DOES THE FEDERAL TAX LAW FAVOR ENTREPRENEURS?

Presentation to National Tax Association Spring Meetings

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Urban-Brookings Tax Policy Center
• What is an Entrepreneur?
• Why are Entrepreneurs Important?
• What Does Entrepreneurial Income Look Like?
  – How Much Labor and How Much Capital?
• How does the Tax Burden on Entrepreneurs Compare with Other Activities?
  – Taxation of accrued gains?
  – Effects of taxes on enterprise value?
• How do taxes matter?
Background: What is an Entrepreneur?

- Merriman Webster: “A person who organizes, manages, and assumes the risk of a business organization
- Schumpeter: “the doing of new things or the doing of things that are already being done in a new way” (need not be spectacular or of historic importance)
- Eisenman (2013): “The pursuit of opportunity beyond resources controlled”
EXAMPLE: ERIC YUAN
ATTRIBUTES OF EXAMPLE

- Perceiving an Unmet Need
- Displaying Tenacity and Persistence
- Being Willing to Take Risk and Give Up Secure Employment
- Being an Outsider

NOTE: DOES NOT ONLY APPLY FOUNDERS OF HIGH-TECH FIRMS OR EVEN FOR-PROFIT FIRMS
How many of Top 20 were big firms in earlier years?

<table>
<thead>
<tr>
<th>Number in:</th>
<th>2019</th>
<th>1999</th>
<th>1979</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 20</td>
<td>20</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Top 50</td>
<td></td>
<td>7</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Top 100</td>
<td></td>
<td>15</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Top 500</td>
<td></td>
<td>18</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Why it Matters? Sources of Economic Growth
(in %/year, from BLS, Multifactor Productivity Trends, 3/24/20)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output/hr</strong></td>
<td>2.2%</td>
<td>2.8%</td>
<td>1.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Capital intensity</td>
<td>0.9%</td>
<td>1.1%</td>
<td>0.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Labor composition</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Multifactor productivity</td>
<td>1.0%</td>
<td>1.4%</td>
<td>0.5%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>
Entrepreneurial Income – Compensation with Special Characteristics

- Work effort supplied by business owners, not employee
- Net profits begin some years after business started
- Profits come from innovation
  - New product or service
  - Entry into new market
  - Lower cost production
  - Superior form of business organization
Entrepreneurial Income Includes Standard Economic Categories

- Labor income
  - Return to effort, skills, and ideas

- Capital income
  - Return for waiting until firm matures and becomes profitable
  - Return for assuming risk
Analyze Return to Entrepreneurial Function

- Entrepreneur starts a company and supplies ideas and “sweat equity” and gains ownership share
- Entrepreneur sells company when it matures and generates profits
  - Others supply work effort (employees) and financial capital and manage ongoing enterprise
- In practice:
  - Same person may perform multiple functions
  - Entrepreneur supplies effort throughout the growth period
  - Entrepreneur may continue to run an ongoing enterprise
Two Components of Tax Rate on Entrepreneurial Income

● “Accrual Tax Rate” in Growth Phase Reflects Tax Preferences
  - Deferral of tax on asset value growth
  - Preferential capital gains rate

● “Asset Tax Rate” Reflects Effects on Firm Value of Taxation of Mature Enterprises
  - Increases with higher total taxes on business income (firm value down)
  - Declines with lower after-tax discount rate (firm value up)
Determinants of Accrual Tax Rate

- Declines with increases in number of years to maturity
- Declines as risk-adjusted discount rate increases
- Increases with marginal tax rate of business owner
- Declines with more preferential treatment of capital gains

Equations can be found at:
https://www.taxpolicycenter.org/sites/default/files/publication/137641/2001042-taxing-entrepreneurial-income_0.pdf
Effective Income Tax Rates on Buildup of Entrepreneurial Income: Current Law

<table>
<thead>
<tr>
<th>Years to Maturity</th>
<th>Discount rate</th>
<th>Effective tax rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>20%</td>
<td>15.9%</td>
</tr>
<tr>
<td>6</td>
<td>20%</td>
<td>13.0%</td>
</tr>
<tr>
<td>8</td>
<td>20%</td>
<td>11.0%</td>
</tr>
<tr>
<td>10</td>
<td>20%</td>
<td>9.5%</td>
</tr>
<tr>
<td>12</td>
<td>20%</td>
<td>8.4%</td>
</tr>
<tr>
<td>8</td>
<td>10%</td>
<td>14.5%</td>
</tr>
<tr>
<td>8</td>
<td>15%</td>
<td>12.4%</td>
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<tr>
<td>8</td>
<td>20%</td>
<td>11.0%</td>
</tr>
<tr>
<td>8</td>
<td>25%</td>
<td>9.9%</td>
</tr>
<tr>
<td>8</td>
<td>30%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

MTR=40.8%  MTRgains=23.8%
Determinants of “Asset Value Tax Rate”

- Value of Firm Depends on Discounted Value of After-tax Income
  - Reduced by higher tax rate on firm and increased by higher tax rates on alternative investments

- The tax rate on the firm increases as:
  - The net of tax equity premium rises
  - The effective corporate tax rate rises
  - The capital gains rate on the “marginal” investor rises
  - The ratio of corporate interest costs to equity costs falls (lower interest rate, higher tax rate on interest deductions, lower debt/capital ratio)
## Asset Tax Rates Under Alternative Assumptions

<table>
<thead>
<tr>
<th>Interest rate</th>
<th>Equity premium</th>
<th>Debt to capital ratio</th>
<th>MTR on equity income</th>
<th>Corporate ETR</th>
<th>Asset tax rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>4%</td>
<td>6%</td>
<td>40%</td>
<td>4.5%</td>
<td>7.5%</td>
<td>-7.8%</td>
</tr>
<tr>
<td>4%</td>
<td>6%</td>
<td>40%</td>
<td>4.5%</td>
<td>15.0%</td>
<td>0.9%</td>
</tr>
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<td>4%</td>
<td>6%</td>
<td>40%</td>
<td>4.5%</td>
<td>21.0%</td>
<td>7.9%</td>
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<tr>
<td>4%</td>
<td>6%</td>
<td>40%</td>
<td>0</td>
<td>15%</td>
<td>-2.8%</td>
</tr>
<tr>
<td>4%</td>
<td>6%</td>
<td>40%</td>
<td>17.9%</td>
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<td>4%</td>
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<td>60%</td>
<td>4.5%</td>
<td>15%</td>
<td>-0.7%</td>
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<tr>
<td>4%</td>
<td>2%</td>
<td>40%</td>
<td>4.5%</td>
<td>15%</td>
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<td>7.5%</td>
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<tr>
<td>6%</td>
<td>6%</td>
<td>40%</td>
<td>4.5%</td>
<td>15%</td>
<td>-3.3%</td>
</tr>
</tbody>
</table>
### Combined Effective Tax Rates

<table>
<thead>
<tr>
<th></th>
<th>Tax-rate on build-up</th>
<th>Tax rate on asset value</th>
<th>Combined effective tax rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>6.7%</td>
<td>-11.9%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Medium</td>
<td>11.0%</td>
<td>0.9%</td>
<td>11.8%</td>
</tr>
<tr>
<td>High</td>
<td>18.7%</td>
<td>15.0%</td>
<td>30.9%</td>
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Do Tax Rates on Entrepreneurial Income Matter?

- Effects on Supply of Entrepreneurs
  - Business start-up vs. secure job
  - Decision to migrate to USA
  - Cost of financial capital

- Effects on Income Distribution
  - Extraordinary wealth of successful entrepreneurs
  - Are these long-term economic rents?
Alternative Policies to Promote Entrepreneurship

- Minimize regulatory burdens, including tax provisions with high compliance costs
- Rules to protect intellectual property
- Free trade and liberal immigration rules
- Public funding of basic scientific research
Entrepreneurial income defined as return from starting a firm and growing it to maturity
Effective tax rate depends on both taxation in growth phase and taxation of income of mature firm
Rate depends on a large number of parameters
Best guess is entrepreneurship gets a net preference, especially since TCJA cut in corporate tax rate

Question: Is favorable tax treatment a needed incentive to promote growth or a windfall for the super-rich?
THANK YOU

For more information please contact:

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View many studies on tax policy at
www.taxpolicycenter.org