20 KAUFFMAN 15 INDEX

mainstreetentrepreneurship

NATIONAL TRENDS

Robert W. Fairlie Joshua Russell Arnobio Morelix E.J. Reedy





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Foreword

By Maria Contreras-Sweet, 24th Administrator of the U.S. Small Business Administration

Main Street entrepreneurship is at the heart of the American economy. We must remember that, year in and year out, most jobs come from the local restaurants, shoe stores, barber shops, and many other establishments that shape our communities and that we walk by every day.

The Kauffman Foundation defines a Main Street business as one with fewer than fifty employees and in existence for longer than five years. Using those parameters, Main Street businesses represent two-thirds of firms in this country and employ about 24 million workers. These businesses, which have a median age of fifteen years, grow deep roots in their respective communities. What Main Street businesses lack in individual size, they make up for in history and collective impact.

But these firms are much more than an economic force; they are an irreplaceable part of our American experience, a channel to grow our middle class and a path to economic opportunity. The entrepreneurs behind these small, local businesses are leaders in their communities. They support local charities, provide young people their first jobs, and create a multiplier effect as they attract more businesses to their local economies.

This Main Street Entrepreneurship Index takes the Kauffman Foundation's exacting analytical methods and focuses them on these "mom and pop" enterprises and the entrepreneurs behind them. We should all take note. The data presented here are essential to effective policymaking at every level of government. Successful government policies can help ensure that our entrepreneurial ecosystem remains healthy. That is a national priority and essential to the American dream.

As this index shows, the representation of small business owners is changing. In 2015, the index experienced the second largest year-over-year growth in more than two decades. Businesses

owned by women, minorities, and immigrants are increasing. The number of small business owners with college degrees is also increasing, from 34 percent in 1997 to 39 percent today. However, despite the dynamic leadership potential of our Millennials and veterans, Kauffman's new index suggests that young entrepreneurs (ages 20-34) and veteran-owned firms are actually declining.

At the U.S. Small Business Administration (SBA), our mission is to support the success of our nation's small businesses. We do this in four ways: capital, counseling, contracts, and disaster relief. SBA works with approved lenders to take on some of the risk for small business owners who need better access to loans to grow their ventures. We also direct the world's largest network of free business advisers, counselors, and mentors to provide customized assistance to entrepreneurs. We work with our partners in federal government to level the playing field so small business owners, especially those from underserved backgrounds, can more successfully compete for federal contracting dollars. And in the unforeseen case of natural disasters, we offer loans to help businesses reopen as quickly as possible. Each piece of SBA's work is focused on the same mission: to empower our nation's small businesses.

The Kauffman Foundation shares the values at the heart of SBA's mission. Chief among these are values of entrepreneurship, social upward mobility, and economic mobility. We all have a stake in creating a future where these values are realized and our Main Street businesses are more successful than ever. But to get there, we need better data than ever. This index is an important step forward, equipping us with the information required to make wise policy decisions and ensure the continued vitality of our entrepreneurial ecosystem. Together, we can use good data to bring our country's businesses to new heights.

We should all take note. The data presented here are essential to effective policymaking at every level of government.

Introducing the New Kauffman Index: Main **Street Entrepreneurship**

The United States has a great tradition of both big and small business. Today, we focus in on the small businesses and, specifically, on measures of what we call "Main Street" entrepreneurship. Earlier this year, the Kauffman Foundation released the first in a new series of reports—the Kauffman Index: Startup Activity—which provided a way of looking at startup activity across time and geographies in the United States. In this report, we introduce the first-ever Kauffman Index: Main Street Entrepreneurship—the second of various research installments under the umbrella of the new Kauffman Index of Entrepreneurship.

For the past ten years, the original Kauffman Index authored by Robert W. Fairlie—has been an early indicator for entrepreneurship in the United States, used by entrepreneurs and policymakers from the federal to state and local levels. The Kauffman Index also has been one of the most-requested and far-reaching entrepreneurship indicators in the United States and, arguably, the world.

In the policy world, the Index has been referenced in multiple testimonies to the U.S. Senate and House of Representatives, by U.S. Embassies and Consulates across various countries—including nations like Spain, Ukraine, and the United Kingdom—by multiple federal agencies, by state governments and governors from fifteen states from Arizona to New York—and by the White House's Office of the President of the United States. On the academic side, more than 200 research papers quote the Kauffman Index. In media circles, the Kauffman Index has been highlighted in hundreds of media channels, including most major publications like The New York Times, The Wall Street Journal, TIME, CNN, the Financial Times, and Harvard Business Review.

Originally, the Kauffman Index tracked one of the earliest measures of business creation: when people first start working for themselves and became entrepreneurs. Now, we are expanding it to include other dimensions of entrepreneurship.

The new and expanded Kauffman Index of Entrepreneurship 2015 remains focused primarily on entrepreneurial outcomes, as opposed to inputs. That means we are more concerned with actual results of entrepreneurial activity—things like new companies. business density, and growth rates.

The Kauffman Index: Main Street Entrepreneurship takes a dual approach for understanding Main Street business activity, looking both at locally established business entities (companies with fewer than fifty employees and older than five years) and the business owners (incorporated or unincorporated and with or without employees).

We understand "Main Street" is a broad concept that can take many connotations, from industry-based perspectives, to size-based, to location-based. We recognize there are other approaches to the concept, and welcome conversations on the topic as we further explore indicators of Main Street entrepreneurship.

And, with the Kauffman Index of Entrepreneurship 2015, all these data will be presented at three geographic levels:

- National
- State
- Metropolitan—covering the forty largest U.S. metropolitan areas by population

Wherever possible, the Kauffman Index also presents demographic characteristics of the business owners examined in different contexts.

The new Kauffman Index of Entrepreneurship is based on extensive entrepreneurship research, and our algorithm attempts to present a balanced perspective on how to measure entrepreneurship. Nonetheless, entrepreneurship is a complex phenomenon, and we expect to further build out and enhance the Index in the coming years, particularly as new data become available from the Annual Survey of Entrepreneurs, a forthcoming project from a major public-private partnership between the U.S. Census Bureau and the Kauffman Foundation.

To help state and local leaders access the data relevant to their locales, the Index will offer enhanced, customizable data visualization, benchmarking tools, and detailed reports diving into the trends of different ecosystems across the United States.

We hope that you can use what we developed here to learn more about, and foster, your own entrepreneurial ecosystem.

Originally, the Kauffman Index tracked one of the earliest measures of business creation: when people first start working for themselves and became entrepreneurs. Now, we are expanding it to include other dimensions of entrepreneurship.

Executive Summary

The Kauffman Index: Main Street Entrepreneurship is a novel indicator of small business activity in the United States, integrating high-quality sources of timely information into one composite indicator. The Index captures business activity in all industries, and is based on both a nationally representative sample size of roughly 900,000 responses each year and on the universe of all employer businesses in the United States. The focus here is on established small businesses—employer firms older than five years and with fewer than fifty employees—and the business owners based on a location. As such, we examine both the business owners and the businesses they own.

Main Street entrepreneurship is an important aspect of the U.S. economy and society. Established small businesses make up 63 percent of all employer firms in the U.S.¹ and are a source of local economic activity.

Entrepreneurship is a multi-dimensional phenomenon, and the Kauffman Index of Entrepreneurship series—the umbrella initiative for all Kauffman Index reports—studies and analyzes entrepreneurship from various perspectives. Another report, the Kauffman Index: Startup Activity, seeks to view the beginnings of entrepreneurship, focusing on new business creation, market opportunity, and startup density. This report, the Kauffman Index: Main Street Entrepreneurship, takes a different angle and attempts to understand prevalence of local small business.

This report presents trends in Main Street entrepreneurship over the past two decades for the United States. Two separate reports look at these same trends in all fifty states and the forty largest U.S. metropolitan areas. Some Main Street Entrepreneurship Index components, when available, also are reported by demographic groups.

The Main Street Entrepreneurship Index—an indicator of the number of established small businesses and the number of business owners in a location—experienced an increase in the 2015 Index, reversing a six-year downward trend in the United States. The reversing trends were driven by the increase in established small firm density—the number of established small employer businesses to the total population. However, the Index gain remains below pre-recession levels and just above the historical norm, as shown in Figure 1 on page 11.

Despite the recent year increase, long-term trends of Main Street entrepreneurship do not look as encouraging. The Rate of Business Owners—the percentage of adults owning businesses in a given month—has been on a declining trend since we started tracking it in the 1990s, going from 7.8 percent to 6.0 percent in the most recent year. And while short-term trends for Established Small Business Density look promising, long-term trends do not. The density indicator has grown steadily from the 1980s until the early 2000s, but has plateaued since the mid-2000s, until its recent increase from the 2014 to 2015 Index.

A major driver of this year's Index uptick is the increase of established micro-enterprises: employer businesses operating for more than five years with fewer than ten employees.² Total established micro-enterprises grew by 3.6 percent from the 2014 to 2015 Index, compared to a 1.2 percent growth for all other established small businesses.

A Snapshot of National Trends in Main Street Entrepreneurship

Main Street Entrepreneurship

 The Main Street Entrepreneurship Index rose in 2015—reversing a downward trend that started in 2009.

Rate of Business Owners

Looking inside the components of the Main Street
 Entrepreneurship Index, the Rate of Business Owners
 in the United States is virtually unchanged in the past
 year, going from 5,980 out of 100,000 adults in the
 2014 Main Street Entrepreneurship Index to 6,000
 out of 100,000 adults in the 2015 Index.

Established Small Business Density

Established Small Business Density—another component of the Index—rose in the United States in the 2015 Main Street Entrepreneurship Index, from 984.4 established small business per 100,000 people to 1,006.6 established small business per 100,000 people. After falling sharply during the recession, this is the third year in a row that Established Small Business Density has risen in the United States, reaching higher than pre-recession levels.

^{1.} Authors' calculations from U.S. Census Bureau Business Dynamics Statistics data.

^{2.} In this report, we consider micro-enterprises employer businesses with fewer than ten employees. This definition mirrors the one by the European Commission. http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm.

Main Street Entrepreneurship National Demographic Trends

Gender of Business Owners—Male and Female **Business Owners**

- Most business owners were male in the 2015 Index, with male business owners making up 67.0 percent of all business owners. The share of female business owners has increased slightly since the 1997 Index, reaching a two-decade peak of 33.8 percent in the 2013 Index before falling to 33.0 percent of owners in the 2015 Index.
- Males are more likely than females to be business owners, though the Rate of Business Owners for men has fallen from 11.0 percent in the 1997 Index to 8.2 percent in the 2015 Index. The Rate of Business Owners for females also has fallen during this time, from 4.8 percent in the 1997 Index to 3.9 percent in the 2015 Index.

Educational Background of Business Owners

Business owners in the United States continue to come from many different educational backgrounds. However, since the 1997 Index, the share of business owners who were college graduates has increased from 34.0 percent to 39.0 percent. This makes college graduates the biggest educational category of business owners in the United States.

Age of Business Owners

- Adults age forty-five to fifty-four make up the largest share of business owners, representing 32.3 percent, while adults age fifty-five to sixty-four make up another 28 percent of all business owners. Young business owners (age twenty to thirty-four) have been on the decline, down from 21.1 percent of all business owners in the 1997 Index to 15.7 percent of business owners in the 2015 Index.
- Even though the Rate of Business Owners among adults age fifty-five to sixty-four has been on the decline, the aging of the U.S. population has increased their share of all business owners from 15.8 percent in the 1997 Index to 28.0 percent in the 2015 Index.

Nativity of Business Owners—Immigrant and Native **Business Owners**

Immigrant business owners now account for 20.6 percent of all business owners in the United States, up from just 10.9 percent in the 1997 Index. The share of business owners who are immigrants has been on an upward trend since the 1997 Index, with the 2015 Index showing the largest share of immigrant entrepreneurs yet.

As a population, immigrants are 24.7 percent more likely than native-born citizens to own businesses in 2014. This dynamic has changed over the last two decades. In the 1997 Index, immigrants were 9.6 percent less likely to be business owners than native-born adults, and were almost as likely to own a business in the 2006 Index.

Veteran Status of Business Owners

Veterans, as a share of business owners, has been on a decline from the high of 14.9 percent of business owners in the 1997 Index to a low of 4.8 percent of business owners in the 2014 and 2015 Indices. This reflects both the falling population of veterans and the decline of the Rate of Business Owners among veterans.

Ethnicity of Business Owners

Business owners in the United States are becoming increasingly ethnically diverse, with 28.0 percent of business owners being comprised of African American, Latino, Asian, and other non-white business owners in the 2015 Index. Most of this rise has been in Asian and Latino business owners, who now account for 6.2 percent and 13.5 percent of business owners in the 2015 Index, up from 3.8 percent and 5.6 percent, respectively, in the 1997 Index.

Understanding the Indicators of the Kauffman Index: Main **Street Entrepreneurship**

The Kauffman Index: Main Street Entrepreneurship presents a novel index measure of small business activity in the United States—across national, state, and metropolitan-area levels. The Index captures business activity along two dimensions. First, it captures the Rate of Business Owners in the economy—the annual percentage of adults owning businesses, on average. Second, it captures Established Small Business Density, the ratio of established small employer businesses to the person population in the economy. The combination of these two distinct and important dimensions provides a view of small business activity in the country, across national, state, and metropolitan-area levels. These businesses make up a large share of firms in the nation, with established small businesses representing 63 percent of all employer firms

in the United States, according to the Census' Business Dynamics Statistics.

The Main Street Entrepreneurship Index captures all types of small business activity and is based on nationally representative sample sizes of more than 900,000 observations each year and on administrative data covering the universe of employer business entities. The separate components of the Index also provide evidence on potentially different trends in small business activity—trends we analyze based on both Rate of Business Owners from household surveys and Established Small Business Density measures from business-level data. The Main Street Entrepreneurship Index improves over other possible measures of business activity because of its timeliness, exclusion of "casual" businesses, and inclusion of all types of business activity, regardless of industry.

The Components of the Kauffman Index: Main Street Entrepreneurship

The Kauffman Index: Main Street Entrepreneurship provides a broad index measure of small business activity in the United States, looking at both businesses and business owners.

On the business side, the Index tracks locally established small business with employees. This means employer businesses older than five years—so that we are not looking at startups and young businesses—with fewer than fifty employees. This measure only takes into account firms established locally.

On the firm owner side, we track local business owners—incorporated or unincorporated, with or without employees.

The Main Street Entrepreneurship Index is an equally weighted index of two normalized measures of business activity.³ The two component measures of the Main Street Index are:

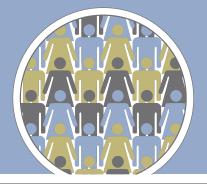
- i) The Rate of Business Owners in the economy, calculated as the percentage of adults owning businesses as their main job.
- ii) The Established Small Business Density, measured as the number of established small employer businesses normalized by population.

Before presenting trends in the Main Street Entrepreneurship Index, we briefly discuss each component measure (see Methodology and Framework for more details).



^{3.} We normalize each of two measures by subtracting the mean and dividing by the standard deviation for that measure (i.e., create a z-score for each variable). This creates a comparable scale for including the two measures in the Main Street Entrepreneurship Index. We use annual estimates from a nineteen-year period back from the latest year available (2012 or 2014) to calculate the mean and standard deviations for each component measure (see Methodology and Framework for more details).

Rate of Business Owners



First, the Rate of Business Owners captures the percentage of the adult population that owns a business. The Rate of Business Owners as measured here captures all business owners, including those who own incorporated or unincorporated businesses, and those who are employers or non-employers.⁴ The Rate of Business Owners is calculated from data from the Current Population Survey (CPS), a monthly survey conducted by the U.S. Bureau of the Census and the Bureau of Labor Statistics. Although the Rate of Business Owners also captures owners of very large firms, it is overwhelmingly represented by owners of small businesses.

The second component measure of the Main Street Entrepreneurship Index is a measure of the ratio of established small employer businesses to the population. These established small employer businesses generally are larger than established non-employer businesses are. Established Small Business Density is defined as the number of established (over the age of five years) small (fewer than fifty employees) employer businesses to the

total population (in 100,000s). The number of established small employer businesses is from the U.S. Census Business Dynamics Statistics (BDS) and is taken from the universe of businesses with payroll tax records in the United States, as recorded by the Internal Revenue Service. With established small businesses representing a large share of all businesses, they are an important group for economic activity in the "Main Street" economy.

In this report, we present national estimates of the Main Street Entrepreneurship Index first. We then present trends in each of the two component measures of the Index. The first component measure, the Rate of Business Owners, provides information that allows for a presentation of trends by demographic groups.

We understand "Main Street" is a concept that can take different forms, from industry-based perspectives, to size-based, to location-based. We recognize there are other approaches to the idea, and welcome further explorations on indicators of Main Street entrepreneurship.

Established Small Business Density



4. The U.S. Census Bureau notes that the definitions of non-employers and self-employed business owners are not the same. Although most self-employed business owners are non-employers, about a million self-employed business owners are classified as employer businesses. http://www.census.gov/econ/nonemployer/index.html.

A Big Tent Approach to Entrepreneurship

The Kauffman Index of Entrepreneurship—the umbrella under which all Kauffman Index reports reside—attempts to view the complex phenomenon of entrepreneurship from different angles. The Kauffman Index: Startup Activity seeks to view the beginnings of entrepreneurship, focusing on new business creation, market opportunity, and startup density. The components of the Kauffman Index: Main Street Entrepreneurship attempt to understand another dimension of entrepreneurship, the prevalence of local small business.

The Rate of Business Owners component of the Main Street Entrepreneurship Index looks at the stock, or the total number, of entrepreneurs in a locality at a given point in time. This component is parallel to the Startup Activity Index component, Rate of New Entrepreneurs, which focused on the transition into entrepreneurship at a given point in time. While the Rate of Business Owners component includes all new entrepreneurs present in the

Rate of New Entrepreneurs component, the trends seen in the components vary. The Rate of Business Owners has been relatively flat, seeing only small increases or decreases between years. On the other hand, the Rate of New Entrepreneurs has been on a slight upward trend, only showing decline shortly after the Great Recession, but has recovered between 2013 and 2014. A comparison of the components over time can be seen below.

The total number of business owners at a given time is impacted by the number of new entrepreneurs starting businesses (captured in the Startup Activity Index), the continuing business owners, and the number of business owners exiting their businesses—either pursuing other work activities or leaving the workforce entirely. These overall trends would indicate that the monthly flow of people into business—the Rate of New Entrepreneurs—hasn't changed much over time; however, other changes to the composition of business owners are occurring. Perhaps there has been an increased outflow of businesses—some evidence of this exists starting during the Great Recession. But clearly, these two trend lines are moving quite differently.

Table A
Rate of Business Owners Compared to
Rate of New Entrepreneurs (1996–2014)

Year	Rate of Business Owners	Rate of New Entrepreneurs
1996	7.81%	0.31%
1997	7.81%	0.28%
1998	7.65%	0.29%
1999	7.35%	0.27%
2000	7.21%	0.27%
2001	7.01%	0.27%
2002	6.94%	0.28%
2003	7.17%	0.30%
2004	7.26%	0.30%
2005	7.21%	0.28%
2006	7.31%	0.30%
2007	7.30%	0.30%
2008	7.07%	0.32%
2009	6.63%	0.34%
2010	6.34%	0.34%
2011	6.09%	0.32%
2012	6.09%	0.30%
2013	5.98%	0.28%
2014	6.00%	0.31%

The Established Small Business Density component of the Main Street Entrepreneurship Index looks at the number of businesses over the age of five with fewer than fifty employees per population. This component is parallel to the Startup Activity Index Component, Startup Density, which measured the number of new businesses per population. Though both of these components are similar, they do not overlap in the entrepreneurial trends we look at on this report. The Main Street Entrepreneurship Index looks at businesses that already are established in their areas—proxied by their age—but have not expanded their business beyond fifty employees. The trends among these components vary as well. The Established Small Business

Density component has been on a general upward trend, increasing 7.8 percent from 1994 to 2012. On the other hand, the Startup Density component has been on a downward trend, decreasing 30.9 percent from 1994 to 2012. A comparison of the components over time can be seen below.

Though components of these two reports use parallel data sources and calculations, both focus on different aspects and trends of entrepreneurship. These reports should be taken together as a tool for helping understand the broad spectrum of entrepreneurship in the United States.

Table B **Established Small Density Component** Compared to Startup Density (1994–2012)

Year	Established Small Business Density	Startup Density
1994	934.0	189.0
1995	943.6	192.7
1996	951.1	191.2
1997	955.4	190.7
1998	949.6	186.7
1999	947.5	178.0
2000	946.0	170.8
2001	974.3	165.3
2002	970.0	175.0
2003	977.3	174.7
2004	985.5	179.8
2005	993.3	185.8
2006	986.4	188.3
2007	991.7	175.6
2008	987.9	161.4
2009	976.3	133.4
2010	981.7	125.5
2011	984.4	128.8
2012	1006.6	130.6

National Trends in Main Street Entrepreneurship Activity

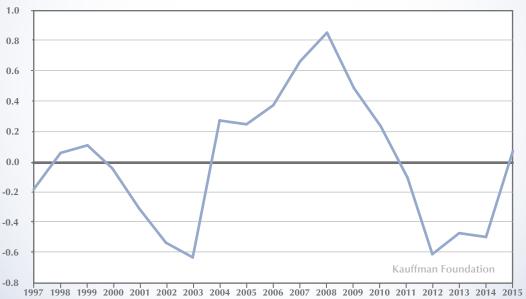
The Kauffman Index: Main Street Entrepreneurship calculates an index measure of business activity across the years. Figure 1 (below) and Table 1 (in Appendix) present results. The Main Street Entrepreneurship Index rose in 2015, continuing the upward trend started in the Index for 2013. Over the past two decades, the Main Street Entrepreneurship Index generally has followed the business

cycle. The Index rose during the late 1990s and during the expansionary period prior to the Great Recession. The increase in the Main Street Entrepreneurship Index from 2014 to 2015 was also very large—it represents the second largest year-over-year increase in the past two decades.

The Main Street Entrepreneurship Index rose in 2015, which points to a more flourishing local and small entrepreneurship activity. We next discuss trends in each of the two component measures of the Main Street Entrepreneurship Index.

The Main Street Entrepreneurship Index rose in 2015, but the Index remains below pre-recessionary levels.





SOURCE: Authors' calculations using the CPS, BDS, and BEA. For an interactive version, please see: www.kauffmanindex.org.

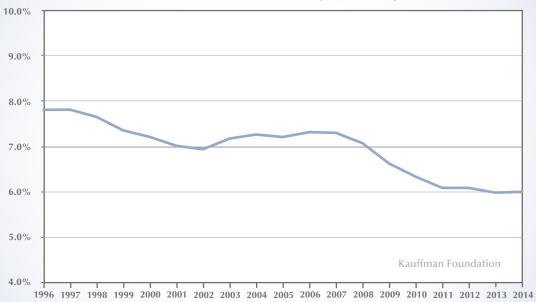


This section discusses trends in the Rate of Business Owners. The Rate of Business Owners measures the percentage of the adult population that owns a business. It captures all business owners, including those who own incorporated or unincorporated businesses, and those who are employers or non-employers. Table 1A (below) and Figure 1A (in Appendix) present results. In 2014, an

average of 6.0 percent of the adult population owned a business. This business ownership rate translates into more than 11 million adults owning businesses. In 2014, the Rate of Business Owners did not change from the past few years. Since 2011, it has remained at roughly 6 percent. The current level of business ownership, however, is lower than in the previous decades. Over the reported time period, the Rate of Business Owners declined in the late 1990s, rose slightly in the early 2000s, and then declined again in the late 2000s. The Rate of Business Owners was 7.3 percent in 2007, before declining steadily until hitting a plateau at roughly 6 percent starting in 2011.



Figure 1A Rate of Business Owners (1996–2014)



SOURCE: Authors' calculations using the CPS. For an interactive version, please see: www.kauffmanindex.org.

Rate of Business Owners by Demographic Groups

The detailed demographic information available in the CPS and large sample sizes allows for the estimation of separate Rate of Business Owners by gender, race, immigrant status, age, and level of education. This represents an advantage of the individual-level CPS data because large, nationally representative business-level datasets typically provide either no, or very limited, demographic information on the owner. For men, the

Rate of Business Owners remained essentially unchanged from 8.13 percent in 2013 to 8.2 percent in 2014. (Table 2, in Appendix, and Figure 2, below, report results). The pattern over time was very similar to that for the total population, including the recent plateau and earlier decline from 2007. For women, there was also little change in the Rate of Business Owners from 2013 to 2014. The Rate of Business Owners among women is 3.9 percent. Overall, men are substantially more likely to own businesses than are women, which holds in all reported years.

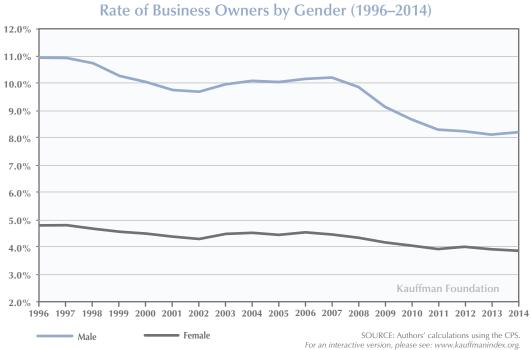
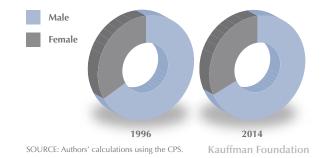


Figure 2
Rate of Business Owners by Gender (1996–2014)

Figure 2A
Changes in the Composition of Business Owners by Gender (1996, 2014)

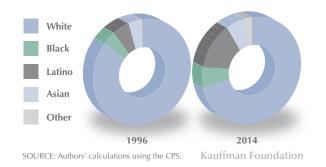


Gender	1996	2014
Male	68.5%	67.0%
Female	31.5%	33.0%

10.0% 9.0% 8.0% 7.0% 6.0% 5.0% 4.0% 3.0% 2.0% 1.0% Kauffman Foundation 0.0% 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 3 Rate of Business Owners by Race (1996–2014)

Figure 3A Changes in the Composition of Business Owners by Race (1996, 2014)



White

Black

Latino

Asian

Race	1996	2014
White	86.0%	72.0%
Black	4.2%	6.3%
Latino	5.6%	13.5%
Asian	3.8%	6.2%
Other	0.4%	2.0%

SOURCE: Authors' calcuations using the CPS.

For an interactive version, please see: www.kauffmanindex.org.

Racial and ethnic groups experienced somewhat different patterns in the Rate of Business Owners between 2013 and 2014. Table 3 (in Appendix) and Figure 3 (above) report estimates of Rate of Business Owners by race and ethnicity. African Americans and Latinos experienced increases in rates of business ownership in 2014, whereas whites experienced no change and Asians experienced a decline. The Rate of Business Owners is highest among whites and lowest among African Americans.

Reflecting the longer-term trends showing rising Latino rates of business ownership and a growing Latino share of the total U.S. population, the Latino share of all business owners rose from 5.6 percent in 1996 to 13.5 percent in 2014. Figure 3A reports estimates of the share of all business owners by race from 1996 to 2014. The Asian and African American shares of business owners also rose substantially from 1996 to 2014. The white share of business owners declined substantially over the past eighteen years.

The Rate of Business Owners among immigrants did not change in 2014. Table 4 (in Appendix) and Figure 4 (below) report estimates of Rate of Business Owners by nativity. The Rate of Business Owners among immigrants of 7.2 percent is higher than that for the native-born of 5.8 percent. A growing immigrant population and rising

relative Rate of Business Owners contributed to a rising share of business owners that are immigrant. Figure 4A reports estimates of the share of business owners by nativity. Immigrant entrepreneurs represent 20.6 percent of all business owners in 2014, which is up substantially from 10.9 percent in 1996.

Figure 4
Rate of Business Owners by Nativity (1996–2014)

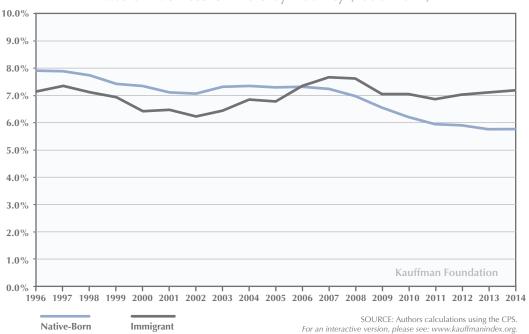
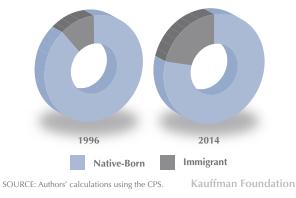


Figure 4A
Changes in the Composition of Business Owners by Nativity (1996, 2014)



Nativity	1996	2014
Native-Born	89.1%	79.4%
Immigrant	10.9%	20.6%

Figure 5 Rate of Business Owners by Age (1996–2014)

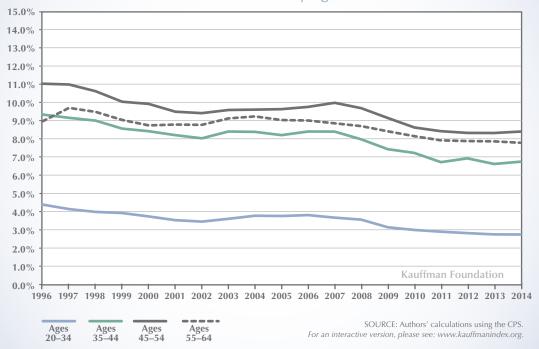
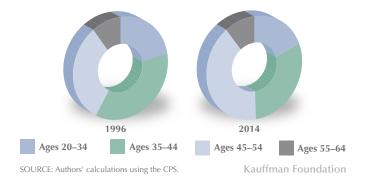


Figure 5A Changes in the Composition of Business Owners by Age (1996, 2014)



Age	1996	2014
Ages 20–34	21.1%	15.7%
Ages 35–44	33.6%	23.9%
Ages 45–54	29.6%	32.3%
Ages 55–64	9.0%	7.8%

Table 5 (in Appendix) and Figure 5 (above) report estimates of the Rate of Business Owners by age group. All of the age groups experienced essentially no change in the Rate of Business Owners in 2014. The Rate of Business Owners is the lowest among the youngest group. Figure 5A reports estimates of the share of business owners by

age group. An aging population has led to a rising share of business owners in the age fifty-five to sixty-four group. This group represented 15.8 percent of business owners in 1996, but now represents 28.0 percent of all business owners in 2014.

The Rate of Business Owners did not notably change in 2014 for any major educational group. Table 6 (in Appendix) and Figure 6 (below) report estimates by education level. The Rate of Business Owners is highest among college graduates and lowest among high-school dropouts. Among college graduates, 7.6 percent own a business, and among high-school dropouts 5.3 percent own a business.

Figure 6
Rate of Business Owners by Education (1996–2014)

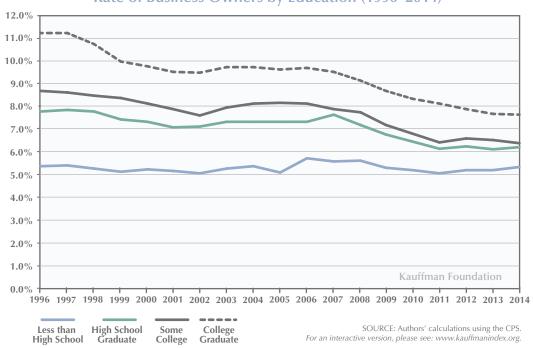
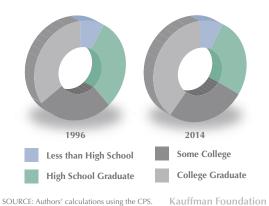


Figure 6A
Changes in the Composition of Business Owners by Education (1996, 2014)



Education	1996	2014
Less than High School	8.8%	8.2%
High School Graduate	30.4%	26.3%
Some College	26.8%	26.5%
College Graduate	34.0%	39.0%

Figure 7
Rate of Business Owners by Veteran Status (1996–2014)

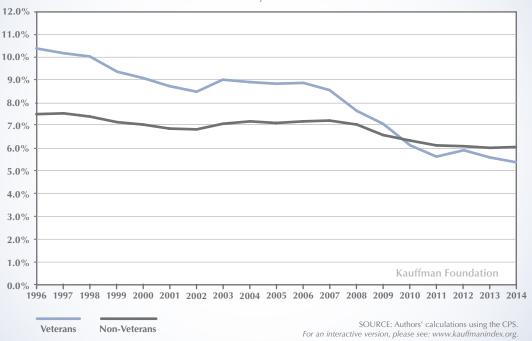
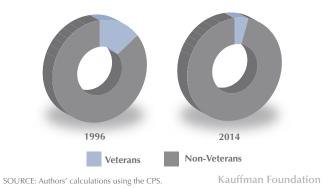


Figure 7A

Changes in the Composition of Business Owners by Veteran Status (1996, 2014)



Veteran Status	1996	2014
Veterans	14.9%	4.8%
Non-Veterans	85.1%	95.2%

Table 7 (in Appendix) and Figure 7 (above) report estimates of the Rate of Business Owners by veteran status. In 2014, the Rate of Business Owners was 5.4 percent for veterans, which was lower than the non-veteran rate of 6.0 percent. The share of all business

owners represented by veterans was 10.6 percent in 1996. This share steadily declined to 4.8 percent by 2014. Most of the decline in the veteran share of business owners over the past two decades was due to the declining share of veterans in the U.S. working-age population.



Focusing on Established Small Business Density, Figure 1B reports results for trends in the established small employer business. Established Small Business Density is the ratio of the number of established small employer businesses (older than age five with fewer than fifty employees) divided by the total person population (in 100,000s). This is a yearly measure calculated from the U.S. Census Business Dynamics Statistics for firm data and the Bureau of Economic Analysis for population data.

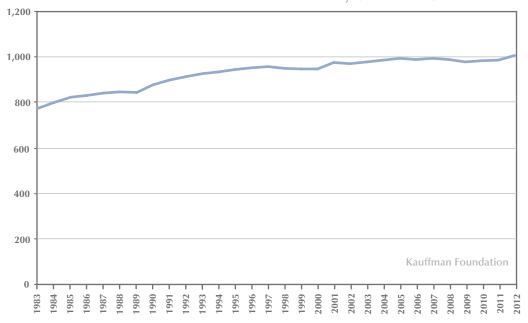
We present this indicator going back from 1983 to 2012, the latest year for which the data are available. This measure differs from the Rate of Business Owners in two key ways: 1) the Rate of Business Owners is a measure based on individuals—the business owners themselves. As such, it tracks individuals who own businesses rather than tracking the business entity. 2) It is a very broad measure of business ownership, including all business owners, regardless of how many people their businesses employ,

if any, and it includes self-employed individuals with no employees. Small Business Density only includes businesses employing at least one, but less than fifty, persons thus being a slightly more mature measure of Main Street entrepreneurship activity. Both researchers and entrepreneurs have suggested density as a key indicator of vibrancy in entrepreneurial ecosystems in the context of startups and young firms (Stangler and Bell-Masterson 2015 and Feld 2012). Here, we use the density concept to measure on the context of small businesses.

The Established Small Business Density was 1,006.6 in the most recent year with data available, which represents 92,353 more established small business in that year. The Established Small Business Density increased from 984.4 for every 100,000 population to 1,006.6 for every 100,000 population from the 2014 to 2015 Index. After a few years of declining rates, the Established Small Business Density reversed course and has increased over the past three years. Over a longer period, the Established Small Business Density mostly increased until hitting a plateau around 2004 and dropping in the recession and its aftermath.



Figure 1B Established Small Business Density (1983–2012)



Source: Authors' calculations using BDS and BEA data. For an interactive version, please see: www.kauffmanindex.org

Appendix: National Data, Business Owner Demographic Profiles, and Charts



NATIONAL PROFILE

United States of America

Rate of Business Owners

2015	2014
Component	Component
6.00%	5.98%

Measures the percent of the adult population of a given area that owns a business as their main job.

Source: Author calculations from CPS. Yearly measure.

Established Small Business Density

2015	2014
Component	Component
1 006 6	984 4

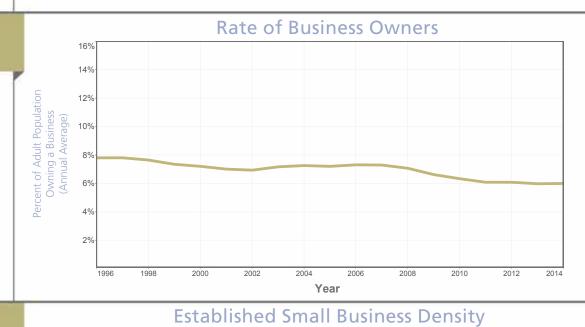
Number of established small businesses per 100,000 resident population. Established small businesses are defined as businesses over the age of five employing at least one, but less than fifty, employees.

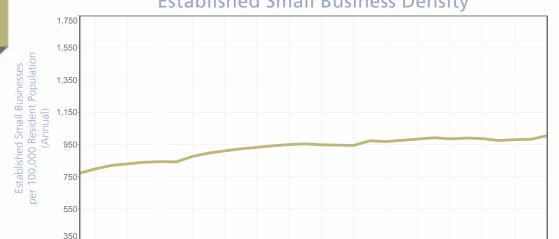
Source: Author calculations from BDS and BEA. Yearly measure.

Composition of Established Small Businesses

Changes in the composition of established small businesses with percentage breakdowns by business size. Established small businesses are defined as employer businesses over the age of five with less than fifty employees.

Source: Author calculations from BDS.





Composition of Established Small Businesses

1998

Year

2000

2002

2004

2006

2010 2012

1994

1984

1986

1988

1990

1992

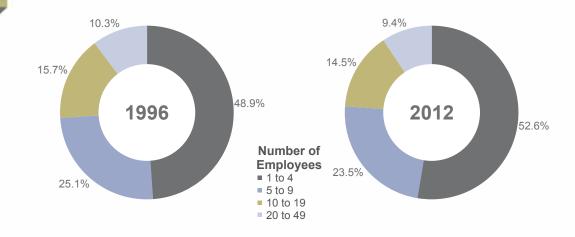
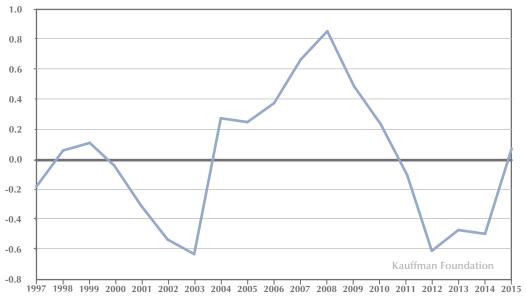


TABLE 1
Kauffman Index: Main Street Entrepreneurship (1997–2015)

		Main Street Index Component Measures						
		Rate of Bus	iness Owners	Established Small Business Density				
Year	Main Street Entrepreneurship Index	Rate	N	Density	Pop (1000s)			
1997	-0.19	7.8%	823,372	934.0	263,126			
1998	0.05	7.8%	826,002	943.5	266,278			
1999	0.11	7.6%	828,037	951.1	269,394			
2000	-0.04	7.4%	826,325	955.4	272,647			
2001	-0.31	7.2%	824,821	949.6	275,854			
2002	-0.53	7.0%	882,875	947.5	279,040			
2003	-0.63	6.9%	963,720	946.0	282,162			
2004	0.27	7.2%	954,211	974.3	284,969			
2005	0.24	7.3%	937,905	970.0	287,625			
2006	0.38	7.2%	933,319	977.3	290,108			
2007	0.67	7.3%	926,655	985.5	292,805			
2008	0.85	7.3%	915,715	993.3	295,517			
2009	0.49	7.1%	909,374	986.4	298,380			
2010	0.24	6.6%	917,089	991.7	301,231			
2011	-0.10	6.3%	917,287	987.9	304,094			
2012	-0.61	6.1%	903,065	976.3	306,772			
2013	-0.47	6.1%	895,076	981.7	309,326			
2014	-0.50	6.0%	883,138	984.4	311,583			
2015	0.07	6.0%	880,974	1,006.6	313,874			

Notes: (1) Estimates calculated by authors using the Current Population Survey, the Business Dynamics Statistics, and population data from the Bureau of Economic Analysis (2) The Rate of Business Owners is the percentage of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked. (3) All observations with allocated labor force status, class of worker, and hours worked variables are excluded.

Figure 1
Kauffman Index: Main Street Entrepreneurship (1997–2015)



SOURCE: Authors' calculations using the CPS, BDS, and BEA. For an interactive version, please see: www.kauffmanindex.org.

Figure 1A
Rate of Business Owners (1996–2014)

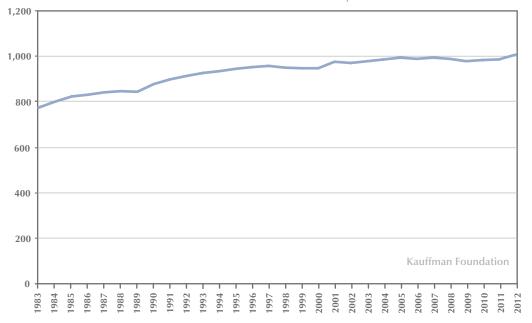


10.0%
9.0%
8.0%
7.0%
6.0%
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

SOURCE: Authors' calculations using the CPS. For an interactive version, please see: www.kauffmanindex.org.



Figure 1B Established Small Business Density (1983–2012)



Source: Authors' calculations using BDS and BEA data. For an interactive version, please see: www.kauffmanindex.org.

TABLE 2
Rate of Business Owners by Gender (1996–2014)

	Ma	ale	Fem	nale	To	tal
	Rate of Business	Sample	Rate of Business	Sample	Rate of Business	Sample
Year	Owners	Size	Owners	Size	Owners	Size
1996	10.95%	392,350	4.81%	431,022	7.81%	823,372
1997	10.94%	395,420	4.81%	430,582	7.81%	826,002
1998	10.75%	396,965	4.69%	431,072	7.65%	828,037
1999	10.28%	395,656	4.58%	430,669	7.35%	826,325
2000	10.06%	396,132	4.51%	428,689	7.21%	824,821
2001	9.77%	424,212	4.39%	458,663	7.01%	882,875
2002	9.71%	461,731	4.31%	501,989	6.94%	963,720
2003	9.98%	457,138	4.49%	497,073	7.17%	954,211
2004	10.10%	450,168	4.54%	487,737	7.26%	937,905
2005	10.06%	448,009	4.46%	485,310	7.21%	933,319
2006	10.17%	445,884	4.55%	480,771	7.31%	926,655
2007	10.22%	440,382	4.47%	475,333	7.30%	915,715
2008	9.88%	438,407	4.36%	470,967	7.07%	909,374
2009	9.15%	442,553	4.19%	474,536	6.63%	917,089
2010	8.69%	441,987	4.07%	475,300	6.34%	917,287
2011	8.31%	434,057	3.94%	469,008	6.09%	903,065
2012	8.25%	430,764	4.02%	464,312	6.09%	895,076
2013	8.13%	424,792	3.93%	458,346	5.98%	883,138
2014	8.22%	424,044	3.88%	456,930	6.00%	880,974

Notes: (1) Estimates calculated by the authors using the Current Population Survey. (2) The Rate of Business Owners is the percent of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked per week. (3) All observations with allocated labor force status, class of worker, and hours worked variables are excluded.

Figure 2
Rate of Business Owners by Gender (1996–2014)

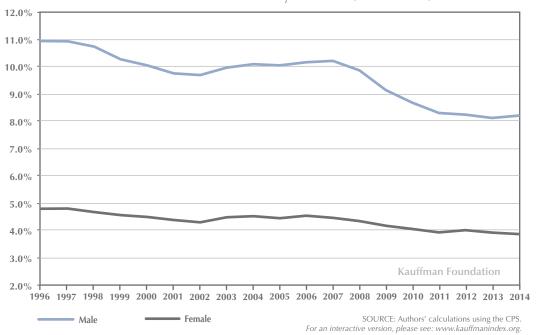
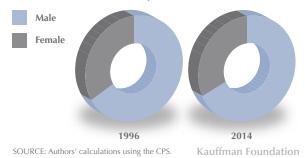


Figure 2A
Changes in the Composition of
Business Owners by Gender (1996, 2014)



Gender	1996	2014
Male	68.5%	67.0%
Female	31.5%	33.0%

TABLE 3
Rate of Business Owners by Race (1996–2014)

	White	9	Black		Latino)	Asiar	1	Total	
Year	Rate of Business Owners	Sample Size								
1996	9.11%	633,228	2.72%	81,534	4.46%	66,747	7.82%	31,735	7.81%	823,372
1997	9.13%	631,161	2.74%	82,404	4.53%	69,224	7.88%	32,375	7.81%	826,002
1998	8.94%	630,870	2.84%	81,884	4.30%	71,358	8.08%	33,349	7.65%	828,037
1999	8.52%	626,929	3.02%	81,386	4.50%	74,558	7.45%	33,246	7.35%	826,325
2000	8.39%	616,686	3.17%	83,136	4.22%	79,606	7.01%	34,308	7.21%	824,821
2001	8.13%	662,471	2.97%	87,820	4.24%	82,693	7.28%	37,552	7.01%	882,875
2002	8.10%	728,990	2.94%	92,404	4.26%	87,875	6.47%	41,122	6.94%	963,720
2003	8.36%	710,576	3.14%	88,685	4.68%	91,907	6.94%	37,618	7.17%	954,211
2004	8.41%	693,549	3.13%	86,096	4.96%	91,709	7.60%	38,223	7.26%	937,905
2005	8.35%	685,538	3.29%	84,676	4.93%	94,529	7.41%	40,523	7.21%	933,319
2006	8.36%	671,724	3.40%	85,565	5.32%	100,252	8.19%	42,312	7.31%	926,655
2007	8.38%	661,392	3.31%	86,862	5.58%	99,546	7.49%	42,665	7.30%	915,715
2008	8.10%	654,191	3.41%	86,307	5.50%	100,245	7.17%	44,052	7.07%	909,374
2009	7.61%	656,542	3.22%	88,456	5.09%	101,703	6.95%	45,482	6.63%	917,089
2010	7.29%	648,550	2.87%	92,151	5.01%	104,629	6.63%	47,271	6.34%	917,287
2011	7.10%	635,378	2.74%	90,888	4.71%	103,711	5.79%	48,730	6.09%	903,065
2012	7.02%	625,546	2.94%	89,605	4.96%	105,316	5.81%	50,424	6.09%	895,076
2013	6.85%	612,919	2.77%	89,095	4.99%	106,441	6.50%	50,829	5.98%	883,138
2014	6.85%	606,168	2.95%	90,621	5.42%	108,000	5.83%	51,235	6.00%	880,974

⁽¹⁾ Estimates calculated by the authors using the Current Population Survey. (2) The Rate of Business Owners is the percent of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked per week. (3) Race and Spanish codes changed in 2003. Estimates for 2003 only include individuals reporting one race. (4) All observations with allocated labor force status, class of worker, and hours worked variables are excluded.

Figure 3
Rate of Business Owners by Race (1996–2014)

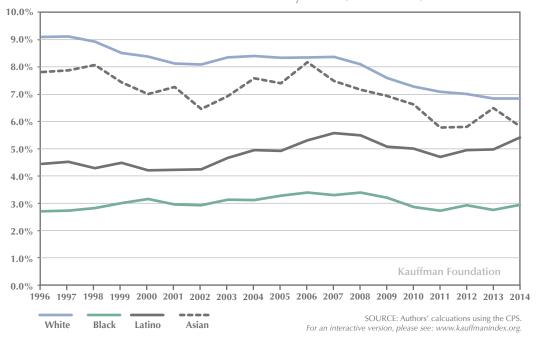
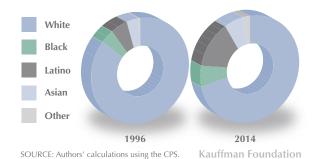


Figure 3A
Changes in Composition of
Business Owners by Race (1996, 2014)



Race	1996	2014
White	86.0%	72.0%
Black	4.2%	6.3%
Latino	5.6%	13.5%
Asian	3.8%	6.2%
Other	0.4%	2.0%

TABLE 4
Rate of Business Owners by Nativity (1996–2014)

	Native	e-Born	Immi	grant	To	tal
Year	Rate of Business Owners	Sample Size	Rate of Business Owners	Sample Size	Rate of Business Owners	Sample Size
1996	7.90%	735,704	7.14%	87,668	7.81%	823,372
1997	7.88%	734,986	7.34%	91,016	7.81%	826,002
1998	7.73%	733,649	7.11%	94,388	7.65%	828,037
1999	7.42%	730,815	6.93%	95,510	7.35%	826,325
2000	7.33%	722,873	6.41%	101,948	7.21%	824,821
2001	7.10%	774,322	6.47%	108,553	7.01%	882,875
2002	7.06%	847,497	6.22%	116,223	6.94%	963,720
2003	7.31%	836,987	6.44%	117,224	7.17%	954,211
2004	7.34%	821,230	6.84%	116,675	7.26%	937,905
2005	7.29%	813,781	6.77%	119,538	7.21%	933,319
2006	7.31%	801,727	7.34%	124,928	7.31%	926,655
2007	7.23%	791,007	7.66%	124,708	7.30%	915,715
2008	6.97%	784,765	7.61%	124,609	7.07%	909,374
2009	6.55%	790,420	7.04%	126,669	6.63%	917,089
2010	6.20%	787,166	7.04%	130,121	6.34%	917,287
2011	5.94%	773,829	6.85%	129,236	6.09%	903,065
2012	5.90%	765,644	7.02%	129,432	6.09%	895,076
2013	5.75%	755,062	7.10%	128,076	5.98%	883,138
2014	5.76%	752,910	7.18%	128,064	6.00%	880,974

Notes: (1) Estimates calculated by the authors using the Current Population Survey. (2) The Rate of Business Owners is the percent of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked per week. (3) All observations with allocated labor force status, class of worker, and hours worked variables are excluded.

Figure 4
Rate of Business Owners by Nativity (1996–2014)

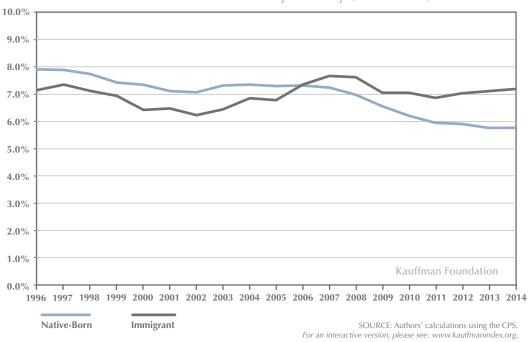
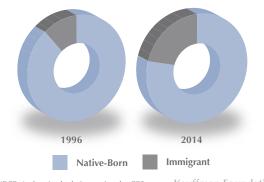


Figure 4A
Changes in Composition of
Business Owners by Nativity (1996, 2014)



SOURCE: Authors' calculations using the CPS.

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Nativity	1996	2014
Native-Born	89.1%	79.4%
Immigrant	10.9%	20.6%

TABLE 5
Rate of Business Owners by Age (1996–2014)

	Ages 20–34 Ages 35–44				Ages 45	_54	Ages 55	_64	Tota	
	Ages 20	_J T	Ages 33-		Ages 43	-J+	Ages 33	_ 	1014	•
	Rate of Business	Sample	Rate of Business	Sample	Rate of Business	Sample	Rate of Business	Sample	Rate of Business	Sample
Year	Owners	Size	Owners	Size	Owners	Size	Owners	Size	Owners	Size
1996	4.41%	293,276	9.35%	232,094	11.05%	179,575	8.98%	118,427	7.81%	823,372
1997	4.16%	288,208	9.17%	233,862	11.00%	183,208	9.72%	120,724	7.81%	826,002
1998	4.01%	282,136	9.02%	231,813	10.63%	189,454	9.50%	124,634	7.65%	828,037
1999	3.94%	274,343	8.58%	229,232	10.06%	194,903	9.05%	127,847	7.35%	826,325
2000	3.76%	272,316	8.44%	226,735	9.93%	198,107	8.75%	127,663	7.21%	824,821
2001	3.55%	286,312	8.22%	238,868	9.51%	218,496	8.80%	139,199	7.01%	882,875
2002	3.47%	309,269	8.05%	256,355	9.43%	239,571	8.79%	158,525	6.94%	963,720
2003	3.63%	301,974	8.42%	247,783	9.60%	239,594	9.14%	164,860	7.17%	954,211
2004	3.80%	296,011	8.40%	235,440	9.62%	237,369	9.25%	169,085	7.26%	937,905
2005	3.78%	292,851	8.22%	231,784	9.65%	236,312	9.05%	172,372	7.21%	933,319
2006	3.83%	288,109	8.42%	225,462	9.77%	236,391	9.03%	176,693	7.31%	926,655
2007	3.69%	283,064	8.42%	217,752	9.99%	233,499	8.87%	181,400	7.30%	915,715
2008	3.58%	281,770	7.99%	210,495	9.70%	232,174	8.72%	184,935	7.07%	909,374
2009	3.16%	285,038	7.45%	207,126	9.16%	234,298	8.43%	190,627	6.63%	917,089
2010	3.01%	289,100	7.25%	203,024	8.64%	231,314	8.16%	193,849	6.34%	917,287
2011	2.92%	285,718	6.74%	196,584	8.44%	222,165	7.93%	198,598	6.09%	903,065
2012	2.84%	283,078	6.95%	194,090	8.34%	218,170	7.89%	199,738	6.09%	895,076
2013	2.77%	278,382	6.64%	189,568	8.34%	213,955	7.88%	201,233	5.98%	883,138
2014	2.77%	279,270	6.76%	188,197	8.42%	209,612	7.80%	203,895	6.00%	880,974

Notes: (1) Estimates calculated by the authors using the Current Population Survey. (2) The Rate of Business Owners is the percent of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked per week. (3) All observations with allocated labor force status, class of worker, and hours worked variables are excluded.

Figure 5
Rate of Business Owners by Age (1996–2014)

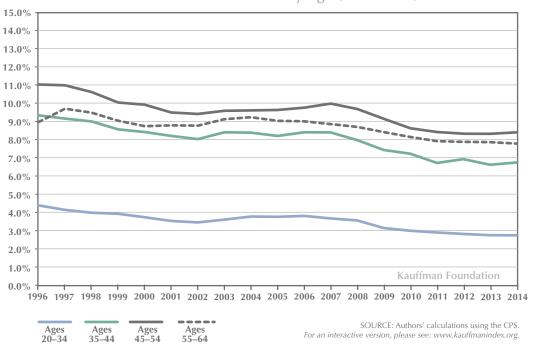
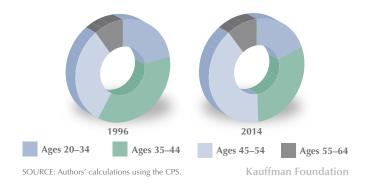


Figure 5A
Changes in Composition of
Business Owners by Age (1996, 2014)



Age	1996	2014
Ages 20–34	21.1%	15.7%
Ages 35-44	33.6%	23.9%
Ages 45-54	29.6%	32.3%
Ages 55-64	9.0%	7.8%

TABLE 6
Rate of Business Owners by Education (1996–2014)

	Less than High School		High School C	Graduate	Some College		College Graduate		Total (Ages 25–64)	
Year	Rate of Business Owners	Sample Size								
1996	5.37%	97,418	7.77%	250,384	8.66%	197,076	11.19%	193,739	8.56%	738,617
1997	5.39%	95,214	7.77%	250,974	8.59%	197,676	11.19%	198,138	8.59%	741,970
1997		92,729		248,617	8.47%	197,644		204,674	8.42%	741,970
	5.26%	,	7.75%			-	10.73%	· ·		-
1999	5.11%	88,894	7.40%	244,756	8.34%	200,678	9.95%	208,976	8.07%	743,304
2000	5.21%	87,884	7.31%	240,210	8.09%	202,124	9.73%	209,233	7.94%	739,451
2001	5.14%	91,464	7.05%	254,232	7.86%	219,049	9.50%	227,695	7.73%	792,440
2002	5.05%	96,348	7.10%	276,253	7.58%	238,406	9.45%	254,658	7.67%	865,665
2003	5.27%	94,060	7.29%	271,576	7.94%	235,173	9.70%	255,665	7.93%	856,474
2004	5.35%	91,722	7.32%	263,880	8.10%	232,617	9.70%	253,218	8.00%	841,437
2005	5.09%	91,415	7.29%	259,383	8.15%	232,040	9.60%	253,882	7.95%	836,720
2006	5.70%	90,497	7.29%	254,313	8.09%	230,610	9.67%	255,818	8.04%	831,238
2007	5.58%	85,472	7.63%	249,165	7.88%	228,568	9.48%	259,680	8.04%	822,885
2008	5.61%	82,569	7.17%	244,168	7.73%	229,220	9.13%	261,537	7.77%	817,494
2009	5.30%	82,706	6.75%	245,486	7.18%	231,852	8.65%	265,098	7.30%	825,142
2010	5.17%	81,791	6.43%	244,772	6.80%	230,746	8.32%	266,557	7.00%	823,866
2011	5.03%	79,200	6.13%	237,994	6.41%	227,673	8.10%	267,105	6.72%	811,972
2012	5.17%	76,223	6.23%	231,149	6.56%	226,858	7.85%	270,514	6.74%	804,744
2013	5.18%	73,472	6.10%	226,091	6.50%	223,702	7.65%	271,406	6.64%	794,671
2014	5.33%	72,789	6.21%	224,856	6.36%	222,586	7.62%	272,222	6.64%	792,453

Notes: (1) Estimates calculated by the authors using the Current Population Survey. (2) The Rate of Business Owners is the percent of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked per week. (3) All observations with allocated labor force status, class of worker, and hours worked variables are excluded.

Figure 6
Rate of Business Owners by Education (1996–2014)

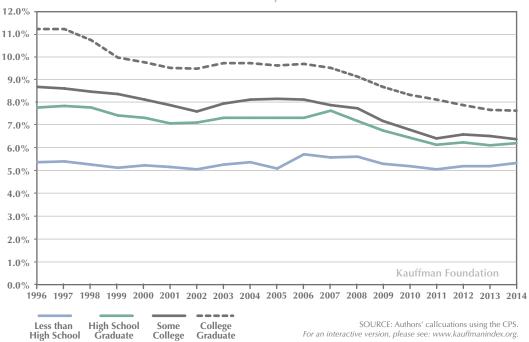
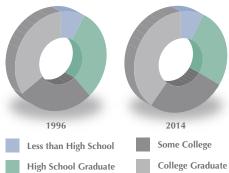


Figure 6A
Changes in Composition of
Business Owners by Education
(1996, 2014)



SOURCE: Authors' calculations using the CPS. Kauffman Foundation

Education	1996	2014
Less than High School	8.8%	8.2%
High School Graduate	30.4%	26.3%
Some College	26.8%	26.5%
College Graduate	34.0%	39.0%

TABLE 7
Rate of Business Owners by Veteran Status (1996–2014)

	Vete	rans	Non-V	eteran	To	tal
Year	Rate of Business Owners	Sample Size	Rate of Business Owners	Sample Size	Rate of Business Owners	Sample Size
1996	10.39%	93,840	7.49%	725,207	7.81%	823,372
1997	10.17%	90,613	7.53%	730,301	7.81%	826,002
1998	10.03%	88,405	7.39%	733,563	7.65%	828,037
1999	9.36%	85,914	7.15%	732,884	7.35%	826,325
2000	9.09%	81,100	7.04%	734,388	7.21%	824,821
2001	8.72%	83,715	6.87%	787,623	7.01%	882,875
2002	8.48%	89,433	6.84%	859,548	6.94%	963,720
2003	9.00%	85,222	7.06%	852,039	7.17%	954,211
2004	8.91%	81,562	7.18%	838,370	7.26%	937,905
2005	8.85%	79,162	7.10%	843,438	7.21%	933,319
2006	8.87%	76,621	7.18%	850,034	7.31%	926,655
2007	8.54%	72,889	7.20%	842,826	7.30%	915,715
2008	7.63%	69,671	7.03%	839,703	7.07%	909,374
2009	7.06%	67,512	6.59%	849,577	6.63%	917,089
2010	6.13%	64,228	6.35%	853,059	6.34%	917,287
2011	5.64%	60,913	6.12%	842,152	6.09%	903,065
2012	5.91%	56,741	6.10%	838,335	6.09%	895,076
2013	5.59%	52,945	6.01%	830,193	5.98%	883,138
2014	5.37%	50,195	6.04%	830,779	6.00%	880,974

Notes: (1) Estimates calculated by the authors using the Current Population Survey. (2) The Rate of Business Owners is the percent of individuals (ages twenty to sixty-four) who own a business as their main job with fifteen or more hours worked per week. (3) All observations with allocated labor force status, class of worker, and hours worked variables are excluded. (4) The total sample size is slightly larger than the sum of the veteran and non-veteran sample sizes from 1996 to 2005 because of missing values for veteran status in those years.

Figure 7
Rate of Business Owners by Veteran Status (1996–2014)

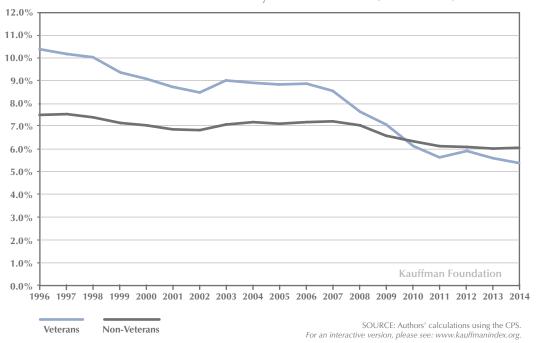
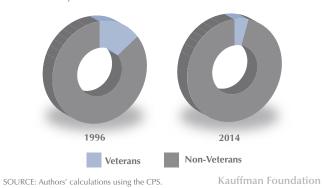


Figure 7A
Changes in Composition of Business Owners
by Veteran Status (1996, 2014)



Veteran Status	1996	2014
Veterans	14.9%	4.8%
Non-Veterans	85.1%	95.2%

KAUFFMAN INDEX:



Rate of Business Owners



Methodology and Framework

In this part of the report, we discuss the methodology and framework for the Kauffman Index: Main Street Entrepreneurship across all geographic levels: national, state, and metropolitan area.

Definitions of Main Street Entrepreneurship Index Components

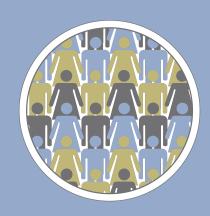
The Kauffman Index: Main Street Entrepreneurship is calculated based on two components: the Rate of Business Owners and the Established Small Business Density. In this section, we provide detailed definitions of each one of these components.



Component A: Rate of Business Owners

Component A of the Kauffman Index: Main Street Entrepreneurship comes from

the Current Population Survey (CPS) and is calculated by author Rob Fairlie. The CPS microdata capture all business owners, including those who own incorporated or unincorporated businesses, and those who are employers or non-employers. To create the Rate of Business Owners, all individuals who own businesses as their main jobs are identified as business owners. Additionally, only business owners who report owning businesses as their main jobs with fifteen or more usual hours worked in the survey month are counted.⁵ Using these criteria, the Rate of Business Owners is defined as the percent of the adult, working-age (ages twenty to sixty-four) population that owns a business.



Rate of Business Owners

- Broad measure of business ownership.
- Measures the percentage of the U.S. adult population that owns a business as their main job.
- Includes entrepreneurs with incorporated or unincorporated businesses, with or without employees.
- Data based on the Current Population Survey jointly produced by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics
- What the number means
 - For example, the United States Rate of Business Owners was 6.0 percent in the 2015 Index. This means that 6,000 out of every 100,000 adults own businesses in the United States.

5. The U.S. Bureau of Labor Statistics reports total numbers for unincorporated and incorporated self-employed workers from the CPS, but does not impose any hours worked restrictions or report breakouts by demographic group or geographical area (See http://www.bls.gov/news.release/empsit.t09.htm).

The main job is defined as the one with the most hours worked. Individuals who start side businesses will, therefore, not be counted if they are working more hours on a wage/salary job. The requirement that business owners work fifteen or more hours per week in the survey month is imposed to rule out part-time business owners and very small business activities. It may, therefore, result in an understatement of the percent of individuals owning any type of business. But, the goal here is to capture business ownership activities with at least some work effort (i.e., roughly two or more days per week).

The Rate of Business Owners is a parallel measure to the Rate of New Entrepreneurs (formerly the Kauffman Index of Entrepreneurial Activity, Fairlie 2014), which is a component measure of the related report, Kauffman Index: Startup Activity (Fairlie et al. 2015). The Rate of New Entrepreneurs captures business creation (or the flow into business ownership). The Rate of Business Owners captures current business ownership (or the stock of business ownership). Other than this major difference in measurement, many definitions and restrictions are similar.

The CPS sample was designed to produce national and state estimates of the unemployment rate and additional labor force characteristics of the civilian, non-institutional population ages sixteen and older. The total national sample size is drawn to ensure a high level of precision for the monthly national unemployment rate. For each of the fifty states, the sample also is designed to guarantee precise estimates of average annual unemployment rates, resulting in varying sample rates by state (Polivka 2000). Sampling weights provided by the CPS, which also adjust for non-response and post-

stratification raking, are used for all national and state-level estimates. The CPS also can be used to calculate metropolitan-area estimates, but only for the largest metropolitan areas in the United States. For example, the Bureau of Labor Statistics reports annual labor-force participation and unemployment rates for the largest fifty-four metropolitan statistical areas. We focus on the forty largest metropolitan statistical areas in our analysis and calculate moving averages when needed to ensure adequate precision in all reported estimates.

Component B: Established Small Business Density

The Established Small Business
Density component of the Kauffman Index: Main Street
Entrepreneurship uses U.S. Census Bureau data from the
Business Dynamics Statistics, and it measures the number
of established small employer firms normalized by the
population of a given area. We define established small
businesses here as employer firms that are older than five
years of age and employ less than fifty employees, and
we divide the number of established small businesses in a
region by every 100,000 people living in the area to arrive
at the Established Small Business Density measure.

Small businesses are defined as firms with fewer than fifty employees based on the European Commission's definition of small businesses.⁸ The U.S. Small Business Association (SBA) uses various definitions of small businesses varying by industry, but generally defines small businesses as those with fewer than 500 employees.⁹ Firms with fewer than 500 employees represent

Established Small Business Density



- The number of established small businesses by total population.
- Established small businesses are defined as employer firms over the age
 of five employing at least one, but less than fifty, employees.
- Measures the number of established small businesses normalized by the population of an area.
- Data based on the U.S. Census Business Dynamics Statistics and Bureau of Economic Analysis.
- What the number means:
 - For example, the 2015 Index Established Small Business Density for the New York metropolitan area was 1,267.1. That means that, for every 100,000 people living in the New York metro area, there were 1,267.1 employer businesses older than five years, employing less than fifty employees.
- 6. See Fairlie 2014 and http://www.kauffman.org/research-and-policy/kauffman-index-of-entrepreneurial-activity.aspx for previous reports.
- 7. See http://www.bls.gov/opub/gp/pdf/gp13_27.pdf for Bureau of Labor Statistics use of the CPS at the metropolitan-area level.
- 8. The definition comes from the European Union recommendation 2003/261 found at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361&locale=en.
- 9. https://www.sba.gov/content/summary-size-standards-industry-sector.

99.8 percent of all firms in the United States, so this definition, while helpful, is not used here to allow for a narrower definition and more nuanced look at the varying trends among states and metropolitan areas.

The choice for established firms was made so that the Main Street Entrepreneurship Index did not measure startups and young firms.

Our definition here is loosely based on the entrepreneurship density measure suggested by our Kauffman Foundation colleagues Stangler and Bell-Masterson (2015) in their Measuring an Entrepreneurial Ecosystem paper. The measure used in their study is based on young firms instead of established small firms.

Calculating the Main Street Entrepreneurship Index

The Kauffman Index: Main Street Entrepreneurship provides a broad index measure of small business activity in the United States. It is an equally weighted index of two normalized measures of business activity. The two component measures of the Main Street Entrepreneurship Index are: i) the Rate of Business Owners among the U.S. adult population, and ii) the Established Small Business Density (established small employer businesses, normalized by population).

Each of these measures is normalized by subtracting the mean and dividing by the standard deviation for that measure (i.e., creating a z-score for each variable). 10 This creates a comparable scale for including the two measures in the Main Street Entrepreneurship Index. We use national annual estimates from 1996 to the latest vear available (2014) to calculate the mean and standard deviations for each of the CPS-based components. Similarly, we use national annual numbers from 1994 to the latest year available (2012) to calculate the mean and standard deviation for the BDS-based component of the Index. The same normalization method is used for all three geographical levels—national, state, and metropolitan area—for comparability and consistency over time.

The components we use for the national-level Main Street Entrepreneurship Index are all annual numbers. The Rate of Business Owners covers years from 1996 to the latest year available (2014). The Established Small Business Density covers years from 1994 to the latest year available (2012) at the time we started the data assembling for this report.

The Rate of Business Owners component of the statelevel Main Street Entrepreneurship Index is calculated on three-year moving averages with the same yearly coverage as the national-level numbers. The reason we do threeyear moving averages on the sample-based CPS measures is to reduce sampling issues. Because these are three-year moving averages with annual estimates starting in 1996, the first year for which three-year moving averages are available is 1998. The Established Small Business Density component of the Index is presented yearly, from 1994 to the latest year available (2012) at the time we started assembling the data.

For the metropolitan-area level Main Street Entrepreneurship Index, we present the Rate of Business Owners component on a three-year moving average from 2008 to the latest year available (2014). Because these are three-year moving averages, annual estimates are first calculated in 2006. The Established Small Business Density component of the Index is presented yearly, from 1994 to the latest year available (2012) at the time we started the data assembling.

We recognize "Main Street" entrepreneurship is a broad concept with many potential interpretations. We also understand there are other approaches to the concept, and welcome conversations on the topic as we further explore indicators of Main Street entrepreneurship.

Data Sources and Component Measures

Data Sources

In this section, we discuss the underlying data sources used to calculate each of the components of the Main Street Entrepreneurship Index.

Rate of Business Owners

To calculate the Rate of Business Owners, the underlying dataset used is the basic monthly files of the Current Population Survey. These surveys, conducted monthly by the U.S. Bureau of the Census and the Bureau of Labor Statistics, represent the entire U.S. population and contain observations for more than 130,000 people each month. Combining the monthly files creates a sample size of roughly 900,000 adults ages twenty to sixty-four each year.

^{10.} This is one of the normalization methods recommended by the OECD and the Joint Research Centre from the European Commission in the Handbook on Construction Composite Indicators (2008).

Established Small Business Density

We use two types of datasets to calculate Established Small Business Density: a firm-level dataset and a population dataset.

For the firm-level dataset, we use the U.S. Census Business Dynamics Statistics, which is constructed using administrative payroll tax records from the Internal Revenue Service (IRS). The BDS data present, among other things, numbers of firms tabulated by employment size, by firm age, and by geography (national, state, and metropolitan area). We make use of that data to calculate the number of employer firms older than age five with fewer than fifty employees by different geographical levels. We then normalize this number by population to arrive at the Established Small Business Density of an area. To calculate population, we use data from Bureau of Economic Analysis (BEA).

Matching BDS state and national numbers to BEA population data is a non-issue because the definitions of the geographical areas are the same. However, this is slightly different for metropolitan areas. Because metropolitan-area definitions may vary across datasets, we used the Office of Management and Budget (OMB) definitions for metropolitan areas from December 2009 to calculate Small Business Density. This is the definition of metros used on the BDS dataset, and it means that, to calculate population using the BEA, we aggregated population data from the county level up to the metropolitan level.

We match the forty largest metropolitan areas in the United States by population using the OMB 2009 definition of metros and the BEA population data to their counterparts in the CPS dataset. This was the most appropriate aggregation method because neither the CPS nor the BDS dataset provides county-level data. To diminish issues of changing metro definitions, we only present the top forty metropolitan areas in the United States—in which shifts in county composition are less likely to cause big shifts in total population or business activity—and only use CPS data for metros in the most recent years, from 2006 to the most recent year available (2014). The metropolitan-area codes listed on the CPS have perfect matches to metropolitan-area codes on BDS except for two metro areas: Boston-Cambridge-Quincy, MA-NH, and Providence-New Bedford-Fall River, RI-MA.

Standard Errors and Confidence Intervals

Rate of Business Owners

The analysis of the Rate of Business Owners by state includes confidence intervals that indicate confidence bands of approximately 0.007 around the Rate of Business Owners. While larger states have smaller confidence bands of 0.003 to 0.005, the smallest states have larger confidence bands of approximately 0.009 to 0.011.11 Oversampling in the CPS ensures that these small states have sample sizes of at least roughly 10,000 observations per year and, therefore, provides a minimum level of precision.

Established Small Business Density

Because the BDS is based on administrative data covering the universe of employer businesses, sampling concerns like standard errors and confidence intervals are irrelevant. Nonetheless, nonsampling errors still could occur. These could be caused, for example, by data entry issues with the IRS payroll tax records or by businesses submitting incorrect employment data to the IRS. However, these are probably randomly distributed and are unlikely to cause significant biases in the data. 12 Please see Jarmin and Miranda (2002) for a complete discussion of potential complications on the dataset caused by changes in the administrative data on which the BDS is based.

Advantages Over Other Possible Measures of Main Street **Entrepreneurship Activity**

The Kauffman Index: Main Street Entrepreneurship has several advantages over other possible measures of Main Street entrepreneurship activity based on household or business-level data. We chose to use two distinct datasets: one based on individuals (CPS) and the other based on businesses (BDS). This allows us to study both business owners and the businesses they own. These datasets have complementary strengths that make this Index a robust measure of Main Street entrepreneurship activity.

^{11.} For more discussion on issues related to calculating standard errors on estimates from the CPS, see Fairlie (2014).

^{12.} Based on "Reliability of the Data" section of the Business Dynamics Overview page. http://www.census.gov/ces/dataproducts/bds/overview.html#reliability.

Rate of Business Owners

The Rate of Business Owners component of the Index is based on the CPS, and this dataset provides three prominent advantages as a timely and broad measure of small business ownership activity. First, the CPS data are available only a couple of months after the end of the year, whereas even relatively timely data, such as the American Community Survey (ACS), take more than a year to be released. Second, this component of the Main Street Entrepreneurship Index includes all types of business activities (employers, non-employers, unincorporated and incorporated businesses), but does not include smallscale side business activities, such as consulting gigs and casual businesses (because only the main job activity is recorded, and the individual must devote fifteen or more hours a week to working in the business). Third, the CPS data include detailed information on demographic characteristics of the owner, whereas most businesslevel datasets contain no information on the owner (e.g., employer and non-employer data).

Established Small Business Density

The Established Small Business Density component of the Main Street Index, based on the BDS, presents four main advantages compared to other businesslevel datasets. First, it is based on administrative data covering the overall employer business population. As such, it has no potential sampling issues. Second, it has detailed coverage across all levels of geography, including metropolitan areas. Third, it provides firm-level data, rather than just establishment-level data. Fourth, it provides detailed employment level and age breakdown of firms, allowing us to clearly identify established small firms (over the age of five with fewer than fifty employees).

A dataset that is similar to the BDS data we use is the Business Employment Dynamics (BED) product from the Bureau of Labor Statistics. We chose not to use it for this report because of two distinct advantages we see the BDS having over the BED. First, the BDS tracks firm-level data, as opposed to the establishment-level data tracked by the BED. Second, the BDS has data available at the metropolitan level, while the BED does not.

Because the BED tracks establishments rather than firms, the BDS numbers are different than the BED numbers. Nonetheless, the trends on the two datasets move largely in tandem, and usually point in the same direction.

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