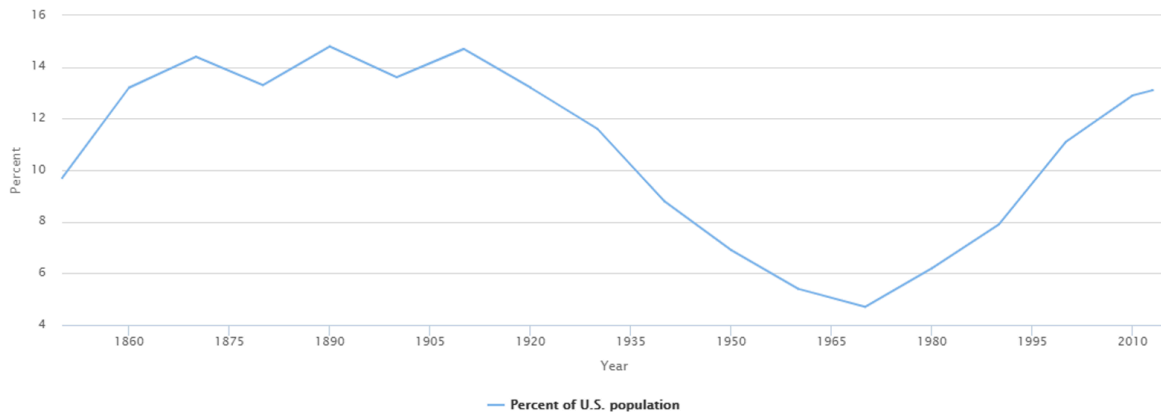
FURCA End of Summer Report

Legal immigration is of significant importance in determining the economic and demographic profile of developed nations, especially of the United States. Through my review of existing research, I found strong evidence that legal immigration contributes positively to the U.S. economy in multiple ways. Contrary to common misconceptions, immigrants generally do not take jobs from native-born workers; instead, they help drive economic growth. Numerous studies show that immigrant entrepreneurs are more likely to start businesses, create jobs, and contribute to innovation, particularly in high-growth sectors. For example, high-skilled immigration is associated with increased productivity and wage growth, especially in STEM and technology fields. While there is a small wage impact for the lowest-earning 10% of native workers—estimated at a 0.2 -- 0.3% decline for every 1% increase in the foreign-born labor share—this effect is limited to low-skilled sectors with intense labor competition. ([Immigration and the Wage Distribution in the United States - PMC](#)) For the vast majority of native workers, immigration has either neutral or slightly positive effects on wages. Research by economists (Ottaviano and Peri) further supports this by showing that, over the long term, immigration has a net positive effect on native-born workers' wages. Overall, the literature reinforces the view that legal immigration, especially when supported by effective policy, enhances national productivity and benefits the economy.

Legal immigrants now make up nearly 14% of the total U.S. population and play a major role in the labor force, tax revenue, and overall economic productivity. Over the years, the share of immigrants in the U.S. population has shifted significantly—reaching its lowest point around 1970, and steadily increasing in the decades since due to changes in immigration policy and global migration patterns. Reforms such as the 1965 Immigration and Nationality Act opened the door for more diverse and skilled immigrants, reshaping the country's labor force and economic structure.

Figure (1-[HHRG-118-JU01-20240111-SD013.pdf](#))

Figure1



In this research, I conducted both a literature review and a regression-based empirical analysis to better understand the economic role of legal immigration in the United States over the past two decades. The main objective was to examine the relationship between the proportion of legal immigrants and key economic indicators at the state level, including GDP growth, employment, and income distribution.

To achieve this, I employed simple linear regression models, panel data analysis, and hypothesis testing methods such as t-tests and F-tests.

The dataset covered a wide time range and included the following indicators:

- Immigrant Share of Population (by state): the percentage of people living in each state who are legal immigrants. 2000–2023
- Gini Coefficient (Income Inequality Index): A measure of income inequality within each state, where 0 means perfect equality and 1 means maximum inequality. -2006–2023
- Unemployment Rate (by state): The percentage of the labor force that is unemployed but actively seeking work in each state. 2006–2008
- Real GDP Growth Rate (by state): The inflation-adjusted rate at which the economy of each state has grown over time. - 2000–2023
- Real Personal Income (by state): The inflation-adjusted average income earned by individuals in each state. -2010–2020:

All monetary values have been adjusted to real terms to account for inflation, allowing accurate comparison over time. The data for these variables were obtained from the U.S. Bureau of Labor Statistics, U.S. Census Bureau, Bureau of Economic Analysis, and the Migration Policy Institute.

Methodology :

Unemployment Model

$$Unemployment_{i,t} = \beta_0 + \beta_1 Immigrant Share_{i,t} + \beta_2 Control Variables_{i,t}$$

GDP Growth Model

$$GDP Growth Rate_{i,t} = \beta_0 + Immigrant Share_{i,t} + \beta_2 Control Variables_{i,t}$$

Income Inequality Model

$$Income Inequality_{i,t} = \beta_0 + Immigrant Share_{i,t} + \beta_2 Control Variables_{i,t}$$

Results 1. Relationship between immigrants share and GDP growth rate + employment rate

Variable	Coefficient	Std. Error	P-value
Intercept	1.1721	0.213	0.000
Immigrant share	-0.128	0.013	0.317

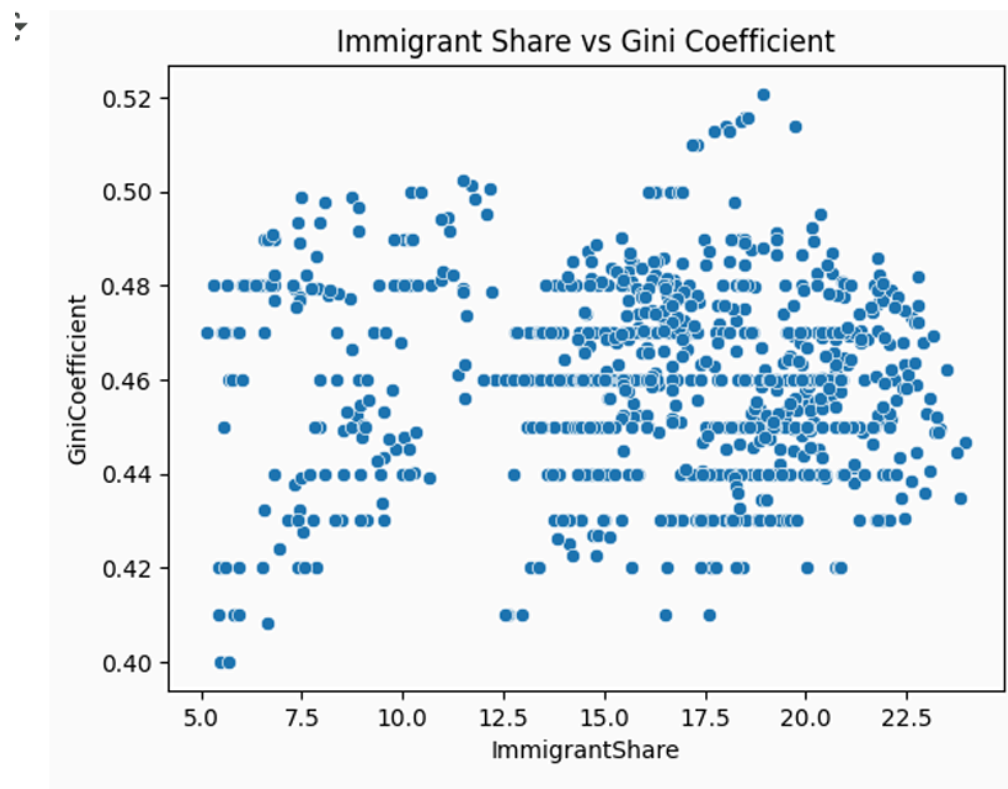
In this regression (2000–2023), I tested whether immigrant share and employment change are linked to GDP growth across U.S. states. The results show a strong positive relationship between employment change and GDP growth (coefficient = 0.97, $p < 0.001$), meaning more jobs are strongly associated with higher economic output. However, immigrant share does not show a significant effect on GDP growth in this model (coefficient = -0.0128 , $p = 0.317$). The model explains about 46% of the variation in GDP growth ($R^2 = 0.464$), indicating other factors also play a role.

Result 2: Relationship between income inequality and share of immigrants in the U.S.

Variable	paramet	Std. Error	t-stats	p-value	Confidence interval 95%
Gini coeff	0.0068	0.0003	25.271	0.0000	[0.0063,0.0073]
Immigrants share	-0.0077	0.0131	-0.5872	0.5573	[-0.0335, 0.0181]

The regression analysis, based on 850 observations across 50 entities and 17 time periods, demonstrates a small but statistically significant positive relationship between immigrant share and income inequality, with a Gini coefficient estimate of 0.0068 ($p < 0.001$). This suggests that an increase in immigrant share is associated with a slight rise in income inequality. However, the effect size is minor. The model explains 50.7% of the variation in income inequality. The F-test for poolability (151.50, $p = 0.0000$) confirms the appropriateness of pooling data across entities, with entity-specific effects included in the model.

My preliminary panel regression and scatter plot (figure 2) analysis shows that there is no strong or consistent relationship between immigrant share and income inequality (measured by Gini Coefficient) across U.S. states from 2006 to 2023. While some states with higher immigrant shares also display higher inequality, the pattern is not uniform or statistically strong.



Result 3: Relationship between unemployment rate and immigrants share

Variable	paramet	Std. Error	t-stats	p-value	Confidence interval 95%
Immigrant share	-0.0013	0.0004	-3.0974	0.0020	[-0.0021,-0.0005]

The fixed effects panel regression analysis, based on 1,200 observations across 50 U.S. states over 24 time periods, reveals a small but statistically significant negative relationship between immigrant share and unemployment rate ($\beta = -0.0013$, $p = 0.002$). This indicates that states with higher immigrant shares tend to have slightly lower unemployment rates, suggesting that legal immigrants may support the labor market rather than displace native-born workers. Specifically, for each 1% increase in immigrant share, the unemployment rate decreases by approximately 0.0013 percentage points. Despite this finding, the model explains only 0.83% of the variation in unemployment, highlighting that other factors such as local economic conditions, industry composition,

and state labor policies likely play a more substantial role in influencing unemployment rates. The F-test for poolability confirms the appropriateness of controlling for state-level differences, with entity-specific effects included in the model.

Conclusion

Overall, my regression analysis provides a nuanced view of how legal immigration relates to key economic indicators in the United States. Employment change shows a strong and significant positive relationship with GDP growth, confirming that job creation is a major driver of economic performance. In contrast, immigrant share does not have a significant direct effect on GDP growth, though it does show a small but statistically significant association with increased income inequality and a slight decrease in unemployment rates. These findings suggest that while immigration may not directly boost economic output at the state level, it may contribute to labor market stability and influence inequality in modest ways. The literature supports these conclusions, consistently showing that immigrants—particularly high-skilled and entrepreneurial ones—play a crucial role in driving innovation, business formation, and long-term wage growth. For most native-born workers, the effects of immigration on wages are neutral or slightly positive, with only a small negative effect concentrated in low-skilled sectors.

As I continue to build on this research, I plan to further explore how legal immigration affects different sectors of the U.S. economy—especially those facing labor shortages or undergoing technological change. I'm also interested in studying how policy reforms can maximize the economic benefits of immigration while addressing challenges like income inequality. The skills and insights I've gained this summer have deepened my understanding of labor market dynamics and economic development, which I hope to apply in future research that bridges both U.S. and global perspectives.

I want to sincerely thank the FURSCA team and my advisor, Dr. Azhar Uddin, for their invaluable guidance, support, and encouragement throughout this project. This experience has been a meaningful and transformative part of my academic journey, strengthening both my research skills and my passion for making a real-world impact. I look forward to presenting my findings at the Elkin R. Isaac Research Symposium in Spring 2026 and at other relevant conferences and academic events in the future.

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