

SIGNALING DESIGN

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ABSTRACT: We revisit the classic job-market signaling model of [Spence \(1973\)](#). In our model, schools are profit seeking and simultaneously commit to a signaling policy, comprising of a fee to attend the school, and a signal structure that determines what signal is released to the job-market as a function of the candidate's effort. We find that a monopoly school always captures the entire social surplus. In contrast, competition among schools leads to (1) a shift in the social surplus from schools to job candidates; and (2) efficiency loss induced by a higher effort to separate abilities. Our findings temper the prevailing argument that competition should be promoted to enhance social efficiency. To further understand the nature of inefficiency, we consider two distinct purposes of signaling: *sorting* — firms want to hire all ability types but at different wages; and *screening* — firms only want to hire high-type candidates. We show that if the social value of screening is not captured in wages, then competition may be more efficient than monopoly.

KEYWORDS: signaling, competition, equilibrium refinement.

JEL CLASSIFICATION: D82, D83, D43.

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OCTOBER 7, 2023

We thank Ben Brooks, Francesc Dilme, Alessandro Pavan and Maher Said for helpful comments and discussions. We are grateful to Jorge Zazueta for helpful research assistance—all errors remain our own. Pai gratefully acknowledges support from the NSF (CCF-1763349).