ARTICLE

Geotaxation and the Digital: Janus in the Mirror

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Geotaxation focuses on international tax relations and their development under the influence of geographical factors, considering, for example, collaborations among states, the international impact of national or local tax policies etc. Today geotaxation is required to expand to new spaces, where human activity is evolving, such as the cyberspace. Different from all other geo-tax subjects, cyber-reality is challenging established social structures and norms and international relations, including in the tax area. On these premises, this article explores the changes that cyberspace and modern geotaxation imply for the state and the potential development of the international tax scenario.

GEOTAXATION IN THE INFORMATION AGE

Geopolitics has been defined as 'great power competition over access to strategic locations and natural resources'. In essence, it focuses on the impact of geography on international political relations and vice versa. The principal actor in international political relations is the state. And the effective power to tax is historically a constitutive element of the state. Tax revenue is, in fact, one of the fundamental resources for the modern state to perform its role, i.e. to ensure security of the people in its territory and to deliver its policy objectives. Tax policy can, therefore, be considered of key relevance for national sovereignty.

In this light, geotaxation can be understood as the study of the interactions between geography and the international tax framework. It focuses on international tax relations and their development under the influence of geographical factors. Thus, it considers collaborations among different states at various levels, such as the League of Nations, the OECD, the BEPS Inclusive Framework, the UN, the IMF and the European Union, and their impact on national and international tax policy. It also considers the implications of national or local tax policies for other states and subsequently for the international tax framework. A representative example of high-impact national tax policy can be seen in so-called harmful tax practices.

Beyond the above, long-existing factors influencing tax policies, however, modern geotaxation is required to expand to new spaces, completely untracked. It is known as cyberspace and it is the product of new communication technologies and their interaction in a virtual network. Cyberspace marks the unlimited extension of the place where human activity can evolve, the multiplication of time, of the faces of the single user, through profiling, and subsequently the multiplication of relations and transactions.

Intrinsically different from all other geotax subjects, cyber-reality is challenging established social structures and norms, international relations, including taxation, as a whole. It is preaching a weaker role for the state, raising questions as to the authority (1) to fill the vacuum for spaces that until now were regulated thereby and (2) to produce appropriate rules to regulate the new space, cyberspace.

This article will explore the changes that cyberspace and modern geotaxation imply for the state, as historically the main actor in the international tax scenario and the respective potential development of such scenario. To this end, section 2 includes an analysis of the traditional role of modern states and its evolution due to the influence of geotaxation factors, such as state cooperation and tax havens. Section 3 examines the challenges set forth by

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- 1 I. Overland, Future Petroleum Geopolitics: Consequences of Climate Policy and Unconventional Oil and Gas, in Handbook of Clean Energy Systems (Wiley 2015).
- M. Hearson, Bargaining Away the Tax Base: The North-South Politics of Treaty Diffusion, Thesis for the Department of International Relations of the London School of Economics and Political Science for the degree of doctor of philosophy (Aug. 2016).
- D. Rosenbloom, Where's the Pony? Reflections on the Making of International Tax Policy, 57(3) Can. Tax J. (2009).

the development of cyberspace to the historical role of the state and questions arising from an international tax perspective. Section 4 considers the future, outlining a direction towards an optimal international tax framework in the current context. Finally, the author concludes that the role of the state must be reinvented to respond to the cyber-reality: compromises are required and flexibility to adapt to continuous transition.

2 TRADITIONAL GEOTAXATION FACTORS IN THE MODERN ERA

2.1 State: Main Actor of the International Tax Scenario

For international law, each state is a sovereign entity (*superiorem non recognoscens*), a subject of own, independent and exclusive rights. States' sovereignty is divided into (1) domestic sovereignty and (2) international sovereignty or independence. On the one hand, domestic sovereignty means 'the formal organization of political authority within the state and the ability of public authorities to exercise effective control within the borders of their own polity'. The state exists if there is (1) some formal structure (2) exercising effectively power (monopoly over the means of force) (3) within a certain territory/space.

The individuals within such territory/space are subject to the effective control of the state in a relation of subordination. Overall, all individuals are subject to the control of some state, depending on their location.

On the other hand, international sovereignty or independence is considered to result from 'mutual recognition between territorial entities that have formal juridical independence'. Relations among sovereign states are coordinate – no state is subordinate to any other state. Coordination means pluralism and decentralization. There is no global state; in the international arena there are only peers.

A core aspect of sovereignty – domestic and international – is that the state exercises its power over a specific, own territory and the individuals settled there. Each state excludes other states from interference with its domestic affairs evolving in such territory and is excluded from interfering with such affairs of other states in their own territory (mutual non-interference). As in the international context all states are equal, international public law provides the rules for states' interaction.

The territory identifies the limits of sovereignty. This is the case also with fiscal sovereignty. A state's taxing power is thus limited by the same territory. Under generally acceptable international tax rules, in principle, taxing power may be exercised if there is a connection of the taxpayer with the territory (residence-based taxation) or if the taxable income is located within such territory (source-based taxation).

Taxing power is then a constitutive element of the state and a key indicator of its effective existence, i.e. of the state's ability to enforce its commands and to exclude other states from interfering with its territory. In this context, international tax rules prescribe the interaction of states where their taxing power conflicts or overlaps with that of their peers. To regulate such situations, states have established an expanded bilateral tax treaty network

Any limitation to the state's taxing power implies a compromise of the state's sovereignty, a restriction of the state's dominion in (or in connection with) its territory, a loss of effective power. In the words of Rosenbloom 'there can be no other legal subject – no courts, no legislature, no functioning democracy – without a tax system. And conversely, as the tax system of a country fractures and loses legitimacy, so does representational government'. The question is who gains the power lost and how the states should react, if at all.

2.2 A Decline of State Fiscal Sovereignty: Tax Competition and Globalization

States' sovereignty – domestic and international – has historically been the key to the development of the international tax framework. Today, there are approximately two hundred sovereign states, which coexist on equal terms in the international tax arena. As there is no global fiscal sovereignty, international taxation is the product of the interactions of the various fiscal sovereignties.

The rules of this interaction have recently been changed, however, due to globalization and new technologies, marking an unprecedented mobility for taxpayers and taxable bases. Such mobility implies, in effect, a new margin for taxpayers to determine the state of taxation and therefore a new competition dimension for taxing states. From this perspective, globalization seems to

- ⁴ S. Krasner, Sovereignty: Organized Hypocrisy (Princeton University Press 1999).
- ⁵ H. Kelsen, General Theory of Law and State 213 (Etas 2000, Italian translation).
- The state has also been defined as 'an organization with a comparative advantage in violence, extending over a geographic area whose boundaries are determined by its power to tax constituents' while it has been attributed 'two mutually reinforcing monopolies', i.e. military force to ensure payment of taxes and taxation that ensures maintenance of military force. See D. North, Structure and Change in Economic History (WW Norton & Co 1981); N. Elias, The Civilizing Process: Sociogenetic and Psychogenetic Investigations (Blackwell Publishing 1939).
- 7 Rosenbloom, supra n. 3
- 8 P. Valente, Taxless Corporate Income: Balance Against White Income, Grey Rules and Black Holes, 57(7) Eur. Tax'n (2017).

transform the international tax arena into a market where states act as providers of taxing frameworks that can be more or less attractive for taxpayers. ⁹

Globalization has thus introduced a strong element of competition among states for capital, residents and taxable bases. While exercising their taxing power, states must duly weight the tax offer (i.e. the domestic tax framework) of other states, if they are to maintain their own tax revenue. In other words, there is a new limit to fiscal sovereignty, which must be exercised in a manner that ensures competitiveness of the domestic tax framework.

Tax competition can be positive, as it can lead to optimization of the national and international tax framework and improve resource allocation, both in and outside the state. Tax competition may, nevertheless, be considered harmful where it drives international taxation to the bottom. This is the case where tax competition is unconstrained, leading to convergence of national tax rules towards (1) ever-lower nominal corporate tax rates, (2) ever-lower taxes on mobile revenue components, such as capital and interest and (3) broader taxable bases, shifting the burden to least mobile taxpayers, such as SMEs and individuals.

Harmful tax competition has stimulated international efforts to be curbed in a collaborative manner, for example in the context of the ${\rm OECD}^{13}$ and the EU. 14

2.3 Other Actors in the International Tax Scenario

The decline of states' fiscal sovereignty and their respective role in the international tax scenario came with the rise of new actors, claiming to have a say in the process. New actors include international and supranational authorities and transnational corporations.

2.3.1 International and Supranational Institutions

International and supranational initiatives have been undertaken for the pursuit of goals shared among various states, especially where unilateral actions:

- cannot lead to the achievement of such goals or can do so less effectively than interstate cooperation; or
- can be harmful for the pursuit of such goals, for example where a lack of global perspective compromises the results of unilateral efforts.

Interstate cooperation is often driven by international institutions established to this end. Such institutions enjoy so much power as is conceded to them by the cooperating states or Member States. In other words, states remain sovereign and they choose to concede part of their sovereignty. International institutions, such as the OECD, must be distinguished from supranational ones, such as the EU. Supranational institutions are conceded the power to take decisions binding the states and the means to enforce such decisions, in case of non-compliance. This is not the case with the OECD, where decisions are taken on the basis of ad hoc agreement by member countries, i.e. states are bound to the extent they agree and comply on a voluntary basis.

In all cases, there is some concession of power by the states, signalling that certain interests need to be promoted collectively. This is illustrated at the OECD level, in the case of the OECD Model Tax Convention (OECD Model) and the commentary thereon, as well as the Transfer Pricing Guidelines (OECD Guidelines). Both instruments are not binding for OECD members. Nevertheless, today, they constitute standard points of reference for bilateral treaty negotiations, for treaty interpretation at the domestic level, for the domestic application of national tax law and bilateral treaties in relation to taxable income with cross-border elements. Furthermore, they have been adopted by a large number of tax jurisdictions, regardless of membership in the OECD. It is a voluntary restriction of single states' fiscal sovereignty in favour of commonly acceptable standards.

The Base Erosion and Profit Shifting Project is another illustrative example. Launched in 2013 under the aegis of the OECD on the basis of an Action Plan developed by the G20 together with the OECD member countries, it quickly transformed into an international cooperation initiative against tax avoidance and evasion, embraced by more than hundred jurisdictions (the BEPS Inclusive Framework). The result was a series of commonly

- 9 S. Strange, The Retreat of the State: The Diffusion of Power in the World Economy (Cambridge University Press 1996).
- T. Dagan, International Tax Policy, Bar Ilan University Faculty of Law Research Paper No. 1805 (Cambridge University Press 2018).
- 11 Ibid.; CFE Tax Advisers Europe, Opinion Statement FC 10/2018 on the European Commission Platform for Tax Good Governance Discussion Questionnaire on Tax Competition and Competitiveness (Dec. 2018), http://taxadviserseurope.org/wp-content/uploads/2018/12/CFE-Opinion-Statement-Tax-Competitiveness-Final.pdf (accessed 12 Dec. 2018); C. Tiebout, A Pure Theory of Local Expenditures, 64(5) J. Pol. Econ. (1956).
- M. Devereux, B. Lockwood & M. Redoano, Is There a Race to the Bottom in Corporate Taxes? An Overview of Recent Research (May 2003), https://warwick.ac.uk/fac/soc/pais/research/research/research/research/keytopic/race/lockwood_overview_may03.pdf (accessed 26 Oct. 2018); A. Coehlo, A. Tavares-Lehmann & F. Lehmann, The Influence of the Tax Burden in Attracting Foreign Direct Investment, https://www.researchgate.net/publication/267995554_THE_INFLUENCE_OF_THE_TAX_BURDEN_IN_ATTRACTING_FOREIGN_DIRECT_INVESTMENT.pdf (accessed 26 Oct. 2018).
- OECD, Committee on Fiscal Affairs, Harmful Tax Competition: An Emerging Global Issue (OECD Publishing 1998); OECD, Centre for Tax Policy & Admin, The OECD's Project on Harmful Tax Practices: 2006 Update on Progress in Member Countries (OECD Publications 25 Sept. 2006).
- Council Conclusions of the ECOFIN Council Meeting on 1 Dec. 1997 Concerning Taxation Policy, OJ C2 (6 Jan. 1998).
- OECD, Background Brief: Inclusive Framework on BEPS (OECD Jan. 2017).

accepted recommendations to be implemented voluntarily at the single state and tax treaty level in order to ensure coordination and to remedy mismatches and loopholes in the international tax framework. States' effective adoption of the recommended measures, including through signature of the so-called Multilateral Instrument 16 indicates a further compromise of their fiscal sovereignty – even more so taking into account the stipulation of mechanisms for the monitoring of states' compliance, for example peer review in relation to BEPS minimum standards. Thus, BEPS evidences that shared risks can be an opportunity for cooperation of sovereigns through the compromise of their sovereignty.¹⁷ At the same time, it indicates once more (similarly to the OECD Model and the OECD Guidelines) that under certain conditions, soft law can be an instrument more effective than hard law.

In the case of European institutions, the compromise of Member States' sovereignty is even stronger, as is the commitment of the Member States to cooperate in the context of a union of shared economic and political goals and values. Thus, European institutions (including the European Commission, the EU Court of Justice and the European Central Bank) take decisions binding for Member States and enforceable, in the areas of their competence.

However, the area of taxation constitutes one of the most significant pending question marks over European cooperation. Decisions on tax matters require, in principle, unanimous consent by Member States. 18 This requirement renders the decision-making process particularly difficult for such matters, explaining the lack of coordination of the tax laws of Member States, with few exceptions for VAT and excise duties. The role of European institutions is limited to monitoring and supervision of Member State compliance with EU law principles, for example equal treatment of taxpayers. There is some compromise of the fiscal sovereignty of Member States, but still poor from an EU law perspective. The result is a single market with free movement rights between tax jurisdictions with different tax systems, inspiring (1) broad arbitrage by taxpayers and (2) double competition among Member States in the EU and between the EU and the rest of the world.

The loss of tax revenue is then part of the price for the ongoing refusal of Member States to compromise their fiscal sovereignty.

From the above, it arises that international and supranational institutions have emerged as new key players in the international tax arena, highly influential for the development of the international tax framework. Their influence is evidence of, and reason for, the retreat of states' fiscal sovereignty. Such retreat is necessitated by the new world order and while states seem usually to recognize such need, where they refuse, they must afford a reduction of their tax revenue from mobile taxable bases.

2.3.2 Transnational Corporations

Another critical actor in the international tax arena is the transnational corporation. In essence, a transnational corporation is a multinational corporation the management of which is largely centralized at a global level. Multinationals are distinguished for performing their business activities in several jurisdictions through a local presence, relatively independent in each jurisdiction. Transnational corporations perform their activities in several jurisdictions through local legal entities coordinated by a single management. There is a unique economic organism exercising a single entrepreneurial activity through various local instruments under a single leader. Local entities cannot function effectively if separated from the organism. Thus, transnational corporations transcend in terms of economy national frontiers, irrespective of, but still complying with, legal requirements. To this end, such corporations (1) exploit economies of scale deriving from international integration (global dimension), (2) adjust their offer to the local market and consumer needs (local dimension) and (3) use the know-how from local markets to optimize their offer and resource allocation (learning dimension). 19

It is argued that transnational corporations are 'political institutions having political relations with civil society', ²⁰ i.e. that their activity has real political impact, including in terms of taxation. The tax-related impact is twofold, in terms of:

- distribution of tax revenue among tax jurisdictions;
- national tax law and subsequently fiscal sovereignty, as states seek to provide attractive frameworks.

To begin with distribution, the international tax framework includes widely accepted rules for the allocation of the business profits of transnational corporations among the various

- OECD, Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (OECD 24 Nov. 2016). See also P. Valente, BEPS Action 15: Release of Multilateral Instrument, 45(3) Intertax (2017).
- W. Morris, International Tax Reform: What Will the Future Be?, Tax J. (26 Sept. 2018), https://www.taxjournal.com/articles/international-tax-reform-what-will-future-be-26092018 (accessed 26 Oct. 2018).
- However, on 15 Jan. 2019, the European Commission proposed the progressive transition to a qualified majority decision-making system for certain areas of EU tax policy. Cf. European Commission, Commission Launches Debate on a Gradual Transition to More Efficient and Democratic Decision-Making in EU Tax Policy (Press Release 2019), http://europa.eu/rapid/press-release_IP-19-225_en.htm (accessed 18 Jan. 2019).
- ¹⁹ C. A. Bartlett & S. Goshal, Managing Across Borders: The Transnational Solution (Harvard Business School Press 1998).
- ²⁰ Strange, supra n. 9.

jurisdictions, i.e. Article 9 of the OECD Model and the OECD Transfer Pricing Guidelines. ²¹ These rules embrace the arm's length principle, providing that transactions between related enterprises are to be priced as if they had taken place between independent enterprises, i.e. under free competition conditions. According to the OECD Guidelines, however, even so, transfer pricing is no exact science. ²² Judgment is required and thus there is margin for discretion. ²³ As several different outcomes might be equally acceptable, transnational corporations can always manipulate transfer prices to a certain extent. ²⁴

As transnational corporations have some discretion regarding the allocation of their taxable profits amongst states, national tax regimes gain relevance for their decision. In other words, to the extent that such corporations are able to manipulate the distribution of their profits, they may be expected to opt for a structure of their business activities that permits the most favourable taxation (among other considerations). And as states wish to attract investment and tax revenue, they may be expected to construe tax regimes addressing the aforementioned need of transnational corporations and to pursue enforcement on the same consideration. It follows that states' fiscal sovereignty is constrained by the preferences of transnational corporations, and such corporations have their own role to play in the new tax scenario, independently from the will of states.

2.2.3 Tax Havens

Furthermore, considerable influence on the development of the international tax framework is exerted by tax havens, the activity of which introduces additional restrictions on the fiscal sovereignty of other states. This is the case even more in the present context of the high mobility of capital and production factors. The pressure that tax havens generate for other states has stimulated a strong international reaction, for example under the aegis of the OECD and the EU, towards the worldwide adoption of countermeasures that have significantly changed the tax landscape.

Tax havens have been defined by the OECD as fiscally sovereign jurisdictions that employ tax and other 'incentives to attract activities in the financial and other sectors'. ²⁵ In a 1998 report on harmful tax competition, the OECD distinguished four key features of tax havens:

 no or low income taxation (usually limited to income with cross-border elements);

- lack of effective exchange of information with other jurisdictions (secrecy jurisdictions);
- lack of transparency in the operation of legislative, legal or administrative provisions; and
- lack of substantial activity requirements, which encourages investment of passive income flows (e.g. interest and royalties), as well as the booking of article profits.

The above features render such jurisdictions particularly attractive for the investment of mobile income flows, which are then diverted from the jurisdiction where the value was created (original taxing jurisdiction). Lack of transparency and exchange of information serves the protection of the arguable investment from tax audits. The result is extraction of taxable income from the place of creation, leading to base erosion and compromise of the respective state's fiscal sovereignty. In other words, the original tax jurisdiction is pressed to introduce measures:

- to remedy the lack of tax revenue (e.g. by reducing investment) or by increasing taxes on static income flows (e.g. real estate or personal income tax); and
- to enhance its tax competitiveness, for example by applying lower tax rates to mobile income flows, in order to disincentivize their transfer away therefrom.

For these reasons, tax havens are deemed to be the protagonists of the tax race to the bottom through harmful tax competition, while facilitating criminal activity, such as money laundering, fraud and evasion. Employing favourable tax law (without substance) to drain other states' resources, they oblige such other states to react through corresponding legislation; they de facto indicate the direction of other states' laws and the development of international taxation in general. In addition, their activity has caused the adoption of a series of norms at the national and bilateral treaty level aimed at curbing their effects. In particular, such norms (1) impose substantial activity requirements, to ensure that income is taxed at the place of value creation and (2) enhance transparency and cooperation amongst jurisdictions, ensuring that tax authorities have access to the necessary information to assess transactions with cross-border elements.²⁶

3 CYBERSPACE

If the above are of fundamental relevance for geotaxation, to understand the evolution of the international tax

- ²¹ OECD, Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (OECD Publishing 10 July 2017).
- 22 *Ibid* para 1.13
- ²³ Alternatives to the arm's length principle have been discussed from time to time; although the formulary apportionment method has been supported by a series of jurisdictions, the arm's length principle is still the focus of most jurisdictions' consent. OECD, supra n. 21, paras 1.16 et seq.
- ²⁴ C. Fuest, S. Hebous & N. Riedel, International Debt Shifting and Multinational Firms in Developing Economies, 113(2) Econ. Ltr. (Nov. 2011).
- OECD, Harmful Tax Competition, supra n. 13.
- OECD, Base Erosion and Profit Shifting, http://www.oecd.org/tax/beps/ (accessed 13 Dec. 2018).

framework, their impact is still modest, compared to the new entry: cyberspace.

Its very definition has proven challenging: there are currently at least twenty-eight definitions, none of which is widely accepted.²⁷ Nonetheless, there seems to be convergence on cyberspace outlined as 'a global and dynamic domain characterized by the combined use of electrons and electromagnetic spectrum, whose purpose is to create, store, modify, exchange, share and extract, use, eliminate information and disrupt physical resources'.²⁸

Briefly, constituent elements of cyberspace are: (1) tangible telecommunications devices, (2) computer systems and software, (3) network between computer systems (intranet), (4) network of networks (internet), (5) users, (6) intermediaries and (7) data.²⁹ What is not part of cyberspace - and its most distinctive element - is a supervisory authority monitoring in a centralized manner the activities performed therein. There is no institution and no clear hierarchy for the whole-of-cyberspace and thus no ultimate accountability. The function of cyberspace is instilled by the continuous flow of information among users. The considerable increase in the value of intangible assets in relation to that of tangibles in the context of the digital economy is, in essence, due to the potential of cyberspace. In addition, as all takes place only virtually, the same user can apply multiple, different appearances (profiles) or choose complete anonymity.

These characteristics of cyberspace explain the unprecedented challenge it poses to sovereignty, including fiscal sovereignty. First, sovereignty is correlated to the effective exercise of power and fiscal sovereignty to the ability to impose taxes. Effective exercise of (taxing) power means enforcement. The problem is that cyberspace seems to be a domain 'with no system of law enforceable'. 30 In fact, the (potential) veil of anonymity renders the application of any rule highly burdensome, if not impossible. And even if anonymity were not the problem, that would be the lack of rules for a major part of the activities online, in cyberspace, that vary significantly from activities in the physical world and thus cannot fall under existing frameworks. A straightforward example is the lack of consistent rules for the valuation of intangibles.³¹ The lack of proper rules for the taxation of digital business models is, in fact, considered a main cause of the stateless income phenomenon and is the target of a series of legislative initiatives, at the national, international and supranational levels. 32

A prerequisite to enforcement is the establishment of laws. Yet, the law-making process in cyberspace needs to first address some burning tricky questions:

- In the absence of both a central cyberauthority and a global state, which institution – if any – or which state/states has/have jurisdiction and competence to write the rules for cyberspace?
- If rules are to be enacted, who will fall under these rules? All users? Or only some users? How should the term 'users' be defined?
- And taking into account that cyberspace is global and unlimited, connoting an unprecedented interaction of cultures and values and systems of governance, what rules would be appropriate?

Second, until today, sovereignty has been recognized to states in connection with a specific territory. Territorial borders indicated the persons (and consequently the activities) within the jurisdiction and power of each state. There are no such borders in cyberspace; the same activity takes place by the same persons everywhere (and nowhere). In the physical world, physical presence will be in either State A or in State B and on this premise there are rules that define in which of the two it should be identified and to what extent. In cyberspace, there is physical absence: there can be no physical presence in either State A or in State B (even if there can be major (even physical) impact in both of them). There is a jurisdictional conflict that cannot be resolved while remaining loyal to the current notion of sovereignty. Cyberspace introduces an aterritorial space, questioning the very foundations of state sovereignty. Under existing rules, the absence of any physical presence in any state means the absence of any state's competence, i.e. no power, no law, no tax. And absence is expanding, such that it is becoming the rule rather than the exception.

Third, there are specific new technologies that are increasingly challenging (even) specific roles that the state used to play within its territory. By way of an example, blockchain technology has enabled the

F. Krammer, S. Starr & L. Wentz, Cyberpower and National Security: Policy Recommendations for a Strategic Framework, in Cyberpower and National Security (National Defense University Press 2009).

M. Mayer, L. Martino, P. Mazurier & G. Tzvetkova, How Would You Define Cyberspace², Experimental Online Laboratory, PhD in Politics, Human Rights and Sustainability, Scuola Superiore Sant'Anna, https://www.academia.edu/7097256/How_would_you_define_Cyberspace (accessed 14 Dec. 2018).

²⁹ Ibid

M. Mayer, N. de Scalzi, L. Martino & I. Chiarugi, International Politics in the Digital Age: Power Diffusion or Power Concentration?, From the XXVIIth SISP Conference, University of Florence, International Relations Section (12–14 Sept. 2013).

OECD, Aligning Transfer Pricing Outcomes with Value Creation – Actions 8–10 Final Reports, OECD/G20 Base Erosion and Profit Shifting Project (OECD Publishing 5 Oct. 2015).

Valente, supra n. 8; European Commission, Communication from the Commission to the European Parliament and the Council, Time to Establish a Modern, Fair and Efficient Taxation Standard for the Digital Economy, COM(2018) 146 final (Brussels 21 Mar. 2018).

function of peer-to-peer electronic payments, with the use of cryptocurrencies, such as the bitcoin.³³ In other words, it has enabled payments without financial intermediaries.³⁴ Similar is the case of other blockchain applications, such as land registration. Maintenance of the registry used to be a public function of the state, which thus had ultimate control over all transactions involving land. There are already states, however, experimenting with land titling based on blockchain, which will allow the transfer of real estate with recourse to the information in the blocks, i.e. without recourse to a public service.³⁵ The state is no longer needed as an intermediary; conversely individuals are growing increasingly independent from the state and its control.

The vacuum of state or other institutional jurisdiction and authority in cyberspace has left room for action to non-state actors. The dominant position that such actors have gained is evidenced in the often highly impressive impact of cyber-campaigns - for example the case of the Zapatistas in Mexico³⁶ or in the partnerships of states with private industry for cybersecurity purposes. 37,38 Equally, the power of Internet giants such as Google and Facebook cannot be ignored. Mastering the data of millions of users, it might be no exaggeration to claim that they can manipulate to an important extent the information that such users access on a daily basis, and thus users' opinions, thoughts, emotions and market trends.³⁹ Apparently, they have a real potential to influence political developments more than governments can, and certainly in a wider range of territories.

4 STEPPING INTO THE FUTURE

From the above, it clearly arises that the state, in its Westphalian sense, is in severe crisis. State sovereignty has been injured by economic developments, while it has not managed to extend itself to the new spaces that have emerged in the Information Age. And where

the state cannot effectively exercise authority, the socalled Pinocchio problem arises: 'the strings that bound us to state and nation have snapped, and we are left adrift in a world of multiple authorities, allegiances, loyalties and identities'. ⁴⁰ The next question is: are such multiple authorities adequate to undertake the role of guide? Is the state still needed?

There is fierce debate regarding whether - and to what extent - the society can function effectively without the involvement of the state, if it is possible to have governance without government. 41 Such governance would mean that an activity can be performed effectively without an institutional hierarchical organization, either due to an alternative equivalent organization or due to purely voluntary compliance. Nevertheless, experience has shown that this is not always the case. There is a need for some supervision by the state in order to incentivize players to continue to abide by certain standards. For example although the risk of anarchy can be a strong incentive for compliance, its effectiveness is conditioned on the existence of clear and precise rules. 42 It is thus concluded that states are necessary to provide a so-called 'shadow of hierarchy', to warrant the continuous respect of minimum standards by setting the framework and the incentives for compliance. 43

Having accepted that the presence of the state is still needed, it is relevant to determine the role that the state should be expected to play in present circumstances, considering that its traditional role has been heavily questioned. In this respect, what is certain is that the state exists if it is effective and to the extent that it is effective – in other words: to the extent that it can make laws that are enforceable. Furthermore, the outline of the state's role in the Information Age (i.e. in physical space and in cyberspace) must be based on certain undeniable facts:

- territorial limits are no longer relevant for the determination of states' jurisdiction;
- in a borderless space, there may be jurisdiction of either all or of none;

- 33 S. Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System, https://bitcoin.org/bitcoin.pdf (accessed 22 Nov. 2018).
- P. Valente, Bitcoin and Virtual Currencies Are Real: Are Regulators Still Virtual?, 46(6/7) Intertax (2018).
- World Bank Group (H. Natarajan, S. Krause & H. Gradstein), Distributed Ledger Technology (DLT) and Blockchain, FinTech n. 1 (2017), http://documents.worldbank.org/curated/en/177911513714062215/pdf/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf (accessed 22 Nov. 2018).
- 36 W. S. McLaughlin, The Use of the Internet for Political Action by Non-State Dissident Actors in the Middle East, 8 First Monday 11 (Nov. 2003).
- P. Gallagher, The Partnership Between NIST and the Private Sector: Improving Cybersecurity, Testimony (25 July 2013), https://www.nist.gov/speech-testimony/partnership-between-nist-and-private-sector-improving-cybersecurity (accessed 14 Dec. 2018).
- ³⁸ C. Whyte, On the Future of Order in the Cyberspace, 9(2) Strategic Studies Q. (2015).
- ³⁹ E. Goodman & J. Powels, Google and Facebook: Most Powerful and Secretive Empires We've Ever Known, The Guardian (28 Sept. 2016).
- 40 Strange, supra n. 9.
- E. Grande & L. Pauly, Complex Sovereignty: Reconstituting Political Authority in the Twenty-First Century (University of Toronto Press 2005); R. Hall & T. Bierstecker, The Emergence of Private Authority in Global Governance (Cambridge University Press 2002).
- ⁴² J. Goldstein & L. Martin, Legalization, Trade Liberalization and Domestic Politics: A Cautionary Note, 34(3) Int'l Org. (Summer 2000).
- ⁴³ T. Boerzel & T. Risse, Governance Without a State: Can It Work?, 4 Reg. Governance (2010).

- non-state actors, for example transnational corporations and Internet giants, have a significant impact on international politics, including taxation;
- there is vast potential in new technologies and the private sector is already familiar therewith; and
- the coordinates of modern society are under continuous change that cannot be expected to stop anytime

From the above, it follows, first and foremost, that states around the world need to establish strong cooperative relations and to reach agreement to lead together in the new era. Cyberspace can function only on international standards and such standards can be established only with worldwide consent, i.e. with conscious concession of important parts of sovereignty by states. Such cooperation could be put in place under the aegis of international bodies, established by states to have power thereon, independent therefrom. The alternative scenario seems to be the EU tax landscape, where the reluctance of Member States to concede sovereignty has led to double competition that harms the competitiveness of the single market.

Furthermore, non-state actors need to be adequately engaged and incentivized to comply with the standards set. This could be achieved by effectively involving such non-state actors in the rule-making processes. Giving the floor to a broad range of stakeholders, it may be expected that future rules will be more practical and flexible, more business-like. In addition, the more stakeholders understand the purpose behind a rule, the more they can be expected to comply therewith.

It is also of critical importance that states employ state-of-the-art technological applications for the performance of their tasks. By way of an example, blockchain technologies warrant speed and precision that would enhance the potential of states to enforce their laws. And enforceability of the state's law is a precondition to the effective existence of the state itself. To the same end, states should closely follow technological and economic developments to ensure that the framework they set corresponds to reality. This is the only way to avoid having the Pinocchio problem arise again.

5 Conclusion

The idea of the modern state took shape in the 1600s, grounded on the concept of sovereignty – domestic and international. Sovereignty, including fiscal sovereignty, has been connected with a specific territory over which the state exercises its power and beyond which it must give precedence to other states. In the centuries since then, the coordinates of the space of human action have changed substantially. The planetary space is no longer a limit. Cyberspace has emerged to host an increasingly important part of human conduct, including highly valuable economic activities.

Yet cyberspace exists beyond state authority; in fact it exists beyond all states' authority. There is no territory, no

limit, no clear and enforceable framework. In the tax area, this means no taxation or — in a best-case scenario — uncoordinated and difficult-to-enforce, manipulatable tax rules. The consequence is a lack of tax revenue for states, i.e. a lack of resources for governments to pursue their policies and perform the leading role assigned to them, their growing weaker and losing control. Such impact is enhanced by the rise of new actors or the expanded role of existing ones, influencing the tax scenario: international and supranational institutions, transnational corporations and tax havens.

In this regard, it has been argued that the human society could drive further into the Information Age without the state, and that the state could be replaced with better alternatives. However, there seems to be significant evidence to the contrary: states are still needed, although they need to transform from within to be able to perform a new role, a role adapted to the demands of the new world. The new coordinates cannot be ignored. States must coexist and cooperate with new powerful actors for the definition of future tax policies. At the same time, states must establish stable cooperative relations with one another at a broad level and in a structured manner, if they are to impose their tax policies in cyberspace (and subsequently in physical space as well).

Recent initiatives provide evidence that states are indeed moving in the above direction. The BEPS Inclusive Framework connotes the fruitful cooperation of more than one hundred tax jurisdictions for the improvement of the international tax framework. But this is not always the case. A counterexample is the EU, where Member States are still reluctant to compromise their fiscal sovereignty, thus prolonging the lack of coordination of tax laws in the single market and despite the risk for broad tax arbitrage at the expense of their taxable bases.

There is, nonetheless, no margin for such reluctance. In the new space, the economy is developing at the speed of light and the law needs to follow without delay, if recurrence of the BEPS problem is to be avoided. States need to take action to provide a clear framework and to ensure its enforcement. Such action should be taken in a coordinated manner and with a cooperative spirit. The structure and modus operandi of transnational corporations should be the leading example for states' cooperation with the purpose of barring all exits to stateless income.

In addition, the rule-making process, in the tax area but not only, should be inclusive. All key stakeholders (e. g. transnational corporations, civil society (individual tax-payers), tax advisers and NGOs) should be invited to contribute in order for the new rules to be practical, building on the input of all interested parties. On this premise, tax compliance could be expected to be enhanced, as taxpayers would be more aware of tax law and would better understand the reason for their tax obligations. Moreover, they could be motivated to comply with such laws, in order to preserve the privilege to take part in the rule-making process.

The flexibility of tax rules is of key relevance. As mentioned, soft law instruments have been proven largely operational where different cultures intermingle and varying standards need to be compromised. Equally, for the same reason, they are easier to develop and to adjust to new standards.

Finally, new technologies should be exploited by governments, if they are to govern an ever more high-tech private sector. And their development should be promoted.

Change is the only constant; everything flows. 44 It has always been like this. The difference, today, is that change is an integral part of daily life – not just life as a whole – so that it must be embedded in the human mentality, social culture, government policies and law, including taxation.

The continuous transition unavoidably recalls Janus, 45 the two-faced Roman god, signifying the passage towards a new start. Gazing both forwards and backwards, Janus incorporates the threshold between stability (the past) and fluidity (the future). The essence of Janus lies in the awareness that each system arises from disorder in the absence of form, from the uncertainty that succeeds the collapse of an existing form. Its two-faced image stands between beginning and end, between entrance and exit.

Janus should inspire the new legal framework (which should be a global one) and every new legal framework going forward.

⁴⁴ Platon, Kratilos, para. 402a – saying attributed to Heraclitus of Ephesus, a pre-Socratic Greek philosopher.

P. Valente & L. Bagetto, Geofiscalità – Il Dilemma di Giano tra Cifra Tellurica e Continente Digitale (Eurilink University Press 2017).