

The Effect of War on Spatial Differentiation of Real Estate Values and Urban Disorder in Damascus Metropolitan Area

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Abstract : The Syrian war, which commenced in 2011, has resulted in significant changes in the real estate market in the Damascus metropolitan area, with rising levels of insecurity and disputes over tenure rights. The quest for spatial justice is, therefore, imperative, and this study performs a spatiotemporal analysis to investigate the impact of the war on real estate differentiation. Using the hedonic price models including 2,411 housing transactions over the period 2010-2022, this study aims to understand the spatial dynamics of the real estate market in wartime. Our findings indicate that war variables have had a significant impact on the differentiation and depreciation of property prices. Notably, property attributes have a more substantial impact on real estate values than district location, with severely damaged buildings in Damascus city resulting in an 89% decline in prices, while prices in Rural Damascus districts have decreased by 50%. Additionally, this study examines the urban texture of Damascus using correlation and homogeneity statistics derived from the gray-level co-occurrence matrix obtained from Google Earth Engine. We monitored 250 samples from hedonic datasets within three different years of the Syrian war (2015, 2019, and 2022). Our findings show that correlation values were highly differentiated, particularly among Rural Damascus districts, with a total decline of 87.2%. While homogeneity values decreased overall between 2015 and 2019, they improved slightly after 2019. The findings have valuable implications, not only for investment prospects in setting up a successful reconstruction strategy but also for spatial justice of property rights in strongly encouraging sustainable real estate development.

Keywords : hedonic price, real estate differentiation, reconstruction strategy, spatial justice, urban texture analysis

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