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The Kauffman Index: Startup Activity | National Trends

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## The Kauffman Index: Startup Activity

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## **Executive Summary**

The Kauffman Index: Startup Activity is a novel leading indicator of business creation in the United States. Capturing all new business activity from owners in their first month of significant effort in running their businesses to larger startups that already employ workers, this index provides the earliest documentation of business development across the country. The Index captures all types of business activity and is based on nationally-representative sample sizes of more than an half million observations each year or the universe of all employer businesses in the United States.

Trends in startup activity over the past two decades for the nation, states and metropolitan statistical areas (MSAs) are presented. Trends in startup activity are also reported for specific population groups for some component measures of the index when available. Key findings include:

- The total business creation rate increased from 280 out of 100,000 adults in 2013 to 310 out of 100,000 adults in 2014. The business creation rate of 0.31 percent translates into more than 500,000 new business owners each month during the year.
- Trends in the share of business starts indicate that the share coming from individuals who are not unemployed and looking for a job was much higher in 2014 than the share at the end of the Great Recession.

• The overall decline in business creation rates was due mainly to a drop in business creation rates among men, but was also due to a slight drop in rates among women.

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#### 1. Introduction

The Kauffman Index: Startup Activity provides a novel index measure of a broad range of startup activity in the United States. The index captures startup activity along three dimensions. First, it captures the total level of business creation by individuals in the economy. Second, it captures the percentage of total business creation by individuals that is generated by "opportunity entrepreneurship" relative to "necessity entrepreneurship." Third, it captures the rate at which new businesses with employees are created in the economy. The combination of these three distinct and important dimensions of business creation provides a broad view of startup activity in the country.

The Kauffman Index: Startup Activity (KISA) is a leading indicator of new business creation in the United States. Capturing new business owners in their first month and new employer businesses in their first year, the index provides the earliest documentation of new business development across the country. The startup activity index captures all types of business activity and is based on nationally-representative sample sizes of more than an half million observations each year or administrative data covering the universe of employer business entities. The separate components of the index also provide evidence on potentially different trends in business creation created by "opportunity" business creation relative to unemployment-related ("necessity") business creation over the business cycle. The KISA improves over other possible measures of entrepreneurship because of its timeliness, dynamic nature, inclusion of all types of business activity, exclusion of "casual" businesses, and measurement at the time of business creation instead of retrospectively.

In this report, national estimates of the startup activity index are presented first. We then present trends in each of the three component measures of the index. Some of the component measures provide information that allows for a presentation of trends by demographic groups. Next, we turn to presenting startup activity indices by state and MSA.

## 2. National Trends in Startup Activity

The Kauffman Index: Startup Activity provides a broad index measure of business startup activity in the United States. It is an equally weighted index of three normalized measures of business creation.<sup>1</sup> The three component measures of the KISA are:

- i) The total business creation rate by individuals in the economy.
- ii) The percentage of total business creation by individuals that is generated by "opportunity" business creation vs. "necessity" business creation.
- iii) The employer startup rate (new employer businesses to population ratio)

Before presenting trends in the startup activity index we briefly discuss each component measure (see Appendix 1 for more details). First, the total business creation rate captures the percentage of the adult, non-business owner population that starts a business each *month*. It was formerly known as the Kauffman Index of Entrepreneurial Activity and presented in a series of reports over more than a decade (Fairlie 2014). The total business creation rate as measured here captures *all* new business owners, including

<sup>1</sup> We normalize each of three 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 three measures in the startup activity index. We use annual estimates from 1996 to the latest year available (2012 or 2014) to calculate the mean and standard deviation for each component measure (See Appendix 1 for more details).

<sup>2</sup> See "Kauffman Index of Entrepreneurial Activity, 1996 - 2012" (Fairlie 2013) and http://www.kauffman.org/research-and-policy/kauffman-index-of-entrepreneurial-activity.aspx for previous reports.

those who own incorporated or unincorporated businesses, and those who are employers or non-employers.<sup>3</sup> Business creation is calculated from matched 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.

Another component measure of the startup activity index is the percentage of total business creation by individuals that is generated by "opportunity entrepreneurship" relative to "necessity entrepreneurship." The total business creation rate includes businesses of *all* types, and thus cannot cleanly disaggregate between the creation of high-growth potential businesses and individuals starting businesses because of limited job opportunities.<sup>4</sup> One approximate method for disentangling these two types of startups is to examine the share of new entrepreneurs coming out of unemployment compared to the share of the new entrepreneurs coming out of wage and salary work, school, or other labor market states (Fairlie 2014). Individuals starting businesses out of unemployment might be more inclined to start those businesses out of necessity than opportunity (although many of those businesses could eventually be very successful).

The third component of the startup activity index is a measure of the rate of creation of businesses with employees. These employer businesses are generally larger and have higher growth potential than non-employer businesses. The employer startup measure is defined as the number of newly established employer businesses to the total population (in 1,000s). The number of newly created employer businesses is from the BDS and is taken from the universe of registered businesses in the United States.

<sup>3</sup> 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.

<sup>4</sup> See Fairlie (2011) "Entrepreneurship, Economic Conditions, and the Great Recession" *Journal of Economics and Management Strategy* for more evidence and discussion.

Although new businesses with employees represent only a small share of all new businesses they represent an important group for job creation and economic growth in the economy.

#### *Trends in the Startup Activity Index*

We present trends in the startup activity index first, then discuss trends in each of the three component measures. Figure 1 and Table 1 present results. The startup activity index rose in 2014, reversing a downward trend that started in 2008 in the middle of the Great Recession. Over the past two decades the startup index has generally followed the business cycle. The index rose during the "Roaring Nineties" and during the expansionary period prior to the Great Recession. The increase in the startup index from 2013 to 2014 was also very large – it represents the largest year-over-year increase over the past two decades.

Startup activity rose in 2014 which might be a good signal for job creation, innovation and economic advancement. We next discuss trends in each of the component measures of the startup index before discussing startup activity indices by state and MSA.

## 2.1 Trends in Total Business Creation Rates by Individuals

This section discusses trends in the total business creation rate. The total business creation rate measures the percentage of the adult, non-business owner population that starts a business each *month*. It captures *all* new business owners, including those who own incorporated or unincorporated business, and those who are employers or non-employers. The presentation updates results reported for the Kauffman Index of

Entrepreneurial Activity in previous reports (e.g. Fairlie 2014). Table 1 and Figure 1.A present results. In 2014, an average of 0.31 percent of the adult population, or 310 out of 100,000 adults created a new business each month.<sup>5</sup> This business-creation rate translates into over 500,000 new businesses being created each month during the year. In 2014, the business creation rate reversed a downward trend over the past few years. The business creation rate increased from 0.28 percent of the adult population (280 out of 100,000) in 2013 to 0.31 percent (310 out of 100,000) in 2014.

#### Business Creation Activity by Demographic Groups

The detailed demographic information available in the CPS and large sample sizes allow for the estimation of separate business creation rates by gender, race, immigrant status, age, and 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. Business creation activity increased for men from 2013 to 2014 reversing a downward trend that started in 2011 (Table 2 and Figure 2 report results). For women, there was no change in business creation rates from 2013 to 2104. Overall, men are substantially more likely to start a business each month than are women, which holds in all reported years. In 2014, the male business creation rate was 0.41 percent compared with the female business creation rate of 0.22 percent.

All racial and ethnic groups experienced increases in business creation rates between 2013 and 2014. Table 3 and Figure 3 report estimates of total business creation

<sup>5</sup> Estimates of annual business creation rates would be approximately 6 to 8 times higher. Annual rates are not 12 times higher than monthly rates because individuals can potentially start and exit from business ownership multiple times within the same year.

rates by race and ethnicity. Business creation rates are highest among Latinos and Asians and lowest among African-Americans.

Reflecting the longer-term trends showing rising Latino rates of entrepreneurship and a growing share of the total U.S. population, the Latino share of all new entrepreneurs rose from 10.5 percent in 1996 to 22.1 percent in 2014. Figure 3.B reports estimates of the share of new entrepreneurs by race from 1996 to 2013. The Asian share of new entrepreneurs also rose substantially from 1996 to 2014. The white share of new entrepreneurs declined over the past eighteen years, whereas the black share increased slightly.

The business creation rate increased for immigrants in 2014. Table 4 and Figure 4 report estimates of business creation rates by nativity. The business creation rate among immigrants of 0.52 percent is substantially higher than that for the native-born of 0.27 percent. A growing immigrant population and rising entrepreneurship rate contributed to a rising share of new entrepreneurs that are immigrant. Figure 4.B reports estimates of the share of new entrepreneurs by nativity. Immigrant entrepreneurs represent nearly 30 percent of all new entrepreneurs in 2014, which is up substantially from 13.3 percent in 1996.

Figure 5 and Table 5 report estimates of business creation rates by age group. All of the age groups experienced increases in business creation rates except the 45-54 age group which experienced no change in 2014. Business creation is the lowest among the youngest group. Figure 5.B reports estimates of the share of new entrepreneurs by age group. An aging population has led to a rising share of new entrepreneurs in the ages 55-

64 group. The ages 55-64 group represented 14.5 percent of new entrepreneurs in 1996 whereas it represented 25.8 percent of new entrepreneurs in 2014.

Business creation rates increased for individuals with a college education and high school education. Table 6 and Figure 6 report estimates by education level. Among high school dropouts and those with some college business creation rates did not change in 2014. Total business creation rates are the highest among the least educated group, but this could reflect a high level of "necessity entrepreneurship" for this group because of more limited labor market opportunities.

Table 7 and Figure 7 reports estimates of total business creation by veteran status. In 2014, the business creation rate was 0.31 percent for veterans, which was the same as the non-veteran rate. The share of all new entrepreneurs represented by veterans was 12.3 percent in 1996. This share steadily declined to 5.6 percent by 2014 (see Figure 7.B). Most of the decline in the veteran share of new entrepreneurs over the past two decades was due to the declining share of veterans in the U.S. working-age population.<sup>6</sup>

### 2.2 Trends in the Opportunity Share of Total Business Creation

With this measure of business creation that includes businesses of *all* types it is impossible to cleanly disaggregate between the creation of high-growth potential businesses and individuals starting businesses because of limited job opportunities. To identify separate startup motivations the share of new entrepreneurs coming out of unemployment is compared to the share of the new entrepreneurs coming out of wage and salary work, school, or other labor market states. Individuals starting businesses out

<sup>6</sup> See Fairlie (2012) "Kauffman Index of Entrepreneurial Activity by Veteran Status, 1996-2011," <a href="http://www.kauffman.org/uploadedFiles/DownLoadableResources/2012%20KIEA\_VET\_FINAL.pdf">http://www.kauffman.org/uploadedFiles/DownLoadableResources/2012%20KIEA\_VET\_FINAL.pdf</a> for more details.

of unemployment might be more inclined to start those businesses out of necessity than opportunity. The distinction is not perfect because many successful businesses are created by people who have lost their jobs and are unemployed, but the distinction offers at least some suggestive evidence on the influence of economic conditions on overall business creation.

The share of business creation coming from individuals who are not unemployed and looking for a job (i.e. "opportunity" entrepreneurship) was substantially higher than at the end of the Great Recession. In 2014, 79.6 percent of total business starts were from those who were not unemployed and looking for a job. This share increased from 2013 and is now substantially higher than it was in 2009 at the end of the recession. Figure 1.C displays trends in the share from 1996 to 2014 (Table 1). Over the past two decades, the share of new business creation from "opportunity" entrepreneurship increased when economic conditions were improving and decreased when economic conditions were worsening. The largest share of "opportunity" entrepreneurship occurred at the height of the "Roaring 90s," and the smallest share was in 2009 at the end of the Great Recession. The share of opportunity business creation also decreased in the recession of the early 2000s and increased in the following growth period in the mid-2000s. It is important to note, however, that although the motivation for starting businesses when economic conditions are weak and unemployment rates are high may differ from those created in stronger economic conditions, many of these businesses may eventually be very successful.<sup>7</sup>

<sup>7</sup> For example, the majority of Fortune 500 companies were started during recessions or bear markets. See Stangler, Dane. 2009. *The Economic Future just Happened*, Kansas City: Ewing Marion Kauffman Foundation, http://www.kauffman.org/uploadedFiles/the-economic-future-just-happened.pdf

More tables and figures ... (male/female, nonminority/minority, US born/immigrant???)

### 2.3 Trends in Employer Business Creation Rates

Focusing on employer businesses, Figure 1.C and Table 1 report results for trends in the employer business creation rate. The employer business creation rate is the ratio of the number of new employer businesses divided by the total population (in 100,000s). New employer businesses are defined as those with business age equal to zero. The number of new employer businesses is from the Business Dynamics Statistics (BDS) which is created from the Longitudinal Business Database (LBD) compiled by the U.S. Census Bureau. It is based on the universe of employer businesses in the United States.

The employer business creation rate was 130.6 in 2012, which represents 410,001 new employer businesses created that year. \*\* this seems a lot lower than BED data, which are more like 200,000 per quarter \*\* The employer business creation rate increased from 128.8 (or 128.8 out of 100,000 people) to 130.6 (or 130.6 out of 100,000 people) from 2013 to 2014. After several years of declining rates, the employer business creation rate reversed its course and has increased over the past two years. Over a longer period, the employer business creation rate increased in the years leading up to the Great Recession and dropped sharply in the recession and aftermath.

#### 3. Startup Activity by State

There was substantial variation in startup activity rates across states in 2014. Table X reports results.

# 4. Startup Activity by Metropolitan Area

An index of startup activity is also created for the forty largest metropolitan areas in the United States (Table X).

# 5. Summary

#### References

Bureau of Labor Statistics. 2014. *Labor Force Statistics from the Current Population Survey*, <a href="http://www.bls.gov/cps/">http://www.bls.gov/cps/</a>

Bureau of Labor Statistics. 2014. "Table 8. Private sector establishment births and deaths, seasonally adjusted," *Business Employment Dynamics*, http://www.bls.gov/news.release/cewbd.t08.htm

Fairlie, Robert W. 2014. *Kauffman Index of Entrepreneurial Activity,* 1996 – 2013, Kansas City: Ewing Marion Kauffman Foundation.

Fairlie, Robert W. 2012. *Kauffman Index of Entrepreneurial Activity by Veteran Status*, 1996-2011, Kansas City: Ewing Marion Kauffman Foundation.

Fairlie, Robert W. 2011. "Entrepreneurship, Economic Conditions, and the Great Recession" *Journal of Economics and Management Strategy*, 22(2): 207-231.

Kauffman Foundation and LegalZoom. 2014. *Who Started New Businesses in 2013?* Kansas City: Ewing Marion Kauffman Foundation. http://www.kauffman.org/what-we-do/research/2014/01/who-started-new-business-in-2013

Stangler, Dane. 2009. *The Economic Future just Happened*, Kansas City: Ewing Marion Kauffman Foundation.

Reedy, E.J., and Litan, Robert E. 2011. "Starting Smaller; Staying Smaller: America's Slow Leak in Job Creation," Kauffman Foundation Research Series: Firm Formation and Economic Growth, Kansas City: Ewing Marion Kauffman Foundation.

# Appendix 1 Calculating the Startup Activity Index

The Kauffman Index: Startup Activity (KISA) provides a broad index measure of business startup activity in the United States. It is an equally weighted index of three normalized measures of business creation. The three component measures of the KISA are: i) the total business creation rate by individuals in the economy, ii) the percentage of total business creation by individuals that is generated by "opportunity" business creation vs. "necessity" business creation, and iii) the employer startup density (new employer businesses to population ratio).

Each of three measures is normalized 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 three measures in the startup activity index. We use annual estimates from 1996 to the latest year available (2012 or 2014) to calculate the mean and standard deviation for each component measure. The same normalization is used for all three geographical levels – national, state and MSA – for comparability and consistency over time.

# Appendix 2 Data Sources and Component Measures

We discuss the underlying data sources used to calculate the component measures for the startup index. To calculate the total business creation rate and the opportunity share the underlying dataset used is the basic monthly files to the Current Population Survey (CPS). 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. By linking the CPS files over time, longitudinal data are created, allowing for the examination of business creations. Combining the monthly files creates a sample size of roughly 700,000 adults ages 20-64 each year.

Households in the CPS are interviewed each month over a four-month period. Eight months later they are re-interviewed in each month of a second four-month period. Thus, individuals who are interviewed in January, February, March, and April of one year are interviewed again in January, February, March, and April of the following year. The CPS rotation pattern makes it possible to match information on individuals monthly and, therefore, to create two-month panel data for up to 75 percent of all CPS respondents. To match these data, the household and individual identifiers provided by the CPS are used. False matches are removed by comparing race, sex, and age codes from the two months. After removing all non-unique matches, the underlying CPS data are checked extensively for coding errors and other problems.

Monthly match rates generally are between 94 and 96 percent (see Fairlie 2005). Household moves are the primary reason for non-matching. A somewhat non-random sample (mainly geographic movers) will, therefore, be lost due to the matching routine.

Moves do not appear to create a serious problem for month-to-month matches, however, because the observable characteristics of the original sample and the matched sample are very similar (see Fairlie 2005).

The microdata used in this report and a codebook are available for downloading at http://www.kauffman.org/research-and-policy/kiea-data-files.aspx. The dataset includes the entrepreneurial index as well as many additional variables for analysis.

#### **DETAILED DEFINITIONS**

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 total business creation rate (formerly known as the Kauffman Index of Entrepreneurial Activity), all individuals who do not own a business as their main job are identified in the first survey month. By matching CPS files, it is then determined whether these individuals own a business as their main job with fifteen or more usual hours worked in the following survey month. Reducing the likelihood of reporting spurious changes in business ownership status from month to month, individuals are asked by survey-takers whether they currently have the same main job as reported in the previous month. If the answer is yes, then the interviewer carries forward job information including business ownership from the previous month's survey. If the answer is no, then the respondent is asked the full series of job-related questions. Survey-takers ask this question at the beginning of the job section to save time during the interview process and improve consistency in reporting.

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 second 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 creating any type of business. The Kauffman Index also excludes individuals who owned a business and worked fewer than fifteen hours in the first survey month.

Thus, the Kauffman Index does not capture business owners who increased their hours from less than fifteen per week in one month to fifteen or more hours per week in the second month. In addition, the Kauffman Index does not capture when these business owners changed from non-business owners to business owners with less than fifteen hours worked. These individuals are excluded from the sample but may have been at the earliest stages of starting a business. More information concerning the definition is provided in Fairlie (2006).

The Kauffman Index also may overstate business creation in certain respects because of small changes in how individuals report their work status. Longstanding business owners who also have salaried positions may, for example, report that they are not business owners as their main jobs in a particular month because their wage/salary jobs had more hours in that month. If the individuals then switched to having more hours in business ownership the following month, it would appear that a new business had been created.

For the definition of the total business creation rate discussed in this report, all observations with allocated labor force status, class of worker, and hours worked

variables are excluded. Entrepreneurial activity is substantially higher for allocated or imputed observations. These observations were included in the first Kauffman Index report (Fairlie 2005). See Fairlie (2006) for a complete discussion of the issues and comparisons between unadjusted and adjusted rates of entrepreneurial activity.

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 over. 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 and the District of Columbia, the sample is also designed to guarantee precise estimates of average *annual* unemployment rates resulting in varying sample rates by state (Polivka 2000).<sup>8</sup> 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 opportunity share of total business creation is defined as the share of total business creation coming out of wage and salary work, school, or other labor market states. Alternatively, individuals can start businesses coming out of unemployment. The initial labor market state is defined in the first survey month. Business creations are measured in the second (or following) survey month.

#### STANDARD ERRORS AND CONFIDENCE INTERVALS

The analysis of entrepreneurial activity by state includes confidence intervals that indicate confidence bands of approximately 0.15 percent around the rates of

<sup>8</sup> The ratio of households sampled for each state range from 1 in 100 households to 1 in 3,000 households (Polivka 2000).

entrepreneurial activity. While larger states have smaller confidence bands, the smallest states have larger confidence bands of approximately 0.20 percent. Oversampling in the CPS ensures that these small states have sample sizes of at least 5,000 observations, and, therefore, provides a minimum level of precision.

The standard errors used to create the confidence intervals reported here may understate the true variability in the state estimates. Both stratification of the sample and the raking procedure (post-stratification) will reduce the variance of CPS estimates (Polivka 2000 and Train, Cahoon and Maken 1978). On the other hand, the CPS clustering (i.e., nearby houses on the same block and multiple household members) leads to a larger sampling variance than would have been obtained from simple random sampling. It appears as though the latter effect dominates in the CPS and treating the CPS as random generally understates standard errors (Polivka 2000). National unemployment rate estimates indicate that treating the CPS as a random sample leads to an understatement of the variance of the unemployment rate by 23 percent. Another problem associated with the estimates reported here is that multiple observations (up to three) may occur for the same individual.

All of the reported confidence intervals should be considered approximate, as the actual confidence intervals may be slightly larger. The complete correction for the standard errors and confidence intervals involves obtaining confidential replicate weights from the BLS and employing sophisticated statistical procedures. Corrections for the possibility of multiple observations per person, which may create the largest bias in standard errors, are made using statistical survey procedures for all reported confidence intervals. It is important to note, however, that the estimates of entrepreneurial activity

rates are not subject to any of these problems. By using the sample weights provided by the CPS, all estimates of rates of entrepreneurial activity are correct.

#### ADVANTAGES OVER OTHER POSSIBLE MEASURES OF ENTREPRENEURSHIP

The Kauffman Index of Entrepreneurial Activity has several advantages over other possible measures of entrepreneurship based on household or business-level data. 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 over a year to be released. Second, the index includes all types of business activities (employers, non-employers, unincorporated and incorporated businesses), but does not include small-scale business activities such as consulting and casual businesses. For example, the County Business Patterns data include only employer firms and the Survey of Business Owners and underlying non-employer data include any business activity with at least \$1,000 in annual sales. Third, the panel data created from matching consecutive months of the CPS allow for a dynamic measure of business creation, whereas most datasets only allow for a static measure of business ownership (e.g. ACS). Finally, the CPS data included detailed information on demographic characteristics of the owner, whereas most business-level datasets contain no information on the owner (e.g. employer and non-employer data).

#### COMPARISON TO SELECTED DATASETS

The main difference between the Kauffman Index and possible measures of entrepreneurial activity from the ACS (and related decennial Census of the Population) is

that the index measures flows into business ownership rather than the number of existing business owners at a specific point in time. Cross-sectional datasets, such as the ACS, do not provide information on business creation. Static measures of business ownership based on cross-sectional data do not capture the dynamic nature of entrepreneurial activity that the Kauffman Index illustrates.

The Kauffman Index differs from the Survey of Business Owners (SBO) conducted every 5 years by the U.S. Census Bureau in several major ways. First, the Kauffman Index is based on household survey data and measures individual business owners. The SBO includes all firms operating during the year that filed tax forms as individual proprietorships, partnerships, or any type of corporation. Second, the Kauffman Index captures business creation, whereas the SBO captures the number of existing businesses at a point in time. Third, the Kauffman Index only includes individuals starting businesses as their main work activity with a substantial hours commitment. The SBO includes all firms with receipts of \$1,000 or more, which may include side or "casual" businesses owned by wage/salary workers, the unemployed, or retired workers. Finally, the Kauffman Index includes all new business owners, whereas the SBO excludes agricultural and a few other types of businesses.

The Kauffman Index captures a broader range of entrepreneurial activity than the national and state level firm or establishment birth data from the Business Employer Dynamics (BED) or the Statistics of U.S. Businesses (SUSB). The BED data are compiled by the U.S. Bureau of Labor Statistics (BLS) from existing quarterly state unemployment insurance (UI) records through the Quarterly Census of Employment and Wages (QCEW) or ES-202 program. The SUSB data are collected by the U.S. Census

Bureau and summarized by the U.S. Small Business Administration (SBA), Office of Advocacy. Both of these datasets include only employer firms. Employer firms represent only approximately roughly one-fourth of all firms, and many firms start with no employees. These data, therefore, are likely to lead to a substantial undercount in the rate of entrepreneurial activity, particularly for certain industries and regions. Finally, the BED and SUSB data are business-level data containing essentially no information on the owner's characteristics, while the CPS is person-level data containing very detailed information on the owner.

The Kauffman Index also differs from the Total early-stage Entrepreneurial Activity (TEA) index used in the Global Entrepreneurship Monitor. The TEA captures the percentage of the age 18–64 population who are currently nascent entrepreneurs (i.e. individuals who are actively involved in setting up a business) or who are currently an owner-manager of a new business (i.e. businesses with no payments to owners or employees for more than 42 months). The nascent entrepreneurs captured in the TEA who are still in the start-up phase of business creation are not necessarily captured in the Kauffman Index because they may not be working on the new business for fifteen hours or more per week. The Kauffman Index also differs from the TEA in that it captures entrepreneurship at the point in time when the business is created because it is based on panel data.