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TO WHAT EXTENT WILL DEMOGRAPHIC CHANGES HELP IDAHO REACH ITS EDUCATIONAL ATTAINMENT GOALS FOR 2020?

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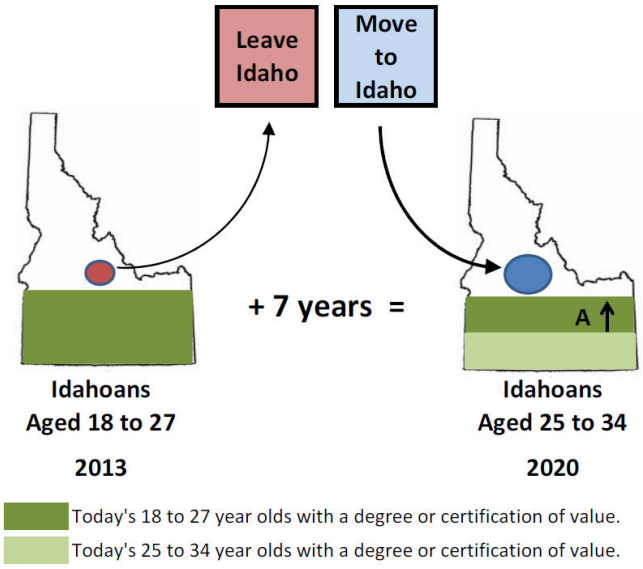
Demographic changes will close approximately 10 percentage points of the 25 percentage point gap between today's level of educational attainment among 25 to 34 year olds and Idaho Business for Education's (IBE) target for 2020. The remainder will need to be addressed by strategic policies.

Introduction

Idaho Business for Education (IBE) has a goal: "By 2020, 60% of Idaho's 25-34 year olds will have a degree or certification of value that they utilize in the workplace environment." In this *Issue Brief*, we examine how two demographic changes are likely to impact Idaho's ability to reach this target.[1] First, we consider cohort effects. Those who will be 25 to 34 years old in 2020 are currently 18 to 27 years old, so a key to understanding the goal for 2020 is to understand the educational attainment of today's 18 to 27 year olds. Second, we examine the ratio of native to non-native Idahoans. As the mix of natives to non-natives changes in Idaho, the relative educational attainment of these two groups could, in theory, impact the ability to reach the 60 percent target.

The methodology for this analysis is illustrated in Exhibit 1. The arrow labeled "A" represents the extent to which educational attainment can be expected to increase if individuals aged 18 to 27 years old today have a higher level of attainment than those currently aged 25 to 34 years old. The red circle represents the fraction of Idahoans currently aged 18 to 27 years old who will leave Idaho by 2020. The blue circle represents those who will move to Idaho in the next seven years. The relevant impact of (domestic and international) migration for the purposes of this analysis is the difference in educational attainment among those in the red circle and those in the blue circle. Finally, the white area represents those who currently do not have a degree or certification of value, per IBEs goal.

Exhibit 1. Graphical Depiction of Cohort and Migration Effects on the Educational Attainment of Individuals Aged 25 to 34 Years Old in 2020.



Source: ECONorthwest, 2013.

The results of our descriptive empirical work reveal that cohort effects will likely bridge approximately 10 percentage points of the 25 percentage point gap between IBE's 60 percent target for 2020 and today's 35 percent of 25 to 34 year olds with an Associate's degree or higher.

[1] For the purposes of this *Issue Brief*, we define "a degree or certification of value" as a two-year Associate's degree or higher. This definition is based on pragmatic considerations given the available data. To the extent that other forms of certification besides a two-year Associate's degree meet IBE's requirement, the educational attainment percentages reported in this *Issue Brief* may be understated. On the other hand, we also do not address the "that they utilize in the workplace environment" side of the goal, due to definitional issues. To the extent that some individuals may achieve the educational attainment requirement but not the workplace requirement, the percentages reported in this *Issue Brief* – based on educational attainment only – may be overstated.

The latest data for 2011 and 2012 show negative net domestic migration and positive net international migration. This trend, combined with the fact that, on average, children in immigrant households face substantially larger challenges than children in US-born households could present a headwind. Further, the educational attainment of the population entering Idaho in recent years has been lower than the educational attainment of Idaho's current population. Importantly, though, the magnitude of migration – over just a seven-year period – relative to the size of Idaho's total population suggests that the impact of migration on IBE's goal for 2020 will be marginal.

In the next section we present some background on the current state of educational attainment in Idaho, providing context by benchmarking educational attainment in Idaho to that of nearby states and the nation as a whole. In Sections III and IV, we examine the likely impacts of cohort effects and migration, respectively, on reaching IBE's 60 percentage goal for 2020. The final section provides some additional discussion points. We conclude that, while demographic changes will help Idaho reach the 60 percent goal by 2020, demographic changes alone are not sufficient. The remaining gap, if IBE's goal is to be realized, will need to be bridged by effective policies.

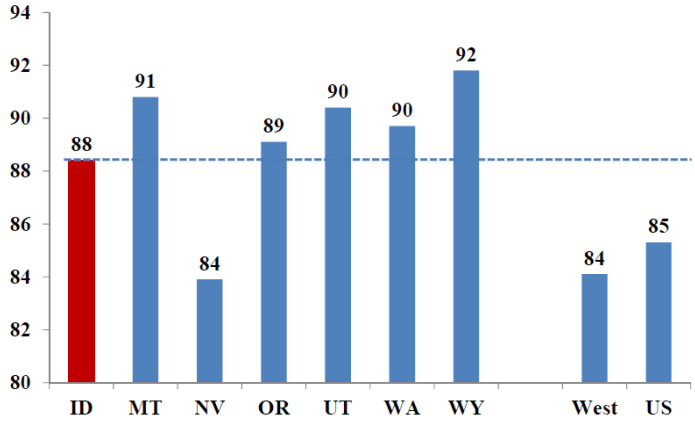
Background

State-by-state comparisons are most applicable between states with similar economic make-ups and, consequently, similar educational needs. To the extent that states differ with respect to their economic make-up, comparisons of educational attainment might be misleading. An alternative approach is to assess how educational attainment meets the needs of the state economy. Such analyses, however, are well beyond the scope of this *Issue Brief* and we, therefore, rely on state and national comparisons. This benchmarking approach is best viewed as just one way to assess educational performance.

With the exception of Nevada, which is unique because its economy is tied to mining and gambling, high school completion rates in Idaho lag behind all of its bordering states – Montana, Oregon, Utah, Washington, and Wyoming (Exhibit 2). The good news is that the differences are not that big. Wyoming has the highest high school completion rate at 91.8 percent while Idaho's rate of completion is less than four percentage points lower at 88.4 percent. To put the difference in context, the high school completion rate for all Western states is much lower at 84.1 percent.[2] The high school completion rate for the country as a whole (85.3%) and Southern region (83.4%) are also lower than Idaho's (see Exhibit 3).[3] While Idaho lags behind its bordering states with respect to high school completion, the differences are small. What's more, Idaho's rate of high school completion exceeds that of the country as a whole.

In contrast, when it comes to having a Bachelor's degree or more, Idaho lags behind the rest of the country (Exhibit 4). Idaho also lags behind most of its bordering states, as with the case of high school completion. The difference with college attainment compared to high school attainment is that the size of the gap is fairly large.

Exhibit 2. Percentage of People Aged 25 Years and Over Who Have Completed High School or More, Idaho and Surrounding States, 2009.



Source: Ryan, C., L. Camille, and J. Siebens. 2012. "Educational Attainment in the United States, 2009" U.S. Census Bureau, Current Population Reports, P20-566 (February).

The percentage of Idahoans who have completed a Bachelor's degree or more was 23.9 percent in 2009, compared with 31.0 percent in Washington and 29.2 percent in Oregon – differences of more than five percentage points. The rate for all Western states was 29.3 percent and the rate for the country as a whole was 27.9 percent.

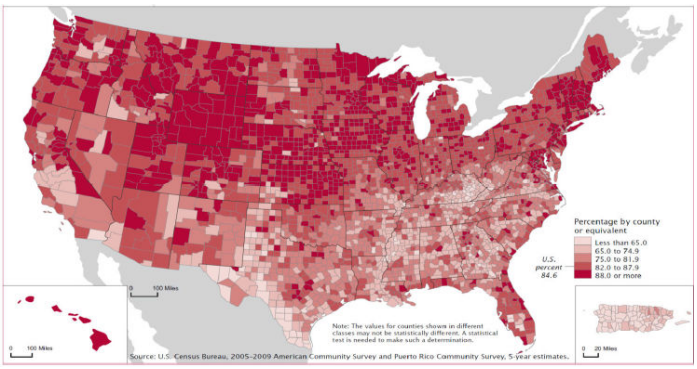
[2] The following states are included in the West region: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

[3] The following states are included in the South region: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia.

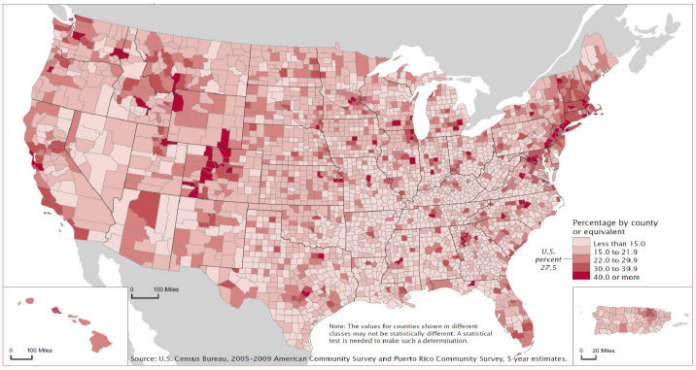
The outcome measures also matter. The two metrics just described – high school and four-year college completion rates – focus on student outcomes. Other metrics focus on inputs, such as spending per student and student-to-teacher ratios. Still other metrics focus on access to education, such as college affordability, and variation across students, such as achievement and attainment gaps.[4] The reason there are so many different measures of education is that no one measure captures the story in its entirety. Each measure highlights a different facet of education, and a particular need or shortcoming.

Exhibit 3. Percentage of People Aged 25 Years and Over Who Have Completed High School or More and a Bachelor's Degree or More, 2005 to 2009.

High School Degree or More



Bachelor's Degree or More

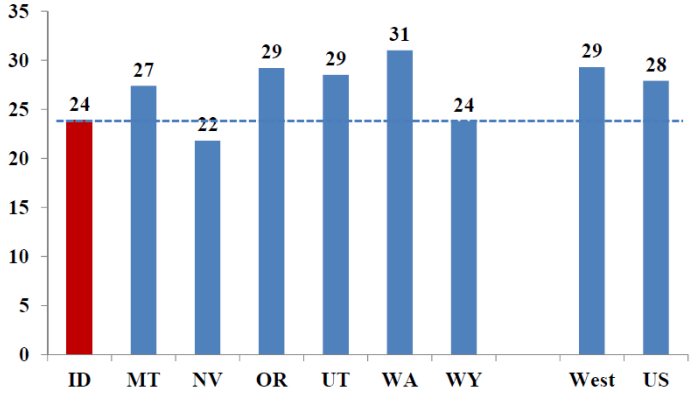


Source: Ryan, C., L. Camille, and J. Siebens. 2012. "Educational Attainment in the United States, 2009" U.S. Census Bureau, Current Population Reports, P20-566 (February).

For the purposes of the analysis in this *Issue Brief*, the key takeaway is that, relative to the United States as a whole, Idaho over-performs with respect to high school completion rates, but under-performs with respect to college completion rates.

[4] ECONorthwest. 2010. "The Economic Impacts of Oregon's Student Achievement Gap." (October).

Exhibit 4. Percentage of People Aged 25 Years and Over Who Have Completed a Bachelor's Degree or More, Idaho and Surrounding States, 2009.

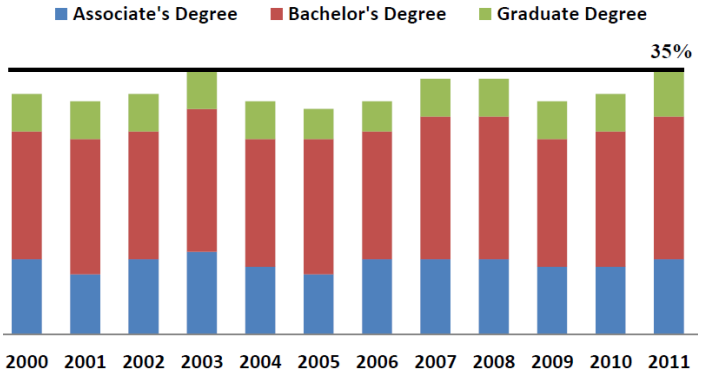


Source: Ryan, C., L. Camille, and J. Siebens. 2012. "Educational Attainment in the United States, 2009" U.S. Census Bureau, Current Population Reports, P20-566 (February).

The impact of cohort effects

As noted above, we consider a two-year Associate's degree or higher as meeting IBE's standard of a degree or certification of value. This definition is likely to be, if anything, a conservative estimate, as many individuals may meet IBEs criteria with some form of certification that is obtained without a two-year college degree. Currently 35 percent of Idaho's 25 to 34 year olds have a two-year college degree or higher – a full 25 percentage points below the 60 percent threshold (Exhibit 5).

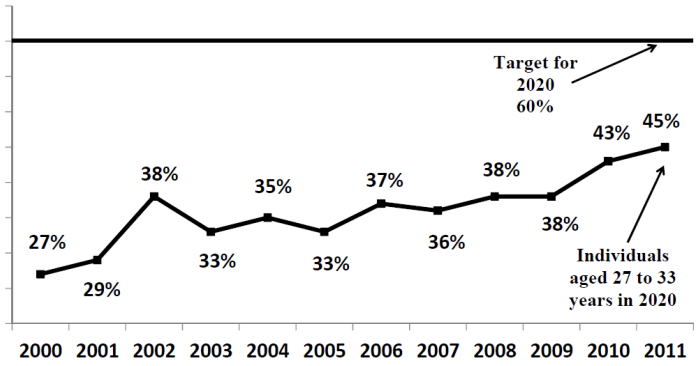
Exhibit 5. Educational Attainment of the Population Aged 25 to 34 Years, Idaho, 2000 to 2011.



Source: The Annie E. Casey Foundation. 2013. KIDS COUNT Data Center, Educational Attainment of Population Ages 25 to 34.

The relevant percentage from IBE's perspective, however, is not the status of current 25 to 34 year olds, but rather the status of 25 to 34 year olds in 2020. These individuals are currently 18 to 27 years old. The Annie E. Casey Foundation publishes state-level information about the percentage of 18 to 24 year olds (reasonably close to our 18 to 27 year olds in the target population) who are enrolled in or who completed college, as recently as 2011. The fraction for Idaho in 2011 is 45 percent, which provides some evidence that we are not 25 percentage points away from the 2020 target, but substantially closer (Exhibit 6).

Exhibit 6. Young Adults Aged 18 to 24 Years Who Were Enrolled in or Completed College, Idaho, 2000 to 2011.

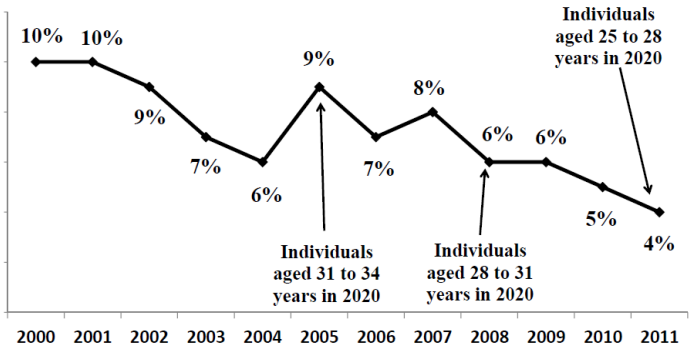


Source: The Annie E. Casey Foundation. 2013. KIDS COUNT Data Center, Young Adults Ages 18 to 24 Enrolled in or Completed College.

Of course, some individuals who are currently enrolled in college will not complete a two-year degree. This fraction is inherently unknowable until 2020. What can be done now is examine enrollment rates and completion rates among those who are currently 25 to 34 years old. As noted above, 35 percent of those aged 25 to 34 years in 2011 obtained an Associate's, Bachelor's or Graduate degree. In 2004, the same fraction – 35 percent – of this cohort was either enrolled in or completed college. Therefore, one can reasonably conclude that today's higher rate of enrollment or completion of college among 18 to 24 year olds is likely to translate into higher educational attainment among 25 to 34 year olds in 2020. Under this logic, approximately 10 percentage points of the 25 percentage point gap (25%=60%-35%) is likely to be gained because of existing enrollment among today's 18 to 27 year olds.

Another trend supports the notion that younger cohorts are already in a position to achieve higher educational attainment at ages 25 to 34 compared with those Idahoans who are currently aged 25 to 34. The fraction of 16 to 19 year olds who are not in school and not high school graduates has been declining for much of the past decade, from 10 percent in 2000 to 4 percent in 2011 (Exhibit 7). Those individuals aged 16 to 19 in 2011 will be 25 to 28 in 2020. Therefore, just 4 percent of those who will be aged 25 to 28 in 2020 were not in school and not high school graduates in 2011, compared with about 10 percent of those who are currently 25 to 34 years old (aged 16 to 19 in the late 1990s and early 2000s).

Exhibit 7. Teens Aged 16 to 19 Years Who Were Not in School and Not High School Graduates, Idaho, 2000 to 2011.



Source: The Annie E. Casey Foundation. 2013. KIDS COUNT Data Center, Teens Ages 16 to 19 Not in School and Not High School Graduates.

So, not only is the younger generation more likely to have been enrolled in or completed college as was the current cohort of 25 to 34 year olds at similar ages, they are also more likely to be in school at ages 16 to 19. Both factors mean that today's 18 to 27 year olds will almost certainly achieve higher levels of educational attainment at ages 25 to 34 compared with today's 25 to 34 year olds. How much higher will depend in part on the degree to which current retention rates can be improved.[5]

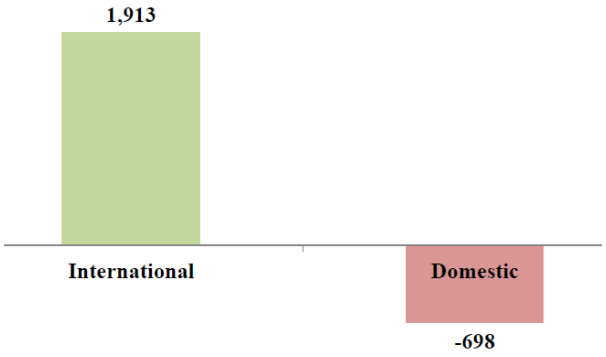
The impact of migration

In addition to cohort effects, educational attainment among 25 to 34 year olds in 2020 can be influenced – in either direction – by changes in migration. The influx of large numbers of out-of-state and more educated workers could boost the fraction of 25 to 34 year olds with an Associate's degree or higher, thus bringing Idaho closer to IBE's 60 percent goal for 2020. The influx of large numbers of migrants with low levels of education, in contrast, would do just the opposite.

[5] A recent analysis by Complete College America on public colleges and universities in Idaho found that just 28 percent (50 percent) of full-time enrollees at 2-year (4-year) public colleges completed their degree in 200 percent time (on time = 100% time). See http://www.completecollege.org/docs/Idaho.pdf.

Between 2011 and 2012, Idaho experienced negative net domestic migration and positive net international migration (Exhibit 8).

Exhibit 8. Net International and Net Domestic Migration, Idaho, 2011 to 2012.



Source: Governing. 2012. State Population Census Estimates, www.governing.com.

The fact that international migration is positive, in and of itself, says little about its impact on the ability of Idaho to achieve IBE's goal for 2020. For example, if the age distribution and educational attainment of immigrants is identical to the native population, then the fact that immigration takes place is irrelevant to the question at hand.

The Annie E. Casey Foundation provides statistics about the well being of children from immigrant families relative to US-born families. Two of these statistics suggest that the recent influx of international immigrants could possibly make it more difficult to achieve the 60 percent goal by 2020. First, children from immigrant families are much more likely to be linguistically isolated than children from US-born families (21% and 0%, respectively). Second, children from immigrant families are much more likely than children from US-born families to have parents with less than a high school degree (37% and 4%, respectively).

While these statistics suggest a potential challenge, it is critical to examine the magnitude of this impact. The U.S. Census Bureau's estimate of Idaho's population in 2012 is 1.6 million. This means that over the seven-year period between 2013 and 2020 net international immigration represents less than one percent of Idaho's population. The impact of international migration on the ability to achieve IBE's 60 percent goal by 2020 is more or less negligible.

Another consideration is the make-up of the domestic population that migrates into the state relative to the make-up of the domestic population that leaves the state. Data from the U.S. Census Bureau's American Community Survey (ACS) show that the net population moving into the state recently had educational attainment levels below those of the current population. According to the ACS data, in 2007 approximately 21.7 percent of the net population of 22 to 39 year olds who moved to Idaho had an Associate's degree or higher. The ACS data for the same time period show that, among all Idahoans aged 25 to 34 years old (a slightly different age range), 33.4 percent had an Associate's degree or higher.[6]

As noted above, in order for migration to have a substantial impact it must also be the case that the size of the migrating population is large relative to the size of the overall population. State-to-state migration data show that between 2009 and 2010 the number of individuals who left Idaho and the number who moved to Idaho were both approximately 20,000 individuals, or 1.3 percent of Idaho's population.[7] Therefore, while the relevant educational attainment gap between the net population that has entered Idaho recently and the existing population is a sizable eleven percentage points (22% compared with 33%), this difference applies to just one percent of Idaho's population per year. Notably, while the impact of domestic migration on the goal for 2020 might be relatively small over the next seven years, migration could, if current trends continue, play a significant role beyond 2020 as the cumulative effect of migration mounts.

We conclude that, while the impact of migration unambiguously exerts downward pressure on the ability to achieve the 60 percent goal because of the different educational attainment levels of those leaving and entering the state, the overall magnitude of the impact appears to be small when it comes to addressing the question of Idaho's educational preparedness by 2020.

Discussion

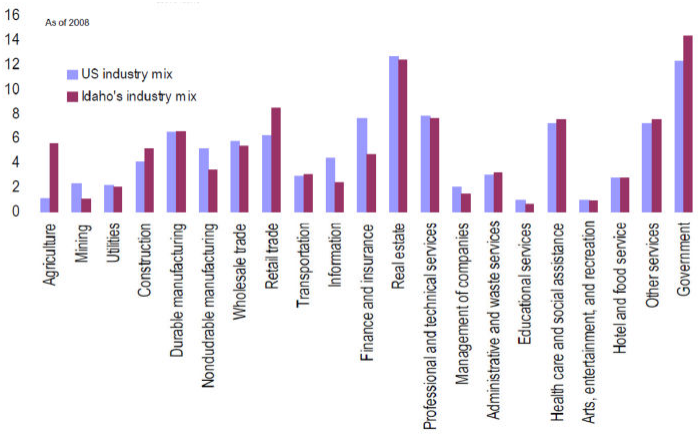
The analysis presented above shows that there is at least a 15 percentage point gap between IBE's goal and the likely educational attainment of 25 to 34 year olds in 2020. As noted earlier, our analysis focuses on the fraction of individuals who are likely to have at least an Associate's degree. IBE's goal, however, is more general in that it

[6] The National Center for Higher Education Management Systems. 2013. Net Migration by State, Age-Group, and Degree Level. Available at: http://www.higheredinfo.org/dbrowser/?level=&mode=definitions&state=0&submeasure=269.

[7] Tax Foundation. 2013. State to State Migration Data. Available at: interactive.taxfoundation.org/migration. This finding, in which the number of Idahoans leaving the state is similar to the number of individuals moving into Idaho, is consistent with the low net domestic migration numbers shown in Exhibit 8.

includes "a degree or certification of value." To the extent that a certification of value can be obtained without a two-year Associate's degree, the 15 percentage point gap might actually be smaller. That said, IBE's goal also states that the degree or certification be utilized in the workplace environment. Today's economic climate, especially for younger workers, indicates that this objective is not a trivial one. It is quite possible that a sizable fraction of individuals aged 25 to 34 will meet IBE's education and certification requirement in 2020 but not meet the workforce requirement.

Exhibit 9. Real GDP by Industry (Percent of Nominal GDP), Idaho and the United States, 2008.



Source: Glassman, J. 2012. "The State of Idaho's Economy," Chase Regional Analysis Report, Idaho (March).

To understand the workforce requirement, it is important to understand the current industry mix in Idaho. As a percentage of State Gross Domestic Product (GDP), agriculture is not the dominant industry in Idaho (Exhibit 9).[8] Government, real estate, and retail trade each contribute more to Idaho's GDP than agriculture. In a relative sense, though, Idaho's industries are more concentrated in agriculture, construction, retail trade, and government than the rest of the country, and notably less concentrated in information, and finance and insurance. The industries for which Idaho is relatively more heavily concentrated than the rest of the country by and large do not require higher degrees of education. Therefore, Idaho's lower college attainment rates relative to the country appear to be more or less consistent with Idaho's industry mix. This situation could provide an additional challenge for meeting the workplace criteria of IBE's goal.

Another question is whether it makes sense to examine if education in Idaho today is satisfying the needs of Idaho's current employers. Economists might argue that this kind of match is inevitable, because the two sides (labor supply and labor demand) are mutually determined, and the current mix of workers' educational attainment and employer demands is the logical outcome of an evolving process. Simply put, people have gained the amount of education necessary to satisfy the demands of employers and employers have chosen to locate in Idaho to the extent that Idaho's labor resources can fulfill their needs. While some kind of equilibrium has undoubtedly been reached, the outcome for the future is not predetermined. We have little insight into what opportunities and challenges lie ahead and it makes sense to undertake an offensive move to attract high-quality employers with high-paying jobs regardless of the current mix of industries in the state. IBE's goal appears well aligned with such a strategy.

Conclusion

We find that demographic changes will likely bridge 10 percentage points of the 25 percentage point gap between IBE's 60 percent target and today's 35 percent rate of educational attainment among 25 to 34 year olds. The impact of international and domestic migration is likely to be marginal given the expected size of the migrating population over the next seven years relative to the size of Idaho's total population. The key takeaway is that demographic changes work in favor of reaching IBE's 60 percent goal by 2020, but such changes cover less than half of the gap. Targeted policies will be needed if Idaho is to achieve IBE's 60 percent goal by 2020.

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ECONorthwest was established in 1974 and is the largest economic consulting firm in the Pacific Northwest. ECONorthwest provides professional economics, planning, and financial consulting services and expert testimony for a wide variety of private and public sector clients throughout the United States and worldwide.

Idaho Business for Education (IBE) is a non-profit, non-partisan organization, comprising Idaho's business leaders who are committed to transforming Idaho's education system. IBE is focused on ensuring that Idaho prepares students with a high-quality education that produces the well-educated workforce our businesses and economy require.