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Introduction

Takatoshi Ito and Anne O. Krueger

The phenomenal economic growth of the international economy over the past half-century has been in part caused by, and in part the result of, falling real and artificial barriers to international transactions among nations. Real barriers, such as transport and communications costs, have fallen sharply. It is estimated that the real cost of a three-minute phone call between London and New York, for example, is now less than 3 percent of what it was prior to World War II. Likewise, the cost of ocean shipping has dropped by about 80 percent over the same period, while air transport has become so cheap that many goods are now air-freighted between countries. As to artificial barriers, eight rounds of multilateral trade negotiations under the auspices of the General Agreement on Tariffs and Trade have resulted in a virtual elimination of quantitative restrictions on trade among industrialized countries and a reduction in average tariff rates on manufactured goods from close to 50 percent to under 5 percent.

Success in some dimensions normally brings new problems to light, and that is nowhere more true than in international trade relations. The great decline in transactions and tariff costs between countries has made producers everywhere extremely sensitive to governmental measures that impose even small cost differentials on them relative to their foreign competitors. Calls for a "level playing field" are frequently heard, with claims that foreign industries have an "unfair" advantage because of subsidies from

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their government or cross-subsidies from domestic monopoly positions created by the home government. Appeals for protection also come from producers whose costs are increased by domestic regulatory measures for causes such as the environment. Likewise, as more goods and services have become tradable, the ability of inefficient regulatory regimes in domestic economies to handicap producers relative to their foreign competitors has increased.

Thus two fields that were formerly fairly independent—policy analysis of regulation and competition and of international economic policy—have moved closer together. One result has been calls for an international "competition" policy. Such a policy would entail an international agreement on what constitutes fair business practices and would incorporate that agreement into the World Trade Organization (WTO). Analyses of what competition policy might be and what it might do are under way throughout the world, and the topic is inherently complex.

One group of advocates of competition policy are those who believe that antidumping measures in many countries have gone far beyond their intended purpose (of preventing predatory pricing) and are used as a form of protection.[1] They believe that competition policy could replace antidumping practices with beneficial effects for the efficiency of the global trading system.

A second group of advocates believes that traditional (national) antimonopoly and antitrust laws are no longer serving their original purpose. In traditional industrial organization theory, the market share of the largest company or top three companies was an important indicator of the degree of competition in the market. However, competition can come from new entrants, imports, or substitute new products or services. The loss of monopoly power of local telephone companies with the advent of cellular telephones, and the potential threat of cable TV competition illustrates the point. Likewise, the fact that there are only three major U.S. automobile companies no longer suggests a highly concentrated industry because competition from foreign auto manufacturers severely limits any monopoly power.

Third, technological advance has made the concept of "natural monopoly," which was used as the basis for some regulation, largely obsolete. What used to be considered "natural monopolies," such as long-distance telephone service, railroads, and airlines, have been privatized with success in many countries. Fixed costs have become smaller, and advances in software technology have made it possible to increase the productivity of the existing capital stock.

1. See Boltuck and Litan (1991) for a good analysis of the divergence between antidumping measures used to prevent predatory pricing and the reality of antidumping measures as actually practiced in the United States.

At the same time as calls for a worldwide competition policy have increased, however, economists and others have begun questioning the efficiency of regulation for other reasons, noting that sometimes the regulated have benefited from oversight, and that sometimes regulation of "natural monopolies" has given them more market power than the enterprises would have had if left alone. The move to more efficient domestic regulation, which has resulted in deregulation in some industries, privatization in others, and changes in regulatory regimes in still others, has been one outcome. It is now widely recognized that efficient regulation takes place when social welfare is increased through government actions that, at the least cost, increase consumer welfare. In some instances, there is considerably more competition than was earlier thought, either because technology has increased the choices available or because earlier regulators simply failed to recognize potential alternatives. Indeed, in some instances, regulation itself has served as a major barrier to entry. In other instances, attempted intervention—public ownership, for example—has simply failed to achieve results even equal to those achievable with private monopoly.

Many of the sectors most affected by changes in the regulatory environment are critical to the success of exporters and significantly affect the competitive positions of producers in a number of industries. Financial services, for example, are rapidly being deregulated, in part because of the great cost advantages they provide for users of those services in countries where the costs of financial services are low. Telecommunications markets are rapidly being broken into their component parts, with competition among suppliers introduced wherever feasible. As with financial services, the availability of cheap telecommunications facilities gives yet another competitive edge to exporters.

As these changes are taking place, producers everywhere are becoming more sensitive to anything that affects their costs and margins relative to their foreign competitors. In part this is because of the great reduction in barriers to trade from the levels that earlier prevailed through transport and communications costs and through tariffs and other trade barriers.

The eighth annual National Bureau of Economic Research–East Asia Seminar on Economics was held in Taipei in June 1997 to consider these issues as they relate to the Asia-Pacific region. The papers presented at that conference provide interesting insights into the extent to which the deregulation problems of the countries of the region are similar, and into the gains that can result from improved regulatory or competitive environments for business services.

In chapter 1 Roger Noll examines the ways in which international trade considerations impinge on policy decisions regarding the regulatory environment. As he notes, trade friction over differences between regulatory regimes has increased markedly. This has led to calls for an "international competition policy" that would presumably become part of the WTO.

Such an effort might cut in two ways. On one hand, it might impose stricter regulation on industries in some countries than nationals would prefer and might indeed even be a way for some countries to protect their own industries.[2] On the other hand, there are clearly instances in which regulatory regimes impose costs "artificially" on producers in one country in ways that deprive those producers, who may be low cost, of their competitive advantage. Noll nicely illustrates this in table 1.1.

Noll starts by telling the "tale of the teleshopper," indicating how many different steps and costs, both artificial and real, may lie between the retail consumer and the producer. As he demonstrates, protection of domestic sellers can come about through such means as policies that supply low-quality access lines at high usage prices, through policies that regulate domestic package delivery, or in border delays. Thus not only have barriers to trade fallen sharply, but all sorts of economic activities that were previously of concern only for domestic economic activity now affect the ability of foreigners to compete in domestic markets. Interestingly, Noll blames these regulatory trade distortions for spurring regional and bilateral trade agreements.

Noll then discusses mechanisms for rationalizing regulatory objectives and methods. He focuses on the unnecessary costs of regulation, and ways that they can be avoided. He provides a careful analysis of the types of situations in which efficient government interventions may be called for. He examines regulatory regimes that promote competition, frameworks for preventing natural monopolists from abusing their power, and social regulation (including environmental concerns and protective standards). Noll concludes by examining ways in which competition policy, procedural reforms—especially focusing on mandatory cost-benefit analysis—and internationalization can all bring about more efficient regulatory regimes.

Whereas Roger Noll's paper focuses on the implications of internationalization for regulatory reform issues, Sadao Nagaoka examines the features of international trade that impinge on competition policy. He starts with a review of trade theory and analyzes the behavior of producers with a degree of monopoly power that might result in a reduction in social welfare, either of the producing country or of consumers in the rest of the world. He then uses that framework to analyze Japan's competition policy.

As Nagaoka points out, international trade itself generally brings about

2. To date, the greatest danger of protection appearing in the guise of common standards would appear to be conditions surrounding the employment of labor. Calls for labor standards are most frequently heard emanating from workers' representatives in rich countries. It is clear that raising labor costs in countries with abundant unskilled labor would deprive these countries of part of their comparative advantage. Another area where calls for common standards have been heard is environmental protection. Again, there are a number of issues, especially when there is little or no evidence of international spillovers.

greater competition for home producers than occurs when production is confined to the home market (or is protected for the home market). He examines Japanese anticartel policy, noting that it has become stricter over the years. Ironically, however, as anticartel policy has succeeded, firms have been accused of dumping in foreign markets when in fact they have been selling at lower prices due to greater competition. Instead of benefiting from price reductions, foreigners have through antidumping measures insisted on higher prices, thus reducing their own welfare when in fact it should have increased.

In addition to breaking up cartels, Japan has regulated mergers and acquisitions fairly strictly and has prevented vertical restraints of trade primarily by applying sections of the unfair trade practices law. Nagaoka concludes by noting that international regulation through national treatment is highly desirable because it will prevent rent-shifting policies that can otherwise result through regulation. He also calls for measures to contain the ability of antidumping measures to offset the gains that might otherwise result from competition policy, noting that antidumping legislation as carried out in fact works against a desirable competition policy.

In chapter 3 Frank Wolak considers how changing the regulatory regime has affected markets and price behavior in electricity. Wolak describes the changing structure of the electricity industry, once thought to be a perfect case of natural monopoly. He describes how companies behave in response to incentives after deregulation. He uses evidence on the design of electricity markets in England and Wales, Norway and Sweden, Australia, and New Zealand. Features of the market structure, the type of power generation, and the market rules are characterized for each country. Then Wolak analyzes the relationship between market rules, market structure, and the behavior of prices. He argues that although electricity is no longer considered to be a natural monopoly, it is also not perfectly competitive. Controlling market power is an important policy issue, and his analysis shows that there is no one framework that suits all situations, and that careful analysis of each situation is called for.

The next three papers consider the regulation of service industries. In chapter 4 Motoshige Itoh addresses the Japanese distribution system and the related issue of market access by foreign companies. The Japanese distribution sector was a focus of trade negotiations between the United States and Japan in the late 1980s because the United States claimed that restrictions placed on the construction of shopping malls and discount stores by the Japanese Large Scale Retail Store Law effectively created a trade barrier to imports. Statistics show that Japan had more small and medium-size stores per capita than any other advanced country. Because large retail stores carry more imported goods than small neighborhood stores, this allegedly contributed to Japan's trade surpluses.

Itoh carefully reviews structural changes in the Japanese distribution

system as well as the legal situation. The Large Scale Retail Store Law was liberalized twice, in 1990 and 1994, and then abolished in 1998. Itoh attributes the change to the "motorization" of Japanese society. As more city dwellers have come to afford autos, demands for large discount stores have increased. He is skeptical of whether the liberalization of the law contributed to increased imports, attributing most of the expansion to the yen appreciation after 1985.

Itoh also analyzes changes in the distribution system since 1985 and shows that costs have been reduced not only in large discount stores but also in convenience stores (such as Seven-Eleven Japan) and specialized small stores. Itoh concludes that changes in tastes and lifestyles drove the changes in the distribution sector in Japan.

In chapter 5 Changqi Wu and Leonard Cheng consider Hong Kong's regulation of business services. Hong Kong's economy is remarkable in the extent to which it has transformed from a manufacturing-based economy to one based on services. As Hong Kong has become a major trader in services, the government has deregulated and liberalized markets for telecommunications, public transport, and electricity. Wu and Cheng characterize the shift as being primarily one "from regulation to competition."

They first trace the history of monopoly regulation in Hong Kong. Regulation seems to have started mostly in the 1950s and 1960s, along traditional lines with permitted rates of return on electricity production, local telephone service, public bus service, and transport services. But with the 1990s, deregulation came in all these industries, and the government began replacing rate-of-return regulation with measures to achieve more competition. There are now four companies competing in telecommunications (compared to one company earlier) and three bus companies, and there will shortly be two companies competing in cargo services at the airport, contrasted with the earlier monopoly positions in each of these areas.

Wu and Cheng show that rate-of-return regulation induced the electricity company to raise the capital-labor ratio more than was desirable on economic efficiency grounds. They also show that the rate of total factor productivity growth in electric power was negligible during the period when rate-of-return regulation was in effect, and that firms invested in excess capacity.

They then contrast the poor performance of the regulated electricity industry with that of the telecommunications service industry and show that regulated telecommunications was much like electricity: once deregulation and liberalization, accompanied by appropriate conditions applied to suppliers (number portability, restrictions on discrimination in access fees, etc.), had begun, the growth rate of revenues increased markedly, and Hong Kong Telecommunications announced plans for significant cutbacks in the number of employees as a cost-reducing measure, despite rapid growth in output.

Wu and Cheng regard Hong Kong as being in the midst of a transition from rate-of-return regulation to liberalization and competition within an appropriate set of guidelines. They note that some industries have advanced further than others, and that there remain a number of sheltered segments among Hong Kong's business service industries.

The other paper examining transportation services and deregulation is chapter 6, by Hirotaka Yamauchi. In his paper, Yamauchi outlines airline deregulation policy in Japan. In the old regime prior to 1986, the Ministry of Transport strictly controlled routing and airfares, viewing the industry as a natural monopoly. Japan Airlines was designated the international airline, All Nippon Airways the major domestic carrier, and Toa Domestic Airlines (now Japan Air Systems) the local route airline. Virtually no discount airfares, except for multiple-coupon discounts for the same route, were available. The U.S.-Japan Airline Service Treaty granted very favorable rights to U.S. airlines. With these handicaps, Japanese airlines did not innovate in management.

Yamauchi then describes the emergence of dynamics for deregulation and the airline industry's evolution in the 1990s. An interesting part of the story is how the movement to rectify "unequal" treatment between U.S. and Japanese airlines spilled over into domestic deregulation because allowing entry of an airline (Nippon Cargo Airlines) meant the end of the old regime. After a decade, regulations have greatly changed. By 1998, airfares in Japan were deregulated, and the U.S.-Japan Airline Service Treaty was renegotiated so that rights have been equalized.

The next four papers all examine the liberalization of the financial service sector. Two papers examine the situation in Taiwan, one paper deals with Hong Kong, and one treats Korea. Chang analyzes the deregulation of financial services in chapter 7. He starts by noting the traditional hostility of the Taiwanese authorities to services, in contrast to their preferential treatment of manufacturing industries. In consequence, there was a strong regulatory environment for financial services. This in turn resulted in a bifurcated financial system, with a formal and an informal sector. Until deregulation, the formal sector consisted almost entirely of publicly owned (or, what was the same thing, ruling party owned) banks and financial institutions. As late as 1990, 94 percent of financial institutions were publicly owned. Among the other negative effects of this structure, small and medium-size enterprises were systematically deprived of access to credit from the formal sector, even when they were in activities that were entitled to preferential credit. There is also evidence that the banking sector was inefficient in a number of ways.

In the 1990s, reforms started. A new banking law came into effect, and the process of liberalization began. Interest rates were decontrolled, private banks were permitted to enter, the foreign exchange market was significantly liberalized, and foreign banks were permitted to enter. Chang

concludes that international pressures have, to a considerable extent, been responsible for deregulation, which has, in any event, not gone as rapidly as it might have. The informal sector still exists, probably because the older banks have not entirely adjusted to the new environment.

Whereas Chang concentrates on the issues that gave rise to reforms and the inefficiencies of the former system, in chapter 8 Wu and Hu analyze the effects of deregulation to date. They focus on the impact of Taiwanese financial deregulation on spreads between lending and deposit rates and differentials between official and informal interest rates. They find greater fluctuation in interest rates in both the formal and informal sectors prior to the liberalization of interest rates. Also, the spreads between lending and deposit interest rates of domestic and local foreign banks fell after 1991. They attribute this decline to the entry of private commercial banks and greater competition in the Taiwanese banking system.

The differential between informal and formal sector interest rates did not shrink, however. Wu and Hu attribute this result to the increased risk premium resulting when commercial banks could take on riskier loans, thus leading to greater riskiness of the average informal sector loan. Overall, they conclude that financial liberalization in Taiwan has increased efficiency and reduced costs in the financial system.

Kang traces the liberalization of the Korean banking system in chapter 9. In the Korean case, the chief objective seems to have been to strengthen the financial system, partly in response to foreign competition. However, the Korean authorities were aware that some banks held a number of nonperforming loans in their portfolios and therefore thought that liberalization should proceed slowly so that these banks would have time to adjust.

Legislation to guide liberalization was passed in 1988, but liberalization was to take ten years and go through several phases. Kang believes that the key changes came about in the early 1990s, when interest rate ceilings were liberalized. He examines the behavior of deposit and lending rates and concludes that interest rate spreads have come down significantly for national banks but not for regional banks. Accompanying this was a drop in the profitability of banking. These results seem to be attributable to the existence of less competition at the regional level.

Kang concludes by noting that a considerable distance remains in financial liberalization, and that a recent commission on the financial sector recommended the remaining steps be undertaken in a "big bang" rather than at the gradual pace of reforms to date.

Hong Kong seems to have started with an even more rigid banking sector than Taiwan or Korea, as there had been a cartel of banks starting from the 1890s. As Kwan and Lui discuss in chapter 10, the case of Hong Kong is of special interest, not least because it is one of the large international financial centers.

Until deregulation, interest rate caps in Hong Kong had highly distor-

tionary effects: with the Hong Kong dollar tied to the U.S. dollar, the interest rate had to be close to the U.S. rate; but since inflation was higher in Hong Kong, the resulting real interest rate was often negative. Deregulation of interest rate caps took place early in 1995, and competition among banks increased greatly. Kwan and Lui use available data to test for interest rate spreads and the profitability of banks, and they show that spreads decreased significantly. Interestingly enough, banking profitability did not decline. The authors attribute this result to the banks' response to the removal of interest rate caps: they began offering new services and simultaneously began accepting riskier loans.

Another crucial area of business services is telecommunications. Historically, telecommunications were viewed as a natural monopoly and regulated or owned by governments. Technological change has provided the means for competition and allowed movement toward more market-based services. Issues are complicated, however, because of concerns relating to network access (which may be owned by the preexisting company) and the fact that opportunities for competition differ from activity to activity within the telecommunications industry. As chapters 11 through 14, on Taiwan, Korea, China, and the United States show, no country has yet successfully completed the transition from full regulation or government ownership to private markets for telecommunications. But all four governments are trying to achieve more efficient, lower cost telecommunications services by liberalizing their regimes.

Chen views Taiwan's telecommunications liberalization as being "in process." A governmental department, the Directorate General of Telecommunications (DGT), operated and regulated all telecommunications equipment until the late 1980s. An earlier liberalization attempt in the late 1970s failed because of opposition from trade unions. During the thirty years prior to the start of liberalization in the late 1980s, there was exceptionally rapid growth in demand, and the DGT expanded telecommunications services rapidly, from 0.29 telephone mainlines per 100 inhabitants in 1950 to 32.1 in 1991 and 41.3 in 1996. Even with the rapid growth prior to 1990, demand continued to grow more rapidly still, and discontent emerged over the long waiting period for a phone and deteriorating quality of service.

In Taiwan (and in Korea, as Nam documents), telecommunications policy came into conflict with, among other things, industrial policy, as the authorities sought to induce domestic firms to produce telecommunications equipment; this often resulted in the use of outmoded equipment in operations. The DGT had taken a stake in three local suppliers, subsidiaries of foreign firms, creating a less than competitive environment for telecommunications equipment.

When liberalization did start in Taiwan in the late 1980s, international competition was a major factor behind it. Until 1996, progress with tele-

communications liberalization was limited; however, the market for customer premises equipment was liberalized, as well as some related services, as competition was permitted. Moreover, a set of laws proposed in 1996 is intended to take the process much further. Among other things, the law split off the regulatory arm of the DGT from its operating arm, which then faces competition in most of its activities.

Chen reports that to date the program has been subject to numerous criticisms, both because of ambiguity as to what the law covers and because many aspects of industry operation are still regulated. The DGT continues to use rate-of-return regulation, which induces operators to invest more than is economically efficient. There is also a 20 percent limitation on permitted foreign capital. Chen notes that regulation can be inimical to the entry of new techniques and new services, especially when, as in Taiwan, different services are regulated separately. There are also questions about the extent to which Chunghwa Telecom, the operating spinoff from the DGT, is favored by the DGT in its regulations.

In considering telecommunications liberalization in Korea, Nam reports a very similar story. Telecommunications was a government monopoly, with international and domestic service provided by the government, and no separate regulatory authority until the late 1980s. The government has since moved to liberalize telecommunications but has continued with rate regulation and, in addition, has tended to set access charges more to protect the profits of new entrants than on economic efficiency grounds. Nam believes that needed (and feasible) competition has not yet been allowed to permeate the telecommunications industry.

Whereas Korea and Taiwan are in the process of liberalizing telecommunications, Lu reports that China still regulates the industry, where demand and delivery have both grown very rapidly. Foreigners are not yet permitted in the industry, and there has, to date, been little effort to begin deregulation.

As for the United States, Crandall notes that it has been deregulating and liberalizing telecommunications for thirty years without completing the process. He believes that in the United States, the political demand to provide universal access at virtually identical prices (and the cross-subsidy resulting from that) has basically impeded liberalization. As he points out, unless prices are allowed to reflect costs, one cannot expect competition to perform the regulatory role that it might otherwise. Crandall draws four key lessons from the U.S. experience: (1) rate distortions should be eliminated before introducing competition; (2) unbundling of essential facilities should be of limited duration, encouraging new entrants to build their own facilities (with greater competition resulting); (3) a date certain should be established when rates will be deregulated after entry barriers have been removed; and (4) regulations should be restricted to requiring reciprocal interconnection after rate and service deregulation occurs.

The similarities between financial deregulation, where nonperforming loans in the portfolios of existing institutions create concerns for authorities set on deregulation, and telecommunications deregulation, where pricing regulations or considerations prevent competition, are striking. As experience with deregulation and liberalization proceeds, it is likely that new means for addressing these issues will be found, and that comparative experience and international pressures will continue to push the liberalization process forward across many business service sectors.

Reference

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