

Social Network Effects And The Demand For Quality

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The utility from consuming products of a certain quality depends on social network effects, such as the so-called bandwagon effect, denoted by Leibenstein (1950) as "...the extent to which the demand for a commodity is increased due to the fact that others are also consuming the same commodity." The demand for products may be subject to a bandwagon effect because of signaling effects, or because consumption of a certain product is becoming more fashionable. While empirical research has indicated that such bandwagon effects increase willingness to pay for high quality products, their impact on the average quality of products offered on a market and on total welfare is not fully understood (Shang and Croson, 2009).

In this paper, we analyze how the strength of this social network effect impacts average quality offered on a market, consumption and total welfare. We discuss a model where products are differentiated according to their quality and where the production of such products generates positive externalities to all. Consumers differ in their preference for quality and those consumers purchasing a high quality product variety receive the additional benefits of being a member of the network. Producers are duopolists competing in both, prices and quality of the variety they produce; the market is not covered. Depending on the strength of the social network effect, we show that (a) firms may produce lower quality, (b) the market may generate fewer positive environmental externalities, and (c) total welfare may deteriorate. The results are driven by the fact that firms have an incentive to differentiate their qualities more if consumers benefit from a social network effect. The main policy implication is that if there is a network effect, regulators should choose a stricter minimum environmental quality standard. If firms can engage in advertisement, they endogenize the network effect.

Keywords: Quality Differentiation, Social Network Effect, Minimum Quality Standard.

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