



Universiteit
Leiden
The Netherlands

Taxation of virtual currency

Bal, A.M.

Citation

Bal, A. M. (2014, December 2). *Taxation of virtual currency*. Meijers-reeks. Retrieved from <https://hdl.handle.net/1887/29963>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/29963>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/29963> holds various files of this Leiden University dissertation.

Author: Bal, Aleksandra Marta

Title: Taxtation of virtual currency

Issue Date: 2014-12-02

Taxation of virtual currency

Taxation of virtual currency

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 2 december 2014
klokke 10.00 uur

door

Aleksandra Marta Bal

geboren te Mikołów (Polen)
in 1983

Promotiecommissie:

Promotoren: prof. dr. H. Vording
prof. dr. J.P. Boer

Overige leden: prof. dr. F. Vanistendael (KU Leuven, Belgium)
prof. dr. H.W.M. van Kesteren (Tilburg University)
prof. M. Walpole (University of New South Wales, Sydney,
Australia)

Lay-out: Anne-Marie Krens – Tekstbeeld – Oegstgeest

ISBN 978-94-6203-690-1

© 2014 A.M. Bal

Alle rechten voorbehouden. Niets uit deze uitgave mag worden vervoelvoudigd, opgeslagen in een geautomatiseerd gegevensbestand of openbaar gemaakt, in enige vorm of op enige wijze, hetzij elektronisch, mechanisch, in fotokopie of anderszins zonder voorafgaande schriftelijke toestemming van de uitgever.

Voor zover het maken van kopieën uit deze uitgave is toegestaan op grond van art. 16h t/m 16m Auteurswet jo. Besluit van 27 november 2002, Stb. 575, dient men de daarvoor wettelijk verschuldigde vergoeding te voldoen aan Stichting Reprorecht, Postbus 3051, 2130 KB Hoofddorp.

No part of this book may be reproduced in any form, by print, photoprint, microfilm or any other means without written permission from the publisher.

Table of contents

1	INTRODUCTION	1
1.1	Introductory remarks	1
1.2	Aim and scope	4
1.3	Outline	7
1.4	Previous work	10
1.4.1	Literature	10
1.4.2	Governments and legislators	13
1.4.2.1	The United States	13
1.4.2.2	European countries	15
1.4.2.3	Other countries	18
1.4.3	International organizations	21
1.4.3.1	OECD	21
1.4.3.2	European Union	23
2	DIGITAL ENVIRONMENT	25
2.1	Introductory remarks	25
2.2	Internet	25
2.3	Peer-to-peer networks	27
2.4	Electronic commerce	28
2.5	Virtual community	30
2.6	Virtual economy	30
3	THE CONCEPT OF VIRTUAL CURRENCY	33
3.1	Introductory remarks	33
3.2	Community-related virtual currencies	34
3.2.1	Initial remarks	34
3.2.2	Legal framework	37
3.2.3	Types of virtual worlds	41
3.2.3.1	Initial comments	41
3.2.3.2	Structured worlds	41
3.2.3.3	Unstructured worlds	44
3.2.4	Trade in virtual worlds	49
3.2.4.1	Initial comments	49
3.2.4.2	In-World Transactions (IWT)	50
3.2.4.3	Real Money Trade (RMT)	51
3.2.4.4	Examples of high-profile trade activity	54

3.3	Universal virtual currencies	55
3.4	Characterization as money in the economic sense	61
3.5	Characterization as money in the legal sense	63
3.6	Characterization as electronic money	64
3.7	Characterization as securities or assets	66
3.8	Conclusions	67
4	INCOME TAX: GENERAL CONSIDERATIONS	69
4.1	Introductory remarks	69
4.2	Definition of income	72
4.2.1	Subjective interpretations	72
4.2.2	Objective interpretations	73
4.2.3	Schanz-Haig-Simons model	75
4.2.4	Accounting definition	76
4.2.5	Interim conclusions	77
4.2.5.1	Value	80
4.2.5.2	Enhancement of economic position	81
4.3	Principles of income taxation	81
4.3.1	Equity	82
4.3.2	Certainty and flexibility	86
4.3.3	Administrative feasibility	90
4.3.4	Neutrality	93
4.4	Conclusions	94
5	INCOME TAX: COUNTRY-SPECIFIC CONSIDERATIONS	97
5.1	Structure of tax systems	97
5.1.1	Global and schedular systems	97
5.1.2	Income categories	99
5.1.2.1	Business income	99
5.1.2.2	Windfall gains	100
5.1.2.3	Benefits in kind	101
5.1.2.4	Imputed income	101
5.1.2.5	Capital gains	103
5.1.3	Income determination	103
5.2	The United States	105
5.2.1	Characteristics of individual income tax	105
5.2.2	Taxation of income from virtual trade	110
5.2.2.1	Initial comments	110
5.2.2.2	Accession to wealth	112
5.2.2.3	Realization	112
5.2.2.4	Complete dominion	117
5.2.2.5	Valuation	119
5.2.2.6	Imputed income	121
5.2.2.7	Income versus capital gain treatment	122
5.2.3	Conclusions	123

5.3	The United Kingdom	124
5.3.1	Characteristics of individual income tax	124
5.3.2	Characteristics of capital gains tax	126
5.3.3	Taxation of income from virtual trade	128
5.3.3.1	Initial comments	128
5.3.3.2	Trading income	128
5.3.3.3	Income from profession and vocation	133
5.3.3.4	Miscellaneous income	134
5.3.3.5	Capital gains	136
5.3.4	Conclusions	137
5.4	Germany	138
5.4.1	Characteristics of individual income tax	138
5.4.2	Taxation of income from virtual trade	143
5.4.2.1	Initial comments	143
5.4.2.2	Business income	144
5.4.2.3	Income from independent personal services	148
5.4.2.4	Miscellaneous income	150
5.4.3	Conclusion	151
5.5	The Netherlands	152
5.5.1	Characteristics of individual income tax	152
5.5.2	Taxation of income from virtual trade	154
5.5.2.1	Initial comments	154
5.5.2.2	Business income	157
5.5.2.3	Income from other activities	160
5.5.2.4	Savings income / net wealth income	161
5.5.3	Conclusions	163
5.6	International aspects	164
5.6.1	Basic principles of international tax law	164
5.6.2	Cross-border virtual trade	165
5.6.2.1	The United States	165
5.6.2.2	The United Kingdom	169
5.6.2.3	Germany	170
5.6.2.4	The Netherlands	171
5.6.3	Conclusions	172
6	INCOME TAX: CONCLUSIONS	173
6.1	The model scenario	173
6.2	The actual scenario	174
6.3	The issues	176
6.4	The solutions	178
6.4.1	Initial comments	178
6.4.2	Virtual income	178
6.4.3	Real income	180
6.4.3.1	Initial comments	180
6.4.3.1	Taxpayer information	182
6.4.3.2	Monitoring and reporting	186

7	INDIRECT TAX: GENERAL CONSIDERATIONS	191
7.1	Introductory remarks	191
7.2	General characteristics and types of indirect taxes	193
7.3	History of indirect consumption taxes	195
7.4	Rise of electronic commerce	197
7.5	The model tax system	201
7.5.1	Initial comments	201
7.5.2	Basic characteristics	202
7.5.2.1	Transaction tax	202
7.5.2.2	Indirect tax	203
7.5.2.3	Place of taxation	204
7.5.3	Principles of taxation	204
7.5.3.1	Neutrality	204
7.5.3.2	Equity	206
7.5.3.3	Administrative feasibility and certainty	208
7.5.4	Interim conclusions	209
8	INDIRECT TAX: COUNTRY-SPECIFIC CONSIDERATIONS	211
8.1	The European Union	211
8.1.1	Sources of EU VAT law	211
8.1.2	Taxable person	212
8.1.2.1	Beginning of economic activities	213
8.1.2.2	Purpose and result of economic activities	214
8.1.2.3	Duration of economic activities	215
8.1.2.4	Exploitation of property	217
8.1.2.5	Acting as such	219
8.1.2.6	National case law	219
8.1.2.7	Interim conclusions	223
8.1.3	Taxable transaction	224
8.1.3.1	Supplies of goods and services	224
8.1.3.2	Consideration	227
8.1.3.3	Unlawful activities	229
8.1.4	Place of taxation	230
8.1.4.1	Initial comments	230
8.1.4.2	Rules until 1 January 2015	231
8.1.4.3	Rules from 1 January 2015	232
8.1.5	Chargeable event and tax liability	236
8.1.6	Exemptions	237
8.1.7	Taxable amount	238
8.1.8	Tax deduction	139
8.1.9	Administrative obligations	240
8.1.9.1	Registration	240
8.1.9.2	One Stop Shop scheme	241
8.1.9.3	Other compliance obligations	242
8.1.10	Conclusions	243

8.2	The United States	244
8.2.1	Initial comments	244
8.2.2	State versus federal taxing rights	245
8.2.2.1	Due Process and Commerce Clause	245
8.2.2.2	Landmark judgments	247
8.2.2.3	“Amazon” laws	250
8.2.2.4	Proposed legislative measures	252
8.2.2.5	Simplification efforts by states	254
8.2.3	Basic characteristics of sales taxes	255
8.2.3.1	Personal scope	255
8.2.3.2	Taxable transactions	256
8.2.3.3	Place of taxation	260
8.2.3.4	Tax amount	262
8.2.3.5	Administrative obligations	263
8.2.4	Basic characteristics of use taxes	263
8.2.5	Conclusions	264
8.3	International aspects	265
9	INDIRECT TAX: CONCLUSIONS	267
9.1	Introductory remarks	267
9.2	EU VAT	268
9.2.1	Unclear concept of taxable person	268
9.2.2	Place of taxation	269
9.2.2.1	Initial comments	269
9.2.2.2	Identification of customer location	270
9.2.2.3	One Stop Shop regime	274
9.2.2.4	Recommendations	276
9.2.3	Exemptions	279
9.3	US Sales Tax	280
9.3.1	Uniform treatment of digital goods	280
9.3.2	Nexus and interstate trade	281
9.3.3	Place of taxation	283
9.3.4	Reform	283
9.4	Conclusions	285
	SUMMARY	287
	SAMENVATTING	293
	BIBLIOGRAPHY	299
	CURRICULUM VITAE	311

Acknowledgements

I would like to convey my appreciation to all who gave their time and expertise in making this thesis possible. First of all, I would like to express my sincere indebtedness to my supervisors, Professors Hank Vording and Koos Boer, for their guidance, advice and constructive observations. They helped me improve the quality of the thesis while allowing me sufficient flexibility to carry out my research project.

The thesis would not have been completed without the support of the International Bureau for Fiscal Documentation (IBFD) in Amsterdam. I would like to express my gratitude to all IBFD colleagues for their assistance in making this thesis possible.

Finally, I would like to thank my family and friends, especially Zdzisław Bal, Anna Bergier-Bal and Menno Sas for their support and encouragement of this academic endeavour.

