



# The Implications of Online Platforms and Technology for Taxation

Editor: **Dennis Weber**

**IBFD**

# The Implications of Online Platforms and Technology on Taxation

## Why this book?

Societies around the globe are evolving towards a model that, among other elements, will be heavily based on online platforms and new technologies such as artificial intelligence and blockchain. This transition towards a more platform-based and technology-powered society has been accelerated by the COVID-19 crisis. Pursuant to historical evidence, every time there has been a major technological change or global crisis, the tax system has evolved accordingly. Therefore, the evolution towards a platform-based and technology-driven society will also have a significant impact on the design and structure of 21st-century tax regimes. Indeed, this impact is already becoming apparent in certain areas of current systems, creating an urgent need to design tax rules that are easy to comply with, difficult to circumvent and respectful of taxpayers' fundamental rights.

This publication is composed of an introduction and nine chapters written by established and rising scholars from all around the globe. It comprehensively discusses the implications of online platforms and technology on taxation and taxpayers' rights. The purpose of this book is to provide academics, tax authorities and practitioners with a comprehensive examination of issues related to platforms' tax-reporting obligations in the field of direct and indirect taxation (e.g. DAC7 and VAT); the legal status of digital workers and its income tax implications; the challenges and opportunities created by distributed ledger technologies (including blockchain) for tax systems; the tax implications of virtual currencies, crypto assets, NFTs and DeFi; and the need for explainable AI in tax law. The book is based on the presentations made during a conference organized by the CPT project of the Amsterdam Centre for Tax Law (ACTL) of the University of Amsterdam (UvA) together with the Group for Research on European and International Taxation (GREIT) in Amsterdam on 7 and 8 April 2022.

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# **The Implications of Online Platforms and Technology for Taxation**

Editor:  
Dennis Weber



IBFD

*Visitors' address:*

Rietlandpark 301  
1019 DW Amsterdam  
The Netherlands

*Postal address:*

P.O. Box 20237  
1000 HE Amsterdam  
The Netherlands

Telephone: 31-20-554 0100

Email: [info@ibfd.org](mailto:info@ibfd.org)

[www.ibfd.org](http://www.ibfd.org)

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This book is the result of the cooperation between the Group for Research on European and International Taxation (GREIT) and the CPT project of the Amsterdam Centre for Tax Law (ACTL) of the University of Amsterdam (UvA).

### **About the GREIT**

The GREIT comprises a network of academics specialized in EU and international tax law. It conducts independent expert research on the development of EU and international taxation.

For more information, *see* the website of the GREIT, linked on the ACTL website ([www.actl.uva.nl](http://www.actl.uva.nl)).

### **About the CPT project**

This book is part of the project “Designing the tax system for a Cashless, Platform-based and Technology-driven society” (CPT project), a research initiative of the ACTL of the UvA. Working from the conviction that society is in the process of transitioning to a new economic model, the CPT project examines how tax systems can be designed and structured for a society based primarily on cashless payment methods, online platforms and digital technologies, such as artificial intelligence and blockchain. The ultimate goal is to arrive at concrete recommendations that not only help different stakeholders (such as governments and commercial organizations) address problems under current tax systems and/or introduce structural tax reforms, but also provide guidelines and/or minimum standards for the redesigning of modern tax systems.

As an independent and inclusive initiative with a strong impact on society, the CPT project is financed with UvA funding and funds provided by external stakeholders (i.e. businesses and governments) who are interested in supporting academic research to design fair, efficient and fraud-proof tax systems.

Stakeholders participating in and financing this project include the private commercial organizations Ernst & Young (EY), Gatti Pavesi Bianchi Ludovici, Loyens & Loeff, Maisto e Associati, &Partners, Microsoft, Netflix and NEXI Group. Other organizations supporting this initiative are the Dutch Association of Tax Advisers (NOB) and the Dutch Branch of the International Fiscal Association (IFA).

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Part of the CPT project is also financed by the Netherlands legal research agenda 2019-2025 on Digital Legal Studies, and the project forms part of Amsterdam Law School's "Digital Transformation of Decision-Making" initiative.

Other (non-commercial) partners of the CPT project are the University of Cape Town (UCT) in South Africa and Chulalongkorn University in Thailand, as well as the tax authority of the Autonomous City of Buenos Aires (AGIP).

For more information, *see* the website of the CPT project, linked on the ACTL website ([www.actl.uva.nl](http://www.actl.uva.nl)).

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## Table of Contents

<b>Foreword</b>		xvii
<b>Introduction:</b>	<b>Reflections about the Implications of Platforms and Technology for Taxation and Taxpayers' Rights</b>	1
	<i>Raffaele Russo</i>	
0.1.	Technology and platforms over the last decades	1
0.1.1.	Web 1.0	2
0.1.2.	Web 2.0	3
0.1.3.	Web 3.0	3
0.2.	Implications of technology developments for taxation	4
0.2.1.	Web 1.0: The Ottawa principles	4
0.2.2.	Web 2.0: The end of bank secrecy and the BEPS Project	5
0.2.3.	Web 3.0: A crypto tax system?	5
0.3.	Non-conclusions	6
Part 1		
Online Platforms, VAT Collection and Reporting Obligations		
<b>Chapter 1:</b>	<b>Tax Reporting by Online Platforms: Operational and Fundamental Implications of DAC7 and the OECD Model Rules</b>	9
	<i>Juan Manuel Vázquez and Nevia Čičin-Šain</i>	
1.1.	Introduction	9
1.2.	The OECD MRs and DAC7	17
1.2.1.	Why were the rules adopted?	18
1.2.1.1.	Lack of transparency regarding platform sellers' activities and income	18
1.2.1.2.	The need for harmonization as a result of the proliferation of unilateral reporting requirements	19



## Table of Contents

---

1.2.1.3.	The limitations of both domestic regimes (territoriality) and existing international administrative cooperation legal frameworks	20
1.2.2.	What do the rules involve?	22
1.2.3.	Who must comply with the rules?	22
1.2.3.1.	Platforms, POs, excluded POs and RPOs	23
1.2.3.2.	Relevant activities	27
1.2.3.3.	Reportable and excluded sellers	29
1.2.4.	How must the rules be complied with?	30
1.2.4.1.	Due diligence procedure	31
1.2.4.1.1.	Collection of seller's information (Step 1)	31
1.2.4.1.2.	Verification of seller information (Step 2)	32
1.2.4.1.3.	Recordkeeping (Step 3)	33
1.2.4.2.	Reporting (Step 4)	34
1.2.4.3.	Exchange of information (Step 5)	37
1.2.5.	What are the sanctions for non-compliance?	38
1.2.6.	When do the rules enter into force?	39
1.3.	Operational and fundamental implications of the rules	40
1.3.1.	Operational issues	41
1.3.1.1.	Interpretation of DAC7 and Member States' legislation transposing it	41
1.3.1.2.	Problematic definitions in DAC7	44
1.3.1.2.1.	The term "platform"	44
1.3.1.2.2.	The term "personal service"	48
1.3.1.2.3.	The term "excluded sellers"	50
1.3.1.2.4.	The term "consideration"	50
1.3.1.2.5.	The terms "qualified non-Union jurisdiction" and "qualified non-Union platform operator"	51
1.3.1.3.	Impact on businesses and governments	52
1.3.2.	Fundamental questions	54
1.3.2.1.	Necessity, effectiveness and efficiency of DAC7 rules	55
1.3.2.1.1.	DAC7 and VAT reporting by PSPs	56
1.3.2.1.2.	DAC7 and VAT recordkeeping and reporting via electronic interfaces	58
1.3.2.2.	What is the impact of developments regarding the "status of platform workers" on the rules?	61
1.3.2.3.	Do these types of reporting obligations respect fundamental rights?	66
1.3.2.3.1.	Freedom to conduct business	67

1.3.2.3.2.	Property rights	68
1.3.2.3.3.	Privacy and data protection rights	71
1.3.2.4.	Are these types of reporting obligations compatible with the EU fundamental freedoms?	75
1.3.2.5.	Are the reporting rules proportional?	80
1.3.2.6.	When considered collectively, do the several reporting obligations imposed on POs contravene the proportionality principle as general principle of EU law?	82
1.3.2.7.	Fairness: Should the “deputization of platforms” by tax administrations be compensated somehow?	84
1.4.	Conclusion	86
<b>Chapter 2:</b>	<b>Secure Digital Reporting Requirements to Tackle EU VAT Fraud</b>	91
	<i>Marie Lamensch, Sascha Jafari and Marta Papis-Almansa</i>	
2.1.	Introduction	91
2.2.	The transitional system and VAT fraud	93
2.2.1.	A transitional VAT system	93
2.2.2.	VAT fraud	94
2.3.	DRRs as a means to improve compliance and combat fraud	98
2.3.1.	Functioning of DRRs and their forms and benefits	98
2.3.2.	DRR as a tool to combat fraud	100
2.3.3.	DRR as a tool to facilitate compliance	101
2.3.4.	Evidence from other jurisdictions	102
2.3.5.	Reporting models and harmonization efforts of the European Union	104
2.4.	Proposal for a DRR++ system for intra-Community transactions	108
2.4.1.	The basic institutional framework for the intra-Community DRR system	108
2.4.2.	Ensuring interoperability and efficiency	111
2.4.3.	Ensuring the confidentiality of the data	112
2.4.4.	Ensuring the protection of taxpayers’ rights	114

## Table of Contents

---

2.4.4.1.	Compatibility of the DRR as such with the established EU legal framework for the protection of human rights	114
2.4.4.2.	The impact of the DRR on the other procedural and material tax law rules in the light of the rule of law principle	118
2.4.4.3.	Compatibility of the DRR and the use of it by tax administrations with the fundamental principles underlying the EU VAT system	119
2.5.	DRR and the 2017 definitive system proposal	120
2.6.	Conclusion	122

### Part 2

#### Online (Labour) Platforms and Corporate Taxation

<b>Chapter 3:</b>	<b>Digital Labour Platforms and Digital Workers: International Tax Implications</b>	125
	<i>Svitlana Buriak and Annabelle Gawer</i>	
3.1.	Gig workers, digital labour platforms and algorithmic management: What does it have to do with international taxation?	125
3.2.	The status of digital platform workers in labour law: Global developments	129
3.3.	Corporate tax implications of the quasi-employee status of platform workers	135
3.3.1.	Alternatives for business and market presence and their tax consequences	135
3.3.2.	The OECD Pillar One solution to address the digital economy	138
3.3.3.	The treatment of functional integration and economic dependency in international tax law: Seeking coherence	144
3.3.3.1.	Substance-based carve-out under the GloBE rules	144
3.3.3.2.	CFC rules	148
3.3.3.3.	Source taxation of business income	150

3.4.	On-demand platform-mediated work: A tax response – New variant of PE and profit allocation rules?	152
3.5.	Conclusions	155
<b>Chapter 4:</b>	<b>Flexibility, Mobility and Automation of Labour under Article 7 of the OECD Model? A First Conceptual Exploration</b>	159
	<i>Daniel Smit</i>	
4.1.	Introduction	159
4.2.	Tax treaty corporate residency and the labour factor	161
4.2.1.	What role does “labour” play when determining tax treaty corporate residency?	161
4.2.2.	How do new forms of labour affect the determination of the place of effective management?	163
4.2.2.1.	More flexible forms of labour (e.g. online outsourcing)	163
4.2.2.2.	Increased acceptance of remote working (e.g. remote board of directors)	164
4.2.2.3.	Automation (e.g. “robots in the boardroom”)	166
4.3.	PE and the labour factor	167
4.3.1.	What role does “labour” play when determining the presence of a (dependent agency) PE and attributable profits?	167
4.3.1.1.	The (dependent agency) PE concept	168
4.3.1.2.	Profit attribution	169
4.3.2.	How do new forms of labour affect determining PE nexus/PE profit attribution?	170
4.3.2.1.	More flexible forms of labour (e.g. online outsourcing)	170
4.3.2.2.	Increased acceptance of remote working (e.g. foreign home office)	171
4.3.2.3.	Automation	174
4.4.	Conclusion	175

Part 3  
The Implications of Distributed Ledger Technologies  
(including Blockchain) on Tax Systems

<b>Chapter 5:</b>	<b>Blockchain Technology and the Opportunities for Taxation</b>	179
	<i>Dennis Post and Claudio Cipollini</i>	
5.1.	Introduction	179
5.2.	The basics of blockchain technology	181
5.2.1.	Blockchain architecture	181
5.2.2.	Types of blockchain networks	183
5.2.3.	Key features	185
5.2.4.	Associated tools and functionalities	188
5.3.	The stakeholders' perspectives	191
5.3.1.	The tax administration's perspective	193
5.3.2.	The taxpayer's perspective	194
5.3.3.	The ecosystem perspective	195
5.4.	Tax scenarios for blockchain implementation	196
5.4.1.	Disparate data	198
5.4.2.	Multiple parties in a complex ecosystem	198
5.4.3.	Multiple versions of the "truth"	199
5.4.4.	Lack of trust between parties	200
5.4.5.	Lack of security in transactions	201
5.4.6.	Multiple processes carried out on a manual basis	201
5.5.	The empirical experience	202
5.5.1.	Exchange of taxpayers' information	203
5.5.2.	Withholding tax	207
5.5.3.	Transfer pricing (TP)	210
5.5.4.	VAT	212
5.5.5.	Customs	216
5.5.6.	Excise	219
5.6.	Discussion of the results and areas for future research	220
5.7.	Conclusions	225

---

Part 4		
Virtual Currencies, Cryptoassets, NFTs and Other Implications of De-Fi for Tax Systems		
<b>Chapter 6:</b>	<b>Beyond <i>Hedqvist</i> (C-264/14): The Characterization of Cryptoassets under European VAT</b>	229
	<i>Giorgio Beretta</i>	
6.1.	Introduction	229
6.2.	<i>Hedqvist</i> (C-264/14)	232
6.3.	VAT and cryptoassets after <i>Hedqvist</i> (C-264/14)	236
6.4.	Legal characterization under European VAT	240
6.5.	The VAT characterization of cryptoassets	243
6.5.1.	Cryptoassets as pure means of payment	243
6.5.2.	Cryptoassets as services, goods or vouchers	245
6.5.3.	Cryptoassets as electronically supplied services or intangibles	248
6.5.4.	Cryptoassets as negotiable instruments, currencies or securities	251
6.6.	VAT vs legal characterization of cryptoassets	253
6.7.	Conclusion	256
<b>Chapter 7:</b>	<b>Direct Taxation Aspects of Cryptoassets</b>	259
	<i>Luisa Scarcella</i>	
7.1.	Introduction	259
7.2.	Different types of cryptoassets and connected activities	260
7.2.1.	Classifying cryptoassets based on their function	260
7.2.2.	Key activities and stakeholders	263
7.2.2.1.	Mining	264
7.2.2.2.	Decentralized autonomous organizations (DAOs)	267
7.2.2.3.	Crypto exchanges	268
7.2.2.4.	Crypto wallets	269

## Table of Contents

---

7.3.	Taxable events and different types of direct taxes questions	270
7.3.1.	Creation of cryptoassets	271
7.3.2.	Acquisition of cryptoassets	272
7.3.3.	Disposal of cryptoassets	273
7.4.	Different types of countries' responses	274
7.5.	Conclusions	278
<p>Part 5 Explainable AI in Tax Law</p>		
<b>Chapter 8:</b>	<b>Explainable AI and Taxation: A Real-Life Application</b> <i>Benjamin Alarie and Anthony Niblett</i>	283
8.1.	Introduction	283
8.2.	A hypothetical problem	288
8.3.	An AI solution	291
8.3.1.	Quality data and predictive algorithms pave the way for a solution	291
8.3.2.	Applying the solution to Sally's problem	293
8.4.	Explaining the AI solution	295
8.4.1.	Explanation of the prediction	296
8.4.2.	Closest cases	297
8.4.3.	Counterfactuals	299
8.4.4.	Ex ante explanations of the algorithm and data	301
8.5.	Implications and discussion	302
8.6.	Conclusion	304

Part 6  
CPT-GREIT Conference 2022

<b>Chapter 9:</b>	<b>Report on the CPT-GREIT Annual Conference in Amsterdam</b>	309
	<i>Nkosivumile Hlongwa, Rupal Maheshwari, Gandhi Zilli, Luis Javier González Cerda, Nupur Gupta, Sreema Seeram, Maria Laura Coimbra and Matteo Poliscchio</i>	
9.1.	Introduction	309
9.2.	Opening remarks	310
9.3.	Reporting and due diligence obligations imposed on online platforms in relation to sellers in the sharing and gig economy (DAC7 and OECD Model Rules)	313
9.3.1.	Fundamental implications of DAC7 and the OECD Model Rules	314
9.3.2.	Fundamental and operational implications of DAC7 and the OECD Model Rules	315
9.3.3.	Comparison of DAC7 with CRS and FATCA reporting obligations	317
9.3.4.	Implementation challenges for governments	317
9.3.5.	Impact on platform businesses	318
9.4.	Online platforms and VAT reporting	319
9.4.1.	Platforms as new VAT collectors	320
9.4.2.	Technology-based solution to collect VAT	321
9.4.3.	Opportunities and challenges in the use of new technologies under VAT	322
9.5.	Workforce in the digital era: The legal status of digital workers and its personal and business income tax implications	323
9.5.1.	Platform labour in contemporary capitalism	323
9.5.2.	The recognition of the employment status of digital workers and its tax treaty implications	324
9.5.3.	Allocation of business profits to the jurisdiction of digital workers: Nexus, transfer pricing rules (significant people functions), FA under BEFIT	325



## Table of Contents

---

9.6.	The implications of distributed ledger technologies (including blockchain) on tax systems	327
9.6.1.	Topic I: The fundamentals of a blockchain-based tax system: Governance and legal aspects	327
9.6.2.	Topic II: VAT real-time reporting: Blockchain applications and possible future developments	328
9.6.3.	Topic III: Blockchain-based solutions for cross-border withholding tax: An example of a public-private partnership involving tax authorities, universities and private parties led by HMRC	329
9.7.	Virtual currencies, cryptoassets, NFTs and other implications of De-Fi for tax systems	331
9.7.1.	Direct tax aspects of cryptoassets	332
9.7.2.	The characterization of cryptoassets under European VAT	332
9.7.3.	OECD work on third-party reporting on cryptoassets	333
9.8.	Explainable AI in tax law	334
9.8.1.	Transparent AI	335
9.8.2.	AI and taxation: Real-life applications	335
9.8.3.	Towards XAI in tax law	335
	<b>List of Contributors</b>	<b>337</b>

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## Foreword

The CPT<sup>1</sup> project of the Amsterdam Centre for Tax Law (ACTL) of the University of Amsterdam (UvA) together with the Group for Research on European and International Taxation (GREIT) on 7 and 8 April 2022 organized their joint two-day conference about “The Implications of Online Platforms and Technology on Taxation and Taxpayers’ Rights”.

The papers in this book are the result of this conference.

I’m proud that that the CPT team and the GREIT were able to organize this and that we could publish original papers that bring the taxation of online platforms, technology and taxpayer rights together in one book.

Dennis Weber  
Board Member of the GREIT and  
Director of the UvA CPT project

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1. CPT is a shorthand for the official name of the research project, which is “Designing the tax system for a cashless, platform-based and technology-driven society”.

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## Introduction

# Reflections about the Implications of Platforms and Technology for Taxation and Taxpayers' Rights

Raffaele Russo

### 0.1. Technology and platforms over the last decades

We are living in interesting times. Technological developments are changing the way in which we interact, work, think and make our choices. It is sometimes difficult for those who are at the centre of changes to actually appreciate their breadth. They also shape new ways of working, together or on our own. At the same time, changes are not happening all at once. Today, we are probably at the height of a third wave of a process of change that started more than 20 years ago with the spread of the World Wide Web. In these 20 years or so, policymakers have had a terrible time catching up with developments, while the private sector is more and more focused on the short term. This leaves academia as, possibly, the place to start reflecting about what could happen in the next 10-20 years and how these changes may have an impact on the way in which tax systems are designed and administered.

As noted by Keen and Slemrod, “[o]ver the millennia, the fundamental challenges faced by rulers aiming to extract resources to fund the state’s activities, or their own fancies, have remained largely unaltered. What has changed, and is still changing, is how they address them”. It is safe to say that every time there has been an economic and social revolution, the tax system has changed dramatically.<sup>1</sup>

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1. For instance, revenue needs were amplified by the wars of the eighteenth century leading to Pitt the Younger’s introduction of the first genuine income tax in 1799. By the eve of the First World War, stable and good-enough tax structures, along with decent-enough bureaucratic tax administrations, had become established in most of the industrialized countries, though even by then, surprisingly few had followed the British lead of adopting a personal income tax. Social tensions led to the first steps, in Germany and Great Britain, toward a welfare state, which would need to be funded, and to pressures toward more progressive taxation, with the adoption of income taxes by the German states between 1891 and 1912. In the United States, swelling popular support for an income tax, in part to replace tariffs that were widely believed to unfairly burden the poor, led first to a modest tax on corporations and then to a constitutional amendment in 1913 that allowed a federal income tax. These pressures were as nothing, however, compared to the massive increase in taxation in the belligerents once the First World War began. This led

Currently, discussions about tax and international tax policy are dominated by narrow-scope topics like the amount of corporate tax paid by multinationals and its allocation across borders. There is very little focus on the broader issue of how technology, which is changing our societies, could be used to render the tax system more equitable and user-friendly. It was also for these reasons that, together with a number of friends from the Amsterdam Centre for Tax Law at the University of Amsterdam, we decided to launch the “CPT Project”, a research project on designing the tax system for a cashless, platform-based and technology-driven society. The objective is to analyse and discuss how technological developments can help to design tax systems that are easy to comply with and difficult to circumvent.

For the purposes of this introduction, the author decided to look at what has happened in the last few decades, starting with what is now called “Web 1.0” (from 1991 to 2004), passing through the current “Web 2.0 architecture” (from 2004 to roughly 2022) and finishing with the current “novel Web 3.0”, outlining the related tax discussions in each of these stages and possibly identifying what should be the key principles of tax systems of the future.

### 0.1.1. Web 1.0

Web 1.0 was characterized chiefly by the sound of the Internet connection and the fact that users had to wait minutes before a page would appear on their screen. Still, all this was revolutionary. Different sides of the world were being connected through the Internet. From a commercial point of view, on one side there were the producers of content; on the other side, the consumers of such content. Then there were two key developments, cryptography and cloud computing, which provided the possibility to send and store data at a much higher rate and for relatively little cost. Coupled with

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to the introduction of the income tax where it had not existed – in France days after the outbreak, in Russia in 1916 – and to higher rates and lower exemption thresholds where it did. The standard rate in Britain rose to an unprecedented 30%, and its coverage more than doubled. The top rate of the US income tax rose from 7% when it was introduced in 1913 to 77% in 1918. The Second World War proved even more transformative, with the income tax becoming for the first time something that applied to most ordinary people. In the decades since, there has been relatively little development in the broad types of tax instruments that governments levy, with two major exceptions. One is the emergence of a distinct tax on corporations. The other, and more fundamental, is the rise of the value-added tax (VAT). See M. Keen & J. Slemrod, *Chapter 2: The way we were*, in *Rebellion, Rascals, and Revenue: Tax Follies and Wisdom through the Ages* p. 32 et seq. (Princeton University Press 2021).

an inpouring of venture capital, this first development led to the explosion of what is commonly called Web 2.0.

### 0.1.2. Web 2.0

Web 2.0 is essentially characterized by the fact that the dividing lines between producers and consumers of content are blurred. Users create, post and share their content online, and it is consumed by other users who can do the same actions. This is made possible by large platforms that capitalize on network effects and economies of scale to create communities that increasingly interact with each other. The rise of large platforms in Web 2.0 eliminated a number of old intermediaries in the value chain, with platforms themselves becoming the single most relevant intermediary: gatekeepers in the platform economy. Meanwhile, other key technologies are taking shape and these include primarily artificial intelligence, quantum computing, and last but not least, blockchain. These developments have the potential to change once again the fundamentals of our societies and, according to many, we are now in transition from Web 2.0 into Web 3.0.

### 0.1.3. Web 3.0

Web 3.0 is essentially characterized by decentralization. There will be, say its proponents, no need for platforms or gatekeepers to intermediate between users. It will be the “system” itself, via smart contracts sitting on blockchains (finally united into the blockchain of blockchains), that will regulate interactions. Following a compliance-by-design approach, legislation will be coded into the blockchains and everyone will be allowed to see it. Users will be able to capitalize on their contribution, will be able to value it according to market standards and monetize it on their own, via interactions with other users, but this time in a fully disintermediated way.

The different waves of technological developments have had their own tax momentum and, at each stage, there have been attempts to understand and regulate the different phenomena. With hindsight, it can be said that the results have been sub-optimal.

## 0.2. Implications of technology developments for taxation

### 0.2.1. Web 1.0: The Ottawa principles

Tax-wise, the era of Web 1.0 was characterized by discussions on the taxation of e-commerce and how international tax principles should adapt to it. At the June 1996 meeting of the OECD Committee on Fiscal Affairs (CFA), Canada, Australia and the United States submitted a note on the “Implications of the Communications Revolution for Tax Policy and Administration”. The CFA then asked its Working Parties to identify the implications of the communications revolution in their own fields of taxation. After a conference on electronic commerce held in Turku, Finland in November 1997, the CFA adopted, at its January 1998 meeting, a series of proposals for the preparation of a ministerial meeting on electronic commerce in Ottawa on 7-8 October 1998. Just before the ministerial meeting, the CFA adopted the report *Electronic Commerce: Taxation Framework Conditions*,<sup>2</sup> which became known as the Ottawa principles.

Until 2005 the work went on at a normal pace to ensure that tax rules would adapt to globalization based on the Ottawa principles: technical advisory groups were formed, reports were issued for comments and new guidance (in the form of Commentary language) was ultimately released. Overall the approach was always inclined to safeguard residence taxation and the principles that were at the basis of the world economy since the beginning of the 20th century. It was an uneven battle, with some developed countries effectively imposing these rules on the others who fundamentally saw double tax treaties as a way to signal to the actors of globalization that they were open for business and followed international standards. No big change took place tax-wise.

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2. In this report the CFA draws the following main conclusions: (i) the widely accepted general tax principles that guide governments in relation to conventional commerce should also guide them in relation to electronic commerce; (ii) the CFA believes that at the stage of development at that time existing taxation rules can implement these principles; (iii) this approach does not preclude new administrative or legislative measures, or changes to existing measures, relating to e-commerce, provided that those measures are intended to assist in the application of the existing taxation principles, and are not intended to impose a discriminatory tax treatment of e-commerce transactions; (iv) the application of these principles to e-commerce should be structured to maintain the fiscal sovereignty of countries, to achieve a fair sharing of the tax base from e-commerce between countries and to avoid double and unintentional non-taxation; and (v) the process of implementing these principles should involve an intensified dialogue with business and with non-member economies. OECD, *Electronic Commerce: Taxation Framework Conditions*, A Report by the Committee on Fiscal Affairs (1998), available at <https://www.oecd.org/ctp/consumption/1923256.pdf> (accessed 9 Sept. 2022).

### 0.2.2. Web 2.0: The end of bank secrecy and the BEPS Project

When globalization exploded and web 2.0 was becoming dominant, with a number of newcomers edging out incumbents, the world economy underwent a number of crises. This triggered a substantial change in approach when addressing tax issues at a global level. After centuries of tolerance, bank secrecy was abolished for tax purposes and a decision was taken to amend international tax rules and do so in a way that would allocate more taxing rights to market countries, whether to curb the aggressive planning that had become widespread (the BEPS Project) or just to rebalance a system that was not tenable anymore from a geopolitical point of view (the two-pillar approach). Important developments, although largely unnoticed by the wider public, were made in the area of VAT, which itself had to adapt to the increasingly intangible nature of the economy.

Interestingly, the 2015 BEPS Report on Action 1 (*Addressing the Tax Challenges of the Digital Economy*) identified certain trends that, in addition to the lively discussions about the taxation of digital economy giants, could have an impact on international tax policy. Among these were the sharing economy and virtual currencies. Fast-forward 7 years, and countries have adopted several measures to engage online platforms in the collection of VAT from cross-border transactions, while the Model Rules for Reporting by Platform Operators with respect to Sellers in the Sharing and Gig Economy (the so-called DAC7 in the European Union) are being implemented in a number of jurisdictions.<sup>3</sup>

### 0.2.3. Web 3.0: A crypto tax system?

When they first appeared on the scene, Web 2.0 platforms were originally thought of as “saviours of the world” and as players championing the notion of “making the world a better place”, facilitating interactions, providing additional business opportunities and offering their services for free. A decade later, these same players have been accused of all sorts of wrongdoings in terms of their medium-term social consequences, tax and labour law violations, privacy issues and ultimately political interference. Interestingly, the position of the key players in the crypto industry is the

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3. For more details, see in this book, J.M. Vázquez & N. Čičin-Šain, *Chapter 1: Tax Reporting by Online Platforms: Operational and Fundamental Implications of DAC7 and the OECD Model Rules* and M. Lamensch, S. Jafari & M. Papis-Almansa, *Chapter 2: Secure Digital Reporting Requirements to Tackle EU VAT Fraud*.

exact opposite: they were originally considered as anarchist, anti-system crypto punks and now many are realizing the potential that the blockchain can bring to the world. What will happen with Web 3.0 is extremely unclear at this stage. Even though seminars and workshops about taxation in the metaverse abound, it is not clear, at least to this author, where the discussions are going and what their underlying goal is. Another example is the current discussions on how to extend the rules regarding the Common Reporting Standard for banking information to cryptoassets and crypto intermediaries.<sup>4</sup>

### **0.3. Non-conclusions**

The ambition of the CPT Project is to provide an in-depth analysis of how tax systems could be designed and structured for a digital society in which cash will disappear and technologies such as artificial intelligence (AI) and blockchain will be at the core of almost everything.<sup>5</sup>

This means, for example, that tax rules should be drafted in such a way that they can be easily coded and that tax operations can be tokenized. It also implies a broad reflection on the tax mix and in particular on the role of direct taxes. In that context, it is likely that a debate about flat versus progressive taxation will emerge, as will one about the taxation of capital, with a resurgence of wealth taxes. New ways to collect consumption taxes could be conceived, particularly via Central Bank Digital Currencies. At the same time, the protection of taxpayers' rights will become key. This likely means that there will always have to be human intervention and explicability in the case of AI, and that a new balance needs to be found to ensure taxpayers' privacy while avoiding it becoming the new banking secrecy.<sup>6</sup>

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4. For more details, see G. Beretta, *Chapter 6: Beyond Hedqvist (C-264/14): The Characterization of Cryptoassets under European VAT* and L. Scarcella, *Chapter 7: Direct Taxation Aspects of Cryptoassets*.

5. For more details, see the ground-breaking D. Post & C. Cipollini, *Chapter 5: Blockchain Technology and the Opportunities for Taxation*.

6. For more details, see B. Kuźniacki et al., *Requirements for Tax XAI Under Constitutional Principles and Human Rights*, in *Explainable and Transparent AI and Multi-Agent Systems* (D. Calvaresi et al. eds., EXTRAAMAS 2022, Lecture Notes in Computer Science, vol. 13283, Springer 2022), [https://link.springer.com/chapter/10.1007/978-3-031-15565-9\\_14](https://link.springer.com/chapter/10.1007/978-3-031-15565-9_14); and B. Alarie & A. Niblett, *Chapter 8: Explainable AI and Taxation: A Real-Life Application*.



## Part 1

### Online Platforms, VAT Collection and Reporting Obligations

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## Chapter 1

# Tax Reporting by Online Platforms: Operational and Fundamental Implications of DAC7 and the OECD Model Rules

Juan Manuel Vázquez and Nevia Čičin-Šain

### 1.1. Introduction<sup>1</sup>

Many of the biggest companies in the world, including Amazon, Uber and Airbnb, as well as an increasing proportion of small and medium-sized enterprises (SMEs), operate via digital platforms. What these businesses have in common is that they all use information and communication technologies to (i) facilitate interactions between different sets of users; (ii) collect and exploit their data; and (iii) enhance and benefit from direct and indirect network effects.<sup>2</sup> Because of their ability to connect members of one group (e.g. people looking for a ride or accommodation) with those of another group (e.g. drivers looking for passengers or hosts looking for guests), businesses using this model are often called “matchmakers”, “multisided platforms”<sup>3</sup> or the “new intermediaries”. In addition, because of providing access to the digital market and acting as the main gateway between businesses and customers, they are also referred to as “gatekeepers”.<sup>4</sup>

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1. This work has been developed in the context of the conference on “The Implications of Online Platforms and Technology on Taxation and Taxpayers’ Rights”, co-organized by the CPT project of the Amsterdam Centre for Tax Law (ACTL) of the University of Amsterdam (UvA), together with the Group for Research on European and International Taxation (GREIT) on 7 and 8 April 2022. The authors would like to thank Jasper van Schijndel for his valuable input on the operational challenges addressed in section 1.3.1. of this chapter, as well as Prof. Pasquale Pistone, Willem-Jan van Veen and Raffaele Russo for kindly commenting on this work.

2. Direct network effects occur when the value of a product, service or platform increases simply because the number of users increases, causing the network itself to grow. Indirect network effects, on the other hand, occur when a platform or service depends on two or more user groups, such as producers and consumers, buyers and sellers or users and developers. As more people from one group join the platform, the other group receives a greater value amount. See T. Stobierski, *What Are Network Effects?*, HBS Business Insights Blog (12 Nov. 2020), available at <https://online.hbs.edu/blog/post/what-are-network-effects> (accessed 3 June 2022).

3. D.S. Evans & R. Schmalensee, *Matchmakers: The New Economics of Multisided Platforms* (Harvard Business Review Press 2016).

4. The term “gatekeeper” is frequently used within both the regulatory and academic fields. See Regulation (EU) 2022/1925 of the European Parliament and of the Council

Enterprises that leverage the power of platform business models have grown dramatically in size and scale over the last 2 decades. This growth has led platforms to become important players in various sectors of the economy. While it is difficult to give a precise estimation of the size of the platform economy, the total size of transactions occurring on platforms is significant and likely to grow. The European Commission estimated that, in 2018, the total value of services transacted on digital platforms in the EU 27 was EUR 34.3 billion, while the total value of goods transacted on online peer-to-peer platforms was EUR 20.7 billion. In turn, the largest service sectors in this industry are short-term accommodation, transportation/personal services and collaborative finance, and they are expected to continue growing over the next years.<sup>5</sup>

Platforms have brought a range of important benefits to society<sup>6</sup> which, in the early days, spurred quite an interest in these businesses. However, like every other innovation, platforms rapidly proved that they can also produce negative effects. While some complaints about platforms reflect their disruptive impact on traditional industries (e.g. it is not hard to understand why hotel chains might dislike Airbnb or why taxi companies might have very strong feelings against Uber),<sup>7</sup> others refer to the so-called “unintended

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of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), OJ L 265/1 (2022) [hereinafter Digital Markets Act]; M. Cian, *Online Platforms as Gatekeepers to the Digital World – A Preliminary Issue on Business Freedom, Competition and the Need for a Special Market Regulation*, 7 Journal of European Consumer and Market Law (2018); D. Geradin, *What Is a Digital Gatekeeper? Which Platforms Should Be Captured by the EC Proposal for a Digital Market Act?* (18 Feb. 2021), available at <https://www.ssrn.com/abstract=3788152> (accessed 22 June 2022).

5. European Commission, Commission Staff Working Document – Impact Assessment: Tax fraud and evasion – better cooperation between national tax authorities on exchanging information, SWD(2020) 131 final, p. 11 (15 July 2020), available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2020%3A131%3AFIN> (accessed 29 Nov. 2022).

6. These benefits include, inter alia, fostering digital value creation and economic growth, facilitating efficiency gains, promoting data-driven innovation, increasing consumer choice, facilitating access to information and offering the potential to enhance citizens’ participation in society and democracy. See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Online Platforms and the Digital Single Market: Opportunities and Challenges for Europe*, COM(2016) 288 final, p. 3 (25 May 2016), available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0288&from=EN> (accessed 15 June 2021).

7. G.G. Parker, M.W. Van Alstyne & S.P. Choudary, *Platform Revolution: How Networked Markets Are Transforming the Economy – and How to Make Them Work for You* p. 231 (W.W. Norton & Company 2018).

side effects” of online platforms.<sup>8</sup> In addition, sharing and gig economy platforms have created completely new business models that have radically changed the traditional equilibrium of supply and demand, blurred the lines between owners and users, producers and consumers, workers and contractors, and transcended the spatial divides of personal and professional, business and home, public and private, etc.<sup>9</sup>

The unintended side effects and socio-economic changes brought by platforms have not only reversed the public perception of these businesses (which is now much more negative than 20 years ago), but have also raised policymakers’ awareness about the different policy and regulatory challenges they cause. In this regard, observers have recognized that there is significant tension between the social goals of promoting digital innovation and economic development (which argue for a relatively *laissez-faire* approach to regulating platforms) and the social goals of preventing harm (e.g. tax fraud by platform sellers), encouraging fair competition and maintaining respect for the rule of law.<sup>10</sup>

The significant tensions brought up by the rapid growth of the platform economy have raised a common and very important challenge: the need to design balanced (external)<sup>11</sup> regulatory regimes to ensure that platforms operate fairly.<sup>12</sup> As a consequence of this challenge, a significant degree of reflection and activities within policy institutions has arisen not only in Europe, but worldwide.<sup>13</sup> The essential questions to be answered in this regard are, *inter alia*: What should platforms do to keep their services safe and lawful, and to what extent are they responsible when they fail to do so?<sup>14</sup>

8. These could be, for instance, the facilitation of exchanges of illegal goods, services and content online, the misuse of services by manipulative algorithmic systems to amplify the spread of disinformation, the vulnerability of platform workers and the emergence of new economic activities of which the performers do not pay their fair share of taxes.

9. Unsurprisingly, then, sharing and gig economy platforms have defied conventional regulatory theory. See O. Lobel, *The Law of the Platform*, San Diego Legal Studies Paper No. 16-212 (2016), available at <https://ssrn.com/abstract=2742380> (accessed 28 Nov. 2022).

10. Parker, Alstyné & Choudary, *supra* n. 7, at ch. 11.

11. In contrast to the internal governance of platform ecosystems (i.e. the management of platforms and their stakeholders using appropriate policies and mechanisms to govern the operations of all sides of the platform and maintain its ecosystem), the term “external” used herein refers to government-imposed legislation regulating platform businesses.

12. Parker, Alstyné & Choudary, *supra* n. 7, at ch. 11.

13. European Parliamentary Research Service, *Online platforms: Economic and societal effects*, p. 62 (2021), available at [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/656336/EPRS\\_STU\(2021\)656336\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/656336/EPRS_STU(2021)656336_EN.pdf) (accessed 15 Mar. 2021).

14. R. Chavannes, *Regulation of Online Platforms in the European Union – The State of Play*, Fair Balance (17 May 2019), available at <https://blog.chavannes.net/2019/05/regulation-of-online-platforms-in-the-european-union-the-state-of-play/> (accessed 16 Sept. 2021).





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## Contact

**IBFD Head Office**

Tel.: +31-20-554 0100 (GMT+2)

Email: [info@ibfd.org](mailto:info@ibfd.org)

**Visitors' Address:**

Rietlandpark 301  
1019 DW, Amsterdam  
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