## Contents

List of Figures ................................................................. XI

List of Tables ................................................................. XI

Management Summary (German) ........................................... 1

1 Freight Transport and Economic Growth – Two Inseparable Twins? ...... 5

2 Coupled or Decoupled? An Inquiry into the Relationships between Transport, Trade and Economic Growth ......................................................... 9
   2.1 Literature Review ................................................................ 9
   2.1.1 Transport Infrastructure Investment and Economic Growth ........ 9
   2.1.1.1 Production Function Modeling ......................................... 13
   2.1.1.2 Cost Function Modeling .................................................. 19
   2.1.1.3 (Specification) Problems Concerning Both Approaches ........ 21
   2.1.1.4 Conclusions ................................................................. 24
   2.1.2 Transport Costs and Trade .............................................. 28
   2.1.2.1 The Measurement of Transport Costs ................................ 29
   2.1.2.2 Transport Costs as Restrictions to Trade ......................... 31
   2.1.2.3 Conclusions ................................................................. 34
   2.1.3 Trade and Economic Growth .......................................... 35
   2.1.3.1 Economic Growth ........................................................ 35
   2.1.3.2 Gains from Trade ......................................................... 38
   2.1.3.3 Empirical Evidence on the Relationship between Trade Volume and Income ................................................................. 45
   2.1.3.4 Conclusions ................................................................. 48
   2.1.4 Location decision, Production Structure and Economic Growth ...... 49
   2.1.4.1 Gains from Agglomeration ............................................. 51
   2.1.4.2 Gains from Concentration ............................................. 52
   2.1.4.3 Plant Location, Plant Size and Transport Costs ................... 52
   2.1.4.4 Conclusions ................................................................. 54
   2.2 Empirical Evidence on the Relationship between Transport, Trade and Economic Growth ................................................................. 55
   2.2.1 Transport Costs and Trade Volume .................................... 56
   2.2.1.1 Theoretical Considerations – The Gravity Equation in a Framework of Monopolistic Competition ................................................................. 58
2.2.1.2 Empirical Estimation ................................................ 63
2.2.2 Trade Volume and GDP ............................................. 68
2.2.2.1 Empirical Estimation ............................................ 69
2.2.3 Concluding Empirical Remarks ................................. 72
2.3 Concluding Remarks .................................................. 73

3 Qualitative Aspects of Transport Infrastructure ............... 77
  3.1 Previous Research on Transport Quality Attributes .......... 78
  3.2 Empirical Analysis .................................................... 80
    3.2.1 Methodology ...................................................... 80
    3.2.1.1 Design of the Questionnaire ............................... 82
    3.2.1.2 Specification of Attributes and Attribute Levels ......... 83
    3.2.1.3 Experimental Choice Design ............................... 86
    3.2.1.4 Sample ......................................................... 90
    3.2.2 Results .......................................................... 91
    3.2.2.1 Average Relative Importances ............................. 92
    3.2.2.2 Average Partial Utility Values ............................ 93
    3.2.3 Cluster analysis ................................................. 97
  3.3 Combination of Results with Traffic Flow Data .............. 101
  3.4 Conclusions .......................................................... 104

4 Concluding Remarks and Outlook .................................... 107
Transport, Trade and Economic Growth - Coupled or Decoupled?
An Inquiry into Relationships between Transport, Trade and Economic Growth and into User Preferences concerning Growth-oriented Transport Policy (Ed.)
2007, XIII, 119 p., Hardcover
ISBN: 978-3-540-68296-7