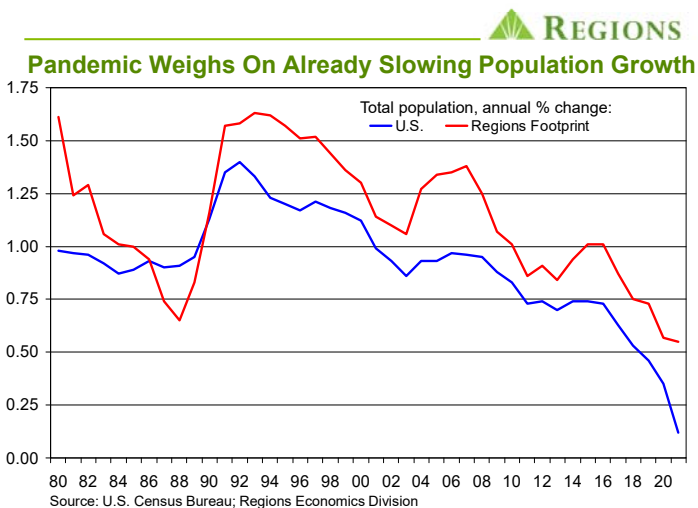




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2021 State Population: Regions Footprint

The U.S. Census Bureau recently released comprehensive data on 2021 state level population, including the components of change in population. The most striking element of the data is the horrible toll exacted by the pandemic, which is most visible in the sharp deceleration in the rate of population growth but is also clear in the data on the components of population change. In several states within the Regions footprint, the number of deaths exceeded the number of births in 2020 and 2021, while in the remaining states the gap between births and deaths narrowed significantly. On the flip side, many in-footprint states have seen meaningful increases in net domestic in-migration over the past two years, which has been the primary source of population growth since the onset of the pandemic. It remains to be seen how long the changes in population growth patterns brought about by the pandemic will persist, and whether, or to what extent, the effects of the pandemic will impact the longer-term trend rate of population growth. Recall that patterns of domestic migration were significantly impacted by the 2007-09 recession and, in many states, it was several years before domestic migration patterns again resembled the patterns that had been in place prior to that recession. It is likely the changes brought about by the pandemic will be similarly long-lasting, particularly with many workers now having greater latitude in determining where they work. Note that comparable data on the metro area are not yet available, so this discussion will be on the national and state levels.

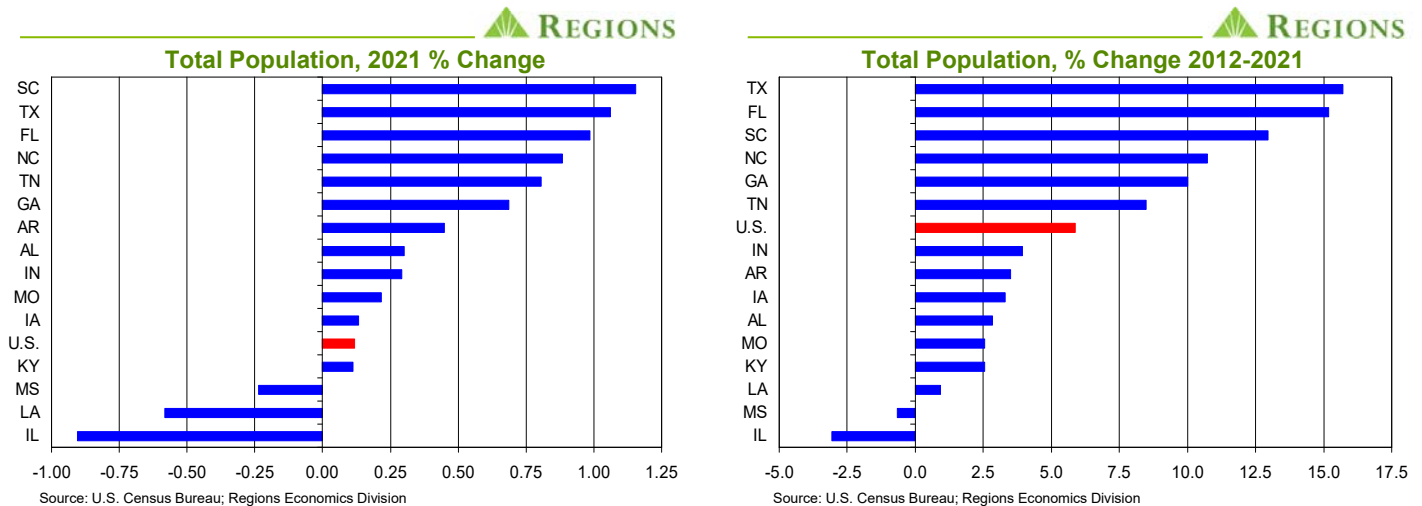


As seen in the chart to the side, total population growth in the Regions footprint has consistently outpaced growth for the U.S. as a whole. Indeed, the last year in which population growth in the footprint lagged growth for the U.S. as a whole was 1989. Overall trends in population growth have been similar, i.e., growth has been decelerating for some time, mainly due to falling birth rates. In addition, net migration into the Regions footprint dropped off sharply in the years following the 2007-09 recession though, interestingly enough, the past two years saw a sharp increase in net domestic in-migration into the footprint. The population of the Regions footprint has consistently grown at a faster pace than that of the U.S. as a whole, but as we routinely point out in our presentations of data on the state and metro area levels, looking at the data for the footprint as a whole masks what are often stark differences across individual states/metro areas. The same is true with the data on population and the components of change.

For the U.S. as a whole, total population barely budged in 2021, rising by just 0.12 percent, the smallest annual increase on record in data going back to 1900. Population increased by 392,665 persons in 2021; to put this in perspective, in the ten years prior to the pandemic the average annual increase in the total population of the U.S. was 2,155,842 persons. The total population of the 15-state Regions footprint grew by 0.55 percent in 2021, reflecting an increase of 731,337 persons. Note that this is substantially greater than the increase in population for the U.S. as a whole, with the difference accounted for by significantly higher net domestic migration into the Regions footprint, i.e., people moving from other states into states within the Regions footprint. Between 2014 and 2019, the footprint accounted for just over 55 percent of the net increase in U.S. population, with this share jumping to 76.1 percent in 2020 before the footprint more than accounted for total U.S. population growth in 2021.

Eighteen states sustained population losses in 2021, of which three – Illinois, Louisiana, and Mississippi – are within the Regions footprint. The total decline in population amongst the 18 states that suffered population losses was 884,271 persons, while the total increase in population amongst the remaining states was 1,276,936 persons. For some states, population losses are nothing new; Illinois has seen its population decline in eight consecutive years, with Louisiana having seen population declines in five consecutive years. For many states, however, the effects triggered by the pandemic were of sufficient magnitude to turn what had been slowing population growth into population losses, particularly states, such as New Jersey and Pennsylvania, which have long been plagued by flat to only slightly

growing populations. Higher tax burdens and housing costs have for some time been a catalyst for domestic migration, as people have fled higher-cost states, such as California, Illinois, New Jersey, and New York, in favor of lower-cost states such as Florida, Tennessee, Texas, and Utah. With the pandemic having resulted in more flexible working arrangements for greater numbers of workers, these patterns in domestic migration have been amplified over the past two years. Pronounced changes in domestic migration have for some states compounded the effects of secular declines in birth rates and what over the past two years have been increased mortality rates, resulting in outright population declines. In other states, in-migration has mitigated the effects of lower birth rates/increased mortality rates, such that total population has continued to grow. While mortality rates will at some point begin to decline, birth rates are unlikely to rise to a meaningful degree any time soon, so for many states one of the key determinants of the change in population will be the extent to which domestic migration either works against them or in their favor. As such, factors like tax burdens, housing costs, and business costs will play key roles in population patterns.

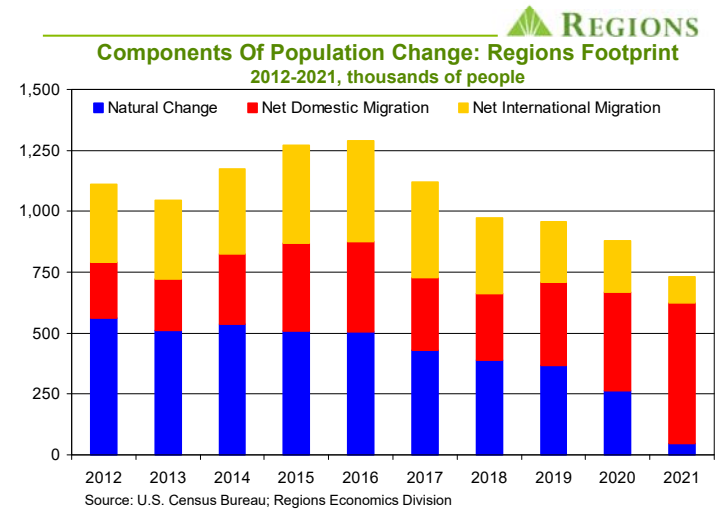
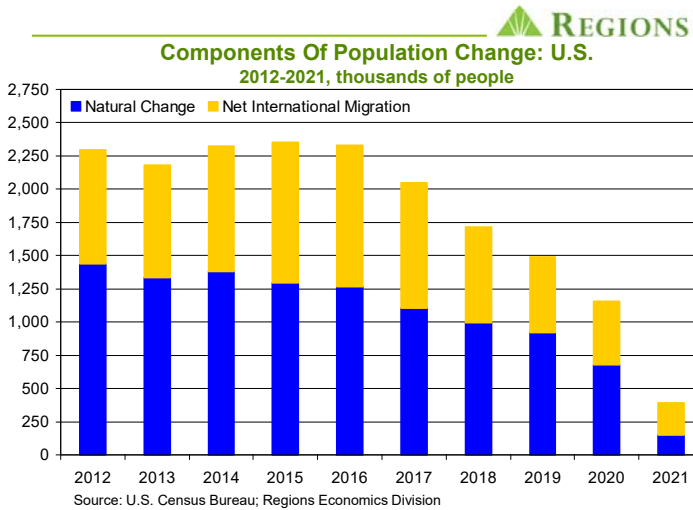
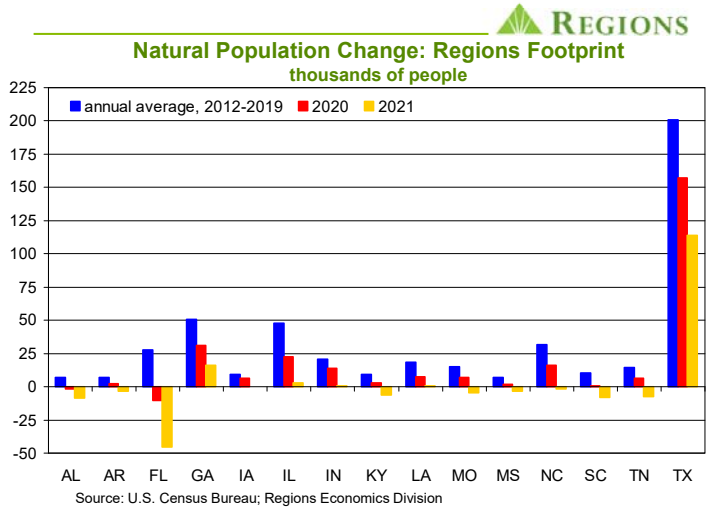


The first chart above shows the 2021 change in total population for the U.S. and each state in the Regions footprint. With an increase of 1.15 percent, South Carolina posted the largest percentage increase in total population of any of the in-footprint states in 2021, followed by Texas (1.06 percent), Florida (0.99 percent), and North Carolina (0.88 percent). At the other end of the spectrum, Illinois saw its population decline by 0.90 percent in 2021, while Louisiana’s population declined by 0.58 percent and Mississippi’s population declined by 0.24 percent. With an increase of 2.88 percent, Idaho posted the nation’s largest percentage increase in total population in 2021, followed by Utah (1.72 percent) and Montana (1.66 percent, though the ongoing drama surrounding the Dutton family has clearly acted as a drag on Montana’s population growth). With a decline of 2.90 percent, Washington DC saw the largest percentage decline in population in 2021, with New York seeing its population decline by 1.58 percent. It is interesting to note that, in terms of absolute numbers, Texas (up 311,337) and Florida (up 214,232) posted the nation’s largest population increases in 2021. The second chart above shows the total change in population from 2012 through 2021, and it comes as no surprise that Texas and Florida posted the largest increases over this period. What is interesting is that over this extended period six of the 15 states within the Regions footprint posted population growth above the U.S. average, but in 2021, 11 of the 15 in-footprint states did so. While the six fastest growing states within the footprint have seen above-average growth for years, the question is whether the above-average growth in the other states in 2021 will persist, or whether they will fall back to the rest of the pack as the effects from the pandemic fade.

The effects of the pandemic can be more clearly seen by examining the components of population change. Changes in population can be broken down into three main components: 1) “natural” change, or, the difference between the number of births and the number of deaths in a given geography in a given time period; 2) net domestic migration, or the difference between the numbers of people who move into and out of a given geography within the same country in a given time period; and 3) net foreign migration, or, the difference between the numbers of people who move into and out of a given geography from/to abroad in a given time period. Obviously, for the U.S. as a whole, net domestic migration is by definition equal to zero. As noted earlier, natural change has been a drag on overall population growth over the past several years, reflecting an aging population and fewer births. That drag has intensified considerably over the past two years as mortality rates have risen since the onset of the pandemic, to the point that in 2021 there were 25 states in which the natural change in population was negative, i.e., the number of deaths exceeded the number of births, with nine of these states included in the Regions footprint. Florida’s natural change in population in 2021 was -45,248 persons, the largest natural decline in population of any state and the second consecutive year in which Florida’s natural change was negative. Conversely, the natural change

in population in Texas in 2021 was 113,845 persons, easily the largest increase in the U.S. For the U.S. as a whole, the natural change in population in 2021 was 148,043 persons, a long way from the average annual natural increase of close to 1.3 million persons in the decade prior to the pandemic, though the natural change had been diminishing in the most recent years as declines in birth rates became more pronounced.

To put in perspective how the pandemic has impacted population growth patterns, in 2019 there were only four states – Maine, New Hampshire, Vermont, and West Virginia – with natural declines in population, relatively sparsely populated states with older populations. To this point, the chart to the side shows the longer-term average annual natural change in population and the changes seen in 2020 and 2021 for each state in the Regions footprint. In each state, the changes in 2020 and 2021 were either positive but much smaller than pre-pandemic averages or were negative. While perhaps not matching those of 2021, when there were over 3.4 million deaths in the U.S., mortality rates in 2022 will likely remain above pre-pandemic norms while birth rates are likely to remain below pre-pandemic norms. As such, natural change will for most states either be only modestly positive or an outright negative for total 2022 population growth.

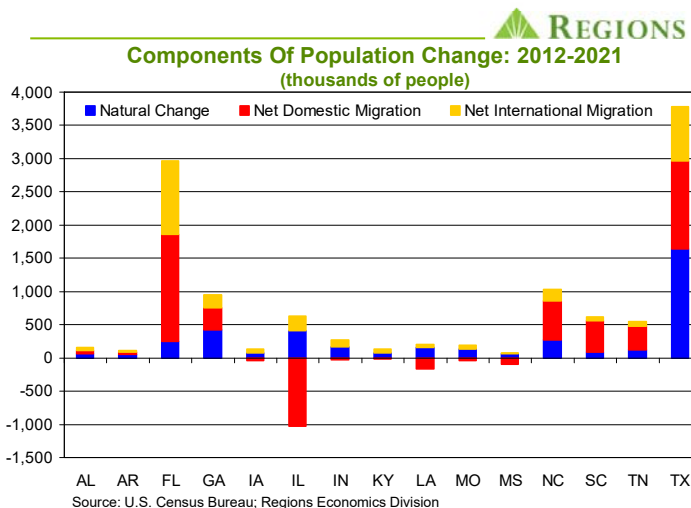


The two charts above show a more complete picture of the components of population change for the U.S. and for the Regions footprint. As noted above, the Regions footprint saw a significant increase in net domestic in-migration in 2020 and an even more pronounced increase in 2021, this after several years of smaller increases than prior to the 2007-09 recession. In 2021, the footprint saw net domestic in-migration of 577,855 persons, easily the largest increase over the 1991-2001 period. While Illinois, Louisiana, and Mississippi all experienced net domestic out-migration in 2021, the other in-footprint states more than made up the difference, with Florida attracting 220,890 people from elsewhere in the U.S. and Texas attracting 170,307 people. Strong in-migration has long been the foundation of Florida’s above-average growth in total population, more than making up for well below average natural change that reflects an older population and a below-average birth rate. Conversely, there is not a single year over the 1991-2021 period in which Illinois did not experience net domestic out-migration, which has been the main culprit behind the state’s long-running population decline.

It is also worth noting that in the several years leading up to the pandemic, foreign in-migration had been a weaker support for total population growth in both the U.S. and the Regions footprint. That support has weakened ever further since the onset of the pandemic. Net foreign in-migration fell sharply around the 2007-09 recession but began to rebound before peaking in 2016 then declining in 2017, 2018, and 2019. The decline intensified in 2020 and even more so in 2021, to the point that the U.S. posted net foreign in-migration of just 244,622 persons in 2021, and these patterns have also held for the Regions footprint. Recall that a number of states took measures to limit foreign in-migration in the years leading up to the pandemic, and international movement has been somewhat restricted since

the onset of the pandemic. It remains to be seen when, and to what extent, foreign in-migration will resume what had been its traditional role as a key driver of total population growth.

The chart to the side breaks down the total change in population for each state in the Regions footprint over the 2012-2021 period. Over this period, there were seven states (Iowa, Illinois, Indiana, Kentucky, Louisiana, Missouri, and Mississippi) that experienced net domestic out-migration, though to varying degrees net foreign in-migration provided an offset. At the same time, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Texas all boasted strong in-migration that either supplemented or offset patterns in natural change. What is interesting is that states such as Alabama, Arkansas, Indiana, Kentucky, and Missouri saw strong domestic in-migration in 2021 after years of little or no success along these lines, interesting in the sense that we do not know whether 2021 was a one-off or the start of a more lasting pattern of solid net domestic in-migration.



That of course is part of a broader question that will take years to answer, i.e., how lasting will the dramatic changes in population growth patterns seen since the onset of the pandemic prove to be in the post-pandemic world. Note that we use the term “post-pandemic” in a broad sense to mean learning to live with the pandemic to the point that it is less disruptive to patterns of economic and social activity, as opposed to meaning COVID-19 having been vanquished. This isn’t simply a matter of counting people, as there will be implications for the broader economy. We have for several years been pointing to demographic factors, specifically an aging population and declining birth rates, as being a drag on growth in labor supply, which in turn has implications for economic growth and inflation. That many states acted to restrict foreign in-migration in the years leading up to the pandemic only served to exacerbate labor supply issues, and it remains to be seen how firms will navigate through what could become increasingly binding labor supply constraints over coming years.

Domestic migration patterns will also bear watching over coming years. For instance, how much longer will we see migration away from high-cost states/metro areas to low-cost states/metro areas, and, as a natural follow-up, how long can low-cost areas continue to absorb high rates of in-migration before they can no longer be considered low-cost areas. Eventually prolonged periods of rapid growth will put upward pressure on housing costs, potentially to the point that housing cost differentials have been erased, while increased demand puts increasing pressure on state and local governments to fund things such as education, transportation, and public safety. At the same time, however, those high-cost states/metro areas experiencing high rates of out-migration find it increasingly difficult to fund these and other services and, as such, face the choice of either raising taxes/fees or cutting services, if not some of both, making it more difficult for those left behind, perhaps lacking the option of moving.

It will take years to have a sense of the extent to which the pandemic truly changed things, including population growth patterns. That said, many of the trends we’ve discussed here – falling birth rates, domestic migration patterns, diminished foreign in-migration – were in place well before the pandemic, but have been magnified considerably since the onset of the pandemic. Finding ways to revitalize the nation’s population growth will be a key element, not only of recovering from the pandemic, but also of supporting a faster sustainable rate of economic growth. Of course, raising the question of how to accomplish this is easier than actually answering that question.