Just Passing Through: Characterizing U.S. Pass-Through Business Owners

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Abstract

We investigate the use of administrative data on the owners of partnerships and S-corporations to develop new statistics that characterize business owners. Income from these types of entities is "passed through" to owners to be taxed on the owners' tax returns. The information returns associated with such pass-through entities (Form K1 records) make it possible to link individual owners to the businesses they own. These linkages can be leveraged to associate measures of the demographic and human capital characteristics of business owners with the characteristics of the businesses they own. This paper describes measurement issues associated with administrative records on these pass-through entities and their integration with other Census data products. In addition, we document a number of interesting trends in business ownership among pass-through entities. We show a substantial decline in both entry and exit with less churn among both owners and owned businesses. We also show that the owners of pass-through entities are older, more likely to be male, and more likely to be white compared to the working population.

Keyword: business owner, form K1, administrative data

*All opinions and views expressed are those of the authors and do not represent those of the U.S. Census Bureau. All results have been reviewed to ensure that no con dential information is disclosed. This work has benefitted from discussions with John Haltiwanger, Henry Hyatt, Javier Miranda, and Kristin Sandusky. Email: nathan.goldschlag@census.gov; jisoo.daniel.kim@census.gov; kristin.mccue@census.gov

1 Introduction

In recent decades the U.S. economy has experienced lackluster productivity growth and a declining rate of new business formation. Understanding the causes of these trends, in particular the decline in start-ups and its effects on economic growth, requires a better understanding of the supply of potential entrepreneurs and the career paths that lead to founding a new business. This paper documents work at Census combining administrative records from the Internal Revenue Service's (IRS) Form K-1 with a number of Census data sources to address this need. Leveraging existing administrative records can provide new information resources at low cost that complement information collected in Census surveys such as the quinquenial Survey of Business Owners (SBO) and Census's recently launched Annual Survey of Entrepreneurs (ASE).

Our investigation of the K1 data for years 2007 to 2015 reveals a number of interesting patterns. First, the coverage of the K1 data is substantial, with about 7.4 million businesses and 13 million owners each year. Second, there is a substantial amount of churn in both the set of owners and businesses observed each year, but entry and exit of owners and businesses falls substantially between 2008 and 2015. After linking to Census data on individuals and businesses we are able to characterize attributes of business owners and the types of businesses they own. Relative to the population of employees, K1 business owners are older, are more likely to be male, and more likely to be white. K1 business owners are less likely to be foreign born, which is surprising given a growing literature describing immigrants as highly entrepreneurial, but not necessarily inconsistent. ¹ Finally, the K1 data files at Census themselves show significant heterogeneity across years—the types of entities and attributes available change over time. In addition, we find that for a significant share of businesses the shares reported for individual owners do not sum to 100%, which raises to concerns about using these data to identify primary business owners.

¹See Fairlie and Lofstrom (2015) for a recent survey of this literature. The under-representation we find here could simply reflect that, while immigrants may be more likely to own businesses, the businesses they own may be less likely to be organized as partnerships and S-corps covered in the K1 data.

The paper is organized as follows: In section 2 we describe the properties of the K1 data we are using and issues involved in linking them to Census sources. In section 3, we describe methods and results of linkages to our primary Census sources: the Business Register, the Longitudinal Business Database, and the Census Numident. Section 4 presents some descriptive statistics on characteristics of K1 owners and owned businesses that illustrate the kinds of statistics that are made possible by those linkages. Section 5 concludes.

2 Pass-Through Entities and K1 Filings

A firm's legal form of organization determines whether taxes on the income it generates are levied directly on the business or through taxes assessed on the income of the owners of the business. Partnerships and S corporations (henceforth S-corps) are considered "pass-through entities," meaning that income and losses flow through the business and become taxable income for the firm's partners or shareholders. The information returns resulting from this tax treatment are of potential use for creating statistics on business owners because they provide an administrative record link between characteristics of businesses and characteristics of their owners. Partnerships and S-corps report income paid to (or losses realized by) each owner on Form K-1. In addition, the business reports its overall profits or losses on income on Form 1065 (partnerships) or Form 1120S (S-corps).²

The K1 return includes information on both the filer (the partnership or S-corp) and the recipient(s) of pass through income, which can be either an individual or another business. As filed, the identifying information on each K1 record includes the federal Employer Identification Number (EIN), name and address of the business, along with the social security

²Form K1 is also used for other kinds of transactions, but the work described here uses only filings by partnerships and S-corps. Appendix A contains copies of the 2016 versions of Schedule K1 associated with income returns 1065 and 1120. Form 1065 is used to report the income, gains, losses, deductions, credits, and other information from the operation of a partnership. A partnership does not pay tax on its income but instead passes through any profits or losses to its partners. Partners must include partnership items on their individual tax or information returns. Similarly, Form 1120S is used to report the income, gains, losses, deductions, credits, and other information of a domestic corporation or other entity for any tax year covered by an election to be an S corporation.

number (SSN), name and address of the recipient owner. Thus each K1 record pairs a business with one of its recipient owners, either an individual or another businesses. Because partnerships and S-corps can have multiple owners, businesses typically file multiple K1s. On arrival at Census, the K1 records are anonymized by removing the personal identification information in the files and assigning internal unique person identifiers, known as protected identification keys (PIKs). Similar processing of other Census person-level files makes it possible to link together information on the same person from different Census sources, while safeguarding the identities of individual owners.

Each record in these files represents an owner/owned-entity pair, and our goal is to use the link between the two parties to associate human capital and demographic characteristics of business owners with their business. Doing so is complicated by the fact that some partnerships own interest in—and receive pass-through income from—other partnerships. In these cases, the K1 record links to another partnership rather than a person. Some of these "tiered entities" may be linkable to person characteristics by recursively following links in the K1 files. However, the ownership structure and tax incidence of these cases can be quite complex (May, 2012; Cooper, McClelland, Pearce, Prisinzano, Sullivan, Yagan, Zidar, and Zwick, 2016). In this initial work, we focus on the records for partnerships with only individual owners and on S-corps (which cannot be owned by other businesses).

The analyses described in this paper use K1 data from tax years 2007 to 2015. The data for 2007 to 2012 exclude K1 records for which the owner is another business (tiered entities), while data for 2013 to 2015 include them. This means that in years 2007-2012 the total counts of K1 businesses (as well as the total counts of owners) are understated because some K1 partnerships have only business owners, in which case none of their K1 filings are included in the data we are using.

Table 1 gives a sense of the scope of these data by providing record counts. The first pair of columns gives the total number of K1 business/owner combinations, along with the share of records associated with tiered entitities for the years in which they are included.

The second pair of columns gives the number of K1 businesses (i.e. unique EINs) and then a separate count of those with at least one owner who is a person rather than another business. The final pair gives counts of unique owners—either persons (i.e. unique PIKs), or businesses (unique EINs among owners). The total number of business/owner combinations ranges from 20 to 32 million across these years. The substantial increase in the first column record count between 2012 and 2013 is driven by the addition of tiered entity records beginning in 2013. Tiered entities account for about 15% of records and 12% of owners in years when they are present in the files.

Each year about 7 to 8 million businesses file K1 returns. The number of K1 businesses grew over this period: excluding tiered entities for the sake of longitudinal consistency, the count of businesses rose by almost 20% between 2007 and 2015. In the years when tiered entities are included, there are several hundred thousand K1 businesses that have only business owners. These types of cases are not observed prior to 2013 and therefore we largely exclude them from the analyses that follow. Finally, on average there are about 13 million individual business owners receiving pass-through income or losses each year. As with the number of K1 businesses, the number of individuals observed in the data is growing over time, increasing 22% over this period, or on average about 2.5% per year. There is substantial variation in year-to-year growth rates, with a 0.4% increase between 2009 and 2010 followed by an increase of 6% between 2010 and 2011. This pattern also appears for K1 businesses (0% followed by 5%) and business/owner pairs (1% followed by 11%).

Using the K1 data we can characterize whether business ownership tends to be relatively concentrated or diffuse. That is, among those with some stake in K1 businesses, how many businesses does the typical individual (or business in the case of tiered entities) own and conversely how many individuals own the typical business. Table 2 shows the mean number of K1 businesses that each individual owner has an interest in. Roughly 70% of individuals have interest in only one K1 business, with the average number of K1 businesses per person growing from 1.71 to 1.92 over the period. But a substantial number of individuals receive

gains or losses from multiple K1 businesses, with roughly 775,000 individuals per year owning stake in 5 or more K1 businesses. Table 3 shows similar statistics for tiered entities, which are more likely than individuals to have an ownership stake in mulitple K1 businesses: 67% of tiered entities own only 1 K1 business and 9% own stakes in 5 or more.

Table 4 and 5 show the owner size distribution of K1 partnerships and S-corps. Here we examine partnerships and S-corps separately because the number of owners and the trends over time differ substantially for the two groups. From table 4 we can see that on average partnerships have about 5 owners and this number grows slightly over time. The growth in size seems to be driven primarily by an increasing share of K1 partnerships with 2 to 4 owners—the share of partnerships with 5 or more owners actually declined over the period. On average, S-corps have fewer owners (1.6) than partnerships. In contrast to the trend among partnerships, the average number of owners for K1 S-corps is declining. The share of K1 S-corps with a single owner increased from 61% to over 65% while the share with more than two owners declined.

The differences we observe between partnerships and S-corps indicate that that shifts in the composition of K1 records by legal form of organization can affect the average characteristics of K1 owners and businesses. Table 6 shows that the share of K1 businesses that were organized as partnerships increased over this period from about 41% of all K1 businesses in 2007 to 43% in 2015, while the S-corp share fell from 59% to 55%. This table explicitly excludes tiered entities. Since tiered entities are comprised exclusively of partnerships and in our data tiered entities are only observed starting in 2013, if they were included the share of partnerships in the K1 data would rise much more dramatically in 2013.

K1 records also include information on the ownership shares of partners at the beginning and end of the tax year. This information is of interest for our work because it potentially provides additional information on the relative importance of individual owners where firms

³For comparison, in 2008 10% of all employer establishments were owned by businesses organized as partnerships and 37% were owned by businesses organized as S-corps. For 2015 those shares were 11% and 41%. See 2008 and 2015 County Business Patterns by Legal Form of Organization for more information.

have multiple owners with different characteristics and some choice must be made about how to characterize the ownership of the firm. It is also important to note that ownership shares do not necessarily determine reported passed-through income for each owner. In table 7 we present mean ownership shares by whether the owner is an individual or a business (tiered entity) and break out individuals into those working for S-corps and those working for partnerships. Individuals on average have larger ownership shares than do businesses, holding close to one-quarter share in the businesses in which they are partners. The ownerships shares of individuals part of S-corps tend to be much higher than individuals in partnerships (62% vs 8%). This is at least partly mechanical since the mean number of owners in S-corps is much less than partnerships (1.6 vs 5.5). By comparison, businesses hold about 7% ownership on average. It may be that the tiered entities (i.e. partnerships that include other businesses among their partners) are larger than the businesses with only person owners, but the K1 records on their own do not provide us with a measure of size. For both tiered and non-tiered entities, the median ownership share is quite small–50% of individual owners have an ownership share of about a half a percent.

One of the most notable deficits of the ownership share data is that for many K1 businesses these shares sum to less than 100%. Table 8 documents this pattern. Here, rather than average shares across owners, we total ownership shares within a K1 business. On average, beginning-of-year ownership shares for K1 businesses sum to 78% in 2013, but the average declines slightly in 2014 and 2015. Overall, about 72% of K1 businesses have beginning-of-year ownership shares that sum to 100%. For cases with only one owner record with missing share information, we could potentially impute the missing share based on the difference between the summed shares and 100%. Table 8 shows that across the years about 2.8% of K1 business overall (and 10% of businesses with more than one owner) are missing a single ownership share. So such a strategy would not be applicable to many businesses, and would need to consider the fact that the ownership shares for about 28% of K1 businesses

⁴May (2012) notes this issue as well, and reports that it results because some filers do not provide a numeric response to the ownership share questions.

do not sum to 100.

The K1 filings also include information on business income and losses flowing through to owners. Our files contain some data on owner income information for tax years 2013-2015, however, the 2014 and 2015 data are incomplete. Table 9 describes business income and losses at both the individual and business-level for 2013, the year in which the income field in our files is populated in each of the extracts that Census received. On average, individuals receive a net positive allocation of income from their K1 interests of about \$21 thousand. The distribution of income received by individual owners is highly skewed, with the mean (\$20k) being well above the 75th percentile (\$366) and with a substantial mass at 0. Table 9 also describes total net income at the K1 business-level, based on totaling the positive and negative income passed through to each owner. Partnerships tend to pass through almost 19% more income than do S-corps. Among employer businesses in 2013, partnerships had 58% more employment than S-corps, which is consistent with our finding that partnerships have higher revenues, though the K1 data include non-employer businesses as well. However, the total income for S-corps is much more skewed than that of partnerships, with the 90th percentile for S-corps more than 2.5 times larger than that for partnerships.

Because the K1 data are of particular interest for understanding the formation of new businesses and the individuals who start them, it is important to note that the set of individuals and businesses filing Form K1 changes from year to year. Each year there are individuals receiving Form K1 who did not appear in the previous year (entry), individuals that received a Form K1 in the previous year but not the current year (exit), and individuals receiving a Form K1 in both the current and prior year (continuers). Table 10 describes entry and exit dynamics for individual owners in the K1 data, excluding tiered entities in years 2013-2015 to make the population described consistent over time.

We classify each individual owner as an "entrant", "continuer", or an "exit" based on

⁵See 2013 County Business Patterns by Legal Form of Organization for more information.

⁶All percentiles, including medians, are fuzzy in order to avoid the disclosure of sensitive information. These percentiles are calculated as the mean of two surrounding percentiles.

whether their PIK appears in the current and/or prior year file. Comparing the 2008 set of owners to those in 2007, we find that 14% of the 2008 owners did not have a record in the 2007 file, and so are classified as entrants. The exit rate between 2007 and 2008 was 12%, while continuers account 86% of the 2008 PIKs-the bulk of the data. Both exit and entry rates vary substantially across this set of years, but in general we observe a decline in dynamism among K1 owners over the period for which we have data. The share of continuers rises steadily over the period while entry and exit decline. This decline in churn of the individuals observed in the K1 data is consistent with findings of secular declines in measures of business dynamism including firm entry, job creation and destruction, and job-to-job flows in other business data (Hyatt and Spletzer, 2013; Decker, Haltiwanger, Jarmin, and Miranda, 2014). Splitting individuals into those that only own S-corps and those that only own partnerships we see generally similar trends with a few exceptions. The exit rate for individuals only owning S-corps remains relatively flat and is actually rising among individuals that only own partnerships, which suggest that the overall decline shown in table 10 is driven by individuals that own businesses of both types. We observe a similar pattern at the K1 business-level population. Table 11 shows analogous entry and exit shares for K1 businesses. The distribution of K1 businesses across the three categories is roughly similar to that for individuals. Moreover, we see a similar rise in continuers and decline in both entry and exit of K1 businesses.

The administrative records on ownership relationships for pass-through entities provide a rich set of characteristics with which we can better understand the dynamics of business owners and entrepreneurship. The value of these data is greatly increased when combined with other Census data on individuals and businesses. In the next section we describe several linking exercises to characterize the attributes of both K1 individual owners and the businesses they own.

3 Linking K1 Data to Census Data Sources

In order to evaluate potential uses of K1 data to produce new public-use statistics, we first describe efforts to match the K1 data to various Census data assets, paying particular attention to coverage issues with respect to businesses and individuals appearing in the K1 files. The key Census data we focus on here are the Business Register (BR), the Longitudinal Business Database (LBD), the Census version of the Social Security Administration's Numident file, and decennial census data, each of which is described briefly below.

3.1 Business Register

The BR contains a list of all legal entities (generally businesses) that operate within the U.S. and its island areas as identified by the Master File systems of the Internal Revenue Service, except employers classified as private households. Its primary purpose is to serve as the sampling frame for surveys of employer businesses for the Economic Census and other Census business surveys. The database is updated throughout the year, integrating information from IRS, the Bureau of Labor Statistics, and Census data collections.

The BR stores basic business identification and contact information needed for survey operations including EIN, business name, and business location. In addition, the BR also stores attributes of the business including industry, employment, and payroll. Those variables are used in survey edits and imputations and serve as inputs to Census data products such as County Business Patterns (CBP). The primary statistical unit in the BR is an establishment, defined as an economic unit–generally at a single physical location—where business is conducted or where services or industrial operations are performed. The BR additionally maintains information on more aggregate units, including EIN entities (defined simply as

⁷All BR information about individual businesses is confidential under Title 13, United States Code. Additionally, Federal tax information incorporated in the BR is confidential under both Title 13 and the Internal Revenue Code (Title 26), whereas other administrative data in the BR are confidential under administrative directives, contractual agreements with supplying agencies, and a more general statute (Title 18) that prohibits disclosure of sensitive Federal government information. Therefore, BR information about individual businesses is available only for internal use by authorized Census Bureau programs.

the unit a business uses for filing payroll or business tax forms) and enterprises (defined as an economic unit composed of one or more establishments under common ownership or control). There is substantial variation in the complexity of business organizations. One of the most basic and useful distinctions is between single- and multi-establishment enterprises. For single establishment companies the enterprise, establishment, and EIN units are the same.

While the BR is primarily used as a source of information on employer businesses, it also includes tables with administrative records on non-employers—that is businesses with zero payroll. These records are important when considering the population of businesses filing K1 reports since many of them may have partners or shareholders who are actively involved in the business but do not have payroll because those involved are not statutory employees. In particular, we use the BR EIN Units file to determine whether partnerships and S-corps in the K1 files also appear in the BR, and then use the employer records in the BR to determine whether a K1 business is associated with employment.

3.2 Longitudinal Business Database

While the BR is a relational database that is continuously updated, Census also maintains annual end-of year snapshot files which store historical data for 1976 to the present. The employers in these files are linked longitudinally to create the confidential Longitudinal Business Database (LBD), which provides the microdata that are used to create annual releases of Census's Business Dynamics Statistics (BDS) (Jarmin and Miranda, 2002). The longitudinal linkages in the LBD make it possible to calculate the age of both establishments and firms. Firm age in the LBD is defined as the age of the oldest establishment associated with the firm. Linking the same establishment from year-to-year also allows the analysis of employment growth and contraction.

3.3 Census Numident

Since 1972, the SSA maintains an electronic master list of all assigned SSNs, the Numerical Index File or Numident.⁸ Upon receipt of Numident records, Census anonymizes the data by replacing the SSNs with PIKs. The PIKs can then be used to link K1 information to Numident variables. Census's version of the Numident file provides data on gender, date of birth, and whether an individual is foreign born. We use the PIKs assigned to shareholders and partners in the K1 records to link these characteristics.

3.4 Decennial Census

We use links to decennial census data to associate race and ethnicity categories with K1 owners. While the Numident provides some information on these characteristics, the categories used have changed over time and are not consistent with current definitions. Where possible we use race and ethnicity variables from the 2010 population census, because it is close in time to the K1 data years that we are using, but we use 2000 race and ethnicity data for cases where 2010 values are not available.

3.5 Match Rates to Census Data

Table 12 reports the results of matching 2007-2015 K1 businesses to both the BR EIN UNITS file and the LBD using the EINs of the K1 businesses. We first match the EINs of K1 businesses to the EIN Units file which has the most comprehensive coverage because it includes both employers and nonemployers. We find that virtually all of the K1 businesses appear in the BR's EIN Units file, and that close to half of them are businesses with paid employees. The match rate to both the EIN Units data and the share with employees is very stable over time. The LBD excludes establishments with no payroll, so we expect to find lower match rates in this column. About 38% of K1 businesses are matched to one or

⁸See https://www.ssa.gov/policy/docs/ssb/v69n2/v69n2p55.html for details.

more establishments in the LBD, about 49% that match to employer EINs in the BR. The match rate to the LBD is stable over time.

While table 12 shows the match rate of K1 businesses to the BR and LBD we might also be interested in the share of S-corps and partnerships in the LBD covered by K1 filings. About 86% of S-corp and partnership establishments in the LBD between 2007 and 2014 match to an EIN in the K1 data. Despite being relatively high, our prior was that nearly all S-corp and partnerships in the LBD would be covered by the K1. It is also important to note that we find significant heterogeneity in match rates across types of businesses. Table 13 shows the cross-tabulation of match rates from the LBD into the K1 by legal form and multi/single-unit status. Single-units have a much higher match rates than establishments in multi-unit firms for both S-corps and partnerships. Multi-unit partnerships have the lowest match rate with less than a quarter of establishments of that type matching to the K1. In order to explore the role of complex multi-unit firms in these linkages we calculate a firm-level match rate where if at least one of the firm's S-corp or partnership establishments match to the K1 the entire firm is considered a match. This raises the overall match rate from 86% to 94%, which suggests that complex multi-units may file K1s for some subset of their establishments we expect to have K1 filings.

Table 14 reports analogous statistics for tiered entities—that is, partnerships that have an ownership stake in another partnership. Match rates for the owner businesses are considerably lower than they are for K1 businesses. Only about 60% of the owner entity EINs appear in the BR EIN Units data, and among those a relatively small share (28%) are employers.

Table 15 reports match rates of K1 individual owners to the Census Numident. We find that nearly all of the PIKs assigned to K1 records are also present in the Census Numident files, though this may simply reflect that we only have records for individual owners of K1 businesses for whom it is possible to assign a PIK. In the next section we use these matches to characterize the attributes of K1 businesses and their individual owners.

4 Characteristics of K1 Owners and Businesses

In this section we use the linkages described above to characterize the populations of individuals and businesses that appear in the K1 data. Table 16 describes demographic attributes of individuals who own at least one K1 business. We show these characteristics by year in order to identify trends in demographic characteristics among the K1 individual owners. We also include estimates for the working population based on Current Population Survey (CPS) data, to provide some context based on a more general, but also economically active, population. Owners of K1 businesses are more likely to be male (65%) compared to the CPS working population (49%) and less likely to be foreign born (14% compared to 17%). The fact that K1 business owners are less likely to be foreign born than the average employee is somewhat surprising given a growing literature describing immigrants as highly entrepreneurial. However, the under-representation of immigrants that we find here could simply reflect that, while immigrants may be more likely to own businesses, the businesses they own may be less likely to be organized as the partnerships and S-corps covered in the K1 data. We find that the foreign-born share increases faster among K1 business owners than among employees over this period, rising from 13% in 2007 to 16% by 2015.

Table 17 shows the average age of K1 owners and the working population along with the distribution across age groups. K1 owners are on average in their early to mid 50s, and mean age for the group increases by 2.7 years between 2007 and 2015. They are older on average than the working population, for which the mean is about 45. While a modest increase in the age of K1 owners is unsurprising given that the U.S. population is aging over this period, we note that the mean age of the CPS sample grew only 1.4 years over the same period. Individuals less than 25 years of age are underrepresented (3%) among K1 owners compared

⁹Race and ethnicity for K1 owners are based on data from the 2010 census, where available, and the 2000 census when no match to 2010 was found. Characteristics of the working population are based on weighted estimates using IPUMS Current Population Survey Annual Social and Economic Supplement Files for 2007-2015. Sample includes all respondents aged 18 or more who reported working in the prior calendar year. Estimates are weighted using the supplement weights.

¹⁰See Fairlie and Lofstrom (2015) for a recent survey of this literature.

to the working age population (13%). The aging of the K1 owners on average is primarily driven by the 7 point increase in the share over 65, which compares to a 3 point increase among the working age population.

Table 18 shows the distribution of individuals that own K1 businesses by race and ethnicity. Relative to employees, K1 owners are more likely to be white (82%) or Asian(6%) and less likely to be in each of the other categories. Looking at changes over time, the share of white K1 owners is falling while the shares of owners from other groups are increasing, reflecting trends also found in the CPS estimates.

Turning now to the characteristics of K1 businesses, table 19 shows the distribution of K1 businesses by NAICS sector. Note that for firms associated with at least one K1 EIN with positive payroll, industry is assigned based on the employment weighted modal NAICS sector for the owning firm, which for multi-units could be different from the NAICS sector of the firm's K1 EIN(s). Real estate rental and leasing (NAICS 53) accounts for the largest share of EINs in the K1 businesses overall (26%) but the businesses in this sector are predominantly non-employers. Finance and insurance (NAICS 52) is the other sizable group that is dominated by non-employers. Among employer EINs, the 5 largest sectors are professional, scientific, and technical services (NAICS 54), construction (23), retail trade (44-45), health care and social assistance (62), and accommodation and food services (72).

Table 20 gives the employment size distribution for employer K1 entities. We find that, even after excluding entities with no paid employees, most K1 entities are quite small, with more than 75% of them having fewer than 9 employees. The size of K1 businesses is highly skewed with some very large entities as well. The mean number of employees is substantially greater than the median, with S-corps having 14 employees on average and 29 for partnerships. Unsurprisingly, it is the multi-unit firms that account for the most employment with a mean size of 272 and 75% of multi-unit K1 businesses having over 114 employees. Table 21 further decomposes the firm size by NAICS sector, with sectors ordered from largest to smallest mean size. Perhaps unsurprisingly, management of companies and enterprises (NAICS

55) has the largest employment levels and is the only sector in which the majority of firms have more than 10 employees. The size distribution in the industries with the largest K1 businesses are highly skewed. For example, health care (NAICS 62), administrative support services (56), and utilities (22) all have a mean size many times greater than the median.

Figure 1 shows the difference in firm and employment shares across firm size bins between K1 firms and the population of firms in the BDS data in 2012. Positive values indicate that the share of firms or employment is higher among firms with at least one K1 EIN than among the general population of firms in the BDS data. The figure points to only modest differences in firm share, with the primary difference less left skewness in the K1-EIN owning firm distribution. Roughly 88% of firms in both the BDS and K1 firms have fewer than 20 employees. The employment shares, on the other hand, suggests that firms that own at least one K1 entity tend to be over-represented on an employment-weighted basis among firms with less than 250 employees and under-represented among the largest firms. The highest over-representation in employment share is among firms with between 20 and 49 employees and the largest under-representation is among firms with more than 10,000 employees.

The firm age distribution is also of particular interest here, as startups are by definition young. Figure 2 compares the BDS and K1-EIN owning firm and employment distributions by firm age categories. In contrast to our firm size findings, differences in firm and employment shares are somewhat more consistent across firm age. K1 firms are over-represented in firm share across most firm age bins, with the exception of the oldest three categories (firms 21 and older). On an employment weighted basis, K1 firms are over represented in all but the very oldest firms—the left censored group for which we do not know exact firm age, but in 2012 were more than 35 years old.

5 Conclusion

Businesses organized as partnerships or S-corps must report income passed through to each owner via information returns filed with the IRS. These Form K1 returns provide administrative data that link owners and businesses. These linkages allow us to jointly characterize business owners and the types of businesses they own. In this paper, we describe measurement issues associated with linking K1 data to a number of Census data sources that contain additional information on people and businesses. The K1 data present a number of challenges, including shifting coverage by owner type (individual versus tiered entity) and owner shares that do not sum to 100%. Despite these issues, we document a number of interesting patterns among business owners. We find significant entry and exit of both business owners and the businesses they own. Consistent with existing evidence on more general populations of businesses, over time we see a rise in continuers and decline in both entry and exit of K1 businesses. We also show that owners of K1 owners are older, more likely to be male, and more likely to be white than the working population. The firms associates with K1 filings differ somewhat from the broader population of firms in their age, size, and industry distributions, but there is substantial overlap in the population distributions, suggesting that a better understanding of these pass-through entities is likely to be informative about business dynamism among the broader population. These findings provide a starting point for developing new statistics that characterize business owners using administrative records.

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Tables

Table 1: K1 Overall Record Counts, 2007-2015

	Business/	% Tiered	k	K1 Businesses		wners
Year	Owner Pairs	Entity	All	With Person Owners	Persons	Businesses
2007	19,909,000		6,717,000	6,717,000	11,622,000	
2008	20,782,000		6,894,000	6,894,000	11,947,000	
2009	21,995,000		6,917,000	6,917,000	12,405,000	
2010	22,170,000		6,917,000	6,917,000	12,451,000	
2011	24,552,000		7,239,000	7,239,000	13,220,000	
2012	25,279,000		7,369,000	7,369,000	13,381,000	
2013	31,047,000	14.9%	7,867,000	7,528,000	13,654,000	1,913,000
2014	31,602,000	15.2%	8,164,000	7,805,000	13,799,000	1,949,000
2015	32,021,000	15.3%	8,395,000	8,017,000	14,132,000	1,976,000

Source: K1 filings.

Notes: Total Observations are at the PIK-EIN level. Business Owners are EIN entities who are (partial or sole) owners of a K1 business, also known as tiered entities. K1 Businesses includes businesses with only business owners. K1 Businesses With Person Owners includes only K1 EINs that have at least one person owner. Since tiered entities are only available after 2012 this set of K1 businesses is consistent over time.

Table 2: K1 Businesses per Individual Owner, 2007-2015

	Person	Mean # of K1	% with 1	% with 2-4	% with 5+
Year	Owners	Businesses	K1 Business	K1 Business	K1 Business
2007	11,622,000	1.71	72.5%	22.9%	4.7%
2008	11,947,000	1.74	71.7%	23.4%	4.9%
2009	12,405,000	1.77	70.6%	24.2%	5.3%
2010	12,451,000	1.78	70.4%	24.2%	6.0%
2011	13,220,000	1.85	68.9%	25.1%	6.2%
2012	13,381,000	1.89	68.6%	25.2%	6.6%
2013	13,667,000	1.93	68.1%	25.3%	6.6%
2014	13,813,000	1.94	68.1%	25.3%	6.3%
2015	14,147,000	1.92	68.4%	25.3%	5.8%

Source: K1 filings.

Notes: Observations are unique individual K1 owners for each year. Business owners are excluded.

Table 3: K1 Businesses per Business Owner (Tiered Entity), 2013-2015

	Business	Mean # of	% with 1	% with 2-4	% with 5+
Year	Owners	Businesses	K1 Business	K1 Business	K1 Business
2013	1,913,000	2.4	67.3%	23.5%	9.2%
2014	1,949,000	2.45	66.9%	23.7%	9.4%
2015	1,976,000	2.46	67.2%	23.6%	9.3%

Notes: Observations are unique business K1 owners (tiered entities) for each year. Individual owners are excluded.

Table 4: Owners per Partnership K1 Business, 2007-2015

	K1	Mean # of	% with 1	% with 2-4	% with 5+
Year	Businesses	Owners	Owner	Owners	Owners
2007	2,753,000	4.82	10.5%	75.3%	14.2%
2008	2,843,000	4.95	10.5%	75.7%	13.8%
2009	2,888,000	5.33	10.4%	76.0%	13.6%
2010	2,891,000	5.4	10.3%	76.3%	13.4%
2011	3,046,000	5.83	9.8%	77.0%	13.3%
2012	3,126,000	5.89	10.2%	76.7%	13.1%
2013	3,554,000	6.03	10.1%	77.1%	12.8%
2014	3,697,000	5.87	10.1%	77.2%	12.7%
2015	3,808,000	5.77	10.2%	77.3%	12.6%

Source: K1 filings.

Notes: Observations are unique K1 businesses (EINs) organized as partnerships for each year. Owners include only individual, excluding business owners (tiered entities). K1 EINs with solely business owners are excluded from the analysis.

Table 5: Owners per S-corp K1 Business, 2007-2015

-	K1	Mean # of	% with 1	% with 2-4	% with 5+
Year	Businesses	Owners	Owner	Owners	Owners
2007	3,965,000	1.67	60.6%	36.8%	2.6%
2008	4,052,000	1.66	61.2%	36.3%	2.5%
2009	4,030,000	1.64	62.2%	35.4%	2.4%
2010	4,027,000	1.63	62.6%	35.1%	2.4%
2011	4,194,000	1.62	63.1%	34.6%	2.3%
2012	4,244,000	1.61	63.6%	34.1%	2.3%
2013	4,315,000	1.6	64.3%	33.6%	2.2%
2014	4,469,000	1.58	64.8%	33.1%	2.1%
2015	4,589,000	1.57	65.3%	32.6%	2.0%

Notes: Observations are unique K1 businesses (EINs) organized as S-corps for each year. Owners include only individual, excluding business owners (tiered entities). K1 EINs with solely business owners are excluded from the analysis.

Table 6: Legal form for K1 Businesses, 2007-2015

	K1	%	%
Year	Businesses	Partnerships	S-Corps
2007	6,717,000	41%	59%
2008	6,894,000	41%	59%
2009	6,917,000	42%	58%
2010	6,917,000	42%	58%
2011	7,239,000	42%	58%
2012	7,369,000	42%	58%
2013	7,528,000	43%	57%
2014	7,805,000	43%	57%
2015	8,017,000	43%	57%

Source: K1 filings.

Notes: Observations are unique K1 businesses (EINs) for each year. K1 EINs with solely business owners are excluded from the analysis.

Table 7: Ownership Share by Owner Type

Partner Type		Total	2013	2014	2015
All Individuals					
	Mean	22.4%	22.2%	22.4%	22.6%
	Median	0.5%	0.5%	0.5%	0.5%
S-Corporation		0.0%	0.0%	0.0%	0.0%
	Mean	62.4%	61.9%	62.4%	63.0%
	Median	50.0%	50.0%	50.0%	50.0%
Partnership		0.0%	0.0%	0.0%	0.0%
	Mean	8.2%	8.3%	8.1%	8.1%
	Median	0.0%	0.0%	0.0%	0.0%
Business					
	Mean	7.5%	7.8%	7.4%	7.3%
	Median	0.1%	0.1%	0.1%	0.1%

Notes: Observations are individual and business owners. Fuzzy medians, based on the mean of surrounding percentiles, are used to avoid the disclosure of sensitive information.

Table 8: Total Ownership Shares

2013 79%	2014	2015			
79%	- 004				
79%	-001				
1070	78%	77%			
100%	100%	100%			
74%	73%	73%			
% Businesses missing exactly 1 ownership share					
2.9%	2.8%	2.9%			
10.3%	9.7%	10.0%			
	100% 74% 2.9%	100% 100% 74% 73% 2.9% 2.8%			

Source: K1 filings.

Notes: Business ownership is the sum of ownership shares across all owners within each K1 business in a given year.

Table 9: K1 Business Income or Loss, 2013

Year	N	Mean	25th Pct	Median	75th Pct	90th Pct	
Owner Income							
	31,047,000	20,600	-188	0	366	24,729	
K1 Business Income	K1 Business Income						
Partnerships	4,312,000	89,000	-520	0	190	59,000	
S-Corporations	3,555,000	75,000	-1,000	8,300	50,000	152,000	

Notes: Owner Income shows the income of K1 owners including both individual and business owners. K1 Business Income shows income aggregated across all owners within each K1 business.

Table 10: Entry and Exit Dynamics of K1 Individual Owners, 2007-2015

	Individual			
Year	Owner Count	Entry	Continue	Exit
2007	11,622,000			
2008	11,947,000	14.3%	85.7%	11.6%
2009	12,405,000	13.0%	87.0%	9.3%
2010	12,451,000	10.1%	89.9%	9.7%
2011	13,220,000	11.6%	88.4%	5.7%
2012	13,381,000	9.8%	90.2%	8.6%
2013	13,667,000	9.4%	90.6%	7.3%
2014	13,813,000	8.8%	91.2%	7.8%
2015	14,147,000	9.2%	90.8%	6.9%

Source: K1 filings.

Notes: An owner is considered an entrant if observed owning a K1 business in t but is not observed in (t-1). Similarly, exits are owners observed in year (t-1) but not t. Continuers are those observed in t and (t-1). Given that our coverage of the K1 data are begins in 2007, we cannot capture entry dynamics before 2008.

Table 11: Entry and Exit Dynamics of K1 EINs, 2007-2015

Year	K1 Businesses	Entry	Continue	Exit
2007	6,717,000			
2008	6,894,000	15.1%	84.9%	9.2%
2009	6,917,000	10.8%	89.2%	9.1%
2010	6,917,000	10.1%	89.9%	8.8%
2011	7,239,000	10.0%	90.0%	8.3%
2012	7,369,000	9.8%	90.2%	8.2%
2013	7,528,000	10.1%	89.9%	8.0%
2014	7,805,000	10.0%	90.0%	8.2%
2015	8,017,000	9.9%	90.1%	9.4%

Notes: A K1 business is considered an entrant if observed in t but is not in (t-1). Similarly, exits are K1 businesses in (t-1) but not t. Continuers are those in both t and (t-1). Given that our coverage of the K1 data are begins in 2007, we cannot capture entry dynamics before 2008. K1 EINs with solely business owners are excluded from the analysis.

Table 12: Match Rates of K1 Owned Entities

		% Match	% Employer	% Match
Year	K1 Businesses	EINUNITS	EINs	LBD
2007	6,717,000	>95%	49.7%	38.0%
2008	6,894,000	>95%	49.7%	38.0%
2009	6,917,000	>95%	49.6%	37.3%
2010	6,917,000	>95%	49.7%	37.3%
2011	7,239,000	>95%	49.7%	37.2%
2012	7,369,000	>95%	49.9%	37.5%
2013	7,528,000	>95%	49.7%	37.6%
2014	7,805,000	>95%	49.7%	39.3%
2015	8,017,000	>95%	49.6%	

Source: K1 filings, Business Register, Longitudinal Business Database. Notes: Table shows match rates of unique EINs in each year of K1 businesses to the BR EINUNITS file as well as the Longitudinal Business Database. Employer EINs are EINs in the BR EINUNITS file with positive payroll in the given year. K1 EINs with solely business owners are excluded from the analysis.

Table 13: Match Rates of LBD S-Corps and Partnerships

	S-Corporation	Partnership
Single-Unit	97.8%	80.3%
Multi-Unit	35.6%	24.4%

Source: K1 filings, Business Register, Longitudinal Business Database.

Notes: Table shows match rates of establishments classified as S-corps, partnerships, multi-unit, and single unit in the LBD to the K1 EINs between 2007 and 2014.

Table 14: Match Rates of K1 Owner Entities

		% Match	% Employer
Year	Owner EINs	EINUNITS	Firms
2013	1,913,000	59.2%	28.0%
2014	1,949,000	59.5%	27.7%
2015	1,976,000	60.0%	27.1%

Source: K1 filings, Business Register.

Notes: Table shows match rates of business owner EINs (tiered entities) in each year of K1 data to the EINUNITS universe. Employer EINs are EINs in the BR EINUNITS file with positive payroll in the specific year.

Table 15: Match Rates of K1 Individual Owners

		% Match	
Year	Owners	NUMIDENT	
2007	11,622,000	>95%	
2008	11,947,000	>95%	
2009	12,405,000	>95%	
2010	12,451,000	>95%	
2011	13,220,000	>95%	
2012	13,381,000	>95%	
2013	13,667,000	>95%	
2014	13,813,000	>95%	
2015	14,147,000	>95%	

Source: K1 filings, Census NUMIDENT.

Notes: Table shows match rates of individual owner PIKs in each year of K1 data to the Census NUMIDENT file. Match rates have been top-coded to avoid the disclosure of sensitive information.

Table 16: Demographic Characteristics of Individual K1 Owners, 2007-2015

Individual Characteristic	2007	2008	2009	2010	2011	2012	2013	2014	2015
Overall Count									
N (Mil)	11.6	11.9	12.4	12.5	13.2	13.4	13.7	13.8	14.1
Percent Male									
K1 Owners	65%	65%	65%	65%	65%	64%	64%	64%	64%
CPS	49%	49%	49%	48%	48%	48%	48%	49%	48%
Percent Foreign Born									
K1 Owners	13%	14%	14%	14%	14%	14%	15%	15%	16%
CPS	16%	16%	16%	16%	17%	17%	17%	17%	17%

Source: K1 filings, Census NUMIDENT, CPS

Notes: Table shows characteristics of K1 owners derived from the Census NUMIDENT. Characteristics of the working population are based on weighted estimates using IPUMS Current Population Survey Annual Social and Economic Supplement Files for 2007-2015. Sample includes all respondents aged 18 or more who reported working in the prior calendar year. Estimates are weighted using the supplement weights.

Table 17: Age of Individual K1 Owners, 2007-2015

Individual Cl	haracteristic	2007	2008	2009	2010	2011	2012	2013	2014	2015
K1 Owners										
	Mean Age	51.4	51.7	52.2	52.8	53.3	53.8	54.1	54.2	54.1
	<25	3%	3%	3%	3%	3%	3%	2%	2%	2%
	25-44	30%	29%	28%	27%	26%	25%	25%	25%	25%
	45-64	48%	49%	49%	49%	49%	48%	48%	48%	47%
	≥ 65	18%	19%	20%	21%	23%	24%	25%	25%	25%
CPS										
	Mean Age	44.0	44.2	44.4	44.6	44.8	44.9	45.1	45.3	45.4
	<25	13%	13%	13%	13%	13%	13%	13%	13%	12%
	25-44	37%	37%	36%	35%	35%	35%	34%	34%	34%
	45-64	34%	34%	35%	35%	35%	35%	35%	34%	34%
	\geq 65	16%	16%	17%	17%	17%	18%	18%	19%	19%

Source: K1 filings, Census NUMIDENT, CPS

Notes: Table shows characteristics of K1 owners derived from the Census NUMIDENT. Characteristics of the working population are based on weighted estimates using IPUMS Current Population Survey Annual Social and Economic Supplement Files for 2007-2015. Sample includes all respondents aged 18 or more who reported working in the prior calendar year. Estimates are weighted using the supplement weights.

Table 18: Race of Individual K1 Owners, 2007-2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Race and Hispanio	e Ethnicity	y, K1 Owr	ners (%)						
White	90.1	89.8	89.5	89.5	89.3	89.2	88.9	88.5	88
Black	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4
AIAN	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Asian	5.4	5.6	5.8	5.9	6	6	6.2	6.4	6.8
NHOPI	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other or >1 race	2	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.5
Percent Hispanic	4.3	4.4	4.4	4.4	4.5	4.6	4.7	4.9	5.1
Percent missing	10.9	10.8	10.8	10.7	10.8	10.4	10.7	11	11.4
N (Mil)	11.6	11.9	12.4	12.5	13.2	13.4	13.7	13.8	14.1
Race and Hispanio	e Ethnicity	y, Working	g Populati	on (%)					
White	81.5	81.3	81.2	80.1	79.9	79.7	79.4	79.1	78.7
Black	11.7	11.7	11.8	12	12.1	12.1	12.3	12.3	12.4
AIAN	0.8	0.9	0.9	1	0.9	1	1	0.9	1.1
Asian	4.6	4.6	4.5	5.1	5.2	5.3	5.4	5.6	5.8
NHOPI	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Other or >1 race	1.2	1.3	1.3	1.5	1.6	1.6	1.6	1.7	1.6
Percent Hispanic	13.3	13.5	13.7	14.2	14.5	14.8	15	15.2	15.5
N	144,900	145,600	147,200	149,100	146,800	144,800	145,800	144,300	144,300

Source: K1 filings, 2000 and 2010 Decennial Censuses.

Notes: Race and ethnicity for K1 owners are based on data from the 2010 census, where available, and the 2000 census when no match to 2010 was found. Missing values are cases with no match to either census. Characteristics of the working population are based on weighted estimates using IPUMS Current Population Survey Annual Social and Economic Supplement Files for 2007-2015. Sample includes all respondents aged 18 or more who reported working in the prior calendar year. Estimates are weighted using the supplement weights.

Table 19: NAICS Sector Distribution of K1 Businesses, 2007-2015

-			Employer	Non-Employer
NAICS2	Name	Total	EINs	EINs
53	Real Estate and Rental and Leasing	25.6%	6.9%	44.1%
54	Professional, Scientific, and Technical Services	11.9%	16.0%	8.0%
23	Construction	10.2%	13.1%	7.3%
44-45	Retail Trade	8.1%	11.1%	5.2%
52	Finance and Insurance	7.0%	4.1%	9.8%
62	Health Care and Social Assistance	5.5%	9.1%	1.9%
72	Accommodation and Food Services	4.9%	8.1%	1.6%
81	Other Services (except Public Administration)	4.5%	6.0%	2.9%
56	Admin and Support and Waste Mgmt and Remediation Svcs	4.1%	5.5%	2.7%
42	Wholesale Trade	3.8%	5.3%	2.3%
11	Agriculture, Forestry, Fishing and Hunting	2.9%	2.5%	3.4%
31-33	Manufacturing	2.9%	4.3%	1.5%
48-49	Transportation and Warehousing	2.7%	3.0%	2.4%
71	Arts, Entertainment, and Recreation	1.8%	1.9%	1.8%
51	Information	1.4%	1.4%	1.5%
61	Educational Services	0.8%	1.0%	0.7%
21	Mining, Quarrying, and Oil and Gas Extraction	0.7%	0.4%	0.9%
55	Management of Companies and Enterprises	0.6%	0.1%	1.1%
0	Missing	0.4%	0.1%	0.7%
22	Utilities	0.1%	0.0%	0.1%
	Total	100.0%	100.0%	100.0%

Source: K1 filings, Business Register.

Notes: Sector is defined at the 2-digit NAICS level. Employer EINs and Non-employer EINs indicate the proportion of K1 businesses across NAICS sectors with positive payroll and zero payroll respective.

Table 20: Employment Size of K1 EINs

	All Owned	S-Corp	Partnership	Single-Unit	Multi-Unit
Value	Firms	Firms	Firms	Firms	Firms
Mean	15.9	13.7	28.7	8.7	271.8
p25	1	1	2	1	19
p50	3	3	4.5	3	43.5
p75	8.5	8.5	11.5	8	114.5
p90	22	20	30	18.5	295

Source: K1 filings, Longitudinal Business Database.

Notes: Only K1 businesses that successfully match to the Longitudinal Business Database are reported. The unit of analysis is at the firm-level, therefore statistics reported are the characteristics of firms associated with at least one K1 business. K1 EINs with solely business owners are excluded from the analysis.

Table 21: Employment Size of K1 EINs by NAICS Sector

NAICS2	Industry Name	Mean	p25	p50	p75	p90	% Emp. EINs
54	Professional, Scientific, and Technical Services	8.2	1	2	5	13	16.0%
23	Construction	8.7	1	3	7	16.5	13.1%
44-45	Retail Trade	15.8	2	4	8.5	20	11.1%
62	Health Care and Social Assistance	20.5	2	5	10	23	9.1%
72	Accommodation and Food Services	26.6	4	10	21.5	43	8.1%
53	Real Estate and Rental and Leasing	6.4	1	2	4	9	6.9%
81	Other Services (except Public Administration)	7.5	1	3	7	14	6.0%
56	Admin and Support and Waste Mgmt and Remediation Svcs	28.9	1	3	8.5	26.5	5.5%
42	Wholesale Trade	13.6	1	3	9.5	24	5.3%
31-33	Manufacturing	32.1	2.5	7	19	49.5	4.3%
52	Finance and Insurance	23.0	1	2	5	11	4.1%
48-49	Transportation and Warehousing	17.7	1	2.5	7.5	20	3.0%
11	Agriculture, Forestry, Fishing and Hunting	7.0	1	2	6	13	2.5%
71	Arts, Entertainment, and Recreation	14.1	1	2.5	8.5	23.5	1.9%
51	Information	29.3	1	2	7.5	21	1.4%
61	Educational Services	11.7	1	3	8.5	19.5	1.0%
21	Mining, Quarrying, and Oil and Gas Extraction	16.1	1	3	9.5	27	0.4%
55	Management of Companies and Enterprises	75.3	1	5	33	122.5	0.1%
22	Utilities	64.2	1	3	6.5	17	0.1%

Source: K1 filings, Longitudinal Business Database.

Notes: This table shows the employment statistics of K1 businesses across 2-digit NAICS industries. Only K1 businesses that successfully match to the Longitudinal Business Database are included. Similar to Table 17, employment statistics are calculated at the firm-level. "Employer EINs" indicates the proportion of EINs with positive payroll that the specific NAICS-2 industry accounts for. K1 EINs with solely business owners are excluded from the analysis.

Figures

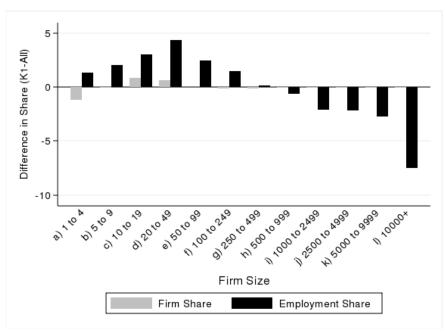


Figure 1: K1 Firm Size Distribution Relative to BDS

Source: K1 filings, Longitudinal Business Database, Business Dynamics Statistics.

Notes: Firm and employment shares for both K1 firms and BDS are for 2012. BDS data drawn from the 2014 release vintage. Firm share captures difference in share of firms across firm size groups between BDS data and firms that own at least one K1 EIN. Positive values suggest a higher share among K1 firms relative to the population of all firms in the BDS.

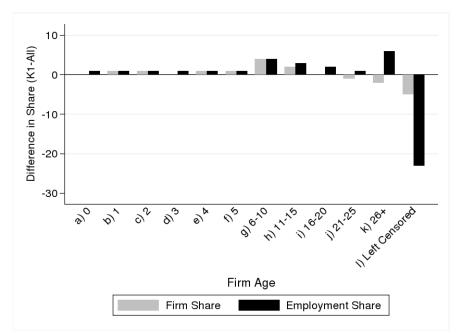


Figure 2: K1 Firm Age Distribution Relative to BDS

Source: K1 filings, Longitudinal Business Database, Business Dynamics Statistics.

Notes: Firm and employment shares for both K1 firms and BDS are for 2012. BDS data drawn from the 2014 release vintage. Firm share captures difference in share of firms across firm age groups between BDS data and firms that own at least one K1 EIN. Positive values suggest a higher share among K1 firms relative to the population of all firms in the BDS.

Appendix A. Form K-1

				Г	☐ Final K	-1 Amende	d K-1	L51113 OMB No. 1545-0123
	edule K-1		2016		art III	Partner's Share o	f Cur	rent Year Income,
(Fo	rm 1065)		<u> </u>			Deductions, Cred	its, a	nd Other Items
	rtment of the Treasury nal Revenue Service	year begi	dar year 2016, or tax nning, 2016	1	Ordinar	y business income (loss)	15	Credits
Do	etnorio Shoro of Inc	endir	ıg, 20	2	Net ren	tal real estate income (loss)		
	rtner's Share of Inc edits, etc.		m and separate instructions.	3	Other r	et rental income (loss)	16	Foreign transactions
F	Part I Information A	bout the Par	tnership	4	Guaran	teed payments		
Α	Partnership's employer identif	fication number		5	Interes	income		
В	Partnership's name, address,	city, state, and ZIF	code	6a	Ordina	ry dividends		
				6b	Qualifie	ed dividends		
С	IRS Center where partnership	filed return		7	Royalti	es		
D	Check if this is a publicly	traded partnership	(PTP)	8	Net sho	ort-term capital gain (loss)		
E E	Part II Information A Partner's identifying number	bout the Par	tner	9a	Net Ion	g-term capital gain (loss)	17	Alternative minimum tax (AMT) items
F	Partner's name, address, city.	state and ZIP con	le .	9b	Collect	ibles (28%) gain (loss)		
		,,		9с	Unreca	ptured section 1250 gain		
				10	Net sec	ction 1231 gain (loss)	18	Tax-exempt income and nondeductible expenses
G	General partner or LLC member-manager	Limit	ed partner or other LLC ber	11	Other is	ncome (loss)		
н	Domestic partner	Forei	gn partner					
11	What type of entity is this part	ner?						
12	If this partner is a retirement p						19	Distributions
			🗆	12	Section	179 deduction		
J	Partner's share of profit, loss,	and capital (see in		L.				
	Beginning	1	Ending	13	Other o	leductions		Other left words
	Profit	%	<u>%</u>				20	Other information
	Loss Capital	%	<u>%</u> %					
		•						
K	Partner's share of liabilities at Nonrecourse	*		14	Solf-on	nployment earnings (loss)	+	
	Qualified nonrecourse financir			''	OCII CII	ipioyment carnings (1003)		
	Recourse							
L	Partner's capital account anal	lysis:		*Se	ee attac	hed statement for ad	dition	l information.
	Beginning capital account .							
	Capital contributed during the	year \$						
	Current year increase (decrease							
	Withdrawals & distributions	\$ ()	É				
	Ending capital account	\$) eg				
	Tax basis GA Other (explain)	AAP 🗌 Se	ction 704(b) book	For IRS Use Only				
М	Did the partner contribute pro Yes No If "Yes," attach statement	0	gain or loss?					

Schedule K-1 (Form 1065) 2016 Page **2**

This list identifies the codes used on Schedule K-1 for all partners and provides summarized reporting information for partners who file Form 1040. For detailed reporting and filing information, see the separate Partner's Instructions for Schedule K-1 and the instructions for your income tax return.

FOI	detailed reporting and ming informa	ition, see the separate Farther's in	Struction			
1. 0	rdinary business income (loss). Determ	nine whether the income (loss) is			ode Empowerment zone	Report on
pa	ssive or nonpassive and enter on your r	eturn as follows. Report on		-	employment credit	
	Passive loss	See the Partner's Instructions		м	Credit for increasing research	
	Passive income	Schedule E, line 28, column (g)			activities	0 " 5
	Nonpassive loss	Schedule E, line 28, column (h)		N		See the Partner's Instructions
	Nonpassive income	Schedule E, line 28, column (j)		_	security and Medicare taxes	
	Net rental real estate income (loss)	See the Partner's Instructions		0		
3.	Other net rental income (loss)	O-b	40	P	Other credits	
	Net income	Schedule E, line 28, column (g) See the Partner's Instructions	16.		oreign transactions Name of country or U.S.	
4.	Net loss Guaranteed payments	Schedule E, line 28, column (j)		А	possession	
	Interest income	Form 1040, line 8a		В		Form 1116, Part I
	Ordinary dividends	Form 1040, line 9a		č		7 10111 1110,1 4111
	Qualified dividends	Form 1040, line 9b			partner level	
7.	Royalties	Schedule E, line 4		F	oreign gross income sourced at parti-	ership level
	Net short-term capital gain (loss)	Schedule D, line 5			Passive category	
9a.	Net long-term capital gain (loss)	Schedule D, line 12		E		Form 1116, Part I
90.	Collectibles (28%) gain (loss)	28% Rate Gain Worksheet, line 4		F		at a satura de la cont
0-	Universal section 1050 main	(Schedule D instructions)			eductions allocated and apportioned	
	Unrecaptured section 1250 gain Net section 1231 gain (loss)	See the Partner's Instructions See the Partner's Instructions		G H		Form 1116, Part I Form 1116, Part I
	Other income (loss)	See the Faither's mandetions			eductions allocated and apportioned	
	Code				come	at partifership level to foreign source
	A Other portfolio income (loss)	See the Partner's Instructions		ï	Passive category	
	B Involuntary conversions	See the Partner's Instructions		Ĵ	General category	Form 1116, Part I
	C Sec. 1256 contracts & straddles	Form 6781, line 1		Κ	Other	
	D Mining exploration costs recapture	See Pub. 535		0	ther information	
	E Cancellation of debt	Form 1040, line 21 or Form 982		L	Total foreign taxes paid	Form 1116, Part II
40	F Other income (loss)	See the Partner's Instructions		М	rotal foreign taxee accraca	Form 1116, Part II
	Section 179 deduction Other deductions	See the Partner's Instructions		N	Reduction in taxes available for credit Foreign trading gross receipts	Form 1116, line 12 Form 8873
13.	A Cash contributions (50%)			P		Form 8873
	B Cash contributions (30%)			Q		See the Partner's Instructions
	C Noncash contributions (50%)		17.		Iternative minimum tax (AMT) item	
	D Noncash contributions (30%)	See the Partner's	• • • • • • • • • • • • • • • • • • • •		Post-1986 depreciation adjustment	
	E Capital gain property to a 50%	Instructions		В		See the Partner's
	organization (30%)			С		Instructions and
	F Capital gain property (20%)			D	Oil, gas, & geothermal-gross income	the Instructions for
	G Contributions (100%)			Ε	Oil, gas, & geothermal—deductions	Form 6251
	H Investment interest expense	Form 4952, line 1		F		
	I Deductions—royalty income	Schedule E, line 19	18.		ax-exempt income and nondeduct	
	J Section 59(e)(2) expenditures	See the Partner's Instructions			Tax-exempt interest income	Form 1040, line 8b
	K Deductions—portfolio (2% floor)	Schedule A, line 23		В		See the Partner's Instructions
	L Deductions—portfolio (other)	Schedule A, line 28	40	c	Nondeductible expenses istributions	See the Partner's Instructions
	 Amounts paid for medical insurance Educational assistance benefits 	Schedule A, line 1 or Form 1040, line 29 See the Partner's Instructions	19.		Cash and marketable securities	
	O Dependent care benefits	Form 2441, line 12		B		See the Partner's Instructions
	P Preproductive period expenses	See the Partner's Instructions		č	Other property	occ the rather s mondonons
	Q Commercial revitalization deduction		20.	ō	ther information	
	from rental real estate activities	See Form 8582 instructions		Α	Investment income	Form 4952, line 4a
	R Pensions and IRAs	See the Partner's Instructions		В		Form 4952, line 5
	S Reforestation expense deduction	See the Partner's Instructions		С		Form 4136
	T Domestic production activities	0 5 0000 i		D		
	information U Qualified production activities income	See Form 8903 instructions Form 8903, line 7b		_	(other than rental real estate)	See the Partner's Instructions
	V Employer's Form W-2 wages	Form 8903, line 17		E		See the Partner's Instructions
	W Other deductions	See the Partner's Instructions		٠	credit (section 42(j)(5))	Form 8611, line 8
	Self-employment earnings (loss)			G		7 0111 00 11, 11110 0
	: If you have a section 179 deduction or	any partner-level deductions, see the		-	credit (other)	Form 8611, line 8
	er's Instructions before completing Sch			Н	Recapture of investment credit	See Form 4255
	A Net earnings (loss) from			Ţ		See the Partner's Instructions
	self-employment	Schedule SE, Section A or B		J		
	B Gross farming or fishing income	See the Partner's Instructions		,,	long-term contracts	See Form 8697
	C Gross non-farm income	See the Partner's Instructions		K	Look-back interest—income forecast method	0 5 0000
15.	Credits			L		See Form 8866
	A Low-income housing credit			-	section 179 deductions	
	(section 42(j)(5)) from pre-2008			м		
	buildings			N		
	B Low-income housing credit (other) from pre-2008 buildings				partners	
	C Low-income housing credit			0	Section 453(I)(3) information	
	(section 42(j)(5)) from			Ρ	Section 453A(c) information	
	post-2007 buildings	See the Partner's Instructions		Q		
	D Low-income housing credit			R		See the Partner's
				s	expenditures CCF nongualified withdrawals	Instructions
	(other) from post-2007			T		
	buildings					
	buildings E Qualified rehabilitation					
	buildings Qualified rehabilitation expenditures (rental real estate)			Ü	Reserved	
	buildings E Qualified rehabilitation expenditures (rental real estate) F Other rental real estate credits			Ü	Reserved Unrelated business taxable income	
	buildings Qualified rehabilitation expenditures (rental real estate)	Form 1040, line 73; check box a		V W X	Reserved Unrelated business taxable income Precontribution gain (loss) Section 108(i) information	
	buildings E Qualified rehabilitation expenditures (rental real estate) F Other rental real estate credits G Other rental credits	Form 1040, line 73; check box a		V W X Y	Reserved Unrelated business taxable income Precontribution gain (loss) Section 108(i) information Net investment income	
	buildings Qualified rehabilitation expenditures (rental real estate) F Other rental real estate credits G Other rental credits H Undistributed capital gains credit I Biofuel producer credit J Work opportunity credit			V W X Y	Reserved Unrelated business taxable income Precontribution gain (loss) Section 108(i) information	
	buildings E Qualified rehabilitation expenditures (rental real estate) F Other rental real estate credits G Other rental credits H Undistributed capital gains credit I Biofuel producer credit	Form 1040, line 73; check box a See the Partner's Instructions		V W X Y	Reserved Unrelated business taxable income Precontribution gain (loss) Section 108(i) information Net investment income	

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Amended K-1 OMB No. 1545-0123 Part III
Shareholder's Share of Current Year Income,
Deductions, Credits, and Other Items Schedule K-1 (Form 1120S) Department of the Treasury Internal Revenue Service For calendar year 2016, or tax Ordinary business income (loss) 13 Credits year beginning _____, 2016 Net rental real estate income (loss) ending Shareholder's Share of Income, Deductions, 3 Other net rental income (loss) Credits, etc. ► See back of form and separate instructions. Interest income Part I Information About the Corporation 5a Ordinary dividends A Corporation's employer identification number 5b Qualified dividends 14 Foreign transactions B Corporation's name, address, city, state, and ZIP code Royalties Net short-term capital gain (loss) 8a Net long-term capital gain (loss) C IRS Center where corporation filed return 8b Collectibles (28%) gain (loss) Part II Information About the Shareholder 8c Unrecaptured section 1250 gain D Shareholder's identifying number 9 Net section 1231 gain (loss) E Shareholder's name, address, city, state, and ZIP code 15 Alternative minimum tax (AMT) items 10 Other income (loss) F Shareholder's percentage of stock ownership for tax year 11 Section 179 deduction 16 Items affecting shareholder basis Other deductions Other information * See attached statement for additional information.

Schedule K-1 (Form 1120S) 2016 Page **2**

This list identifies the codes used on Schedule K-1 for all shareholders and provides summarized reporting information for shareholders who file Form 1040. For detailed reporting and filing information, see the separate Shareholder's Instructions for Schedule K-1 and the instructions for your income tax return.

Code Report on**

				C	ode	Report on
1.	Ordinary business income (loss). Dete passive or nonpassive and enter on you Passive loss Passive income Nonpassive loss		14.		security and Medicare taxes Backup withholding	See the Shareholder's Instructions
	•			~		
	Nonpassive income	Schedule E, line 28, column (j)			possession	
2.	Net rental real estate income (loss)	See the Shareholder's Instructions		В	Gross income from all sources	Form 1116, Part I
3.	Other net rental income (loss)			С	Gross income sourced at	
٠.	Net income	Schedule E, line 28, column (g)			shareholder level	
				_		nto loval
	Net loss	See the Shareholder's Instructions			oreign gross income sourced at corpor	ate ievei
4.	Interest income	Form 1040, line 8a		D		5 4440 B 11
5a	Ordinary dividends	Form 1040, line 9a		Ε		Form 1116, Part I
	Qualified dividends	Form 1040, line 9b		F	Other	
				D	eductions allocated and apportioned a	
6.	Royalties	Schedule E, line 4		G	Interest expense	Form 1116, Part I
7.	Net short-term capital gain (loss)	Schedule D, line 5		Н	Other	Form 1116, Part I
	Net long-term capital gain (loss)	Schedule D, line 12		г	eductions allocated and apportioned a	t corporate level to foreign source
					ncome	t corporate level to releight course
80	Collectibles (28%) gain (loss)	28% Rate Gain Worksheet, line 4		ï		
		(Schedule D instructions)		j		Form 1116, Part I
8c	Unrecaptured section 1250 gain	See the Shareholder's Instructions				roini irro, raiti
	Net section 1231 gain (loss)	See the Shareholder's Instructions		K		
		occ the onarcholder a mandellona			Other information	
10.	Other income (loss)			L		Form 1116, Part II
	Code			М		Form 1116, Part II
	A Other portfolio income (loss)	See the Shareholder's Instructions		N		
	B Involuntary conversions	See the Shareholder's Instructions			credit	Form 1116, line 12
	C Sec. 1256 contracts & straddles	Form 6781, line 1		0		Form 8873
	D Mining exploration costs recapture	See Pub. 535		Р	Extraterritorial income exclusion	Form 8873
	E Other income (loss)	See the Shareholder's Instructions		Q	Other foreign transactions	See the Shareholder's Instructions
11	Section 179 deduction	See the Shareholder's Instructions	15.	Α	Iternative minimum tax (AMT) items	
		See the Shareholder's mandellons		Α		0 41
12.	Other deductions			В		See the
	A Cash contributions (50%)			С		Shareholder's
	B Cash contributions (30%)			D		Instructions and
	C Noncash contributions (50%)			Е		the Instructions for
	D Noncash contributions (30%)	See the Shareholder's		F		Form 6251
	E Capital gain property to a 50%	Instructions	16	14	ems affecting shareholder basis	
	organization (30%)		10.	Ä		Form 1040, line 8b
	F Capital gain property (20%)			В	•	TOTAL TOTO, IIIIC OD
	G Contributions (100%)			c		
	H Investment interest expense	Form 4952, line 1		Ď		See the Shareholder's
	I Deductions—royalty income	Schedule E, line 19		_		Instructions
	J Section 59(e)(2) expenditures	See the Shareholder's Instructions		Ε	Repayment of loans from	
	K Deductions—portfolio (2% floor)	Schedule A, line 23			shareholders J	
	L Deductions—portfolio (other)	Schedule A, line 28	17.	С	Other information	
	M Preproductive period expenses	See the Shareholder's Instructions		Α	Investment income	Form 4952, line 4a
	N Commercial revitalization deduction			В	Investment expenses	Form 4952, line 5
	from rental real estate activities	See Form 8582 instructions		С	Qualified rehabilitation expenditures	3
	 Reforestation expense deduction 	See the Shareholder's Instructions			(other than rental real estate)	See the Shareholder's Instructions
	P Domestic production activities			D	Basis of energy property	See the Shareholder's Instructions
	information	See Form 8903 instructions		Ε	Recapture of low-income housing	
	Q Qualified production activities income				credit (section 42(j)(5))	Form 8611, line 8
	R Employer's Form W-2 wages	Form 8903, line 17		F		
	S Other deductions	See the Shareholder's Instructions			credit (other)	Form 8611, line 8
40				G		See Form 4255
13.	Credits A Low-income housing credit (section			Н		See the Shareholder's Instructions
	A Low-income housing credit (section 42(j)(5)) from pre-2008 buildings	1		ï	Look-back interest—completed	
	B Low-income housing credit (other) from				long-term contracts	See Form 8697
	pre-2008 buildings	'		J	Look-back interest-income forecast	
	C Low-income housing credit (section				method	See Form 8866
	42(j)(5)) from post-2007 buildings	See the Shareholder's		Κ	Dispositions of property with	
	D Low-income housing credit (other)	Instructions			section 179 deductions	
	from post-2007 buildings	1		L		
	E Qualified rehabilitation expenditures			_	deduction	
	(rental real estate)			м		
				N		
	F Other rental real estate credits G Other rental credits	J		ö	Section 1260(b) information	
		Form 1040 line 73 hov a		ă		See the Shareholder's
	H Undistributed capital gains credit	Form 1040, line 73, box a		_	Interest allocable to production expenditures	Instructions
	Biofuel producer credit	1		^		
	J Work opportunity credit	1		Q	CCF nonqualified withdrawals	
	K Disabled access credit	See the Shareholder's		R	Depletion information—oil and gas	
	L Empowerment zone employment	Instructions		s		
	credit	1		Т	Coolion 100(i) illionnation	
	M Credit for increasing research	J		U	Net investment income	
	activities			٧	Other information	
					,	