

Accepted Manuscript

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PII: S1051-1377(17)30298-X
DOI: [10.1016/j.jhe.2018.06.001](https://doi.org/10.1016/j.jhe.2018.06.001)
Reference: YJHEC 1583

To appear in: *Journal of Housing Economics*

Received date: 21 November 2017
Revised date: 12 May 2018
Accepted date: 1 June 2018

Please cite this article as: Maisy Wong, A Tractable Approach to Compare the Hedonic and Discrete Choice Frameworks, *Journal of Housing Economics* (2018), doi: [10.1016/j.jhe.2018.06.001](https://doi.org/10.1016/j.jhe.2018.06.001)

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Abstract

The two primary approaches to estimate marginal willingness-to-pay (MWTP) are hedonic (Rosen, 1974) and discrete choice (McFadden, 1974). While both approaches rely on revealed preference methods to estimate MWTP, the primitives underlying both models are different, making it difficult to compare them. This paper establishes the assumptions needed to develop a tractable framework to compare both approaches. I begin with a discrete choice model and show how to derive the gradient of the equilibrium price function implicitly. I then incorporate Rosen's insight that the price gradient is equal to the MWTP of the marginal individual whose indifference curve is tangent to the price function in equilibrium. However, with discrete choices, some individuals may be inframarginal and their indifference curves will not be tangent to the price function. The analytical mapping I derive formalizes this intuition and shows that the price gradient depends on weighted averages of marginal utilities where higher weights are assigned to individuals whose choice probabilities indicate more uncertain choices (*marginal* individuals). As this choice becomes more certain, the weights start to decrease. This result shows how choice probabilities and other moments of choice data can be used to distinguish marginal versus inframarginal individuals.¹

JEL: C01, R21, J23

Keywords: Hedonic, discrete choice, sorting, demand

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¹I am indebted to Fernando Ferreira for his guidance and time. I am grateful for the feedback from the editor and two referees. I thank Kenneth Chay, Michael Greenstone, HanMing Fang, Alex Gelber, Mark Jenkins, Jeremy Tobacman and participants at the CSWEP Mentoring Workshop for comments. Hyejin Lee and Xuequan Peng provided excellent research assistance. I am grateful to the Research Sponsors Program of the Zell/Lurie Real Estate Center at Wharton for financial support. All errors are my own.

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