International tax competition with rising intangible capital and financial globalization
by Vincenzo Quadrini and José-Victor Ríos-Rull

Discussion by: Fabrizio Perri
Minneapolis Fed

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The question

How do equilibrium capital taxes depend on structural features such as:

- Financial globalization?
- Multinational production?
- Share of intangible capital?
Discussion outline

▷ Some context
▷ Quick summary
▷ Supporting evidence
▷ Some data
Theory: capital taxes in closed economy

- With commitment, $\tau_k$ goes to 0 in the long run.
- With discretion, the government at time $t$ perceives capital taxation at $t$ to be non-distortionary, thus it increases it.
- $\tau_k$ is positive and high in the long run.
Open economy: threat of capital flight reduces the ability to tax (shifts left Laffer peak)

As economy becomes more open (lower cost of investing abroad) equilibrium taxes fall

Openness increases the elasticity of capital to taxes
Theory: capital taxes with growing multinationals (this paper)

As multinational become more important, and their ownership more internationally diversified equilibrium $T_k$ increase!

What’s going on?
Some historical background

These taxes as having quite different impacts on the economy. The paper then suggests that some forces (e.g. capital flight) will encourage governments to shift away from capital income taxation while others (e.g. tax exportation) will have the opposite effect.
Globalization modelled as more multinational production ($\lambda \downarrow$) and financial diversification ($\theta \downarrow$)

Both changes increase incentive to tax through “Tax exportation”!
Endogenous taxes

- No cooperation
- No commitment
- Each govt. chooses $\tau(X)$, taking as given $\tau^*(X)$ and $\tau'(X)$
- Complicated fixed point in function space, authors solve for ss AND transition!!
- Because of higher incentive to “Tax exportation” with more globalization, higher capital taxes
- Intuition: globalization reduces the domestic cost of taxes and (in this context) does not affect much elasticities
- Takeaway: how exactly you model globalization matters!
Insight of the paper

- It is not globalization per se but globalization + intangible capital

“MNEs own significant stocks of intangible capital (e.g., intellectual property, brands, blueprints) and have a presence in countries that vary widely in corporate tax rates. These characteristics allow MNEs to legally take advantage of differences in national tax regimes to shift profits from high-tax jurisdictions—such as the United States—to low-tax jurisdictions, such as Bermuda. Increasingly common profit-shifting practices include transfer pricing and complex global structuring related to intangible capital, in which an MNE effectively underprices intangible capital when “sold” from one of its entities in a high-tax jurisdiction to another of its entities in a low-tax jurisdiction or engages in a series of transactions among subsidiaries that are strategically located in order to reduce the MNE’s effective global tax rate. For US MNEs, these strategies allow them to book earnings in low-tax foreign affiliates in ways that are disproportionate to the economic activity carried out in those affiliates”

Guvenen, Mataloni, Rassier and Ruhl, 2022
The tax impact of more intangible capital

Figure 3: Steady state tax rates, capital and output for different shares of intangible capital (determined by $\alpha$), foreign investments (determined by $\lambda$), and foreign ownership of multinationals (determined by $\theta$).

The bottom panels of Figure 3 are constructed using $\alpha = 0.6$ and $\lambda = 0.825$, that is, the values that target for the 2020 moments. As we can see, the taxation of profits increases when a larger share of multinationals are owned by foreigners. This is because a larger share of profits earned in the country belong to foreigners, which increases the incentive of the local government to tax these profits. For example, when the value of multinationals owned by foreigners is 10% the value of output, the profit tax rate is 15.3%. When the foreign ownership is 50% the value of output, the profit tax rate is 24%.

Overall, when we switch from the baseline calibration with $\alpha = 0.3$, $\lambda = 0.934$ and $23$, the profit tax rate is 24%.

▷ Very large predicted decline in capital taxes!
▷ Intangible capital makes it easier for firms to book profits in lower tax jurisdictions
▷ Possibly interesting to explore interaction between intangible and globalization
▷ Conjecture: impact of intangible K on taxes much smaller in more closed economies
Intangible and tax shifting

Falato and al (2022)

Guvenen et al (2022)

- Over 2000-2010 large increase in value of intangible and large increase in profits booked by multinationals in tax heavens!
- Support the view that intangible capital limits capital taxation
Recent data on tax rates

Figure 3: Effective Taxation of Capital and Labor

Notes: This figure plots the time series of average effective tax rates on labor (blue) and capital (red), as well as the effective tax rate on corporate profits (red dashed line). The top-left panel corresponds to the global average, weighting country-year observations by their share in that year's total NDP, in constant 2019 USD (N=156). The bottom-left panel shows the results for high-income OECD countries (N=37), and the bottom-right panel for low- and middle-income countries (N=119). High-income countries are OECD countries that meet the World Bank's income threshold of high-income. The dataset is composed of two (quasi) balanced panels: the first covers the years 1965-1993 and excludes communist regimes. It accounts for 85-90% of World GDP during those years. The second, covers 1994-2018 and integrates former communist countries, and in particular China and Russia, and accounts for 98% of World GDP. Figure shows how the entry into our panel in 1994 of these countries impact the results, by imputing their pre-1994 data with a regression procedure.

Recent data on tax rates

**Remark 1**

- Across developed countries $\tau_k$ declined, especially when compared to $\tau_L$ (20ppt)
- However most of the decline occurred before globalization and increase in intangible K!
- Possibly paper overestimates impact of intangible K on $\tau_K$?
Recent data on tax rates

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Remark 2
▷ In developing countries $\tau_k$ increased!
▷ Possibly consistent with tax exportation motives highlighted in this work
Conclusions

- Impressive theoretical and computational machine to assess the impact of various structural factors on equilibrium taxation in open economies
  - How you model globalization matters a great deal
  - Important complementarities between globalization and intangible K
  - Incentive to tax exportation are large
- Possibly take a look at recent tax data to refine quantitative findings