

Table of Contents

1/ Introduction	8
2/ Economic evaluation of public goods	10
Categories of goods	11
Benefits from the provision of a public good	12
Value of public goods and its estimation	13
Hedonic pricing method	15
3/ Application domains of hedonic pricing methods	18
Spatial planning	19
Investment projects evaluation	24
Real estate market analysis	26
Calculation of taxes and financial contributions	28
4/ Review studies of hedonic prizes	30
Public transport	33
Natural areas	40
School facilities	46
Summary of the review	50
5/ Theoretical description of hedonic pricing models	52
Linear regression model	53
Spatial fixed effects models	55
Spatial regression models	57
Difference-in-differences	61
Meta-analyses	64
6/ Data for hedonic pricing models	66
Identification of relevant characteristics and available data	66
Selection of metrics and calculation of variables	75
Data deficits	80
7/ Application of cross-sectional models	82
Data analysis and dwelling sample preparation	83
Selecting variables and estimating their effects by OLS	86
Spatial error model SEM	94
Spatial fixed effects models	95
Methodological challenges	96
8/ Application of difference-in-differences models	98
Definition of public goods	99
Definition of the treatment and control groups	100
Estimated effects of intervention	108
Verification of the identical trends between treatment and control groups	110
Lack of data as a limiting factor	114

9/ Estimates of public goods effects	116
Price level control in quarterly periods	117
Characteristics of the dwellings	117
Characteristics of the dwelling's neighbourhood and location	119
Public transport	120
School facilities	124
Civic amenities	125
Natural areas	125
Time conditionality of effect estimates	126
10/ Aggregation of economic benefit of public goods	128
11/ Benefit transfer using meta-analyses	130
Meta-analysis 1: the effects of public transport	130
Meta-analysis 2: the effects of railway transit	135
Meta-analysis 3: the effects of natural areas	141
Meta-analysis 4: the effects of natural areas	144
12/ Application of results	148
Using the pre-estimated effects	149
Estimating aggregate effects for specific interventions	150
Designing new hedonic models and re-estimating effects	150
13/ Bibliography	152