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The Relationship between Environmental Factors and Purchasing Decisions in the Residential Market in Sweden

Authors : Agnieszka Zalejska-Jonsson

Abstract : The Swedish Green Building Council (SGBC) was established in 2009. Since then, over 1000 buildings have been certified, of which approximately 600 are newly produced and 340 are residential buildings. During that time, approximately 2000 apartment buildings have been built in Sweden. This means that over a five- year period 17% of residential buildings have been certified according to the environmental building scheme. The certification of the building is not a guarantee of environmental progress but it gives us an indication of the extent of the progress. The overarching aim of this study is to investigate the factors behind the relatively slow evolution of the green residential housing market in Sweden. The intention is to examine stated willingness to pay (WTP) for green and low energy apartments, and to explore which factors have a significant effect on stated WTP among apartment owners. A green building was defined as a building certified according to the environmental scheme and a low energy building as a building designed and constructed with high energy efficiency goals. Data for this study were collected through a survey conducted among occupants of comparable apartment buildings: two green and one conventional. The total number of received responses was 429: green A (N=160), response rate 42%; green B (N=138) response rate 35%, and conventional (N=131) response rate 43%. The study applied a quasi-experimental method. Survey responses regarding factors affecting purchase of apartment, stated WTP and environmental literacy have been analysed using descriptive statistics, the Mann–Whitney (rank sum) test and logistic models. Comments received from respondents have been used for further interpretation of results. Results indicate that environmental education has a significant effect on stated WTP. Occupants who declared higher WTP showed a higher level of environmental literacy and indicated that energy efficiency was one of the important factors that affected their decision to buy an apartment. Generally, the respondents were more likely to pay more for low energy buildings than for green buildings. This is to a great extent a consequence of rational customer behaviour and difficulty in apprehending the meaning of green building certification. The analysis shows that people living in green buildings indicate higher WTP for both green and low energy buildings, the difference being statistically significant. It is concluded that growth in the green housing market in Sweden might be achieved if policymakers and developers engage in active education in the environmental labelling system. The demand for green buildings is more likely to increase when the difference between green and conventional buildings is easily understood and information is not only delivered by the estate agent, but is part of an environmental education programme.

Keywords : consumer, environmental education, housing market, stated WTP, Sweden
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