The Nonemployee Workforce*

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Abstract

How has the nature of work transformed in an era of increasing firm-to-individual contracting? This paper characterizes the modern nonemployee workforce by leveraging a unique linkage of IRS Form 1099-NEC records and U.S. Census Bureau administrative business data. We present three sets of empirical exercises: (1) a demographic profile of nonemployee recipients (2) a demand-side analysis of the firms issuing these payments by size, industry, and employer status; and (3) a reconciliation of nonemployee compensation with formal self-employment filings (IRS Form 1040 Schedule C). Our results illustrate the differences between traditional employment and formal self-employment, and are helpful for capturing the evolving organization of production in the United States.

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1 Introduction

How has the organization of work evolved as firms increasingly rely on labor supplied outside the traditional employment relationship, and to what extent do standard economic statistics capture this shift? While public attention has focused on the rise of the "gig economy," empirical evidence on the size, composition, and growth of independent contracting remains fragmented. Measures based on household surveys, administrative tax filings, and business registers often disagree on fundamental trends in self-employment and contract work (Abraham et al., 2019, 2021). A central challenge is that many individuals who perform substantial nonemployee labor do not appear in payroll-based data or in the conventional employer and nonemployer business frames. This missing visibility raises core questions about how labor services are supplied, how firms structure production, and how well our existing statistical systems reflect modern labor markets.

This paper characterizes the nonemployee workforce by integrating nonemployee information returns into the U.S. Census Bureau's administrative data infrastructure. We bridge the historical gap between the administrative records used to track firms and those used to track workers by linking individual-level tax records to a comprehensive frame of traditional employer-employee relationships. By overlaying IRS Form 1099-NEC payments onto this foundation, we are able to situate nonemployee labor within a unified environment that captures both employer and nonemployer business activity. This integration allows us to move beyond siloed administrative definitions and construct a transaction-based view of the labor market, facilitating a direct comparison of traditional and nonemployee attachments.

First, we show that individual 1099-NEC recipients differ markedly depending on whether they appear as business owners. Individuals who receive nonemployee compensation without any accompanying business filing—"latent" contractors—are disproportionately young and more racially and ethnically diverse than owners of employer or nonemployer firms. These differences are mirrored across industries, where women, Hispanic workers, and younger workers concentrate in distinct sectors of the contracting landscape.

Second, we document substantial heterogeneity in firms' use of nonemployee labor. Nearly 6.4 million EINs issue 1099-NECs, with multi-unit employers exhibiting the highest propensities to contract out. Yet the distribution of dollars looks strikingly different: although most firms

issue at least some payments to individuals, nearly 90 percent of all 1099-NEC dollars flow to other business entities rather than to people. This pattern highlights the central role of business-to-business contracting in the broader nonemployee economy.

Our third set of results shows that contracting and formal self-employment are deeply interconnected. More than half of individuals who receive a 1099-NEC also file a Schedule C, and more than half of Schedule C filers receive at least one 1099-NEC. Together, these findings imply that nonemployee compensation represents a significant share of small-business income: roughly one-fourth of all sole-proprietorship revenue in 2022 derives from payments reported on 1099-NECs.

Finally, we find that issuer–recipient relationships are highly fluid. Only about half of contracting relationships persist from one year to the next, with the remainder reflecting new entrants, exits, or substantial reconfiguration of client portfolios. This degree of churn suggests that nonemployee contracting represents a dynamic form of labor market attachment that is not well captured in point-in-time measures of employment or business activity.

This work sits at the intersection of several strands of research. A growing literature uses administrative records to assess independent contracting and the limitations of survey-based measures of contingent work (Collins et al., 2019; Garin et al., 2024). Another body of work examines the dynamics of self-employment, the role of nonemployer businesses in the U.S. economy, and the life cycle of small firms (Goetz et al., 2025; Hyatt et al., 2021). Our contribution is to connect these domains by analyzing the complete universe of firm-to-individual nonemployee payments and embedding them within long-standing Census Bureau business and job frames. This approach not only clarifies the relationship between contracting and self-employment but also reveals the extent to which nonemployee work spans demographic groups, industries, and types of businesses.

The empirical results have broader implications for understanding labor markets in a period of structural change. If meaningful and growing shares of labor services occur outside the W-2 system, then measures of employment, labor income, business formation, and entrepreneurial activity may omit important segments of economic activity. The fluidity we document in contracting relationships suggests that independent work is not solely a niche phenomenon associated with platform-based labor markets but is instead a pervasive feature of production across traditional industries. Moreover, the demographic patterns we uncover indicate that

standard measures of business ownership may understate the economic activity of younger workers and historically underrepresented groups who participate in contracting without formal business registration.

The remainder of this paper proceeds as follows. Section 2 provides a detailed background on the reporting framework and the history of IRS information returns. Section 3 describes the data construction and the linkage between the IRS and Census Bureau frames. Section 4 presents our primary empirical results on recipients, issuers, and the reconciliation with self-employment filings. Section 5 discusses plans for future work. Section 6 discusses the implications of our findings for economic measurement and concludes.

2 Nonemployee Compensation

To understand the 1099-NEC population, one must first establish the legal and administrative framework that distinguishes these workers from the traditional employment model. This section explores the criteria for classification and the specific information returns used by the IRS to track these distinct labor arrangements.

2.1 Distinguishing Employees from Nonemployees

The primary conceptual and legal distinction in the U.S. labor market is between a wage-and-salary employee and a nonemployee provider of labor services. Under IRS guidelines, this distinction rests on the degree of control and independence in the relationship, typically categorized into behavioral control, financial control, and the type of relationship between the parties (U.S. Internal Revenue Service, 2025c). An employee generally performs services under the direct control of an employer who dictates not only what will be done but how it will be done. In contrast, an independent contractor provides services where the payer has the right to control or direct only the result of the work, not the specific methods used to achieve it.

These distinct labor arrangements are tracked through different administrative instruments known as information returns. An information return is a form filed by a person or business with the IRS to report specific types of payments or transactions to third parties; it is distinct from a tax filing (such as Form 1040 or 1120), which is used by a taxpayer to calculate and

finalize their own tax liability. Wage and salary employment is reported on IRS Form W-2, while nonemployee compensation is reported on IRS Form 1099-NEC.

2.2 Reporting Framework: 1099-NEC, 1099-MISC, and 1099-K

A critical challenge in measuring the nonemployee workforce is the overlapping reporting framework governed by different information returns. While Form 1099-NEC is the primary instrument for reporting nonemployee compensation, it must be distinguished from Form 1099-MISC and Form 1099-K, as each captures different types of economic activity. Table 1 provides a comparative overview of these forms alongside the standard W-2 for traditional employment.

Historically, nonemployee compensation was reported on Form 1099-MISC. However, since the 2020 tax year, Form 1099-MISC has been reserved for miscellaneous income such as rent, prizes, awards, and other income payments that do not stem from a service-provider relationship (U.S. Internal Revenue Service, 2025b). In contrast, Form 1099-NEC is used specifically for payments made to someone who is not an employee for services performed in the course of a trade or business (U.S. Internal Revenue Service, 2025d).

Furthermore, the rise of the "gig economy" has increased the relevance of Form 1099-K (Payment Card and Third Party Network Transactions). Form 1099-K is issued by payment settlement entities, such as credit card companies or Third Party Settlement Organizations (TPSOs) like Uber, Lyft, or Etsy, to report the gross amount of reportable payment transactions (U.S. Internal Revenue Service, 2025a). This creates a reporting hierarchy: if a payment is reportable via a payment card or TPSO (1099-K), it is generally not reported on a 1099-NEC, even if the payment constitutes nonemployee compensation. For researchers, this means that while 1099-NEC data provides a robust look at traditional nonemployee contracting, it does not represent app-based workers who primarily receive 1099-K forms.

2.3 IRS Form 1099-NEC: History and Scope

IRS Form 1099-NEC (Nonemployee Compensation) currently serves as the primary information return for reporting payments of $600 or more to service providers who are not employees. While it is now a cornerstone of the administrative data on the contracting economy, the form has a discontinuous history. Originally in use through 1982, the IRS retired Form 1099-NEC in 1983,

Table 1: Comparison of Select Information and Tax Returns

IRS Form	Primary Use	Reporting Threshold	Typical Recipient[a]
Information Returns (Payments to Third Parties)			
W-2	Wage and salary income	$600 or more	Employees
1099-NEC	Nonemployee compensation	$600 or more	Independent contractors, freelancers, attorneys
1099-MISC	Miscellaneous income (rent, prizes, royalties)	Typically $600	Landlords, award winners, medical/health providers, payees, etc.
1099-K	Payment card and 3rd party network trans.	Varies by year/platform[b]	Gig workers (e.g., rideshare), online marketplaces, vendors
Tax Returns and Schedules (Business and Owner Reporting)			
941	Employer's Quarterly Federal Tax Return	Any paid wages	Employer firms[a]
1040 Schedule C	Profit or Loss From Business	$400 or more (net)	Sole proprietors[a]
1065 Schedule K-1	Partner's Share of Income, Credits, etc.	Any income/loss	Partners in a partnership
1120-S Schedule K-1	Shareholder's Share of Income, Credits, etc.	Any income/loss	Shareholders in an S corporation

Notes: Reporting thresholds are current as of tax filing year 2025. The One Big Beautiful Bill Act increased thresholds for 1099-NEC and 1099-MISC to $2,000 for tax year 2026.
a: For IRS Forms 941 and 1040, Schedule C, we list the filer rather than the recipient.
b: Historically, the 1099-K threshold was $20,000 and 200 transactions, though recent legislative changes have introduced a lower $600 threshold with phased-in implementation.

consolidating nonemployee compensation reporting into Box 7 of Form 1099-MISC. For nearly four decades, these payments to independent contractors were reported using 1099-MISC until the form was reinstated for tax year 2020.

The scope of "nonemployee compensation" encompasses more than just flat service fees. According to IRS instructions, it explicitly includes commissions, bonuses, and prizes or awards paid for services performed in the course of a trade or business (U.S. Internal Revenue Service,

2025b). This is a critical distinction for researchers: while a "prize" sounds like miscellaneous income, if it is awarded to a contractor as an incentive or performance bonus, it is classified as NEC. In contrast, prizes or awards that are not related to services—such as a sweepstakes win or a random drawing—remain on Form 1099-MISC. This ensures that payments tied to labor supply are centralized on the 1099-NEC, regardless of whether they are labeled as "wages" in the conventional sense.

The requirements for filing a 1099-NEC are met if: (1) the payment is made to someone who is not an employee; (2) the payment is for services rendered in the course of a trade or business; (3) the payment is made to an individual, partnership, or estate; and (4) the payments total at least $600 for the year. Notably, payments to corporations are generally exempt from 1099-NEC reporting, with two critical exceptions: medical and health care payments, and legal fees. Consequently, 1099-NEC issuance is required for payments to law firms regardless of their corporate status.

Recent legislative shifts also affect the reporting of nonemployee compensation. While the reporting threshold has remained at $600 for decades, the One Big Beautiful Bill Act of 2025 has scheduled an increase of this threshold to $2,000 beginning in tax year 2026. Furthermore, there is a complex interaction with Form 1099-K; if a business pays a contractor via a credit card or third-party settlement organization (e.g., PayPal), the payment is typically reported on Form 1099-K by the payment processor rather than on a 1099-NEC by the hiring firm. This "1099-K override" means that 1099-NEC data alone may understate the total volume of nonemployee compensation in sectors where digital payment platforms are prevalent.

2.4 IRS Form 1099-NEC and Self-Employment

While Form 1099-NEC is the primary administrative signal of nonemployee compensation, its presence does not create a universal one-to-one mapping to a Schedule C business filing. For the majority of individual recipients identified by a Social Security Number (SSN) or Protected Identification Key (PIK), the receipt of a 1099-NEC indicates an independent contractor relationship, which generally requires the individual to report profit or loss from a business on IRS Form 1040, Schedule C (U.S. Internal Revenue Service, 2025e). However, several administrative and legal exceptions exist where nonemployee compensation is reported on alternative forms or

filtered through different business structures. A primary distinction occurs when the recipient is a business entity rather than an individual; if the form is issued to an Employer Identification Number (EIN) representing a partnership or an S corporation, the income is reported on Form 1065 or Form 1120-S, respectively. Even when issued to an individual, the 1099-NEC may be intended for a pass-through entity where the individual is a partner or shareholder, with the income eventually reflected on their personal return via a Schedule K-1.

The specific nature of the activity also dictates the appropriate reporting schedule. For individuals engaged in agricultural services, such as harvesting or custom combine work, nonemployee compensation is typically reported on IRS Form 1040, Schedule F. Another critical exception involves the distinction between a business and a hobby. As detailed in IRS guidance, if an individual pursues an activity for enjoyment without a primary motive for profit, the activity may be classified as a hobby (U.S. Internal Revenue Service, 2022). In such cases, the individual does not file Schedule C—which is reserved for activities carried out in a businesslike manner with an intent to profit—but instead reports the income on Form 1040, Schedule 1.

Furthermore, 1099-NEC income may not yield a Schedule C in instances of misclassified wage and salary labor or when payments are made for isolated, one-time transactions that do not constitute a regular trade or business. In the latter case, the income is often reported as "Other Income" on Schedule 1. Other specialized scenarios include payments made to the estate of a deceased self-employed individual, which are reported on IRS Form 1041, or payments to statutory employees who may receive both a W-2 and a 1099-NEC but have unique filing requirements. Understanding these divergent reporting paths is essential for our linkage methodology, as it defines the expected match rate between information returns and entities that are recorded in the Census Bureau data infrastructure.

3 Data Infrastructure

The analysis in this paper relies on a sophisticated data linkage infrastructure that connects business entities to individual owners and their various income streams. This section details the foundational Census Bureau data products and the underlying microdata frames used to construct our research sample. We build on the work of Goetz et al. (2017), Goetz and Kroff (2021), and Goetz et al. (2025).

3.1 The Census Business Register (BR)

The foundation of our data infrastructure is the Census Business Register (BR), a comprehensive and continuously updated database of all known employer and nonemployer business establishments in the United States. The BR serves as the primary sampling frame for all economic censuses and surveys conducted by the U.S. Census Bureau. At its core, the BR is constructed from a combination of federal administrative records, primarily from the Internal Revenue Service (IRS).

The administrative backbone of the BR consists of several key tax filings that signal business activity and organizational structure. For employer businesses, the Register relies on IRS Form 941 (Employer's Quarterly Federal Tax Return) to identify firms with active payroll. The broader universe of business activity—including both employer and nonemployer entities—is captured through an array of income tax returns. These include Form 1120 (U.S. Corporation Income Tax Return) for C corporations, Form 1120-S for S corporations, and Form 1065 (U.S. Return of Partnership Income) for partnerships. Crucially, for the study of the self-employed and nonemployee workforce, the BR incorporates IRS Form 1040, Schedule C (Profit or Loss From Business) filings, which represent the vast majority of the more than thirty million businesses currently tracked in the nonemployer universe (Goetz et al., 2025).

By anchoring our analysis in the BR, we can observe how nonemployee compensation flows interact with the employer and nonemployer businesses. As documented in Cao et al. (2026), the divergence between different administrative frames—such as those maintained by the Census Bureau versus other federal agencies—highlights the complexity of capturing the full universe of business activity. This section describes how we utilize these core BR tax filings to distinguish between 1099-NEC recipients who are already captured in the formal register and those who represent "latent" economic activity existing outside traditional tax-based business definitions.

3.2 Nonemployer Statistics (NES) and Nonemployer Statistics by Demographics (NES-D)

The foundation of the Census Bureau's measurement of independent work lies in the Nonemployer Statistics (NES) program. The NES provides the primary annual universe of U.S. businesses that have no paid employees, a group that accounts for the majority of all business

entities in the United States (Hyatt et al., 2021). The NES universe is constructed from administrative tax records maintained in the Census Bureau's BR (U.S. Census Bureau, 2025b). This potential universe is primarily derived from annual business income tax returns filed with the Internal Revenue Service (IRS), including Schedule C (sole proprietorships), Form 1065 (partnerships), Form 1120-S (S corporations) and 1120 (C corporations). To be included in the NES, a business must typically report annual receipts of $1,000 or more and meet specific industry-level receipts cutoffs that are periodically updated to ensure the precision of the nonemployer universe (U.S. Census Bureau, 2025b).

Building upon this universe, the Nonemployer Statistics by Demographics (NES-D) was developed to provide a comprehensive picture of business ownership characteristics that was previously only available through the quinquennial Survey of Business Owners (U.S. Census Bureau, 2026; Luque et al., 2019). Because nonemployer businesses are beyond the scope of the Annual Business Survey and the Annual Integrated Economic Survey, the NES-D serves as the vital annual link for understanding the demographics of the non-wage workforce. The NES-D is not a survey; rather, it is an annual series based on administrative records and census data that provides demographic characteristics microdata and tabulations for nonemployers. NES-D tabulations provide counts and receipts by owner characteristics, geography, industry, receipt-size class, and legal form of organization (LFO). Importantly, it leverages existing administrative and census records to identify near-universe coverage of nonemployer business owners and assigns demographic characteristics to both the owners and their businesses.[1] Currently, demographic characteristics include age, sex, race, Hispanic origin, veteran status, and foreign-born and citizenship status.

Several input data sources provide demographics for NES-D. Note that all individual-level data at the Census Bureau is anonymized upon arrival by assigning to each individual an anonymized individual identifier called Protected Identification Key or PIK. PIKs are used as linkage keys across individual-level data sources.

For the assignment of race and Hispanic origin to nonemployers, NES-D uses previous decennial Census and American Community Survey (ACS) records, with the Census Numident serving as a secondary source. In its assignment, NES-D gives priority to the most recent

[1]Currently owners of C-corporations cannot be unequivocally identified with data sources available at the Census Bureau, and thus, cannot be assigned demographics.

race and Hispanic origin information available for an individual; hence, priority is first given to 2011-2025 ACS data, then the 2010 Census, followed by 2001-2010 ACS data, and finally Census 2000. Whenever an owner cannot be assigned a race or Hispanic origin via ACS or Decennial data, NES-D then uses place of birth information in the Census Numident to try to assign a race or Hispanic origin to that owner. It uses an algorithm or crosswalk that maps place of birth information in the Numident to either a Hispanic origin or a race. Note, though, that obtaining race and Hispanic origin from place of birth information is only applicable to people born outside the U.S..

The Census Numident is the primary source of the age, sex, place of birth and citizenship status of the business owner. Place of birth information is then used to determine whether the business owner is born in or outside the U.S.. The Census Numident is derived from the SSA Numident file, which contains all transactions ever recorded against any single SSN - with each entry representing an addition or change (such as name changes) to the SSN record. This file is edited at the Census Bureau to create the Census Numident, which contains one record for each anonymized SSN or PIK.

In order to assign demographic traits to business owner and their businesses, NES-D must first identify the owners themselves. Owner identification relies on business tax filings, which vary by the legal form of organization of the business. In the case of sole proprietorships, (anonymized) owners identifiers or PIKs are obtained using Form 1040 Schedule C records. In the case of partnerships and S-corporations, PIKs are obtained from Forms 1065 and 1120S Schedule K-1. K-1 data contain the business EIN along with the owner identifiers. Hence, for a given partnership or S-corporation, NES-D obtains EIN-PIK pairs along with the owners' ownership shares. NES-D then uses the owners' PIKs to link demographics characteristics to them. Businesses are assigned to demographic groups by determining the total share of firm ownership held by individual owners of each (demographic) group. Assigning demographic characteristics to owners of sole proprietorships, and by extension to the firms themselves, is straightforward. For partnerships and S-corporations, the assignment of demographic characteristics to the firm as a whole is more complicated since these types of firms can have more than one owner, and not all owners are necessarily individuals. This type of challenge grows in magnitude for employer firms since they tend to have more complex ownership structures. Despite these challenges, building on NES-D's lessons, the current Employer Characteristics

Project (EC) is the employer counterpart of NES-D and provides administrative-records based demographic and other characteristics microdata for the near universe of employer business owners.

The task of identifying owners of C-corporations is a lot more challenging. Currently, NES-D does not include demographics for C-corporations (accounting for 2 percent of nonemployer businesses) and their owners since there is no tax data available at Census that unequivocally identifies all owners of C-corporations in the U.S. There are current efforts underway evaluating the merit of imputing demographics for nonemployer and small employer C-corporations, and of developing alternative ways of demographically classifying public corporations other than those based on owner demographics (e.g., demographics of executive board members) using third-party data.

3.3 The Longitudinal Business Database (LBD)

While the NES provides a universe of firms without employees, the Longitudinal Business Database (LBD) serves as the Census Bureau's premier historical tracking system for all U.S. business establishments with at least one paid employee (Chow et al., 2021). Covering the period from 1976 to the present, the LBD links establishment records across years to identify the precise timing of economic births, deaths, expansions, and contractions at specific business locations. The database is constructed by curating administrative data from the BR, supplemented by survey data from the Economic Census and economic surveys.

The primary functional unit of the LBD is the establishment, defined as a single physical location where business is conducted. These establishments are further organized into firms, which may consist of a single establishment (Single-Unit) or multiple locations (Multi-Unit) under common operational control. A significant contribution of the recent LBD redesign, as described by Chow et al. (2021), was the modernization of the longitudinal matching process. This process utilizes a combination of stable administrative identifiers—such as the Census File Number and EIN—as well as sophisticated name and address matching algorithms to maintain record continuity even when a business undergoes a change in legal ownership or organizational structure.

The LBD provides several critical variables for economic analysis, including annual em-

ployment and payroll measures derived from IRS Form 941 filings, providing a snapshot of labor utilization as of the March 12th pay period each year. It also features vintage-consistent industry codes, which are a harmonized set of NAICS codes that allow researchers to track industry dynamics over time, accounting for the periodic updates to the North American Industry Classification System. Additionally, the LBD tracks business age and tenure, variables that distinguish between "births" (new economic activity) and "reactivations" of existing identifiers, which is essential for accurately measuring entrepreneurial activity (Chow et al., 2021).

Beyond its use as a microdata research tool, the LBD is the source for the Business Dynamics Statistics (BDS), a public-use data series that provides aggregate measures of job creation and destruction. By providing a longitudinal link for every employer establishment in the U.S. economy, the LBD allows for the study of firm life cycles and the contribution of young firms to overall employment growth. As noted in the previous subsection, the LBD's focus on the employer universe makes it a natural counterpart to the NES. The integration of these two frames is what enables the construction of the Longitudinal Business Database for Nonemployers (LBD-NE), which will be discussed in the following section as the primary tool for tracking the transition of businesses between nonemployer and employer status.

3.4 The Longitudinal Business Database for Nonemployers (LBD-NE)

The primary infrastructure for tracking the lifecycle and transitions of businesses without employees is the LBD-NE. As described by Goetz et al. (2025), the LBD-NE is a research dataset that provides a longitudinal link for nonemployer business entities, effectively mirroring the structure of the employer-focused LBD. While the standard NES provides annual snapshots, the LBD-NE enables the tracking of a single business entity over time, allowing researchers to observe business survival, growth in receipts, and, crucially, the "graduation" of a nonemployer business into an employer firm.

The construction of the LBD-NE relies on the curation of administrative tax identifiers. A nonemployer business may be identified by either a Social Security Number (SSN) in the case of most sole proprietorships, or an EIN for partnerships, corporations, and some sole proprietorship. Therefore the LBD-NE utilizes a sophisticated matching algorithm to maintain longitudi-

nal continuity across these different identifier types (Goetz et al., 2025). This infrastructure is essential for distinguishing between a "true" business death and a mere administrative change, such as a sole proprietor incorporating and obtaining a new EIN. By following these entities over time, the LBD-NE provides a detailed view of the entry and exit dynamics that define the nonemployer sector, which accounts for the vast majority of business births in the U.S. economy (Chow et al., 2021).

3.5 The Wage and Salary Job Frame (WSJ)

To complement the establishment-level view provided by the BR, we incorporate data from the Longitudinal Employer-Household Dynamics (LEHD) infrastructure. As detailed in the foundational work by Abowd et al. (2009), the LEHD program integrates administrative records from state unemployment insurance (UI) systems with Census Bureau business and demographic data. A central component of this infrastructure is the Employer Characteristics File (ECF), which contains information on all business locations (establishments) that report UI-covered employment. The ECF provides the longitudinal linkage for employer firms and serves as a primary bridge between workers and their specific places of work (U.S. Census Bureau, 2025a).

The LEHD infrastructure is critical for distinguishing between nonemployee compensation and traditional wage-and-salary employment. While the LBD and LBD-NE provide the frame for business units, the LEHD data allows us to observe the "job" as the unit of analysis. Recent advancements in this area include the development of a comprehensive Wage and Salary Job Frame (WSJ), which links individual workers to firms using both UI wage records and IRS Form W-2 filings (Tucker et al., 2024). This job frame addresses historical limitations in the LEHD data, such as the imputation of workers to specific establishments within multi-unit firms, by utilizing updated establishment imputation procedures that improve the precision of the worker-to-firm match.

Integrating the 1099-NEC records into this worker-firm environment allows us to characterize the "missing middle" of the labor market with unprecedented detail. As noted by Cao et al. (2026), discrepancies between administrative frames—such as the differences in establishment counts between the Census Bureau and the Bureau of Labor Statistics—often stem from how different systems capture business locations and their associated labor. By overlaying nonem-

ployee payment flows onto the existing wage-and-salary job frame, we can identify individuals who simultaneously hold traditional W-2 jobs and receive 1099-NEC compensation, as well as those whose primary labor market attachment is through nonemployee contracting. This linkage is a prerequisite for the construction of the Self-Employment Job Frame (SEJ) discussed in the following section.

3.6 The Self-Employment Job Frame (SEJ)

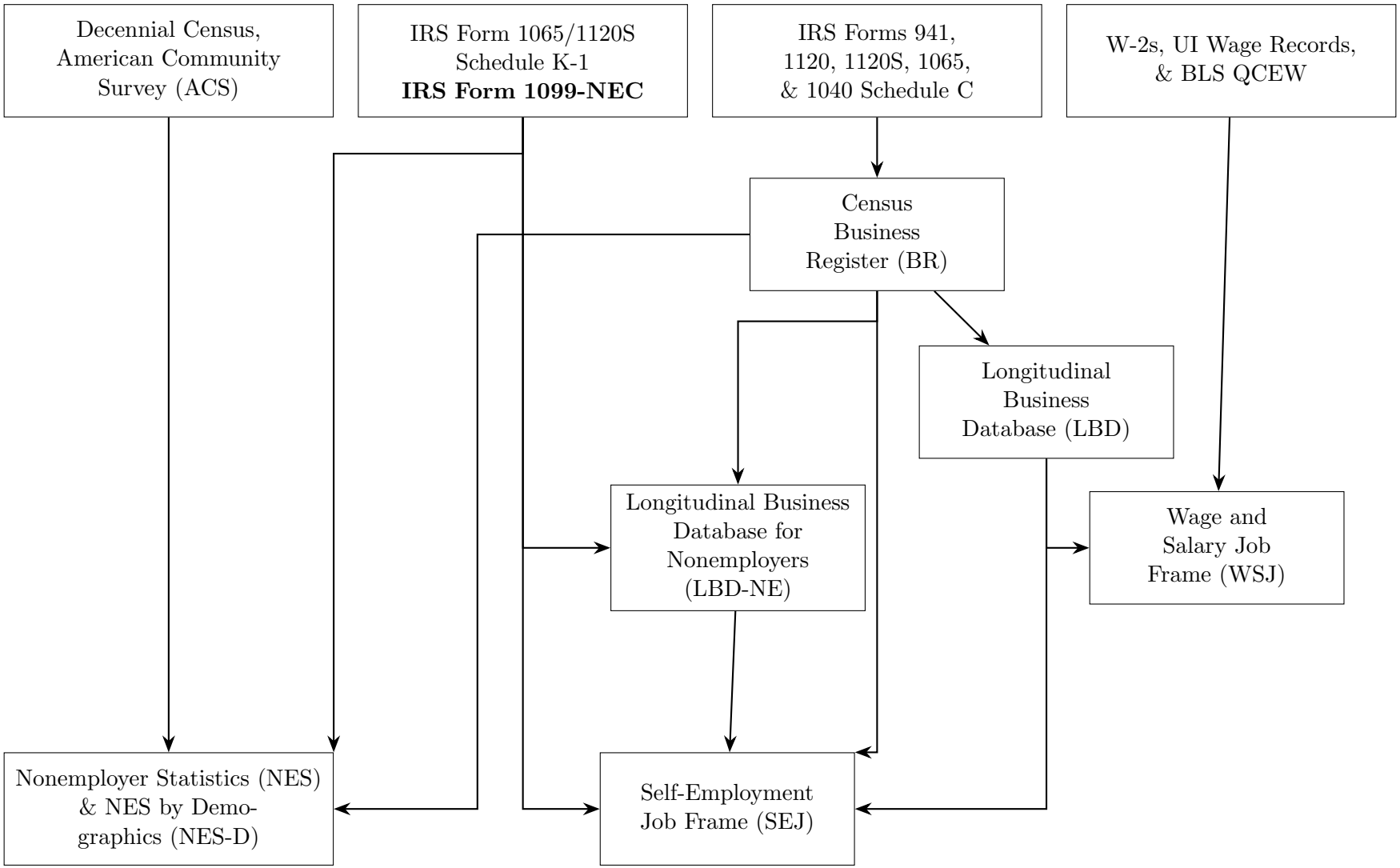
While the LBD-NE tracks business entities, the SEJ is designed to track the individuals who own and operate them. The SEJ serves as a bridge between the business-side records of the LBD-NE and the person-side records of the Census Bureau's demographic and labor frames. As outlined in Section 2 of Goetz et al. (2025) and further detailed in the technical documentation by Graham et al. (2025), the SEJ defines a "self-employment job" as a unique link between an individual (identified by a Protected Identification Key, or PIK) and a business entity where that individual has an ownership stake and is actively engaged in work.

The SEJ is constructed by integrating several types of IRS tax filings to identify these individual-to-firm links. For sole proprietors, the link is established through Schedule C filings, which connect a single individual directly to their business activity. For more complex organizational forms, such as partnerships and S corporations, the SEJ utilizes Schedule K-1 filings to link the specific partners or shareholders to the parent firm identified in the LBD or LBD-NE (Goetz et al., 2025; Graham et al., 2025). This person-to-firm linkage is critical because it allows researchers to view self-employment through the same "job" lens used for traditional W-2 employment. By harmonizing these records, the SEJ enables the measurement of "moonlighting" (individuals holding both a W-2 job and a self-employment job) and provides a more accurate count of the total number of people participating in the entrepreneurial economy at any given time.

3.7 Integrating 1099-NECs into the Census Infrastructure

The integration of IRS Form 1099-NEC into the Census Bureau's administrative record system represents a structural shift in how the nonemployee workforce is situated within the U.S. economic data ecosystem. Historically, the administrative data infrastructure was largely bi-

Figure 1: Administrative Records and Data Products



furcated: the "employer" universe was anchored in the BR, while the "worker" universe was centered on the LEHD infrastructure files derived from state UI records. Figure 1 illustrates how the reintroduction of the 1099-NEC, alongside the development of the modern WSJ, bridges these legacy domains to create a transaction-level link between firms and individual service providers.

To understand the relationships illustrated in the flowchart, it is helpful to follow the data from the primary inputs in the top row down to the integrated research products. On the far right, the traditional worker-firm linkage is represented by UI Wage Records and the BLS QCEW. While these served as the primary components of the legacy LEHD system, they are now combined with IRS Form W-2 filings to produce the WSJ. This modern frame defines the boundaries of formal employer-employee relationships with greater coverage than the UI system alone. Parallel to this, the core BR is populated by primary business tax filings, including Forms 941, 1120, and Schedule C. As the flow lines indicate, the BR serves as the longitudinal anchor that distributes information to both the employer-based LBD and the nonemployer-focused LBD-NE.

The novelty of the current infrastructure is the role played by the 1099-NEC payment stream, which provides a multi-directional feed that was previously absent from both the firm and worker frames. By tracing the flow from the 1099-NEC input node, we see that these records first enhance the LBD-NE and NES, allowing us to observe economic activity even when it has not yet reached the threshold of a formal Schedule C business filing. Furthermore, by joining these payment records with demographic data from the Decennial Census and the ACS (leftmost node), the infrastructure produces the NES-D, which offers a granular look at the characteristics of the individuals receiving these payments.

Most significantly, the 1099-NEC serves as a primary input for the SEJ, which acts as the nonemployee analog to the WSJ. As depicted at the bottom right of the flowchart, the SEJ sits at the confluence of the LBD-NE and the 1099-NEC payment stream. By following these integrated paths, the infrastructure transforms what would otherwise be an anonymous stream of transactions into a relationship-level observation. This allows us to identify "moonlighters" by checking for a matching record in the WSJ or to identify "latent businesses" by noting the absence of a corresponding tax filing in the BR. Ultimately, this integrated approach allows us to observe the "missing middle" of the labor market with a level of precision that was previously

impossible using siloed administrative frames.

4 Characterizing the Nonemployee Workforce

As this project is a work-in-progress, this section describes the proposed empirical tabulations designed to quantify the 1099-NEC population and its integration into the broader business ecosystem. Our analysis utilizes the universe of 1099-NEC filings linked to the Self-Employment Job (SEJ) frame, the LBD-NE, and demographic data sources underlying the NES-D and the Employer Characteristics Project (EC)[2] as well as the Census Bureau's Demographic Frame. These tabulations are intended to complement and extend existing official data products, specifically the Census Bureau's NES and NES-D, by providing a more granular look at the contractual relationships underlying nonemployer activity.

4.1 Who are Nonemployees?

A central objective of this research is to characterize the individuals who provide labor services as nonemployees. Unlike traditional employment data, which often relies on firm-side reporting of demographic aggregates, our linkage of 1099-NEC microdata to the SEJ, NES-D and EC's underlying demographics data sources, and the Census Bureau's Demographic Frame allows for a granular person-level analysis. It is important to note that the results discussed in this subsection specifically characterize recipients of Form 1099-NEC who are individuals (identified via SSN/PIK); payments issued to business entities (EINs) are excluded from this demographic characterization to focus on the individual labor supply.

Our preliminary results begin by stratifying these individual recipients according to the nature of the business entities they operate. We distinguish between four primary categories of nonemployee service providers, as follows. (1) There are individuals 1099-NEC recipients with no formal business ownership (e.g., they do not file an IRS Form 1040 Schedule C). (2) Some recipients operate a nonemployer sole proprietorship (filing a Schedule C with no employees). (3) Some individuals are owners of nonemployer businesses other than sole proprietorships

[2]The EC is the employer counterpart of NES-D, and provides administrative-records based demographic/other characteristics to nearly the entire universe of employer business owners, with the exception of C-corporations.

(specifically, partners in a partnership or shareholders in an S corporation). (4) Finally, some individuals are owners of an employer firm (whether a sole proprietorship, partnership, or S corporation), who do not also own a nonemployer business.

A variety of administrative and census data sources provide demographic information for the populations above: 1099-NEC individual recipients, owners of nonemployer businesses and owners of employer businesses. For nonemployers, we use microdata from NES-D, while for employer business owners, we draw on ongoing work from the Employer Characteristics (EC) Project. In order to make meaningful comparisons, for individuals receiving 1099-NECs, we use the same data sources and methodology developed in NES-D/EC for demographics assignment, and use the Demographic Frame as a tertiary source for sex, race, and Hispanic origin.

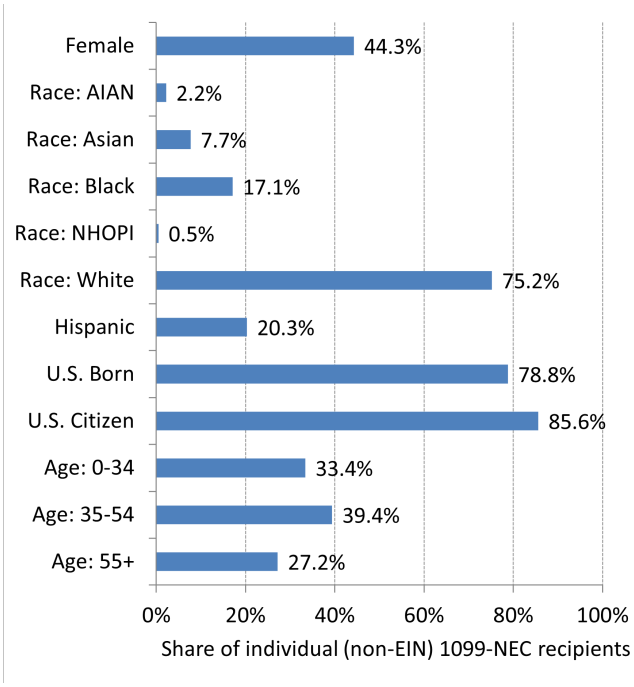
For each of these mutually exclusive categories, we provide a detailed demographic profile, tabulating the frequency of recipients who are female, American Indian or Alaska Native (AIAN), Asian, Black, Native Hawaiian or Other Pacific Islander (NHOPI), White, or Hispanic. Furthermore, we analyze these groups by nativity and citizenship status (U.S. born vs. U.S. citizen) and across three distinct age cohorts: 0–34, 35–54, and 55+. This stratification is essential for identifying which segments of the nonemployee workforce are "latent" workers—those earning nonemployee compensation without a formal business filing—versus those who are integrated into the formal nonemployer or employer business universes.

In particular, the first category—individuals who receive nonemployee compensation but do not file a Schedule C—represents a previously underexplored segment of the workforce and a potential statistical "blind spot" in administrative and survey-based measures of self-employment (Goetz et al., 2025). Distinguishing this group from formally recognized nonemployers is valuable, as it captures labor supply that would otherwise be omitted from conventional datasets such as the NNES or the ILBD.

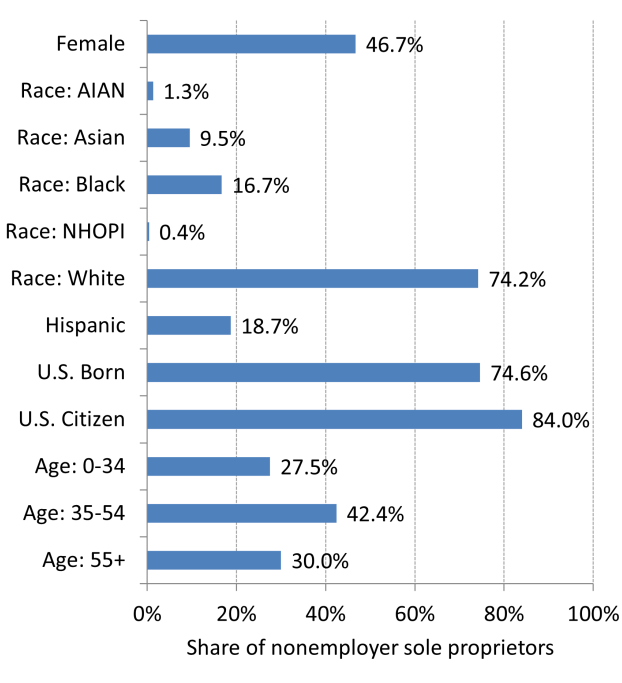
We separately report demographics of nonemployer sole proprietors from owners of nonemployer partnerships and S corporations, as these legal forms differ meaningfully in organizational structure, ownership composition, and economic activity (Luque et al., 2019). In particular, nonemployee compensation reported on 1099-NEC forms and linked to individuals is conceptually more comparable to the activity of nonemployer sole proprietors than to that of partnerships or S corporations, which may involve multiple owners and more complex organizational structures. This distinction improves the interpretability of comparisons across categories. In-

Figure 2: Characteristics of 1099-NEC Recipients, Compared with Business Owners, 2022

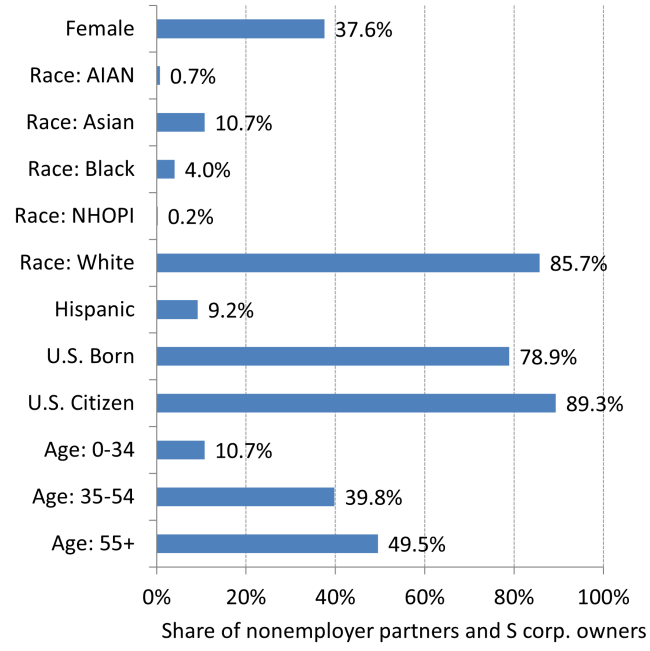
(a) 1099-NEC Recipients



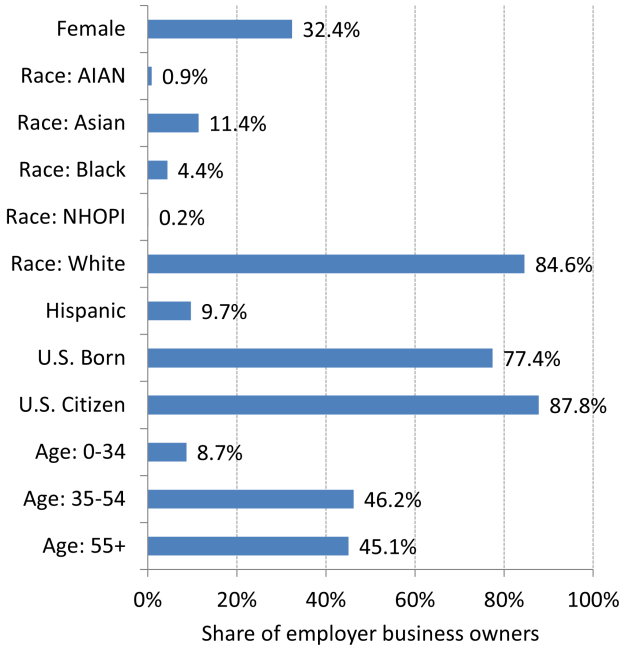
(b) Nonemployer Sole Proprietors



(c) Nonemployer Partners & S Corp. Owners



(d) Employer Sole Props., Partners, & S Corp. Owners

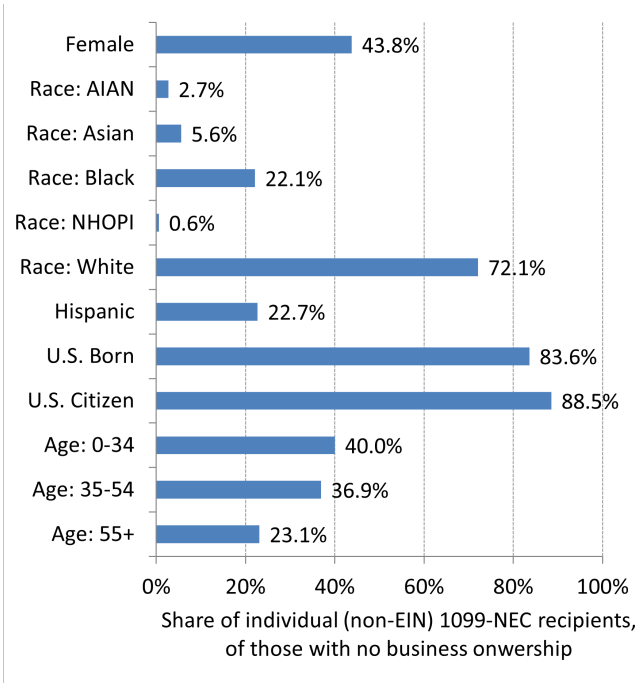


Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-ESMD010-006. AIAN: American Indican or Alaska Native. NHPOI: Native Hawaiian or Other Pacific Islander.

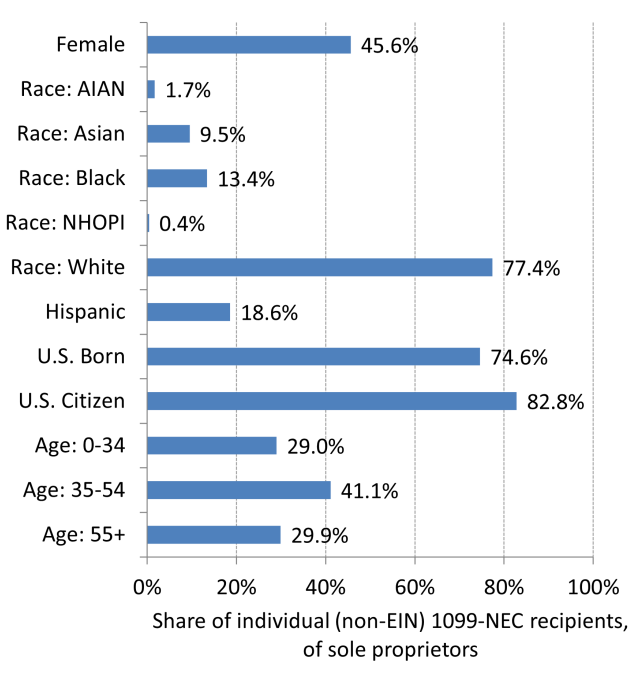
deed, we find that the demographic composition of 1099 recipients (Figure 2A) is more alike to nonemployer sole proprietors (Figure 2B) than to non-sole proprietor nonemployers (Figure

Figure 3: Characteristics of 1099-NEC Recipients in 2022, by Business Ownership

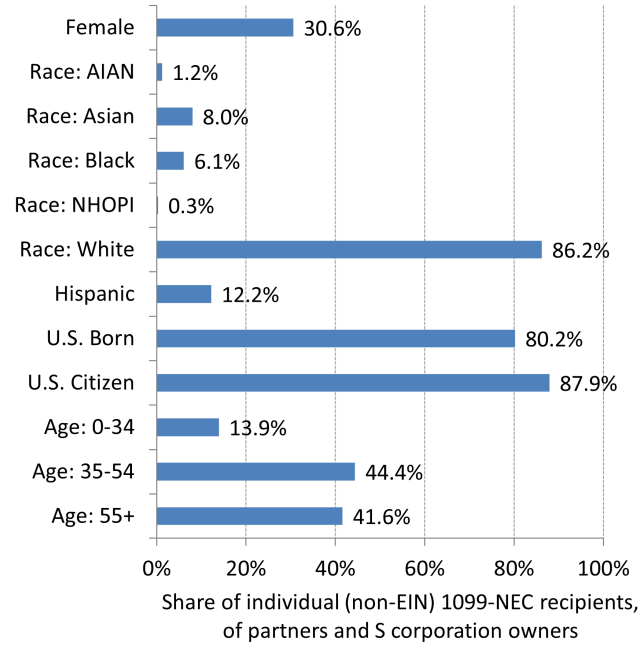
(a) Not Business Owners



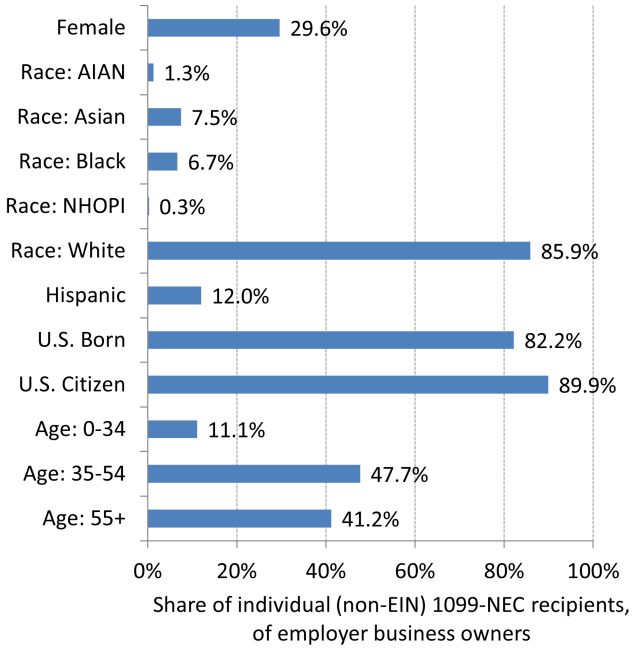
(b) Nonemployer Sole Proprietors



(c) Nonemployer Partners & S Corp. Owners



(d) Employer Sole Props., Partners, & S Corp. Owners



Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-ESMD010-006. AIAN: American Indican or Alaska Native. NHPOI: Native Hawaiian or Other Pacific Islander.

2C) or employers (Figure 2D) along most demographic dimensions.

We find that 1099-NEC recipients without formal business ownership are substantially

younger than their counterparts in the other categories. Approximately 40 percent of these non-owners fall into the youngest age cohort (0–34, Figure 3A), compared with 29.0 percent of nonemployer sole proprietors (Figure 3B), 13.9 percent of owners of other nonemployer entities (Figure 3C), and just 11.1 percent of employer-firm owners (Figure 3D). This gradient suggests that nonemployee work without formal business attachment is disproportionately concentrated among younger individuals. Whether this reflects a life-cycle progression, whereby individuals transition into formal ownership as they age, or a more structural shift toward less formal modes of work remains an open question that would require longitudinal analysis to resolve. Nevertheless, the cross-sectional evidence indicates that analyses limited to formally recognized nonemployers will systematically understate the participation and earnings of younger workers in nonemployee labor markets.

Similar patterns arise across race and ethnicity. The share of Black 1099-NEC recipients is notably higher among non-owners (22.1 percent, Figure 3A) than among nonemployer sole proprietors (13.4 percent, Figure 3B), other nonemployer business owners (6.1 percent Figure 3C), or employer-firm owners (6.7 percent, Figure 3D). Parallel overrepresentation is observed for American Indian or Alaska Native (AIAN), Native Hawaiian or Other Pacific Islander (NHOPI), and Hispanic recipients within the non-owner group. As with age, these disparities imply that restricting attention to individuals engaged in formal nonemployer activity would omit a substantial portion of nonemployee labor supply among these demographic groups. Consequently, conventional measures may understate both the extent of participation and the distribution of earnings for historically underrepresented populations in nonemployee work.

The final set of tabulations explored in this subsection examines the intersection of worker demographics and the industrial demand for their services. We calculate the frequency with which 1099-NEC recipients of specific ages, sexes, races, and ethnicities are utilized across different NAICS industry sectors of the issuing firms. This analysis reveals the extent to which demographic groups are concentrated in specific types of contract work—for instance, whether younger workers are disproportionately represented in the professional and technical services sectors or whether specific minority groups are more prevalent in the construction or transportation sectors. By linking the characteristics of the individual provider to the industry of the purchasing firm, we provide a comprehensive map of the demographic dependencies that define the modern labor market for independent contractors.

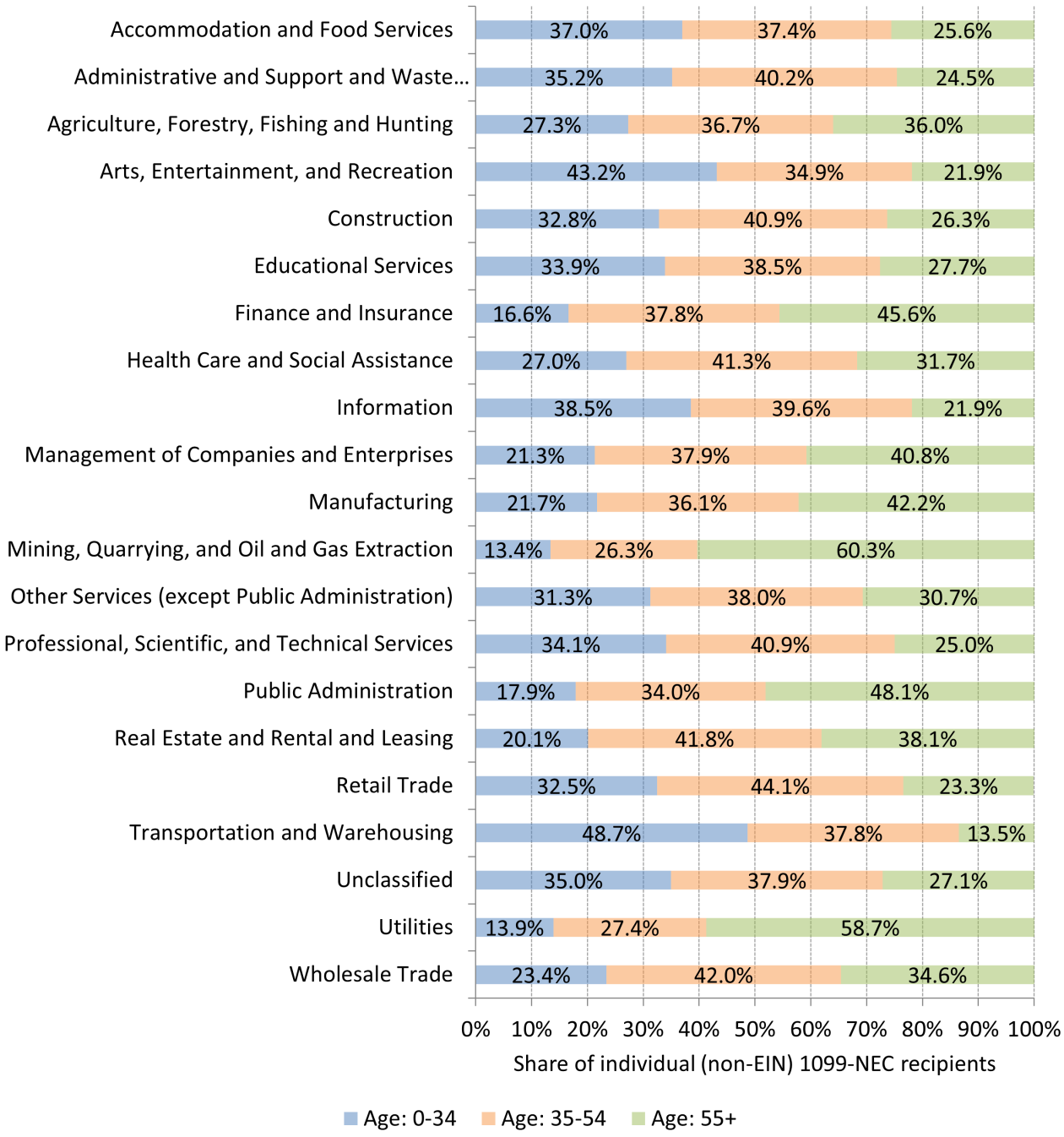


Figure 4: Age distributions of 1099-NEC recipients by NAICS sector in 2022.

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-ESMD010-006.

We find that nonemployee age distributions vary substantially across industries. Older nonemployee workers (ages 55+) are highly concentrated in sectors such as Mining, Quarrying, and Oil and Gas Extraction (60.3 percent) and Utilities (57.8 percent, Figure 4). In contrast,

Table 2: Demographic Composition of 1099-NEC PIK recipients by Industry (Percent), 2022.

Industry	Female	AIAN	Asian	Black	NHOPI	White	Hispanic
Accom. & Food Serv.	41.9	2.6	8.7	13.1	0.6	78.1	24.1
Admin. & Support	46.6	2.4	5.5	21.9	0.5	72.4	26.7
Agriculture	33.2	2.1	2.7	4.5	0.3	92.1	12.8
Arts & Rec.	42.3	1.8	5.6	12.2	0.5	83.5	12.6
Construction	19.9	3.2	3.5	8.3	0.5	86.6	37.8
Education	55.3	1.9	7.2	13.8	0.4	79.6	11.8
Finance & Ins.	34.9	1.3	6.8	10.1	0.3	83.3	12.7
Health Care	67.3	2.1	8.3	23.1	0.4	68.6	18.1
Information	49.8	1.8	7.5	19.8	0.5	73.8	12.8
Mgmt. of Comp.	43.6	1.6	6.9	9.7	0.4	83.7	11.3
Manufacturing	33.7	1.6	6.0	6.1	0.3	87.9	16.4
Mining & Oil	26.9	2.2	1.4	4.6	0.1	93.1	13.1
Other Serv.	50.2	2.0	14.6	14.6	0.4	70.9	15.4
Prof. & Tech.	45.0	1.8	11.0	20.0	0.5	69.7	18.2
Public Admin.	44.7	4.8	3.8	13.2	0.4	80.1	11.0
Real Estate	47.2	1.6	6.4	9.0	0.4	84.7	17.1
Retail Trade	54.1	2.0	7.0	16.3	0.5	76.8	20.2
Transport & Ware.	42.2	2.4	7.5	32.1	0.6	60.8	23.6
Utilities	22.7	2.1	2.8	6.3	0.4	90.1	10.0
Wholesale	46.6	1.8	8.3	7.0	0.5	84.5	19.3
Unclassified	39.8	2.4	7.0	12.0	0.4	80.6	23.5

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-ESMD010-006. AIAN: American Indican or Alaska Native. NHPOI: Native Hawaiian or Other Pacific Islander.

younger workers (ages 0–34) are more prevalent in sectors that may offer lower barriers to entry or more flexible work arrangements, including Transportation and Warehousing (48.7 percent), Arts, Entertainment, and Recreation (43.2 percent), and Information (38.5 percent, Figure 4). It is unclear whether these differences reflect life-cycle dynamics, where workers transition across sectors and into different forms of work as they age, or a more structural shift toward nonemployee work arrangements among younger workers in certain industries. Future longitudinal analyses may be able to distinguish between these potential mechanisms.

Patterns by sex and ethnicity further demonstrate how nonemployees are differentially distributed across sectors by demographics (Table 2). Women constitute a majority of 1099-NEC recipients in three industries – Health Care and Social Assistance (67.3 percent), Retail Trade (54.1 percent), and Educational Services (55.3 percent) – while most other sectors have a majority of male recipients, particularly Construction (19.9 percent women) and

Utilities (22.7 percent). Similarly, Hispanic recipients are disproportionately represented in Construction st(37.8 percent) and Administrative and Support and Waste Management and Remediation Services (27.7 percent).

These demographic variations matter because they directly influence how labor markets function across sectors. For example, differences in age composition may impact future labor supply, affecting worker availability, experience levels, and turnover within industries. Recognizing these differences is therefore important for understanding both current workforce dynamics and how they may evolve over time.

4.2 Who Pays Nonemployees?

In this subsection we address the economic nature of the relationship between the entities issuing 1099-NECs and the recipients providing services. The measures we create are motivated by the need to understand the supply chain of nonemployee labor and the degree to which traditional firms, tracked in the LBD, rely on external contractors for core or peripheral business functions (Chow et al., 2021; Goetz et al., 2025). Specifically, we seek to answer whether the "gig" model acts as a supplement to or a replacement for traditional employment, and how this reliance evolves across a firm's life cycle. This analysis acknowledges that while IRS rules specify that private households should not issue Form 1099-NEC for purposes unrelated to operating a business, both individuals (using SSNs) and business entities (using EINs) can be recipients of nonemployee compensation (U.S. Internal Revenue Service, 2025b). We investigate the concentration of this work to distinguish between individuals serving a single client and those operating as diversified business entities within the LBD-NE.

To address these questions, we propose a comprehensive set of tabulations that characterize the universe of issuers and recipients. In the first set of tabulations, we classify each issuing EIN into one of five mutually exclusive states relative to the BR. An EIN is considered "active" if it is identified as a nonemployer business, a single-unit employer firm (operating a single establishment), or a multi-unit employer firm (operating multiple establishments). Conversely, an EIN may be present in the BR but classified as inactive, or it may be entirely absent from the register in a given reference year. For each of these five groups, we calculate the total number of issuing entities, the volume of 1099-NEC forms issued, and the aggregate

Table 3: 1099-issuance among EINs (to all recipients) by issuer EIN Type

Type of EIN	1099-NEC-issuing EINs (thousands)	# 1099-NECs issued (thousands)	Compensation billions USD)	All EINs (thousands)
1099-NECs issued to an EIN or an individual				
Nonemployer (w/ EIN)	1,368	7,974	439.7	10,490
SU Employer	2,497	26,960	1,396	6,396
MU Employer	207	19,530	2,344	342
EINUNITS only	1,152	9,729	1,217	—
Other EIN	1,184	4,828	329.6	—
ALL TYPES	6,408	69,021	5,726.3	—
1099-NECs issued individuals only (EIN-recipients excluded)				
Nonemployer (w/ EIN)	945	3,990	74	10,490
SU Employer	1,996	14,410	236	6,396
MU Employer	175	10,840	157	342
EINUNITS only	800	4,832	79	—
Other EIN	935	3,045	49	—
ALL TYPES	4,851	37,117	595	—

All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Total Counts of EINs in the Census BR EINUNITS file or not in the BR ("Other EIN") are omitted.

compensation recorded. Crucially, these counts are further disaggregated by the tax identifier of the recipient—distinguishing between payments made to another EIN versus those made to a Protected Identification Key (PIK). This allows us to isolate payments to what are likely sole proprietors, who typically use their Social Security Number (SSN) as their primary tax identifier for nonemployee compensation.

Table 3 shows the number of EINs that issue 1099-NECs, the number of 1099s issued, and the total amount of compensation represented in these filings. The top panel includes all 1099s issued to any type of recipient, either an individual PIK or another EIN business, while the bottom panel focuses exclusively on 1099s for which the recipient is an individual. The set of EINs are broken down by what type of business they represent according to the BR sources, as described above. Of the 6.4 million EINs that issue any 1099-NECs, the vast majority of them (4.9 million) issue at least one of them to an individual PIK recipient. However, the number of total 1099 filings to PIKS numbers only 37 million out of the 69 million overall (a bit more than half), and the compensation to individuals of 595 billion only represents about one tenth of the overall 1099 compensation (5.7 trillion). Therefore, while businesses are more likely to

Table 4: Fraction of EINs that issue 1099-NECs

Type of EIN	Issue 1099-NECs (including to EINs)	Issue 1099-NECs to individuals
Nonemployer (w/ EIN)	13.0%	9.0%
SU Employer	39.0%	31.2%
MU Employer	60.5%	51.2%

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005.

hire individual 1099 workers than they are to contract with other businesses for labor services, the payments to other businesses represent a much greater share of the dollar-weighted activity. This is particularly true for multi-unit employers: while over half of their 1099s are issued to PIK recipients (10.8 out of 19.5 million), the associated compensation only represents 7% of total 1099 payments by this firms. Single-unit firms and Nonemployer firms, on the other hand, pay compensation to PIK recipients that represents around 17% of their total 1099 payments.

Table 4 shows the fraction of each type of active EIN business that issues 1099-NECs to either any recipient, or to individual PIK recipients in particular. We see that the propensity to issue is highest for multi-unit employers, who issue at a propensity of over 60% to any recipient and over 51% to PIKs specifically. This contrasts with Nonemployers who have an EIN, which only issue 1099-NECs at rates of 13% and 9%, respectively. Single-unit employers are more likely to engage 1099 labor than nonemployers, but not as much as their multi-unit counterparts.

Table 5: 1099-NEC Recipients as a Share of Labor Expenditures or Compensated Individuals

1099-NEC Worker Share	Number of Employers, by Share of Labor Expenditures	Number of Employers by Share of Employment Number of W-2 Employees		
		Less than 20	20 to 499	500 or More
$< 25\%$	1,509	435	506	36
$25\% - 49\%$	289	403	47	1
$50\% - 74\%$	189	454	12	0
$75\% - 99\%$	142	235	3	0

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Numbers in the table are in thousands of U.S. businesses. Employer businesses with no W-2 records are omitted. Counts are in thousands. Zero (in thousands) indicates a count of less than 500.

A second set of tabulations focuses specifically on the labor-service payments made to indi-

viduals (SSNs) as a share of the firm's total labor expenditures (the sum of W-2 wage and salary payments and 1099-NEC payments). By exploring how this nonemployee payment share varies across the firm-size distribution, we look for empirical evidence of labor substitution—specifically, whether firms of certain sizes or in certain growth phases systematically substitute nonemployee contractors for regular wage-and-salary employees. Table 5 shows what fraction of an EIN's labor bill is represented by payments to 1099-NEC workers. First we calculate the fraction of each EINs labor bill is represented by 1099-NEC payments to PIKs. We then place EINs in bins according to this fraction, which gives us a sense of how many firms use 1099-NEC labor at different levels of intensity. The left-hand side of 5 shows that the bulk of EINs pay less than 25% of their labor bill to 1099 workers (1.5 out of 2.1 million EINS), but a significant number rely on contract labor much more heavily than that. In fact, 331,000 employer EINs pay the majority of their labor bill to contract workers as opposed to W2 employees. The right-hand side panel of Table 5 shows these same figures broken down by the size of the firm, in terms of the number of W2 employees they have. Indeed, the firms that rely more heavily on contract work tend to be in the smallest size category (less than 20), yet a significant number of larger firms (20-499 employees, and 500+) make payments to contract workers that represent 25% or more of their labor bill.

Table 6: 1099-issuance (to PIKs) among Employers and Nonemployers, by Legal Form

Legal Form	1099-NEC-issuing Employer EINs	All Employer EINs	1099-NEC-issuing Nonemployer EINs	All Nonemployer EINs
Sole Propretor	171	859	129	5,160
Partnership	292	827	430	3,033
S Corporation	1,100	3,511	271	1,677
C Corporation	326	995	114	622
Tax-Exempt Corp.	169	325	0	1
Tax-Exempt Other	58	122	0	0
Government	51	85	0	0
Other (Trusts, etc.)	4	9	0	0

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. EINs with an unknown legal form are omitted. Counts are in thousands. Zero (in thousands) indicates a count of less than 500.

Further analysis investigates the institutional and industrial drivers of nonemployee utilization. We propose tabulations that explore the frequency of 1099-NEC issuance to individuals across different legal forms of organization—including C corporations, S corporations, partner-

Table 7: 1099-issuance (to PIKs) among Employers and Nonemployers, by Industry

NAICS Sector	1099-NEC-issuing Employer EINs	All Employer EINs	1099-NEC-issuing Nonemployer EINs	All Nonemployer EINs
Ag. services	22	60	24	189
Finance/insurance	80	259	30	525
Information	44	96	16	138
Manufacturing	96	246	19	187
Prof/sci/tech serv	298	882	100	1,337
Accom. and food serv.	113	588	17	225
Admin. spt./waste mgmt.	109	382	39	572
Arts and entertain.	60	151	31	387
Business management	5	13	3	55
Construction	292	788	128	889
Ed. services	60	118	8	144
Government	27	48	1	30
Health Care	242	724	34	639
Mining	8	18	5	45
Other Services	247	777	63	860
Real Estate	136	379	309	2477
Retail	151	657	35	725
Transp. and wrhsing.	72	240	62	836
Utilities	7	13	2	12
Wholesale	97	281	22	225

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Issuers with an unknown industry are omitted. Counts are in thousands. Zero (in thousands) indicates a count of less than 500.

ships, sole proprietorships, nonprofits, and government entities—further segmented by whether the issuer is an employer or a nonemployer. Table 6 shows the employer and nonemployer 1099-issuers by legal form of organization. Of particular note is that S Corporations are by far the most common legal form of 1099-issuing EINS amongst employers, while Partnerships are the dominant form for 1099-issuing nonemployer EINS. Along similar lines, we also detail these issuance patterns by North American Industry Classification System (NAICS) sector to identify industries with a structural reliance on external labor. Table 7 shows the employer and nonemployer 1099-issuers by 2-digit NAICS sector. Among employer EINS it is the service sectors that are particularly reliant on 1099 labor; professional services, construction, health care, and other services reveal the highest numbers and shares of 1099 issuers. For nonemployer EINs, 1099-issuance is highly concentrated in Real Estate with 309,000 out of 945,000

Table 8: 1099-issuance (to PIKs) among Employers and Nonemployers, by Size

Size	1099-NEC-issuing Employer EINs	All Employer EINs	1099-NEC-issuing Nonemployer EINs	All Nonemployer EINs
Small	1,724	5,939	168	5,898
Medium	423	766	346	3,041
Large	24	33	431	1,551

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Counts are in thousands.

Table 9: 1099-issuance (to PIKs) among Employers and Nonemployers, by Transition

Size	1099-NEC-issuing Employer EINs	All Employer EINs	1099-NEC-issuing Nonemployer EINs	All Nonemployer EINs
Continuer	1,996	5,992	796	8,131
Entrant	119	547	112	2,156
Transitioner	56	199	37	203

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Counts are in thousands.

nonemployer 1099-issuers belonging to this sector. Note however that the entire nonemployer universe is quite skewed toward real estate in general, and that only 12% of nonemployer EINs in real estate issue 1099s (309 thousand out of 2.5 million).

Finally, we measure the intensity of 1099-NEC usage by the issuer's scale (number of employees for employer firms or total revenue for nonemployers) and their position in the business life cycle, specifically focusing on whether the issuer is a recent entrant, an exiting entity, or a firm undergoing an organizational transition. Table 8 shows the employer and nonemployer 1099-issuers by size of the business. EIN-level businesses are classified as small, medium, or large, where this classification is determined by employment size for employers, and by revenue size for nonemployers. The propensity at which an EIN is likely to issue a 1099-NEC is increasing in size for both employers and nonemployers. While there are not many employers in the large category (more than 500 employees), over two-thirds of them hire some contractor labor. This lies in contrast with the smallest category of employer EINs which hire contractors at a rate of under one-third. Large nonemployers have around a 28% propensity to use 1099 workers, while small ones file 1099-NECs at a mere 3% rate. Finally, Table 9 shows the employer and nonemployer 1099-issuers by their year-to-year dynamics, specifically whether they entered, continued, or transitioned in activity status from the prior year. Here we see that continuers,

Table 10: 1099-NEC receipt and Schedule C filings, 2022

	Received 1099-NEC and filed Schedule C	Received 1099-NEC and did not file Schedule C	Filed Schedule C, no 1099-NEC
Total people (millions)	13.7	11.9	11.9
Total 1099-NECs (millions)	21.8	15.3	-
1099-NEC receipts (billions)	454	369	-
Total Schedule Cs (millions)	14.8	-	12.3
Schedule C receipts (billions)	760	-	1,021

All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Omitted totals (e.g., total 1099-NECs received by non-recipients) are equal to zero by construction.

or EINs who were active in both t and $t-1$, have the highest preponderance of 1099-NEC issuance. Around a third of all continuing employers, and 9% of continuing nonemployers issue 1099-NECs to PIK recipients, which is higher than the overall average for those categories. In contrast we see that for entrants, EINs that are active in the given year after not operating in the previous one, only 22% and 5% of employers respectively use contract work. Transitioners, either employer firms this year who were nonemployers in the previous year or vice versa, have 1099-issuing propensities that lie somewhere in between those of continuers and entrants.

4.3 Nonemployee Self-Employment

A core empirical contribution of this paper is the reconciliation of nonemployee compensation reported via information returns with the formal business tax filings of individuals. By linking 1099-NEC records issued to individuals (SSN/PIK) with IRS Form 1040, Schedule C filings, we can evaluate the degree of overlap between the contracting workforce and the universe of nonemployer sole proprietorships. As noted by Goetz et al. (2025), this is not a straightforward one-to-one matching exercise. A single individual may receive multiple 1099-NEC forms from different clients and, simultaneously, may file multiple Schedule C forms representing distinct lines of business or industries.

To characterize this complex landscape, we first analyze the raw counts of these instruments relative to the populations they represent. We compare the total volume of 1099-NEC records against the number of distinct recipients, and the total number of Schedule C filings against

the number of unique filers. We then tabulate the overlap between these two populations, categorizing individuals into three mutually exclusive groups: (1) individuals who received at least one 1099-NEC and filed at least one Schedule C; (2) "latent" workers who received at least one 1099-NEC but did not file a corresponding Schedule C; and (3) formal business owners who filed at least one Schedule C but did not receive any 1099-NEC income. For each group, we count not only the unique individuals but also the total number of 1099-NEC and Schedule C records associated with them, providing a measure of the intensity of both contracting and formal self-employment activity.

Our initial findings on the overlap between the population of 1099-NEC recipients and Schedule C sole proprietorships is shown in Table 10. First of all, note that these populations are basically of the same magnitude: in 2022, there were about 25.5 million individuals who received a 1099-NEC, and about 25.6 million who filed IRS Form 1040 Schedule C. Of these, more than half (15.3 million) both received a 1099-NEC and filed a Schedule C, but somewhat less than half were in one group but not the other (about 11.9 million in each case). Of the 823 billion reported revenue issued to 1099-NEC recipients, more than half (454 billion) went to Schedule C filers, who also were recipients of nearly three-fifths (21.8 million) of total 1099-NECs.

Our exercise in Table in Table 10 furthermore helps us understand the roughly $1.8 trillion dollars of revenue that Schedule C sole proprietors reported to the IRS in 2021. Most revenue (about $1.0 trillion) went to Schedule C filers who did not receive a 1099-NEC. Schedule C filers reported $760 billion, and the 1099-NECs themselves provided about three-fifths of this ($454 billion). Overall, 1099-NEC disbursements accounted for about one-fourth of the total revenue received by sole proprietorships in 2022.

Table 11 provides a cross-sectional view of the overlap between nonemployee compensation, formal business filing, and traditional wage-and-salary employment. By stratifying 1099-NEC recipients based on whether they also appear in the Census WSJ, the table illustrates the extent to which independent contracting serves as a primary source of income versus a supplemental activity. This classification is crucial for identifying "moonlighters"—individuals who maintain traditional W-2 employment while simultaneously performing contract work—compared to those whose sole labor market attachment is through the nonemployee workforce.

The table further reconciles these payment flows with IRS Form 1040 Schedule C filings, of-

Table 11: 1099-NEC Recipients vs. Non-Recipient Schedule C Filers

	1099-NEC Recipients			Schedule C filers, no 1099-NEC		
	Total (millions)	Mean 1099-NEC income	1099-NECs per recipient	Total (millions)	Mean Schedule C income	Schedule Cs per recipient
No wage and salary income	10.3	33,125	1.6	5.9	97,875	1.0
Wage and salary income, and:						
Mostly wage and salary	12.1	8,250	1.3	4.2	13.375	1.0
Less wage and salary	3.0	46,125	1.8	1.8	154,000	1.1

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. The total number of recipients (1099-NEC) or filers (Schedule C) and total income were both rounded to four significant digits prior to the calculation of average income. "Mostly" vs. "less:" wage and salary income is compared to 1099-NEC income for 1099-NEC recipients, and Schedule C income for the set of Schedule C filers with no 1099-NECs.

fering a granular look at the "missing middle" of the labor market. By observing the match rate between 1099-NEC receipts and formal business declarations, we can quantify the share of the workforce that operates as "latent" businesses—those receiving nonemployee compensation but lacking a formal business signal in traditional administrative registers. These results are foundational for understanding whether 1099-NEC income is a precursor to formal entrepreneurship or an isolated stream of labor income that remains outside the scope of traditional employer-based statistics.

Table 12: Entrant vs. Continuing 1099-NEC Recipients and Non-Recipient Schedule C Filers

	1099-NEC Recipients			Schedule C filers, no 1099-NEC		
	Total (millions)	Mean 1099-NEC income	1099-NECs per recipient	Total (millions)	Mean Schedule C income	Schedule Cs per recipient
Entrant	10.4	11,000	1.1	5.0	54,000	1.0
Continuer	15.1	32,000	1.7	6.9	108,000	1.0

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. All estimates (including average dollar amounts) were rounded in accordance with Census Bureau requirements for the release of data.

Table 12 shifts to a longitudinal perspective, distinguishing new recipients of nonemployee comepensation (entrants), from continuers within the business ecosystem. By tracking individuals over time, the table distinguishes between those with a sustained attachment to both 1099-NEC contracting and Schedule C filing and those who represent transitory "gig" activity. This dynamic view allows us to analyze the lifecycle of the nonemployee relationship and determine the stability of contract work as a structural alternative to traditional employment.

Furthermore, the table highlights the flow of workers between "non-filing" status and formal business ownership, providing evidence on the role of 1099-NEC work as an entry point for micro-businesses. By documenting the share of recipients who transition into filing a Schedule C after receiving 1099-NEC payments, we can assess the degree to which nonemployee compensation facilitates the formalization of "latent" businesses. These transitions are essential for characterizing the fluidity of the modern American worker and the evolving boundaries of the formal business universe.

Table 13: The Dynamics of 1099-NEC Recipiency (millions)

	Total (millions)		Share of Total	
	2021	2022	2021	2022
Total 1099-NECs	34.7	37.1	100.0%	100.0%
Same issuer in 2021 and 2022	16.9	16.9	48.6%	45.4%
Worker received no 1099-NECs in 2021	-	11.9	-	32.0%
Worker received no 1099-NECs in 2022	10.1	-	29.1%	
1099-NEC recipient in 2021 and 2022:				
New issuer in 2022	-	8.3	-	22.5%
Issuer ends in 2021	7.7	-	22.2%	-

Notes: All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY26-CES018-005. Omitted totals (e.g., total 1099-NECs received by non-recipients) and shares are equal to zero by construction.

We explore the dynamics of independent contracting in Table 13. There were 34.7 million 1099-NECs issued to individuals (i.e., not to an EIN) in 2021, and about 37.1 million in 2022. Of these, less than half (16.9 million) were issuer-recipient combinations that were found in both years. That is, that relationship between the contractor and the client firm existed in both 2021 and 2022. Most 1099-NEC issuer-recipient relationships did not span 2021 and 2022. Our microdata allows us to distinguish individuals who did not receive 1099-NEC income at all in one of those years from those who changed their client portfolios. Among the 20.2 million new

issuer-recipient pairs found in 2022, 11.9 million did not receive any 1099-NEC in 2021, while 8.3 million did receive such income. Likewise, among the 17.8 million 1099-NEC relationships that ended in 2021, 10.1 million are associated with individuals who received no 1099-NEC in 2022, and 7.7 million with those who received such income.

5 Future Work

Recent work at Census to identify the owners of employer businesses has resulted in the creation of new administrative-records based microdata: the Employer Characteristics Database. The Employer Characteristics is the employer analogue to NES-D. We plan to leverage both annual Employer Characteristics data and NES-D to characterize the demographics of 1099-NEC issuers and EIN-type 1099-NEC recipients –in addition to the already characterized recipient PIKs. This analysis will evaluate how the demographics of businesses that issue (or receive) 1099-NECs compare to the underlying business demographics of all employers and all nonemployers. To our knowledge, such analyses have not previously been done and would shed light on what segments of the population utilize contractors, and perform contracting services from both a static as well as dynamic perspective.

The incorporation of new IRS return data will also enable enhancements to the LBD-NE infrastructure. Information about whether a nonemployer issues (and/or receives) 1099-NECs allows us to classify businesses in ways that have heretofore not been possible. We can now distinguish between nonemployers that are contracting firms who hire labor with those that do not, and firms can be stratified based on the intensity of their use in terms of number of contractors or level of compensation. We may also observe nonemployers contracting with other EIN businesses (both employers and nonemployers), which can inform an expanded definition of a "firm" relationship. In cases where nonemployers receive 1099-NECs, we may also be able to make categorizations about what kind of business they are engaged in. For instance, a sole-proprietor who receives one 1099-NEC representing the bulk of their revenue may be themselves a contractor working for one firm. On the other hand, an S Corporation receiving many 1099s from other EIN businesses is likely a more complex enterprise serving corporate clients. Therefore, many new tabulations of the NES and NES-D along these dimensions will be possible thanks to the linking of these tax data.

Building upon these infrastructural advancements, the next frontier for this research is the development of a comprehensive suite of workforce dynamics statistics that fully integrate the self-employed. Historically, published measures of labor market churn—such as entry, exit, and job-to-job mobility—have excluded nonemployee activity, leaving a significant gap in our understanding of total workforce fluidity. Future work can address this by integrating IRS Form 1099-K records alongside the 1099-NEC filings utilized in this paper to capture a more exhaustive characterization of platform-processed payments and the broader "gig economy". Because the 1099-NEC specifically links the compensated worker to a paying business entity, this framework opens the door to measuring nonemployee transitions and labor market mobility across specific industries, geographies, and demographics. Furthermore, this longitudinal approach enables the systematic tracking of worker reclassification, providing empirical evidence on when and why businesses shift workers between traditional employment and nonemployee roles. Together, these expanded statistics will provide a uniquely detailed, data-driven view of how contracting and platform work shape the modern American labor market.

6 Conclusion

This paper provides a new characterization of the modern nonemployee workforce by leveraging a novel linkage of IRS Form 1099-NEC administrative records with the U.S. Census Bureau's comprehensive business data infrastructure. While a growing body of literature has documented the rise of the gig economy and independent contracting, empirical progress has long been hampered by the limitations of household surveys and the fragmented nature of administrative tax data. By integrating transaction-level information returns with the BR, the LBD, and the job frames, we move beyond survey-based proxies to a transaction-based view of labor service provision. Our approach allows us to observe the flow of payments from the perspective of both the payer and the recipient, providing a more complete account of the "missing middle" of the labor market that exists between traditional wage-and-salary employment and formal business ownership.

Our results reveal a workforce that is significantly more heterogeneous and integrated into the formal economy than previously recognized. We find that the nonemployee landscape is not a monolith of "gig" workers; rather, it consists of a complex mix of established contrac-

tors, "latent" businesses operating without a formal employer signal, and a large number of "moonlighters" who utilize nonemployee compensation to supplement traditional W-2 earnings. By reconciling these payments with formal self-employment filings (Schedule C), we document that the visibility of this activity in traditional administrative frames varies substantially by industry and recipient demographics. Furthermore, our longitudinal analysis suggests that for many, nonemployee work serves as a critical entry point into the formal business ecosystem, facilitating the transition from informal labor provision to established entrepreneurship.

The implications of these findings for economic measurement are substantial. As the boundary between being an "employee" and a "business" continues to blur, traditional indicators of labor market health—such as the unemployment rate or payroll employment counts—may fail to capture the true scale of productive activity. Our results suggest that the growth in nonemployer business statistics documented in recent years is driven in large part by the firm-to-individual contracting captured in the 1099-NEC data. For policymakers, this shift highlights a growing misalignment between the actual organization of production and the design of economic safety nets. If a rising share of the workforce exists outside the W-2 system, existing frameworks for UI, workers' compensation, and tax withholding may require examination to remain effective in a "contract-first" economy (Abraham et al., 2024).

Despite the richness of the linked 1099-NEC and Census data, several questions remains for future research. While we have analyzed 1099-NECs from 2021 and 2022, the scheduled increase of the reporting threshold from $600 to $2,000 under the One Big Beautiful Bill Act of 2025 may create a challenge for longitudinal consistency. Future work should investigate how this higher threshold affects the visibility of small-scale "gig" work and whether it induces changes in how firms and contractors structure their payment arrangements. Additionally, as the SEJ continues to evolve (Graham et al., 2025), integrating multi-year histories of nonemployee compensation could provide deeper insights into whether contract work serves as a permanent alternative to traditional employment or a transitory state during periods of economic volatility. Ultimately, the continued modernization of the administrative data infrastructure remains essential for maintaining a clear-eyed view of the American worker in a rapidly changing labor market.

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