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Multinational Corporations and Commercialised States: Can State Aid Serve as the Basis for an FDI-Driven Growth Strategy?

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Abstract

In recent decades, governments around the world have increasingly used various forms of state aid to try to attract and retain the business activity of foreign-owned multinational corporations. Yet, in most cases, this "commercialisation of state sovereignty" (Palan, 2002) has failed to catalyse foreign investment and economic growth as intended. This paper seeks to understand the general failure of such commercialised state strategies, while also explaining how demand and income growth in some notable exceptions can be understood. To this end, a simple demand-led model is presented that suggests that foreign-targeted state aid may lead to beggar-thy-neighbour, FDI-driven growth in one economy if certain conditions are met, such as there being sufficiently little policy competition from other countries. It is shown that the exceptional cases tend to be the early movers, i.e. those few economies and special economic zones that engaged in the commercialisation of state sovereignty before the widespread competitive emulation that followed. This paper argues that state aid for the attraction of foreign multinationals is unlikely to be an effective growth strategy in the current environment of intense state competition and that international coordination on corporation tax and other forms of state aid is desirable.

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1. Introduction

In recent decades, governments around the world have increasingly used various forms of state aid to try to attract and retain the business activity of foreign-owned multinational corporations. This kind of "commercialisation of state sovereignty" (Palan, 2002), reflected in falling effective corporate tax rates as well as rapidly increasing numbers of special economic zones (SEZs) and investment promotion agencies (IPAs) around the world, has become a defining feature of neoliberal globalisation. Such trends, which will be analysed in depth in the following section, reflect the beliefs of policymakers around the world that they can catalyse economic growth through the state-sponsored appeasement of foreign multinationals.

Yet, as noted by Dunning & Lundan (2008) and Danzman & Slaski (2021), there is a good deal of consensus that, in most cases, tax incentives and other related state commercialising strategies simply do not work as intended. Frick et al. (2019), ADB (2015), and Farole (2011) conclude that most SEZs fail to outperform their surrounding host economies and those that do perform well do not tend to do so for long. Torslov et al. (2018) and Saez & Zucman (2020) show that multinationals predominantly shift profits to low-tax jurisdictions rather than tangible capital or employment, and that lowering corporate tax rates in high-tax jurisdictions does little to prevent the shifting of profits. Hence, despite the proliferation of growth strategies based on the commercialisation of state sovereignty, there is scant evidence that they consistently spur economic growth in the majority of cases.

However, there are exceptional cases where state commercialising strategies do appear to drive growth. Generally, the high rates of growth of national income in numerous tax havens are widely seen as dependent on their ability to attract the financial flows of foreign multinationals. As Saez and Zucman (2020, p. 83) point out, the ratio of corporate income tax revenues to national income in Malta, Luxembourg, Hong Kong, Cyprus and Ireland are amongst the highest in the world, despite—or, rather, because of—some of the lowest effective rates of corporation tax in the world. The authors also argue that, despite statutory rates of zero percent, traditional tax havens such as the Bermuda and the British Virgin Islands also "generate serious revenue" through charging flat fees on company registration and re-registration (p.84). Through attracting, taxing and spending these foreign capital flows that would otherwise be the tax base of foreign countries, some tax havens appear to successfully fuel aggregate demand and growth in this quintessentially beggar-thy-neighbour way.

Moreover, there appear to be further exceptional cases where tangible capital and employment is attracted through the commercialisation of state sovereignty, rather than just financial capital in the form of shifted profits. For example, the phenomenal growth of Ireland and Singapore is associated not just with the gains of tax base erosion, but also with high rates of employment and investment of foreign multinationals whose presence is widely seen as being induced through an array of policy incentives (Soon & Stoever, 1996; Garcimartín et al., 2008; Nabeshima & Nabeshima, 2012; Woodgate, 2021). Furthermore, a few exceptional SEZs have also proven to be highly successful. ADB (2015, p.105) and Amirahmadi and Wu (1995) single out a few early SEZs in China, Malaysia, South Korea, and Taiwan as performing particularly well. Moreover, data provided in UNCTAD (2019, p.179-181) and ADB (2015, p.88) show that a large majority of foreign direct investment (FDI) in China, Vietnam, and Malaysia has taken place in their SEZs in recent years.

Against this backdrop, this paper attempts to shed light on the following two central questions. Firstly, why do state commercialising strategies appear to be able to spur economic

growth in a few exceptional cases, but not in general? Second, how—i.e. through which channels—does the commercialisation of state sovereignty increase effective demand and income growth in those exceptional cases? This paper addresses these questions in a simple demand-led macroeconomic model, where two theoretical categories of commercialised states are identified and analysed, namely tax havens and export platforms. For the purposes of this paper, the former is defined as an economy where a commercialised state strategy leads to the inflow of shifted profits whereas the latter receives inflows of tangible capital as a result.

In response to the second research question, our simple model shows that, under certain conditions, tax havens may boost demand and national income through the spending of increased tax revenues collected from foreign multinationals engaged in profit shifting. In export platform economies, growth of demand and income is more likely to occur through the greenfield investment and employment needed to facilitate the growth of the genuine exports of foreign affiliates. It is argued that, in both cases, the success of state commercialising strategies in spurring growth largely depends on the extent to which tax havens and export platforms manage to differentiate between domestic and foreign-owned firms when granting tax incentives and other forms of state aid. For example, tax incentives offered to domestic firms immediately decreases tax revenue collected, whereas those offered exclusively to foreign multinationals may increase revenues through an expansion of the tax base. With an exogenously fixed public budget position, this leads to higher government expenditure. The growth conditions for "traditional" tax havens, which are those that do not differentiate between foreign and domestic firms, are shown to be more difficult to fulfil than "modern" tax havens, which target foreign multinationals exclusively and tailor their incentive packages in response.

Regarding the first research question, we argue that state commercialising strategies most often do not spur growth because of a coordination problem. Our model predicts that one country acting alone in offering state aid to foreign multinationals may boost national income, but many countries doing so simultaneously may not. Furthermore, it is supposed that if a competing commercialised state in the same region already offers an effective rate of corporate tax—broadly defined to include subsidies and benefits in kind—that is sufficiently close to some political or legal minimum or the economic minimum provided by our model, then the commercialisation of state sovereignty can only fail to boost growth. This generalises the "paradox of tax competition" argument seen in Woodgate (2020) to include kinds of incentives not restricted to just corporate tax incentives and to incorporate effects on demand not limited to greenfield FDI inflows.

From this central thesis, it follows that there is an early mover advantage in the commercialisation of state sovereignty. Indeed, it is held that most, if not all, of the exceptional successes (of Ireland, Singapore, and SEZs in Shenzen and Taiwan and so on) can be explained by the fact that they were among the first to compete when there was little competition in their respective regions. From this, it follows that commercialised states that managed to grow through this beggar-thy-neighbour strategy are generally not good models for other countries now wishing emulate their economic success.

The paper proceeds as follows. Section 2 defines the commercialisation of state sovereignty and, with reference to the relevant data, argues that it is now so widespread that it has come to be a defining feature of modern neoliberal globalisation. Section 3 explains how tax havens and export platforms both tend to exhibit high trade surpluses and uses this as the basis for a simple model to find the conditions under which the attraction of foreign

multinationals may induce growth. Section 4 analyses the implications of this model, particularly in relation to our research questions, while section 5 concludes.

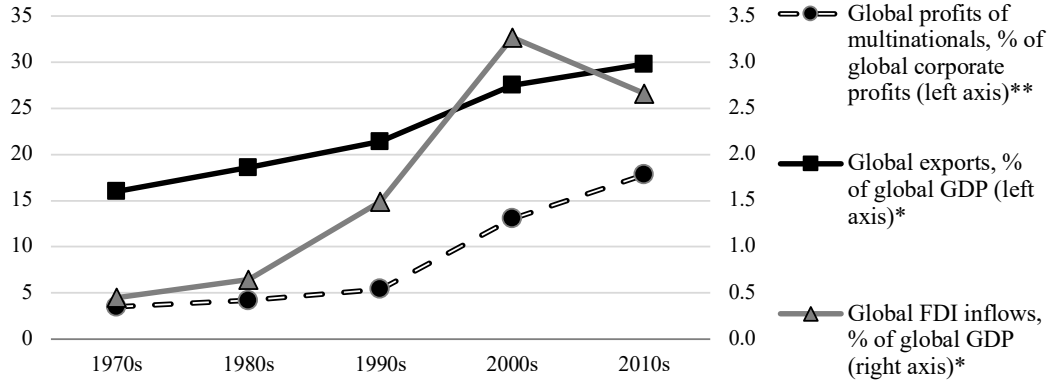
2. Neoliberal Globalisation and the Commercialisation of State Sovereignty

A key difference between the current and previous waves of globalisation lies in the "increased international mobility of means of production (capital and technology) resulting from improvements in transportation, communication, and ability to manage globally diversified production networks" (Palley, 2015, p. 53). Such globalised production networks, Palley continues, are "configured on the principle of global cost arbitrage", whereby it is "as if factories are placed on barges that float between countries to take advantage of lowest costs – which can be due to under-valued exchange rates, low taxes, subsidies, absence of regulation, or abundant cheap exploitable labor" (*ibid.*). Palley and others refer to this most recent kind of globalisation as "neoliberal globalisation", which he categorises as the third wave of globalisation that began in 1990 and that runs until today. Given that the first instances of this "barge economics" phenomenon occurred before 1990, he also accepts that such a discrete periodisation has, by necessity, a somewhat arbitrary element about it (2018, p.6).

Empirically, the 1990s appears to a reasonably good approximation of the start date of neoliberal globalisation. As figure 1 shows, the share of worldwide exports in global GDP increased in a steady and linear fashion every decade since the 1970s, whereas it is only in the 1990s that the share of worldwide foreign direct investment (FDI) inflows in global GDP really take off. Similarly, it is around the 1990s that multinationals' share of global corporate profits increases sharply. From this, it is clearly evidenced that multinational corporations and global value chains are central to the era of neoliberal globalisation.

In this paper, we will argue that another key aspect of neoliberal globalisation is what Palan (2002) calls the "commercialisation of state sovereignty". Although Palan (2002) does not offer a precise definition, here we will take the term to refer to the phenomenon whereby the state aligns its laws and regulations with the interests of foreign multinationals in order to attract and retain their business activity. Such business activity can be related to genuine production (e.g. investment and employment) or intangible capital flows (e.g. profits and

Figure 1. *Neoliberal globalisation: Steady increase in global trade vs. sudden increases in FDI and the profits of multinationals (decade averages)*



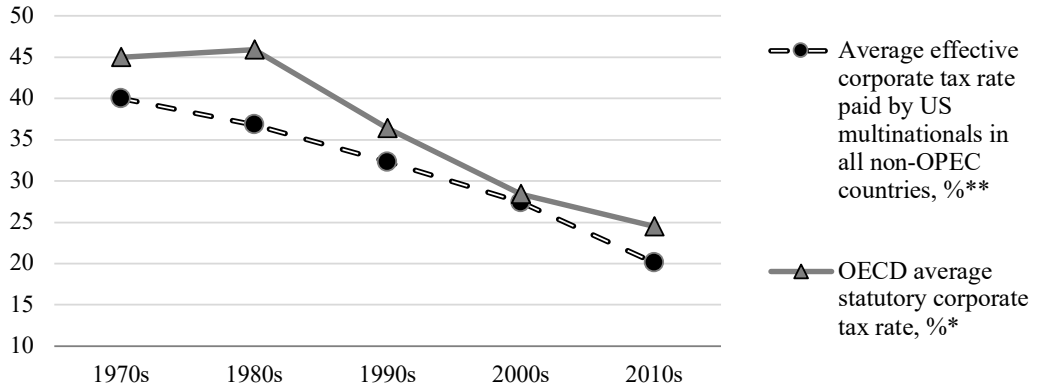
***Sources**:* *World Bank (2020) **Saez & Zucman (2020)

intellectual property). The term could also be applied to the efforts of policymakers to appeal to the desires of wealthy individuals for financial secrecy and tax minimisation as well, but that is not the focus in this paper. Here, our use of the term will be more in line with Saez and Zucman (2020, p.83), who write that commercialised states are those that have "sold multinationals the right to decide for themselves their rate of taxation, regulatory constraints, and legal obligations".

Palan (2002) describes the commercialisation of state sovereignty in the context of tax havens in particular since they "perfected" the strategy, but also mentions that tax havens are not the only states to do so (p.172). Elsewhere (Palan, 1998), he suggests other kinds of commercialisation of state sovereignty, albeit not by this name. The author notes that nations offering special economic zones (SEZs)[1] and flags of convenience[2] are similar to tax havens: "the principle common denominator is that they have come about as states [that] use their sovereignty, or their right to write the law, often deliberately, to create special territorial or juridical enclaves characterised by a reduction in regulations, including taxation" (p.626).

Evidence of the widespread nature of the commercialisation of state sovereignty abounds. For example, the race to the bottom in corporate tax rates around the world is widely seen as the result of governments' attempts to attract foreign multinationals or appease domestic firms in order to prevent them from moving abroad (Saez & Zucman, 2020, ch. 5). The average statutory corporate tax rate across the OECD halved from 47% in 1981 to 23.5% in 2019 (OECD 2021). Using decade averages, as shown in figure 2, we can see that this persistent fall in statutory corporate tax rates appears to begin in the 1990s, though our measure of the effective corporate tax rate faced by multinationals around the world begins to fall before the 1990s.[3]

Figure 2. *Falling corporate tax rates around the world (decade averages)*



***Sources**:* *OECD (2021), Khan et al. (2020) **Wright & Zucman (2018), BEA (2020)

A second indicator of the intensive and extensive nature of the commercialisation of state sovereignty is displayed in figure 3, which shows estimates of the number of SEZs worldwide, as well as the number of countries that have established SEZs. Again, it appears to

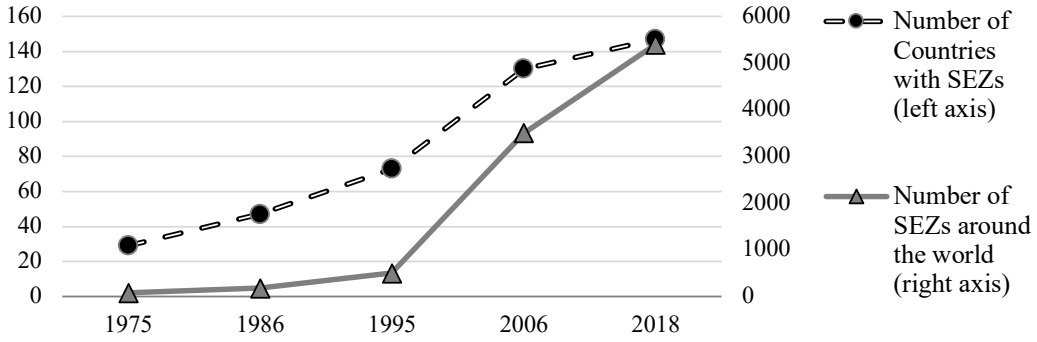
[1] UNCTAD (2019, p.128) defines as SEZs as "geographically delimited areas within which governments facilitate industrial activity through fiscal and regulatory incentives and infrastructure support",

[2] A flag of convenience is the business practice of registering a ship or aircraft in a country other than that of its owners in order to reduce or eschew operating and regulatory costs.

[3] Following Wright and Zucman (2018), this effective corporate tax rate measure is defined by the ratio of foreign income tax paid by majority-owned affiliates of US multinationals in non-oil exporting nations to the "profit-type return" of these affiliates, as reported in BEA (2020) "Activities of US MNEs abroad" survey.

be around the 1990s that SEZs begin to become extremely widespread. UNCTAD (2019) estimate that the number of SEZs in existence around the world grows from 500 to 3500 between 1995 and 2006. The proliferation of SEZs demonstrates a kind of commercialisation of state sovereignty, albeit a kind that does not necessarily improve the attractiveness of the entire state to foreign multinationals, but rather a well-defined area within it.

Figure 3. *Proliferation of special economic zones around the world*



***Source**:* UNCTAD (2019)

SEZs around the world offer a broad range of incentives to lure in foreign capital, as is reflected in table 1. The data employed come from two sources, one referring to a sample of 127 SEZs (UNCTAD, 2019) and the other to a larger sample of 553 SEZs around the world (CIIP, 2017). Chief among these incentives are tax exemptions, tax holidays, or a reduced corporate tax rate, as well as an elimination or reduction of import tariffs and VAT. In the CIIP sample, 68% of SEZs offer a complete corporate tax exemption, 18% offer exemptions based on firm qualifications and performance (e.g. number of persons employed, percentage of output that is exported, amount of investment, etc.), and 7% offer a reduced rate. In a third of the SEZs in the UNCTAD sample, a government-backed "one-stop-shop" for legal, bureaucratic, and/or technical advice is available and labour hiring and firing procedures are relaxed. Other legal assurances and offers of low rent at favourable conditions are found in around a quarter of surveyed SEZs, whereas other incentives seen in table 1 are less common.

A third and final trend closely associated with the commercialisation of state sovereignty is the rapid growth of investment promotion agencies (IPAs) around the world. Most frequently, IPAs are public agencies whose primary mandate is to attract and retain inward foreign investment, usually with a clear preference for greenfield FDI projects (OECD, 2018). They do so through a number of means. Among other functions, IPAs typically advertise the business environment of their region, target particular sectors, reach out to desired foreign companies, act as an intermediary between foreign corporations and local government, and offer or negotiate deals with foreign firms regarding tax, tariffs, and subsidies. As Danzman and Slaski (2021, p.2) put it, "IPAs are the bureaucratic gatekeepers of incentives, and are the part of the state that works most closely with multinational enterprises to encourage them to pursue local investment opportunities." As Martincus & Sztajerowska (2019, p.xxi) point out, now "virtually each country has at least one IPA that seeks to attract and facilitate FDI". Yet, this is a very recent phenomenon. As figure 4 makes clear, the number of countries across the OECD, Latin American and Caribbean regions with IPAs, as well as the number of foreign offices of each IPA, has ballooned only in recent decades.

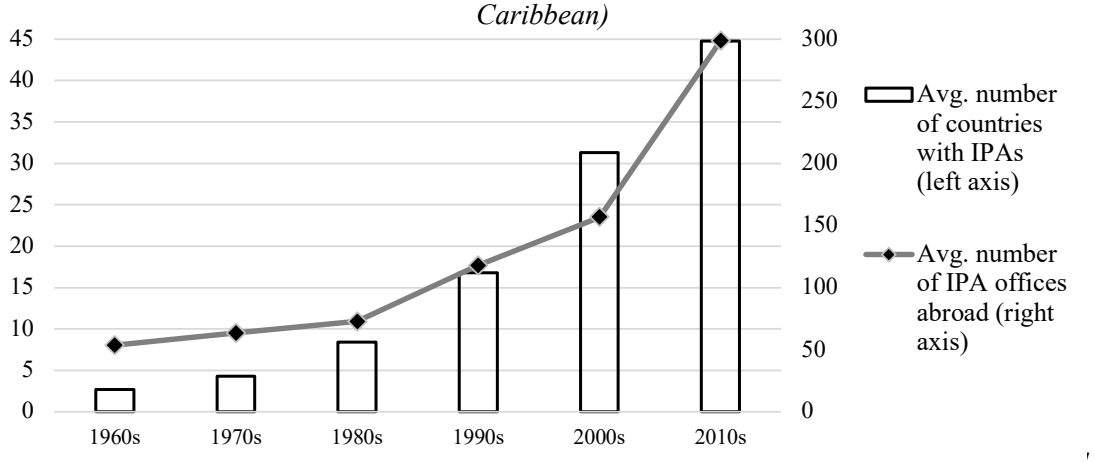
From this data follows the first central point to be advanced in this paper, namely that Palan's "commercialisation of state sovereignty", broadly defined, is the other side of the coin to Palley's "barge economics". Where Palley rightly declares that neoliberal globalisation "has been driven by corporate restructuring of global production" (2018, p.29), we might add that it has also been intensified by governments keen to outcompete one another in order to facilitate and benefit from such global corporate restructuring. The two processes characterise the current era of neoliberal globalisation and have become intricately interwoven.

Table 1. *Investment attraction tools and their prevalence in SEZs around the world*

Incentives	**Measures include…**	
Fiscal incentives 72%* - 92%†	• Complete tax exemptions • Performance-based tax deductions • Reduced tax rates	68%† 18%† 7%†
Special customs 74%* - 95%†	• Import duty exemption on… o Capital equipment & material inputs o Capital equipment only	 55%† 40%†
Investment facilitation 32.3%*	• Legal and technical advice • Relaxed recruitment and employment regulation	
Investment protection 26.0%*	• Assurances SEZ firms cannot be expropriated or affected by newer domestic laws	
Preferential land use 25.2%*	• Exemptions from lease payment • Reduced rent	
Trade facilitation 17.3%*	• Simplification of tax filing obligations	
Infrastructure 16.5%*	• Provision of electricity, gas, water, communication utilities	
Social amenities 3.1%*	• Provision of educational, health, or recreation facilities	

** Of a sample of 127 SEZs (UNCTAD 2019, pp. 166-167)*
† Of a sample of 553 SEZs (CIIP 2017, p. 19)

Figure 4. *Growth in the number of national IPAs and their offices abroad (Sample of 51 countries across the OECD, Latin America and Caribbean)*



Data: *Martincus & Sztajerowska (2019)*

3. Growth conditions for commercialised states

The data on corporate tax rates, SEZs, and IPAs strongly suggest many policymakers around the world believe their incentives may attract some part of the business activity of foreign multinationals, and that the establishment of foreign affiliates will stimulate regional or national economic growth. However, as mentioned in the introduction, reviews of the literature tend to find that effective state commercialising strategies appear to be the exception rather than the rule. In this section, we develop a simple model that may help explain why this is the case.

3.1 Two kinds of commercialised states

In this paper, we focus on two theoretical categories of commercialised states in particular, *tax havens* and *export platforms*. In reality, the two categories can and do overlap. However, for the purposes of our analysis it will serve us well to make the theoretical distinction.

Though there are a number of definitions of tax havens and ways to identify them, here we will take a tax haven to be any country that is a net recipient of the shifted profits of foreign multinationals. Three channels of profit shifting have been observed in the literature (Cobham & Janský, 2020). First, through *transfer mispricing*, a subsidiary in a low-tax jurisdiction receives intergroup imports at artificially low prices (i.e. at cost or near-cost price) and exports to consumers or other affiliates at (close to) market price. Second, through *intra-group royalty payments*, the multinational locates its intellectual property in the low-tax jurisdiction such that other affiliates around the world pay service fees for its use. Third, through *debt shifting*, loans are charged at high interest rates by the affiliate in the low-tax country to other affiliates in higher tax countries. In each case, the end effect is to reduce a multinational's worldwide tax bill by shifting its gross profits to affiliates in tax havens. Hence, indicators of tax haven status are usually given by especially low effective rates of corporate tax, high FDI inflows and foreign affiliate profitability ratios, and inflated measures of output, gross operating surplus, and the profit share. Based on these kinds of indicators, there is a strong degree of consensus in the related literature as to which countries are tax havens (Hines 2010, Garcia-Bernardo et al., 2017; Tørsløv et al., 2018; Cobham & Janský 2018, 2019).

Important for our purposes is the distortionary effect of profit shifting on the trade balance of tax havens. As Tørsløv et al. (2018, p. 31) point out, the first two methods of profit shifting listed above are the most prevalent, accounting for around 85% of shifted profits worldwide. They are also the methods that tend to inflate the net exports of tax havens and reduce the net exports of non-havens. For example, the authors estimate that, once corrected for effects of profit shifting, Ireland's reported trade surplus of 31% of GDP in 2015 turns into a trade *deficit* of 5.8%. Profit shifting is found to distort the trade balance of other (especially smaller) tax havens to an even greater extent (ibid., appendix table C5b).

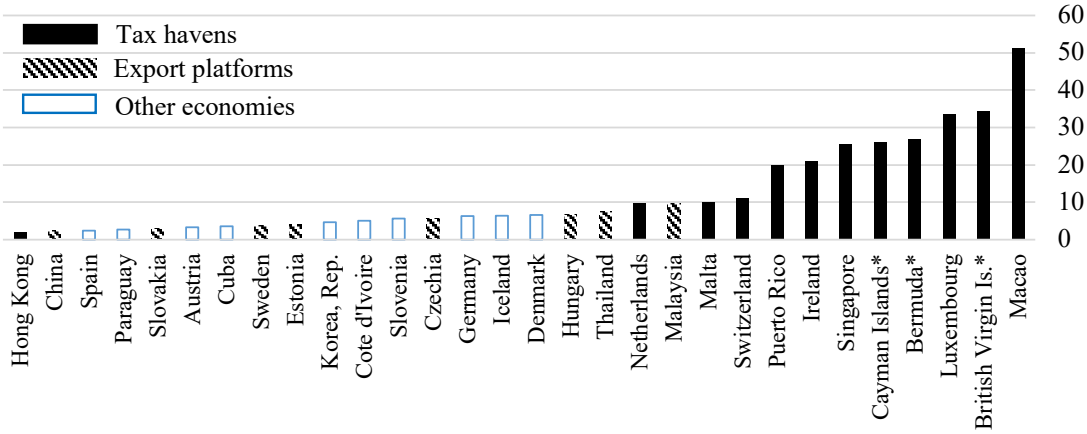
The second theoretical category of commercialised state that will be analysed in more detail is what we term export platforms. In contrast to tax havens, export platform economies host foreign affiliates that are engaged in the genuine production of goods and services. However, these goods and services are predominantly destined for sale in other countries. This may be because the market of the host economy is small relative to the home and third markets. Alternatively, it may be influenced by policymakers who explicitly encourage exports through linking state aid incentives to the trade performance of foreign affiliates in order to, for example, protect indigenous infant industries from the threat of established foreign corporations. To the extent that policymakers aim to fill SEZs with foreign affiliates, it follows that SEZs are one

kind of instrument of an export platform economy. Of course, they are not strictly necessary. For example, IPAs may be tasked with attracting foreign-owned export-oriented manufactures.

From this discussion, it follows that both types of commercialised states are likely to exhibit a relatively high percentage of trade due to foreign affiliates. In the case of tax havens, this increased foreign affiliate trade reflects profit shifting and tax planning, whereas in the case of export platforms this trade relates to genuine goods and services. Such considerations help us understand those countries found to have some of the highest trade surpluses on record. This is reflected in figure 5, where all countries for which data was available in the World Bank database were ordered in terms of highest average trade surplus to GDP ratios across the 2010s. As an indicator of the trade surpluses of the traditional tax havens found in the Caribbean, three tax haven economies were added with data from UNstat (2021). Economies where a majority of exports is of fuels or precious metals are excluded, as are all economies where the average net export-GDP ratio is less than 2%.

Of the thirty economies in figure 5, twelve can be considered as tax havens and eight as export platforms. Here, to be considered a tax haven, the economy in question must have been found to be a net recipient of shifted profits in the literature (Tørsløv et al., 2018; Cobham & Janský 2018, 2019). To be designated an export platform, at least 40% of the net exports of the non-haven economy in question must be due to foreign-owned firms using data from the OECD Analytical Activities of Multinational Enterprises database (see Cadestin et al. 2018).[4] Tax havens tend to have some of the highest trade surpluses in the world. Export platforms, as defined here, are dispersed amongst the top thirty, and nearly all belong to either the SEZ-dependent Asian group (China, Thailand, Malaysia) or the Central and Eastern European group (Slovakia, Estonia, Czechia, Hungary), whose "FDI-oriented state strategies" (Drahokoupil 2009, p. 18) are well established in the literature (Bohle 2009, 2018; Bohle & Regan, 2021).

Figure 5. *Top net exports-GDP ratios (%, 2010s average), exc. oil and precious metal exporters*



Sources: World Bank (2020), *UNstat (2021)

Though the two types of commercialised state are distinct, they are both induced by the same kind of government policies and likely have similar consequences regarding the trade balance. In the modelling approach that follows, these commonalities will be kept in mind. As

[4] 40% is, of course, a rather arbitrary threshold. In any case, as this is just illustrative, the exact threshold for the definition of "export platform" is unimportant for our ultimate purposes.

a means to simplify the otherwise complex nature of state commercialising strategies, we will employ an especially broad definition of the effective rate of tax. The effective corporate tax rate on foreign affiliates is defined by

$$\tau_{FA} = \frac{T_{FA} - S_{FA}}{\Pi_{FA}}, \tag{1}$$

where T_{FA} is the tax collected from foreign affiliates, S_{FA} represents the output subsidies and the monetary value of all benefits to kind paid by the government to foreign affiliates, and Π_{FA} denotes the total profits of foreign affiliates. S_{FA} may include any of the investment incentives seen in table 1 that do not affect T_{FA}, e.g. direct and indirect subsidies, reduced rent on public lands, provision and maintenance of infrastructure and amenities used by foreign affiliates, reduced compliance and bureaucratic costs, and so on. We will suppose S_{FA} is dependent upon genuine output, and so is paid by the governments of export platforms but not tax havens. Hence, τ_{FA} is bounded between zero and one in tax havens, but may be negative in export platforms.

3.2 Model

Presented here is a highly simplified, two-period, demand-led model in which prices and the capital stock is fixed. Foreign affiliates do not exist in the first period, only in the second. Hence, period one is the benchmark against which the macroeconomic effects of the presence and operation of foreign affiliates, seen in period two, are compared. A discrete, two-period model is preferred to a continuous alternative primarily because small changes in tax incentives are not likely to attract foreign multinationals, whereas large changes are. Profit shifting and tax base erosion, in particular, appear to be winner-take-all phenomena. Economies that establish near zero effective corporate tax rates may receive shifted profits, but other, higher-tax economies that lower corporate tax rates slightly do not attract shifted profits as a result nor do they appear to prevent domestically made profits from being shifted out. Hence, the discrete periodisation is preferred.

We begin with the benchmark model of period one, i.e. with no foreign affiliates nor commercialised state strategies. We employ a simple Keynesian consumption function, where consumption (C) is a function of autonomous consumption (C_A) and the product of the marginal propensity to consume (c) and disposable income, given by the difference between national income (Y) and total income tax revenues (T)

$$C = C_A + c(Y - T). \tag{2}$$

Tax revenues are in turn given by the product of average effective tax rate (τ) and total income

$$T = \tau Y. \tag{3}$$

Investment (I) is given by

$$I = I_A + \gamma Y, \tag{4}$$

where I_A is autonomous investment and γ represents the responsiveness of investment to changes in the income level. Note that our simplified investment function assumes that the effective rate of tax has no direct effect on domestic investment.[5] Government expenditures (G) are dependent upon the exogenously determined fiscal budget parameter (b) and tax revenues

[5] For a related discussion, see Mott and Slattery (1994, p.404).

$$G = bT. \tag{5}$$

A value of b equal to one implies the government is following a balanced budget rule, greater than one implies a targeted deficit and less than one reflects a persistent fiscal surplus. For simplicity, we suppose deficits are financed through money emission. Hence, we need not analyse interest payments nor debt dynamics. Lastly, a simplified net export function is employed, where net exports (*NX*) are determined by an autonomous part (NX_A) and an induced part in which η reflects the responsiveness of net exports to changes in the income level

$$NX = NX_A - \eta Y. \tag{6}$$

Solving for the equilibrium level of income in period one (Y_1^*), we find that

$$Y_1^* = \frac{E_A}{m - \tau_1(b - c)}. \tag{7}$$

All autonomous expenditures are captured in $E_A = C_A + I_A + NX_A$ and m is defined such that $m = 1 + \eta - c - \gamma$. Importantly, E_A and m will not vary between periods one and two, whereas the effective tax rate may vary (and is thus separated from the rest of the denominator). We make the usual assumption of Keynesian stability, i.e. we assume that $m - \tau_1(b - c) > 0$ at all times. From equation (7) it follows that in the benchmark economy of period one with no foreign affiliates or state commercialising strategies, a decrease in the effective tax rate will lower the equilibrium income level as long as the fiscal budget parameter is greater than the marginal propensity to consume ($b > c$). Of course, in any given real economy, this is likely always the case and so the benchmark economy reflects the conclusion of Kalecki (1944, p. 57) that "income tax financed expenditure… should be pushed as far as politically possible".

In period two, we wish to understand the effects on equilibrium national income due the operation of newly established foreign affiliates. We begin with the assumption regarding their behaviour. Throughout the analysis, we suppose that all foreign affiliate profits net of tax are repatriated out of the economy, such that net factor income receipts (*NY*) are given by

$$NY = -(1 - \tau_2)\Pi_{FA}, \tag{8}$$

where τ_2 is the effective rate of tax in the second period and Π_{FA} are the gross profits of foreign affiliates. Foreign affiliates may affect aggregate demand directly by their investment expenditure (I_{FA}) and by the value of their net exports (NX_{FA}). Supposing the functions determining the components of demand are otherwise the same as in period one, the additional aggregate demand due to foreign affiliates is given by

$$AD_{FA} = I_{FA} + NX_{FA}. \tag{9}$$

Again, to keep the focus on the area of interest, we suppose that all foreign investment (I_F) is financed entirely by the foreign parent.

To find another expression for the net exports of foreign affiliates (NX_{FA}), we begin with the income statement of all foreign affiliates

$$\Pi_{FA} = X_{FA} + R_{FA}^D - M_{FA} - Mat_{FA}^D - W_{FA}, \tag{10}$$

where X_{FA} is the revenue generated by affiliates through exports and R_{FA}^D through domestic sales, M_{FA} represent the materials inputs that are imported and Mat_{FA}^D are those sourced domestically, whereas W_{FA} is the wage bill paid by foreign affiliates to (local) labour. We assume all revenues are generated through exports and all material inputs are imported ($R_{FA}^D =$

$Mat_{FA}^{D} = 0$) or, to the same effect, that $R_{FA}^{D} = Mat_{FA}^{D}$. Under these assumptions, it naturally follows that

$$NX_{FA} = \Pi_{FA} + W_{FA}. \tag{11}$$

Since gross profits are equal to net profits (which are, in turn, equal to net factor income payments by equation 8) and the tax paid by foreign affiliates, we can express this as

$$NX_{FA} = \tau_2 \Pi_{FA} + W_{FA} - NY. \tag{12}$$

Lastly, assuming that the tax collected from foreign affiliates is injected back into the circular flow in the same period through government spending according to equation (5), we can write equation (9) as

$$AD_{FA} = I_{FA} + b\tau_2 \Pi_{FA} + W_{FA} - NY. \tag{13}$$

In equilibrium, the domestic product (Y^D) is equal to total aggregate demand, which is comprised of domestic aggregate demand and the aggregate demand due to foreign affiliates:

$$Y_2^D = E_A + Y_2[c(1-\tau_2) + \gamma + b\tau_2 - \eta] + AD_{FA}. \tag{14}$$

Substituting equation (13) into (14), we get

$$Y_2^D = E_A + Y_2[c(1-\tau_2) + \gamma + b\tau_2 - \eta] + I_{FA} + b\tau_2 \Pi_{FA} + W_{FA} - NY. \tag{15}$$

Recognising that national income is equal to sum of the domestic product and net factor income receipts ($Y = Y^D + NY$), it follows that the equilibrium level of national income in period two is given by

$$Y_2^* = \frac{E_A + W_{FA} + b\tau_2 \Pi_{FA} + I_{FA}}{m - \tau_2(b-c)}. \tag{16}$$

3.2.1 Revisiting the FDI-led growth hypothesis

Before we consider how particular commercialised state strategies may or may not work, it is worth briefly contextualising the model in its general form. Suppose, for now, that, for whatever reason, foreign affiliates are established in period two, but the effective rate of tax in period two is the same as in period one ($\tau_2 = \tau_1$). From equations (7) and (16), we can see that the equilibrium national income level increases in period two in proportion to the increase in foreign affiliate activity, whether in terms of investment undertaken or wages or taxes paid locally:

$$Y_2^* = Y_1^* + \frac{W_{FA} + b\tau_2 \Pi_{FA} + I_{FA}}{m - \tau_2(b-c)}. \tag{17}$$

Our simple model thus suggests an economy may be "FDI-led" or "FDI-driven", in the sense that the establishment and operations of foreign affiliates, and the necessary FDI that goes with it, may lead to higher levels of equilibrium national income. Though Singer (1950) is best known for his reasoned doubts concerning the possibility of growth driven by FDI, our finding here is actually strongly in line with Singer's conclusion. Singer (1950, p.484) writes, "the main requirement [for the FDI-led growth] of underdeveloped countries would seem to be to provide for some method of income absorption". He suggests three ways in which foreign incomes may be absorbed (ibid.): First, via "the reinvestment of profits in the underdeveloped countries themselves", which is reflected in the I_F term in equation (17). We will refer to this as the investment channel. Second, via "the absorption of profits by fiscal measures and their utilization for the finance of economic development", which is clearly captured in the $b\tau_1 \Pi_F$

term. We will refer to this as the tax channel. Or, finally, via "the absorption of rising productivity in primary production in rising real wages and other real incomes", which relates to the W_F term in equation (17). This will be referred to as the employment channel. Especially if the kind of FDI is not in the primary but rather the higher value-added manufacturing and services sectors, and so the terms of trade problems associated with the Prebisch-Signer hypothesis are less relevant, then it stands to reason that an economy that attracts many foreign affiliates without lowering aggregate demand of domestic residents can expect to grow.

Thus, our model in its general form supports the hypothesis that, in principle, an economy may be FDI-led. In the case of commercialised states that aim to achieve such FDI-led increases in national income, however, it remains to be seen under which conditions, if any, state aid may be used as a catalyst.

3.2.2 Growth conditions for tax havens

Let us now consider the growth conditions of tax havens, i.e. economies that are the recipient of shifted profits in the second period. Two conditions are imposed on the effective rate of tax in period two. First, it is lower than the rate in period one ($\tau_2 < \tau_1$) and, second, it is low enough to induce multinationals to set up shell companies in this low-tax economy to facilitate pure profit shifting for tax avoidance and evasion purposes. In order to induce foreign multinationals to do so, let us suppose the effective rate of tax must be no greater than some tax haven threshold tax rate (τ_{TH}):

$$\tau_2 \leq \tau_{TH} \tag{18}$$

Though the determinants of τ_{TH} can be said to be complex and varied, we can speak broadly of two kinds of determinants. It depends, firstly, on the effective rates of tax elsewhere in the relevant region (Woodgate, 2020). For example, if effective rates of tax are already near zero in other countries in which multinationals would consider locating, τ_{TH} may be effectively zero and our given economy cannot establish itself as a tax haven since it can no longer induce multinationals to change their tax planning arrangements. Second, τ_{TH} depends on international legal agreements and conventions surrounding corporation tax and the degree of enforcement of the corresponding rules. For the reasons Zucman (2014) explains, the current three pillars of international taxation—source-based taxation, arm's length pricing, and bilateral double taxation treaties—mean that tax differentials between countries enable and incentivise profit shifting in the first place. The exact nature of the international legal system surrounding the taxation of corporations affects the tax haven threshold, and, in principle, an alternative system could eliminate the threshold. We will return to the importance of the determinants of τ_{TH} later. For now, we accept that this hypothetical threshold exists and that our model economy will receive shifted profits by matching or undercutting it.

Importantly, the model economy is a pure tax haven in the sense that no genuine value-added is created by the new foreign affiliates in period two. We suppose that any legal or accounting costs of setting up and maintaining the shell company are negligible. Hence, in our model tax haven of period two

$$W_{FA} = I_{FA} = 0, \tag{19}$$

and so, in line with the discussion in section 3.1, any increase in the value of net exports actually reflects the value of shifted profits

$$NX_{FA} = \Pi_{FA}. \tag{20}$$

With this arrangement, this tax haven is left with an equilibrium level of income in period two that, by equation (16), is equal to

$$Y_2^* = \frac{E_A + b\tau_2 \Pi_{FA}}{m - \tau_{TH}(b - c)}. \tag{21}$$

Note that, for simplicity, we have set $\tau_2 = \tau_{TH}$, the maximum effective tax rate at which the economy can still establish itself as a tax haven. Comparing equations (7) and (21), we find that the condition for the increase of the equilibrium national income level ($Y_2^* > Y_1^*$) is

$$\Pi_{FA} > Y_1^* \left(1 - \frac{c}{b}\right)\left(\frac{\tau_1}{\tau_{TH}} - 1\right). \tag{22}$$

Equation (22) says that for this particular commercialised state strategy to spur growth, it must be that the value of shifted profits is sufficiently large. Sufficiency is determined by the size of the economy in period one (Y_1^*), the ratio of the marginal propensity to consume to the fiscal budget parameter, and the ratio of the effective rate of tax in period one to that of period two. For example, if $\tau_1 = 0.4,\ \tau_{TH} = 0.05,\ c = 0.7,\ b = 1$, then our simple model predicts an economy that attracts a value of shifted profits that is greater than 2.1 times the value of equilibrium national income in period one ($\Pi_F > 2.1 * Y_1^*$) will see growth of income in period two. Hence, economic size matters a great deal—physically smaller or poorer countries are more likely to grow through this particular tax haven strategy. Also important is the degree of tax competition necessary for the economy to establish itself as a tax haven, i.e. how much lower τ_2 must be relative to τ_1, which is determined by the threshold rate (τ_{TH}) discussed above. If τ_{TH} is zero or sufficiently close to zero, then even the smallest economy could not grow through this commercialised state strategy.

Besides traditional tax havens, especially in the Caribbean, that are marked by low or zero rates of tax across many income streams and not just corporation tax, it seems many modern tax havens do not employ an especially low *average* effective rate of tax but rather a low effective rate on corporations alone. As such, the tax haven strategy modelled so far can be seen as a blunderbuss approach to attracting foreign multinationals. A more targeted approach of lowering the effective rates of tax on foreign affiliates exclusively could attract the activity of multinationals without leading to a reduction in tax revenues collected from domestic firms. Indeed, this is one of the main purposes of investment promotion agencies, namely seeking out foreign firms and tailoring the state aid package necessary to induce that firm to establish an affiliate locally. Alternatively, by filling SEZs primarily with foreign-owned firms, policymakers can achieve an effective rate of corporate tax on foreign affiliates that is lower than that faced by domestic firms.

It is easy to show that a "modern" or "targeted" tax haven that manages to keep domestic effective rates of tax constant across the two periods ($\tau_2 = \tau_1$) while charging an especially low effective rate of corporate tax on foreign affiliates alone, denoted τ_{FA}, has a much higher chance of growth. Supposing $\tau_{FA} \leq \tau_{TH}$, the growth condition for our model economy becomes

$$Y_2^* = Y_1^* + \frac{b\tau_{FA}\Pi_{FA}}{m - \tau_2(b - c)}. \tag{23}$$

In this hypothetical case, holding all else equal, the growth of national income is ensured as long as the tax haven threshold can be undercut.

Given this result, why would any commercialised state pursue the blunderbuss approach related to equation (22) rather than the targeted tax haven approach related to equation (23)? There are at least two highly relevant political constraints. First, it may be considered unacceptable to local firms that foreign-owned competitors pay less tax. Hence, there may be domestic pressures against the targeted approach. There are also political constraints imposed from abroad. Within the EU, offering tax advantages on a selective basis may be considered state aid and is prohibited in the general case (European Commission, 2021). However, lowering overall or statutory rates of tax, although increasingly frowned upon, is nonetheless considered an expression of state sovereignty rather than a beggar-thy-neighbour growth strategy that can be legislated against. World Trade Organisation rules may also limit the extent to which a targeted tax haven approach works (Daly, 2016). For such reasons, economies wishing to pursue a tax haven growth strategy may be constrained in the extent to which they can target foreign affiliates exclusively with tax incentives.

3.2.3 Growth conditions for export platforms

Lastly, let us consider a second period in which the model economy has attracted foreign multinationals whose affiliates are not mere shell companies, but produce and export genuine goods and services. We assume that there is no pressing constraint on the supply of labour in the economy such that any increase in the employment of foreign affiliates can be facilitated (and is facilitated, again, without wage or price inflation). We continue to suppose the overall effective tax rate does not change between the two periods ($\tau_2 = \tau_1$) and that foreign multinationals are attracted through the targeted foreign effective corporate tax rate (τ_{FA}). This time, however, we suppose that τ_{FA} may be less than or equal to zero, since we will consider subsidies paid to foreign affiliates and other benefits in kind linked to output (represented by S_{FA} in equation 1). The tax rate threshold for the successful attraction of genuinely productive foreign multinationals (τ_{EP}) may also be negative, as it is partly determined by how low effective corporate tax rates are elsewhere and these rates may be negative for the same reason. The condition for our model economy to host the genuine production of foreign affiliates in the second period is thus

$$\tau_{FA} \leq \tau_{EP}. \tag{24}$$

Now the net exports of foreign affiliates represent genuine value added and not shifted profits. Thus, we are back to the general case where $NX_{FA} = \Pi_{FA} + W_{FA}$ and $I_{FA} > 0$. Purely for simplicity, let us suppose that the model economy follows a balanced budget rule, such that $b = 1$. The equilibrium level of income in period two is thus

$$Y_2^* = Y_1^* + \frac{W_{FA} + \tau_{FA}\Pi_{FA} + I_{FA}}{m - \tau_2(1-c)}. \tag{25}$$

If $\tau_{FA} > 0$, all three (employment, tax, and investment) channels are in effect and there is an unambiguous increase in the level of income. Note that the any induced government expenditure here is due to taxes collected on the profits connected to genuine production, not shifted profits. If subsidies exceed tax revenue collected from foreign affiliates such that $\tau_{FA} < 0$, then $Y_2^* > Y_1^*$ if

$$|\tau_{FA}| < (W_{FA} + I_{FA})/\Pi_{FA}. \tag{26}$$

If we suppose, in analogue with how domestic investment is determined, that foreign affiliate investment increases linearly by a factor of μ with total value added of foreign affiliates

$$I_{FA} = \mu(NX_{FA}) = \mu(\Pi_{FA} + W_{FA}), \tag{27}$$

then the growth condition for when $\tau_{FA} < 0$ behind equation (26) becomes

$$|\tau_{FA}| < \frac{W_{FA}}{\Pi_{FA}}(1 + \mu) + \mu. \tag{28}$$

Equation (28) implies there is a limit to how strongly negative the effective rate of tax on foreign affiliates can be while still having a net positive effect on the level of income. However, especially if $W_{FA} > \Pi_{FA}$, the effective limit on how negative τ_{FA} may be again given by exogenous legal or political constraints rather than this theoretical macroeconomic limit.

4. Discussion: Relevance and Implications of the Model

The simple theory offered in the preceding section throws forth a number of implications that may help us assess its relevance and usefulness. First, condition (22) suggests that smaller economies are more likely to engage in tax and policy competition. As shown in Woodgate (2020, p.528), this prediction is borne out in the data. Second, condition (22) also suggests that the "traditional" tax havens, i.e. those economies with low or zero tax rates on many types of income and not just corporate income, must attract level of shifted profits that is far greater than the size of the economy in the first period. This appears to be the case in Bermuda, the British Virgin Islands, and the Cayman Islands, for example, which are all economies with no (or a zero-rated) statutory tax on various income streams. Estimates from Tørsløv et al. (2018) indicate the value of shifted profits was over 19 times the value of national income in 2015 in the Cayman Islands and British Virgin Islands and around 5 times national income in Bermuda. Hence, it appears these traditional tax havens may indeed attract a sufficiently high level of shifted profits. Lastly, our tax haven model economy grows through the spending of the part of shifted profits that are taxed at an especially low rate, so it follows that tax havens should have low effective rates of corporate tax, yet high corporate tax revenues. As noted in the introduction, this is indeed the case. For example, company registration fees paid by foreign multinationals make up 56% of total government revenues in the British Virgin Islands.[6] Recent data published by OECD (2020, p. 40) shows that corporate tax paid by foreign affiliates accounts for 65% of total corporate tax receipts in Ireland, 45% in Luxembourg, and 33% in Singapore, as opposed to 7% just on average across Canada, France, Italy, Japan, and the United States.

Our export platform model suggests a large part of employee compensation and investment in particular is due to foreign affiliates. This can also be seen in the data, although proving that the high degree of foreign affiliate activity is caused by state commercialisation and not, say, low wage rates is a difficult and involved task. Nonetheless, data on SEZs in particular may be taken as indicative. Around 80% of cumulative FDI in China and around 60-70% of FDI in Vietnam has taken place in their respective SEZs (UNCTAD 2019, pp.179-181). In Malaysia, 72% of all FDI flowed into SEZs while 83% of exports came from SEZs in 2006 (ADB 2015, pp. 88). The percentage of national exports originating from SEZs was 67% in Sri Lanka (2005), 49% in the Philippines (2011), and 44% in China (2012).[7] Though indicative, further empirical work is warranted to examine more closely any causal link between state

[6] BVI government finance accounts. Average 2014-16. Ratio of fees from registry of corporate affairs to total government revenue.
[7] Data from ADB (2015, pp. 88-90). Years data refer to determined purely by data availability.

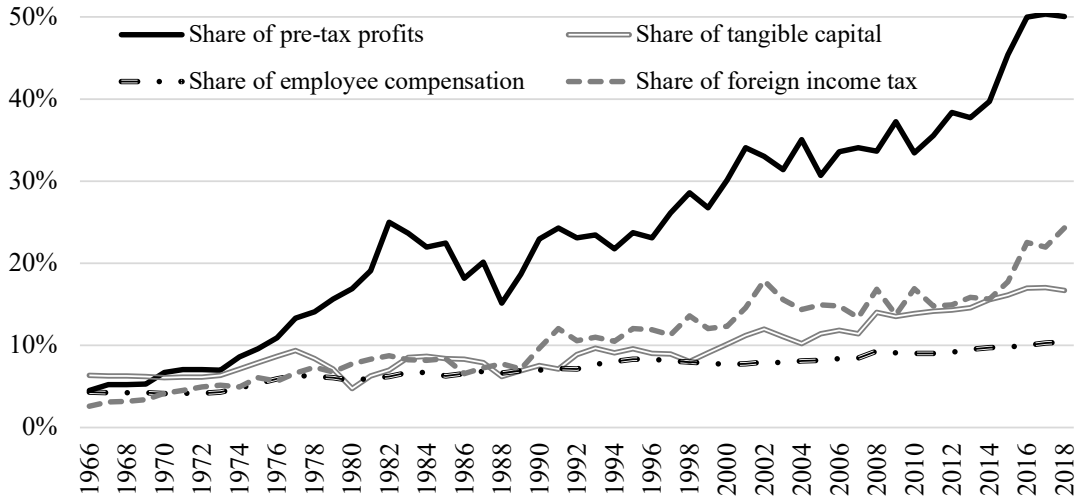
commercialisation and economic performance in these SEZ-dependent countries, as well as the Central and Eastern European countries, which exhibit a high degree of economic activity due to foreign affiliates as well as a high level of state aid (Bohle 2009, 2018; Drahokoupil 2009).

4.1 Genuine production in tax havens

In this paper, we suppose that tax havens grow exclusively through the taxing and spending of shifted profits. However, a number of modern tax havens appear to benefit to some extent through the productive investment and genuine net exports of foreign affiliates too. As shown in figure 6, the share of worldwide gross profits of US multinationals that are booked in six prominent tax haven economies (Ireland, Luxembourg, the Netherlands, Switzerland, Singapore, and the grouped economy of Bermuda and the Caribbean) soared from 4.5% in 1966 to 50% in 2018. In the same timeframe, the percentage of worldwide foreign income taxes paid by US multinationals in these tax havens grew from 2.6% to 24.3%. From the point of view of our model, this is as expected. Yet, the share of tangible capital and employee compensation going to tax havens has also risen from 6.4% and 4.3% to 16.7% and 10.4% respectively, which, although not as stark an increase as that of gross profits and corporate tax paid, is not insignificant.

What might explain why the employee compensation and tangible investment of foreign affiliates is rising in these tax havens, many of which have relatively expensive labour costs? One likely reason is that multinationals often must prove "economic substance" in order to qualify for particularly low effective tax rates, and so, as Tørsløv et al. (2018, p. 21) suggest, it may simply be "easier for multinationals to shift profits into the countries where they also have sizable real activity". Woodgate (2021, p.26) shows this is likely the case in Ireland, and argues foreign multinationals have an incentive to locate capital intensive production processes and high-skill, managerial labour in tax havens like Ireland. The cost of doing so will likely be

Figure 6. *Profits, tangible capital, tax and wage bills of non-oil US affiliates in tax havens as a percentage of the respective totals of non-oil US affiliates in all countries*



Sources: Wright & Zucman (2018), BEA (2020)

similar to what it would be elsewhere, but locating this kind of business activity in the selected tax haven comes with the benefit of helping prove economic substance to local and foreign tax authorities. These considerations may help explain why modern tax havens appear to be benefiting not just from higher tax revenues, but also from higher rates of employment and tangible investment.

4.2 The coordination problem of commercialised state growth strategies

Our model advanced the notion that state aid may be used to spur growth in tax havens and export platforms and explained the channels through which such growth may take place. However, ceteris paribus conditions were imposed throughout, which ought to be relaxed if we are to understand why, in practice, most attempts at the commercialisation of state sovereignty fail. In particular, the thresholds that determine whether an effective rate of tax is low enough for the model economy to establish itself as a tax haven (τ_{TH}) or an export platform (τ_{EP}) within its region may in fact vary between periods. When numerous economies face the same growth conditions seen above and simultaneously engage in the commercialisation of state sovereignty to lure foreign multinationals, these effective threshold rates fall. Hence, while the commercialised state approach may work for one economy alone as we saw above, it will likely not work for many economies following the same strategy at once, as argued in a related model in Woodgate (2020). There is thus a coordination problem, which prevents commercialised state strategies from being effective for those that enact them at the same time as others or after the threshold values have already fallen to the legal or economic minimum.

This theory would therefore predict that early movers in the ensuing race to the bottom in effective rates of tax are the few economies where state commercialising strategies worked. This first-mover advantage issue is well established within the literature on SEZs. Farole (2011, p.249) considers the "entrenched position of 'factory Asia'" as one of main challenges that the more recently established African SEZs inevitably face. Narula and Zhan (2019, p.2) write that "much of the popular understanding of SEZs focuses on examples from this [pre-1990s] period (such as Ireland, India, Malaysia, South Korea and Mauritius)", when multinationals found reliable, export-oriented locations to be in short supply. However, as the authors add, "developing countries in today's global economy that seek to pursue an SEZ-driven approach to development are unlikely to see similar benefits as those countries that followed this approach prior to the 1980s" (ibid.). This sentiment is echoed by ADB (2015, p. 105), who write "numerous [SEZs] have failed—and as we close in on the present—successes have become fewer; no SEZ established since the turn of the century has come close to matching the performance of Shenzhen or of the zones set up in Taipei, China and in Malaysia in the 1970s".

Nonetheless, SEZs continue to be built and policy competition continues to intensify. An explicit example is offered in ADB (2015, p.84), where the super-competitive "X+1" strategy upheld by SEZs in cities close to Shanghai means that they automatically offer one additional incentive for every new incentive offered by Shanghai. More explicit yet, according to survey of investment promotion agencies found in UNCTAD (2019, p. 191), the number one challenge facing their SEZs is "high competition with neighbouring countries". Hence, it appears the early movers' success with SEZs encouraged emulation elsewhere, but to such an extent that the ensuing competition makes it increasingly difficult to win over foreign multinationals.

Furthermore, most of the havens mentioned in this paper did indeed establish themselves as such at a very early stage. Luxembourg, for example, introduced the concept of the tax-

exempt holding company as early as 1929 (Palan, 2009). Switzerland passed its Banking Act of 1934, which established the principle of financial secrecy, one of the "three pillars of the offshore world" (ibid.). Another pillar, "virtual residency", had been ruled lawful by British courts as early as the 1920s, allowing companies across the then British Empire to register in London but pay taxes elsewhere. Combined with the third pillar, "easy incorporation", this precedent helped paved the way for British overseas territories and ex-colonies, especially in the Caribbean, to be used as the ideal location for tax-planning shell companies. By the 1970s, it emerged that the Netherlands had a similar route set up to the Netherlands Antilles (van Dijk et al. 2006, p.15). The commercialisation of the Irish state is exemplified as early as 1956, when 50% of profits resulting from exports were made tax-free, later increased to 100% in 1958. Interestingly, the personal writings of John Costello, the Taoiseach (Irish prime minister) in 1956, suggest he was keenly aware of the tax haven growth strategy described above:

> "I would foresee that if [the exports profits tax relief bill were passed] a great deal of trading would be attracted to Ireland. I would visualise that many English manufacturing concerns would find it worth their while to open businesses, i.e. trading companies in Ireland, and so fix their prices that their real profits or exports were made here to benefit from the favourable rate, and that we would get a lot of extra tax as a consequence." (As quoted in Barry 2011, p. 13).

Due to these kind policies and others, the effective corporate tax rate on US-owned foreign affiliates (not including subsidies or benefits in kind) was as low as 20% in Switzerland, 9% in Singapore, and 2% in Ireland as early as 1984, when the non-haven average was as high as 58% (Wright & Zucman 2018, appendix).

Hence, many of the dominant tax havens and export platforms of today raced to bottom on effective rates of tax before other countries (in the same region) started to do the same—and often long before the era of neoliberal globalisation began in earnest. Newer competing commercialised states had to contend with a degree of competition not faced by the first movers, reflected in the threshold values of τ_{TH} and τ_{EP} falling ever more quickly, and eventually could no longer outcompete the first movers as τ_{TH} and τ_{EP} hit their lower bounds. The embeddedness of each economy in its historical context as seen here should caution policymakers against simply copying the same state commercialising policies in the hope of the same outcomes.

5. Conclusion

This paper has argued that the commercialisation of state sovereignty is a defining feature of neoliberal globalisation, which, under the right conditions, may spur economic growth in a quintessentially beggar-thy-neighbour way. The success of commercialised state strategies depends a great deal on the degree of competition between states. Early movers faced no or little competition for the attraction of foreign multinationals and were thus more likely to be successful in boosting demand indirectly (though the tax channel) in tax havens and directly (through net exports and greenfield FDI) in export platforms. The success of the early movers likely lent state commercialising strategies a degree of legitimacy in the eyes of policymakers elsewhere, who then engaged in "competitive emulation" (Palan 1998, p. 639) by offering their own arrays of foreign investment incentives, often through SEZs and IPAs. No doubt, such incentives were also encouraged by lobbying, the strategic interests and behavioural biases of policymakers (Danzman & Slaski, 2021), and objectionable neoclassical capital theory, which

supposes the optimal corporate tax rate is zero (Mankiw et al., 2009). Whatever the motivation, such competitive emulation ultimately only served to shift the goalposts concerning how intensely governments must compete in order to attract foreign multinationals (represented in our model by how low τ_{TH} and τ_{EP} are). When commercialised states cannot keep up in the ensuing race to the bottom or can no longer outcompete their rivals at the "bottom", we expect that commercialised state strategies are thus rendered ineffective, as there is little room to entice foreign multinationals away from their entrenched position in early mover economies.

In the beggar-thy-neighbour zero-sum-game of state commercialisation, simultaneous and widespread competition means the surest winners in the race to the bottom are the multinationals and their shareholders, who mostly reside in richer nations. This has important ramifications for inequality and uneven development the world over, as well as stagnant demand and output growth in wage-led economies. Certain policy initiatives designed to curb profit shifting and tax base erosion such as a global minimum corporate tax rate and the imposition of remedial taxes on repatriated corporate profits, which are detailed by researchers like Saez and Zucman (2020, ch. 6) and are gaining traction amongst policymakers in the OECD and G20 (Partington, 2021), are thus to be encouraged. While it makes sense to combat the commercialisation of state sovereignty by focussing on its most egregious form first (i.e. the facilitation of profit shifting), it ought to be followed with international coordination to combat or limit competition for genuine production with other kinds of targeted state aid.

Final remarks concern the main limitations of the modelling approach employed and suggestions for future research. Our model is an analysis of the short run, where prices, wages, and the productive capacity of capital is held constant. Exchange rate effects were also excluded from the analysis, which in reality may prove important, especially in small tax havens with large capital inflows. Productivity and the related spillover effects from foreign affiliates to local firms may also be pertinent to the topic at hand, though were not included here. Future work in this line of research may wish to relax some of these assumptions and extend the analysis of the core elements identified here into the long run.

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