

Business dynamism in Wisconsin

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Executive summary

Business dynamism—the entry, growth and exit of firms—is an important part of a healthy economy. New firms bring innovation and job creation. Successful firms grow and labor and capital are reallocated to their most productive uses. Business dynamism in the United States and Wisconsin, however, have been declining for decades.

The share of small establishments, the share of young establishments, the establishment entry rate, the establishment exit rate, and the rate of new entrepreneurship are all smaller in Wisconsin than most other states.

Wisconsin has relatively high levels of business income taxation and relatively low levels of working-age population growth. These factors depress business creation and growth relative to states with lower taxation and faster population growth.

What opportunities and challenges face Wisconsin's businesses? The Center for Research on the Wisconsin Economy invites you to a panel discussion with leading thinkers and policy makers who will take up these issues. The event takes place October 16, 2023 on the University of Wisconsin–Madison campus. Find out more at go.wisc.edu/lca749.

Policy briefs are short, timely reports that highlight economic issues of importance to policy makers, business leaders, and the public. This brief is available at crowe.wisc.edu. The views expressed herein are those of the authors and not necessarily those of the Center for Research on the Wisconsin Economy, the Department of Economics, or the University of Wisconsin.

In the United States, the business creation and destruction that underlies a strong, market-driven economy has waned in recent years (Davis et al., 2006; Hathaway and Litan, 2014). These trends are observed in Wisconsin as well, but compared with the United States as a whole, Wisconsin has fewer small businesses, fewer young businesses, and lower business entry and exit rates. In this primer, we lay out the data surrounding business dynamism in Wisconsin and some of the factors related to its decline.

Business dynamism in Wisconsin

There were 129,040 business establishments in Wisconsin in 2021, the last year in which data were available.¹ This is equivalent to 21.9 establishments per 1,000 residents, similar to the value of 21.7 for the United States. The share of small businesses and the share of young businesses, however, are smaller in Wisconsin than in the United States. The data are reported in table 1. For example, 47.9% of the establishments in Wisconsin have 1–4 employees, 67.9% have 1–9 employees, and 82.2% have 1–19 employees. The corresponding values for the United States are larger at 52.5%, 71.3%, and 84.4%, respectively. In 2021, 6.2% of the establishments in Wisconsin were less than one year old, 28.4% were five years old or younger, and 43.4% were ten years old or younger. The corresponding values for the U.S. are larger at 8.1%, 33.6%, and 50.2%, respectively.

Figure 1 plots the evolution of the share of establishments with 1–4 employees. The share of establishments with 1–4 employees is smaller in Wisconsin than in the United States in each year between 1978 and 2021. Moreover, the share of establishments with 1–4 employees has been declining at a faster rate in Wisconsin than in the United States. As a result, the gap between Wisconsin and the United States has more than doubled, from 1.9 percentage points in 1978 to 4.7 percentage points in 2021.

Figure 2 shows that the share of establishments less than one year old is smaller in Wisconsin than the United States in each year between 1978 and 2021. During this period, the share has been declining at a similar rate in Wisconsin and the United States, so that the gap between them is relatively flat at 1.5–2 percentage points. The patterns for the share of establishments less than five years old are similar.

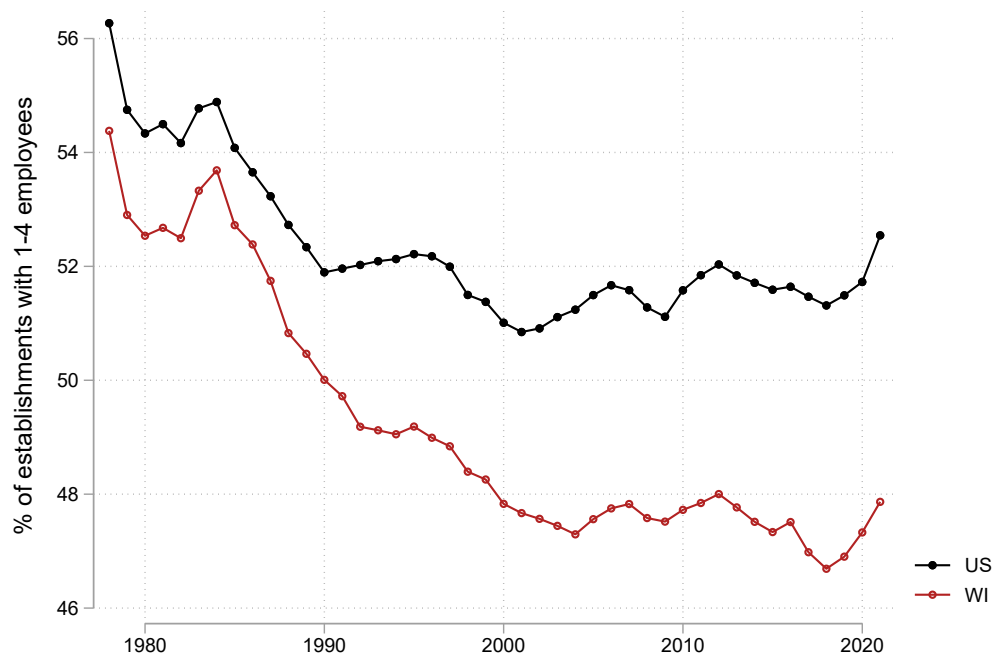
Figure 2 suggests that there is less business entry in Wisconsin than in the United States as a whole. Figure 3 confirms this using the establishment entry rate data. For each year t , the establishment entry rate is defined as the ratio between the number of establishments created in the previous 12 months and the average of the numbers of establishments in year t and $t - 1$. As shown in the figure, the establishment entry rate in Wisconsin is lower than the rate in the United States in each year over the last four decades. While the rate declined in both Wisconsin and the United States during this period, the gap between them is relatively flat at 2–2.5 percentage points.

¹ The data are from the Business Dynamics Statistics (BDS) of the U.S. Census Bureau.

Table 1: Business establishments in 2021

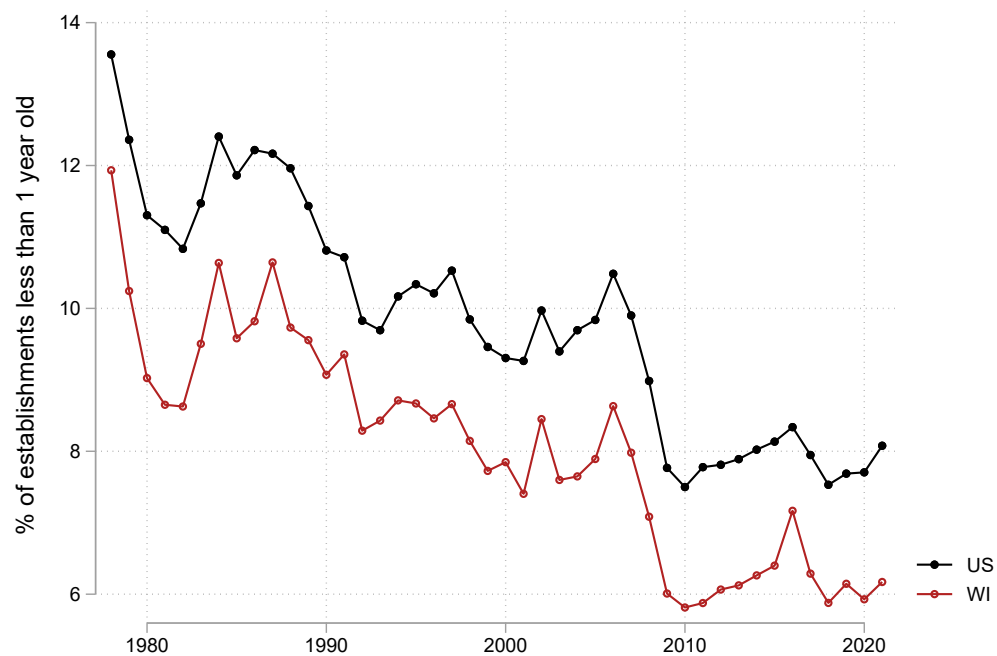
	WI	US
Number	129,040	7,193,411
Per 1000 residents	21.9	21.7
Size distribution (%)		
Employees		
1–4	47.9	52.5
5–9	20.0	18.8
10–19	14.3	13.1
20–99	14.7	12.9
100–499	2.8	2.3
500–999	0.2	0.2
1000+	0.1	0.1
Age distribution (%)		
Years		
<1	6.2	8.1
1–5	22.2	25.5
6–10	15.0	16.6
11–44	48.1	44.5
45+	8.5	5.3

Figure 1: Percentage of establishments with 1-4 employees



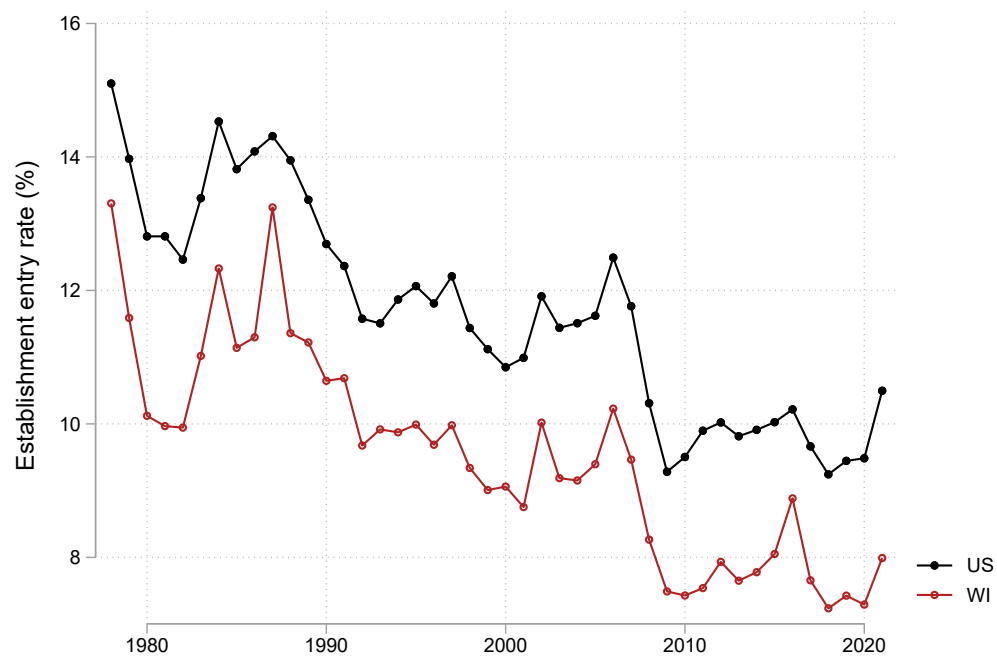
Source: Business Dynamics Statistics, U.S. Census Bureau.

Figure 2: Percentage of establishments less than 1 year old



Source: Business Dynamics Statistics, U.S. Census Bureau.

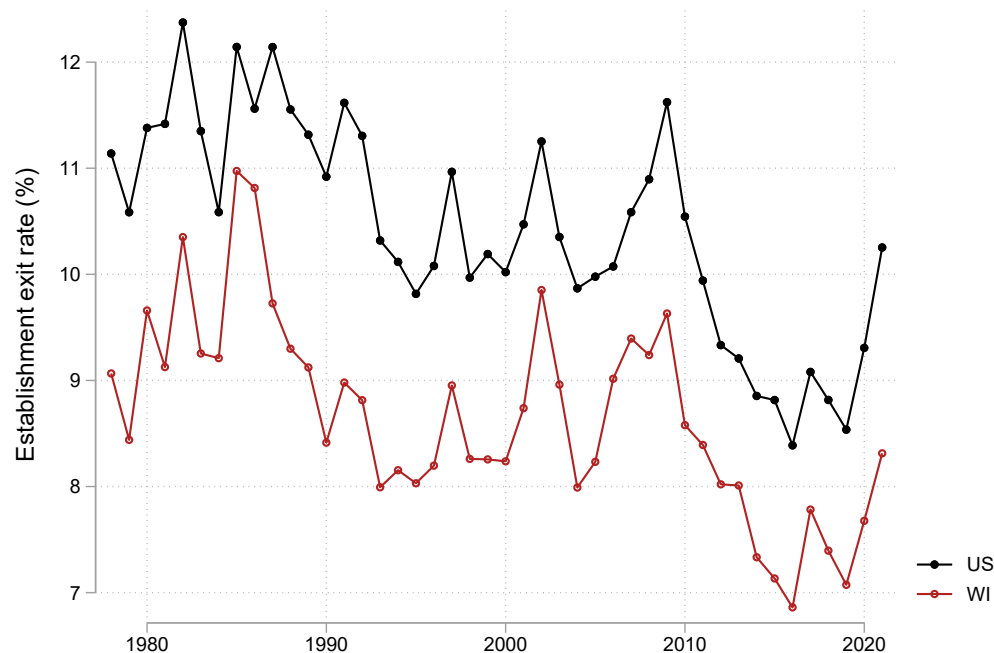
Figure 3: Establishment entry rate



Source: Business Dynamics Statistics, U.S. Census Bureau.

Figure 4 plots the establishment exit rate. For each year t , the establishment exit rate is defined as the ratio between the number of establishments that exited in the previous 12 months and the average of the numbers of establishments in year t and $t - 1$. Similar to the establishment entry rate, the establishment exit rate in Wisconsin is also lower than the rate in the United States in each year over the last four decades. While the rate declined in both Wisconsin and the United States during this period, the gap between them is relatively flat at 1.5–2 percentage points.

Figure 4: Establishment exit rate



Source: Business Dynamics Statistics, U.S. Census Bureau.

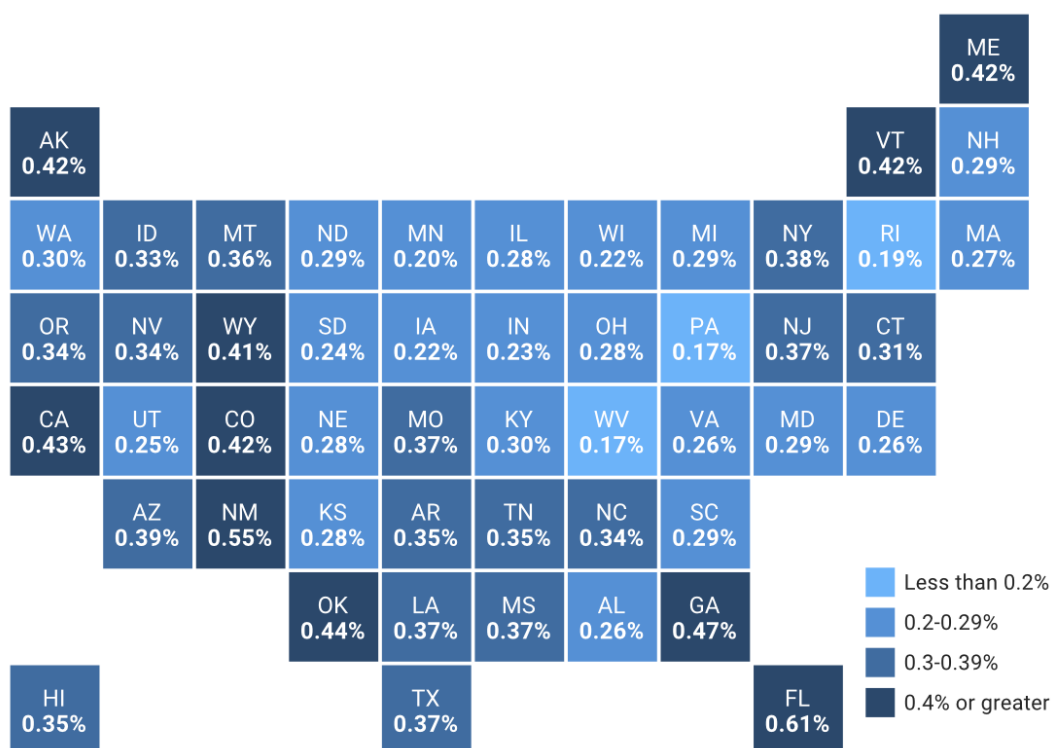
A related measure is the rate of new entrepreneurship, which captures all new business owners, including those without employees. This measure is also relatively low in Wisconsin. In figure 5, we plot the percentage of the population that started a new business in each state in 2021.² Only 0.22% of Wisconsinites started a new business in 2021, much lower than the value of 0.36% for the United States as a whole.

Why is business dynamism low in Wisconsin?

Research points to several factors that influence business dynamism and help explain its variance across states, countries, and time. We focus on three. **Business taxation** lowers the return to starting and growing a business, so higher taxes generally lead to lower rates of business creation. The overall population growth rate and the age distribution determine the **growth rate of the working-age population**. Economies with stronger working-age population growth have stronger business

²These figures are calculated by researchers at the Kauffman Foundation using data from the Current Population Survey.

Figure 5: Percent of population that started a new business in 2021



Source: Kauffman Foundation.

formation. **Policy and regulation**, at both the local and national levels, have a direct impact on the return to business formation.

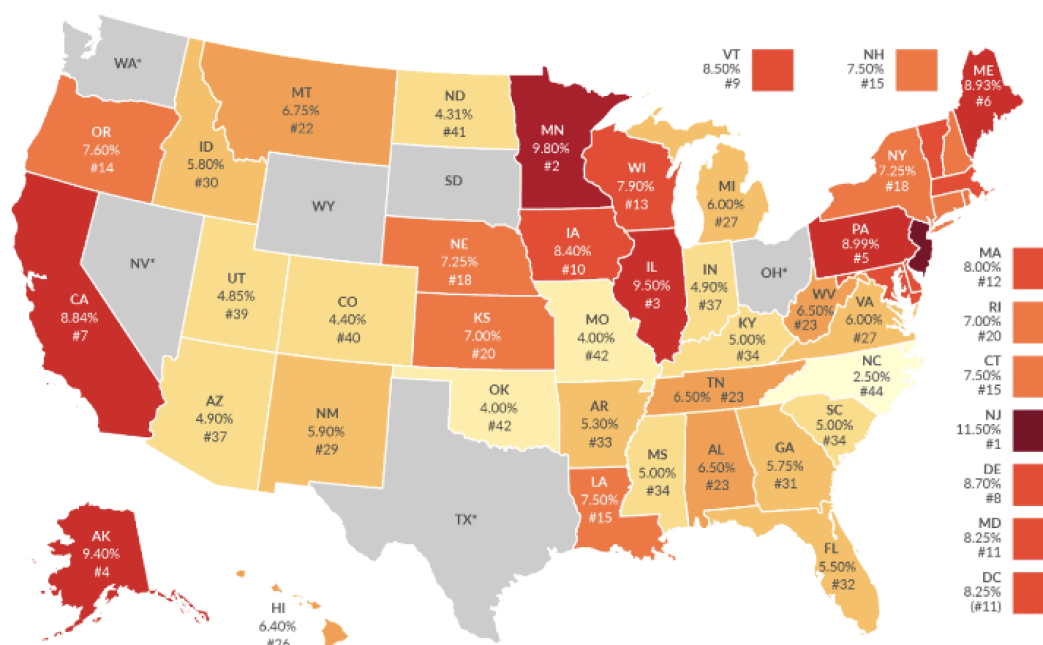
Business taxation

Wisconsin's corporations face the state's corporate tax and Wisconsin's pass-through business face the state's individual income tax; both tax rates are large. The high tax rates in Wisconsin contribute to the state's low business dynamism.

Wisconsin has a flat corporate income tax rate of 7.9%. Using data from Fritts (2023), figure 6 shows that Wisconsin's (top) corporate income tax rate is the 13th highest among all states and the District of Columbia. Loughhead et al. (2022) find that, in fiscal year 2020, corporate income taxes accounted for 7.2% of total tax collections by the state of Wisconsin, higher than the average value of 4.9% across all states and the District of Columbia.

Instead of the corporate income tax, pass-through businesses, including sole proprietorships, partnerships and S-corporations, are subject to the individual income tax. Using data from the U.S. Census Bureau, we find that, in 2021, 66% of all business establishments in Wisconsin were pass-through businesses. Pass-through businesses accounted for 44% of the employment by all businesses. The corresponding values for the United States are 67% and 43%, respectively.

Figure 6: Top marginal state corporate income tax rates in 2023



Source: Fritts (2023), Tax Foundation.

Guo et al. (2023) show that pass-through income in Wisconsin is highly concentrated among high-income households, who are subject to the state's top marginal individual income tax rate of 7.65%. For example, in 2019, 42% of the state's pass-through income was reported by households whose annual income was \$1 million or more, and 55% was reported by households whose annual income was \$500 thousand or more. This suggests that the top individual income tax rate has a significant impact on the state's business dynamism. Using data from Vermeer (2023), figure 7 plots the top marginal individual income tax rate by state. At 7.65%, Wisconsin's top marginal individual income tax rate is the 10th highest among all states and the District of Columbia.

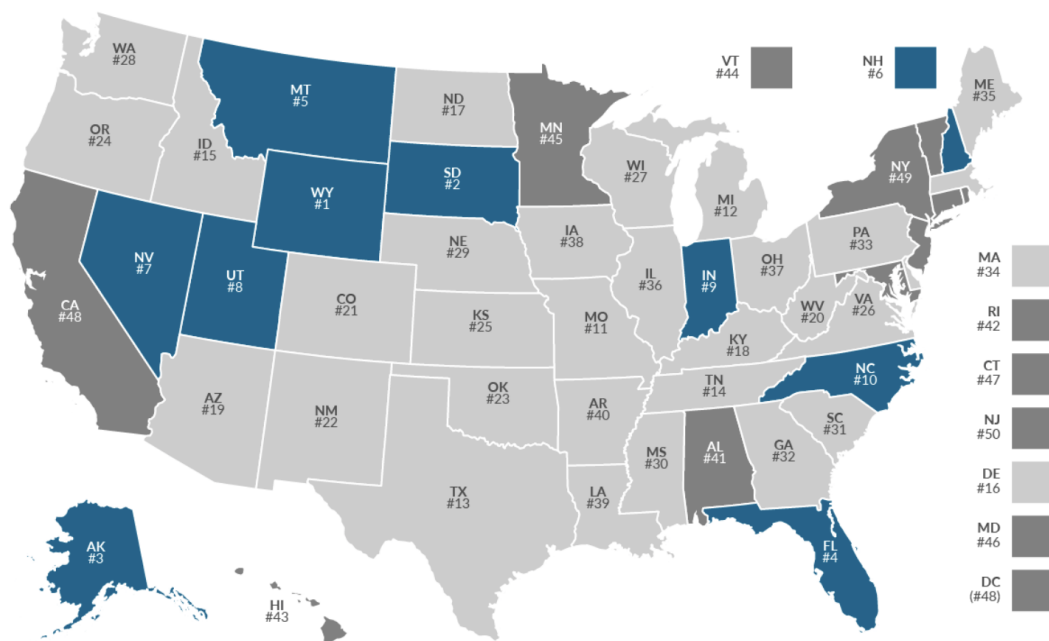
Standing at 5%, Wisconsin's sales tax rate, however, is lower than the rates in most other states. Wisconsin's combined state and average local sales tax rate is 5.42%, which is the 44th highest among all states and the District of Columbia (Tax Foundation, 2023).

The state business tax climate index summarizes the various taxes that businesses face (Fritts and Walczak, 2023). Figure 8 plots the tax climate index that combines and ranks the corporate income tax, the individual income tax, the sales tax, the property tax, and the unemployment insurance tax of each state. In addition to the tax rates, it also accounts for other measures of each state's tax structure, such as the base of each of the five taxes. In 2023, Wisconsin ranks 27th out of the U.S. states and the District of Columbia. Wisconsin's rankings for the five components are: 31st for the corporate income tax, 38th for the individual income tax, 7th for the sales tax, 15th for the property tax, and 31st for the unemployment insurance tax.

Map showing the percentage of the population aged 65 and over by state. The color scale ranges from 2.50% (lightest yellow) to 13.30% (darkest red).

State	Percentage
WA***	7.00%
OR	9.90%
CA	13.30%
MT	6.75%
ID*	5.80%
WY	-
UT*	4.85%
NV	-
AZ*	2.50%
CO*	4.40%
NM	5.90%
TX	-
ND	2.90%
SD	-
NE	6.64%
KS	5.70%
OK	4.75%
AR	4.90%
LA	4.25%
MS*	5.00%
AL	5.00%
GA	5.75%
FL	-
VT	8.75%
NH**	4.00%
ME	7.15%
MA	9.00%
RI	5.99%
CT	6.99%
NJ	10.75%
DE	6.60%
MD	5.75%
DC	10.75%
NY	10.90%
PA*	3.07%
WV	6.50%
VA	5.75%
NC*	4.75%
SC	6.50%
OH	3.99%
MI*	4.25%
IN*	3.15%
IL*	4.95%
IA	6.00%
MO	4.95%
WI	7.65%
MN	9.85%
AK	-
HI	11.00%

Figure 8: State business tax climate index in 2023



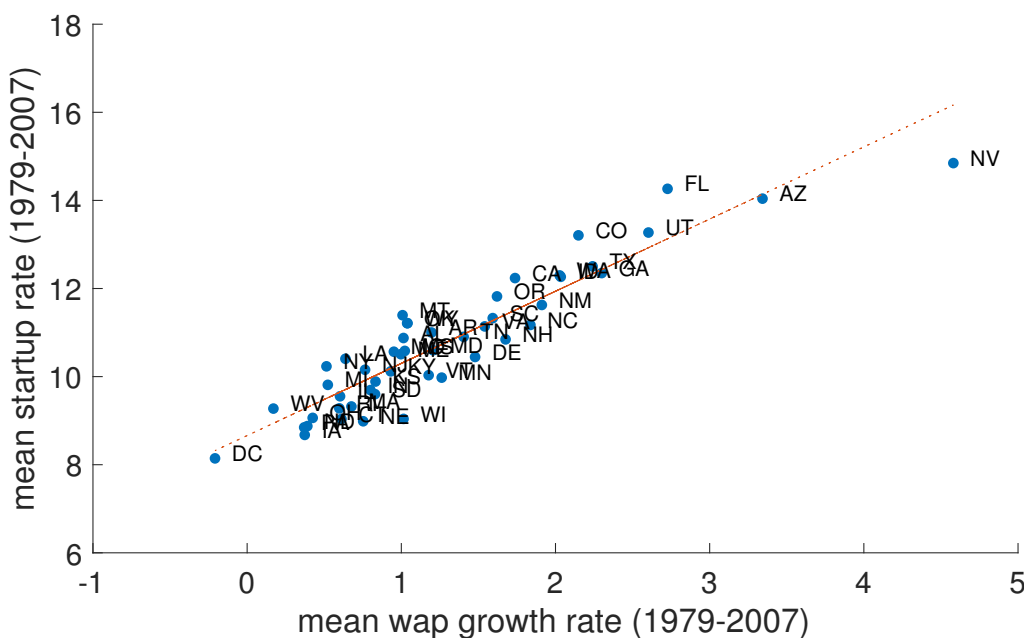
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Demographics

Business creation and growth depends on the population that is available to support it. Broadly, there are two factors: the growth rate of the working-age population and the labor force participation rate. In Wisconsin, the working-age population is growing slowly compared to the United States, while Wisconsin's labor force participation rate remains higher than the U.S. average.

In figure 9 we plot, from 1979 to 2007, the average working-age population growth rate and the startup rate, the share of new employers as a fraction of all employers. The relationship is striking: higher startup rates are strongly correlated with the working-age population growth rate. Wisconsin's relatively low population growth rate is consistent with its low startup rate.

Figure 9: Average working-age population (wap) growth and the startup rates



Source: Karahan et al. (2022).

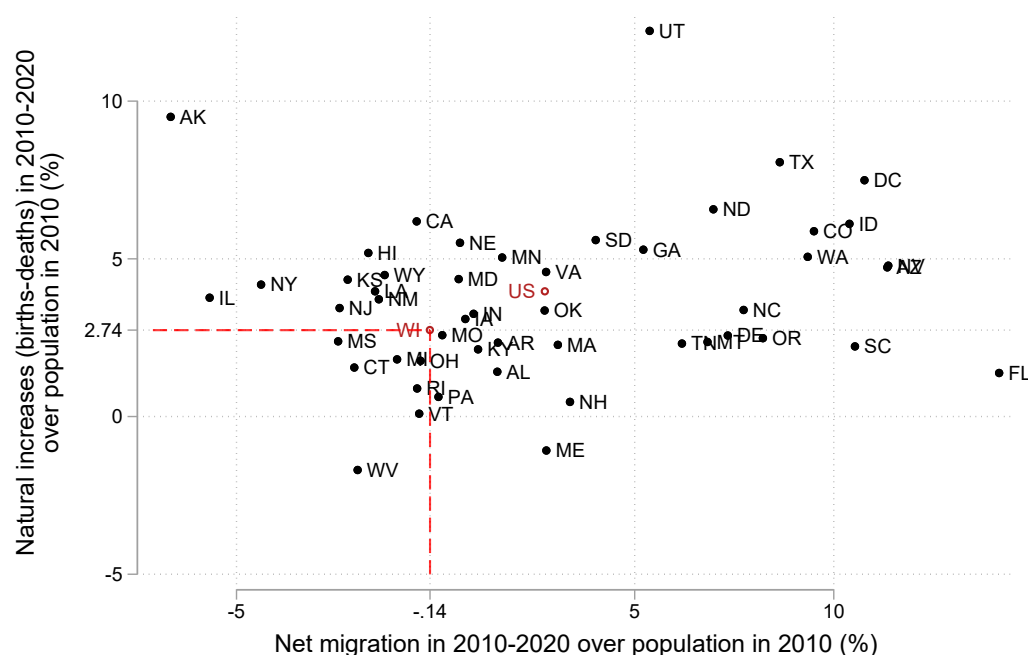
Population growth

Between 2010 and 2020, Wisconsin's population grew by only 3.6%, less than half of the 7.4% growth for the United States. What accounts for the relatively slow growth in Wisconsin's population?

In figure 10, we decompose the population change between 2010 and 2020 for each state into two components: *natural increases* (births minus deaths) and *net (domestic and international) migration*. The horizontal axis is the change in population from net migration from 2010–2020 as a share of the population in 2010. The vertical axis is the change in population from natural increases from 2010–2020 as a share of the population in 2010. Wisconsin's population increased

by 2.74% due to births and deaths and decreased by 0.14% due to net migration.³ Both natural increases and net migration are smaller in Wisconsin than in the United States and most other states.

Figure 10: Population change due to natural increases and net migration



Source: U.S. Census Bureau.

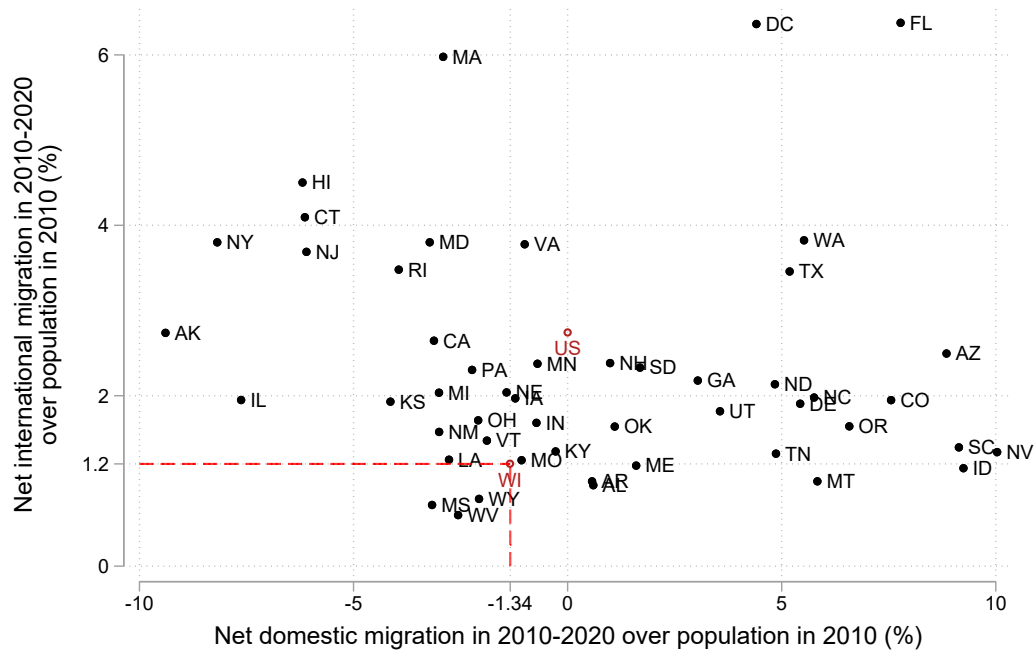
In Wisconsin, the relatively low growth from natural increases is a reflection of its low birth rates. From 2010 to 2020, Wisconsin's population increased by 11.9% due to births and decreased by 9.2% due to deaths. The corresponding values for the United States are 13.0% and 9.0%. The gap between Wisconsin and the United States is 1.1 percentage points for births and 0.2 percentage point for deaths.

Both domestic and international migration have contributed to the low population growth in Wisconsin relative to other states. Figure 11 further decomposes net migration into net domestic migration and net international migration. The horizontal axis is the change in population from net domestic migration from 2010–2020 as a share of the population in 2010. The vertical axis is the change in net international migration from 2010–2020 as a share of the population in 2010. From 2010 to 2020, Wisconsin's population increased by 1.20% due to international migration and decreased by 1.34% due to domestic migration. The corresponding values for the United States are 2.74% and 0% (by definition).

The slower population growth in Wisconsin has contributed to the slower growth in the crucial

³Data are estimates from the U.S. Census Bureau. Due to the different data sources, the sum of the two components in figure 10 may not equal the total population change from the censuses in 2010 and 2020.

Figure 11: Population change due to domestic and international migration



Source: U.S. Census Bureau.

working-age population, and so has the age structure of the state. Wisconsin's population is older than most other states. Figure 12 shows that both the median age and the share of the population 65-years old or older are larger in Wisconsin than the United States. Moreover, Wisconsin's population is getting older at a faster rate. Wisconsin is aging slightly faster than the United States as a whole, though the trends are generally similar.

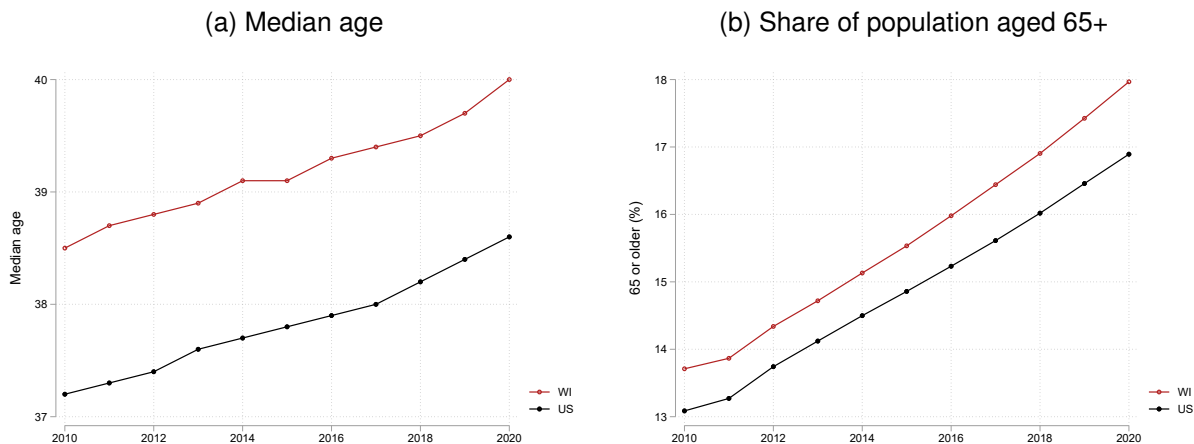
Labor force participation

The workforce available in Wisconsin is a function of the size of the working-age population and the share of the population engaged in work. We measure this as the *labor force participation rate*: the employed plus the unemployed as a share of the working age population. We plot the labor force participation rate in figure 13.

Wisconsin enjoys a higher labor force participation rate than the United States as a whole—almost 5 percentage points higher in 2010. The trend since 2010, however, has been negative in both Wisconsin and the United States, with Wisconsin's labor force participation rate declining much faster. The labor force participation rate in Wisconsin decreased from 69.7% in January 2010 to 66.1% in January 2020. The drop of 3.6 percentage points is more than twice the value for the United States, where the labor force participation rate dropped by 1.5 percentage points from 64.8% in January 2010 to 63.3% in January 2020.

As a result, the civilian labor force in Wisconsin increased by only 0.4% from January 2010 to January 2020, much less than the 3.6% increase in the state's population discussed above. During

Figure 12: Wisconsin's aging population



Source: U.S. Census Bureau.

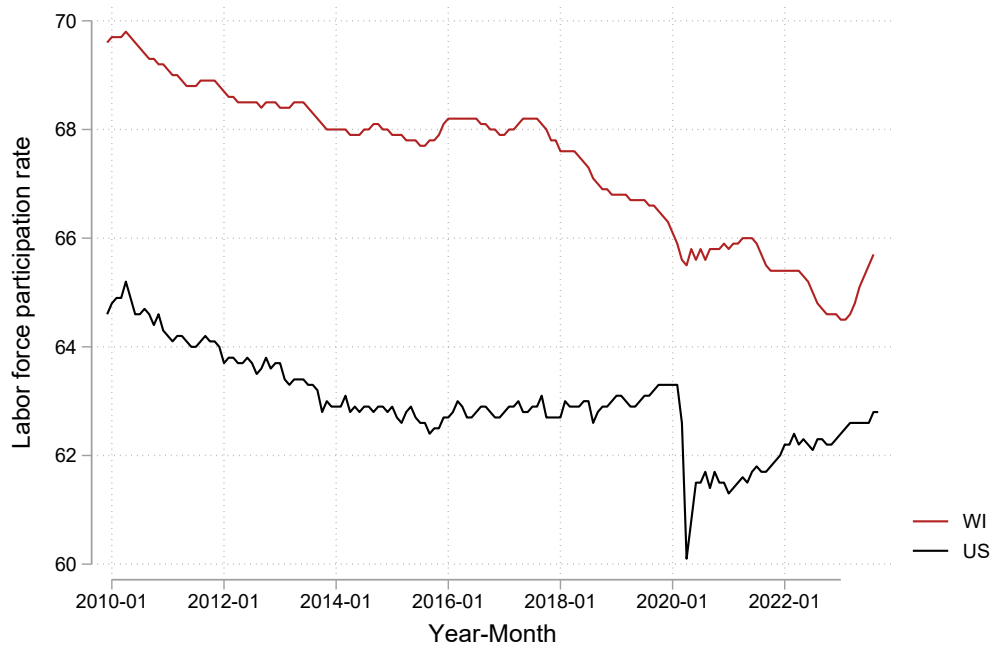
the same period, the civilian labor force in the United States increased by 7.1%, slightly less than the population growth rate of 7.4%.

Regulation

The link between regulation and business creation and growth can be direct (policies that make creating a business harder or more expensive) and indirect (policies that decrease the return to operating a business). Regulation exists at both the federal and state level and includes policies related to: minimum wages, overtime pay, occupational licensing, the environment, and advertising. There is substantial heterogeneity in the regulatory burden across industries and occupations, as well. Regulatory burdens often hurt small and young businesses disproportionately. The fixed costs associated with regulatory compliance make it easier for large firms to comply and harder for small firms.

Firms in all states are subject to federal regulation and changes in the federal regulatory environment are a factor in the decline in business dynamism throughout the country. On the state level, Thumbtack (2022) surveys small business owners asking: “How unfriendly or friendly is your state or local government with regard to business regulations generally?” Based on responses to this question, each state receives a grade from “A+” to “F”. Wisconsin’s grade is D+, worse than most other states. Other indicators are mixed. Ruger and Sorens (2021), for example, construct an index of regulatory policy for each state that accounts for land use and environmental policy, health insurance, the labor market, lawsuit freedom, and occupational freedom. Wisconsin ranks 9th among the 50 states. Edwards (2021) constructs an index measuring regulatory barriers for entrepreneurs. Wisconsin ranks 19th among the 50 states.

Figure 13: Labor force participation rate



Source: U.S. Bureau of Labor Statistics.

Policies to boost business dynamism in Wisconsin

What can governments do to foster business creation and growth? Put simply, they need to implement policy that works against the forces outlined above. Policies that increase the incentive for entrepreneurs and workers to migrate to the state, policies that increase the birth rate in the state, and policies that incentivize labor force participation can help grow the working age population and boost business creation.

What can governments in Wisconsin do? On October 16, 2023 the Center for Research on the Wisconsin Economy will lead a panel discussion of leading thinkers and policy makers on the policies that encourage business growth in the state and minimize barriers faced by firms. We hope you can join us. Find out more at go.wisc.edu/lca749.

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