

Discussion of *Efficient Redistribution*  
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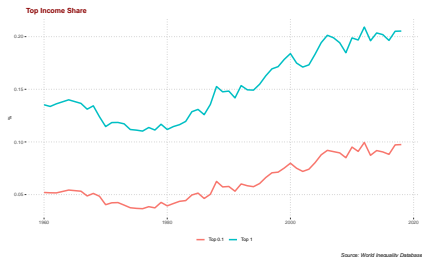
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# The Paper: Main Theme

- **Fact:** Large Increase in Earnings-, Income and Wealth Inequality  
⇒ Calls for redistribution ↑ (Occupy Wall Street, Piketty, Young)



From Omer Koru's JMP

- **Question:** How much redistribution, how to finance optimally?
- **Answer:** Flat income tax with large transfer (UBI)  $\approx$  optimal!
  - Additional tax progressivity not very helpful
  - Wealth tax not very helpful
- **Method:** Optimal tax transition in model of top income & wealth inequality.

# Paper in Nutshell I: Model of Top Income Inequality

- Period utility

$$u(c, h) = \log(c) - \frac{1}{3}h^3$$

- Budget constraint

$$(1 + \tau_s)c + a' = (1 - \tau) \frac{(i)^{1-\xi}}{1 - \xi} + \iota + a - \frac{\tau_a a^{1+\xi_a}}{1 + \xi_a}$$

$$i = W \cdot e \cdot h + r \cdot a$$

- Stochastic productivity process:  $e \in \{E_n, \bar{e}\}$ 
  - If  $e \in E_n$ , productivity follows log-normal AR(1) ( $\mu = 1$ , yearly)

$$\log e' = 0.986 \log e + 0.171u$$

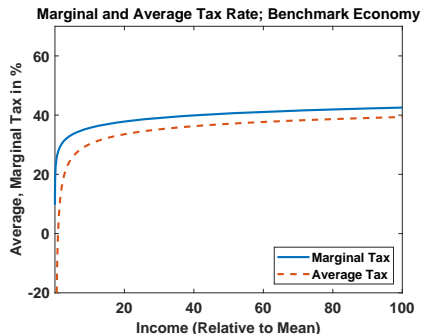
- Transitions into superstar (Castaneda et al., 2003) state  $\bar{e} = 404$

$$\begin{bmatrix} 0.99999 & 5.3e^{-6} \\ 0.025 & 0.975 \end{bmatrix}$$

- Superstars: 0.02% of pop. Make 10% of all earnings, 8% of wealth.
- Being a superstar is highly persistent (expected duration 40 years).

## Paper in a Nutshell II: Tax Policy Transition

- One-time unexpected but permanent tax reform: choose  $(\tau, \xi, \tau_a, \xi_a)$  once and for all.
- Calculate transition path from initial stationary equilibrium.
- Time-varying transfer  $\iota_t$  adjusts to balance budget every period.
- Status Quo:  $\iota = \$18,000$  and flat tax of ca. 30% ( $\xi \approx 0$ ).



$$T'(i) = 1 - \frac{(1 - \tau)}{(i)^\xi} \quad t(i) = -\frac{\iota}{i} + 1 - \frac{(1 - \tau)}{(1 - \xi)(i)^\xi}$$

## Paper in a Nutshell III: Social Welfare Function

- In model, households are heterogeneous. Welfare impact of policy reform is heterogeneous. How to aggregate across households?
- **Step 1:** For household  $i$ , transform lifetime utility  $V_i$  from stochastic processes  $\{c_{it}, h_{it}\}$  into constant consumption flow  $\omega_i$

$$V_i(\{c_{it}, h_{it}\}) = \frac{\log(\omega_i)}{1 - \beta}$$

- **Step 2:** Aggregate the  $\omega_i$  in the population:
  - Average Welfare (akin to risk-adjusted GDP of Benabou, 2002, Lump-sum redistribution authority of Auerbach and Kotlikoff, 1987)

$$W^A = \int \omega_i di$$

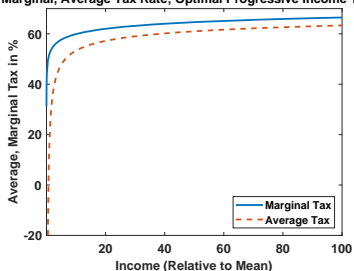
- Utilitarian Welfare (government values redistribution, not just insurance)

$$W^U = \int V_i di = \frac{\int \log(\omega_i) di}{1 - \beta}$$

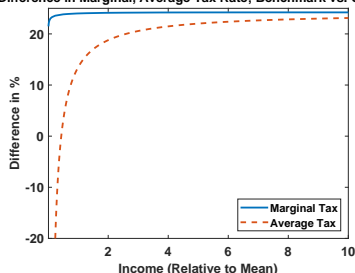
# Main Results: Optimal Utilitarian Tax Reform

- Significant expansion of lump-sum transfer  $\iota$  (from  $\approx$  \$18,000 to  $\approx$  \$26,500). Andrew Young's proposal not generous enough.
- Big income tax increase (22%). Small increase in progressivity.
- Wealth tax used relatively little (on top of the income tax)

Marginal, Average Tax Rate; Optimal Progressive Income Taxes



Difference in Marginal, Average Tax Rate; Benchmark vs. Optimal



Outcomes	Base	$\tau \cdot i$	$T(i)$	$+T(a)$
$\Delta Y$ (in %), SS		-19%	-21%	-23%
$\Delta W^U$ (in %)		7.8%	8.5%	9.5%
Gini $\omega_i$ , SS	0.38	0.30	0.26	0.21

## Comments I: Social Welfare Function

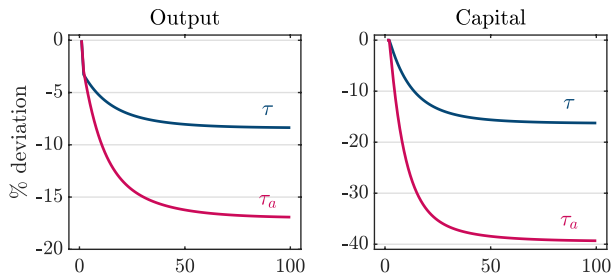
- Are results robust to different social welfare function? Utilitarian welfare  $W^U$  v/s average welfare  $W^A$
- Yes for optimal policy (at least qualitatively)
  - Expansion of transfer
  - Increase in level of income tax
  - Moderate role for wealth taxes and additional tax progressivity
- But: now welfare gains from optimal tax reform small.

Outcomes	$W^U; \tau \cdot i$	$W^A; \tau \cdot i$
$\tau$ (in %)	56%	43%
$\Delta W^U$ (in %)	7.8%	0.6%

- Do households value insurance too little? log-utility!
- Is there too little scope for insurance? Normal and superstar state very persistent. Too little opportunity through  $T(i)$ ?

## Comments II: Tax Policy Transitions

- I like: transitions! Steady state analysis overstates macro costs of tax reforms (Bakis-Kaymak-Poschke 2015, Dyrda-Pedroni 2018)




- Concerns: restriction of tax instruments
  - In welfare terms, how close are we to the constrained efficient allocation (Heathcote and Tsujiyama, 2020)? (Is the title optimal?)
  - Time-dependent taxes?  $\tau_{a0}$  v/s  $\tau_{at}$ .
  - Restriction on  $T(i)$  i): No discrimination of  $(\tau_k, \tau_l)$ .
  - Restriction on  $T(i)$  ii): High taxes at the very top? Kindermann & Krueger (2020) find **79%** optimal marginal rate on top 1%. Why?



## Comments III: Model of Top Income Inequality<sup>1</sup>

- What does it take (in model) to be a top earner? Luck ( $\bar{e}$ ) and sweat (high  $h$ ). Not human capital accumulation.
- Key assumption:  $F(e'|e)$  and especially  $\bar{e}$  invariant to tax code.
- What do top earners actually do? Of top 0.1% earners
  - 60% executives, managers, supervisors, and financial professionals
  - Small but important minority at the very top are sports/entertainment stars and entrepreneurs
  - Almost 50% of earned income of this group from pass-through entities (sole proprietorships, partnerships, S-corps)
- Being a top earner is transitory: between 1999 and 2007, of those reporting income of \$1million or more
  - Only 50% did so for one year
  - 2/3 did so for one or two year
  - Only approx. 10% for all years

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<sup>1</sup>Paper contains extension to model with entrepreneurs. See also Brüggemann (2019) 

# Conclusions

- Very rich, thought-provoking paper!
  - Coherent Theory of Earnings and Wealth Inequality
  - Ambitious Tax Transition Analysis
  - Massive social welfare gains from increase in lump-sum transfers. Most from redistribution, some for better insurance.
- My interpretation: potent call for generous universal basic income (see Daruich-Fernandez 2020, Luduvic 2020, Guner-Kaygusuz-Ventura 2019) and advice how to best finance it.

THANK YOU