Dynamic price competition with endogenous switching costs

[DRAFT]

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Abstract

Switching costs (SC) affect consumers in their daily life, and may hinder their free decision to change providers of certain product or service.Firms may have incentives to strategically use switching costs to "lock-in" and "then-ripoff" consumers, and to lessen competition

I develop a theoretical framework for a dynamic competition game under the presence of switching costs, where two firms or networks compete in prices and strategically use switching costs (SC are endogenous and set by the firms). I consider a two-period game where firms simultaneously compete and set prices and switching costs in the first period; in the second period firms use introductory offers, since they can distinguish between old and newcomers consumers, to attract consumers (rival's consumers). I focus on finding a Sub Game Perfect Symmetric equilibrium in pure strategies.

To the scope of this preliminary version, I present a baseline model of competition in linear prices and introductory offers; and I model demand based on a linear probability model that allows for some heterogeneity of consumers. By using backward induction, if consumers and firms are equally patient, I find a unique symmetric Sub Game Perfect equilibrium where a third of the population switch providers. Second period prices are increasing in exogenous switching costs, and loyal consumers are charged higher than newcomers (switchers). The lower bound of the endogenous switching costs is decreasing in exogenous switching costs and in firms' discount rate, but increasing in a random firm preference parameter.

Therefore, an external reduction of exogenous switching costs would reduce both second period prices (loyal consumers and switchers) but would increase the lower bound of endogenous switching costs only if firms could anticipate such reduction in the first period.

Keywords: Dynamic competition, duopoly, switching costs, introductory offers.