Business in the United States

Who Owns it and How Much Tax Do They Pay?

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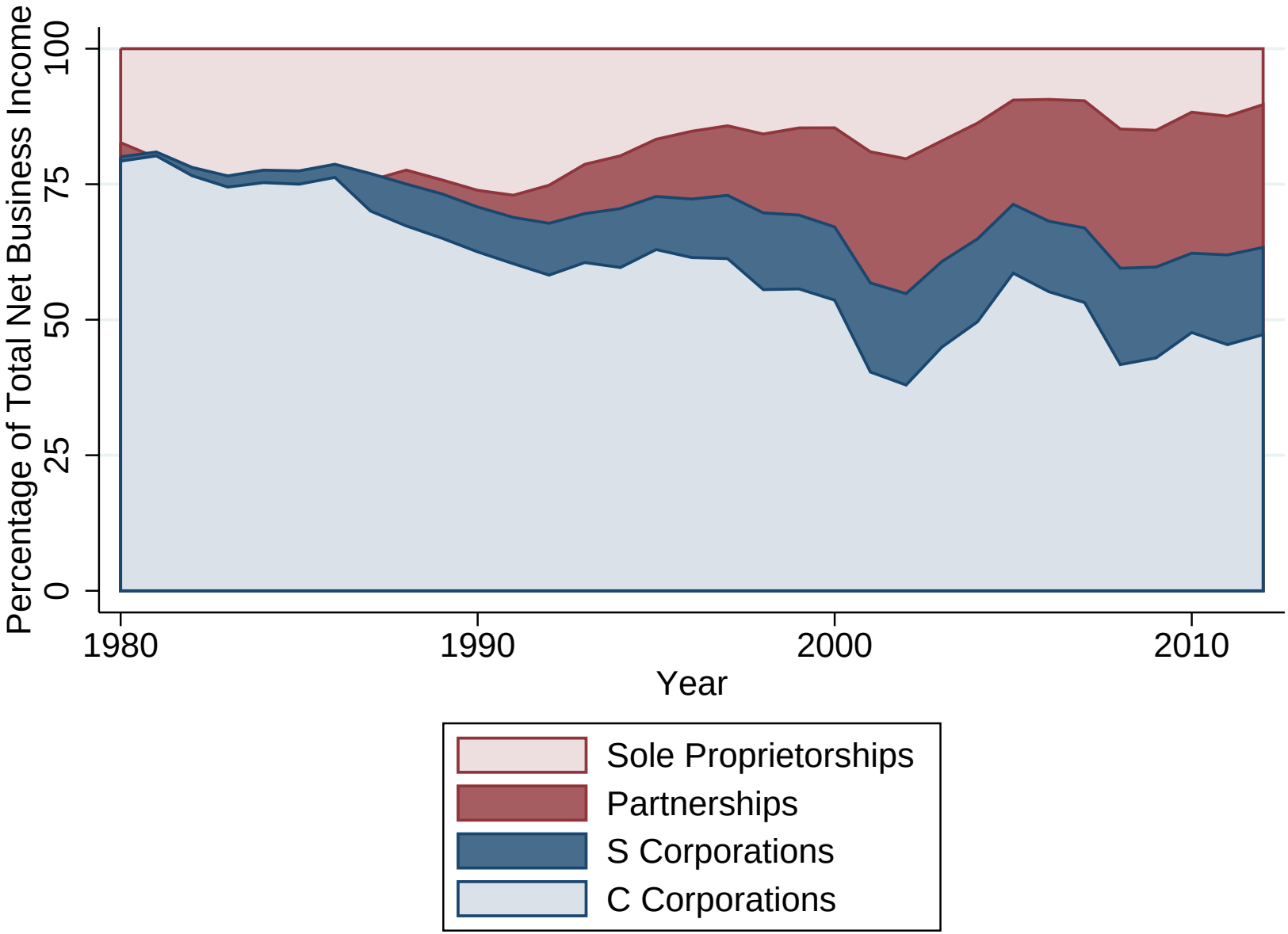
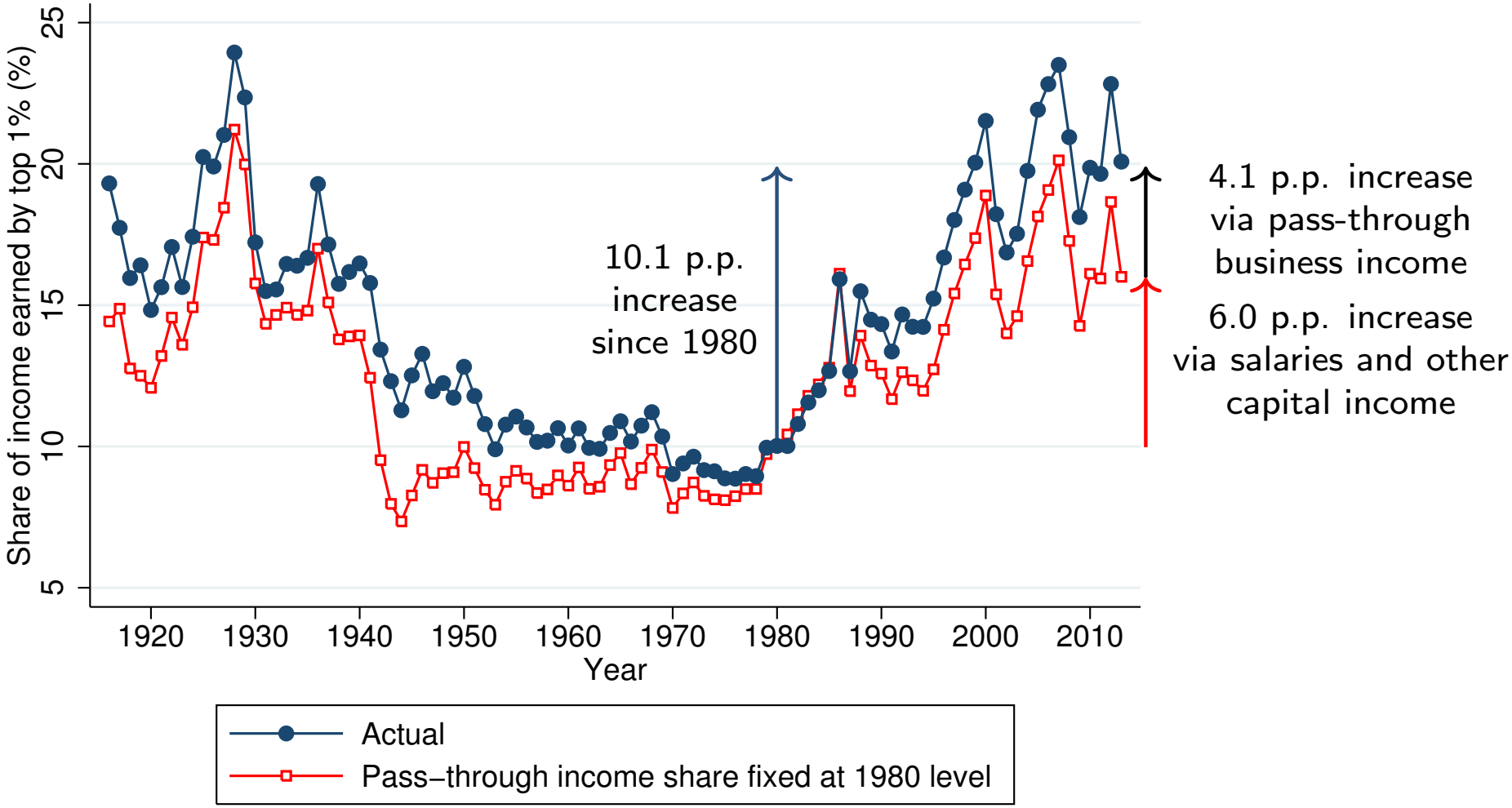
TPE, September 24th, 2015

*The views expressed here are the authors' and do not necessarily reflect those of the Treasury Department.

The Rise of Pass-Throughs



Pass-Throughs and Top-1% Income Share



This Paper

We use administrative tax data from the U.S. in 2011 to:

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We find:

1. Pass-through business income is especially concentrated
2. Average federal income tax rate on pass-throughs is 19%
3. 30% of income earned by partnerships cannot be unambiguously traced to an identifiable, ultimate owner

Roadmap

1. Linking businesses to their owners
2. Who owns businesses in the pass-through sector?
3. Method for estimating average tax rates
4. Average tax rates on business income

1. Linking Businesses to Their Owners

Partnerships file a business inc. tax return...

Form **1065**
Department of the Treasury
Internal Revenue Service

U.S. Return of Partnership Income

For calendar year 2011, or tax year beginning _____, 2011, ending _____, 20_____.
▶ See separate instructions.

OMB No. 1545-0099

2011

A Principal business activity	**Print or type.**	Name of partnership	**D** Employer identification number
B Principal product or service		Number, street, and room or suite no. If a P.O. box, see the instructions.	**E** Date business started
C Business code number		City or town, state, and ZIP code	**F** Total assets (see the instructions) $

G Check applicable boxes: **(1)** ☐ Initial return **(2)** ☐ Final return **(3)** ☐ Name change **(4)** ☐ Address change **(5)** ☐ Amended return
(6) ☐ Technical termination - also check (1) or (2)

H Check accounting method: **(1)** ☐ Cash **(2)** ☐ Accrual **(3)** ☐ Other (specify) ▶ _____

I Number of Schedules K-1. Attach one for each person who was a partner at any time during the tax year ▶ _____

J Check if Schedules C and M-3 are attached . . . . . ☐

Caution. *Include **only** trade or business income and expenses on lines 1a through 22 below. See the instructions for more information.*

Income	**1a**	Merchant card and third-party payments (including amounts reported on Form(s) 1099-K). For 2011, enter -0-	**1a**				
	b	Gross receipts or sales not reported on line 1a (see instructions)	**1b**				
	c	Total. Add lines 1a and 1b	**1c**				
	d	Returns and allowances plus any other adjustments to line 1a (see instructions)	**1d**				
	e	Subtract line 1d from line 1c	**1e**				
	2	Cost of goods sold (attach Form 1125-A)	**2**				
	3	Gross profit. Subtract line 2 from line 1e				**3**	
	4	Ordinary income (loss) from other partnerships, estates, and trusts (attach statement)				**4**	
	5	Net farm profit (loss) (attach Schedule F (Form 1040))				**5**	
	6	Net gain (loss) from Form 4797, Part II, line 17 (attach Form 4797)				**6**	
	7	Other income (loss) (attach statement)				**7**	
	8	**Total income (loss).** Combine lines 3 through 7				**8**	
limitations)	**9**	Salaries and wages (other than to partners) (less employment credits)				**9**	
	10	Guaranteed payments to partners				**10**	
	11	Repairs and maintenance				**11**	

WHICH LISTS ALLOCATIONS ONLY BY PARTNER TYPE. . .

Form 1065 (2011) Page 5

Analysis of Net Income (Loss)

1	Net income (loss). Combine Schedule K, lines 1 through 11. From the result, subtract the sum of Schedule K, lines 12 through 13d, and 16l					1	
2	Analysis by partner type:	(i) Corporate	(ii) Individual (active)	(iii) Individual (passive)	(iv) Partnership	(v) Exempt organization	(vi) Nominee/Other
a	General partners						
b	Limited partners						

. . . but are reflected in K-1s

(issued per partner)

Schedule K-1 (Form 1065)

Department of the Treasury
Internal Revenue Service

2011

For calendar year 2011, or tax year beginning _____, 2011
ending _____, 20____

☐ Final K-1 ☐ Amended K-1 OMB No. 1545-0099

Partner's Share of Income, Deductions, Credits, etc. ▶ See back of form and separate instructions.

Part I Information About the Partnership

A Partnership's employer identification number

B Partnership's name, address, city, state, and ZIP code

C IRS Center where partnership filed return

D ☐ Check if this is a publicly traded partnership (PTP)

Part II Information About the Partner

E Partner's identifying number

F Partner's name, address, city, state, and ZIP code

Part III Partner's Share of Current Year Income, Deductions, Credits, and Other Items

1	Ordinary business income (loss)	15	Credits
2	Net rental real estate income (loss)		
3	Other net rental income (loss)	16	Foreign transactions
4	Guaranteed payments		
5	Interest income		
6a	Ordinary dividends		
6b	Qualified dividends		
7	Royalties		
8	Net short-term capital gain (loss)		
9a	Net long-term capital gain (loss)	17	Alternative minimum tax (AMT) items
9b	Collectibles (28%) gain (loss)		
9c	Unrecaptured section 1250 gain		
10	Net section 1231 gain (loss)	18	Tax-exempt income and nondeductible expenses
11	Other income (loss)		

Linking Partnerships to Partners

Data Challenge: Partners can be one of many entity types, and different kinds of returns are processed by different systems.

Our Procedure: Link K-1s to partnership returns by merging on the Document Locator Number (linking **25.5m** K-1s to **3.6m** partnerships)

High coverage:

- Match 97.7% of partnerships to a K1
- Match 98.2% of aggregate ordinary business income

Partnerships with Partnership Partners

- Partnerships can be owned by other partnerships
- Not problematic for sector-wide analyses
- Problematic for industry breakdowns and possibly audits

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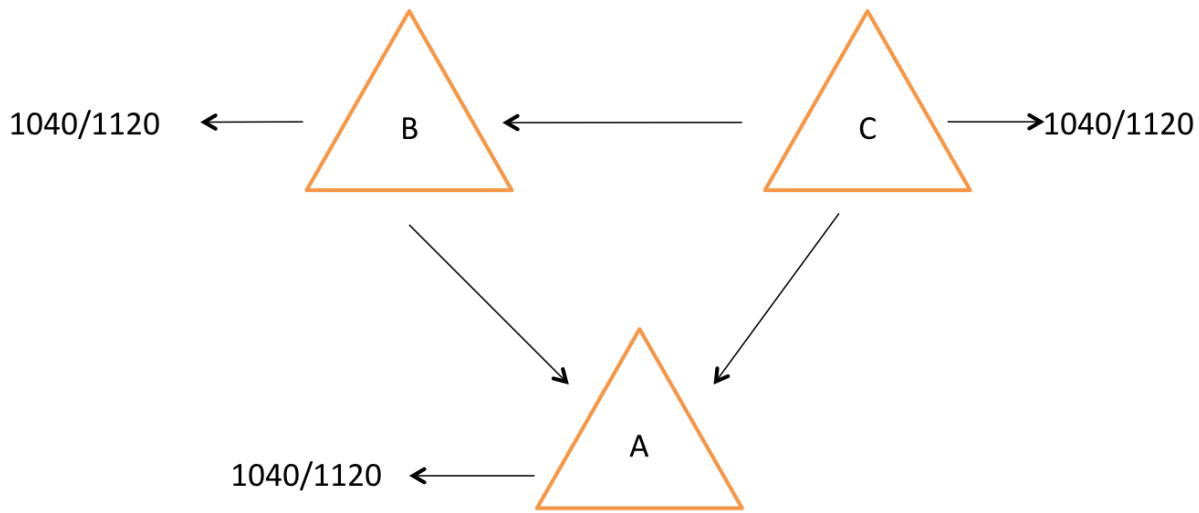

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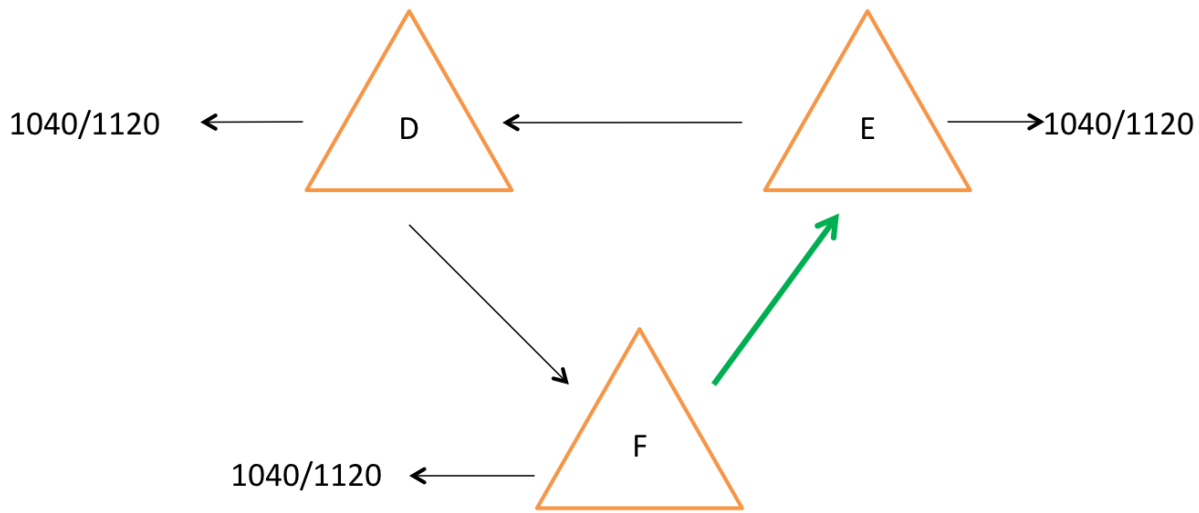

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- Problematic for industry breakdowns and possibly audits
- Use recursive algorithm to trace income through tiers until only "nontransparent" partnerships remain

Classifying Partners

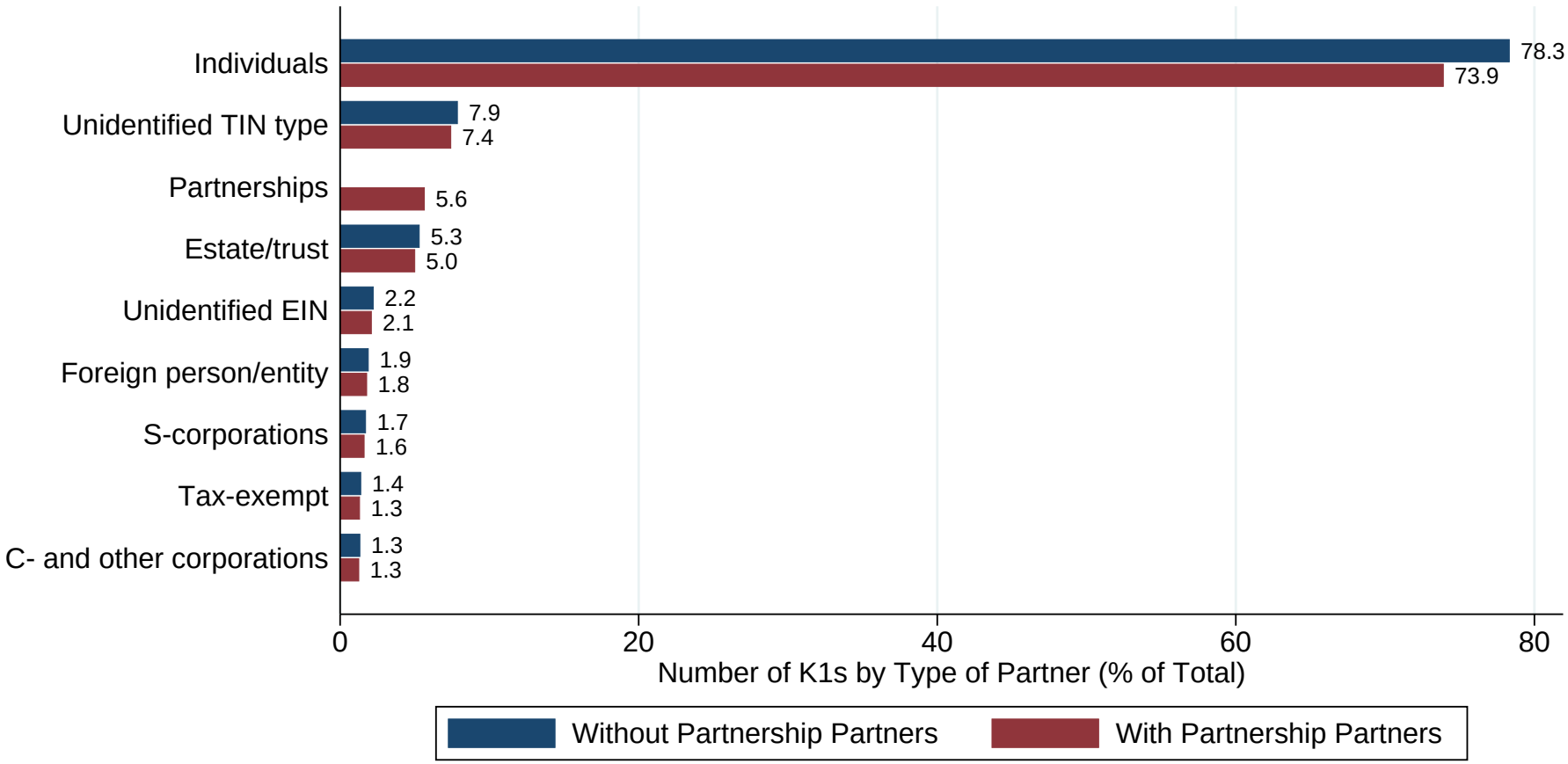
Partner Type	Form Filed
Individual	1040
C- and other corporations	$1120, 1120j \; \forall \; j \in \{$F,PC,L,RIC,REIT,H,C,POL,ND,SF,FSC$\}$
S-corporations	1120S
Tax-exempt	$990, 990j \; \forall \; j \in \{T,R,PF,ZR,C\}$
Estate/trust	1041
Foreign person/entity	1042, 1042S, 8805, 8288A
Partnerships	1065, 1065B, 1066
Unidentified EIN	Taxpayer identifier classifiable as EIN, but tax form unknown
Unidentified TIN type	Taxpayer identifier not classifiable

Linking Other Business Types to their Owners

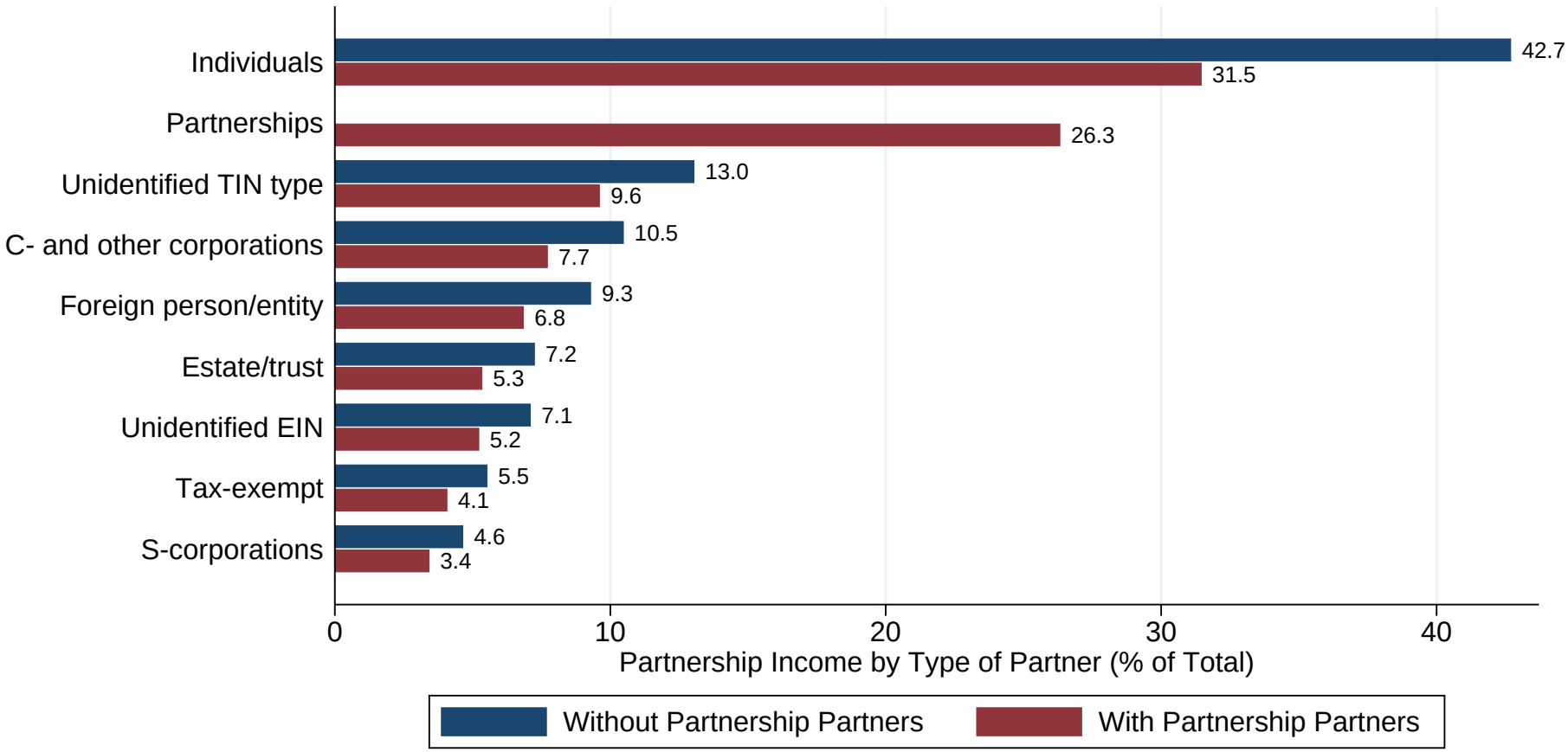
1. **S-Corporations**
   - Owners must not be other business entities
   - Link 1120S K1s to owner's Form 1040
2. **Sole Proprietorships**
   - Income reported directly on Form 1040
3. **C-Corporations**
   - Owners are not identifiable
   - Use dividend income from Form 1040

2. Who Owns Businesses?

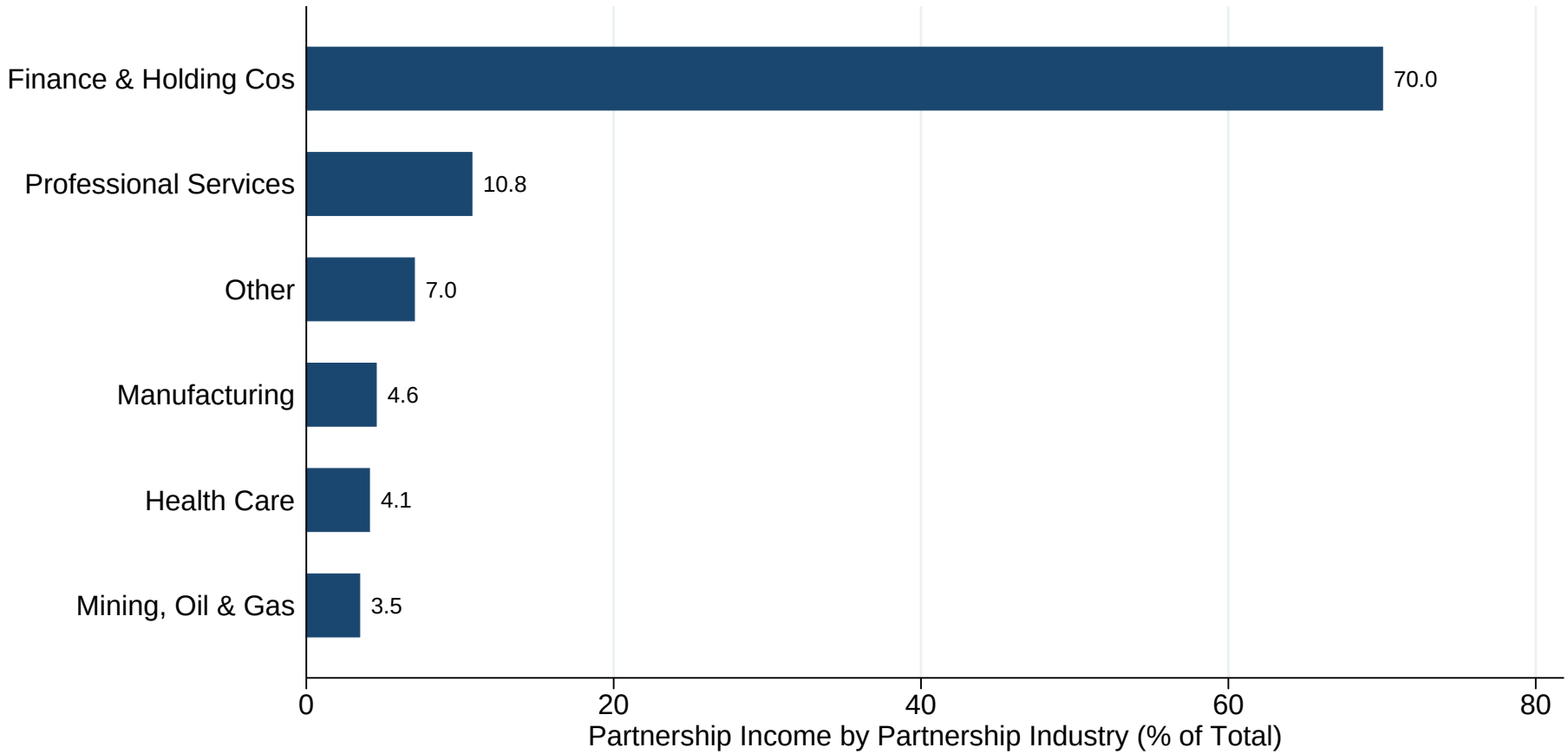
Number of K1s by Type of Partner



Income Shares by Type of Partner

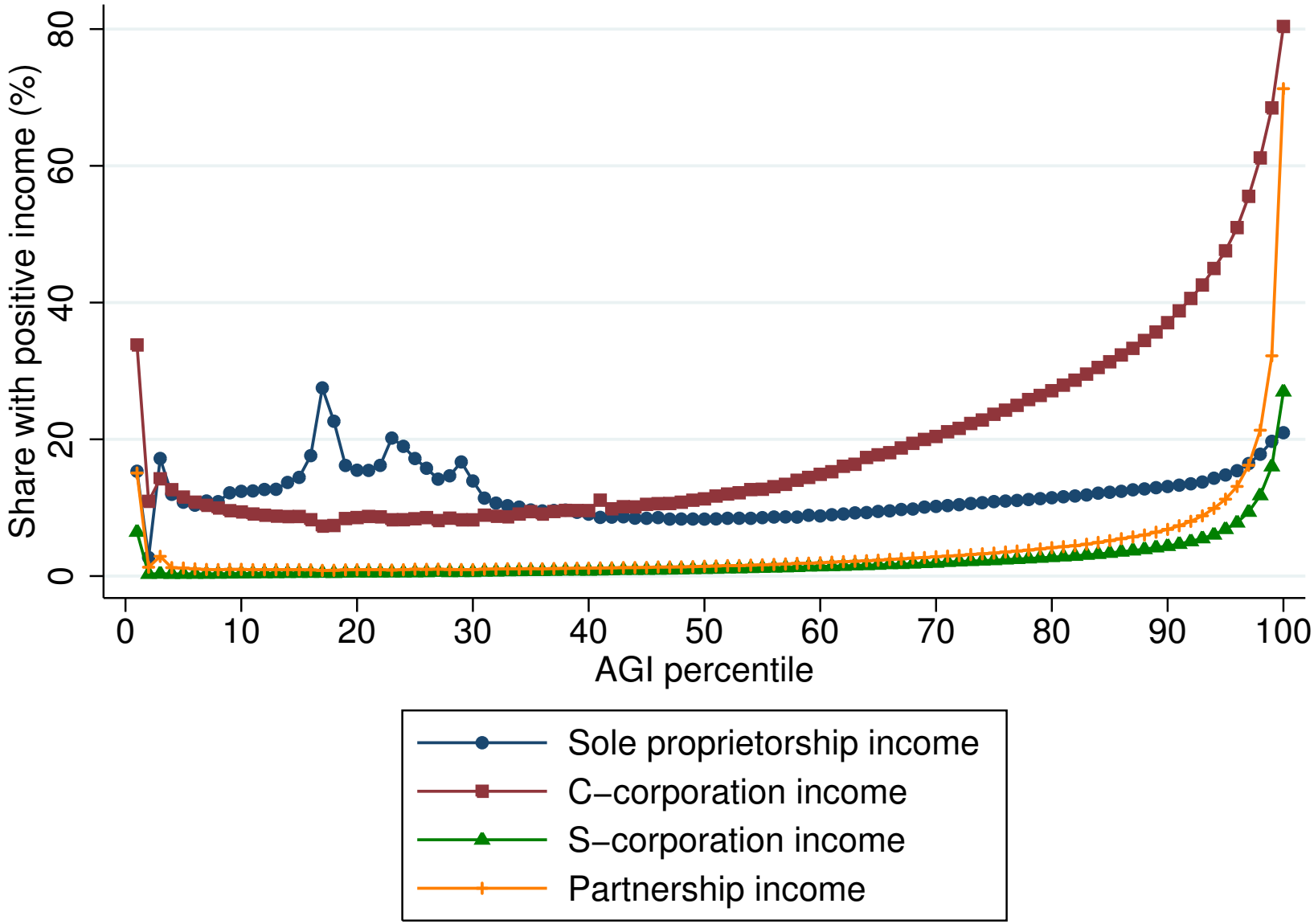


Partnership Income Shares by Industry



Note: "Finance & Holding Cos" includes real estate and rental partnerships ($\approx$ 3.1% of total)

Business Participation Rates by AGI Pctile



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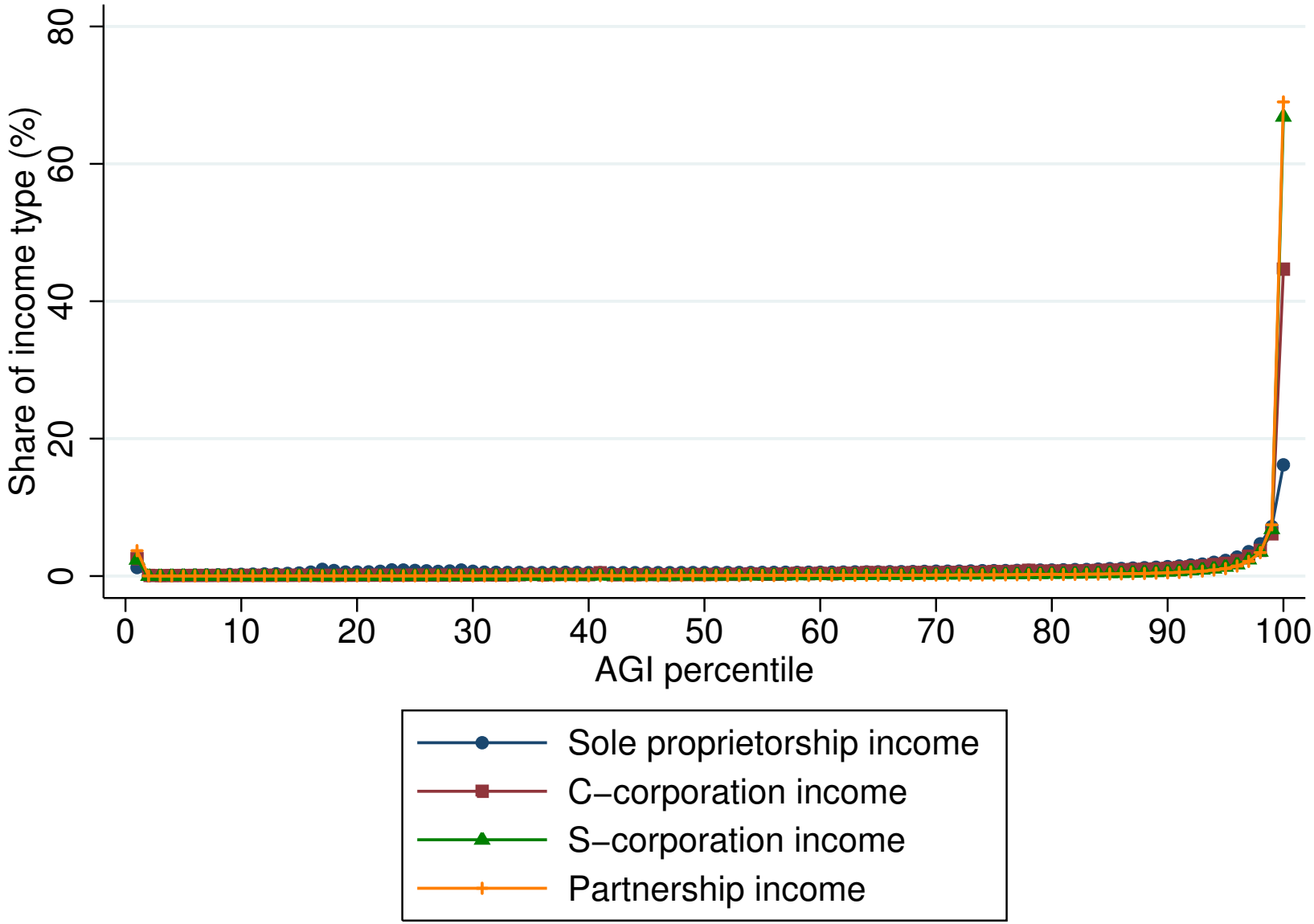
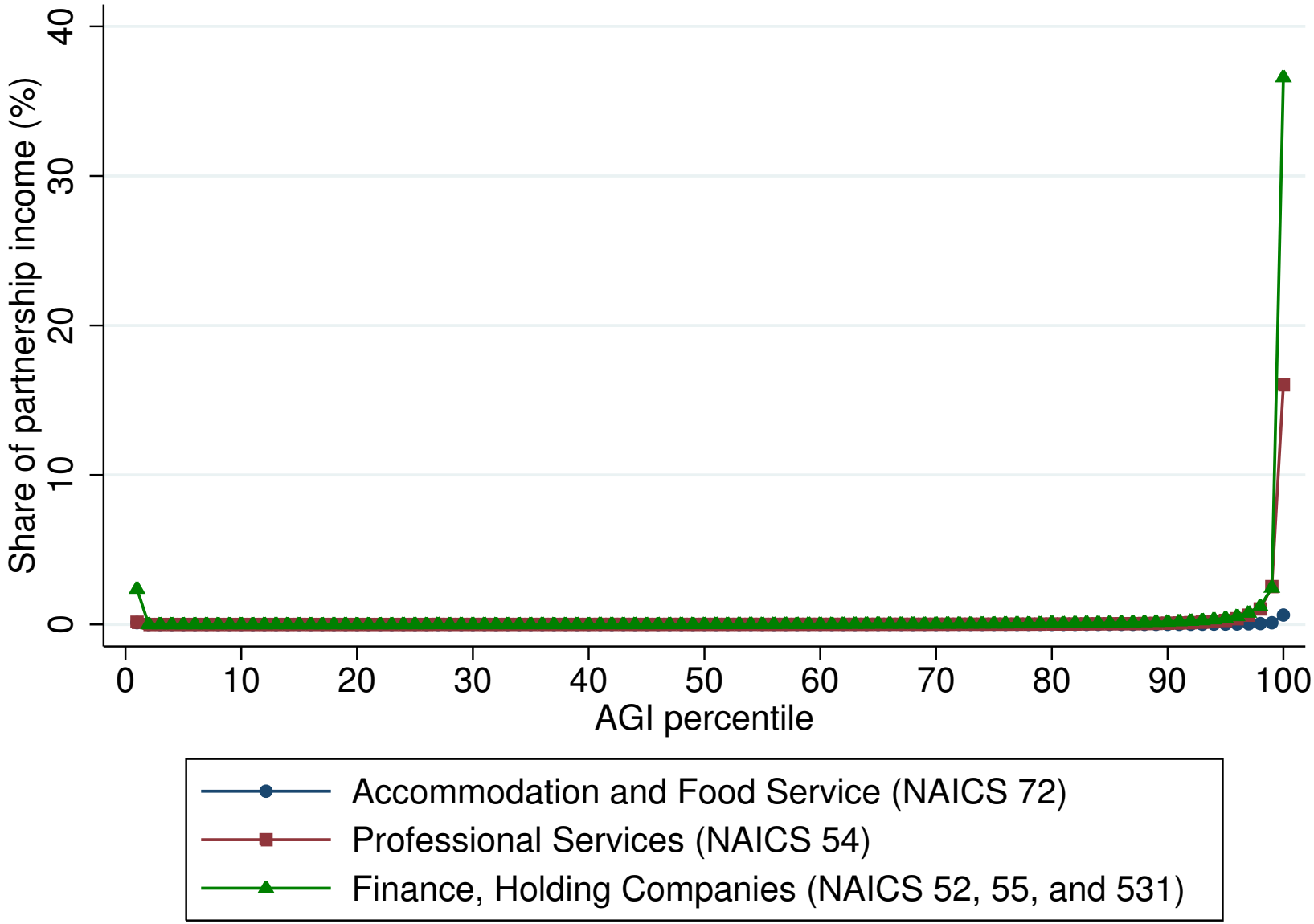


Partnership Income Shares by AGI Pctile

Three Sample Industries



3. Method for Estimating Average Tax Rates

Tax Rates on Income Distributed to Partners

Calculated Rates

$$T_{ik} = \begin{cases} T_{ik}^{\text{OTA}} = \frac{TAX_{ik}}{Y_{ik}} & \text{if } k \text{ files } form \in \{1040, 1120, 1120\text{S}\} \\ T_{ik}^{\text{Assigned}} & \text{otherwise} \end{cases}$$

where

- $T_{ik} \equiv$ tax rate on income type i to partner k from all partnerships p
- $i \equiv$ income type in {capital gains, dividends, ordinary business income, interest}
- $Y_{ik} \equiv$ sum of payment of income type i to partner k from all partnerships
- $TAX_{ik} \equiv$ change in tax liability from the OTA tax calculator

Tax Rates on Income Distributed to Partners

Assigned Rates

$$T_{ik}^{\text{Assigned}} = \begin{cases} T_{i,1040}^{\text{OTA}} & \text{if } form \in \{\text{1120-RIC,1120-REIT,1066,1041}\} \\ T_{i,1120}^{\text{OTA}} & \text{if } form \in \{1120j\} \forall\ j \in \{\text{F,PC,L,H,C,POL,ND,SF,FSC}\} \\ .025 & \text{if } form \in \{\text{8805,1042S,8288A,1042}\} \\ 0 & \text{if } form \in \{\text{990,990j}\} \forall\ j \in \{\text{T,R,PF,ZR,C}\} \\ \frac{.025 + T_{i,1120}^{\text{OTA}}}{2} & \text{if } k \text{ has unidentified EIN or tin type} \end{cases}$$

where

- *form* is the tax form partner k files
- $T_{i,1040}^{\text{OTA}}$ is the tax rate for individuals from the OTA tax calculator for income type i
- $T_{i,1120}^{\text{OTA}}$ is the tax rate for C-corporations

Aggregating Tax Rates

Partnership Rates

$$T_p = \left(\frac{\sum_{i \in \mathcal{I}} \sum_{k \in \mathcal{K}} T_{ik} Y_{ikp}}{Y_p} \right)$$

where

- the numerator is the sum of tax liabilities over income types i and partners k associated with payments from partnership p
- the denominator is the total payments from partnership p

Partnership Sector Rate

$$T = \left(\frac{\sum_{i \in \mathcal{I}} \sum_{k \in \mathcal{K}} \sum_{p \in \mathcal{P}} T_{ik} Y_{ikp}}{Y} \right)$$

where

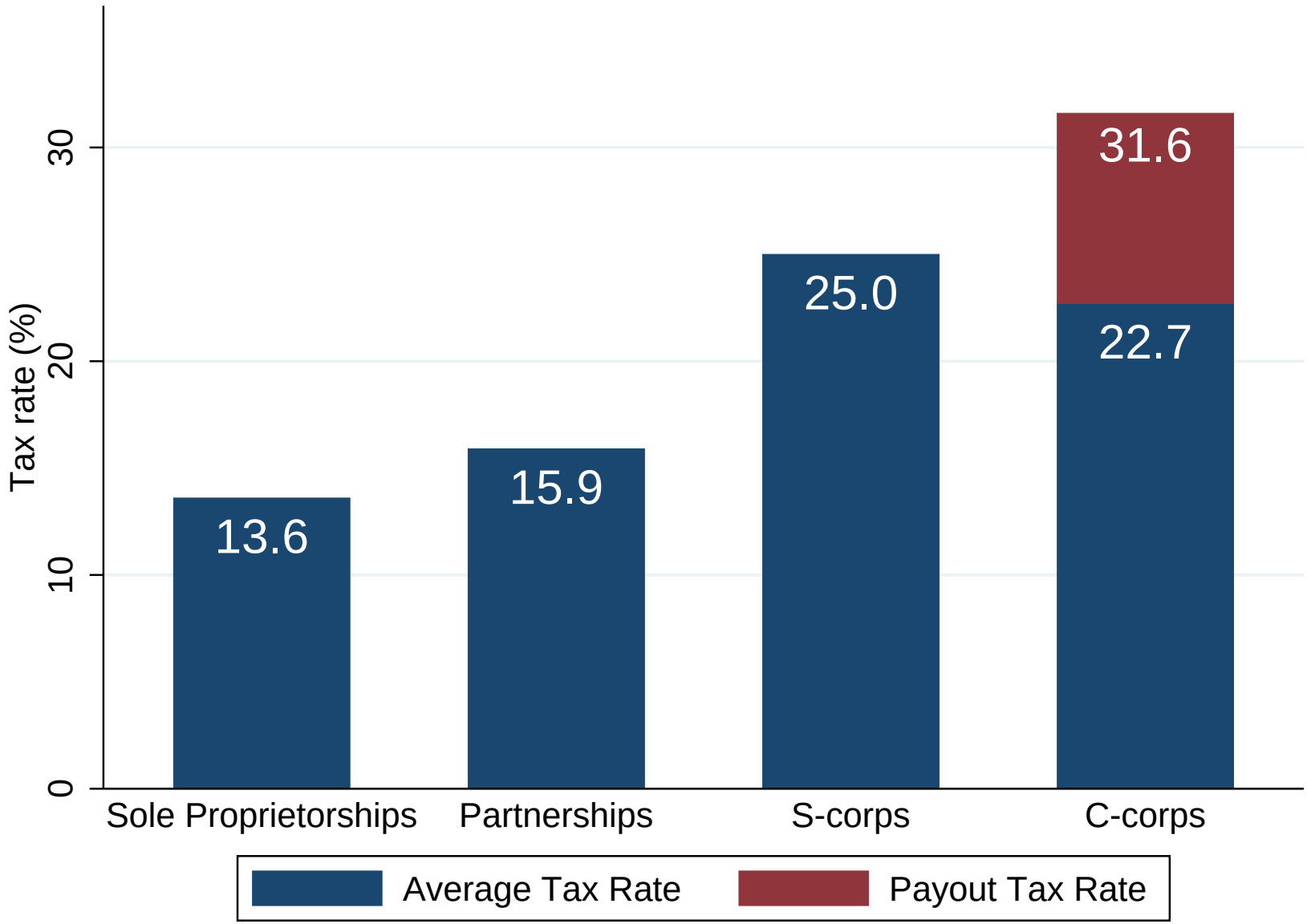
- the numerator is the sum of tax liabilities from payments from partnerships
- the denominator is the total payments from all partnerships

Tax Rates on Other Business Types

1. **S-Corporations**
   - $TAX_S \equiv$ Actual tax minus hypothetical tax with zero 1120S income
   - Tax rate is TAX_S divided by actual 1120S income
2. **Sole Proprietorships**
   - Same method as S-Corporations
3. **C-Corporations**
   - $TAX_{C1} \equiv$ Actual taxes paid
   - First layer is TAX_{C1} divided by taxable income
   - $TAX_{C2} \equiv$ Estimate from Poterba (2004) for dividend+cap gains tax times income net of first layer of tax
   - Final rate combines first and second layer of tax

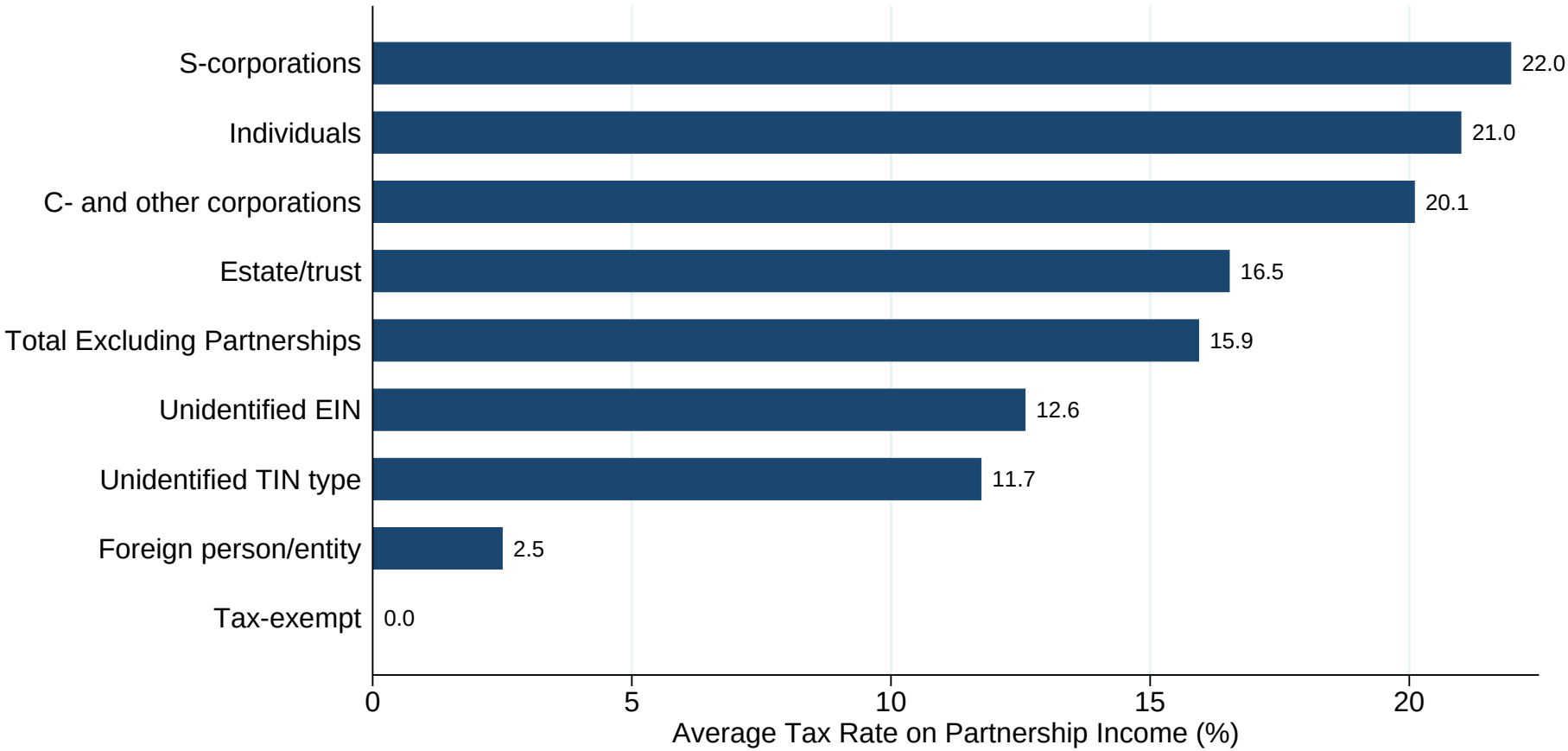
4. Average Tax Rates on Business Income

Tax Rate by Entity Type



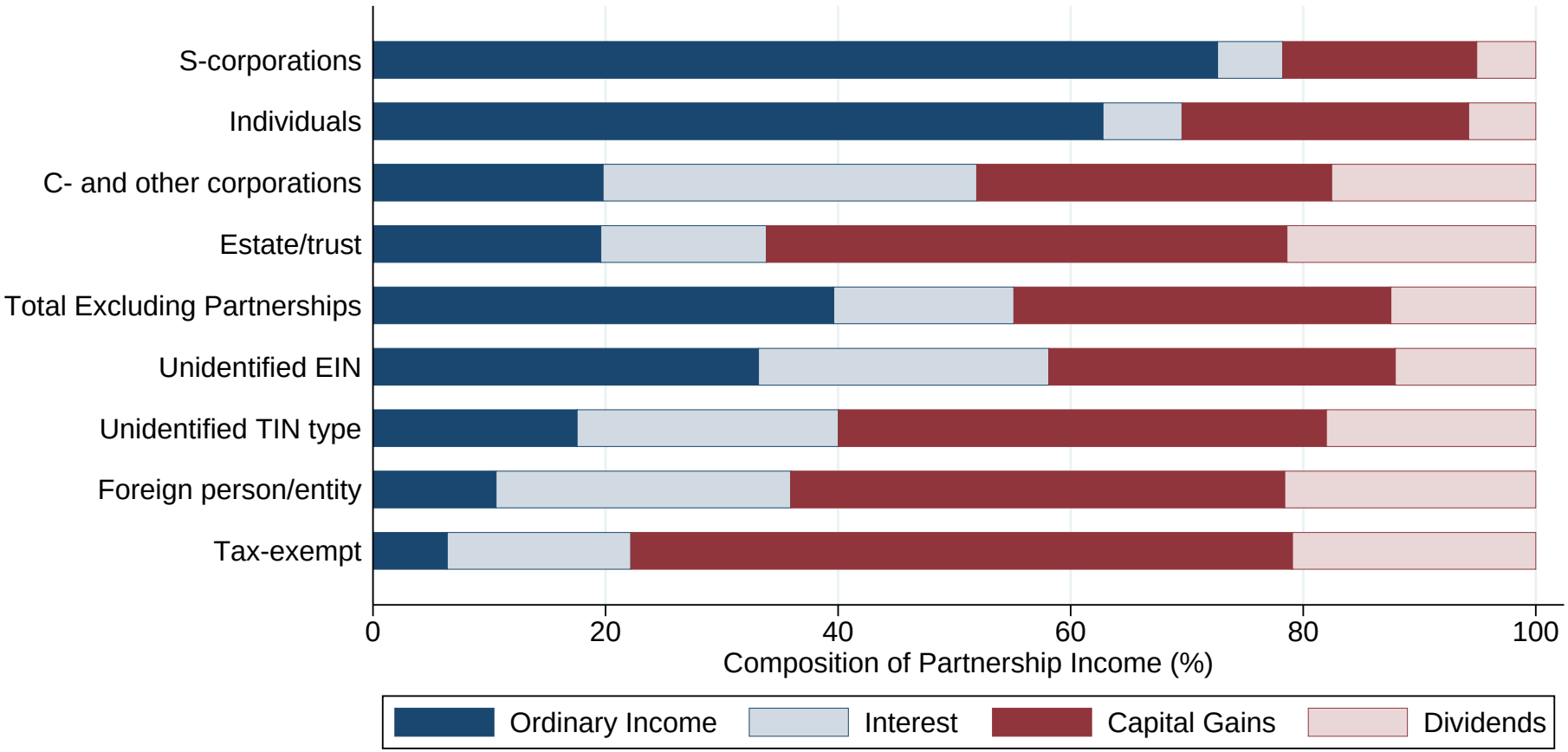
Tax Rates on Partnership Income

By Type of Partner



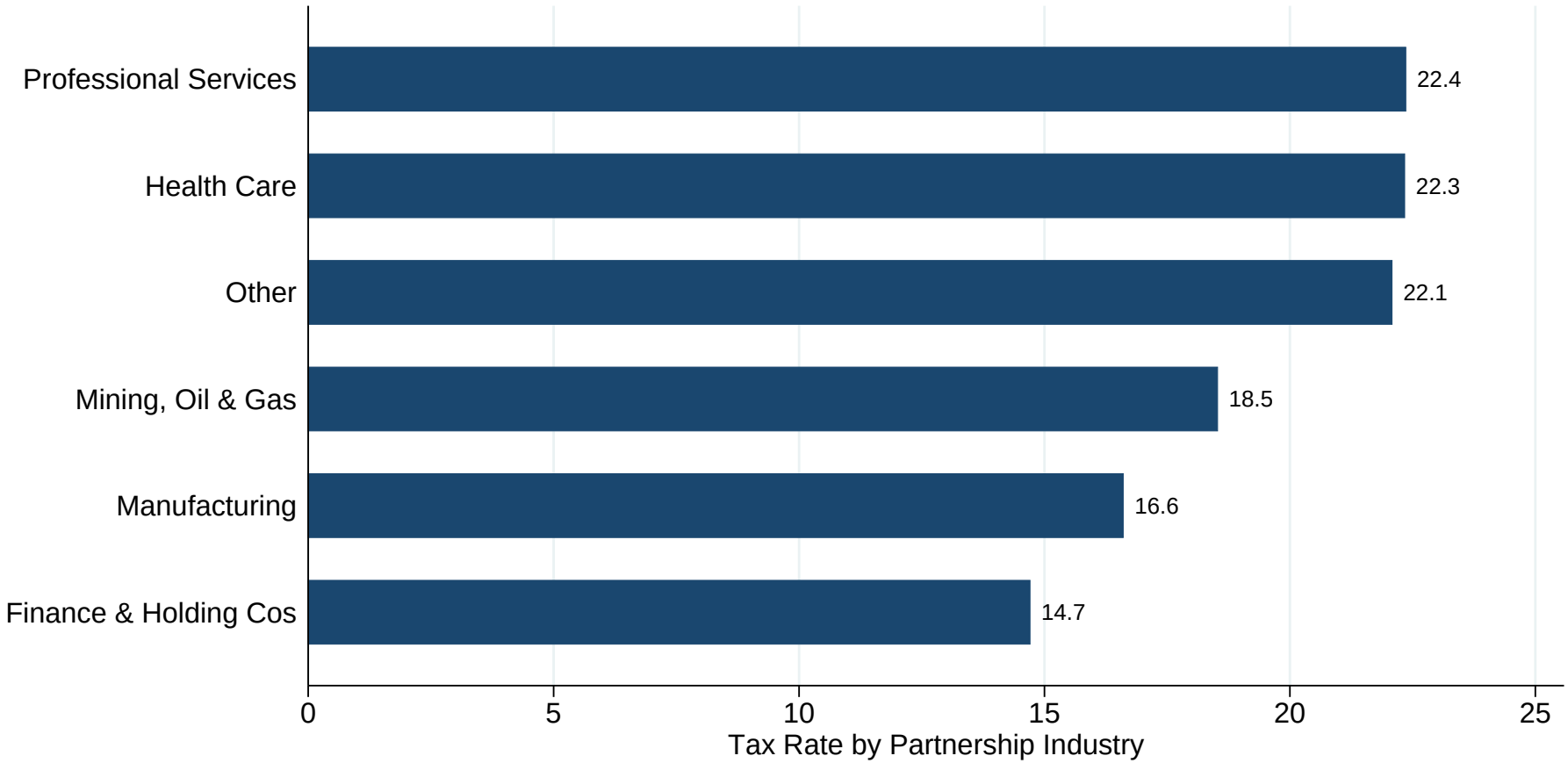
Partnership Income Type Distribution

By Type of Partner



Tax Rates on Partnership Income

By Industry



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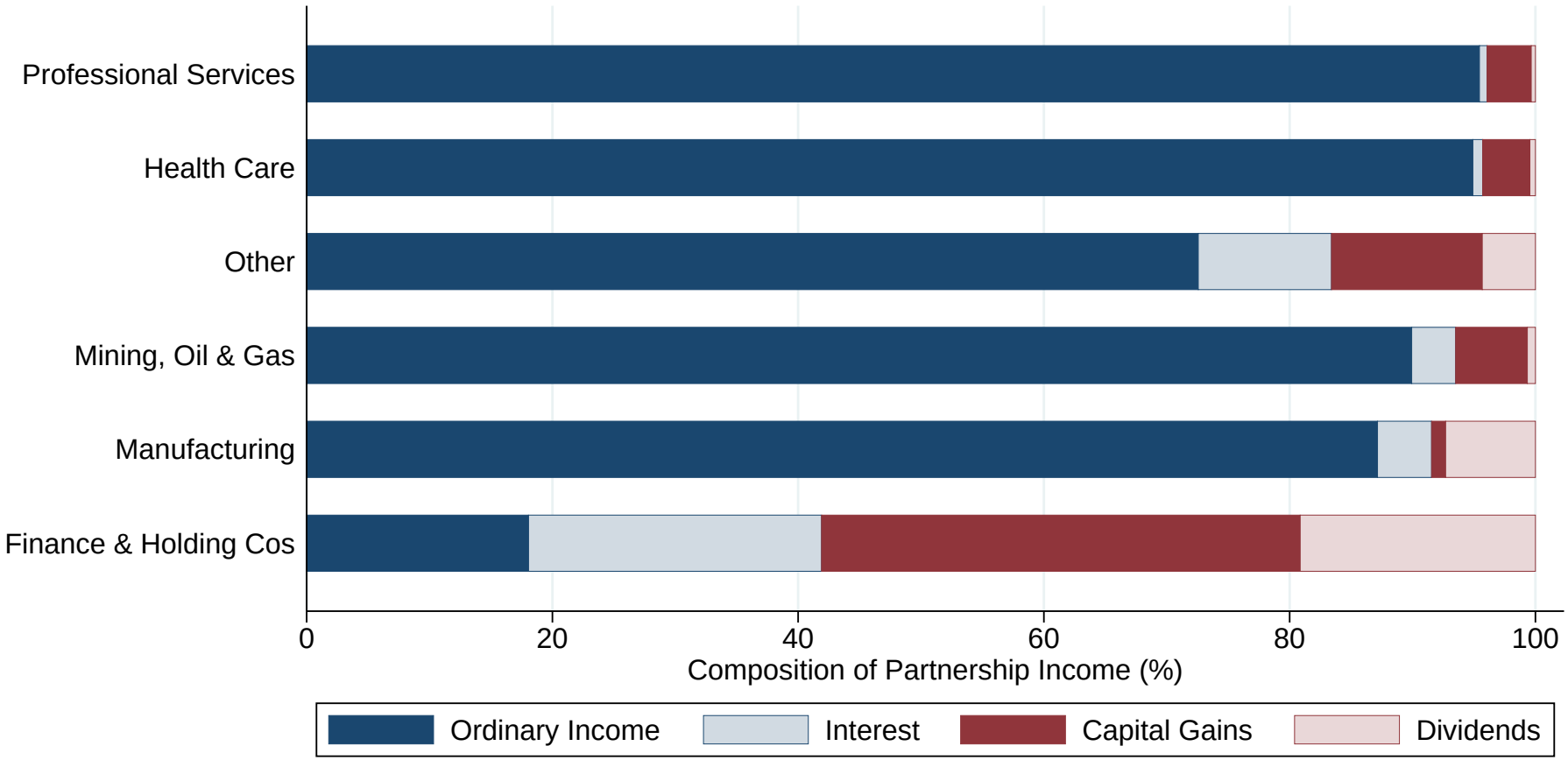

Note: "Finance & Holding Cos" includes real estate and rental partnerships ($\approx$ 3.1% of total)

Partnership Ownership is Opaque

1. 20% of income earned by unclassifiable partners
   - Use income type allocations to "guess" applicable rate
2. Not all partnership income can be uniquely linked to an originating partnership
   - Use recursive algorithm to trace income through tiers until only "nontransparent" partnerships remain

Partnership Ownership is Opaque

Some Facts about Nontransparent Partnerships

1. Algorithm reaches fixed point after 22 steps
2. 22,417 nontransparent partnerships remain (out of 3.6M)
3. Unsolved partnerships issue 9.6M K1s (out of 25.5M)
4. $100B of taxable income in this group (out of $671B)
5. Tax paid on this income is 8.8% (compared to 17.1% for remaining $571B)

Conclusion

1. **The Rise of Pass-throughs**: U.S. business activity has migrated from corporations to pass-throughs.
2. **Who Owns Them?**
   - 69% of pass-through income earned by individuals accrues to the top-1%
   - The union of income flowing (1) to unclassifiable partners and (2) through nontransparent partnerships is $200B, or 30% of income earned in the partnership sector overall.
3. **How Much Tax Do They Pay?** The average federal income tax rate on pass-through business income in 2011 is 19%.
4. **Implication**: With pass-through activity at 1980 levels:
   - Average rate in 2011 would have been 28% (instead of 24%)
   - Tax revenue would have been at least $100B higher