

Abstract of "Firm Capabilities and Industry Evolution: The Case of the U. S. Automobile Industry"

by Steven Klepper

In its first fifteen years the U.S. automobile industry was characterized by a great deal of entry and the number of firms exceeded 200. Despite robust growth in the market for automobiles, the industry subsequently sustained a prolonged shakeout in the number of producers and evolved to be an oligopoly dominated by three firms. The industry also evolved to be heavily concentrated around Detroit, Michigan, which not only was home to its top three firms but most of its other leaders. A model of industry evolution characterized by heterogeneous firm capabilities, increasing returns associated with R&D, and a birth and inheritance process governing entry is developed to explain these patterns. Predictions of the model concerning entry and firm survival are tested using data on the origin and years of production of every entrant into the industry. The shakeout is shown to result from a process imparting strong advantages to early entrants, and the geographic concentration of the industry is attributed to the success of four early entrants around Detroit, who in turn spawned a large number of successful firms in the Detroit area that together dominated the industry.