

Local Exchange Competition: A Study of Two Firms Interaction and the Effects on Expected Price for Access

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Abstract

In this study we conduct an evaluation of expected price for access to local telephone service, at the household level, where there is competition between two firms. We proceed by simulating the behavior of two profit seeking firms in a competition game that resembles one current U.S. local telephone access market. The game is calibrated to the U.S. market in the following way: All parameters are chosen so that they match U.S. market data. For instance, we estimate the inverse demand for local access using 1990 U.S. Census data in a way similar to Perl (1983)[8][9]. For the two firms cost function, we fit a cost function from 1993 replacement cost data for 14 service areas provided by [7]. We differentiate the costs of the two providers by the ratio differences between telephone service facilities and cable service facilities as provided by Reed[11]. From our interactive game, we can extract optimal strategies (i.e. quantities) for the two firms, and compute expected prices. The originality of this kind of prediction is that it is based on equilibrium behavior only.