Concrete productivity statistics

Persistent and substantial variations in productivity among individual factories have been observed, even in industries that are narrowly defined. Attempts to explain this variation have tended to focus on technological or "supplyside" reasons such as management approaches.

In "Market Structure and Productivity: A Concrete Example," (NBER Working Paper 10501), Chad Syverson of the University of Chicago focuses on the other side of the exchange process—the demand side. Syverson states that, "The more difficult it is for consumers to switch between competing suppliers, the greater the productivity dispersion that can be sustained."

To investigate this notion, Syverson considers a concrete example—literally. He analyzes data from the Census of Manufactures for a single four-digit Standard Industrial Classification (SIC) industry: ready-mixed concrete, SIC 3273. An advantage of these data is that a physical measure of the product is available (cubic yards), in addition to the dollar value of shipments. Syverson focuses on one aspect of substitutability in this study, pertaining to transport costs. The ready-mixed concrete industry has substantial transport costs, which implies that there are separate geographic markets for the product.

He uses the concrete data to test the premise that, "in markets where it is easy for industry consumers to switch suppliers, productivity distributions should exhibit higher minima, less dispersion, and higher central tendency than those in low-substitutability markets." His findings support this premise: they show that markets that have high demand densities for this product have higher minimum and mean productivity levels, and such mar-

kets have less dispersion in productivity levels among producers.

Up the ladder

Top businesspeople have always enjoyed at least some celebrity. Even the robber barons, such as Rockefeller and Carnegie, had popular biographies written about them attributing their success to hard work, according to the introduction to Peter Capelli and Monika Hamori's recent NBER Working Paper, "The Path to the Top: Changes in the Attributes and Careers of Corporate Executives, 1980 to 2001." In addition to the celebrity accorded some of today's top business leaders, they hold important positions in the world. Understanding the nature of success in the business world, say Capelli and Hamori, "says a great deal about access to positions of influence, about social mobility generally, and specifically about career development practices."

The brief survey of literature that introduces the concepts of executive career studies is good reading. According to the works cited by Capelli and Hamori, there have been three broad eras of executive recruitment since the beginning of the 20th century. The first was an era marked by a mix of entrepreneurial merit in some cases and inherited wealth or position in the early years of the century. A second, broadly occupying the middle years of the century, was marked by the rise of what William A. Whyte labeled the "organization man." The final era started in the 1980s and is characterized by what Michael B. Arthur and Denise M. Rousseau call "the boundaryless career."

The nature of successful, high-performance careers that may not reflect secure, long-term commitments between an organization and its members is the subject of Capelli and Hamori's new research. They found significant difference between the attributes and career paths of the top 10 executives in the Fortune 100 companies in 1980 and those in evidence among a similar panel in 2001. In terms of basic attributes, today's executives are younger, more likely to have a college degree, and somewhat more likely to be women. The latter, as the authors say, was "not a difficult achievement given that the number was zero in 1980."

In terms of career path, today's top executives are less likely to have been lifetime employees of their companies, took less time to get to the top rungs of the corporate ladder, and had seen bigger promotions, as evidenced both by a direct measure of promotion size and the fact they had held fewer positions during their successful careers.

These findings were robust to several factors including restriction to those executives for which Capelli and Hamori could fill in a complete career history and restriction of the sample to firms that were in the Fortune 100 in both 1980 and 2001. One partition of the data that did yield some interesting differences was between firms in manufacturing and service industries.

In 1980, there were very few differences between executives in manufacturing and top managers in service firms. In 2001, according to the data, "Executives in the service sector are younger, more likely to be women and to be Ivy League graduates. Most important, they are much less likely to have started their career in the same company ... and they spent four and a half fewer years in their current organization. They also got to the top about two and a half years sooner than their peers in manufacturing. The manufacturing/ service distinction apparently was irrelevant in understanding differences in executive experience in 1980 but has become highly relevant in 2001."