

Economics of Immigration

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Introduction

According to a report published by Makinsey Global Institute (2016)[1] in 2015 more than 90 percent of the world's 247 million migrants moved voluntarily mainly for economic reasons and 10 percent are refugee and asylum seekers who have fled to another country to escape conflict and persecution. About 50 percent of the world's migrants have moved from developing to developed countries where labor productivity is higher hence, mobility magnified their productivity. In 2015 immigrants contributed about \$6.7 trillion (9.4%) of global GDP. North America captured up to \$2.5 trillion of this output. Extensive academic research shows that immigrants do not harm native employment or wages although there can be some short-term negative effects. This paper presents the issues related to economics of immigration from four different aspects: 1. The profile of immigrants in the U.S. using Bureau of Census Data; 2. The effect of Immigrants on Medicare Trust Fund; 3. Effects of undocumented workers on the State/Local Tax and Social Security Trust Fund; and 4. Economic Benefits of Retaining International Students. Summary and conclusions are presented in the last section.

The profile of immigrants in the U.S. Bureau of Census Data 2014-15

One-in-three workers in California and one-in-100 workers in West Virginia are immigrants. Immigrants are persons living in the United States who were not American citizens at birth. This includes naturalized American citizens, legal permanent residents (green card holders), illegal aliens, and people on long-term temporary visas, such as, foreign students or guest-workers.

1. The nation's 42.2 million immigrants (legal and illegal) in 2014 (13.3% of U.S. population), the highest percentage in 94 years. Average immigrant has lived in the United States for almost 21 years.
2. About 25 percent of immigrants above age 18 have less than high school diploma compared to 6 percent of natives. For bachelor's degree natives' have slightly higher share than immigrants but for graduate and professional degree immigrants have higher share. Median annual earnings and household income for immigrants are lower than natives.
3. Overall 21.4 percent of immigrants lack insurance compared to 8.8 percent of natives. Immigrant households have significantly higher share of food assistance (27.3%) and Medicaid (33.6%) compared to native households.

The real debated among the researchers is whether a large influx of immigrants with a specific level of education and training has the potential negative impact on the wages and employment level for the native workers of that same type. There have been a significant number of academic research investigating this issue. Shirerholz (2010) [2] and Costa et al. (2014) [3] found on average

immigrants have a small but positive impact on the labor market outcomes of native-born workers. The key result they found is immigration between 1994 and 2007 raised the wages of the U.S. born workers by 0.4 percent (\$3.68 per week) and lowered the wages of foreign-born workers by 4.6 percent (\$33.11 per week).

Using data from 1990 to 2006, Ottaviano and Peri (2011) [4] found immigration had a small positive effect on the wages of native unskilled workers (0.6% to +1.7%) but had a substantial negative effect (-6.7%) on the previous generation of the immigrants. One possible explanation is that the unskilled natives respond to an increase in immigration by specializing in work that makes better use of their command of English language. The research documented that less educated native workers and immigrants work as complements rather than substitutes for each other. For example, less educated native workers tend to have jobs in manufacturing and mining, while immigrants tend to have jobs in personal services and agriculture. The data also found more educated U.S. born workers tend to work as managers, teachers, and nurses, while immigrants tend to work as engineers, scientists, and doctors. Peri (2010) [5] found over the long-run (10 years and beyond) a 1 percent of net inflow of immigrants employment, increases income per worker by 0.6 to 0.9 percent. This implies that total immigration of the U.S. from 1990 to 2007 was associated with a 6.6 to 9.9 percent increase in real income per worker. Which is equivalent to \$5,100 in yearly income of average U.S. workers in constant 2005 dollars.

The effect of immigrants on Medicare Trust Fund

It is a common concern among the politicians and economists that paying into the program through payroll taxes health care may not be sustainable in the near future. This is due to a rising healthcare spending, expansion of enrollment by baby-boomers, and shrinking size of working-age population. One study estimated the dependency ratio (the ratio of working-age to retirement-age people) among immigrants was 6.5 to 1, compared to 4.7 to 1 for U.S. born.

The annual report of the BTFHI and FSMITF (2010) [6], projected the Hospital Insurance Trust Fund will be exhausted in 2024 implying the revenues and the assets will not be sufficient to cover the full costs of the Medicare program.

However, the role immigrants play in funding Medicare and their use of the program is not well understood. Many immigrants in the U.S. are working-age taxpayers with high labor-force participation rate and few are elderly beneficiaries of Medicare. This demographic profile suggests that immigrants may be disproportionately subsidizing the Medicare Trust Fund under Medicare Part-A. A study by Harvard Medical School professors (Zallman, et al. 2013) [7] found that between 2002 and 2009 immigrants contributed estimated \$115.2 billion more to the Medicare Trust Fund than they took out. The study also found:

1. In 2009 immigrants contributed \$33.1 billion to HITF, or 14.7 percent of all contributions and were responsible for \$19.3 billion of its expenditure (7.9%).
2. This created \$13.8 billion surplus whereas, U.S. born citizens created \$30.9 billion deficit.
3. Noncitizen immigrants (7.1% of U.S. resident population) contributed a net surplus of \$10.1 billion accounting for most of the surplus from immigrants.

4. Among Medicare enrollees, average expenditures were \$1,465 lower for immigrants.
5. Immigrants accounted for 10.6% of SMITF expenditures. Per-capita SMITF expenditures for immigrants were \$175 lower than U.S. born, and per capita expenditure for noncitizens were \$601 lower than U.S. born.

The authors suggested that any policy to reduce immigration would almost certainly weaken Medicare's financial health while an increasing flow of immigrants might bolster its sustainability. Providing a path to citizenship for currently undocumented immigrants would increase payroll taxes by reducing immigrants "off the book" employments and removing barriers that keep them out of higher paying jobs.

Effects of undocumented workers on the State/local tax and Social Security Trust Fund

Public debates over federal immigration reform often suffer from insufficient and inaccurate information about tax contributions of undocumented immigrants at the state level. The fact is undocumented immigrants living in the U.S. pay billions of dollars each year in state and local taxes. To better inform the ongoing debates on immigration policy reform the Institute on Taxation & Economic Policy, produced a report in Feb, 2016 (Christensen et. Al., 2016) [8]. The report provides state-by-state national estimates on the current state and local tax contribution of 11 million undocumented immigrants living in the U.S. as of 2013. It also produces a hypothetical scenario on increase in tax contributions if all these taxpayers were granted legal status via a pathway to citizenship as part of a comprehensive immigration reform. Like any other people living and working in the U.S. undocumented immigrants pay state and local taxes. They pay sales and excise taxes when they purchase goods and services. They pay property taxes directly on their homes or indirectly as renters. Many undocumented immigrants also pay state income taxes. The best evidence suggests at least 50 percent undocumented immigrant households currently file income tax returns using Individual Tax Identification Number (ITINs), and many who do not file income tax returns still have taxes deducted from their pay checks. The findings from the report are as follows:

1. Undocumented immigrants contribute to state and local taxes collectively \$11.64 billion per year.
2. This includes more than \$6.9 billion in sales and excise taxes, \$3.6 billion in property taxes, and \$1.1 billion in personal income taxes.
3. A pathway to citizenship to these immigrants could generate additional \$2.1 billion total state and local taxes per year.

Social Security Trust Fund

The Office of the Chief Actuary (OCACT) [9], Social Security Administration, Actuarial Note No. 151, April 2013, provided the information related to projections of the effects of unauthorized immigrants on the U. S. labor force and the actuarial status of the Social Security Trust Fund.

1. According to Bureau of Census in 2009, 21.7 million who were foreign born living in the U.S. are not an U.S. citizen. Of these 12.6 million individuals were not legal permanent residents of the U.S. Of these, 10.8 million reside in the U.S. in an unauthorized status.
2. Of this 10.8 million, estimated 8.3 million immigrants are working. Of these 2.7 million have SSNs in their names thus can work, pay taxes, and have earnings credited to their records for potential benefits in the future.
3. There are estimated 3.9 million unauthorized immigrants worked in the underground economy in 2010.
4. OCACT estimate there are about 3.1 million unauthorized immigrants working and paying Social Security taxes in 2010 and approximately \$13 billion payroll taxes are collected from these workers and their employers in 2010.
5. For the year 2010 the excess of tax revenue paid to the Trust Fund over the benefits paid from these funds on earnings of unauthorized workers is about \$12 billion cash flow of the program.

The OCACT projections assume that the unauthorized residents work at about the same rate at the rest of the population by age and sex, but earnings are less likely to be reported as taxable and even less likely to be credited for future benefit entitlement. Hence it is suggested that the presence of unauthorized workers in the U.S. has a positive effect on the financial status of the Social Security program.

Economic benefits of retaining international students

The United States being the home of the world's leading universities is the top destination for higher education in the globe. Immigrants have long driven innovation and growth in the U.S. economy. Over one-third of U.S. Nobel Prize winners in physiology and medicine between 1901 and 2012 were foreign-born. According to a study by The Chicago Council of Global Affairs (2016) [10], Open Doors – IIE (2016) [11], and NAFSA (2016) [12], international students in U.S. topped one million for the first time in 2015-16 and they make up of 5% of the students in the U.S. higher education. They contributed more than \$35 billion in the U.S. economy in 2015. The two of the top-10 destinations for growth of international students are California (10.5%) and Florida (10.4%). The Kauffman Foundation Study (2012) found immigrants were behind 25 percent of new high tech companies founded between 2006 and 2012. These firms generating \$63 billion in sales and employing 560,000 workers. Immigrants with advanced degrees are 3 times more likely to file patents than their native-born peers.

A study by Holen (2009) estimated if no green card or H-1B visa constraints had existed in the period 2003-07, an additional 182,000 foreign graduates in science and technology field would have remained in the U.S. Their contribution to GDP would have been \$14 billion in 2008, including \$2.7 to \$3.6 billion in tax payments. The Geography of Foreign Students in U.S. Higher Education -A Joint Project of Brookings and J.P. Morgan Chase (2014) [14].

1. Sixty-seven percent of the foreign students pursuing bachelor's or higher degree are in science, technology, engineering, and math (STEM) or business, management and

marketing fields versus 48 percent of the native students. Failure to retain these F-1 visa holder students represent not just a loss of wage income and tax revenue, but also loss of their ideas and innovations.

2. If 51 percent of engineering doctorate and 41 percent physical sciences doctorate earners from foreign-born students are forced to leave the United States, private and taxpayers investment in research loses value.
3. According NSF 2012 data 176,000 foreign graduate student studied science and engineering in American universities in 2010. In 2009 federal government spent more than \$63 billion on science and engineering research at American universities which helped to finance PhD programs that are heavily populated by foreign students.
4. Study by Peri et al. (2015) [15] found 1 percent increase in college educated workers in STEM-fields increases the wages of other college-educated workers by 5-6 percent in a metropolitan area, local economies have much to gain by retaining these talented foreign-born workers.
5. Forty-five percent of foreign student graduates extend their visa to work in the same metropolitan areas as their college and university.

The study by Chicago Council of Global Affairs Study (2016) estimated the loss of wages and income tax by state due to low transition of F-1 Visa holders in Top-10 States in 2014 are \$8.4 billion and \$238 million, respectively. The figures for undocumented students are \$1.5 billion and \$40 million, respectively.

Higher education contributing to American export

Higher education is a major American service export because foreigners pay U.S. institutions hence, money flows into the U.S. economy from abroad just like when we sell our merchandise or services abroad or a foreign tourist visits our country. Hence, if border control prevents the entry of the foreign students or make them feel unwelcome so they go elsewhere, American jobs and American students pay the price (Startz, 2017) [16]. According to Bureau of Economic Analysis education accounts for 5 percent of the entire national export sector. While the direct spending on education by the foreign students topped \$35 billion in 2015 that does not include the indirect spending on room and board, used cars, pizza shop or anything else that college students spend money on. It is estimated the value of education export if indirect effects are added would be \$50 billion in 2015.

The fact is U.S. currently accounts for 25 percent of the world market for international students in higher education. Universities in UK, Canada, and Australia teach in English and already have a higher ratio of foreign to domestic students than U.S. In addition, China and many universities in Europe have switched part or all of their instructions to English to become more customer-friendly to foreign students. Blocking American exports and moving jobs overseas should not be a part of US national policy. In a recent study by Brookings Institution (Startz, 2017) [17] found 8 percent of our public-school teachers are foreign born and some of them are undocumented and/or on a temporary Visa. If we do not have teachers from abroad or do not allow immigrants who want to be a teacher in America that would affect negatively for states like Florida, Texas, and California where 10-15 percent teachers are immigrants.

Conclusions

America's goal should be an immigration policy that fosters economic growth. A policy that allows people who want to work here to come legally. Since several studies found most of the immigrants' skills are complementary to the skills of native-born Americans. As a result, the inflow of immigrants would make native-born Americans specialize in the skills they have comparative advantage (i.e. English language) and become more efficient. This would increase overall efficiency, productivity, and create jobs for native-born Americans. It is far more easier for talented immigrants to settle in Canada and Australia than in the U.S.

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