Production and Operations Management

Portability's Asymmetric Impact on Service Competition: Evidence from the Global Wireless Industry

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Abstract

This paper studies the impact of customer information portability on market competition in service-oriented industries. By allowing customer information to be transferrable among service providers, such portability may help reduce customer switching costs, and is expected to even the playing field for small firms and promote competition. Yet the actual consequences are unclear. To investigate this issue, we focus on the global wireless industry, and study the effectiveness of Mobile Number Portability (MNP) policy. We construct a duopoly model in which switching costs are heterogeneous across customer segments. The model predicts that the market share of large firms will shrink, while the average price may depend on the customer base composition. We test these predictions empirically on a panel data of 218 wireless operators in 52 countries over 6 years. We find relative market share gains for small firms and reduction for large firms under MNP. Yet, large firms are still able to sustain higher prices than small firms. Probing deeper into customer segmentation, we find that on average, the share of contract customers *increases* for large firms after MNP, while it *decreases* for small firms. This means that large firms are able to retain higher-value contract customers while small firms tend to attract lower-value "pay-as-you-go" customers. Contrary to the policy intention, large firms tend to remain dominant in more concentrated markets, and MNP is incapable of changing this. In fact, contracts become even more important after MNP, highlighting the possible "lock-in" effect of contracts. These findings are relevant to other services industries (e.g., healthcare, financial services, and digital media) where portability is at stake to lower customer switching costs and enhance service competition.

Key words:
public policy, portability, wireless telecomm industry, switching costs, competition, customer segmentation