

# Immigration Reform, Economic Growth, and the Fiscal Challenge

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## **Executive Summary**

Immigration reform can raise population growth, labor force growth, and thus growth in Gross Domestic Product (GDP). In addition, immigrants have displayed entrepreneurial rates above that of the native born population. New entrepreneurial vigor embodied in new capital and consumer goods can raise the standard of living.

These channels suggest that any discussion of immigration reform that omits the benefits on economic performance is incomplete. Similarly, there will be direct feedback from better economic growth to more revenues, fewer federal outlays, and “dynamic” improvement in the federal budget. Traditional “static” budget analyses of immigration reforms’ impacts will be similarly incomplete.

A rudimentary analysis of these impacts suggests that in the absence of immigration, the population and overall economy will decline as a result of low U.S. birth rates. A benchmark immigration reform would raise the pace of economic growth by nearly a percentage point over the near term, raise GDP per capita by over \$1,500 and reduce the cumulative federal deficit by over \$2.5 trillion.

## **Introduction**

The United States faces interrelated challenges of weak economic growth and dramatic levels and projected growth in federal debt. The threats posed by this environment on economic opportunity and the social safety net have been the focus of recent federal policy debates. Recently, there has arisen bipartisan interest in reform of the laws that govern U.S. immigration policy, covering the core criteria used to grant visas, specialized programs for agriculture and hi-tech industries, border security and visa-tracking capabilities, temporary work programs, the future of undocumented adults and children already present in the U.S., systems for employer verification of work eligibility, and other dimensions.

Inspection of the breadth of the impacts of immigration reform suggests that it will have important economic impacts. This represents an economic policy opportunity at the same time; indeed the degree to which immigration policy *is* economic policy has been traditionally underappreciated in the United States. In this way, immigration reform can be thought of as another tool to address its growth and fiscal challenges.

This short paper examines the linkages between immigration reform, economic growth and budgetary performance. The mechanics of reform and the research literature suggest that immigration reform can raise the overall pace of population growth – indeed, in the absence of immigration, low birth-rates mean that the U.S. population will actually shrink. Because foreign-born individuals tend to have higher rates of labor force participation, this translates into an even more rapid pace of growth in the labor force. At historic rates of population growth, this immediately translates into more rapid overall growth in Gross Domestic Product (GDP).

There are, however, two reasons for even further impacts. Immigrants have traditionally displayed an entrepreneurial bent, with rates of small business ownership above that of the native born population. New

entrepreneurial vigor offers the potential for productivity-enhancing innovations. In addition, to the extent that new innovation is “embodied” in new capital and consumer goods, more rapid economic growth *per se* means that more output will have these advances embedded within, and productivity per worker will rise.

Taken as a whole, these channels of impacts suggest that any discussion of immigration reform that omits the benefits on economic performance is incomplete. Similarly, there will be direct feedback from better economic growth to more revenues, fewer federal outlays, and improved budgetary performance. These links are fundamentally “dynamic” in the jargon of federal budgeting. They stem from the fact that policy changes reshape the growth environment, and thus in turn reshape the budget. Traditional “static” budget analyses will be similarly incomplete.

The remainder is organized as follows. I begin with a brief review of some key facts on U.S. demography and immigration policy, followed by a review of the links between demography and economic performance. In the next sections, I connect the dots and look at the impacts of immigration reform on the economy and the budget. The final section is a summary.

To anticipate the results, in the absence of immigration reform the low levels of U.S. birth rates indicate that the population and overall economy will decline. A benchmark immigration reform would raise the pace of economic growth by nearly a percentage point over the near term, raise GDP per capita by over \$1,500 and reduce the cumulative federal deficit by over \$2.5 trillion.

### **U.S. Demography and Immigration Policy**

According to the Pew Research Center, America’s birth rate has fallen to its lowest level since 1920 when record keeping began. At current rates, there will be an average of 1.93 children born to each child bearing aged woman in the U.S. In contrast, the replacement rate in the U.S. and other developed countries is roughly 2.1. This leads to the most important and striking fact: because native born women are having fewer than an average of 2.1 children in their lifetimes, in the absence of immigration the population of the United States will decline and the size of its economy will contract.

Immigrants have a much higher birth rate than native-born women. For native-born women in 2012, the birth rate was 58.4 per 1,000 women compared to 87.8 for foreign-born women.<sup>i</sup> In 2007, 25 percent of all U.S. births were from foreign-born mothers, compared with 16 percent in 1990. (That share has decreased slightly in more recent years to 23 percent.)

It is often said that demography is destiny. If so, the U.S. destiny is fairly daunting. As Jonathan Last put it, “if you strip these immigrants—and their relatively high fertility rates—from our population profile, America suddenly looks an awful lot like continental Europe, which has a fertility rate of 1.5, not quite as demographically terminal as Japan.”<sup>ii</sup>

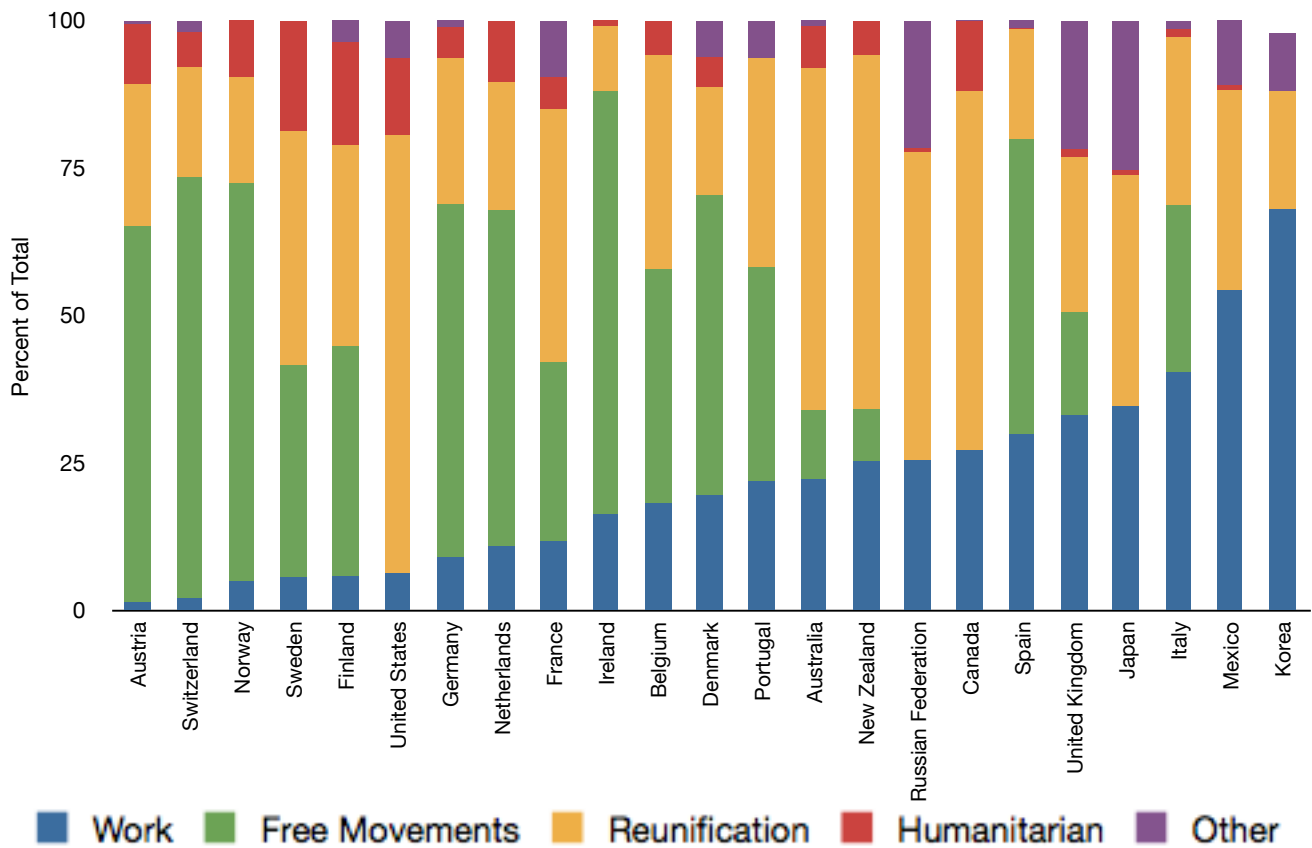
Given that immigration has such profound economic implications, it is interesting to note that immigration to the United States has primarily been concerned with family reunification. In 2010, 74 percent of our permanent immigrants were for purposes of family reunification, greater by far than any other OECD country. In this way, the U.S. remains an outlier when compared to the rest of developed economies, who since the 1980’s all promote reunification to a far lesser extent than we do. Australia, Canada, and the United Kingdom undertook reforms to focus their system on economic growth and less so on reunification.

As evidenced in chart 1, the United States remains behind the bulk of other countries whose immigration policies attract immigrants for purposes of work. In 2010, the United States issued a mere 6.4 percent of visas for economic reasons, compared to the United Kingdom’s 33 percent.

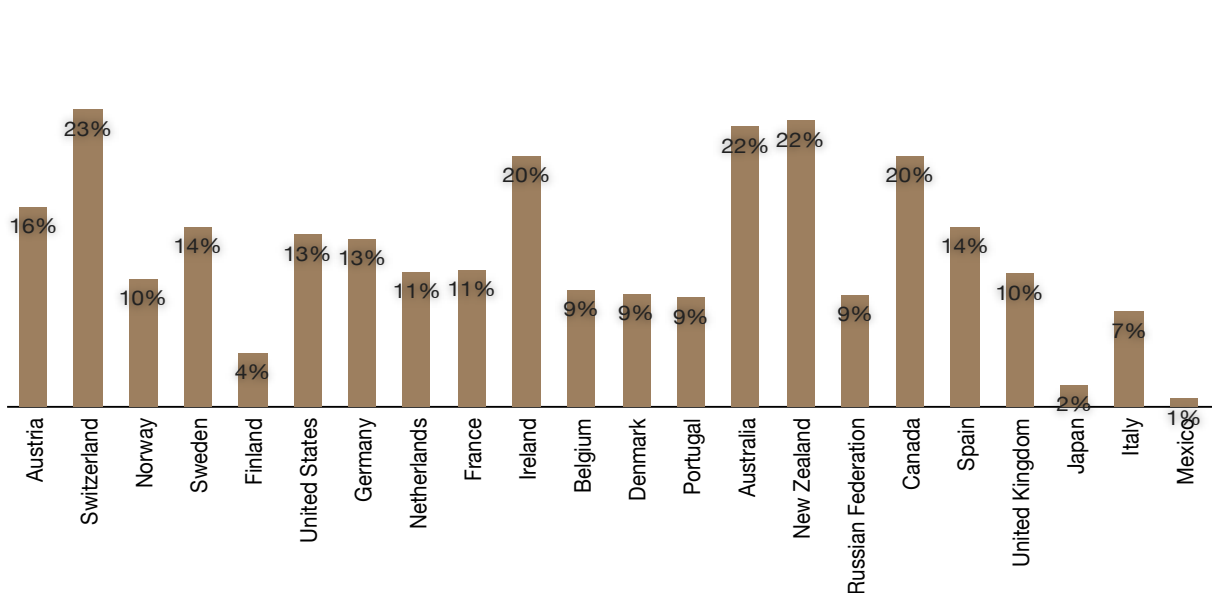
This paucity of economic focus is not due to a lack of applications. The United States has always been a place that immigrants want to come to work and start businesses. According to the US Citizenship and Immigration Service, the denial rate for L-1B visas, those set aside for employees with “specialized knowledge,” reached an all-time high of 27 percent in 2011.<sup>iii</sup>

These trends suggest that any immigration reform will have deep economic implications, that such a reform should be thought as a one additional tool in economic policy, and that reform should be – at least in part – evaluated from an economic perspective.

**Chart 1: Permanent Inflows by Category, 2010**



**Chart 2: Immigrants as a Percentage of Population, 2010**



## Demography and Economic Growth

The building blocks of economic growth are not complex. Total GDP stems from the total number of workers and the average output per worker, or productivity. The pace of overall population growth will raise the number of workers, and thus raise GDP. In addition, the structure of the population – by age, gender, and education – can influence the fraction of the population at work. Growth in the labor force participation rate can, in turn, raise the rate of GDP above the rate of population growth.

Similarly, the structure of the population affects productivity; thus changes in education and other aspects of the population can influence the growth of productivity. However, there is a further impact between demography and productivity that works through the overall pace of economic growth.

Research suggests that innovation is at least in part embodied into the quality of consumer and, especially, capital goods.<sup>iv</sup> To the extent this is true, productivity will be higher as the opportunities for this embodiment to take place are greater. In particular, at higher rates of *overall* GDP growth, there will be greater replacement of existing capital goods and investment in new capital goods.<sup>v</sup>

To close the circle, more rapid overall population growth would generate more rapid GDP growth, which would in turn raise productivity growth. The latter raises GDP per capita, or the standard of living.

## Immigration Reform and Growth

As federal policymakers contemplate immigration reform, it is useful to include in the discussion the demographic channels on economic growth. For example, the difference between the low-immigration and high-immigration projections by the U.S. Census amounts to more rapid population growth of nearly 0.2 percent annually (from 0.81 percent to 0.99 percent).<sup>vi</sup> If we think of the difference between these projections as a hypothetical immigration reform, such a population-enhancing reform would raise GDP growth as well.

As noted above, there would be effects above and beyond that of greater population as well. Labor force participation rates are higher among the foreign-born, especially among males and later in work careers.<sup>vii</sup> Similarly, the rates of entrepreneurship among immigrants are higher than among the native born population, raising the possibility of greater innovation and productivity growth in the aftermath of immigration reform.<sup>viii</sup> Finally, the combined effect of these impacts on economic growth would allow greater productivity growth through the embodiment effect on quality of capital goods.

How large might these effects be? Returning to the Census projections permits one to piece together the kinds of impacts immigration reform might produce. In the interest of being conservative, consider the difference between the “constant net migration” and “high net migration” scenarios.<sup>ix</sup> The more rapid population growth translates directly into more rapid GDP growth rates by 0.25 percent annually over the first 10 years. As noted above, there would be an additional growth impact as the economy benefited from adjusting to a labor force growth rate that would be higher by 3.2 percentage points (after fully phasing in the immigration population). In addition, the more rapid economic growth might raise productivity by another 20 percent through the embodiment effect. Summing the impacts, the overall growth rate in real GDP would rise from 3.0 percent to 3.9 percent, on average annually, over the first 10 years.<sup>x</sup> The upshot is that GDP after 10 years would be higher – a difference of \$64,700 per capita versus \$62,900 per capita. This higher per capita income of \$1,700 after ten years is a core benefit of immigration reform.

## The Economy and the Budget

Immigration reform will also influence the budget outlook through its impacts on economic growth. These impacts are “dynamic” effects in the parlance of federal budgeting. That is, any budgetary analysis that is

conducted strictly using the baseline economic growth impacts will necessarily be incomplete by excluding the impacts that produce more rapid economic growth.

How large are these impacts? One metric is the CBO “rules of thumb” for the linkages between the pace of real GDP growth and the federal budget.<sup>xi</sup> These indicate that over 10 years an additional 0.1 percentage in average economic growth will reduce the federal deficit by a bit over \$300 billion. In this context, the rules imply that over the first 10 years of the benchmark immigration reform, the federal deficit would be reduced by a cumulative amount of \$2.7 trillion.

It is important to emphasize that ballpark estimates of this type are exactly that: ballpark. At even half the estimated size, they should be an important component of the debate. Even more important, it would be even more incorrect to exclude these effects and thus *de facto* assert that they are zero.

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<sup>i</sup> <http://www.pewsocialtrends.org/2012/11/29/u-s-birth-rate-falls-to-a-record-low-decline-is-greatest-among-immigrants/>

<sup>ii</sup> <http://online.wsj.com/article/SB10001424127887323375204578270053387770718.html>

<sup>iii</sup> [http://www.nfap.com/pdf/NFAP\\_Policy\\_Brief.USCIS\\_and\\_Denial\\_Rates\\_of\\_L1\\_and\\_H%201B\\_Petitions.February2012.pdf](http://www.nfap.com/pdf/NFAP_Policy_Brief.USCIS_and_Denial_Rates_of_L1_and_H%201B_Petitions.February2012.pdf)

<sup>iv</sup> For a nice discussion, see <http://www.frbsf.org/publications/economics/letter/2002/el2002-05.html>

<sup>v</sup> Estimates suggest that this channel could be responsible for up to 20 percent of productivity growth. See <http://www.nber.org/papers/w3971.pdf> or <http://www.carnegie-rochester.rochester.edu/april03-pdfs/a03laitnerstolyarov.pdf>

<sup>vi</sup> See <http://www.census.gov/population/projections/data/national/>

<sup>vii</sup> See [http://www.census.gov/compendia/statab/cats/labor\\_force\\_employment\\_earnings/labor\\_force\\_status.html](http://www.census.gov/compendia/statab/cats/labor_force_employment_earnings/labor_force_status.html)

<sup>viii</sup> For a great summary, see <http://www.sba.gov/sites/default/files/rs396tot.pdf>

<sup>ix</sup> The computations here use actual 2012 GDP and economic growth rates in the most recent CBO *Budget and Economic Outlook* as the baseline for comparison.

<sup>x</sup> Some of this rise would be “transitory” in that once labor force participation rates stabilized, the difference would decline to 0.6 percentage points over the longer term.

<sup>xi</sup> See [http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/120xx/doc12039/01-26\\_fy2011outlook.pdf](http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/120xx/doc12039/01-26_fy2011outlook.pdf)