buildings

MDPI

Supplementary Materials

Economic evaluation of the indoor environmental quality of buildings. The noise pollution effects on housing prices in the city of Bari (Italy)

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Variable	Mean	Standard Deviation	Levels/Intervals	Frequence [%]
Total selling price [€]	203,640	112,819		
Total surface of the property [m²]	97.88	38.87		
			<60	0.16
			60-90	0.28
			90-110	0.20
			110-150	0.23
			>150	0.13
Number of bathrooms [n]	1.35	0.50		
			1	0.66
			2	0.33
			3	0.01
Floor level [n.]	3.03	2.12		
			0	0.045
			1	0.29
			2	0.125
			3	0.18
			4	0.125
			5	0.07
			6	0.095
			>6	0.07
Presence of lift [1-presence, 0-absence]	0.71	0.45		
			0	0.29
			1	0.71
Presence of the parking [1-presence, 0-absence]	0.20	0.40		
			0	0.81
			1	0.19
Quality of the maintenance conditions [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.94	1.64		
			1	0.35
			3	0.33
			5	0.32
Distance from the waterfront [Km by walking]	1.62	0.69		
			0.25-0.6	0.065
			0.6-1.0	0.085
			1.0-1.5	0.30
			1.5-2.0	0.245
			2.0-2.5	0.22
			2.5-4.0	0.085
Maintenance conditions of the public spaces adjacent to	2.85	1.23		
			1	0.23

	Mean	Std. Dev.	Category	Value
the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]			3	0.62
			5	0.15
Distance from the nearest food market or grocery shop [Km by walking]	0.42	0.30		
			0.1-0.2	0.13
			0.2-0.3	0.22
			0.3-0.5	0.36
			0.5-0.7	0.16
			>0.7	0.13
Maintenance conditions of the buildings facades adjacent to the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.90	1.26		
			1	0.22
			3	0.60
			5	0.18
Road private and public vehicular traffic level [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	0.95	0.42		
			1	0.355
			3	0.44
			5	0.205
Distance from the nearest public green space [Km by walking]	2.70	1.47		
			0.02-0.5	0.14
			0.5-0.8	0.195
			0.8-1.0	0.14
			1.0-1.2	0.195
			1.2-1.5	0.24
			>1.5	0.09
Distance from the nearest highway [km by car]	3.58	0.98		
			1.2-2.0	0.065
			2.0-3.0	0.19
			3.0-3.5	0.175
			3.5-4.0	0.185
			4.5-5.0	0.32
			>5.0	0.065
Distance from the nearest railway station [Km by walking]	2.09	0.65		
			0.65-1.5	0.165
			1.5-2.0	0.255
			2.0-2.5	0.35
			2.5-3.0	0.10
			>3.0	0.13
Perceived environmental quality level of the area in	2.79	0.48		
			1.9-2.4	0.17

which the property is located [scores scale from 1 to 5]			2.4-3.0	0.53
			3.0-4.0	0.25
			>4.0	0.05
	64.80	6.85		
Sound level in the street where the property is located [dB(A)]			≤40	0.01
			>40 - ≤50	0.045
			>50 - ≤55	0.045
			>55 - ≤60	0.265
			>60 - ≤65	0.27
			>65 - ≤70	0.23
			>70 ≤75	0.135

Table S1. Descriptive statistics of the variables for the municipal OMI central area

Variable	Mean	Standard Deviation	Levels/Intervals	Frequence [%]
Total selling price [€]	228,635	110,130		
Total surface of the property [m²]	105.95	35.86		
			<60	0.05
			60-90	0.27
			90-110	0.22
			110-150	0.38
			>150	0.08
Number of bathrooms [n]	1.43	0.55		
			1	0.60
			2	0.38
			3	0.02
Floor level [n.]	2.70	1.93		
			1	0.37
			2	0.18
			3	0.21
			4	0.06
			5	0.11
			6	0.03
			>6	0.04
Presence of lift [1-presence, 0-absence]	0.71	0.45		
			0	0.29
			1	0.71
Presence of the parking [1-presence, 0-absence]	0.49	0.50		
			0	0.51

			1	0.49
Quality of the maintenance conditions [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.70	1.53		
			1	0.38
			3	0.40
			5	0.22
	3.20	0.61		
			2.2-2.5	0.08
Distance from the waterfront [Km by walking]			2.5-3.0	0.34
			3.0-3.5	0.29
			3.5-4.0	0.14
			4.5-5.0	0.15
Maintenance conditions of the public spaces adjacent to the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.57	1.53		
			1	0.42
			3	0.37
			5	0.21
	0.50	0.33		
			0.1-0.25	0.19
Distance from the nearest food market or grocery shop [Km by walking]			0.25-0.5	0.35
			0.5-0.7	0.27
			0.7-1.0	0.16
			1.0-2.5	0.03
Maintenance conditions of the buildings facades adjacent to the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	3.02	1.16		
			1	0.16
			3	0.66
			5	0.18
Road private and public vehicular traffic level [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	1.21	0.62		
			1	0.16
			3	0.51
			5	0.33
	3.35	1.36		
			0.04-0.5	0.08
Distance from the nearest public green space [Km by walking]			0.5-0.7	0.12
			0.7-1.0	0.17
			1.0-1.5	0.29
			1.5-2.0	0.22
			2.0-3.5	0.12
	1.75	0.69		

Variable	Mean	Standard Deviation	Levels/Intervals	Frequence [%]
Distance from the nearest highway [km by car]			0.35-1.0	0.12
			1.0-1.5	0.16
			1.5-2.0	0.28
			2.0-2.5	0.29
			2.5-3.2	0.15
Distance from the nearest railway station [Km by walking]	3.64	0.85		
			2.7-3.0	0.16
			3.0-3.5	0.39
			3.5-4.0	0.25
			4.0-4.5	0.09
			4.5-6.0	0.06
			6.0-7.1	0.05
Perceived environmental quality level of the area in which the property is located [scores scale from 1 to 5]	3.29	0.44		
			2.4-3.0	0.24
			3.0-3.5	0.29
			3.5-4.0	0.44
			4.0-4.2	0.03
Sound level in the street where the property is located [dB(A)]	62.90	6.57		
			≤40	0.00
			>40 -≤50	0.04
			>50 ≤55	0.17
			>55 ≤60	0.31
			>60 ≤65	0.25
			>65 ≤70	0.13
			>70 ≤75	0.10

Table S2. Descriptive statistics of the variables for the municipal OMI semicentral area

Variable	Mean	Standard Deviation	Levels/Intervals	Frequence [%]
Total selling price [€]	208,668	82.145		
Total surface of the property [m²]	103.26	37.06		
			<60	0.11
			60-90	0.24
			90-110	0.23
			110-150	0.36
			>150	0.06
Number of bathrooms [n]	1.51	0.56		
			1	0.52
			2	0.45
			3	0.03

	2.80	2.08		
			0	0.05
			1	0.28
			2	0.17
Floor level [n.]			3	0.23
			4	0.08
			5	0.08
			6	0.03
			>6	0.08
Presence of lift	0.83	0.38		
[1-presence, 0-absence]			0	0.17
			1	0.83
Presence of the parking	0.78	0.41		
[1-presence, 0-absence]			0	0.22
			1	0.78
Quality of the maintenance	3.13	1.59		
conditions [scores scale: 1- to			1	0.28
be restructured; 3- fit for hab-			3	0.37
itation; 5- restructured]			5	0.35
	5.21	1.22		
			1.7-4.0	0.14
Distance from the waterfront			4.0-5.0	0.34
[Km by walking]			5.0-5.5	0.12
			5.5-6.0	0.15
			6.0-10.0	0.25
Maintenance conditions of	1.81	0.98		
the public spaces adjacent to				
the property [scores scale: 1-			1	0.59
to be restructured; 3- fit for			3	0.40
habitation; 5- restructured]			5	0.01
	1.10	1.09		
			0.02-0.5	0.35
Distance from the nearest			0.5-0.8	0.22
food market or grocery shop			0.8-1.2	0.18
[Km by walking]			1.2-3.0	0.10
			3.0-4.8	0.15
Maintenance conditions of	2.90	1.38		
the buildings facades adjacent			1	0.26

to the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]			3	0.52
			5	0.22
Road private and public vehicular traffic level [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	3.15	1.35		
			1	0.18
			3	0.43
			5	0.39
Distance from the nearest public green space [Km by walking]	3.41	1.46		
			0.45-1.0	0.05
			1.0-2.0	0.14
			2.0-3.0	0.19
			3.0-4.0	0.42
			4.0-6.3	0.20
Distance from the nearest highway [km by car]	1.48	0.59		
			0.1-1.0	0.09
			1.0-1.5	0.62
			1.5-2.0	0.13
			2.0-2.5	0.10
			2.5-3.5	0.06
Distance from the nearest railway station [Km by walking]	6.15	1.55		
			3.4-4.5	0.11
			4.5-5.0	0.12
			5.0-5.5	0.24
			5.5-6.5	0.16
			6.5-7.5	0.14
			7.5-10.5	0.23
Perceived environmental quality level of the area in which the property is located [scores scale from 1 to 5]	2.55	0.29		
			2.2-2.5	0.34
			2.5-2.7	0.40
			2.7-3.0	0.08
			3.0-3.1	0.18
Sound level in the street where the property is located [dB(A)]	59.12	7.58		
			≤40	0.00
			>40 -≤50	0.26
			>50 -≤55	0.14
			>55 -≤60	0.33
			>60 -≤65	0.13
			>65 -≤70	0.04
			>70 -≤75	0.10

Table S3. Descriptive statistics of the variables for the municipal OMI peripheral area

Variable	Mean	Standard Deviation	Levels/Intervals	Frequence [%]
Total selling price [€]	146,421	45,529		
Total surface of the property [m²]	89.67	25.31		
			<60	0.11
			60-90	0.38
			90-110	0.29
			110-150	0.20
			>150	0.02
Number of bathrooms [n]	1.30	0.46		
			1	0.70
			2	0.30
			3	0.00
Floor level [n.]	3.20	2.52		
			1	0.065
			2	0.265
			3	0.16
			4	0.16
			5	0.075
			6	0.065
			7	0.055
			>7	0.155
Presence of lift [1-presence, 0-absence]	0.75	0.43		
			0	0.25
			1	0.75
Presence of the parking [1-presence, 0-absence]	0.75	0.43		
			0	0.245
			1	0.755
Quality of the maintenance conditions [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	3.33	1.54		
			1	0.225
			3	0.375
			5	0.40
Distance from the waterfront [Km by walking]	8.18	2.03		
			3.3-6.0	0.105
			6.0-7.0	0.125
			7.0-8.0	0.14
			8.0-9.0	0.38

			9.0-10.0	0.165
			10.0-15.6	0.085
Maintenance conditions of the public spaces adjacent to the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.76	1.31		
			1	0.28
			3	0.56
			5	0.16
Distance from the nearest food market or grocery shop [Km by walking]	0.67	0.51		
			0.1-0.4	0.34
			0.4-0.6	0.23
			0.6-0.8	0.05
			0.8-1.0	0.09
			1.0-1.5	0.19
			1.5-2.4	0.10
Maintenance conditions of the buildings facades adjacent to the property [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.68	1.30		
			1	0.31
			3	0.55
			5	0.14
Road private and public vehicular traffic level [scores scale: 1- to be restructured; 3- fit for habitation; 5- restructured]	2.41	1.98		
			1	0.155
			3	0.525
			5	0.32
Distance from the nearest public green space [Km by walking]	3.33	1.35		
			0.2-0.7	0.145
			0.7-1.5	0.325
			1.5-2.0	0.13
			2.0-3.5	0.135
			3.5-5.0	0.135
			5.0-8.0	0.09
			8.0-9.3	0.04
Distance from the nearest highway [km by car]	2.69	1.23		
			0.2-0.5	0.12
			0.5-2.0	0.115
			2.0-3.0	0.315
			3.0-3.5	0.155
			3.5-4.5	0.225
			4.5-6.0	0.07
	8.59	2.22		
			3.3-6.5	0.14

			6.5-8.0	0.21
			8.0-8.5	0.13
Distance from the nearest railway station [Km by walking]			8.5-9.0	0.235
			9.0-10.0	0.125
			10.0-13.5	0.13
			13.5-18.4	0.03
Perceived environmental quality level of the area in which the property is located [scores scale from 1 to 5]	3.08	0.49		
			1.7-2.5	0.06
			2.5-3.0	0.40
			3.0-3.5	0.31
			3.5-4.0	0.23
Sound level in the street where the property is located [dB(A)]	57.02	5.91		
			≤40	0.00
			>40 -≤50	0.25
			>50 -≤55	0.33
			>55 -≤60	0.255
			>60 -≤65	0.125
			>65 -≤70	0.02
			>70 -≤75	0.02

Table S4. Descriptive statistics of the variables for the municipal OMI suburban area