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

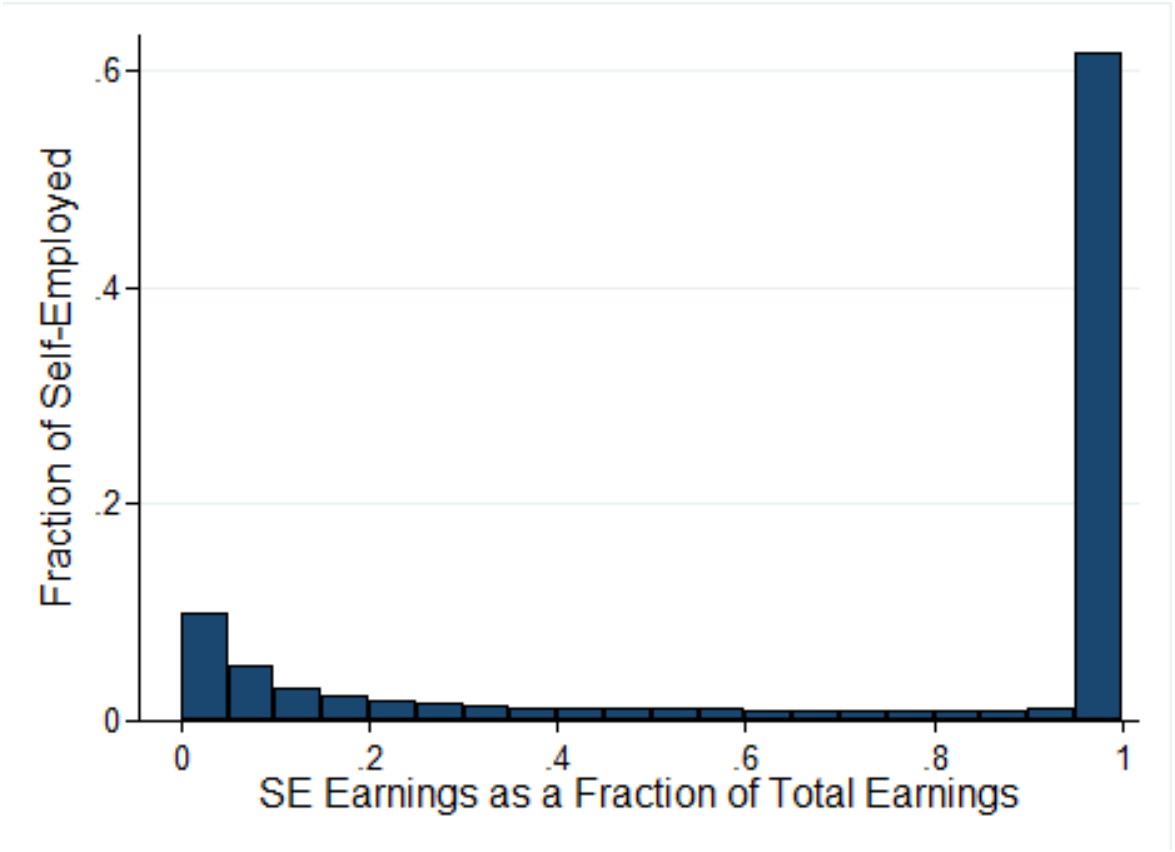
Tax Forms Filed/Received by Earnings Source, 2014

2014	Files Sched C	One 1099MISC	Multiple 1099MISC	One 1099K	Multiple 1099K
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

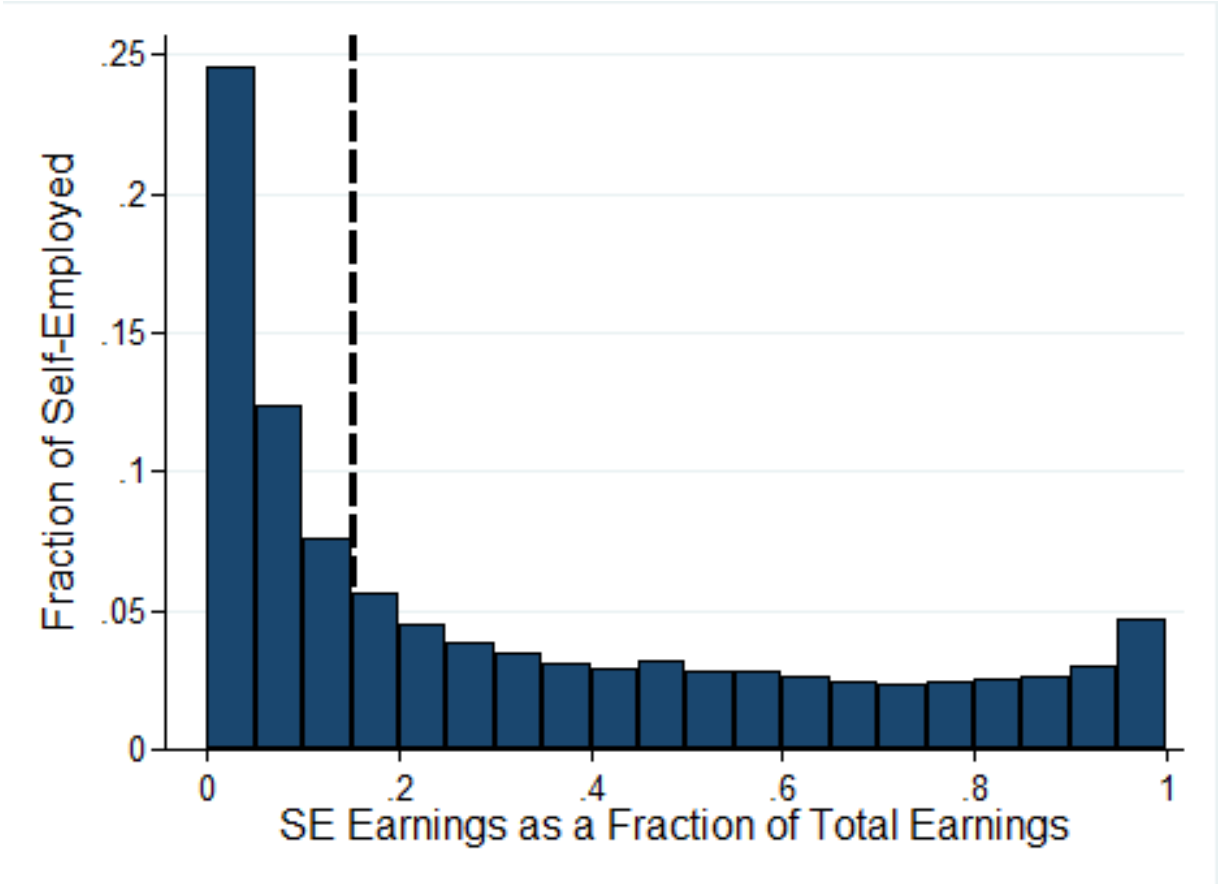
SE income as a Share of Total Earnings

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



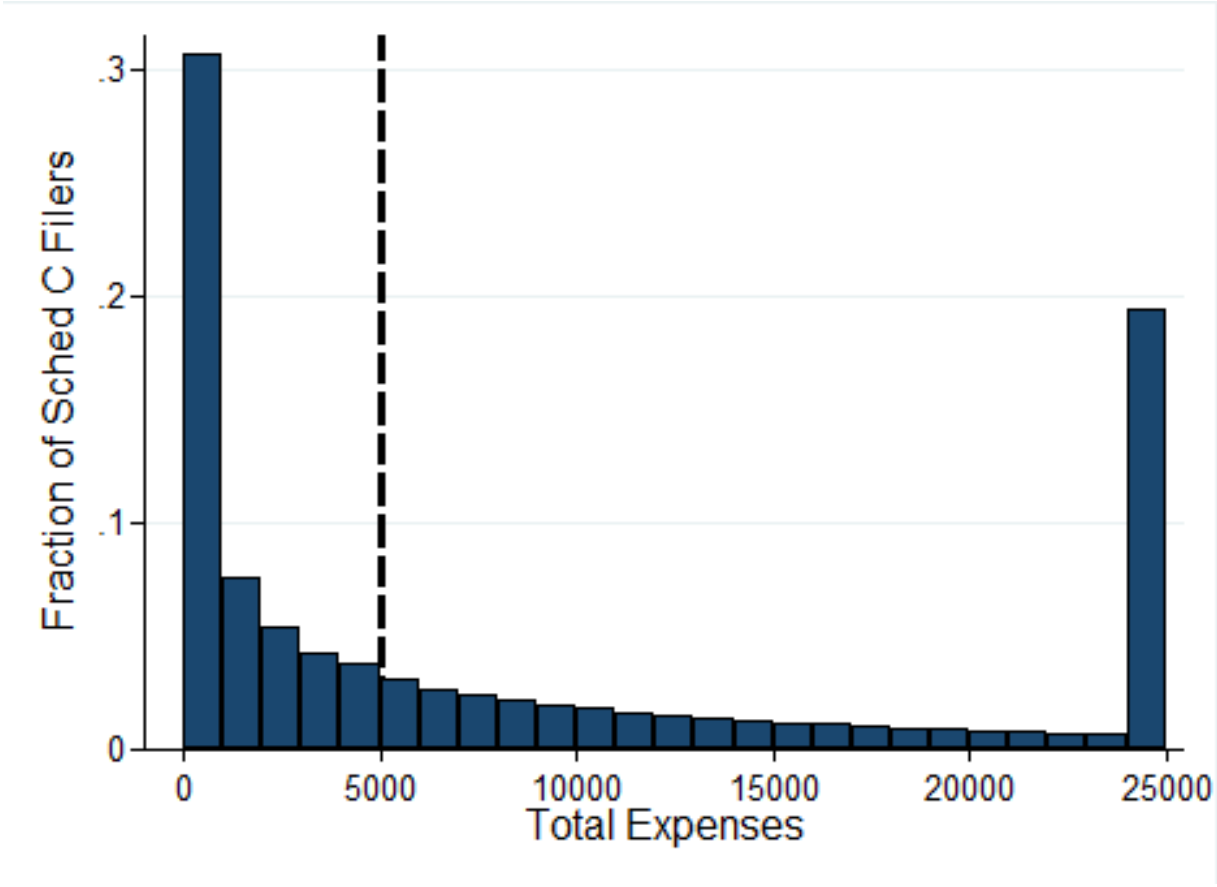
SE income as a Share of Total Earnings

- 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

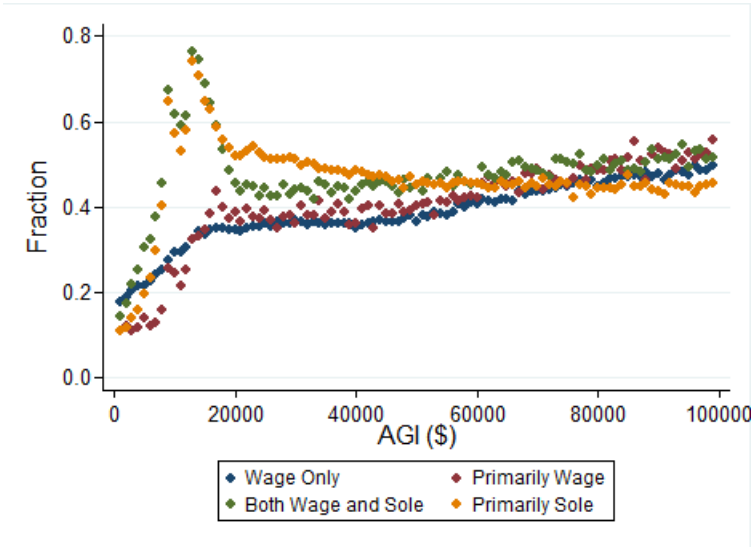
Demographics and Benefits, 2014

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

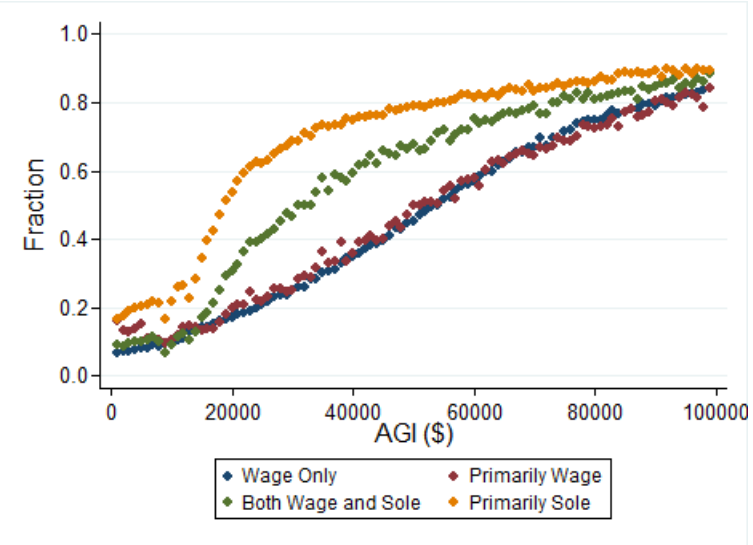
- The SE with few expenses are more likely to be female, single, and have children, and less likely to be covered by health insurance or contribute to a retirement account

Demographics by AGI, 2014

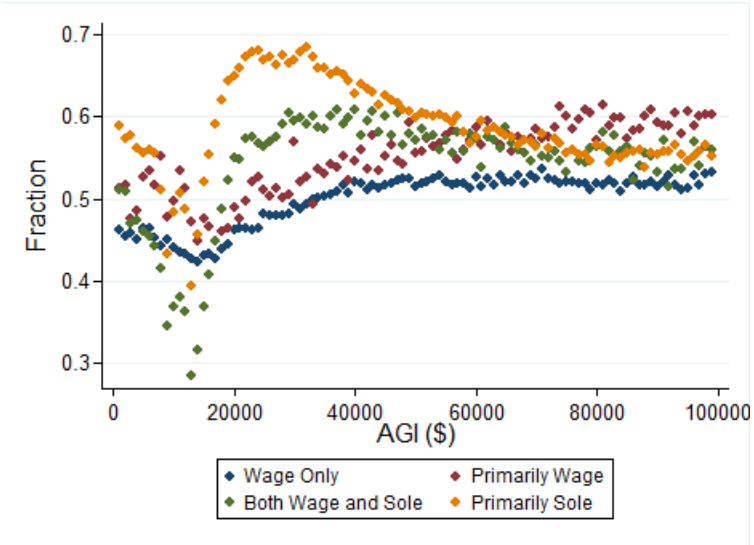
Fraction with Children



Fraction Married



Fraction Male

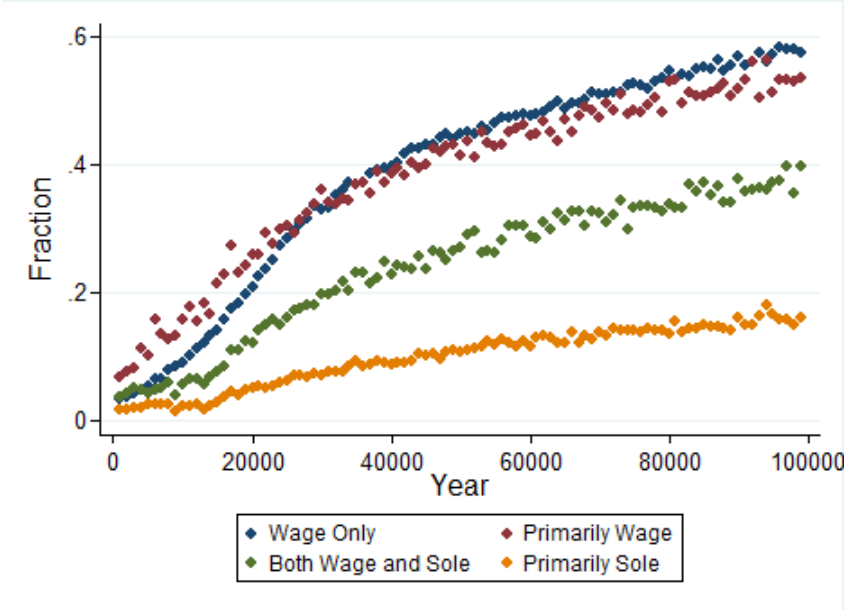


- Less variation in demographics across groups at higher AGI's

Benefits Coverage, 2014

Covered by Health Insurance

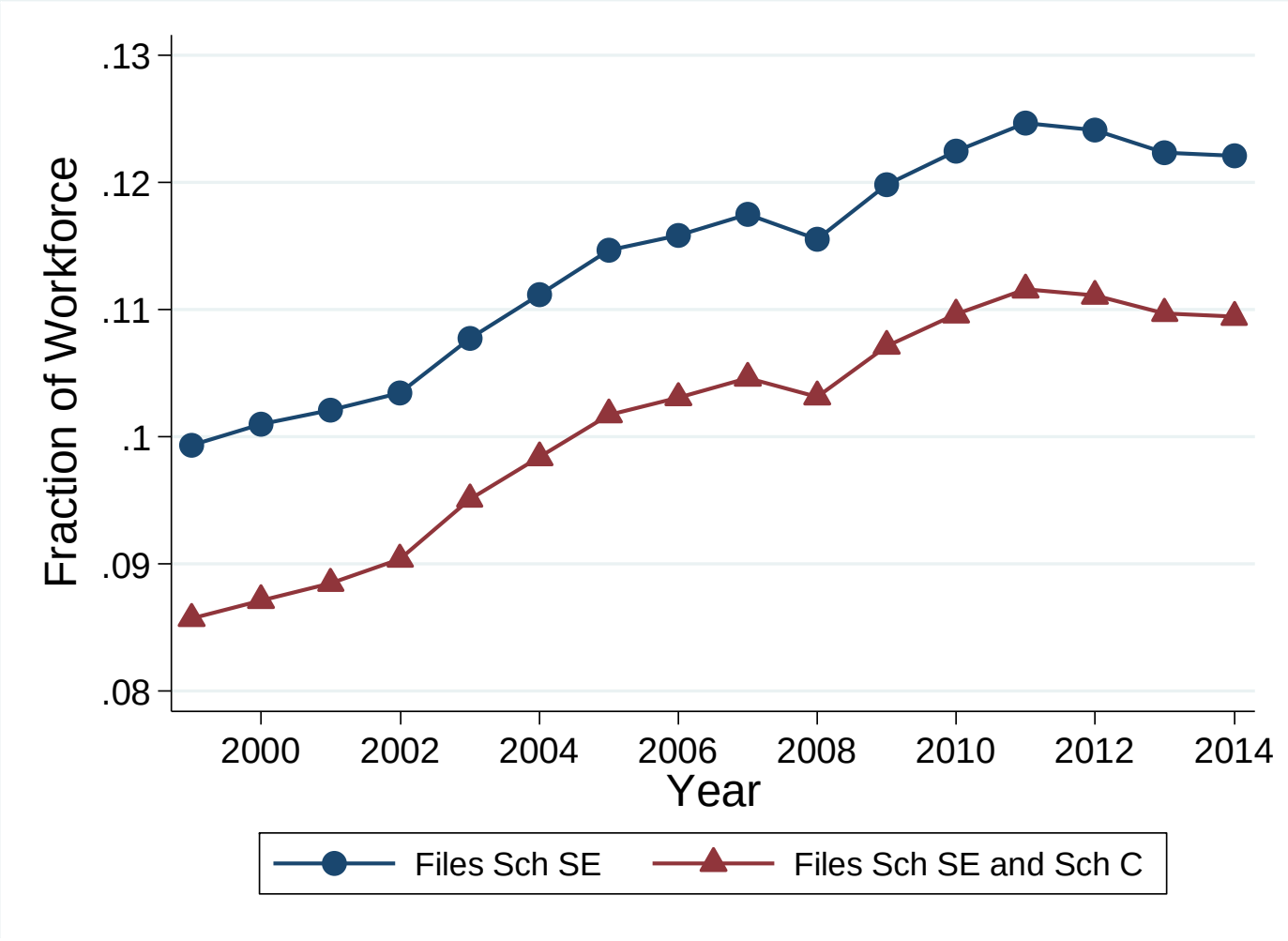
Contributes to a Retirement Plan



- 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

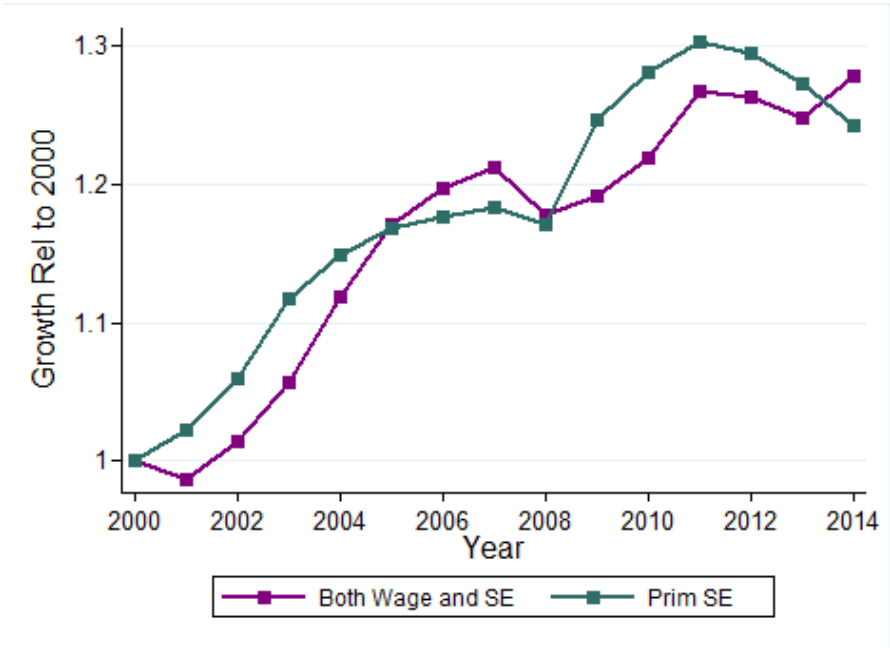
- Fraction of people with income from self-employment grew by roughly 25% between 2000 and 2014



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

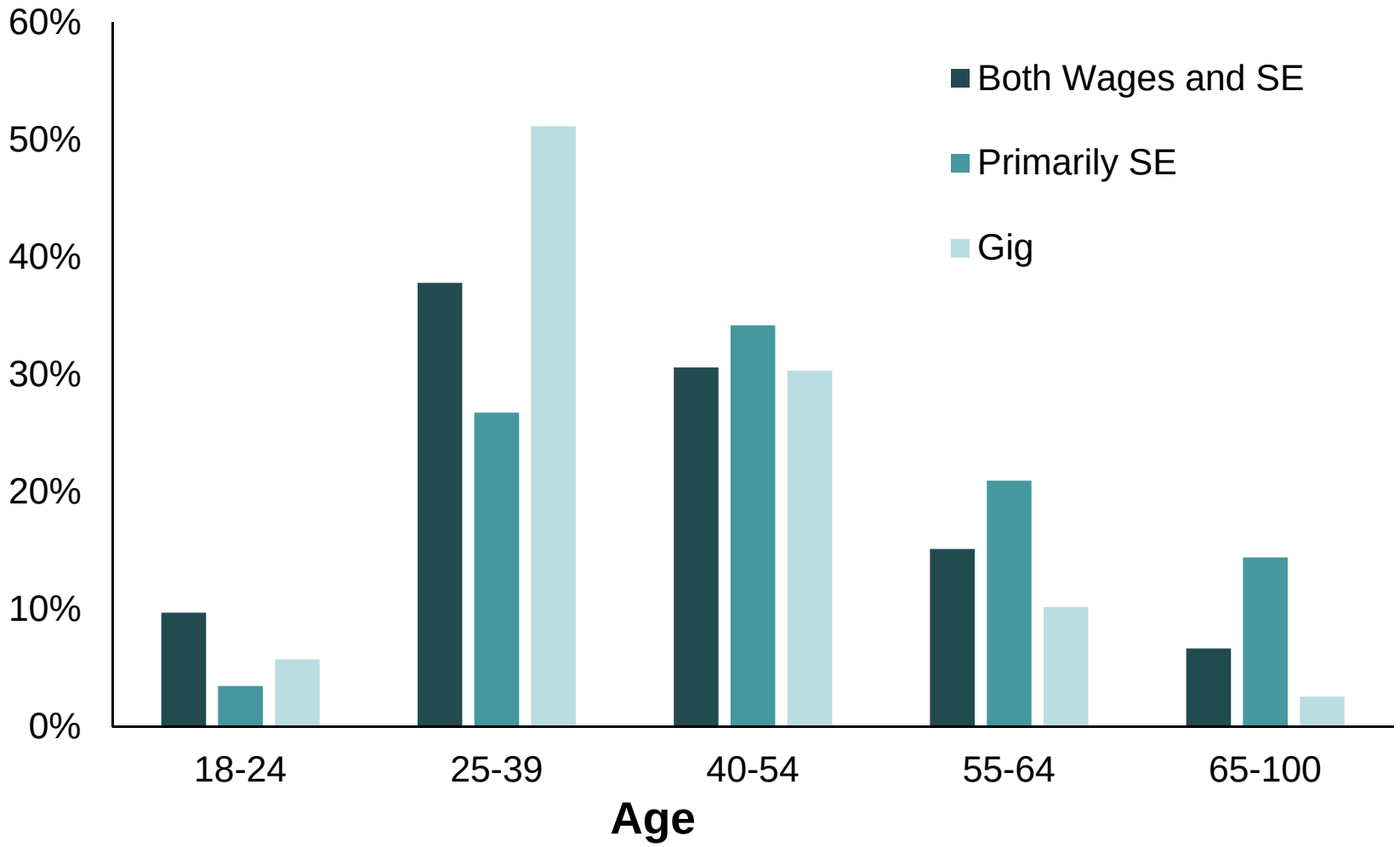
- Self-identified as working at an online gig firm on Schedule C
  - Generally follow Harris and Krueger (2015) in identifying online gig firms
  - Likely an underestimate of the true online gig workforce
- Identify additional workers by matching EIN from self-identified information returns
  - Might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

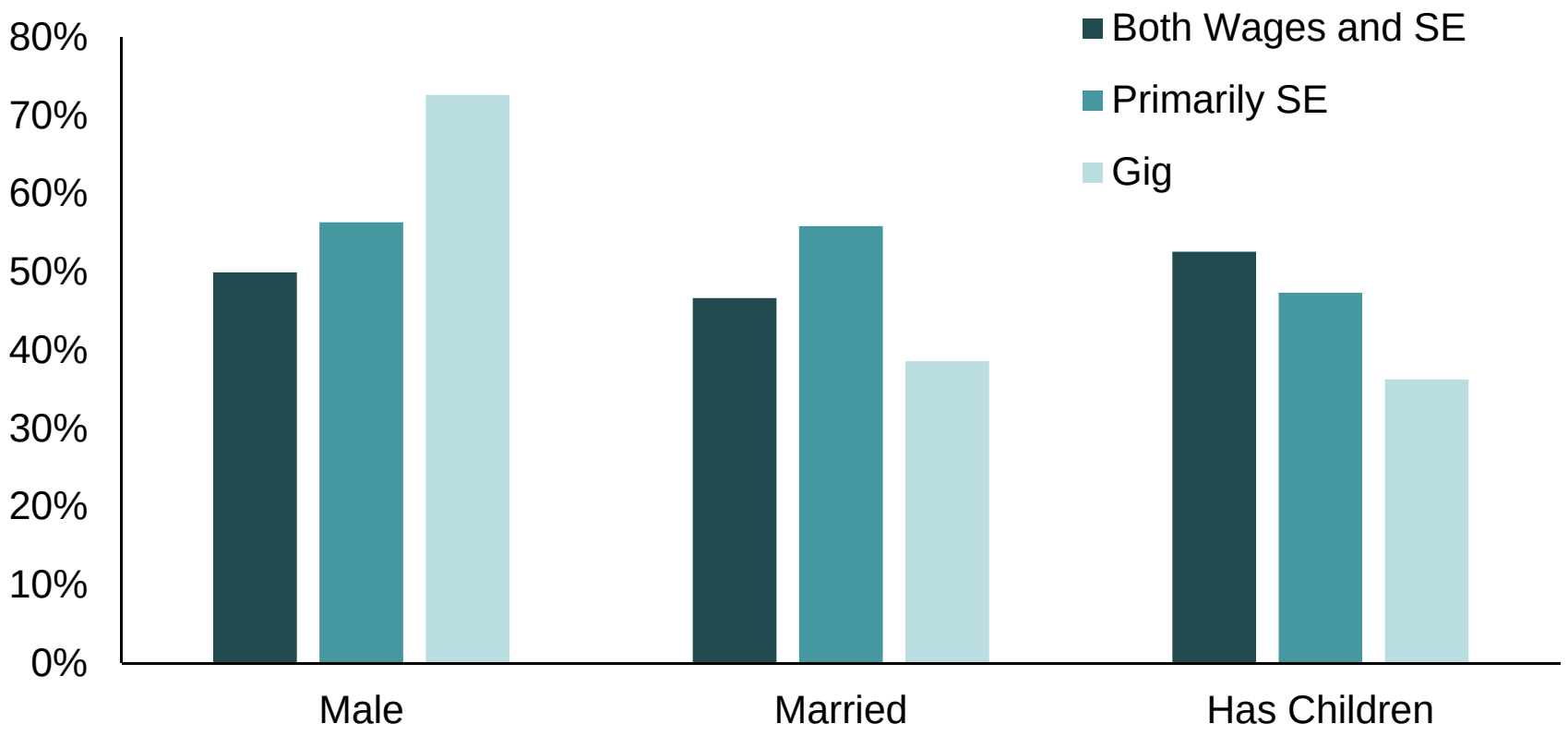
- Largest share of online gig workers appear in the Primarily Wage category

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