

941 946 320

Essays in international trade with heterogeneous firms

Inauguraldissertation
zur Erlangung des akademischen Grades
eines Doktors der Wirtschaftswissenschaften
der Universität Mannheim

vorgelegt von
Gonzague Vannoorenberghe
April 2009

Contents

1	Introduction	1
2	Trade and skill premium	7
2.1	Introduction	7
2.2	The model	10
2.2.1	Demand	10
2.2.2	Production	11
2.2.3	Equilibrium	15
2.3	Trade liberalisation	16
2.3.1	Trade liberalisation as a marginal decrease in the variable costs of exporting	17
2.3.2	Trade liberalisation as a decrease in the fixed costs of exporting	19
2.4	Numerical simulations	21
2.4.1	Calibration	21
2.4.2	Results	22
2.5	Conclusion	23
2.6	Appendix to chapter 2	25
3	Trade and investment in process innovation	35
3.1	Introduction	35
3.2	The closed economy	38
3.2.1	Demand	38
3.2.2	Firms	38
3.2.3	The cutoff productivity level	41

3.3	The open economy	42
3.3.1	The setup	42
3.3.2	Trade liberalisation	45
3.3.3	Investment intensity at the firm level	47
3.3.4	Aggregate investment intensity	48
3.4	The Puzzles	50
3.4.1	Tobin's Q and firm size	50
3.4.2	The distribution of firm size	52
3.5	Conclusion	54
3.6	Appendix to chapter 3	56
4	Firm-level volatility and openness	65
4.1	Introduction	65
4.2	The Model	67
4.2.1	Demand	67
4.2.2	Firms	69
4.2.3	The Price index	75
4.3	Empirical Predictions	76
4.3.1	Non-exporters	77
4.3.2	Exporters	77
4.4	The Data	81
4.5	Results	83
4.5.1	Prediction 1: the short run substitution between markets	83
4.5.2	Prediction 2: Market share and volatility	85
4.5.3	Prediction 3: Volatility of exporters and diversification effect	87
4.6	Robustness	88
4.6.1	Volatility of employment and value added	88
4.6.2	Inventories	88
4.6.3	Controlling for multinationals	89
4.7	Conclusion	89
4.8	Appendix to chapter 4	91