Independent Contracting, Self-Employment, and Gig Work: Evidence from California Tax Data

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Motivation

- Little rigorous evidence about the prevalence of independent contracting exists
- Puzzling and contradicting evidence
 - → Anecdotes and non-representative samples indicate increases in freelance work (Freelancers Union, Upwork, and Edelman Intelligence 2016)
 - → Major labor force surveys tend to show negligible increases in independent contracting or self-employment since 2000 (Katz and Krueger 2019, Abraham et al. 2021)
- Issues with existing employer surveys and administrative data
 - \rightarrow Designed to measure traditional work
 - → Independent contracts may not perceive themselves as such or do side jobs not well-captured by standard surveys (Katz and Krueger 2019)
- Tax data can help reconcile the contradicting evidence and can be crucial to understanding the modern labor market

This paper

Setting, Data and Partnership

- California, the fifth largest economy in the world
- The California Policy Lab (CPL) developed a partnership with California tax agency, the Franchise Tax Board (FTB)
- Universe of CA tax-filers, 2012-2017
- Use self-reported Schedule C and 1099 information returns to classify IC workers

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Questions:

- What is the prevalence of independent contracting among tax-filers?
- How does independent contracting interact with traditional employment and the labor market more broadly?
- Who and where are the independent contractors?

Advantages and disadvantages of tax data for measuring IC

Advantages

- Universe of tax-filers with both employer- and self-reported earnings
- Capture information on both primary and auxiliary work that surveys commonly miss
- Less reliance on self-reports for OPE work

Disadvantages

- Individuals have incentives to be strategic in reporting
- Earnings sources subject to transitory changes
- Likely to miss lowest-earning workers
- Cannot observe earnings not reported to tax authorities

Form	Filing level	Relevant data	Type of resident	E-filers	Paper filers	
Header	DLN (filing unit) and SSN	Primary and spouse SSN, age, zip code, filing method	Full-time + part/non-residents	\bigcirc	\bigcirc	
CA 540 & 540 2 EZ	DLN	Filing status, dependents, Federal AGI	Full time residents only	\bigcirc	\odot	
1040, 1040 EZ & 1040A	DLN	EITC, UI benefits, retirement income, etc. Full-time + part/non-residents		\bigcirc		
W2	SSN	EIN, wage & salary earnings, NAICS code*	Full-time + part/non-residents	\bigcirc	\bigcirc	
Schedule C and Schedule C EZ	SSN	Gross receipts, gross income, net profit, NAICS code, expenses	Full-time + part/non-residents	\bigcirc	Flag for households who paper filed	
1099-MISC	SSN	EIN, non-employee compensation, NAICS code	IRS Transfer	\bigcirc		
1099-K	SSN	EIN, gross amount payment card/TPN transactions, NAICS code	IRS Transfer	\bigcirc		

• Universe

- \rightarrow Primarily e-filers (87% of all filers)
- \rightarrow Ages 18-64
- \rightarrow Exclude non-resident/part-year-resident returns

• Universe

• CA Form-540

- \rightarrow CA analog to IRS Form 1040
- \rightarrow Tax-unit level
- $\rightarrow~$ Information about family structure, age, and total family income

• Universe

- CA Form-540
- W2
 - \rightarrow Information returns filed by employers
 - $\rightarrow~$ Information about earnings from traditional jobs

Universe

- CA Form-540
- W2
- Schedule C
 - $\rightarrow~$ Detailed information about self-employment income, expense, and profits
 - $\rightarrow~$ Impose restrictions to avoid counting businesses

Universe

- CA Form-540
- W2
- Schedule C
- 1099-K
 - $\rightarrow~$ Information return used by many online platforms
 - $\rightarrow~$ Used to report payments processed through platforms
 - $\rightarrow~$ Limit to 1099-K from 55 OPE firms we tag

Universe

- CA Form-540
- W2
- Schedule C
- 1099-K
- 1099-MISC
 - $\rightarrow~$ Used and reported for most independent contracting exceeding \$600 in payments
 - \rightarrow Limit to 1099-MISCs with positive non-employee compensation

Traditional Worker, IC, and OPE Definition

Traditional Worker

• Individuals receiving at least one W2 with positive earnings

Independent Contractor (IC)

- IC Gross Receipts = max { Schedule C Receipts, 1099 earnings}
- IC Expenses = Schedule C Expenses
- IC Earnings = IC Gross Receipts IC Expenses
- IC = 1{IC Earnings >0 }

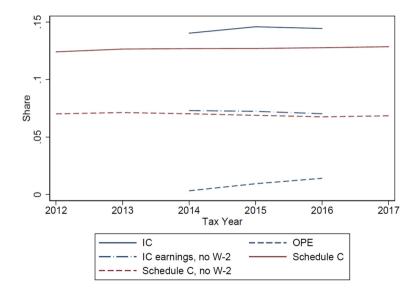
Online Platform Economy (OPE)

• IC with 1099 from at least one OPE firm

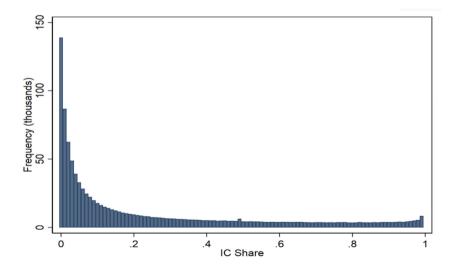
Prevalence of IC in CA

	All filers		Filers with earned income			
	N (1,000s)	%	Total %	No OPE %	With OPE %	
Earned income source	(1)	(2)	(3)	(4)	(5)	
No earned income	2,698	16.2	_			
W-2 only	11,912	71.7	85.6	85.6		
W-2 and IC	1,032	6.2	7.4	6.3	1.1	
IC only	979	5.9	7.0	6.7	0.3	
Total	16,621	100.0	100.0	98.6	1.4	

Prevalence of IC in CA



Most IC earnings are supplemental to traditional employment earnings



Year-to-year stability of IC status

	2016 status							
2015 status (row %)	W-2 only (%) (1)	Primarily W-2 (> 85%) (%) (2)	Mixed W-2 and IC (%) (3)	Primarily IC (>85%) (%) (4)	IC only (%) (5)	No earnings (%) (6)	Total (1,000s) (7)	
								W-2 only
Primarily W-2	51	37	7	1	2	1	417	
Mixed	34	13	34	4	13	3	265	
Primarily IC	18	4	19	22	32	5	47	
IC only	5	1	5	2	75	13	704	
No earnings	10	0	0	0	4	85	1,957	

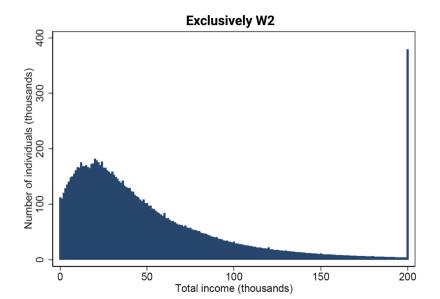
Who are the independent contractors?

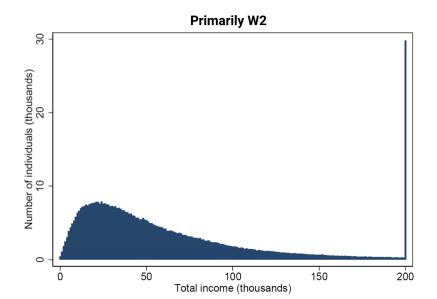
Age

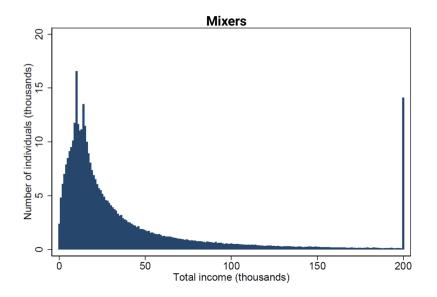
- Larger representations of IC workers in older age groups
 - ightarrow 17.7% of 56-64 year olds have IC earnings compared to 9.4% of 18-24 group
- OPE work more common among younger works
 - ightarrow 4% of 26-40 year olds with OPE earnings compared to 0.6% of the 56-64 group

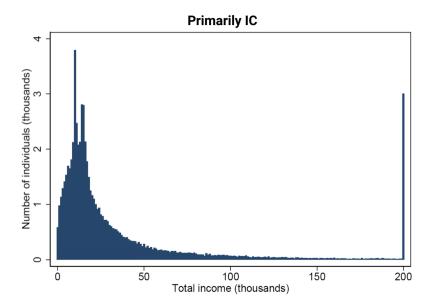
Individual- and Neighborhood-level earnings representation

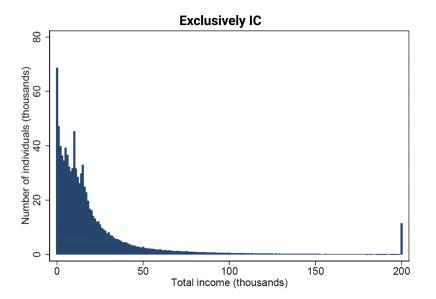
- IC work more prevalent in lower regions of the earnings distribution
 - ightarrow 26.5% of workers in lower quartile have IC earnings compared to 9.6% in the top quartile
 - $\rightarrow~$ 2.4% of workers in lower quartile have OPE earnings compared to 0.4% in the top quartile
- IC work more prevalent in wealthier neighborhoods
 - $\rightarrow~$ 16.8% of workers in the top mean AGI zip quartile have IC earnings compared to 13.9% in bottom quartile

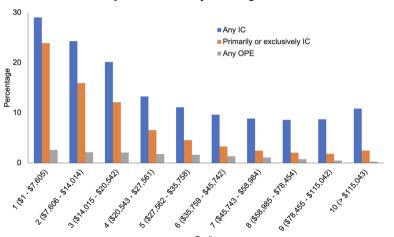








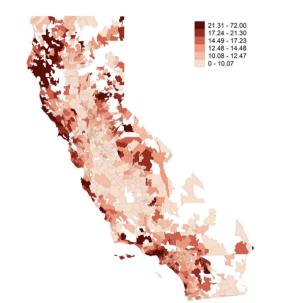




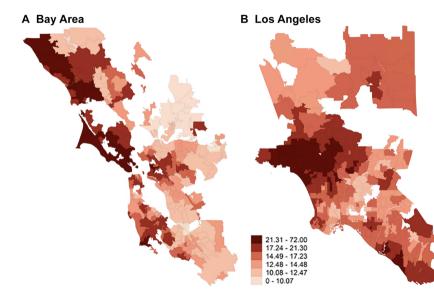
IC Representation by Earnings Decile

Decile

Interactions with broader labor market: Geography



Interactions with broader labor market: Geography



Interactions with broader labor market: Industry

Assign industry based on Schedule C if available; otherwise issuer of largest 1099.

- Professional services, personal and laundry services, administrative services, transportation, and health care and social assistance
 - $\rightarrow~$ Over half of IC workers
 - $\rightarrow~$ Less than one third of W2 workers
- 41.7% of OPE workers are in NAICS 48-49 (Transportation and Warehousing), vs. 3.0% of W2 workers and 9.9% of IC workers.
- OPE workers also overrepresented in:
 - \rightarrow NAICS 51: Information (7.1% of OPE, 2.6% of W2, 2.8% of IC)
 - \rightarrow NAICS 812: Personal and laundry services (4.0% of OPE, 0.9% of W2, 12.0% of IC)
- Note: 37% of OPE workers are not matched to industries.

Conclusion

- Growth in IC work threatens to undermine many labor market arrangements made for traditional work . But how fast is it growing?
- We use tax data to shed light about IC work in CA
 - \rightarrow 14% of California tax-filers earn IC income and 7% are exclusively IC workers
 - \rightarrow 1.4% have OPE earnings, and just 0.3% are exclusively IC
 - \rightarrow Negligible trends in overall IC prevalence between 2012-2017
 - \rightarrow OPE work rose from 2014-2016
- Tax data can be a central and important source of information for policymakers responding to changes in the organization of work, but data quality issues still loom