Contents

	Intr	oduction	1
1	The	Policy Setting	7
	1.1	Basic Concepts of International Taxation	7
	1.2	The Harmonization Process in the EC	11
		1.2.1 Value-Added Taxation with Border Controls	11
		1.2.2 Value-Added Taxation in the Internal Market	15
	1.3	Feasible International Tax Principles	21
2	The	oretical Aspects	29
	2.1	Introduction: Domestic Taxes and Foreign Trade	29
	2.2	Trade Distortions vs. Domestic Efficiency	32
	2.3	Fiscal vs. Political Externalities	35
	2.4	Optimal Taxation vs. Tax Reform Analysis	41
	2.5	Application to EC Policy Issues	43
3	ΑI	Dual General Equilibrium Framework	47
	3.1	The Trade Model and its Assumptions	.47
	3.2	Dual Functions and their Properties	49
	3.3	Introducing General Commodity Taxes	53
	3.4	General Tax Principles	
		3.4.1 General Destination Principle	
		3.4.2 General Origin Principle	

4	Res	tricted	Destination Principle	59
	4.1	The T	wo-Country Model	59
	4.2	Tax R	eform and Terms of Trade Changes	63
	4.3	Introd	ucing Changes in the Tax Base	68
	4.4	Globa	Welfare Effects of Tax Reform	73
5	Res	tricted	l Origin Principle	77
	5.1	The T	hree-Country Model	77
	5.2	Tax R	deform in the Small-Union Case	82
		5.2.1	The Basic Trade Pattern	83
		5.2.2	Alternative Trade Patterns	86
	5.3	Tax R	Reform with Endogenous World Prices	90
		5.3.1	Simplifying Assumptions	91
		5.3.2	Relative Price Effects	. 93
		5.3.3	National Welfare Effects	98
	5.4	Suppl	lement: Trade Deflection	102
	5.5	Sumn	nary: The Limitations of Theoretical Analysis	104
6	Alt	ernati	ve Tax Principles: A Numerical Comparison	107
	6.1	The F	Empirical Model	109
	6.2	The I	Data Base	111
		6.2.1	Deriving the Benchmark Data Set	111
		6.2.2	Functional Forms and Elasticity Estimates	. 117
	6.3	Simul	ation Results for Homogeneous Goods	119
		6.3.1	Measuring Welfare Change	119
		6.3.2	Welfare Effects of a Switch in the Tax Base	121
		6.3.3	Welfare Effects of a Change in Tax Rates	125
		6.3.4	Overall Effects of a Change in the Tax Principle	130
		6.3.5	Sensitivity Analysis	131
	6.4	Exten	ding the Model: Differentiated Goods	133
		6.4.1	Changes in the Model and the Data Base	133

		6.4.2	Simulation Results for Differentiated Goods	138
	6.5	A Sec	ond-Best Tax Principle for the EC	144
7	Tax	Rate	Harmonization	147
	7.1	Public	Goods in the Dual Framework	148
	7.2	Hetero	ogeneous Preferences for Public Goods	151
	7.3	Tax C	Competition and Public Good Supply	160
		7.3.1	Tax Reform in One Country	160
		7.3.2	Alternative Views of Government Behavior	167
		7.3.3	A Brief Survey of Empirical Results	172
	7.4	Optim	nal Tax Rate Harmonization in the EC	175
8	Sun	nmary	and Outlook	179
	8.1	Summ	nary: Evaluating the Policy Choices	179
		8.1.1	Results of the Study	179
		8.1.2	Welfare Analysis and International Tax Policy	183
	8.2	Outloo	ok: International Capital Movements	185
	App	endix		189
		Apper	ndix A: Derivation of Selected Equations	189
		Apper	ndix B: MPS/GE Simulation Results	195
		• •	ndix C: List of Symbols Used	
	Bib	liograp	bhy	203

List of Tables

1.1	Principles for International Commodity Taxation (Single-Stage Tax).
1.2	Comparison of International Tax Principles (Multi-Stage Tax) 11
1.3	Value-Added Tax Rates in EC Member States (1987) 15
1.4	Tax Revenues in EC Member States
1.5	Effects of Alternative Second-Best Tax Principles
2.1	Trade Distortions and Heterogeneous Preferences
2.2	Fiscal vs. Political Externalities
4.1	Restricted Destination Principle and Trade Policies 60
4.2	Welfare Effects under the Restricted Destination Principle
5.1	Welfare Effects under the Restricted Origin Principle (I) 90
5.2	Relative Price Effects under the Restricted Origin Principle 98
5.3	Welfare Effects under the Restricted Origin Principle (II) 102
6.1	Gross Domestic Product by Region (1987)
6.2	National Accounting Classification of Goods
6.3	International Trade Classification of Goods
6.4	Benchmark Data Set: Homogeneous Goods (1987)
6.5	Input Coefficients by Sector and Region
6.6	Substitution Elasticities in Single-Stage Functions
6.7	Homogeneous Goods (I): Switch in Tax Base (bill. US-\$) 120
6.8	Homogeneous Goods (II): Change in Tax Rates (bill. US-\$) 128
6.9	Homogeneous Goods (III): Overall Welfare Effects
6.10	Change in Tax Rates – Sensitivity Analysis ($\sigma^C = 0.1$) 13:

6.11	Benchmark Data Set: Differentiated Goods (1987)
6.12	Substitution Elasticities in Nested Utility Functions
6.13	Differentiated Goods (I): Switch in Tax Base (bill. US-\$) 138
6.14	Differentiated Goods (II): Change in Tax Rates (bill. US-\$) 140
	Differentiated Goods (III): Overall Welfare Effects
7 1	Global Welfare Effects and Preferences for Public Goods 15
7.2	National Welfare Effects with Public Goods

List of Figures

1.1	Taxation of Trade under the Restricted Destination Principle 23
1.2	Taxation of Trade under the Restricted Origin Principle
2.1	Externalities in Government Relations
4.1	Terms of Trade Effects of a Tax Change
4.2	Tax Base and Terms of Trade Effects of a Tax Change
5.1	The Basic Trade Pattern (I)
5.2	Symmetric Trade Pattern (II)
5.3	Asymmetric Trade Pattern (III)
5.4	Trade Flows with Deflection
6.1	The Basic Trade Pattern
6.2	Welfare Effects of a Switch in the Tax Base
6.3	Welfare Effects of a Change in Tax Rates
7.1	Costs and Benefits of Public Goods in a First-Best Setting 150
7.2	Tax Rate Harmonization with Heterogeneous Preferences 159
7.3	Fiscal vs. Political Externalities and Public Good Supply 172