Apr 28th, 12:00 AM - 12:00 AM

The Effects of Immigration on Developed Countries

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THE EFFECTS OF IMMIGRATION ON DEVELOPED COUNTRIES

Applied Econometrics: Senior Capstone
Senior Scholar's Day
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Background

- Formation of countries
- Conflicting comments regarding immigration and unemployment and overall GDP
- Opposition based on increase in government provided goods, services, and public assistance and unemployment
- Countries with very low population growth rates
- OECD: United States, Canada, Spain, and Japan
- Second biggest economy in the world

Literature Review

- West, D. (2011) – immigrants raised American GDP by $37 billion per year; greatest fear is the “crowding-out” effect
- Treyz and Evangelakis (2018)- what if immigration were to cease?
- Feridun, M. (2007)- immigration does not cause unemployment
- Islam, F. et al (2012)-immigration and GDP can cause each other in long-run
- Boubtane, E. et al (2016)- growth impact is high even in countries that have non-selective migration policies

Econometric Model

- $GDP_{it} = \beta_0 + \beta_1 MS_{it} + \beta_2 LF_{it} + \beta_3 PGR_{it} + \beta_4 TR_{it} + \beta_5 UNEM_{it} + \varepsilon_{it}$

GDP =Gross Domestic Product Per Capita

MS= International Migrant Stock as % of total population

LF= Labor Force Participation Rate ages 15 and up

PGR= Population Growth Rate annual % compared to previous year

TR= Trade as % of total GDP

UNEM= Unemployment Rate % of total labor force

Dependent Variable: GD?
Method: Pooled Least Squares
Date: 12/17/19 Time: 12:55
Sample (adjusted): 1991 2015
Included observations: 25 after adjustments
Cross-sections included: 5
Total pool (unbalanced) observations: 116
White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	116962.5	17390.89	6.725505	0.0000
LF?	-1376.560	273.5722	-5.031798	0.0000
MS?	0.000719	5.49E-05	13.10577	0.0000
PGR?	-6796.938	1836.520	-3.700987	0.0003
TR?	196.9082	74.17935	2.654488	0.0091
UNEM?	-1405.238	262.4219	-5.354879	0.0000

R-squared	0.463977	Mean dependent var	29230.14
Adjusted R-squared	0.439613	S.D. dependent var	14730.78
S.E. of regression	11027.31	Akaike info criterion	21.50448
Sum squared resid	1.34E+10	Schwarz criterion	21.64690
Log likelihood	-1241.260	Hannan-Quinn criter.	21.56229
F-statistic	19.04305	Durbin-Watson stat	0.086140
Prob(F-statistic)	0.000000		

Dependent Variable: MS?
Method: Pooled Least Squares
Date: 11/14/19 Time: 10:18
Sample (adjusted): 1960 2015
Included observations: 56 after adjustments
Cross-sections included: 5
Total pool (unbalanced) observations: 279
White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1856019.	741466.2	2.503174	0.0129
GD?	2.40E-06	1.45E-07	16.47758	0.0000
TR?	-30289.10	17950.79	-1.687341	0.0927

R-squared	0.671224	Mean dependent var	6605136.
Adjusted R-squared	0.668841	S.D. dependent var	10817450
S.E. of regression	6225054.	Akaike info criterion	34.13676
Sum squared resid	1.07E+16	Schwarz criterion	34.17580
Log likelihood	-4759.078	Hannan-Quinn criter.	34.15242
F-statistic	281.7381	Durbin-Watson stat	0.010055
Prob(F-statistic)	0.000000		

REGRESSION RESULTS

Conclusions

- Migrant stock does seem to have a positive correlation to GDP per capita growth
- Developed nations could benefit from pro-growth immigration policies, especially if there is a crisis of a shrinking population