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Overhauling corporate taxation in the digital economy

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Abstract

Is the corporate income tax (CIT) still an efficient system for taxing companies today? The CIT was introduced when economies were characterised primarily by tangible assets and goods and by limited international trade. Globalisation, digitalisation and the increasing weight of immaterial goods in company transactions and balance sheets have rendered that system outdated. These radical changes call for equally radical reflections on how to reform the CIT, bearing in mind the need for a corporate tax system that is fit for both the digital and the traditional economy, in developing and developed countries alike.

Rather than offering a complete solution, this paper discusses various approaches that could contribute to a solution. First, we suggest that the CIT base should always be strictly aligned with the accounting profit and loss account, eschewing special adjustments for tax purposes. Second, a more radical possibility would be to abandon altogether the reference to corporate income and tax companies instead on cash flow, based on destination. And, third, the possibility could also be explored to tax companies with reference to 'presumptive' indicators of activity, rather than on the basis of public accounts. Presumptive indicators are already used in federal systems to allocate corporate income among decentralised jurisdictions. These propositions would not be viable without international agreement, at least at the level of the European Union. Such an agreement may prove difficult given the conflicts of interest between EU member states and between them and the United States.

1. The origins of the corporate income tax

In most national tax systems, a corporate income tax (CIT) was introduced in the 1950s "more as an expedient to increase revenues than as part of an organic and rational tax reform plan" (Cosciani, 1986, p.4). In the second half of the 20th century the process of industrialisation, the growth in the number of companies and the development of foreign trade progressively brought the issue of corporate taxation back to the fore.

One of the main advantages of the CIT is that it helps collect substantial revenues from a relatively limited number of taxpayers (Bird, 2002): in 2016, CIT in the European Union accounted for 6.8% of total tax revenues, while before the crisis, in 2007, it accounted for 8.6%. The corporate tax is meant to target the return to capital; as the ultimate beneficiaries of those returns may be difficult to reach, administrative convenience has led to companies being taxed as intermediaries; in this sense, the CIT offers a backstop to revenue collection from shareholders. Moreover, all modern tax systems resort to companies as collectors for the tax authorities, e.g. for value-added taxation, labour income taxation and social security contributions (Lupi, 2011).

On the other hand, Gordon and Sarada (2019) recently confirmed that countries strongly compete for the corporate tax base, which results in statutory corporate tax rates falling – roughly by half since 1980 as markets have become more open. The data presented in the book lead the authors to forecast a declining role for corporate income in tax systems and a likely shift of taxation towards some sort of consumption base.

Over the last 40 years there have been numerous reports and commissions on a desirable evolution of the CIT, but none of them achieved sufficient consensus. In general, the definition of the corporate tax base is inherently linked to public policy objectives. Recently, Brooks (2018) has reviewed all the definitions of taxable income observed since the end of 1800 and concluded that "each concept serves a specific goal, but none is truly comprehensive, nor can any be".

A fundamental weakness of the CIT stems from the conventional nature of its tax base, traditionally identified with the profits shown in company accounts. Yet, accounting principles and balance sheet items were meant to provide information on the company's economic situation and were not conceived for the purpose of taxing corporate income. The problem is that, while some balance sheet items merely record objective events, such as interest payments, expenses for salaries or purchases of inputs necessary for producing the company's output, other items are the result of estimates. These include such items as losses on bad loans, evaluation of inventories, and depreciation allowances for company assets and investments. In particular, the very concept of depreciation – which was a critical component in the identification of the yearly return to capital for tax purposes - is based in reality on estimates of fairly uncertain nature. These items are anything but objective data and yet they substantially contribute to determining the taxable income. They may also change over time. Therefore, the identification of the CIT tax base with net profits from the profit and loss account appears a somewhat arbitrary decision based on shaky conceptual foundations.

A related question is whether the CIT effectively promotes the companies' interest by defining a predictable and stable tax base over time, or it is cherished by companies because it implies a low tax burden. It is a fact that current tax systems often reconcile the considerable complexity in the definition of taxable income with elaborate tax reliefs (i.e. deductions) defined at the national level, which in practice are often a way to grant opaque and unsystematic reductions of the tax burden.

Complex issues also arise concerning the integration of tax on company profit and tax on shareholders' dividends. Under the classic taxation model, the CIT was levied on the company and subsequently also on the dividends paid to individual shareholders; however, over time double taxation of company profit came to be seen as a problem. For one thing, various distortions originate from the double taxation of profits: for example, the taxation of business profits is not neutral with respect to the legal form of the company; debt financing is favoured over equity; there is a lock-in effect for profits that generate relevant capital gains, which, in turn, are taxed under a special tax regime. Thus, some sort of integration between company taxation and shareholder taxation was eventually introduced, albeit in different forms across EU member states.

At the end of the 1980s, the Dual Income Tax system, introduced by the Nordic countries, had a strong impact on the taxation of corporate income. This income was ideally split into two components – capital income and earned income – that were taxed differently: the 'normal' share of profits, equal to some notion of market returns, or of suitable bonds, was taxed at the same rate as the income from financial assets, or was completely exempt; the CIT was only applied to returns exceeding that threshold. The Dual Income Tax was an irreversible step in breaking the link between corporate tax and the return on capital.

Finally, in the last thirty years, other changes in technology and market structure have had a deep impact on the functioning of the CIT: mainly the internationalisation of productive processes, the digitalisation of the economy and the increasing importance of intangible assets in the production of business income. These factors tend to combine and their combination further increases their distortive effects on the proper functioning of the CIT. As recently noted in a Policy Paper by the International Monetary Fund (IMF, 2019), the international corporate tax system is under unprecedented stress. They conclude that the OECD Project on Base erosion and profit shifting (BEPS) that call for a taxation "where value is created" does not offer an adequate basis for real progress.[1]

In general, the CIT is commonly considered inefficient because it tends to distort decisions on the place and amount of investment, the form of investment (subsidiary or branch) and the method of financing (debt, equity, raised locally or on international markets). In an increasingly digital and global setting, this calls for radical rethinking of this model of taxation.

2. The crisis of the CIT: a perfect storm

A serious blow to the functioning of the CIT came from the **internationalisation of production processes.**

For decades companies with international activities had learned to take advantage of the gaps and asymmetries between national tax systems in order to reduce the tax burden;[2] the absence, at the international level, of consistent tax coordination among jurisdictions gives companies arbitrage opportunities, leading to both the relocation of tax bases abroad (profit shifting) and to the erosion of these tax bases (base erosion).[3]

Multinational companies have evolved towards a model of specialisation and integration in which single units are delegated to manage a part of the business at the global level; as result, there has been a massive increase in international transactions, including those within the company that in some cases exceed 70% of total business transactions. One of the implications is that companies can generate income in a particular jurisdiction without a permanent establishment in that territory. The new global enterprise operates and competes in a space "beyond" national territories (Carpentieri, 2018). The

[1] We refer to the G-20/OECD BEPS project, launched in 2013, aimed at closing gaps in international tax rules that allowed the corporate tax base to be eroded or artificially shifted to low/no tax jurisdictions. As noted by Grinberg (2018), "the consensus academic view is that any exercise to define specific sources of value creation in entirely subjective". Furthermore, as already observed by IMF (2019), "if the place in which value is created can be changed, it leaves open the possibility of distortions arising from differences in tax treatment and of collectively damaging competition to attract the value creating activities."

[2] "The dynamics of tax policy in a world of mobile corporations has become considerably more complex. There is a view that firms have become increasingly aggressive in seeking tax advantages, while there has been growing popular discontent about the apparent ability of corporations to relocate activity in response to tax differences" (Desai & Dharmapala, 2018, pp. 247 and following).

[3] Among others, the instrumental use of misalignments related to the so-called hybrid financial instruments, cf. OECD (2015).

taxation of multinational companies, based traditionally on the combined use of residence and territorial principles (including complex mechanisms to deal with double taxation), has become dysfunctional.

Further radical changes in the production processes have been brought about by the **digitalisation of the economy**. The notion of a digital economy, a term used for the first time in 1994 (Tapscott, 1994), still lacks a clear definition, although digitalisation is increasingly pervading the economy and society (OECD, 2014). It is important to note that what is becoming digital is the economy as a whole, making it exceedingly difficult to single out digital companies for tax purposes. From this perspective, any changes in international tax rules to meet the challenge of digitalisation must eventually apply across all sectors of the economy.

The benefits of digitalisation are enormous: first and foremost, access to information is faster and there is more opportunity to participate in society. Digitalisation increases the efficiency of production processes and the speed of circulation of information between customers and suppliers; it also lowers the costs of communication.[4] At the same time, questions have been raised on the potential impact of digitalisation on low-skilled workers.

Digital companies have access to markets and generate profits without the need to have fixed on-site locations.[5] The stateless income[6] that these companies produce does not contribute to public expenditure in the countries where multinational companies sell their goods or services (Olbert & Spengel, 2017). In this perspective, the internet and digital platforms have created an 'above territories' territory, inaccessible to national tax authorities. Expanding the notion of a permanent establishment to cover significant 'digital presence' does not yet appear to offer a solution.[7]

Also, digital networks have the ability to change the nature of goods: for example, material goods, when becoming accessible through the internet, can acquire some of the typical characteristics of intangible goods. A book can be read on the internet simultaneously by an indeterminate number of people (through, for example, Kindle technology); by proposing a pay-for-access service, the same network can also artificially generate a scarcity of the good, making it more akin to a traditional economic good.

This new production system renders both the CIT and conventional mechanisms to avoid double taxation of multinational companies obsolete.

[4] As demonstrated by Evangelista et al. (2014).

[5] On the new operations of multinational companies and the national States' difficult adaptation to the economic integration produced by globalisation cf. Carpentieri L. (2018), p. 351.

[6] According to the statement coined by Kleinbard (2001 and 2011).

[7] The comprehensive solution was envisaged in European Commission (2018).

The attempts, under way by some European states, to establish web taxes at national or EU level (even assuming that the obstacle of the unanimity vote for fiscal matters in the European Union can be overcome) are likely to raise conflicts between tax jurisdictions since such taxes inevitably overlap with the claims on corporate income of their state of legal residence. In addition, these web taxes tend to overlap with VAT, and, as does VAT, they may translate into higher final prices of products and services. At all events, as observed by the IMF (2019), attempts to isolate a 'digital economy' (or 'digital activities') for special treatment may prove misguided, given the pervasive impact of these technologies and their unpredictable evolution over time. Not surprisingly, in one of its recent policy notes, the OECD (2019) has ruled out the introduction of a new tax on multinational web companies, basically for two reasons. On one hand, it would be necessary to revise the rules of transfer pricing in order to take account of the peculiarities of the companies that do business on the internet; on the other hand, there would be a need to develop effective tools to tackle the profit shifting of multinational companies from the countries of the users and consumers of digital content services to the countries with low taxation.

The third and final factor that intensifies the CIT crisis is the **silent industrial revolution** that has taken place in recent years, both in advanced countries and in many emerging economies, one that is well-documented by Haskel and Westlake (2018).

Companies invest less in tangible assets, machinery, factories, offices, etc. Paradoxically, some of them may operate and generate profits even in the absence of traditional capital goods, because value today is found more in know-how than in material production. As Goodwin (2015) noted in a famous press interview, the **"**world's largest taxi firm, Uber, owns no cars. The world's most popular media company, Facebook, creates no content. The world's most valuable retailer, Alibaba, carries no stock. And the world's largest accommodation provider, Airbnb, owns no property. Something big is going on."

Investments today tend to focus on intangible assets, namely research and development, software, marketing, intellectual property, etc. New business models rely heavily on these intangible assets that are very hard to value. This change has two consequences. First, there exists no satisfactory measurement system that is reliable and stable over time for intangible assets. Second, the prevalence of these assets over the material ones changes the way the economy operates.

Intangible assets have different economic characteristics from tangible ones: they are often non-rival, thus they can be enjoyed by many persons simultaneously; they tend to become obsolete and lose market value in a short time, making it almost impossible to recover the initial investment with the sale of the asset ('sunkenness'); they generate spillover effects vis-à-vis other companies, weakening the incentive to invest (also because the protection of intellectual property rights is inefficient and expensive); they acquire greater value if used in combination (synergy), something that tends to favour larger companies.[8]

The evaluation of a physical asset for tax purposes can be carried out by looking, for example, at the value at which the machinery or property can be resold. But for intangible assets, there is often no such reference. How does one value an intangible investment whose purpose is the improvement of software? Whether the investment has created value can be assessed and measured only after the software is sold together with the entire application or device. The possibility of this happening and the timeframe in which this will happen are very uncertain and variable.

These considerations make Haskel and Westlake (2018) conclude that at the global level there is a significant underestimation of investments in intangible assets, which are often recorded in company accounts as current expenses. For these expenditures, the notion of yearly depreciation may often prove meaningless. Indeed, Haskel and Westlake stress that computing the service life of this type of intangible investment and, consequently, the annual amortisation rate, is close to impossible, as the company does not know for how long the immaterial good can be exploited in production.

3. The CIT crisis in the European Union and the United States

Within the European Union, profit shifting of companies' income was in part favoured by the principles of free movements of capital, freedom of establishment and non-discrimination among residents and non-residents. For a long time, it was believed that those rights would have generated more efficiency and productivity, rather than generating distortions. Empirical evidence seemed to indicate that real investment flows are not highly reactive to the differences in tax rates among jurisdictions and that, with open tax competition, different tax rates may over time come to correspond to the locational benefits offered to investors.

However, the increase in capital mobility, the widespread practices of aggressive tax planning by multinational businesses and the behaviour of some member states eager to attract capital to their jurisdictions have led to the emergence of true tax havens within the European Union. Derogations provided for in Article 65 of the TFEU on the freedom of movement of capital and other tools offered by

[8] A further change regards the ability to finance intangible investments in relation to traditional ones: the presence of a sunk cost makes them less suitable to be financed through debt. Equity financing also tends to be lower than that needed because this type of asset is often under-reported in the financial statements due to uncertainty and measurement problems. Finally, in many countries and for many companies there is not much venture capital available.

the Treaties try to limit profit shifting, but the increasing erosion of tax bases appears very large (Jansky, 2019).

Within the European Union, the attempt to tackle the CIT crisis and find new coordinated ways for taxing multinational companies are further complicated by the significant differences in national tax systems.

While it is true that the European Treaties do not explicitly mention the harmonisation of direct taxation, Article 115 of the TFEU provides for European initiatives in the "approximation of such laws, regulations or administrative provisions of the member states as directly affect the establishment or functioning of the internal market". This provision has created the legal basis for the various harmonisation measures undertaken over the years which, however, require unanimity to be adopted.

The first proposals for coordination date back to more than fifty years ago.[9] In the early 1990s the Ruding Report explicitly recognised that the 'spontaneous' convergence of tax systems that took place in the previous decade had not been enough to resolve the market distortions created by differences in the national tax systems. The Report indicated some priorities: (a) the elimination of discriminatory provisions; (b) the fixing of a minimum tax rate, to limit harmful tax competition; (c) the transparency of tax incentives. These proposals received a lukewarm reaction from the Council, which only adopted the measures that were deemed essential for the proper functioning of the internal market (the parent-subsidiary directive, the directive on mergers and the Arbitration Agreement on transfer pricing).

The dossier on the coordination of national tax systems regained momentum in 1996 at the Ecofin meeting in Verona. The Commission identified three tax policy issues that the European Union needed to address: (a) the stabilisation of tax revenues; (b) the proper functioning of the internal market; (c) the promotion of employment. According to the Commission, the tax burden had been shifted from the more mobile (capital) to the less mobile productive factors (work); in addition, lack of coordination between national tax systems had become a source of distortions generating unemployment. A High-Level Group chaired by Dawn Primarolo was established to counter unfair tax practices and to draft a report suggesting some areas of joint action. The 'Monti Package' was subsequently approved and consisted of two directives (for the taxation of savings and interest and royalties), a code of conduct for comparing unfair tax measures, and some guidelines on state aid rules.

In 2000, the Lisbon European Council adopted the strategic goal to make the European Union "the most competitive and dynamic knowledge-based economy in the world". In 2001, the Commission

[9] The 1962 Neuman Report and the 1970 Van den Tempel Report called for a certain degree of harmonisation of direct taxation.

presented a communication (European Commission, 2001), that affirmed the need to adapt company taxation in the European Union to the Lisbon Strategy with the aim of ensuring a better functioning of the internal market through tackling the inefficiencies created by the differences in national tax rules. It pointed out that compliance costs, problems in transfer pricing rules and the ample room for double taxation undermined European competitiveness, preventing companies from enjoying the full benefits of the internal market.

The Commission communication discussed various technical options to address these problems. The first option was Home State Taxation (HST), to be based on the voluntary mutual recognition of the tax regime in force in the other member states (Lodin & Gammie, 2001). The companies operating in more than one member state could calculate their tax base in accordance with the tax rules of the country of residence of the parent company. The taxable income thus determined, after allowing for the netting of cross-border gains and losses according to the law of the country of origin, would then be shared among the member states in function of the payroll and/or revenues of each country; and each country would apply its own tax rates on this fraction of the taxable income. This proposal had the political advantage of not requiring any harmonisation of the tax rules, but it also presented various challenges – the main one being that companies subject to different tax laws would have had to work side by side in the same market, while each tax administration would need to be able to verify tax statements made according the rules of all member states. The HST system could only have worked in the presence of a substantial convergence of the tax and legal systems of EU countries, which was not the case.[10]

Subsequently, the Commission turned to a different approach, the Common Consolidated Corporate Tax Base (CCCTB) model.[11] In its first version, the CCCTB was proposed as an optional tax system that firms could choose as an alternative to that of their country of residence. According to this proposal, there would be an agreement on a common set of rules for the calculation of taxable profits. The common base would then be consolidated at EU level and apportioned amongst the member states according to a formula based on three factors (sales, employment and tangible assets). It was, therefore, necessary for countries to adopt a common definition of the tax base, but also to agree on the definition of consolidated profit, given that the rules for consolidation at group level differed greatly among countries. The main advantage of this system consisted of the possibility to compensate losses for companies belonging to the same group but located in different countries and to eliminate problems related to transfer prices. It should be noted, however, that these benefits would have only affected the

[10] Among others, Klemm (2001).

[11] For an assessment of the main elements of the proposal, cf. Fuest (2008).

companies located within the European Union – or the subset of EU countries adhering to the system – and not those partly located in third countries.

The proposal struggled to build sufficient support among the member states and in 2016 the project for a common tax base was re-elaborated from a different perspective (European Commission, 2016). The new proposal for a CCCTB provides for two steps: the first is the definition of a common corporate tax base (CCTB), and the second includes the consolidation of the common corporate tax base (CCCTB). Great efforts were made in the past to arrive at a common definition of the tax base (necessary for taking advantage of the benefits of deducting the losses on a pan-European basis), which however turned out to be more the sum than the synthesis of the different approaches. In the end, the CCCTB would be allocated among the member states based on presumptive indicators, according to the '***formulary apportionment'*** method.[12] Recently, in her Political Guidelines, the designated President of the European Commission has announced her commitment to achieve the longstanding goal of a common consolidated corporate tax base (von der Leyen, 2019).

Once again, the CCCTB appears to be an attempt to rescue the corporate income tax almost as it is today; the tax base would always be represented by profits, but it would then be apportioned among the several tax jurisdictions through indicators. An agreement does not appear in sight. It would require the member states to agree on the rules for determining corporate income on a consolidated basis at EU level, and then on the formula for dividing this income among the different tax jurisdictions. Furthermore, even if both agreements were reached, the solution would be limited to the member states, or only to those that adopted them under an enhanced cooperation.

The European Commission (2018) has recognised that "the CCCTB with its current scope would not offer a structural solution to some of the important challenges in taxing businesses of the digital economy". This is because of its limited scope (it is mandatory only for large multinational companies) and because the definition of a permanent establishment in the CCCTB follows the one currently applied internationally. Moreover, the profit allocation rules (the apportionment formula) in the CCCTB may not sufficiently capture the digital activities of a company as the rules on a taxable nexus for digital activities are not considered.

A main weakness of the CCCTB, however, remains its perimeter of application, which at best would cover the European Union. Moreover, the reaction of the European Union regarding issues of taxation of the digital economy appears too slow with respect to the rapid changes taking place in the economy.

[12] This system has been operating for a long time in Canada and the United States. For a more detailed description of the system cf. Weiner (2005).

Within the EU the introduction of shared tax measures requires unanimity. The Commission's proposal to shift from unanimity in tax matters to 'qualified majority voting' could accelerate agreement over a course of action for a Digital Service Tax (DST) at an EU level, but in the race to achieve consensus on redesigning international tax rules so that they apply effectively to digitalised business, the OECD appears to be the leading.

In its "Tax challenges arising from digitalisation: interim report", the OECD (2018) emphasised the need for a global plan and a long-term solution, just days before the European Commission released both a long-term and an interim proposal on 21 March 2018.[13]

This difference in approach initiated a geopolitical struggle between short-term measures driven by political expediency and the OECD's vision of more long-term measures and a principled riposte to unilateral actions that could jeopardise its chance of success. The OECD's interim report delivered some important conclusions in relation to the taxation of the digital economy. This report included confirmation that the digital economy could not be 'ring-fenced' from the broader economy and noted that any interim measures would need to be consistent with international tax and trade obligations.

Moreover, while Europe and the OECD were discussing their proposals and seeking to develop a general consensus on the best way to tax digital companies, the US with the Trump tax reform has 'challenged' the other countries and in particular the European Union, putting a 'mortgage' on all the income produced by US multinationals everywhere in the world through its subsidiaries and exceeding 10% of the value of their instrumental assets.

At the end of 2017, President Trump signed the Tax Cuts and Jobs Act bringing sweeping changes to the tax code and, in particular, turning US corporate income tax from a 'worldwide' system to a 'territorial' system.

[13] The European Commission's interim solution envisages the introduction on a transitional basis of an indirect tax on revenues from certain digital services for which the participation of the users plays a central role in value creation. This tax should be levied on companies with worldwide revenues higher than €750 million, of which more than €50 million is generated within the EU. This DST would apply to revenues from three types of digital services: a) advertisements placed on a digital interface and directed towards the users of that interface; b) the revenues from offering multilateral digital interfaces that allow users to interact among themselves and eventually facilitate the supply of peer-to-peer goods and services (social networks, sharing economy, etc.); c) services that transmit the data collected on the users and generated by the users' digital activities on the digital interfaces. The long-term proposal intends to reform corporate tax rules by identifying a new kind of nexus (which overcomes the traditional notion of permanent establishment) based on 'significant digital presence'. The significant digital presence in a member state would be verified, in a tax period, when the company that provides digital services through an interface meets one or more of the following conditions: the revenues from providing digital services to users in a jurisdiction exceed €7 million, the number of users of digital service in a member state exceeds 100,000, or if the number of business contracts for digital services exceeds 3,000.

In a worldwide system, corporate income is taxed in the country of tax residence, regardless of where it is gained. Under the territorial tax system, only domestic earnings are subject to taxation in each jurisdiction and profits gained abroad are excluded. Under the 'worldwide' system, US multinationals were taxed on income earned abroad, but they could avoid the tax by deferring the repatriation of profits ('tax deferral'). This was at the origin of a lock-in effect, i.e. the parking in overseas subsidiaries of undistributed profits – which over time came to pile up into enormous amounts.

With the Trump reform, US multinationals will continue to benefit from the de-taxation, as the dividends distributed from foreign subsidiaries will not be taxed in the US, with a system very similar to that adopted in most EU member states. In this way, US multinationals are encouraged to bring the money back to the US in the future because profits earned abroad and repatriated as dividends will not be taxed. For earnings generated in lower-tax jurisdictions, the US company will pay this lower tax rate on company profits and send home dividends that will remain untaxed. For past undistributed dividends, the reform introduced a one-off levy, regardless of the country in which they are made, at a rate of 8% for illiquid activities and 15.5% for liquid ones.

Companies with over $500 million in annual gross receipts at group level for the preceding three years are subjected to the Base Erosion Anti-abuse Tax (BEAT). The BEAT is a minimum tax payable by companies resident in the US who deduct from their tax base 'payments' in favour of foreign affiliates for the services received, for the use of intangible assets or for the purchase of depreciable assets. According to this approach, even in the total absence of tax avoidance, the US corporation tax, calculated in the ordinary way, cannot in any case be less than 10% on a deemed[14] tax base.

The Trump reform risks intensifying tax competition globally, leading to a possible erosion of tax bases in EU countries. Moreover, the reform will affect the fiscal planning strategies of multinationals as the lower taxes on the American companies increase the fiscal attraction of the United States relative to other countries by influencing the way companies choose to invest or move profits.

US tax reform has strongly relaunched tax competition between countries; these provisions make it even more urgent to find a coordinated solution at the OECD and EU levels.

[14] This tax base is calculated as US profit plus base-eroding payments – such as royalties and management fees – made by US corporations to related foreign persons.

4. Other options for the taxation of business income

Tax systems must adapt to the radical changes in business models and activities. To this end, it appears that it would not suffice to update or to amend the current tax systems; they must be reformed.[15]

Devereux and Vella explore a broad variety of solutions: the most radical is the elimination of the CIT**;** an intermediate option is to determine the taxable income of the company and implement a 'transparency' tax on the shareholders, allocating income according to each shareholder's ownership share; a further possibility is to provide for a tax based on the location of the consumers to be implemented on the profits or on the cash flow.[16]

At all events, if one wants to keep the taxation of business income anchored to the profit and loss accounts, these should become the tax base also for tax purposes, thus eliminating all 'twin-track' fiscal distinctions that greatly contribute to the opacity of tax systems, and that often open the door for aggressive tax planning operations (notably, but by no means solely, in Italy). The rules for determining the tax base of the CIT should be the same as used for statutory financial statements and they should remain unchanged over time. This principle has a major advantage: it creates a strong disincentive to tarnish the budgetary procedure with the aim of reducing the tax burden since this would worsen the company's public results for shareholders and market investors. There would also be a strong incentive for the company to provide a fair evaluation of intangible assets and digital activities. In a more general perspective, it would increase the transparency of the CIT and, at international level, improve comparability among national tax systems.

An entirely different approach, which would rescind altogether the link between taxation and business profit, could be the cash flow tax proposed for the first time at the end of the 1970s by the Meade Committee. The cash flow tax records transactions at the time of the payment, disregarding accounting rules entirely.[17] The advantage would be twofold: cash flows are easier to track, and the earnings are more difficult to manipulate. The tax base would be based on the same factors as those of the formulary apportionment of the European proposed CCCTB, that is the revenues arising from sales of goods and services net of productive inputs (assets and labour cost). This system would also provide a strong incentive to invest in both material and immaterial assets, because the purchase of these assets would result in an immediate reduction of the taxable base. In the cash flow tax, the financial components

[15] Not by chance Devereux (2018) writes: "I believe that we are in the midst of a shifting of the tectonic plates of international taxation of profits" .

[16] Among others: Devereux and Vella (2017), Devereux and Vella (2014).

[17] Also, for some years in Italy there have been discussions on the possibility of taxing the company on a cash flow basis rather than in accordance with the accrual principle, cf. Lupi and Versiglioni (2015).

would no longer be relevant and thus the present distortion in favour of debt financing (as interest rates on debt are deductible as a cost from the tax base, and dividends are not) would be eliminated.

In its original formulation, the cash flow tax was conceived as a tax on the cash flow of domestic producers ('origin-based') and, as such, it encouraged companies to move their production or fiscal residence to countries with low taxation. More recently, this aspect has been reconsidered (Auerbach et al., 2017); the tax would be based on destination (Destination-Based Cash Flow Tax – DBCFT), that is taxing rights would be allocated to the jurisdiction in which the consumer (a factor much less open to manipulation) is located rather than to the jurisdiction of the company's production or residence.[18]

The DBCFT "is a tax applied to the cash flow of all domestic consumption and that excludes the cash flow of goods or services that are produced domestically, but consumed elsewhere" (Pomerleau & Etin, 2016). The border adjustments included in the proposal are "taxes or tax reductions that apply when payments for goods and services cross international borders". Imported goods purchased/consumed domestically are subject to the tax while goods produced domestically and sold internationally are exempt. Therefore, the DBCFT would lighten the levy on exports and tax imports, similarly to what happens with VAT but, unlike the latter, it would retain the payroll deduction from the tax base.

The advantages of the DBCFT are numerous: the elimination of the company's residence as a key factor for tax purposes; the solution of the problem of taxing mobile factors; the removal of the incentives to manipulate transfer prices, as intra-group transactions would be ignored by the tax system; the full and immediate deductibility of investments; the absence of distortions on the companies' financing choices, since financial flows are excluded from the base. From an economic viewpoint, the DBCFT would be a more efficient tax as it is less distortive with respect to choices of location and funding. It would also be more robust in relation to the practices of tax avoidance, including intra-group financing and transactions.

As noted by IMF (2019, p.27), adoption of a DBCFT (even unilateral) is not expected to affect trade since that tax does not create a preference for domestic production over imports. All sales to final consumers, imported or domestically produced, are taxed, and all domestic costs are deductible, whether used to produce for exports or for the domestic market. Thus, if adopted universally, the DBCFT would eliminate both profit shifting and tax competition. A recent paper provided some estimates on the revenue implications of this tax using national accounts data: on average, a universally adopted DBCFT surprisingly generates a similar level of revenue as the CIT, but some countries lose while others win

[18] As noted by IMF (2019, p. 25) "the notion of user participation as creating a taxing right, though conceptually quite distinct, in practice allocates some taxing rights to jurisdictions in which final users of a product are located. Indeed, and though doubtless unintended, the call to tax where value is created might seem to imply some taxing rights in the destination country since there is no value without buyers."

(Hebous et al., 2019). Countries with a large trade surplus would face the largest decline in revenue, at least in the short term. Unilateral DBCFT adoption can generate negative spillover effects, which are found to be sizeable if the DBCFT country is large and integrated. Spillovers could prompt other countries to adopt a DBCFT, as a rising number of DBCFT countries raises the cost of maintaining source-based CITs.

On the other hand, the DBCFT would pose problems both from an administrative and legal point of view. First of all, if adopted unilaterally by individual countries, DBCFT could lead to either double taxation or no taxation, as companies exporting from a DBCFT jurisdiction would not pay any CIT, neither in the home nor in the country of destination of its exports; while, on the other hand, a company exporting from a traditional to a DBCTF taxation country would be taxed by both jurisdictions.

A further issue is that in the transition from the traditional tax to the cash flow tax, the full tax-deductibility of the investment would co-exist with the deduction of the costs not yet amortised and, therefore, would lead to revenue shortfalls. Above all, the cash flow tax would risk destabilising the international agreements built on the traditional notion of profit: if the new tax were not recognised in the bilateral treaties against double taxation, foreign investors could lose the right to the credit on their domestic tax and all bilateral and multilateral agreements on fiscal cooperation signed in the last decades would become inapplicable and would need to be amended. Border adjustment on direct taxes is also considered discriminatory and therefore prohibited under the WTO,[19] since for imported goods the deduction of the costs of labour would not be allowed, thus creating discrimination between domestic and foreign labour.[20]

Generally, the change toward territorial taxation strengthens the case for some form of minimum taxation on foreign earnings. If active business income earned in foreign subsidiaries is taxed only by the source country, there is an incentive to make domestic income appear to arise in low-tax jurisdictions abroad, and so escape taxation at home. Charging some minimum tax on income from abroad can then provide a backstop, in the absence of which territoriality can jeopardise domestic taxation. In this prospective, the US GILTI tax, introduced by the Tax Cuts and Jobs Act, is a minimum tax on outbound foreign direct investments returns.

Finally, an even more radical reform could entail taxing corporations through a presumptive tax. At the beginning of the 1990s, Sadka and Tanzi (1993) suggested taxing companies through a presumptive tax

[19] WTO condemned, for example, the regime of export subsidies enjoyed by the United States Foreign Sales Corporation (FSC). Read more in Schoen (2016).

[20] This incompatibility with the WTO could, however, be overcome with proper precautions. For further information, cf. Grinberg (2017).

based on the tangible assets owned, considering the latter as indicators of average annual business activity and, therefore, of the location benefits enjoyed by the businesses.

The option to tax with moderate rates, in a presumptive manner, certain indicators of real economic activity in each jurisdiction – such as sales, fixed assets or employees – can be seen in the same line (Micossi & Parascandolo, 2010). This approach offers great advantages in terms of efficiency, simplicity and decentralisation, including the full autonomy of national fiscal administrations. These factors cannot be easily moved around the group to avoid taxation: relocating employees to a low-tax jurisdiction involves much more than transferring intangible assets to a letterbox company in such a jurisdiction, and a firm has even less power over the location of its customers.

The indicators on which presumptive taxation would be based are the same as those used for the allocation of income with the formulary apportionment system provided for by the CCCBT. In this case, however, taxation would be applied directly based on these indicators without first going through the cumbersome circuit of identifying a transnational common tax base and an unambiguous criterion of consolidation of the tax base for the groups.

Today, obviously, this proposal should take intangible assets into account, because of their relevance. Since they are by definition mobile among jurisdictions and can be easily used to reduce the tax burden, it would be very difficult to determine an equitable presumptive indicator for them. In this perspective the presumptive tax could be combined with a minimum tax.

The reference to a wide tax base, without exemptions or deductions, would allow for the application of a low tax rate. This system would require, ideally, a 'source' type tax with no further taxation of capital income at the personal level. There would be no offsetting for cross-border losses, in line with the concept of this taxation as a tax on benefits that companies enjoy in a certain fiscal jurisdiction. In accordance with this assumption, the amount paid in relation to this tax would not be deductible from other taxes. The interest paid on funding through debt would be taxed, thus again eliminating the tax incentive in favour of debt.

Taxation of companies based on locational benefits in a fiscal jurisdiction would leave space for substantial differences in taxation rates among jurisdictions, since countries that offer more tangible and intangible infrastructures (education and research, primarily) would be able to apply higher tax rates than jurisdictions that offer less, without fearing the flight of productive capital.

5. Conclusions

The radical changes in companies' business models induced by globalisation, digitalisation and the prevalence of intangible assets seem to have made the CIT crisis irreversible.

The corporate income tax was introduced when economies were characterised primarily by tangible assets and goods (thus more easily controlled and evaluated) and by limited international trade. This system appears inadequate to deal with the vertical integration of the company's functions at the international level, a context in which inter-company transactions may constitute most of a company's transactions.

With the digitalisation of the economy, a global corporation produces profits at a global level: companies' revenues become mobile, as do the flows of dividends, interest or royalties. These radical changes evoke similarly radical reflections on how to reform the corporate tax system to make it more efficient and equitable with respect to the evolution of production models.

First, if the corporate income tax remains anchored to the profit and loss accounts, it would be essential to use the latter as an unequivocal reference in time, also for tax purposes, avoiding the variations, which may increase or decrease the tax burden, which are typical of the so-called twin-track. This would create a strong disincentive to distort the balance sheet in order to reduce the tax burden since that would worsen the companies' bottom lines, which are key for investors; it would also increase transparency and comparability on effective tax burdens at the international level among jurisdictions.

Second, a more radical solution would be to abandon the reference to corporate income: a cash flow tax based on destination could be assessed for taxing companies. This approach would require appropriate solutions for issues of compatibility with the current rules and with administrative management. However, once introduced, it would be a significant simplification of the system. There would also be significant gains in terms of the neutrality and efficiency of the fiscal system as well as in companies' investment and financing choices.

Finally, an even more radical reform would include taxing corporations through a presumptive tax. The tax base could be determined on uniform criteria built on company activity indicators. Companies would be taxed at source – and the tax would represent a kind of counterpart to the benefits of localisation obtained by the company in each jurisdiction. There would be no consolidation of results across jurisdictions, with all the problems of definition that it entails, and no longer even cross-border offsetting of losses or inter-company transfers. The advantages in terms of neutrality and efficiency would be considerable.

All the solutions outlined above require agreement on the new system (at least) on a continental basis (that is, at the level of the European Union). However, such an agreement between the European Union and other advanced countries on one side, and the United States on the other, within the OECD framework, does not appear likely due to the conflict of interest between the United States and all the other countries in the taxation of large multinational digital companies.

In its most recent documents, the OECD underlines that in the absence of multilateral action there is a risk of uncoordinated, unilateral action, both to attract a greater tax base and to protect the existing tax base, with adverse consequences for all countries, large and small, developed and developing as well as taxpayers. Recognising that it would be difficult to ring-fence the digital economy from the rest of the economy for tax purposes, the OECD is trying to develop a new approach (under its Pillar II framework) that leaves jurisdictions free to determine their own tax systems, including whether they have a corporate income tax and where they set their tax rates, but takes into account the right of other jurisdictions to apply rules to ensure that all internationally operating businesses pay a minimum level of tax. More ambitious proposals to harmonise corporate income tax for multinationals internationally (under the OECD Pillar I framework) still appear to be barely in their infancy.

We would like to stress, in conclusion, that our discussion falls short of designing a complete system, but rather opens the way to experimental directions to start reflecting on the new CIT needed for the digital and immaterial economy. Our considerations are driven by a concern to establish an intelligible and efficient conceptual basis for the definition of the CIT, and therefore we are not yet able to tackle aspects concerning the impact on different tax jurisdictions, economic sectors or company kinds. Nor can we speculate on the impact of our tentative suggestions, were they to be adopted Europe-wide, on the relationships with other important tax jurisdictions where most digital multinationals are located.

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