



Immigrant and Native-Born Fertility, 2008 to 2018

By Steven A. Camarota and Karen Zeigler

“Only Immigrants Can Reverse America’s Baby Bust” reads the title of a Bloomberg News column from last year.¹ Former Florida Governor Jeb Bush famously said in 2013 that “Immigrants are more fertile.” Bush and many others have argued for large-scale immigration on the grounds that America’s aging society needs immigrants and their higher fertility to, in Bush’s words, “rebuild the demographic pyramid.” However, demographers have generally found that, although immigration can significantly increase the overall size of a nation’s population, its impact on slowing population aging is quite limited. This analysis looks at the actual fertility of immigrants based on the Census Bureau’s American Community Survey, which includes legal and illegal immigrants. The findings show that immigrant fertility has declined even more steeply than that of the native-born in recent years. As a result, immigration’s small impact on the overall fertility rate has become even more modest.

- The birth rate for women in their reproductive years (ages 15-50) declined nearly three times as much for immigrants (legal and illegal) as for the native-born between 2008 and 2018.
- The birth rate for immigrant women of reproductive age declined from 76 to 61 births per thousand from 2008 to 2018 — a decline of 15 births per thousand. In contrast, native fertility declined from 55 to 50 births per thousand — a decline of five births per thousand.
- Although still higher than that of the native-born, immigrant fertility has only a small impact on the nation’s overall birth rate. The presence of immigrants raises the birth rate for all women in their reproductive years by just two births per thousand (3.9 percent).
- Immigration has a minor impact because the difference between immigrant and native fertility is too small to significantly change the nation’s overall birth rate.
- Even if the number of immigrant women ages 15-50 doubled, along with births to this population, it would still only raise the overall national birth rate an additional 2.6 percent above the current level.²
- In addition to births per thousand, fertility is often measured using the total fertility rate (TFR). The TFR reports the number of children a woman can be expected to have in her lifetime based on current patterns.
- Like the birth rate, the TFR of immigrants has declined more rapidly than that of native-born women. In 2008, immigrant women had a TFR of 2.75 children; by 2018 it had fallen to 2.15 — a 0.61-child decline. For native-born women, it declined from 2.07 to 1.74 — a 0.34-child decline.
- Like births per thousand, the presence of immigrants in the country has only a small impact on the nation’s overall TFR. In 2018, immigrants only increased the nation’s overall TFR by 0.08 children (4.5 percent).
- The current TFR of immigrant women of 2.15 is now just above 2.1, the level necessary to replace the existing population. It seems likely that immigrant fertility will soon dip below replacement level, which means that, in the long run, immigration will add to the aging of American society.

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- Another reason that immigration can add to population aging in the long-term is that for every major racial/ethnic group sending large numbers of immigrants, fertility is below the replacement level among the native-born generation.
- In 2018, three-fourths of immigrant women in their reproductive years were either Hispanic or Asian. Among native-born Hispanic women the TFR in 2018 was 1.77 children, and it was 1.58 children for native-born Asians — both well below replacement level.
- There is now little meaningful difference in the TFR's of native-born Hispanics (1.77), blacks (1.75), and whites (1.73).
- Although immigration has only a small impact on overall fertility and aging, it has a significant impact on population size. For example, new immigrants and births to immigrants between 2000 and 2018 added 35.9 million people to the country — equal to more than three-fourths of U.S. population growth over this time period.³

Discussion

There is no question that America is aging due to both a decline in fertility rates and increases in life expectancy. Many advocates of immigration, like Jeb Bush, argue that immigrants can fundamentally change this fact, partly because of their higher fertility. It is true that immigrants have more children on average than the native-born. But the impact on the nation's overall fertility rate is quite modest no matter how fertility is measured. Therefore, it would be incorrect to argue that the fertility of immigrants “rebuilds the demographic pyramid.” Further, immigrant fertility is falling, so the impact of immigration on aging is falling as well.

Demographers, the people who study human populations, have long known that immigration has only a small impact on the aging of low-fertility countries like the United States. In an important 1992 article in *Demography*, the leading academic journal in the field, economist Carl Schmertmann explained that, mathematically, “constant inflows of immigrants, even at relatively young ages, do not necessarily rejuvenate low-fertility populations. In fact, immigration may even contribute to population aging.”⁴ The Census Bureau also concluded in projections done in 2000 that immigration is a “highly inefficient” means for increasing the percentage of the population that is of working-age in the long-run.⁵ Thomas Espenshade, the former chairman of Princeton's sociology department and director of its graduate program in population studies, has observed, “the effect of alternative immigration levels on population age structure is small, unless we are willing to entertain a volume of U.S. immigration of historic proportion.”⁶ In a 2019 report for the Center for Immigration Studies, published by the authors, we also demonstrated the modest impact of immigration on slowing the aging of American society.⁷

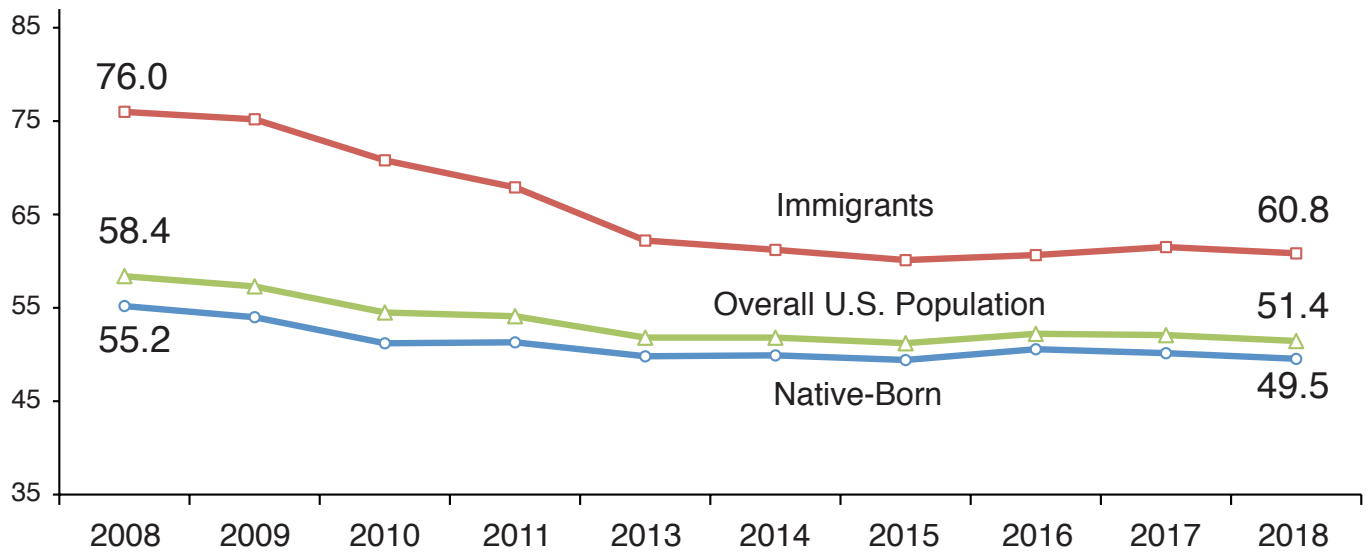
Births per Thousand, Ages 15 to 50

This analysis uses the public-use files of the 2006 to 2018 American Community Surveys (ACS) to measure fertility among immigrants and the native-born. Figures 1 through 3 report births per thousand for immigrants, the native-born, and the total population. (Table 1 reports more detailed information for birth rates.) Figure 1 reports births per thousand for women 15-50. More typically, demographers have examined fertility for women 15-44 and we do so in the next section of this report. However, we follow the Census Bureau's example in a recent publication and report births for women 15-50 in Figure 1.⁸ Doing so provides a more complete picture of fertility in modern America, as there are now a significant number of births to women over age 44 — 103,000 in 2018.

Figure 1 shows that the birth rate for immigrant women 15-50 has declined more significantly than the rate for the native-born. The birth rate for all immigrant women (15-50) declined by 15.2 births (20.0 percent) from 2008 to 2018, while the birth rate for native-born women declined by 5.7 births (10.3 percent). We can also calculate immigration's impact on the overall birth rate for women 15-50 simply by comparing births per thousand for all women (immigrant and native-born), which was 51.4 per thousand in 2018, to the rate for native-born women, which was 49.5 per thousand. Thus, the presence of immigrants in the United States increased the overall birth rate by just 1.9 births per thousand (3.9 percent). Because immigrant fertility has declined more steeply than native-born fertility, the impact of immigrants on the nation's fertility has also declined. In 2008, the presence of immigrants increased fertility for all women (15 to 50) by 3.2 births per thousand, or 5.8 percent. So what was a small impact has become even smaller. As for different groups of immigrants, the largest decline has been for Hispanics. Among the native-born, Hispanics have also experienced a large decline. (See Table 1.)

Figure 1. Births per Thousand Among Women Ages 15-50, 2008-2018

The birth rate of immigrants has declined more than it has for the native-born.
The presence of immigrants only slightly increases overall fertility in the United States.



Source: Public-use files of the 2008 to the 2018 American Community Surveys, except 2012. The Census Bureau reports a problem with the fertility variable in 2012.

Births per Thousand, Ages 15-44

Figure 2 reports births per thousand for women 15-44. The results are very similar to those shown in Figure 1, though the rates for both immigrants and the native-born are higher than in Figure 1, reflecting the exclusion of women over age 44, who have the lowest fertility rates. As in Figure 1, immigrant fertility declined more than native-born fertility. Figure 2 also shows that the immigrant birth rate is higher than the rate for native-born women, but that immigrants only slightly raise the overall fertility rate for women 15-44. In 2018, the fertility of all women (immigrant and native-born) in the United States in this age group was 59.9 births per thousand. If immigrants are not counted, the rate would be 57.1 births per thousand — the rate for native-born women. Thus, immigrants increased the fertility of all women in the United States (15-44) by only 2.8 births per thousand (4.9 percent) in 2018.

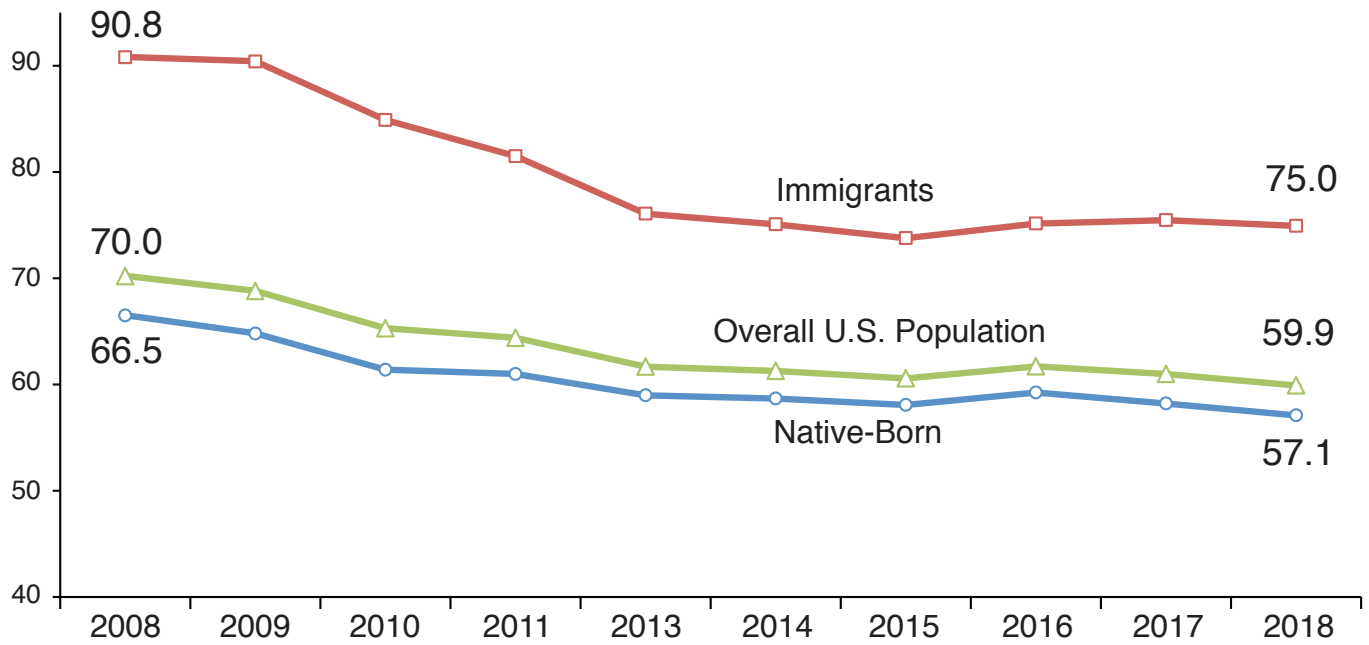
Births per Thousand for the Entire Population

While birth rates are often reported for women in their reproductive years, it is also possible to report births relative to the entire population. This is often referred to as the crude birth rate. This is expressed as births per thousand relative to the country's total population, including children, men, and women outside their child-bearing years. This measure of fertility tends to show a larger impact on the nation's fertility from immigration than looking at women in their reproductive years because the crude birth rate reflects both the higher fertility of immigrants and the somewhat larger share who are in their reproductive years compared to the native-born.⁹ Figure 3 shows, however, that even when the nation's fertility is measured as a crude birth rate, the impact of immigration remains small. The rate for the nation as a whole is 12.1 births per thousand. Without immigrants it would be 11.2 births per thousand — the rate for the native-born alone. The almost one birth per thousand that immigration added to the crude birth rate means that the 44.8 million immigrants in the country in 2018 increased fertility by just 7.9 percent.

Like Figures 1 and 2, Figure 3 also indicates that the fertility of immigrants is falling faster than that of the native-born. Between 2008 and 2018, the fertility of native-born women fell by 2.1 births per thousand, compared to 5.8 births per thousand for immigrants. The decline in fertility for immigrants means their impact on the overall fertility rate of the nation has also become somewhat smaller. In 2008, immigrants increased the nation's overall crude birth rate by 9.8 percent, compared to 7.9 percent in 2018.

Figure 2. Births per Thousand Among Women Ages 15-44, 2008-2018

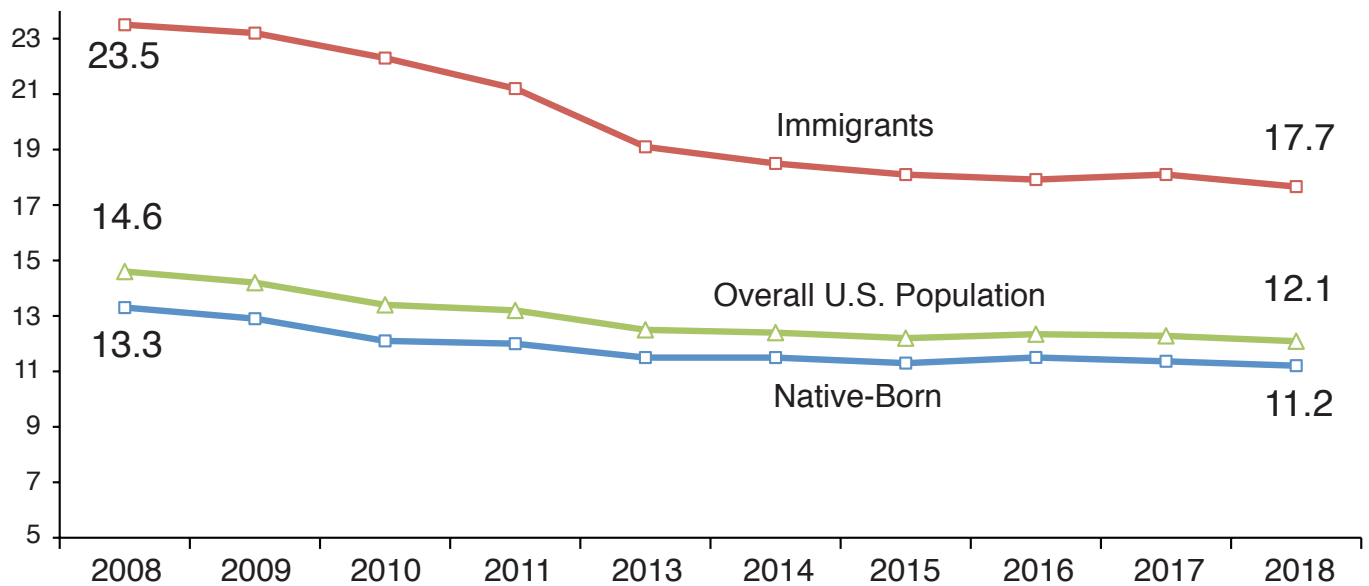
The birth rate of immigrants has declined more than it has for the native-born.
The presence of immigrants only slightly increases overall fertility in the United States.



Source: Public-use files of the 2008 to the 2018 American Community Surveys, except 2012. The Census Bureau reports a problem with the fertility variable in 2012.

Figure 3. Births per Thousand for Total Populations, 2008-2018

The crude birth rate has declined more for immigrants than for the native-born.
The presence of immigrants only slightly increases the overall birth rate in the United States.



Source: Public-use files of the 2008 to the 2018 American Community Surveys, except 2012. The Census Bureau reports a problem with the fertility variable in 2012.

Figure reports the number of births for entire populations, not just women in their reproductive years.

Total Fertility Rate

In addition to births per thousand, demographers often use the total fertility rate (TFR) to measure fertility. The Census Bureau defines TFR as “the average number of children that would be born per woman if all women lived to the end of their childbearing years and bore children according to a given set of age-specific fertility rates.”¹⁰ One way to think about the TFR is that it assumes that when women who are currently in the 20-24 age group move into the 25-29 age group, they will have the same fertility as women in that age group do today. In other words, the TFR uses current fertility rates by age to estimate the fertility of today’s women during their lifetime. (Table 3 at the end of this report shows the calculations used to generate a TFR).

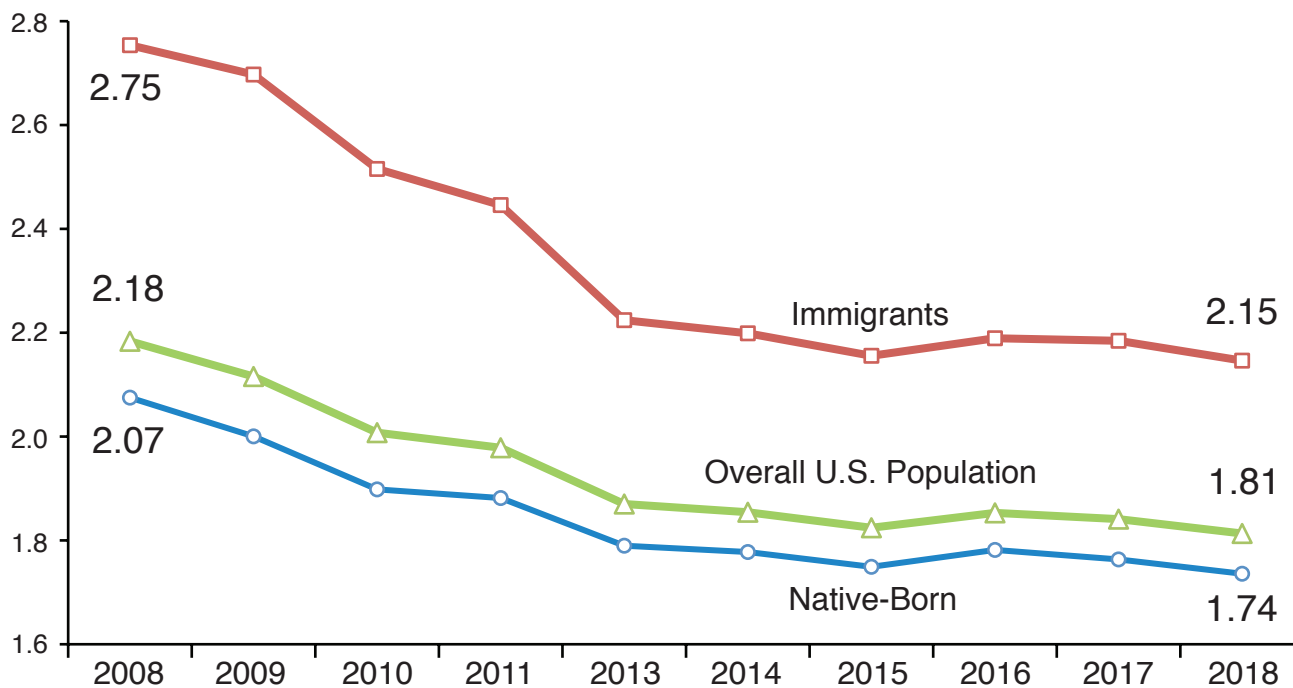
The assumption that younger women will have the same fertility as the current cohort of older women may, of course, turn out to be wrong. But the primary reason the TFR is used so often in population studies is that it provides a shorthand way of looking at the fertility of all women in their reproductive years now and a way to attempt to predict future fertility. As a general rule, it can be said that a TFR of at least 2.1 children per woman is necessary to maintain the current population, in the long run, putting aside people entering or leaving a country.¹¹ Hence a TFR of 2.1 is referred to as replacement-level fertility.

Figure 4 reports the TFR of immigrants and the native-born. Like birth rates, the TFR for immigrants has declined more rapidly than the TFR for the native-born since 2008. In 2008, the TFR for immigrants was 2.75 children, by 2018 it had fallen to 2.15 children — a 0.61-child decline. For native-born women it declined from 2.07 to 1.74 — a 0.34-child decline. Just as immigrants have a small impact on birth rates, they have only a small impact on the nation’s overall TFR. In 2018, immigrants only increased the nation’s overall TFR by 0.08 children (4.5 percent). If present trends continue, the TFR of immigrants may drop below the 2.1 replacement rate in the next few years. If that happens it would mean that, in the long run, the arrival of immigrants would contribute to the aging of American society, as it will be adding people who do not replace themselves. Among immigrants, the largest fall in TFR was among Hispanics (See Table 2).

Figure 4. Total Fertility Rate, 2008-2018

The Total Fertility Rate of immigrants has declined more than for natives.

The presence of immigrants only slightly increases the Total Fertility Rate in the United States.



Source: Public-use files of the 2008 to the 2018 American Community Surveys, except 2012. The Census Bureau reports a problem with the fertility variable in 2012.

The Total Fertility Rate reports the number of children a woman can be expected to have in her lifetime based on current patterns.

A Changing Age Profile

Could a decline in net immigration in recent years have reduced the number of immigrants in their primary reproductive years as fewer young immigrants arrived and those already in the country aged? This might explain the decline in immigrant fertility relative to the native-born. Table 3 reports births for immigrants and the native-born in 2008 and 2018 by five-year age groups and the resulting TFRs. The table shows that birth rates for both immigrant and native-born women fell significantly for those women under age 30. Equally important, the birth rate for immigrants declined more than the rate for the native-born for every five-year age group between 15 and 50, except those 40-44. Therefore, the decline in fertility for both groups would have occurred regardless of changes in the distribution of women across age groups. Further, the fact that for almost all age groups immigrant fertility fell faster than native-born fertility means the difference between the two groups would have narrowed as well.¹²

Conclusion

The idea that immigrants can prevent the aging of society and “rebuild the demographic pyramid” because they are “more fertile” has an intrinsic appeal. It is tempting partly because it seems like a quick fix to problems like funding Social Security and Medicare and avoiding politically painful choices like cutting benefits, raising taxes, or raising the retirement age. Prior research shows that the “immigration will fix aging” argument is largely a mirage. As this analysis shows, immigrants’ somewhat higher fertility has only a small impact on the overall fertility rate no matter how fertility is measured. In fact, even if the number of immigrant women (15-50) doubled, along with the number of births to this population, it would only raise the nation’s overall birth rate for women 15-50 by 2.6 percent above the current level.

Further, the fertility of immigrants is declining. This decline in immigrant fertility means that the small impact immigration has on the overall fertility rate in the United States, and the resulting impact on the aging of America’s population, is becoming even smaller. Fertility is dropping around the world, including from all of the primary immigrant-sending regions. Thus it should come as no surprise that immigrants in the United States are also having fewer children. One can favor reduced or increased immigration for any number of reasons, but America will simply have to look for solutions other than immigration to deal with the challenges associated with an aging society.

Methods and Data Source

This report uses the public-use files of the 2006 to 2018 American Community Surveys (ACS), excluding 2012. Data from 2012 is not used because of a problem reported by the Census Bureau with this variable in that particular year.¹³ The ACS is ideally suited for studying immigrant and native fertility because the survey asks women 15-50 if they had a child in the last year and it also identifies both immigrants and the native-born.¹⁴ The TFRs of immigrants and the native-born in this report are calculated using the age range of 15-50 because the ACS reports data for that population, allowing for a more complete analysis of fertility. However, the TFR can also be calculated for the age group 15-44. The inclusion of those 45-50 has only a tiny impact on the results.¹⁵

Table 1. Births per Thousand, 2006 to 2018

Women 15-50												
Births per 1,000	2006	2007	2008	2009	2010	2011	2013	2014	2015	2016	2017	2018
Total	55.1	55.0	58.4	57.3	54.5	54.1	51.8	51.8	51.2	52.2	52.1	51.4
Native-Born	52.3	51.9	55.2	54.0	51.2	51.3	49.8	49.9	49.4	50.6	50.1	49.5
Immigrants	70.5	72.0	76.0	75.2	70.8	67.9	62.2	61.2	60.1	60.6	61.5	60.8
White	49.7	49.3	52.3	50.8	48.0	49.1	48.2	48.4	48.5	49.5	49.5	49.3
Native-Born	49.5	49.0	51.8	50.3	47.5	48.7	47.8	48.2	48.1	49.1	48.9	48.8
Immigrants	53.7	57.3	62.7	62.7	58.5	57.8	55.6	54.9	57.6	59.0	63.3	61.3
Black	58.8	55.9	61.5	61.5	59.3	54.7	52.7	52.5	51.9	54.2	55.3	54.0
Native-Born	57.5	54.5	60.5	60.3	57.8	52.8	50.9	50.7	49.3	51.5	52.9	50.9
Immigrants	71.4	69.7	70.3	73.7	72.9	71.8	68.5	68.7	72.6	77.7	74.6	78.3
Asian	53.7	55.9	63.0	60.1	55.8	57.0	53.7	52.6	49.9	51.6	52.3	51.4
Native-Born	37.7	40.9	44.7	43.9	37.7	43.7	41.7	41.7	41.0	40.9	38.2	41.7
Immigrants	58.9	60.8	69.1	65.6	62.4	61.8	58.4	57.0	53.4	56.2	58.1	55.7
Other	58.5	62.9	61.1	64.4	57.5	59.6	54.8	50.7	54.3	55.0	49.4	51.7
Native-Born	58.9	61.7	62.2	63.1	55.9	59.8	54.2	50.1	53.4	53.6	48.0	51.5
Immigrants	55.5	73.5	50.0	78.6	70.1	57.3	59.6	55.5	63.2	66.7	61.3	53.4
Hispanic	74.1	75.7	78.2	76.2	71.6	68.0	61.6	51.8	58.8	58.3	57.3	55.4
Native-Born	66.2	68.7	71.2	69.0	65.8	63.1	58.8	59.1	56.2	57.0	55.3	52.2
Immigrants	82.4	83.1	86.0	84.6	78.5	74.0	65.3	64.4	62.4	60.3	60.6	60.7
Women 15-44												
Births per 1,000	2006	2007	2008	2009	2010	2011	2013	2014	2015	2016	2017	2018
Total	66.5	66.6	70.2	68.8	65.3	64.4	61.7	61.3	60.6	61.7	61.0	59.9
Native-Born	63.3	62.9	66.5	64.8	61.4	61.0	59.0	58.7	58.1	59.3	58.2	57.1
Immigrants	84.0	86.4	90.8	90.4	84.9	81.5	76.1	75.1	73.8	75.2	75.5	75.0
White	61.5	61.1	64.3	62.5	59.1	59.9	58.5	58.5	58.6	59.6	58.9	58.4
Native-Born	61.2	60.7	63.8	61.8	58.5	59.4	58.1	58.0	58.0	59.1	58.1	57.6
Immigrants	68.2	71.9	77.8	78.6	72.8	70.6	69.5	68.8	72.3	73.1	78.3	75.8
Black	69.3	66.4	72.3	72.4	69.9	64.2	62.0	61.6	60.4	63.4	64.4	62.3
Native-Born	67.7	64.6	71.1	70.6	67.9	61.7	59.7	59.2	57.2	59.9	61.3	58.3
Immigrants	84.9	84.1	84.7	90.6	88.7	87.8	84.1	84.0	88.3	95.8	90.0	94.6
Asian	62.9	66.2	72.9	69.9	64.3	65.6	63.0	61.3	58.4	60.4	60.6	59.4
Native-Born	40.8	44.6	48.5	46.9	39.8	46.3	44.3	43.9	43.7	43.0	40.3	43.7
Immigrants	71.0	74.0	82.2	78.8	74.5	73.7	71.4	69.3	65.1	69.3	70.4	67.7
Other	67.8	72.5	70.6	73.4	65.3	66.6	61.9	56.6	60.7	61.9	55.0	57.8
Native-Born	67.9	71.1	71.5	71.5	63.0	66.4	60.8	55.5	59.3	59.5	53.2	57.2
Immigrants	66.5	85.6	61.8	94.1	84.0	68.2	72.7	67.0	75.4	84.3	72.9	64.0
Hispanic	84.1	86.3	88.8	86.7	81.2	77.4	70.4	70.0	67.1	66.7	65.4	63.1
Native-Born	73.5	76.3	78.7	76.1	72.2	69.4	64.4	64.3	61.4	62.1	60.2	56.5
Immigrants	95.7	97.5	101.0	99.9	92.9	88.2	79.4	78.9	76.6	75.0	75.0	75.7
Total Population												
Births per 1,000	2006	2007	2008	2009	2010	2011	2013	2014	2015	2016	2017	2018
Total	14.0	13.9	14.6	14.2	13.4	13.2	12.5	12.4	12.2	12.3	12.3	12.1
Native-Born	12.9	12.6	13.3	12.9	12.1	12.0	11.5	11.5	11.3	11.5	11.4	11.2
Immigrants	22.2	22.5	23.5	23.2	22.3	21.2	19.1	18.5	18.1	17.9	18.1	17.7
White	12.1	11.9	12.5	12.0	11.1	11.3	10.8	10.8	10.7	10.8	10.8	10.7
Native-Born	12.1	11.8	12.4	11.9	11.0	11.2	10.7	10.7	10.6	10.7	10.6	10.5
Immigrants	13.3	14.3	15.6	15.7	14.4	14.1	13.5	12.9	13.6	13.8	14.8	14.5
Black	16.6	15.7	17.2	17.2	16.3	14.9	14.2	14.1	13.8	14.3	14.5	14.1
Native-Born	15.9	15.0	16.6	16.5	15.6	14.1	13.5	13.4	12.9	13.3	13.6	13.0
Immigrants	25.5	23.9	24.1	24.8	24.6	23.6	21.8	21.6	23.3	23.9	22.8	23.8
Asian	15.9	16.5	18.2	17.3	16.4	16.7	15.6	15.3	14.4	14.8	15.1	14.8
Native-Born	8.2	8.7	9.6	9.4	8.6	10.0	9.9	10.1	9.9	10.0	9.4	10.6
Immigrants	19.9	20.4	22.5	21.3	20.5	20.2	18.7	18.0	16.8	17.4	18.0	17.0
Other	14.7	15.6	14.9	15.6	14.0	14.3	13.2	12.1	13.1	13.4	11.9	12.5
Native-Born	14.3	14.8	14.8	14.8	13.2	14.0	12.7	11.7	12.5	12.8	11.3	12.3
Immigrants	19.0	25.4	17.1	26.8	22.7	18.4	19.1	17.4	19.4	20.6	19.0	15.6
Hispanic	19.7	19.9	20.3	19.6	19.3	18.2	16.4	16.3	15.6	15.4	15.1	14.6
Native-Born	15.0	15.4	15.9	15.2	15.3	14.7	13.8	14.0	13.4	13.7	13.4	12.8
Immigrants	26.8	26.8	27.5	27.0	26.0	24.4	21.0	20.6	19.7	18.7	18.5	18.2

Source: Public-use files of the 2006 to 2018 American Community Surveys, except 2012. The Census Bureau reports a problem with the fertility variable in 2012.

Table 2. Total Fertility Rate, 2006 to 2018

Total Population												
	2006	2007	2008	2009	2010	2011	2013	2014	2015	2016	2017	2018
Total	2.08	2.07	2.18	2.12	2.01	1.98	1.87	1.85	1.82	1.85	1.84	1.81
White	1.95	1.93	2.02	1.94	1.83	1.85	1.77	1.77	1.75	1.77	1.76	1.75
Black	2.17	2.05	2.24	2.22	2.15	1.96	1.85	1.84	1.81	1.90	1.92	1.87
Asian	1.79	1.86	2.14	1.99	1.87	1.91	1.80	1.76	1.67	1.71	1.73	1.69
Other	2.07	2.25	2.11	2.22	2.01	2.05	1.89	1.74	1.87	1.89	1.72	1.78
Hispanic	2.50	2.58	2.68	2.61	2.45	2.34	2.13	2.12	2.05	2.04	2.01	1.95
Native-Born Population												
	2006	2007	2008	2009	2010	2011	2013	2014	2015	2016	2017	2018
Total	2.00	1.97	2.07	2.00	1.90	1.88	1.79	1.78	1.75	1.78	1.76	1.74
White	1.95	1.91	2.00	1.92	1.81	1.83	1.76	1.76	1.74	1.76	1.74	1.73
Black	2.11	1.99	2.19	2.15	2.07	1.87	1.76	1.74	1.69	1.78	1.81	1.75
Asian	1.44	1.69	1.79	1.72	1.49	1.78	1.59	1.53	1.59	1.51	1.44	1.58
Other	2.08	2.19	2.14	2.15	1.92	2.04	1.85	1.71	1.83	1.83	1.66	1.77
Hispanic	2.17	2.25	2.36	2.25	2.15	2.07	1.93	1.94	1.85	1.89	1.85	1.77
Foreign-Born Population												
	2006	2007	2008	2009	2010	2011	2013	2014	2015	2016	2017	2018
Total	2.49	2.58	2.75	2.70	2.52	2.45	2.22	2.20	2.16	2.19	2.18	2.15
White	1.97	2.12	2.29	2.20	2.08	2.01	1.94	1.90	1.99	2.01	2.13	2.09
Black	2.46	2.45	2.51	2.59	2.54	2.57	2.35	2.37	2.56	2.69	2.58	2.63
Asian	1.88	1.95	2.25	2.09	2.02	2.02	1.93	1.88	1.76	1.82	1.89	1.77
Other	1.99	2.58	1.80	2.72	2.45	2.04	2.06	1.97	2.16	2.34	2.09	1.80
Hispanic	2.90	2.99	3.15	3.11	2.86	2.77	2.46	2.46	2.38	2.37	2.33	2.34

Source: Public-use files of the 2006 to 2018 American Community Surveys, except 2012. The Census Bureau reports a problem with the fertility variable in 2012. The Total Fertility Rate reports the number of children a woman can be expected to have in her lifetime based on current patterns.

Table 3. Birth Rates by Five-Year Cohorts & the TFR for Women 15 to 50

Total Population, 2008					Total Population, 2018				
Age	Number of Births	Population	Births per 1,000	Projected Births During Age Interval ¹	Age	Number of Births	Population	Births per 1,000	Projected Births During Age Interval ¹
15-19	301,695	10,675,350	28.3	141.3	15-19	119,475	10,401,590	11.5	57.4
20-24	982,292	10,206,504	96.2	481.2	20-24	626,040	10,624,127	58.9	294.6
25-29	1,253,157	10,231,737	122.5	612.4	25-29	1,065,295	11,431,640	93.2	465.9
30-34	1,021,905	9,553,367	107.0	534.8	30-34	1,131,028	10,903,020	103.7	518.7
35-39	599,432	10,487,579	57.2	285.8	35-39	697,364	10,837,191	64.3	321.7
40-44	195,486	10,850,437	18.0	90.1	40-44	213,739	10,079,747	21.2	106.0
45-50	88,536	14,014,324	6.3	37.9	45-50	102,911	12,628,548	8.1	48.9
15-50	4,442,503	76,019,298	58.4		15-50	3,955,852	76,905,863	51.4	
Total Fertility Rate:² 2.18					Total Fertility Rate:² 1.81				
Native-Born Population, 2008					Native-Born Population, 2018				
Age	Number of Births	Population	Births per 1,000	Projected Births During Age Interval ¹	Age	Number of Births	Population	Births per 1,000	Projected Births During Age Interval ¹
15-19	270,211	9,948,822	27.2	135.8	15-19	107,795	9,695,357	11.1	55.6
20-24	843,026	9,047,792	93.2	465.9	20-24	560,917	9,523,118	58.9	294.5
25-29	1,035,393	8,655,746	119.6	598.1	25-29	899,339	9,858,804	91.2	456.1
30-34	765,525	7,578,186	101.0	505.1	30-34	880,922	8,850,541	99.5	497.7
35-39	429,000	8,341,787	51.4	257.1	35-39	505,062	8,487,318	59.5	297.5
40-44	140,704	8,846,064	15.9	79.5	40-44	136,577	7,691,257	17.8	88.8
45-50	66,146	11,862,935	5.6	33.5	45-50	74,495	9,799,511	7.6	45.6
15-50	3,550,005	64,281,332	55.2		15-50	3,165,107	63,905,906	49.5	
Total Fertility Rate:² 2.07					Total Fertility Rate:² 1.74				
Foreign-Born Population, 2008					Foreign-Born Population, 2018				
Age	Number of Births	Population	Births per 1,000	Projected Births During Age Interval ¹	Age	Number of Births	Population	Births per 1,000	Projected Births During Age Interval ¹
15-19	31,484	726,528	43.3	216.7	15-19	11,680	706,233	16.5	82.7
20-24	139,266	1,158,712	120.2	601.0	20-24	65,123	1,101,009	59.1	295.7
25-29	217,764	1,575,991	138.2	690.9	25-29	165,956	1,572,836	105.5	527.6
30-34	256,380	1,975,181	129.8	649.0	30-34	250,106	2,052,479	121.9	609.3
35-39	170,432	2,145,792	79.4	397.1	35-39	192,302	2,349,873	81.8	409.2
40-44	54,782	2,004,373	27.3	136.7	40-44	77,162	2,388,490	32.3	161.5
45-50	22,390	2,151,389	10.4	62.4	45-50	28,416	2,829,037	10.0	60.3
15-50	892,498	11,737,966	76.0		15-50	790,745	12,999,957	60.8	
Total Fertility Rate:² 2.75					Total Fertility Rate:² 2.15				

Source: Public-use files of the 2008 and 2018 American Community Surveys.

The total fertility rate reports the number of children a woman can be expected to have in her lifetime based on current patterns.

¹ Multiplies the number of births per 1,000 by five for the number of years in each age cohort.

² Sums the projected number of births for the age cohorts and divides by 1,000.

End Notes

¹ Adam Minter, [“Only Immigrants Can Reverse America’s Baby Bust: Asia’s aging societies show that other well-meaning policies simply can’t boost birth rates enough”](#), Bloomberg, May 19, 2019.

² In 2018, the total population of women 15 to 50 in the United States was 76.906 million, and there were 3.956 million births, making for 51.4 births per thousand. Of this population, there were 13 million immigrant women who had 790,745 births in that year. If the number of immigrant women was doubled to 26 million and the number of births to immigrant women also doubled to 1.581 million, then the total female population would be 89.906 million and the total number of births would be 4.747 million, making for 52.8 births per thousand, or 2.6 percent above the overall (immigrant and native-born combined) current birth rate of 51.4 births per thousand.

³ There were 21.7 million immigrants in the country in 2018 who indicated that they had arrived between 2000 and 2018, according to the 2018 ACS. In addition, there were 15.1 million U.S.-born children of immigrants born between 2000 and 2018 living in the country, according to the 2018 Current Population Survey’s Annual Social and Economic Supplement (CPS ASEC). Unlike the ACS, which does not ask each person about their mother’s place of birth, the ASEC does ask this question, making it straightforward to calculate the number of U.S.-born children in the country age 18 or younger with an immigrant mother. (It should be noted that many of these births were to immigrant women who arrived prior to 2000.) Adding the 21.7 million post-2000 immigrants in the country to the 15.1 million births to immigrants since 2000 means that immigration added 36.8 million people to the U.S. population between 2000 and 2018. It is worth adding that population growth in the United States is estimated by the Census Bureau from July 1 to July 1 of each year. If we wish to estimate immigration’s impact on the population since 2000, it would make sense to exclude those immigrants who arrived in the first half of 2000 as they were already included in the 2000 population estimates for July 1 of that year. Doing so means that immigration added 35.9 million people, equal to 79 percent of population growth over this time period.

⁴ Carl P. Schmertmann, “Immigrants’ Ages and the Structure of Stationary Populations with Below-Replacement Fertility”, *Demography*, Vol. 29, No. 4, 1992.

⁵ The 2000 Census Bureau population projections mentioned above can be found [here](#).

⁶ Thomas J. Espenshade, [“Can Immigration Slow U.S. Population Aging?”](#), *Journal of Policy Analysis and Management*, Vol. 13, No. 4 (Autumn, 1994), pp.759-768.

⁷ Steven Camarota and Karen Zeigler, [“Projecting the Impact of Immigration on the U.S. Population: A look at size and age structure through 2060”](#), Center for Immigration Studies, February 2019. The findings of that report confirm an older analysis of Census Bureau projections done by the Center for Immigration Studies and Decision Demographics. See Stephen Tordella, Steven Camarota, Tom Godfrey, and Nancy Wemmerus Rosene, [“Evaluating the Role of Immigration in U.S. Population Projections”](#), paper presented at the Annual Meeting of the Population Association of America, May 2012.

⁸ Lindsay M. Monte and Renee R. Ellis, [“Fertility of Women in the United States: 2012”](#), U.S. Census Bureau, 2014. The Bureau reports more recent years at their website using the 15 to 50 age range, [here](#).

⁹ In 2018 of all immigrants 22.7 percent were women ages 15 to 44; 19.2 percent were native-born women in this age group.

¹⁰ See the Census Bureau glossary of terms page, [here](#).

¹¹ The idea behind the 2.1 number is that each woman has to have one child to replace herself and one man in order for the population to reproduce itself. It has traditionally been assumed that 2.1 children rather than 2.0 children are necessary to sustain the population, partly because there are slightly more boys than girls born each year. It should also be added that if life expectancy is increasing (as it has for more than a century) it might be some time before the population actually declines, even if fertility drops below 2.1.

¹² The share of immigrants in the younger age groups, which have higher fertility, did fall slightly between 2008 and 2018. Thus, the aging of immigrants played a small role in their fertility decline. If we take the fertility rates for immigrant women

in each group in 2018, but adjust the population shares in each age group so they are what they were in 2008, almost all of the decline in immigrant fertility would still have occurred. Had there not been a slight shift of immigrants into the older age cohorts, fertility for immigrant women 15-50 would have declined to 63.9 births in 2018 — a 12.1 births per-thousand decline since 2008. As we have seen, births per-thousand for the 15-50 age group declined from 76 to 60.8 births for immigrant women — a 15.2 births per-thousand decline. This means that 80 percent of the decline in immigrant fertility would have occurred regardless of their aging into cohorts with lower fertility. The story for the native-born is somewhat different. Among the native-born, the share in the age groups with higher birth rates actually increased slightly. If we take the fertility rates for native-born women in each group in 2018, but adjust the population shares in each group so they are what they were in 2008, the native-born rate would have declined more than it actually did. As we have seen, births per thousand for the 15-50 age group declined from 55.2 to 49.5 births per thousand for native-born women — a decline of 5.7 births. Had there not been a slight shift of native-born women into the higher fertility cohorts, native-born fertility would have declined to 45.6 births per thousand in 2018 — a decline of 9.6 births per thousand. This means that because native-born women 15-50 became a little more youthful, the fertility for the native-born overall did not decline as much as it would have otherwise. Nonetheless, the decline for native-born women would still have been a good deal less than the 15.2 births per thousand decline for immigrant women and the fertility rates of immigrants and the native-born still would have converged.

¹³ In its most recent source and accuracy statement for the 2012 ACS, the Census Bureau states that, “the ACS PUMS [Public Use Micro Sample] file has suppressed variables in the 2012 year PUMS file for a limited number of geographies. This is due to non-sampling error or issues with interpreting the recode. ... The fertility variable (FER) was suppressed in 59 PUMAs [Public Use Microdata Areas] within states (sic) Florida, Georgia, Kansas, Montana, North Carolina, Ohio and Texas.” This comes to 1.8 million (weighted) cases with missing values for the fertility question. Because it is not clear what biases the missing values introduced, we have chosen to exclude the 2012 ACS from this analysis. See p. 10 in [“PUMS Accuracy of the Data \(2012\)”](#).

¹⁴ The Census Bureau’s definition refers to immigrants as the “foreign-born”. The foreign-born are those who are not U.S. citizens at birth and include naturalized American citizens, legal permanent residents (green card holders), illegal immigrants, and long-term visitors such as guestworkers and foreign students.

¹⁵ In 2018, the TFR for native-born women when those 45 and over are included was 1.74; without them it was 1.69. For immigrants it was 2.15 when women 45 and older are included and 2.09 when they are excluded.