

Do Actions Speak Louder? : Investigating the Relationship between the Heightened Executive Order Usage and US Foreign-Born Labor Market

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Introduction

- Scholars like Gullo et. al discovered foreign-born workers to be significant contributors to US labor force growth, labor market efficiency, and more (Gullo et. al 2020).
- Since 1996, immigration-related policy has been more prevalent in the executive branch than the legislative (Orrenius & Zavodny 2012).
- Executive orders are regulatory guidelines issued by the US President in office. Trump has signed eight immigration-related executive orders within the first month of his second term (Federal Register).
- As there is a lack of existing literature on the relationship between executive orders and the foreign-born labor force, this research attempts to bridge the gap.

Hypothesis: In the short run, the results of executive orders involving the foreign-born labor force differ depending on the prevailing party of the US president.

Data

With the time frame spanning from 2007 to 2025 Q2, all variables' data are collected from a US government agency.

- Real Gross Domestic Product per Capita (RGDPPC), the dependent variable of this study: US Bureau of Economic Analysis
 - FY 2025 Q2: 4.84%
- Foreign-born unemployment level: US Bureau of Labor Statistics
 - Current Population Survey (CPS)
 - including documented and undocumented immigrants.
- President affiliation: US Office of History, Art, and Archives
 - 1 = Republican Party
 - 0 = Democratic Party
- H-1B visa approvals: US Citizenship and Immigration Services & US Department of Labor
 - These visas do not grant US citizenship, as they are temporary.
 - H-1B visas represent the trend of high-skilled immigration in the US economy.
- Executive orders: Office of the Federal Register
 - Including only executive orders that involve immigration.

This time series dataset has **74 observations** within the sample size.

Methodology

The Newey-West method is used for each regression model.

- This is based on Borjas’ economic case study on the relationship between immigration and Gross State Product (GSP) growth (Borjas 2019).
 - Though Borjas used OLS, I used the Newey-West method to correct serial correlation within my model.
- Recession and time are also included in this model to minimize the potential cost of error.
- The foreign-born labor force variables are logged to evaluate a percentage change.

$$\text{Log (RGDPPC)} = \beta_0 + \beta_1 * \log(\text{unemployment level})_i + \beta_2 * \text{time}_i + \beta_3 * \text{party affiliation}_i + \beta_4 * \log(H - 1B \text{ visa approvals})_i + \beta_5 * EOP_i - \beta_6 * EON_i - \beta_7 * \text{recession}_i + E_i.$$

Regression Models

Dependent Variable: LOG_RGDPPC Method: Least Squares Date: 11/05/25 Time: 16:25 Sample: 1 74 Included observations: 74 HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(UNEMPLOYMENT_LEVEL)	-0.023542	0.005195	-4.532043	0.0000
TIME	0.001395	0.000132	10.56692	0.0000
PARTY_AFFILIATION	-0.002910	0.003764	-0.773235	0.4421
LOG(H_1B_APPROVALS)	0.002420	0.002973	0.814166	0.4185
EOP	0.001810	0.000807	2.243076	0.0283
EON	0.000376	0.000468	0.804035	0.4243
RECESSION	0.005695	0.004235	1.344706	0.1833
C	4.865867	0.047524	102.3874	0.0000
R-squared	0.950399	Mean dependent var	4.774662	
Adjusted R-squared	0.945138	S.D. dependent var	0.035114	
S.E. of regression	0.008225	Akaike info criterion	-6.661587	
Sum squared resid	0.004464	Schwarz criterion	-6.412498	
Log likelihood	254.4787	Hannan-Quinn criter.	-6.562222	
F-statistic	180.6582	Durbin-Watson stat	0.340876	
Prob(F-statistic)	0.000000	Wald F-statistic	139.4076	
Prob(Wald F-statistic)	0.000000			

Dependent Variable: LOG_RGDPPC Method: Least Squares Date: 11/05/25 Time: 14:30 Sample: 1 74 Included observations: 74 HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(UNEMPLOYMENT_LEVEL)	-0.042978	0.014043	-3.060448	0.0032
PARTY_AFFILIATION	-0.032079	0.008875	-3.614721	0.0006
LOG(H_1B_APPROVALS)	0.046694	0.012044	3.876882	0.0002
TRUMP	0.026809	0.006938	3.864321	0.0003
EOP	0.005411	0.001837	2.944879	0.0045
EON	0.002216	0.004199	0.527657	0.5995
EON*TRUMP	-0.001734	0.004166	-0.416304	0.6785
C	4.562579	0.199140	22.91146	0.0000
R-squared	0.670103	Mean dependent var	4.774662	
Adjusted R-squared	0.635114	S.D. dependent var	0.035114	
S.E. of regression	0.021211	Akaike info criterion	-4.766824	
Sum squared resid	0.029693	Schwarz criterion	-4.517736	
Log likelihood	184.3725	Hannan-Quinn criter.	-4.667460	
F-statistic	19.15175	Durbin-Watson stat	0.614803	
Prob(F-statistic)	0.000000	Wald F-statistic	52.91670	
Prob(Wald F-statistic)	0.000000			

Findings

- When the unemployment level increases by 1%, real GDP per capita (RGDPPC) decreases by 2.35%, holding all other things constant.
 - There is a significant relationship between unemployment and RGDPPC.
- Recognizing times of recession, party affiliation has no impact on RGDPPC with respect to the foreign-born labor force.
- Positive executive orders are significant and do impact the economy in the short run, specifically RGDPPC.
- Negative executive orders are insignificant and do not impact the economy in the short run.
- Trump’s negative executive orders have a negative but insignificant impact on the RGDPPC with respect to the foreign-born labor market in the short run.

In the short run, there is a statistically significant relationship between positive executive orders and the foriegn-born labor force market, as reflected in real GDP per capita in the short run, regardless of party affiliation.

Limitations of Research

- The earliest foreign-born labor force variables were recorded in 2007 based on FRED.
- There is no categorization of executive orders within the Federal Register, so executive orders are based on interpretation.
- A significant portion of the sample set is within a recession period.

Due to these limitations, I believe future research should analyze this relationship in the long run to depict a more accurate relationship.

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