

Taxing forms in the digital environment

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Abstract. Taxation is a phenomenon of legal adagio to a preliminary juridical relevant relation generated by legal subjects' interactions in a given environment. The traditional milieu is evolving in newer directions as human activity, including markets, are digitalizing. This new domain of legal interaction is addressed also by tax legislation in both substantial and procedural dimensions. This new map of tax relevancy is read by the present study to catalogue classical and emerging instruments of taxation in the digital environment.

1 Introduction

The emerging digital world can be seen both as a set of instruments used by conventional interactions and as a new, *sui generis* collaborative space. The fourth industrial revolution is bringing in the traditional framework of human interaction a set of instruments that are replacing conventional ones or even adding to the classical framework. From robots to bots, from brain drain to tax base erosion, from digital assets to digital contracts, all these forms of expressing business intention and materializing transactions have some standard traits and some new individualities. The aim of the study is to identify the taxation relevancy of these economic dynamics and to verify how legal solutions for classical taxation are applicable in these cases and where there is room for new tax regulation.

In writing this paper, a literature review analysis of the relevant business dimensions sustained or generated by the digital environment has been used. The literature review is accompanied by a historical approach as the study focuses on the clash of classical taxation theory with these emerging business tools.

Our working hypothesis is that the digital market remains a market governed by similar rules to the conventional one and that digital advent is a tool both for businesses and fiscal actors.

The relevancy of the study is deriving from the relevancy of the digital environment based on a constant interrogation: how do we interact in the digital environment? A series of characteristics of this interaction has been identified in the literature; the digital interaction is pseudo-anonymous, as it is mediated through a digital persona (avatar, nickname etc.), de-materialized (interaction is ensured in the on-line environment), de-territorialized (actors are no longer bound to a geographical territory, but to a digital territory) and de-intermediated (actors interact directly, even if a support platform is present).

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2 Digital environment – what is it good for?

The digital environment has two dimensions; in a classical legal theory it is the place for personal interactions (including forms of social interactions with no patrimonial direct content, such as a digital agora) and for patrimonial interactions. The latter is the foundation of the digital market. Digital market has its roots in the entrainment of Internet in the market [1] and is also known as electronic market. The digital market includes interactions on the World Wide Web, distributed ledger technology, such as blockchain [2] and digital spaces, known as metaverses [3]. The relation between these digital spaces and digital market is that of intersecting multitudes, as the patrimonial dimension is present only in a portion of the digitalized relationships. We will define the digital market as a market in which the economic actors relate at distance using a form of technology. This emerging market is a place of interaction between businesses, consumers and government regulators that raises economic discussions exceeding this study: contract formation, digital marketing, price regulation, consumer protection etc. These focus points are relevant as they do not represent new dimensions of business *per se*, but new forms of expression of classical trade regulation. This permanency of traditional roles is the foundation of our study as it grounds our statement that emerging markets tend to follow tradition patrimonial patterns (we will use the term patrimonial and not economic since our study is a legal one). A smart contract [4] is a contract nevertheless and the novelty is addressing issues of traditional contracts (enforceability, contractual risks, contractual costs), but is not challenging structural dimensions.

To test our theory, we will first proceed to identifying the utility models of these digital interactions in their patrimonial relevancy with the exclusion of personal, non-economic interactions. We can list at least six domains of the digital space with legal subsequent relevancy. We will use the fiscal relevancy criteria as recognized by classical tax theory: subject and object of taxation, taxable base, collecting method [5] and denounce any subsequent aspects that are ground for other legal fields, such as protection of the parties or enforcement issues. Secondary, we will underline, if the case, the novelty of the relationship as to its content, dividing the matter into two arenas: traditional dimensions altered by digital performance and new spectrums of social relations, digital relations.

Primarily, digital spaces are used as frame for work relationships: digital labour [6] and digitally mediated labour [1]. Although labour relations are not entirely part of the market as they are governed by different rules, their patrimonial dimensions raise the question of taxation. We choose to firstly address this space, as labour relations' volatility increased under the COVID pandemic [7]. Digital labour is a form of cultural labour, that we will treat from a taxation perspective and dissociate it as a form of independent activity. Digitally mediated labour is a form of dependent activity in which the digital connectors mediated the interactions between employer and employee in domains that are prone to such an interaction (controlling services, software development, distribution of products, management functions, gaming services). Some forms of labour are emergent ones, such as 'immaterial labour', part of the digital environment where work has shifted from factory to society [8] in taxation perspective; the materiality of a patrimonial activity is part of the traceability process and proof of the dependency relation. For example, working on a product for an employer from home or using a platform to identify clients to deliver work has a material dimension; creating a digital product for a company loses this dimension and qualifies as immaterial work. The digital context also fashions new spaces for problematic activities, such as '24-7 electronic sweatshops', the emergence of 'net-slaves' [9]. Though the ethical aspect of work is not the object of this study, since our analysis focuses on taxation, the patrimonial relevancy of the activity and the inherent organization of work relationships are significant in determining tax relevancy and tax collection. Digital labour and digitally mediated labour bring through the mediation of the on-line spectrum some particularities to the traditional labour taxation forms

[10] the lack of concomitant physical presence, as a constant of digital environment allows employers and employees to form contractual bounds with an extraterritoriality dimension. Also, the digitally mediated work tends to dilute the traditional dependency between the employer and the employee and transfer some of the risks and obligations to the employee, as a free worker. This autonomy has significant implications in taxation. In all cases, the digital environment is a place that mediates interactions and offers an alternative to on-site work. In the spectrum of labour relations, the fourth industrial revolution introduces a new actor: robots and AI as ‘workers’. Even if the issue is relatively new and undergoing, some discussions have risen about the taxation of this work form; from taxation of robots as goods for VAT purposes to taxation of robots or AI as revenue generators, even subject of tax law [11] the implicit replacement of traditional workers by robots or bots generates a shift in the subject of taxation debate. As their autonomy is still at bay, these contributors to the taxable base are not seen as subjects of taxation, but as forms of action of a traditional tax subject natural or legal person.

Secondly, the digital environment is a digital market, as a space that mediates interactions between supply and demand. This market is a market governed by traceability as all information is stored forever [12]. The purposes of this traceability are obvious (product liability, product information etc.); the tax relevancy is implicit as all transactions are collected in a digital registry and are potentially available to the tax authority. The digital market has a prime relevancy as a substitute for conventional market as it brings together the participant to the supply chain, and even generates new supply chains – digital supply chains [13]. Contracts are formed at distance between partners from different jurisdictions, accessibility of products increases as information asymmetries decrease [1]. In this context, contracts are relevant considering a feature for VAT theory as to the object of the contract: supply of goods and supply of services. The VAT theory limits the concept of supply of goods to material, mobile goods and assimilates immaterial goods to services. This construct is useful in taxation as it generates an algorithm for distribution of the power to tax between involved jurisdictions in a digital transaction. A role in the digital market is undertaken by the intermediary platforms both as significant retailers in business to consumer dimension (Shopify, BigCommerce, AdobeCommerce, Amazon, Alibaba) or consumer to consumer contracts (e-Bay, Bonanza, Facebook Market). Other actors are the on-line payment agents that manage payment information: account holders, card activity, digital wallet activity (traditional banks, Chargebee, Paddle, Revolut). The platforms in both cases have a relevant role as they aggregate transactions and information about transactions. This triangulation (supplier-platform-buyer) could be a facilitator for tax collection as the platforms hold all information about the transactions.

The digital market has a second relevancy as a market for ‘products’ generated and used in the digital environment. This market is bringing together digitally native suppliers [14] with their clients in all forms of transactions b2b; b2c; b2pc. The applications are infinite, from gaming to education, from media to AI services, from crypto assets to data market. The legal relevant dimensions are given by the immateriality of the product, hence our prior statement that digital products are mostly qualifiable as services, by the immediate and digitalized execution of the contract, by data administration and by cyber-security issues. In this context, some taxing directions are to be identified. There is a market for digital products, which raises questions about the place of taxation, such as delivery of digitalized content (regardless of the object: on-line courses, music, media content, gaming etc.). Since the transactions ensuring the transfer of these products are entirely digitalized, the real issue is the place of taxation. We will ensure an analysis on this issue, as we will address the clash between classical permanent establishment theory and the new criteria of digitally relevant presence. The digitalization of the product moves the accent in the jurisdictional matter from the place of supplier’s establishment (the common rule derived from VAT theory) to the

place of reception of the content. Even more, as content and subsequently the pricing are highly fragmented, a gross manner of determining the volume of transaction is required. In the vast realm of digitalized products, there are some emerging categories. Firstly, the product may present itself as a content usually mediated through a platform (Instagram, Twitter, YouTube, Patreon, Only-fans etc.), with a professional title (that gets further and further from classical professional recognition such as formal occupational classification) or a personal title, known as user generated content, susceptible of instant fame. The vast category of influencers [15] and content creators are a subset of digital labourers as they deliver a generated content which integrates a pricing dynamic (directly or indirectly). Influencers are information or art creators, hence authors in a traditional approach, and their revenues are relevant as intellectual property rights revenues. The integration of these forms of revenues in traditional classification of the taxable base is rather easy due to the similarities in the consumer's approach. Contemporary tax legislations have already undergone this process of integration. In a procedural dimension, the platform ensuring the interactions between creator and consumer plays a patrimonial role and may have a tax collection role. Platforms associate a patrimonial content to the relation between the creator and the follower, directly, through a subscription or indirectly, through deliverance of controlled content, such as advertising. YouTube has a subscription for ad-free content; Patreon allows variable pay-outs to access content; Facebook is free of charge but includes paid services such as promoting your posts. Where content is accessible without fees (Twitter, Instagram, TikTok), social-media-based metrics [15] such as number of followers, frequency of posts, reading of posts, usage of uppercase letters, usage of distinct words, and even hashtags may allow the identification of such influencers and the analysis of their fiscal behaviour. Subsequent contractual dynamics may be revealed with patrimonial relevancy, such as promoting a brand or a product. Secondly, the digital content can be represented by a digital asset or a crypto asset, such as a cryptocurrency (Bitcoin, Ethereum, Dogecoin – on coinmarketcap.com, there are 8864 such instruments listed), stable-coin (USDC, Binance USD), investment token (DAI), game token (GALA) or a non-fungible token (BAYC). Here as the digital market accrued, regulations emerged. The DAC regulation (Directive of Administrative Cooperation) focuses explicitly on the exchange of information between tax administration and the latest proposal reacts to use of crypto assets and e-money. These instruments as they are significantly relevant to patrimony dynamics, highly mobile and imply a certain occult dynamic due to their extremely digitalized algorithm, undergo a process of regulatory approach with the European Union – MiCA regulation. We do not intent to analyse these regulations, but rather point out the jurisprudential approach of the ECJ, confirming our working hypotheses; a cryptocurrency is just a currency [16, 17] and should be treated as such by assimilation to e-money and digitalized payment forms. The secondary patrimonial dynamic as an investing instrument has more fiscal relevancy, but also assimilable to the treatment of revenue in corporate or personal taxation (with no VAT implications) [18]. A relevant emerging market, in a business manner seems to be the data commerce [19]; the concerns for equal access to business opportunity and hence the emerging of data cooperatives is not relevant to our study. We will only state that the commercial relevancy of these new instruments is like any other commerce with immaterial goods.

The digital market users are flirting with the idea of a digital life of humans. The promoted idea of a digital verse, a Meta-verse as an alternative or a complement to our physical existence is conceptualizing a marginal economic ecosystem, as a scalable and networked environment using digital interactions of avatars. The source of such a persona is identifiable in the gaming experience, where interactions with other humans through their digital persona is a constant. Transferring activities from the physical world to the Meta-verse may have a variety of purposes: shopping, gaming, learning, working, meeting others etc. [20, 21]; it is characterized using an avatar, in 'an immersive Internet as a gigantic, unified, persistent, and

shared realm' [22]. The experience is an alternative, phenomenological in a philosophical sense, where a real person creates a persona and lives through it. The content is ensured by a platform that allows personas to interact; like any other human interactions the metaverse contact may become legally relevant. It may lead to the need of protection some values, either inherent or metaverse generated; it may generate a patrimonial content such as a transaction of a metaverse 'product' or 'service'; it may gain at certain point a fiscal relevancy. Since the metaverse has a God [23] and that God is omniscient, the platform facilitating the content is also controlling all the information. It may not control all interactions, hence allowing the statement that avatars have free will, as a projection of the person controlling them, but it will codify and archive all interactions. Eating an apple in the garden of the Metaverse will leave a recorded trace in the code and will allow further legal treatment, including a tax response where a taxable base is formed. It is to God to scan all records and identify the primordial sin. Selling 'land', training skilful avatars, performing a cultural act for a price, paying for goods or services are all part of our Universe and transferable to the Metaverse, as encrypted in the code of our human interactions.

The digital life is not reserved only to humans; bots inhabit the Internet and 'live' there too and even AI powered bots. These presences, even if not human in a legal sense, replicate a human presence and engage in social interaction. The quality of this 'replica' [24] is not an issue for our study; its presence is legally relevant as it simulates, replaces, or supplements a human activity [25] and therefore bears similar legal significances. In a legal sense, and especially in the field of tax law, the measure for relevancy is not authenticity, but purpose, refined as patrimonial content [11]. A service provided to a human being by a Bot or an AI application is as relevant for fiscal purposes as a service provided by another human being. The legal analysis may raise inquiries about the subject of taxation or means of taxing but not to the existence of an object of taxation. At this moment in the Internet revolution, as we do not acknowledge to these presences the quality of law subject, legal debates are mere philosophical approaches [26, 27, 28] and despite their newness, we are not in the presence of an alteration of the classical paradigms.

All environments that sustain interactions with legal relevancy contain two types of relations which are qualifiable as licit or illicit [29]; therefore, this rule applies to the internet mediated interactions too. In the context of our study, this rule allows a subsequent qualification of transactions as transparent for tax purposes or means of tax avoidance and tax evasion. The digital interactions due to their aptitudes in relation to traceability may be viewed as opaque in relation to the classical means of identifying transactions, but also more transparent in relation to newer ways of communication with tax authorities. This bipolarity reshapes tax compliance and consequently tax evasion and determines an adaptation of the means of implementing taxation not only for the taxpayer, but also for tax authorities [29]. A possible scenario implies that tax authorities using digital means become invisible, 'this is one possible scenario that could evolve from today's landscape of cashless payments, cash registers and digital-invoicing tools that are connected directly to accounting software, and digital tax registries—that is firmly established and maturing in many countries'.

3 What tax challenges are arising?

In this landscape of the digital market, seen both as a subset of the classical markets and a space for new transactions, taxation is under pressure for change both in a material and procedural dimension. The classical theory of taxation organizes around the concept of taxation matter, which is the core of the legal context and a permanency in all markets. Taxation is a secondary legal relation; it derives from a legal interaction with patrimony relevancy, which occurs in each market and has its own existence and purpose. The scope of a patrimonial activity is not taxation; taxation is an external effect, imposed by public force.

The patrimonial activity has an autonomous existence that orientates the behaviour of both participants and tax authority. One can identify subsets of taxation in relation to their subject and their object. A classical dichotomy artificially organises taxation around the type of the subject: personal taxation and company taxation. This artificiality of the dichotomy derives from the fact that the form of organising an activity and does not affect its taxing relevancy as a core, but merely transposes a public policy towards types of business. For example, a lighter tax regime for small farms does not qualify all revenues deriving from farming as non-taxable but transposes a policy of the tax sovereign towards a group of taxpayers: small farmers. Therefore, taxation's main core is not the form of organizing an activity but the content of that activity; one can organize taxation around its content as capital taxation (inert or invested in a business), work taxation (seen as activity delivered in the frame of a labour contract or even independently), consumption taxation (as an effect of consuming products or services) and property taxation.

Taxation is a reflection of the public authority and hence it is strongly related to the space of domination; fiscal authority encompasses the power to decide the object and the level of taxation. Hence, fiscal jurisdictions are heterogeneous; one activity may be taxable in one jurisdiction and exempted from taxation in another. This heterogeneity is a result of fiscal autonomy and part of the state autonomy. Consequently, the place of a transaction is relevant in determining the fiscal effects of the transaction. The classical theory of taxation has produced a set of legal rules to address the potential conflict of jurisdictions synthesized as treaties for avoiding double taxation that rely on a liaison element such as residence or permanent establishment [30]. These two concepts bear a high relevancy of the geographical connection to a certain tax jurisdiction and are under significant pressure as digital market is not mapped [31, 32]. The current tax system is built taking into consideration the actual geographical location of the participants in a legal relation. This location is relevant differently: in capital taxation its ties the business to the geographical source of decision; in work taxation it ties the revenue to the location where work is delivered; in consumption taxation it connects taxation to the location of either the buyer or the seller; in property taxation it gives relevancy to the place where the goods are stored. In this context, digital market brings two new dimensions: one is the shift in the relevance of physical place for a transaction (parts of the transactions have vague connections to a physical, geographical place) and the second is the surplus of mobility that may led to tax erosion. This new reality imposes the rewriting of the classical paradigm for determining the place of taxation; it may be treated as an international taxation matter, but from a certain level on it is a digital taxation matter where territory as seen in the classical theory loses its relevancy. In an analysis of emerging business models [33] regarding Amazon and other digitalized distribution channel is obvious that geography does not serve any role. An alternative solution is required [33, 34] an inventory of relevant factors includes: quantitative facts such as number of active users, number of registered users, amount of costs, etc. and qualitative elements: availability of local domain, local digital platform etc. The emerging taxing models, for implementing a digital permanent establishment (*sic!*) may rely on introducing flat tax for digital market in relation to users located in a certain jurisdiction or taxing the revenues at source under the concept of significant digital presence [35].

A secondary dimension in taxation is the burden of proof; the main characteristic of tax law is the absent creditor. The creditor for tax duties is absent at the tax relevant event; the event in the classical form or digitalized takes unfolds as an act or legal fact between private entities. The public creditor is absent; he does not perceive the event, nor its dimensions. The public creditor is informed through tax formalities about the occurrence of such event by the debtor. This emphasis on transparency from the debtor is a vulnerability of the tax collection system and puts pressure on the proof dynamic in tax law. As to classical business context proof is assured by a concoction of written and material elements, such as invoice, banking

turnovers, accounting evidence. In the digital context, as all interactions are mediated by a computational environment, proof and traceability are always obtainable. So, tax audit is evolving in two directions: (1) a synchrony one where digital invoicing is connected to a tax authority server and data processing can signal red flags in taxpayers' behaviour; (2) an asynchrony one where tax audit investigates digital content in its prior mention omniscient dimension to retrace fiscally relevant transactions.

3.1 Substantive dimensions in taxing digital economy

Tax law is facing the digital economy both in a material and procedural dimension. The material elements revolve around the classical or emerging transactions, as tax law is a legal domain after the economic dynamic. Traditional tax theory considers two elements in a rather specific manner: the object of taxation and the subject of taxation. Both components have a classic dimension and newer forms in digital environments.

The most intuitive and direct dimension of digital environment taxation maintains the traditional subject and object and follows its transfer in the digital world. Economic actors, both companies and natural persons will owe tax for the transactions concluded and executed in digital form in identical conditions. A transaction considering its object will be taxed both in case of goods or services material or digitalized, paid in cash, through banking in fiduciary or crypto currency. The relevant tax in this context might be corporate tax or revenue tax, depending on the tax subject. The determination of the tax matter is also ruled by the general provisions of applicable legislation; it might be actual or flat-rate determination; it might be due annually or for smaller fractions of time.

In a more autonomous stage, emerging tax subjects or taxable personas gain fiscal relevancy. This gain is not autonomous completely, it roots also in the transfer of taxable subject or taxable object from physical transactions to digital transaction, with or without a connection to the natural world. It is the case in taxing e-taxpayers, such as the digital workers or the emergent agents such as influencers, facilitators, platforms.

Finally, taxes are due for digital content; such is the case of digital 'goods' or more precise digital services, and of digital personas. In this dimension, as though the digital existence seems entirely autonomous, it is not yet the case. The digital content or the digital persona are projections of a real world will; at this moment in time, even the most autonomous digital existence, such as an avatar in the Metaverse or an AI bot is still related immediately or 'mediately' to the will of a real person, a natural person.

In a very non-sophisticated, direct, and straightforward way, tax law has a unifying duty in addressing economy; it will assure in a normative frame the necessary resources for the budgetary dynamics without significant attention to transactional nuances. 'Render unto Caesar that which is Caesar's' transposes in contemporary dimensions in the flexibility of taxation norms in defining taxable subjects (extended to any legal entity) or taxable matter (especially when it comes to legal entities), but a certain inflexibility in sparing economic dimensions. The normative frame might consider, due to national legislator's preferences, some variables tending to modulate some economic sectors or to favour some vulnerable subjects. For example, promoting digital companies through fiscal incentives upon the salary tax might be a sign of encouraging the economy or adjusting tax evasion in the field.

In the most pragmatic manner, direct taxation is devised between two main sources: taxing businesses and taxing employees. These two main directions target different economic contexts; the first is focusing on professional revenue generated by the difference between a product or a services cost and its selling price regardless of the context, content or market; the second is deriving a tax consequence from delivering labour as an inherent component of any services, including digital ones.

3.2 Procedural dimensions in taxing digital economy

The procedural dimensions of taxation include personal obligations under the principle of loyal cooperation. The tax creditor is an absentee landlord; the tax authorities are a shadow presence in all markets, unequipped to supervise all transactions, working on risk evaluation. The debtor and other third parties are traditionally obliged to communicate the existence of the tax debt and to facilitate its audit. This declarative context puts supplementary pressure on the taxpayer and generates consequences as tax avoidance and tax evasion. The procedural dimensions include even preliminary procedures such as corporate authorization and tax purposes registration [5] that are a formal barrier to contractual freedom. In the traditional markets, actors tend to follow through these procedures, as traceability of the activity is easier through physical evidence. In the digital markets, actors are more fluid, so their fiscal dimension is also uncertain. The connection to a fiscal jurisdiction is diluted, so the classical *permanent establishment* needs a new cloth. This concept is related to the traditional way of determining tax jurisdiction as the form of distributing power between states. The new concept of *relevant presence* within a market it seems to answer this difficulty as it shifts accent within taxation from the physical point of connection between business and territory and answers better to the new frame of action. The concept of relevant presence was formulated by European legislation and addresses the market by considering not the source of them economical would but the destination. This new paradigm of taxation allows states to give significance in fiscal matters to the emerging economic dimension and to recognize their power to tax regardless of the source of the good or service and thanking into account only the destination. In this new context even the notion of eroding tax source gains new significance; tax avoidance and tax evasion not only embrace new forms but also demand newer fighting measures.

Identifying the source of the revenue and identifying relevant jurisdiction are more than ever related to the procedural dimensions of taxation. This puts a supplementary pressure on audit capacity of tax administrations. Hence newer forms of audit are required for addressing the transition from the traditional ones to digital ones, as the face-to-face audit is replaced by digital audit. Tax audit inhabits the digital environment and tax authorities are called upon to implement measures of supervising digital transactions. In a recent study, the digital environment [29] was approached as a world, requiring tax authorities to intervene with the same means. These means address several stages of the tax administration activity, such as tax registration, declaring activities and providing information for determining taxes and implementing audit procedures. As information is very fluid in a first-hand approach, digital tax administration should be easier as algorithm would help identifying fraudulent transactions and would allow tax authorities to process faster relevant information. A well-adjusted algorithm would allow tax authorities to extract relevant information about taxable transactions from the very environment that generated them. Secondary, the information once extracted, further processing would reveal the amount of tax due to certain jurisdiction.

The premises of this dynamics is also declarative; someone, either the taxpayer or the platform accommodating transactions, must declare the relevant information in due time and to a certain fiscal jurisdiction. The companies will face a supplementary burden as main collectors of information; the costs of such compliant behaviour might be relevant but it is subsidiary to the access to a certain market. In some cases, the traditional line between companies and physical persons, between professionals and non-professionals will become blurry and will create a generalization of the professional model. One could assert that in the digital environment actors assuming an active role all become professionals. For example, the traditional not so challenging role of an employee, as a protected taxpayer through withholding measures, will diminish in order accommodate the mobility given by the digital context. Processing banking data, VAT information, direct taxation information are part of the business model in the digital environment. It is a 'take it or leave it' moment. Once the

information processes to a certain form, accessible to the tax administration, tax effects will occur. Secondary, instruments of tax cooperation would find a suitable environment to exchange automatically or upon request relevant fiscal information about the digital transactions of residents. The administrative cooperation in fiscal matters finds in the digital environment both a challenge and a new form for action.

Where to?

Taxation is a clash between public and private; forces are confronting each other in a patrimonial dynamic. The traditional way to address this clash is to consider the public realm as stronger; but in fact, the public realm is a projection of the private will in a conglomerated manner. There is no public money, as Margaret Thatcher stated; maybe there is also no direct public will, but a filtered private will through lenses of power [36]. Hence, the stronger part in this dynamic is the private actor, that which mobilizes will and resources. In this spectrum, patrimonial and personal, the private dimension will always be more resourceful. The computational power of the private actors combined is no match for the public sector. Nor should it be. In economic dynamics state intervention is secondary and counter-reactive; it follows private evolutions and adjusts to them. Hence, taxation as a second level, normative influenced intervention will always oppose a reaction to the evolutions in the private sector. This transfer of instruments might be infused with derived normative interventions, but these are a mere reaction, transfer, lend from the private environment.

References

1. M.D. Smith, J. Bailey, E. Brynjolfsson, *Understanding digital markets: Review and assessment*, (MIT Press, Massachusetts, USA, 2009)
2. M. Nofer, P. Gomber, O. Hinz, D. Schiereck, *Bus Inf Syst Eng*, **59.3**, 183-187, DOI: 0.1007/s12599-017-0467-3, (2017)
3. J. Anderson, R. Lee, *The metaverse in 2040*, URL: https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2022/06/PI_2022.06.30_Metaverse-Predictions_FINAL.pdf, accessed: 1.03.2023, (Pew Research Center, 2022)
4. Z. Zheng, S. Xie, H.N. Dai, W. Chen, X. Chen, J. Weng, M. Imran, *Future Generation Computer Systems*, **105**, 475-491, DOI: 10.1016/j.future.2019.12.019 (2019)
5. I.M. Costea, *Drept financiar. Note de curs, ed. a 8-a*, [Financial Law. Course. 8th ed.] (Hamangiu, Bucharest, 2023)
6. C. Fuchs, M. Sandoval, *Open Access J. Global Sustainable Information Soc.*, **12.2**, 486-563, DOI: 10.31269/triplec.v12i2.549, (2014)
7. G.M. Cortes, E. Forsythe, *ILR Review*, **76.1**, 30-55, 023, pp. 30–55, DOI: 10.1177/00197939221076856, (2023)
8. R. Gill, A. Pratt, *Theory, Culture & Soc*, **25.7-8**, 1-30, DOI: 10.1177/0263276408097794, (2008)
9. T. Terranova, *Social text*, **18(2)**, 33-58, (2000)
10. I.M. Costea, *Perspectives Bus L J*, **1**, 320-331, (2012)
11. I.M. Costea, *Analele Științifice UAIC. SSJ*, **65.2-bis**, 7-14, (2019)
12. J.M. Song, J. Sung, T. Park, *Procedia Comp Sc*, **162**, 119-122, DOI: 10.1016/j.procs.2019.11.266, (2019)

13. M.M. Queiroz, S.C. Farias Pereira, R. Telles, M. C. Machado, Benchmarking: an international J, **28(5)**, 1761-1787, DOI 10.1108/BIJ-12-2018-0435 (2019)
14. G. Wang, J Product Inn Man, **39(1)**, 95-118, DOI: 10.1111/jpim.12605, (2021)
15. P. Harrigan, T.M. Daly, K. Coussement, J.A. Lee, G.N. Soutar, U. Evers, Int J Information Man, **56**, 102-246, DOI: 10.1016/j.ijinfomgt.2020.102246, (2021)
16. D.M. Ilucă, Analele Științifice UAIC. SSJ, **65(2-bis)**, 219-234, (2019)
17. D.M. Ilucă, Analele Științifice UAIC. SSJ, **63(2)**, 311-326, (2017)
18. ECJ, C-264/14, Skatteverket Vs. David Hedqvist, ECLI:EU:C:2015:718, URL: <https://curia.europa.eu/juris/liste.jsf?num=C-264/14>, accessed: 1.03.2023, (2015)
19. C.T. Ungureanu, Analele Științifice UAIC. SSJ, **68(3)**, 7-23, DOI: 10.47743/jss-2022-68-3-, (2022)
20. M. Sparkes, What is a metaverse, (Elsevier, 2021)
21. B. Kye, N. Han, E. Kim, Y. Park, S. Jo, J Educ Eval Prof, **18**, 18-32, DOI: 10.3352/jeehp.2021.18.32, (2021)
22. L.H. Lee, T. Braud, P. Zhou, L. Wang, D. Xu, Z. Lin, A. Kumar, C. Bermejo, P. Hui, J Latex Class Files, **14(8)**, 1-46, DOI: 10.48550/arXiv.2110.05352, (2021)
23. C. Leaua, C., The Greek Gods and the Metaverse: Legal Order in the Layered Universe, URL: <https://irishtechnews.ie/greek-gods-metaverse-crenguta-leaua-efi-pylarinou/>, accessed: 1.03.2023 (2020)
24. D.J. Chalmers, *Science fiction and philosophy: From time travel to superintelligence*, in S. Sneider (eds.), *The singularity: A philosophical analysis*, 171-224, (John Wiley&sons, US, 2016)
25. C. Codrea, Hermeneia, **15**, 145-157, (2015)
26. P. Čerka, G. Jurgita, S. Gintarė, Computer law & security R, **33(5)**, 685-699, (2017)
27. S. Wojtczak, AI & Society, **37(1)**, 205-213, (2022)
28. V.A.J. Kurki, T. Pietrzykowski, Legal personhood: Animals, artificial intelligence and the unborn, (Springer, 2017)
29. B. Bertagnoll, J. Davis, J. Dimson, K. Kamath, J. Rebolledo, Reimagining tax authorities for the future, URL: <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/reimagining-tax-authorities-for-the-future>, accessed: 1.03.2023 (2023)
30. A.A. Skaar, Permanent establishment: erosion of a tax treaty principle, (Kluwer Law International BV, 2020)
31. J.A.G. Requena, Intertax, **45(11)**, 732-741, DOI: 10.54648/taxi2017063, (2017)
32. B. Hoffart, NJ Techn & Intell Prop, **6**, pp.: 106-117, (2007)
33. W. Schön, *Ten questions about why and how to tax the digitalized economy*, Working Paper of the Max Planck Institute for Tax Law and Public Finance, **11**, 1-31, (2017)
34. I.M. Costea, I.M., Analele Științifice UAIC.SSJ, **64.1-bis**, 211-220, (2018)
35. R.A. Petruzzi, V. Koukouloti, European taxation, **58.9**, 391-400, (2018)
36. C. Codrea, Logică juridică. Curs universitar [Legal Logics. University course] (Hamangiu, Bucharest, 2023)