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Strategic disclosure: The case of business school rankings☆

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ABSTRACT

We empirically analyze disclosure decisions made by 240 MBA programs about which rankings to display on their websites. We present three main findings. First, consistent with theories of countersignaling, top schools are least likely to disclose their rankings, whereas mid-ranked schools are most likely to disclose. Second, schools that do poorly in the *U.S. News* rankings are more likely to disclose their *Princeton Review* certification, suggesting that schools treat different certifications as substitutes. Third, conditional on displaying a ranking, the majority of schools coarsen information to make it seem more favorable. The stark patterns in the data help to provide empirical evidence on the strategic elements of voluntary disclosure and marketing decisions.

1. Introduction

One of the most well-known theories of voluntary disclosure relates to an idea known as *information unraveling* (Grossman, 1981; Milgrom, 1981; Jovanovic, 1982). Considering a setting in which there is a single dimension of product quality, these models argue that organizations will disclose information about their quality if disclosure costs are low and the information is favorable. In equilibrium, consumers infer that firms that do not disclose their quality are likely to be worse than firms that do. Therefore, through the unraveling process, higher-quality firms should have an incentive to reveal information about their product quality, which should then put pressure on all firms to disclose. However, predicted patterns of voluntary disclosure can be qualitatively different when we take into account additional features that are prevalent in a variety of real-world settings, such as multiple signals of quality and customers' prior beliefs.

A leading example of how the traditional unraveling result might break down is presented in Feltovich et al. (2002), who show that disclosure patterns can be non-monotonic, with middle-performing firms disclosing their quality while top-performing firms choose to withhold information. This "countersignaling" occurs because a high quality firm withholding information signals to potential customers that they are confident that other information about them will be favorable. Feltovich et al. (2002) suggest that such countersignaling may underlie a wide variety of situations, such as the differences between the ostentatious displays of the nouveau riche and the more measured outward approach of old-moneyed families. Psychologists have also investigated ideas related to countersignaling. Bellezza et al. (2014) demonstrate that employees can be perceived to be of higher status when they choose not to conform to a workplace norm (for example, by dressing casually when business dress is the standard). Moreover, a high quality firm's benefit to disclosing information may be outweighed

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by the cost of disclosure if consumers already have precise prior beliefs about the very best firms. To date, there is little empirical evidence of situations in which high quality firms are choosing to countersignal while lower quality firms are disclosing information.

In this paper, we graphically and statistically test for unraveling and countersignaling by collecting and analyzing the rankings displayed on the websites of 240 top-ranked U.S. business schools. Business schools provide a rich empirical context in which to test for patterns of voluntary disclosure of quality reports for several reasons. First, rankings have been shown to have a large effect on applicants' decisions (Bowman and Bastedo, 2009; Meredith, 2004; Monks and Ehrenberg, 1999) and admissions decisions (Conlin et al., 2013). Hence, business schools have the incentive to be strategic in their disclosure decisions. Second, rankings are verifiable, a condition stipulated in the unraveling literature. Third, business schools are ranked by many media outlets. Even within a media outlet, such as *U.S. News and World Report*, multiple rankings of MBA programs exist (for example, "Best Evening MBA Program" and "Best MBA Program in New England"). Hence, business schools face a strategic decision about which rankings, if any, to reveal on their websites. Fourth, education decisions are among the most significant choices many people will make in their lifetime and students and policymakers are interested in improving the decision making process.

Turning to the data, we find large amounts of voluntary disclosure of rankings; 65% of the schools in our sample publish or mention at least one ranking on their main websites. We find that disclosure decisions are non-monotonic as a function of a school's rank: top schools are least likely to display their rankings, mid-ranked schools are most likely to display their rankings, and bottom-ranked schools fall in between. These findings are largely consistent with the idea of countersignaling. We also find that schools that have a branded name, as measured by the count of mentions in the *New York Times*, are less likely to disclose rankings on their website, which provides further evidence consistent with consumers' priors from competing signals influence whether a school discloses information.

Beyond these main results, we consider two other features that are common to many disclosure settings but are not captured in the basic unraveling result. First, organizations choose not only whether to reveal information, but also what information to reveal – and can hence select certain dimensions over others. Whereas the existing literature has demonstrated that voluntary disclosure of a single dimension of quality information is incomplete (Dranove and Jin, 2010; Mathios, 2000; Jin and Leslie, 2003) and that disclosure rates depend on factors such as the amount of competition (Jin, 2005) and cost of disclosure (Lewis, 2010), the idea of selective disclosure focuses on situations in which there are multiple pieces of information that a firm can choose to disclose.

Second, there is growing evidence that consumers respond differently to information when it is visible or salient than when it is shrouded or opaque (Pope, 2009; Brown et al., 2010; Luca and Smith, 2013). In these settings, Gabaix and Laibson (2006) show theoretically that information revelation can break down. Even when an organization chooses to disclose information, they may still choose to *shroud* certain pieces of information that would make the organization look less favorable.

These ideas lead us to two additional empirical results regarding voluntary disclosure. First, we show that schools selectively reveal favorable rankings. For example, schools that do poorly or are unranked in *U.S. News and World Report* are more likely to display an Association to Advance Collegiate Schools of Business (AACSB) accreditation or mention that they made *Princeton Review's* list of top overall business schools, which is a pooled group with no explicit rank. In fact, exactly zero of the top-50 schools mention that they are included on Princeton Review's unordered list of top programs, while 30% of unranked schools mention that they are on the list. This suggests that schools treat different rankings and accreditations as substitutes for each other.

Second, conditional on displaying a ranking, the majority of schools coarsen information to make it seem more favorable – for example, saying "top-ranked program" instead of "top-ranked program in the Northeast," or "top 20" instead of "ranked number 20." Overall, each individual ranking is verifiable, but selective disclosure and shrouding of information may undermine market mechanisms of voluntary information disclosure.

Overall, these findings shed new light on equilibrium patterns of voluntary disclosure in a context in which the information being disclosed is relevant to customers and the discloser has significant freedom to disclose or not. In particular, we provide novel field evidence consistent with countersignaling, which was first modeled by Feltovich et al. (2002). Moreover, we analyze the type of multidimensional disclosure problem that is common in the field, whereas most of this literature has focused on single-dimensional disclosure problems. Our results show that there is significant substitutability between information sources. Finally, drawing on the idea of shrouded attributes, we are able to relax the assumption that schools will either disclose truthfully or not disclose at all, and show that the vast majority of schools engage in some sort of shrouding.

2. Data

This analysis uses two types of data. First, we compile a set of U.S. business schools that are ranked in a number of different *sources*, as we refer to them, including *U.S. News & World Report (USNWR)*, *Bloomberg Business Week*, *Princeton Review*, *The Economist*, *Forbes*, and *The Financial Times*. These are popular sources of rankings that can be found on the Internet or on newsstands.

We designate rankings into one of two categories: *overall* or *specialty*. Overall rankings are those that rank each business school as a whole; specialty rankings are those that rank specific programs (e.g., top part-time or executive MBA programs)