Taxing Consumption in Unequal Economies

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The views expressed here are those of the authors and do not necessarily represent the views of the Bank of Spain and the Eurosystem.

In a Nutshell: the Paper in One Slide

Motivation, Main Message and Results

- Increased income and wealth **inequality** & extraordinary pressure on **public finances**;

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  - Biden tax on unrealised capital gains;
  - wealth tax, Guvenen et al. (QJE, 2023);
  - increase in capital income tax, Piketty et al. (2022); Boar and Midrigan (AER:insights, 2023);
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- Our message: linear **consumption taxes** are great for **efficient redistribution**;
- **Main Contribution**: Optimal Policy Reform
  - all revenues raised by **linear consumption taxes**;
  - social insurance with highly **progressive wage tax**;
  - no taxes on **wealth** or **capital**;
  - large welfare gains, 2/3 from **redistribution**, 1/3 from **efficiency**;

Our Analysis

- Macro framework: standard life-cycle model of households, firms and government;
  - rich heterogeneity in i) age; ii) labor productivity; and iii) entrepreneurial abilities;
  - incomplete markets and uninsurable idiosyncratic risk, i.e no *Arrow-Debreu* securities;
  - estimated on macro and micro US data to match income, wealth inequalities and distributional moments, e.g., *onepercenters*;
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- Our welfare metric: policy reforms are evaluated through the average welfare of a newborn, i.e., *utilitarian welfare*;

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- Instead of capital income: shift in taxes from most to least productive entrepreneurs; increase in efficiency; GE effects on wages; everyone gains; slight increase in inequality; $\rightarrow$ stronger GE effects than wealth tax, Guvenen et al. (QJE, 2023)

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- Total long-run welfare gains: equivalent to 18% higher consumption per-capital per-year; 89% of newborns better off;

The Model

General Setting: Life-Cycle Economy with no Aggregate Uncertainty

Households:

- Agents live up to age J, retire at R, face risk of early death, pop. growth n;
- Incomplete markets, i.e., no Arrow-Debreu securitites;
- Standard utility function in consumption and leisure: $\sum_{j=1}^{J} \tilde{\beta}^{j-1} u(c_j, h_j)$;
- Heterogeneous labour productivity, type i, age j and shock z_h:
  $\log e(i, j, z_h) = \bar{e}_i + \sum_{k=0}^{4} \alpha_k j^k + z_h$, with $z_h' = z_h + \varepsilon_e \quad \varepsilon_e \sim N(0, \sigma_{\varepsilon h}^2)$
- Entrepreneurial choice, so each household works on the market and can also run a business;

Households: the Entrepreneurial Choice

A theory of wealth return heterogeneity and capital misallocation, Macnamara et al. (2022)

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- Some households choose to be also entrepreneurs if have high entrepreneurial abilities x_i;
  - sell capital services $q = x_i(j, z_r)k$ (linear backyard tech.) to final good firms at price p;
  - heterogeneous entrepreneurial ability, age j and shocks z_r:
    $\log x_i(j, z_r) = \sum_{m=0}^{2} \kappa_m j^m + \log z_r$ with $z_r' = \rho_r z_r + \varepsilon_r \quad \varepsilon_r \sim N(0, \sigma_{\varepsilon r}^2)$;
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  - borrow from other households, given collateral constraint $k \leq \lambda a$;
- Household chooses to be also entrepreneur if $x_i(j, z_r) \geq \bar{x} = (r + \delta)/p$;
- Heterogeneous return on wealth is $r_i^a(j, z_r) = r + \lambda \max\{p x_i(j, z_r) - (r + \delta), 0\}$;
- Misallocation of capital due to λ;

A Theory of Wealth Return Heterogeneity

Why is Important

- In the **data**:
  - high return dispersion in the data due to private business, Fagereng et.al. (ECA, 2020);
  - this responsible for concentration of capital income and wealth, Smith et. al. (QJE, 2023);
  - entrepreneurs: 7 pc in total, 58 pc (46 pc) in top 1 pc wealth (income) are entrepreneurs;

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- For this **paper**:
  - return heterogeneity in combination with labor income dispersion makes taxing consumption particularly appealing;

Final good firms:

- Produce homogeneous good;
- Hire labor and buys intermediate capital goods;
- Operate Cobb-Douglas technology, $Y = F(Q, L) = Q^{\alpha} L^{1-\alpha}$;
- Optimal behavior and perfect factor markets imply $w = F_L$ and $p + \delta = F_Q$;

The Government

- Wage Tax Function, $T_l(y_l) = y_l - \lambda_l (y_l)^{1-\tau_l}$; λ_l: tax level; τ_l: progressivity; Heathcoate et al. (AER, 2014; QJE, 2014)
- We assume a flat capital income tax, at the rate τ_k, i.e., $T_k = \tau_k r_i a$;
- Then we have a consumption tax $T_c = \tau_c c$ and a wealth tax $T_a = \tau_a a$.
- It runs Social Security scheme (kept fixed in the paper); ◂ Social Security
- Provides a uniform public good, G (kept fixed in the paper);

Summary of the Model

- The model has 3 types of **economic agents**:

  1. **Households**, who differ in age, labor and entrepreneurial abilities and choose consumption/savings, hours and entrepreneurial activity;

  2. **A final good firm**, who hires labor and buys intermediate capital goods in order to produce a uniform good;

  3. **A government**, who provides a public good, a social security scheme and taxes income via progressive tax function and linear taxes either on consumption or wealth;

Quantitative Assessment

Quantitative Strategy

- We solve and estimate the model in the steady state, US economy in 2019-transition later; ◂ Numerical algorithm

- We split our parameters into two main groups:

  1. Externally set group
     - (i) previous literature – e.g., risk aversion;
     - (ii) through external estimates – e.g., labor income risk (SCF), tax function (TAXSIM);
  2. Internally set group: jointly estimate model via Simulated Method of Moments (SMM) to match cross-sectional moments in 2019 SCF and macroeconomic moments.

Fixed Parameters

Parameters	Notation	Value	Source
Risk Aversion	σ	4	Typical in lit.
Capital Share	α	0.36	Typical in lit.
Maximum Age	J	85	Corresp. to age 105
Retirement Age	R	45	Corresp. to age 65
Survival Prob.	s_j	See paper	USMD 2018
Pop. Growth	n	0.007	World Bank
Soc. Sec. Tax	τ_{ss}	0.124	IRS
Soc. Sec. Cap	$\bar{y}$	107.7	IRS
Soc. Sec. Bend Pt. 1	y_1	9.33	SSA
Soc. Sec. Bend Pt. 2	y_2	56.23	SSA
Ent. Prod.-Age, Coef 0	κ_0	-0.135	Normalization
Cons. Tax Rate	τ_c	0.075	Guvenen et al. (QJE, 2023)
Wealth Tax	τ_a	0	Guvenen et al. (QJE, 2023)
Soc. Sec. Benefit	χ	1.027	Balanced Budget

External Estimates

Tax Functions (TAXSIM) and Earning Age Profiles (SCF)

Parameters	**Notation**	**Value**	**Std. Err.**
Wage Tax Progr.	τ_l	0.201	0.001
Wage Tax Level	λ	1.692	0.053
Capital Inc. Tax Rate	τ_k	0.270	0.007
Age wage coefficient 1	α_1	0.147	0.013
Age wage coefficient 2	α_1	-7.253	1.133
Age wage coefficient 3	α_1	1.662	0.375
Age wage coefficient 4	α_1	-1.432	0.013

Note: α_k from SCF, τ_l from NBER TAXSIM.

◂ Details

Estimated Parameters

- **SMM estimation**: Θ parameters, M data moments, $m(\Theta)$ model's moments, W weighting matrix, i.e.

$$\hat{\Theta} = \arg\min_{\Theta} \left(\hat{M} - \hat{m}\left(\Theta\right)\right)' W \left(\hat{M} - \hat{m}\left(\Theta\right)\right);$$

Parameters	**Notation**	**Value**	**Std. Err.**
Utility Cons. Weight	γ	0.374	0.004
St.Dev Wage PC	σ_e	0.523	0.027
St.Dev Wage Idios Shock	$\sigma_{\epsilon h}$	0.215	0.005
Labor Ability Constant	α_0	2.851	0.094
Return Persistence	ρ_r	0.988	0.001
Return Shock	$\sigma_{\varepsilon r}$	0.117	0.008
Ent. Ability, Coef 1 (x100)	κ_1	2.451	0.503
Ent. Ability, Coef 2 (x10000)	κ_2	-3.156	0.598
Discount Factor	β	0.995	0.004
Coll. Constraint	λ	2.518	0.134
Depreciation Rate	δ	0.045	0.003

Note: Standard errors calculated using Cocci Plagborg-Møller (2021)

Performance of the Model

Cross-Section Moments	Model	Data	Macro Moments	Model	Data
Entrepreneurship Rate	**0.089**	**0.092**	K/Y Ratio	2.71	2.95
Avg. Numb. of Years an Ent.	14.52	14.67	I/Y Ratio	0.22	0.22
Avg. Age Became an Ent.	39.56	39.33	Borr. Rate	0.019	0.019
Ent. Rate Age, Coef 1 x1e2	0.767	0.725			
Ent. Rate Age, Coef 2 x1e5	-0.986	-1.006			
Wealth Gini	0.843	0.853			
Wealth Share, Top 1%	**0.360**	**0.373**			
Wealth Share, Top 5%	0.606	0.650			
Wealth Share, Top 20%	0.885	0.874			
Earnings Gini	**0.647**	**0.649**			
Earnings Share, Top 1%	0.116	0.120			
Earnings Share, Top 5%	0.299	0.279			
Earnings Share, Top 20%	0.625	0.575			
Average Earnings	57.76	57.84			
Average Hours (working age)	0.309	0.313			

Back-of-the-Envelope Return Profile for the US (Untargeted)

Table: Return on Wealth by Wealth Percentiles, Benchmark Model vs. Data

Wealth Percentile	**Returns (Model)**	**Returns (Data)**
[99-100]	**0.071**	**0.074**
[95-99)	0.039	0.066
[90-95)	0.033	0.059
[75-90)	0.029	0.053
[50-75)	0.025	0.049
[25-50)	0.021	0.040
[10-25)	0.019	0.021
[1-10)	0.021	0.028

Note: Own calculation in SCF.

Model Performance: Income Shares (Untargeted)

Table: Untargeted Moments from Piketty et al. (QJE, 2018)

Moments	**Model**	**Data**
Capital Income Share, Top 1%	**0.60**	**0.62**
Capital Income Share, Top 10%	0.32	0.42
Capital Income Share, Bottom 90%	0.10	0.12
Capital Income Share, All	0.24	0.26

Policy Experiments

Optimal Policy

Government spending and social security fixed at status-quo ◂ Short Run

Variable	Status-Quo	Cons. Tax
Capital Income Tax	25%	0%
Consumption Tax	7.5%	30.4%
Wealth Tax	0%	0%
Labor Income Tax	13.5%	0%
Labor Tax Progressivity	0.20	0.36
Relative Progressivity	1	1.46
TFP	1	1.031
Wealth	1	1.166
Hours	0.309	0.272
Output	1	1.004
Wages	1	1.141
Borrowing Rate	0.019	0.009
Entrepreneurial Rate	0.089	0.059
Wealth Gini	0.817	0.799
Earnings Gini	0.635	0.631
Consumption Gini	0.440	0.393
CE Welfare Gain		0.18
efficiency		0.04
distribution		0.13
Share of Households Better Off		89%

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- Although would bring huge gains, might be difficult to implement and voted for;
- We now analyse partial reforms: i) intuitions; ii) been introduced around the world; iii) easier to implement; iv) comparable to the literature;

Optimality of Consumption Taxes: Part 1

Replace **Capital Income Tax** with **Consumption Tax** in Revenue Neutral Fashion, Earning Taxes at Status-Quo

Variable	**Status-Quo**	**Cons. Tax**
Capital Income Tax	25%	0%
Consumption Tax	7.5%	12.2%
TFP	1	1.046
Wealth	1	1.157
Hours	0.309	0.302
Output	1	1.093
Wages	1	1.108
Borrowing Rate	0.019	0.013
Entrepreneurial Rate	0.088	0.045
Wealth Gini	0.817	0.846
Earnings Gini	0.635	0.638
Consumption Gini	0.440	0.465
CE Welfare Gain		0.069
efficiency		0.124
distribution		-0.046
Share of Households Better Off	-	100%

◂ Short Run

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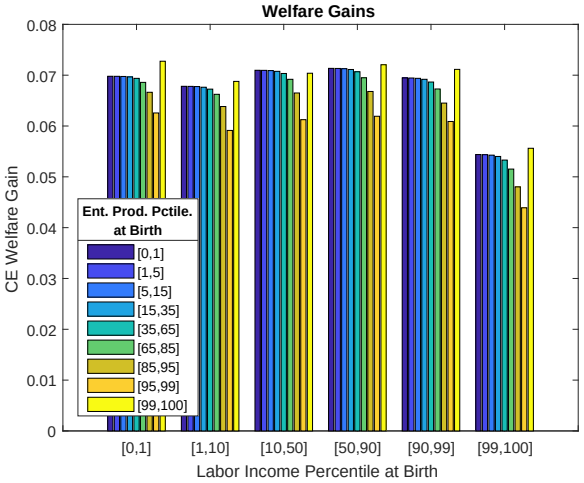
Replace **Capital Income Tax** with **Consumption Tax** in Revenue Neutral Fashion, Earning Taxes at Status-Quo

Figure: Replacing Linear Capital Income Taxes with Consumption Tax



Optimality of Consumption Taxes: Part 2

Eliminate Capital Tax + **Zero Average Labor Income Tax**; Progressivity at the Status-Quo Short Run.

Variable	Status-Quo	Cons. Tax
Capital Income Tax	25%	0%
Consumption Tax	7.5%	25.8%
Labor Income Tax (Average)	13.5%	0%
Labor Tax Progressivity (τ_l)	0.20	0.20
Relative Progressivity (status-quo)	1	1
TFP	1	1.021
Wealth	1	1.350
Hours	0.310	0.311
Output	1	1.114
Wages	1	1.134
Borrowing Rate	0.019	0.009
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Wealth Gini	0.817	0.833
Earnings Gini	0.635	0.637
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CE Welfare Gain		0.122
efficiency		0.138
distribution		-0.014
Share of Households Better Off		100%

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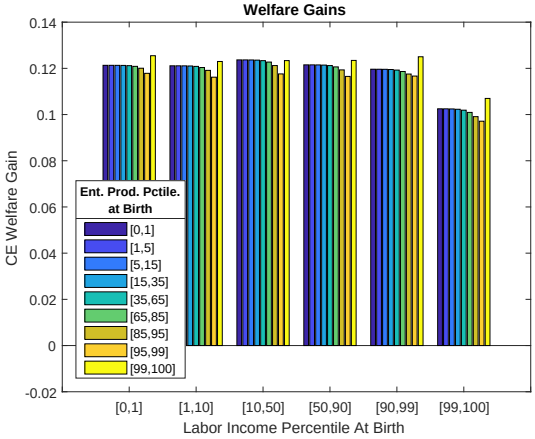

Optimality of Consumption Taxes: Part 3

Optimal Progressive Labor Taxes + **Consumption** ◂ Short Run

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Capital Income Tax	25%	0%
Consumption Tax	7.5%	30.4%
Labor Income Tax	13.5%	0%
Labor Tax Progressivity	0.20	0.36
Relative Progressivity	1	1.46
TFP	1	1.031
Wealth	1	1.166
Hours	0.309	0.272
Output	1	1.004
Wages	1	1.141
Borrowing Rate	0.019	0.009
Entrepreneurial Rate	0.089	0.059
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Earnings Gini	0.635	0.631
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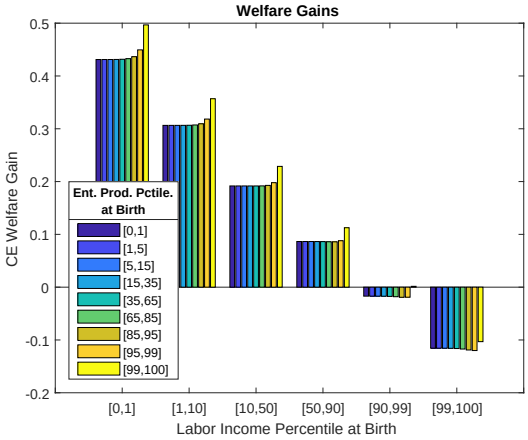
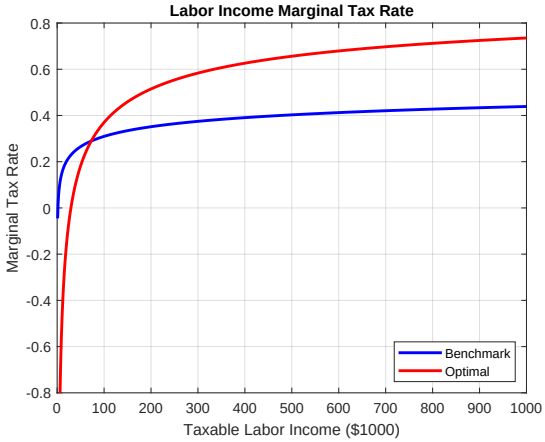


Labor Income Tax Schedule with Optimal Policy



Extra Important Results

- Results without consumption taxation; ◂ No Consumption Taxation
- Transition and political economy features; ◂ Transition
- Results without entrepreneurs; ◂ No Entrepreneurs
- Results with intergenerational links and correlation in abilities; ◂ Intergenrational links
- Removing the *Life-Cycle* insurance channel; ◂ Veil of Ignorance

Conclusion

- Tax consumption!
- Taxing consumption is better than capital and/or wealth, when there is return heterogeneity-the estimated welfare gains might be a lower bound (no wealth hiding, no measurement issues *et cetera*);
- Consumption taxes can be used to raise revenues, while progressive labor income taxes (zero on average) can still be used to provide insurance - this policy prescription holds even without return heterogeneity.
- The optimal progressivity of labor income taxes depend on all the instruments adopted. In the optimal policy, the progressivity of the labor income tax is much higher than in the status-quo or when consumption taxes are not available.
- **Conclusions**: consumption taxation systematically changes canonical normative conclusions about: i) capital income taxes; ii) progressivity of labor income tax; and iii) wealth taxes.

Appendix

US Social Security

How we model Social Security to mimic the US system:

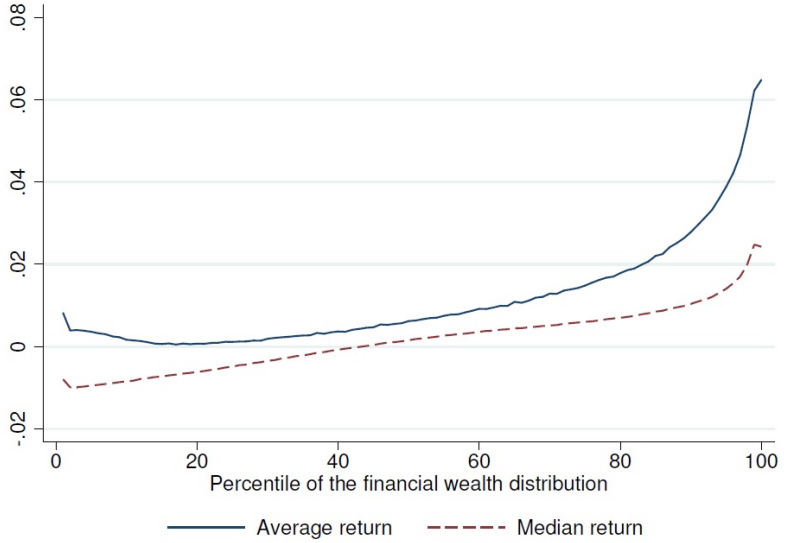
$$\bar{b}_i = \chi \Phi \left(\min \left\{ wL_i, \bar{y} \right\} \right) \qquad \text{(S.S. retirement benefit)}$$
$$T_{ss} = \tau_{ss} \min(weh, \bar{y}) \qquad \text{(Flat S.S. tax up to a cap)}$$

- $\Phi(\cdot)$ is a progressive function, modeled on the US social security benefit schedule, with bend points y_1, y_2.
- χ set internally to ensure balanced budget.

Return

Norwegian Data (Fagereng et al., 2020)

Figure 2. The correlation between financial wealth and its return



Numerical Solution Technique/1

We proceed to solve for the stationary equilibrium using the following Gauss-Jacobi algorithm.

1. Start with a guess for a vector $\dagger = (\bar{x}, \chi, Q, T_b, r, L_i)$.

2. Given $\{L_i\}_{i=1}^{I}$, compute aggregate labor $L = \sum_{i=1}^{I} \pi_i L_i$.

3. Given Q and L, determine prices $p = F_1(Q, L)$ and $w = F_2(Q, L)$.

4. Given w and L_i, determine the social security benefit $b(i, j) = \chi w L_i \times \mathbb{1}\{j \geq R\}$

5. Given w, r, p, $b(i, j)$, and T_b, solve for the policy functions $a'_{i,j}(a, z_h, z_r)$ and $h_{i,j}(a, z_h, z_r)$ for $i = 1, \ldots, I$ and $j = 1, \ldots, J$ by iterating on the Bellman equation.

6. Calculate the distributions $\psi_{i,j}$ for $i = 1, \ldots, I$ and $j = 1, \ldots, \psi_J$ using Monte Carlo simulation.

Numerical Solution Technique/2

7. Given $\psi_{i,j}$, solve for $\hat{Q}$, $\{\hat{L}_i\}_{i=1}^{I}$, $\hat{T}_b$:

$$\hat{Q} = \sum_{i=1}^{I} \pi_i \sum_{j=1}^{J} \mu_j \int z_r a d\psi_{i,j}$$

$$\hat{L}_i = \sum_{j=1}^{J} \mu_j \int e(i,j,z_h) h_{i,j}(a,z_h,z_r) d\psi_{i,j} \text{ for } i = 1,\ldots,I$$

$$\hat{T}_b = \frac{1}{1+n}\left[\sum_{i=1}^{I} \pi_i \sum_{j=1}^{J} \mu_j (1-s_{j+1}) \int E\left[a'_{i,j}(a,z_h,z_r)(1+r(z'_r))\middle| z_r\right] d\psi_{i,j}\right]$$

Also solve for $\hat{r}$, the interest rate such that the bond market clears given the existing wealth distribution. Define $\hat{k}(a,z_r;\hat{r}) = \lambda a \mathbb{1}\{pz_r \geq \hat{r}+\delta\}$. Then solve for $\hat{r}$ such that

$$\sum_{i=1}^{I} \pi_i \sum_{j=1}^{J} \mu_j \int \left[\hat{k}(a,z_r;\hat{r}) - a\right] d\psi_{i,j} = 0$$

8. If $(r, Q, \{L_i\}_{i=1}^{I}, T_b)$ are sufficiently close to $(\hat{r}, \hat{Q}, \{\hat{L}_i\}_{i=1}^{I}, \hat{T}_b)$, stop. Otherwise update $(r, Q, \{L_i\}_{i=1}^{I}, T_b)$, and return to step 2, with update parameter ω.

Back

External Estimates

Tax Function Estimation

- **Tax Functions**: wage and capital income taxes:
  - To estimate $T_l(y_l) = y_l - \lambda_l (y_l)^{1-\tau_l}$;
  - SCF measure of income from different sources, then tax liabilities with NBER's TAXSIM programme;
  - To estimate labor income tax, regress log post-tax labor income on log pre-tax labor income (assuming zero capital income in order to compute the tax)
    $\lambda_l = 1.69$, $\tau_l = 0.21$; Average labor income tax=13.5%;
  - Similar exercise for capital income, $\tau_k = 0.27$;

Back

Labor Abilities

1. The ability process is

$$\log e(i, j, z_h) = \bar{e}_i + (\alpha_0 + \alpha_1 j + \alpha_2 j^2 + \alpha_3 j^3 + \alpha_4 j^4) + z_h$$

   where z_h is random walk:

$$z_h' = z_h + \varepsilon_e, \quad \varepsilon_e \sim N(0, \sigma^2_{\varepsilon h})$$

2. Identification in SCF:
   i. Estimate age-profile coefficients $(\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4)$ directly from SCF.
   ii. Still need to identify $\sigma^2_{\varepsilon h}$ and $\sigma^2_{\bar{e}_i}$;

What about taxing wealth rather than consumption?

Substitute capital income tax with linear **wealth tax**. Guvenen et al. (QJE, 2023).

Back

Variable	Status-Quo	Cons. Tax	Wealth Tax
Capital Income Tax	25%	0%	0%
Consumption Tax	7.5%	11.5%	7.5%
Wealth Tax	0%	0%	1.5%
TFP	1	1.046	1.058
Wealth	1	1.157	1.015
Hours	0.310	0.303	0.306
Output	1	1.093	1.060
Wages	1	1.114	1.068
Borrowing Rate	0.019	0.013	0.024
Entrepreneurial Rate	0.088	0.045	0.036
Wealth Gini	0.817	0.846	0.863
Earnings Gini	0.635	0.638	0.638
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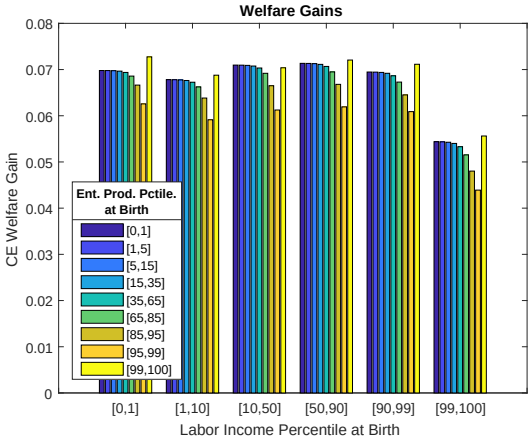

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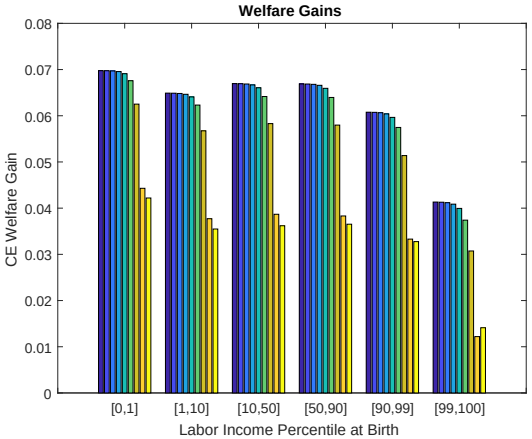

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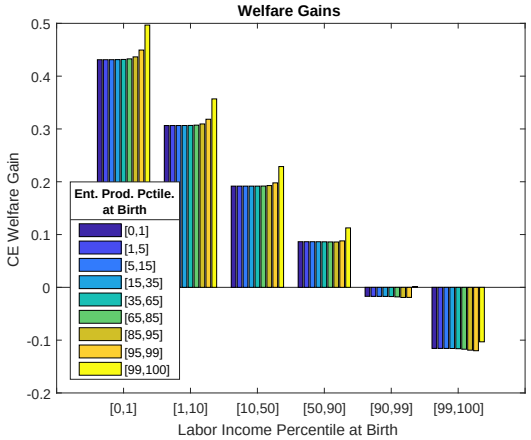

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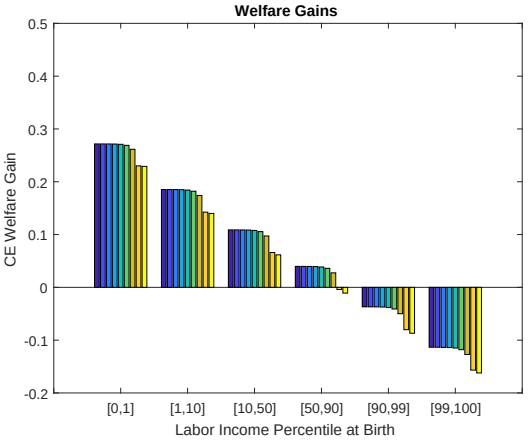

Transition Path and Democratic Support: Would Consumption Taxation Be Voted for?

Table: Partial Reforms and Democratic Support

	No τ_k	**No τ_h**	**Optimal**	**Democracy**	**Pareto**
Consumption Tax	12.2%	25.8%	30.4%	28.6%	33.4%
Avg. Lab. Income Tax	15.1%	0%	0%	0%	0%
Labor Tax Progressivity	0.20	0.20	0.35	0.30	0.35
Capital Income Tax	0%	0%	0%	0%	0%
Wealth Tax	0%	0%	0%	0%	0%
CE Welfare Gain (Long-Run)	6.9	12.2	18.0	16.6	15.7
CE Welfare Gain (Alive)	3.6	1.5	-2.5	0.5	0.5
Pct. Support	**93.5**	**63.5**	**44.2**	**50.1**	**100**

◂ Back Optimal ◂ Back Simple ref 1 ◂ Back Simple ref 2 ◂ Back Final

No Entrepreneurs

Back

Variable	Status-quo	Baseline	No Ret. Het
Capital Income Tax	25%	0%	0%
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Wealth Tax	0%	0%	0%
Labor Income Tax	13.5%	0%	0%
Labor Tax Progressivity	0.20	0.35	0.36
Relative Progressivity	1	1.46	1.46
TFP	1	1.031	1
Wealth	1	1.166	1.182
Hours	0.309	0.246	0.242
Output	1	1.004	0.970
Wages	1	1.141	1.118
Borrowing Rate	0.019	0.009	0.001
Entrepreneurial Rate	0.089	0.059	n/a
Wealth Gini	0.817	0.799	0.715
Earnings Gini	0.635	0.636	0.633
Consumption Gini	0.440	0.393	0.381
CE Welfare Gain		0.180	0.156
Share of Households Better Off		89%	89%

No Entrepreneurs

Back

Variable	Status-quo	Baseline	No Ret. Het
Capital Income Tax	25%	0%	0%
Consumption Tax	7.5%	30.4%	34.8%
Wealth Tax	0%	0%	0%
Labor Income Tax	13.5%	0%	0%
Labor Tax Progressivity	0.20	0.35	0.36
Relative Progressivity	1	1.46	1.46
TFP	1	1.031	1
Wealth	1	1.166	1.182
Hours	0.309	0.246	0.242
Output	1	1.004	0.970
Wages	1	1.141	1.118
Borrowing Rate	0.019	0.009	0.001
Entrepreneurial Rate	0.089	0.059	n/a
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Intergenerational Links and Correlation between Abilities

Back

Variable	Status-quo	Baseline	Links and Corr.
Capital Income Tax	25%	0%	0%
Consumption Tax	7.5%	30.4%	32.6%
Wealth Tax	0%	0%	0%
Labor Income Tax	13.5%	0%	0%
Labor Tax Progressivity	0.20	0.35	0.36
Relative Progressivity	1	1.46	1.47
TFP	1	1.031	1.032
Wealth	1	1.166	1.160
Hours	0.309	0.246	0.245
Output	1	1.004	1.005
Wages	1	1.141	1.139
Borrowing Rate	0.019	0.009	0.013
Entrepreneurial Rate	0.089	0.059	0.078
Wealth Gini	0.817	0.799	0.801
Earnings Gini	0.635	0.636	0.636
Consumption Gini	0.440	0.393	0.388
CE Welfare Gain		0.180	0.174
Share of Households Better Off		89%	89%

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Veil of Ignorance Only

Back

Variable	Status-quo	Baseline	Veil of Ignorance
Capital Income Tax	25%	0%	0%
Consumption Tax	7.5%	30.4%	19.3%
Wealth Tax	0%	0%	0%
Labor Income Tax	13.5%	0%	0%
Labor Tax Progressivity	0.20	0.35	0.28
Relative Progressivity	1	1.46	1.18
TFP	1	1.031	1.014
Wealth	1	1.166	1.224
Hours	0.309	0.246	0.243
Output	1	1.004	1.037
Wages	1	1.141	1.124
Borrowing Rate	0.019	0.009	0.015
Entrepreneurial Rate	0.089	0.059	0.072
Wealth Gini	0.817	0.799	0.792
Earnings Gini	0.635	0.636	0.636
Consumption Gini	0.440	0.393	0.382
CE Welfare Gain		0.180	0.082
Share of Households Better Off		89%	89%

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Consumption Tax	7.5%	30.4%	19.3%
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