

Japanese Firm Behavior: Introduction to the Special Issue

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Japan's current trade surplus with the United States comes mostly from some of its manufacturing industries. It is evident that Japan's comparative advantage lies in manufacturing. In particular, Japanese firms are competitive in those technology-oriented manufacturing industries that are believed to lead to future economic growth. With the present yen/dollar exchange rate and high value added, the cost of raw materials that must be imported from abroad may pose little problem for Japan's technology-oriented manufacturing industries.

Managerial and Decision Economics published a special issue on Competitiveness, Technology and Productivity in 1989. Various problems faced by US firms as a result of the competition from Japanese companies are among the topics discussed in the papers included in that special issue. This issue contains papers analyzing various aspects of Japanese firm behavior and the environment in which they operate. The emphasis is on the Japanese manufacturing sector.

The papers contained in this issue are broadly classified into four groups: Japanese manufacturing—past and present, empirical studies related to Japanese manufacturing, Japanese industrial relations, and policy and finance. The first two papers by Saxonhouse and by Daly are concerned with historical and recent experiences, respectively, of Japanese manufacturing industries. Saxonhouse focuses on the successful expansion of the Japanese cotton textile industry during the late nineteenth century and the first four decades of the twentieth century. This is the period during which Japan became the major exporter of cotton cloth, replacing Britain. During this period, the Japanese cotton textile industry achieved substantial technological progress, with remarkably uniform technical and managerial practice. Rapid diffusion of new practices is believed by many to be an important determinant of Japan's modern-day business suc-

cess. It is interesting, therefore, to learn this also seems to have been an important element in the success of the Japanese cotton textile industry during the historical period Saxonhouse examines. Saxonhouse considers a series of factors that may have facilitated this diffusion process. He considers this example to be of special interest because it is in contrast to well-documented evidence from economic history for other countries of considerable dispersion in inter-firm, intra-industry productivity performance and substantial gaps between average practice and best practice.

Daly looks at modern corporate management practices in Japan, and at the effects of these practices on efficiency and on success in international trade. He finds that in many areas of manufacturing Japan has achieved unit labor costs that are lower than in other industrialized countries. Daly argues that, from the efficient plant layouts and inventory systems that characterize Japanese manufacturing, it is evident that productivity measures taking account of labor plus capital costs would reveal even larger productivity advantages in Japan's favor.

The next three papers are concerned with empirical issues related to the performance of Japanese firms. Nakamura considers the short-run performance of US firms' subsidiaries in Japan. The paper by Tsurumi and Tsurumi tests whether Japanese firms in the semiconductor industry maximize value added, which would be consistent with long-term firm-value maximization. The paper by Shibata *et al.* looks at the impact on firm performance of various organizational aspects of the so-called 'Japanese Management Style'.

Despite the competitive position enjoyed by many Japanese manufacturing firms, both in Japan and abroad, and the prevailing exchange rates, foreign (mostly US and European) firms' direct investment in Japan increased from about \$930

million in 1984 to \$2.2 billion in 1987. This rapid increase in direct investment in Japan is continuing. The paper by Nakamura presents an empirical model for the short-run performance of US firms' subsidiaries in the Japanese chemical industry. These subsidiaries are considerably more profitable than most domestic Japanese firms. It is shown that imports from US parent firms are one of the factors that have been contributing to the growth and profitability of US chemical industry subsidiaries in Japan. Because these subsidiaries tend to have higher average import propensities than their domestic Japanese counterparts, a Japanese government policy encouraging the establishment of more subsidiaries in Japan might help to increase the overall level of Japanese imports.

Tsurumi and Tsurumi note that few Japanese firms use quarterly or annual earnings per share as a performance guide, and that many Japanese executives pay little attention to the short-term movement of the stock prices of their firms. This does not mean, however, that Japanese firms do not care about profitability. Tsurumi and Tsurumi argue that Japanese firms diligently track profit opportunities, but do not view maximization of short-term profit as an appropriate goal. Rather, the ultimate goal is to become the world's most efficient provider of whatever product or service a firm offers. Using firm data for the Japanese semiconductor industry, Tsurumi and Tsurumi show that the Japanese firms in this industry behave according to value added maximization which is consistent with long-term goals. The paper by Shibata *et al.* is concerned with empirically determining the linkages between firms' performance and the way Japanese firms organize, manage and make decisions. The authors have collected information on the norms held by Japanese managers with respect to decision process characteristics, management style and organizational design. These data have been analyzed by factor analysis, and then a regression framework has been used to match the estimated factor scores to the performance criteria for the firms for which the managers work. This paper reveals the eclectic nature of Japanese management, which seems to foster efficiency and organizational learning, encourages innovation and experimentation, but discourages certain types of risk taking.

The papers by Hashimoto and by Kanemoto and MacLeod are concerned with the Japanese industrial relations system, which is viewed by many

researchers to be the driving force behind the competitiveness of the modern Japanese manufacturing sector. Daly, Tsurumi and Tsurumi, and Ziembra all note, for example, that the permanent, life-long nature of the Japanese employer-employee relationship allows (or compels) the firm management to take a long-term view toward achieving strategic goals. While the papers by Hashimoto and by Kanemoto and MacLeod both acknowledge the importance of cultural factors, both studies also reject the notion that Japanese labor practices are culture- and tradition-specific. Instead, attention is focused on economic conditions and motivations. The economic explanations that are offered in the two studies are, however, quite different.

Hashimoto takes the perspective that prototypes of lifetime employment, seniority wages, and bonus payments were all developed in order to meet the historical need for stabilizing employment of skilled workers as the process of industrialization accelerated and acute labor shortages developed, accompanied by high turnover. He distinguishes between two types of firm-specific human capital investment: investments in firm-specific technical skills, and investments in the reliability of information exchanged between the employer and employees as well as among employees. He hypothesizes that increased demand for investing in firm-specific technical skills during the post-war economic growth period encouraged subsequent investment in information reliability. Hashimoto argues that the increased information reliability, in turn, further stimulated investment in technical skills. The strengthening of the employer-employee attachment—as reflected in joint consultations, consensus-based decision making and enterprise unions—is viewed as a consequence of the investments in technical skills and information reliability.

Kanemoto and MacLeod try to account for Japanese labor practices in terms of agency and monitoring costs. In US firms, both the job and the performance standard for each individual worker are usually clearly specified, but the wages a worker receives are determined primarily by the job the worker holds rather than by characteristics of the worker such as skill and formal education. In contrast, in Japanese firms job descriptions are quite vague, with wages being determined primarily by the characteristics of each individual. Kanemoto and MacLeod argue that the US labor market is characterized by an exit-based incentive mechanism, with the employer using threats to terminate

employment for any worker who does not produce as expected. In contrast, Japanese labor practices are viewed as being characterized by an incentive system in which worker behavior is conditioned by the presence of limited possibilities for promotions and a steep wage-tenure profile. This study concludes that the Japanese and US systems are examples of two different labor market equilibria. Both the Kanemoto and MacLeod paper and the Hashimoto paper, however, discuss possibilities for transplanting Japanese labor practices to the United States (with substantially different recommendations for firms contemplating this).

The last group of papers by McMillan and by Ziemba consider Japanese firms' strategies and the Japanese stock market from a global perspective. McMillan notes that:

... the environment of Japanese industry and management, both domestic and international, is going to be significantly different in the next decade from anything experienced in the past generation. The biggest Japanese companies, far from being the highly leveraged firms dependent on government administrative guidance and generous bank finance, are among the most financially solvent in the world. And far from being the passive cartelized strongholds depicted in descriptions of Japan Inc., these major corporations are fiercely competitive not only against foreign firms, but sector by sector, against their own Japanese counterparts.

McMillan focuses, in particular, on the impacts of trade protectionism in North America and Europe which is specifically aimed at Japanese goods, and on currency realignments. He relates these factors to two sorts of massive adjustments that are taking place in Japanese manufacturing industries: a shift towards higher value-added production and in-

creased technological intensity in Japan's export mix; and the financial restructuring of Japanese corporations around international equity markets, with increased long-term offshore borrowing. McMillan predicts a strengthening of Japanese manufacturing at home, and a growth in Japanese multinationalization abroad.

There has been a huge increase in Japanese stock prices in the past forty years. Taking a historical perspective, Ziemba considers the impacts on the stock market of certain institutional characteristics of (and possible future developments in) the Japanese economy. He notes, in particular, that 'land and stock prices are intertwined in Japan'. Ziemba asserts, for instance, that 'for there to be a giant stock market crash in Japan there almost certainly must be a land crash as well'; although he sees such a crash as highly unlikely. After reviewing various factors that might affect the Japanese stock prices in the long run, Ziemba concludes, like McMillan, that, with external asset holdings increasing at an enormous rate, Japanese firms seem poised to increase their economic importance. In contrast with McMillan, who cites Japan's inadequate infrastructure as an important constraint on Japanese corporate growth, Ziemba views Japan's continuing dependence on imported energy and other commodities and the growing anti-Japanese feeling in the West as the challenges that must be met if Japan is to continue to enjoy vigorous economic growth.

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