Selling on Platforms: Demand Boost versus Customer Migration*

Heiko Karle† Marcel Preuss‡ Markus Reisinger§

PRELIMINARY VERSION: May 2024

Abstract

We study sellers of non-durable goods or services that can sell directly to consumers or via an online marketplace (platform) over multiple periods. Before joining the platform, each seller has a loyal customer base. Selling via the platform offers sellers an additional benefit (e.g., access to additional customers). If a seller joins the platform at some point and then quits, its former loyal customers who derive a sufficiently high benefit from using the platform will buy from other sellers on the platform instead, if the platform can recommend a sufficiently good substitute. We analyze which single-period contracts the platform offers to sellers in the presence of such demand substitution patterns and show that they lead to inefficiencies. Specifically, we find that as the platform's ability to recommend substitutes improves, both sellers and consumers are worse off. Beyond a well-defined threshold, improving its ability to recommend substitutes hurts even the platform, and yet it will always seek to improve it. A regulator can raise welfare, consumer surplus, sellers' profits, and sometimes even the platform's profits by putting a cap on platform fees or by limiting how much customer data the platform can collect for its recommendation algorithm.

*We are grateful to Jacopo Gambato, Bruno Jullien, Thomas Jungbauer, Ulrich Laitenberger, and seminar particiants at the 2024 MaCCI Annual Conference for their helpful comments and valuable discussions. All remaining errors are our own.

†Department of Economics, Frankfurt School of Finance & Management, Adickesallee 32-34, 60322 Frankfurt am Main, Germany. E-Mail: h.karle@fs.de.

‡Johnson Graduate School of Management, Cornell University, Sage Hall, Ithaca, 14853 New York, USA. E-mail: preuss@cornell.edu.

§Department of Economics, Frankfurt School of Finance & Management, Adickesallee 32-34, 60322 Frankfurt am Main, Germany. E-Mail: m.reisinger@fs.de.