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Mirko Moro

Karen Mayor

Seán Lyons

Richard S.J. Tol

Stirling Economics Discussion Paper 2011-07

May 2011

Online at
http://www.management.stir.ac.uk/research/economics/working-papers

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Mirko Moro*
Economics Division, University of Stirling, Scotland
Economic and Social Research Institute, Dublin, Ireland
Email: Mirko.Moro@stir.ac.uk

Karen Mayor
Economic and Social Research Institute, Dublin, Ireland
Department of Economics, Trinity College Dublin, Ireland
Email: Karen.Mayor@esri.ie

Seán Lyons
Economic and Social Research Institute, Dublin, Ireland
Department of Economics, Trinity College Dublin, Ireland
Email: Sean.Lyons@esri.ie

Richard S.J. Tol
Economic and Social Research Institute, Dublin, Ireland
Department of Economics, Trinity College Dublin, Ireland
Institute for Environmental Studies and Department of Spatial Economics, Vrije Universiteit, Amsterdam, The Netherlands
Email: Richard.Tol@esri.ie

Acknowledgements
We thank Kathryn Graddy, Stephan Heblich, Ian Lange and Chris Timmins for comments. Thanks also to the Scottish Institute for Research in Economics for a research grant (Moro).

*Corresponding author: Mirko Moro, Economics Division, University of Stirling, FK94LA, Scotland, United Kingdom, Email: mirko.moro@stir.ac.uk

April 2011: Word count (text and footnotes): 5024

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Abstract

Does the housing market reflect cultural heritage? We estimate several specifications of a hedonic price equation to establish whether distance to cultural heritage site is capitalised into housing prices in Greater Dublin, Ireland. The results show that distance to the nearest historic building has a significant and robust effect on housing prices. To our knowledge this is the first application of the hedonic price method to cultural heritage.

Keywords: cultural economics, cultural heritage, hedonic price, hedonic regression, non-market valuation

April 2011: Word count (text and footnotes): 5024

1 Introduction

Cultural heritage - including monuments, historic buildings, museum collections and archaeological sites – is considered an important resource of historic and socio-economic significance in a modern society. Built cultural heritage provides an array of positive externalities and spillovers, ranging from visitors' attraction to a more general capacity of attracting high-human capital individuals with subsequent effect on regional growth (Falk et al., 2010) and cultivation of civic pride through preservation (Noonan, 2007). [1]

Therefore it is not a surprise that the protection, maintenance and production of cultural heritage are common goals for many societies, in developed as well as developing countries (Snowball, 2008). While individuals maximize their utility, governments are expected to maximize society's utility, i.e. social well-being (Frey, 2003). Political decisions on cultural investments are consequently expected to be judged according to the costs and benefits to society. However, the provision of cultural heritage is costly and therefore competes with other social goals. The optimal provision of public goods is then to be found by comparing costs and benefits. The cost of protecting cultural heritage can vary greatly depending on the good, its characteristics and location, but the exercise of estimating those costs is not different from any project appraisal. In contrast, benefits arising from cultural heritage and accruing to individuals are hard to estimate. Cultural heritage goods are local public goods,[2] and because they are not traded in markets, the benefits that individuals receive from their enjoyment can only be inferred using so-called non-market valuation methods. Even when the use of cultural heritage goods is not free, the fees charged are usually nominal, and neither correspond to the

[1] An online survey of over 3,000 US people conducted by the New York Magazine in 2010 showed that "creative capital" ranked 5th among the most important factors of someone's neighborhood choice. In this light, the presence of cultural goods will be associated with members of the so-called "creative class" too (Florida, 2002).

[2] Perhaps more correctly, the social benefits arising from the culture that some goods generate can be regarded as public goods, neither rival nor excludable (Abbing, 1980).

total benefits provided by built cultural heritage nor relate to the true cost of providing and maintaining them (Alberini and Longo, 2009).

The literature on non-market valuation is now very extensive, encompassing different disciplines and sub-fields, with its methods typically classified as revealed-preference or stated-preference approaches (see e.g., Champ et al., 2003). Revealed-preference approaches are indirect valuation methods which are based on the actual behaviour of individuals. These methods utilise complementarity and substitutive relationships between non-marketed and various marketed goods to infer the value attributed to public goods from market transactions in private goods. Examples include the travel cost method and the hedonic pricing (HP) method. On the contrary, stated-preference approaches, such as contingent valuation and choice modelling, are direct methods of eliciting individual's preferences. They rely on asking people questions to compute their willingness to pay (WTP) for hypothetical improvements in environmental quality or their willingness to accept payment in exchange for bearing a particular, hypothetical loss (for reviews on this see Bateman et al., 2002).

Stated preference methods are usually thought to provide the most appropriate way to measure the social benefits of conserving cultural heritage goods for their promise to provide the total economic value of cultural goods (Alberini and Longo, 2009; Navrud and Ready, 2002). It is recognised that social benefits arise from both the use and non use of cultural goods. People may have preferences towards the conservation of an 18th century town mansion whether they enjoy visiting or viewing it regularly (i.e., use value of tourists and residents), or if they wish to keep the possibility of a future visit open (option value). In certain instances, people express the desire to allow others or future generations to enjoy cultural goods (altruistic and bequest values, respectively), or, more simply, because they feel

that the preservation of important artefacts is worthwhile in itself, even if nobody will ever enjoy them (i.e., existence value).

In this paper, we ask whether private markets reflect heritage by looking at the premium that individuals are willing to pay when purchasing a house near cultural heritage goods such as historic and cultural monuments, memorials and buildings. To our knowledge, this has never been done before. There may be two reasons for this, the first practical and the second conceptual. In order to estimate a hedonic housing price function of cultural heritage the amount of detailed and spatially-referenced information to be collected from several sources is considerable and may not be available, in particular for confidentiality reasons. We built a unique GIS dataset comprising the location and characteristics of houses purchased between 2001 and 2006 in the Dublin Region, the Republic of Ireland's capital city, and the location and characteristics of five categories of national and historic monuments: historic buildings, churches, archaeological sites, Martello towers [3] and memorials.

Although the value captured by housing markets – the use value – is a fraction of the total economic value, the study of the effect of heritage sites on the property market would without doubt reveal actual preferences towards cultural goods.

Note that this paper offers little by way of policy advice. We find that cultural heritage has value. This suggests that it should be preserved – but we do not have data about the state of the heritage or the expenditure on its maintenance. We can therefore not assess whether cultural heritage is over- underpreserved in Dublin.[4] The results presented below improve our understanding of cultural heritage without immediate policy implications.

[3] Martello towers are small defensive coastal forts built during the Napoleonic wars in the 19th century.
[4] Creating new heritage is difficult and takes time.

The paper continues as follows. Section 2 reviews the literature the on valuation of cultural heritage. Section 3 presents the data. Section 4 discusses the methods and results. Section 5 concludes.

2 Valuing cultural heritage

Pearce et al. (2002) constitute perhaps the first published review of existing studies on the subject of valuing cultural heritage. The authors identify only 27 studies that formed the bulk of the literature on valuing cultural heritage before 2002. None of these published articles made use of the HP method. A more recent review on the subject arrived at the same conclusion (Snowball, 2008).

On the contrary, stated-preference methods have been used extensively to place values on cultural heritage goods including conservation of museum collections (Brown, 2004), congestion at museums (Maddison and Foster, 2003) and art festivals (Snowball and Willis, 2006). A majority of studies, maybe more in spirit with the present paper, focus on the valuation of historic, archaeological, religious sites and buildings (see e.g., Navrud and Ready, 2002).[5]

The travel cost method – a revealed preference method - has received more attention than HP. For example, the method has been used to value museums (Martin, 1994) and performances at a theatre in Manchester (Forrest, et al., 2000). Poor and Smith (2004) use the travel cost method to value the historic city of St. Mary's in USA, Bedate et al. (2004) to value two

[5] The book edited by Navrud and Ready (2002) collects a number of studies prior 2002, to which we refer. More recent contributions using contingent valuation include the valuation of historical shipwrecks off the coast of North Carolina (Whitehead and Finney 2003), access to Machu Picchu site (Mourato et al., 2004), the restoration of an old Arab pirate tower in Valencia (Del Saz Salazar and Marques 2005) and conservation of preservation of the My Son World Heritage site in Vietnam (Tuan and Navrud, 2008) and of Armenian monuments (Alberini and Longo, 2009). Choice modeling valuation methods have been used too, for example, to value the protection of aboriginal cultural heritage sites in Central Queensland, Australia (Rolfe and Windle, 2003).

Spanish cathedrals and a museum in Castilla y Leon, and Boter et al. (2005) applied the method to value the access to Dutch Museums. Finally, Alberini and Longo (2006) combine travel cost and contingent valuation to estimate cultural heritage sites in Armenia.

To our knowledge, no study has ever applied the housing markets to infer the premium attached to proximity to cultural heritage goods. Clark and Kahn (1988) used a hedonic wage model to show how cultural amenities are important in intercity choice of location using city-level data, instead of individual data. Existing studies using property prices concentrate on the effect of designation of buildings as cultural heritage, and on specific architectural and historical properties of built heritage. The literature has shown mixed results because designation may have positive and negative effects on the hedonic value. The listing of a building limits the owner's property rights, while signalling the cultural value of the building itself and often receiving financial benefits in the form of tax deductions. The "premium" has been found to be as large as 18% (Coulson and Leichenko, 2001) or as negative as -30% (Asabere and Huffman, 1994).[6] A common feature of studies that link the designation to the house price is that it is not really clear whether the value of cultural heritage is captured. In our paper we analyse whether cultural heritage provide spatial externalities by analysing the effect of proximity to existing and established cultural heritage sites on house prices.

3 Data

The dataset used in this analysis is combination of different spatially referenced datasets built using Geographical Information Systems software. It contains detailed information on housing transactions and year sold, house prices and characteristics (e.g., number of rooms, floor space), characteristics of the area in which each house is located and distance to the

[6] Recent papers seem to be more likely to find positive effect of architectural properties or listings. See the recent contributions of Narwold et al. (2008), Noonan (2007) and Ruijgrok (2006). For comprehensive reviews on the subject, we refer to Leichenko et al. 2001 and Lazrak et al., 2009.

nearest national or historic cultural heritage good and its characteristics. Descriptive statistics of all the variables used in the paper can be found in Table 1.

3.1 Housing data

The house price data were provided by Sherry FitzGerald, Ireland's largest property advisory group and auctioneer. The dataset consists of a representative sample of house sales facilitated by Sherry FitzGerald in the Dublin area between January 2001 and December 2006. This amounts to just over 9,700 dwellings. The complete addresses were used, along with the national database of buildings of Ireland, [7] to geo-code the data. Not all addresses in the original database were amenable to geo-coding. Our valid sample size after geo-coding was 6,956, covering most of the Dublin area (see Figure 1) and a wide range of house prices. This is not only a very large sample but also very detailed and location specific. A comparison of the dataset with other sources of housing market data (provided by the Department of the Environment) indicates that our sample has an average price for houses that is much higher than other sources. However, this reflects the fact that the majority of transactions within our sample dataset take place in South Dublin, a part of the city that is generally much more expensive than other areas. Indeed, Sherry FitzGerald focuses on the top end of the housing market.

The available structural variables are the floor space, measured in square metres; the number of bedrooms; the presence or not of a utility room, of parking and of a garden; whether the heating system is gas fired or not; and the condition of the house as assessed by the real estate agent (excellent, fair, poor, very poor). The type of dwelling is also included (apartment, detached house, semi-detached house, terraced house and cottage) as well as in what period the house was built (pre-1900, 1900-1950, 1950-1975, 1975-2000, post-2000).

[7] The definitive database of buildings in the Republic of Ireland is called GeoDirectory

3.2 Data on neighbourhood and location characteristics

The set of controls include environmental and transport variables. The environmental variables include the distance to the nearest bathing beach and to the coastline. These data were provided by the Ireland Environmental Protection Agency (EPA). The distance to the nearest public access park is also included; these data were extracted from the CORINE 2000 project courtesy of the EPA and the European Environment Agency's data on green urban areas within urban zones. Transport variables include three types of rail transport: proximity to train stations, commuter rail stations and light rail stations, as well as distance to tracks.

Electoral division and locality dummy variables are used in different specifications to account for unobserved characteristics, for instance number of jobs and the local crime rate that are yet not available at the spatial level desired. There are more than 284 electoral divisions (EDs) within the Dublin Region, with an average of 24 houses within each ED in our sample. For the sake of parsimony, 90 locality dummies representing neighbourhoods at a lower disaggregate spatial level were built. Each of these areas is made up of one or more EDs sharing a common area name, which brings the average number of houses per area to 78. The data on ED boundaries comes from the national mapping agency, the Ordnance Survey Ireland.

3.3 Data on cultural heritage

We distinguish between five types of cultural heritage: a) historic buildings, b) archaeological sites, c) churches, d) Martello towers, and e) a residual category of memorials, obelisk and gardens (we will refer to this category as memorials for simplicity of exposition).

The complete list of built heritage sites with their characteristics can be found in the Appendix (Table A1). The list includes 142 heritage sites and was constructed by using

several sources. Harbison (2002) and the Department of Environment, Heritage and Local Government (2009) provide a list of the National Monuments which are in the ownership or guardianship of the Irish State through the Office of Public Works. [8] The list of heritage sites was extended to include other internationally renowned historic and iconic buildings and sites, such as Trinity College, The Royal Kilmainham Hospital, Saint Patrick's Church and Christ Church Cathedral, by complementing additional inventories found at the Heritage Ireland (www.heritageireland.com), Discover Ireland (www.discoverireland.ie) and Visit Dublin (www.visitdublin.com) websites. Heritage Ireland is kept by the Office of Public Works, Discover Ireland is operated by Fáilte Ireland, the National Tourism Development Authority, and features information and listings of tourist attractions, while Visit Dublin is the official online tourist office for Dublin. The list was then completed with the addition of 14 still standing Martello towers.

Table A1 summarises some characteristics of these cultural heritage sites. As mentioned, they were divided into four broad categories: 15% are archaeological sites, 51% are historic buildings (i.e., houses, castles, mansions, buildings home of museums, etc.), 10% are churches, 10% are Martello towers and 14% is a residual category including memorials, gardens and obelisks. Information on access fees was collected too: 59% of these sites are free to access. Finally, the vast majority of them (99%) were built after the year 1500 and 19% are in State care.

To our knowledge this is the most comprehensive inventory of heritage sites in Dublin. A digital map of heritage sites was created by matching available addresses with geographical coordinates using several sources, from Google Maps to www.wikimapia.org. The final map was validated by overlaying the official road map of Dublin published by the national

[8] These monuments are named "National monuments in State care". The Irish Office of Public Works is a State Agency of the Department of Finance in the Republic of Ireland and is responsible for the protection of the Irish built heritage.

mapping agency (the Irish Ordnance Survey) with the map of monuments and checking manually that every monument was in the right position (see Figure 2).

4 Cultural heritage hedonic price model

The HP method exploits the relationship between the characteristics of a location, including cultural heritage, and house prices (see Griliches, 1971, Rosen, 1974 for seminal contributions). [9] When choosing between different houses and locations within a single market, individuals make trade-offs that reveal something about the value they place on local cultural heritage. This choice affects the levels of housing prices. Equilibrium is reached when differences in house prices reflect differences in house characteristics (including the quantity and quality of cultural heritage goods) in such a way that buyers and sellers cannot do better by making other deals. Housing prices must adjust to equalize utility across locations; otherwise some individuals would have an incentive to move to locations where they could enjoy more utility, i.e., more cultural heritage goods, *ceteris paribus*. Each buyer will prefer different housing unit, but each will buy additional cultural heritage up to the point where their marginal WTP equals the marginal implicit price. Given enough transactions, the buyers' own optimisation assures that the marginal implicit prices are equal to the residents' marginal WTP for more of the cultural heritage good. Formally, this implies that welfare measures can be computed by estimating the hedonic price function:

$$p = f(\mathbf{x}, \mathbf{n}, \mathbf{c}) + \varepsilon \quad (1)$$

where **x** is the vector of house characteristics (e.g., number of bedrooms, type of housing), **n** includes neighbourhood or location characteristics. The variable **c** represents the effect of distance (measured in 100 meters) to the nearest heritage sites on the house price. As

[9] The earliest applications of hedonics to the housing market can be traced back to Ridker and Henning (1967) and by Nourse (1967)

mentioned in the data sections, and because the map of heritage sites include very heterogeneous monuments, the effect of distance to the nearest historical building, churches, Martello towers and the memorials have been analysed separately. These variables were constructed by using Geographic Information Systems software ArcGIS 9.3.

The hedonic price method is based on a number of restrictive assumptions, including the assumption of equilibrium in the housing market, perfect information of the characteristics of all the alternative sites, no transaction and mobility costs. Disequilibrium conditions would constitute an econometric problem for the estimation of the effect of heritage sites on house prices only if disequilibrium is correlated with heritage sites, which seems unlikely. Moreover, the choice of focussing on a homogenous area – Dublin – would attenuate problems arising from the assumption of costless mobility.

4.1 Basic econometric model

Panel A of Table 2 reports only the coefficients on distance to the nearest heritage site of a hedonic regression in which the log of house price is regressed against it and the vector of house characteristics **x**, neighbourhood and location characteristics **n** detailed in Section 4.1 and 4.2 (this specification will be called semi-log henceforth).[10] Recent reviews on the literature shows that this functional form is a common specification (see e.g., Behrer, 2010). Every column of Table 2 represents a separate regression on the distance to the nearest historical buildings, church, Martello tower, archaeological site, memorial, respectively. In all the regressions that will follow, standard errors have been corrected for clustering within localities (Moulton, 1990; Williams, 2000)

[10] The full set of estimated coefficients can be found in Table A1 in the Appendix.

The results of the coefficients on house attributes are in line with expectations and are similar across all regressions (see Table A1 in the Appendix). Floor space, the number of bedrooms, the presence of a utility room, a parking, a garden, a gas heating system are all positive and significant. Fair, poor and very poor conditions are negatively associated with house price, (with respect to excellent condition); detached house command a higher price with respect to semi-detached, while the other types of dwelling command a lower premium. Houses built prior to 2000 command a lower price than houses built after the year 2000, with the exception of very old dwellings.

Contrary to our expectations, the set of variables controlling for proximity to transport infrastructures are in general not statistically significant, with the exception of the dummy taking the value of 1 when the purchased house is located within 200 meters from a train track, whose negative coefficient is statistically significant for 2 regressions. As discussed in Mayor et al. (forthcoming) this variable might be picking up the negative externality of railway noise. The other coefficients on the transport dummy variables show that proximity to rail stations is an urban amenity, but the effect is not statistically significant.

The environmental variables include distance to bathing beach and coast. These variables constitute important controls as the effect of heritage sites located near the coast, e.g., Martello towers, could be biased upward otherwise. Proximity to coast commands a premium and the coefficients on the dummies are statistically significant; the positive effect decreases the further the purchased house is located from the coast. Living within 250 meters to a bathing beach is a disamenity and is statistically significant, while living within 500 meters to it is associated with a positive effect on house prices (albeit significant only for the historical building regression). Living further away does not have any significant impact in any of the

regressions. Also this effect has been documented in Dublin already and can be explained by congestion effects (see e.g., Brereton et al., 2008 and Mayor et al. forthcoming).

The distance to nearest historical buildings, churches and memorials is negatively associated with the house price and it is statistically significant. Proximity to archaeological site does not seem to have any effect on property value. The statistically significant coefficients are comparable and seem reasonable in size. However, the hypothesis that the estimated coefficients are equal can be rejected at 1% significance level using a Wald test corrected by the Bonferroni's method to account for multiple comparisons (Korn and Graubard, 1990; Judge et al., 1985). The property value decreases by 0.8% and 0.5% as the distance to historical buildings, churches and memorials increases by 100 meters, respectively. At the sample mean, this compares to a fall of about €4600 and €2900 in the house price for every additional 100 meters. Heritage sites characteristics such as whether the access is free, whether the heritage site was built prior 1500 and whether it is under State care do not have a statistically significant effect at any conventional level (see Table A1 in the Appendix).

4.2 Sensitivity of cultural heritage coefficients to different functional forms

The choice of the functional form of hedonic models is an empirical one as there is no compelling theoretical foundation for any particular form (Malpezzi, 2002; Halvorsen and Pollakowski 1981). The Panels in Table 2 shows how the coefficient on distance to the nearest heritage sites changes as the functional form changes for different categories. [11]

Panel B shows double log specifications in which the estimated coefficients of the distance are logged. The signs of the coefficients are robust; however there is no evidence of a statistically significant effect of distance to the nearest church. A 1% increase in distance to

[11] The full set of estimations is available upon request.

the nearest historical building, which translates to 20m at the mean, is associated with a 0.07% decrease in house price while a 1% increase in distance to the nearest memorial, which translates to 60m at the mean, is associated to 0.15%. The R^2 is slightly higher when using the semi-log specification suggesting this to be the more adequate functional form.

Panel C illustrates the results from a linear specification. The size of the effects is comparable with the semi log specification. The coefficient on historical building is significant at 11% level (t-stat=-1.59), while churches and Martello towers have a statistically significant coefficients at 5 and 10%, respectively. The only substantial difference between the linear and the semi-log specification is the change in significance level of the coefficients on historical building (from 1% to 11%) and Martello tower (from 20% to 10%).

From a theoretical point of view, the linear specification is the least favourite simply because it is hard to justify a relationship between distance and property value that does not account for marginally decreasing effects. In order to further test this, the dependent variable house prices is transformed by a Box-Cox transform with the parameter θ. Formally, we estimated the parameter of the model

$$p^{(\theta)} = \beta`\mathbf{x} + \lambda`\mathbf{n} + \gamma`\mathbf{c} + \varepsilon \qquad (2)$$

for every heritage site category. The Box-Cox model with general θ is difficult to interpret and use, however the signs of the coefficients are all negative (see Panel D). The estimate of θ is -0.4 for every regression, which gives more support for a semi-log model ($\theta = 0$) than the linear model ($\theta = 1$). Because of this, the linear specification cannot be considered as providing the best fit (see Cameron and Trivedi, 2009 for the same conclusion).

The nonlinearity of the relationship between house prices and distance to heritage site could be better described by a quadratic regression, in which the log of house price is regressed

against distance and the square of distance as in Panel E. The nonlinear relationship is confirmed by the negative sign on the coefficients of the squared variables, however, the quadratic functional form does not seem appropriate. The size of the coefficient on the squared distance is not substantial and is statistically different from zero only for distance to the nearest archaeological site.

Finally, the superiority of the semi-log specification is confirmed by two statistics often use to compare non-nested and nested models alike: Akaike information criterion and Bayesian information criterion (see Akaike, 1974; Raftery, 1995).

4.3 Further econometric issues and robustness checks

It is arguable whether the premiums commanded by proximity to heritage sites have changed during the short time span considered in our data (2001-2006). However, the Republic of Ireland, and Dublin in particular, has experienced an unprecedented housing boom during the years considered in the study. In addition, house prices increased faster than wages and this might have had some repercussion on the way people were trading off bundles of housing attributes.

Quarterly dummies from first quarter of 2001 to third quarter of 2006 have been included to control for temporal stability in the semi-log function (see Panel A in Table 3). As expected, the introduction of quarterly dummies does not have any impact on the results.

Admittedly, the existence of omitted variables that are positively correlated with distance to heritage sites with the consequences of biasing upward our estimates cannot be ruled out. A list of omitted variables that could affect our results would include the location of shops, schools and offices and last but not least parks. So far these unobservables have been controlled for by the set of locality dummies. As a consequence, distance to the nearest park

is included in the regressions of Panel B in Table 3. Once again the results do not change. Data limitations do not allow us to control for other variables. Dublin city centre is simultaneously rich in heritage sites, shops, cinemas, restaurants, and other urban amenities. The spatial distribution of heritage sites allow us to identify a sub-sample of heritage sites that are located outside the city centre and therefore are not likely to be affected by the omitted variables identified. GIS software allowed us to select and build separate maps for every category of heritage site by dropping those included within the canals, which typically identify the city centre of Dublin. Excluding these, the number of churches and memorials drop to 2 and 3, respectively. As a consequence, we run separate housing regressions on the nearest historical building, Martello tower and archaeological site only. The size and significance of the coefficient on the distance to nearest historical buildings is not affected, implying strong robustness, while the distance to the nearest Martello tower and archaeological site are not statistically significant, as above.

5 Conclusions

We built a unique spatially referenced dataset that merges location and characteristics of houses purchased in Dublin in 2001-2006 with location and characteristics of a list of national and historic monuments. This paper aims to study whether private markets reflect distance to cultural heritage sites. Five categories of heritage sites were identified – historic buildings, churches, archaeological sites, Martello towers and memorials – and the effect of their distance to house price have been studied. Several specifications and empirical strategies have been run and tested. We found that the distance to the nearest historic building negatively affects the property value under different specifications. Our favourite specification suggests that the effect is reasonable with house prices decreasing by 0.6-0.7% for every 100 meters.

This paper shows that previous works in economics understate the potential of the actual behaviour in revealing preferences towards more intangible goods, such as cultural heritage goods. Contrary to what is commonly stated by economists so far (see e.g., Bille and Shutlze, 2006; Snowball, 2008), the hedonic pricing valuation method can be useful in the case of cultural heritage goods.

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Table 1 Descriptive statistics

	Mean	St. Dev	Frequency	Min	Max
No of bedrooms	3.28	0.926		1	13
Floor space (square meters)	118.29	84		28	4277
Presence of utility room	25.7%	0.437		0	1
Gas fired heating system			48.3%	0	1
Fair condition			10.8%	0	1
Good condition			38.5%	0	1
Poor condition			3.2%	0	1
Very poor condition			0.6%	0	1
Apartment			3.2%	0	1
Detached			13.3%	0	1
Terraced			30.6%	0	1
Cottage			0.7%	0	1
Pre-1900			4.6%	0	1
Pre-1950			16.0%	0	1
Pre-1975			19.4%	0	1
Pre-2000			34.6%	0	1
Presence of garden			83.7%	0	1
Presence of parking			63.5%	0	1
250m from beach			0.1%	0	1
500m from beach			0.3%	0	1
1000m from beach			2.9%	0	1
1500m from beach			3.9%	0	1
250m from coast			4.6%	0	1
500 m from coast			5.8%	0	1
1000m from coast			9.7%	0	1
1500m from coast			7.4%	0	1
200m from train track			8.2%	0	1
1000m from train track			31.2%	0	1
1500m from urban train station			28.6%	0	1
250m from train station			0.6%	0	1
500m from train station			2.0%	0	1
1000m from train station			7.7%	0	1
1500m from train station			5.8%	0	1
500m from tram station			5%	0	1
1000m from tram station			5%	0	1
1500m from tram station			10.7%	0	1

Table 2 Cultural heritage hedonics regressions

Panel A Semi Log

Distance to the nearest	Historical building	Church	Martello tower	Archaeological site	Memorials
Historical building	-0.008***				
	(0.002)				
Church		-0.005**			
		(0.002)			
Martello tower			-0.003		
			(0.002)		
Archaeological site				0.002	
				(0.003)	
Memorial					-0.005**
					(0.002)
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.658	0.658	0.654	0.653	0.658

Panel B Double Log

Log of distance to the nearest	Historical building	Church	Martello tower	Archaeological site	Memorial
Historical building	-0.070*				
	(0.042)				
Church		-0.112			
		(0.071)			
Martello tower			-0.081		
			(0.051)		
Archaeological site				0.043	
				(0.037)	
Memorial					-0.154**
					(0.062)
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.652	0.654	0.654	0.653	0.656

Panel C Linear

Distance to the nearest	Historical building	Church	Martello tower	Archaeological site	Memorial
Historical building	-3,016				
	(1,897)				
Church		-3,683**			
		(1,638)			
Martello tower			-2,891*		
			(1,708)		
Archaeological site				484	
				(2,057)	
Memorial					-3,616**
					(1,532)
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.551	0.553	0.552	0.550	0.553

Panel D Box-Cox

Distance to the nearest	Historical building	Church	Martello tower	Archaeological site	Memorial
Historical building	-0.00003				
	(0.000)				
Church		-0.00002			
		(0.000)			
Martello tower			-0.00001		
			(0.000)		
Archaeological site				0.00001	
				(0.000)	
Memorial					-0.00002
					(0.000)
θ	-0.433***	-0.426***	-0.426***	-0.429***	-0.424***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Observations	6,684	6,684	6,684	6,684	6,684

Panel E Quadratic

Distance to the nearest	Historical building	Church	Martello tower	Archaeological site	Memorial
Historical building	-0.008				
	(0.005)				
Squared term	-0.000				
	(0.000)				
Church		-0.004			
		(0.004)			
Squared term		-0.000			
		(0.000)			
Martello Tower			-0.002		
			(0.004)		
Squared term			-0.000		
			(0.000)		
Archaeological site				0.013***	
				(0.004)	
Squared term				-0.000***	
				(0.000)	
Memorial					-0.010**
					(0.004)
Squared term					0.000
					(0.000)
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.658	0.658	0.654	0.656	0.658

Note: Every column is a separate house regression on distance to the nearest historical building, church, Martello tower, archaeological site and memorial, respectively. Every regression controls for all the set of covariates described in Section 3. *, ** and *** denotes statistical significance at 10, 5 and 1% level, respectively. Standard errors adjusted to control for intra class correlation within localities in parenthesis.

Table 3 Robustness checks

Panel A Temporal stability, semi log

Distance to the Nearest	Historical building	Church	Martello tower	Archaeological site	Memorial
Historical buildings	-0.006***				
	(0.002)				
Churches		-0.004**			
		(0.002)			
Martello tower			-0.003		
			(0.002)		
Archaeological site				0.002	
				(0.003)	
Memorial					-0.005**
					(0.002)
Quarterly dummies	yes	yes	yes	yes	yes
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.842	0.841	0.839	0.839	0.843

Panel B Including distance to the nearest park

VARIABLES	(1) Historical building	(2) Church	(3) Martello tower	(4) Archaeological site	(5) Memorial
Historical buildings	-0.005***				
	(0.002)				
Churches		-0.004*			
		(0.002)			
Martello tower			-0.002		
			(0.002)		
Archaeological site				0.004*	
				(0.002)	
Memorial					-0.006***
					(0.002)
Park	yes	yes	yes	yes	yes
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.843	0.842	0.840	0.842	0.843

Panel C Excluding cultural heritage in city centre, semi log

Distance to the nearest	Historical building	Martello tower	Archaeological site
Historical buildings	-0.006***		
	(0.002)		
Martello tower		-0.003	
		(0.002)	
Archaeological site			0.003
			(0.003)
Observations	6,684	6,684	6,684
R-squared	0.839	0.837	0.837

Notes: Every column is a separate house regression on distance to the nearest historical building, church, Martello tower, archaeological site and memorial, respectively. Every regression controls for all the set of covariates described in Section 3. *, ** and *** denotes statistical significance at 10, 5 and 1% level, respectively. Standard errors adjusted to control for intra class correlation within localities in parenthesis.

Figure 1 Spatial distribution of houses in Dublin

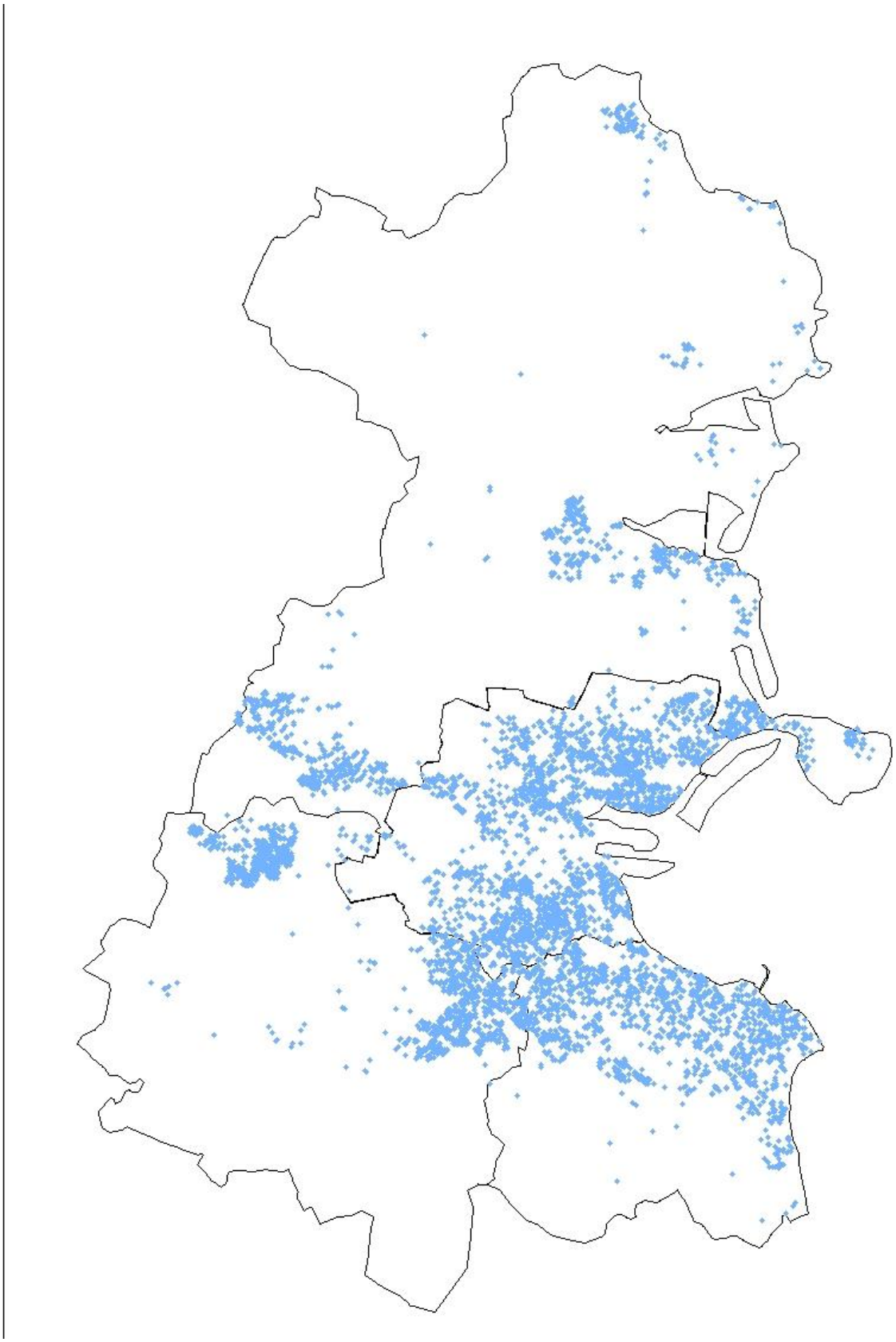
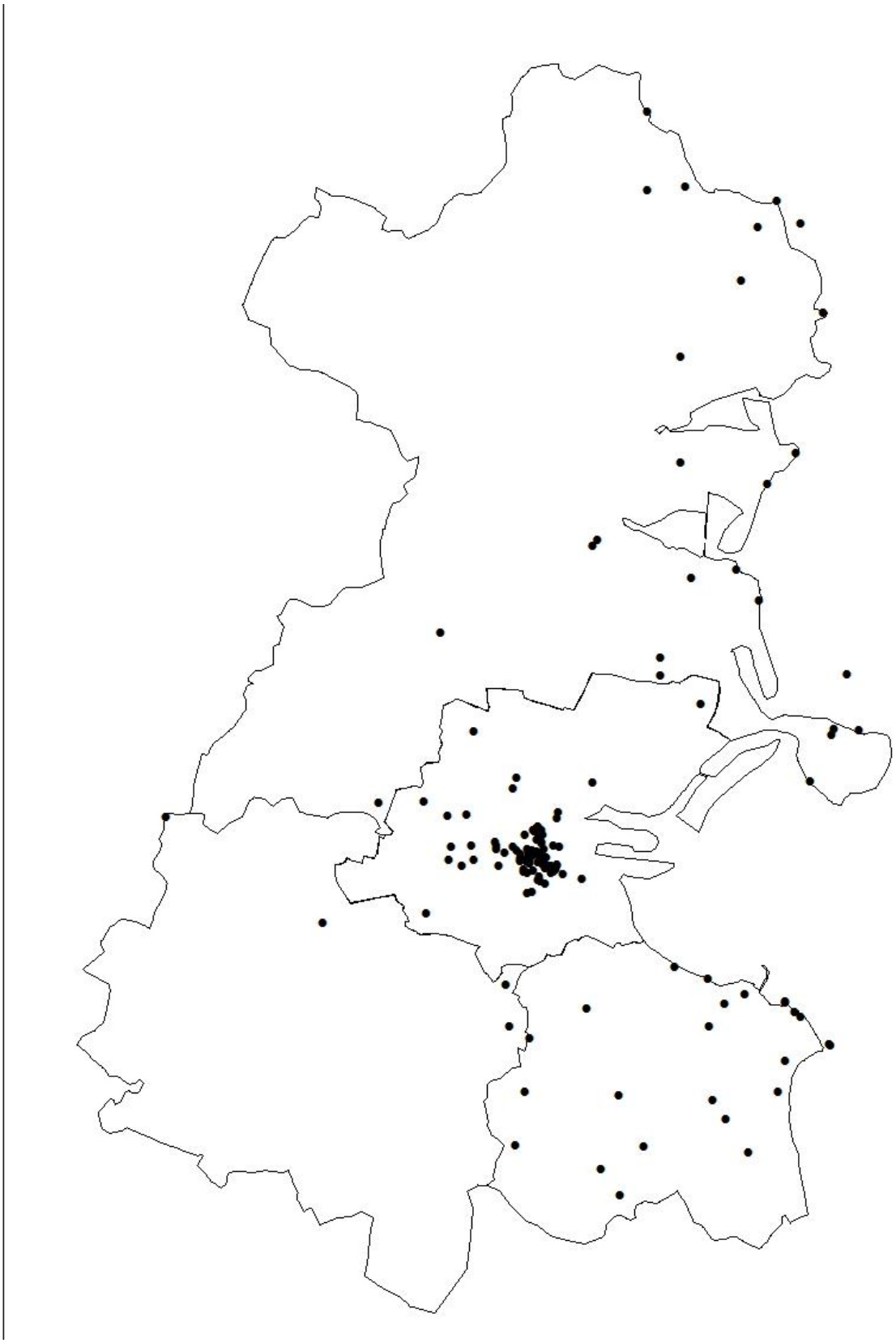


Figure 2 Map of heritage sites in Dublin



Appendix

Table A1 Cultural heritage sites in Dublin

	Name	Source	Category	Date	Access	State care
1	Baldongan Church	Office of Public Works (OPW) and Harbison, 1992, p. 123	Archaeological site	Pre1500	Free	yes
2	Ballyedmonduff Wedge-tomb	Office of Public Works (OPW) and Harbison, 1992, p. 123	Archaeological site	Pre1500	Free	yes
3	Clondalkin Tower, Church, Cross	Office of Public Works (OPW) and Harbison, 1992, p. 124	Archaeological site	Pre1500	Free	yes
4	Dalkey (tower known as Archbold's Castle) Martello Tower (South Dublin) no. 9	Office of Public Works (OPW) and Harbison, 1992, p. 124	Archaeological site	Pre1500	Free	yes
5	Dalkey Island, Early Christian Church	Office of Public Works (OPW) and Harbison, 1992, p. 124	Archaeological site	Pre1500	Free	yes
6	Christ Church Cathedral	Office of Public Works (OPW) and Harbison, 1992, p. 125	Church	Pre1500	Not free	no
7	St Audoen's Church	Office of Public Works (OPW) and Harbison, 1992, p. 126	Church	Pre1500	Free	yes
8	St Mary's Cistercian Abbey	Office of Public Works (OPW) and Harbison, 1992, p. 126	Church	Pre1500	Free	yes
9	St Michan's Church	Office of Public Works (OPW) and Harbison, 1992, p. 126	Church	Post1500	Free	no
10	St Patrick's Cathedral	Office of Public Works (OPW) and Harbison, 1992, p. 128	Church	Pre1500	Not free	no
11	St Werburgh's Church	Office of Public Works (OPW) and Harbison, 1992, p. 129	Church	Pre1500	Free	no
12	Marino Casino	Office of Public Works (OPW) and Harbison, 1992, p. 129	Historic building	Post1500	Not free	yes
13	Dunsoghly Castle	Office of Public Works (OPW) and Harbison, 1992, p. 130	Historic building	Pre1500		yes
14	Finglas High Cross	Office of Public Works (OPW) and Harbison, 1992, p. 131	Archaeological site	Pre1500	Free	no
15	Howth St Mary's Church	Office of Public Works (OPW) and Harbison, 1992, p. 131	Archaeological site	Pre1500	Free	yes
16	Kilgobbin Cross	Office of Public Works (OPW) and Harbison, 1992, p. 131	Archaeological site	Pre1500	Free	yes
17	Killiney Church	Office of Public Works (OPW) and Harbison, 1992, p. 132	Archaeological site	Pre1500	Free	yes
18	Kill of the Grange Church, Well and Bullaun Stone	Office of Public Works (OPW) and Harbison, 1992, p. 132	Archaeological site	Pre1500	Free	yes
19	Kilmashogue Wedge-tomb	Office of Public Works (OPW) and Harbison, 1992, p. 132	Archaeological site	Pre1500	Free	yes
20	Lusk Abbey and Round tower	Office of Public Works (OPW) and Harbison, 1992, p. 132	Archaeological site	Pre1500	Free	yes
21	Monkstown Castle	Office of Public Works (OPW) and Harbison, 1992, p. 133	Archaeological site	Pre1500	Free	yes
22	Rathmichael (Church and tower)	Office of Public Works (OPW) and Harbison, 1992, p. 134	Church	Post1500	free	yes
23	St Doulagh's Church	Office of Public Works (OPW) and Harbison, 1992, p. 135	Church	Post1500	Free	no
24	Swords Castle	Office of Public Works (OPW) and Harbison, 1992, p. 136	Historic building	Pre1500	Free	yes

25	Laughanstown Crosses and Tully Church	Office of Public Works (OPW) and Harbison, 1992, p. 136	Archaeological site	Pre1500	Free	yes
26	Dublin Castle	Office of Public Works (OPW)	Historic building	Post1500	Not Free	no
27	Farmleigh	Office of Public Works (OPW)	Historic building	Post1500	Free	no
28	Kilmainham Gaol	Office of Public Works (OPW)	Historic building	Post1500	Not free	yes
29	Rathfarnham Castle	Office of Public Works (OPW)	Historic building	Post1500	Free	yes
30	Dolmen Brennanstown	Office of Public Works (OPW)	Archaeological site	Pre1500	Free	yes
31	Glencullen Standing Stone	Office of Public Works (OPW)	Archaeological site	Pre1500	Free	yes
32	Grange Abbey	Office of Public Works (OPW)	Archaeological site	Pre1500	Free	yes
33	Tower Balrothery	Office of Public Works (OPW)	Archaeological site	Pre1500	Free	yes
34	Cairn Tibradden	Office of Public Works (OPW)	Archaeological site	Pre1500	Free	yes
35	Kiltiernan Dolmen	Office of Public Works (OPW)	Archaeological site	Pre1500	Free	yes
36	Aras an Uachtarain	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Historic building	Post1500	Free	no
37	Arbour Hill Church and Cemetery	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Church	Post1500	Free	no
38	Garden of Remembrance	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	Free	no
39	Government Buildings	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Historic building	Post1500	Free	no
40	Grangergorman Military Cemetery	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	Free	no
41	National Botanic Gardens	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	Free	no
42	Pearse Museum	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Historic building	Post1500	Free	no
43	Wellington Monument	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	Free	no
44	Magazine Fort	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	-999	no
45	Ashtown Castle	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Historic building	Pre1500	Free	no
46	Royal Hospital, Kilmainham	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Historic building	Post1500	Mixed	no
47	Croppy Acre	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	Free	no
48	Iveagh Gardens	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1500	Free	no
49	War Memorial Gardens	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Other	Post1501	Free	no
50	Leixlip Castle	Heritage Ireland (http://www.heritageireland.ie/en/Dublin)	Historic building	Pre1500	Free	no
51	Spire	Discover Ireland	Other	Post1500	Free	no
52	Newbridge House	Discover Ireland	Historic building	Post1500	Not free	no
53	Malahide Castle	Discover Ireland	Historic building	Pre1500	Not free	no

54	Oratory Dun Laoghaire	Discover Ireland	Archaeological site	Pre1500		no
55	The George Bernard Shaw Birthplace	Discover Ireland	Historic building	Post1500	Not free	no
56	Powerscourt Townhouse Centre	Discover Ireland	Historic building	Post1500	Not free	no
57	Dublin City Hall	Discover Ireland	Historic building	Post1500	Free	no
58	Number 82 Merrion Square	Discover Ireland	Historic building		Not free	no
59	O' Connell Bridge	Discover Ireland	Other	Post1500	Free	no
60	General Post Office	Discover Ireland	Historic building	Post1500	Not Free	no
61	Geragh The Scott House	Discover Ireland	Historic building	Post1500		no
62	Mansion House	Discover Ireland	Historic building	Post1500		no
63	Drimnagh Castle	Discover Ireland	Historic building	Pre1500		no
64	Old Jameson Distillery	Discover Ireland	Other	Post1500	Not free	no
65	North Richmond Street Dublin	Discover Ireland	Historic building	Post1500	private	no
66	Marlay Demesne	Discover Ireland	Historic building	Post1500	Beingrestored	no
67	Belcamp Hutchinson	Discover Ireland	Historic building	Post1500	hotel	no
68	Leinster House	Discover Ireland	Historic building	Post1500	Free	no
69	Newman House	Discover Ireland	Historic building	Post1500	Free	no
70	The James Joyce House of the Dead	Discover Ireland	Historic building	Post1500		no
71	Oscar Wilde House	Discover Ireland	Historic building	Post1500	Not Free	no
72	Swords Round Tower	Discover Ireland	Archaeological site	Pre1500	Free	no
73	Ha'penny Bridge	Discover Ireland	Other	Post1500	Free	no
74	Trinity College Dublin	Discover Ireland	Historic building	Post1500	Not Free	no
75	Ardgillan Castle And Victorian Gardens	Discover Ireland	Historic building	Post1500	Free	no
76	Airfield	Discover Ireland	Historic building	Post1500	Not Free	no
77	Belvedere House	Discover Ireland	Historic building	Post1500	Not Free	no
78	National Archives of Ireland	Discover Ireland	Other		Free	no
79	Number 29	Discover Ireland	Historic building	Post1500	Not Free	no
80	The Four Courts	Discover Ireland	Historic building	Post1500	Free	no
81	Findlater Church	Discover Ireland	Other	Post1500	Free	no
82	Freemasons Hall	Discover Ireland	Historic building	Post1500	Not Free	no

83	Deepwell	Discover Ireland	Historic building	Post1500	Not Free	no
84	Bullock Castle	Discover Ireland	Historic building	Pre1500	Free	no
85	The National Gallery of Ireland	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	hotel	no
86	National Museum of Ireland - Archaeology	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Free	no
87	National Museum of Ireland - Decorative Arts & History	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Free	no
88	Dublin City Gallery The Hugh Lane	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Free	no
89	National Museum of Ireland - Natural History	Discover Ireland and Failte Ireland attractions list	Church	Post1800	Free	no
90	The National Library of Ireland	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Free	no
91	Skerries Mills	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Not Free	no
92	James Joyce Tower	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Not Free	no
93	National Transport Museum of Ireland	Discover Ireland and Failte Ireland attractions list	Historic building	Post1500	Not free	
94	National print museum	Discover Ireland	Historic building	Post1500	Free	no
95	Dublin writers museum	Discover Ireland	Historic building	Post1500	Not Free	no
96	Temple Bar Cultural Trust and Temple Bar Cultural Information Centre	Discover Ireland	Historic building	Post1500	Not Free	no
97	Irish Jewish Museum	Discover Ireland	Historic building	Post1500	Free	no
98	National Concert Hall	Discover Ireland	Historic building	Post1500	Not Free	no
99	Ye Olde Hurdy-Gurdy Museum of Vintage Radio	Discover Ireland	Martello tower	Post1500	Not Free	no
100	Custom House Visitor Centre	Discover Ireland	Historic building	Post1500	Not Free	no
101	Martello tower (North Dublin) no. 1	www.martellotowers.ie	Martello tower	Post1500		no
102	Martello tower (North Dublin) no. 3	www.martellotowers.ie	Martello tower	Post1500	Free	no
103	Martello tower (North Dublin) no. 4	www.martellotowers.ie	Martello tower	Post1500	Not Free	no
104	Martello tower (North Dublin) no. 5	www.martellotowers.ie	Martello tower	Post1500		no
105	Martello tower (North Dublin) no. 6	www.martellotowers.ie	Martello tower	Post1500	Not Free	no
106	Martello tower (North Dublin) no. 7	www.martellotowers.ie	Martello tower	Post1500	Not Free	no
107	Martello tower (North Dublin) no. 9	www.martellotowers.ie	Martello tower	Post1500	Free	no
108	Martello tower (North Dublin) no. 10	www.martellotowers.ie	Martello tower	Post1500	Free	no
109	Martello tower (North Dublin) no. 11	www.martellotowers.ie	Martello tower	Post1500	Free	no
110	Martello tower (North Dublin) no. 12	www.martellotowers.ie	Martello tower	Post1500	Free	no
111	Martello tower (South Dublin) no. 7	www.martellotowers.ie	Martello tower	Post1500	Free	no

112	Martello tower (South Dublin) no. 8	www.martellotowers.ie	Martello tower	Post1500	Free	no
113	Martello tower (South Dublin) no. 14	www.martellotowers.ie	Martello tower	Post1500	Free	no
114	Bank of Ireland - College Green	www.visitdublin.com	Historic building	Post1500	Free	no
115	Bewley's	www.visitdublin.com	Historic building	Post1500	Free	no
116	Glasnevin Cemetery	www.visitdublin.com	Other	Post1500	Free	no
117	Guinness Storehouse	www.visitdublin.com	Other	Post1500	NotFree	no
118	Carmelite church	www.visitdublin.com	Church	Post1500	Free	no
119	Henrietta Street	www.visitdublin.com	Other	Post1500	Free	no
120	Huguenot Graveyard	www.visitdublin.com	Other	Post1500		no
121	Isolde tower	www.visitdublin.com	Other	Pre1500	Free	no
122	Marsh's Library	www.visitdublin.com	Historic building	Post1500	Notfree	no
123	Provost's house	www.visitdublin.com	Historic building	Post1500	Notfree	no
124	Saint Ann's Church	www.visitdublin.com	Church	Post1500	Free	no
125	St. Mary's Pro Cathedral	www.visitdublin.com	Church	Post1500	Free	no
126	Tailor's Hall	www.visitdublin.com	Historic building	Post1500		no
127	Chester Beatty Library	www.visitdublin.com	Historic building	Post1500	Free	no
128	Long Room Library & Book of Kells	www.visitdublin.com	Historic building	Post1500	Notfree	no
129	The James Joyce Centre	www.visitdublin.com	Historic building	Post1500	Notfree	no
130	Croke Park Experience	www.visitdublin.com	Historic building	Post1500	Notfree	no
131	Graphic Studio Gallery	www.visitdublin.com	Historic building	Post1500	Free	no
132	JeanieJohnston Tall Ship / Famine Museum	www.visitdublin.com	Historic building	Post1500	Notfree	no
133	National Photographic Archive	www.visitdublin.com	Historic building	Post1500	Free	no
134	The National Leprechaun Museum	www.visitdublin.com	Historic building	Post1500	Notfree	no
135	National Wax Museum Plus	www.visitdublin.com	Historic building	Post1500	Notfree	no
136	Bridge Art Gallery	www.visitdublin.com	Historic building	Post1500		no
137	Cill Rialaig Project @ Origin Gallery	www.visitdublin.com	Historic building	Post1500		no
138	16 Moore Street	www.visitdublin.com	Historic building	Post1500	Free	no
139	Church of St Michael and John	www.visitdublin.com	Church	Post1500	Free	no
140	Parnell Square	www.visitdublin.com	Other	Post1500	Free	no

141	Royal Irish Academy	www.visitdublin.com	Historic building	Post1500		no
142	Sunlight Chambers	www.visitdublin.com	Historic building	Post1500	Free	no

Table A2 Showing full set of estimates of semi log regression of Table 2

	Historical building	Church	Martello tower	Archaeological site	Memorials
Floor space (square meters)	0.001**	0.001**	0.001**	0.001**	0.001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
No of bedrooms	0.162***	0.164***	0.166***	0.165***	0.164***
	(0.014)	(0.013)	(0.014)	(0.014)	(0.013)
Presence of utility room	0.099***	0.102***	0.102***	0.099***	0.102***
	(0.016)	(0.015)	(0.016)	(0.017)	(0.015)
Gas fired heating system	0.150***	0.148***	0.145***	0.144***	0.148***
	(0.019)	(0.019)	(0.020)	(0.021)	(0.019)
Presence of garden	0.025*	0.024*	0.024*	0.024*	0.022*
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Presence of parking	0.049***	0.049***	0.049***	0.050***	0.047***
	(0.015)	(0.015)	(0.014)	(0.015)	(0.015)
Good condition	-0.030***	-0.029***	-0.028**	-0.027**	-0.030***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.010)
Fair condition	-0.085***	-0.084***	-0.080***	-0.080***	-0.083***
	(0.020)	(0.021)	(0.021)	(0.021)	(0.021)
Poor condition	-0.093***	-0.094***	-0.087**	-0.090***	-0.095***
	(0.033)	(0.033)	(0.033)	(0.034)	(0.033)
Very poor condition	-0.137**	-0.133**	-0.128**	-0.135**	-0.136**
	(0.062)	(0.062)	(0.060)	(0.061)	(0.063)
Apartment	-0.079	-0.063	-0.067	-0.073	-0.065
	(0.054)	(0.058)	(0.059)	(0.057)	(0.059)
Detached	0.255***	0.258***	0.259***	0.264***	0.262***
	(0.026)	(0.026)	(0.027)	(0.030)	(0.027)
Terraced	-0.110***	-0.106***	-0.104***	-0.106***	-0.108***
	(0.017)	(0.018)	(0.018)	(0.018)	(0.018)
Cottage	-0.305***	-0.298***	-0.294***	-0.293***	-0.304***
	(0.052)	(0.052)	(0.049)	(0.052)	(0.054)
Pre-1900	0.070	0.071	0.076	0.078	0.069
	(0.071)	(0.071)	(0.070)	(0.071)	(0.071)
Pre-1950	-0.083**	-0.082**	-0.078**	-0.074*	-0.083**
	(0.038)	(0.038)	(0.039)	(0.039)	(0.038)
Pre-1975	-0.166***	-0.160***	-0.161***	-0.153***	-0.160***
	(0.033)	(0.035)	(0.036)	(0.036)	(0.035)
Pre-2000	-0.219***	-0.218***	-0.222***	-0.213***	-0.217***

	(0.030)	(0.029)	(0.031)	(0.030)	(0.029)
250m from train station	-0.014	0.018	0.038	0.046	0.033
	(0.098)	(0.095)	(0.115)	(0.133)	(0.092)
500m from train station	0.009	0.043	0.058	0.061	0.047
	(0.074)	(0.065)	(0.084)	(0.099)	(0.066)
1000m from train station	-0.046	-0.013	-0.009	-0.011	-0.015
	(0.055)	(0.047)	(0.062)	(0.070)	(0.049)
1500m from train station	-0.011	0.006	0.012	0.013	0.001
	(0.045)	(0.040)	(0.052)	(0.053)	(0.039)
1500m from urban train station	0.015	0.038	0.039	0.043	0.044*
	(0.028)	(0.027)	(0.031)	(0.028)	(0.026)
500m from tram station	0.103	0.073	0.087	0.096	0.055
	(0.084)	(0.063)	(0.076)	(0.075)	(0.065)
1000m from tram station	0.198**	0.157**	0.162**	0.173**	0.141**
	(0.084)	(0.062)	(0.075)	(0.072)	(0.065)
2000m from tram station	0.112**	0.100***	0.091**	0.104**	0.083**
	(0.048)	(0.034)	(0.043)	(0.040)	(0.040)
200m from train track	-0.053*	-0.052	-0.058*	-0.042	-0.044
	(0.031)	(0.038)	(0.034)	(0.032)	(0.039)
1000m from train track	-0.031	-0.034	-0.036	-0.027	-0.030
	(0.029)	(0.037)	(0.038)	(0.034)	(0.040)
250m from beach	-0.582***	-0.612***	-0.608***	-0.600***	-0.651***
	(0.101)	(0.105)	(0.087)	(0.098)	(0.121)
500m from beach	0.253**	0.222*	0.165	0.210	0.201
	(0.115)	(0.130)	(0.128)	(0.128)	(0.133)
1000m from beach	0.048	0.028	-0.002	0.020	0.001
	(0.058)	(0.064)	(0.067)	(0.066)	(0.074)
1500m from beach	0.036	0.009	0.004	0.007	-0.022
	(0.071)	(0.078)	(0.082)	(0.079)	(0.090)
250m from coast	0.243***	0.267***	0.237***	0.248***	0.273***
	(0.069)	(0.075)	(0.077)	(0.077)	(0.078)
500 m from coast	0.154***	0.163***	0.153***	0.161***	0.178***
	(0.052)	(0.054)	(0.055)	(0.060)	(0.061)
1000m from coast	0.107**	0.115***	0.118**	0.121**	0.124**
	(0.046)	(0.044)	(0.050)	(0.050)	(0.049)
1500m from coast	0.084**	0.091**	0.086**	0.091**	0.089**
	(0.041)	(0.038)	(0.036)	(0.037)	(0.040)
Free access	0.010	-0.001	-0.007	-0.002	0.001
	(0.036)	(0.035)	(0.036)	(0.039)	(0.037)

State care	0.035	-0.025	-0.008	0.014	-0.020
	(0.033)	(0.047)	(0.050)	(0.040)	(0.049)
Prior 1500	-0.048	-0.026	-0.042	-0.062	-0.011
	(0.038)	(0.044)	(0.044)	(0.045)	(0.043)
Historical buildings	-0.008***				
	(0.002)				
Churches		-0.005**			
		(0.002)			
Martello tower			-0.003		
			(0.002)		
Archaeological				0.002	
				(0.003)	
Memorial					-0.005**
					(0.002)
Observations	6,684	6,684	6,684	6,684	6,684
R-squared	0.658	0.658	0.654	0.653	0.658

Notes: Every column is a separate house regression on distance to the nearest historical building, church, Martello tower, archaeological site and memorial, respectively. Every regression controls for all the set of covariates described in Section 3. *, ** and *** denotes statistical significance at 10, 5 and 1% level, respectively. Standard errors adjusted to control for intra class correlation within localities in parenthesis.