

WU Institute for Austrian  
and International Tax Law

Series Editor: Michael Lang

Editors: Georg Kofler, Michael Lang, Pasquale Pistone, Alexander Rust,  
Josef Schuch, Karoline Spies, Claus Staringer, Rita Szudoczky

# Crypto Assets

Tax Law and Policy

30

European and International  
Tax Law and Policy Series

IBFD



# Crypto Assets: Tax Law and Policy

## Why this book?

The emergence of crypto assets, particularly virtual currencies, and their implications for taxation puts a bright spotlight on existing tax measures and, perhaps, the need to develop new tax policies. The decentralized nature of crypto assets has given rise to several overarching issues that need to be addressed at a supranational level. Key issues discussed in this publication include those relating to the regulatory and governance framework, the transparency and reporting framework and the emergence of central bank digital currencies. From a national perspective, many jurisdictions have issued specific guidance or created targeted legislation to deal with certain crypto-asset transactions. However, the way in which these new challenges are addressed varies widely from country to country. The aim of this book is to provide tax authorities, policymakers, courts and practitioners with an overview of tax measures implemented in different jurisdictions. Therefore, the income and capital gains tax implications of crypto-asset origination and extinction events, as well as the implications of using of crypto assets in investment and business transactions, are discussed from both a domestic and international perspective. The treatment of crypto assets in terms of VAT and other taxes, such as inheritance and gift taxes, is also discussed, and each author concludes by offering an outlook on the future of crypto-asset policy in their respective jurisdiction.

<b>Title:</b>	Crypto Assets: Tax Law and Policy
<b>Date of publication:</b>	October 2024
<b>ISBN:</b>	978-90-8722-911-5 (print), 978-90-8722-913-9 (PDF), 978-90-8722-912-2 (e-pub)
<b>Type of publication:</b>	Book
<b>Number of pages:</b>	932
<b>Terms:</b>	Shipping fees apply. Shipping information is available on our website.
<b>Price (print/online):</b>	EUR 160   USD 175 (VAT excl.)
<b>Price (eBook: e-Pub or PDF):</b>	EUR 128   USD 140 (VAT excl.)

## Order information

To order the book, please visit [www.ibfd.org/shop/book](http://www.ibfd.org/shop/book). You can purchase a copy of the book by means of your credit card, or on the basis of an invoice. Our books encompass a wide variety of topics, and are available in one or more of the following formats:

- IBFD Print books
- IBFD eBooks – downloadable on a variety of electronic devices
- IBFD Online books – accessible online through the IBFD Tax Research Platform



# Crypto Assets

## Tax Law and Policy

Editors:

Georg Kofler

Michael Lang

Pasquale Pistone

Alexander Rust

Josef Schuch

Karoline Spies

Claus Staringer

Rita Szudoczky



Volume 30

WU Institute for Austrian and International Tax Law  
European and International Tax Law and Policy Series

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)

© 2024 IBFD

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written prior permission of the publisher. Applications for permission to reproduce all or part of this publication should be directed to: [permissions@ibfd.org](mailto:permissions@ibfd.org).

## **Disclaimer**

This publication has been carefully compiled by IBFD and/or its author, but no representation is made or warranty given (either express or implied) as to the completeness or accuracy of the information it contains. IBFD and/or the author are not liable for the information in this publication or any decision or consequence based on the use of it. IBFD and/or the author will not be liable for any direct or consequential damages arising from the use of the information contained in this publication. However, IBFD will be liable for damages that are the result of an intentional act (*opzet*) or gross negligence (*grove schuld*) on IBFD's part. In no event shall IBFD's total liability exceed the price of the ordered product. The information contained in this publication is not intended to be an advice on any particular matter. No subscriber or other reader should act on the basis of any matter contained in this publication without considering appropriate professional advice.

IBFD and/or the author cannot be held responsible for external content, broken links or risks within the external websites that are referenced as hyperlinks within this publication.

Where photocopying of parts of this publication is permitted under article 16B of the 1912 Copyright Act jo. the Decree of 20 June 1974, Stb. 351, as amended by the Decree of 23 August 1985, Stb. 471, and article 17 of the 1912 Copyright Act, legally due fees must be paid to Stichting Reprorecht (P.O. Box 882, 1180 AW Amstelveen). Where the use of parts of this publication for the purpose of anthologies, readers and other compilations (article 16 of the 1912 Copyright Act) is concerned, one should address the publisher.

ISBN 978-90-8722-911-5 (print)

ISBN 978-90-8722-912-2 (eBook, ePub); 978-90-8722-913-9 (eBook, PDF)

ISSN 2451-8360 (print); 2589-9694 (electronic)

NUR 826

---

## Table of Contents

<b>Preface</b>		xliii
<b>Chapter 1: General Report</b>		1
	<i>Georg Kofler, Jeffrey Owens and Robert Risse</i>	
1.1.	General framework and domestic tax guidance	1
1.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	5
1.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	9
1.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	12
1.5.	Income and capital gains taxes: International aspects	14
1.6.	Wealth taxes, inheritance and gift taxes, and other taxes	15
1.7.	Value added taxation	16
1.8.	Policy outlook	20
<b>Chapter 2: The Global Governance of Crypto Assets: A Reflection Twenty-Five Years In</b>		23
	<i>Giulio Soana</i>	
2.1.	Disintermediation and decentralization: Untangling the core of crypto asset innovation	23
2.2.	The policy challenge of decentralization: Policing a headless environment	26
2.3.	Circumscribing the playing field: From virtual currency to crypto asset	27
2.3.1.	Drawing the internal categories: One or many?	32

2.3.1.1.	Stable coins	33
2.3.1.2.	Non-fungible tokens	35
2.4.	The main regulatory strategy: Intermediary regulation and registration duties	36
2.5.	Reigning decentralized arrangements: Peer-to-peer transactions and decentralized autonomous organizations	39
2.6.	A case study: The Tornado Cash case	46
2.7.	Conclusions	48
<b>Chapter 3:</b>	<b>Global Transparency and the Exchange of Information for Crypto Assets</b>	49
	<i>Richard Stern</i>	
3.1.	Introduction and context	49
3.1.1.	Web3 and the metaverse	49
3.1.1.1.	Web3	49
3.1.1.2.	Crypto assets and the metaverse	50
3.1.1.3.	The future of tax	51
3.1.2.	The emergence of crypto assets	51
3.1.2.1.	Crypto-asset markets	51
3.1.2.2.	The economics of crypto markets	52
3.2.	Regulation, monitoring and supervision of crypto assets: Why should this be a priority?	52
3.2.1.	Global regulatory approach to crypto assets	52
3.2.2.	A global challenge for tax authorities	54
3.2.3.	Crypto assets and tax transparency	55
3.2.4.	The importance of a global approach	55
3.3.	Taxation of crypto assets: The global environment and key international developments	56
3.3.1.	Introduction and overview	56
3.3.2.	OECD Crypto-Asset Reporting Framework	56
3.3.2.1.	Crypto-Asset Reporting Framework: Background	56
3.3.2.2.	Review of the rules: The Crypto-Asset Reporting Framework	57
3.3.2.3.	Scope	58



3.3.2.4.	Assets in scope	59
3.3.2.5.	Specific crypto-asset considerations	60
3.3.2.6.	Expanding the scope of tax transparency	62
3.3.2.7.	Interaction between the CARF and CRS	62
3.3.3.	European Union	63
3.3.3.1.	Proposed EU tax transparency rules for transactions in crypto assets	63
3.3.3.2.	Contents of the DAC8 proposal	64
3.3.4.	Other international tax considerations	66
3.3.4.1.	G20	66
3.3.4.2.	Global Forum on Transparency and Exchange of Information for Tax Purposes	66
3.3.4.3.	International Monetary Fund	66
3.3.4.4.	United Nations	67
3.3.5.	Conclusions	68
3.4.	What is being done at a country level?	69
3.4.1.	Australia: Strengthening information collection	69
3.4.2.	New Zealand: Consultations on the CARF	69
3.4.3.	United Kingdom: Aligning definitions with the CARF	70
3.4.4.	United States: Introducing reporting requirements	70
3.5.	Global trends and potential impact	70
3.5.1.	Trends	70
3.5.2.	Potential impact	71
3.5.2.1.	Country responses	71
3.5.2.2.	International landscape	71
3.6.	Conclusions	72
	References	72
<b>Chapter 4:</b>	<b>Central Bank Digital Currencies: Current Status and Tax Implications</b>	<b>73</b>
	<i>Giacomo Ricotti, Giorgia Rocco and Alessandra Sanelli</i>	
4.1.	Introduction	73
4.2.	The design of a retail central bank digital currency	75
4.2.1.	Main drivers	75

4.2.2.	Key principles and considerations	78
4.2.3.	Core features of retail central bank digital currencies	79
4.2.3.1.	Privacy	79
4.2.3.2.	Regulatory requirements	80
4.2.3.3.	Accessibility, ease of use and financial inclusion	81
4.2.3.4.	Security	81
4.2.3.5.	Interoperability	82
4.2.3.6.	Programmability	83
4.3.	Main central bank digital currency projects	84
4.3.1.	State of the art	84
4.3.2.	The digital euro	85
4.4.	Tax implications of central bank digital currencies	88
4.4.1.	Tax treatment of central bank digital currencies	88
4.4.2.	The possible impact of central bank digital currencies on tax evasion	91
4.4.2.1.	The general framework	91
4.4.2.2.	The international dimension	97
4.4.3.	Facilitating tax payments and fiscal transfers	100
4.5.	Conclusions and policy outlook	105
	References	107
<b>Chapter 5:</b>	<b>Crypto Assets: Tax Law and Policy in Australia</b>	<b>115</b>
	<i>Christina Allen, Kerrie Sadiq and Richard Krever</i>	
5.1.	General framework and domestic tax guidance	115
5.1.1.	Crypto asset regulatory frameworks	115
5.1.2.	Tax characterization of crypto assets	120
5.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	123
5.2.1.	Crypto mining and staking	124
5.2.2.	Crypto airdrops	126
5.2.3.	Crypto chain splits	126
5.2.4.	Extinction	128
5.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	129
5.3.1.	Crypto assets are not foreign currency	130

5.3.2.	Disposing of crypto assets	131
5.3.3.	Personal use asset rules	133
5.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	134
5.4.1.	Ordinary business transactions	135
5.4.2.	Salary or wages	136
5.4.3.	Gifts and donations	136
5.5.	Income and capital gains taxes: International aspects	136
5.6.	Wealth taxes, inheritance and gift taxes, and other taxes	137
5.7.	Value added taxation	137
5.7.1.	Non-digital currency	137
5.7.2.	Digital currency	139
5.8.	Policy outlook	140
<b>Chapter 6:</b>	<b>Crypto Assets: Tax Law and Policy in Austria</b>	<b>143</b>
	<i>Rainer Borns and Yasmin Lawson</i>	
6.1.	General framework and domestic tax guidance	143
6.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	147
6.2.1.	Origination (“creation”)	147
6.2.2.	Extinction (“loss”)	149
6.3.	Income and capital gains taxes: Post-originated events (“use”) in investment transactions	149
6.3.1.	Taxable income arising from crypto assets	149
6.3.2.	Tax rate and collection regime	152
6.4.	Income and capital gains taxes: Post-originated events (“use”) in business transactions	154
6.5.	Income and capital gains taxes: International aspects	156
6.5.1.	Crypto assets under tax treaty law	156
6.5.2.	Crypto assets under exit taxation regime	157

6.6.	Wealth taxes, inheritance and gift taxes, and other taxes	159
6.6.1.	Wealth taxes, inheritance and gift taxes	159
6.6.2.	Other taxes	159
6.6.2.1.	Transfer taxes	159
6.6.2.2.	Stamp duty	160
6.6.2.3.	Gambling taxes	160
6.7.	Value added taxation	161
6.7.1.	Introduction	161
6.7.2.	Post-origination events (“use”)	161
6.7.3.	VAT treatment of origination events (“mining”)	162
6.7.4.	Crypto-related services (“provision of wallets”)	164
6.8.	Policy outlook	164
<b>Chapter 7:</b>	<b>Crypto Assets: Tax Law and Policy in Belgium</b> <i>Jean-Philippe Van West, Michel Maus and Peter Vanvelthoven</i>	167
7.1.	General framework and domestic tax guidance	167
7.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	169
7.2.1.	Personal income tax: General framework	170
7.2.2.	Personal income tax: The mining of cryptocurrencies	171
7.2.3.	Personal income tax: The staking of cryptocurrencies	173
7.2.4.	Corporate income tax	173
7.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	174
7.3.1.	Personal income tax	174
7.3.2.	Corporate income tax	176
7.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	177
7.5.	Income and capital gains taxes: International aspects	179

7.6.	Wealth taxes, inheritance and gift taxes, and other taxes	180
7.6.1.	Gift tax	180
7.6.2.	Inheritance tax	181
7.7.	Value added taxation	182
7.7.1.	Airdrop	183
7.7.2.	Mining	183
7.7.3.	Staking	184
7.7.4.	Digital wallets	184
7.8.	Policy outlook	185
<b>Chapter 8:</b>	<b>Crypto Assets: Tax Law and Policy in Brazil</b> <i>Luís Eduardo Schoueri and Felipe Kertesz Renault</i>	187
8.1.	General framework and domestic tax guidance	187
8.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	191
8.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	192
8.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	195
8.5.	Income and capital gains taxes: International aspects	196
8.6.	Wealth taxes, inheritance and gift taxes, and other taxes	198
8.7.	Value added taxation	200
8.8.	Policy outlook	201
<b>Chapter 9:</b>	<b>Crypto Assets: Tax Law and Policy in Bulgaria</b> <i>Nikoleta Nesheva</i>	203
9.1.	General framework and domestic tax guidance	203

9.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	207
9.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	210
9.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	213
9.5.	Income and capital gain taxes: International aspects	215
9.6.	Wealth taxes, inheritance and gift taxes, and other taxes	217
9.7.	Value added taxation	218
9.8.	Policy outlook	220
<b>Chapter 10:</b>	<b>Crypto Assets: Tax Law and Policy in Canada</b>	<b>223</b>
	<i>Jennifer E. Farrell</i>	
10.1.	General framework and domestic tax guidance	223
10.1.1.	Legal status of crypto assets	223
10.1.2.	Characterization for legal purposes	225
10.1.2.1.	Securities law	225
10.1.2.2.	Other areas of law and accounting principles	227
10.1.3.	Classification for income and capital gains tax purposes	228
10.1.3.1.	Statute	228
10.1.3.2.	Case law	230
10.1.3.3.	Government guidance and position statements	231
10.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	232
10.2.1.	Mining and staking activity	233
10.2.2.	Airdrops and forks	235
10.2.3.	Extinction and loss events	236
10.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	236
10.3.1.	Selling and trading crypto assets	236

10.3.2.	Crypto assets held for speculation or investment	238
10.3.3.	Donations	238
10.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	238
10.4.1.	Business transactions	238
10.4.2.	Medium of exchange	239
10.4.3.	Use as wage or salary	240
10.5.	Income and capital gains taxes: International aspects	240
10.5.1.	Tax treaty rules	240
10.5.2.	Exit tax	240
10.5.3.	Reporting requirements for foreign property	241
10.6.	Wealth taxes, inheritance and gift taxes, and other taxes	242
10.6.1.	Wealth tax and inheritance and gift taxes	242
10.6.2.	Gambling activity	242
10.7.	Value added taxation	243
10.7.1.	Indirect taxation of cryptocurrencies	243
10.7.2.	Taxation of mining activities	245
10.8.	Policy outlook	249
10.8.1.	Legislative and guidance inertia	249
10.8.2.	Non-compliance and tax evasion	249
<b>Chapter 11:</b>	<b>Crypto Assets: Tax Law and Policy in Chile</b>	<b>251</b>
	<i>Cristóbal Pérez Jarpa</i>	
11.1.	General framework and domestic tax guidance	251
11.1.1.	The crypto-asset revolution and its impact in Chile	251
11.1.2.	Issues, case law and the evolution of the regulation of crypto assets in Chile	253
11.1.2.1.	Pre-2018: Uncertainty, lack of regulation and judicial disputes	253
11.1.2.2.	From 2018 to 2022: Administrative interpretations and first steps for regulating the crypto-asset market	255

11.1.2.3.	Post-2022: The Fintech Law and its challenges, and the definition of crypto assets by the tax administration	259
11.1.2.3.1.	General aspects, requirements, crypto assets and stablecoins	259
11.1.2.3.2.	Conceptualization issues: Fintech Law – Tax administration	262
11.1.2.3.3.	Main flaws and challenges	264
11.1.3.	The general tax framework for crypto assets	265
11.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	267
11.2.1.	Acquisition of crypto assets by purchasing	267
11.2.2.	Gratuitous acquisition of crypto assets	267
11.2.3.	Acquisition of crypto assets via “proof of stake”	267
11.2.4.	Acquisition of crypto assets via “proof of work” system	268
11.2.5.	Extinction of crypto assets	268
11.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	269
11.3.1.	Selling of crypto assets for fiat currency	269
11.3.1.1.	Individuals	269
11.3.1.2.	Corporations and EIs	270
11.3.2.	The bartering of crypto assets for other crypto assets	271
11.3.3.	Intermediaries/exchange companies of crypto assets and the holding of crypto assets in a wallet	271
11.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	272
11.5.	Income and capital gains taxes: International aspects	273
11.6.	Wealth taxes, inheritance and gift taxes, and other taxes	274
11.6.1.	Wealth taxes	274
11.6.2.	Inheritance and gift taxes	275
11.6.3.	Gambling taxes	276
11.6.4.	Transfer taxes and stamp duties	276
11.7.	Value added taxation	277



11.7.1.	Taxable event: “Selling”	277
11.7.2.	Taxable event: “Service”	278
11.8.	Policy outlook	279
11.8.1.	Current status: Late reaction and pending measures	279
11.8.2.	The use of blockchain by tax administration: The experience of e-invoice and VAT pre-filling forms	282
11.8.3.	Ongoing developments: Current studies for a CBDC	282
11.8.4.	Ongoing debates and the near future: Uncertainties	283
<b>Chapter 12:</b>	<b>Crypto Assets: Tax Law and Policy in China</b>	<b>285</b>
	<i>Xiangdan Luo and Qiaoyu Li</i>	
12.1.	General framework and domestic tax guidance	285
12.1.1.	The legal status of crypto assets	285
12.1.2.	Classification and treatment of crypto assets for Chinese tax law purposes	287
12.1.2.1.	Income taxes and capital gains tax for domestic and international aspects	287
12.1.2.2.	Wealth taxes, inheritance and gift taxes, and other taxes	288
12.1.2.3.	Value added taxation	288
12.2.	The use of blockchain technology in administrative practice	290
12.2.1.	Electronic invoicing of VAT	290
12.2.2.	Recent developments of the Golden Tax Project: The “Skynet”	291
12.3.	The practice of E-CNY in China	294
12.3.1.	E-CNY as financial infrastructure at the retail end	294
12.3.2.	Possible application of E-CNY in tax administration	295
12.4.	Policy outlook	295
<b>Chapter 13:</b>	<b>Crypto Assets: Tax Law and Policy in Colombia</b>	<b>297</b>
	<i>Diego Alejandro Hernández Rivera and Andrés Felipe Lema González</i>	
13.1.	General framework and domestic tax guidance	297
13.1.1.	Bill Proposal 139 of 2021C	298

13.1.2.	Current legal framework: Rulings, concepts and circulars issued by national administrative authorities	298
13.1.2.1.	Central Bank	298
13.1.2.2.	Watchdog circulars	299
13.1.2.2.1.	Financial Watchdog	299
13.1.2.2.2.	Corporate Watchdog	299
13.1.3.	Crypto assets: Tax treatment	300
13.1.3.1.	Characterization for income and capital gains tax purposes	300
13.1.3.1.1.	Recognition of cryptos as intangible assets	300
13.1.3.1.2.	Income recognition and taxation	301
13.1.3.1.3.	Crypto assets in foreign exchange – Exchange differences	303
13.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	303
13.2.1.	Crypto-asset creation or acquisition events	303
13.2.1.1.	Purchase of crypto assets through exchanges using fiat currencies	303
13.2.1.2.	Sale of tokenized crypto assets by the creators of the asset	304
13.2.1.3.	Receipt of crypto assets as a remuneration, incentive or reward	304
13.2.1.4.	Splitting of a crypto asset into several independent crypto assets	305
13.2.1.5.	Receipt of crypto assets by loyalty campaigns, donations or airdrops	305
13.2.2.	Crypto-asset extinction events	306
13.2.2.1.	Exchange for fiat or another type of asset	306
13.2.2.2.	Loss of access to the wallet in which crypto assets are stored and theft	306
13.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	307
13.3.1.	Tax consequences of selling crypto assets against fiat currency	307
13.3.2.	Tax consequences of selling crypto assets against other crypto assets	308
13.3.3.	Regime for crypto assets as speculation and investment vehicles	308

13.3.3.1.	Gains or borrowing transactions with crypto assets	309
13.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	309
13.4.1.	Crypto-asset legal regime in business transactions	309
13.4.1.1.	Payments for personal services	309
13.4.1.2.	Payments for goods	310
13.4.2.	Valuation of crypto assets for transactional purposes	310
13.4.2.1.	Decreases and increases in value of crypto held in trade or business	311
13.5.	Income and capital gains taxes: International aspects	311
13.5.1.	Residence and source taxation	311
13.5.2.	Tax treaties	312
13.6.	Wealth taxes, inheritance and gift taxes, and other taxes	313
13.6.1.	Wealth tax	313
13.6.2.	Industry and commerce tax	314
13.7.	Value added taxation	315
13.8.	Policy outlook	318
<b>Chapter 14:</b>	<b>Crypto Assets: Tax Law and Policy in Denmark</b>	<b>319</b>
	<i>Louise Blichfeldt Fjord</i>	
14.1.	General framework and domestic tax guidance	319
14.1.1.	Classification of crypto assets	319
14.1.1.1.	Utility tokens	322
14.1.1.2.	Non-fungible tokens	322
14.1.1.3.	Security tokens	322
14.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	324
14.2.1.	Tax considerations concerning the origination of cryptocurrencies	324
14.2.1.1.	Airdrops	325
14.2.1.2.	Gifts	325
14.2.1.3.	Hard fork	325
14.2.1.4.	Staking rewards	326
14.2.1.5.	Mining	326

14.2.2.	Tax considerations concerning the extinction of crypto assets	327
14.2.2.1.	Gifts	327
14.2.2.2.	Crypto assets lost by fraud, bankruptcy or theft	328
14.2.2.3.	Loss of a code for a virtual wallet	328
14.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	329
14.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	332
14.5.	Income and capital gains taxes: International aspects	334
14.6.	Wealth taxes, inheritance and gift taxes, and other taxes	335
14.7.	Value added taxation	336
14.8.	Policy outlook	337
<b>Chapter 15:</b>	<b>Crypto Assets: Tax Law and Policy in Finland</b>	<b>339</b>
	<i>Mika Nissinen</i>	
15.1.	General framework and domestic tax guidance	339
15.1.1.	Legal background	339
15.1.2.	Legal definition of crypto assets	340
15.1.3.	Tax law	343
15.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	344
15.2.1.	Creation of new crypto assets	344
15.2.2.	Income from existing crypto assets	345
15.2.3.	Split of crypto assets (hard fork)	346
15.2.4.	Airdrops	346
15.2.5.	Extinction (“loss”)	347
15.2.6.	Crypto lending	348
15.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	349

15.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	350
15.5.	Income and capital gains taxes: International aspects	351
15.5.1.	General international aspects	351
15.5.2.	Business profits	352
15.6.	Wealth taxes, inheritance and gift taxes, and other taxes	353
15.7.	Value added taxation	354
15.8.	Policy outlook	356
15.8.1.	Use of blockchain technology in taxation	356
15.8.2.	Not every new thing needs new tax regulations	357
15.8.3.	The legal status of crypto assets should primarily be resolved elsewhere than in tax law	358
15.8.4.	Investment, asset or currency?	360
15.8.5.	Self-regulation is not sufficient regulation	363
15.8.6.	The difficulty of providing information is not a sufficient reason not to tax crypto assets	364
<b>Chapter 16:</b>	<b>Crypto Assets: Tax Law and Policy in France</b>	<b>367</b>
	<i>Quentin Thouéry des Hivernalis</i>	
16.1.	General framework and domestic tax guidance	367
16.1.1.	Legal definitions of crypto assets	367
16.1.1.1.	Cryptocurrencies	367
16.1.1.2.	Tokens	367
16.1.2.	Accounting definition of crypto assets	368
16.1.2.1.	Security tokens	368
16.1.2.2.	Utility and currency tokens	368
16.1.2.2.1.	Tokens held by the subscriber to an initial coin offering	368
16.1.2.2.2.	Tokens held by the issuer of an initial coin offering	369
16.1.3.	Tax definitions of crypto assets	369
16.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	371
16.2.1.	Preliminary remark: Distinction between business assets and non-business assets	371
16.2.2.	“Creation” of crypto assets	372

16.2.2.1.	Purchase of crypto for fiat currency	372
16.2.2.2.	Receipt of crypto assets as remuneration or incentive	372
16.2.2.2.1.	Mining (solo, pool, cloud) of crypto assets	372
16.2.2.2.2.	Staking of crypto assets	373
16.2.2.3.	Sale of crypto-asset tokens	373
16.2.2.4.	Forks	373
16.2.2.5.	Creation and selling of non-fungible tokens	374
16.2.2.6.	Wages paid in crypto assets	375
16.2.2.7.	Airdrops	375
16.2.3.	Loss of crypto assets	376
16.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	376
16.3.1.	Investment transactions made by individuals	376
16.3.1.1.	Preliminary remark	377
16.3.1.2.	Selling of crypto assets	377
16.3.1.2.1.	Selling of crypto assets against other crypto assets	377
16.3.1.2.2.	Selling crypto assets against fiat currencies	377
16.3.1.2.2.1.	Taxation of occasional gains	377
16.3.1.2.2.2.	Net capital gain calculation	378
16.3.1.2.2.3.	Taxation of professional/regular individuals’ traders	379
16.3.1.2.2.4.	Selling of non-fungible tokens	379
16.3.2.	Investment transactions made by companies subject to corporate income tax	380
16.3.3.	Depositing crypto assets in decentralized finance lending protocols	381
16.3.4.	Providing liquidity to decentralized exchanges	381
16.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	382
16.4.1.	Payment for goods and services	382
16.4.2.	Payment of wages	383
16.4.3.	Valuation variation consequences	383
16.5.	Income and capital gains taxes: International aspects	384
16.5.1.	Withholding taxes on payments in crypto	384
16.5.2.	Transfer of residence	385
16.6.	Wealth taxes, inheritance and gift taxes, and other taxes	385
16.6.1.	Transfer tax	385

16.6.2	Digital services tax	385
16.6.3.	Wealth tax	386
16.6.4.	Inheritance and gift taxes	386
16.7.	Value added taxation	386
16.8.	Policy outlook	388
<b>Chapter 17:</b>	<b>Crypto Assets: Tax Law and Policy in Germany</b>	391
	<i>Florian Zawodsky</i>	
17.1.	General framework and domestic tax guidance	391
17.1.1.	Legal framework in Germany	391
17.1.2.	General characterization of crypto assets for legal purposes	391
17.1.3.	Tax law	392
17.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	393
17.2.1.	Terminology	393
17.2.2.	Taxable events	394
17.2.2.1.	Creation of virtual currencies	394
17.2.2.2.	Airdrops	396
17.2.2.3.	Extinction of virtual currencies	397
17.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	397
17.3.1.	German Income Tax Act	397
17.3.2.	Other income	398
17.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	400
17.4.1.	German business taxation	400
17.4.2.	Accounting	401
17.5.	Income and capital gains taxes: International aspects	404
17.6.	Wealth taxes, inheritance and gift taxes, and other taxes	404
17.7.	Value added taxation	405

17.7.1.	Court of Justice of the European Union – <i>Hedqvist</i>	406
17.7.2.	<i>Bundesfinanzhof</i> (Federal Finance Court) – V R 38/19	407
17.7.3.	Mining	408
17.7.4.	Non-fungible tokens	409
17.8.	Policy outlook	410
<b>Chapter 18:</b>	<b>Crypto Assets: Tax Law and Policy in Greece</b> <i>Areti-Maxine Avlichou</i>	411
18.1.	General framework and domestic tax guidance	411
18.2.	Income and capital gains taxes: Origination ("creation") and extinction ("loss")	419
18.3.	Income and capital gains taxes: Post-origination events ("use") in investment transactions	422
18.4.	Income and capital gains taxes: Post-origination events ("use") in business transactions	423
18.5.	Income and capital gains taxes: International aspects	424
18.6.	Wealth taxes, inheritance and gift taxes, and other taxes	427
18.7.	Value added taxation	429
18.8.	Policy outlook	430
<b>Chapter 19:</b>	<b>Crypto Assets: Tax Law and Policy in Hungary</b> <i>Borbála Kolozs</i>	433
19.1.	General framework and domestic tax guidance	433
19.2.	Income and capital gains taxes: Origination ("creation") and extinction ("loss")	438
19.3.	Income and capital gains taxes: Post-origination events ("use") in investment transactions	442



19.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	444
19.5.	Income and capital gains taxes: International aspects	445
19.6.	Wealth taxes, inheritance and gift taxes, and other taxes	446
19.7.	Value added taxation	447
19.8.	Policy outlook	449
<b>Chapter 20:</b>	<b>Crypto Assets: Tax Law and Policy in India</b>	451
	<i>Suranjali Tandon</i>	
20.1.	General framework and domestic tax guidance	451
20.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	456
20.2.1.	Tax treatment prior to 2022: Lack of clarity	456
20.2.2.	Amendments towards simplification	458
20.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	463
20.3.1.	Tax consequences of selling cryptocurrencies – Whether gain or loss	463
20.3.2.	Selling crypto assets against fiat currency or other assets	464
20.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	464
20.5.	Income and capital gains taxes: International aspects	464
20.6.	Wealth taxes, inheritance and gift taxes, and other taxes	466
20.7.	Value added taxation	467
20.8.	Policy outlook	468

<b>Chapter 21:</b>	<b>Crypto Assets: Tax Law and Policy in Indonesia</b>	469
	<i>Ika Riswanti Putranti</i>	
21.1.	General framework and domestic tax guidance	469
21.1.1.	Regulating crypto as a digital asset	469
21.1.2.	Imposition of tax on crypto assets	472
21.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	476
21.2.1.	Crypto assets origination (“creation”)	476
21.2.2.	Crypto assets extinction (“loss”)	481
21.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	483
21.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	484
21.4.1.	Income tax on crypto asset trading transactions	484
21.5.	Income and capital gains taxes: International aspects	487
21.5.1.	Security token vis-à-vis utility token	487
21.5.2.	Exit tax regime and tax treaties	489
21.6.	Wealth taxes, inheritance and gift taxes, and other taxes	491
21.7.	Value added taxation	494
21.8.	Policy outlook	497
<b>Chapter 22:</b>	<b>Crypto Assets: Tax Law and Policy in Israel</b>	499
	<i>Tamir Shanan</i>	
22.1.	General framework and domestic tax guidance	499
22.1.1.	Characterization of crypto assets for legal purposes	499
22.1.2.	Classification of crypto assets for income tax purposes	501
22.2.	Income and capital gain taxes: Origination (“creation”) and extinction (“loss”)	504
22.2.1.	Tax implications arising from initial token offerings (ITOs)	504

22.2.2.	Tax implications arising from mining/staking of crypto tokens	504
22.2.3.	Tax implications arising from chain splits (forks) of crypto tokens	505
22.2.4.	Tax implications arising from fortuitous issuances or receipts of crypto tokens	505
22.3.	Income and capital gain taxes: Post-origination event (“use”) in investment transactions	506
22.3.1.	Disposition of crypto assets against fiat currency	506
22.3.2.	Disposition of crypto assets against other crypto assets	507
22.3.3.	Tax implications upon disposition of crypto assets held for speculation or investment	507
22.4.	Income and capital gain taxes: Post-origination event (“use”) in business transactions	508
22.4.1.	Tax implications arising from crypto tokens as consideration made in payment for goods and services, and crypto tokens issued to employees or directors	508
22.5.	Income and capital gain taxes: International aspects	509
22.6.	Wealth taxes, inheritance and gift taxes, and other taxes	511
22.6.1.	Wealth tax	511
22.6.2.	Estate/inheritance tax	511
22.6.3.	Gift tax	512
22.7.	Value added taxation	513
22.8.	Policy outlook	514
<b>Chapter 23:</b>	<b>Crypto Assets: Tax Law and Policy in Italy</b>	<b>517</b>
	<i>Gianluigi Bizioli and Roberto Scalia</i>	
23.1.	General framework and domestic tax guidance	517
23.1.1.	Basics (smart contract and distributed ledger technology), legal nature and types of crypto assets	517
23.1.2.	Crypto assets’ qualification in the domestic tax system	520

23.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	520
23.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	525
23.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	526
23.5.	Income and capital gains taxes: International aspects	528
23.5.1.	Domestic tax law	528
23.5.2.	Tax treaties	531
23.6.	Wealth taxes, inheritance and gift taxes, and other taxes	534
23.6.1.	Inheritance and gift tax	534
23.6.2.	Fiscal monitoring, stamp duty tax, tax on financial assets held abroad, tax on the value of crypto assets and digital service tax	536
23.7.	Value added taxation	538
23.8.	Policy outlook	542
<b>Chapter 24:</b>	<b>Crypto Assets: Tax Law and Policy in Japan</b>	<b>545</b>
	<i>Atsushi Onishi</i>	
24.1.	General framework and domestic tax guidance	545
24.1.1.	Definition of “crypto assets”	546
24.1.2.	Nature of crypto assets	547
24.1.3.	Treatment of crypto assets in tax matters	548
24.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	548
24.2.1.	Obtaining new crypto assets by fork	548
24.2.2.	Obtaining new crypto assets by mining, staking and lending	549
24.2.3.	Extinguishing crypto assets by redemption, loss of access to a wallet and theft	549

---

24.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	550
24.3.1.	Common issues to both individual taxation and corporation taxation	550
24.3.2.	Individual taxation	551
24.3.2.1.	When income from crypto-asset transactions should be reported as gross revenue (timing)	551
24.3.2.2.	Classes of income from crypto-asset transactions	551
24.3.2.3.	Necessary expenses	552
24.3.2.4.	Treatment when transferring crypto assets with a consideration at a conspicuously low value	552
24.3.2.5.	Margin transactions of crypto assets	553
24.3.2.6.	Credit transactions of crypto assets	553
24.3.2.7.	Improvement of tax payment environment	554
24.3.2.8.	Collection of evidence	554
24.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	555
24.4.1.	Corporation taxation	555
24.4.1.1.	Amount of income of domestic corporation for the business year	555
24.4.1.2.	Timing of inclusion of profits and losses from crypto-asset transactions	556
24.4.1.3.	Amount of transfer cost of crypto assets	556
24.4.1.4.	Valuation of crypto assets at the end of the business year	556
24.4.1.5.	Credit transactions of crypto assets	557
24.4.2.	Payment of salary by crypto assets	558
24.5.	Income and capital gains taxes: International aspects	558
24.5.1.	Source rule	558
24.5.2.	Tax treaty	560
24.6.	Wealth taxes, inheritance and gift taxes and other taxes	560
24.6.1.	Inheritance and gift taxes	560
24.6.2.	Valuation of the crypto assets	560
24.7.	Value added taxation	561

24.7.1.	Consumption taxation in the case of alienation of crypto assets	562
24.7.2.	Consumption taxation in the case of loan of crypto assets	562
24.8.	Policy outlook	563
<b>Chapter 25:</b>	<b>Crypto Assets: Tax Law and Policy in Mexico</b>	<b>565</b>
	<i>Ximena García Torres</i>	
25.1.	General framework and domestic tax guidance	565
25.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	568
25.2.1.	Treatment of origination events by corporate taxpayers	568
25.2.2.	Treatment of origination events by individual taxpayers	570
25.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	571
25.3.1.	Treatment of post-origination events in investment transactions by corporate taxpayers	571
25.3.2.	Treatment of post-origination events in investment transactions by individual taxpayers	571
25.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	572
25.4.1.	Treatment of post-origination events in business transactions by corporate taxpayers	572
25.4.2.	Treatment of post-origination events in business transactions by individual taxpayers	574
25.5.	Income and capital gains taxes: International aspects	575
25.6.	Wealth taxes, inheritance and gift taxes, and other taxes	576
25.7.	Value added taxation	576
25.8.	Policy outlook	577

---

<b>Chapter 26:</b>	<b>Crypto Assets: Tax Law and Policy in the Netherlands</b>	579
	<i>Pepijn Pinkse and Nick Kitsz</i>	
26.1.	General framework and domestic tax guidance	579
26.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	586
26.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	590
26.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	593
26.5.	Income and capital gains taxes: International aspects	594
26.6.	Wealth taxes, inheritance and gift taxes, and other taxes	594
26.7.	Value added taxation	595
26.8.	Policy outlook	599
<b>Chapter 27:</b>	<b>Crypto Assets: Tax Law and Policy in New Zealand</b>	601
	<i>Adrian Sawyer and Andrew Smith</i>	
27.1.	General framework and domestic tax guidance	601
27.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	604
27.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	605
27.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	608
27.5.	Income and capital gains taxes: International aspects	609

27.6.	Wealth taxes, inheritance and gift taxes, and other taxes	611
27.7.	Value added taxation	611
27.8.	Policy outlook	614
<b>Chapter 28:</b>	<b>Crypto Assets: Tax Law and Policy in Nigeria</b>	617
	<i>Emmanuel Igwe Eze</i>	
28.1.	General framework and domestic tax guidance	617
28.1.1.	Relevance of crypto assets to Nigeria	617
28.1.2.	Need for financial inclusion	617
28.1.3.	Remittances	618
28.1.4.	Inflation and currency devaluation	619
28.1.5.	Regulatory and administrative framework for crypto assets in Nigeria	620
28.1.6.	SEC classification of crypto assets in Nigeria	621
28.1.7.	What are “crypto assets”?	622
28.1.8.	Scope of crypto assets under SEC regulation	622
28.1.9.	Whom to regulate	622
28.1.10.	Categorization and treatment of digital assets by the SEC	623
28.1.11.	CBN vs. SEC: Legal status of crypto assets in Nigeria	624
28.1.12.	General classification and characterization of crypto assets in Nigeria and its impact on the domestic tax system	625
28.1.12.1.	Tax authorities and the legal status of crypto assets in Nigeria	625
28.1.12.2.	Taxation of crypto assets in Nigeria and the SEC classification and characterization of crypto assets	626
28.1.12.3.	Classification of crypto assets under the Capital Gains Tax Act (CGTA)	626
28.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	627
28.2.1.	Originating events for crypto assets – Treatment for direct tax purposes in Nigeria	627
28.2.1.1.	Mining tax treatment of block rewards	627
28.2.1.2.	Staking – Tax implications of staking rewards	628
28.2.2.	Tax treatment of chain splits or forks	629



28.2.3.	Tax treatment of airdrops	630
28.2.4.	Purchase of crypto assets for fiat currency	631
28.2.5.	Initial Coin or Token Offering	631
28.2.6.	Terminal events for crypto assets – Treatment of loss for direct tax purposes in Nigeria	633
28.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	634
28.3.1.	Selling crypto assets against fiat currency	634
28.3.2.	Selling crypto assets against crypto assets	635
28.3.3.	Crypto assets held for speculation and investment	635
28.3.4.	Crypto assets treated as equity or debt and the withholding tax obligation	636
28.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	636
28.4.1.	Buying and selling goods or services in crypto – Direct tax implications	636
28.4.2.	How to determine FMV	637
28.4.3.	Crypto assets as wages for employment	637
28.4.4.	Loss treatment of crypto assets in business transactions	637
28.5.	Income and capital gains taxes: International aspects	638
28.6.	Wealth taxes, inheritance and gift taxes, and other taxes	639
28.7.	Value added taxation	639
28.8.	Policy outlook	640
<b>Chapter 29:</b>	<b>Crypto Assets: Tax Law and Policy in North Macedonia</b>	<b>641</b>
	<i>Aleksandra Maksimovska Stojkova and Elena Neshovska Kjoseva</i>	
29.1.	General framework and domestic tax guidance	641
29.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	647

29.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	648
29.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	649
29.5.	Income and capital gains taxes: International aspects	651
29.6.	Wealth taxes, inheritance and gift taxes, and other taxes	652
29.7.	Value added taxation	653
29.8.	Policy outlook	655
<b>Chapter 30:</b>	<b>Crypto Assets: Tax Law and Policy in Poland</b> <i>Izabela Andrzejewska-Czernek and Marcelina Szwed-Ziemichód</i>	657
30.1.	General framework and domestic tax guidance	657
30.1.1.	General remarks	657
30.1.2.	The legal definition of virtual currency for tax purposes (from 2019)	658
30.1.3.	The status of crypto assets for income tax purposes up until the end of 2018	659
30.1.4.	Taxation of cryptocurrency-derived income up until 31 December 2018	661
30.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	662
30.2.1.	Mining	662
30.2.2.	Forks and airdrops	664
30.2.3.	Minting/issuing tokens under token sales (ICO/NFT sale)	664
30.2.4.	Extinction events	665
30.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	666
30.3.1.	Using crypto assets: Crypto transactions (buying, selling, exchanging)	668
30.3.2.	Donation in crypto assets	669

30.3.3.	Obligation of VASP to withhold any tax related to crypto	670
30.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	670
30.4.1.	Taxation of VASP v. non-VASP	670
30.4.2.	Using crypto assets as payment in day-to-day operations	671
30.4.3.	Receiving crypto assets as a wage/remuneration (individuals)	672
30.5.	Income and capital gains taxes: International aspects	672
30.5.1.	Qualification under double tax treaties	672
30.5.2.	Deduction of foreign tax	673
30.5.3.	Exit tax	673
30.5.4.	Controlled foreign company	674
30.6.	Wealth taxes, inheritance and gift taxes, and other taxes	674
30.6.1.	Wealth tax	674
30.6.2.	Inheritance and gift taxes	674
30.6.3.	Transfer tax (tax on civil law transactions)	675
30.7.	Value added taxation	675
30.8.	Policy outlook	676
<b>Chapter 31:</b>	<b>Crypto Assets: Tax Law and Policy in Portugal</b>	679
	<i>João Ochôa and Rodrigo Rabeca Domingues</i>	
31.1.	General framework and domestic tax guidance	679
31.1.1.	Introduction	679
31.1.2.	Regulatory framework	681
31.1.2.1.	Prevention of money laundering and terrorist financing, and the Portuguese Central Bank work on crypto assets	681
31.1.2.2.	The Portuguese Securities Exchange Commission work on crypto assets	683
31.1.2.3.	Corporate law issues	684
31.1.2.4.	Classification for accounting purposes	684

31.1.3.	Brief overview of the Portuguese tax system	686
31.1.3.1.	PIT	687
31.1.3.2.	CIT	689
31.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	691
31.2.1.	PIT treatment of origination and extinction events	691
31.2.1.1.	Overview	691
31.2.1.1.1.	Business income	691
31.2.1.1.2.	Investment income	693
31.2.1.2.	Analysis of specific origination and extinction events	693
31.2.2.	CIT treatment of origination and extinction events	695
31.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	697
31.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	699
31.5.	Income and capital gains taxes: International aspects	700
31.6.	Wealth taxes, inheritance and gift taxes, and other taxes	701
31.7.	Value added taxation	703
31.8.	Policy outlook	704
<b>Chapter 32:</b>	<b>Crypto Assets: Tax Law and Policy in Serbia</b> <i>Svetislav Kostić and Lidija Živković</i>	705
32.1.	General framework and domestic tax guidance	705
32.1.1.	Digital assets in Serbia until the COVID-19 pandemic	705
32.1.2.	Digital assets in Serbia during and after the COVID-19 pandemic	707
32.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	710

---

32.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	711
32.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	715
32.5.	Income and capital gains taxes: International aspects	716
32.6.	Wealth taxes, inheritance and gift taxes, and other taxes	717
32.7.	Value added taxation	717
32.8.	Policy outlook	721
<b>Chapter 33:</b>	<b>Crypto Assets: Tax Law and Policy in South Africa</b>	<b>723</b>
	<i>Shaun Parsons and Craig West</i>	
33.1.	General framework and domestic tax guidance	723
33.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	726
33.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	729
33.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	732
33.5.	Income and capital gains taxes: International aspects	734
33.6.	Wealth taxes, inheritance and gift taxes, and other taxes	735
33.7.	Value added taxation	736
33.8.	Policy outlook	739

<b>Chapter 34:</b>	<b>Crypto Assets: Tax Law and Policy in Taiwan</b>	<b>743</b>
	<i>Stefan Shih-Chou Huang</i>	
34.1.	General framework and domestic tax guidance	743
34.1.1.	FTX incident triggered crypto-tax issues in Taiwan	743
34.1.2.	Taiwan government’s regulatory positions on crypto assets	744
34.1.3.	Taiwanese courts’ perspectives on crypto assets	747
34.1.4.	Anti-money laundering supervisory framework on crypto assets	747
34.1.5.	Conservative and reluctant official stance toward crypto-asset taxation	748
34.1.6.	Basic “domestic” tax guidance on crypto assets	749
34.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	750
34.2.1.	No personal income tax on mining and airdrop	750
34.2.2.	No corporate taxation on business minting and mining	750
34.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	751
34.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	752
34.4.1.	Corporate holding and transacting crypto assets	752
34.4.2.	Corporate taxation of local crypto exchanges	752
34.5.	Income and capital gains taxes: International aspects	753
34.5.1.	Individual investment via foreign exchanges	753
34.5.2.	Corporate investment via foreign crypto exchange	753
34.6.	Wealth taxes, inheritance and gift taxes, and other taxes	754
34.6.1.	No property taxation on crypto assets	754
34.6.2.	Estate and gift taxation on crypto assets	754
34.6.3.	No transaction taxation on crypto assets	754
34.7.	Value added taxation	755
34.7.1.	Different crypto assets and exchanges, different VAT nature	755
34.7.2.	Individual’s supply of crypto assets	756

34.7.3.	Business mining of crypto assets	757
34.7.4.	Business supply of crypto assets	757
34.7.5.	Commission earned by local crypto exchange	757
34.7.6.	Supply of crypto assets via foreign crypto exchange	758
34.8.	Policy outlook	758
34.8.1.	A categorized regulatory framework is expected	758
34.8.2.	A new special agency proposed	759
34.8.3.	Further anticipated developments	760
<b>Chapter 35:</b>	<b>Crypto Assets: Tax Law and Policy in Türkiye</b>	<b>761</b>
	<i>Emrah Ferhatoğlu</i>	
35.1.	General framework and domestic tax guidance	761
35.1.1.	Regulation on the disuse of crypto assets in payments	761
35.1.2.	Recent legal developments: Law No. 7518 amending the Capital Markets Law	762
35.1.3.	Case law on crypto assets	764
35.1.4.	Public statements of certain government agencies on crypto assets	765
35.1.5.	Qualification of crypto assets in Turkish tax law	765
35.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	766
35.2.1.	Tax treatment of airdrops	766
35.2.2.	Tax treatment of initial coin offering tokens	767
35.2.3.	Tax treatment of crypto asset mining and staking	768
35.2.4.	Extinction of crypto assets	769
35.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	770
35.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	770
35.5.	Income and capital gains taxes: International aspects	771
35.6.	Wealth taxes, inheritance and gift taxes, and other taxes	772
35.6.1.	Inheritance and gift tax	772
35.6.1.1.	Inherited crypto assets	773

35.6.1.2.	Gratuitous transfers between living persons	775
35.6.1.3.	Valuation of crypto assets for inheritance and transfer tax purposes	776
35.6.1.4.	Ensuring clarity in inheritance and transfer taxation	777
35.6.2.	Banking and insurance transaction tax	777
35.6.3.	Stamp duty	778
35.7.	Value added taxation	779
35.7.1.	VAT treatment for cryptocurrency exchange platforms	779
35.7.2.	VAT treatment of NFTs	780
35.7.3.	VAT treatment of crypto-asset mining	780
35.7.4.	VAT treatment of ICO	780
35.8.	Policy outlook	781
<b>Chapter 36:</b>	<b>Crypto Assets: Tax Law and Policy in the United Kingdom</b>	<b>783</b>
	<i>Ben Symons</i>	
36.1.	General framework and domestic tax guidance	783
36.1.1.	How is cryptocurrency treated for legal purposes in the United Kingdom?	783
36.1.2.	How is cryptocurrency treated for accounting purposes?	784
36.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	785
36.2.1.	Cryptocurrency acquired through an initial coin offering	785
36.2.2.	Cryptocurrency acquired through “mining”	785
36.2.3.	Receipt of cryptocurrency from “staking”	786
36.2.4.	Forks	787
36.2.5.	Airdropped tokens	787
36.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	788
36.3.1.	Are the crypto assets being sold as part of a “trade”, or were they held as a long-term investment?	788
36.3.2.	Gambling	789
36.3.3.	Crypto assets are exchanged for other crypto assets	789



---

36.3.4.	Valuation	790
36.3.5.	Mechanisms imposed on crypto exchanges to withhold/collect tax	790
36.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	791
36.4.1.	Are the crypto assets being sold as part of a “trade”, or were they held as a long-term investment?	791
36.4.2.	Payment of wages in cryptocurrency	791
36.4.3.	Treatment of an employee who later sells cryptocurrency	792
36.5.	Income and capital gains taxes: International aspects	792
36.5.1.	The relevance of the source rules and the location of the cryptocurrency	792
36.5.2.	Domicile and the taxation of cryptocurrency in the United Kingdom	793
36.5.3.	When is cryptocurrency situated for the purposes of inheritance tax?	794
36.5.4.	Where is cryptocurrency situated for the purposes of capital gains tax?	795
36.6.	Wealth taxes, inheritance and gift taxes, and other taxes	796
36.6.1.	Discussion of issues in relation to domicile	796
36.7.	Value added taxation	797
36.7.1.	Cryptocurrency is used as a form of payment	797
36.7.2.	VAT treatment of mining activities	798
36.7.3.	Capital raising tokens	798
36.7.4.	Utility tokens and initial coin offerings	799
36.7.5.	Non-fungible tokens and VAT	801
36.8.	Policy outlook	802
36.8.1.	General overview	802
36.8.2.	Decentralized finance	802
36.8.3.	Non-fungible tokens	803
36.8.4.	Crypto-Asset Reporting Framework	803

<b>Chapter 37:</b>	<b>Crypto Assets: Tax Law and Policy in the United States</b>	805
	<i>Omri Marian</i>	
37.1.	General framework and domestic tax guidance	805
37.1.1.	Regulatory framework in areas other than tax	805
37.1.1.1.	Securities regulation	805
37.1.1.2.	Commodities regulation	806
37.1.1.3.	Illicit finance	807
37.1.1.4.	Banking regulation	807
37.1.2.	Tax framework	808
37.1.2.1.	In general	808
37.1.2.2.	Possible tax classifications of crypto assets	810
37.1.2.2.1.	Property other than currency	810
37.1.2.2.2.	Commodities for tax purposes	811
37.1.2.2.3.	Securities for tax purposes	812
37.1.2.3.	Determination of fair market value for tax purposes	812
37.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	813
37.2.1.	Creation and acquisition	813
37.2.1.1.	Mining and staking	813
37.2.1.2.	Mining and staking as a trade or business	814
37.2.1.3.	Purchase of crypto assets for fiat currencies	815
37.2.1.4.	Forks and airdrops	815
37.2.1.5.	Initial coin offerings (ICOs)	816
37.2.2.	Extinction and loss	817
37.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	818
37.3.1.	Recognition of gain and loss in general	818
37.3.2.	Character of gain and loss	820
37.3.3.	Mark-to-market accounting for dealers and traders	820
37.3.4.	Lending transactions	820
37.3.5.	Future contracts on crypto assets	821
37.3.6.	The application of certain anti-abuse rules to sale and exchange of crypto assets	822
37.3.6.1.	Wash sales	822
37.3.6.2.	Constructive sales	822
37.3.6.3.	Straddles	823

37.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	823
37.5.	Income and capital gains taxes: International aspects	825
37.5.1.	Source of income from crypto assets	825
37.5.2.	Inbound taxation	826
37.5.2.1.	Active income from trade or business	826
37.5.2.2.	Passive income	827
37.5.3.	Outbound taxation	828
37.6.	Wealth taxes, inheritance and gift taxes, and other taxes	829
37.7.	Value added taxation	830
37.8.	Policy outlook	830
<b>Chapter 38:</b>	<b>Crypto Assets: Tax Law and Policy in Uruguay</b>	833
	<i>Andrea Laura Riccardi Sacchi</i>	
38.1.	General framework and domestic tax guidance	833
38.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	840
38.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	841
38.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	843
38.5.	Income and capital gains taxes: International aspects	843
38.6.	Wealth taxes, inheritance and gift taxes, and other taxes	846
38.7.	Value added taxation	847
38.8.	Policy outlook	849

<b>Chapter 39:</b>	<b>Crypto Assets: Tax Law and Policy in Venezuela</b>	853
	<i>Rosa María Rodríguez de Abreu</i>	
39.1.	General framework and domestic tax guidance	853
39.1.1.	Background	853
39.1.2.	Regulatory framework	854
39.1.3.	Transparency and reporting for crypto assets and international exchange of relevant data	856
39.1.4.	CBDC El Petro: Digital currency of the Central Bank of Venezuela	857
39.1.5.	General framework of crypto assets in Venezuela	858
39.2.	Income and capital gains taxes: Origination (“creation”) and extinction (“loss”)	859
39.3.	Income and capital gains taxes: Post-origination events (“use”) in investment transactions	859
39.4.	Income and capital gains taxes: Post-origination events (“use”) in business transactions	860
39.5.	Income and capital gains taxes: International aspects	862
39.6.	Wealth taxes, inheritance and gift axes, and other taxes	863
39.7.	Value added taxation	864
39.8.	Policy outlook	865
	<b>List of Contributors</b>	867









The Home of International Taxation

## 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  
The Netherlands

**Postal Address:**

P.O. Box 20237  
1000 HE Amsterdam  
The Netherlands

Order online at [ibfd.org/Shop/Book](https://ibfd.org/Shop/Book)