Taxing Top Incomes in a World of Ideas

Chad Jones

February 2019
The Saez (2001) Calculation

- Income: $z \sim \text{Pareto}(\alpha)$

- Tax revenue:
  \[ T = \tau_0 \bar{z} + \tau (z_m - \bar{z}) \]
  where $z_m$ is average income above cutoff $\bar{z}$

- Revenue-maximizing top tax rate:
  \[ z_m - \bar{z} + \tau z_m'(\tau) = 0 \]
  mechanical gain behavioral loss

- Divide by $z_m$ $\Rightarrow$ elasticity form and rearrange:
  \[ \tau^* = \frac{1}{1 + \alpha \cdot \eta_{z_m,1-\tau}} \]
  where $\alpha = \frac{z_m}{z_m - \bar{z}}$. 
\[ \tau^* = \frac{1}{1 + \alpha \cdot \eta_{z_m,1-\tau}} \]

- **Intuition**
  - Decreasing in \( \eta_{z_m,1-\tau} \): elasticity of top income wrt \( 1 - \tau \)
  - Increasing in \( \frac{1}{\alpha} = \frac{z_m - \bar{z}}{z_m} \): change in revenue as a percent of income = Pareto inequality

- **Diamond and Saez (2011) Calibration**
  - \( \alpha = 1.5 \) from Pareto income distribution
  - \( \eta = 0.2 \) from literature

\[ \Rightarrow \quad \tau_{d-s}^* \approx 77\% \]
This Paper

- How does this calculation change when:
  - New ideas drive economic growth
  - The reward for a new idea is a top income
  - Creation of ideas is broad
    - A formal “research subsidy” is imperfect (Walmart, Amazon)

- Adds a new force to the Saez (2001) calculation
  - \( \uparrow \tau \Rightarrow \downarrow w \Rightarrow \text{Lowers revenue} \) from other brackets
  - Also lowers consumption throughout the economy

- The efforts of a relatively small number of entrepreneurs is responsible for the bulk of economy-wide income growth
Literature Review

- **Human capital**: Badel and Huggett, Kindermann and Krueger
- **Superstars/inventors**: Scheuer and Werning, Chetty et al
- **Spillovers**: Lockwood-Nathanson-Weyl
- **Mirrlees w/ Imperfect Substitution**: Sachs-Tsyvinski-Werquin
- **Inventors and taxes**: Akcigit-Baslandze-Stantcheva, Moretti and Wilson, Akcigit-Grigsby-Nicholas-Stantcheva
- **Growth and taxes**: Stokey and Rebelo, Jaimovich and Rebelo
This paper does not calculate “the” optimal top tax rate

- Many other considerations in the literature
  - Rent seeking
  - Occupational choice (other brackets, concavity)
  - Top tax diverts people away from finance to ideas?
  - Social safety net, lenient bankruptcy insure the downside
  - How sensitive are entrepreneurs to top tax rates?
  - Empirical evidence on growth and taxes (later)

- Still, including economic growth and ideas seems important
Basic Setup
Overview

- BGP of an idea-based growth model. Romer 1990, Jones 1995
  - Semi-endogenous growth
  - Basic R&D (subsidized directly), Applied R&D (top tax rate)
  - BGP simplifies: static comparison vs transition dynamics

- Three alternative approaches to the top tax rate:
  - Revenue maximization
  - Maximize welfare of median worker
  - Maximize utilitarian social welfare
The Economic Environment

- Consumption goods produced by labor $L$ and “applied” ideas $A$:

  $$Y = A^\gamma L$$  \hspace{1cm} (1)

- Applied ideas produced from entrepreneurs, effort $e$, talent $z$, and basic research $B$:

  $$A = \nu_a \mathbb{E}[ez] S_a B^\beta$$  \hspace{1cm} (2)

- Fundamental ideas produced from basic research:

  $$B = \nu_b S_b$$  \hspace{1cm} (3)

- $L$, $S_a$, $S_b$ exogenous. $e$, $z$ endogenous (unspecified for now)
Nonrivalry of Ideas (Romer): \( Y = A^\gamma L \)

- Constant returns to rival inputs \((L)\)
  - Given a stock of nonrival blueprints/ideas \(A\)
  - Standard replication argument

- \(\Rightarrow\) Increasing returns to ideas and rival inputs together
  - \(\gamma > 0\) measures the degree of IRS

- Hints at why effects can be large
  - One computer or year of school \(\Rightarrow\) 1 worker more productive
  - One new idea \(\Rightarrow\) any number of people more productive

*Distortions of the computer/schooling have small effects.*

*Distorting the creation of the idea...*
BGP from a Dynamic Growth Model

- Production of basic ideas
  \[ \dot{B}_t = \bar{b} S^\lambda_{bt} B^{\phi_b}_t \]

- Production of applied ideas
  \[ \dot{A}_t = \bar{a} (\mathbb{E}(eZ) S_{at})^\lambda A^{\phi_a}_t B^{\alpha}_t \]

- BGP implies that stocks are proportional to flows:
  - $A$ and $B$ are proportional to $S_a$ and $S_b$ (to some powers)
  - $S_a$, $S_b$, $L$ all grow at the same exogenous population growth rate.
Output = Consumption:

- Combining (1) - (3):

\[ Y = \left( \nu \mathbb{E}[e^z] S_a S_b^\beta \right)^\gamma L. \]  

1. Output per person \( y \propto (S_a S_b^\beta)^\gamma \)
2. Intuition: \( y \) depends on stock of ideas, not ideas per person
3. LR growth = \( \gamma(1 + \beta)n \) where \( n \) is population growth

- Taxes distort \( \mathbb{E}(e^z) \), not \( S_a \) or \( S_b \) here
  - Simplicity
  - Cutoff \( \Rightarrow \) rich nonlinear tax could get it right?
  - Middle rate \( \Rightarrow \) right number become entrepreneurs...
Nonlinear Income Tax

- Tax Revenue

\[ T = \tau_0[wL + w_b S_b + w_a \mathbb{E}(ez) S_a] + (\tau - \tau_0)[w_a \mathbb{E}(ez) - \bar{w}]S_a \]

- Full growth model: entrepreneurs paid a constant share of GDP

\[ \frac{w_a \mathbb{E}(ez) S_a}{Y} = \rho \]

and \( Y = wL + w_b S_b + w_a \mathbb{E}(ez) S_a \)

- Therefore

\[ T = \tau_0 Y + (\tau - \tau_0) [\rho Y - \bar{w} S_a] \]
The Top Tax Rate that Maximizes Revenue
Revenue-Maximizing Top Tax Rate

- Two key equations:

\[ T = \tau_0 Y + (\tau - \tau_0) [\rho Y - \bar{w} S_a] \]

\[ Y = \left( \nu \mathbb{E} [ez] S_a S_b^\beta \right)^\gamma L \]

- Choose \( \tau \) to maximize tax revenue (given \( \tau_0 \) for now)

- A higher \( \tau \) reduces the effort of entrepreneurs,
  - Leads to less innovation
  - which reduces everyone’s income (\( Y \))
  - which lowers tax revenue received via \( \tau_0 \)
Solution

$$\max_{\tau} T = \tau_0 Y(\tau) + (\tau - \tau_0) [\rho Y(\tau) - \bar{w}S_a]$$

- FOC:
  $$\left((\rho - \bar{\rho}) Y + \frac{\partial Y}{\partial \tau} \cdot [(1 - \rho)\tau_0 + \rho\tau] \right) = 0$$

  where $\bar{\rho} \equiv \frac{\bar{w}S_a}{Y}$

- Rearranging with $\Delta \rho \equiv \rho - \bar{\rho}$

$$\tau_{rm}^* = \frac{1 - \tau_0 \cdot \frac{1-\rho}{\Delta \rho} \cdot \eta_{Y,1-\tau}}{1 + \frac{\rho}{\Delta \rho} \cdot \eta_{Y,1-\tau}}$$
**Interpretation**

\[
\tau^*_{rm} = \frac{1 - \tau_0 \cdot \frac{1-\rho}{\Delta \rho} \cdot \eta_{Y,1-\tau}}{1 + \frac{\rho}{\Delta \rho} \eta_{Y,1-\tau}} \quad \text{vs} \quad \tau^*_{ds} = \frac{1}{1 + \alpha \cdot \eta_{z_m,1-\tau}}
\]

- **Remarks:** Two key differences
  
  - \( \eta_{Y,1-\tau} \) versus \( \eta_{z_m,1-\tau} \)
    
    \( \eta_{Y,1-\tau} \Rightarrow \) How GDP changes if researchers keep more
    
    \( \eta_{z_m,1-\tau} \Rightarrow \) How average top incomes change
  
  - If \( \tau_0 > 0 \), then \( \tau^* \) is lower

  Distorting research lowers GDP

  \( \Rightarrow \) lowers revenue from other taxes!
Guide to Intuition

\( \eta_{Y,1-\tau} \) The economic model

\( \rho \eta_{Y,1-\tau} \) Behavioral effect via top earners

\( (1 - \rho) \eta_{Y,1-\tau} \) Behavioral effect via workers

\( \Delta \rho \equiv \rho - \bar{\rho} \) Tax base for \( \tau \), mechanical effect

\( 1 - \Delta \rho \) Tax base for \( \tau_0 \)
What is $\eta_{Y,1-\tau}$?

$$Y = \left( \nu \mathbb{E}[ez] S_a S_b^\beta \right)^\gamma L \quad \Rightarrow \quad \eta_{Y,1-\tau} = \gamma \cdot \zeta$$

- $\gamma$ is the degree of IRS via ideas
- $\zeta$ is the elasticity of $\mathbb{E}[ez]$ with respect to $1-\tau$.
  - Standard Diamond-Saez elasticity: $\zeta = \eta_{zm,1-\tau}$
  - How individual behavior changes when the tax rate changes
  - Cool insight from PublicEcon: all that matters is the value of this elasticity, not the mechanism!
  - So for now, just treat as a parameter (endogenized later)
Calibration

- Parameter values for numerical examples

\[ \gamma \in [1/8, 1] \]

\[ g_{tfp} = \gamma (1 + \beta) \cdot g_S \approx 1\% . \]

\[ \zeta \in \{0.2, 0.5\} \]

Behavioral elasticity. Saez values

\[ \tau_0 = 0.2 \]

Average tax rate outside the top.

\[ \Delta \rho = 0.10 \]

Share of income taxed at the top rate; top returns account for 20% of taxable income.

\[ \rho = 0.15 \]

So \[ \frac{\rho}{\Delta \rho} = 1.5 \] as in Saez pareto parameter, \( \alpha \).
## Revenue-Maximizing Top Tax Rate, $\tau^*_rm$

<table>
<thead>
<tr>
<th>Degree of IRS, $\gamma$</th>
<th>Behav. Elas = 0.2</th>
<th>Behav. Elas = 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\tau_0 = 0$</td>
<td>$\tau_0 = 0.2$</td>
<td>$\tau_0 = 0$</td>
</tr>
<tr>
<td>1/8</td>
<td>0.970</td>
<td>0.935</td>
</tr>
<tr>
<td>1/4</td>
<td>0.941</td>
<td>0.875</td>
</tr>
<tr>
<td>1/2</td>
<td>0.889</td>
<td>0.763</td>
</tr>
<tr>
<td>1</td>
<td>0.800</td>
<td>0.573</td>
</tr>
</tbody>
</table>
Intuition

• Suppose we double the “keep rate” $1 - \tau$. What is the long-run effect on GDP?
  
  o Answer: $2^{\eta_Y, 1-\tau} = 2^{\gamma \zeta}$

  o Baseline: $\gamma = 1/2$ and $\zeta = 1/6 \Rightarrow 2^{1/12} \approx 1.06$

Going from $\tau = 75\%$ to $\tau = 50\%$ raises GDP by just 6%!

• With $\Delta \rho = 10\%$, the revenue cost is 2.5% of GDP
  $\Rightarrow$ 6% gain to all $>$ redistributing 2.5% to the bottom half!

• 6% seems small, but achieved by a small group of researchers working 15% harder...
Maximizing Worker Welfare

– Revenue-max ignores effect on consumption
– Worker welfare yields a clean closed-form solution
Choose $\tau$ and $\tau_0$ to Maximize Worker Welfare

- **Workers:**
  \[ c^w = w(1 - \tau_0) \]
  \[ u_w(c) = \theta \log c \]

- **Government budget constraint**
  \[ \tau_0 Y + (\tau - \tau_0)(\rho Y - \bar{w}S_a) = \Omega Y \]

Exogenous government spending share of GDP = $\Omega$

- **Therefore:**
  \[ \max_{\tau, \tau_0} \log(1 - \tau_0) + \log Y(\tau) \quad \text{s.t.} \]
  \[ \tau_0 Y + (\tau - \tau_0)(\rho Y - \bar{w}S_a) = \Omega Y. \]
First Order Conditions

• The top rate that maximizes worker welfare satisfies

\[
\tau_{ww}^* = \frac{1 - \eta Y,1-\tau}{1 + \frac{\rho \Delta \rho}{\Delta \rho} \eta Y,1-\tau} \left(\frac{1-\rho}{\Delta \rho} \cdot \tau_0^* + \frac{1-\Delta \rho}{\Delta \rho} \cdot (1 - \tau_0^*) - \frac{\Omega}{\Delta \rho}\right).
\]

• Three new terms relative to Saez:

\[
\eta \frac{1-\rho}{\Delta \rho} \cdot \tau_0^*
\]

Original term from RevMax

\[
\eta \frac{1-\Delta \rho}{\Delta \rho} \cdot (1 - \tau_0^*)
\]

Direct effect of a higher tax rate reducing GDP
\[ \Rightarrow \] reduce workers consumption

\[
\eta \frac{\Omega}{\Delta \rho}
\]

Need to raise \( \Omega \) in revenue
Solution

• Combining with the Govt Budget Constraint:

\[
\tau_{ww}^* = \frac{1 - \eta_{Y,1-\tau}}{1 + \frac{\rho}{\Delta \rho} \eta_{Y,1-\tau} + \frac{\bar{\rho}}{1-\Delta \rho} \eta_{Y,1-\tau}} \left[ \frac{1-\Delta \rho}{\Delta \rho} - \frac{\Omega}{\Delta \rho} \left( 1 + \frac{\bar{\rho}}{1-\Delta \rho} \right) \right],
\]

• Another intuition: when is “flat tax” optimal?

\[
\tau \leq \tau_0 \quad \text{and} \quad \kappa \geq \kappa_0 \iff \eta_{Y,1-\tau} \geq \frac{\Delta \rho}{1-\Delta \rho}.
\]

○ Raise \(c^w\) by \(\downarrow \tau\): raises GDP by \(\eta_{Y,1-\tau}\)

○ Redistribution cost: take from \(\Delta \rho\) people, give to \(1 - \Delta \rho\)

• Baseline parameters: \(\frac{\Delta \rho}{1-\Delta \rho} = \frac{1}{9}\) and \(\eta_{Y,1-\tau} = \frac{1}{6} \cdot \gamma\).

So \(\gamma > 2/3 \Rightarrow \tau < \tau_0\).
## Tax Rates that Maximize Worker Welfare

<table>
<thead>
<tr>
<th>Degree of IRS, $\gamma$</th>
<th>Behavioral elast. = 0.2</th>
<th>Behavioral elast. = 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\tau_{ww}^*$</td>
<td>$\tau_0^*$</td>
</tr>
<tr>
<td>1/8</td>
<td>0.830</td>
<td>0.130</td>
</tr>
<tr>
<td>1/4</td>
<td>0.670</td>
<td>0.148</td>
</tr>
<tr>
<td>1/2</td>
<td>0.377</td>
<td>0.180</td>
</tr>
<tr>
<td>1</td>
<td>-0.118</td>
<td>0.235</td>
</tr>
</tbody>
</table>

*The top rate that maximizes worker welfare can be negative!"
Maximizing Utilitarian Social Welfare
Entrepreneurs

- Utility function depends on consumption and effort:

$$u(c, e) = \theta \log c - \zeta e^{1/\zeta}$$

- Researcher with talent $z$ solves

$$\max_{c,e} u(c, e) \quad \text{s.t.}$$

$$c = \bar{w}(1 - \tau_0) + [w_s ez - \bar{w}](1 - \tau) + R$$

$$= \bar{w}(1 - \tau_0) - \bar{w}(1 - \tau) + w_s ez(1 - \tau) + R$$

$$= \bar{w}(\tau - \tau_0) + w_s ez(1 - \tau) + R$$

where $R$ is a lump sum rebate.

- FOC:

$$e^{\frac{1}{\zeta} - 1} = \frac{\theta w_s z (1 - \tau)}{c}.$$
SE/IE and Rebates

- Log preferences imply that SE and IE cancel: \( \frac{\partial e}{\partial \tau} = 0 \)

- Standard approach is to rebate tax revenue to neutralize the IE.
  - Tricky here because IE’s are heterogeneous!

- Shortcut: heterogeneous rebates that vary with \( z \) to deliver

\[
c_z = w_sez(1 - \tau)^{1-\alpha}
\]

\[
e_z = e^* = [\theta(1 - \tau)^{\alpha}]^\zeta,
\]

where \( \alpha \) parameterizes the elasticity of effort wrt \( 1 - \tau \)

- \( \eta_{Y,1-\tau} = \alpha \zeta \gamma \)

- governs tradeoff with redistribution
Utilitarian Social Welfare

- Social Welfare:

\[
SWF \equiv Lu(c^w) + S_b u(c^b) + S_a \cdot \int u(c_z, e_z) dF(z).
\]

- Substitution of equilibrium conditions gives

\[
SWF \propto \log Y + \ell \log(1 - \tau_0) + s(1 - \alpha) \log(1 - \tau) - s\zeta(1 - \tau)^\alpha
\]

where \( s \equiv \frac{S_a}{L+S_b+S_a}, \ \ell \equiv 1 - s, \)
Tax Rates that Maximize Social Welfare

- Proposition 2 gives the tax rates, written in terms of the “keep rates” \( \kappa \equiv 1 - \tau \) and \( \kappa_0 \equiv 1 - \tau_0 \).

- Two well-behaved nonlinear equations:

\[
\alpha \zeta s \kappa^\alpha + \frac{\kappa}{\kappa_0} \cdot \frac{\ell}{1 - \Delta \rho} (\Delta \rho + \bar{\rho}\eta) = \eta \left(1 + \frac{\bar{\rho}\ell}{1 - \Delta \rho}\right) + s(1 - \alpha)
\]

\[
\kappa_0(1 - \Delta \rho) + \kappa\Delta \rho = 1 - \Omega.
\]
Maximizing Social Welfare: $\alpha = 1$
Tax Rates that Maximize Social Welfare ($\alpha = 1$)

<table>
<thead>
<tr>
<th>Degree of IRS, $\gamma$</th>
<th>Behavioral elast. = 0.2</th>
<th>Behavioral elast. = 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\tau^*$</td>
<td>GDP loss if $\tau = 0.75$</td>
</tr>
<tr>
<td>1/8</td>
<td>0.835</td>
<td>-0.9%</td>
</tr>
<tr>
<td>1/4</td>
<td>0.679</td>
<td>1.0%</td>
</tr>
<tr>
<td>1/2</td>
<td>0.390</td>
<td>7.2%</td>
</tr>
<tr>
<td>1</td>
<td>-0.107</td>
<td>22.0%</td>
</tr>
</tbody>
</table>
### Tax Rates that Maximize Social Welfare ($\alpha = 1/2$)

<table>
<thead>
<tr>
<th>Degree of IRS, $\gamma$</th>
<th>Behavioral elast. = 0.2</th>
<th>Behavioral elast. = 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\tau^*$</td>
<td>GDP loss if $\tau = 0.75$</td>
</tr>
<tr>
<td>1/8</td>
<td>0.539</td>
<td>0.6%</td>
</tr>
<tr>
<td>1/4</td>
<td>0.461</td>
<td>1.6%</td>
</tr>
<tr>
<td>1/2</td>
<td>0.309</td>
<td>4.1%</td>
</tr>
<tr>
<td>1</td>
<td>0.030</td>
<td>10.7%</td>
</tr>
</tbody>
</table>
## Summary of Calibration Exercises

<table>
<thead>
<tr>
<th>Exercise</th>
<th>$\gamma = 1/2$</th>
<th>$\gamma = 1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saez revenue-maximization, $\tau_0 = 0$</td>
<td>0.89</td>
<td>0.80</td>
</tr>
<tr>
<td>Revenue-maximization w/ ideas</td>
<td>0.76</td>
<td>0.57</td>
</tr>
<tr>
<td>Worker welfare (incl. worker consumption)</td>
<td>0.38</td>
<td>-0.12</td>
</tr>
<tr>
<td>Utilitarian welfare (incl. entrepreneur cons.)</td>
<td>0.31</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Incorporating ideas sharply lowers the top tax rate.
Extensions
Does Michael Jordan Create Ideas?

- Group $M$ of top earners who do not create ideas

$$Y = A^\gamma (\mathbb{E}(ez)M)^\psi L^{1-\psi}$$

- Paid fraction $\rho_m$ of GDP. Total tax revenue:

$$T = \tau_0 Y + (\tau - \tau_0)\left[(w_a\mathbb{E}(ez) - \bar{w})S_a + (w_m\mathbb{E}(ez) - \bar{w})M\right]$$
$$= \tau_0 Y + (\tau - \tau_0)\left[(\rho_s + \rho_m)Y - \bar{w}(S_a + M)\right].$$

where $\rho \equiv \rho_s + \rho_m$.

$\Rightarrow$ Same formula for $\tau^*$ applies; interpret $\rho$ and $\Delta \rho$ to include all top earners. MJ does not create ideas; ideas create MJ!
The Social Return to Research

• How big is the gap between equilibrium share and optimal share to pay for research?

• Jones and Williams (1998) social rate of return calculation here:

\[ \tilde{r} = g\gamma + \lambda g_y \left( \frac{1}{\rho_s(1 - \tau)} - \frac{1}{\gamma} \right) \]

⇒ After tax share of payments to entrepreneurs should equal $\gamma$

• Simple calibration: $\tau = 1/2 \Rightarrow \tilde{r} = 39\%$ if $\rho_s = 10\%$
  
  ○ Consistent with SROR estimates e.g. Bloom et al. (2013)

  ○ But those are returns to formal R&D...
Evidence on Growth and Taxes? Important and puzzling!!!

- Stokey and Rebelo (1995)
  - Growth rates flat in the 20th century
  - Taxes increased a lot!

- But other things were not equal!
  - Massive government investments in basic research after WWII
  - Decline in basic research investment in recent decades?

- Short-run vs long-run?
  - Shift from goods to ideas may reduce GDP in short run...
GEMS Entrepreneurs versus Taxes

ENTREPRENEURS, PERCENT OF 18-64 YEAR OLDS (GEMS)

EFFECTIVE TOP TAX RATE, 2000-2011

Countries plotted include:
- United States
- Canada
- Luxembourg
- Switzerland
- Turkey
- Portugal
- Ireland
- United Kingdom
- Greece
- Spain
- Japan
- Italy
- Germany
- Austria
- France
- Finland
- Norway
- Netherlands
- Sweden
- Denmark
- Iceland
Environment for Full Growth Model

Final output
\[ Y_t = \int_0^{A_t} x_{it}^\rho di \left( \mathbb{E}(ez)M_t \right)^{1-\rho} \]

Production of variety \( i \)
\[ x_{it} = \ell_{it} \]

Resource constraint (\( \ell \))
\[ \int \ell_{it} di = L_t \]

Resource constraint (\( N \))
\[ L_t + S_{bt} = N_t \]

Population growth
\[ N_t = \bar{N} \exp(nt) \]

Entrepreneurs
\[ S_{at} = \bar{S}_a \exp(nt) \]

Managers
\[ M_t = \bar{M} \exp(nt) \]

Applied ideas
\[ \dot{A}_t = \bar{a}(\mathbb{E}(ez)S_{at})^\lambda A_t^{\phi_a} B_t^\alpha \]

Basic ideas
\[ \dot{B}_t = \bar{b}S_{bt}^\lambda B_t^{\phi_b} \]

Talent heterogeneity
\[ z_i \sim F(z) \]

Utility \((S_a, M)\)
\[ u(c, e) = \theta \log c - \zeta e^{1/\zeta} \]
Conclusion

- Lots of unanswered questions
  - What is the “right” top tax rate? Many other considerations...
  - Why is evidence on growth and taxes so murky?
  - What is true effect of taxes on growth and innovation? Akcigit et al (2018) makes progress...

- Still, innovation is a key force that needs to be incorporated
  - Taxes affect entrepreneurship and innovation
  - Innovation is largely responsible for economic growth
  - Distorting the behavior of a small group of innovators can affect all our incomes