ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

The Process of Approaching the Taxation of the Exploitation of Personal Data

Nabil LAZAAR, *(Phd, Student)*
University Ibno Tofail – Morocco
Research Laboratory in Science of Management of Organizations at the ENCG of Kenitra

Correspondence address :	University Ibno Tofail Av. de L'Université, Kénitra Morocco – Kenitra 14242 05 30 21 45 79
Disclosure Statement :	Authors is not aware of any findings that might be perceived as affecting the objectivity of this study
Conflict of Interest :	The author report's no conflicts of interest.
Cite this article :	LAZAAR, N. (2022). The Process of Approaching the Taxation of the Exploitation of Personal Data. International Journal of Accounting, Finance, Auditing, Management and Economics, 3(6-1), 324-350. https://doi.org/10.5281/zenodo.7419548
License	**This is an open access article under the CC BY-NC-ND license**

Received: October 25, 2022 *Published online: December 10, 2022*

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

The Process of Approaching the Taxation of the Exploitation of Personal Data

Abstract

As pointed out, Harakat M. (2015), in seeking to elucidate the fiscal impact of such or such a measure on economic and social growth, through the evaluation of positive or negative distortions of the tax, it is necessary to take into account the social cost, the tax architecture of security and transparency, in order to satisfy the four maxims, put forward by Smith A. (1776): Proportionality, Stability, Equity, Efficiency. For this, the State has, at the time of the introduction or the re-examination of an instrument of state action, the possibility of examining its appropriateness to know if it has the expected effect, if it is the most effective and the least expensive to achieve the objective fixed by the law or if, on the contrary, other instruments better marketed, would be more appropriate, in reference to the famous duality Equity-Efficiency. This article follows up on our previous work of immersing ourselves in the literature dealing with instruments for taxing the negative externalities of the exploitation of Big Data by Data-Driven-Business-Models, and proposes narrative an overview of the theory of externalities by attempting to draw some lessons from environmental taxation, and then by presenting the various proposals for tax measures on Big Data, in order to prepare ourselves for a better approach to the framework for adopting a tax measure taxing the negative externalities of Big Data in Morocco, which is the subject of our doctoral thesis.

Keywords: Big-Data, Value, Externality, Taxation, Policy Strategies, Free Labour
JEL Classification: F38, H20
Paper type: Theoretical Research

Introduction

Chignard S. and Benyayer (2015, p 33), asked the question "*What is data worth?*" to specialists, business leaders, activists, and users of digital services, without finding a unanimous response. A diversity of answers that testifies to the relativity of perceptions, and brings up to date the question of the notion of "Value" itself. At the same time, another debate of a completely different register is beginning to overheat the scientific community and the professional sphere, but whose scope may reach our understanding of the importance of highlighting Big-Data (BD) in the external communications of companies so that all stakeholders can know its weight. This debate is about the role of the Business Model (BM) in financial statements and the possibility of incorporating it into a conceptual and normative framework driven by accounting standard setters. The way in which this concept could be mobilized to extend the usefulness of accounting figures is a matter of debate since it can be considered either as a principle guiding the rules of recognition and valuation of transactions or as a basis for a report capable of explaining the interactions between economic, social and environmental aspects.

Thus, according to the literature, such debates from the accounting doctrine, are exchanged today in a context of profound changes in the WB in the digital age especially those focused on the exploitation of data, "Data-Driven-Business-Models (DDBM)" in this case. In this sense, Levieils M. (2015, p. 194) reminds us that BDs illustrate very well these debates and the shortcomings of making accounting and legal systems evolve in a coordinated manner, given that the criteria implemented by accountants and tax specialists are not based on legal definitions and generate distinctions (according to the objects, the conditions of creation, etc.) that no longer fit into the definition of a business.From an accounting and/or tax point of view, the circumstances at the origin of the entry of the intangible asset into the company's assets are decisive for the possibility of capitalizing, or not, certain of these assets, whereas from a legal point of view, these assets are defined and governed as such by legal provisions Levieils M. (2015, p 198 - 199).

In fact, according to several authors, valuation in tax law refers to a tax intrusion into the private sphere of the contracting parties during transfers for valuable consideration, with a view to controlling a posteriori the price posted by the contract, which must obey, according to them, the goodwill of its procreators. This is how Jemmar (2010, p 28) describes this situation as awkward, due to the rivalry between the rule of civil law, where the contract is the law of the parties, and the rule of tax law, which is dedicated to protecting the general interest. This being said, the thesis that we propose to support is that the thing whose value we want to measure (*the personal data exploited by the DDBM*) and by ricochet its economic substance, is in our eyes,

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

pertaining to the general interest, which represents, with the BM hosting it, the entry point to the market on which they depend.
Hence the objective of this article is to provide a very brief overview of the theory of externality effects (§1), which characterize the digital economy as a whole and MDDs in particular. We will then review the notion of externality (§1.1), before presenting some related economic instruments of correction (§1.2). Second, we will present some proposals for tax measures relating to BD (§2), which have often been a source of inspiration in the discussions led mainly by the OECD and the EU on the subject, particularly during the development of the BEPS action plan (§2.1), and finally, we will discuss the proven contribution of the experts' Collin & Colin in this area (§2.3).

1. Overview Of Externalities Theory And Green Taxation

According to Lévêque (1998, p. 3), the concept of externality is in the midst of the theoretical polemic on the need for regulation in the face of market imperfections, and thus, according to him, this concept serves above all to identify the nuisances caused by all kinds of pollution. Indeed, as external effects of industrial and agricultural activities, the resulting nuisances are, according to the author, the object of an increasing number of regulatory measures.
He then clarifies his remarks by proposing a definition of externality, considering it to be "*an effect of the action of one economic agent on another that occurs outside the market. The externality is said to be positive when the effect improves the well-being of the other agent, and negative when this agent sees his well-being diminish*" (Ibid). Whether it is the invention of a new technique that will allow access to others or the construction of a prison that will lower the real estate value of the surrounding properties, are both examples of externalities among many others.

1.1. The origins of the concept of "externality

In his historical note on externalities, Laffont (1975, p. 420) offers us the possibility of following the emergence and growth of notions associated with the phenomena of non-market interdependence, given the complex theoretical problems posed by the effects of externality, in order to master them first, before venturing into any reflection on corrective policies, which, according to him, always remain costly in terms of information and implementation.

1.1.1. From the beginning to the clarification of the concept

Laffont (1975, p. 607) attributes the paternity of the identification of external effects to Sidgwick H. (1887), who, according to him, was the first to have become aware of the limits posed by the said effects, in a decentralized

economy. Indeed, the latter already understands "*that there are utilities which, by their nature, cannot practically be appropriated by those who produce them*"; he goes even further, by arguing that the system of natural freedom may not have the vocation to achieve the expected results, even in a society composed essentially of homo economicus, and this, for various reasons (p. 420 - 421). Three years later, Marshall, A. (1890) introduced the terms internal and external economies, allowing for the evolution of ideas, despite the criticism of his approach by his peers, which led him, according to them, to confusion that took a long time to clear up, notably by identifying external economies as those dependent on the general development of industry, whereas internal economies depended on the resources of firms and the efficiency of their management (Ibid).

Finally, Chapter IX of Pigou's (1920) "*Economies of Welfare*" was the origin of a "*Pigouvian tradition*", which in turn gave rise to a violent controversy known as the "*black box*" controversy[1] , whose main contribution was to clarify the concept. Clapham (1922, p. 305 - 314), the initiator of the controversy, criticized the concepts (boxes) of increasing, constant or decreasing returns industries used by Marshall and Pigou, which in his view did not cover any reality. It is with the contribution of Viner (1931) that certain misunderstandings finally fade, by introducing a capital differentiation between the external pecuniary economy and the external technological economy. The first refers to the current meaning: "*an external effect of the activity of one firm on another without any mediation by prices*" (Berta, 2008, p. 4). While the other refers to effects brought about by prices: the modification of the quantity of output produced impacts a variation in the prices of the inputs essential to its production. Marshall's external economies are part of this.

1.1.2. In the extension of the concept

For Barta (2008, p 14), Scitovsky (1954), in consigning the notion of the external economy to what he calls the theory of equilibrium, offers us a clear relationship with the first theorem of welfare economics, by advancing that *"It is also admitted that the external economy is a cause of divergence between private profit and collective benefit and thus of the failure of perfect competition to produce Paretian optimality*" (Scitovsky, 1954, p 143). Indeed, Laffont (1975) states that in the presence of externalities, the competitive equilibrium is no longer an equilibrium in the sense of Pareto, where optimality requires the equality of social marginal costs and benefits, whereas in equilibrium the decentralized behavior of economic agents only guarantees

[1] *This "black box" description refers to the difficulty of illustrating the Marshallian concept with precise empirical phenomena.*

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

the equality of private marginal costs and benefits through prices (Boemare, 2001, p 23).

That said, an economic policy inspired by welfare economics was the subject of a harsh and unprecedented critique by Coase (1960) and the followers of his theorem who followed him, resulting in the emergence of a new approach to external effects. Indeed, Laffont (1975, p 425) points out that, in his work, Economies of Welfare, Pigou (1920) outlines the broad lines of state intervention to achieve the optimum in the presence of external effects, which proposes solutions to the extremities by subsidy and taxation. This is in total contradiction with the thinking of Coase (1960), who formulated it as follows: "*I argue that the suggested courses of action are inappropriate, in that they lead to results that are not necessarily, or even usually, desirable*", in the sense that he attempts to highlight the mutual nature of the problem and develops the point that the initial state with respect to which a corrective policy must be thought through is not systematically the zero position, and proposes in exchange, the creation of artificial markets of rights for the externality.

1.2. Instruments for correcting externalities

According to Daudigeos and Valiorgue (2009, p. 6), the proven contribution of the theory of external effects, as outlined above, is to conceive of the various characteristics of an economic activity differently, given that, while other theoretical frameworks limit economic activity to its simple market dimension, the theory of external effects includes non-market reflections in this dimension. However, although the article by these authors is an extension of the work of Coase (1937), it teaches us that the institutional and market framing of business activity is partial and that this deficiency is the cause of "*social and environmental costs*" that are borne by the stakeholders, who see their well-being deteriorate (Ibid).

1.2.1. Public intervention as a solution to the externality problem

According to Lévêque (1998, p. 6), the normative solution to the problem of externalities is to regulate. The public regulator must therefore determine the optimal threshold for the production of externalities and implement a system that will force economic agents to reach it. However, the author explains that if the regulator is assumed to have all the information, the harm caused by the externality is neutralized as quickly as it occurred, since the determination of the optimum is basically a simple matter of calculation since the costs and benefits are already known to the regulator. In this respect, Lévêque observes that negative externalities are particularly affected by two information deficiencies: a lack of data on the benefits of welfare improvement actions, when they concern goods that have no market, and a lack of information on the costs associated with the withdrawal of such an effect by each emitter,

when the harmful industry is heterogeneous. He goes on to say that these informational gaps point to two areas of economic reflection: "*the monetary valuation of non-market goods on the one hand, and the question of whether to regulate by price or by quantity on the other*" (Ibid). In response to the problem of externalities and thus to market failures, environmental economics has opposed two methods of intervention: the regulatory approach, known as the administrative approach, and the economic approach (Diemer 2009, p. 4). One of the main methods, according to Lévêque (1998, p. 4), is to levy a tax on each unit of pollution emitted, a tax borne by the agent responsible for the negative externality. This method is referred to in the literature as the Pigouvian solution, in the sense that it was Pigou who was the first economist to suggest taxing polluters, or the principle widely popularized by the same literature of the "Polluter Pays", where the tax completes the price system and ensures the decentralization of the economy with pollution (Boemare, 2001, p. 31).

In this respect, Lévêque (1998) answers the question "*how can the regulator evaluate the monetary benefits of the clean-up action?*" by basing himself on the work of Faucheux and Noël (1995), who list the four main difficulties in such an exercise. We summarize the essence of their work in Table 1 below.

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

Table 1: Monetary valuation of clean-up benefits and consumer surplus

Difficulty	Main idea	Solution	Illustration
No market	There is no price that can serve as an approximation of the use value of the good. In the absence of a market price, neglecting the consumer surplus to obtain an approximate value of the use value of a good is tantamount to denying any economic value to the good in question.	Measuring the value in use therefore necessarily involves estimating the consumer surplus. - One way of doing this is to calculate the expenditure that the consumer makes to satisfy his need impacted by the negative extenuating effect. This sum is interpreted as an approximation of the consumer's willingness to pay in order to continue his activity.	This method, based on the observation of recreational expenditures, has led to the estimation, for example, that the Monteverdi nature reserve in Costa Rica would represent a surplus of about 500,000 dollars for the 15,000 tourists who visit it each year [OECD, 1995]. Taking into account the lifetime of the forest and a discount rate of 4%, the value of the 10,000 ha of the reserve reaches the figure of 125 million dollars.
Determining the value of non-use	Taking into account the value that the individual lends to a good independently of its use. In other words, this amounts to calculating an	In order to estimate this existence value, surveys must be conducted by asking people to express their preferences. The method used (called contingent analysis) is a kind of market research in which the product is a change in the environment (e.g. the creation of a nature reserve). Respondents are asked how much they	We learn that residents of the Chesapeake Bay area in the United States are willing to pay $34 each year for water quality compatible with swimming even though they do not practice this leisure activity,

	economic value of non-use	would be willing to pay for this hypothetical environmental change, or what they would be willing to accept in compensation if the change were not implemented	nor do they intend to do so in the future.
Consideration of future generations	The behavior of future generations cannot be observed nor can their willingness to pay or receive be probed	No solution proposed	Same as
The sincere revelation of preferences	People asked about their willingness to pay may engage in strategic free rider behavior	To avoid such manipulation of information, the public authority can set up a mechanism that encourages respondents to declare their true preferences. These incentive mechanisms are cumbersome to set up. More simply, the public authority can survey two identical samples of the population using a procedure that encourages overestimation of preferences and another that results in the opposite.	The authority then has a low valuation (L) and a high valuation (H). If the cost of producing the good is less than B, the rational public decision is to make the investment; it is to do nothing if the cost is greater than H; the indeterminacy remains only if the cost is between B and H.

Source: adapted by authors from Lévêque F. (1998), pp - 07 - 09

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

As we have seen above, the economic policy inspired by the Economies of Welfare was the target of a powerful and unique attack by Coase and the followers of his current who were at the origin of a new approach to external effects. Thus, Laffont (1975, p. 426), explains that Coase's idea is to conceive of a situation in which the polluter does not have to pay a tax, and prefers the solution whereby the agent is impacted by the negative effect, on the other hand, has to pay in order to obtain the reduction of the externality. Thus, it seems to Laffont (1975) that the "*polluter pays"* principle from the Pigouvian tradition may not lead to an optimum of production according to Coase (Ibid., p. 427), proposing instead that the public authorities identify common rights relating to the responsibilities of externalities, which may be called into question by negotiations between parties. In so doing, the said negotiations will make it possible to achieve a maximum value of production, driven by laissez-faire, which is much less costly according to Coase.

In this regard, Daudigeos and Valiorgue (2009, p. 6), remind us that the concept of external effects allows us to understand the social structure of the market and non-market relations that are built between the firm and its stakeholders in the same sequence. It is at this point that the authors identify two fundamental dimensions that make it possible to define the external effects that are not or only partially integrated into economic activity, as in Dales (1968), namely rivalry and exclusivity. These two dimensions, inspired in passing by the analytical perspective of the work on the theory of public goods, which constitutes, among other things, one of the variants of the theory of external effects, make it possible to better apprehend the different economic and social realities that are hidden behind external effects. In doing so, the authors identify three institutional conditions necessary for a voluntary assumption of responsibility for the internalization of negative externalities by firms in a Coasian world of bilateral transactions without state interventionism, demonstrating then that only one type of negative externality is potentially soluble in the CSR framework, under the market, technical and ethical conditions of particular goods. We propose to synthesize their conclusion in Table 2 below, which summarizes the main ideas, as well as Table 3, which summarizes the impact of rivalry on the importance of the three types of transaction costs from Coase's work.

Table 2: Institutional Conditions for Voluntary Externalities

Institutional conditions	Main ideas	Illustrations
The existence of market outlets that value the internalization of external effects	One of the essential conditions for a company to take responsibility for the external effects that it has previously left to its stakeholders is that it be able to defer all or part of the additional organizational and transaction costs associated with internalizing "social and environmental costs. There must therefore be market outlets for the company to be able to defer these additional costs and maintain a certain stability in its value creation process.	**Simple transactions:** in this first configuration, the beneficiary of the internalization of externalities is willing to pay for the improvement of his situation. **Dual transactions:** in this second configuration, a third party is willing to pay for the welfare that the internalization of an external effect generates for others. It requires a differentiation between the victims of the external effect and those who value their internalization, i.e. the development of an explanatory model with three actors: a polluter, a polluted person and a third party not concerned by the external effect but ready to pay for its internalization.
Technical conditions or low transaction costs	Externalities described as circumscribed and case-specific (exclusive) are theoretically soluble because a solvent demand is conceivable. But the existence of potentially solvent demand is not enough to guarantee the validity of a market treatment of externalities. For in certain situations, it is the very organization of markets that may pose a problem, without needing to mention the case of major externalities. The functioning of a market is not free; it does not	**The degree of rivalry allows us to distinguish two situations:** **Non-rivalry:** all affected stakeholders are affected in the same way. This regularity in the damage suffered leads to a reduction and relative stabilization of transaction costs. It is therefore possible to assess the level of degradation of the stakeholders' well-being and to set a level of compensation. **Rivalry: It is** much more difficult to commit to the signing of contracts since each contract is specific,

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

	take place without transaction costs, which can be prohibitive for the formation of markets.	which makes their drafting even more complex. The verification of the application of these contracts is also particularly complex. This situation contributes to considerably increase the transaction costs and limit the appearance of a market solution.
Ethical conditions or the social acceptability of markets	This point echoes the many debates surrounding the economic valuation of social and environmental damages. The search for compromise and its corollary, the commodification of life in order to evaluate the amounts on which the stakeholders will make transactions, is not without question.	**The "virtue market"** may in many situations be deemed immoral by many stakeholders who consider certain rights to be non-negotiable. Market transactions involving the internalization of externalities are inevitably embedded in a much broader institutional infrastructure that may in some situations prevent such a solution from emerging as politically and morally unacceptable. **A private benefit does** not automatically mean a positive social net product. If the technical and economic conditions are right for a profit-making internalization for the company, it may have no impact on the overall sum of the welfare of the parties involved.

Source: Adapted from Daudigeos & Valiorgue (2009), pp - 11 - 19

Table 3: Institutional Conditions for Voluntary Externalities

	Discovery costs	**Trading costs**	**Audit costs**
No Rival	It is enough to get in touch with a stakeholder to assess the extent of the degradation suffered by all stakeholders	Relatively low because there is consensus, proposal of a standard contract.	Relatively low because stakeholders' expectations are homogeneous
Rival	Contact with all stakeholders is required	Very important because it is necessary to negotiate with all the stakeholders	Very important because stakeholders' expectations are heterogeneous

Source: Daudigeos & Valiorgue, B (2009), pp – 17

2. Proposals for Measures and Tax Impact Studies Relating to Big Data

The personal data market is a critical component of today's economy, yet it has largely escaped the attention of the tax community. The only real tax analysis of the personal data market has been done by the international tax community in reports on the taxation of the digital economy more broadly. This section explores that analysis and explains how data transactions should be treated for tax purposes both internationally and globally.

2.1. Differentiating policy strategies for digital taxation

The digital economy we recalled, has been able to create new BMs based on the exploitation of personal data and has raised the issue of international taxation in connection with economic development. As a result, the international movement to lay the foundations of the international tax system based on the new DDBMs has become increasingly active (Thimmesch, 2016, p 156). Despite the divergence of positions of foreign organizations and countries, the need to introduce domestic policy increases when cooperation at the international level is lacking. Several studies have been conducted to analyze the policy network and to assist in decision-making. The results of these studies have shown, for the most part, that there are differences between domestic actors depending on the stakeholders in the tax decision. The EU suggested the notion of "Significant Digital Presence (SDP)" in the long term, "Digital Services Tax (DST)" in the short term, and the OECD suggested the principle of "Significant Economic Presence (SEP)" in the long term. It was

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

found that a cautious approach to decision-making and a thorough study of the political process is needed (Kim, 2019, p 45).

2.1.1. On the current state of taxes on digital services

In recent years, concerns have been raised that the current international tax system does not adequately reflect the digitization of the economy. Under current international tax rules, multinationals generally pay corporate taxes where production takes place rather than where consumers or, particularly for the digital sector, users are located. Yet some argue that, through the digital economy, companies implicitly derive income from users abroad but, without a physical presence, are not subject to corporate tax in that foreign country.
As such, a study by KPMG published in 2020 summarizes the development of taxation of the digital economy by the world, in a context where the challenge of taxing this economy has been clearly identified in the OECD BEPS initiative as Action No. 1: "*Addressing the tax challenges of the digital economy*". Indeed, at a time when intergovernmental groups, including the OECD, are trying to reach a consensus on the taxation of the digital economy, some countries are taking unilateral measures, such as the introduction of taxes on digital services. We will try in what follows, through table 4 and 5 below, to draw up a benchmark of the laws proposed, adopted, or rejected by the jurisdictions to which Morocco can be compared, by their GDP, namely 4 countries whose GDP is greater than that of Morocco (Chile, Egypt, Romania, and Vietnam) and 4 other countries whose GDP is greater than that of Morocco (Slovakia, Kenya, Tunisia, and Zimbabwe), without forgetting finally, France for all the very obvious economic, political and historical reasons. It emerges in a synthetic way that at the level of taxes leads the proposals ranged from the taxation of income to the provision of a digital interface allowing users to get in touch and interact with others such as the case of France establishing the rate of 3% to those drawn by non-residents from digital and e-commerce operations in Vietnam or finally to the gross income of the Tunisian digital market with a rate of 1.5%. On the side of indirect taxes, the legislation varied from a public consultation on the joint and several liability of online platform operators for the payment of VAT due by certain defaulting users of the platform such as France to an imposition of incompatible online platforms as unfavorable and subject to VAT on the commission charged to bring patient flows to doctors as an intermediary activity in Chile to finally be an obligation of non-resident sellers of radio, television and digital services to consumers in Zimbabwe register and collect VAT.

Table 4: Summary table of some direct taxes adopted or proposed in countries comparable to Morocco

Type of tax	Country	GDPBn	GDP Morocco	Status of the law	Date of last change	Type of layout	Rates	In line with OECD guidelines	Applicable tax base
Direct tax	France	2 75,25	23,52	Legislation enacted	01-Jan-19	TNS	3,0%	No	Share of taxable service revenues related to France after application of the "French digital presence" ratios to the corresponding worldwide digital service revenues : 1. Provision of a digital interface allowing users to contact and interact with others ("intermediary services"). 2. Provision of services to advertisers based on data collected from users ("user data-based advertising services")
	Chile	298,17	2,53	Rejection of a public announcement / proposal	(-)	TNS	10,0%	No	The August 2018 proposal to introduce a 10% digital tax on digital services provided by foreign platforms has been dropped
	Egypt	249,56	2,11	Public announcement / intention to implement	21-Sep-19	NC	NC	No	In its 2020 budget proposal, the Egyptian Ministry of Finance announced its intention to strengthen measures to tax the digital economy.
	Romania	239,85	2,03	Public announcement / intention to implement	23-May-18	TNS	NC	No	The Official Journal has published a decision approving the European Commission's proposals on the taxation of companies with a significant digital presence. However, no further steps have been taken to implement the proposals
	Kenya	89,21	0,76	Legislation enacted	07-Nov-19	Digital RMI	NC	No	Income earned through a digital marketplace (i.e., a platform that allows direct interaction between buyers and sellers of goods and services through electronic means) is taxable.
	Tunisia	39,91	0,34	Legislation enacted	01-Jan-21	TSN	1,5%	No	Gross revenues from the digital market
	Zimbabwe	26,13	0,22	Legislation enacted	01-Jan-20	TSN	3,0%	No	Detailed requirement to be determined by decree

Source: Adapted from KPMG, (2020)

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

Table 5: Summary table of some indirect taxes adopted or proposed in countries comparable to Morocco

Type of tax	Country	Status of the law	Date of last change	Type of layout	Rates	In line with OECD guidelines	Applicable tax base
Indirect tax	France	Legislation enacted	23-Dec-18	Obl. Declarative	NC	No	As of January 1, 2020, France has introduced a reporting requirement for online platforms
		Legislation enacted	05-Aug-19	VAT	NC	N/A	The French tax authorities have updated the administrative procedure clarifying the VAT treatment applicable to the public offering of digital money
		Legislation enacted	07-Jan-20	Obl. Declarative	NC	No	France has expanded the scope of data that online platforms must report to the French tax authorities to include French gross taxable receipts relating to transactions made on online platform users
		Bill / public consultation	07-Apr-20	VAT	NC	No	The French tax authorities have launched a public consultation on the joint and several liability of online platform operators for the payment of VAT due by certain defaulting platform users in France.
	Chile	Legislation enacted	15-Jun-20	Withholding Tax	NC	Yes	Effective June 1, 2020, Chile requires non-resident providers of digital services to Chilean consumers to register for and collect VAT. The circular includes the following: (1) a detailed explanation of the new digital services and taxable events triggering the application of VAT; (2) territorial criteria for assessing the tax; (3) rules on the interaction between VAT and withholding taxes on digital services; (4) rules on who is responsible for withholding and paying the tax; and (5) details on how the new simplified registration works
		Legislation enacted	28-Jul-20	VAT	NC	N/A	This is the VAT that applies to online platforms where patients are treated by doctors via video calls. The online platform is considered a taxpayer and is subject to VAT on the commission charged for bringing patient flows to the doctors as an intermediary activity
		Legislation enacted	22-Aug-20	Obl. Declarative	NC	N/A	On August 21, 2020, the Chilean tax authorities issued a resolution requiring banks to submit a quarterly payment card report identifying each payment to non-resident or Chilean domiciled entities via credit

							and debit cards and other payment systems. The report must include the international reference number, date, name and location of the foreign company, amount, currency and U.S. dollar equivalent, and other details.
	Egypt	Bill / public consultation	03-Jun-20	VAT	NC	Yes	On June 15, 2020, a draft amendment to the VAT law was published for consultation, which, if approved, would introduce, among other things, VAT obligations for non-residents conducting e-commerce transactions with Egyptian consumers
	Kenya	Legislation enacted	31-May-13	VAT	NC	Yes	Effective September 2, 2013, Kenya requires non-residents providing digital services to Kenyan consumers to register and collect VAT.
		Legislation enacted	09-Jun-20	VAT	NC	Yes	As of January 1, 2020, VAT is applicable to sales made via a digital marketplace. It is currently unclear whether sellers residing in Hownon will account for VAT. In addition, Kenya will extend the VAT self-assessment requirement under the reverse charge mechanism to non-VAT registered recipients of taxable imported services.
	Tunisia	Legislation enacted	27-Dec-19	Withholding Tax	3,0%	N/A	Starting January 1, 2020, a 3% digital tax applies to the sale of computer applications and digital services by non-resident companies. A decree to be published will set out the detailed requirements
	Zimbabwe	Legislation enacted	20-Jan-20	Obl. Declarative	NC	Yes	Effective January 1, 2020, Zimbabwe requires non-resident sellers of radio, television and digital services to consumers in Zimbabwe to register and collect VAT.

Source: Adapted from KPMG, (2020)

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

2.1.2. Political trends in international organizations

As illustrated by the different DDBMs and the different modes of value creation, any attempt to redefine the nexus from the perspective of domestic law, as well as treaty law, will, of course, be confronted with the question of how much domestic value creation or market participation must exist in order to conclude that taxation in the non-resident state is justified, the latter being, for example, the state of consumption, the state of residence of the users, or more generally, the state of destination or "*market*". Therefore, if profits are to be taxed *where value is created, it is* necessary to identify what that value is and how to measure it, before deciding where it was created. Indeed, three frequently observed characteristics of DDBMs are generally recognized, "*there is no consensus on their relevance and importance to where value is created and which stakeholder gets the credit for that value*" (OECD, 2018, p 3). This difference in perspective is clearly demonstrated in the OECD's 2018 Interim Report, according to which over 113 countries in the Inclusive Framework can be broadly divided into three groups, which we summarize in Table 6 below.

Table 6: The positions of the three groups of 113 countries in the OECD's inclusive framework

Group / (Standard bearer)	Position	Point of disagreement	Recommendation
1er Group (Great Britain)	Not in favour of any change in the tax system	The first group of countries shares the view that, taken together, certain features frequently observed in some DDBMs - in particular, the use of data and user participation - can lead to misalignments between the place of taxation of profits and the location in which value is created	Being generally supportive of the broad principles underlying the existing international tax framework, these challenges are, in this group's view, limited to certain DDBMs and can be addressed through targeted changes to existing tax rules, including a reconsideration of the rules relating to the allocation of profits and linkages.
2ème Group (France)	Favourable to global change	The second group of countries believes that the ongoing digital transformation of the economy and, more generally, trends associated with globalization present challenges to the continued effectiveness of the existing international tax framework for corporate profits,	These challenges are not exclusive or specific to MDDs, but concern the distribution of benefits as well as the issue of linkage.
3ème Group (Germany)	Status qo	The third group of countries considers that the BEPS package has largely addressed double non-taxation concerns, although these countries also stress that it is still too early to fully assess the impact of all BEPS measures	These countries are generally satisfied with the existing tax system and do not currently see the need for significant reform of international tax rules

Source: Adapted from OECD (2018), pp - 03

Since then, the call for new tax approaches to the digital economy has gained enormous political momentum over the past two years Kofler and Sinnig, (2019, p 180).

2.2. The Colin & Collin Report

The use of personal data in the digital economy remains the major challenge facing global taxation, as it provides another means for businesses to create value that is difficult to attribute to a particular activity or jurisdiction. For this reason, the commercialization of personal data has only been recognized by the literature following the publication of two reports that analyze more generally the global tax issues created by the digital economy, namely, on the one hand, the one published by the OECD in 2015, which we just mentioned, and on the other hand, the famous report commissioned by the French government in 2012, published in January 2013 and specifically identified personal data as the "*common denominator*" and "*core of the value creation*" in the digital economy. The French report, provides a relatively more robust analysis, offering to detail how the modern economy has been built around the "*regular and systematic control*" of consumers who receive no monetary consideration for the data they generate Collin and Colin, (2013, p 73). The authors also explain to us that this data is "*free or nearly free*" to data aggregators, as it is collected as a "*positive externality*" of an online application that can be provided by its developers at near-zero marginal cost (Ibid, p 49). The report's emphasis on these factors results in the adoption of a position that consumers are treated as unpaid workers - not as a stakeholder in the value creation of which they are the source (Ibid, p 2, 49-54, 79, 102, 114 - 116).

2.2.1. On the non-apprehension of the data from Free Work by the tax authorities

The report has the merit of pushing the reasoning in order to explore all the tracks that can be outlined to reintegrate the "*Free Work*" of the Net users in the economic and incidentally fiscal logic, given that the phenomenon of the "Digital Labor" is not apprehended by the taxation, while concluding, however, that none of these concepts correspond to the exchange of personal data in a practical way. Indeed, the authors point out that the OECD's approach of distinguishing intangible assets from mere market conditions or other circumstances that are not likely to be owned, controlled, or transferred by a single company, creates vagueness and prevents any consideration that might lead to accounting or tax law to consider, for example, a community of users and the free collaboration it provides to companies, as an asset of that company (Ibid, p 79 - 84).

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

The authors were thus precursors, considering that comics constituted a real challenge for taxation, in the sense that the mass represented by them is in fact only slightly extrapolated in accounting, because the latter does not offer sufficiently reliable instruments to identify and quantify such wealth, often fortuitous as to its occurrence and ephemeral as to its durability (Ibid, p 81). This being said since personal data are not intangible assets in the strict sense of the word, the authors suggest that we refer to accounting regulations, even though they admit that, as the law stands, the possibility of considering the integrity of personal data collected by a company as an asset is not always obvious, for two main reasons: on the one hand, given the legal vacuum regarding the notion of ownership of personal data, although this can be ascertained in case of the existence of a license for the exploitation of the data by the companies or in case of evidence observing the absence of data portability. On the other hand, given that the accounting regulations only consider that an intangible asset can be entered in the balance sheet for the elements obtained from the business, even though it is separately transferable (Ibid, p. 84).

The report then explores ways of reconstructing the reality of an economic exchange consisting of exchanging a supply of data for a supply of service, by extrapolating it to the logic, which is not alien to accounting and tax law, of breaking down two operations that have been concatenated to escape any monetary flow, just as there can be a direct link between the delivery of a good invoiced at a price below the market price or almost free of charge and the value of a service that the buyer is obliged to provide to the other party, thus escaping the VAT that is supposed to be charged on the sale, which must be established on the current price of the good. This, therefore, is provided for by the current tax regulations, which include in the scope of this tax any hypothesis of barter between goods and services compensated without being invoiced, and thus gives the tax authorities the power to proceed to the decomposition of the two operations, to value them and to tax them (Ibid, p 85). It might also be possible to recharacterize the collection of personal data as an acquisition of an intangible asset from another person, in which case it could no longer be interpreted as mere market terms but rather as a new fixed asset.

Finally, the authors believe that the collaboration obtained from users could well be examined as benefiting the company, not as a simple passive collection of a free resource, but rather as a real capacity of attraction for the company, based on the new quantitative approach to venture capital investment, quoting a famous seed fund executive in 2009, who said that the "traction" of increasing the number and intensity of users of a company's services was "the

new intellectual property" that must be taken into account in the valuation of early-stage digital companies (Ibid, p 86).

2.2.2. The introduction of a tax incentive for the collection and use of personal data

With the above, Colin, P & N Colin, N (2013), thus make the diagnosis of a tax system that is struggling to keep pace with the changes in the digital economy, both in terms of national regimes and at the international level, with a view to the incomplete harmonization from which value-added tax suffers, due in particular to tough competition between member states of international organizations, the OECD, the EU, and the WTO, or the predominance of the principle of territoriality that governs corporate income tax, where the notion of exploitation is understood as the usual exercise of activity on the national territory, thus presupposing a physical presence within the framework of operations forming a complete commercial cycle on this territory, rarely verified in the activities characterizing the digital economy. These attributes have also been adopted by bilateral tax treaties to eliminate double taxation, in particular through the concepts of fixed business installations, permanent establishments, and dependent agents, all of which put forward criteria of tangible presence of premises and persons (Ibid, p 66 - 68). The report goes on to refer to proposals for measures that are often inappropriate, uninspired, or uninformative for Latin law regimes. Indeed, the authors mention digital taxation projects that focus on certain sectors or BMs rather than others, including the tax on online advertising, due by advertising service providers and based on the amounts, excluding agency commissions and VAT, for a rate of 0.5% of the fraction of the base between 20 and 50 ME and 1% beyond. However, this tax, which is intended to be the counterpart of the taxes on advertising broadcast by radio and television and the tax on the expenses of advertisements by means of printed advertisements, announcements, and insertions in free newspapers for the French case[2], present, according to our authors several disadvantages, of which notably, that they concern only one sector and consequently only one BM of the digital economy, in addition to the fact that they concern only the most mature markets dominated essentially by a few very large companies, all American, and finally that their collection is subordinated to the goodwill of the tax administrations of the advertisers' State (Ibid, p 72 - 74).

A similar and equally controversial proposal was introduced in the 2018 PLF in Morocco, which, according to circular note No. 728, was intended to improve the system relating to on-screen advertising and, with a view to adapting to the development of new information technologies in the field of

[2] *Art. 302 - Bis, 302 - Bis KG and 302 - Bis MA of the French General Tax Code*

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

advertising, by amending and supplementing Articles 251-b, 254 and 183-B of the CGI in order to broaden the notion of "*screen advertisements*" to all advertisements broadcast on all types of digital screens, to simplify the declaration system by providing for a single contact person for the filing of declarations and the payment of duties, and finally to introduce a solidarity measure for the payment of stamp duties between the parties concerned. A provision that has caused an outcry from several professional organizations including the Moroccan Federation of Newspaper Publishers (FMEJ), the Group of Advertisers of Morocco (GAM), and the Union of Consulting Agencies in Communication (UACC), as underlined by Mounir Jazouli, president of the GAM "*Today more than ever, the screen tax is a major issue for all actors of the Moroccan advertising market, advertisers, communication agencies, electronic press, and digital content publishers*".[3] Colin & Colin (2013, p 75 - 79), finally point out the developments in the US, although they are significant, do not find in the eyes of our experts the source of lessons to countries of Latin law such as France, and consequently Morocco, in particular, because the US has chosen since the early days of the digital economy to prohibit any taxation related thereto, supported by the *Internet Tax Freedom Act.* That said, the evolution of the American position since 2008 around the extension of sales taxes to transactions conducted over the Internet, and the tug of war that has opposed mainly Amazon to the states of Texas, Pennsylvania and California, the *cradle of* the digital economy, According to the report, this is a political lesson rather than a fiscal one, as the US is normalizing its situation in relation to the rest of the world, but also because such a development shows that the digital economy does not die from being subject to new taxes. After having drawn up this picture of the inadequacy of the national and international tax framework, the researchers propose, at the very end of their report, a few proposals that are articulated around two major axes, having inspired in passing, the inclusive framework of the OECD/G20, in particular the power of taxation on the economic bases linked to personal data resulting from the free work of users, or measures that can be taken at the national level through the introduction of an incentive tax on data collection (Ibid, p 121 -151), which we summarize in Table 7 below.

[3] *Interviewed by Khennach Kaoutar, and published in Al Bayane on 08/02/2018*

Table 7: Proposed tax measures from the Collin, P & Colin, N report (2013) (*)[4]

Objectives of the proposal	Encourage taxpayers to behave in a manner consistent with public interest objectives	
	Converge DDBMs and counter-models based on data protection and data return to users.	
Details of the proposal	**Material and territorial scope of application**	All companies, regardless of their State of ES, which regularly and systematically exploit and monitor personal data from the free work of users located in that State.
	Tax threshold	The tax would only apply beyond a threshold expressed in number of users to be determined in the sense of not handicapping startups and facilitate the administration of the tax by the AF.
	Rate	In the form of a unit rate per user tracked, based on a grid of behavior with regard to the objectives pursued by the imposition, favoring those that comply with good management practice of data exploitation from those that do not respect the privacy rights of users
	Declarative provisions	Double declarative basis, on the one hand the companies would quantify themselves under the control of the AF the volume of data they collect and exploit, as well as the responsibility to establish by means of external audits by independent third parties following the example of the CAC.
Scope of application	**Hypothesis 1**	The most unanimous restriction would be to take into account only data that is collected through regular and systematic monitoring of user activity
	Hypothesis 2	It would consist in using the status of host in the sense of the directive 2000/31/CE (*)
	Hypothesis 3	The nature of the data observed, submitted by the user or inferred from further processing

[4] *"The hosts are defined as "the natural or legal persons who ensure, even free of charge, for public availability by services of communication to the public online, the storage of signals, written images, sounds or messages of any kind provided by recipients of these services,"* Collin, & Colin **(2013)**

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

Tax audit	**Appointment of a fiscal representative**	Institution of an obligation to appoint a tax representative in the State of destination
Benefits	**Short term solution**	It can be discussed and implemented independently of any international negotiation while resonating with the discussions that are opening up in the framework of the OECD/G20 proposals
	Virtuous source of constraint	For companies that make money from the data collected from their customers, like an ecological tax.
Securing digital sovereignty	The proposal of this tax would imply that all digital companies collecting personal data in a State must be directly accountable to the public authorities of this State represented by its arm acting in terms of personal data protection of the citizens of this State. The CNDP for the Moroccan case must therefore remain a direct and permanent interlocutor for these companies, otherwise an irreducible distance will be created between the large companies concerned and the Moroccan state.	

Source: Adapted from Collin, P, & Colin, N (2013), pp - 121 - 142

3. Conclusion

We live in an increasingly digitised world where 'data-driven activities' are fast becoming the economic mainstream. A puzzling paradox arises that there is little or no data available to economic and regulatory decision-makers around the world to appreciate the importance of data to the economy Mandel (2012, p 1). In any case, the end user does not receive any direct remuneration for the raw material he supplies. He is de facto excluded from the value chain of the (WB) of which he is the main stakeholder, and even, according to the think tank GenerationLibre (2018, p 8), the victim of a 'plundering in good standing' of his data. It is in this sense that we humbly believe that our research work has the particularity of going off the beaten track, by presenting Big Data from another angle, different from that of the Buzzword, by subjecting its fiscal matter to a transdisciplinary perspective, mobilising, among other things, a rich and dense theoretical corpus, notably that of externality or impact studies in the fiscal field, the literature of which is beginning.

This article aims to guide us in our review of the literature on the theory of externalities, from its origins to the instruments it proposes to correct market failures, whether administrative or fiscal, or the intentional conditions for the voluntary assumption of responsibility for external effects by economic actors. This further strengthened our choice of the Pigouvian solution as a corrective tool for the negative externalities of the exploitation of DDBM as mentioned in the previous chapter. Finally, we closed our theoretical corpus with the contribution of tax impact studies dealing with the digital issue more globally to arrive at the contribution of the essential work of Collin, N, and Colin, N (2013) which has the merit of specifically identifying personal data as the "common denominator" and the "heart of value creation" in the digital economy.

We therefore believe that the mobilisation of such theoretical bases will allow us to question our conception of the creation and sharing of value, and will thus push our traditional understanding of the firm and of the Common Good by collecting, in a more exhaustive way, all the dimensions of value cited by the literature in order to contribute to the implementation of tax measures adapted to the Moroccan context. Thus, it provides a first insight into the taxation of BDs in a developing country strongly impacted by the culture of subjection in the elaboration of its own tax decision.

Finally, it should be recalled that several limitations to our study are to be noted, given that at the time of writing tax reform in Morocco is reaching its climax with the development of the new legal framework of the national tax policy materialized by the draft framework law 69-19 on tax reform. Indeed, such a bill constitutes, in itself, a limit and a possible opening to the scope of our research. Firstly, this reform is a limitation, given the priorities (Article 2) and fundamental objectives (Article 3) that it sets for itself, which do not include the regulation of markets for greater equity between the digital economy and the national economy, the aim of the measure adopted by our conceptual model. It could even encourage the digital economy via priority measures favouring the development of start-ups operating in the NT field (Article 4-6°-1°).

Finally, the ultimate limit to our work would be the one imposed by the ongoing talks at the G20 on the GAFA tax, which, once established, will bury for a while any attempt at a tax on the exploitation of personal data for a global flat tax that is unconcerned with the negative externality of any DDBM, regardless of its size, because today you do not need to be Amazon or Google to take advantage of databases. Continuous technological progress has democratised the use of data by making it accessible to almost every company in the world of any size.

However, this work opens up several avenues for future research. Firstly, we propose to further explore the key activities and key data dimensions of DDBMs in the light of a survey of Data Scientists, whose numbers are increasing daily in Morocco. This would allow us to gain external validity and to test the Big Data analysis capabilities, data practices and analysis and data

ISSN: 2658-8455
Volume 3, Issue 6-1 (2022), pp. 324-350.

IJAFAME
International Journal of Accounting, Finance, Auditing, Management & Economics

sources collected and/or exploited specifically by DDBMs of Moroccan origin. In addition, we suggest establishing studies looking at the analysis of tax decision making in Morocco, this time integrating representatives of international institutions, or compiling the responses to the public consultation conducted by the OECD on the issue. While the notion of digital taxation is slowly emerging in the management literature, the theoretical framework of management dealing with the taxation of negative externalities of this economy remains largely ignored in the literature.

References

(1). Becker, J & English, J (2019), "Taxing Where Value Is Created: What's 'User Involvement' Got to Do with It?", Intertax Vol. 47, Nº. 2, 2019, (Our translation)
(2). Berta, N (2008), "Le concept d'externalité de l'économie externe à l'interaction directe" : quelques problèmes de définition", Documents de Travail du Centre d'Economie de la Sorbonne,
(3). Bloch F. & Demangez G. (2015), "Taxation and Privacy Protection on Internet Platforms", in FranceStartégie (2015), Ibid, (Our translation)
(4). Bouayad, A. N & al (2013), "La fiscalité verte au Maroc : Etat des lieux et perspectives", in "Evolution des cadres théoriques et institutionnels de l'économie verte", Université Hassan I -Settat, Faculté Polydisciplinaire de Khouribga
(5). Bourreau M. & al (2015), "Digital Platforms, Advertising and Taxation", in FranceStartégie (2015), Ibid (Our translation)
(6). Caruana, N (2017), "Environmental taxation: for a new definition of the notion of double dividend", Lavoisier | "Gestion & Finances Publiques "2017/3 N° 3 Chignard S. & Benyayer L.D. (2015), "DATANOMICS", the new business model of data, FYP Editions,
(7). Collin. P & Colin, N. (2013), Mission d'expertise sur la fiscalité de l'économie numérique, Rapport au Ministre de l'économie et des finances, au Ministre du redressement productif, au Ministre délégué, chargée des petites et moyennes entreprises, de l'innovation et de l'économie numérique
(8). Connon D. & Diankoy, S (2018), "Tax policy should recognize the true value of user data", WorldBank blogs, , [Online], posted 27/12/2018, accessed 12/04/20189, [URL]: https://blogs.worldbank.org/developmenttalk/tax-policy-should-recognize-true-value-user-data (Our Translation)
(9). Cornu, G (2001), "Vocabulaire juridique", Paris, Press Universitaires de France,
(10). Cremer J. (2015), "Taxing network externalities", in FranceStartégie (2015), Ibid
(11). Daudigeos, T. & Valiorgue, B (2009) " L'internalisation des effets externes négatifs est-elle possible dans le cadre de la RSE ? ", paper, XVIIIth International Conference on Strategic Management,
(12). De Filippi, P. (2013), "Taxing the cloud: introducing a new taxation system on data collection?", Internet Policy Review, May 2013 | Volume 2 | Issue 2, (Our translation)
(13). De Sadeleer N. (2005), "Environmental principles: from political slogans to legal rules", UK, Oxford University press, (Translation by Vedrine C (2011))
(14). Diemer, A (2009), "Fundamentals in the framework of sustainable development", Module 1: Economics - File 2 Environment
(15). EU, (2017), "EU Comm'n, Communication from the Commission to the European Parliament and the Council. A Fair and Efficient Tax System in the European Union for the Digital Single Market," COM, 547 final, (Our translation)

(16). FranceStartégie (2015) "Digital taxation: what lessons can be learned from theoretical models?" Analysis Note No. 26, March 2015
(17). GenerationLibre (2018) "My data is mine, for a patrimoniality of personal data", Report, January 2018,
(18). Grolleau, G & Salhi, S (2009), "Externality and environmental transaction two sides of the same coin?" RURAL ECONOMY 311/MAY/JUNE, 09
(19). Houstiou, R, (2007) " Vers un principe général du droit de l'environnement : le principe de protecteur payeur ", in Mélanges Prieur, Pour un droit commun de l'environnement, Dalloz,
(20). Jemmar S. (2010), "l'évaluation des biens et services en droit fiscal", @ L'Harmattan,
(21). Kim, J. Y (2019) '디지털 과세(Digital Taxation)에 대한 정책전략의 차별성, 분석 김지영 서울과학기술대학교 IT정책전문대학원 공공정책전공 박사과정', Journal of Digital Convergence Vol. 17. No. 12,
(22). Kofler, G & al (2018), "Taxation of the Digital economy: 'Quick Fixes' or Long-Term Solution?", European Taxation December 2017, IBFD, (Our translation)
(23). Kofler, G & Sinnig, J (2019), "Equalization Taxes and the EU's 'Digital Services Tax'", INTERTAX, Volume 47, Issue 2, (Our translation)
(24). KPMG, (2020), "Taxation of the digitalized economy", Developments summary, updated on 27/10/2020
(25). Lévêque F. (1998), "La réglementation des externalités", Chapter 2 of the book "L'économie de la réglementation", Editions La Découverte - Collection Repères,
(26). Leviels M. (2015), "Intangible assets: tell me your use and I will tell you your price The valuation and accounting and tax treatment of databases Badwill accounting and tax treatment of the database industry", in "Intellectual property & the digital transformation of the economy" Expert insights, NPI, 2015,
(27). Madsbjerg, S (2017), "It's Time to Tax Companies for Using Our Personal Data", The New York Times, [Online], posted 14/11/2017, accessed 05/05/2018, [URL]: https://www.nytimes.com/2017/11/14/business/dealbook/taxing-companies-for-using-our-personal-data.html (Our translation)
(28). Mandel M. (2012), "Beyond Goods and Services: The (Unmeasured) Rise of the Data-Driven Economy", Policy Memo, PPI, October 2012.
(29). OECD (2017), "Meeting the Tax Challenges of the Digital Economy, Action 1 - Final Report 2015, Project.
(30). OECD, (1972), "Recommendations on Guidelines for International Environmental Economics", Paris, 26/05/72,
(31). OECD, (2010), "Taxation, Innovation and the Environment",
(32). OECD, (2018), "Brief on the tax challenges esarising from digitalisation" interim report 2018, (Our translation)
(33). OECD/G20 on Tax Base Erosion and Profit Shifting", OECD Publishing, Paris.
(34). Perez, P (2014), "Internet, tax evasion at very high speed", After Tomorrow, 2014/1, n° 29, NF, pp - 37