

Attachment: Brief literature review of the effect of designation on area on house prices

International results for hedonic analysis

Numerous studies have been undertaken globally to ascertain the impact of heritage listing (designation) on property values (see Table 1). Ford (1989), Asabere and Huffman (1994a), Leichenko et al (2001), Coulson and Leichenko (2001), Deodhar (2004), Coulson and Lahr (2005), Narwold et al (2008), and Noonan (2007) all found that designated houses typically sold for a premium when compared to similar properties that were not designated. Others such as Asabere, Hachey and Grubaugh (1989), Schaffer and Millerick (1991), and Asabere and Huffman (1994b) deduced that designation typically led to a discount in the value or had mixed results including no significant price effect. Summaries of these conclusions can be found in Table 1.

The Australian Government Productivity Commission (2006) investigated the effect heritage listing had on the value of residential single dwelling properties in Ku-ring-gai and Parramatta. The analysis found no significant effect on house prices in either area.

An Australian study by William Jeffries in 2012 reviewed the effect of heritage listing on house prices in Mosman. The review challenged the assumptions and methods of previous Australian studies including Deodhar (2004) and the Australian Productivity Commission (2006). The study hypothesized that the previous studies which employed a hedonic price methodology failed to give consideration to:

1. A variance effect – heritage listing increases the price of some properties while reducing the price of others, giving an overall outcome which is erroneous as the two outcomes:
 - a) offset each other to a neutral outcome;
 - b) result in false positive; or
 - c) result in a false negative.
2. Doesn't measure the effect on the prices of neighbouring properties.

Jeffries applied three models to the data:

- When using the hedonic price model the results were closely aligned to the findings of Deodhar and the Productivity Commission for Ku-ring-gai with an estimated increase to house prices of 17.9%. Jeffries postulated this positive outcome was the result of the types of houses which had been listed which may have been of higher quality (design, materials, setting) before listing and therefore regardless of designation, this subset may have had a higher house price compared to the overall sample.
- The difference-in-differences model estimated the average treatment effect i.e. the model assessed before and after listing prices. The results of this modelling were statistically insignificant and therefore it could not be concluded that the higher prices for heritage properties pre-existed the designation.
- The fixed effects model utilised in the calculation only those properties which had sales in both the before and after designation time periods. This analysis eliminates time-invariant observables and unobservables leaving only time-variant observables i.e. changes that occurred as a result of the changing condition (heritage listing) not the environment of the changing time (e.g. past and present macro and micro economic climates). Again, there was no statistically significant result.

Finally Jeffries tested the hypothesis that heritage listing increases the prices of some houses while decreasing the prices of others, with the overall effect being to cancel each other out to no effect. Jeffries applied the Breusch-Pagan heteroskedasticity test to the Mosman data to determine if this variance existed. Jeffries found that designation did not have a varying effect on the price of the houses that were listed or the neighbouring houses.

Results for historic precincts (hedonic modelling and repeat sales analysis)

Ford (1989), Asabere and Huffman (1994a), Coulson and Lahr (2005), and Thompson, Rosenbaum and Schmitz (2010) all used hedonic analysis to ascertain the impact of heritage listing on historic precincts or neighbourhoods and found a positive effect on houses prices.

Australian examples of the impact on property valuations and sale price from being included in a statutorily recognised heritage conservation area (heritage precincts) has tended to review the effect of listing on houses prices in country and mining towns.

Countrywide Valuers and Trevor Budge and Associates in their 1992 study of the Victorian mining town of Maldon found no adverse effect on property valuations from the heritage and planning and controls set in place as a result of heritage listing. The study concluded the planning controls had conserved the heritage character of Maldon and attracted visitors and property buyers to the town. Property values in Maldon were comparable or higher than neighbouring towns which were not included in the heritage overlay.

Penfold (1994) reviewed the impact of heritage controls on prices for four conservation areas in four Sydney local government areas: Ashfield, Burwood, North Sydney and Waverly. The study found that the statutory recognition of the conservation areas had favourable impacts on Ashfield and Burwood but made little difference to the prices in North Sydney and Waverly.

Cotteril (2007) stated in the Sinclair Knight Merz report of the impact of heritage overlays on house prices in Ballarat that “well maintained and marketed heritage listed residential properties are likely to sell at a premium...” and “...generally residential house prices are more likely to be affected by external economic factors such as interest rates and property location”.

Armitage and Irons (2005) reviewed seven Australian and international studies on the effect of heritage listing on property prices. They surmised that the impact of heritage listing on property prices is marginal and generally tends to be positive, particularly in the case of placing heritage controls on entire precincts. They also note that individual cases, or outliers, do show significant upside or downside value movements. They attributed the positive effects in heritage precincts to the increased consistency and greater certainty of character in an area protected by conservation controls.

Table 1: Overview of studies
(Adapted from Lazrak, Nijkamp, Rietveld and Rouwendal (2009) and Jeffries (2012))

Author(s)	Study	Study area	Key findings
Jeffries (2012)	Does heritage listing have an effect on property prices in Australia? Evidence from Mosman Sydney	Mosman, NSW	Cannot be concluded that heritage listing impacts house prices. A test for heteroskedacity yielded statistically insignificant results.
Zahirovic-Herbert and Chatterjee (2012)	Historic Preservation and residential property values: evidence from quantile regression	Baton Rouge, Louisiana	Results for historic districts. Buyers pay an average of approximately 6.5% for houses located in the nationally designated historic districts. Near Historic District, is a positive and indicates a 3.8% price premium for houses sold within walking distance from historic districts' boundaries'.
Moro, Mayor, Lyons and Tol (2011)	Does the housing market reflect cultural heritage? A case study of greater Dublin	Greater Dublin, Ireland	Results show that some types of cultural heritage sites, such as historic buildings, memorials, and Martello towers, provide positive spillovers to property prices while archaeological sites seem to be a negative amenity.
Thompson, Rosenbaum and Schmitz (2010)	Property values on the plains: the impact of historic designation	Nebraska, USA	Sale prices of houses in designated precincts rose \$5000 a year in comparison to houses in non-designated precincts in the years after designation.
Narwold, Sandy and Tu (2008)	The effect of historically designated houses on sale price	San Diego, USA	Historic designation of single-family residences creates a 16 percent increase in housing value which is higher than the capitalization of the property tax savings due to designation.
Noonan (2007)	The effect of landmarks and districts on sale price	Chicago, USA	Designated property has a positive effect on both itself and neighbouring properties.
Australian Government Productivity Commission (2006)	Effect of heritage listing: a hedonic study of two local government areas (on property value).	Parramatta and Ku-ring-gai, Australia	Heritage listing had no significant effect on the value of residential single dwelling properties.

Author(s)	Study	Study area	Key findings
Ruijgrok (2006)	The effect of 'authenticity', 'ensemble' and landmark designation on house prices	Tiel, Netherlands	Authenticity and façade elements accounts for 15 percent of sale prices in the Hanseatic city of Tiel.
Coulson and Lahr (2005)	The effect of district designation on appreciation rate	Memphis, Tennessee, USA	Appreciation rate were 14-23% higher when properties were in neighbourhoods which were zoned historical. Local designation is more important than national designation.
Deodhar (2004)	The effect of heritage listing on sale prices	Sydney, Australia	On average heritage listed houses commanded a 12 percent premium over non heritage listed houses. This premium is a combined value of heritage character, their architectural style elements, and their statutory listing status.
Coulson and Leichenko (2001)	The effect of designation on tax appraisal value	Abilane, Texas, USA	Local historic designation raises value 17.6 percent of designated property.
Leichenko, Coulson and Listokin (2001)	The effect of historic designation on house prices	nine different Texas cities, USA	Historical designated properties in Texas enjoy 5-20% higher appraised prices than other property.
Asabere and Huffman (1994a)	The effect of federal historic district on sales prices	Philadelphia, USA	Owner-occupied property located in national historic districts in Philadelphia sell at a premium of 26 percent.
Asabere and Huffman (1994b)	The effect of historic façade easements on sale prices	Philadelphia, USA	Condominiums with historic easements sell for about 30 percent less than comparable properties.
Asabere et al. (1994)	The sales effects of local preservation	Philadelphia, USA	Small historic apartment buildings experience a 24 percent reduction in price compared to non-locally certified properties.
Moorhouse and Smith (1994)	The effect of architecture on original purchase price	Boston, USA	Architecture design was valued with a premium.

Author(s)	Study	Study area	Key findings
Schaeffer and Millerick (1991)	The impact of historic district on sale prices	Chicago, USA	Properties with national historic designation have a premium and local historic designation have a discount over non designated properties. Properties near a historic district may enjoy positive externalities.
Asabere, Hachey and Grubaugh (1989)	The effect of architecture and historic district on home value	Newburyport, Massachusetts, USA	Historical architectural styles have positive premiums. The historic district of Newburyport does not have positive external effects.
Ford (1989)	The price effects of local historic districts	Baltimore, Maryland, USA	Historic districts do have higher prices than non-historical districts.
Vandell and Lane (1989)	The effect of design quality on rent and vacancy behaviour on the office market	Boston and Cambridge, USA	Design quality has a positive premium of 22 percent on rents but there is a weak relationship between vacancy behaviour and design quality.
Hough and Kratz (1983)	The effect of architectural quality on office rents	Chicago, USA	Tenants are willing to pay a premium to be in new architecturally significant office building, but apparently see no benefits associated with old office