Discussion of Use It or Lose It: Efficiency Gains from Wealth Taxation

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Main focus so far:

- Motivate non-equivalence between τ_k and τ_w
  - aka "net" and "gross capital tax"
- Calibrate to US: match top 1% and 10% wealth
- Experiment: set $\tau_k = 0$, find τ_w to balance gov't budget
  - not optimizing yet
- Compare welfare and output in two steady states
  - evaluate efficiency gains vs. distributional concerns

Overview:

- Raises stimulating questions, especially given recently renewed interest in
  - wealth distribution
  - (world-wide) wealth tax
- Important to understand qualitatively:
  - why τ_k could be non-equivalent to τ_w
- Important to evaluate quantitatively:
  - effects of replacing (amending) τ_k with τ_w

Key elements:

1. r_i - heterogeneity of returns
2. $r_i \nrightarrow r_j$ - capital market friction (particular inc. mkts)
3. $\tau_k(ra) = \tau_k$ - linear tax (equivalently for τ_w)

Comments:

1. needed for wealth distribution in standard models
2. paper treats as limit case (investment autarky)
   - should really think of z_i heterogeneity as including transaction costs
   - calibrating to actual returns heterogeneity - implies that?
3. needed to stop gov't from circumventing 2
   - linear is not key, restricted is key

Simple arithmetic:

Alice owns a_A, gets return r_A
Bob owns a_B, gets return r_B

Revenue-neutral experiment needs:

$$\tau_k r_A a_A + \tau_k r_B a_B = \tau_w (1 + r_A) a_A + \tau_w (1 + r_B) a_B$$

- if $r_A = r_B = r$ then

$$\tau_k r (a_A + a_B) = \tau_w (1 + r) (a_A + a_B)$$

  and no distinction as in standard inc. mkts with $\tau_k = \tau_w \frac{1+r}{r}$
- if $r_A \neq r_B$ then need

$$\tau_k = \tau_w \frac{(1 + r_A) a_A + (1 + r_B) a_B}{r_A a_A + r_B a_B}$$

- More generally: non-equivalence if mapping depends on a

But note: arbitrarily non-linear $\tau_w(a)$ can undo this

Example from paper

	Capital Income Tax		Wealth Tax	
	$r_1 = 0\%$	$r_2 = 20\%$	$r_1 = 0\%$	$r_2 = 20\%$
Wealth	1000	1000	1000	1000
Pre-tax Income	0	200	0	200
Tax rate	$\tau_k = \frac{50}{200} = 0.25$		$\tau_w = \frac{50}{2200} = 2.27\%$	
Tax liability	0	50	$1000\frac{50}{2200} \approx 23$	$1200\frac{50}{2200} \approx 27$
After-tax rate of return	0	$\frac{200-50}{1000} = 15\%$	$-\frac{23}{1000} = -2.3\%$	$\frac{200-27}{1000} = 17.3\%$
After-tax Wealth Ratio	$W_2/W_1 = 1150/1000 = 1.15$		$W_2/W_1 = 1173/977 \approx 1.20$	

- example of arbitrarily non-linear $\tau_w(a)$:
  - $\tau_w = 0$ for $a < 1200$ and $\tau_w = 0.25$ otherwise

Next steps

Experiment results under non-equivalence: intuitive starting point

- Consider next steps in the paper:

1. Take into account transitions
2. Add uncertainty in returns during life-cycle
3. Optimize non-linear τ_w

Next step 1

Transitions:

- potentially important
- current results suggest some cohorts may be worse off
- interesting to ask about political support with many cohorts

Next step 2

Uncertainty in returns during life-cycle:

important but secondary to accounting for potential responses of r_i to policy:

- currently key for τ_w effects: distribution of r_i
- but no way for the distribution to respond to τ_w
- seems important qualitatively and for realism
- for example, via (Ben-Porath) human capital?

Next step 3

Optimize non-linear τ_w:

- note: no disutility of entrepreneurial effort
- without efficiency-equity trade-off (SWF?),
  why not confiscatory tax (except for the highest r_i)?
- key concern: arbitrary non-linearity (see above)?
  - for example, asymmetric info still implies positive tax:
    IEE still holds with R replaced by $\left[R\left(a\right)+aR'\left(a\right)\right]>0$

Related quantitative comments:

- Quantitative realism: probably need some non-linearity in τ_k
  - for example, short-term capital gains taxation
  - also "[Set] τ_l to be 30 percent, consistent with the current US economy"?
- Back-of-the-envelope measure of friction from r_i-distribution:

$$\begin{aligned}
\tau_k^* - \tau_k^{calibrated} &= \tau_w^* \frac{1+\bar{r}}{\bar{r}} - 0.25 \\
&= 0.0215 \frac{1+1/\beta}{1/\beta} - 0.25 \\
&= 0.45 - 0.25 = 0.20
\end{aligned}$$