

Global Profit Shifting through Intellectual Property and the Impact of US Tax Reforms

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Globalization has allowed multinational enterprises (MNEs) to expand their operations to reach new markets across the globe. However, one drawback of globalization is that MNEs can easily shift their profits to lower-tax countries.

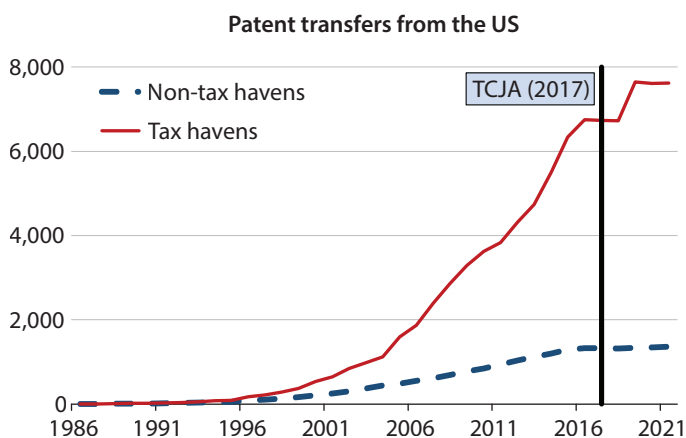
Profit shifting is a practice in which MNEs move their profits from high-tax countries to low-tax countries to lower their overall tax burden. One of the most common forms of this practice is the transfer of intellectual property (IP), including patents, trademarks, copyrights, and trade secrets. It's a popular option for MNEs looking to reduce their tax burdens, as IP is transferred across borders easily without a need for significant capital investment or even a physical presence.

Several notable papers, including [2022 studies by Torslov, Wier, and Zucman](#) and [by Guvenen, Mataloni, Rassier, and Ruhl](#), have argued that the movement of IP is the main channel for profit shifting. However, empirical evidence on the prevalence of this practice has been scarce. This essay uses IP transactions data from the platform ktMINE to compute the amount of patent transfers flowing from the US to two groups of countries: tax havens and non-tax havens.¹

The figure's left panel displays the number of patent transfers per 1 million people from the US to tax havens and non-tax havens between 1986 and 2021.² The data suggest there was a notable increase in profit shifting involving the transfer of patents to foreign firms after 2000, particularly to tax havens, which saw a disproportionate increase given their size. In 1986, the US sold 0.6 patents to non-tax havens and 1.3 patents to tax havens, per 1 million people, with both groups showing relatively flat trends between 1986 and 1999. However, patent transfers to both groups of countries picked up significantly after 2000, particularly to tax havens. By 2016, the US had sold 1,360 patents to non-tax havens and 7,616 patents to tax havens, per 1 million people. These trends suggest that US companies may have engaged in profit shifting by moving IP to tax havens.

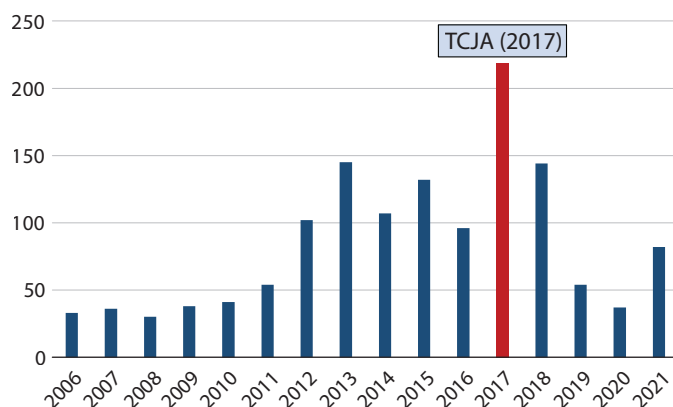
To address profit-shifting practices, governments have introduced numerous tax reforms. In the US, the 2017 Tax Cuts and Jobs Act (TCJA) established the Global Intangible Low-Taxed Income (GILTI) tax, which imposed a tax on companies holding IP in tax havens. We find that the introduction of the GILTI tax had an impact on these trends. The figure shows a flattening in the stock of patent sales

US Intellectual Property Transfers, 1986-2021



SOURCE: ktMINE, Bureau of Economic Analysis, and authors' calculations.

US imports of proprietary rights from R&D



to tax havens, which may suggest that firms are holding off on these types of transactions.³ These trends are also consistent with data from the Bureau of Economic Analysis, which can be analyzed to further investigate the impact of the TCJA on profit shifting. The figure's right panel shows that imports of proprietary IP, the result of research and development activities, increased dramatically after 2017. This suggests that (i) sales of patents from the US to tax havens slowed after the reform and (ii) some of the IP that was “parked” in those tax havens began flowing back to the US.

Globalization has made it easier for companies to engage in profit shifting, specifically by moving their IP to tax havens. The introduction of tax reforms, such as the GILTI tax, may have had an impact on these trends, but more research is needed to fully understand its effectiveness. Indeed, a [2020 paper by Kimberly Clausing](#) and a [2022 paper by Garcia-Bernardo, Janský, and Zucman](#) argue that the effect of the TCJA on profit shifting may have been modest and that more data are needed to fully understand its impact.

More recently a larger scale reform has been proposed—the G20-OECD Global Minimum Tax. There have been many discussions about the OECD global tax deal, which seeks to have a potentially significant impact on profit-shifting practices. The two-pillar deal would establish a global minimum tax rate of 15% on MNEs in an attempt to curb tax competition and profit shifting. Its effectiveness would depend on its implementation and on countries' cooperation. ■

Notes

¹ In most jurisdictions, IP data are in the public domain but are costly and difficult to collect and organize: ktMINE sources IP data from patent offices, financial regulatory authorities, and other places around the world and aggregates them into the largest repository of IP data available. From this repository we were able to produce a dataset of patent-ownership changes from the mid-1980s to present day.

² These values represent the total stock of direct patent transfers over time as opposed to year flows computed as the cumulative sum of the flows. That is, the figure shows for each year the total number of patents that each group of countries owns in that year.

³ While the data show a flattening trend in patent sales to tax havens, there are some exceptions, such as the Cayman Islands, where patent sales continued to increase even after the introduction of the GILTI tax. It could be that the Cayman Islands has not yet implemented the necessary legislation to enforce the GILTI tax.