

Contents

<i>Abstract</i>	3
<i>List of publications</i>	9
<i>List of tables</i>	11
<i>List of figures</i>	13
<i>List of acronyms</i>	15
<i>Acknowledgements</i>	17

Introduction 21

I Background	21
Technical standards and standardization	22
Rules for innovation and regulatory technique	26
New Approach and New Legislative Framework	29
New goals and challenges	32
II Dissertation goals, methodology, and structure	35
Goals and scope	35
Data and methodology	36
Structure	37
Papers	38
References	43

Papers 55

1 How voluntary are harmonized standards? Perceptions of the co-regulatory role of standardization in the European Union	55
1.1 Introduction	55
1.1.1 Debates on the European standardization system	56
1.2 Methodology	58
1.2.1 Data collection	60
1.2.2 Questionnaire	60
1.2.3 Response and sample	60
1.3 Results	62

1.3.1	Usage and voluntariness of harmonized European standards	62
1.3.2	Control and legitimacy	65
1.4	Discussion	67
1.5	Conclusion	68
	References	69
2	The impact of standard-setting knowledge networks on firm innovation	71
2.1	Introduction	71
2.2	Theory and hypotheses	72
2.2.1	Standardization and innovation	72
2.2.2	The role of knowledge exchange in standardization	73
2.2.3	Standardization networks	75
2.3	Methodology	77
2.3.1	Data	77
2.3.2	Regression	78
2.3.3	Network model	79
2.3.4	Variables	80
2.4	Results	82
2.4.1	Descriptive statistics	82
2.4.2	Regression analysis	85
2.4.3	Robustness	88
2.5	Discussion and conclusion	88
	References	94
3	Stakeholder perceptions of the role of standards for addressing the sustainable development goals	101
3.1	Introduction	101
3.2	Literature review	103
3.3	Methods	108
3.4	Results	110
3.5	Discussion	115
3.6	Conclusion	117
	References	118
4	SDG 5 and the gender gap in standardization: Empirical evidence from Germany	123
4.1	Introduction	123
4.2	Literature and Theory	125
4.2.1	Initiatives on the consideration of gender in standards	125
4.2.2	Perspectives on gender in standardization	127
4.2.3	Causes of female under-representation in standardization	129
4.2.4	Hypotheses	130
4.3	Materials and Methods	131
4.3.1	Data	131
4.3.2	Models	132
4.4	Results	133
4.4.1	Regional differences	133
4.4.2	Size	133
4.4.3	Education	134

4.4.4	standards-setting organizations (SSOs)	134
4.4.5	Regression	136
4.5	Discussion	139
4.6	Conclusion	140
	References	141
5	The effect of the COVID-19 pandemic on standardization	147
5.1	Introduction	147
5.2	Background	148
5.3	Methodology	152
5.4	Results	153
5.4.1	Response and sample	153
5.4.2	Impact on standardizing organizations	154
5.4.3	Change in perceptions	156
5.4.4	Effect on standard-setting activity	157
5.4.5	Digitalization	160
5.5	Discussion	163
5.6	Conclusion	166
	References	167
	<i>Conclusion</i>	173
III	Conclusion	173
	Main findings	173
	Implications	174
	Limitations and future research	176
	Concluding words	180
	References	181