

# Contents

<b>1</b>	<b>Introduction</b>	1
1.1	Foundations of the Analysis of the Welfare Effects of PTAs	2
1.2	The Welfare Effects of PTAs and Trade Costs	3
1.3	The Welfare Effects of PTAs and the Size of Countries	4
1.4	Plan of the Book	5
<b>2</b>	<b>The Theory of Trade Agreements, Economic Integration, Size of Economies, Trade Costs and Welfare</b>	9
2.1	Preferential Trade Agreements	9
2.1.1	PTAs and Regional Trade Agreements	9
2.1.2	The GATT and the WTO	11
2.2	The Theory of Economic Integration	13
2.2.1	Defining Economic Integration	13
2.2.2	The Traditional Welfare Analysis of Economic Integration	14
2.3	The General Equilibrium Analysis of Economic Integration	15
2.3.1	The Theory of Second Best	15
2.3.2	The Transfer Payment Principle	16
2.3.3	Welfare Comparisons	19
2.3.4	Welfare Comparisons in Economic Integration	22
2.3.5	Conclusions	25
2.4	Trade Costs, Economic Integration and Welfare	26
2.4.1	Defining Trade Costs	26
2.4.2	Transportation Costs	27
2.4.3	Tariff Barriers	28
2.4.4	Non-Tariff Barriers	31
2.4.5	Trade Costs and Economic Welfare	31
2.4.6	Welfare Comparison with Consumer Distortions	32
2.5	The Impact of Size on the Characteristics of Economies	34
2.5.1	The Analysis of the Size of Economies	34
2.5.2	The Particular Characteristics of Small Economies	35
2.5.3	Trade Costs and the Size of Economies	40

2.5.4 Economic Integration and the Size of Economies .....	43
2.5.5 Welfare Comparisons with Production Distortions .....	44
2.5.6 Conclusions .....	45
2.6 Summary and Conclusions .....	46
<b>3 An Empirical Analysis of the Size Characteristics of Economies .....</b>	<b>47</b>
3.1 Measuring the Size of Economies .....	47
3.2 The Impact of Country Size: Data Sources and Methodology .....	48
3.2.1 Data Sources .....	48
3.2.2 The Choice of Benchmark Year .....	49
3.2.3 The Cross-Section Data Analysis .....	49
3.2.4 The Panel Data Analysis .....	49
3.2.5 The E45 Data Set .....	49
3.2.6 The W218 Data Set .....	50
3.3 The Construction of a Size Classification of Economies .....	51
3.3.1 Classification of Size .....	55
3.4 The Size Characteristics of Economies .....	59
3.4.1 Openness to International Trade .....	59
3.4.2 Output and Export Diversification .....	59
3.4.3 Exports .....	60
3.4.4 Trading Partners .....	60
3.4.5 Import Variety .....	61
3.4.6 Trade Vulnerability .....	62
3.4.7 The Size of the Public Sector .....	63
3.4.8 Economic Performance .....	63
3.5 An Empirical Investigation of the Size Characteristics of Economies .....	64
3.5.1 The Impact of Country Size on Openness to Trade .....	64
3.5.2 The Impact of Country Size on the Importance and Share of Exports .....	65
3.5.3 The Impact of Country Size on the Number and Importance of Trading Partners .....	66
3.5.4 The Impact of Country Size on Import Variety .....	68
3.5.5 The Impact of Country Size on Trade Vulnerability .....	68
3.5.6 The Impact of Country Size on the Public Sector .....	69
3.5.7 The Impact of Country Size on Economic Performance .....	73
3.6 Summary and Conclusions .....	74
<b>4 An Empirical Analysis of the Impact of Trade Costs on Trade   Flows and Welfare: Country Size and PTA Implications .....</b>	<b>75</b>
4.1 Trade Costs and the Gravity Model .....	75
4.2 An Empirical Investigation of the Impact of Trade Costs on Trade Flows and Country Size Effects .....	77
4.3 Implications of the Gravity Model .....	80

4.4	Counterfactual Welfare Analysis .....	88
4.5	An Applied Counterfactual Welfare Analysis of the Size of Countries .....	90
4.6	Exercise I: Analysis of the Effects of a Fall in Trade Costs of 10 % in the EU .....	93
4.6.1	Exercise I: Anderson and van Wincoop Model Results .....	93
4.6.2	Exercise I: MC-IR Model Results .....	93
4.7	Exercise II: Analysis of the Effects of a Fall in Trade Costs of 10 % in the E45-EU Region .....	95
4.7.1	Exercise II: Anderson and van Wincoop Model Results .....	95
4.7.2	Exercise II: MC-IR Model Results .....	97
4.8	Exercise III: Analysis of the Effects of a Fall in Trade Costs of 10 % in the E45 Region .....	97
4.8.1	Exercise III: Anderson and van Wincoop Model Results .....	99
4.8.2	Exercise III: MC-IR Model Results .....	99
4.9	Findings in the Context of Previous Empirical Studies .....	99
4.10	Summary and Conclusion .....	101
<b>5</b>	<b>A Cross-Section Analysis of Size Classification and the Effects of Preferential Trade Agreements .....</b>	<b>105</b>
5.1	Cross-Section Analysis of the Trade Effects of PTAs .....	106
5.2	Estimating the Trade Effects of PTAs .....	108
5.3	Estimating the Trade Effects of PTA Membership with Respect to Country Size .....	113
5.4	Summary of the Trade Effects of PTA Membership with Respect to Country Size .....	124
5.5	Estimating the Trade Effects of Membership of the European Union and Size Classification .....	126
5.6	Estimating the Trade Effects of Membership of CISFTA and Size Classifications .....	130
5.7	Summary and Conclusion .....	134
<b>6</b>	<b>A Panel Data Analysis of Size Classification and the Effects of Preferential Trade Agreements .....</b>	<b>135</b>
6.1	Econometric Specification of the Panel Data Gravity Model .....	136
6.2	A Panel Data Analysis of PTAs .....	138
6.2.1	The Common Constant Method .....	138
6.2.2	The Random Effects Method .....	139
6.2.3	The Fixed Effects Method .....	140
6.3	The Two-Way Fixed Effects Estimation of the Effects of PTAs ...	140
6.4	The Random Effects Estimation of the Effects of PTAs .....	141
6.5	A Comparison of the Panel Data Estimation Methods of the Effects of PTAs for E45 Trade Flows .....	144

6.6	Panel Data Analysis of Size Classification and the Effects of PTAs on E45 Trade Flows .....	144
6.7	Panel Data Analysis of the Effects of PTAs on E45 Trade Flows .....	147
6.8	Size of Countries and the Effects of PTA Membership on Trade Flows .....	149
6.9	An Econometric Gravity Model Analysis of the Welfare Effects of PTAs .....	152
6.10	Summary and Conclusions .....	155
<b>7</b>	<b>Summary and Conclusions .....</b>	<b>157</b>
7.1	Objectives .....	158
7.2	Principal Findings .....	159
7.2.1	Principal Findings Relating to Size and the Economics Characteristics of Small Countries .....	159
7.2.2	Principal Findings Relating to the Impact of Trade Costs on Trade Flows with Reference to Country Size and PTA Membership .....	160
7.2.3	Principal Findings Relating to the Cross-Section Analysis of the Trade Flow Effects of PTAs .....	163
7.2.4	Principal Findings from the Panel Data Analysis of the Effects of PTAs .....	164
7.3	Suggestions for Future Research .....	165
<b>8</b>	<b>Appendix .....</b>	<b>167</b>
8.1	Chapter 2: Synopsis of Selected RTAs .....	167
8.1.1	EU .....	167
8.1.2	EFTA, CEFTA, CISFTA .....	168
8.1.3	NAFTA .....	169
8.1.4	ASEAN .....	169
8.1.5	COMESA .....	169
8.1.6	MERCOSUR .....	169
8.2	Chapter 3: Countries in Data Set .....	170
8.2.1	W218 .....	170
8.2.2	E45 .....	171
8.3	Chapter 3: Industry Diversification .....	172
8.4	Chapter 3: Export Market Diversification .....	176
8.5	Chapter 5: Capital/Largest Cities-W218 Data Set .....	180
8.6	Chapter 5: Country Cultural Divisions .....	184
8.6.1	Asia South-West (Other than Arabic) .....	185
8.6.2	Baltic .....	185
8.6.3	Celtic .....	185
8.6.4	Norden .....	185
8.6.5	East Central and South-East Europe .....	185

8.6.6	Eastern Europe, Northern and Central Asia .....	185
8.6.7	East Mediterranean (Other than Arabic) .....	185
8.6.8	Romano-Hellenic Division .....	186
8.6.9	Dutch- and German Speaking .....	186
8.6.10	French Speaking .....	186
8.6.11	Portuguese Speaking .....	186
8.6.12	UK .....	186
8.7	Chapter 5: PTAs Dummy Variables .....	187
8.8	Chapter 6: Membership of PTAs .....	190
<b>References</b>	.....	<b>193</b>
<b>Index</b>	.....	<b>203</b>