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The international coordination of corporate taxation: old solutions for new challenges?[§]

Abstract

The ways in which multinational companies operate in the current economic context questions the adequacy of international coordination of corporate taxation. A conceptual approach would require abandoning the classic paradigms of the international tax system (permanent establishment, arm's length, transfer pricing); they remain at the basis of the "Base Erosion and Profit Shifting" project (BEPS) elaborated by the OECD but are now obsolescent. The crisis of this system has been exacerbated by the Trump Reform and the explosion of the digital economy. The former introduces new regimes that undermine international cooperation and are in contrast with the WTO rules and with the double taxation treaties, regardless of the traditional OECD principles. The latter has features that cannot be governed by current tax rules, even if improved with the suggestions of the BEPS project. Solutions proposed at international level or applied by individual countries could lead to great uncertainty. A rational response to these challenges would rest on different bases, such as those of a system of formulary apportionment, with advantages in terms of simplicity, cost and certainty, fostering allocative efficiency and growth. Although this design is not feasible at international level, applying such a system in Europe, with the common consolidated corporate tax base (CCCTB), could ensure greater attractiveness and efficiency of the EU internal market: it would apply the same formulary system applied to other markets (e.g., the US market), while intra-European transactions are still regulated by the transfer pricing mechanism.

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[*] Bank of Italy, Tax Directorate. The views expressed in the articles are those of the author and do not involve the responsibility of the Bank.

[§] This version is updated to 15 March 2019. Although the work is the result of a common elaboration, Vieri Ceriani wrote paragraphs 1, 2 and 3, Giacomo Ricotti paragraph 4.

This work aims to propose some views on the international coordination of corporate taxation. Without claiming organicity and thoroughness, the first part outlines, in an abstract, purely enlightenment approach, the possible evolution of international taxation appropriate for the current context of a globalized and digitized economy. However, this plan is not feasible, at least in a reasonable time span, because of the lack of the necessary political international cooperation.

In the second part, we reflect on the possible trends in the international tax system after BEPS, i.e. the likely evolution that would come from the action plan agreed at the OECD on behalf of the G20. That context was weakened by the Trump tax reform which, in homage to the "America First" doctrine, went against the spirit of international cooperation that had given rise to the BEPS project. The third part deals with the Trump tax reform and highlights its innovative features. The fourth part explores the issues related to the digital economy.

1. An Enlightenment design

Starting from the recognition of reality, it is a fact that today companies operate as a network, without borders. Different production units, some with independent legal personality, others not, each specializing in a different activity: marketing, research & development, design, logistics, finance, production, and so on. It is common for these production units to be located in different countries. Manufacturing production too is often split and specialized between different units, rather than being concentrated in large Taylorist plants. It is no coincidence that much of the growth in international trade in recent decades has been due to trade in semi-finished products.

Networking is the fundamental characteristic of current production system, at least for the majority of medium-large companies, which have been globalized for some decades now. A production model profoundly different from the pre-globalization era prevails. Today, the company operates without borders and as a network.

In comparison with this reality, tax systems have lagged far behind, showing signs of obsolescence: this happens because they are still based on reconstructing the value chain in order to split it in several parts and assign to each political jurisdiction the value produced by the productive units located in it; consequently, this implies trying to tax the income attributable to each unit on the basis of its location.

Splitting the value produced by a network of interlinked activities using the geographical boundaries of the state jurisdictions is becoming more and more difficult; the limits of this approach are increasingly evident. Establishing with traditional criteria whether a productive activity is to be considered a "permanent establishment" is often difficult. Applying the rules of transfer pricing, based on the arm's length principle, is becoming increasingly complex, uncertain and costly. For the digital economy, the application of traditional criteria is even more problematic: e.g., a company may extract value from the economic relations with counterparts physically present in a certain jurisdiction, even though the company is not (present) there. Moreover, by applying traditional principles, the various political jurisdictions have over the years built incoherent national tax systems, characterized by regimes sometimes aimed at attracting

tax base, sometimes at protecting their tax base. Double taxation and no taxation, aggressive tax planning by companies and the adoption of anti-abuse national regulations by governments are becoming frequent. Business location choices are influenced by tax considerations, which often lead to solutions that are not optimal from an economic point of view, therefore inefficient from a systemic point of view.

The current system generates high costs, uncertainty, litigation, cases of double or no taxation, distortions in production choices, dampening growth.

For a long time economic literature has stressed the need for a more cooperative approach at international level in designing corporate income taxation (Tanzi, 1995).

If a benevolent dictator or an eminent academic were requested to design a tax system based on how multinational companies operate today - as Luigi Einaudi and three other experts in public finance were asked to do at the beginning of the 20th century[1] - he would probably design something very different from the current tax system.

He would probably start from a simple and rational basic idea. Instead of trying to split a value chain spread over a plurality of political jurisdictions, he would take as a reference for corporate income tax the entire value produced on a global scale, and then distribute it among the various jurisdictions on the basis of conventional criteria, simple and objectively verifiable, abandoning the abstract alleged "purity" of traditional criteria. He would take a single "value" at the global level instead of the sum of a plurality of national "values" determined by criteria of uncertain application and in any case different from each other. The results of the financial statements (individual or consolidated, according to the legal personality of the different entities in which the company is divided) can offer a sufficiently reliable basis of reference.

The criteria for financial reporting, even for consolidated financial reporting, are more homogeneous internationally than the tax rules and are well known to companies, which have been applying them for decades. The determination of the resulting "value" is much more reliable than the sum of the national tax "values", e.g., because the financial statements' profit is subject to external and internal audits, aimed at ensuring that the interests and rights of the various stakeholders (starting with shareholders and creditors) are taken into account.

This balancing of different interests is undoubtedly, in principle, a strength of financial reporting. It can be a good starting point for calculating the overall tax base, if a short bridge between the balance sheet result and the tax base is provided for. This means that a double track system has to be avoided: tax authorities should identify only a few elements (no more than five) to modify, considering a tax value different from the accounting one, without redoing another balance sheet for tax reasons only. It would be important to achieve a greater convergence of national and international accounting principles.

Once the global profit has been determined, it can be split among the various jurisdictions, renouncing the search for an unattainable and abstract precision and applying instead apportionment formulas, which use presumptive economic indicators

[1] In 1921 the League of Nations commissioned Einaudi, Bruins, Seligman and Stamp to analyze the problem of double taxation; the four experts submitted a report in 1923, which was the basis for the development of the first models of the Convention for the avoidance of double taxation (Carroll, 1939).

(Tanzi, 1995). In the experiences of federal states (such as the USA and Canada), as well as in the proposal of the European Commission for a CCCTB, the apportionment criteria are more than one: sales, personnel expenses and tangible fixed assets (it is reasonable that intangibles are distributed in proportion to the abovementioned other three factors). These are simple formulas, weighted averages, which can be adapted to take account of the differences between production sectors.

What would be the advantages of such a system? In short, it would be better suited to the current operating way of the globalized company and it would have strong advantages for the company itself, in terms of certainty and simplicity of application. Insofar as determining the profit at consolidated level is not a problem, as it is already calculated for other purposes, applying an apportionment formula using information known to the company's accounts does not raise any problems either. Certainly, it would be much simpler than applying the rules of transfer pricing that we apply today and philosophizing on the ontological nature of a particular production unit, wondering whether or not it meets the characteristics of the permanent establishment. Given the merits of the “Enlightenment” proposal, it would no longer be necessary to apply transfer pricing; the geographical location of sales, personnel and tangible assets could make the concept of permanent establishment useless, with obvious strong gains in terms of simplicity, compliance costs and above all legal certainty. Aggressive tax planning would be very limited, but not eliminated.

Each State could, of course, apply its own rates on the national tax base arising from the apportionment. It could also apply specific tax credits to support economic policy deemed particularly worthy and useful, such as research and development or environmental protection. Each country would retain its fiscal autonomy, as well as the possibility of tax competition, on the one hand through the tax rates, on the other hand through specific targeted incentives. As regards the latter, policies of attraction based on specific tax systems would require joint examination, as has already been the case for two decades in international fora (OECD, EU), in order to avoid harmful forms of tax competition aimed at attracting particularly mobile tax bases.

What has been said so far is a Cartesian, Enlightenment design. It is consistent with the current characteristics of companies, which operate globally and in networks; it has strong advantages in terms of simplicity, costs and certainty; it would eliminate many tax distortions; it would promote allocative efficiency and growth.

Unfortunately, this is completely unachievable. Because the globalization of businesses has not been matched by an adequate strengthening of inter-state cooperation. At supranational level, such a political agreement is now impossible. Indeed, this proposal was considered in the OECD during the discussion on the BEPS project but was discarded because of the huge political difficulties of concluding a global supranational agreement, which should have included all countries. In fact, there were already many points of disagreement on the BEPS project among the main OECD countries and between these and the main emerging countries.

Keeping the debate on the Enlightenment design open is undoubtedly useful as an intellectual exercise and is not an end in itself. Indeed, this design is not dead; on the contrary, it is the basis of the European Commission's proposal for a directive on the harmonization of the corporate tax base. The proposal goes in the right direction, it only

has the great drawback of being limited to the EU Member States. It could be seen as a first step towards a global model, to be aimed at in the future by seeking agreements with non-EU countries. But it is a long and difficult path, as we have just said, with an uncertain outcome. In the meantime, the harmonized tax base would still be an important step forward for Europe. At least, it would put the European internal market on an equal level playing field with other internal markets of federal states (such as those of the United States and Canada), where transactions between subjects residing in different states (or provinces) are subject to a system of formula apportionment, not to the transfer pricing criteria that instead is applied among EU member states. This is no small difference, which places Europe at a competitive disadvantage.

2. Which trends after BEPS?

Leaving aside the global enlightenment designs and allowing the proposal to harmonize the tax bases in Europe to take its course, we examine the likely short-to-medium-term scenario for international corporate taxation as outlined by the OECD with the BEPS project, under a mandate from the G20.

The proposals follow the traditional OECD principles and aim to introduce corrective measures on certain aspects. But the structure is the same as always, the one originally adopted by the OECD immediately after its establishment: bilateral agreements against double taxation, based in particular on the arm's length principle for transfer pricing and on the notion of permanent establishment.

The number of bilateral agreements in force already exceeds thousands and will continue to grow exponentially. Differences, which encourage treaty shopping, will not diminish. The multilateral agreement introduced by the BEPS project to speed up the process of adapting the treaties to the agreed changes covers only a few aspects (hybrid mismatches, treaty abuse, permanent establishment, dispute resolution) and is being implemented with a high degree of flexibility, which allows for large discrepancies in the transposition of the suggested changes. Furthermore, the United States has not joined the multilateral agreement.

The permanent establishment principle is always more difficult to apply in reality. The principle provides that the productive entity has tax subjectivity when, although not being a company, it performs sufficiently important functions independently of the parent company and is located in a jurisdiction other than that in which the parent company resides. It is a principle that in some cases is well defined, but in others it has rather weak boundaries, which raise frequent litigations. In an attempt to extend the right to tax to countries where the digital economy is present only with ancillary activities, BEPS proposed to extend the notion of permanent establishment to the activities of commissioners and logistical support for distribution to consumers. However, so far few states have adopted these changes, and it is not certain that their counterparts in bilateral double taxation agreements will accept them. However, the big question of how to attribute the right to tax when in a jurisdiction the digital enterprise is physically absent, but still draws value from web sales or the data it extracts from its users, remains open.

As for transfer pricing criteria, an attempt is being made to improve a system that is still oriented, as a principle, towards finding the price that would be set autonomously among independent companies under market conditions. However, due to the way companies are organized and the resulting value chain, in today's economy very often there is no comparable, namely a transaction carried out elsewhere in the market between autonomous and independent entities; in the digital economy, moreover, it makes less and less sense to look for "the" market price (Fudenberg and Villas Boas, 2012). Even if a comparable exists, the choice of the method to be applied is open to different solutions and therefore uncertain *a priori*: it is necessary to choose the most "appropriate" method. The OECD's suggestion is to make massive use of advance price agreements between tax authorities and companies.

However, this solution involves a disproportionate amount of administrative work. First, today the economic reality is infinitely more complex than it was one century ago: the number of states, companies and transactions involved has exploded exponentially. Neither companies nor tax authorities have enough adequately trained human resources to deal with a reasonable share of the cases. Moreover, the economic reality is evolving much faster than in the past, while negotiating and concluding advance pricing agreements on transfer pricing takes time, in relative terms too much time. When tax authorities define an agreement (APA or MAP), it is possible that the economic activity has already changed, that the company is producing something else or in other countries, and that the agreement is already obsolete. It is as if at a film festival the jury wanted to judge each film scene by scene. But the movies are played fast and there are many movies, not only in that festival: every day thousands of movies are shown in the world. Companies certainly do not stop. They will continue to invest and produce, they will try to reduce the tax risks associated with transfer pricing, but they will encounter high costs, little certainty and many disputes.

In reality, the scheme adopted by the OECD from its beginning and developed since the 1960s is almost identical to that which had been produced by the League of Nations between the two world wars. It is almost a century old and refers to an economic and geopolitical reality completely different from the current one, much simpler in terms of the number of players and the types of activity. It is giving signs of obsolescence. It is evolving towards a set of rules that are difficult and above all unclear to apply and that will give rise to much and growing litigation: not only between companies and the tax authorities, but also between tax administrations of different states.

As far as litigation is concerned, the solution proposed by BEPS is to make as much use as possible of advance agreements between tax authorities and companies on permanent establishment and transfer pricing and to extend agreements between tax administrations on a multilateral basis. For disputes between tax authorities, the solution is to have recourse to compulsory arbitration when an agreement is not reached.

In brief, in the near future the international tax system is expected to evolve along the lines outlined by BEPS, with solutions that seek to address some of the problems by treating their symptoms, without calling into question the basic principles. Companies will continue to face high costs, a lot of uncertainty and litigation. From a systemic point of view, distortions in production choices and uncertainty will remain, to the detriment of growth.

There are many ways in which an economy can grow: there is no doubt that one way to stimulate global GDP is to make tax experts, consulting firms, tax officials, tax lawyers and international arbitrators work harder (Tanzi, 2018). Having an economic background, perhaps we are in conflict of interest with those who have instead a legal background, but it seems legitimate to doubt that this is not the most efficient way to design a tax system and to stimulate economic growth.

The considerations made so far have illustrated, on the one hand, an enlightenment, Cartesian and therefore abstract and unattainable design, at least in the foreseeable future; on the other hand, the likely medium-term trends, in particular in the light of the BEPS. However, the scenario has taken a different and unforeseen path, because a new actor has arrived and overwhelmed the stage: the Trump administration.

3. The TRUMP tax reform

3.1. The proposal

In mid-2016 during the presidential election campaign, a very innovative tax reform proposal (known as the Ryan proposal) was presented by the Republican Members of Parliament. Radical proposals for tax reform have been always discussed in the US Parliament's work. They stimulate debate, give political visibility to the proponents, but they have almost no hope of succeeding. It seemed to be the case also for the Ryan proposal, presented when the presidential election campaign was getting to the heart. Trump's election turned this proposal into a flagship of the new administration and placed it at the center of domestic political debate; but it also sparked a lively international debate. Because it was very radical and explosive to some extent.

Indeed, it proposed a cash flow tax with border adjustment. The cash flow tax differs from the normal tax on profits because it takes into account the transactions at the time of payment, on a cash basis, and not on an accrual basis; it allows the immediate deductibility of investment expenses; as regards the non-financial sector, it ignores the movements relating to interest and changes in assets or liabilities (so the net interest expense is not deductible). This is not a new reform proposal: starting from the Meade report (Meade, 1978), it has met the favor of many economists because it eliminates the debt-bias and is also inflation neutral. However, it has never been applied in practice, mainly for two practical reasons: 1) the full deductibility of new investments coexists with the deduction of the depreciation instalments not yet deducted on old investments, creating revenue problems in the transition; 2) international agreements are built on the notion of traditional profit, not on the notion of profit from cash flow, and it is not clear at all whether the counterparts of these agreements will consider the new tax equivalent to the classic one. The risk that the new tax will not be recognized in bilateral double taxation treaties, and thus foreign investors will lose their right to credit for their domestic tax, has so far been a major restraint, among other things, on the adoption of cash flow.

Paradoxically, the United States has so far been very firm in denying the treaty coverage to taxes that deviate, even in minor aspects, from the traditional and orthodox notion of tax profit adopted for the corporation tax. Given their importance in international

relations, this position has been a fundamental obstacle to the adoption of cash flow. The adoption of the proposal would have involved a surprising reversal of roles, and in any case the need to renegotiate all existing treaties.

But the proposal was not limited to cash flow, it provided also for border adjustment, echoed from VAT. Therefore, exports would be exempt and imports would not be deductible. It is clear that the competitiveness of the US economy would have been strengthened; exports would have been advantaged and imports would have been penalized. It is also clear that the intention is to encourage the repatriation of economic activities carried out abroad and to hinder the effects of globalization. This combination of cash flow and border adjustment is relatively new in literature. Its proponents point out some potential positive features (Auerbach et al., 2017a; Auerbach et al., 2017b). In particular, there would be no incentive to use transfer pricing to shift profits to low tax countries. However, it does not appear that the current US administration would have been inclined to enter difficult multilateral negotiations to persuade its main economic partners to adopt the new tax as well. It would probably have adopted the new tax unilaterally and left the rest of the world to decide how to adapt and/or react.

The interesting aspect is that the border adjustment in direct taxes is considered discriminatory and is therefore prohibited by the WTO. A dispute was expected to arise, and the United States were likely to lose. The historical precedent is the ruling of the WTO (of 20 March 2000) which, accepting the EU's appeal, condemned the Foreign Sales Corporation, a measure that allowed a reduction of the tax on profits from exports, considered illegitimate because it was an illegal export subsidy. The new border adjustment would have been much more intrusive than the Foreign Sales Corporation (which, however, was an updated version of the former Domestic International Sales Corporation, introduced in 1971 and replaced in 1984).

Besides these very radical and innovative aspects, Ryan's proposal provided for other, less disruptive, nevertheless highly innovative, measures. In particular, in addition to a drastic reduction of the legal rate, it repeals the world-wide taxation (full taxation of inbound dividends from foreign companies, granting a credit for taxes paid abroad) and the transition to a territorial system (introducing a participation exemption, i.e. the exemption of dividends from shareholdings in foreign companies), which is already prevalent at the international level, in particular in European countries.

3.2 The main features of the reform

In December 2017, after the US Congress approved the "reconciliation" between the two different texts, the tax reform was enacted, entering into force in the 2018 tax year . Several points still need to be clarified, perhaps some legislative adjustments and certainly a lot of interpretative secondary legislation will be necessary, but the structure of the reform is well defined.

The Cash Flow Tax proposed by Ryan was discarded, clearly because it was considered too ambitious (even if in the version approved by the House of Representatives there was still the border adjustment on imports and exports, which was then cancelled in the draft approved by the Senate and in the final version). However, new regimes are

planned, which, from a tax-design point of view, make the new corporate tax highly innovative.

The reform is concentrated on relief for companies: the nominal rate drops from 35% to 21%. For individuals the intervention is very limited, basically a slight adjustment. The tax remains structured in seven brackets and seven rates: the highest rate drops from 39.6% to 37%, the intermediate (fourth bracket) from 28% to 24%. Standard and child deductions have increased, while those for state and local taxes have been reduced. Overall, as mentioned, the benefits for taxpayers are modest, equal on average to about 4% of the taxes due before the reform (JCT, 2017a), and concentrated on the wealthiest taxpayers. However, they are temporary; for budgetary reasons, the changes will cease in 2025. On the contrary, the reduction in the corporate income tax rate is permanent.

The reform implies an overall revenue loss estimated over 10 years at $1.46 trillion (about 0.7% of GDP per year), of which $1.1 trillion is due to temporary measures on individuals, the rest to measures on corporations (JCT, 2017b). The revenue loss falls to $1.07 trillion taking into account the positive indirect revenue effects of the growth stimulus, partly offset by higher interest expenditure (JCT, 2017c).

From the point of view of political economy, providing permanent reliefs only on companies is also motivated by the belief that the reduction of taxes on profits will pass on to wages, or that the tax reliefs on profits will lead to wage increases (Arulampalam et al., 2009; Fuest et al., 2017). Although far from being undisputed in the economic literature, the transfer to wages is the reason why, despite having campaigned (with some success) among the blue collars, the reliefs are concentrated on companies; the increase in wages is hoped to be a consequence of the reliefs on profits.

The reform is above all intended to stimulate investment in the United States. In addition to the reduction in the nominal rate, the immediate deductibility of investment expenditure is granted until 2022 (2023 for aircraft), but real estate and intangible assets are excluded. From this point of view, the reform is therefore in favor of the "traditional" economy, not of the digital economy (or of the real estate).

Domestic investments will also be encouraged by the possibility of repatriating at a reduced rate the profits accumulated abroad. In fact, the passage from world-wide taxation to territorial taxation is confirmed. The world-wide system in force until now (full taxation of incoming dividends from foreign companies, with tax credit for taxes paid abroad) had led to an impressive lock-out phenomenon of profits accumulated abroad and not repatriated and to the so-called inversion, i.e., to the location abroad of the headquarters of American multinational companies. It should be noted that the USA was one of the few countries to adopt this method of taxation: the so-called territorial method – i.e., the exemption of dividends from foreign companies - had long been prevalent at the international level (particularly in Europe). The Trump reform removed the disincentive to repatriate profits from abroad.

For profits accumulated and not yet distributed by foreign companies controlled by American companies, a mandatory one-off tax (called Toll Charge) of 15.5% is imposed on profits held as cash or cash equivalents, reduced to 8% on profits held in other forms. Not only does the Toll Charge (which can be spread over eight years) provide significant revenue to limit the cost of the reform on the public budget, but it

also allows the release at a facilitated rate of the reserves of profits held abroad, thus freeing up financial resources for investment.

In conclusion, the reform aims to stimulate investment in the US through the freeing of financial resources (profits held abroad), the rate reduction and the immediate deductibility of investment expenditures.

From the point of view of the tax design, after discarding the ambitious Cash Flow Tax with Border Adjustment, new regimes are introduced, aiming at these two objectives:

- to increase the competitiveness of the American tax system, in order to make it more attractive;
- to contrast the phenomena of tax erosion of American enterprises, especially of the multinationals, to guarantee a minimum level of taxation, less corrodible by tax planning.

The main new regimes are summarized below. Some of them are based on measures already known in other legal systems, while others are considered to be absolute novelties on the international scene.

- **Limit on the deductibility of interest and treatment of hybrid financial instruments**. The deductibility of interest expense (net of interest income) is limited to 30% of EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization); from 2022 the limit will apply to EBIT, becoming more stringent. It is a measure aimed at countering the tax base erosion due to excessive indebtedness, already present in the US tax system, that applied a thin capitalization rule based on the ratio of the stock of debt to capital. The new rule, more difficult to be circumvented, takes as a reference the flows and is already quite widespread in other countries (including Italy). The ATAD Directive provides for its adoption by all EU Member States by the end of 2018. The new regime for hybrid financial instruments also has anti-avoidance purposes: if the recipient of the payment is not taxed abroad, or enjoys preferential treatment, the deductibility of costs in the United States is not recognized. The ATAD Directive contains similar provisions for European countries; the ATAD2 Directive (to be transposed by the end of 2019) extends the measures to mismatches that include third countries.
- **Changes to the loss regime**. Losses could be carried back for two years and forward for twenty years. Now they can only be carried forward indefinitely, but they may be used to offset the taxable income of subsequent years only up to 80% of the taxable income of any year. Here, too, the US has aligned itself with measures that have long been in place in other countries, particularly in Europe.
- **FDII (Foreign Derived Intangible Income)**. The foreign income of American companies is subject to reduced taxation (13.125%, 16.406% since 2026). The reference to income from intangible assets is misleading. In reality, this reduced rate applies to the part of the income that exceeds the notional yield of 10% on the tangible assets used in the USA; the part of the tax base subject to the reduced rate therefore includes the income that derives from sales made abroad. FDII reiterates

the aims of the regimes of Domestic International Sales, of the Foreign Sales and of the Extraterritorial Income, all declared illegitimate by the WTO, and therefore falls among the measures that are incompatible with WTO rules. It does not seem to reconcile, either, with the rules on the patent box agreed in the G20, based on the nexus approach. In reality, it completely disregards this agreement, since it is a different matter and has other objectives. The reference to foreign income derived from intangible assets is purely nominal or perhaps, better, provocative. In fact, the FDII considers all the income produced abroad by resident companies, except for the notional yield of 10% on the tangible assets used in the USA, as a sort of extra-profit generated using intangibles owned by the American companies. The "provocative" nature of the measure is evident: all the value produced abroad is the result of the use of US-owned intangibles. This eliminates any discussion on the international distribution of the value chain and the right to tax, in conflict with the positions expressed by other countries, primarily European countries. On the contrary, this is the position that has long been expressed by the US administrations: the profits of American multinationals must be taxed back in the USA. Their erosion is due to measures promoted by jurisdictions that practice aggressive tax competition, primarily by some European countries.

- **GILTI (Global Intangible Low Taxed Income**). It subjects the income of foreign companies controlled by American companies to a minimum tax rate of 10.5 % (13.5% since 2026). The taxable amount is determined in the same way as the FDII: 10% of the value of the tangible assets used abroad is subtracted from the income of the foreign subsidiaries. This portion of income remains subject to foreign state residence taxes and, under the new territorial regime, will be exempted in the United States when repatriated as a dividend. Income in excess of the notional return on tangible assets is taxed on an annual basis, even if not repatriated as a dividend. In this way a sort of world-wide taxation, at a reduced rate, is imposed on the profits of American multinationals controlled companies. Through the GILTI the American tax authorities ensure that US multinationals remain subject to a minimum taxation on the incomes produced abroad by their controlled companies. A credit equal to 80% of the taxes paid abroad is granted: so, if foreign taxes exceed 13.125% nothing is due in the United States. The calculation of the GILTI is on an aggregate basis, i.e. on the total income abroad and not on a country-by-country analysis. In short, it is a sort of strengthened and pervasive CFC (controlled foreign companies) rule which operates as an alternative minimum tax at a reduced rate on a world-wide basis and not on a country-by-country basis, without exemptions.
- **BEAT (Base Erosion Alternative Tax).** It basically meets the same anti-avoidance objectives as GILTI and somehow complements them. It provides for a minimum tax for large companies operating abroad through subsidiaries. It applies to companies belonging to groups with a turnover of more than $500 million in the USA (on a three-year average). These companies must pay a tax of not less than 10% of a tax base equal to the taxable income plus payments that may reduce the tax base, i.e. payments to foreign entities related to the American company (at least 25%). Secondary legislation will precisely define what these payments to foreign entities are: they certainly include interest, royalties, insurance premiums and services, whilst costs for the purchase of goods are excluded. BEAT applies if these payments amount to more than 3% of income. BEAT also presents a problem of discrimination

of payments to foreign related parties compared to payments to resident parties. It was introduced in the final version of the reform to replace the border adjustment provided for in the Ryan proposal and approved by Congress. It is also potentially in conflict with WTO rules and, above all, with double taxation treaties, in violation of the non-discrimination clause. It could only be justified if it had a purely anti-avoidance nature, which must however be demonstrated[2].

GILTI and FDII can be interpreted as two specular measures: even if the tax rates are not the same, in substance they try to tax, with reduced rates, the income produced abroad, through direct sales (FDII) or through foreign entities (GILTI). In both cases, export income may be fully taxed at a reduced rate (e.g. if the value of the fixed assets is zero, or if assets are fully depreciated). BEAT, as noted, is a complement to GILTI's anti-avoidance purposes. In short, this is a package of innovative measures to facilitate exports, to impose minimum anti-avoidance taxes on a world-wide scale, to bring back to US taxation foreign income by introducing an innovative notion of revenue from intangibles, defined *a contraris* by subtracting the notional return on tangible assets from taxable income.

3.3. Effects and consequences of the reform

The declared aims of the reform are to increase the fiscal competitiveness of the United States, attract investment, stimulate domestic production and improve the trade balance. In line with the slogan "America First" little importance is given to the problems of international coordination of taxation.

3.3.1. The effectiveness of reform in achieving macroeconomic objectives

How effective are the rate reduction, the immediate deductibility of investment expenses, the transition to the territorial regime and the freeing of financial resources (profits held abroad) compared to the declared aims?

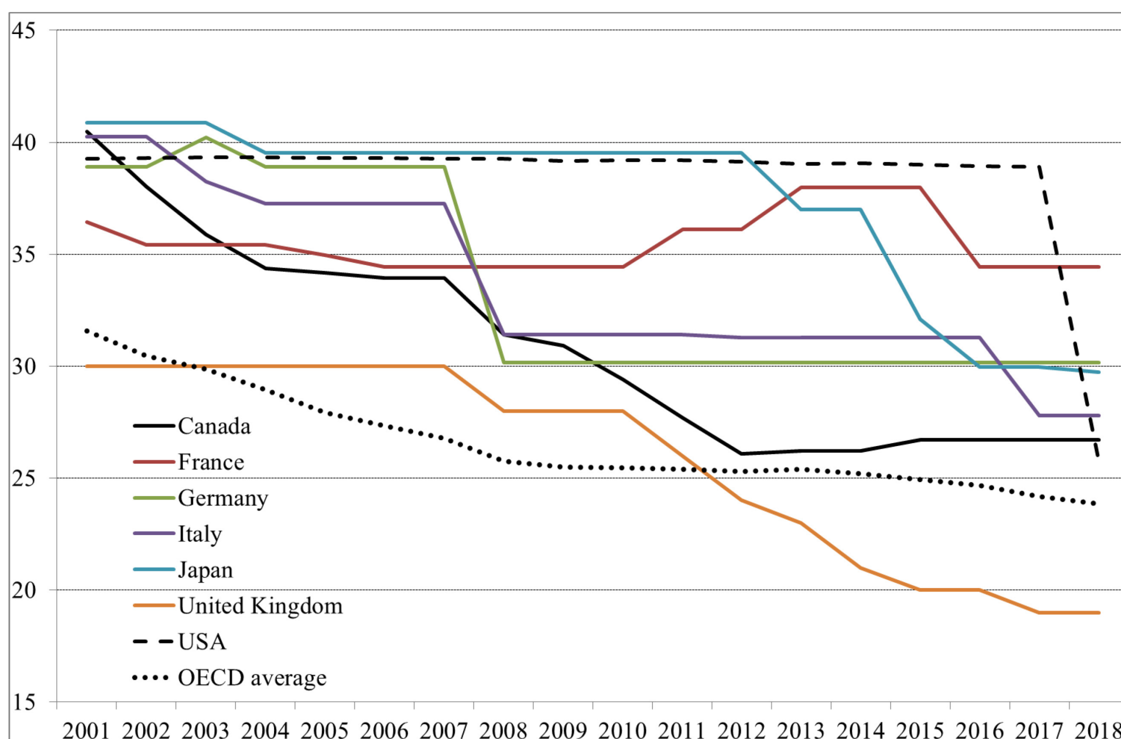
The reduction of the federal tax rate to 21% brings the overall rate, including the average of state and local rates, from 38.9% to 25.75%, bringing it closer to the OECD 2018 average of 23.75%. This is a significant reduction, bringing the rate in line with that of other countries (see Figure 1). An assessment of the "attractiveness" of the reform cannot, however, be limited to the statutory tax rates, but must also consider at least the immediate deductibility of investment expenditure.

For example, a study by ZEW (ZEW, 2017) estimates that the initial reform proposal could have resulted in a reduction in the US effective average tax rate (EATR) from 36.5 to 22.7%, which would thus be close to the European EATR (20.9%) but well below the German one (28.2%). This could lead to a 25% increase in German investment in the US compared with a 9% increase in US investment in Germany. Gravelle and Marples (2018) estimate that the marginal effective tax rate on equity-financed investments could fall significantly, by about 13 p.p.

[2] Avi-Yonah proposed this interpretation (Avi-Yonah 2018a; Avi-Yonah 2018b).

Figure 1 – Corporate income tax statutory rates in G7 countries

(percentage points)



Source: OECD.Stat, IBFD *Tax research Platform*, PWC *Worldwide Tax Summaries*.

$2 trillion funds held abroad could be repatriated (UNCTAD, 2017). In the future the share of profits retained abroad is expected to fall. UNCTAD also estimates that US foreign investment can fall from $6,400 billion to $4,500 billion. These are massive financial movements. It is not certain, however, that they will result in new investments in productive capital and new jobs in the United States: they could, to a large extent, result in distributions of profits to shareholders, in the acquisition of other companies or in the reduction of debts. The first data show a significant growth of the operations of shares buy-back, which could reach the sum of $1 trillion in 2018 alone, the highest value recorded in the last twenty years (Samson, 2018).

There are further doubts about the reform's ability to stimulate investment in the US. As a result of the increase in the government deficit, interest rates are likely to rise, with negative effects on investment. Moreover, as mentioned above, many aspects of the tax reform are not yet well defined, domestic and international disputes are foreseeable, and uncertainty does not encourage investors.

However, the econometric simulations carried out so far agree that the reform will have some positive effect on growth in the United States (Harris and Looney, 2018). Chalk (and others, 2018) estimate that the reform should have some positive effects on investment and therefore on potential growth, to which would be added the effects on the consumer demand side of the relief on households. The level of GDP could rise by

about 1 p.p. in the coming years (until 2021), and then be gradually reabsorbed towards the trend profile, also as a result of the rise in interest rates.

The Trump reform will have an effect on other countries as a result of the reallocation of tax bases and the "repatriation" of investments by US multinationals. For the other countries, a loss of revenue from multinationals of between 1.5 and 13.5% has been estimated, which could increase in the case of reactions from countries, for example in the case of competitive rate reductions, which could fall by 4 p.p. on average. On the contrary it should be considered that the GILTI mechanism introduces a minimum, beyond which it is no longer convenient for multinationals to establish themselves in countries with reduced rates and, in turn, for other countries to reduce the levy (Beer et al., 2018).

3.3.2. The effects on production sectors

Reform is complex and it is not easy to assess its effects on different economic sectors. In some cases, contradictory assessments can be made. For example, as far as the digital economy is concerned, the reform could be interpreted as beneficial, because the new alternative minimum taxes are at a lower rate than the ordinary one. However, a more careful analysis shows that the alternative minimum tax rate is much higher than the actual tax rate that currently web giants can achieve thanks to an accurate global tax planning. Therefore, the reform should be read as an intervention against tax base erosion; hence in relative terms it penalizes especially the sectors that gained most advantages from tax erosion, i.e. the web industry.

However, it should also be pointed out that imposing a significant minimum tax in the USA could also offer protection against applications of EU state aid legislation that have recently hit web giants (for example, the Apple case) also in light of the argument that no tax had been paid anywhere in the world.

Banks and insurance companies, in particular as a result of BEAT, could be penalized by the reform. European banking groups operating in the US could be especially disadvantaged because of the non-deductibility of interest payable on securities issued by their US subsidiaries for prudential reasons.

Traditional sectors which have made little use of elusive practices exploiting globalization should benefit most from lower rates and more favorable treatment of investment expenditure.

An analysis of equity prices shows that in general the market expects the greatest benefits to accrue to companies with the highest effective taxation in the US, while companies with a strong foreign presence would be penalized, because the benefits of territorial taxation would offset neither the costs of the toll charge on profits retained abroad, nor the effects of GILTI and BEAT (Wagner et al., 2018).

3.3.3. The tax reform and the trade war

As pointed out, some of the new regimes established by the reform (FDII and BEAT) conflict with the international rules agreed in the WTO, as they subsidize domestic production. A historical dispute with the European Union has been is reopened. In reality, the aggressive attitude on the fiscal level is only one aspect, and not the most serious, of the Trump administration's trade war against the rest of the world,

particularly China and Europe. The tax reform was followed, as is well known, by the imposition of import duties: the tax measures have become a secondary aspect of a much wider conflict, the outcome of which has not yet emerged. From a formal point of view, the European Commission, as well as China, has initiated procedures to bring the incriminated regimes before the WTO, but it will take a long time; in any case the outcome, if favorable, will be to authorize the complainants to impose countervailing duties on American exports. Therefore, it will lead to an escalation of the current trade war on duties, which tends to expand and assume connotations that even risk upsetting the geo-political structure consolidated from the post-war period to the present day. This is testified by the conclusion of the 2018 G7 summit (June 9-10, 2018), which saw an unprecedented and sensational clash between the United States and the other countries (the four Europeans, Japan and Canada). The "conclusion" that WTO rules will be re-examined establishes a conflict situation, whose outcome is unpredictable. It is not even clear whether the Trump administration actually wants to renegotiate the WTO rules and therefore remain within a multilateral framework (which, in any case, would require very long negotiating time), or whether it intends to go beyond multilateralism more radically and enter a context of bilateral relations in which it will assert its own weight on a case by case approach. The possible weakening of the unity of action of the European Customs Union would be functional to this prospect.

3.3.4. International coordination in business taxation

Trump's tax reform is in some important respects against the recent efforts to improve international coordination. There is no support for the cooperative approach so far strongly sponsored by the G20, in particular with the BEPS (Base Erosion and Profit Shifting) project entrusted to the OECD, which is now in the implementation phase of the Action Plans approved in 2015.

The Trump reform is, in some ways, in line with what is already in force in the rest of the world (transition from the world-wide system to the territorial one); in others it pursues the anti-avoidance objectives of the BEPS project with measures that are in tune with the Action Plans and with the initiatives of other countries: it has already been noted, in particular, that the limitation to the deductibility of net interest expenses and the new regime of hybrid instruments are in line with what has been decided by the EU countries.

But other measures, while pursuing the BEPS objectives, do so in a way that is far from the Action Plans. In particular, as noted, GILTI appears to be a very effective anti-avoidance measure, a new and reinforced version of the CFC measures; BEAT also pursues the same aims of combating profit shifting. The reform therefore pursues the BEPS objectives, but in a very different way from the Action Plans. The GILTI is not applied on a country basis, but cumulatively on all subsidiaries; the BEAT also takes as a reference the total purchases from all foreign companies. It has already been mentioned that the FDII does not rely on agreements reached on the taxation of intellectual property.

It seems that a non-multilateral but dichotomous vision of international relations emerges: USA versus the rest of the world. What is important is to ensure a minimum taxation of the world-wide income of the American multinationals. It does not matter if the multinationals are located in countries with low (or no) taxation or in countries with

high taxation: they can use the mix they prefer, they are free to choose, what matters is that they pay a minimum tax. After all, this is a consolidated position on the US side: the incomes of the US multinationals should be taxed in the US, except for recognizing the tax credit for the taxes paid abroad. The traditional approach was to tax at the full rate at the time of the repatriation of profits, which caused an indefinite tax deferral. The reform exempts repatriation of profits and contents itself with a sort of minimum annual tax on total profits produced abroad.

The important innovation with respect to the past is that now a precise case-by-case examination of taxation in the individual state of origin is abandoned and the American company consolidates all profits and losses gained in the rest of the world. It is not necessary to analyze the taxation system of the jurisdiction in which the American multinational is active. It no longer makes sense to try to determine whether a specific jurisdiction applies harmful tax competition measures, or excessive advantageous taxation, it only matters how many taxes the American multinational overall pays in the rest of the world.

The EU's approach to the ATAD Directive is on the contrary traditional: CFC measures will be applied on a case-by-case basis, taking into account the relative level of effective taxation of the country where the related company is located, and it will be possible to adopt black or white lists of countries with advantageous tax regimes. The new approach of the Trump reform undermines international coordination between high-tax countries, aimed at putting pressure on jurisdictions that implement tax competition.

In particular, the US administration has not signed the multilateral agreement giving legal effect to some of the Action Plans, nor will it participate in country-by-country reporting (CBCR), except on a bilateral basis; it will not change the definition of the permanent establishment.

More generally, a basic philosophy emerges which contrasts with the traditional approach followed so far in the coordination of international taxation. The basic strategy was to arrive at broadly aligned definitions of the tax base, to reach a bilateral agreement between the source state and the state of residence on the allocation of taxing power, crediting the tax due in the country of residence with the tax paid in the country of origin, so as to avoid double taxation. This is the traditional approach of the OECD and UN convention schemes, inherited from the one developed by the League of Nations almost a century ago.

The BEPS project sticks to this scheme, introducing a number of improvements aimed at reducing double taxation and combating double non-imposition, as well as at resolving any disputes between states by means of mutual agreement procedures, if possible defined multilaterally, or at resorting to arbitration procedures in case no agreement is reached. The Trump reform, with its innovative GILTI, FDII and BEAT regimes, is opposite to the OECD scheme, WTO rules and double taxation treaties. As mentioned, FDII taxes exports more favorably than domestic sales; BEAT discriminates against payments to foreign related parties and, above all, overlaps with transfer pricing as a tool for allocating profits between jurisdictions.

Double taxation is likely to increase, in particular with BEAT, and the Treaties do not provide adequate protection for businesses. It should be borne in mind that in the US, international treaties and domestic law have equal legal value: in other words, domestic

law can lead to treaty overriding. Moreover, in the context that is emerging, the use of MAPs is very unlikely to spread.

Another novelty is that the new schemes introduced by the reform seem to be independent of the traditional OECD principles. The BEPS Action Plan remains close to traditional orthodoxy: it aims to improve the definition of a permanent establishment and to introduce adjustments to transfer pricing among related companies, in line with the traditional arm's length principle: transfer prices among related companies must be aligned with those between unrelated parties. The logic is to determine with some precision how value creation (i.e. the tax base) is distributed among the various political jurisdictions. The new institutions introduced by the reform (GILTI and BEAT) disregard a precise examination of the value chain; they only aim to ensure that companies pay a minimum tax based on the overall results of the group's operations on a world-wide basis. They are therefore dystonic with respect to traditional principles.

In conclusion, significant uncertainties are to be expected with regard to international tax coordination. In particular, what "strategic" orientation can the OECD take? Recognizing that the Trump reform still pursues the BEPS objectives is a fact that cannot be disputed. But it is also indisputable that it does so by radically distancing itself from the Action Plans; moreover, the Trump administration does not sign the multilateral agreement, does not join the CBCR, does not change the definition of permanent establishment.

Is the Trump reform a model that can be exported to other countries? Could other (major) countries adopt minimum taxation systems such as GILTI and BEAT? As mentioned before, the reform, inspired by the "America First" principle, does not take into account the need for coordination with other countries. The relationship is between the USA and the rest of the world; once the minimum of taxation at home is guaranteed, the other countries are free to decide how to tax American economic activities abroad. Could the OECD propose the global adoption of the new taxation model? That is, a new model providing for a different distribution of taxing power: starting from a world-wide minimum domestic tax, the other jurisdictions decide to tax at source as they prefer. It is not clear what effects it would produce: would it be a better coordinated system, or instead the cases of double or no taxation or mismatches would increase? The latter is more likely to be the case. Would it still be necessary to apply the principles of transfer pricing to individual transactions, or they could be ignored? However, the idea that, by consensus, all (or many) jurisdictions adopt minimum domestic taxes such as GILTI and BEAT is fascinating and is gaining momentum (see paragraph 4).

3.3.5. What is the response from the EU?

For the time being, the European Commission does not seem to be oriented towards the American model. As mentioned above, the ATAD Directive provided for the adoption by the end of 2018 of traditional CFC measures based on a bilateral comparison between the level of taxation at home and in the country where the subsidiary is established. So far, there has been no evidence of any intention to change the approach. However, some kind of response strategy is needed.

The violation of WTO rules (for FDII and BEAT) has been taken up by the Commission and absorbed in the tariff package, which is followed at the highest institutional level. The formal steps to initiate legal action at the WTO have been taken.

The new US administration disregards WTO rules. As mentioned, the "communiqué" of the 2018 G7 provides for a re-examination of the functions and rules of the WTO. Will the increase in duties on aluminum and steel be followed by those on cars? Although the intention seems to avoid the limitless escalation of the trade war, some form of European retaliation seems inevitable. However, if the Trump administration has implemented a break with international agreements and their underlying principles, it is also true that the EU (and in particular Germany) has so far pursued a policy of mercantilist penetration, pursuing an export-led growth model. These considerations only indicate that the specific problem of the "legitimacy" of some of the new tax regimes introduced by the Trump reform goes beyond taxation and is absorbed in a very far-reaching process of political negotiation.

Returning to the tax area, would it be possible and appropriate to respond competitively by reducing rates or changing some specific regime?

In fact, the EU countries still mainly refer to the BEPS scheme. As mentioned above, the ATAD commits them to limit the deductibility of interest payments and to regulate the treatment of hybrid financial instruments, in line with BEPS and in analogy with the US reform. Unlike the US, however, they are also committed to participating in the multilateral agreement and country-by-country reporting, which may be less competitive than the US on these issues. In general, they have little room for maneuver with regard to the adoption of special regimes, because they are bound by common rules: by directives on corporate taxation and soft law agreements (the code of conduct on tax competition), as well as by state aid rules. Rate reductions are of course still available, especially for Member States with higher taxation.

One possible common response (at least by some Member States, in the framework of a possible enhanced cooperation) is the adoption of the common tax base (CCCTB), as provided for in the draft directive under discussion for some time now. The main advantage in terms of tax competition would be the reduction in costs associated with harmonizing the rules and, in the version with group consolidation and allocation of the tax base according to the formulary apportionment, the transfer pricing overcoming in relations between member states, with a consequent reduction in the associated compliance costs and tax risks. The answer to the Trump reform, in other words, could be to eliminate some competitive disadvantages – i.e. the plurality of rules for determining taxable income and the application of transfer pricing to intra-Community transactions - that make the European internal market less attractive than the US market from a tax point of view.

Other possible responses have been put forward at both national and European level, especially as regards the taxation of the digital economy (see para. 4). In March 2018 the European Commission proposed two Directives on the taxation of the digital economy, envisaging a long-term and a short-term solution (see para. 4.1.2). The short-term solution has been enacted by Italy; other member states are planning to do the same. More interestingly, in 2018 Germany and France proposed a general solution regarding all business and not only the digital economy, to ensure a minimum tax on all companies, regardless of the allocation of profits and taxing rights between different jurisdictions. This proposal is very similar to the GILTI and BEAT regimes and marks the first interesting convergence towards some aspects of the Trump reform. It has been

taken on board, together with other proposals, by the OECD in a consultation document published in February 2019 (see para. 4.1.3).

3.3.6. Some general considerations

Summing up, the Trump reform entails a significant tax reduction for US companies; it aims to encourage domestic production and investment in the USA; removes the lock-in effect on profits held abroad and the incentives to inversion (moving abroad the registered office of US multinationals); pursues some objectives of the BEPS project in an anti-avoidance function, but does so in a manner different from the BEPS action plans by introducing new institutions that undermine international cooperation. In particular, it departs from the traditional approach to transfer pricing and CFC regimes.

It certainly does not simplify the tax system. The new schemes (GILTI, FDII, BEAT) are additions to the existing tax code, they do not replace existing schemes. In short, the Trump reform complicates the US system. As a result, the possibilities for tax planning will increase. There will be more uncertainty: secondary legislation will have to be defined and corrected; disputes will arise and there will be risks of conflicts with the US tax authority (IRS) and with authorities in other countries; double taxation will increase, aggravated by the treaty override.

Compared to the globalized network business model, the Trump reform is a step backwards. It aims to combat globalization by changing the international distribution of the value chain and the international allocation of functions, with the aim of "America First". From this point of view, it certainly does not go in the direction of economic efficiency.

Given this scenario and the substantial stalemate of the BEPS project, the idea of aiming at the formulary apportionment as a global solution is going to gain momentum in the academic debate (Cavelti et al., 2017).

4. The taxation of the digital economy

The problem of the taxation of the digital economy has become increasingly important with the emergence of what has been called the "fourth industrial revolution", as it poses particular challenges for the taxation of digital activities at national and international level.

The regulatory framework governing direct taxation at the international level does not allow the jurisdiction where the sales take place to tax profits, if a permanent establishment of the seller does not exist in that jurisdiction. And even when there is a permanent establishment, the allocation of profits among jurisdictions is complicated by the fact that the major source of these profits comes from intangibles, i.e. goods that are difficult to value. Indeed, the current transfer pricing criteria do not take into account the sources of value that characterize the digital economy, such as, for example, the collection of data from websites users: in this case, it is not clear where to tax the profits that the web companies obtain by reselling these data that have not been explicitly bought. Where is the value that is exploited by these companies created? In the country where the website users are resident? In the jurisdiction of residence of the web companies?

In other words, the concepts underlying the international taxation system (the permanent establishment, the arm's length principle and the transfer pricing criteria) are questioned by the value creation process typical of the digital economy. More generally, this process has exacerbated the effects of the base erosion and profit shifting activities, underlining the weaknesses of an international taxation system based on separate accounting.

4.1. International initiatives

The taxation of the digital economy raises the problem of splitting the corporate tax base among different jurisdictions. As such, it has been addressed in recent years at the supranational level (G7, G20, OECD, EU). The G20 and G7 have repeatedly stressed the need to achieve fair taxation of the digital economy, giving a mandate to the OECD to find technical solutions to the problem.

4.1.1 Initial OECD work

The OECD started to analyze the issue in the BEPS project: in 2015 the BEPS Action 1 (OECD, 2015) came to the conclusion that the problems raised by the digital economy could be solved with the tools that were being prepared, more generally, to tackle the BEPS phenomenon. The impossibility of responding to the new challenges with old tools quickly led to the search for other solutions: the OECD submitted its first conclusions on this subject at the G20 in March 2018 in an Interim report of the Task force on the Digital Economy (OECD, 2018), supporting the need for "long-term" solutions which would intervene on the concepts of permanent establishment and on the transfer pricing rules by introducing some taxation in the place of sale. However, the same report acknowledged the positions of three groups of countries on this proposal: the first, represented by the main European countries, in support of a solution that only concerns the digital economy; a second, headed by the USA, in favor of applying this solution to all industrial sectors; a third, composed of the smaller countries (Ireland, Singapore, etc.), which considers the rules provided by the BEPS project adequate. One of the points of greatest disagreement has been the tax treatment of the data sold by users, often not entirely consciously: for some countries the profits deriving from the collection and use of data should be taxed in the country of residence of the service's or website's users; for others, it would be a purchase of raw materials by web companies, therefore not taxable in the country from which the data come.

While waiting for an agreed solution, the report accepts that in the meantime a single country may apply temporary measures, as already happened in India and Italy, to ensure that at least a part of the profits of these activities is taxed where the customers of the companies reside. These are the so-called web taxes, indirect taxes of the excise type, applied to the turnover achieved in each country; among the various conditions imposed for the introduction of the web taxes, the OECD stresses that these should not have the characteristics of direct taxes, nor be contrary to the tax treaties against double taxation (DTTs).

4.1.2 EU initiatives

The European Union has also examined the problem. Already in 2014, the Commission asked a group of experts to issue a report on this topic; the report, however, focused on

indirect taxation of electronic commerce, leaving in the background the problems associated with direct taxes (European Commission, 2014). Subsequently, starting in 2017, the European Commission, called on by the Ecofin and the Council, addressed the issue of direct taxation in a Communication of September 2017; starting from this document, two directive proposals and a recommendation were developed and then published in March 2018.

The first Directive proposal sets out a long-term solution, introducing the concept of "significant digital presence", which would allow to tax the profits of digital activities in the territory where they are generated, even if in that jurisdiction there is no physical presence of the company. The approval of the Directive would entail, in substance, a multilateral modification of the DTTs between the Member States. The existence of a "significant digital presence" is presumed on the basis of certain quantitative indicators, connected with the thresholds of turnover, users or contracts, each referred to in a Member State. Profits would continue to be allocated among jurisdictions according to the transfer pricing rules but integrated with elements that take account of the specific features of digital activity (exploitation of user data, etc.). The same definition of digital presence would then be introduced in the Directive on the CCCTB still under discussion, aiming at allocating profits among the Member States according to the place of creation of value, but using a formula instead of transfer pricing.

To avoid distortions of competition, this Directive proposal is accompanied by a Recommendation to the Member States to proceed with the modification of their DTTs with third States, so that the same rules apply wherever web companies are resident.

Aware of the difficulty of reaching an agreement on this proposal in a short time, the Commission has also put forward another proposal for a Directive on the Digital Services Tax (DST), a levy that should have temporary application, until the introduction of the Directive on "significant digital presence". This would be a 3% tax on revenues generated in EU countries by the provision of certain digital services (sale of online advertising; intermediation activities aimed at facilitating interaction between users, allowing the sale of goods and services between them; sale of data generated by users of a site), with an expected revenue of about 5 billion euros. It would be collected from the country where the users are located and would apply only to large entities (at least 750 million of consolidated turnover, 50 million of which are generated within the EU). The DST would obviously not be provided for by DTTs: in order to reduce the double taxation, which would inevitably arise, the Commission expects the Member States to allow its deduction, as a cost, for the purposes of direct taxation.

The DST Directive would make it possible to tax to some extent companies not yet taxed and, at the same time, to prevent Member States from adopting similar measures unilaterally, with the risk that the heterogeneity of tax approaches would damage the internal market. Applying it only to large players would make it possible not to hinder the emergence of start-ups, especially European ones.

The approval of these directive proposals seems rather remote. Within the European Union, some countries have already expressed their opposition to both proposals (the

Netherlands, Denmark, Ireland, Malta, the Czech Republic, Sweden and Finland). Other countries would like to set limits to restrict the scope of the DST, avoiding that the user data sale is taxed. The Franco-German proposal for a minimum tax (see below) under many respects is also at odds with these Directives. As far as the entry into force of the DST is concerned, Germany would prefer to wait for the final OECD report scheduled for 2020 to assess the possibility of an agreement at a global level. During the March 12, 2019 ECOFIN Member States failed to reach a consensus even on a Digital Advertising Tax (i.e. a temporary DST with a limited scope, as the tax base would be just the advertising revenue). The possibility of implementing enhanced cooperation for the DST could be considered, such as the one on the Financial Transaction Tax started more than 5 years ago; the enhanced cooperation procedure may start only if at least 9 countries agree with it.

The contrasts that have emerged among the various countries are leading to unilateral solutions, with the adoption of the DST or other levies on digital activities by one or more countries: in addition to Italy, the web tax has also been proposed in France, Spain and the UK[3]. This is obviously for the sole purpose of taxing in some way web companies; but at the same time it creates double taxation issues and increases tax uncertainty at the international level, undermining international cooperation. In the absence of more far-reaching solutions, these measures are likely to become definitive. Besides implementing new taxes, unilateral interventions have also taken the form of targeted tax assessments on digital companies (in Italy, on Apple and Google) or questioning the existence of state aid (DG Competition vs. Apple and Amazon, among others).

4.1.3 The 2019 OECD consultation document

Since the publication of the Interim Report, the Inclusive Framework (IF) and the OECD Task Force on the Digital Economy have continued to examine different solutions for the taxation of the digital economy, aiming at a long-term solution. The results of the work, to which the 125 countries belonging to the IF contributed, were anticipated in a policy note (OECD, 2019a) and then detailed in a consultation document (OECD, 2019b).

The OECD proposes a strategy based on two pillars, to be developed in parallel: the first pillar deals with tax challenges to the concepts of profit allocation and nexus rules posed by the digital economy, advancing three possible long-term solutions; the second pillar deals with the problem of profit shifting to low tax countries, putting forward two proposals to address some issues not yet solved in the BEPS project[4]. The broad declared purpose is to propose innovative solutions, even departing from the "orthodox" criteria followed so far. However, as we shall see, the room for novelties seems to be confined to residual issues, while the traditional system based on arm's length principle and transfer pricing rules would remain substantially unchanged.

The first pillar ("revised profit allocation and nexus rules") provides for three proposals that have in common the widening of the taxing rights of the jurisdictions where

[3] Other measures, such as the Diverted Profit tax, have been introduced by the United Kingdom and Australia: even if they are not limited to the digital economy, they are still aimed at finding new methods to tackle international tax avoidance, also affecting web companies.
[4] See IMF (2019) for an economic analysis of these proposals.

consumers and websites users are located, to try to find a consistent tax treatment of two of the characteristics of the digital economy, that is, the possibility of creating value from user data and the ability to be present in a market without a physical presence. In doing so, they determine profit on a global scale and then allocate it with various methods, using the concepts of routine and residual profit; for this purpose, they also introduce elements of formula apportionment, but always within a context of transfer pricing.

The first proposal ("user participation" proposal) identifies the active participation of users as one of the sources of value for certain types of digital business (social media platforms, search engines, online marketplaces). After having attributed a routine profit according to the classic rules of transfer pricing, the residual profit would be allocated to the user jurisdictions on the basis of quantitative elements, such as revenues. The idea of taxing only profits generated by user participation was put forward by the UK (HM Treasury, 2018) and, more generally, by the EU Commission; it implies the possibility of ring-fencing the digital economy.

The second proposal ("marketing intangibles" proposal) would apply instead to all companies that sell outside their country of residence, without providing for a ring-fencing of the digital economy. It was proposed, first of all, by the United States (Soong Johnston, 2018; VanderWolk, 2018). In this case, the nexus with the foreign jurisdiction would be represented by the existence of marketing intangibles[5] in the jurisdiction where the goods or services are sold: the value creation in a jurisdiction would be due to the investment that the company makes in a jurisdiction to increase the demand for its products. To these intangibles would be allocated a portion of the residual profit, i.e. the profit that remains after remunerating the routine functions, calculated in accordance with the transfer pricing procedures. The residual profit to be attributed to market intangibles would be established with the classic methods of transfer pricing (e.g. cost-based methods) or with formulas. Finally, it would be allocated among countries on the basis of the sales or the residence of the advertising’s targets.

The third proposal ("significant economic presence" proposal) identifies the nexus with a jurisdiction on the basis of a digital interaction with subjects present in that country, as also provided for by the EU Commission in one of the two directive proposals. The fact that a company sells goods or services in a country is not a sufficient condition to be considered resident in that country, i.e. to establish a nexus based on a “significant economic presence”. In order to tax a part of company’s income in those jurisdictions, it is also necessary, for example, to have a user base or to maintain a website in the local language. The application of this proposal requires that the taxable amount to be allocated to jurisdictions with a significant presence is calculated from the sales made in these countries, applying a coefficient of profitability to the turnover. This revenue is then allocated to countries with an apportionment system.

[5] By "marketing intangibles", the OECD means the same meaning as the one used in the Transfer Pricing Guidelines: “an intangible . . . that relates to marketing activities, aids in the commercial exploitation of a product or service and/or has an important promotional value for the product concerned. Depending on the context, marketing intangibles may include, for example, trademarks, trade names, customer lists, customer relationships, and proprietary market and customer data that is used or aids in marketing and selling goods or services to customers.”

The second pillar of the OECD document discusses two inter-related "Global anti-base erosion" proposals, which resume a solution proposed by Germany and supported by France (Herzfeld, 2018)[6]. Broadly speaking, they are a response to the critical issues not solved by the BEPS, whose actions do not always succeed in avoiding the tax bases shifting to low taxation countries[7]. It would be a matter of ensuring a minimum tax on all companies, regardless of the allocation of profits and taxing rights between different jurisdictions. Therefore, it would not be an answer to problems created in particular by the digital economy, but a systemic solution. As in other cases, the intervention of the OECD is also due to the desire to avoid both unilateral, uncoordinated measures, aimed at attracting/defending the tax base, and a tax rates race to the bottom.

The first proposal ("income inclusion rule") provides for the inclusion in the shareholder's income of the income of companies owned abroad, calculated under the tax law in force in the shareholder's country; the inclusion would take place on a per jurisdiction basis and giving a credit for taxes paid abroad. The measure would be very similar to the US GILTI and would guarantee that a minimum tax is applied on the income wherever it is produced.

The second proposal ("tax on base eroding payments") consists of two parts: one ("undertaxed payments rule") provides for the non-deductibility of certain payments to related parties, if they are not subject to a minimum tax; the other ("subject to tax rule") allows the source State to not apply certain benefits provided by the conventions (for example, those for dividends and interest), if the State of the resident does not tax these payments adequately. In this case, the reference model appears to be the US BEAT, modified in order to prevent the incompatibility with the DTTs.

4.2. Some considerations

4.2.1. Taxing the digital economy: What? Who?

The debate on the taxation of the digital economy has focused on two issues: the concept of value and the scope of the new forms of taxation.

As to the first point, it is indeed a conundrum: what does value mean? How does this concept fit into the existing national and international legal framework?

The Commission itself, while reaffirming the principle that profits should be taxed where value is created, has acknowledged that it is not always very clear what is meant by value, how it should be measured and where it is created (European Commission, 2017). As it has been observed by several authors, the concept of value is not enshrined in the DTTs (Christians, 2018). On the contrary, it is based on economic analyses that are not immediately transferable to the legal categories of corporate income taxation (VanderWolk, 2018) and seems to have been introduced in the BEPS project (and then transferred to the taxation of the digital economy) more for the easy usability in political terms than for an effective use of this term in the field of taxation (Vanistendael, 2018).

[6] Franco-German joint declaration on the taxation of digital companies and minimum taxation (December 2018).
[7] This is the case of the distribution models, modified by the multinationals in response to the anti-erosion suggestions of BEPS Action 7 (OECD, 2019b).

In short, it would be a new "mantra" (Schon, 2017), not a well-defined concept to use as the basis of a new international taxation framework. Moreover, it is not clear how users contribute to creating value: if it is true that digital companies are able to sell users' data, should these be treated as the price paid by users to obtain certain services? Or as natural resources, which are extracted and refined by digital companies? Or as an investment in marketing intangibles (OECD, 2019b)? Could users be assimilated to suppliers, remunerated using free services?

The other aspect at the center of the debate is not whether it is possible to tax in the countries where sales take place[8], but rather whom to tax with these new rules: only digital companies or all companies obtaining, in whole or partially, their turnover from the exploitation of intangible assets? Clearly, this is a problem of industrial policy and not just of fiscal policy, which triggered the disagreement that also emerged in OECD's work and was reported both in the 2018 Interim Report and in the proposals contained in the 2019 consultation document.

Taxing only digital companies (or rather, companies that extract value from data generated by users) would affect mainly US companies (an effect also recognized by the Commission in the Impact Assessment on the proposal for a Directive on DST); it is no coincidence, therefore, that the proposals of the European Commission and the web tax introduced by single countries have been interpreted by the United States as an attack on their sovereignty (Mnuchin, 2018). The doubts recently raised by Germany on these proposals could also be motivated by the fear of commercial retaliation by the U.S. (O'Shea, 2018).

As an alternative to the ring-fencing of the digital economy, the new rules should apply to all companies, not just to digital ones; in the OECD consultation document, this idea is embodied in the "marketing intangibles" proposal. For all companies, taxation would also be based on the place of sale, with an allocation of part of the tax base and revenue to net importing countries (such as the United States), to the detriment of exporting countries (Germany, but also other countries in the EU, such as Italy). Obviously, it does not seem easy to find a balance: the weight to be attributed to the share of profits taxed in the jurisdiction of residence of consumers should be carefully calibrated, to avoid that the taxing rights of the country of production of goods or services, or those of the importing country, are excessively compressed.

4.2.2 The proposals' weaknesses

The proposals put forward so far are critical in a number of respects.

Starting with web taxes, the fact that they only affect certain activities would introduce distortions and enable tax avoidances, as well as generating uncertainty. It is not even

[8] The fact that a solution to the problem of taxation of electronic commerce is based on the possibility of applying the levy also at the place of destination of sales has been confirmed in the United States by case law: the decision of the Supreme Court in the South Dakota v. Wayfair Inc. case, modifying previous statements of case law, has established that a State may require a non-resident seller, provided that he exceeds a certain volume of business, to apply indirect taxes due in the State of destination of the sales. Although this decision does not concern direct taxation, it is particularly striking because of the overlap between the arguments put forward by the United States Supreme Court and those of the European Commission and the OECD to justify the levy in the country of destination of the goods (Avi Yonah, 2018c).

clear that a DST such as the one proposed by the EU does not conflict with DTTs. It taxes a part of corporate income (the profits) and is not borne by consumers (such as excise duties). Moreover, it is not certain that web taxes will be able to bring the levy on web companies closer, in quantitative terms, to that borne by other companies, not only because they are levied on revenues instead of profits, but also because they would not affect all the activities from which the digital economy derives value: for example, the turnover deriving from the transfer of digital content via the web (films and music, above all) or from the activity of distance selling would not be subject to the DST proposed by the EU. Doubts have also been raised from a technical point of view: the localization of the users (and therefore, in the end, the allocation of the tax bases) would be carried out on the IP addresses attributed by the network at the time of the purchases or use of a site. However, these IPs are often mobile, do not always refer to the State where the user is actually located, and are not univocally attributable in the case of the use of virtual private networks (VPNs). Finally, both EU Commission proposals are based on qualitative definitions, such as "digital services" or "digital interface", which can be challenged and thus lead to uncertainties in the application of the Directives.

Moving on to the long-term solutions contained in the OECD consultation document, these have in common the application complexity; the concrete implementation of the proposals is based, in any case, on data that tax Authorities do not have, but that must be declared by the enterprises, such as the self-declaration that the thresholds established for the existence of a significant digital presence in relation to turnover, users or contracts concluded in each jurisdiction are exceeded; these data should then be shared among the tax Authorities. The OECD itself acknowledges that for all the proposals it would be necessary to provide for "a strong dispute resolution component to minimize additional controversy and double taxation". Also, the modification of the nexus to give more taxing rights to the countries where the sales take place and the possibility of double taxation would imply a change in the DTTs.

More specifically, the proposals that refer to the taxation of marketing intangibles provide mechanisms for allocating tax bases between different countries based not only on balance sheet data, but also on information available only in cost accounting, with further complications for companies and tax Authorities. Moreover, this proposal can also be subject to avoidance: MNEs could allocate income in low tax countries by distinguishing between the jurisdictions where advertising is sold and those where its targets reside.

Finally, it is not clear how the proposal for a minimum corporate income tax, in addition to raising problems of double taxation if not carefully designed, can solve the problems associated with the digital economy, as it would not tax (at least in part) the web companies in the place of sale of goods, but would only guarantee that they are subject to a minimum tax, intervening on the mechanisms of profit shifting in the countries of the source of payments or strengthening the CFC provisions in the country of residence of the parent company. It would therefore be a more general intervention, not calibrated on the specificities of the digital economy. Also for this “minimum tax” proposal there would be enforcement problems, as the OECD (OECD, 2019b) recalls: for example, the definition of an "effective tax rate test"; the possibility that it could be circumvented by the residence inversion; the difficulty for minority shareholders to find the data necessary for the calculation of the tax; the identification of non-deductible

costs; the need to assess the compatibility of the two proposals with the DTTs and the international law.

4.2.3. Formula apportionment: why not?

In the case of the digital economy, as in the case of other problems addressed by the BEPS project and the Trump reform, the solution cannot be found without an agreement at supranational level, accepting the possibility that taxes can be paid in a state, even if there is not a permanent physical presence.

However, the agreement should not necessarily provide for the application of transfer pricing criteria, which would be made increasingly complex by the need to examine the contribution of the activity carried out in each State to the formation of the value chain. Even if the proposals put forward in the various contexts provide for the application of profits allocation formulas, these are still systems based on the arm's length principle and on transfer pricing, criteria which would not be set aside.

On the contrary, it would be necessary to think over, also for the digital economy, the use of the formulary apportionment system, based on three or four drivers[9], but easier and more immediate for implementation. This system would have several advantages over the aforementioned proposals:

a) it would be less complex in the application, without the need to distinguish between routine and residual profit;

b) it would be easier to find the data necessary for the calculation of the formula, which for the most part are already included among those communicated by the MNEs in the country-by-country reporting; it is true that this applies only to large MNEs, but this would be consistent with the need to provide application thresholds to the new rules to avoid excessive compliance costs, as also provided for by the OECD and the EU Commission, for small and medium enterprises;

c) the use of new definitions of permanent establishments could be avoided by providing that distance selling should also be taken into account for apportionment purposes;

d) it would guarantee a more balanced distribution of the tax base among countries than other theoretical solutions, such as the Destination Based Cash Flow Tax (Auerbach, 2017)[10]; the latter, in fact, is equivalent to a formula with a single apportionment factor, the sales; this, among other things, implies that the tax base is entirely allocated to the country where sales are made, without acknowledging the contribution to the value creation of the country where production takes place;

[9] In addition to the usual drivers provided for in the classic formula apportionment systems (turnover, wages, assets), we should reflect on the need to introduce another driver that captures the specificities of the digital economy. Indeed, the driver “turnover” - if not necessarily linked to the presence of a permanent establishment in the jurisdiction where the sales take place - could help to take into account the value created in other jurisdictions. Probably, an additional driver must be added to consider the value created by the exploitation of the data transferred by the users, but it is not easy to find out a good proxy without implementation technical problems.

[10] It should be noted that the DBCFT combines the benefits of a cash flow tax with the provision of border adjustments. But the benefits of a cash flow tax are not exclusive to a DBCFT, they can also be enjoyed within another system of allocation of the tax base between countries, such as, for example, a formulary apportionment systemor a systembased on the arm's length principle.

e) finally, if the introduction of a formulary apportionment system concerns only one area (such as the EU), it would be necessary to deal with economic relations with third countries, in order to tackle profit shifting phenomena; while now the CCCTB proposal provides for the application of the arm's length principle and transfer pricing in these cases, the possibility of applying a minimum tax, such as that proposed by the OECD in its consultation document (OECD, 2019b), could be evaluated.

5. Conclusion

Since the beginning of this decade, the international system of corporate income taxation has been undergoing a profound crisis. The globalization of the economy and the consequent productive and commercial reorganization of enterprises, which started in the last decades of the twentieth century, have revealed the difficulties of a system conceived in the first half of that century. The economic crisis has made the need for a new balance in international taxation even more evident. The agreement reached within the G20 led to the BEPS project developed by the OECD, in a climate of cooperation among the major jurisdictions, where series of proposals were developed. However, they are still anchored to arm's length and separate accounting (with the corollary of the mechanism of transfer pricing).

The BEPS agreement is also looking weary, not only for the different application of some of the solutions proposed by the OECD and the non-participation of some countries in multilateral agreements, but also for two concomitant causes: the Trump reform and the growing importance of the digital economy. On the one hand, due to the Trump reform, the United States government, although following some suggestions of the BEPS project, has essentially declared the crisis of transfer pricing a methodology for the tax base allocation among the jurisdictions in which multinationals operate; more generally, the US administration has not accepted the philosophy of BEPS and has been in contrast with the treaties against double taxation and with the rules on international trade shared so far. On the other hand, the growing importance of the digital economy has made it increasingly clear that it is impossible to manage digital companies' activities under the current tax rules, even if improved by the BEPS project's suggestions. Overall, the current system does not give certainty to economic activity, with a depressing effect on cross border and even domestic investments, and therefore on economic growth.

If one recognizes the inadequacy of a tax system designed in the twentieth century to meet the challenges of the economy of the twenty-first century, a rational solution, such as that outlined in our "Enlightenment design", should rely on different bases, such as those of a system of formulary apportionment. With globalized enterprises, it is increasingly frustrating to try to allocate tax bases among jurisdictions as if it were possible to identify single legal or economic entities that exchange products and services. Then one should also recognize the indivisibility of the profit and divide it according to economically significant drivers, which balance the taxing rights of the jurisdictions where goods and services are produced and of those where goods and services are sold. The introduction of the CCCTB within the EU could be an example of the advantages of a system of formulary apportionment, although applied within a restricted area. The transition to this model, moreover, would ensure a greater

attractiveness and efficiency of the internal market within the EU, which would be at least on a level playing field with other markets (such as that of the United States) where systems of formulary apportionment are applied, while intra-Community transactions are still regulated by the mechanism of transfer pricing.

In the meantime, an opposite trend is emerging: on the one hand, national and short-term solutions are being sought for the taxation of the digital economy. On the other hand, in order to seek a more far-reaching agreement - which the OECD hopes to achieve by 2020 - proposals are being put forward based on systems of complex application, which are often unlikely to be implemented as they imply a strong conflict of interests between exporting and importing countries. More generally, solutions that guarantee minimum taxation, such as those provided for in the Trump reform, may prevail, but it is not clear how these systems could be coordinated to avoid double taxation and tax competition. Ultimately, the result could be greater uncertainty in international taxation.

In this framework it lacks a level of cooperation similar to that which led to the BEPS project. This was, however, a limited cooperation that implied an inevitable focus on the extraordinary maintenance of an obsolete system rather than on the introduction of new paradigms. The subsequent loss of the cooperative spirit is heavily conditioning the continuation of the BEPS project. The resumption of favorable conditions, hopefully soon, will allow progress in finding more coherent and solid solutions and prevent the BEPS project from being a missed opportunity.

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