
The outline if not the detail of Max Holland’s “cautionary tale” will be familiar. A once-entrepreneurial manufacturer, bought up by a go-go conglomerate, buffeted by inflation and stagflation, bought out by junk bonds, blown away by quick-learning Japanese manufacturers, and backed into a specious case for protectionism—it is all here: a classic study in American manufacturing’s decline. New to many will be the details, including accounts of the rise of Burgmaster, an upstart machine-tool firm distinguished by its workable NC turret drills, and the coming of Houdaille (pronounced “WHO-dye”), a conglomerate noted first for its massive leveraged buyout and then for its protectionist pleas. Perhaps only Kohlberg, Kravis, and Roberts, the leveraged-buyout specialists, are household names. Holland tells a deceptively simple story that encapsulates principal trends in postwar American business. His thoughtful and balanced book was named one of *Business Week*’s ten best in 1989.

Burgmaster’s postwar rise was predicated on assertive technological innovation, entrepreneurial leadership, and attention to user-needs. The firm was founded in 1945 by Fred Burg, a Czechoslovak by birth, a locksmith by training, a machinist by vocation, and a department store salesman by necessity, whose true passion was tinkering with machines. In a rented garage he, his son, and son-in-law began the manufacture of a device to center drill bits in their chucks. Here and subsequently, Fred Burg got his boldest ideas after visiting customers and listening carefully to their problems. One such visit resulted in Burg’s invention of turret drills, which fundamentally enhanced machine shop productivity; their manufacture filled ever-larger factories with orders. And while MIT and the Air Force dithered with a hopelessly complex version of numerically-controlled machine tools, the Burgs’ engineers quickly developed and economically manufactured a line of turret drills with NC controls. Burgmaster’s successful machine tools, Holland insists, were a combination of technical possibility and commercial necessity—the result of a company managed for the long term by people who understood their workforce, products, and customers.

In 1965 Burgmaster was bought up by Houdaille, a peripatetic conglomerate that had begun life as a manufacturer of automobile parts. Being a favored division in a conglomerate going places helped raise capital for a new Los Angeles factory, but also entrained more subtle and ominous changes. The Burgs’ emphasis on shop-floor management and employee performance gave way to Houdaille’s requirements for formal credentials and, above all, meeting monthly forecasts. The Burgs’ detailed knowledge about machine tools and easy familiarity with their workers gave way to Houdaille’s technical ignorance and insistence on “managing by the numbers.” Ironically, the firm’s 1970 licensing agreement with a Japanese machine builder, Yamazaki, eased that firm’s entree into the American market. But Yamazaki’s history, as Holland relates it, underscores the importance of intense interfirm competition as well as its management’s long-term commitment to quality, technological innovation, and customer satisfaction. Formal directives from MITI had little practical influence, a point Houdaille willfully inverted when it sought governmental relief from “unfair” Japanese imports. Indeed, pressing a 1981 petition for tax-credit protectionism eventually cost the conglomerate $1.5 million in lawyers’ fees, and to little avail. A 1986 voluntary restraint agreement, which for five years limited Japanese machine tool imports to 1981 levels, was more the result of lobbying by the National Machine Tool Builders Association. Now, the conglomerate’s problems were seen only in legal and political terms.
Burgmaster’s tailspin to the auction block in 1986 seemed inevitable given the many factors ranged against it. By then, the machine-tool firm had completely frittered away its assets. The highly skilled machinists and design engineers, once held to the company by personal loyalty and the zest of technical change, had all departed the faceless conglomerate division for higher paying jobs in southern California aerospace firms. Sales-driven efforts to innovate became futile. Heavy interest charges from the 1979 leveraged buyout compelled the firm to maintain cash flow, at all costs, so half-completed machines were shipped to consumers. Once-loyal consumers were not impressed; nor were once-loyal suppliers when accountants began withholding payments and discounting invoices. A generation of good will evaporated. The point was not to make profits, as typically understood, but to generate enough cash flow to take advantage of the trumped-up depreciation allowances that cheated the tax man. This was, in Seymour Melman’s memorable phrase, profits without production. And, relentlessly, the Japanese machine tools kept coming, their quality unmatched and their price, owing to the overvalued dollar of Reagan’s military Keynesianism, unmatchable.

One’s quibbles with such a successful case study can be few. Holland has the historian’s eye for detail, and the journalist’s ear for turn of phrase, but occasionally his explanations are too thin. One instance is Burg’s transition from making machine-tool accessories to successfully manufacturing machine tools themselves. Launching the manufacture of world-beating machine tools must have entailed some difficulty, but Holland’s source interviews have not recaptured this complexity. Similarly, while Holland is evenhanded in his treatment of corporate financing, I could not follow the rationale behind the “pot of gold” that motivated institutional investors to back leveraged buyouts. In the event, the 1979 LBO netted common-stock holders a whopping 436 percent profit in 1986 when KKR engineered a second deal to recapitalize the conglomerate’s staggering debt. Holland explains the profits as a move to appease the original equity investors; I wondered how they justified such a rate of return on a company going down the tubes. Ultimately, Holland blames government’s militarization of the economy and management’s abandonment of sound manufacturing principles for Burgmaster’s demise. His is a penetrating case study in the decline of American manufacturing. As Holland insists, there are few, if any villains; rather, there are a dozen fundamental changes in government policy, managerial practice, and financial regulation that appear necessary if American manufacturing is to avoid additional tragic tales of when the machine stopped.

Thomas J. Misa
Illinois Institute of Technology