Taxation of Top Incomes and Tax Avoidance Alessandro Di Nola¹, Georgi Kocharkov², Almuth Scholl¹, Anna-Mariia Tkhir³, Haomin Wang¹ ¹University of Konstanz ²Deutsche Bundesbank ³Goethe University Frankfurt

Motivation

- Recent increase in concentration of income at the top led to proposals to significantly raise the top marginal income tax rate (Diamond and Saez, 2011). However, elasticity of taxable income (ETI) is high at the top (Mertens and Olea, 2018),
- Many top earners are business owners: 40% of the top 1% income is business income.
- Entrepreneurs can (1) report income as wage or profit to lower tax liability (2) choose pass-through business to avoid the double taxation on C-corporations.

	Pass	-Through	C-Corp.
	Sole-Prop.	S-Corp.	
Access to capital	d	ifficult	easy
Operating expenses	minimal	medium	high
Income Types	wage only	wage and profit	wage and profit
Tax on profit	-	income tax	corp. + dividend tax
Prevalence	67%	24%	9%

Research Questions

- How does tax avoidance affect tax revenue and productive efficiency?
- What are the aggregate and distributional consequences of an increase in the top marginal tax rate and in tax progressivity in the presence of tax avoidance?

Heterogeneous-Agent Model

- Agents have different working and entrepreneurial abilities (ε, θ) and asset levels (*a*).
- Occupational choice: Worker or Entrepreneur.
- Entrepreneurs choose to be sole-proprietors, S-corps, or C-corps.
- S- and C-corps owners choose to declare fraction ϕ of income as wage and the rest as profit.



Calibration Result

Selected Parameters :			
	Sole-Prop.	S-Corp.	C-Corp.
Collateral constraint λ	1.4	1.4	2.4
Operating cost κ	0	0.02	0.025
Avoidance cost $C(1)$	-	0.19	8

Optimal Occupation and Legal Form Choice



• Individuals with high entrepreneurial ability and high wealth choose to be entrepreneurs.

• Among entrepreneurs, those with the highest ability and wealth run C-corps.



• Higher concentration of entrepreneurs at the top of income and wealth distributions.

Reform 1: Eliminating Tax Avoidance

We consider two counterfactual scenarios:

- 1. No intensive margin of tax avoidance: S-corps are subject to the same tax treatment as sole-prop., and C-corps cannot report labor income.
- 2. No tax avoidance on any margin: All entrepreneurs are subject to the same tax treatment as sole-prop., i.e. pay income and payroll taxes.

	Benchmark	No Income Shifting (1)	No Tax Avoidance on all margins (2)
Share of Entre	0.144	0.148	0.171
Dist. of LFO:			
Sole-Prop.	0.667	0.889	0.316
S-Corp	0.231	-	-
C-corp	0.102	0.111	0.684
$\mathbb{E}(\text{Entre. Ability} entre)$	1.522	1.519	1.525
$\mathbb{E}\left(\mathbf{Capital} entre ight)$	6.591	6.288	9.281
Ave. income	0.411	0.408	0.435
Tot. tax revenue	0.149	0.155	0.161

Summary

- revenue.

Reform 2: Increasing Tax Progressivity

der:

0.2 rate .0 **tax** -0.1

-0.2

-0.3

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. Eliminating income shifting: Small increase in tax revenue. Scorps become sole proprietors but no increase in the share of entrepreneurs. Little macroeconomic impact and small increase in tax

2. Eliminating all tax avoidance: More entrepreneurs and a greater share of C-corps. Significant improvement in average income due to easier access to capital as a result of more C-corps. Large increase in tax revenue

We consider a revenue-neutral increase in income tax progressivity un-

. the **benchmark economy** with tax avoidance, and

2. the **no-tax-avoidance economy** (scenario 2), where all businesses pay income taxes.



Inequality measure Gini Wealth Top 1% Wealth S Gini Income Top 1% Income Aggregate outcom Ave. Income Capital entre. Share Entre. Dist. of legal for Sole Prop. S-Corp. C-Corp.

Summary

- income taxes.

- higher operating costs.
- ciency.

Conclusions

- Next steps:
- forms.

References

	Benchmark Economy		No Tax Avoidance	
	$\tau_{hsv} = 0.06$	$\tau_{hsv} = 0.15$	$\tau_{hsv} = 0.06$	$\tau_{hsv} = 0.15$
	(1)	(2)	(3)	(4)
ires:				
	0.822	0.825	0.829	0.776
Share	0.329	0.340	0.331	0.250
	0.483	0.499	0.515	0.510
Share	0.211	0.217	0.224	0.206
nes:				
	0.411	0.398	0.435	0.407
	0.761	0.803	1.273	1.051
	0.144	0.149	0.171	0.196
ms:				
	0.667	0.698	0.316	0.309
	0.231	0.078	-	-
	0.102	0.224	0.684	0.691

. Increasing tax progressivity in the Benchmark economy:

• Entrepreneurs move from S-corps to C-corps to avoid the higher

• Slightly higher inequality!

• More C-corps \Rightarrow more capital in the entrepreneurial sector but

• Average income goes down, suggesting a drop in economic effi-

2. Increasing tax progressivity in the no-tax-avoidance economy:

• Little change in legal form distribution.

• Significantly lower inequality but a drop in average income (economic efficiency) \Rightarrow equity-efficiency tradeoff.

• We build a heterogeneous agent model with choices of occupation and legal forms of businesses. Two margins of tax avoidance:

- Intensive: S- and C-corp owners can report income as labor or capital income to lower tax burden.

-Extensive: Entrepreneurs can choose to run pass-throughs to avoid double taxation of C-corps.

• Tax avoidance on the extensive margin lowers productive efficiency, and makes progressive taxation ineffective at lowering inequality.

– Optimal top marginal tax rate with tax avoidance and optimal allocation of entrepreneurial talent across occupations and legal

^[1] Sebastian Dyrda and Benjamin W. Pugsley. Taxes, private equity, and evolution of income inequality in the us. 2018.

^[2] Karel Mertens and Jose Luis Montiel Olea. Marginal tax rates and income: New time series evidence. The Quarterly Journal of Economics, 133(4):1803–1884, 2018.

^[3] Matthew Smith, Danny Yagan, Owen Zidar, and Eric Zwick. Capitalists in the Twenty-First Century. The Quarterly Journal of Economics, 134(4):1675–1745, 2019.