

Immigrant Entrepreneurship in New England

By Josh Bedi

The author acknowledges the contributions of Aidan Enright and Liam Day



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Executive Summary

This report documents findings on immigrant entrepreneurship in New England, where immigrants, except in the state of Vermont, are more likely than the U.S. born to own a business. The likelihood is more pronounced in the region's more populous states, which have higher proportions of immigrants. Immigrant entrepreneurs tend to enter industries that are different from those that U.S.-born entrepreneurs enter. Overall, the ratio of immigrant to U.S.-born entrepreneurs in different industries correlates with state-level differences in both population density and proportion of immigrants.

The report documents differences in average educational attainment between immigrant and U.S.-born entrepreneurs. In populous states with high proportions of immigrants, U.S.-born entrepreneurs are more educated than immigrant entrepreneurs; in less-populous states with relatively low proportions of immigrants, the opposite is true.

Finally, the report documents state-level differences in the impact immigrant entrepreneurs have on the economy. To list one prominent example, immigrants in New England are disproportionately represented among the heads of Fortune 500 companies. This suggests immigrant entrepreneurs create jobs and value to a greater degree than U.S.-born entrepreneurs.

The findings of this study prompt several policy recommendations. These include lowering costs associated with incorporating and hiring employees, as well as taking advantage of the ability of universities to sponsor cap-exempt H-1B visas for foreign-born entrepreneurs.

Our findings prompt several policy recommendations, including lowering costs of incorporation and expanding entrepreneur in residence programs.

Introduction

Research has repeatedly found that immigrants are more likely to be self-employed than the U.S. born (e.g., Azoulay et al., 2022; Vador 2021). Indeed, immigrant entrepreneurship has become so pervasive in the United States over the last 30 years that popular media have satirized the phenomenon, a prominent example being the immigrant restaurateur, Babu Bhatt, from Seinfeld ("The Cafe," 1991).

Immigrant entrepreneurship is important for a few reasons. First, immigration has been increasing steadily throughout the twenty-first century, meaning any connection between immigration and entrepreneurship is only likely to grow in the coming years (United Nations, 2019).

In its impact, entrepreneurship has been consistently linked to greater economic opportunity and higher growth (Schumpeter, 2017). This means immigrant entrepreneurs do not just benefit themselves and their consumers; they also benefit the overall economy, providing more opportunity for all.

The report that follows will highlight the importance of immigrants to business formation by outlining the contours of immigrant entrepreneurship in New England. Available data tell us that New England is no exception when it comes to immigrants' proclivity to engage in entrepreneurial activities. At the same time, typical immigrant-owned businesses differ from typical businesses owned by the U.S. born in terms of both the industry in which they operate and the education levels of their owners.

Finally, it is also clear from available data that the typical immigrant-owned business in New England is just as likely to be incorporated as one owned by a U.S.-born entrepreneur, and immigrant business founders are disproportionately represented in Fortune 500 companies.

Available data tell us that New England is no exception when it comes to immigrants' proclivity to engage in entrepreneurial activities.

Entrepreneurship Rates

This study primarily uses data from the 2021 American Community Survey (ACS), the most extensive nationwide survey currently available publicly. To make results more comparable, this study excludes those under the age of 16 and those over the age of 65. While the data are particularly well suited to compare immigrant and U.S.-born entrepreneurship, because of privacy concerns, publicly available ACS data are representative samples of data on individuals and not well suited for counting total immigrant entrepreneurs in the United States.

Rather, the data are suited for calculating the proportion of different types of people, including U.S. born and immigrants, who are entrepreneurs, thus providing a sense of the contribution of immigrants to entrepreneurship. Further, because of a lack of microdata across years, this study does not focus on trends across time, but instead on the most recent year available.

Overall, the data show that immigrants are more entrepreneurial than the U.S. born in New England, with just over 10.5 percent of immigrants engaging in entrepreneurship compared to just over 8.6 percent of U.S.-born citizens. This broad pattern in entrepreneurship rates holds for every New England state except Vermont.

Still, there are several differences across states in terms of how much more entrepreneurial immigrants are compared to the U.S. born, and these differences correlate with state-level differences in population density and percent of the population that is foreign born.

- For example, in Massachusetts and Connecticut the proportion of the population that is foreign born is relatively high—17.6 percent of Massachusetts residents and 15.2 percent of Connecticut residents in 2021 (US Census Bureau, 2022). Immigrants are also noticeably more entrepreneurial in these states than the U.S. born.
- In Massachusetts, more than 10.3 percent of immigrants are entrepreneurs compared to just 7.8 percent of the U.S. born, and in Connecticut the difference is even greater—11.7 percent vs. just over 8.6 percent.
- In Rhode Island, where 14.5 percent of residents are foreign-born (US Census Bureau, 2022), the entrepreneurial gap closes to about a percentage point, with just over 8.8 percent of foreign-born Rhode Islanders engaging in entrepreneurial activity compared to just over 7.8 percent of U.S.-born Rhode Islanders.

For New England states with smaller proportions of immigrants and a lower population density, entrepreneurship rates between the U.S. born and immigrants are either similar or the U.S. born are more entrepreneurial.

- In Maine, where 4.1 percent of residents are foreign born (US Census Bureau, 2022), almost 12.2 percent of the U.S. born are entrepreneurs while 12.7 percent of immigrants own their own businesses.
- In New Hampshire, with a foreign-born population of 5.9 percent (US Census Bureau, 2022), entrepreneurship rates for the U.S. born are close to 8.2 percent while entrepreneurship rates for the foreign born are close to 8.6 percent.
- Finally, in Vermont, with a foreign-born population of 4.1 percent (US Census Bureau, 2022), we see the pattern flip. There, a little over 10.9 percent of the U.S. born own their own businesses, while only around 6.1 percent of immigrants do.

Table 1 offers a synthesis of entrepreneurship rates by state and nativity status.

In states with low population densities there is greater parity in entrepreneurship rates between immigrants and the U.S. born.

Table 1: Immigrant and U.S.-Born Entrepreneurship Rates by State

State	U.S.-Born Entrepreneurship Rate	Foreign-Born Entrepreneurship Rate
Massachusetts	7.8%	10.4%
Connecticut	8.6%	11.7%
Maine	12.2%	12.7%
New Hampshire	8.2%	8.6%
Rhode Island	7.8%	8.8%
Vermont	10.9%	6.1%
New England	8.6%	10.5%

Industries Immigrant Entrepreneurs Enter

While the data give a sense of the contribution of immigrants to business ownership in relative terms, it also illustrates that businesses owned by immigrants are likely found in different industries from those owned by the U.S. born. For this study industries were combined into nine categories:

- Agriculture, forestry, fishing, and hunting
- Resources, utilities, and construction
- Manufacturing
- Wholesale, retail, and transport
- Professional services
- Administration and support services
- Education, health, and social services
- Arts, entertainment, and recreation
- Accommodation, food, and other services

Like data presented above outlining entrepreneurship rates by nativity status, the following data come from a publicly available microsample of the 2021 round of the American Community Survey.

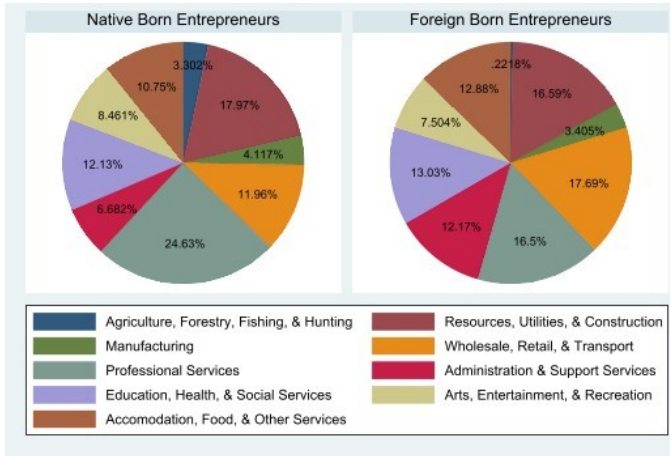
Starting with New England as a whole, there are clear differences in the industries in which immigrant and U.S. born entrepreneurs tend to cluster. The starkest difference is that U.S. born entrepreneurs are almost 14 times more likely than immigrant entrepreneurs to operate businesses in agriculture, forestry, fishing, or hunting. Other differences are smaller in magnitude, but still notable.

Compared to immigrant entrepreneurs, U.S.-born entrepreneurs are a little more than 8 percent more likely to own businesses in resources, utilities, or construction; over 20 percent more likely to own businesses in manufacturing; almost 50 percent more likely to own businesses in professional services; and almost 13 percent more likely to own businesses in arts, entertainment, or recreation.

On the other hand, immigrant entrepreneurs are almost 48 percent more likely to operate businesses in wholesale, retail, and transport; about 82 percent more likely to do business in administration and support services; over 7 percent more likely to own businesses in education, health, and social services; and almost 20 percent more likely to do business in accommodation, food, and other services.

In New England, immigrants and the U.S. born tend to cluster in different industries.

Industry Makeup of Entrepreneurs by Nativity (New England)

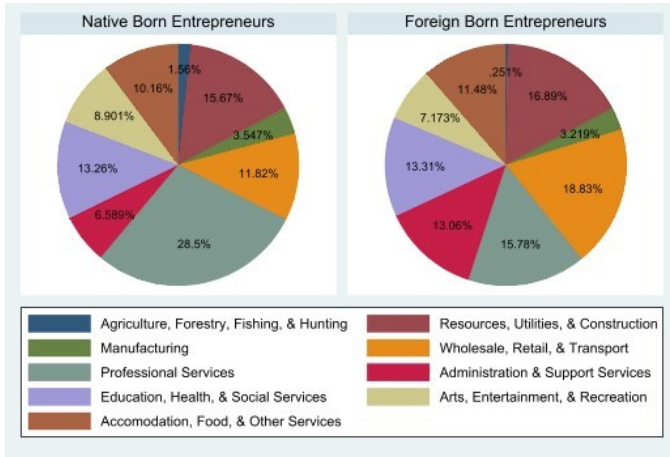


Massachusetts largely reflects patterns in New England, with a few exceptions. As in New England as a whole, U.S.-born entrepreneurs in Massachusetts are more likely than immigrant entrepreneurs to do business in agriculture, forestry, fishing, and hunting; manufacturing; professional services; and arts, entertainment, and recreation. However, the share of immigrant entrepreneurs who enter resources, construction, and utilities is higher than the share of U.S.-born entrepreneurs who operate in that industry category throughout New England.

Again, like New England as a whole, in Massachusetts immigrant entrepreneurs are still more likely to do business in wholesale, retail, and transport; administration and support services; education, health, and social services; and accommodation, food, and other services.

Industry differences for immigrant and U.S.-born entrepreneurs in Massachusetts largely reflect patterns in New England.

Industry Makeup of Entrepreneurs by Nativity (Massachusetts)



In Connecticut, patterns largely track those of New England as a whole, with one exception: U.S.-born entrepreneurs in Connecticut are more likely to do business in health, education, and social services compared to immigrant entrepreneurs. Rhode Island, too, looks a lot like the rest of New England in terms of which industries immigrants cluster in, except that U.S.-born entrepreneurs are more likely to operate in administration and support services, while immigrant entrepreneurs are more likely to do business in resources, utilities, and construction.

Analysis of the smaller New England states reveals starker differences between immigrant and U.S.-born entrepreneurs when it comes to the industry categories in which they operate.

An analysis of smaller New England states reveals starker differences in industry clustering between immigrants and the U.S. born.

Focusing on Maine, it is noteworthy that the data contain no information on immigrant entrepreneurs in agriculture, forestry, fishing, and hunting. Further, like the rest of New England, in Maine U.S.-born entrepreneurs are more likely than immigrant entrepreneurs to operate in the resources, utilities, and construction sector. However, in this case the magnitude of the difference is huge—U.S.-born entrepreneurs are more than eight times more likely than immigrant entrepreneurs to do business in resources, utilities, and construction.

Maine deviates from broader New England patterns along other dimensions. Notably, U.S.-born entrepreneurs in Maine are more likely than immigrant entrepreneurs to do business in wholesale, retail, and transport, while immigrant entrepreneurs are more likely to be involved in professional services as well as arts, entertainment, and recreation. Indeed, compared to New England as a whole, patterns in Maine are reversed.

There are also differences between the industry categories immigrant and U.S.-born entrepreneurs are likely to operate in when comparing New Hampshire to New England as a whole. In New Hampshire, immigrant entrepreneurs are more likely than U.S.-born entrepreneurs to do business in manufacturing; administration and support services; education, health, and social services; arts, entertainment, and recreation; and food, accommodation, and other services.

Finally, Vermont again displays some notable patterns. Recall, Vermont is the only New England state where the data depict the U.S. born as more entrepreneurial than immigrants. It is also the state where there are the largest differences between immigrant and U.S.-born entrepreneurs in terms of the industry categories in which they operate.

Vermont mirrors New England when it comes to agriculture, forestry, fishing, and hunting; resources, utilities, and construction; manufacturing; and wholesale, retail, and transport; but immigrant entrepreneurs in Vermont are much more likely to enter into professional services than in other New England states, with almost half of immigrant entrepreneurs doing business in that industry, making them more than twice as likely as U.S.-born entrepreneurs to offer some kind of professional service.

Conversely, immigrant entrepreneurs in Vermont are noticeably absent from administration and support services, but more likely than U.S.-born entrepreneurs to do business in education, health, and social services as well as in the arts, entertainment, and recreation.

Further, immigrant entrepreneurs are much less likely than U.S.-born entrepreneurs to own a business in accommodation, food, or other services, directly at odds with the broader patterns in New England.

Thus, Vermont is an outlier in New England, not only in terms of how entrepreneurial immigrants are relative to the U.S. born, but also in terms of which industries immigrant entrepreneurs tend to enter.

Pie charts displaying U.S.-born vs. immigrant entrepreneurial rates by industry category for other New England states can be found in the appendix.

While patterns differ across states, it is important to note that immigrant entrepreneurs tend to participate in different industries compared to U.S.-born entrepreneurs. That fact suggests complementarities between the two groups: Instead of crowding out U.S.-born entrepreneurs by entering industries in which they typically do business, immigrant entrepreneurs tend to fill in gaps in other industries.

States with relatively low immigrant populations as a proportion of the total population, like Maine, New Hampshire, and Vermont, display similar patterns in terms of the industries U.S.-born and immigrant entrepreneurs enter. In all these states, immigrant entrepreneurs are more likely than U.S.-born entrepreneurs to do business in arts, entertainment, and recreation; in larger states with higher proportions of immigrants, the opposite is true.

Instead of crowding out U.S.-born entrepreneurs, immigrant entrepreneurs tend to fill in gaps in other industries.

Like the smaller states with low immigrant proportions, New England’s populous states with relatively high proportions — Massachusetts, Connecticut, and Rhode Island — have similarities in industry patterns. Indeed, there are only a few differences in the proportional rates at which U.S.-born and immigrant entrepreneurs enter different industry categories, and unsurprisingly the rates for New England as a whole are driven by patterns in these more populous states.

Educational Attainment Among Immigrant Entrepreneurs

Not only are typical immigrant-owned businesses different in terms of how much they comprise different industry categories, but their owners are also different from the typical U.S.-born business owner in terms of educational attainment.

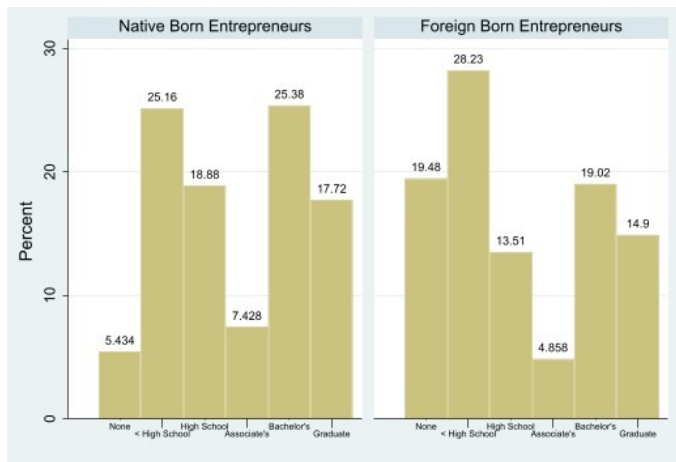
Immigrant entrepreneurs are more likely to come from the tail ends of the education distribution, meaning they are more likely to have either very little or very high levels of education (Kahn et al., 2017). This implies immigrants are more likely than the U.S. born to open both small, low-growth businesses like restaurants and gas stations, and large, high-growth businesses typically associated with Silicon Valley and Boston’s Route 128.

The phenomenon can be partially explained by national immigration policy. The U.S. typically favors immigrants with very high levels of education to attract STEM talent and immigrants with very low levels of education for humanitarian purposes (Enright & Bedi, 2022).

However, in New England generally, foreign-born entrepreneurs are much more likely than U.S.-born entrepreneurs to have no education or less than a high school education.

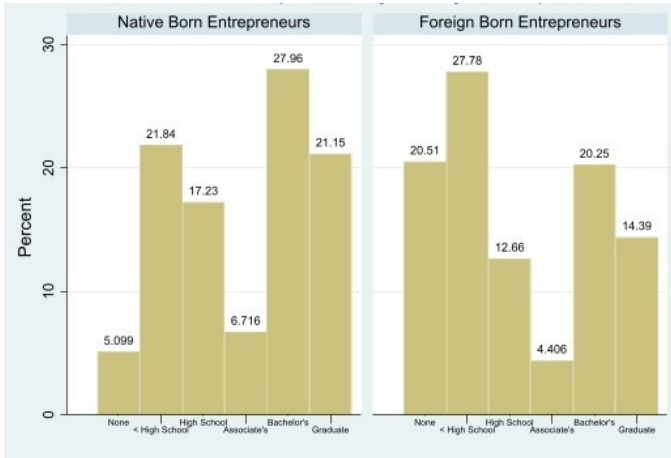
Immigrants are more likely to open businesses of all sizes, from “Main Street” businesses to those typically found along Route 128.

Education Attainment of Entrepreneurs by Nativity Status (New England)



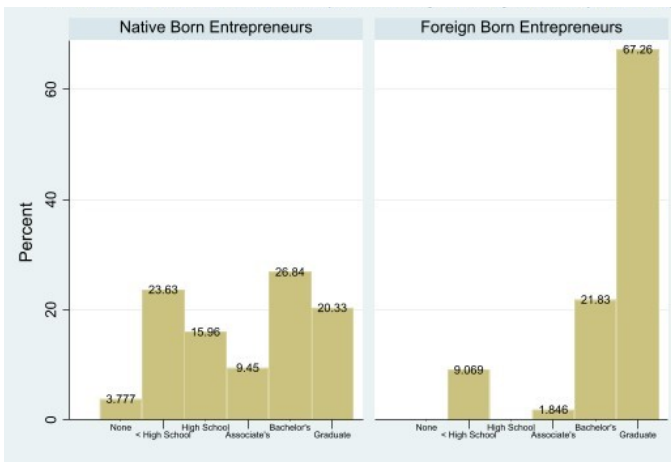
However, the 2021 ACS data reveal that this general pattern masks differences between states in terms of immigrant entrepreneurs’ levels of education. The more densely populated states with relatively high proportions of immigrants — Massachusetts, Connecticut, and Rhode Island — set the general New England trend, whereas immigrant entrepreneurs are, on average, less educated compared to U.S.-born entrepreneurs.

Education Attainment of Entrepreneurs by Nativity Status (Massachusetts)



However, in the less densely populated New England states with relatively low proportions of immigrants—Maine, New Hampshire, and Vermont—the opposite is true: Immigrant entrepreneurs are, on average, more educated. Indeed, in Vermont, close to 70 percent of immigrant entrepreneurs have a graduate degree.

Education Attainment of Entrepreneurs by Nativity Status (Vermont)



The differences in entrepreneurs’ average educational attainment across New England states shed light on state differences in the composition of specific industry categories by immigrant vs. U.S.-born enterprises.

As previously detailed, immigrant entrepreneurs in Vermont, unlike the rest of New England, are much more likely than U.S.-born entrepreneurs to found businesses in professional services. Thus, it is not surprising that immigrant entrepreneurs in Vermont are also much more likely to have a graduate degree. Professional services, such as consulting, require educational credentials. And, as with the difference in how much U.S.-born and immigrant entrepreneurs comprise specific industry categories, differences in educational attainment between the groups suggest they act more as complements than substitutes for one another.

Graphs showing the educational attainment of entrepreneurs by nativity status for the other New England states can be found in the appendix.

Differences in educational attainment and choice of industry suggest that immigrants and the U.S. born act as complements.

Entrepreneurial Impact—Incorporated vs. Unincorporated Businesses

A more refined sense of the growth potential of entrepreneurship across New England will provide more insight into the true impact of immigration in this field. One way to do this is by differentiating between entrepreneurs with incorporated businesses and those with unincorporated businesses. Whether a business is incorporated gives an idea of the growth potential of entrepreneurship as opposed to the relative quantity of entrepreneurship, because incorporated ventures are generally associated with more growth and are the businesses scholars typically refer to when discussing positive relationships between economic growth and entrepreneurship (Levine & Rubenstein, 2017).

The distinctions are important, because not all entrepreneurial enterprises are created equal, and though immigrants have been found to be more likely to engage in business creation, there is also a considerable amount of evidence suggesting that immigrant businesses suffer because of disadvantages their owners experience that are less salient for U.S.-born entrepreneurs. These might include negative attitudes towards immigrants, or legal barriers immigrants face that the U.S. born do not (Li et al., 2018; Wang & Lofstrom, 2020).

This is not to say that smaller, unincorporated businesses are not important. Indeed, despite experiencing several obstacles, immigrant business owners in Boston have contributed significantly to the revitalization of their neighborhoods (Borges-Méndez & Watanabe, 2005).

Others have shown immigrant business owners to be particularly important for rebuilding neighborhoods after significant natural disasters (Chamlee-Wright & Storr, 2009), and immigrant entrepreneurs, including small business owners, are expected to play a major role in economic recovery after the COVID-19 pandemic (Kerr, 2020).

At the same time, incorporated businesses contribute more to net job creation and other important economic measures (Levine & Rubenstein, 2017). This means the extent to which immigrant entrepreneurs contribute to local economies is dependent on the overall impact of their firm.

A deeper look into the 2021 ACS data reveals the entrepreneurial impact of U.S.-born and immigrant entrepreneurs in terms of proportions of business owners who own an incorporated business. For New England overall, U.S.-born entrepreneurs are slightly more likely than foreign-born entrepreneurs to own an incorporated business—33.9 percent compared to 33.7 percent. However, regional averages again mask state differences. As noted above, there are correlations between proportions of populations composed of immigrants, the industries immigrant and U.S.-born entrepreneurs enter into, and the average educational attainment of the two groups of entrepreneurs. But there are no correlations between proportions of populations composed of immigrants and the likelihoods of U.S.-born and immigrant entrepreneurs to incorporate.

While immigrant entrepreneurs are more likely than U.S.-born entrepreneurs to incorporate in relatively populous states with high proportions of immigrants such as Massachusetts and Rhode Island, the same is true for lightly populated Vermont.

The difference is particularly striking in Vermont, where just over half of immigrant business owners incorporate, compared to only about 31 percent of U.S.-born business owners.

Conversely, while immigrant entrepreneurs are less likely than U.S.-born entrepreneurs to incorporate in relatively less populous states with low proportions of immigrants like Maine and New Hampshire, it is also true in Connecticut, with its greater population and higher proportion of immigrants.

In Maine, immigrant entrepreneurs are particularly unlikely to incorporate, with just under 17 percent of immigrant business owners incorporating, compared to 31.55 percent of U.S.-born business owners.

Table 2 offers a synthesis of incorporation rates among entrepreneurs by state and nativity status.

While immigrants engage in higher rates of business creation, comparative disadvantages may hinder their potential.

In Vermont, over half of immigrant businesses are incorporated.

Table 2: Incorporation Rates Among Entrepreneurs by State

State	Incorporation Rates for U.S.-Born Entrepreneurs	Incorporation Rates for Foreign-Born Entrepreneurs
Massachusetts	32.4%	36.4%
Connecticut	38.5%	28.0%
Maine	31.6%	16.8%
New Hampshire	32.3%	31.0%
Rhode Island	36.8%	41.0%
Vermont	30.9%	33.7%
New England	33.9%	33.7%

Fortune 500 Companies

Another way to analyze the impact of immigrant-owned businesses vs. those owned by the U.S. born is by looking at Fortune 500 companies, with their higher employment and greater revenue (Enright & Bedi, 2022).

To conduct the analysis, this report relied on work done by the American Immigration Council, which provides information on whether Fortune 500 companies were founded by immigrants or children of immigrants.

The data provide particularly strong evidence of the impact of immigrant entrepreneurs. Immigrants are not just more entrepreneurial than the U.S. born, but that they also contribute much more to job and value creation, a finding that has also been documented in academic literature (Azoulay et al., 2022).

For example, half of the 18 Fortune 500 companies headquartered in Massachusetts can trace their founding to at least one immigrant or child of an immigrant. These companies are General Electric, Raytheon Technologies, TJX, Thermo Fisher Scientific, Moderna, Wayfair, Global Partners, Boston Scientific, and Biogen.

In total, the nine companies provide 884,000 jobs and produce \$295 billion in yearly revenue in Massachusetts. The other nine Fortune 500 companies in Massachusetts provide 200,000 jobs and produce \$160 billion in yearly revenue in the state (American Immigration Council, 2022).

In Connecticut, the Fortune 500 companies that can trace their founding to at least one immigrant or child of an immigrant include Cigna, Synchrony Financial, Otis Worldwide, Booking Holdings, Amphenol, and GXO Logistics. And though they represent only 40 percent of the absolute number of the state's Fortune 500 companies, they represent the majority of jobs created and revenue produced by Fortune 500 companies in the state—369,000 jobs created by immigrant-founded Fortune 500 companies compared to 329,000 jobs created by Fortune 500 companies founded by U.S.-born individuals, and \$234 billion in yearly revenue vs. \$156 billion (American Immigration Council, 2022).

Rhode Island does not bear out the trend. Fortune 500 companies founded by an immigrant or child of an immigrant represent a small minority of Fortune 500 activity in the state. Of Rhode Island's six Fortune 500 companies, only Hasbro was founded by an immigrant or child of an immigrant. The company is responsible for 6,600 jobs and produces a yearly revenue of \$6 billion. The other five Fortune 500 companies in Rhode Island employ 342,000 individuals and produce a collective yearly revenue of \$347 billion (American Immigration Council, 2022).

The more rural states of Maine, New Hampshire, and Vermont do not have any Fortune 500 companies.

By contributing to job and value creation, the impact of immigrants extends beyond just firm creation.

Discussion, Policy Implications, and Recommendations

A few patterns emerge in the data reported above. First, immigrants seem to be more entrepreneurial than the U.S. born; they open a greater share of businesses than their proportion of the population would suggest, contributing significantly to economic development and job creation.

However, a typical immigrant-owned business is different from one owned by a U.S.-born entrepreneur along at least two important dimensions—the industry in which it operates and the educational attainment of the business owner. Further, there is evidence of the immigrant entrepreneur's impact. In many states, immigrant entrepreneurs are more likely than U.S. born entrepreneurs to incorporate, and businesses founded by an immigrant, or the child of an immigrant, are overrepresented in Fortune 500 statistics.

Based on the data, this report suggests several helpful policy changes. While immigration policy in the United States falls mostly under federal jurisdiction, there are state-level policies that could help New England state governments better leverage the benefits immigrant entrepreneurs bring.

For example, a particularly innovative way to attract immigrants would be to leverage the ability of colleges to apply for cap-exempt H-1B visas, which are reserved for high-skilled workers or entrepreneurs.

A model of this already exists, a program known as the Global Entrepreneur in Residence Program has been in place in Massachusetts since 2014. Under this program, Massachusetts universities sponsor cap-exempt H-1B visa petitions for graduates with advanced degrees who have founded companies. (The Innovation Institute, 2022). Continuing and expanding programs like this in Massachusetts and other states has the potential to allow immigrants to generate economic activity in New England while providing valuable contributions to state university revenues.

Besides incenting more high-skilled immigration through cap-exempt positions at state universities, steps can be taken to reduce the regulatory burden immigrant entrepreneurs face. Compared to U.S. citizens, immigrants are more restricted in terms of the types of employment they can pursue.

For example, immigrants on work visas are often not allowed to switch employers without a change in visa status, and evidence suggests immigrant entrepreneurship is stifled because of employment restrictions immigrants face when they first arrive in the United States (Agarwal et al. 2022). Thus, allowing immigrants at least the same amount of labor market freedom when they arrive as citizens or permanent residents could help them contribute even more to new business creation and entrepreneurship.

Unfortunately, visa employment restrictions are under federal jurisdiction, meaning little to nothing can be done at the state level. However, a number of reforms can be undertaken by legislatures to provide incentives for entrepreneurially oriented immigrants to move to their states.

For example, many state regulations on businesses, like occupational licensing, serve to hamper business creation and growth, and there is evidence that immigrants struggle more with occupational licensing requirements than do the U.S. born (Kerr, 2022). State legislatures could boost immigrant entrepreneurship by reducing occupational licensing requirements, specifically for low-skill occupations where safety and consumer protection do not warrant strict regulation.

In some New England states, occupational licensing laws are particularly burdensome, which means these states stand to gain more from reducing such barriers.

The Institute for Justice provides information on occupational licensing laws in each state and ranks the states along two dimensions (Institute for Justice, 2022). First, states are ranked by how difficult the average occupational license in that state is to acquire. Second, they are ranked by how many occupations are subject to licensing. A higher rank signifies a more burdensome regulatory environment, such that the most burdensome state is given a rank of one while the least burdensome state is given a rank of 51 (Washington, D.C. included).

Allowing immigrants greater labor market freedom could help fully unleash their entrepreneurial potential.

- Vermont is the least burdensome state in New England in terms of the onerousness of the process to obtain occupational licenses, with a rank of 31. Still, in Vermont it takes an average of \$194 and 266 calendar days to obtain an occupational license. Vermont also ranks as the least burdensome state in the entire U.S. in terms of how many low-skilled occupations are licensed, with 31 low-income occupations listed as requiring a license.
- Maine also ranks relatively low in both areas, ranking 26th in how onerous licenses are to obtain, with an average license costing \$226 and 323 calendar days, and 32nd in terms of how many low-skilled occupations are licensed, with 46 listed.

Other New England states maintain much more burdensome occupational licensing regimes.

- Rhode Island ranks 25th in onerousness, with a license costing an average of \$236 and taking 297 calendar days.
- New Hampshire ranks 19th, with a license taking on average 326 days and \$209 to acquire.
- Connecticut ranks 17th, with a license taking on average 374 days and \$290 to acquire.
- Massachusetts maintains the most onerous occupational licensing regime in New England, ranking eighth, with a license taking, on average, 511 days and \$331 to acquire.

In terms of the breadth of occupational licensing laws, New Hampshire, like Vermont, subjects relatively few low-skilled occupations to licensing requirements—a total of 37. Massachusetts, despite how onerous licenses can be to obtain there, is also in the bottom half in terms of how many occupations are subjected to licensing, ranking 29th with a total of 50. Connecticut ranks 15th, requiring licenses for 65 low-skilled occupations, and Rhode Island ranks 11th, requiring licenses for 70 low-skilled occupations.

Thus, by simply lowering the dollar and time costs associated with licensing, and reducing the number of occupations subject to licensing, New England states could do a lot to attract immigrant entrepreneurs from other parts of the country.

Occupational licensing is most often required of low-skilled occupations and can hamper the many benefits that small businesses bring to the economy, including community revitalization (Borges-Méndez & Watanabe, 2005). To boost more impactful entrepreneurship, legislatures should focus on improving state-level economic freedom, which has been found to be beneficial for growth-oriented entrepreneurship (Sanandaji & Leeson, 2013).

A commonly used tool to compare economic freedom at the state level is the Frasier Institute's Economic Freedom of North America Index (Frasier Institute, 2020), which ranks different geographic areas in North America, including U.S. states, across five categories:

- Size of government (with smaller governments considered more economically free)
- Legal system and security of property rights (where more secure property rights and an effective, non-corrupt legal system are considered more economically free)
- Sound money (where a lack of budget deficits and low inflation indicate a more economically free area)
- Freedom to trade internationally
- Regulation (where less burdensome regulatory environments are considered economically free)

In different ways, each of the five categories measures how easy it is to do business. Where government is small, the rule of law is respected, inflation is low and predictable, international trade is allowed, and regulation is low, business tends to thrive. Where the reverse is true, business is typically stifled.

Of the five measures, state governments have most control over size of government, rule of law, and regulation. In states where businesses can expect fair dealings and low crime rates, where regulations do not create undue barriers to entry and growth, and where government growth

Massachusetts has the 8th-most burdensome licensing regime, costing individuals \$331 and 511 days on average.

Reducing the financial and time related barriers imposed by occupational licensing could attract immigrant entrepreneurs to New England.

in the form of high taxes does not deter investment, businesses, including immigrant-owned businesses, can thrive.

In the Frasier Institute's Index, a ranking of one signifies the state with the most economic freedom, while 51 (Puerto Rico is included in these rankings) signifies the least economically free state, and therefore the least friendly towards business.

Here, New England as a whole, with the exception of New Hampshire, performs relatively poorly. While New Hampshire, boasting low taxes and low government spending, as well as a high degree of labor market freedom, is the second-most free economically among the 50 states and Puerto Rico, the other New England states all rank in the bottom half: Massachusetts 26th, Connecticut 42nd, Maine 45th, and Vermont 47th.

These rankings, together with other facts this report has uncovered, could help explain why Vermont has relatively few immigrant entrepreneurs. Since greater economic freedom mostly affects high-impact businesses and most immigrant entrepreneurs in Vermont are owners of incorporated enterprises, it makes sense immigrant entrepreneurship rates would be relatively low in that state.

A more specific policy to help both low- and high-skill entrepreneurs scale their businesses up would be to lower the costs of incorporation. Incorporation does a great deal to encourage both business creation and growth by decreasing the individual liability business owners face. This reduces the risk of business ventures and encourages development of entrepreneurial ideas.

There is, then, room for New England states to lower taxes and increase labor market mobility, which would improve the prospects of businesses owned by both immigrants and the U.S. born.

For example, high minimum wages and mandated costs related to worker dismissal contribute to low rankings in economic freedom by making it more difficult for businesses to hire and fire employees, and state legislatures have direct control over these types of policies. Indeed, according to the U.S. Department of Labor, Massachusetts had, at \$14.25 per hour, the third-highest minimum wage in the U.S. as of January 1, 2022. Connecticut has the sixth highest minimum wage in the U.S. at \$13.00 per hour, and Rhode Island, Maine, and Vermont all mandate minimum wages between \$12 and \$13 per hour.

Conclusions

This report documents the extent of immigrant entrepreneurship in New England by comparing immigrant entrepreneurs with their U.S.-born counterparts. The data suggest immigrants are generally more entrepreneurial in New England, and there is evidence that this entrepreneurship is impactful, particularly in certain states. At the same time, the businesses immigrants own are different from those owned by U.S.-born entrepreneurs, both in terms of the industries in which they likely operate and the educational attainment of the business owners.

In light of the evidence, the region's legislatures should consider doing the following:

- Introduce and expand entrepreneur-in-residence programs.
- Reduce occupational licensing requirements in terms of both monetary costs and the time required to obtain a license, particularly for low-skilled occupations.
- Increase economic freedom at the state level:
 - Simplify and lower state-level taxes on corporations and other businesses.
 - Reduce the costs of incorporation.
 - Increase labor market mobility by easing minimum wage requirements and reducing costs associated with worker dismissal.

Despite voter anxiety about immigration, the data on immigrant entrepreneurship are positive. Immigrants benefit the business environments of the areas in which they settle, making immigration a great bargain not only for immigrants, but for the communities they serve.

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Steps can be taken to maximize the value of the contributions immigrants make. These would involve giving immigrants the room they need to experiment entrepreneurially without being stifled by immigration restrictions, a tight labor market, and overburdensome regulations.

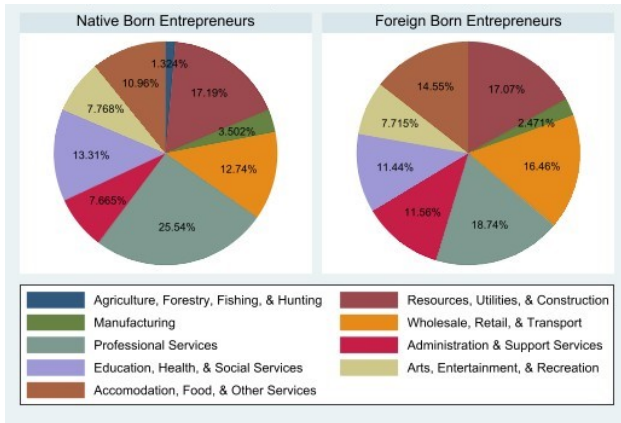
References

- Agarwal, R., Ganco, M., & Raffee, J. (2022). Immigrant entrepreneurship: The effect of early career immigration constraints on new venture formation. *Organization Science*, 33(4), pp. 1372–1395.
- American Community Survey. (2021). ACS 1-Year Estimates Public Use Microdata Sample, 2021. <https://data.census.gov/mdat/#/>.
- American Immigration Council. (2022). New American Fortune 500 in 2022: The Largest American Companies and Their Immigrant Roots. <https://data.americanimmigrationcouncil.org/en/fortune500-2022/>
- Azoulay, P., Jones, B.F., Kim, J.D. and Miranda, J. (2022). Immigration and entrepreneurship in the United States. *American Economic Review: Insights*, 4(1), pp.71–88.
- Borges-Méndez, R., & Watanabe, P. (2005). Immigrant entrepreneurs and neighborhood revitalization: Studies of the Allston Village, East Boston, and Fields Corner neighborhoods in Boston. Immigrant Learning Center.
- Chamlee-Wright, E., & Storr, V. H. (2009). Club goods and post-disaster community return. *Rationality and Society*, 21(4), pp. 429–458.
- Enright, A. and Bedi, J. (2022). Immigrant entrepreneurs and the barriers they face: An academic literature review [No. 255]. Pioneer Institute of Public Policy Research.
- Fraser Institute. (2020). Economic Freedom. <https://www.fraserinstitute.org/economic-freedom/dataset?geozone=na&year=2020&selectedCountry=USA&page=dataset&min-year=2&max-year=0&filter=0>.
- Innovation Institute. (2022). Global Entrepreneur in Residence Pilot Program. <https://innovation.masstech.org/projects-and-initiatives/global-entrepreneur-residence-pilot-program>.
- Institute for Justice. (2022). Ranking Burdens by State. <https://ij.org/report/license-to-work-3/report/results/ranking-burdens-by-state/>.
- Kahn, S., La Mattina, G. and J MacGarvie, M. (2017). “Misfits,” “stars,” and immigrant entrepreneurship. *Small Business Economics*, 49(3), pp.533–557.
- Kerr, S. P. (2020). Immigrant entrepreneurs: What is their role in the pandemic recovery effort?. The Center for Growth and Opportunity.
- Kerr, S.P. (2022). Immigrant entrepreneurs. The Center for Growth and Opportunity.
- Levine, R. and Rubinstein, Y. (2017). Smart and illicit: Who becomes an entrepreneur and do they earn more? *The Quarterly Journal of Economics*, 132(2), pp. 963–1018.
- Li, C., Isidor, R., Dau, L.A. and Kabst, R. (2018). The more the merrier? Immigrant share and entrepreneurial activities. *Entrepreneurship Theory and Practice*, 42(5), pp.698–733.
- Sanandaji, T. and Leeson, P.T. (2013). Billionaires. *Industrial and Corporate Change*, 22(1), pp.313–337.
- Schumpeter, J. A. (2017). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Routledge, Abingdon, England.

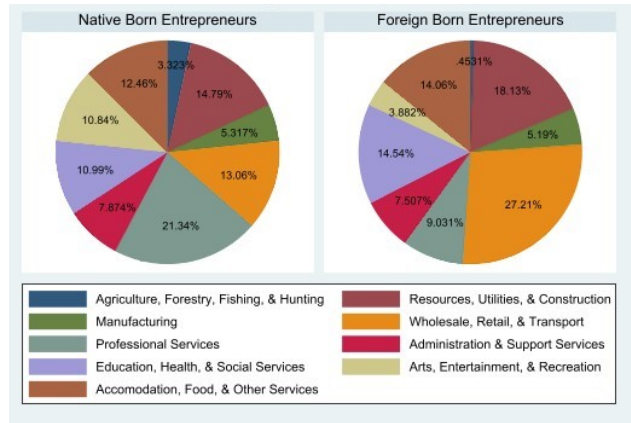
- “The Cafe” (1991). *Seinfeld*, season 3, episode 24. Directed by Tom Cherones. Written by Tom Leopold. NBC, November 6.
- United Nations, Department of Economic and Social Affairs, Population Division (2019). International Migrant Stock, 2019, POP/DB/MIG/Stock/Rev.2019, available at: https://www.un.org/en/development/desa/population/migration/data/estimates2/docs/MigrationStockDocumentation_2019.pdf.
- United States Department of Labor. 2021. State Minimum Wage. https://www.richstatespoorstates.org/variables/state_minimum_wage/.
- US Census Bureau. 2022. Percentage of foreign-born population in the United States in 2021, by state. [https://data.census.gov/table?q=R0501&t=Foreign+Born&g=010XX00US\\$0400000,&tid=ACSDP1Y2021.DP02](https://data.census.gov/table?q=R0501&t=Foreign+Born&g=010XX00US$0400000,&tid=ACSDP1Y2021.DP02).
- Vandor, P. (2021). Are voluntary international migrants self-selected for entrepreneurship? An analysis of entrepreneurial personality traits. *Journal of World Business*, 56(2), p.101142.
- Wang, C. and Lofstrom, M. (2020). September 11 and the rise of necessity self-employment among Mexican immigrants. *Eastern Economic Journal*, 46(1), pp.5–33.

Industry Makeup of Entrepreneurs by Nativity

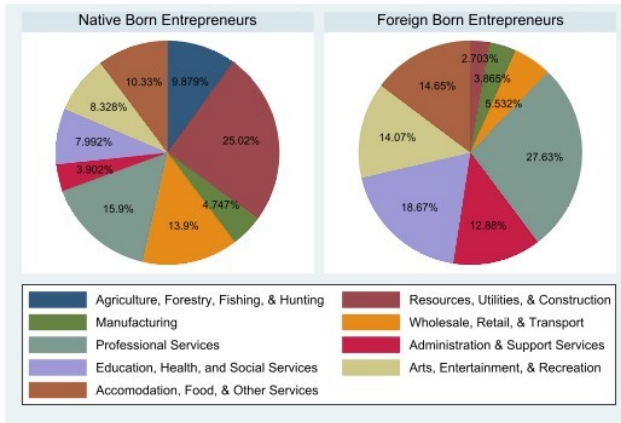
Connecticut



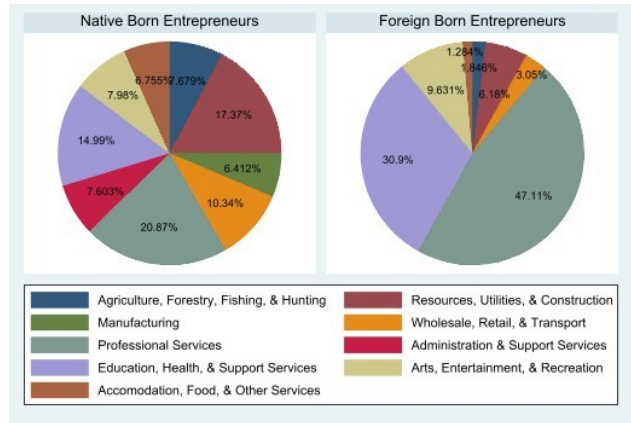
Rhode Island



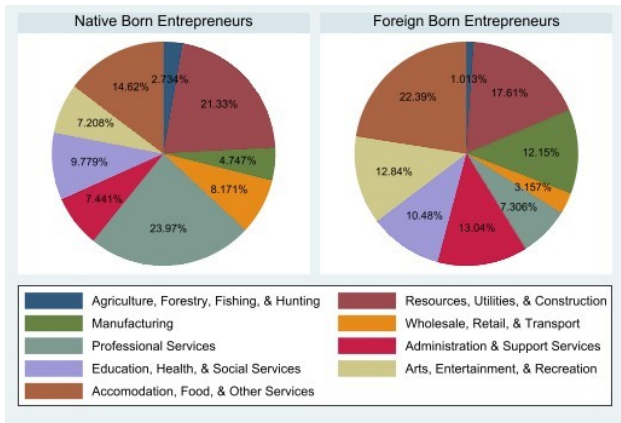
Maine



Vermont

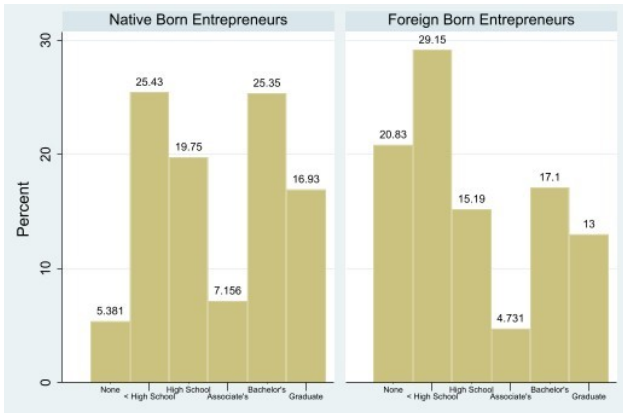


New Hampshire

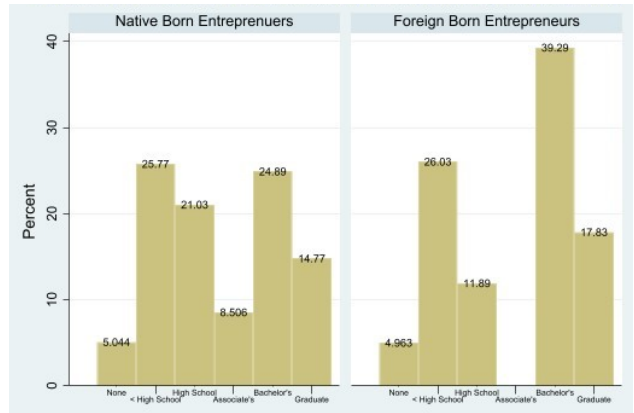


Education Attainment of Entrepreneurs by Nativity

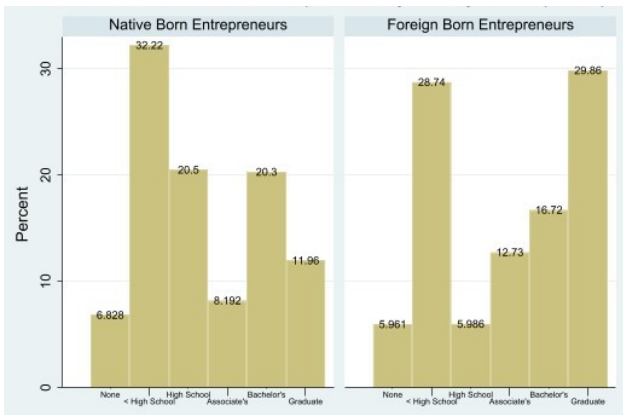
Connecticut



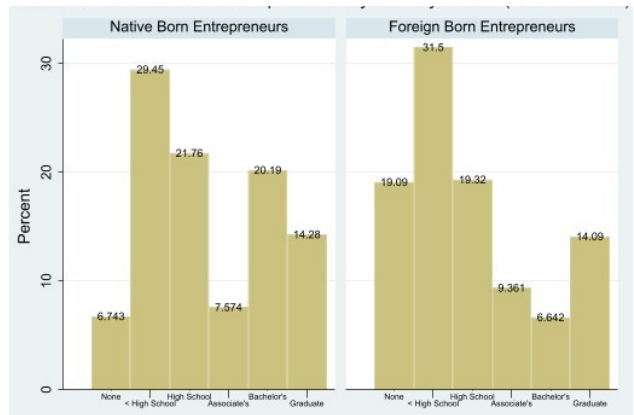
New Hampshire



Maine



Rhode Island



American Community Survey. (2021). ACS 1-Year Estimates Public Use Microdata Sample, 2021. <https://data.census.gov/mdat/#/>.

About the Author

Josh Bedi began his undergraduate career with the International Business Program at Mississippi State University and received a Bachelor of Business Administration in business economics and a Bachelor of Arts in German. At Mississippi State, he worked with Germany Trade and Invest as a Service Industries Intern.

He earned his Ph.D. and was a Mercatus Center Fellow at George Mason University. He is now working at Copenhagen Business School as a Postdoc in Entrepreneurship at the Department of Strategy and Innovation. There, he works under the Mærsk McKinney Møller Chair in Entrepreneurship.

Mission

Pioneer Institute develops and communicates dynamic ideas that advance prosperity and a vibrant civic life in Massachusetts and beyond.

Vision

Success for Pioneer is when the citizens of our state and nation prosper and our society thrives because we enjoy world-class options in education, healthcare, transportation, and economic opportunity, and when our government is limited, accountable, and transparent.

Values

Pioneer believes that America is at its best when our citizenry is well-educated, committed to liberty, personal responsibility, and free enterprise, and both willing and able to test their beliefs based on facts and the free exchange of ideas.

