

# **The Rise of Alternative Work Arrangements: Evidence and Implications for Tax Filing and Benefit Coverage**

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# The Rise of the Alternative Workforce

- Increased interest in measuring the extent to which people engage in non-traditional employment
- GAO (2015) estimates a range of less than 5% to more than one third of the total employed labor force depending on the definition and the data source
- Katz and Krueger (2016) find that the share of contingent workers increased by 50% between 1995 and 2015
  - Net employment growth between 2005 and 2015 is almost entirely (95%) due to growth in alternative work arrangements

# Online Gig Economy

- A growing segment of the alternative workforce includes people who use an online intermediary that matches workers to customers (online gig economy)
  - e.g Uber, Lyft, TaskRabbit, etc...
- Harris and Krueger (2015) argue that workers comprising the online gig economy do not fit easily into the legal definitions of employee or independent contractor
  - Problematic if workers are misclassified by employers as contractors

# Research Goals

- Our goal is to categorize people into meaningful employment categories using income information from tax data
- Self-employment group is diverse
  - We create a set of rules in an attempt to separate independent contractors, employees with contract income, and business owners
- Also interested in identifying people who participate in the online gig economy
- We then compare economic situations across the different worker type
  - Income, household structure, benefits

# Some Pitfalls of Tax Data

- Tax forms are not a perfect indicator
  - A temporary worker may receive wages if they are hired as an employee through a temp agency
  - In tax data this will look like someone with a “traditional” job despite being considered a contingent worker
- People earn multiple forms of income
  - A worker with a traditional job may also have contract income from side consulting work
  - In tax data, they would file a Schedule C and therefore look like someone who is self-employed
- Not everyone receives third party information reporting
  - e.g. thresholds for receiving a 1099K are high
- Difficult to identify firms which firms are issuing W2's, 1099MISC, 1099Ks based on EINs

# Some Strengths of Tax Data

- Large number of observations spanning many years allow us to look at trends over time in types of employment over time
  - Large sample particularly useful when trying to analyze small sub-population of online gig workers
- Link across multiple pieces of information to compare demographic and economic characteristics
  - 1040: AGI, family structure, health care coverage
  - 1095A: Exchange coverage
  - 5498, W2: Retirement benefits

# Data

## **Comparison of 2014 Self-Employed and Wage Earners**

- Draw 10% random sample of people who file a Schedule SE and Schedule C
- Draw 1% random sample of people with W2 and no Schedule SE
  - Merge various forms to get information on age, gender, household income, wages, and access to benefits

## **Trends in Self-Employment, 2000-2014**

- Draw 1% random sample of Schedule SE and Schedule C filers

# Categorizing the Self-Employed

- Use presence of certain tax forms to create course groupings
  - W2: Traditional employee-employer relationships
  - 1099MISC, 1099K, Schedule C, Schedule SE: Online gig economy, contractors, business owners
- We classify people with self-employment income into groups using sources of income and size of business activity
  - Share of total earnings made up by wages
  - Refine categories using amount of business expenses deducted on Schedule C



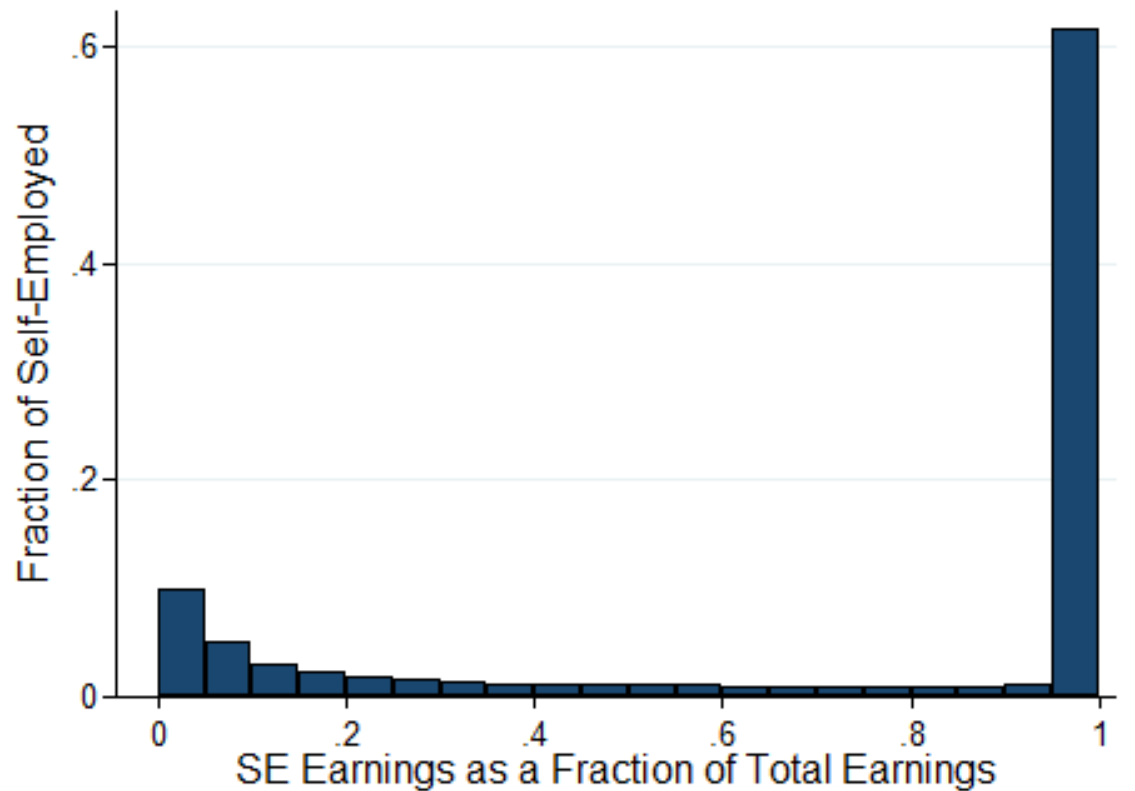
# Tax Forms Filed/Received by Earnings Source, 2014

| <b>2014</b>  | <b>Files<br/>Sched C</b> | <b>One<br/>1099MISC</b> | <b>Multiple<br/>1099MISC</b> | <b>One<br/>1099K</b> | <b>Multiple<br/>1099K</b> |
|--------------|--------------------------|-------------------------|------------------------------|----------------------|---------------------------|
| Wage Only    | 4.4%                     | 2.6%                    | 0.5%                         | 0.3%                 | 0.0%                      |
| SE Only      | 88.5%                    | 32.0%                   | 18.8%                        | 5.8%                 | 2.2%                      |
| SE and Wages | 86.3%                    | 43.1%                   | 16.5%                        | 2.9%                 | 0.9%                      |

- Large fraction of people with SE income did not receive a 1099MISC
- Very few people receive 1099K
- Majority of people with SE income also file a Schedule C
  - We will focus on income and expenses from Schedule C

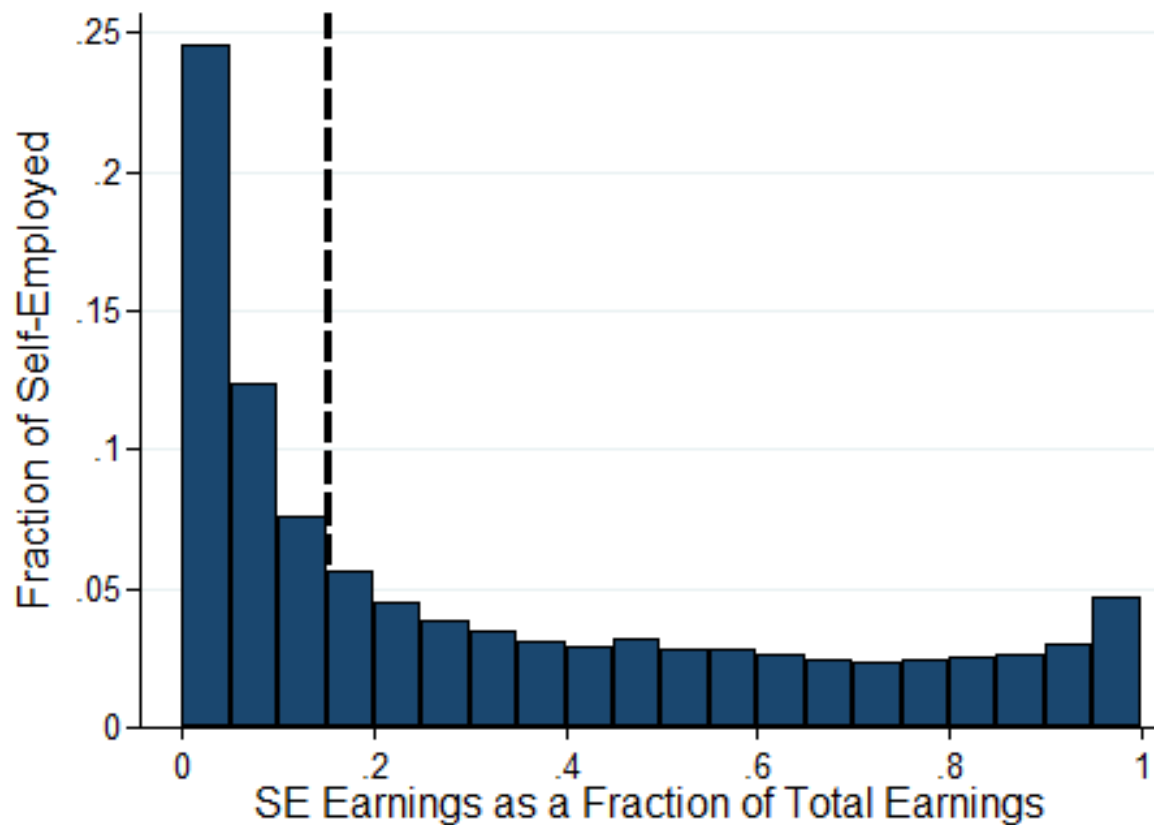
# SE income as a Share of Total Earnings

- Among those with self-employment income, majority (60%) have no wage earnings



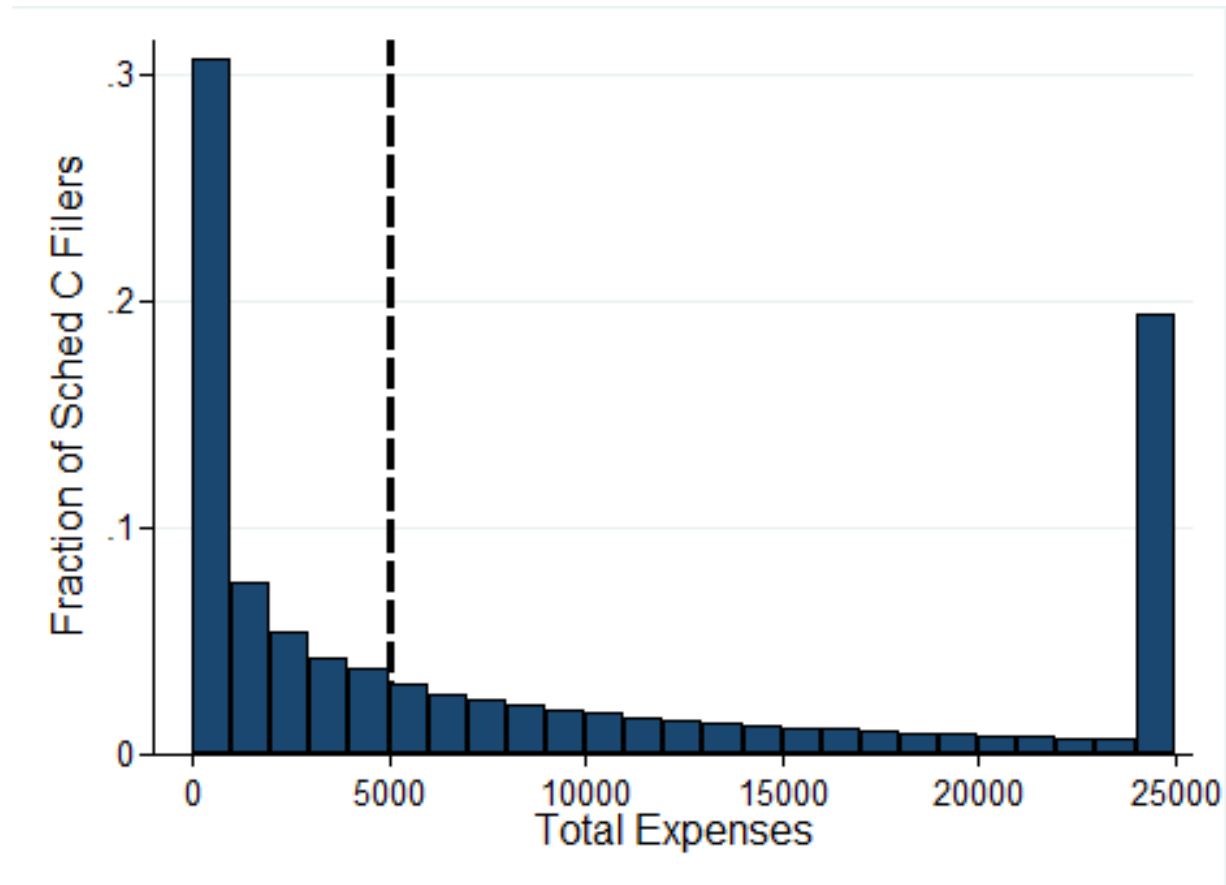
# SE income as a Share of Total Earnings

- Around 44% of people with both wages and self-employment income, earn mostly wages ( SE share < 15%)



# Schedule C Expenses

- Around 50% of Schedule C filers have less than \$5000 in deductions for expenses



# Classification of the Schedule C/SE

|                | Earnings Criterion | Total deduction for expenses |        |         |       |
|----------------|--------------------|------------------------------|--------|---------|-------|
|                |                    | < 5K                         | 5K-10K | 10K-25K | 25K+  |
| Primarily Wage | > 85% Wages        | 57.3%                        | 14.4%  | 14.3%   | 7.7%  |
| Both           | 15-85% Wages       | 62.8%                        | 12.3%  | 13.6%   | 11.3% |
| Primarily SE   | < 15% Wages        | 41.6%                        | 12.4%  | 19.8%   | 26.2% |

- For most Schedule C/SE filers whose wages comprise at least 15% of total earnings, expenses generally fall below \$5,000

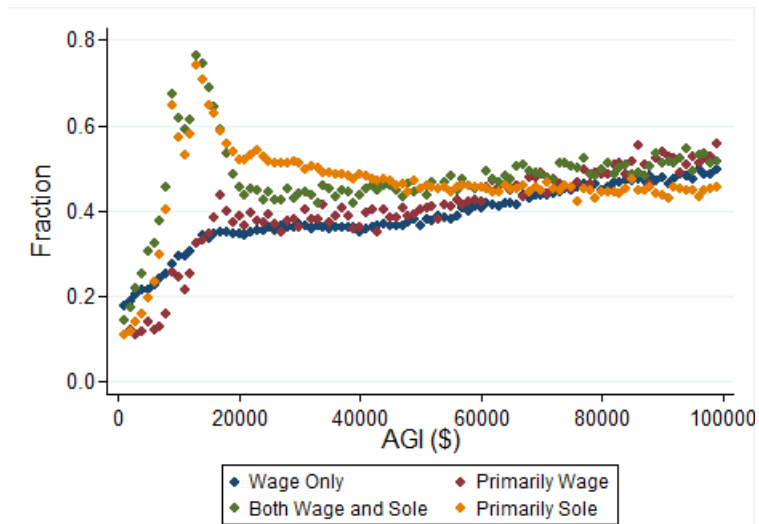
# Demographics and Benefits, 2014

|                                  | Male       | Married    | Has Children | Covered by HI | Contributes to Retirement |
|----------------------------------|------------|------------|--------------|---------------|---------------------------|
| Wage Only                        | 51%        | 52%        | 42%          | 87%           | 42%                       |
| Primarily Wage                   | 58%        | 58%        | 45%          | 90%           | 45%                       |
| <b>Both; &lt; 5K Exp</b>         | <b>42%</b> | <b>40%</b> | <b>56%</b>   | <b>77%</b>    | <b>17%</b>                |
| Both; > 5K Exp                   | 63%        | 59%        | 47%          | 80%           | 28%                       |
| <b>Primarily SE; &lt; 5K Exp</b> | <b>43%</b> | <b>48%</b> | <b>52%</b>   | <b>74%</b>    | <b>5%</b>                 |
| Primarily SE; > 5K Exp           | 66%        | 62%        | 44%          | 75%           | 10%                       |

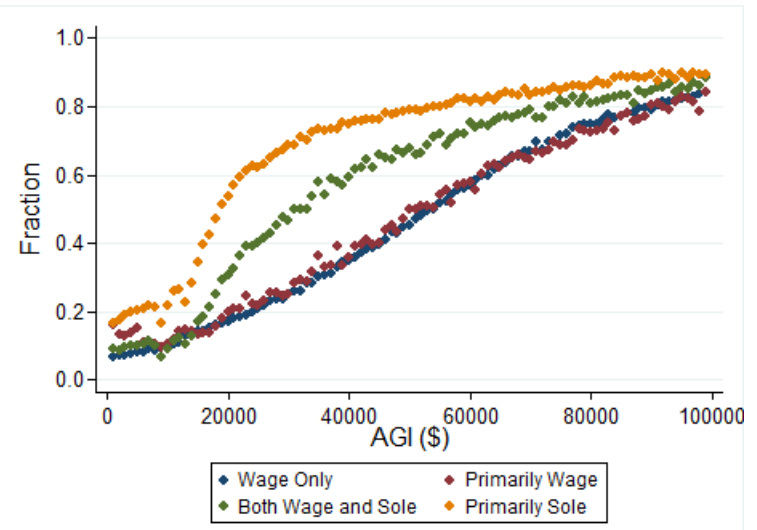
- The SE with few expenses are more likely to be female, single, and have children, and less likely to be covered by health insurance or contribute to a retirement account

# Demographics by AGI, 2014

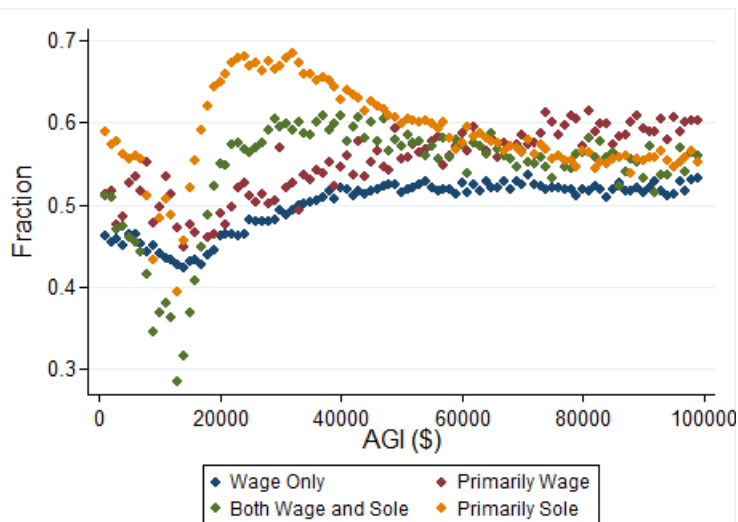
## Fraction with Children



## Fraction Married



## Fraction Male



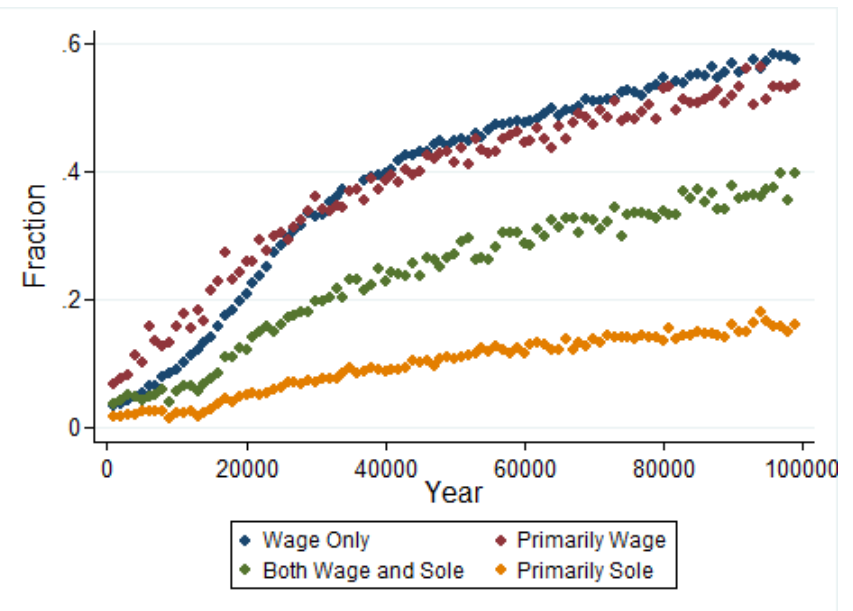
- Less variation in demographics across groups at higher AGI's

# Benefits Coverage, 2014

## Covered by Health Insurance



## Contributes to a Retirement Plan

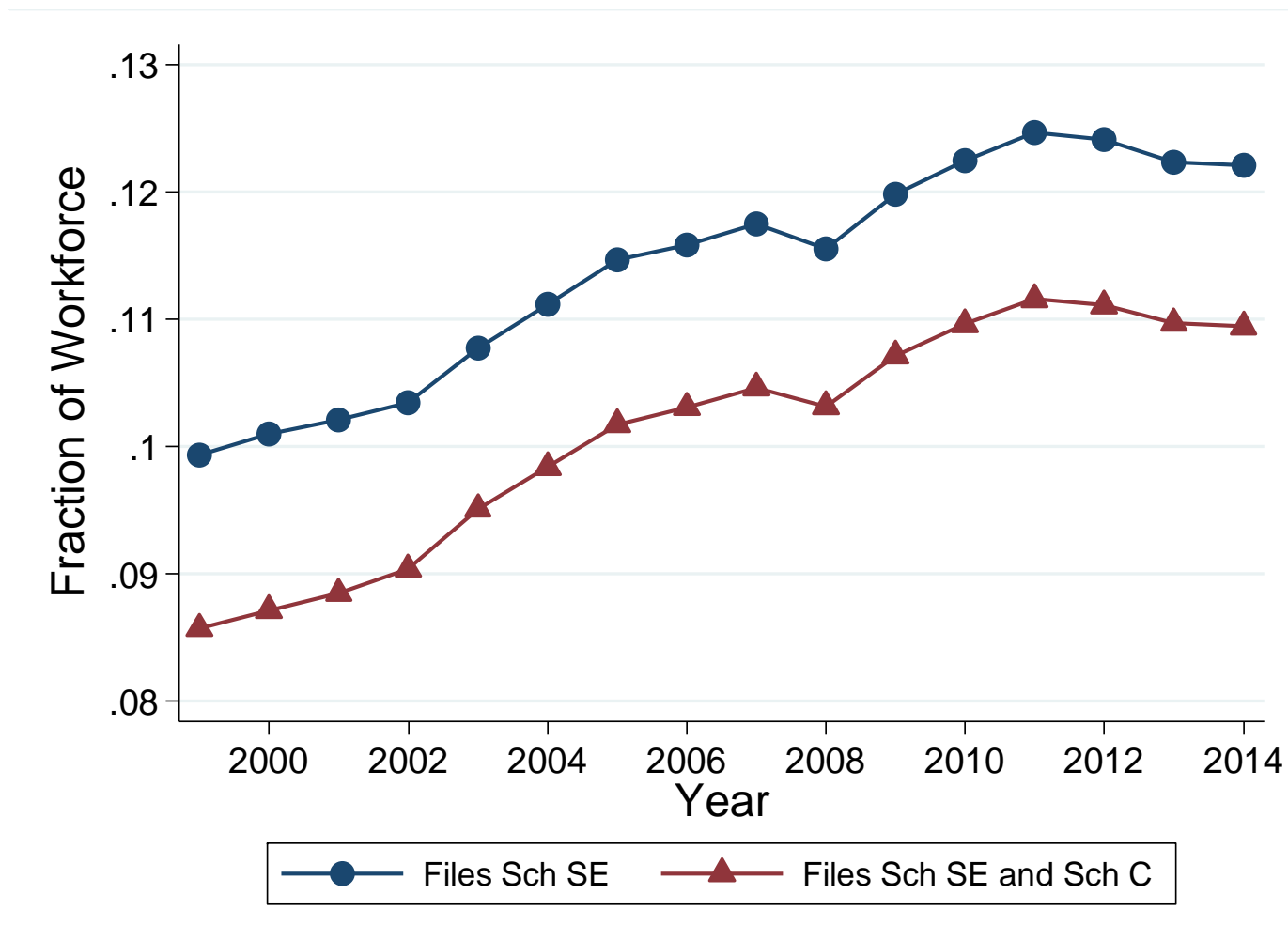


- Gap between wage earners and self-employed closes with income for health insurance but not for contributing to a retirement plan



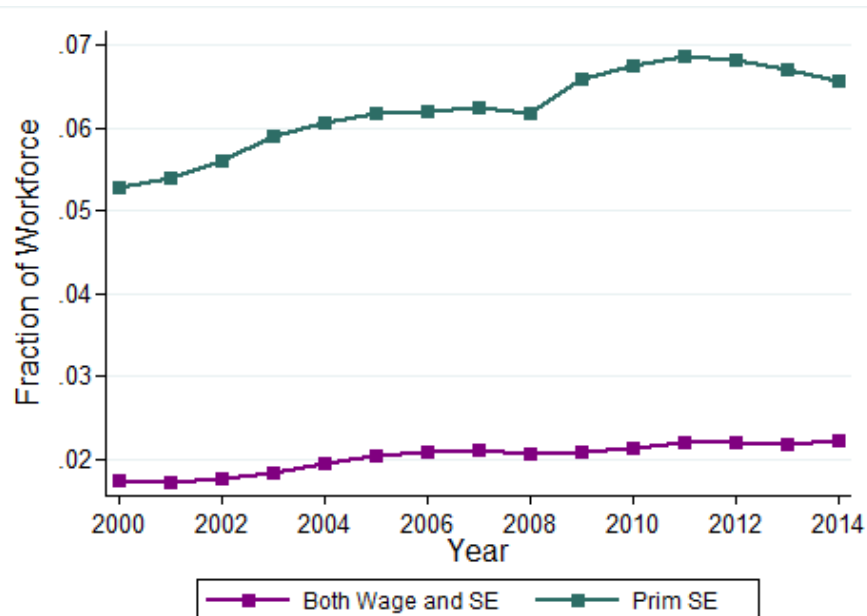
# Growth in Self-Employed

- Fraction of people with income from self-employment grew by roughly 25% between 2000 and 2014

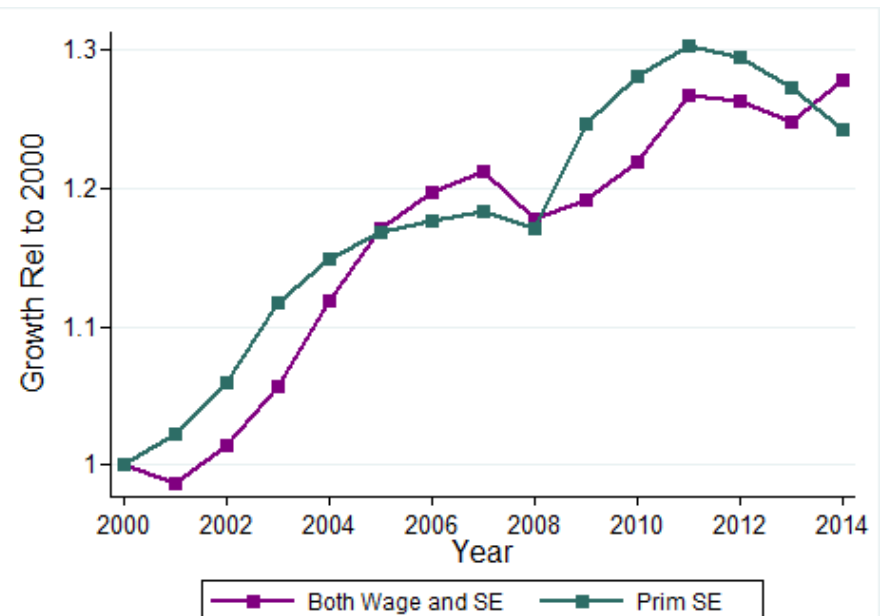


# Changes Over Time

## Share Of Workforce



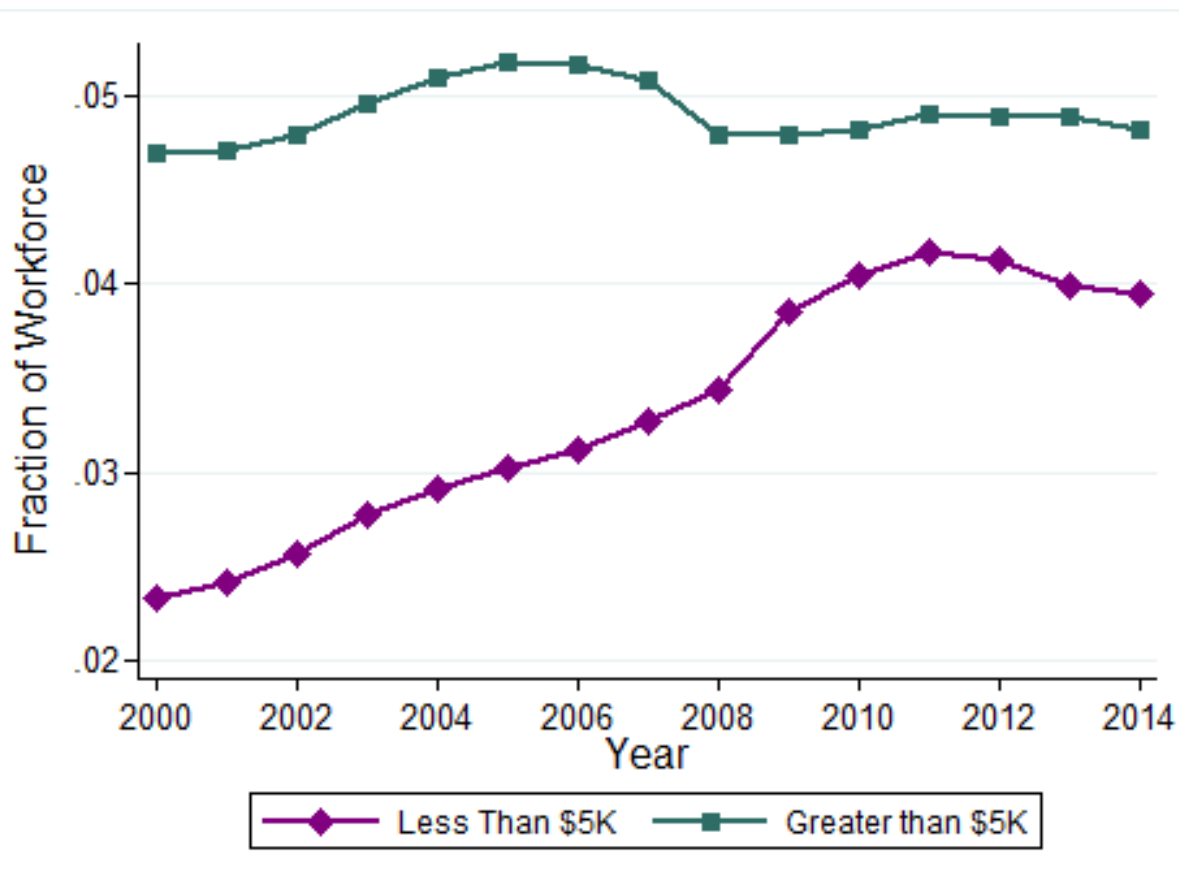
## Share Relative to 2000



- Share of workforce made up by those with at least 15% of earnings from SE income has been growing over time

# Trends in Expenses

- Growth in SE filers is driven by those with few expenses
- Consistent with growth in the online gig economy



# Identifying Gig Workers

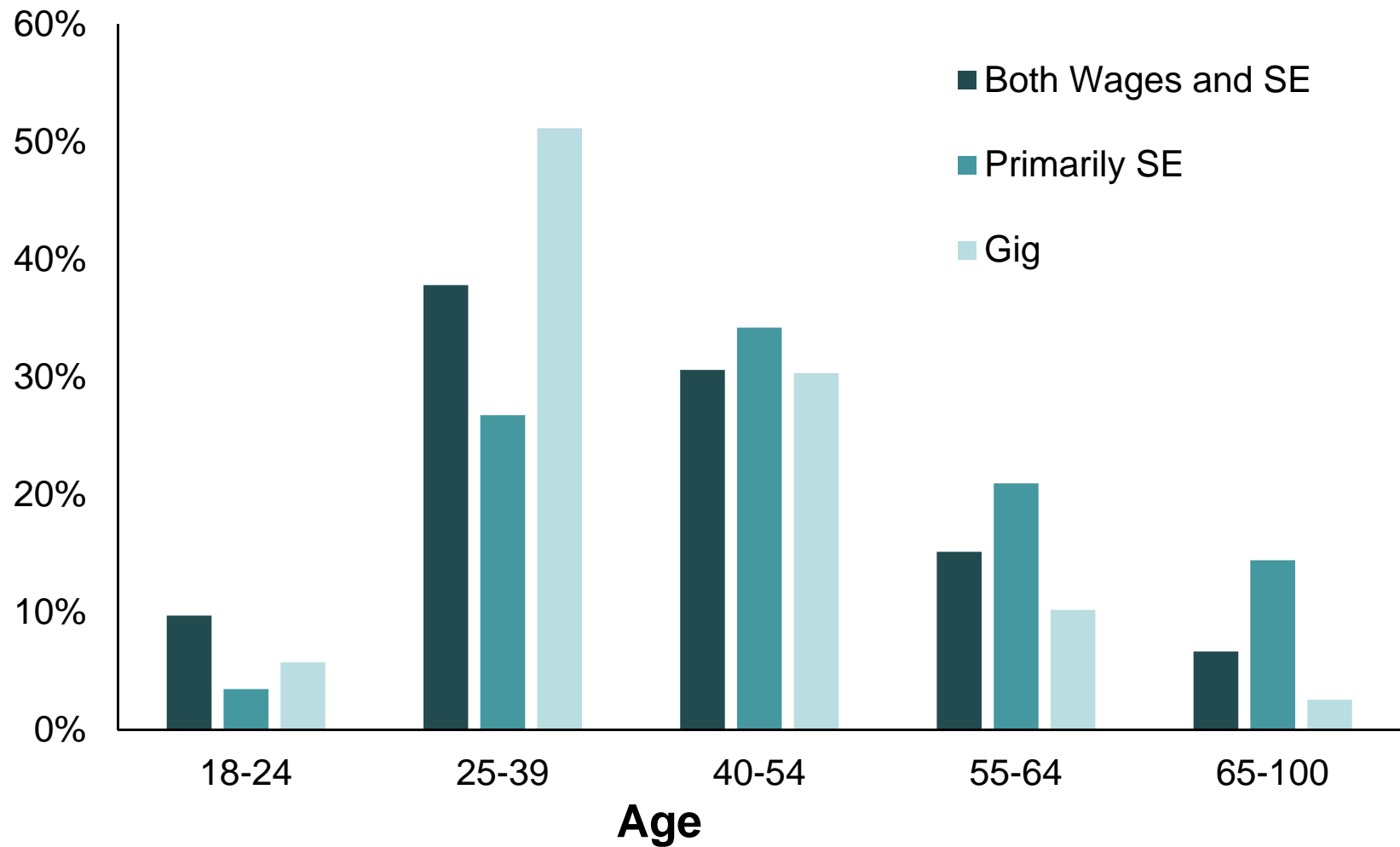
- Self-identified as working at an online gig firm on Schedule C
  - Generally follow Harris and Krueger (2015) in identifying online gig firms
  - Likely an underestimate of the true online gig workforce
- Identify additional workers by matching EIN from self-identified information returns
  - Might include some additional people
- Interested in comparing characteristics of gig workers to self-employed groups

# Identifying Gig Workers

|                | Share of Online Gig Workers |
|----------------|-----------------------------|
| All Workers    | 0.21%                       |
| Primarily Wage | 1.1%                        |
| Both           | 0.95%                       |
| Primarily SE   | 0.73%                       |

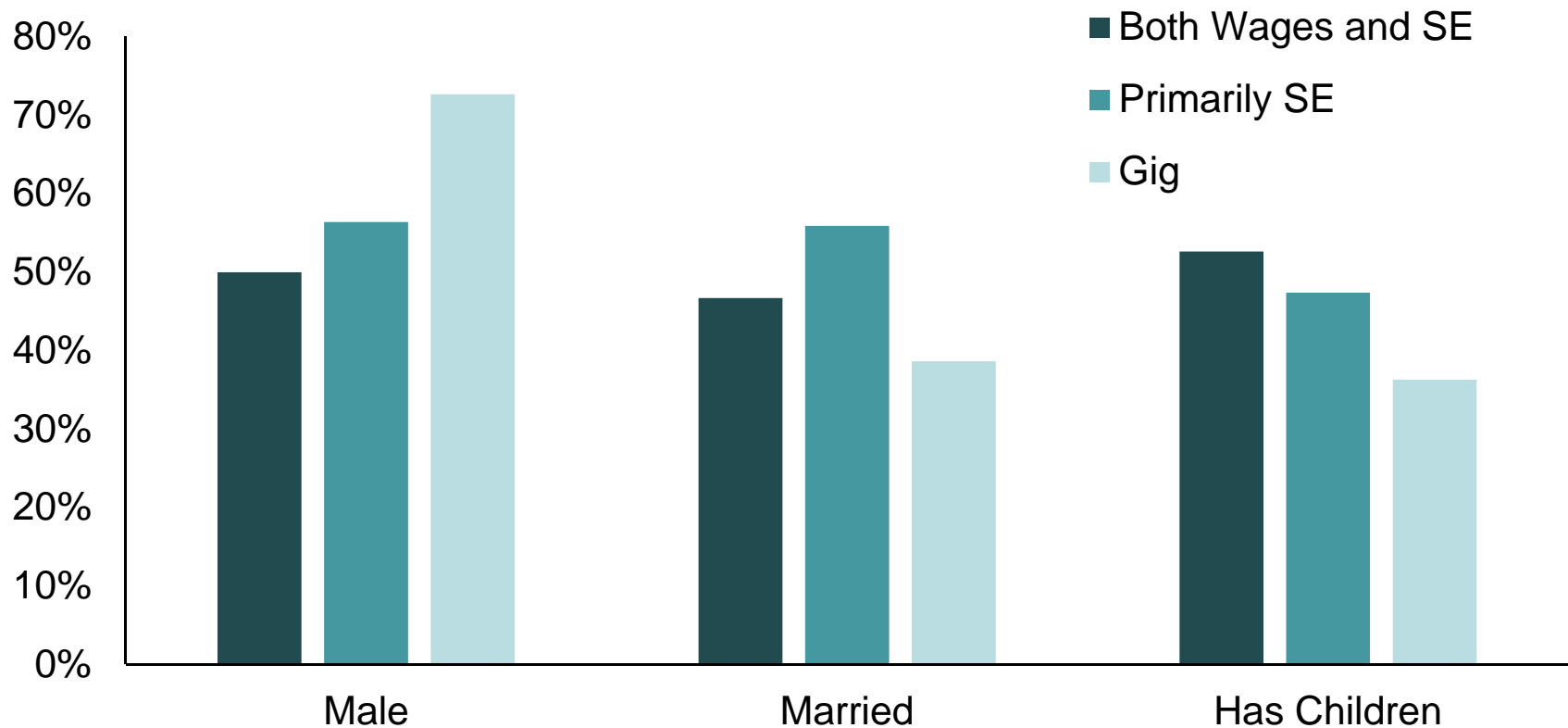
- Largest share of online gig workers appear in the Primarily Wage category

# Demographics, Age



- Online gig workers tend to be younger than the other SE filers

# Demographics, Gender/Family Structure



- Online gig workers are more likely to be male and less likely to be married or have children

# Economics Characteristics

|                   | Total Earnings | Wages  | SE Earnings |
|-------------------|----------------|--------|-------------|
| All Workers       | 47,396         | 43,806 | 3,590       |
| Wage Only         | 47,325         | 47,325 | n.a.        |
| Primarily Wage    | 70,969         | 69,372 | 1,597       |
| Both              | 43,113         | 24,731 | 18,381      |
| Primarily SE      | 28,146         | 188    | 27,957      |
| Online Gig Worker | 35,644         | 29,814 | 5,830       |

- Online gig workers earn less in wages compared to wage earnings and less in SE income compared the other SE groups
- On average their total earnings are higher than the primarily se



# Benefits Coverage

|                   | Made a Contribution to IRA/401K | Covered by Health Insurance |
|-------------------|---------------------------------|-----------------------------|
| All Workers       | 38.3%                           | 86.2%                       |
| Wage Only         | 41.9%                           | 87.1%                       |
| Primarily Wage    | 44.9%                           | 89.7%                       |
| Both              | 21.3%                           | 78.4%                       |
| Primarily SE      | 7.8%                            | 74.7%                       |
| Online Gig Worker | 27.6%                           | 80.4%                       |

- Online gig workers are less likely to contribute to a retirement plan or be covered by health insurance compared to wage earners but more likely compared to other SE groups

# Summary/Conclusion

- Share of total earnings from wages along with total expenses reported on Schedule C worked well as a way to categorize people
- The 1099MISC and 1099K were limited in their use for identifying people in the alternative workforce
  - Added little to what we could learn from Sched SE/C
  - High thresholds and noisy information on form issuer
- Overall, we find those with few expenses drove increase over time in the share of people with SE income
  - Consistent with growth in the online gig economy