

Table of Contents

List of Figures	XI
List of Tables	XIII
1 Theme, Objectives and Structure of the Book	1
1.1 Theme and Objectives of the Book	1
1.1.1 Definitions	2
1.1.2 Public versus Private Sector	4
1.2 Structure of the Book	6
2 Frontier Efficiency Measurement Techniques	9
2.1 Introduction	9
2.2 Non-Parametric Approaches	10
2.2.1 Data Envelopment Analysis (DEA)	10
2.2.2 Input-Oriented DEA Model	11
2.2.3 Output-Oriented DEA Model	13
2.2.4 Free Disposable Hull (FDH)	14
2.3 Exogenous Influences in Non-Parametric Approaches	16
2.3.1 Incorporation into the Programming Problem	16
2.3.2 Two-Stage Approach	17
2.4 Parametric Approaches	19
2.4.1 Deterministic Approaches	20
2.4.2 Stochastic Approaches	23
2.5 Exogenous Influences in Parametric Approaches	28
2.6 Software Issues	30
3 Literature Review on Efficiency Studies	33
3.1 Introduction	33
3.2 Culture	34
3.3 Education	35
3.4 Energy Supply	38
3.5 Health Care	40
3.6 Public Facilities	43

3.7	Security	45
3.8	Transportation	46
3.9	Administrative Units	49
3.9.1	Local Governments	49
3.9.2	Countries	51
3.10	Conclusion	52
4	Applications to German Local Governments	55
4.1	Introduction	55
4.2	Institutional Setting of the Local Governments in Germany	56
4.2.1	Political System	56
4.2.2	Financial System	57
4.2.3	Tasks of the Local Governments	61
4.3	Demographic Change, Economies of Scale and Efficiency	64
4.3.1	Introduction	64
4.3.2	Local Government Efficiency	65
4.3.3	Economies of Scale	71
4.3.4	Conclusion	73
4.4	Intergovernmental Grants and Efficiency	74
4.4.1	Introduction	74
4.4.2	Theoretical Analysis	75
4.4.3	Empirical Analysis	81
4.4.4	Conclusion	86
4.5	Voter Involvement, Fiscal Autonomy and Efficiency	86
4.5.1	Introduction	86
4.5.2	Theoretical Background and Hypotheses	88
4.5.3	Empirical Analysis	89
4.5.4	Conclusion	95
4.6	Determinants of Efficiency: The Case of Road Maintenance	96
4.6.1	Introduction	96
4.6.2	Estimation Approach and Data	97
4.6.3	Results	100
4.6.4	Conclusion	105
5	Summary and Conclusions	107
	Bibliography	113
	Appendices	135
A	Data Sources and Definitions	137

B Estimation Results	139
C Synoptic Table of Efficiency Studies	147