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Dress to impress: Brands as status symbols ☆

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ABSTRACT

We analyzed the market for indivisible, pure status goods. Firms produce and sell different brands of pure status goods to a population that is willing to signal individual abilities to potential matches in another population. Individual status is determined by the most expensive status good one has. There is a stratified equilibrium with a finite number of brands. Under constant tax rates, a monopoly sells different brands to social classes of equal measure, while in contestable markets, social classes have decreasing measures. Under optimal taxation, contestable markets have progressive tax rates, while a monopoly faces an adequate flat tax rate to all brands. In contrast with extant literature, subsidies may be socially optimal, depending on the parameters, in both market structures.

1. Introduction

Consumers strategically purchase particular kinds of goods to signal their social status. The literature has extensively covered the demand for these status goods, their impact on economic growth, and the policies used to correct for externalities. More recently, researchers have incorporated more details of the supply of status goods.[2] These authors have created models where fully separating equilibrium is attained with perfectly customized status goods in which those signaling their

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2 Some examples of status goods demand models are Cole et al. (1992, 1995), Hopkins and Kornienko (2004, 2005, 2009), Ireland (1994, 2001), Frank (1985, 2005), and Rege (2008). Models of the supply of status goods include Pesendorfer (1995), Bagwell and Bernheim (1996), Díaz et al. (2008), and Rayo (2013). For a survey on the literature of the demand for status goods, see Heffetz and Frank (2011).

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status reveal all information. This full customization can either be in the quality space, as in Board (2009), or in the quantity space, as in Cole et al. (1992) and Hopkins and Kornienko (2005).

However, full customization is usually not found in real markets. Typically, markets offer to consumers indivisible status goods with pre-specified qualities. For instance, a Rolex Daytona Cosmograph 40-mm steel watch costs $13,450.00. The next model, the Rolex Daytona Cosmograph 40-mm yellow gold and steel watch, is 11.5% more expensive.[3] Some automobile models having the same basic design and features are offered on different brands by the same firm.[4] One might think that a model with full customization and a continuum of goods is a good approximation for how the market for status goods works. Although this continuous approximation may work well in some contexts, it might not work as well in others. For example, some firms prefer to specialize in products for a specific market niche. For example, Italian car manufacturer Ferrari's starting price for an automobile is around US$ 201,290.[5] Because of their limited production, they also tend to offer few variations in their models. Ferrari offers only a handful of models and no sub-models. The same is true of Ferrari's fiercest competitor, Lamborghini. The British sports cars manufacturer McLaren only offered a single model, the 3-seat McLaren F1, until discontinued in 1998, replacing it by the only model it currently offers, the MP4-12C.[6] The same can be said about the world's most luxurious car, the newly released W-Motors Lycan.[7]

Brand names have always been attached to status. Advertisement campaigns of brands such as Audi, BMW, Rolex, Cartier and Giorgio Armani frequently refer to how society perceives an individual who owns their products. The literature on marketing has recognized social status as a key feature in the market for luxury goods.[8]

The first step in understanding the relationship between brand creation and status is the analysis of the case of pure status goods. Pure status goods generate no direct utility to their owners. Jewelry and fashion accessories are examples of products that resemble pure status goods. These industries' businesses trade substantial amounts of money.[9] A person looking for ways to impress others may find it valuable to wear diamond rings. Impressing others can help to establish contacts for future partnerships in many areas, including business, marriage, and politics.

This paper models the demand and supply of pure status goods to a population, the Greens. Each Green wishes to signal his ability to the population of Reds. We find the number of brands available to Greens and their respective prices under monopoly and in a contestable market. Regardless of the market structure, prices, quantity of different brands of status goods available and social strata locations are determined endogenously.

There is a fixed cost for developing each new brand. Full customization is not attained in equilibrium. Instead, firms offer a finite number of brands. Social norms (conventions) rank brands according to their status levels and establish that the status of an individual is determined by the brand of highest status level that he owns.[10] Hence, no individual purchases more than one status good. All Green individuals who buy a particular brand of status good are pooled together, forming the corresponding social stratum. Private information is never completely revealed. If there is just one brand, Greens are divided in two classes: haves and have nots. With two brands, there are three classes, and so on, as in Bagwell and Bernheim (1996), and Burdett and Coles (1997).

Depending on the social context, it may be reasonable to think of individual status levels as the product of a single signal. For instance, when searching for a first job after college, the top academic degree is usually determined by a single diploma from a single university. While a few extra details might help to fine tuning the match between jobs and applicants, the university that issued the candidate's diploma generates the central signal to the job-market. There are other contexts in which multiple items are used for the signaling of social status; for instance, one dresses with multiple fancy clothes and fashion accessories. Admittedly, this paper best fits the first category of social contexts.

Fixed costs can be quite large in brand development. As an example we can cite legal and red tape costs associated with patenting and obtaining the appropriate government licenses to sell a particular brand of a product.[11] Moreover, creating a reputation for the brand can be even more costly. Vikander (2010) shows a number of examples of huge sums of money spent on social status-oriented television commercials. One of the examples mentioned is the six million dollars spent by Audi on Super Bowl XLII to advertise its Audi R8 model. There are also examples of similar amounts of money being spent on mass circulation magazines by high-end designer clothing, sports apparel and even electronics firms. For goods that are not pure status symbols and have intrinsic utility, we might also have fixed costs associated with consumer switching costs, as in Klemperer (1987).

[3] Prices taken at amazon.com on March 7, 2011.

[4] Bagwell and Bernheim (1996), p. 352.

[5] Manufacturer's Suggested Retail price for the Ferrari California model, taken at www.kbb.com on 02/11/2013.

[6] See http://www.mclarenautomotive.com for details.

[7] See http://www.wmotors.ae/home/ for more information.

[8] See, for instance, Vickers and Renand (2003).

[9] US$146 billion were spent globally on jewelry in 2005, and the expected expenditure for 2015 is US$230 billion. These figures belong to a KPMG study. See Shor (2007).

[10] This hypothesis helps in the exposition, but can be relaxed to some extent. See Remark 1.

[11] Just to give an example, the Brazilian electronics manufacturer Gradiente filed for patent with Brazilian authorities in 2000 trying to register the name "iPhone". The patent was only granted 8 years later, and by that time Apple had already registered, manufactured and sold millions of units of their own iPhone, creating a lawsuit in which millions of dollars are in dispute. Another example is Apple's own lawsuit against Korean electronics manufacturer Samsung over patent breaking.