SESSION I

TRADE POLICY MEASURES

Regional Integration and Foreign Direct Investment

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1. Introduction

Recent years have witnessed a deepening and widening of European integration and a proliferation of new regional integration agreements (RIAs) throughout the world, with acronyms such as APEC, EU, MERCOSUR, and NAFTA attracting increasing attention. Although some integration agreements have been motivated by political considerations, it is clear that economics is generally the driving force: countries enter into RIAs because integration promises various economic benefits. In the short run, integration is expected to stimulate intra-regional trade and investment; in the longer run, it is hoped that the combination of larger markets, tougher competition, more efficient resource allocation, and various positive externalities will raise the growth rates of the participating economies. This paper focuses on the investment effects of RIAs, and discusses how such arrangements may affect foreign direct investment (FDI) flows in the integrating region. With foreign direct investment, we refer to foreign ownership of a controlling share of a firm operating in a country's domestic market: FDI flows refer to changes in the foreign ownership of production factors.

The perhaps most serious challenge facing a study of the relation between regional integration and foreign direct investment is the multi-dimensional character of the issue. There is reason to believe that effects will vary between different integration agreements, and between countries and industries participating in any specific agreement. For instance, the degree of integration at the outset, and the significance and nature of the changes brought about by the RIA, will matter for the outcome. The patterns of trade and investment at the outset will determine how much adjustment is necessary after the agreement. Countries where outward FDI flows are initially very large are not likely to be affected the same way as countries where inflows of FDI are dominant. Integration between developed countries may differ from integration between developing countries or agreements between countries at different levels of development, depending on how competitive and complementary the economies are. For these reasons, we present a simple conceptual framework that provides a rough indication of what to expect from any specific RIA. Moreover, we cover several different examples of regional integration in the empirical part of the paper.

The paper is organized as follows. The next section discusses how regional integration can potentially affect investment patterns among countries, and presents an organizational template for examining the relation between RIAs and FDI. Section 3 reviews some earlier empirical studies of the investment impact of regional integration, with focus on evidence from the European Community, and presents three case studies focusing on different kinds of regional integration: North-North integration (Canada joining CUSFTA), North-South integration (Mexico's accession to NAFTA), and South-South integration (MERCOSUR). Section 4 provides a brief summary and some tentative conclusions.

2. Regional Integration Agreements and FDI: Some Theoretical Considerations

The term regional economic integration typically refers to reductions of regional trade barriers and investment restrictions. To identify and assess some theoretical linkages between RIAs and

incentives to undertake FDI, it is therefore convenient to structure the discussion along these two dimensions of integration. Hence, we begin by discussing effects of *trade liberalization*, and distinguish between the impact on FDI that is mainly a response to trade barriers, and FDI that is primarily motivated by the need to internalize firm-specific intangible assets that cannot be traded efficiently in arm's-length markets. We go on to consider the impact of special *investment provisions* and other institutional changes that are sometimes connected to integration agreements. The focus in this discussion lies on static effects: the possible dynamic effects of regional integration on investment flows are discussed separately. Finally, we suggest a template for classifying entire countries and specific sectors according to the expected impact on investments.[1]

2.1 Effects of Trade Liberalization: Tariff-jumping and Internalization

The early theoretical and empirical literature on foreign investment tended to regard trade and capital movements as substitutable modes of serving foreign markets.[2] This view of the relationship between trade and factor mobility suggests that tariff barriers could motivate import-substituting FDI, and that general tariff reductions would reduce FDI flows or even stimulate a "repatriation" of foreign-owned assets to the home countries of MNCs. However, although much FDI is motivated by tariff-jumping arguments, there is a clear empasis in more recent literature on exploitation of intangible assets as the major motive for foreign investment (see Caves 1996 for a review). In order to compete successfully in a foreign market - where local firms have superior knowledge of the local market, consumer preferences, and business practices - the internationally oriented firm must possess some firm-specific intangible asset, such as technological and marketing expertise, that gives it a competitive edge. The effective exploitation of these assets sometimes requires firms to "internalize" their international operations by establishing foreign affiliates, since other modes of international business, including exports and licensing of technology to foreign firms, carry relatively high transactions costs (Buckley and Casson 1976; Dunning 1977). Some FDI can therefore be expected to occur even when there are no formal trade barriers between countries.

These two views of the motives for FDI give partly contradictory predictions regarding the effects of regional integration, particularly for intra-regional investment flows. Regarding tariff-jumping FDI, we would primarily expect reduced investment flows because trade liberalization makes exporting

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[1] It should be noted already at the outset that the discussion will not address the welfare effects of changes in investment flows. Although the underlying assumption is that increased FDI flows are beneficial to growth and development in the integrating region, it should be recognized that the welfare effects may in fact be negative if the RIA worsens the allocation of resources or adds new distortions, e.g. in the form of higher average protection of the regional market. For a classic reference, see Brecher and Díaz-Alejandro (1977). In addition, the welfare effects on the rest of the world may well be negative if the RIA diverts investment from other countries to the region in question.

[2] See e.g. Mundell (1957). Note, however, that these authors, writing in the Heckscher-Ohlin tradition, seldom refer specifically to foreign *direct* investment: the strict distinction between FDI and foreign portfolio investment did not become essential until it was recognized that the exploitation of firm-specific intangible assets is a major motive for FDI, whereas portfolio investment is mainly motivated by international differences in capital yields.

from the home country relatively more attractive than FDI as a way to serve the regional market.[3] However, regional integration would not create incentives to reduce investment or repatriate capital for projects that were primarily undertaken to internalize the exploitation of intangible assets. In fact, the reduction of regional trade barriers could instead stimulate overall FDI flows among the relevant trading partners by enabling MNCs to operate more efficiently across international borders. This argument applies in particular for vertically integrated FDI, where the operations of the MNC's different affiliates are specialized according to the locational advantages of the host country, and where a predictable and liberal trade environment is a prerequisite for the international division of labor at the firm level. Hence, the static effects on intra-regional FDI flows are subject to partially off-setting influences, and the net impact on any specific RIA or individual member country would tend to be determined by the structure of and motives for pre-existing investment. A reasonable generalization, however, is that countries with low initial trade restrictions are more likely to benefit from increased intra-regional FDI flows as trade barriers are reduced, since they are not very likely to host import-substituting FDI projects that might be withdrawn.

Turning to inter-regional FDI flows, both the tariff-jumping and internalization models suggests increased investment flows. The inflows of FDI from "outsiders" into the region could obviously go up if the average level of protection increases as a result of the RIAs, or if the establishment of a RIA raises fears about future protection (as in the debate on "Fortress Europe"). The inflows of foreign capital would also increase if the volume of incoming FDI was initially restricted by the limited size of the individual national markets. Contrary to the national markets, the integrated "common" market may be large enough to bear the fixed costs for the establishment of new foreign affiliates. This surge of inward FDI would probably not be evenly distributed, but rather concentrated to the geographical areas with the strongest locational advantages. In addition, Kindleberger (1966) has pointed to "investment creation" as a likely response to the trade diversion brought about by RIAs. The term refers to the strategic investment responses by outside firms who lose export markets when their former customers turn to suppliers based in the region, because regional trade is not obstructed by trade barriers.[4]

The potential effects of RIA on outflows of FDI from the integrating region are rarely discussed in formal models. This is mainly related to the simplifying assumption that nothing happens with trade barriers in the rest of the world. However, some changes in outward FDI are feasible even when trade policies in the rest of the world remain unchanged. For instance, it is possible that a firm's capacity to

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[3] To the extent that regional integration results in trade creation, it may be necessary to temper this conclusion somewhat - intra-regional FDI in some member countries might well increase in response to changes in the regional production structure- but the general prediction would still be a reduction of intra-regional trade flows. The extent of these cross-border investment flows of course depends on the initial situation and the relative strength of the firms in the different member countries. This potential impact on intra-regional FDI flows has been termed "investment diversion" by Kindleberger (1966).

[4] It is also possible to picture situations where RIAs could cause a reduction of FDI from outside the region. Specifically, if the initial stock of outside FDI consists of horizontally organized affiliates in several or all of the countries in the region, it is not likely that this structure would be optimal after the establishment of the RIA. A possible response to integration could then be a rationalization of the network of affiliates, so that the entire region could be supplied from a smaller number of affiliates located in the member countries with the most favorable economic conditions. In this case - which is similar to Kindleberger's (1966) investment diversion case - some countries could experience disinvestments as foreign MNCs concentrate their regional operations in other member countries. On balance, however, it appears that the arguments in favor of increased FDI inflows from outside the RIA are stronger.

undertake new FDI projects is restricted by its administrative capability or the availability of investment capital (Stevens and Lipsey 1992). In that case, it is likely that FDI within and outside the region are substitutes. To the extent that integration reduces intra-regional FDI, it may therefore increase the scope for outflows of FDI from the integrating area to other regions. Yet, this impact is not likely to be very strong, and it is reasonable to expect that the trade liberalization element of RIAs results in a net increase in the inflows of FDI to the region. However, intra-regional FDI is subject to contradictory influences, as noted above, and we are not able to say much about the investment effects on individual countries - investment can be expected to cluster to those parts of the RIA where the investment environment is most favorable, and some countries may therefore be left with less FDI than before.

2.2 Explicit Investment Provisions and Other Influences

To the extent that RIAs also liberalize capital flows, an additional stimulus is provided to the FDI process. Capital flows can be liberalized in several ways. Most directly, restrictions on inward foreign direct investment might be reduced or eliminated. Inward FDI will also presumably be encouraged by "national treatment" provisions ensuring that foreign investors are treated no less favorably than domestic investors. Obviously, the practical relevance of such provisions depends on the scope and magnitude of pre-existing barriers to inward FDI, as well as the extent and nature of host government discrimination against foreign investors. Explicit dispute resolution mechanisms are also featured in many integration agreements. To the extent that such mechanisms are effective, they should reduce trade and investment disputes between the participating nations and encourage FDI.[5]

Inward FDI could also be stimulated by the elimination of trade-related investment measures (TRIMs), such as requirements for foreign affiliates to satisfy specific export targets, and by the presence of strong investor property rights which reduce the risk of direct or indirect expropriation. Both types of initiatives may be institutionalized in RIAs. In this context, it is possible that a significant effect of some RIAs may be that they "lock in" economic reforms in the participating countries. By raising reform decision from the national to the international level, the agreements may create a more predictable policy environment for foreign investors, who might otherwise fear that purely national reform efforts are temporary and that various kinds of restrictions may be reintroduced when the political regime changes. These effects are likely to be most important in agreements involving developing countries, where political risk is often considered to limit FDI inflows. Moreover, to the extent that "market forces" become a stronger influence on capital investment decisions compared to political risk, international differences in factor endowments should become stronger influences on investment location decisions. This strengthens the tendency for FDI to be concentrated to the most attractive investment locations in the integrating area.

2.3 Dynamic Effects of Regional Integration

In addition to the static effects discussed above, it is possible that the establishment of RIAs also generates various dynamic effects that affect FDI flows. For instance, analyses of the economic impact of the European Single Market have argued that this specific integration process has led to significant

[5] To the extent that potential trade disputes act as non-tariff barriers to trade, it is also possible that these mechanisms discourage some "tariff-jumping" FDI.

efficiency benefits that will raise the participating countries' growth rates over the medium or long term. These dynamic benefits might increase the attractiveness of the integrated region as a location for domestic as well as foreign investment. The higher growth rates may be temporary, lasting while the economies adjust to the higher real income that comes about because of tougher competition and more efficient allocation of resources in the common market (see e.g. Emerson *et al*. 1989). It is also possible that there are permanent growth effects that occur as the initial gains in efficiency and output raise factor rewards and generate new savings and investments that contribute further to output growth (Baldwin 1989). However, the exact links between regional integration and dynamic growth effects are not well specified, and it is not uncommon that analyses and empirical estimates of dynamic benefits are considered vague or speculative (Smith 1992).

In many instances, FDI may actually be an essential catalyst for these dynamic benefits. Some of the improvements in economic efficiency associated with increased specialization, exploitation of scale economies, and greater geographical concentration of individual economic activities are likely to be driven by inter and intra-regional FDI. Increased FDI flows are also important forces behind the heavier competitive pressure that is expected to encourage local producers to adopt efficiency-enhancing strategies, such as rationalizing plant capacity or reducing slack in the production process (Smith and Venables 1989). In addition, it is likely that FDI will stimulate technology transfer and diffusion, both directly and through *spillovers* to local firms (see Blomström and Kokko 1997).

Furthermore, if regional integration creates a larger market, it is also conceivable that some dynamic effects occur because regional integration influences various firm characteristics, such as the stock of intangible firm-specific assets that facilitate FDI. A larger market may simply allow some firms to grow larger and stronger than what would have been possible in individual national markets. Alternatively, integration may motivate firms to seek strategic alliances or merge with former competitors in order to manage in the more competitive environment that is created when intra-regional trade barriers are removed. As firms become larger, they may be able to invest more in R&D and marketing, which may lead to the creation of new intangible assets that stimulate new FDI, within as well as outside their own region.

Including this kind of dynamic considerations into the analysis, it appears clear that there is a potential for significantly stronger effects on FDI than what static models imply. The main impact of dynamic benefits of integration is to make the integrating region a more attractive investment location, which should stimulate intra-regional FDI flows as well as inflows from the rest of the world.

2.4 Synthesis of the Discussion

Clearly, some FDI has been, and continues to be, motivated primarily by the desire to get behind trade barriers. Other FDI is motivated by foreign investors seeking to exploit input or output markets located abroad in activities where operating a foreign affiliate is the most efficient governance structure. In the discussion above, we have noted that regional integration is not likely to have the same impact on all types of FDI. For any individual country, the overall impact on investment will therefore reflect potentially offsetting influences. However, a reasonable generalization is that regional integration should enhance the attractiveness of investing in the region as a whole by creating a larger common market and contributing to improved overall efficiency and higher income levels in that market. The magnitude of the changes in investment will be related to the significance and nature of the trade and investment liberalization initiatives embodied in the RIA.

In addition to differences between RIAs, there are several reasons why why the impact on investment decisions may vary across countries and industries. For instance, countries characterized by relatively unprotected and efficient domestic markets prior to regional integration are likely to enjoy the strongest increases in foreign as well as domestic investment. The reason is that countries with low trade barriers are not very likely to host import-substituting foreign investment that might be withdrawn or diverted to other locations as a result of regional integration. The *ex ante* structure of trade and investment flows is another determinant of the country and industry specific responses to RIAs. Countries and industries that are already closely linked to their RIA partners before the formal agreements - due to geography, historical conditions, or other reasons - are likely to face smaller changes than countries and industries with limited initial contacts with the other participants in the RIA.

In addition to the distinctions we have made regarding the motives for FDI, it may therefore be useful to specify a summary framework relating trade and investment liberalization initiatives to country and industry characteristics. Figure 1 provides an organizational template for thinking about the FDI process in the context of regional integration. The attribute labeled environmental change summarizes the degree to which trade and investment flows are liberalized by the integration agreements in question. This depends both on the nature of the specific agreement and the initial institutional environment in the region. As one moves down the rows of Figure 1, the degree of liberalization is considered to be ”weaker”. The attribute labeled locational advantage summarizes the degree to which it is advantageous from a profitability standpoint to locate an economic activity in a particular location. This characteristic refers to the availability and cost of various production factors as well as the country’s geographic location with respect to major consumer markets and the general macroeconomic environment. As one moves across the columns (from left to right) in Figure 1, the locational advantages of a particular country - in relation to other members in the RIA and the rest of the world - are presumed to be weaker. Identifying the position of a specific country or industry in Figure 1, we will have a starting hypothesis for the investment impact of regional integration. More detailed predictions regarding FDI flows must, of course, also take into account trade and investment patterns prior to integration, the motives for pre-existing FDI, the competitive strength of domestic versus foreign firms, and so forth.

FIGURE 1. Classification Dimensions

	Locational Advantages (Positive to Negative ⇒)	
Environmental Change (Strong to weak ⇓)	**1**	**2**
	3	**4**

Source: Globerman and Schwindt (1996).

The most pronounced positive impact on investment would presumably be experienced by those economic sectors falling into area 1. These activities experience the strongest degree of integration, and the country in question enjoys a strong locational advantage. Hence, for reasons noted earlier, one would anticipate relatively strong, positive capital flows from both foreign and domestic investors in these sectors. In area 3, the hypothesized impact on domestic investment is weaker, albeit still positive. Area 3 contains those economic activities for which the country in question has a strong locational advantage, but for which the impact of the integration agreement is relatively weak. Economic integration between OECD countries, where the formal and informal barriers to trade and investment are relatively low already at the outset, can be expected to provide many examples of industries falling into this category.

Moving to area 2, the expected impact on inward FDI is negative and the potential for actual disinvestment increases. Specifically, the activities in area 2 are strongly affected by the integration agreement, but the country in question suffers locational disadvantages in these sectors. Many countries and industries where the bulk of existing FDI has been established in order to avoid trade barriers would be classified in this area. Finally, we hypothesize that the impact of integration on activities in area 4 are likely to be small. While the country or industry in question suffers a locational disadvantage in terms of the activities in area 4, the impacts of the integration agreement on the overall economic environment are also quite weak. In other words, area 4 contains activities where investment decisions are not likely to be affected by the RIA, either because the sector in question is excluded from the agreement (such as agriculture in the EFTA or EEA agreements) or because the market is too small to attract the attention of foreign competitors.

3. Empirical Studies of Regional Integration and FDI

In the theoretical discussion, we concluded that it is difficult to make general predictions regarding the results of RIAs on foreign direct investment decisions, but that identifying the position of a specific country or industry in Figure 1 would provide a rough first hypothesis. The strongest positive effects on FDI are likely to occur in countries and industries where the integration agreement result in significant environmental change, and where we find some location advantages with respect to the other members of the RIA or the rest of the world.

In this section, we will review the empirical evidence on the investment effects of RIAs. To cover as many as different outcomes as possible, we have chosen to summarize some earlier empirical studies of the impact of European integration, and to examine three more recent cases of regional integration:

- North-North integration, as illustrated by the impact of the CUSFTA on Canada,
- North-South integration, focusing on Mexican participation in the NAFTA, and
- South-South integration, exemplified by the establishment of the MERCOSUR.

3.1 The Early Evidence

Earlier work on regional integration and foreign direct investment have dealt mainly with the effects of European integration on the size and structure of the activities of MNCs[6]. The period following the formation of the European Community coincided with a considerable inflow of US direct investment, and several studies from the 1960s and 1970s asked to what extent this was motivated by the European integration process (see Yannopoulos 1990 for a survey of the literature). The general conclusion of the debate was that the Common Market had attracted United States investment which might otherwise have been located in other European countries. Thus, the formation of the EC seems to have influenced the locational pattern of US direct investment abroad and lured US firms to increase their activities in the European Community. This empirical result is well in line with the theoretical hypotheses regarding the general effects of RIAs on inter-regional FDI flows discussed above: economic integration is likely to make the region a more attractive investment location for outside investors.

Studies of later stages in European integration have been more mixed in their findings about the effects on inter-regional foreign direct investment. For example, Dunning (1992), claims that the challenges of 1992 have led to a revitalization of US investment in the EC, while Lipsey (1990) concluded that the changes in the location of fixed investment by US MNCs were relatively small up through 1989. The upsurge in Japanese investment in Europe has also attracted much attention, and the conclusion seems to be that those investments have increased as a consequence of the 1992 program, in response to both the opportunities and threats created by the integration process (see e.g. Thomsen and Nicolaides, 1991 and Balasubramanyam and Greenaway, 1992).

Studies of the impact of economic integration on intra-regional investment are more rare and generally constrained by data shortages. Some relatively crude studies by Franko (1976) and Pelkmans (1984), focusing on the changes in the number of foreign manufacturing subsidiaries of EC-firms established in other Community countries, found that European integration coincided with a period of clear shifts in the location of production of multinationals of EC parentage. In other words, these studies found signs of ”investment diversion” in the Kindleberger sense. A similar picture is suggested in a later study by Molle and Morsink (1991), based on FDI flows between EC countries during the period 1975-1983. The study suggests that intra-EC trade and intra-EC investment are complementary to each other, but only above a certain level of trade intensity.

Most of the literature linking RIAs to foreign direct investment focuses on investment effects for the region as a whole. Substantially less attention has been paid to the impact of RIAs on the foreign direct investment outcomes for individual countries within the region. The few earlier works focusing on individual countries include studies of the UK (e.g. Mayes, 1983 and Grant, 1983) and Ireland (O´Farrell, 1983). The results from these studies are mixed. While no investment effects were found in the case of the UK, Ireland´s membership of the EC stimulated direct investment from both EC and non-EC sources. One possible explanation could be that many foreign investors (particularly US firms) had entered the relatively open UK market already during the 1950s and 1960s, before the country’s accession to the EC, so that little additional investment was necessary to respond to the new situation. In other words, the UK experience might illustrate a case that would be classified in area 3 of Figure 1.

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[6] Some exceptions to the European focus are early studies of Latin American integration, including Behrman´s (1972) study of LAFTA, Myltelka´s (1979) study of the Andean Group, and Bulmer-Thomas´(1982) study of The Central American Common Market.

Ireland, by contrast, was not any major location for foreign investment prior to EC membership, and integration provided good opportunities for exploiting the country's locational advantages - this would be an example where area 1 dominates. Winters (1996) notes another distinction between Spain and Portugal, on the one hand, and Greece, on the other hand. Spain and Portugal benefited from significant increases in inward FDI as a result of EC membership, but Greece did not, largely because the country's macroeconomic policies did not provide an attractive environment for foreign investors. Hence, while Spain and Portugal can be classified as area 1 cases, Greece may illustrate area 2: weak locational advantages obstructed the potentially beneficial investment responses to Greek EC membership.

3.2. North-North Integration: Canada in the CUSFTA

The essence of the Canada-US Free Trade Agreement (CUSFTA), which came into effect on January 1, 1989, was the phased bilateral elimination of tariffs. In addition, a number of provisions reduced discrimination against bilateral foreign direct investment, including the extension of rights-of-establishment and national treatment. A range of prominent sectors, such as basic telecommunications, was effectively excluded from coverage under the investment liberalization provisions of the Agreement. Moreover, Canada's existing foreign investment screening procedures were left in place (Globerman and Walker 1993). Nevertheless, the thrust of the investment provisions of the CUSFTA was clearly to expand the legal scope for bilateral direct investment. Moreover, the inclusion of a relatively robust dispute resolution procedure arguably reduced the risks of either government acting in a discriminatory manner towards investors from the other country. In terms of the first classification dimension of Figure 1 (i.e., the degree of environmental change resulting from the RIA) it seems reasonable to characterize the Canadian position as an intermediate one, with moderate changes resulting from the agreement. In this context, it should be remembered that bilateral trade between Canada and the US had been substantially liberalized well before the event studied here, through successive GATT rounds as well as special bilateral agreements such as the Auto Pact and the Defense Sharing Agreement. Regarding the the locational advantages of Canada with respect to the US and the rest of the world, it is also reasonable to suggest an intermediate position. Hence, the position of Canada should be roughly at the center of Figure 1, which implies relatively moderate investment effects of the CUSFTA agreement. Does the empirical evidence support this hypothesis?

Bilateral trade between the United States and Canada has become relatively more important from 1988 onward which indicates that CUSFTA significantly liberalized the North American trade environment (see Globerman and Schwindt, 1996). It is, however, difficult to discern a consistent pattern in FDI flows between the two countries that would clearly be related to the CUSFTA.

Table 1 presents an overview of the Canadian foreign direct investment pattern between 1986 and 1995. Bilateral inward and outward direct investment refer to US direct investment inflows to Canada and Canadian direct investment outflows to the United States, respectively. Other inward and outward direct investment refers to non-US direct investment flows into Canada and Canadian direct investment flows to countries other than the United States. While there are substantial changes in FDI flows for individual years, the overall magnitude of bilateral direct investment was relatively stable (decreasing slightly in nominal terms) over the period 1988-1992. Substantial increases in the nominal value of inward direct investment from the United States emerged in 1993 and continued through 1995, while the nominal value of outward direct investment to the United States increased in 1994 and 1995 - but only back to levels experienced in the mid-1980s. It is unlikely that these increases in investment flows are directly related to the CUSFTA, since they emerged in 1993, well after the implementation of

CUSFTA, and coincided with a general boom in outward FDI flows from the US at that time. Furthermore, it is suggestive that a substantial decline in the value of the Canadian dollar began in 1992 following five years during which the Canadian dollar strengthened against its US counterpart. This decline in the value of the Canadian dollar may well have constituted an important motive for the increased US investments in the country.

Table 1
Inward and Outward Foreign Direct Investment for Canada
(millions of Canadian dollars)*

	Bilateral		Other	
1983	29	1686	2438	1558
1984	3196	3209	2960	1563
1985	-191	3144	1965	2130
1986	-743	3362	4607	1502
1987	6028	7278	4632	4044
1988	2052	2963	5899	1775
1989	2091	3510	3850	1918
1990	3246	2800	5917	2722
1991	1961	1925	1187	4553
1992	2719	1315	2673	3144
1993	5308	968	1117	6522
1994	7279	2456	960	4070
1995	10229	3570	5122	2996

Source: Statistics Canada, *Canada's Balance of International Payments*, Ottawa: Ministry of Industry, various issues
* Net flows including reinvested earnings accruing to direct investors.

Inward direct investment from countries other than the United States exhibits no consistent pattern over the period studied, although the largest inflows took place between 1988 and 1990, right after the implementation of the CUSFTA. Certainly there is no consistent evidence of any lasting diversion of foreign direct investment flows to Canada in response to CUSFTA. However, there is an interesting pattern in the development of Canadian outward direct investment to countries other than the United States. Until 1990, Canadian outward FDI was primarily directed to the US, but the early 1990s saw a significant decrease in the relative importance of the United States as a destination for Canadian outward direct investment. This decreasing share of outward FDI destined for the US is mirrored by an increasing share (beginning in 1991) going to EU member countries other than the United Kingdom, and an even more dramatically increasing share going to regions other than the EU, the United States and Japan. The profitable opportunities encouraging a redirection of Canadian direct investment outflows presumably had nothing to do with CUSFTA. However, CUSFTA may have played an important role in that it guaranteed access to the US market, so that available FDI resources could instead be utilized to establish Canadian presence in other markets.

As a complement to the flow data on FDI, Tables 2 and 3 present some recently published data on the gross product of US foreign affiliates in Canada and Canadian affiliates in the United States. Table 2 focuses on the role of foreign affiliates in the Canadian economy. The second column of the

table measures the share of US majority-owned foreign affiliates in Canadian GDP. The US share has fallen from well over 11 percent in the early 1980s to about 8 percent in the early 1990s. Coupled with the observation that bilateral trade with Canada has increased as a result of the CUSFTA, this suggests that regional integration has resulted in FDI becoming a relatively less important mode for US firms to serve the Canadian market.

Table 2.
Foreign Firms' Shares of Canadian GDP 1977-1993 (percent).

Year	US Affiliates in Canada/ Canadian GDP	All Foreign Firms in Canada/ Canadian GDP
1977	13.8	n.a.
1982	11.3	n.a.
1983	n.a.	16.2
1988	n.a.	15.6
1989	9.5	n.a.
1990	8.8	14.8
1991	8.0	n.a.
1992	7.9	14.3
1993	8.2	15.1

Sources: Mataloni and Goldberg (1994), Mataloni (1995), Fahim-Nader and Zeile (1995), Lipsey, Blomström, and Ramstetter (1995), and World Tables.

In other words, there is some indication that trade has substituted for inward FDI from the US. Another indication of the same development is that Canada's share of US MNCs' foreign production has fallen significantly since the implementation of the CUSFTA. The ratio of US affiliates' production in Canada to the aggregate production of all US affiliates abroad fell from 16.3 percent in 1989 to 12.6 percent in 1993.

At the same time, it appears that Canada has become a somewhat more attractive investment location for outsiders. The last column of Table 2 shows that aggregate output share of all foreign affiliates has remained roughly constant, at about 15 percent of Canadian GDP, which indicates that other foreign investors have made up for the reduction of the US share of Canadian production.

Table 3 shows the data on foreign affiliates' shares of US output since 1988. It can be seen that the share of Canadian affiliates has fallen slightly since the start of the CUSFTA, from 0.7 percent in 1988 to 0.6 percent in 1994, while the aggregate share of all foreign firms has increased from 3.9 percent in 1988 to over 4.6 percent in 1993[7]. The largest increases in the GDP shares of foreign firms seem to have taken place in connection with the implementation of the agreement, in 1988 and 1989. These data suggest a similar development as in the Canadian case: regional integration seems to have reduced the relative importance of intra-regional FDI, but stimulated inflows of FDI from the rest of the world.

[7] Data are not available for the period before 1988, which means that any conclusions regarding the relation between these changes and the establishment of CUSFTA should be treated with caution.

Comparing the Canadian and US experiences, it also appears that the effects on FDI are not evenly distributed. For Canada, the net result appears to be close to zero, where increased inter-regional inflows barely make up for reduced intra-regional investment. In the US case, there seems to be a positive net effect, with the increases in FDI inflows from the rest of the world dominating the reduced Canadian shares.

Table 3
Foreign Firms' Shares of US GDP, 1988-1993 (percent).

Year	Canadian Affiliates in the US / US GDP	All Foreign Firms in the US / US GDP
1988	0.72.	3.89
1989	0.69	4.25
1990	0.69	4.31
1991	0.69	4.50
1992	0.57	4.42
1993	0.65	4.58
1994	0.62	n.a.

Sources: See Table 2.

Hence, Canada offers a potentially instructive case study of the impacts of a RIA on foreign direct investment flows for a small open economy. Since economic theory makes no compelling case for a strong linkage between RIAs and FDI patterns for individual countries, and since the environmental change connected with the CUSFTA was not dramatic, it is hardly surprising that the pattern of overall foreign direct investment into and out of Canada over the past years does not suggest a strong and consistent influence of the agreement.

3.3 North-South Integration: Mexico and NAFTA

Shortly after the establishment of the CUSFTA, Canada and the United States initiated negotiations with Mexico about a possible southern expansion of the integration agreement. In December 1992, the three countries signed the North American Free Trade Agreement (NAFTA). This agreement, which came into effect on January 1, 1994, was the first formal regional integration agreement involving both a developing and developed countries. In essence, the NAFTA is an extended version of the CUSFTA. In addition to the trade and investment liberalization measures introduced already in the CUSFTA, the new treaty includes major advances in areas such as government procurement (where coverage is extended to services and construction) and intellectual property and investor´s rights (introducing binding investor-state arbitration), as well as more stringent rules of origin (see e.g. Hufbauer and Schott 1993 for details).

The overall effects on Mexico of a free trade arrangement with Canada and the United States are expected to be significant, for several reasons. One important determinant is Mexico's geographical location. In the 1970s, many Mexicans considered it to be a drawback to be "so far from heaven and so

close to the United States". Today, when regional trade and investment barriers have been reduced as a result of the NAFTA, the situation is different. The North American share of Mexican exports has increased from around 70 percent in the late 1980s to over 86 percent in 1995 (UN Trade Tapes). The value of Mexican exports more than quadrupled over the same period as a result of the increasing sales to North America, with the largest increases occurring between 1992 and 1995. The North American share of Mexican imports has also grown over this period, but not quite as dramatically

Another reason to expect positive implications of the free trade arrangement for the Mexican economy is related to the significant policy changes that have taken place in recent years. Traditionally, Mexico has been a closed economy. In the mid-1980s, however, important market-oriented reforms were introduced in several sectors, and the economy began to open up. As a consequence of the NAFTA, the reform process has been "locked in" and extended to other sectors, such as autos, textiles and apparel, finance, telecommunications, and land transportation (see Hufbauer and Schott 1993). The coincidence of policy reforms, distinct locational advantages in the form of cheap labor, and free access to a substantial part of the Canadian and US markets, is very likely to promote economic growth in Mexico. In terms of Figure 1, it is reasonable to position Mexico in area 1, which suggests that the effects on FDI should be significant.

It is quite clear that foreign multinationals have noted and reacted on the recent changes in Mexico. As shown in Table 4 below, the inflows of FDI have risen significantly since the late 1980s, from less than USD 3 billion to nearly USD 8 billion in 1994.

Table 4
Foreign Direct Investment Flows into Mexico (USD million)

Year	1989	1990	1991	1992	1993	1994
FDI inflows	2,785	2,549	4,742	4,393	4,389	7,978

Source: IMF, International Financial Statistics (various issues).

Since US multinationals dominate the FDI scene in Mexico it is relevant to look specifically at their responses to the NAFTA agreement. Table 5 suggest that US firms have expanded their presence in Mexico, but that much of the investment increase took place before the formal discussions about NAFTA began. The US FDI position in Mexico has not increased much since 1992, and the share of Mexico in total US investment abroad has actually declined during the past years. This indicates that outsiders account for the bulk of the recent inflows of FDI to Mexico. To some extent, these investments are probably directed to the local market, in response to the country's improving economic and institutional environment, but the investment flows are also likely to reflect some degree of investment diversion and investment creation. To the extent that Mexico has become a relatively more important supplier to the US market through trade creation or trade diversion, foreign multinationals are likely to respond by increasing their productive capacity in Mexico.

Table 5
US Direct Investment Position in Mexico on a Historical-Cost Basis at Yearend, 1992-1995 (Million USD; percent of total US foreign direct investment position in parentheses)

Year	1987	1992	1993	1994	1995
US FDI Stock	4,900	13,730	15,229	15,714	14,037
		(2.73)	(2.72)	(2.53)	(1.97)

Sources: Survey of Current Business, Vol. 75, No. 8, August 1995, and Lowe and Bargas (1996).

Moreover, the timing and character of the changes in the US investment position suggest that NAFTA has perhaps not been the main determinant of the upswing in US investments in Mexico. An equally important stimulus must have been the comprehensive reforms of the country's FDI regulation that commenced already in the mid-1980s and eventually culminated with the NAFTA. The Mexican regulatory framework for FDI, which dated back to 1973, was very restrictive and served as a disincentive for investment from abroad (Blomström 1989). In the backwash of the Mexican debt crisis, these regulations where changed dramatically in 1989 to attract foreigners to invest in Mexico. It appears that US investors responded quite strongly to this first round of reforms. A few years later, the investment regime was further liberalized through the NAFTA (see Gestrin and Rugman 1994 for details). Among others advances, the agreement established a clear, rules-based framework for the impartial treatment of FDI and placed strict limits on the use of performance requirements. It also established dispute-settlement mechanisms specifically designed to deal with investment issues. The US response was relatively mild this time, since many US firms were already in place (and because the agreement guaranteed their access to the Mexican market anyway), but investors from outside the region perceived Mexico as a much more attractive investment location than before.

When it comes to the effects of foreign investment in Mexico, there is some evidence that multinational firms have played an important role in opening up the country to foreign trade, by converting import-substituting industries into exporting (Blomström and Lipsey, 1993). The rapid expansion of the *maquiladoras*, where foreign firms play an important role, has also speeded up the trade liberalization process (Kagami 1996). However, the main contribution of the presence of foreign firms presumably comes from technology transfer and technology spillovers. The Mexican economy seems to have reached a level of development and skills where local firms are able to absorb some of the new technology that is imported and used by foreign multinational firms (see Kokko 1994 and Blomström, Lipsey and Zejan 1994). This means that the foreign owned multinationals operating in Mexico may well act as catalysts in bringing about the kind of dynamic growth effects that have been discussed in connection with the European Single Market program.

The experience of Mexico suggests that North-South integration may be greatly beneficial for the Southern partners, and illustrates some of the prerequisites for achieving these beneficial effects. Firstly, membership in the NAFTA coincided with other reforms that liberalized the institutional framework of the country. Hence, the RIA contributed to a very significant and positive environmental change. Secondly, Mexico possesses strong locational advantages with respect to its northern neighbors. These are made up of increasingly market oriented economic policies, geographical proximity, and cheap labor. Consequently, regional integration has been connected to significant increases in the inflows of foreign investment, in particular from countries outside the NAFTA region.

3.4 South-South Integration: MERCOSUR

Regional integration in the Southern Cone of the Western Hemisphere dates back to 1986, with a bilateral agreement between Argentina and Brazil, which stipulated the elimination of all trade barriers

over a ten-year period. Five years later, in 1991, this agreement was extended under the Treaty of Asuncion, with the purpose of creating a Common Market in the region. The resulting agreement, known as MERCOSUR, also includes Paraguay and Uruguay as members. Intra-regional trade has gradually been liberalized since the early 1990s, culminating in the establishment of a Customs Union on January 1, 1995. The MERCOSUR Customs Union stipulates free trade in (most) goods among the four member countries and a Common External Tariff (CET) for trade with third countries (see Laird 1995). The CET has 11 tariff levels varying from 0 to 20 percent, but some important product groups, like automobiles, telecommunications, and computer equipment, are excluded from the agreement. However, it should be noted that the integration process has not led to an across-the-board reduction of external tariffs for all countries. On the contrary, in several product groups, the CET is a compromise between countries with domestic import-substituting producers (who start out with high tariffs that are reduced as a result of integration) and countries without domestic production (where low initial trade barriers have been raised). In some cases, such as the region's automobile industry, it is even appropriate to talk about a general increase in the external trade barriers as a result of the integration process. In addition to the trade arrangements, a partially new investment regime has also been established to promote and protect investment in the MERCOSUR region (IDB 1996).

Looking at the reforms of the trade and investment rules in the MERCOSUR region during the past decade, it is clear that there have been significant changes, although it is uncertain how much of the reforms should be credited to the formal integration agreement. As noted above, there are areas where unilateral liberalization has been important, and other field where reforms are mainly related to multilateral initiatives, such as the GATT. Yet, in terms of the classification dimensions of Figure 1, it is clear that the environmental changes coinciding with the MERCOSUR process have been strong in all of the participating countries. Regarding the investment environment, it can be argued that Argentina and Brazil are the two countries with the strongest locational advantages, mainly thanks to abundant natural resources, relatively well developed industrial sectors, and large domestic market. Considering the remaining barriers to inter-regional trade, these advantages apply in particular for production aiming at the regional market. Hence, at least for the cases of Argentina and Brazil, participation in the MERCOSUR should be classified in area 1 of Figure 1, which suggests that we should expect relatively significant investment effects for these two countries. The expected impact on the two remaining members, Paraguay and Uruguay, is more uncertain due to their smaller markets and weaker locational advantages.

The effects of the trade liberalization in the Southern Cone are evident from Table 6. During the first half of the 1990s, intra-MERCOSUR exports as a share of the region's total exports more than doubled, to reach nearly 20 percent in 1994.

Table 6
External Trade of MERCOSUR, 1988-1994 (Million USD and percent)

	1988	1989	1990	1991	1992	1993	1994
Total Exports (USD million)	44,829	46,555	46,433	45,911	50,487	54,085	62,027
Intra-MERCOSUR Exports (percent)	6.5	8.2	8.9	11.1	14.3	18.6	19.3
Total Imports (USD million)	23,076	26,061	29,302	34,264	40,649	48,509	62,422
Intra-MERCOSUR Imports (percent)	13.3	15.1	14.5	15.5	18.4	19.6	19.6

Source: Laird (1995)

Intra-regional imports as a share of total imports increased significantly as well, from 13.3 percent in 1988 to 19.6 percent in 1994. It should be remembered that these changes refer to the period immediately before the establishment of the MERCOSUR Customs Union in 1995, and that the shares of intra-regional trade are likely to have increased further since then. Yet, the liberalization of intra-regional trade has been a gradual process, and most of the reforms in this area had already been completed by late 1994.

There is also a renewed interest in the MERCOSUR on the part of foreign investors. The inflow of foreign direct investment into the region more than tripled between 1989 and 1993, as shown in Table 7. As expected, Argentina and Brazil have been the favored localizations for FDI, while Uruguay and, particularly, Paraguay, have been lagging behind. Unfortunately, there are no aggregate data available to analyze FDI flows for the period after the establishment of the Customs Union in 1995.

Table 7
Foreign Direct Investment Flows into MERCOSUR Members (Million USD)

Year	Argentina	Brazil	Paraguay	Uruguay
1989	1,028	1,131	12.8	37.7
1990	1,836	989	76.3	38.6
1991	2,439	1,103	83.1	30.3
1992	4,179	2,061	42.0	n.a.
1993	6,305	1,292	50.0	101.5
1994	n.a.	3,072	n.a.	170.0

Source: IMF: International Financial Statistics.

However, looking at home country data for the major foreign investor in the region, the United States, it appears that the real boom of FDI did not occur until after this event. Table 8 shows that in 1995 alone, the US stock of FDI in the region increased by more than 25 percent, which is significantly higher than the growth rate of US investment in the rest of the world. It should, therefore, be noted that we risk underestimating the investment responses to the MERCOSUR by restricting the analysis to the period for which data are available.

Table 8
US Direct Investment Position in the MERCOSUR on a Historical-Cost Basis at Yearend, 1992-1995. (Million USD; shares of total US foreign direct investment position in parentheses.)

	1992	1993	1994	1995
Argentina	3,327	4,331	5,945	7,962
	(0.66)	(0.77)	(0.96)	(1.12)
Brazil	16,313	16,822	18,798	23,590
	(3.25)	(3.01)	(3.03)	(3.31)
MERCOSUR[a)]	19,640	21,153	24,743	31,552
	(3.91)	(3.78)	(3.99)	(4.43)

[a)] Excluding Paraguay and Uruguay, for which no data are available.
Source: Survey of Current Business, Vol. 75, No. 8, August 1995, and Lowe and Bargas (1996).

The aggregate data do not distinguish between intra- and inter-regional investment flows, but the significant increases in the investment position of the United States, shown in Table 8, suggest that a significant share of the inflows come from outside the MERCOSUR. It is also obvious that the increases in FDI flows have occurred at different times in the individual countries, which may indicate that foreign capital has been attracted by other factors than regional integration. This motivates a closer look at the individual countries.

Argentina registered the largest increases in FDI inflows before 1994, and there is reason to expect that much of this was unrelated to the regional integration process. Chudnovsky, López, and Porta (1995) suggest three major explanations for the increases in foreign investment in Argentina since the early 1990s. The most important attraction for foreign investors was arguably Argentina´s comprehensive privatization program, which opened several public service industries to foreign investment. Several public companies in the telecommunications and transportation sector were sold to foreign investors.

Another important determinant was the country's successful macroeconomic reforms, which managed to bring down public deficits, inflation, and interest rates, and ensured the convertibility of the currency. Unlike the present situation in Europe, where the members of the EU are obliged to fulfill certain macroeconomic "convergence criteria", economic integration in the form of MERCOSUR was not a motive for Argentinean macroeconomic stabilization. A third factor influencing foreign investors was the new wave of protectionism in the region's auto sector in the early 1990s. In 1991, Argentina introduced a system of quotas on imports of finished automobiles, which contributed to an increase in foreign investment inflows to the sector.

In the short run, it is likely that the effects of increased FDI inflows on the Argentinean economy will remain limited. For instance, the impact on the diversification and expansion of exports has been relatively modest so far, since a large part of the foreign investment has taken place in the nontradable sectors, in connection with the privatization of public services. In the long run, however, we should expect positive effects of these investment, since the efficiency of public services is likely to improve and strengthen the country's international competitiveness. In the auto sector, by contrast, it is apparent that the recent FDI inflows have contributed significantly to technology transfer and modernization, but the long-run effects on the country's competitiveness and welfare remain questionable. As in other cases of

import substitution, protectionism distorts the allocation of scarce resources and allows local producers to operate less efficiently than foreign competitors.

The foreign investment in Brazil has fluctuated widely during the past years, and the inflows of FDI have fallen well short of those to Argentina, although the Brazilian market is about four times larger. One reason is that market-oriented reforms were introduced later and macroeconomic stabilization was achieved later in Brazil than in the other countries in the region. Consequently, the positive prospects connected with regional integration were tempered by an unpredictable macroeconomic environment. However, the recent years have witnessed successful reforms and stabilization in Brazil as well and the inflows of FDI have increased markedly. For instance, Brazil replaced Argentina as the favored MERCOSUR location for US direct investment in 1994 and 1995 (see Table 8). The strong locational advantages of Brazil - in terms of its large market and supply of labor and natural resources - suggest that we should expect substantial inflows of foreign investment in the medium run, assuming that the country's macroeconomic environment remains stable.

The experiences of the two smaller countries in the region, Paraguay and Uruguay, are mixed. While the flows of FDI to Uruguay seem to have increased, there is no clear trend for Paraguay. Uruguay is arguably more attractive for foreign investors because of its geographical location between Brazil and Argentina, while the locational advantages of Paraguay are weaker. In both cases, foreign investment can be expected to be directed to industries where economies of scale are not important - industries relying on scale economies are more likely to locate in either Argentina or Brazil, where they can benefit from proximity to larger consumer markets. However, neither Uruguay nor Paraguay is likely to be influenced greatly by static investment effects. Instead, their benefits of economic integration are likely to derive from possible dynamic effects, that lead to growth and increased demand for their exports in the entire MERCOSUR region. It is also possible that economic integration will have a stabilizing impact on the political and macroeconomic environment in both countries, in the sense that radical policy changes are less likely because of the commitments to the neighboring countries.

Given that the MERCOSUR Customs Union was not established until 1995, it is obvious that it is too early to accurately describe even the static effects of that specific RIA on foreign investment. Yet, less ambitious forms of regional integration have been pursued by the MERCOSUR countries since the mid-1980s, so that much of the intra-regional trade had been liberalized in 1994, and it is possible to draw some tentative conclusions from the region's experience to date. The following generalizations are suggested by the analysis above.

First, macroeconomic stability is likely to be a more important determinant of FDI inflows than is regional integration. Both the Argentinean and Brazilian experiences illustrate that foreign investors have responded stronger to successful stabilization programs than to the early stages of the MERCOSUR project. Second, comprehensive integration, as in the case of the MERCOSUR Customs Union, may stimulate significant investment responses. In our data, this has mainly been illustrated by the changes in the US investment position in the region between 1994 and 1995, but there are indications that investors from other countries have also reacted strongly, as discussed above. Third, the inflows of FDI to the region are not likely to be distributed equally to all participating countries. Argentina and Brazil possess relatively strong locational advantages and will also be the main beneficiaries of increased FDI inflows in the short to medium run. Finally, as illustrated by the development in the MERCOSUR auto sector, it is not evident that the welfare effects of all FDI increases will be positive. To the extent that regional integration contributes to increased distortions, e.g. in the form of higher tariff barriers or market sharing

agreements between oligopolistic producers, it is possible that the resulting inefficient allocation of resources outweighs the various benefits of FDI inflows, such as technology spillovers.

4. Summary and Conclusions

The relation between regional integration agreements and foreign direct investment is neither self-evident nor straightforward, as illustrated by the first part of this paper. In our attempt to set up a conceptual framework for thinking about the impact of RIAs on FDI flows, we touched upon several characteristics of countries and investors that contribute to the confusion surrounding the issue. For this reason, we proposed an eclectic approach for examining the impact of regional integration on individual countries or industries, and a rough working hypothesis: the stronger the environmental change and the stronger the locational advantages of the individual industry, the more likely it is that the RIA will lead to inflows of FDI from the outside as well as from the rest of the integrating region (see Figure 1).

The empirical evidence in the second part of the paper provided some support for this rough hypothesis, although the cases also highlighted some of the cross-country differences in the investment effects of regional integration. The first case focused on the Canadian participation in the CUSFTA, and illustrated a situation where the RIA did not appear to cause any radical changes in the inflows of FDI to the country in question. The main reason for the moderate impact of the CUSFTA are probably that the environmental change connected with the agreement was not dramatic (since trade between Canada and the US was already relatively free due to GATT commitments and various bilateral treaties) and that there was already considerably cross-investment between the two countries. The relatively modest investment response to this specific RIA may well be a general characteristic of many North-North agreements, where the trade and investment regimes are relatively open and markets are *de facto* integrated already before the formal RIA.

The second case examined the impact of the NAFTA agreement on foreign investment in Mexico, and suggested that this specific RIA has had a profound impact on the inflows of FDI. The establishment of the NAFTA coincided with and deepened other reforms that liberalized the institutional framework of the country. Hence, the agreement contributed to very significant and positive environmental changes: an added bonus is that these are likely to be perceived as more permanent improvements in the investment environment than purely domestic reforms. Thanks to its increasingly market oriented economic policies, geographical proximity, and supply of cheap labor, Mexico also possesses strong locational advantages with respect to its northern neighbors. Consequently, regional integration has created an abundance of new commercial opportunities for domestic and foreign investors, in the domestic Mexican market as well as in the US and Canadian markets. The response has been a significant increase in the inflows of foreign investment, in particular from countries outside the NAFTA region. The Mexican experience may capture some general characteristics of North-South agreements, primarily related to the potential for improved policy credibility and gains from guaranteed access to large northern markets.

The third case examined the impact of regional integration in the Southern Cone, involving Argentina, Brazil, Paraguay, and Uruguay. Although the MERCOSUR Customs Union was not formally established until the beginning of 1995, a gradual liberalization of intra-regional trade commenced in 1991, and most internal trade barriers had been removed by 1994. The available evidence, although patchy, show that a strong investment expansion has coincided with this integration process, and it is reasonable to assume that comprehensive integration, as in the case of the MERCOSUR Customs Union,

may stimulate further significant investment responses. However, the inflows of FDI to the integrating region are not likely to be distributed equally to all participating countries. In the case of the MERCOSUR, the two countries with the strongest locational advantages, Argentina and Brazil have also been the main beneficiaries of increased FDI inflows in the short to medium run. The experience of the MERCOSUR region also suggests an important caveat that may be relevant for many other instances of South-South RIAs. Macroeconomic stability may have been a more important determinant of FDI inflows to both Argentina and Brazil than is regional integration: both the Argentinean and Brazilian experiences illustrate that foreign investors have responded stronger to successful stabilization programs than to the early stages of the MERCOSUR project. Finally, the structure of the MERCOSUR agreement - with some sectors like autos and telecommunication, where controls and trade barriers have been raised rather than reduced - suggests another important caveat. It is not evident that the welfare effects of all FDI increases stimulated by regional integration agreements will be positive. To the extent that regional integration contributes to increased distortions, e.g. in the form of higher external trade barriers or market sharing agreements between oligopolistic producers, it is possible that the resulting inefficiencies will surpass the various potential benefits of increased FDI inflows.

This brings us to some of the limitations of the present paper. The analysis has focused on the impact of RIAs on FDI flows, but the more general welfare effects have not been discussed in detail, neither for the integrating region nor for the world at large. Moreover, we have concentrated on ownership issues, interpreting FDI flows as changes in the ownership of production factors. Future research should of course consider welfare effects in closer detail, and also take into account factors that determine production location rather than ownership issues alone. Regarding the empirical cases, the discussion has focussed on entire countries, and individual sectors and industries have seldom been addressed. However, the conceptual framework presented in the paper suggests that the impact of RIAs is likely to differ between countries and industries, and more detailed sectoral studies are clearly called for.

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Competition Policies and Trade in an Asia-Pacific Context[1]

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[1] James R. Markusen's comments on an earlier draft of this paper were very helpful. The paper is an Asia-Pacific-oriented distillation of the Institute for International Economics' (IIE) forthcoming policy monograph on global competition policies, jointly authored by Edward M. Graham and myself (1997a). It, in turn, is a distillation of our edited IIE compilation of papers comparing competition policies and practices around the world for the inefficiencies and conflicts that they create for international trade and investment (Graham and Richardson (1997b)). The current paper also draws on Richardson (1997). We are indebted to C. Fred Bergsten, Richard N. Cooper, Geza Feketekuty, Robert E.Litan, Patrick A. Messerlin, Douglas E. Rosenthal, and especially to F. M. Scherer for extremely constructive comments on the monograph.

Contents

I. OVERVIEW

Today's generation, far more than its immediate predecessors, respects and pursues the rewards from highly competitive, global markets. World-wide momentum is still strong toward more open market organization of economic activity. Admittedly there is resistance. Some is ideological (especially in Asia); but much is structural. The most important structural resistance involves border barriers that remain to fully global market integration, such as tariffs, and entry barriers ("behind the border") to fully competitive market structure, such as restrictions on the number and nationality of suppliers of banking, insurance, transportation, and telecommunications services.

Which are the most important remaining barrier to openness? No one has a persuasive answer. But most agree on the relative trend: border barriers are waning in importance relative to entry barriers. More precisely, tariffs, quotas, and border discrimination are being negotiated away, while most regulatory and other barriers that protect incumbent firms, by keeping new suppliers from establishing themselves, are declining much more slowly, especially in large services sectors. Even privatization sometimes replaces a public monopoly with a private monopoly. As a consequence, many commentators would agree that trade has opened over the past several decades at a faster rate than markets themselves have.

Graham and Richardson (1997a,b) tries to answer the questions that follow from these observations. If open global markets are still to be sought, what is the most promising route: via freer trade, freer entry, or some artful combination of the two? What provides the greatest resistance: public border barriers, private anti-competitive practices, pro-incumbent regulation, or some reinforcing mix of these? What are the most feasible and attractive ways of enhancing market access world-wide -- what we will call "contestability" -- access for exporters, foreign investors, and new home suppliers alike? Or is there already too much contestability, openness, access? In what sense and under what circumstances? What are policy supports for ideal openness, both within and among countries?

We believe that the answers lie in judicious experimentation with a blend of principles, policies, and institutions. The ingredients are extracted and mixed from the worlds of “competition policies” and international trade policies. Graham and Richardson (1997a,b) describe the fundamental purposes of competition policies, how they interact with trade policies, and why that interaction has become an international concern. Efficiency, fairness, and conflict are the key features.

We summarize that material very briefly here, and outline a corresponding set of policy initiatives that we find simultaneously desirable and feasible for the Asia-Pacific context. They begin with sensible first steps toward international cooperation -- fact-finding, consultation, dispute settlement, and maintenance of sovereign initiative. In the longer IIE monographs, we then propose for the world system a tougher, but more rewarding, negotiation of an agreement on Trade-Related Antitrust Measures, a TRAMs agreement patterned on the Uruguay Round's TRIPs (Trade-Related Intellectual Property) agreement. There, we also explore the long-run potential for replacing anti-competitive aspects of current "trade remedies" (anti-dumping and countervailing duties) with a new set of competition-policy safeguards, that would be more efficient and more equitable than the current mechanisms.

The ingredients of competition policy and international trade policy are in fact already being blended in reality. This is happening via two routes. First, a formal working group on Trade and Competition Policy has been established in the World Trade Organization to examine many of the issues we examine here. Second, many recent international “trade” disputes fundamentally spring from issues of

competition policy, such as those between Japan and the United States over so-called vertical relationships among manufacturers, users, and distributors of auto parts, memory chips, and photographic film and paper.

II. PROFILE AND OBJECTIVES OF COMPETITION POLICIES IN OPEN ECONOMIES

The concern with competition policies as a new issue in global trade negotiations has mushroomed.[1] Competition policies are at the root of negotiating issues in airlines, basic telecommunications, financial services, insurance, and intellectual property. In all these areas, international differences in regulatory regimes and rules have created highly varied competitive structure. We ourselves have contributed to the growing literature.[2]

Market Competition and Competition Policies: A Profile

In the broadest sense, competition policies trace institutional boundaries between competition and cooperation.

What is called the "market system" is in fact a peculiar mix of competition and cooperation. Everyone is familiar with the competition. But few reflect very deeply on the cooperation. Almost all the agents that compete are "firms" -- social groupings, whose internal organization is for the most part cooperative, not competitive. Firms are not only the suppliers of most products and services; they are also the principal buyers. Consumers (households) are generally buyers only of final goods, assembled from materials and components that have already been bought and sold many times by firms, through a long series of exchanges in both input markets and in internal, intra-firm transactions. The effectiveness of those enormous intermediate transactions contributes heavily to the productivity of workers and other primary inputs. The "economic man/woman" so common in elementary textbooks is really a stylized fiction; so is the mythical individual entrepreneur; typical real market transactions involve competition among cooperative social groups. Many of these groups, including sub-types of firms and labor unions, have legal status that grants them the right to collectively own and exchange property, and to differentiate and isolate their legal liability as group members from their liability as individuals.

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[1] Scherer (1994) and Green and Rosenthal (1996) are close to Graham and Richardson (1997a,b) in coverage, including coverage of comparative competition policy regimes over time and in multiple countries, as well as policy recommendations. Graham and Richardson (1997a,b), however, emphasizes more the fundamental economics and institutions, as well as the integration of existing competition-policy and trade-policy structures at the global level. Scherer's book and Levinsohn (1996) are excellent introductions to economic aspects of competition policies in a global economy. Kuhn et al. (1992) and Ordover (1990) are equally good general introductions to the economics of competition policy, but include less attention to the global economy). First, Fox, and Pitofsky (1991), Gifford and Matsushita (1996), and Matthewson et al. (1990) are excellent introductions to legal aspects, and Hindley (1996), Hoekman (1995,1996), Hoekman and Mavrodies (1994), and Lloyd and Sampson (1994) to political and diplomatic aspects.

[2] See Graham (1994, 1995, 1996b), Graham and Lawrence (1996), and Richardson (1995, 1997).

What is called the market system is thus socially populated, socially rooted, socially conditioned, and socially constructed. It is far, far away from the chaotically competitive "law of the jungle" with which it is sometimes rhetorically confused. Correspondingly, a global market system will be socially constructed and conditioned, too, by both policy design and cultural inertia.

Competition policies are formal social regulations by which this competitive-cooperative market system is governed. They aim to make the market work better. Designed properly, they are market-perfecting and part of the social infrastructure. They regulate the intensity of competition, the scope of cooperation, and define what are impermissible versions of both. Examples of impermissible competition and impermissible "cooperation," respectively, are predation (the equivalent of a premeditated murder of a market competitor) and coercive collusion (one firm being forced to join a group of others).

Like all social regulations, competition policies reflect history and culture. That is why they are constantly changing and always differ across countries. Not all countries have formal competition policies.[3] But all countries have competition conventions, even though many do not codify them. As markets have grown toward global scope, however, differing competition conventions and policies have come into growing contact. Some of this contact has led to conflict, for example, over market access in China; some has led to constructive comparison of alternative policies, with an eye to which might be the "fittest" for growing global markets, such as in deciding the type and duration of protection that an innovator needs from rivals who would copy his intellectual property.

We will begin by describing the two broad objectives of competition policies everywhere and how their interpretation and relative importance differ from country to country. To meet these objectives, every country has developed conventions or rules of conduct for firms acting alone and together, over short intervals of time and over their entire corporate lifetime. In Graham and Richardson (1997a,b) we group these conventions into four "concerns" of competition policies. It turns out, unsurprisingly, that what is welcome competition policy from the perspective of one firm, one industry, or one country is not always welcome in other firms, industries, or countries. In our monographs, we describe the ways that competition-policy objectives and concerns differ for an economy as a whole and for multiple economies in global interaction.

Objectives of Competition Policies: Efficiency and Fairness

One of the most surprising aspects of competition policies is that competition is not their real goal! Efficiency and fairness are the goals. And when these conflict, the goal is to evaluate the tradeoff between them.

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[3] The number of countries implementing a formal competition policy in recent years has risen sharply: see Green and Rosenthal (1996) and Tineo (1997). Most Eastern European and Latin American countries, Korea, Mexico, and Taiwan have recent legislation in place, or have recently revised it. A number of others are in planning or drafting stages.

Competition policies around the world seek a blend of efficiency and fairness[4] in their markets. Efficiency has a fairly clear economic meaning. It is a conservation objective; it aims to minimize waste. Efficiency is the ideal of getting the most out of the resources at hand. An efficient market generates goods that buyers really want at least cost. An efficient charity makes sure to move persons from one project to another when the value of the good that their effort generates is quite different across projects. An efficient society seeks the highest standard of living (material and nonmaterial) consistent with its available resources. If "society" is taken to include only those persons currently living, and the relevant time frame is quite short (days, months, or even a few years) then the efficiency it pursues is called "static efficiency". But if "society" includes future generations, and the relevant time frame is longer (five years, a decade, a new generation) the relevant concept is "dynamic efficiency". Practices that are statically efficient may not be dynamically efficient, and conversely. Thus, the simultaneous pursuit of dynamic and static efficiency involves tradeoffs.

Fairness, by contrast, is nuanced and culturally distinctive. In the United States, it often means equality of opportunity, or (in our context) free entry into business endeavor. In other countries, it sometimes has a more meritocratic meaning (favored activity or loyalty should be rewarded), or sometimes means equity of process or outcome (market division according to historic shares). Japanese auto and consumer electronics firms characterize loyalty toward and from their traditional suppliers as "only fair," while potential American rivals find it to be an unfair foreclosing of their market access, as years of acrimonious bilateral negotiations have revealed.

Indeed, to emphasize "fairness" is almost to invite contention, acrimony, and even international conflict when the protagonists are of different nationalities. To emphasize "fairness" is almost to invite abuse of internal political process, in which weak performers blame their faults on unfair treatment by foreign scapegoats. But there is no denying the importance of fairness as a motive for competition policies, and hence there is a clear need for definition of what is and what is not minimally "fair" in a market system and mutual recognition of some range of threshold standards of fairness in international competition. This need is particularly great because the concepts of fairness and, especially, "fair trade" have been much abused by special interest groups.

Because the real goals of competition policy are efficiency and fairness, competition is in fact a means for attaining these goals. For example, "perfectly" competitive market structure -- where there are large numbers of very small firms that freely enter and exit an industry that produces a standardized product -- does often achieve efficiency and equality of opportunity. But this is not always the case. For example, in the "market" for innovation, perfect competition is generally believed to deliver (inefficiently)

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[4] Some countries de-emphasize fairness as an explicit goal of competition policies, for example the United States today. Others give it more prominence, for example Britain and France, as seen in Donald Hay's and Frederic Jenny's chapters in Graham and Richardson (1997b). Virtually all countries, however, include fairness considerations implicitly and in practically implementing their competition policies. Nevin, Nuttall, and Seabright (1993), p. 11, remark that an effective competition authority "must assist in the enfrancisement in the economic process of many of the interests that are naturally underrepresented in the alliance of managers and politicians that makes up the modern corporatist state. Shareholders, consumers, and potential employees .... an effective competition authority is the ally of all these excluded groups ...."

too little.[5] For products characterized by "natural monopoly," the efficient structure is a single supplier for the entire market. Where buyers of a product have varied needs and specifications, such that efficiency requires a multitude of varieties, rather than one standardized product, the efficient structure is a multitude of quasi-monopolistic suppliers of the necessary varieties.[6] And perfect competition makes no promise about fairness of process or outcome, only fairness of opportunity.

Efficiency and fairness are thus the prize for competition policy; at best competition is a secondary goal or, most accurately, it is an instrument.[7] It will, however, be convenient to use the term "anti-competitive" (somewhat like the term anti-social) to describe practices and structures that interfere with the objectives of efficiency or fairness. A corollary concept is “rule of reason”, which is a legal concept that is used in many cases where considerations of fairness or efficiency (and tradeoffs between these) require subtle judgements and balancing of contentious arguments. Under rule of reason, these judgements are made on the basis of circumstances and probable outcome rather than against fixed *per se* rules.

Efficiency-Fairness Tradeoffs and Cross-Country Conflicts

Efficiency and fairness, like oil and water, do not always mix well. Under most circumstances, neither can be met fully without sacrificing some of the other. Conflict between these objectives occurs within countries and among them.

Within countries, conflict occurs when business practices that enhance the efficiency of some firms appear unfair to others, or when policies that treat all situations even-handedly have a very high efficiency cost. Mergers between firms, for example two large telecommunications companies, often involve efficiency for insiders at the apparent cost of inequity to outsiders, as do grants of exclusive property rights to patented innovations and unique industrial processes. Yet apparently even-handed bans on all forms of "collusion" can force fairness at the cost of efficiency. For some purposes, such as product-standard-setting, cooperation among firms (collusion to a cynic) can reduce resources expended on competing standards, as characterized the early competition between VHS and "Beta" formats for videotapes. Corresponding global cooperation among firms and their governments, such as occurs in Mutual Recognition Agreements (MRAs) over the standards each country sets for various products, can also reduce resource waste.[8]

There are increasing cross-country conflicts in competition policies. These often spring from different conceptions of fairness. Some of these differences are endemic (cultural). Some are generic.

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[5] See Graham and Richardson (1997a,b) and Scherer (1992), pp. 22-40 and Scherer and Ross (1990), Ch. 17.

[6] Then efficiency calls for a market structure called monopolistic competition (with free entry).

[7] Countries differ to the extent that this is true. The United States has sometimes made large numbers of small competitors the chief goal of competition policies, as in the days of "trust-busting.” Japan, by contrast, explicitly worries about "excessive" competition, as described in Suzumura’s chapter.

[8] See the recommendation of APEC’s Eminent Persons Group (1995, pp. 23-26) for an agreement on product standards and testing.

Examples of endemic differences include U.S. insistence on due legal process vs. preferences in continental Europe and Asia for administrative process. Examples of generic differences include differences between fairness seen by would-be entrants and by incumbents, between firms that are small and large, between single-product and diversified firms, and between privately-owned, publically-owned, and state-owned firms. Differences in perceived fairness correspondingly arise when generic varieties of firms differ from country to country. China, for example, has far more state-owned firms than the United States. Chinese entry barriers in sectors dominated by such firms are highly contentious current issues. The United States requires scrupulous financial reporting because most large firms' equities are widely held in public stock markets; but such reporting seems burdensome and unfair to firms that are partly family-owned (as in Taiwan) and corporately owned through a tight network of cross-firm shareholdings (as in Japan).

Sometimes efficiency issues also cause international conflict over competition policies. For example, countries differ in whether the efficiency they seek is primarily for living generations (sometimes called "static" efficiency) or for living and future generations together (so-called "dynamic" efficiency). The former countries may have stricter regulation of cooperative high-technology activities than the latter countries;[9] the latter countries may subsidize innovation, but then force innovating companies to license imitators at a regulated price ceiling. These differences cause conflict when different countries' firms compete with each other on seemingly uneven playing fields, such as existed in the early 1980s between American and Japanese firms, prior to changes in U.S. competition policies that loosened restrictions on consortia for research and development.

An even more important example is that what's efficient for one country isn't always efficient for the world. Export cartels and monopoly marketing boards are prime examples. Every country can by itself achieve national efficiency -- the most output from its national resources -- when its internal competition is intense, but when its exporters charge foreign buyers a monopolistic price in export sales. The country's residents then earn monopoly rents from foreign buyers, but do not pay any efficiency cost for them.[10] But if every country follows this practice, then efficiency costs for everyone in the world loom large because of the collective inefficiencies in world export sales. Such differences in effects on national efficiency were well illustrated in the treatment of the proposed merger of McDonnell-Douglas and Boeing. These differences led European competition-policy authorities initially to conclude that the merger might be anti-competitive for Europe whereas American competition-policy authorities apparently found that it was efficient for the United States. The outcome of the conflict was an uneasy compromise that had some effect of reducing potential efficiency in the United States (e.g., by undoing exclusive selling agreements Boeing had concluded with certain US airlines that might in turn have led to cost reductions in aircraft

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[9] See, for example, Katz and Ordover (1990). Jorde and Teece (1992) contain many papers arguing that US competition policies are insufficiently future-oriented for either long-run US welfare (i.e., future gains are inefficiently foregone) or for the ideal US position in the global economy. But competition among firms to arrive at the ideal type and timing of innovations is on balance favorable, and strong competition policies that insure entry by energetic new firms often deliver dynamic efficiency best. For a detailed review of the evidence on how market structure affects dynamic efficiency, see Scherer and Ross (1990), Ch. 17.

[10] Or to be maximally efficient, a country by itself could offer foreign sellers a monopsonistic price on imports it buys. That is essentially what the economists' famous "optimal tariff" does. It beats down world supply prices of imports to the level that a sole national buyer would offer, and collects rent (monopsonistic surplus) from the world's sellers of those imports. Alternatively, in a few cases, a government makes itself essentially the sole buyer of imports on behalf of its own constituents, as in certain import-licensing schemes.

maintenance) but reducing what was perceived in Europe as anticompetitive behavior (e.g., these same agreements, when undone, opened the possibility of increased market access for Boeing's European rival, Airbus Industrie).

Finally and fundamentally, conflict among nations exists for one simple, yet easy-to-forget lesson: competition is never the preferred system of any one firm as a seller. However successful competition may be as an instrument for delivering efficiency and fairness to a market system as a whole (sellers, buyers, and final consumers together), each firm would rather have less of it as a seller.[11] Each firm would rather have the entire output market to itself, that is, monopolistic market power , and the more the better. This is as true of market-leading firms as for those hanging on for survival. It is also true for every country's firms, taken together, as they face global competition. They prefer market dominance to intense global competition. So skepticism is appropriate whenever one firm complains about the "anti-competitive behavior" of a rival (each would usually love to do the same if they could get away with it), and also when one country's firms complain collectively about the unfair, anti-competitive behavior of foreign rivals as a group. But the skeptic should not be surprised at the complaint, nor, for that matter, be unsympathetic. Global competition policies are an issue precisely because some of these complaints are well taken.

A Brief Efficiency-Fairness Inventory

In almost every country, competition policies aim to reduce inefficiencies. One of the most familiar inefficiency is the wasteful underproduction and over-pricing of a monopolist (a sole seller) with market power. Almost as familiar are "distortions" in relative prices and costs that mislead investors and buyers. Less familiar inefficiencies are: excessive product standardization or (its alter ego) wasteful product differentiation; unduly sluggish innovation or unnecessary duplication of research effort; inadequate realization of scale and scope[12] economies; and under-provisioning of future generations. These are all discussed in Graham and Richardson (1997a,b).

There is also a distributional economics of competition policies, concerned with process and fairness in markets. Its most obvious expression is in policies that oppose coercion and various "abuses of market power" terms that convey the strong sense of involuntary action. When economists defend the market system, they require volunteerism. That is, they rule out coercion from the start (no reputable economist recommends markets for slavery, for contract murder, or for mercenaries to fight wars of territorial aggression). Many competition policies are the legislative expression of the anti-coercion principle.[13] Other policies prohibit abuses of market power, such as boycotts of distributors by members of "horizontal cartels" if the distributors deal with outsiders or new suppliers. Japanese producers of flat glass were found to practice such abuses several years ago, and are accused of continuing to do so despite a

[11] As buyers of inputs, of course, firms prefer input-market competition, including that created by free opportunities to import and outsource inputs.

[12] Scope economies are those which come from the ability of several different product lines to draw on the services of common inputs (for example, legal services or brand name advertising) without depriving other product lines of the same services from the same common inputs.

[13] From this point of view, for example, laws against employment of under-age (child) workers is a species of competition policy.

1995 agreement between the governments of Japan and the United States that the practices would be ended.[14] Similar issues are at the heart of the ongoing Japan-U.S. dispute in the World Trade Organization over alleged abuses in the markets for film and other photographic supplies.

Other process-oriented competition policies include those that outlaw fraud, criminalize theft of intellectual property and industrial secrets, discipline predation, regulate price discrimination (in which a supplier charges different prices to different buyers), and ban "foreclosure" (contracts and other arrangements with suppliers or distributors that completely exclude new firms). The last was the European Union's accusation toward Boeing's recent 20-year exclusive-supplier contracts with American Airlines, Continental, and Delta, though some reports suggest that Europe's Airbus had equal chances to compete for and win those and any other contracts.

There are several levels at which the efficiency and fairness objectives of competition policy are discussed. The most familiar is in the context of a single market for one product. We start there in Graham and Richardson (1997a,b), and then move to the less familiar competition-policy concerns of a whole economy in which many products and services are sold and, finally, of multiple economies in international contact. We shape our discussion to flow from fundamentals, yet try to provide a fresh enough account that the fundamentals, though familiar, appear in new light and new context. There is a wealth of important detail to master on these issues. In this paper we strive instead for integration, definition, and motivation.

That discussion supports our broad policy recommendations. The rest of the current paper focuses on that portion of them that we find most likely to be feasible and desirable in an Asia-Pacific context.

III. POLICY CONSIDERATIONS IN AN ASIA-PACIFIC CONTEXT

Cross-national differences in competition policies are increasingly significant irritants to global trade and investment, and will cause growing inefficiencies in global markets.. The conflict is almost always due to differences in perceived fairness. The inefficiencies will grow as investment and services liberalization leaves uncompetitive firms exposed, and as changes in technology and communications continue to make all markets more global in scope.

Our conclusion in Graham and Richardson (1997a,b) is that there is wisdom and promise in sequential policy initiatives. The first set would involve active "cooperative unilateral" efforts to alleviate these problems. The second would involve multilateral action on a “market-access-oriented” sub-set of Trade-Related Antitrust Measures (TRAMs). We think that the former is especially promising in the near term for the Asia-Pacific context.

We also believe that successful steps in these two will establish the networks and trust and information that would allow a more challenging attempt -- to develop “competition-policy safeguards” for declining industries that would be preferable to antidumping mechanisms and subsidies in the eyes of most constituencies, thereby allowing some existing procedures to be rationalized and others to be phased out

[14] Inside U.S. Trade, August 15, 1997, pp. 6-7.

The Broad Policy Issues: Desirability and Feasibility

In our longer monographs, we have identified what we believe are the priority trade and investment issues in international competition policies and grouped them in Tables 1 and 2 below. Here, unlike our discussion above, we use conventional terminology and classifications. We consider Tables 1 and 2 first from a global perspective, then from an Asia-Pacific perspective.

Table 1 summarizes our provisional categorization in full detail. Table 2 crudely averages Table 1 into five rows for each of the five broad issue ares.

The first column in each table indicates the issue classified as to whether it falls under "market structure", "firm conduct", "exemptions", "trade policy", or "other". These issue areas are not always mutually exclusive. We nonetheless put substantively similar issues in separate categories if the typical regulatory process treats them separately.

The second column in each table represents our effort to categorize these issues by criteria of economic clarity detailed in Graham and Richardson (1997a,b) -- whether there is strong consensus among antitrust specialists (typically lawyers and economists) as to what substantively is best practice towards the issue. If there is such a consensus, we label the issue as "clear", whereas if there is no such consensus, we label the issue as "murky". On some issues where there is a majority consensus but also a minority of specialists who disagree with the consensus, we place the label "clear minus".

The problem underlying the need for this column is, of course, complexity. Whether there is really an abuse or inefficiency in a number of alleged “anti-competitive practices” is a judgment call. The frequency with which such judgment calls are encountered is why competition policies worldwide generally employ a "rule of reason" in deciding whether practices such as entry deterrence, price discrimination, and vertical practices do or do not involve predation, exclusion, or other distortions and inequities.

If there is to be any sort of international convergence on the issues listed, the best practice with respect to the issue should be "clear" or, minimally, "clear minus".[15] If there is no intellectual consensus on what is the best practice, international convergence would serve no function or, possibly worse, could be counterproductive (i.e., what is the point of converging on a bad practice?).

The remaining columns of the tables describe aspects of convergence with respect to each practice. The middle columns describe the status quo; the right columns describe the feasibility and desirability of changing the status quo. Desirability is assessed with respect to reducing both inefficiency and international conflict.

[15] In what follows, we should note, "convergence" pertains both to convergence among the laws and policies of nations (necessary if any sort of international accord is to be reached) and convergence between trade policy and competition policy positions on issue areas where there is substantial overlap (e.g., predation and antidumping). Presumably what is desired is convergence (in both contexts) towards best practice rather than convergence for its own sake!

The third and fourth columns record our assessment of the current state of convergence, first towards best practice (when a consensus exists), and second across national practices.

The fifth column indicates "feasibility of further convergence". By "feasibility" in this context, we mean specifically political feasibility, i.e., is there any consensus among policy officials and legislatures as to what would be normatively better practice? We classify issues as "low" feasibility if either (1) there are substantial difference among officials of different nations on desirable practice; or (2) there is a substantial difference between branches of a single government as to desirable practice.[16] If an issue is not characterized by a high or at least a moderate level of feasibility in this sense, there probably is little hope at this time of any sort of reasonable convergence.

The sixth column represents an effort to judge what might be gained, in terms of economic efficiency, from moving from the present policy regime to one where there was some sort of convergence upon best practice. In areas where we judged the substantively best practice to be "murky", we attempted to judge what would be the efficiency implications for continuation of practices that economists agree lead to inefficiencies. One way of looking at this judgment is as follows: "if we could agree on what is substantively best practice, and this agreement had economic merit, what would we gain". The final column indicates issues for which we judge that failure to reach any sort of convergence will lead to high or growing international tension.

The issue areas marked by a triad of at least moderate clarity, feasibility, efficiency, and conflict-reduction are the following. The common thread through most of them is market access. Virtually all involve barriers to the contestability of markets.

-- cartelization;
-- other horizontal restraints;
-- mergers and acquisitions;
-- price fixing;
-- VERs, OMAs, etc.
-- national treatment for foreign direct investors and services.

A number of issues do not make this list, but have high efficiency and conflict-reduction implications. These include predation/antidumping and VIEs (for which likely efficiency gains would be substantial if there were the political will to implement significant reform of the existing system);[17] vertical practices (for which the underlying economics remains murky);[18] intellectual property and related issues (for which the debate over the welfare tradeoff between strong intellectual property protection and greater rivalry among innovators will likely never be fully resolved); and state aids to industry (is there such a thing as a good subsidy?). Of these issues, the first does not make the list because of feasibility. The last

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[16] For example, trade policy officials may defend existing antidumping statutes, but competition policy officials may see these as irrational when evaluated by standards for predation or price discrimination.

[17] See chapters by Itoh and Nagaoka and by Lipstein in Graham and Richardson (1997b).

[18] For example, there has always been debate as to whether vertical keiretsu in Japan are efficiency-enhancing or otherwise. The Sheard chapter in Graham and Richardson (1997b) argues, after considering pros and cons, that efficiency-enhancing effects dominate on balance.

three do not make the list because the underlying economics of each issue remains murky and hence what is normatively best practice is difficult to determine.

The Policy Issues in an Asia Pacific Context

How would Table 1 and 2 look if it were restricted to the Asia-Pacific theater? What would be the priority international issues in competition policies?

An answer might begin with: "the tables would certainly be different, because of variant conceptions of firms, markets, competition, conglomerates, alliances, and correspondingly variant philosophies of competition policy."[19] Asian firms are sometimes historical extensions of families, or else socially construct themselves that way (sometimes even providing social services and political voice to employees). Even today, external capital markets play less of a role in monitoring and directing Asian firms; internal discussion and decisionmaking more (hence the characterization of Japan as a "market economy, but not a capitalist one"). Incumbency is usually honored; attempted entry is often seen as a affront. Market-share maximization is sometimes explicitly pursued;[20] its opposite face is foreclosure or exit (due, arguably, to predation, however innocent). The largest Asian firms are usually diversified conglomerates, much more so than elsewhere in the world. Conglameration does not automatically imply either horizontal or vertical concentration. Hence conglameration is not in itself a focus of competition policy -- only as it affects market power and its abuse. Yet it raises unique issues of: whether there are institutional barriers to external takeovers of one or another narrow product line, whether certain product lines "protect" others from competition via cross-subsidization; whether conglameration in general is an entry/access deterrent, and if so, whether the deterrence is especially severe for (discriminatory against) foreign firms.

In terms of specific entries in an Asia Pacific version of Tables 1 and 2, our opinion is that there are wider gaps and larger gains from further convergence on several sub-issues: 1. vertical arrangements, especially foreclosure (both efficiency gains and conflict reduction); strategic alliances; 2. Sectoral and functional exemptions, such as for communications and cultural industries; and 3. national treatment for investors. On exemptions and national treatment, the gaps are sometimes quite large. Formal competition policies are in early gestation in some countries, which is almost to say that every sector is treated uniquely as an exemption, and formal acceptance of national treatment for investors is a long way off. An important type of exemption to normal competition policies in the Asia-Pacific context is the degree of reliance on export processing zones with special or uniquely advantageous competition-policy rules -- an example of a geographical exemption from normal competition policy.

The investment disparity may be eased as more Asian economies apply to join the Organization for Economic Cooperation and Development (OECD), and a reduction in competition-policy exemptions may take place as part of the process of negotiations that we describe below. In addition, if and as Asian financial services markets open, liberalize, and become subject to normal competition-policy strictures,

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[19] But differences are perhaps not so marked as they appear. See the Matsushita and Rosenthal chapter in Graham and Richardson (1997b).

[20] Examples of declarations to that effect by Japanese firms are numerous, especially during Japan's catch-up growth; for a Korean counterpart, see, for example Cho Soon (1994), Ch. 4.

there will be a natural tendency for "information markets" to work more swiftly and predictably -- especially for information about corporate plans and performance, supplied by accountants, brokers, and industry specialists, bond- and credit-rating agencies. More perfect information markets, in turn, almost always make other markets work more competitively, one of the most common goals of competition policy.

All of these should help prepare a foundation for regional and multilateral competition-policy initiatives.

Alternatives for a Broad International Competition-Policy Process

The World Trade Organization (WTO) is at present, in our opinion, unable effectively to deal with many of these issues. We think there is good potential for modest growth in WTO capability, however, and outline our agenda for a multilateral TRAMs Agreement (Trade-Related Antitrust Measures) in Graham and Richardson (1997a,b). In the meantime there are many alternative means for filling the gaps, some of which can be carried out bilaterally or regionally, and some of which seem to us to have special promise in an Asia-Pacific context.

There are three generic alternative means by which competition policies can be carried into international markets, to reach situations that fall outside or spill over any particular nation's borders: (1) via noncooperative unilateral actions; (2) via cooperative unilateral actions, sometimes bilateral, sometimes regional, sometimes multilateral; or (3) via variants of supranational mechanisms.

Alternative (1) is the *status quo* default option. It includes all unilateral actions or efforts undertaken by one nation to reach objectionable practices in some other nation.[21] The shortcomings of noncooperative unilateralism are immediately apparent. There is no consensus among national authorities as to what action, if any, is warranted, and if the differences in the objectives of nations are substantial, the actions of one could generate severe frictions. The target might respond with blocking statutes or other measures designed to frustrate the nation initially taking action. Indeed, the final column of Tables 1 and 2 could be seen as a judgment as to how much friction is, or could be, generated by unilateral actions on issues of competition policy.

Alternative (3) has been implemented within the European Union. The major reason is that early on, the member states of what is now the European Union were willing to allow the European Court of Justice to act as final arbiter of competition policy cases.. This willingness has allowed competition issues within Europe, to some considerable extent, to transcend national sovereignty. It is very unlikely that sovereign states not presently members of the European Union or seeking to become members would be willing at any time soon to cede sovereignty to a supranational agency to a similar extent.

[21] For example, efforts to enforce domestic law or policy on the non-domestic activities of firms via some concept of "effects" doctrine, without working with or through the relevant authorities in the nation where the practices actually take place. Both the United States and the European Community (but especially the former) have periodically attempted such an approach.

Far more promising, we believe, is our alternative (2), cooperative unilateralism.

Cooperative Unilateralism: A Promising Asia-Pacific Alternative

What might be achievable under cooperative unilateralism is some combination of the following three items:

i. Positive Comity and Joint Investigations. Under positive comity, a national government which held a grievance that pertained to another nation's competition policy (e.g., private practices that created barriers to imports or direct investments) would appeal to the authorities of that nation to investigate and, if appropriate, to take action under their own competition laws to address the grievance. In responding to the complaint, these authorities would take into account the interests of the complaining nation. Both the NAFTA Agreement and the September 1991 "Agreement Regarding Application of Their Competition Laws" between the United States and the EC Commission provide guidelines for positive comity.[22]

One extension of positive comity might be to increase the scope for cooperative investigation and regulation of conduct that crossed national boundaries (e.g., where mergers or alliances were transborder in nature). Thus, for example, the EU's concerns over the Boeing McDonnell Douglas merger might have led to joint review between the United States and the European Union. The same approach might have been used in the auto parts dispute between the United States and Japan: the case might have been remanded by trade policy officials to a joint effort between the US authorities and the Japanese Fair Trade Commission. Joint report-drafting, as practiced in the U.S.-Japan Structural Impediments Initiative, might be a fruitful way to begin exploring thornier substance such as anti- and pro-competitive aspects of vertical arrangements and the value of private access and judicial oversight. Among other things, such joint studies might allow the time and place for apolitical[23] reflection on competing models of both competition and competition policies.

ii. Extension of Consultation and Mediation Procedures into the Domain of Competition Policy. Consultation provisions are a natural and necessary companion of positive comity. Dispute settlement that emphasized mediation, rather than adjudication or arbitration, seemed to us one of the wisest recommendations of the APEC Wisemen's last report (EPG (1995), pp. 12-15 and Annex 1). It was to be voluntary, non-legalistic, non-coercive, and therefore distinct from WTO dispute settlement. Failure of the mediation process led only to a written assessment of the dispute by a specially constituted review board. Failure of either party to follow the review board's report simply led to its publication after a suitable period (otherwise it remained confidential). There was to be no sanctioned retaliation or withdrawal of concessions. Diplomatic moral suasion was the only mode if mediation failed. But to our knowledge, no action has been taken along these lines.

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[22] See Joelson (1993) in the NAFTA context, and the chapter by Vernon and Nicolaïdis in Graham and Richardson (1997b) in the EC-US context. In 1994 the United States adopted a law that would allow the US Department of Justice and the Federal Trade Commission to negotiate mutual legal assistance agreements with foreign antitrust authorities. So far, only Australia has signed such an agreement. Other nations are wary about what they see as excessively aggressive US penal antitrust remedies.

[23] National exceptionalism in competition policies seems to be as strong as in trade policies.

We find these proposals attractive. In practice, they are not toothless. But neither positive comity nor consultation/mediation rights and obligations need be threatening, and both are naturally implemented on a bilateral basis. More aggressive recent alternatives seem to us to have been failures. Extreme attempts at "grievance bilaterals," especially by the United States in the Structural Impediments Initiative and "framework" talks with Japan and in their counterparts with Korea, have been at best only modestly successful, and most recently failures. They may have increased grievance rather than resolving it.

iii. Strategic Cooperation Toward a Multilateral Agenda. Finally, we view the experience gained through bilateral and regional experiments in positive comity, joint study, consultation, and mediation as the necessary groundwork for a more ambitious multilateral experiment in negotiating trade-related competition-policy measures. Asia-Pacific relationships, especially APEC regimes, are sufficiently new and flexible to be ideal theaters of experimentation.

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TABLE 1
CRITERIA FOR A GLOBAL COMPETITION-POLICY AGENDA : DETAIL

	State of Convergence				Gains from Further Convergence**	
	Economic Clarity	Toward Best Practice*	Toward Each Other	Feasibility of Further Convergence**	Efficiency Gains	Conflict Reduction
I. Issues Pertaining to Market Structure						
Cartelization	clear	low	high	moderate	high	moderate/high
Unwarranted Horizontal Restraints	clear	moderate	moderate	moderate	high	low/moderate
Vertical Arrangements						
resale price arrangements	murky	...	low	moderate	low	low
foreclosure	murky	...	low	low	moderate	high
Strategic Alliances	murky	...	low	??	moderate	??
Mergers and Acquisitions Regulation	clear minus	moderate	moderate	moderate/high	moderate	moderate
II. Issues Pertaining to Firm Conduct						
Predation	clear minus	...	moderate	low	high	high*
Price Fixing	clear	high	high	high	high	low
Price Discrimination	clear minus	...	moderate	low/moderate	low	high
Abuse of Market Power	murky	...	low	low	indeterminate	low
III. Exemptions						
Functional (e.g., for research and development)	murky	...	moderate	moderate	low/moderate	high
Sectoral (e. g., for telecommunications)	murky	...	moderate	low but improving	moderate	high
Temporal (e. g., for recession cartels)	murky	...	low	moderate	moderate	moderate

	State of Convergence				Gains from Further Convergence**	
	Economic Clarity	Toward Best Practice*	Toward Each Other	Feasibility of Further Convergence**	Efficiency Gains	Conflict Reduction
"Efficiency Defense"	murky	...	low	low	indeterminate	moderate
IV. Trade Policy Measures Raising Competition Concerns						
VERs, OMAs, etc.	clear	low	low	high*	high	moderate
VIEs	clear minus	moderate	low	??	high	high
Antidumping	clear	low	low but becoming higher	low	high	high
National Treatment Issues						
for imports	clear	high	high	(in place)	low	low
for foreign direct investors	clear	moderate	moderate but becoming lower	moderate	moderate/high	moderate but growing
V. Other Related Issues						
Intellectual Property Protection	murky	...	moderate but becoming higher	moderate/high ***	moderate	high
State Aids to Industry/Subsidies						
research and development	murky	...	low	moderate ***	moderate	moderate/high
production	clear minus	moderate	low	moderate ***	moderate	moderate/high

* Ellipses indicate that best practice is not clearly delineated and/or controversial.

** Toward each other and/or towards best practice.

*** Based on successes and failures in GATT negotiations during the Uruguay Round.

TABLE 2
CRITERIA FOR A GLOBAL COMPETITION-POLICY AGENDA : SUMMARY

	State of Convergence				Gains from Further Convergence**	
	Economic Clarity	Toward Best Practice*	Toward Each Other	Feasibility of Further Convergence**	Efficiency Gains	Conflict Reduction
I. Issues Pertaining to Market Structure	clear minus	moderate	moderate	moderate	moderate	moderate
II. Issues Pertaining to Firm Conduct	clear minus	...	moderate	low	moderate	moderate
III. Exemptions	murky	...	low	moderate	moderate	high
IV. Trade Policy Measures Raising Competition Concerns	clear	low	moderate	moderate	high	high
V. Other Related Issues	murky	...	moderate	moderate	moderate	high

* Ellipses indicate that best practice is not clearly delineated and/or controversial.

** Toward each other and/or towards best practice.

*** Based on successes and failures in GATT negotiations during the Uruguay Round.

Comments by Robert Weiner on

Regional Integration and Foreign Direct Investment
by Magnus Bloomsötm
and
Competition Policies and Trade in an Asian-Pacific Context
by David Richardson

MR. WEINER:

On behalf of the first panel, welcome to our symposium. We have two presentations in the general policy areas of trade and investment: The first by Professor Magnus Blomström on investment, and then by Professor Richardson on trade policy.

I will make two comments. The first comment is that neither presenter says much about Asia Pacific in general or about APEC in particular. The second comment is that where the papers overlap, which is basically in Professor Richardson's mergers and acquisitions regime, Professor Richardson's assessment of the economic clarity is "clear minus," and I would guess that Professor Blomström's assessment, based on his presentation, is "murky." And so, we are not operating in the "clear zone."

I have a few general comments about the first paper. I think that the most important aspect of Professor Blomström's paper is clearer in the paper than in his presentation: that he is not clear about the welfare implications of foreign direct investment: whether we should in general encourage or discourage foreign direct investment. His point is that whether to encourage or to discourage really depends on whatever the original reasons and initial cases for foreign direct investment were.

One thing that I like about Professor Blomström's paper is that he gives us some examples from other areas of the world, examples of different effects that we might see from foreign direct investment. And if we press Professor Blomström here, we might ask him to speculate about APEC: what the implications for APEC might be, where APEC stands now, and where the Asia Pacific region stands now. He does not really say what kind of speculations he would he make, basing them on the experience of MERCOSUR, the United States-Canada Trade Agreement, and NAFTA. We need some directions for thinking about policy and research. Professor Blomström might think in terms of APEC regions, after his experience in those other regions.

As Professor Blomström pointed out, it is hard to know what effects these agreements have had on foreign direct investment. He also points out there is no reason in general to expect either more or less. The effects depend on whatever particular reasons there were for the amount of foreign direct investment in the initial case and in practice. For example, he points out that there were many reasons for an increase in foreign direct investment in Mexico. It is hard to know relationship between NAFTA and the increase in foreign direct investment. Possibly there is none.

One direction for research might be to look at "higher frequency" data. Another direction might be to look at the effects of the signing of the agreement, or the specific effect of the passing of the agreement on the value of companies that do business in Mexico or the value of the Mexican stock market.

For instance, we may get some news, such as that Congress passed NAFTA. We may hope that not too many other big things happen that would affect the value of the companies that, for example, operate maquiladora workshops or do business in Mexico. We ought to study what happens to their stock prices. We ought to take a look at what happens to the Mexican stock market, while we control data for what happens in the rest of the world. These are "high frequency" data. Then we would have some idea of what people expect these agreements to lead to: the signaling aspect of these agreements.

Another big problem with foreign direct investment is rule changing, which has been a concern of the United States and other source countries for foreign direct investment. One aspect of foreign direct investment is quite unlike portfolio investment: foreign direct investment tends not to be mobile. After you put the plant down in Mexico or buy a plant there, if the Mexican Government changes the rules, for instance, to double your tax rate, or to increase local regulations, you cannot just lift up your plant and go home.

Some agreements make it much harder for countries to renege or to go back, both in a formal legal sense, and in an informal sense. We do not use the term *expropriation* anymore, but we still see such rule changing on a smaller scale. For example, foreign direct investment in Russia sees the rules change constantly, much to the chagrin of many U.S. companies that have put foreign direct investment into Russia, who cannot now easily get it out.

Another recent specific example from another country is Enron, a big U.S. petrochemical company, trying to build a big petrochemical and electric plant in India. The state government kept changing the rules and terms. So signing these agreements might be mistake--might tie the our hands. Or signing might make it more difficult for governments to try to expropriate some of the surplus from foreign direct investment. And that insight into rule changing comes through much more clearly in the paper than in the presentation.

It is not useful to look at foreign direct investment as an end in itself. Whether to try to encourage it or try to encourage countries to change their rules depends on the original conditions. And it may be useful in the discussion period to talk about where APEC stands.

In some sense, Professor Richardson's viewpoint is opposite to Professor Blomstrom’s. Richardson is interested only in welfare. And his paper is really a table, table 1, which tries to take all these different nontariff barriers and put them on some common footing. The table shows their importance in terms of possible benefits and the likelihood or feasibility of coming to some kind of agreement.

Table 1 is both the strength of the paper and its weakness, because it does not spell out whence Professor Richardson's assessments come. I want to know whether those assessments represent his opinion, the result of his work, other people's work, other people's opinion, or just something that he made up on the way here. I understand that his paper is an excerpt from a larger study, but even an excerpt must have footnotes or some other documentation.

There are also some places where the profession does not have a consensus, where not even Professor Richardson claims that we have a consensus. It would be nice to know his basis for concluding that we even have a consensus. These areas are controversial in themselves, even within the

United States.

For instance, many years ago there was an argument about monopoly between the Chicago School and the Everybody Else school, about the worth of regulating monopoly. A few dead weight loss triangles were calculated by the Chicago School, which argued "Let us forget about monopoly regulation. When we compare this to US GNP, it's nothing." And then the Everybody Else School replied, "Wait a minute. There might be some dynamic effects. There might be effects in other industries as some of these prices are transmitted through the economy."

There is controversy, and I suspect that some of the things that are described as "clear" in the table, may be "clear- minus, or murky," You just see one example in terms of the mergers and acquisitions regulation, as mergers and acquisitions are the main forum for foreign direct investment.

It is important to assess the value of working on each issue because we can't--as policy-makers--go and attack everything. It would be nice to know where we can get the most bang for the buck.

One last comment about the table is that a table like this necessarily tends to obscure any possible important interactions among the categories. Neither Professor Richardson's presentation nor the paper mentions this fact. If we deal successfully with some types of competition policy and liberalization somewhere, the distortions may just migrate somewhere else. We can see unintended consequences of regulation and deregulation in the United States.

Usually we expect to see a relationship between the structure of markets and the conduct of the companies competing in the markets. The cartelization issue and the horizontal restraint issue are two clear categories at the top of Professor Richardson's table. Progress on these two issues might make some of pricing issues a lot easier to deal with. Firms that have less market power are less able to price significantly away from efficient levels.

It is important also to discuss linkages, or some potential linkages that might affect the direction of research and policy. In terms of research, it is hard to say here because I do not have a good sense. There has so many little boxes and all we have is Professor Richardson's word for which ones are agreements and which are not. Without citations in his paper it is hard to know where more research is needed. But one suspects that there are areas where almost nothing has been done.

Comments by John Dunning on

Regional Integration and Foreign Direct Investment
by Magnus Blomström

Magnus Blomström has written an encapsulated, yet incisive and well researched paper on the theoretical and empirical implications of regional integration for foreign direct investment (FDI) and the activities of multinational enterprises (MNEs). In it, he critically evaluates some of the more important analytical issues of interest to contemporary scholars. He also presents some persuasive evidence on the changing interface between trade and FDI, consequential upon the main regional integration agreements (RIAs) of recent years, though I was disappointed he did not survey the more recent evidence on the effects of the completion of the European Internal Market Programme (IMP).

In this brief comment, I will contain my attention to the theoretical part of Dr Blomström's paper. While I found his application of the classification dimensions originally set out by Globerman and Schwidt (1995) quite illuminating, I think, from the perspective of his own analysis, a 2 x 2 matrix based on the competitive (or ownership) advantages of countries, - and how each has been affected by regional integration, and in turn affects FDI, might have been more useful.

However, perhaps more importantly, I would have liked Dr. Blomström to have given more attention to (a) the difference between the approaches of trade and FDI scholars on the likely consequences of regional integration-and there *are* important differences[1] and (b) how regional integration impacts on the various types of FDI.

Let me concentrate on (b). At the beginning of his paper, Dr. Blomström rightly identifies some of the contextual variables which might be expected to influence the impact of RIAs on FDI. He distinguishes - but does not follow through - the differences in the effects of regional integration on *intra* and *inter* - regional FDI. And he correctly argues that one would expect a different response to RIAs from tariff jumping MNEs than from those seeking to aggressively exploit a unique competitive advantages. But I think one needs to delve more deeply into the changing motives for, and types of, FDI in our contemporary knowledge-based economy, as these affect not only the reaction of MNEs to the liberalization of cross-border markets, but also the interface between trade and FDI.

Space does not permit me to give more than a couple of examples: and I will do so from the viewpoint of US FDI in the European Union (EU) (previously the European Community).

The first distinction I wish to make is between an *initial market seeking FDI* and a *sequential efficiency seeking FDI*. In the former case, the IMP appears to have had a ambivalent affect of US MNE activity in the EU, with the outcome depending on the extent and content of the competitive advantages of U.S. of EU firms, and attractions of the US of the EU as a locational base for exploiting these advantages. But, in general, trade and FDI continue to be alternative ways for US firms to service the European market; although it is possible that FDI might replace trade for the supply of some goods and services (e.g. final products) while it increases it for others (e.g. intermediate products). However, given that US firms had established plants in the EU well before the initiation of the IMP, its affect on the location and organization of these plants, and what is produced in each plant, is likely to be very different from that likely to follow *initial market seeking FDI*. Such research as has been conducted (EAG 1998)

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[1] As summarized for example in a recent article of mine via Dunning (1997).

suggests that the IMP has led to increase in US efficiency seeking FDI in the EU; and a corresponding increase both in trade between the US and the EU, and intra EU trade conducted by US subsidiaries.

The second distinction is between FDI intended to add value to an existing competitive advantage of an investing firm and to do so from a foreign location: and that intended to protect or augment that advantage by acquiring a foreign firm. Dr. Bloomström's analysis concentrates entirely on the first kind of FDI. Yet it is known that a sizeable (but beyond that unknown) amount of recent US FDI in the EU has taken the form of mergers with, or acquisitions of European companies, the specific intention of which is to harness to specific knowledge-based assets, to promote organizational synergies and to safeguard or gain access to intermediate or final product markets. While the consequences of European integration by affecting both the competitive advantages of US of EU firms and by removing many of the barriers to trade and competition within the EU are tending to make for more strategic asset seeking FDI, though as yet, this is an under-researched area and it is sometime difficult to disentangle the EU affects from other factors, e.g. globalization which have occurred at the same time.

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Comments by James R. Markusen on

"Competition Policies and Trade in an Asia-Pacific Context"
by David Richardson

I am very much an outsider to the area of competition policy, and I did not attend the conference for which the paper was produced. So my first task is to apologize for not being in a position to relate this paper to the broader themes and issues of the conference. I will instead focus narrowly on the paper, and give my impressions as a novice to the topic.

Richardson's paper is very much a "let's get back to basics" sort of exercise. On first reading, the paper seemed long on generalities and lacking in the real meat of specifics and individual policy suggestions. On second reading and upon pondering the broader context, I felt that this was indeed both useful and appropriate. There has been considerable confusion and hot air over competition policy and perhaps that is due in part to an excessive focus on specifics at an early stage, especially manifest in legalistic foci and jurisdictional battles adopted by some participants. Richardson's paper may therefore be a much needed attempt step back and try to look at the fundamentals. We don't want to debate legalistic fine points nor engage in jurisdictional battles until we know what we are talking about and where we want to go.

The paper begins with the most basic questions of all, what is the domain and the objectives of competition policy, and how do the answers to these questions enlighten us as to the sources of the current policy controversies. Richardson does a pretty good job of stating what competition policies are all about: "formal social regulations by which this competitive-cooperative market system is governed". The author is fairly convincing that competition policy is rarely actually about competition at all, often being about fairness and efficiency instead. This seems to me to be a crucial insight in helping us understand many of the controversies.

I like the discussion about fairness. I generally dislike the word, since people often tend to identify "fair" with their own best interests. Therefore, it is often impossible in specific situations to arrive at any consensus about what is fair. Richardson seems to have a similar idea, and makes a convincing case that it is precisely this problem which explains a great many controversies. What is fair to an incumbent is hardly fair to a potential entrant for example. He also makes some persuasive points about the extent to which the notion of fairness is culturally rooted. It can mean equality of opportunity, fairness of process, equality of outcomes, or loyalty in long-term relationships. In an international context, one country might see fairness in terms of one definition which conflicts with the views of its neighbors. Richardson then notes that fairness, by whatever definition, and efficiency may often conflict. This point is much better understood, but it is good to see it integrated into the broader context. Finally, there are a couple of nice observations or caveats to the effect that efficiency, much less fairness, are not synonymous with competition. Departures from strict competition in the areas of natural monopolies, research consortia internalizing knowledge externalities, and intellectual property protection may be efficiency enhancing. Again, competition policy is not primarily about competition.

I was somewhat less happy with section III. I found the table useful, since at least there I was able to find out what is in fact a competition policy. I would have enjoyed more specifics on this, but perhaps a strict page limit interferes with that objective. I would have liked a little more structure and specifics about what exactly are the set of policies that we call "competition policies" and what precisely are the disagreements about what is the "best practice" policy in each case.

Let me give one example. At the time of writing this review, I had just purchased a set of airtickets too and within Europe and paid the usual absolutely astonishing prices for the flights within Europe (Stockholm-Copenhagen-Barcelona-Hamburg-Dublin on one airline, over-Saturday-night fares costs triple the Denver-London return fare). We are also repeatedly told by United, our principal airline in Denver, that they currently have no non-stopped flights to Europe from Denver because they cannot obtain gates in their principal European destinations. This is obviously an excellent example of a situation in which the US and Europe hold different views about what is both efficient and fair. Yet I had a difficult time fitting this example into Richardson's framework, and finally gave up trying to figure out exactly where it would be placed in his Table 1 ("unwanted horizontal restraints"?). What is the economic clarity of airline regulation and what is best practice?

The paper has not helped me as much as I had hope to better understand my personal international-competition-policy irritant.

Turning to the section on the Asia-Pacific context, I had a lot of trouble with "cooperative unilateralism", since the term is never explicitly defined. I tried to figure it out from the discussion in the text. This is not easy since the term is inherently an oxymoron. Just in case other illiterates besides me read the paper, I also confess to having only a vague notion of what "comity" means. As is the case with my airline regulation example from above, I really see little or no hope of *any* cooperative process being useful until nations can come into full agreement on best practice and where we want to go. It seems to me that, in the absence of agreements over best practice and a coincidence of (at least long-term) objectives, we are going to be stuck with tough non-cooperative bargaining in which issues are linked together so that there are gains from trade or worse, unilateral threats (as in the EU's objections to the Boeing, McDonald-Douglas merger or the US's Helms-Burton Law). It strikes me that an economic understand is a prerequisite to a genuine cooperative process and it is this economic consensus that we must seek.

SESSION II

Deregulation

Forthcoming, Journal of Economic Perspectives

U.S. Industry Adjustment to Economic Deregulation

Clifford Winston

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Abstract: This paper develops a framework to analyze the long run adjustment of U.S. industries to economic deregulation, highlighting the role of intensified competition, innovations in operations, marketing, and technology, and adjustments to external shocks. I apply this framework to industries that have recently undergone substantial deregulation--airlines, motor carriers, railroads, banks, and natural gas--and conclude that these industries have become far more efficient because of deregulation and provided large benefits to consumers. I conclude that the same adjustment process and positive outcome for consumers will result from the forthcoming deregulation of communications and electricity.

Ad astra per aspera--through adversity we reach the stars.

Introduction

Economic deregulation does not happen overnight. It takes time for lawmakers and regulators to dismantle regulatory regimes, and then it takes more time for the deregulated industries to adjust to their new competitive environment. Federal regulatory agencies and the U.S. Congress began liberalizing pricing, entry, and exit in the transportation, financial, energy, and communications industries during the mid-1970s. But while some smaller industries such as intercity bus transportation and air cargo have been fully deregulated during that time, the only major American industries fully deregulated to date are airlines and motor carriers.

What about the industries' adjustment? Consider airlines. Economic deregulation of the airline industry began in 1974 when the Civil Aeronautics Board first encouraged experiments with discount fares. It was completed in 1983 when all regulations on fares, entry, and exit were eliminated. Yet more than 20 years after the deregulatory process began, the airline industry continues to shed inefficiencies that accumulated over decades of regulation and to find new ways to market their service. Indeed, the airlines' latest marketing innovation -- selling discount fares on the Internet -- would be illegal if fares were still regulated.

It is not surprising that deregulated (or partially deregulated) industries are slow to achieve maximum efficiency. When regulatory restrictions on pricing, operations, and entry, especially from new firms, have been enforced for decades, managers and employees of regulated firms settle into patterns of inefficient production and missed opportunities for technological advance and entry into new markets. Deregulation frees an industry from the state's control over prices, entry, and exit, although, of course, firms are still subject to antitrust laws and safety regulations. After deregulation, some costs usually fall in short order, but it takes firms a long time to tear down decades-old barriers to efficiency and to adopt more efficient production and marketing practices.

Deregulation is a long-term process, from which society will continue to reap benefits as firms continue to adjust to free market competition and as more and more industries are more fully deregulated. Policymakers, however, take a more myopic view -- and often place a greater weight on minimizing disruptions to the public than on maximizing economic efficiency[1]. This emphasis may play a useful role in gaining passage of deregulatory legislation. Nonetheless, the concern over disruptions can also lead to counterproductive outcomes. For example, the Essential Air Services program was established in 1978 to assuage congressional fears that airline service to small communities would disappear under deregulation. However, Morrison and Winston (1986) suggest that the subsidies provided under this program were not only unnecessary, but may have been responsible for reducing the potential benefits that could be generated in these markets.

Policymakers are impatient, and when deregulation fails to produce insufficient immediate benefits to their constituents, they face temptation to reregulate or to limit further deregulation. For example, Congress deregulated cable television in 1984 and then reregulated it in 1992, even though the reregulation

[1] Hahn and Hird (1991), Winston (1993), and Joskow and Noll (1994) provide comprehensive overviews of regulatory reform. Peltzman(1989), Noll (1989, 1996), and Winston and Crandall (1994) assess political forces underlying regulatory reform.

in all likelihood resulted in a loss in consumers' welfare (Crandall and Furchtgott-Roth, 1996). Similarly, some policymakers were expressing concern early in 1997 that the 1996 Telecommunications Act had not already led to declines in rates -- while failing to acknowledge that this legislation still left the telecommunications industry substantially regulated.

Policymakers and the public tend to notice only what deregulation has done for them lately, forgetting that society will continue to reap benefits from deregulation as industries continue to adjust to the new competitive order. As a result, they often undervalue the benefits of deregulation. To make sure that policymakers and the public do not sell deregulation short, it is useful to examine how the long-run efficiency benefits of deregulation are achieved. In doing so, it will become clear that the U.S. industries' adjustment to deregulation is marked by many common elements. These same elements will probably govern the evolution of other industries -- telecommunications, cable television, and electricity -- that are now embarking on substantial deregulation. It appears likely that each will become far more efficient than it was under regulation and in the process generate substantial benefits to consumers.

Although I believe that the academic community has reached a consensus that deregulation's net-benefits to consumers are substantial, I recognize that this view may not be compelling to certain policymakers who do not care about the average consumer in the country, but only about their constituents. For example, at a recent hearing on the airline industry in the U.S. House of Representatives, Congressman Conyers from Detroit, Michigan, ignored estimates of the large nationwide benefits of airline deregulation and questioned the wisdom of the entire policy because he felt fares at Detroit's Wayne airport were "too high." Setting aside the accuracy of Conyers' assessment, his perspective illustrates that public debates about deregulation persist after it has long been in place. It is therefore important to identify the long run benefits of deregulation to respond to policy proposals that may emerge from these debates.

Theoretical and Empirical Considerations

Neoclassical economic theory predicts that both a profit-maximizing monopolist and a perfectly competitive firm will operate on the technologically efficient production frontier; that is, any profit-maximizing firm should always wish to minimize its costs, regardless of how much competition it faces. But a regulated firm is in a different situation. Although regulated firms can choose their technologies and operating practices, these choices are made subject to the state's control over prices, entry, and exit and without the challenges posed by unrestricted competition from incumbent firms and new entrants, hence managers and employees face a rather different set of incentives in searching for greater efficiency. I am not aware of a formal model of industry adjustment to deregulation that provides theoretical guidance on this issue. Predictions of the effects of deregulation were generally guided by static models that assumed technology and operations would not be significantly affected by the change in the regulatory regime (Winston, 1993). Nonetheless, one can draw on some basic theoretical ideas to identify the central factors that will cause an industry to become more efficient as it adjusts to deregulation.

First, an old-fashioned view is that regulation improves welfare because it helps control monopoly. This view has been discredited because it is clear that regulation primarily limits competition among firms, and this lack of competition causes an industry to accumulate substantial managerial slack or "X-inefficiency"; that is, firms do not minimize the cost of producing a given level of output. When an industry is deregulated, unrestricted competition among incumbent firms and from new entrants forces the industry to shed such inefficiencies and to seek out innovations in marketing, operations, and technology.

Nickell (1996) presents empirical evidence that shows that increased numbers of competitors are associated with a significantly higher rate of total factor productivity growth.

Second, particular regulations can force firms to operate in an inefficient manner. In a seminal paper, Averch and Johnson (1962) showed that a hypothetical form of regulation, rate-of-return regulation, forced regulated firms to choose their inputs in an inefficient manner; because the regulators determined a firm's profits as a percentage of the firm's capital investment (or "rate base"), firms had a strong incentive to overcapitalize. One could modify this model to characterize situations where an actual regulation leads to an operating inefficiency. For example, entry barriers prevented firms, such as airlines and motor carriers, from optimally developing their networks; exit barriers prevented firms, such as railroads, from shedding excess capacity; and price regulations prevented firms, such as natural gas pipelines, from efficiently marketing their capacity during peak and off-peak periods.

Finally, regulations also prevent firms from responding effectively to external disturbances, such as a recession or a large unanticipated change in prices or interest rates. An industry subject to regulation may, because of its cartel status, be somewhat insulated from these shocks. For example, if fuel prices rise, regulated electric utility firms could appeal to regulators to raise prices. But if regulators refuse such appeals, regulated firms lack the flexibility to respond to shocks (Joskow, 1973). Deregulated firms gain the ability to respond more effectively to external disturbances.

To sum up: an industry's adjustment to deregulation will, in theory, be shaped by intensified competition and increased operating freedoms that will cause the industry to become more technologically advanced, to adopt more efficient operating and marketing practices, and to respond more effectively to external shocks. Moreover, one must remember that deregulated industries are facing these challenges and opportunities for the first time, often with a burden or legacy of investments, operating practices, and sunk costs that inhibit change and competition. In what follows, I will present empirical evidence from the airline, trucking, railroad, banking, and natural gas industries that illustrates how these factors govern an industry's adjustment to deregulation. Regulatory reform of the former industries began in the mid-1970s, and their current regulatory status is summarized in Table 1. I focus on these industries because they are major industries that have been subject to regulation for decades and have recently experienced substantial regulatory reform. Thus I do not consider the intercity bus industry because it is comparatively very small (its annual revenues are only $900 million), nor do I consider petroleum production, because it was regulated for a short period. The experience drawn from the industries in Table 1 will constitute evidence that I will use to assess the likely adjustment of other industries to deregulation.

Some of the evidence that I report should be qualified at the outset. The appropriate way to measure the effects of deregulating an industry is a counterfactual analysis that estimates the price, cost, and service changes that are solely attributable to deregulation, and thus would not have occurred had an industry still been regulated. But such an analysis can be complicated. It may need to account for the business cycle, for those elements of technological change due to deregulation and those not, and for changes in the characteristics of products, including service quality. Some argue that an appropriate counterfactual should also allow for regulators to learn from past errors and for regulation to have improved as it hypothetically continued, although there is little evidence that regulators learn and change in this way. To sidestep such complications, a simpler approach is to evaluate changes in real costs and prices over time; for example, one can compare real airline costs in 1977 the first year before deregulation

Table 1
Current Status of Regulatory Reforms

Industry	*Regulatory Status*
Airlines	Pricing, entry, and exit have been fully deregulated.
Motor Carriers	Interstate and intrastate rates, entry, and exit have been fully deregulated.
Railroads	Most rates, including contract rates, have been deregulated, but "tariff" rates for certain commodities are still subject to maximum rate "guidelines."
Banking	Ceilings on interest rates (except for demand deposits) have been eliminated by deregulation, and Congress has authorized interstate banking to take place during the next few years. Thrift institutions have been allowed into consumer and business lending, while affiliates of banks have been permitted some degree of securities underwriting.
Natural Gas	Prices at the wellhead have been fully deregulated. Independent shippers now have access to pipelines at rates regulated by the Federal Energy Regulatory Commission. By obtaining "interruptible" service (i.e., a pipeline owner can stop service to a customer when demand is high under conditions specified by a contract), shippers can obtain discounts from these rates. Shippers can also sell their surplus pipeline capacity to other entities. This competitive re-selling has also led to rates below the tariff rates. Finally, market-based or negotiated rates for pipeline storage service, hub service, and even transportation services are being allowed.

with real airline costs for the most recent period during which cost data have been collected. This simpler approach is taken in many studies of deregulation, thus I will draw on these estimates here. Although these analyses do not constitute a rigorous counterfactual, their conclusions are strongly suggestive and qualitatively consistent with the few rigorous counterfactuals that have been performed, typically using less recent data.

Changes in Entry and Exit and the Extent of Competition

As the airline, trucking, railroad, banking, and natural gas industries have been deregulated, competition has intensified, both among incumbent firms and because of new entrants.

Many of the new entrants that have made their presence felt have come to be identified as "low-cost" or "independent."[2] In the airline industry, Southwest Airlines, the premier low-cost carrier, is generally acknowledged to have set the standard for efficiency and consistent service that other carriers are striving to reach. ValuJet, another low cost carrier, also played an important competitive role until its license was suspended in June, 1996 because of safety concerns (it has subsequently returned and is now known as AirTran); its presence in Atlanta influenced Delta to lower its costs and prices. The trucking industry is composed of two sectors: "less-than-truckload" (LTL), which uses a network of terminals to consolidate shipments of more than one shipper's goods on a truck, and "truckload" trucking, which provides point to point service for one shipper's goods that fill an entire truck. In the LTL segment, low-cost non-union regional carriers, such as Con-Way Transportation Services, have become an important competitive force. In response to this challenge, the national LTL carriers, such as Roadway, have pursued an aggressive policy of purchasing regional (non-union) carriers and operating them as independent business units. The dominant force in Truckload trucking has become the "Advanced Truckload" or "High Service" mega-carrier, such as Schneider National. These carriers have become so efficient that they are capturing substantial traffic from firms that historically, in response to high regulated truck rates and poor service, provided their own trucking services. For-hire trucking operations are now roughly 25 percent less expensive than private carriage, which relies primarily on (more costly) unionized labor, according to estimates from DRI/McGraw-Hill (cited in Corsi, 1996b). In the rail industry, no large carrier has entered for several decades, because of the huge capital requirements to start a railroad and the ubiquitous coverage of existing networks. But since deregulation there has been a substantial increase in the number of smaller low-cost (non-union) railroads such as Montana Rail Link, which have formed a small system from track that they purchased from large railroads. And competition among incumbent railroads is much more intense. Darius Gaskins has frequently pointed out that when he was a Berkeley economics professor, he taught theories that predicted that duopolists had considerable ability to maintain high prices. But as the CEO of Burlington Northern railroad, he learned that duopolists' prices often reflected fierce competition. In banking, new competition has arisen from interstate bank expansions and from non-bank intermediaries, mutual funds, insurance and financial companies, and corporations issuing debt. Finally, in the natural gas industry, independent producers have increased their share of gas production since deregulation, and independent shippers now have competitive access to pipelines.

[2] For more detailed discussion of the material in this section, see Morrison and Winston (1995) for the airline industry; Corsi (1996a) for the Less-Than-Truckload trucking industry; Corsi (1996b) for the Truckload trucking industry; Grimm and Windle (forthcoming) for the railroad industry; Berger, Kashyap, and Scalise (1995) for the banking industry; and DeVany and Walls (1994), Herbert and Kreil (1996), and Energy Information Administration (1995) for the natural gas industry.

Substantial merger activity has generally occurred within a decade of an industry's deregulation. As in any industry, whether recently deregulated or not, the contribution of these mergers to social welfare has been subject to controversy. For example, end-to-end mergers have helped railroads become more efficient, but parallel mergers may have reduced competition between railroads while producing few efficiency gains. Similarly, some airline mergers have been found to enhance social welfare, while others have not.[3] Major mergers often continue as firms adjust to deregulation. In the airline industry, US Airways, Northwest, TWA, and Continental are presently candidates for some type of merger. In the railroad industry, the imminent absorption of Conrail by Norfolk Southern and CSX may lead to other merger proposals. In the trucking industry, national carriers continue to acquire regional carriers, and in the wake of the UPS strike, Federal Express has acquired RPS to compete more effectively for small freight shipments. The growth of nationwide banking has already led to a great deal of merger activity in the banking industry, and seems likely to lead to more.

In some cases, incumbent firms, particularly in the airline, banking, and railroad industries, have seen mergers as the way to enter new markets. Conversely, because regulation enabled many inefficient firms to stay in business, it is not surprising that mergers have also facilitated large-scale exit, especially in the LTL trucking industry and in the banking industry, as weaker firms that were unable to compete effectively in a deregulated environment sought a merger partner to remain in business.

Following deregulation, the net result of entry, exit, and mergers has generally been that competition in actual markets becomes more intense, although the total number of firms in an industry nationwide may either rise or fall. That is, travelers can choose among more airlines when taking a trip; consumers can choose among more lending institutions when seeking a loan; shippers can choose among UPS, Federal Express, or revitalized rail, truck, or intermodal (truck-rail) carriers to ship their goods; and companies can choose among more utilities or an array of marketers to purchase their natural gas.

After deregulation, competition has even developed in markets once thought to have "natural" entry barriers. In other words, experience rather than theory is more instructive about which parts of an industry are competitive and which parts are subject to natural monopoly. Some rail shippers that may appear to be captive to one major railroad have the option of using railroads that have formed a small system or using another major railroad with trackage rights over the "monopoly" carrier's track. In addition, firms contemplating a new plant location or expansion can sign long-term railroad rate contracts before committing to new investment, thus exploiting competitive alternatives before making a decision. Thousands of natural gas end users now contract with pipelines to ship and store their gas and they can release (sell) their unused capacity to other entities. Natural gas end users and rail shippers can benefit from source competition -- for example, Alabama utilities that face rate increases on coal shipped from Colorado can switch to coal from Kentucky if they can access a different railroad -- and from product competition -- for example, utilities that face rate increases on natural gas can shift to coal or oil if their technology permits such substitution.

[3] Winston, Corsi, Grimm, and Evans (1990) discuss railroad mergers in the deregulated environment, while Morrison and Winston (1989) and Werden, Joskow, and Johnson (1991) estimate the effects of airline mergers since deregulation.

Innovations in Marketing, Operations, and Technology

The intensified competition resulting from deregulation causes firms to make innovations in marketing, operations, technology, and governance that enable them to become more efficient, improve their service quality, introduce new products and services, and become more responsive to consumers' preferences.[4] One might suspect that regulation could foster innovations because firms were more profitable in this environment and thus had the resources to devote to innovative activity. I point out, however, that regulation generally did not significantly increase industry profitability.

One way that deregulated firms have marketed their services more effectively is by offering an array of price-service packages to potential customers. Airlines now offer travelers a wide range of fares from discount fares with various travel restrictions -- some of the lowest discount fares are exclusively available on the Internet -- to much higher fares with no travel restrictions. This has contributed to planes flying with a higher percentage of seats filled -- a rise in the so-called "load factor." Railroads and motor carriers now often negotiate price-service packages with shippers directly. During regulation, railroad traffic was effectively prevented from moving under contract rates. Today, more than half of all rail traffic moves at a negotiated contract rate, which has facilitated more efficient use of capacity and services that are tailored to shippers' production and inventory policies. Banks have greatly expanded the scope of financial services they offer customers and provided new tools, such as derivative securities and financial guarantees, to help their customers diversify risk. In the natural gas industry, the development of market centers and hubs has enabled marketers to help business consumers contract for rates and service that match their specific requirements.

Deregulated firms have made a number of innovations in their operations and technology. Among these innovations to date are the airlines' accelerated development of hub-and-spoke networks that have enabled carriers to increase their load factors. Also, the hub-and-spoke system has brought much greater service frequency, which was a dramatic surprise to many. When fares were regulated, airlines competed excessively in flight frequency. It was thus expected that flight frequency would fall when airlines were deregulated. But with the connections made possible by hub-and-spoke networks, one additional aircraft departure from a spoke airport to a hub airport provides many alternatives on connecting flights, so that service frequency has actually risen. Airlines' development of computer reservation systems has also facilitated improvements in scheduling and handling flight reservations. In the trucking and railroad industries, improvements in network design, the expanded use of intermodal operations, double stack rail cars, and increased use of computer systems have enabled faster, more reliable service. For example, Norfolk Southern once tracked its cars and locomotives by posting a video camera at the entrance to each rail yard; now, an electronic scanner automatically tracks each car's arrival. Truck drivers for Schneider National used to have scheduled check-in phone calls to headquarters; now, they roam the highways with small satellite dishes attached to their cabs, and use the data transmitted by technicians in the company's headquarters to track maintenance needs and the location of shipments. Banks have applied advances in information processing and communications to lower consumers' and their own transactions costs. Natural gas companies have used computer technology to lower their operating and maintenance expenses, and have improved their service to customers by unbundling production, transportation, and distribution.

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[4] For more detailed discussion of the material in this section, see Morrison and Winston (1995) for the airline industry; Corsi (1996a, 1996b) for the trucking industry; Winston, Corsi, Grimm, and Evans (1990) for the railroad industry; Berger, Kashyap, and Scalise (1995) for the banking industry; and Henning, Tucker, and Liu (1995) and Herbert (1996) for the natural gas industry.

It could be argued that many of the innovations by deregulated firms have been the direct result of advances in information technology, and thus would have occurred regardless of whether their industries were deregulated. The argument, of course, is not that deregulation was a primary force in the information technology revolution. But the benefits from these advances were realized only because firms had the incentive and operating freedom to design new production systems and write computer programs to optimize operations. Under regulation, these firms had little incentive or competitive pressure to do so, and regulators did not design regulations to stimulate innovative activity.

Deregulated firms have also been spurred by external shocks to improve the efficiency of their operations, and in particular to match their capacity with consumer demand. The airline industry, for example, has traditionally made capacity commitments roughly two years in advance because of the lead times to acquire aircraft. However, the high income elasticity of demand for air travel -- together with a dose of unpredictability -- created overcapacity in the early 1990s, which led to intense fare wars and huge industry losses (Morrison and Winston, 1996). Carriers have subsequently adjusted their operations by expanding their capacity more slowly in the face of growing demand. In addition, American and Delta Airlines have made long-term purchasing commitments to Boeing Aircraft, in return for expedited delivery of planes, which puts American and Delta in a better position to tailor their capacity to demand.[5] Railroads have used contracts to align their cars and equipment with shippers' demand and reduced their vulnerability to problems caused by overcapacity. Contracting for natural gas pipeline storage and capacity, and the development of spot and futures markets have helped the gas industry respond effectively to the business cycle.

The experience of the banking industry with external shocks differs from that of other deregulated industries, because deregulation was followed by a crisis for the savings and loan industry and for many banks, culminating in substantial costs for taxpayers to bail out the S&L deposit insurance fund. But deregulation -- which in this industry meant freeing up the interest rates that savings and loans can pay, and allowing interstate banking and new financial instruments -- can be held responsible for only a fraction of the S&L debacle. The earlier regulations, under which S&L's were limited in the interest they could pay and the loans they could make, could have literally meant the annihilation of the S&L industry when market interest rates climbed sharply in the late 1970s. The S&L disaster was caused by a sequence of events: the legacy of previous regulation, unfavorable interest rate movements, partial deregulation, lax regulatory supervision, moral hazard problems created by federal deposit insurance, and unwarranted optimism over real estate prices in certain areas. The lesson here is not to fear deregulation itself; indeed, the deregulated banking and S&L industries are today vibrant and healthy. However, deregulation can be undermined if it is not supplemented with appropriate policies. In the case of a deregulated banking industry, a vigilant safety-and-soundness regulatory regime was essential, given federal deposit insurance. In other industries, the appropriate supplemental policies mean that deregulated industries continue to be subject to antitrust laws, safety regulations, and so on.

Finally, deregulation has also led to improvements in corporate governance that contribute to innovative activity. Winston, Corsi, Grimm, and Evans (1990) report that under deregulation railroad managers are younger, better educated, and have fewer years of company service than under regulation,

[5] Boeing has agreed not to enforce these commitments as a condition for obtaining the European Commission's approval of its merger with McDonnell-Douglas. American and Delta, however, are unlikely to change their commitments.

and Kole and Lehn (1996) and Meyer and Oster (1984) argue that airline managers have become much more entrepreneurial in the deregulated environment.

Improvements in Industry Efficiency and Consumer Welfare

By stimulating competition and giving firms greater incentives and freedom to seek out efficiency, deregulation has generated substantial improvements in consumer welfare that will continue over time. Because firms will continue to innovate in ways that they would not have under regulation, it is important to bear in mind that any current summary of the gains from deregulation is likely to be a lower bound.

Industry Efficiency

The evidence to date suggests that since deregulation each industry has substantially improved its productivity and reduced its real operating costs from 25 percent to 75 percent. Table 2 gives some examples of what has happened in the main industries considered here. Of course, deregulation should not be given total credit for all of the decline in each industry's real operating costs. For example, some of the decline in rail operating costs can be attributed to the long-run trend in railroads' traffic mix to include a greater proportion of low-cost bulk traffic. Some of the decline in truckload carriers' operating costs can be attributed to these carriers largely eliminating the more costly less-than-truckload traffic from their traffic mix. Nonetheless, deregulation does deserve credit for most of the fall in costs. In general, these cost savings have not significantly increased industry profitability. Rather, the intensity of competition under deregulation has forced much of the savings to be passed on to consumers in lower prices. The one industry where profitability has increased substantially is the railroad industry, which had earned low profits under regulation and experienced many bankruptcies. As hoped for by the architects of the 1980 Staggers Act deregulating the railroads, rail has profited greatly from deregulation. During 1971-80, the industry's return on equity was less than 3 percent, which along with widespread bankruptcies in the Northeast and Midwest heightened concerns about whether this industry could be financially viable in the private sector; during the mid-1990s, it has been more than 8 percent.

The intertwined pattern created by deregulation -- more competition, restructuring, opportunities for new markets, and further cost reductions -- seems likely to continue. The deregulation of international airline markets, which is slowly proceeding through bilateral negotiations between the United States and other countries, will bring new competition to U.S. carriers, along with new possibilities for route networks and marketing. Airlines are currently exploring a number of options to raise labor productivity such as having (lower cost) pilots who work for their affiliates fly smaller (regional) jets that have been recently introduced on short haul routes. The trucking industry has experienced a serious shortage of long-distance drivers, but the increasing use of intermodal operations has helped to alleviate this problem. Of course, intermodal operations also bring more competition in freight markets. Although truckers have significantly reduced their empty mileage, more progress can be made through further load consolidations, and by for-hire motor carriers making further inroads into private trucking operations (Corsi, 1996b). Although

Table 2
Improvements in Industry Efficiency

Industry	*Improvements*
Airlines	Average industry load factors have increased from roughly 52 percent the decade preceding deregulation to roughly 62 percent since deregulation. Real costs per revenue ton-mile have declined at least 25 percent since deregulation. Industry profits have been very volatile during deregulation, although higher, on average, than they would have been under regulation.
Less-Than-Truckload Trucking	Carriers have substantially reduced their empty miles since deregulation. Real operating costs per vehicle mile have fallen 35 percent, but operating profits are slightly lower than they would have been under regulation.
Truckload Trucking	Carriers have substantially reduced their empty miles since deregulation. Real operating costs per vehicle mile have fallen at least 75 percent, but operating profits are slightly lower than they would have been under regulation.
Railroads	Railroads have abandoned one third of their track miles since deregulation. Real operating costs per ton-mile have fallen 60 percent, and rail profits are much higher than they would have been under regulation.
Banking	The real cost of an electronic deposit has fallen 80 percent since deregulation. Current industry returns on equity exceed those just before deregulation.
Natural Gas	Pipeline capacity has been much more efficiently utilized during peak and off-peak periods since deregulation. Real operating and maintenance expenses in transmission and distribution have fallen roughly 35 percent.

Sources: For airlines, Morrison and Winston (1998); for less-than-truckload trucking, Corsi (1996a); for truckload trucking, Corsi (1996b); for railroads, Winston, Corsi, Grimm, and Evans (1990) and Association of American Railroads (1996); for banking, Berger, Kashyap, and Scalise (1995); and for natural gas, Henning, Tucker, and Liu (1995) and Herbert (1996).

railroads have abandoned a lot of track already, they will continue that process. Railroads can also improve their fleet by taking advantage of technological innovations that have made locomotives more powerful and enabled rail cars to carry heavier loads without wearing out track. The spread of smaller low-cost rail carriers should spur the industry to continue to reduce its labor costs. Finally, it is possible that rail mergers will continue to the point where only two large transcontinental railroads, both highly efficient, would remain in the industry. But even this restructuring (if it comes to pass) would still leave two large railroads in the east and two in the west, and thus have little effect on the current level of rail competition between any two given destinations. The growth of nationwide banks and securitization will lead to more consolidations in the banking industry, but also to more competition in local banking markets. And the recent development of electronic banking is opening up a new set of markets where banks are likely to compete with computer and phone companies, according to the American Bankers Association. Finally, continued unbundling of natural gas production, transportation, and distribution will increase competition in this industry, particularly at the distribution level.

Innovations in marketing, operations, and technology are often difficult to anticipate, so the path of any particular industry as it adjusts to deregulation will be unpredictable. Nonetheless, it is striking that nearly 20 years after deregulation began, even industries with low sunk costs and a simple technology, like truckload trucking, are continuing to adjust to deregulation in much the same way as industries with large sunk costs and a more complicated technology, like railroads.

Consumer Welfare

Consumers have turned out to be the primary beneficiaries of deregulation. The evidence to date suggests that since deregulation each industry has significantly improved its service quality and reduced its real average prices from 30 to 75 percent, as summarized in Table 3. As in the case of the decline in operating costs, one can attribute most but not all of the decline in prices to deregulation. Some alternate reasons for lower costs in rail and trucking, which also apply to prices, were given earlier. Certain critics of airline deregulation have argued that fares were already declining before deregulation and that the decline in real fares since deregulation would have occurred anyway. However, Morrison and Winston (1995) show that deregulation has accelerated the decline in real fares, and that the decline would have been much less had fares still been regulated.

It is difficult to itemize the sources of the price declines in each industry according to changes in competition supplied by incumbent firms and new entrants and by improvements in efficiency. Morrison and Winston (1998) are able to provide such a decomposition for the airline industry. They report that competition supplied by incumbent carriers accounts for 18 percent of the savings from lower real fares since deregulation, competition supplied by Southwest Airlines accounts for 31 percent of the savings, competition supplied by other new entrants accounts for 10 percent of the savings, and improvements in carriers' operating efficiencies account for 41 percent of the savings.

Table 3
Improvements in Consumer Welfare [a]

Industry	*Improvements*
Airlines	Average fares are roughly 33 percent lower in real terms since deregulation, and service frequency has improved significantly.
Less-Than-Truckload Trucking	Average rates per vehicle mile have declined at least 35 percent in real terms since deregulation, and service times have improved significantly.
Truckload Trucking	Average rates per vehicle mile have declined at least 75 percent in real terms since deregulation, and, because of the emergence of "Advanced Truckload" carriers, service times have also improved significantly.
Railroads	Average rates per ton mile have declined more than 50 percent in real terms since deregulation, average transit time has fallen at least 20 percent, and the standard deviation of transit time has fallen even more than 20 percent.
Banking	Consumers have benefitted from higher interest rates, from better opportunities to manage risk, and from more banking offices and automated teller machines.
Natural Gas	Average prices for residential customers have declined at least 30 percent in real terms since deregulation, and average prices for commercial and industrial customers have declined even more than 30 percent. In addition, service has been more reliable as shortages have been almost completely eliminated.

Sources: For airlines, Morrison and Winston (1998); for less-than-truckload trucking, Corsi (1996a); for truckload trucking, Corsi (1996b); for railroads, Winston, Corsi, Grimm, and Evans (1990) and Association of American Railroads (1996); for banking, Berger, Kashyap, and Scalise (1995); and for natural gas, Costello and Duann (1996) and Crandall and Ellig (1997).

Deregulation's considerable success has surprised the economics profession in at least some respects. The profession correctly predicted that consumers would gain from lower airline, motor carrier, and natural gas prices, and from higher interest rates on bank deposits, but the profession expected rail rates to rise (or at least not to fall very much), and failed to predict the large gains from improved service quality in all industries (Winston, 1993). Accounting for changes in prices and service quality, a conservative estimate of the annual net benefits that consumers have received just from deregulation of intercity transportation--airlines, railroads, and motor carriers-- amounts to roughly $50 billion in 1996 dollars (Morrison and Winston, 1998). These benefits have been achieved without compromising safety.[6]

To be sure, consumers have not shared equally in the gains from deregulation. Long distance air travelers on high density routes have benefitted more than short-distance travelers on low density routes; large rail and truck shippers have benefitted more than small rail and truck shippers; large savers have benefitted more than small savers; and commercial and industrial natural gas customers have benefitted more than residential natural gas customers. But this distribution of benefits has generally had a rational economic basis. Because one objective of economic regulation is commonly to "equalize" prices and services across all consumer groups and geographical areas, it is not surprising that the transition from regulation to market forces has not "equalized" deregulated prices and services for all customers. In any industry, buyers who make large purchases or reside in markets with many competitors or lower costs will generally receive lower prices and better service than buyers who make small purchases or reside in markets with few competitors or higher costs. In the airline industry, for example, Morrison and Winston (1997) show that roughly 90 percent of the difference in the gains to travelers on high traffic density routes and low traffic density routes can be explained by the higher costs of serving travelers on low density routes, which are attributable to the lesser economies of scale of smaller planes and lower load factors on such routes.

As in other industries, institutions are evolving to maintain competitive forces in many deregulated markets. In shipping, third-party logistics firms have sprung up to analyze shipper distribution patterns and logistics costs and, with the aid of sophisticated software, to determine the lowest-cost routes and the carriers with the lowest rates. These firms are also able to achieve cost savings for shippers by leveraging the volumes of all of their clients to obtain discounts from carriers. Travel agents can obtain lower fares for travelers who can be organized into a bargaining unit. Marketers can obtain lower natural gas prices for an aggregate of residential users, and so on. Many of these institutions are just developing. In the future, they are likely to become more prominent in deregulated markets and enable more consumers to share in the ongoing efficiency gains from deregulation.

Implications for Other Industries

The evidence suggests that deregulation has been and continues to be a success, and further, that this success is the result of an adjustment process that is common to all major industries that have been completely or partially deregulated. Is this conclusion likely to apply to the major industries --

[6] The effects of deregulation on wages and employment vary by industry. For example, truckers have experienced significant losses in wages but railroad workers have not, while railroad employment has been cut but airline employment has risen. In general, the losses to labor from deregulation represent at most a modest fraction of consumers' gains, see Winston (1993) and James Peoples' accompanying article in this issue.

telecommunications, electricity, and cable television -- that are currently facing substantial regulatory reform?[7]

Deregulation in these areas is barely underway and moving very slowly. In telecommunications, prices for interstate long-distance service have been deregulated for incumbent carriers -- subject to various restrictions on geographic conformity of rates and interconnection charges that are kept above costs by state and federal regulators to cross-subsidize local service. The prices of intrastate long distance and local service are still regulated by state regulatory commissions. The 1996 Telecommunications Act envisioned widespread entry by the many players in telecommunications and cable TV into each other's markets, but also left in place a number of existing regulations, including those at the state level, and set up some new preconditions and restrictions on such competition. In electricity, states are exploring deregulation of generation, and allowing access to transmission and eventually to distribution. Cable television rates were deregulated in 1984 and then reregulated in 1992, but, in accordance with the 1996 telecommunications legislation, rates for smaller systems have now been deregulated again. Remaining cable television regulations are to be phased out by 1999. Some in the policy-making community and the press are attempting to assess the overall benefits of deregulation by looking at the short-term effects of these partial steps toward deregulation. I will take a long run perspective, which begins by assessing whether the greater operating freedoms afforded by deregulation will be accompanied by intensified competition in these industries, and then considers both the likely problems of transition and the possible innovations that may benefit the public.

Competition and Potential New Entry

Until recently, many economists would have said that the telecommunications, electricity, and cable TV industries were natural monopolies on the grounds that they have substantial economies of scale, making entry difficult. But recent technological advances have changed the rules of competition in these industries. In telecommunications and cable TV, digital transmission technologies over fiber optics or the electromagnetic spectrum are creating new opportunities for competition in parts of these industries. In electricity, the advent of small scale combined cycle gas turbine (CCGT) technology is doing the same. In all three industries, both incumbents and potential entrants are providing a potentially large source of competitors.

The current incumbent players in telecommunications include both local service companies, like the regional Bell operating companies, several independent companies, and a number of small rural companies; and long distance telephone service, like AT&T, MCI, Sprint, and some smaller carriers. They are potential entrants into each other's markets. Other potential entrants into both the local and long-distance markets include cellular and other wireless companies, cable TV companies, and electric utilities, who often own fiber optic cable networks that could carry phone calls. Even Internet services now offer long distance and international voice calls. Similarly, cable TV companies could face competition from telephone companies, electric utilities, and cellular systems, as well as from direct broadcast satellite (DBS) systems and multichannel microwave distribution services.

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[7] For more detailed discussion of the material in this section see Crandall and Waverman (1995) and Harris and Kraft (1997) for the telecommunications industry; Crandall and Furchgott-Roth (1996) for the cable television industry; and Smith (1996), White (1996), Joskow (1997), and Kwoka (1997) for the electricity industry.

Competition arises in electricity when services are unbundled, so that a single company no longer provides power generation, transmission, and retail distribution services. Independent power producers are potential entrants in generation; retail power merchants and generation companies are potential entrants in transmission; and municipalities could become potential entrants in distribution. An additional source of competition will arise if customers can negotiate with generation companies for power and arrange their own transmission, as has occurred in natural gas.

As in the case of other deregulated industries, the strongest competitive forces could be provided by new low-cost competitors, who are already starting to emerge. For example, "dial around" long distance firms, which can be accessed by dialing a five-digit code, are offering lower long distance rates than larger carriers because they have much lower marketing and promotional expenses. In electricity, pilot experiments in certain states will enable consumers to obtain lower electricity prices from independent start-up companies, which use the latest technologies and have much lower costs than older incumbent utilities. The incumbent utilities have enormous sunk costs of plant already installed and contractual commitments to buy independently generated power at very high rates. Free entry may even create markets for a generic service, such as communications or energy, which could eventually enable consumers to choose among several firms to supply all their energy and communications services. The Potomac Electric Power Company has recently announced a new venture with RCN Corporation of Princeton, New Jersey to offer Washington DC area consumers alternative local telephone service, high-speed Internet connections, and cable television.

The rapid pace of merger activity in the communications and energy industries suggests that firms in these industries are positioning themselves for deregulated competition. Long distance and local telephone companies, regional Bell operating companies, and cable and telephone companies are proposing mergers. The value of mergers between electric utilities and between electric and natural gas utilities rose from $2 billion in 1982 to nearly $20 billion in 1996. Antitrust authorities will again be required to mediate between the private interests of firms and the efficiency objectives of society. However, most of the proposed restructuring is likely to help industries shed inefficiencies developed over decades of regulation. The probable pattern is that the number of competitors may fall over time, but the intensity of competition in communications and electricity markets should become much greater than it was under regulation.

Potential Problems of the Transition

It is clear that intense competition can develop in communications and electricity markets. But the legacy of sunk costs created by regulation presents problems for the transition from regulation to deregulation of these industries. Meyer and Tye (1988) argue that the transition should encourage suppliers to sign the same kind of contracts with each other and with customers that they would have signed had there been no sunk cost legacy of regulation, thereby causing regulatory institutions to wither away. In practice, the competing interests of incumbent firms, new entrants, and consumers -- as mediated through the existing regulatory and legislative structure -- is likely to inhibit prompt or fully efficient solutions. The major problems to be addressed include competitive access, stranded assets, and universal service.

The competitive access issue begins with the observation that to facilitate competition in telecommunications and electricity, competitors must have the option of interconnecting with existing phone networks and electricity transmission lines. As one can imagine, incumbent carriers and new entrants often

disagree as to what charge is reasonable; the new entrants argue that they should be charged only at marginal cost, while the incumbent carriers argue for higher charges that would allow them to recover their earlier capital costs. Parties have been able to agree on access charges in the railroad, natural gas, and airline industries, and market mechanisms have also developed to promote access. In Canada, railroads have engaged in "reciprocal switching," thus enabling shippers to have access to more than one railroad. In natural gas, re-selling of capacity has facilitated access to pipelines. To facilitate entry at airports, airlines are now able to buy or lease slots and gates from each other. The Federal Communications Commission has been trying to issue legally binding guidelines, without much success, on how the regional Bell operating companies and other local exchange companies must open their markets to competition and under what conditions the regional Bell companies can enter long distance markets. And congressional legislation has been introduced that would require the federal government to phase in competition in electricity at the consumer level in any state that has not done so by the year 2000.[8]

The "stranded assets" problem arises because incumbent firms are concerned that with deregulation, they will be stuck with uneconomic capital investments urged upon them by regulators in the past, while having to compete against firms that are using more efficient technologies. The appropriate compensation, if any, for these stranded assets has emerged as a controversial issue in electricity and telecommunications; Kahn (1997) provides a balanced perspective on this issue in the electricity industry. But the issue is not new. In the natural gas industry, deregulation forced pipeline owners to accept from producers contractually priced gas supplies that they were unable to sell to utilities, because the utilities could find lower-cost sources of natural gas. Pipelines were allowed to recover, through a temporary fixed charge on consumers, as much as half the cost of "buying out" existing commitments to producers. In fact, based on data furnished by pipelines, transition costs predicted by the Federal Energy Regulatory Commission to be $44 billion turned out to be only $13 billion (Crandall and Ellig, 1997). After the break-up of AT&T, the depreciation rates for the obsolete capital caused by the break-up were generally allowed to increase (Costello and Graniere, 1996). When competition accelerated the obsolescence of existing investments, regulators resorted to price caps, but these prices caps were not explicitly set to allow the further recovery of stranded assets. Instead, telecommunications firms were responsible for recovering the undepreciated portion of obsolete capital through the increased profitability allowed by price cap regulation. The stranded cost stakes in electricity are huge, because incumbent utilities have been prodded by regulators to make suboptimal investments and sign long-terms contracts that involve costly technologies, like nuclear power and some alternative energy sources, so that their costs will be much higher than new entrants' costs. But several states have already proposed ways to help utilities pay off their construction debts, usually through some fixed charge on consumers' monthly bills, thus enabling deregulation to move forward. Indeed, regulators in California have approved a plan to allow all utility customers to buy electricity from any supplier of their choosing by 1998.

The provision of universal service is not only important to policymakers, but to many supporters of deregulation as well. But if the goal is to provide reasonable prices and service to an area on an ongoing basis, firms need to have incentives to do that, and universal service requirements tend to reduce those incentives. For example, in airline and railroad deregulation efforts were made to "protect" air travelers in rural areas by subsidizing carriers to serve these small communities and to "protect" shippers of certain bulk commodities like coal by instituting maximum rate guidelines. In fact, the airline subsidy program

[8] In the case of communications, regulatory authorities can also enhance social welfare by continuing to reallocate spectrum capacity to facilitate competition in cellular service (Kwerel and Williams, 1992).

reduced carriers' incentives to provide high-quality, low-cost service to small communities (Morrison and Winston, 1986), while maximum rail rate guidelines have had little effect on prices because only a handful of rates have ever been successfully challenged. Another way of providing universal service is to require that large companies cross-subsidize certain users. Such cross-subsidies are difficult to sustain in a competitive market, where services can often be unbundled. Moreover, the gains to the community may not be as large as expected. In telecommunications, for example, Crandall (1997) finds that the inefficient cross-subsidization of local service through supra-competitive long-distance rates has provided very small benefits to low-income consumers because many of these consumers are heavy users of long-distance service. In these ways, policies to preserve universal service have a tendency to undermine the competitive forces that can enable consumers to obtain reasonable prices and service.

Opportunities for Innovations

Deregulation should not receive credit for the technological changes that have opened the possibility of intense competition in the communications and energy industries. But deregulation should allow and encourage more rapid application of these innovations, and by providing greater operating freedom and a more competitive environment it should stimulate new innovations. For example, communications regulation has cost consumers by delaying the introduction of new services, such as voice messaging and cellular telephone (Hausman, 1997). But after just partial deregulation, communications firms' demand for fiber-optic cable to provide an array of services at lower cost has already exceeded expectations. There is also evidence that countries with several competitive telecommunications firms have much greater penetration of cellular phone service than countries with state-run monopolies, and that state regulatory reforms, such as rate caps, have had a beneficial impact on companies' deployment of new technologies that allow much higher speed service, such as high-speed Internet connections (Blustein, 1997; Taylor, Zakardas, and Zona, 1992; Greenstein, McMaster, and Spiller, 1994). Low orbiting satellites represent another technology that could lead to lower costs, and new and improved services. Unbundling electricity production and emerging third parties could lead to various innovations; for example, consider a power marketing firm that also offers a bundled service of optimal climate control and conservation, together with the sale of power.

So what can we expect from deregulating communications and electricity? As with other deregulated industries, the adjustment process will be long and difficult, but the potential benefits to consumers appear to be huge. Remember, real operating costs in other industries fell roughly 25-75 percent following deregulation. Costs should also fall substantially in deregulated communications and electricity industries, as firms are free to shed inefficient technologies and are stimulated by new competition to develop and implement cost-reducing innovations, which should bring prices much closer to marginal costs. In telecommunications, the annual benefits from optimal pricing alone have been estimated to be as high as $30 billion (Crandall and Waverman, 1995). Deregulation of cable television is likely to lead to a more rapid expansion of viewing options (Crandall and Furchtgott-Roth, 1996). The electricity industry will come to be characterized by a competitive generation market, access to the transmission network for all transactions, and a high degree of service unbundling. Although incumbent utilities are likely to suffer losses, new entrants are likely to be profitable, and residential and commercial consumers of electricity are likely to gain considerably more than $10 billion annually from price and entry deregulation (White, 1996). Some gains are already taking place as public transit companies are negotiating contracts with alternative suppliers of electricity or renegotiating contracts with current suppliers that substantially lower their electricity costs.

Conclusion

Some policymakers and economists appear reluctant to draw generalizations from the U.S. experience with deregulation over the last two decades. Industries, it is said, are different: they have different technologies, entry requirements, and so on. That deregulation works in one industry does not imply it will work in others.

This paper suggests, however, that industries are likely to behave quite similarly when it comes to adjusting to deregulation, and that their adjustment, while time-consuming, will raise consumer welfare -- significantly even at first, and increasingly over time. Markets will become more competitive. Firms will develop innovations to become more efficient and more responsive to consumers. The benefits to society will grow as the adjustment continues. Indeed, the success of the U.S. deregulation experiment has gained attention throughout the world as evidenced by countries such as Japan and members of the European Union embarking on policies to liberalize competition in transportation, communications, and banking.

In the absence of any real, accumulating evidence about the impact of regulatory reform, the ideological overtones in the past debate over deregulation have been understandable. But we now have some 20 years of evidence. It is time to refocus the debate directly on that evidence and broaden our vision of where markets can replace governments in determining the most efficient way to create and sell products and services. This process is taking place in telecommunications, electricity, and cable TV. Looking ahead, government control over prices, entry, and exit in ocean transportation clearly warrants the deregulatory reforms proposed by the Clinton Administration. Similar proposals are also warranted at the state and local level for taxis, limousines, and occupational licensure. It may be even more important to question the extent of the government's quasi-monopolist role in providing and regulating urban transportation (Lave, 1985; Winston and Shirley, 1997) and education (Chubb and Moe, 1990). These are big steps. But most of the theoretical arguments for greater competition in these activities parallel the arguments for deregulation. The empirical evidence may also turn out to be the same.

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Regulatory Reform and Trade Liberalization*

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As tariff and other border barriers have fallen over the past several decades, national regulatory system–particularly for services, investment, and energy–have assumed greater importance in trade negotiations. This is because, depending on how they are structured, national regulatory systems can create formidable barriers to the operation of truly "contestable markets" for both domestic and foreign firms. Thus national efforts to introduce more market-based domestic regulatory systems have important implications for the multilateral system.

Regulatory reform encompasses a spectrum of policy changes, ranging from the breakup of public and private monopolies and oligopolies to more efficient and focused regulation and even in some cases complete deregulation. Trade liberalization reinforces and extends domestic regulatory reform by allowing the introduction of more competition in national markets and by providing the opportunity for domestic firms to expand into other national markets. In addition, trade negotiating principles are *national treatment*, or the commitment to equal treatment for both foreign and domestic firms, and *due process*, meaning full consultation before the promulgation of regulations and a fair and expedition adjudication process.

WHAT IS REGULATION REFORM?

Led by the United States, most industrial nations have undertaken extensive programs of regulatory reform over the past two decades. Particularly since the late 1980's, both the new industrial economies (NIE's) of East Asia and Latin America and the formerly command-and-control states of Eastern Europe and the Soviet Union have jointed the movement. Given the diverse history and nature of these countries, it is no surprise that regulatory reform has taken different forms and meanings.

In its broadest reach, the concept of regulatory reform has the goal of introducing more efficient methods of public intervention into national market economies–assuming that such intervention is necessary at all. Within this broad definition are core goals that aim to increase the efficiency of rules governing market entry, production methods, transactions between producers and suppliers, and firm responses to competition.

Regulatory reform encompasses a spectrum of public policy changes, from privatization of public monopolies, particularly in the NIEs and former communist states, but also in some industrial economies, such as the telecommunications monopolies in Germany and France; the breakup of private monopolies, such as AT&T in the United States; more efficient and focused regulation of an existing private market, such as airline deregulation in the United States and in the European Union (EU); and virtually complete deregulation, such as the United States has done in trucking and railroads, including abolition of the Interstate Commerce Commission.

In most such cases, regulatory reform has not resulted in the complete withdrawal of government oversight. Even after sweeping sectoral deregulation, firms are still subject to national competition and antimonopoly laws and regulations. The fact that complete laissez- faire is not the endpoint of most regulatory reform has led some observers–implicit skeptics of the whole process–to introduce the term "reregulation" to describe much that is taking place.[1] Use of this term is flawed on several counts: First,

[1]Jonah Levy, "Globalization and National Systems" (BRIE Working Meeting on Globalization, University of California, Berkeley, March 1996, photocopy); Steven K. Vogel, "The Bureaucratic Approach to

proponents of regulatory reform do not deny the necessity for government oversight in some situations: They just want less intrusive and distortive intervention. Second, characterizing the result of many national economic deregulatory effort as reregulation inaccurately describes the thrust and direction of what is taking place. In all cases, the movement has been from either total monopoly or tight oligopoly, combined with public regulations that aid collusion, to a more truly competitive market, accompanied by less regulatory oversight.

Unfortunately, when government has been a "pervasive participant" in strategic sectors, rent-seeking by firms and individuals is also "pervasive," and thus the path to regulatory reform is strewn with pitfalls. Specifically, economist Robert Rogowsky has written, "rather than directing energy toward improved products and distributional efficiency, [firms have directed] their resources toward maintaining their politically favored or protected position."[2]

BENEFITS OF REGULATORY REFORM

Despite uneven progress, the overwhelmingly positive results have created a strong consensus for wide-ranging national regulatory reform programs. These results span differing political regimes, national levels of development, and regional boundaries. Thus in the United States, estimates of the welfare gains to consumers from regulatory reform in the airline, trucking, and gas industries were $5 billion, $8 billion, and $3 billion respectively.[3] A study of privatization in the telecommunications sectors of Chile and Mexico found economy-wide efficiency gains of 50 percent for Telmex and 155 percent for Chile Telecom. A similar study found gains of 12 percent for British Telecom after privatization. In New Zealand, the cost of long-distance calls has declined almost 11 percent each year since telecommunications reform was completed in 1988, and over $4 billion has been invested in capital improvements by the main competing firms.[4]

The list could go on at some length, but the central point is that there is now little dissent from the proposition that domestic regulatory reform boosts national economic growth and welfare. Extending these benefits to foreign firms engaged in international trade and investment, however, presents a separate set of challenges.

Financial Revolution: Japan's Ministry of finance and Financial System Reform," Governance: An International Journal of Policy and Administration 7, no. 3 (July 1994), pp. 35-36.

[2]Robert Rogowsky, "The Benefits of Regulatory Reform" (OECD Symposium on Regulatory Reform and International Market Openness, Paris, July 1996, photocopy).

[3]Clifford Winston, "Economic Deregulation: Days of Reckoning for Micro economist," *Journal of Economic Literature* 3I, no.3 (September1993), pp. 1420-6I.

[4]Ahmad Galal, Leroy Jones, Pankaj Tandon, and Ingo Vogelsang, *Welfare Consequences of Selling Public Enterprise*: *An Empirical Analysis* (New York: Oxford University Press, 1994).

THE LINK BETWEEN REGULATORY REFORM AND TRADE LIBERALIZATION

Trade liberalization complements and reinforces domestic regulatory reform: Both aim for the achievement of truly "contestable markets." Unfortunately, in many instances domestic regulatory rules and apparatus have the effect of thwarting competition and market entry by more innovative firms both domestic and foreign, often in the name of protecting employment. Because inefficient regulation can harm the performance of domestic firms, firms are likely to enlist strong sympathy from elected officials when they seek protection form foreign competitors.

Further, each sector presents a complex set of issues and delicate questions of timing as public regulatory bodies construct strategies to introduce more competition. At many junctures, there is the danger that foreign competitors will be thwarted by both the method and content of reforms instituted in the name of deregulation.

An excellent example of the potentially negative consequences of mismanaged or rigged deregulation is now unfolding in the Japanese insurance market.[5] This $400 billion market is one of the most tightly regulated in the world, with rules forbidding price and product competition that include restraints on innovative marketing and distribution practices. Foreign firms have been able to establish a presence only in the so-called Third Sector, consisting of niche products such as personal accident and cancer insurance and long-term disability. This sector comprises only 3 percent of the total Japanese insurance market.

In 1994 the Japanese Ministry of finance agreed not to introduce new competition into the Third Sector until the much larger life and nonlife insurance sectors were opened up to competition. Since then the ministry has taken no significant steps to accomplish this goal. Despite this failure, in early 1996 it announced plans to allow the huge, domestic Japanese insurance firms to compete in the nice markets. Without real regulatory reform across the entire insurance sector, these firms will almost certainly wipe out the foreign presence in the third Sector.

The United States and other nations vigorously opposed this manipulation of market liberalization to favor domestic firms, and ultimately the Ministry of Finance backed down. Ironically, by refusing to distinguish between private restrictive practices (in automobiles and semiconductors) and public regulatory actions (in insurance and other financial service), the United States has clouded its own case for strong retaliatory measures. At this juncture of World Trade Organization (WTO) jurisprudence, public actions are far more likely to be found inconsistent with multilateral trading rules than private actions.

ANALYZING REGULATORY REFORM

As tariff and other border trade barriers have fallen over the past several decades, national regulatory systems–particularly for the service sectors, but also importantly for energy–have assumed a greater importance in trade negotiations, not the least because they now represent the greatest impediments to the free flow of trade and investment.

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[5]Claude Barfield, "Principles Needed in U.S. Japan Trade," *Journal of Commerce* (September 5, 1996).

In effect, service, investment, and energy trade negotiations represent negotiations between competing regulatory systems, and these systems can be analyzed in ways similar to standard microeconomic analysis of competition among firms. The economic analysis of the efficiency of regulatory systems focuses both on market failure–such as market power, externalities, and imperfect competition–and on government failure.

Market Power

Market power refers to situations in which one or a few sellers control the market, with the result that the quantity of goods sold is smaller and the price greatly exceeds production costs. Market power can arise through explicit or implicit collusion among producers, through mergers, or even through government restrictions that prevent or impede market entry.

Examples of market power have abounded in key traded sectors such as financial services and telecommunications. In financial services, often in the name of consumer safety and protection, firms were protected by geographic restriction such as on the number of branches, by limits on rates of interest paid on savings accounts and charged on loans, and by restrictions on technology that could expand the range of competition (e.g., automated teller machines). More recently, rapid advances in technology have enabled individual firms to increase their scope vastly. Thus in almost all countries, including the United States, despite the arcane limitations of the Glass-Steagall Act, there has been a merging of the separate banking, securities, and insurance sectors.

In a number of sectors, the issue of regulation has been complicated by historic arguments that a monopoly is "natural"; that is, the technological and economic underpinning of the sector is such that only one company can serve the market. Natural monopoly conditions have been asserted in energy, petroleum extraction and distribution, electric and gas utilities, and telecommunication, among others, as a rationale for economic regulation that supported regulated or nationalized monopolies. Over the past decade, economic research has undercut the basic premise of many "natural" monopolies, demonstrating that there is little evidence of the economies of scale necessary to justify continued monopoly. Moreover, nations that have introduced competition and less restrictive regulation have experienced lower prices and higher productivity. In the United States, for example, more efficient regulation in telecommunications and railroads saves consumers an estimated $2 billion annually.[6]

On both the domestic and the international fronts, however, the most significant recent activity in regulatory reform has been the attempt to manage relations between regulated public and private monopolies and potential new market entrants. The aim is to construct rules that will constrain the market power of the monopolies. For instance, in the telecommunications area, key areas for reform include equipment sales to regulated monopolies and conditions of entry for competing service providers. Specifically, policy reforms aim to achieve nondiscriminatory access to communications networks, reasonable rates for leased lines for new service providers, and transparent, open bidding for equipment suppliers to national monopolies.[7]

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[6]Winston, "Economic Deregulation."

[7]Greg Sidak, *International Competition in Telecommunications* (Washington, DC: AEI Press, 1997).

Externalities (Spillover Effects)

Positive and negative externalities occur when the consequences of one entity's production or consumption decisions result in uncompensated effects on others. Of particular concern are the consequences of negative externalities in areas such as the environment, where the result will be too much of a good or service, at too low a price, and with too few resources being devoted to reducing or correcting the negative externality, such as increased pollution.

The World Trade Organization is now moving to place environmental issues on the multilateral trade agenda; therefore national environmental regulatory systems will come under increasing scrutiny. The major challenge is to move toward a consensus on procedures and methods of regulating the environment by means of flexible, market-based policies.

The move toward multilateral trade discussions on the environment comes at a time when many nations are rethinking their approaches to pollution regulations, although real changes are still sporadic. For most nations, the traditional means of environmental regulation entails setting rigid technical standards that prescribe specific allowances by source or mandating particular technologies, such as particular kinds of wastewater treatment plants. These standards almost always introduce distortions by discriminating between old and new plants and between different industries.

As the costs of such regulation have become more evident and the lack of progress more glaring, some nations have begun to experiment with more economically productive alternatives, including incentives and taxes. The two main experiments to achieve greater economic efficiency have been the use of emissions trading and effluent fees.

The United States has experimented with emissions trading since the late 1970s, although often the process has been burdened with cumbersome constraints. The first major experiment in the early 1980s consisted of trading options for six air pollutants whereby two or more companies that were the sources of the particular pollutant could propose regulations to reallocate pollution among themselves. More recently the United States and Singapore both have used emission trading to meet the requirements to reduce fluorocarbons under the Montreal Protocols.

Effluent fees or taxes have been used more extensively, with mixed results. The challenge is to set the tax high enough both to cover the cost of the potential environmental damage and to create an incentive for polluters to minimize damage. While political pressures often have thwarted this result, more and more nations are adopting the principle behind it: the polluter pays.

The principle of "polluter pays" is the entering point for international negotiations on trade and the environment, for in a number of areas environmental pollution transcends national boundaries and externalities necessarily become subjects of international concern.

Negative externalities also can be found in the financial services area.[8] For banks, a depositor run represents a major negative externality. Depositors either fear that their bank is really insolvent or fear that other depositors fear that the bank is insolvent–and either fear can cause depositors to withdraw their deposits. For international negotiators, there is also the fear of "systemic risk"; that is, that the failure of a large bank or the entire banking system of one country will have negative effects on the entire international banking structure. Recent research has underscored that such fears should not cause elaborate financial regulation at either the national or international levels but that a few basic regulatory requirements, such as adequate capital levels and limitations on a bank's exposure to one or a few borrowers, will suffice to maintain the safety and integrity of the system.[9]

A second key factor in warding off systemic risks is full and timely information about the structure and operations of banking firms in the system–and this leads to the third potential cause of market failure; asymmetric or inadequate information.

Information Requirements

Problems of "asymmetric information" arise when a party on one side of a transaction has information that a party on the other side does not possess. For instance, a borrower may know more about his or her ability to repay a loan than the lender; a manufacturer of a product will know more abut the safety of the product than the consumer; and a drug manufacturer will know more about the efficacy of a drug than either a doctor or a patient.

Remedies for this type of market failure include various disclosure requirements as well as protective standards. In both cases, costs will be incurred, and the challenge to regulators is to find the most effective and least costly alternatives among competing regulatory options. Mandatory product standards, for instance, run the dangers of thwarting technological change by fixing on a particular design or product and of preventing flexible responses to differing local problems. O f equal concern from a trade policy perspective is their vulnerability to capture by local firms and interests that tailor the specifications to local advantage and exclude foreign competition.

Several alternative public interventions offer more market-oriented solutions, less vulnerable to capture. First is the shift from product to performance standards that do not mandate specific technologies or designs and instead lend themselves to open competition. More important are steps to ensure full disclosure to all participants in the process, including foreigners. With each participant able to have a voice in setting standards, routine market bargaining can determine the outcome.

Finally, of particular importance for international transactions, some progress has been made toward the internationalization of standards and product certification. The most important and advanced efforts are being pushed by the business sectors in Europe and the United States, but the members of the

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[8]Lawrence White, "Competition vs. Harmonization: An Overview of International Regulation of Financial Services," in Claude E. Barfield, ed., International Financial Markets: Harmonization: An Overview of International Regulation of Financial Services," pp. 5-18.

[9]Jean Dermine, "International Trade in Banking," pp. 49-83, and Ingo Walter, "Global Competition and Market Access in the Securities Industry," pp. 84-150, in Barfield, *International Financial Markets.*

Asia Pacific Economic Cooperation forum (APEC) also are holding a series of consultations with the aim of mutual recognition agreements (MRAs) and possible harmonization of some aspects of the standards-setting process. Among the barriers they are addressing are: testing and certification requirements that are higher for imports than for domestic goods and services; discriminatory product labeling rules; manipulation of domestic laboratory accreditation to block imports; and mandatory compliance with quality system registration schemes.

In June 1997, pursuant to the much-publicized "New Transatlantic Agenda," agreed to by European Union and U.S. corporate groups, the United States and the European Union negotiated mutual recognition agreements for five sectors: pharmaceuticals, electrical equipment, medical devices, telecommunications equipment, and marine recreational craft. The products covered involve about $50 billion in U.S.-EU trade.

GOVERNMENT FAILURE

The case for public intervention to remedy the consequences of market failure must be balanced against the equal potential for government failure. While government regulation can increase the efficiency of imperfect markets, governments also can fail to meet their goals and intervention can worsen the efficiency of already imperfect markets.

While a number of factors can cause government failure, four problems are particularly relevant.

Conflicting Goals

Often legislatures and political leaders mandate vague and even conflicting goals to regulators, making it difficult to establish and carry out clear programs. For instance, regulators may be required simultaneously to protect the environment, enhance economic growth, advance goals of racial diversity, and guard consumer interests–with little guidance as to priorities or methods of achieving balance. This can lead to disguised protection, as was the case when the U.S. Environmental Protection Agency, in the name of safekeeping the environment, discriminated against non-U.S. oil refineries in regulating emissions, and when Congress, in creating fuel economy standards for motor vehicles, clearly favored the Big Three U.S. automakers.

Asymmetric Information

Even with able personnel, government agencies have difficulty obtaining and utilizing the information necessary to understand market developments in complex sectors such as telecommunication and financial services. The problem of inadequate information is likely to lead to the same problems encountered by private sector entities in overcoming market failures.

Income Distribution

Domestic regulatory agencies often are asked to ameliorate perceived inequities in a nation's income distribution. More efficient methods of addressing inequities would entail taxes and subsidies, but regulation is often the preferred policy choice, particularly through the use of cross-subsidies. Examples of the inefficiencies introduced for such purposes are "must-serve" mandates to insurance companies and the similar mandate for banks to establish branches in poor districts set forth in the U.S. Community Reinvestment Act. In Europe, the "must-serve" mandates have been used as a means of slowing down and blocking the opening the telecommunications markets to non-EU firms.

Rent-Seeking and Capture

Finally, the greatest threat to both efficient and equitable public regulation stems from the lobbying activity of affected individuals and firms that will expend considerable resources to bend policies and regulations in their favor. In many countries the history of economic and health and safety regulation has seen the gradual capture of the regulatory authority by the producers and groups at whom the regulations were originally aimed.

After analyzing the dynamic of both market and government failure, a recent study concluded:

> (t)he real world imperfections of government have yielded numerous instances of the regulatory processes being used for abusive purposes and reaching inefficient outcomes. Indeed the deregulation movement of the late 1970s and 1980s was a reactions to these abusive purposes and inefficient outcomes. These abuses need not lead to the conclusion that all government regulation should be forsaken. But they do point toward constant caution in embracing new regulation–national or international–and toward the value of frequent reassessments of the motives, methods, and outcomes of existing regimes.[10]

HARNESSING REGULATORY REFORM TO TRADE LIBERALIZATION

Despite the warning message of recent Japanese experience with insurance reform, the goal of harnessing domestic regulatory reform to trade liberalization will be attainable over time. Given the myraid of regulatory regimes, political traditions, levels of economic development–and the very particular technological and competitive challenges that each sector represents–progress will be varied and programs will have to be tailored to national priorities.

As they move in future years to revise their regulatory systems, individual national regulatory systems and national policymakers should keep their eyes on the following guidelines: WTO procedural principles and mutual recognition agreements.

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[10]White, "Conpetition vs. Harmonization," pp. 23-24.

WTO Procedural Principles

Because virtually all nations belong to, or soon will belong to, the World Trade Organization, a sensible beginning to the linkage of regulatory reform to trade liberalization would be a commitment to apply certain multilateral principles in reconstructing national regulatory systems. Among these would be the following.

Transparency. This includes the commitment to publish all rules governing sectoral regulation and to see to it that all affected parties–both domestic and foreign–have access to these rules.

National Treatment. This involves the commitment that foreign and domestic firms be treated equally in the construction and application of regulatory regimes.

Minimal Distortion of Trade. This is a commitment to observe the WTO requirement that governments will adopt the method or policy that is the least trade distorting to achieve a social, economic, or political objective.

To these basic WTO rules, the following procedural safeguards should be added:

Due Process. Governments should commit to full consultation with all interested parties–both domestic and foreign–before proposed standards or regulations are put in place. Provision also should be made for open and expeditious appeals process when affected parties feel that unwarranted economic burdens will result from new or revised regulations.

Mutual Recognition Agreements

Moving beyond general principles, a number of plurilateral negotiations are taking place that aim for a series of MRAs that will enhance regulatory reform. Indeed, one recent study predicted that "MRAs will likely be at the heart of trade diplomacy in the coming decade."[11] The high interest in MRAs stems from the continuing drive to reduce trade barriers and the recognition that there exist wide and deeply rooted differences in national regulatory systems based on social preference, level of development, income distribution, tolerance of risk, geography, and government-societal relationships.

As a way station to harmonization, mutual recognition is based on a principle of "equivalence" or at least "acceptability" of each nation's regulatory systems. From this flows the rule that if a product or service is sold (or tested) lawfully in one jurisdiction, it can be sold (or tested) in all member jurisdictions without meeting separate standards or undergoing additional testing. Mutual recognition has been called an extreme form of national treatment: It restricts the regulatory authority of member nations, but it does not involve a transfer of power to the supranational level. (The European Union in its present form blends mutual recognition in some areas with complete harmonization in others. The Maastricht Treaty, and likely the results of the recent Intergovernmental Conference, will move the European Union toward greater harmonization).

[11]Kalypso Nicolaidis, "Mutual Recognition of Regulatory Regimes: Some Lessons and Prospects" (OECD Symposium on Regulatory Reform and International Market Openness, Paris, July 1996, photocopy).

MRAs also can be powerful tools to increase market contestability. They inevitably introduce competition between regulatory systems while also introducing the possibility of a single rule toward which all producers of a product of service will trend. It is for this reason that national regulators remain chary and even skeptical of MRAs in strategic sectors such as financial services and telecommunications.

The two most important specific principles that governments can adopt in the furtherance of mutual recognition are mutual recognition of testing results and the mutual recognition of trade-and investment-related standards. Obviously, each nation still must decide which of its health, safety, and environmental standards are too sensitive or critical for inclusion in MRAs.

Mutual Recognition of Testing. It is universally recognized that there are high costs associated with the duplication of test results that are necessary to certify that various products, production processes, and services meet individual national standards. Commerce is also impeded when professionals–lawyers, accountants, and the like–working for multinational companies are blocked from practicing their professions because of differing educational and profession accrediting organizations. In order to remove these roadblocks, governments, through MRAs, can establish procedures and joint bodies to achieve mutual recognition of both testing and professional certification.

As an important part of the transatlantic business dialogue (TABD), the United States and the European Union negotiated an MRA for pharmaceutical testing. This groundbreaking negotiation focused attention on both the possibilities and the problems inherent in melding different regulatory systems. Among generic problems the negotiators had to overcome were: different definitions of what constitutes the industry–the United States wanted to include medical devices, the European Union did not; level of detail in testing–the U.S. Food and Drug Administration demanded copies of all relevant documents; criteria for judgment–the United States wanted only health and safety, the European Union wanted some economic judgment; and competing bureaucratic perspectives–in both the United States and the European Union, trade and commerce bureaucracies often are at odds with drug regulators.[12]

Mutual Recognition of Trade and Investment-Related Standards. Mutual recognition of actual substantive standards presents somewhat more sensitive issues, particularly when political and social as well as economic objectives are intermixed in regulatory regimes. But as with testing and certification, the costs of differing levels and means of regulation constitute major impediments to trade and investment. The aim of the negotiations is first to induce governments to review their regulatory systems to determine elements of criticality and noncriticality in the achievement of fundamental social and political goals. Rules not deemed central to these goals should become candidates for mutual recognition, relieving producers, exporters, and importers of substantial costs–and ultimately resulting in more varied goods and services at less cost for national consumers.

Harmonization: Negotiated Multilateral Rules. The highest level of integration would be achieved by international negotiations to create some form of multilateral code of regulatory rules. This goal is far down the road, but there are precedents in previous multilateral negotiations and in the current rules governing the WTO. Indeed, it can be argued that all of the nontariff codes (now binding obligations) established during the Tokyo and Uruguay Rounds are precedents for a more wide-ranging code for

[12]FDA Week, November 8, 1996 (Washington, DC: Bureau of National Affairs).

regulatory actions. These would include, for example, existing rules for subsidy, government procurement, and the new multilateral regimes for services and intellectual property.

At the moment, the most import work linking regulatory reform to trade liberalization has been undertaken by the Organization for Economic Cooperation and Development (OECD). In March 1995 the OECD issued a preliminary set of guidelines for member governments to consider before establishing new domestic regulations entitled "Recommendations on Improving the Quality of Government Regulation." The guidelines consist of a series of questions governments should ask when considering new regulations. The questions include such issues as: Is government action justified? Is regulation the best form of government action? What is the appropriate level of government for this action? Do the benefits justify the costs? Are the distribution effects across society transparent? How will compliance be achieved?

Also in 1995, Japan proposed that a number of existing OECD committees should analyze issues presented by domestic regulatory systems with the goal of distilling a set of core principles to guide governments in the future and to minimize barriers to trade. Work is under way in several OECD committees, although as yet no results have been published.

If some consensus can be reached regarding overall principles, the OECD guidelines could very well provide great assistance to ongoing negotiations for specific WTO service sector agreements and for what are likely to be quite difficult and complicated negotiations in the areas of competition policy and the environment.

It also should be noted that regional negotiations in both APEC and through the transatlantic business dialogue are proceeding simultaneously; and if negotiations begin again in the next few years for a Free Trade Area of the Americas, the issue of regulatory reform with at least some attempt of mutual recognition will almost certainly be high on the agenda.

WTO Role. Any future multilateral code for regulatory activity would build on and incorporate the principles and rules for mutual recognition.

Thus existing WTO principles regarding transparency, national treatment, minimum distortion of trade, and due process would form a bedrock set of safeguards. In addition, the WTO could provide the framework for future negotiations to achieve mutual recognition of testing results and standards in an increasing number of substantive areas. These negotiations likely would consist of agreement not only among individual WTO members but also between regional trading groups, if the regional groups reach agreement earlier.

Finally, in some areas–services and investment are key examples–WTO negotiations will involve the establishment of minimum substantive standards. For instance, in the telecommunications sector, questions relating to specific rules for competition between public and private monopolies and outside competitors, and rules for interconnection and equipment procurement necessarily will be included in any multilateral agreement. It should be noted that with regard to both services and investment rules–as well as potential agreements in high-technology sectors–many developing countries will need assistance and competence-building aid because they currently lack the ability to create and maintain sophisticated regulatory systems.

This point leads to a final caveat: Whether through bilateral, regional, or multilateral negotiations, it should be understood that the substantive issues raised by changes in national regulatory systems reflect social, political, and economic beliefs and practices that often are deeply embedded in particular national histories and experiences. Thus, despite sweeping technological changes that are driving pressure for reform and harmonization, progress is not likely to be swift. And to be successful, any proposals for systemic reform will have to accept the necessity for wide variations in approach and substantial leeway for national idiosyncrasies.

Comments by Robert Hahn on

U.S. Industry Adjustment to Economic Deregulation
by Clifford Winston

and

Regulatory Reform and Trade Liberalization
by Claude Barfield

MR. HAHN: I want to spend a couple of minutes framing the discussion, building on Cliff's paper related to regulation, and on Claude's synthesis of trade and regulation. As I see things, there have been three fairly profound changes in the areas of trade and regulation. First, trading barriers are coming down. The area of regulation as a trade barrier has seen two distinct trends: Deregulation, primarily in the United States. Outside the United States, we see not only deregulatory efforts, but we see a second fairly profound change: Privatization, in particular, privatization of state-owned enterprises in the developing world and in transitional, so-called transitional economies. So in essence, we see the walls coming down around regulation of specific industries and trade flows, seeing restrictions on trade flows across national boundaries begin to disappear.

And I think we are seeing a third profound change: rerugulation, which is a countervailing trend in such areas of regulation such as environment, health and safety regulation, and in labor, perhaps, to a lesser extent. We see an increase in many of these types of regulation, both domestic but international. I think this reregulation is in part a political response to the decline in the other regulatory barriers that I just spoke of, in trade and industry-specific regulation. These three changes are my framework for any discussion in the next minutes.

Let me turn specifically and briefly to the two papers. I think Claude's paper presents a nice overview of the linkage between trade and regulatory issues. It identifies possible institutional approaches to the emerging problem of what I call nontariff barriers, which in this case are regulatory barriers that could affect trade patterns. My question is, under what conditions can you expect an organization like the World Trade Organization to effectively address nontariff barriers? Trade policy scholars often say, "Oh, well, the WTO can handle this because it has a set of principles." I am a bit suspicious of putting too much emphasis on a global agreement or on the bureaucrats who enforce that agreement, or on the civil servants in this building who enforce that agreement. So again, my question is, under what conditions should we use the WTO as opposed to other instruments to reduce either barriers to trade, or to reduce these nontariff barriers, such as regulation?

On turning to Cliff's paper, I must say that it calls to mind George Stigler, a Nobel laureate economist, who once wrote a paper that said economists ought to do better benefit-cost analysis and to tell it to all of the world; and then the world would embrace it. And later Stigler confessed that he had "figured out there are politics in the real world, and there may be strategic reasons, good political reasons why legislators and civil servants and what have you, do not listen to the great insights put forth by economists."

Cliff's paper is a different kind of followup confession. Cliff is the foremost authority in the United States and in my view, in the world on measuring the net benefits of deregulation or partial

deregulation in a variety of industries. Now Cliff comes here and says, "Well, I made a mistake. I figured out that things do not adjust as fast as I thought, and we are getting a heck of a lot more benefits than I had thought."

I think that his is a very important insight, if it is correct, as it appears to be. In a sense, the key policy contribution is to say we no longer need to do this industry-by-industry analysis every time the issue of deregulation comes up. We have some 20 years of evidence to support the view that deregulation clearly brings benefits to the large majority of consumers.

I want to ask Cliff two questions. The first is, how can practitioners who are trying to estimate the benefits, or the potential benefits of deregulation, take your insight into account in doing quick estimates--given your insights about adjustment, and given that the world economy is not entirely deregulated in different industrial sectors,? Can they apply a fudge factor?

My second question is whether you think that deregulation is generally a good thing--given that as a political economist you can list situations in which deregulation or attempts at deregulation can lead to perverse outcomes. How would you qualify your conclusion: that we have 20 years of evidence, *so damn the torpedoes, full speed ahead*, for developing countries, or for countries or for particular situations where the political economy might not be ideal for the outcomes that economists might desire?

Comments by Howard Pack on

U.S. Industry Adjustment to Economic Deregulation
by Clifford Winston

Clifford Winston's paper on the benefits from deregulation of several industries will warm the heart of most economists. By the seventh week of most introductory courses on economics, the virtues of competition are firmly instilled in students minds. For those who go on to obtain Ph.ds, to say nothing of pursuing a career in economics, it would be startling indeed if it were found that deregulation did not produce benefits. Winston's survey of the literature confirms this. Assuming that the underlying studies are correctly executed, and the venue of their publication suggests they are, it is clear that deregulation has had positive effects.

Several questions are not explicitly addressed, however, and answering these would increase one's confidence in the ultimate importance of deregulation.

The first issue is how large are the aggregate benefits that have been obtained, increases in both producer and consumer surplus. The decrease in unit costs reported suggest that producer surplus certainly increased but it is difficult to obtain a sense of the order of magnitude such cost saving as a percentage of the aggregate cost of the industries involved. Table 2 provides some of the ingredients of the required calculation but it is not clear if the cost reductions cited mainly refer to variable costs or whether the also include fixed costs. Presumably, as shown in Table 3, the cost reductions have been passed forward to consumers, directly or indirectly in the case of intermediate services such as trucking. Nevertheless, it would be interesting to know the evolution of the rate of return on equity capital in the deregulated sectors to allay any suspicions that Naderites and others continue to hold that the entire effort was designed to harm consumers. While it is stated on pp. 14-15 that deregulation has not significantly increased profitability, this leaves open two questions. (1) Does this refer to profits as a percentage of revenue or to rates of return on capital. It is presumably the latter which is of interest. (2) Assuming that the statement refers to rate of return, what has been the absolute effect - an increase from 12 to 17 % would be significant though small in absolute amount.

The section on cost reduction is perhaps too modest in assessing the benefits. Given the record of relatively slow growth of total factor productivity in the broad sectors of which the deregulated ones are components, the decline in unit costs implies that in these sub-sectors, TFP growth was significant. Most of the deregulated sectors have not benefited from any major technological advance and hence the reduction in cost must have reflected the growing efficiency of using existing resources, disembodied technological progress, unless the costs of inputs declined. It would be interesting to know if the reduction of unit costs is reflected in its presumed mirror image, TFP growth for these subsectors. This is of particular interest as the reduction in costs could also be ascribed to a decrease in rents accruing to factors employed in the sectors. For the national economy, the latter is a transfer among producers and consumers whereas TFP growth would indicate an improvement in the potential GDP, the policy variable of ultimate interest.

While Table 3 provides quite plausible estimates of the price declines or service improvements, only one estimate is given of the increase consumer surplus, $50 billion per year as a result of deregulation of intercity transportation. If I interpret the number correctly as representing the reduction in expenditures which should ultimately be passed on to consumers, the figure is startling, even to one who believes in the benefits of deregulation. It is roughly 3/4 of 1% of GDP. Assuming it is accurate, this is a result to be trumpeted as a singular success. If magnitudes such as this were typical, it would imply that economy wide TFP derived a substantial push from deregulation, something that does not show up in TFP calculations, perhaps because of measurement problems.

While the magnitude of the price declines implies that all groups must have derived absolute benefits, it is also the case that some of the benefits enumerated mainly accrue to the better educated or higher income groups. For example, ATMs and higher interest rates on deposits are likely to largely benefit those with high opportunity cost of time and financial assets, those in the upper quintile of the income distribution. Better airline prices for those able to use the internet have similar effects. Of course, some effects of deregulation work in the opposite direction - the hub and spoke system may increase travel time which adversely affects those with high opportunity cost of time. None of this is to imply that any distributional effects will outweigh the benefits received by most almost all income groups. It does suggest that deregulation in some sectors may have generated some redistribution, both in income and time, which is not easy to measure and may slightly mute the overall rosy picture.

Comments by Bernard Hoekman on

Regulatory Reform and Trade Liberalization
by Claude Barfield

As requested, I have read Claude Barfield's paper "Regulatory Reform and Trade Liberalization" which was presented at the ITC symposium Evaluating APEC Trade Liberalization. The paper discusses regulatory reform in the trade policy context, arguing that international cooperation on trade policy can help support the regulatory reform process. The paper is well written and accessible to the non-specialist. Although I fully agree and support the thesis, more could have been done to amplify and expand on the inks between regulation reform and trade policy, both in terms of how one can support the other and in terms of how the two may give rise to inconsistencies.

For example, Barfield notes that regulation may impose excessive costs on domestic industries and give rise to sympathy from elected officials when these industries seek protection from import competition (p.3), but does not discuss what can/should be done to ensure full consistency between the two policy areas. Trade liberalization is certainly consistent with regulatory reform. However, the fact is that trade policy (e.g., antidumping) may also be used to offset the effects of regulatory reform; this should be recognized. Trade policy is alive and well; regulatory reform could (should) be defined to include the regulation of trade as well.

The proposal to seek agreement in the WTO to apply a minimal set of principles to regulatory regimes--national treatment, transparency, and minimal distortion of trade--is a fine one; it would enhance the efficiency of regulation. However, it is worth noting that these principles do not yet apply in the trade policy area--in services national treatment is the exception rather than the rule. This suggests the trading system still has some way to go before it is ready to tackle policies that have primarily a domestic focus.

I have some doubts about the ability of MRAs to enhance regulatory reform. A fundamental feature of MRAs is that they take regulation as given--the issue is instead to achieve agreement that another country's standards are as good as your own. This may be as difficult to achieve as harmonization of standards; indeed, in effect the terms of negotiation shift to a determination of what are the minimum acceptable standards in a specific area. One way of extending the reach of MRAs would be to seek to apply the MFN principle. Currently, if country A has a MRA with country B, and B has a MRA with C, it not the case that A will accept products produced in C or accept testing certification of entities located in country C. This is currently not required.

It was unclear to me what was meant with mutual recognition of trade and investment related standards. I do not see how or why a government would not apply its standards in a particular area to a foreign investor simply because the investor is not subject to such standards in its home market. Some specific examples that illustrate what the author has in mind in this connection would be helpful.

In my view it is too strong to state that harmonization in some areas has already occurred in the WTO context and that the Tokyo/Uruguay round agreements are precedents. There is very little in the way of constraints on the substance of government rules/requirements in the areas covered by WTO agreements. The agreements are procedural and focus largely on preventing discrimination (the procurement agreement incidentally binds only signatories, not all WTO members). I find it very difficult to envisage a WTO agreement under which governments will be subject to second guessing by WTO members regarding the justification of regulation; whether benefits exceed costs; distributional

effects are transparent, etc. These are all laudatory objectives and principles; they are very unlikely to be adopted in the framework of the WTO. Indeed, such principles have yet to be adopted by most governments, and do not figure in major regional agreements, including the EU. The difficulties of attaining agreement on objectives and methodics are nicely reflected in the ongoing work of the WTO working group on trade and competition policy, where some countries, including the United States, are opposed to discussing the competitive implications of trade policies such as antidumping.

Although the proposal made in the paper for a set of WTO principles on regulation is innovative and far-reaching, at the same time it may not be far-reaching enough. An important question that arises in this connection is whether regulatory disciplines should be kept horizontal, or whether they are best pursued in issue or sector specific talks. The author appears to be advocating a general agreement on regulatory principles, supplemented by specific rules in some areas, e.g., services and investment. However, services and investment account for a large share of "the action" in most economies. It may be more effective to pursue sector or issue specific disciplines from the outset.

This is a question that will also arise when considering the need for a possible general agreement in the WTO on competition law (antitrust), a topic that addressed only tangentially in the paper. Here also it is an open question whether general rules will be deemed desirable or effective by negotiators. Greater discussion of these "strategic" issues would have been useful.

SESSION III

CASE STUDIES A

Japanese Group Boycotts and Closed Government Procurement as Barriers to Trade

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Evaluating APEC Trade Liberalization: Tariff and Nontariff Barriers

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I would like to express my gratitude to the Japan-United States Friendship Commission to the Abe Fellowship Program of the Social Science Research Council, and to the Japan Information Access Project for their support and assistance with this research.

The goal of international trade agreements is to expand trade, and to do so in a manner that appears fair and reciprocal to all parties so that all have an incentive to support the agreements. Nevertheless, promises of reciprocity in formal agreements may be undermined by the very different ways in which domestic institutions shape the implementation of trade policy. Many prominent Japanese observers have argued that Japan presents a number of non-tariff barriers that prevent fair access to the Japanese market. The Mitsubishi Research Institute reports that, "we must recognize that the framework of ~Japan's economy is, by international standards, so far divorced from market economic principles that it not only creates friction with other countries, but also stands in the way of Japan's growth in the 2lst century."[1] Keidanren Vice-Chairman Kumagai Naohiko warns that international trust in Japan has weakened because of regulations and other invisible barriers that block trade and investment from overseas.[2] Economist Shimada Haruo argues that the lack of open markets for goods and services keeps prices high and imports out: "The market does not function rationally; that is, there are a number of barriers preventing free competition, so that despite the rise in the ~ven, cheap goods and services are not being imported from overseas in sufficient quantities."[3]

Shimada's comment points to a troubling symptom of closed Japanese markets: a persistent gap between domestic and international prices. A number of sources have documented this gap. A 1994 MITI survey of business costs found Japanese prices for raw materials, intermediate goods, and capital goods to be 30 percent higher than in the U.S., 19 percent higher than in Germany, and 46 percent higher than in South Korea.[4] A November 1995 survey by Japan's Economic Planning Agency estimated that prices for durable goods were 47 percent above US prices, though 8 percent below German prices. Clothing and shoes were 93 and 35 percent higher respectively, and other manufactured goods 54 and 15 percent higher respectivelv.[5] Sazanami, Urata, and Kawai concluded from their comparison of Japanese domestic and import prices that nontariff barriers add 174 percent to the prices of tradable goods in Japan. For machinery the "implied nontariff barrier rate" was 140 percent, for chemicals 127 percent, and for metal products 60 percent.[6]

It is often difficult to sort out the reasons that foreign firms have a hard time selling in Japanese markets despite a strong price advantage over Japanese suppliers. Typically, there is some quality or

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[1] Mitsubishi Sôgô Kenkyû Jo, Nihon Kaikaku (Reformln,-, Japan), (Tokyo: Dai.vamondo Sha, 1996), p. 44.

[2] Kumshsi,Naohiko, "Nihon ni shinrai o torimodose" (Let's bring back trust in Japan), Gekkan Keidanren, July 1996, p. 48. On the larger problem of Japanese regulatory barrirs to trade to see my paper. "Why Regulatory Reform Won't Open Japan's Markets to Imports," in *Japanese Deregulation: Whhat You Should Know*, Proceedings of conference sponsored by the Japan Information Access Project and the Japan-U.S. Friendship Commission, April 4,1997, Washington, D.C., pp. 1-20, also available at the Japan Information Access Website: http://www.nmjc.org/jiap

[3] Shimada Haruo, Japan Crisis (Tokyo: Kodansha, 1995), p. 101.

[4] "MITI, Tsûshô hakusho (Trade and industry white paper), 1995, p. 140.

[5] Keizai Kikakuchô Bukka Kyoku, Seikeihi chôsa (1995 nen) ni yoru kôbairyoku heika oyobi naigai kakakusa no gaikyó (Purchasing power parity and domestic/intenational price gap based an the survey of living costs (1995) (Based on November 1995 prices), May 1996.

[6] Yoko Sazanami, Shujiro Urata, and Hiroki Kawai, Measuring the Costs of protection in Japan (Washington, D.C. Institute for Intenational Economics, 1995), pp. 6-7. For additional analysis of the causes of high Japanese prices see, "Retail Price Differences in the United States and Japan," in Japanese *Deregulation: What You Should Know*, Proceedings of conference sponsored by the Japan Information Access Project and the Japan-U.S. Friendship Commission, April 4, 1997, Washington, D.C., pp. 83-91.

delivery disadvantage to foreign products that apologists for Japanese trade policy may use to discount evidence of unfair barriers to imports. Another problem with assessing trade barriers is that much of it is informal, illegal, and secret and therefore difficult to research. The secret nature of much of Japan's trade policy makes it impossible to provide an accurate overall assessment of Japan's trade openness, except through Sazanami, Urata, and Kawal's method based on price measurements. Certainly a mere review Japan's formal barriers to trade would be of little use in genuinely measuring Japan's trade openness.

This paper will draw on my book, Restrained Trade: Cartels in Japan's Basic Materials Industries to look at two industries in which Japan has high domestic prices, but few imports and a large volume of exports.[7] The study considers arguments that quality problems account for low import penetration in Japan, but finds it is not a sufficient explanation. Rather, in both the cement and steel cases a host of non-tariff barriers block Imports into the market. Private barriers, that by rights ought to be dismantled by Japan's Fair Trade Commission, include group boycotts or refusals to deal, in which an industry as a group agrees to deny sales to a firm in order to prevent it from going around the industry's cartel. Far from stamping out private non-tariff barriers, the weight of the Japanese government's policies has been to support and supplement them. The Construction Ministry, for instance refuses to buy goods not produced by Japanese insiders to the domestic steel and cement cartels, but the Construction Ministry has not acted as a lone, rogue ministry. The Ministry of International Trade and Industry (MITI) has also supported price cartels and blocked imports.

There are two main arguments as to why industries in Japan are protected, and it is important to think about these in order to understand the obstacles to breaking down non-tariff barriers. One argument is that interest group influence is responsible for government protectionist policies and tolerance for private protectionist actions.[8] Certainly political “pork barrel” is often a reason for government support of protectionist non-tariff barriers, but both business and the state support protectionism as well because they think it will help preserve the manufacture of key products in Japan. Surprisingly, even industrial buyers of expensive inputs express support for cartels that keep their prices high. Recognizing the legitimacy that mercantilist policies enjoy is crucial for understanding these policies’ durability.

Standardized technologies and high levels of industrial concentration make the basic materials industries, such as chemicals, steel, and cement, one of the most successful areas for cartels. Though the basic materials sector is often overlooked because it does not involve the kind of rapid technological innovation of the electronics or machine sectors, it is nevertheless an important source of jobs for Japan's workforce and profits for Japanese firms, and makes up one-third of Japan's value added in the production of manufactured goods.[9] In most of Japan's basic materials industries, domestic prices are high, while both export and import prices are low and this price disparity holds even for completely standardized

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[7] Th book looks at how Japanese cartels work and how the state supports them, and at cartels' contribution to industrial policy, and a nalvzcs long-term relational contract between upstream and downstream industries. It includes detailed case studies of the aluminum and petrochemical industries. Mark Tilton, *Restrained Trade: Cartels in Japan's Basic Materials Industries* (Ithaca, NY: Cornell University Press. 1996).

[8] Robert Uriu, for example, while focusing on formal rather than informal protection, argues that interest group pressure is the main reason for such policies. Robert Uriu, *Troubled Industries*: *Confronting Economic Change in Japan* (Ithaca, NY: Cornell University Press, 1996).

[9] MITI, Kôgyô tôkei hyô, sangyô hen (Census of manufactures, report by industries). 1992.

products. Despite its price structure, Japan is a net exporter of basic materials.[10] This paper will explore the system of cartels and informal trade barriers that enable Japan to keep its prices high while avoiding imports.

The Japanese Cement Market

Japan has long considered cement a strategic industry because it is key to building industrial infrastructure, and because it is one of the few industries that produces manufactured goods for export from domestic raw materials. Japan, like most countries, has ample supplies of limestone and clay. The Japanese cement industry, like most basic materials industries, is vulnerable to competition from newly industrializing, countries because both its technology is standardized and its production process labor intensive. Transportation costs present a certain barrier to international trade and effectively close the inland U.S. market, for example, to imports, but ocean transport makes cement readily transportable to coastal markets all over the world. The location of much of Japan's population and industry near seaports makes the Japanese market especially accessible to imports, and in fact half of the domestic cement used inside Japan is transported by sea.

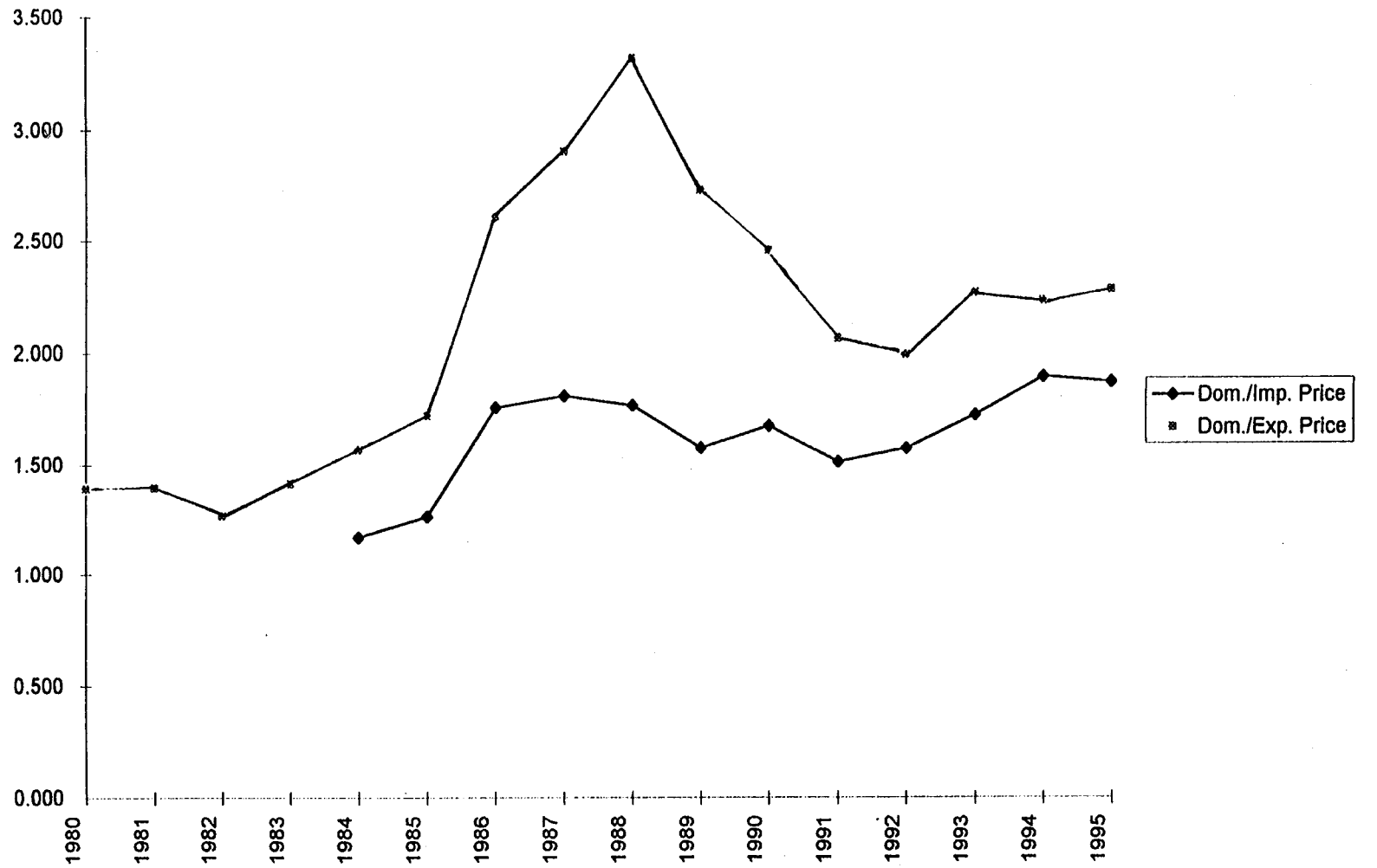
Japan's own success as a cement exporter bears witness to the case with which cement can be shipped long distances. Japan has long been the world''s largest exporter of cement, shipping much of it as far as the Middle East, and stands out as the only advanced industrialized country to export much cement. Unlike the United States, which exports almost no cement but imports large amounts of it, Japan has bought little cement from overseas. Except for a brief episode in 1973, Japan imported no cement from the end of World War II until 1984 and while imports rose to 4.5% of the domestic market in 1989, they fell again to 0.7% by 1995 (See Figure I). Japan's success at resisting cement imports is particularly impressive given that Japanese domestic prices are quite high by international standards. From 1986 to 1995, Japanese domestic undelivered cement prices were on average two-and-a-half times as high as its export prices, and 72 percent over import prices during the same period. One might imagine that, in the absence of formal import barriers, cement producers in other countries would want to take advantage of Japan's high prices. One might also be surprised that Japanese producers are willing to sell cement overseas so cheaply when domestic prices are so temptingly high. How has the Japanese cement industry managed to maintain its high domestic prices and compete so successfully in world markets?

Group Boycotts by the Cement Industry and Allied Industries

The cement industry has a long history of government-sponsored cartels, designed to manage production levels and support prices. The last incarnation of this was the Structurally Depressed Industry Cartel, from 1983 to 1987. This production cartel was discontinued in 1987, and in 1991 the FTC cracked down on the industry's illegal price cartel by slapping the industry with the largest fines for violating the Anti-Monopoly Law in Japan's history. This FTC ruling had a dampening effect on Japan's high prices, but the FTC completely ignored the most import industry price-supporting mechanism: the use of group boycotts to keep imports out of the Japanese market.

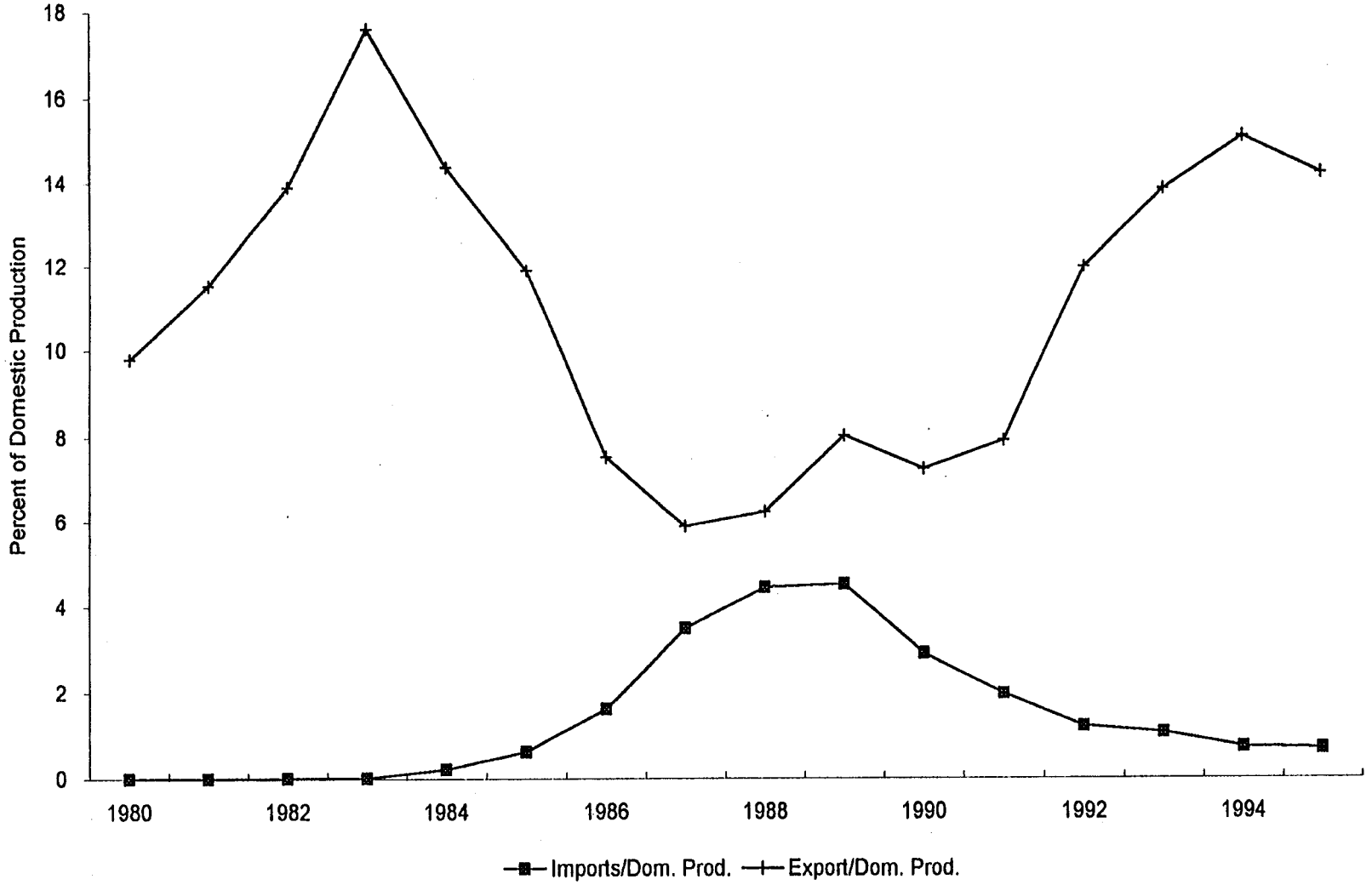
[10] *Restrained Trade*, p. 10.

Figure 1: Ratio of Japanese Domestic Cement Prices to Import and Export Prices



Source for all Figures: Restrained Trade

Figure 2: Japan's International Cement Trade
Imports and Exports Compared to Domestic Production



The core policy which restricts the flow of imports into the Japanese market is a refusal-to-deal agreement between the Japanese cement and construction industries. I learned about the group boycott in most detail from an interview with two top executives at one of Japan's largest cement firms in 1988. In 1991 both the FTC ruling and American anti-dumping penalties against the Japanese cement industry politicized the issue, and I doubt it would now be easy to get such a frank discussion on of collusive activities from an industry insider.[11] More recent newspaper reports, however, suggest that industry actions to keep outsiders out of the market have continued after 1991, as I shall show below.

According to the 1988 interview, the group boycott threat was carried out directly by the Distribution Committee of the Japan Cement Association. In order to implement the agreements, the five members of the Distribution Committee met monthly with representatives of the five big construction trade associations, and separately with representatives of the Ready-Mix Concrete Federation as well (ready-mix concrete is the wet preparation made up from cement, sand, gravel, and water). The cement industry promised the smooth delivery of cement at stable prices in return for the construction industry's loyalty as a customer. The cement industy's commitment to stable prices included a promise to control attempts by local ready-mix concrete cooperative unions to exploit their local monopolies to extract a higher price. The tactic these local cooperative unions often use is to stop production to force construction firms to pay higher prices. The monthly meetings between the construction trade associations and the Cement Association provided a forum for the construction trade associations to ask the Cement Association to pressure local ready-mix concrete cooperative unions to resume production.[12]

In return for the Cement Association's control of the ready-mix cooperative unions, the construction trade associations promised that their members would only buy cement from members of the Cement Association, which includes only domestic firms. The Cement Association enforced this agreement through two layers of refusals to deal. If a construction firm bought ready-mix concrete from an outsider to the Readv-Mix Concrete Federation, then insiders to the Federation refused to deal with that firm. The Cement Association members agreed among themselves not to sell to outsiders to the Ready-Mix Concrete Federation in order to choke off the outsiders' supply.[13] Thus, if a construction firm wanted to be able to buy domestic cement, it had to refrain from buying any imported cement. Small construction firms working in some urban areas were willing to risk being cut off from domestic supplies, but large construction companies that work in more than one locale and which need access to ready-mix concrete in different areas were unwilling to risk losing supplies from members of the Ready-Mix Concrete Federation. Thus, the threat of refusals to deal did not always prevent small firms from buying from outsiders, but it has kept the vast majority of the domestic cement market under the control of the Cement Association.

An important factor which makes cement relatively easy to cartelize is that the construction industry, which buys the cement, is also highly cartelized. Prices in the construction industry are governed by *dangô*, that is, price-fixing by competitors before submitting bids for government construction projects, which account for half of construction projects. Because the construction firms are not under strong

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[11] Because the interview material is from 1988, 1 will discuss the governance mechanisms described in it in the past tense. However, I have no reason to think that the same mechanisms don't continue.

[12] Interview with cement company officials, 1988.

[13] Interview with Japan Cement Association official, 1988. Use of refusals to deal against construction firms that use imports confirmed in Semento Nenkan, Vol. 37 (1985), p. 28, and Scmento Nenkan, Vol. 38 (1986). pp. 16 and 17.

competitive pressure among themselves, they are able to absorb the high cost of domestic cement. According to a recent study the Citizen's Ombudsman Conference, dangô still appeared to be almost universal in bidding for public works contracts in 1995 and 1996.[14] Competition among construction companies is weak not only for government contracts but for private building contracts as well. Japanese construction costs for a 200 square meter house, not counting the cost of land, were 2.19 times the U.S. cost in 1989 at 130 yen/dollar.[15] The *Shûkan Tôyô Keizai* writes that labor productivity in the construction industry is so low that "it is difficult to believe it is in the same country as the auto and electronics industries."[16] The journal hypothesizes that the reason for the lack of competition to spur improved efficiency is spillover from bureaucrats discouraging productivity increases bv fixing cost formulas for public works. This lack of competition among construction firms also gives them some slack for buying expensive domestic materials.

The threat of group boycotts by the Japan Cement Association is the most important anti-import measure, however it does not exist in isolation. Rather, it is part of a long-standing anti-import program supported and carried out by the cement industry, other allied industries, MITI, the Construction Ministry, and the Customs Bureau. Although Japan imported cement from Korea when it was a colony of Japan, Japan imported no cement between World War II and 1973, when the Japanese government brought in a tiny amount of Korean cement in order to goad an uncooperative domestic cement cartel into increasing production. This crack in the door invited in a flood of would-be cement importers from all over Asia, only to find that the Japanese longshoring companies refused to unload any cement not directly-authorized by the government.[17] Except for the government-sponsored trickle in 1973, the Japanese market was hermetically sealed against imports again through the rest of the 1970s, though according to one Korean cement company official posted in Tokyo in 1978, "everyone wanted to sell cement in Japan."[18] Although domestic ready-mix concrete firms were afraid of the Cement Association's sanctions against buying foreign cement, outsiders to the ready-mix concrete cartel which were refuscd cement by domestic cement producers wanted alternative supplies from overseas.

In 1980 a Korean resident in Japan who owned a ~readv-mix concrete asked the Korean firm, Ssangyong Ccmcnt, to sell it cement. Ssangyong attempted to send cement, but death threats from Japanese gangsters convinced it to give up selling cement to Japan for several years. Because domestic cement makers continued to refuse cement to ready-mix concrete companies which were outside the ready-mix concrete joint cooperatives, these outsiders continued to try to get imported cement.[19] In 1984 both Korean and Taiwanese firms began campaigns to sell larger amounts of cement to Japan to firms shut out of the Japanese cement market. Although they managed to sell some cement, they encountered a series of barriers which limited their success, some put up by the Japanese cement industry, and some by the Japanese government. The first barrier was the one which had kept cement imports out in 1973, refusals to deal by longshoring companies. Ssangyong contracted with a longshoring firm to unload its first shipment to Osaka, but the day before the shipment's arrival the longshoring company said it could not do the work

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[14] *Asahi shinbun*, July 21, 1997. Thanks to Ron Bevacqua for sharing this with me.

[15] Uchida Michio and Ôzaki Akiko, "Jûtaku kenchiku hi wa gowari yasuku dekiru" (Construction costs could befifty percent cheaper), Shûkan Tôvô Keizai, September 4, 1993, p. 7.

[16] Ibid.

[17] Semento Nenkan, Vol. 26 (1974), p. 54.

[18] Interview, 1988.

[19] Nihon Keizai Shinbun, May 29, 1985; Semento Nenkan, Vol. 37 (1985), p. 28.

because Japanese cement companies had told it they would no longer give it work if it handled foreign cement. This was a serious threat to the longshoring companies because they handled not only lapanese cement companies' exports, but much of their domestic shipping as well. But a friendly longshoring company told Ssangyong that under the terms of its government license the longshoring firm could not refuse its services. Ssangyong was able to use the threat that it would get the longshoring firm's license revoked to force the issue, but had to struggle anew at each new port I wanted to ship to.[20]

According to a Korean govenunent official handling trade matters in Japan, Korean cement companies encountered similar problems with trucking firms. Just as they pressured longshoring firms, cement manufacturers also pressured trucking firms not to handle cement imports. Korean firms complained to the FTC, but the trucking firms were unwilling to testify to the FTC that cement companies had pressured them.[21] If the cement importers did manage to find a truck to transport their cement, domestic cement makers would try to track the trucks to find out which ready-mix concrete firms were buying imports so that they could intimidate them into stopping their purchases. When the first sizable quantities of cement imports entered Japan in 1984, the *Nihon Keizai Sangyô Shinbun* reported that "the Japanese cement firms are excitedly looking for the criminals' who are buying imported cement ..."[22] The Japanese cement firms sent cars out to tail truckloads of imported cement to find out who was buying it, took pictures of the delivery, and then cut off cement to the companies involved.[23]

Like ready-mix concrete companies, truckers, and longshoremen, trading companies also had long-term relations with the cement companies that they were reluctant to jeopardize by getting involved with cement imports. Even three-and-a-half years after large-scale imports began, Sumitomo Trading Company was saying that, "Given our relationship with the domestic producers we cannot start importing immediately. But the import business is certainly attractive."[24] Eventually, however, trading companies that were not involved with domcstic cement manufacturers did cooperate with cement imports.[25]

The Cement Association's response to imports was openly hostile. Moroi Ken, a prominent leader within the cement industry and within Japanese business more broadly said,

> Since it looks like demand will continue to stagnate or decline over the long term, we are working to establish a hundred year plan of industrial restmcturing. Given this, in principle there should be zero imports. If other countries continue exporting, then it follows that we'll have to export too, but it would not make any sense to go and throw each others' markets intodisarray.[26]

In the spring of 1984 Imamura Kazusuke, acting head of the Cement Association's Committee on Special Measures to deal with Imports and Exports, declared that none of the 23 Japanese cement companies would cooperate with importers:

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[20] Interview with Ssangyong official, 1988.

[21] Interview, Korean trade official, 1988.

[22] Nihon Keizai Sangyô Shinbun, November 1, 1984.

[23] Uesugi Yoshimasa, NIES seihin de nihon no sangyô wa dô naruka (What Will Imports from the NIES Do to Japanese Industry?), Eeru Shuppansha, 1988, p. 50; interview with Korean cement company official, 1988.

[24] Nihon Keizai Shinbun, November 10, 1987.

[25] Nihon Keizal Shinbun, Novcmber 10, 1987

[26] Nihon Keizai Sangyô Shinbun, November 2, 1984.

> Japanese importers will have to bear all the costs of facilities for imports and sales on their own. They will have no support from [domestic cement] makers. Even if they bring in cheaper imports, there will be high costs for them, and the price will end up being the same as for domestic cement.[27]

Thus, despite the fact that Japanese firms were not competitive with imports, there was no chance Korean firms, would be able to form joint ventures with Japanese firms to use their distribution facilities. contacts and networks to distribute Korean cement, much less buy out a Japanese cement maker to achieve the same goal. No Japanese cement firm had to rush to form a joint venture contract with a Korea firm for fear they would be left behind, because the trade association was able to forge an agreement ensuring no firm would cooperate. The marketing of cement requires considerable investment in distribution infrastructure, such as silos to store bulk cement. Since the entire network of silos owned by the twenty-three Japanese cement firms was closed to Korean and Taiwanese firms, they would have to build their own silos if they wanted to enter the Japanese market. Thus, the cement industry used a group boycott to prevent any of the tie-ups or buy-outs that Japanese firms were using at the same time to penetrate the American cement market.

The State Backs Up the Cement Association with Non-tariff Barriers

When Ssangyong tried to build a silo it ran into a series of governmental barriers. First, it had a difficult time buying land on which to build a silo since most harbor land is owned by local government authorities, who refused to sell to it. But Ssangyong however found some private land where the water was too shallow for access by ships and had it dredged. After the firm built the silo it took three months to get a license from the port authority to use it.[28]

Once Ssangyong built its silo and obtained its license to use it, it ran into opposition from the Customs Bureau. Cement is shipped in bulk and the standard international practice for establishing the volume of a shipment of cement is to use a "draft survey" to determine the weight of the cargo by seeing how low the ship rides in the water, figuring out how much water is being displaced, calculating the total weight of the load on board, and then subtracting the weight of fuel, personnel, etc. It is considered accurate and is used in all the countries to which Japan exposes cement. The Japanese customs agents however told Ssangyong that they could not use this standard method but would have to actually weigh all of their cement on a scale. The only available scales were truck scales and to use these would have been prohibitively expensive. Ssangyong got around this non-tariff barrier by having a "hopper-scale" custom built for 50 million yen (approximately $250,000 at the time), into which cement was dropped and weighed before being released into trucks. MITI eventually gave in and allowed the normal draft survey method to be used, but only after a delay of six months.[29] The Tokyo office of the Customs Bureau defended its requirement that the Koreans physically weigh their cement by saying it had the discretionary power to withhold permission to use the draft survey method, even though it is customary.[30]

Once the cement was finally imporied MITI again supported the trade association by creating new cumbersome and expensive testing procedures for imports. When Japan first began importing cement, the

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[27] Nihon Keizai Sangyô Shinbun, Mav 27, 1986.

[28] Interview, Ssangyong official, 1988.

[29] Interview, Ssangyong official, 1988.

[30] Telephone interview, 1988.

procedure for receiving the Japanese Industrial Standards (JIS) approval was the same for foreign as for Japanese cement. The procedure for a Japanese cement manufacturer is to do in-house tests once a year and give the results MITI.[31] In December 1984 MITI mandated that imported cement be tested twice instead of once a year.[32] Furthermore, instead of a single test by the manufacturer, each ready-mix concrete company that wanted to use foreign cement had to arrange for and pay for its own tests by one of the "semi-public" organizations which do the testing. The tests took 45 days and cost 200 to 250 thousand yen (approximately $1,400 - $1,700). Since Japan's 4,000 ready-mix concrete companies are small firms. the expense and trouble of having imported cement tested were not insignificant.[33] Not only was the testing a time-consuming financial burden, but the JIS inspection procedure made it easier for Japanese cement manufacturers to figure out which ready-mix concrete companies were buying imported cement. Japanese ready-mix concrete companies pass a JIS inspection by MITI and are given JIS approval for their ready-mix concrete *on the condition* that they use not just any cement which meets JIS specifications, but cement from a specific cement company. If they want to use another company's cement they have to re-register, thus subjecting themselves to the scrutiny of the Japanese cement cartel.[34]

Thus, MITI's procedures helped the Cement Association check up on the ready-mix concrete companies so that they could pressure them not to buy imports.

The Cement Association Tried To Broker Imports

Although the Cement Association defended the market with government support, imports managed to take 0.3% of the market in 1984. At the same time it continued to use its ties with ready-mix concrete companies. Longshoremen, truckers, and construction companies to keep imports out, the Cement Association negotiated with the Korean and Taiwanese cement trade associations to convince them to restrain their exports.[35] Although the Koreans would not agree to restrain exports to Japan in 1984, they did agree to do so later when they had established a stronger foothold in the Japanese market. In the fall of 1986 the Korean and Japanese cement trade associations agreed that Japanese cement companies would import one million tons per year of Korean cement while the Koreans would import an additional 1.2 million tons of cement into Japan.[36] The Cement Association hoped that, if guaranteed a certain level of exports, the Koreans would cooperate in "developing an orderly market."[37]

The majority share being given to the Koreans was a concession to the Japanese FTC, which said it would not allow the Cement Association to control over half of Korean cement imports into Japan. Nevertheless, even with this precondition the deal did not go through, because of FTC, and more importantly, MITI, disapproval. A MITI official's comment was that "for domestic producers to import when they've lost the ability to sell their own cement is doubtful from the point of view of structural adjustment.[38] MITI thus made very clear that the purpose of its industrial policy was to foster domestic

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[31] Interviews with officials from Korean Ministry of Commerce and Industry and ssangyong. 1988.

[32] 1985 Nenkan, pp. 30-31.

[33] Interview with Ssangyong official, 1988.

[34] Interview with Ssangyong official, 1988.

[35] Ibid.

[36] Nihon Keizai Shinbun, September 2,1986.

[37] Nihon Keizai Shinbun, September 1, 1986.

[38] Nihon Keizai Sangyô Shinbun, October 9, 1986.

manufacturing rather than to benefit domestic firms. By opposing the industry's plan, MITI indicated it was against firms taking advantage of MITI-sponsored cartels to raise prices, but then exploiting the market control mechanisms that MITI had helped foster over the years merely to generate profits from cheap imports. MITI's opposition to imports shows its policies supporting high cement prices were not aimed simply at filling cement company coffers, but at maintaining domestic cement manufacture.

Although the Cement Association was not allowed to broker Korean imports, it did convince Korean cement companies and their agents to cooperate with the domestic cartel by keeping their prices fairly high. Ishihara Mitsue, the Building Materials Department Head of Hanwa Kôgyô, the Steel Trading Company which handled Ssangyong's cement imports, stated clearly that his firm would moderate its price competition with Japanese firms:

> It is true that the sales price of imported cement is cheaper than that for domestic cement, but we will not set prices so as to provoke domestic manufacturers. It is a distribution company's duty (*shimei*) to make sure a situation does not develop where bad money drives out good money bv selling cheaply and driving down prices, and I intend to live up to this duty.

Though of course Ishihara's client had introduced some change into the market, Ishihara implied that collusion among sellers to avoid driving down prices was ethical and that his company would take the moral high road by following this principle. Such statements do not normally produce an outcry from consumers or an investigation by the FTC, but are part of the normal language of public discourse about the market in Japan.

The Construction Industry Cartel and Closed Government Procurement

As shown above, while it is the cement Industry trade association that has made and implemented the core policies which keep prices high and imports out, MITI has supported the trade ~association's policies, and guided trade association policies to fit MITI's strategic goals. In addition, MITI has provided strong leadership for the building and strengthening of the cement cartel.[39] However, politicians have also supported market governance, first of all, by padding construction industry profits. Construction companies use *dangô*, pre-bidding negotiations among themselves, to keep construction prices high. A government audit found that *dangô* was used in over 90% of projects funded by various national and local government agencies in 1992 and 1993, and as we saw above, this practice appears unchanged through 1996.[40] According to one construction firm director in 1993 it was standard for politicians to receive one percent of the value of a government contract as a kickback from construction companies. These kickbacks were also often awarded for private sector contracts.[41]

The LDP's support of large profits in the construction industry has in turn has made it easier for the construction industry to swallow the cement industrie's high prices. LDP dietmembers also intervened more directly in cement. Nearly half of the demand for cement is for public works and, as in construction, dietmembers often tell the Construction Ministry which cement company should get the contract for a

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[39] See Tilton, *Restrained Trade*.

[40] Nihon Keizai Shinbun, November 4, 1993, cited in the *Weekly Japan Digest*, November 8, 1993.

[41] Jun Mamiya, "The Iron Triangle and Coruption in the Construction Industry," Tokyo Business Today, Vol. 61, No. 11, (November 1993), pp. 10-13.

particular project in exchange for campaign donations. Public works projects have been completely off limits to imported because domestic cement purchases have provided the LDP with campaign contributions.[42]

Limited Restrictions on the Cement Cartel in the 1990S

In 1991 the FTC cracked down on the industry's price cartel and levied the heaviest fine ever for violation of the Anti-Monopoly Law. The FTC found that joint sales companies in Hokkaido and the Chûgoku region in Western Japan were holding back production and fixing prices. The FTC appears to have been prompted both by general U.S. pressure to get rid of structural protection and by US Commerce Department findings that Japanese firms were dumping cement in the U.S. market. Another factor was accusations that the industries cartel practices were increasing the costs of the new Kansai International Airports.[43]

One result of the FTC crackdown was to push the largest firms into mergers. In 1991 Mitsubishi Materials acquired Tôhoku Kaihatsu and in late 1993 Onoda and Chichibu Cement announced they would merge.[44] The FTC ruling, along with a fall in demand for cement due to economic recession, may have also contributed to the decline in domestic cement prices by 19% from 1990 to 1995. This price decline, however, was a continuation of a long-term fall in prices in yen terms, though it should be remembered that due to the rise the value of the yen Japanese cement prices have risen in international terms. The failing of the FTC ruling was that it overlooked the trade association's boycott of firms buying imported cement. As a result, the gap between domestic and import prices remained just as wide and imports actually dropped (See Figures I and 2). The direct cause of the drop in imports was increased demand in other Asian countries. But the continued price gap between imported and domestic cement suggests that the threat of boycotts by domestic cement firms continues to scare domestic builders from buying imports.

Another reason the cement industry was still protected from strong domestic competitive pressures and from imports was the powerful ready-mix concrete cartel, built up by MITI and the Cement Association in the 1970s. Ready-mix concrete companies are under no pressure to buy imports because, due to their joint sales operations, set up by MITI in the 1980s, they do not compete over prices. The only price competitors are outsiders to the industrial unions, who rely on imports.

The ready-mix cartel uses powerful informal governance to suppress competition from outsiders who import cheap cement. A March 1993 investigation by the FTC and the Saga prefectural police found that the Saga Ready-Mix Concrete Industrial Union used gangsters a number of times, beginning in 1984, to force outsiders to sell their operations to union members. Later in 1993 the Nagoya Ready-Mix Concrete Cooperative Union decided members would cut priccs by 11% to undercut outsiders' prices and drive them out of business. Although members complained this would push prices below production costs, the Ready-Mix Concrete companies were not left to fight off cheap imports on their own. The industrial union arranged to borrow money from financial institutions to compensate member firms for two-thirds of the price cut.[45] This revelation that Japanese financial institutions would loan a cartel money for the specific purpose of driving companies out of business that dared to bring in imports suggests that

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[42] Interview with employee of Japanese "tied agent" firm (tokuvaku ten), 1987.

[43] Japan Econom Almanac, 1992, p. 150.

[44] *Japan Economic Journal*, 1992, p. 150. *Nihon Keizai Shinbun*, November 12, 1993, cited in *The Weekly Japan Digest*, November 15, 1993.

[45] Asahi Shinbun, August 20, 1993.

cooperation among core Japanese economic institutions to informally protect the domestic cement market continued strong at least as late as 1993.

Throughout its coverage of Japanese cement imports, Japanese newspapers have reported the Japanese cement industry's line that the reason foreign cement has made so little headway is that it is of inferior quality. One of the Ready-Mix Concrete Federation's first moves against cement imports was to mount a campaign warning local government officials not to buy imported cement because of inferior quality. The Korean and Taiwanese cement industries countered that their cement was made with the latest Japanese technology and equipment and passed all of Japan's quality tests.[46] One Japanese journalist specializing in cement said that Japanese cement buyers were genuinely concerned that, even if imported cement passed all of the tests, it might not stand up for fifty or sixty years the way Japanese-made cement would.[47]

Nevertheless, a highly placed executive in one of Japan's largest cement companies said in an interview that there was no real difference in quality between Japanese and Korean cement, except for color.[48] The fact that Japanese cement makers were proposing as early as 1984 that they themselves broker Korean cement imports is further evidence that the Japanese cement industry was not really concerned with the quality of Korean cement. The Cement Association's proposal to broker and guarantee Korean cement implied that through scientific testing one could indeed verify quality and durability. Of course it still might be the case that, even if there was no genuine difference in quality between Japanese and imported cement, the cement industry had succeeded in convincing its buyers that there was one. If that were the case, however, Japanese buyers would have had no interest in imports and MITI and the Cement Association would have had no need to harass cement importers.

The Japanese Steel Market

With MITI's support, the steel industry grew rapidly in the postwar period and by the 1970s became the world's most efficient producer.[49] As in other heavy industries, however, demand dropped in the early 1980s, both because the economy began growing more slowly and because industries learned to use materials more efficiently. Not only did the steel industry face stagnant domestic demand, it lost competitive advantage to developing nations such as Korea, Taiwan, South Africa, and Brazil.

The steel cartel is not as elaborate or visible as the cement cartel, yet is at least as strong and its existence is an open secret. In 1996 1 asked a marketing executive in a large Japanese steel firm who had been posted by his firm for several years to the U.S., about how competition in the Japanese steel market compared with that in the U.S. He replied, "Oh, it's totally different. In the US you have free competition. Here it's like we're violating the Antimonopoly Law everyday. The steel companies get together and talk

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[46] Nihon Keizai Shinbun, August 22, 1987; interview with Ssangyong official, 1988.

[47] Interview, 1988.

[48] Interview with cement company official, 1988.

[49] Ira C. Magaziner and Thonas M. Hout, Japanese Industrial Policy, Policy Papers in International affairs. Institute of International Studies, (Berkeley, California: Univerisity of California, 1981).

about what the price ought to be."[50] A retired steel executive from one of the big insider steel firms told me the Japanese steel industry has an "unseen cartel" (*miezaru karuteru*).[51]

A distinctive feature of the Japanese steel market is that approximately half of total sales, or about two-thirds of sales by the large blast furnace steel markers, are at "big buyer" prices. These apply to sales between the steel industry and their long-term customers, are set oligopolistically and are high compared to Japan's export, import and domestic market, or "dealer" price (See Figure 3). As can be seen in Figure 4, Japan cut its exports significantly due to its own uncompetitive costs, and imports have made some inroads. Yet, despite the large price differential between Japanese and foreign prices, imported ordinary grade steel rose to a peak of only 9 percent of the domestic market in 1991 and dropped back to 8 percent by 1995 (See Figure 4). Japan continued to export 20 percent of its production in 1995, making it a net exporter of 12 percent of its production.

The steel industry is dominated by five blast furnance makers, who produce 68 percent of Japan's crud steel. These blast furnace makers produce steel from iron ore through a continuous casting process, while electronic furnace mini-mills produce 32 percent of Japan's steel by melting down scrap.[52] These Integrated steel producers make a number of products that electric furnace minimills cannot and thus are somewhat buffered against competition from the the minimills, though the minimills recently have begun encroaching on their-territory by producing such items as H-bar steel. The blast furnace producers are the oligopolists of the market. They sell most of their steel to long-standing customers at long-term contract prices, though they sell some steel on the domestic spot market as well at "dealer" or "market" prices. Minimills see most of their steel at dealer prices.

The long-term contract market in Japan is distinct from long-term contract markets for commodities in the West in that it does not involve individual companies taking a gamble by locking in a price for a specific period, but rather reflects permanent commitments by buyers to domestic producers and their acceptance of cost-based prices. As we saw in Figure 3, the big buyer price was much higher than either the dealer, export or import price. It was 19 percent above the export price from 1981 to 1984 and 46 percent above the export price from 1985-1995. By 1995 it was still 35 percent above the export price. The big buyer price was 15 percent above the domestic dealer price from 1981 to 1984, and 35 percent above it from 1985 to 1995. By 1995 it was 53 percent higher than the dealer price. The domestic big buyer price was also 31 percent above the import price from 1981 to 1984 and 57 percent above it from 1985 to 1991. The comparison between the big buyer and import price may exaggerate the difference since the import price listed here is only for the most common grade of steel plate and does not include the delivery charges included in the big buyer prices. However, even if the gap between big buyer prices and import or dealer price were fully justified by quality or delivery charges in the early 1980s, the increase in

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[50] Personal interview, Tokyo, September 1996.

[51] Personal interview, Tokyo, March 1997.

[52] Tekkô Shinbun Sha (Steel Newspaper Company), Tekkô Nenkan (Steel Annual) (Tokyo: Tekkô Shinbun Sha, 1993).

Figure 3: Big Buyer Steel Prices/Export, Import and Dealer Prices

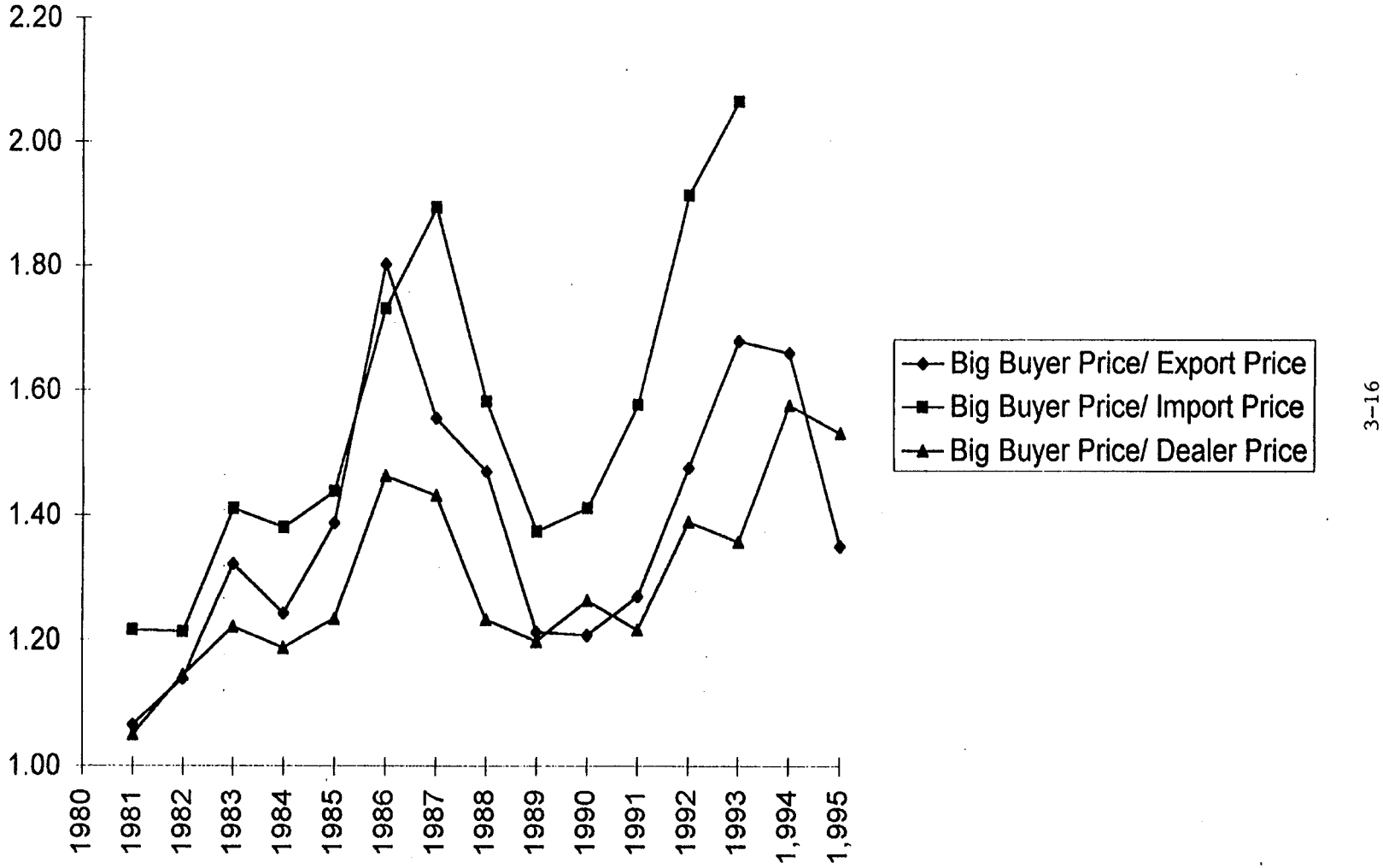
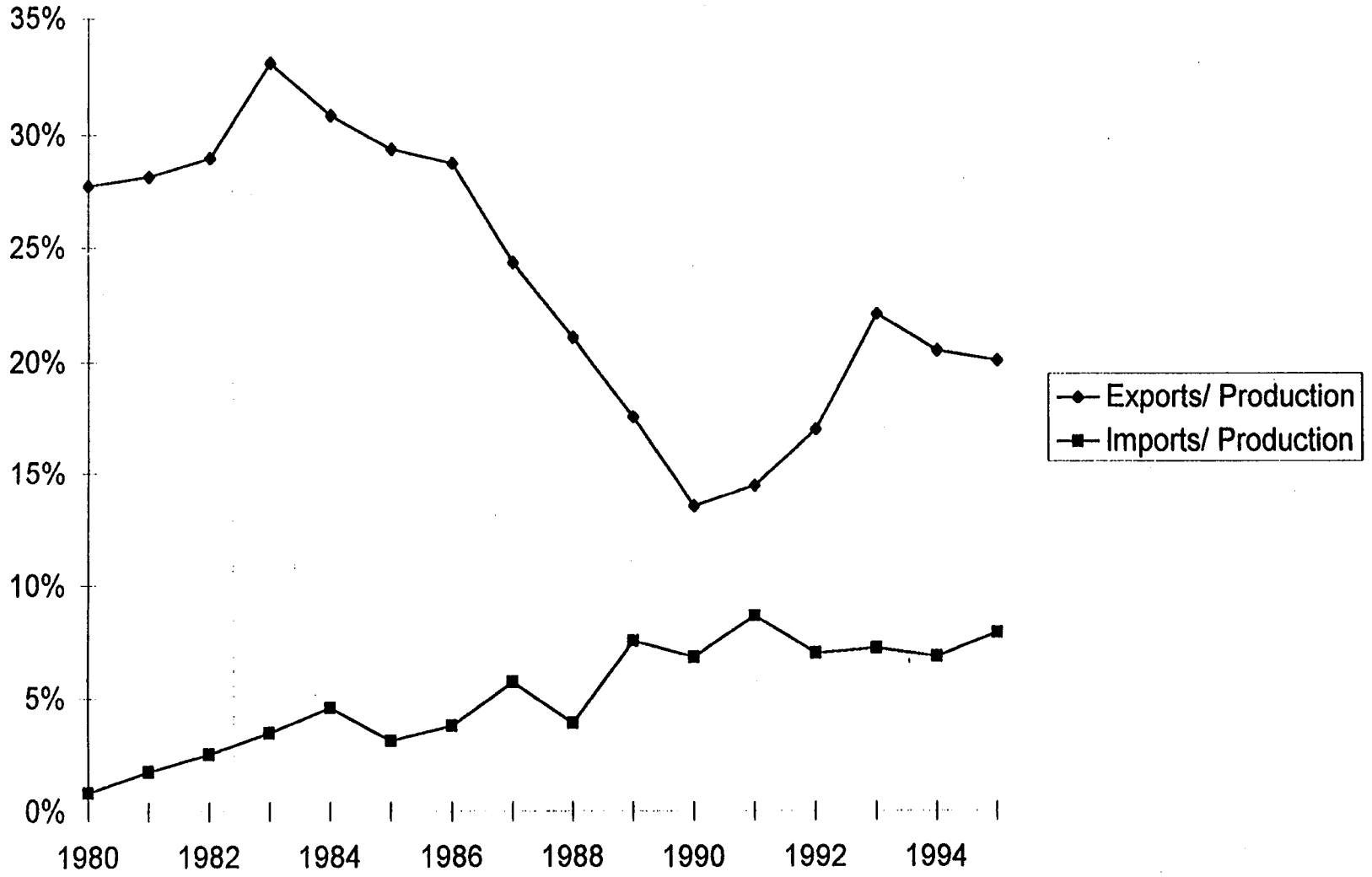


Figure 4: Ratio of Steel Exports and Imports to Domestic Production



the gap since 1985 shows that big buyers tolerated a large increase in the price of domestic steel relative to domestic market prices or import prices. And newspaper reports confirm that there are in fact large real price differentials between imported and big buyer steel prices.[53]

The reason steel makers are able to keep their prices so high was in part because of the industry's strong price cartel. It is universally said that blast furnace sector of the steel industry is very cohesive, both in the sense that firms do not compete with one another over prices and that they speak with a single voice with the bureaucracy, banks, and other firms.[54] Japanese stee firms' strong discipline keeps them from undercutting one another in the domestic market at the same time they sell cheaply overseas. And the power this cohesion gives them vis-a-vis their buyers helps keep them from cutting prices in the fare of cheap imports. As in the other basic materials industries, the industry used govenment led capacity cutting cartels in the 1980s to reduce capacity and support prices.[55]

Big buyer sales take place directly between steel maker and user, with trading companies as intermediaries. Prices do not float, but are negotiated on an industry-to-industry basis once a year or less often if markets are relatively stable. Japan's basic steel price is negotiated between the two price leaders, Nippon Steel and Toyota. Although steel companies are careful not to be too quick to copy the Nippon Steel price for fear of being accused of joint sales increases by the FTC, in fact they follow Nippon Steel's lead.[56] Steel companies are disciplined enough in their cartel that they all charge exactly same price.[57] The blast furnace makers do make as much as a third of their sales at market prices, but not normally to their big buyers.[58]

Materials buyers for one of Japan's largest auto companies say that there is a single industry-wide, cost-based price for steel.[59] Once the auto industry establishes the base price, other user industries follow their lead with minor adjustments depending on the specific prices.[60] Although the steel makers' costs are the basic determinant of the price, the financial situation of the users is also taken into account. Because of this, for instance, the hard-pressed shipbuilding industry receives discounts on its steel. Negotiations to determine the arnount of this discount are carried out on an industry-to-industry basis. When I asked one of the shipbuilders about price leadership he corrected me and told that Mitsubishi Heavy Industy and Nippon Steel acted as "representatives" of the two industries in negotiating the price of Steel.[61] This is an important difference of meaning. Whereas the term "price leadership" suggests impersonal and independent action by the most powerful firms, "representation" suggests that the firms act in cognizance of their responsibility as governing agents of the industry as a whole.

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[53] Nikkei Sangyô Shinbun, April 6, 1987; Nihon Keizai Shinbun, April 22, 1994.

[54] Interviews with retired steel executive, shipbuilding and electronics makers, Tokyo, 1994; Itami, Naze Nihon ga tachiokureta no ka, 1992. A retired executive from one of the large integrated steel producers told me, that none of integrated steel producers cheat on the cartel. Personal interview, Tokyo, March 1997.

[55] The Economist, August 29, 1987, p. 59; Tsûsanshô Seisaku Kyoku (MITI Policy Bureau), Kôzô tenkan enkatsuka hô no Kaisetsu (Commentary on the Law to Facilitate Structural Change), p. 32-33.

[56] Interview, retired steel executive, Tokyo, 1994.

[57] Interview, shipbuilding executive, Tokyo, 1994. Asahi Shinbun, 22, 1986; Japan Economic almanac, 1992, p. 142.

[58] Interview retired steel executive, Tokyo, 1994.

[59] Interview, February 1992.

[60] Interview, electronics executive, Tokyo, 1994.

[61] Interview, Tokyo, 1994.

Nationalism and Steel User Loyalty

We've seen in the case of cement that Japanese construction companies, because of their own strong cartels, can afford to pay high prices for the sake of security of supply, though in fact, many construction companies used market-price or imported steel. But why did Japan's major export industries, such as shipbuilding, electronics and autos, competing with producers all over the world, continue to pay high prices for Japanese steel? It is hard to twnk of an industrv harder pressed to cut costs than shipbuilding, an industry dependent on exports for 60 percent of its sales, and competing with Korea, whose costs are as much as 25 percent below Japan's. The price differential to ship builders between Korean and Japanese steel was roughly unchanged from 1987 to 1994, with Japanese fimis paying 40 percent more for steel than their Korean competitors. In 1994 the cost of Japanese steel alone put Japanese shipbuilders at an eight million dollar cost disadvantace per oil tanker.[62]

Interviews with steel users made clear that the reason steel users pay high prices for Japanese steel and resist switching to imports is partly that they are committed to commitments to firms but also that they choose to honor a larger commitment to support the entire domestic steel industry. Prices, as we have seen, are supported by the steel industry cartel, but they are also supported by buyers' willingness to pay what it costs to keep the domestic steel industry going.

It does not appear that the price gap between domestic and international prices is due to quality differences between Japanese and foreign steel. Fine gradations of quality are not important for the ordinary grade steel used in construction, which accounts for half of all Japanese steel dermand.[63] One Japanese scholar with whom I spoke and who is very familiar with the shipbuilding industry was vehement in saying that quality was decisive for explaining Japanese shipbuilders' purchases of expensive domestic steel. He argued that it was only in 1993 and 1994 that import steel prices had genuinely become attractive to shipbuilders, given the lower quality, lack of fine size gradations, and less convenient delivery of foreign steel.[64] However, 75 percent of the steel shipbuilders use is thick plate, a basically standardized commodity. Two shipbuilders I interviewed said there was no quality problem with ordinary grade Korean steel. One of them pointed out that the steel from Korea's Pohang steel plant was essentially the same as Japanese steel since it was made with equipment supplied by Mitsubishi Heavy Industries.[65] It is true that Japanese steel makers produced steel plate in some four hundred different sizes for their various customers, and that the shipbuilders valued this. By 1994, however, the shipbuilders were begging the steel companies to standardize these sizes but to give them some price relief in return. Though the large number of sizes was supposed to simplify shipbuilding, some argued that fewer sizes would actually increase shipbuilders' efficiency and save them more money in building costs than the steel companies would save by standardizing sizes.[66] If this is true, it suggests that the proliferation of sizes in the steel market has acted more as a barrier to imports than as a genuine contribution to production efficiency.

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[62] Peter Marcus, April 5, 1991, p. 223; Nihon Keizai Shinbun, August 6, 1994; Nikkei Sangyô Shinbun, April 6, 1987.

[63] Interview, retired steel executive, Tokyo, 1994.

[64] Conservation, Tokyo, 1994.

[65] Interviews with two executives of shipbuilding companies (one of them retired), Tokyo, 1994.

[66] Nihon Keizai Shinbun, August 6, 1994.

Auto manufacturers had a greater reason to prefer Japanese steel since forty percent of their steel was surface treated, a product category in which Japanese quality was said to be superior. However, the other sixty percent is hot and cold rolled steel plate, products which most in the auto industry say Korea produces perfectly adequately. And in recent years car makers have questioned whether they have exaggerated their needs for high quality steel and have asked steel makers to shift to cheaper grades.[67]

I asked one shipbuilder, whom one would expect to represent the epitome of internationalized Japanese business, having spent many years selling ships in the West, why his firm didn't buy cheaper Korean steel given the competitive pressures from Korean shipbuilding companies. Although he acknowledged that imports, were of sufficient quality to provide most of the ordinary quality steel the industry needed, he said that it was important to have a domestic industry for the sake of security of supply. He went on to say, "People often say 'Steel is the state' (tetsu wa kokka nari), or 'Steel is the rice of industry.' It's true. If steel gets weak all of industry will get weak. If we switch to imported steel, the country will stop developing."[68] That is, the shipbuilder believes that his company should suppose steel because it is important for the economy as a whole. He also acknowledged that the shipbuilding industry benefits specifically by having a domestic steel industry that has provided it with good quality steel and convenient delivery. In return for these long years of service, he said his firm owed a great moral debt (onkei) to the steel industry.

An electronics maker also argued individual companies should buy domestic steel in order to preserve key industrial linkages in the domestic economy. "[AIthough we might buy tiny amounts of imported steel and might conceivably even buy 10 percent foreign steel], it's hard to imagine buying 30-50 percent of our steel from overseas. Buying our supplies overseas would be a last stage. If we and other big companies buy our steel overseas, then the steel companies would go out of business and we would lose our customers. Our company would have to leave Japan too. And then we wouldn't be able to use Japanese trading practices anymore."[69] This buyer clearly conceives his relational contract with the Japanese steel industry as a whole, and not with particular firms. Failing to support the Japanese steel industry would mean the loss of the vital linkages that support his company. Having to leave Japan would be a disaster because it would mean destroying the system of long-term relations that Japanese firms have thrived on.

Users also said it would be a mistake to choose supply sources based on price. The shipbuilder just cited said, "Japanese steel is number one in the world. Its only problem is price. There's no reason to destroy the industry."[70] And the electronics maker said that even if market prices for steel are lower in the short term, over the long term the big buyer's price is a better deal because it buys security of supply.[71]

Steel Industry ~Refusal-to-Deal Threats

In addition to users' interest in security of supply and overall national economic vitality, they also avoid imports because they fear retaliation from steel makers. Threats of industry-wide boycotts are

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[67] Nihon Keizai Shinbun, April 21, 1994.

[68] Interview, shipbuilding executive, Tokyo, 1994.

[69] Interview, Tokyo, 1994.

[70] Ibid.

[71] Interview, Tokyo, 1994.

strongly suggested by a *Nikkei Sangyô Shinbun* article on Mitsubishi Heavy Industries' (MHI) first purchases of imported steel from Pohang Steel in Korea. Based on an interview with an official of the Materials Division of MHI, the article reports that the company had wanted to buy Korean sheet steel for some time because Japanese steel, at 80,000 yen per ton, cost 60 percent more than Korean steel. Although MHI was concerned that Korean steel might be somewhat inferior to Japanese steel and delivery less convenient, the quality of the Pohang steel was "quite sufficient" for all but the most exacting uses. However, the article reports that "Mitsubishi Heavy Industries has been unable to [buy Korean steel] because it has been concerned with the fact that [Japanese] steel manufacturers were both its suppliers and among its principal customers."[72] That is, MHI feared that buying Korean steel would endanger both its sales of steel making machinery and its supplies of steel from the Japanese steel industry. It is crucial to note that MHI was not simply concerned with a relational contract with a specific individual firm, but was afraid that it might be shut out of dealings with the entire steel industry.

The article quoted a Nippon Steel official was saying, "There is no mistake that [MHI] is importing steel in Nagasaki.... What we'd like to tell them is, Fine. In return we will not supply you with any of the high quality steel that Korea can't produce.[73] Thus, Japan's largest steel manufacturer thinks of its sales relationships as a broad, all-encompassing commitment rather than simply an agreement to buy specific products, and considers a customer's decision to switch to another buyer for one product a betrayal which should be retaliated against by withholding other products it alone can provide. And Mitsubis Heavy Industries, the steel buyer and one of Japan's largest manufacturing firms, also seems to think in terms of inter-industry relational contracts which are enforceable with refusals to deal.

However, much as Nippon Steel would have liked to use a-refusal-to-deal threat to keep MHI from buying Korean steel, it demurred because it feared that making MHI's imports an issue might lead other buyers to push harder for price cuts and possibly desert domestic suppliers altogether in favor of imports. Therefore the company officially treated MHI's imports as a matter of little importance, both because the purchase was small in volume and because MHI had been asked to buy the steel by Pohang under special circumstances in exchange for Pohang's purchase of steel making machinery from MIH.[74]

Mitsubishi never increased the percentage of imports over 10 percent and Japan's other shipbuilders have remained completely loyal to the domestic industry. In interviews, two shipbuilders and a retired steel executive confirmed that the threat of retaliation was an important factor deterring shipbuilder plans to buy imports. In describing the relationship between steel and shipbuilding companies no one used such strong terms as "retaliation," but rather used language of "muutual obligation" and "'power" on the part of steel companies to make sure shipbuilders don't abandon them. This power is also used to make sure buyers don't try to play domestic steel companies off against another to get lower prices.

For most of the major shipbuilders, such as Mitsubishi Heavy Industries, Ishikawajima Harima, or Sumitomo Heavy Industries, shipbuilding is only a small part of their larger operations in industrial machine production. The retaliatory power of the steel companies vis-á-vis these firms is to cut off purchases of new manufacturing equipment or to tell the shipping companies which handle their raw materials imports and steel exports to stop buying ships from particular firms. As one shipbuilder put it, "The shipbuilding industry can't do much about getting the steel industry to lower its prices. If we increase purchases from one steel company to try to get lower prices, then the steel company whose purchases were

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[72] Nikkei Sangyô Shinbun, April 6, 1987.

[73] Ibid.

[74] Ibid.

cut wouldn't have its shipping company buy ships from our firm."[75] A retired steel executive also acknowledged the "power" the steel industry had to oblige shipbuilders to reject imports, and added that steel companies had some similar power over construction companies, whose services they used when they built new production facilities. He noted, however, that the industry's recent stagnation had weakened its ability to coerce these industries.[76]

The threat of retaliation also appears to affect the small intermediary shearing and coil center firms that cut and process steel, as well as the large trading firms that buy and sell steel. The *Nihon Keizai Shinbun* reported that "[i]t is common knowledge that the domestic steel makers use tacit pressure to keep out imports and support the price structure. The ... shearing and coil center firms haven't spoken openly about using imported steel because of fear of reaction from the blast steel makers. The big trading firms haven't handled imports openly."[77] A retired executive from a large Japanese steel firm told me that the coil centers are pressured not to buy from Korea, and that the coil companies worry is that they will be denied supplies of high quality steel from Japanese producers if they buy cheap steel from Korea. He said that the coil companies get around it by buying through smll intermediary trading companies.[78]

An electronics maker I spoke with said that his company's fear of the reaction of steel companies to imports was much less in 1994 than it had been twenty years ago. He said that although his firm was reluctant to buy any imported steel itself, it did arrange for some of its subcontractors to buy imported steel. Although steel companies would have protested before, now they accept small subcontractors' buying imports. And although his large electronics firm does not actually buy any imported steel directly, he thought it could if it gave domestic steel makers advance warning and gave them a chance to match import prices. He said that the threat of buying imports can persuade steel makers to provide discounts on the portion of steel the user might have bought from overseas. In this way, although users buy the vast majority of their steel at standard big buyer prices, they may get discounts on five percent or so of the steel they tell steel companies they are tempted to buy from abroad.[79]

Iketani Masanari, president of Tokyo Steel, the largest of the mini-mills attempting to compete with the steel oligopoly, laughed at the suggestion that the FTC played any role in preventing the steelmakers from bullying their buyers and said that, "To sell your products, you have to find some person at each company who is not afraid of retaliation [from the big steel companies.]"[80] Iketani told me in November 1995 that nothing had changed. He added that overseas the Japanese steel firms had actually retaliated against those going around the cartel. According to Iketani, Japanese five big steel companies have handled their exports as a cartel. In China for instance, the five companies negotiated a single price with Min Metal, the state trading company handling most of China's steel imports, and allocated sales among both among themselves and among the Japanese trading companies which served as intermediaries. In 1993 the Mitsubishi Corporation, on of the trading companies, offered Tokyo Steel a contract to sell 20,000 tons of hot rolled coil to Min Metal. Though Tokyo Steel had been selling bar steel in China. its hot coil sales

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[75] Interview, shipbuilding executive, Tokyo, 1994.

[76] Interview, retired steel executive, Tokyo, 1994.

[77] Nihon Keizai Shinbun, May 10, 1994.

[78] Personal interview, March 1997.

[79] Interview, Tokyo, 1994.

[80] James Sterngold, "Elusive Price Cuts Intrigue Japan," *New York Times*, November 9, 1994, pp. C1, C11.

were seen as a threat to the cartel. The five major steel companies retaliated against the Mitsubishi Corporation by excluding it from rail sales to China. Joint sales negotiations by the five companies with Min Metal were officially stopped as of 1995, but Iketani thinks that in fact they still continue.[81]

In addition to pressuring Japanese buyers not to buy foreign steel, as in the cement case, Japanese producers also appear to have negotiated directly with Korean producers not to export to Japan. One of my retired steel industry informants told me, "I think there was an agreement [with Nippon Steel] that POSCO wouldn't export to Japan. Inayama [of Nippon Steel] was a close friend with Park of POSCO." My informant commented that, in the United States such an agreement would constitute an illegal dividing up of markets, but that in Japan "policies are looser."[82]

Cushions for Downstream Industry

Finally, buyers are able to pay the high prices for expensive domestic steel in part because of the weakness of domestic price competition for downstream goods. As noted in the first chapter electronics firms still benefit from the lack of a large network of discount stores. A 1991 survey found that the lowest available price (typically at discount stores) for electronics and optical goods was 3.3 percent higher in Japan than in the US. However, while discount prices in the two countries are similar, restrictions on building discount stores have limited consumer access to discount sales and while the Large Store Law has been relaxed somewhat it still impedes the building of the Wal-Mart style mass retailer that has produced very cheap prices in the U.S. Though Japan in mid-1994 was widely touted to be in the midst of a retail revolution, an executive at a large electronics maker told me that discount sales were still only 10 percent of total sales. He said, "There is not much discount selling yet in Japan. Japanese consumer can't buy at cheap prices like in the US. In the US you have to sell at cheap prices." Thus to this electronics maker's understanding there is little price competition in the Japanese electronics market compared to the U.S. market.[83]

In the U.S.-Japan price survey, electronics, along with autos is the sector in which Japanese prices were closest to U.S. prices. As the report itself points out, its survey method does not reveal actual average prices, which are likely lower in the U.S. because of the greater freedom there to open discount stores. However, if even electronics manufacturers feel Japan lacks a truly price competitive market, then the protection of manufacturers from price competition in other markets, such as auto parts and capital goods, is even more generous (See Figure 6-9). The electronics maker who said there was little discount pricing of electronics goods in Japan pointed out that the cohesion of the electronics and electrical appliance industries was weak compared to that of the powerful heavy electric machinery industry. The three firms in this industry, Hitachi, Mitsubishi, and Toshiba, have "oligopolistic power" and speak with their customers, the

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[81] Personal interview, November 1995.

[82] Personal interview with retired executive of large Japanese integrated steel firm, March 1997. For a discussion of broader international market dividing strategies, see Thomas R. Howell, William A. Noellert, Jesse G. Kreier, and Alan Wm. Wolff, *Steel and the State: Government Intervention and Steel's Structural Crisis*, Economic Competition Among Nations Series (Boulder and London: Westview Press, 1988.

[83] Years after the yen's sharp rise in 1986, weak price competition among domestic electronics makers anables them to maintain high prices at home while selling products more cheaply abroad, promoting may Japanese to continue to go overseas to by Japanese products. Naoko Yoshida, "Makers Fail to Explain Price Differences in Electronic Pirces," *Tokyo Business Today*, No. 60 (January/February 1993)

electric power companies, as a group. [84] In 1994 MITI admitted that it had been protecting this industry from imports with its performance standards and that, because of U.S. pressure, it would gradually lift its restrictions by the year 2000.[85] Thus, in this case, downstream industry enjoyed oligopolistic power in domestic price negotiations and informal trade protection by MITI and thus was under no pressure to switch to cheap imported steel supplies.

Although the shipbuilding industry relies on exports for sixty percent of its sales, the insulation of the domestic market from imports appears to help it pay the high price of domestic steel. After the shipbuilder cited above told me his industry could not buy imported steel because it would be bad for the country as a whole, I asked him why his firm did not just abandon the Japanese steel industry, buy Korean steel, let the other Japanese shipbuilders worry about supporting the steel industry, and undercut them on price? His answer was straightforward: "If Japanese companies wanted cheaper ships, they could already buy them from Korea." It is true that although Korean ships are much cheaper than Japanese ships and although Korea conunands 35 percent of the world market, Korea has not sold a single ship to Japan in recent years.[86] The weakness of price competition in downstream markets is an important reason Japanese manufacturers can pay high domestic prices for steel.

Closed Government Procurement As A Barrier to Trade

Closed government procurement is also important in restricting steel import access to the domestic market. The Construction Ministry provides regulatory barriers to keep outsiders to the steel cartel out of the construction market, which absorbs half the nation's steel. Although in principle public works projects are supposed to be open to all, the Construction Ministry indirectly fixes prices and designates suppliers. Groups affiliated with the Construction Ministry publish two books that list prices for construction materials and lists companies that are allowed to supply them.[87] Tokyo Steel, a Japanese minimill producer that does not belong to the cartel, complains that this informal rule about construction supply sources restricts government steel purchases to firms that belong to the cartel, even though Tokyo Steel sells more cheaply than cartel members. For example, Tokyo Steel has a MITI license to make sheet piles, interlocking pillars used to support building foundations, and sells them for 55,000 yen a ton, far below the 87,000 yen official price. But the company is kept out of the market for government projects.[88] A retired steel executives from one of the large cartel insider firms confirmed Iketani's story on sheet piles and on steel products more generally: "Government construction projects will never buy from the minimills, even though they can supply the products."[89] Iketani Masanari, president of Tokyo Steel, says that this discrimination carries over into the private sector as well. Since sheet piles are often pulled up and reused, they are commonly leased. But because the leasing companies are punished in the private sector if they use cartel outsi'ders' sheet piles in the public sector, they stick to cartel insiders in the private sector as well. Some small leasing companies and trading companies will use Tokyo Steel sheet piles, but the large

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[84] Interview, electronics firm executive, 1994.

[85] *Nihon Keizai Shinbun,* August 8, 1994.

[86] Nihon Kanzei Kyôkai (Japan Tariff Association), Nihon bôeki geppyô, December issues, 1990-1993.

[87] The books are *Kensetsu bukka*, put out the Kensetsu Bukka Chôsa Kai, and *Sekisan Shiryô*, put out by the keizai Chôsa Kai.

[88] Personal interview, with Iketani Masanari, Tokyo, November 1995.

[89] Personal interview, retired steel company executive, March 1997.

companies avoid them for fear of retribution.[90] The retired steel company executive pointed out that the private leasing companies that handle the sheet piles have capital from the trading companies, who wouldn't want to disturb their relationships with steel companies by handling goods from outsiders to the cartel. The reason that the Construction Ministry is uninterested in getting cheaper prices for its construction projects, according to the retired executive, is that it wants the construction companies to make large profits so that it will continue to give retired Construction Ministry officials jobs as *amakudari*, both in the firms and in special public-private corporations (tokushû hôjin).[91]

MITI Guidance of the Steel Cartel

While the Construction Ministry block sales of steel from outside the domestic steel cartel, MITI guides and protects the cartel. According to the retired steel executive, "MITI does administrative guidance of how much steel should be produced by the industry, . . . MITI asks each steel company to submit a projection of production. If a company wants to expand production, it has to give MITI a reason to do so. This still goes on." He argues that one of the reasons the industry welcomes MITI guidance is that it protects it from the FTC: "One of the principles in Japanese government is that one agency can't get involved in another agency's affairs. What the Steel Federation does is get MITI involved so that it can avoid an investigation by the FTC."[92] Formly, of course, MITI involvement does not guarantee protection from FTC prosecution, as was established under the oil cartel case of the 1970s, but in practice MITI appears to still be able to give the cartel legitimacy.[93] As evidence of the steel cartel's effectiveness, he points to recent production figures, which do not look like the result of market forces. In 1995 Kawasaki and Sumitomo both produced the exact same amount of steel, 10.44 million tons, while in 1996 they differed only slightly, at 9.89 and 9.69 million tons respectively. Figures for other producers appear similarly carefully calibrated.[94] While supporting the cartel with pressure to help cartel members cooperate, MITI also monitors the cartel to prevent price gouging and excessive withholding of production. For instance, when steel makers held back production of H-steel and bar steel in 1987 in order to force prices up, MITI asked the industry to increase production.[95] As in cement, MITI permits the cartel with the understanding it must contribute to the provision of adequate domestic supplies at what MITI considers reasonable prices.

Conclusion

The steel and cement cases show us that informal cartels and group boycotts keep Japanese prices high imports out, and that they are backed up by the Japanese government. As was pointed out at the outset, the basic materials industries enjoy conditions that make it especially easy to organize cartels, and we should not expect that such cartels of exactly this pattern characterize most of the economy. However, the tolerance of the FTC, and the active support of the LDP, MITI, the Construction Ministry, and the

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[90] Personal interview, with Iketani Masanari, Tokyo, November 1995.

[91] Personal interview, retired steel company executive, March 1997.

[92] Person interview, retired steel company executive, March 1997.

[93] Frank K. Upham, Law and Social Change in Postwar Japan (Cambridge, Massachusetts: Harvard University Press, 1987).

[94] *Tekkô Shimbun*, March 12, 1997.

[95] Japan Economic Almanac, 1988, p. 183.

Customs Bureau suggest that numerous branches of the state are eager to support high prices and trade protection for domestic industries when they can. Similar issues of trade association and ministerial cooperation to exclude outsiders are also problems in other markets such as film and pharmaceuticals.[96] Japan's high prices across the board suggest that various forms of informal market governance may protect large parts of the economy. This study also emphasizes the links between industries and the spillover effects that weak competition in one economic sector can have on another. While we tend not to think of construction as a key sector for tradable manufactured goods, cartels in the construction sector provide critical support for Informal trade protection for the Japanese steel industry.

The study also helps explain the durability of informal market protection in Japan. While American scholars like to think that cartels are fragile because of the tendency of individual firms to cheat on them, interviews with buyers of expensive goods from the cartels show considerable support for high prices and import protection because of nationalist beliefs that Japan must retain domestic protection of key industries. Sung Joon Roh argues that managers of Japanese corporations are able to indulge their mercantilist impulses because widespread cross-shareholding of Japanese firms relieves them of strong pressures to produce high profits.[97]

An additional issue that comes to light in this study which is of particular concern in evaluating trade liberalization within APEC is the troubling problem of Japanese and Korean trade associations and firms negotiating over limiting Korean imports to Japan. This would seem to have the effect of creating high price sanctuaries in Asia and diverting exports towards third markets, such as the United States.

While formal import protection of weakened industries, such as cars, steel and textiles, through quotas and the Trigger Price Mcchanism has been much studied and much bewailed, Amcrican formal protection has been much less effective than informal Japanese protection of its own weak industries. Japan has not given the kind of trade opportunities the United States has long provided in markets such as steel, cement, or chemicals to developing nations or for that matter to the U.S. now a cheaper producer of all these goods than Japan. An American recently contacted me for advice on exporting cement to Japan. I told him I thought there were enormous profits to be made, but that he would have to go through an extraordinarily difficult political battle to get access to the Japanese market.

Earlier this year I traveled around various cities in Japan, sponsored by the American Centers, giving frank talks to business groups on the subject matter covered in this paper. I spoke in Japanese and had lively question and answer sessions after the talks. Japanese businesspersons almost universally acknowledged the accuracy of my account of Japanese cartels and informal trade protection, but tended to throw up their hands and say, "What can we do? It's our culture and we can't tolerate the kind of economic upheavals Americans can. You have your way of doing things and we have our way." The problem is that Japan's informal regulation of domestic prices and international trade represents a betrayal of its international trade agreements, and supporters of informal regulation have no good suggestions for how Japan can live up to these agreements.

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[96] *Nikkei Weekly*, July 11, 1995.

[97] Sung Joon Roh, “Agency Capitalism: The Logic of Managed Competition in Japan,” MITI Doctoral Dissertation, August 1996.

Japanese Corporate Activities in Asia: Implications for U.S.-Japan Relations

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Abstract

In Japan, certain business practices that are employed by the keiretsu to maintain stability and prices have the effect of raising the costs and risks of doing business for outsiders, and of making it difficult to access the market. A central question about Japanese investments abroad is whether similar organizational structures and practices of keiretsu are in evidence in markets with extensive Japanese investments. If this is the case, what are the likely implications for foreign market access as a result of such activities? There is a possibility that the keiretsu integrated across borders and operating in downstream distribution channels could become exclusive or closed to non-keiretsu companies. In both cases, from an international trade policy viewpoint, this could constitute a "Transplanted Trade Barrier" (TTB) or measures, policies or practices which, when transferred from one economy to another may have the impact of impeding imports or market access. This paper provides additional insight into the organization and functions of keiretsu in selected countries, particularly with regard to their implications for market access. Based on a survey of Japanese companies in three Asian economies, a majority of Japanese affiliated companies have ties to the keiretsu in Japan. The companies include manufacturers, suppliers, retailers, banks and trading companies which are involved in the production and distribution of both capital and consumer goods. The "keiretsufication" of certain industries may affect market opportunities in Asia for non-keiretsu suppliers and distributors, including both domestic and foreign firms.

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JAPANESE CORPORATE ACTIVITIES IN ASIA: IMPLICATIONS FOR U.S.-JAPAN RELATIONS

Introduction

There are complex and overlapping patterns of trade and investment in Asia, much of which is associated with Japanese foreign direct investment (FDI). Numerous studies have been conducted on the role of Japan's FDI, trade and foreign aid as a contributor to regional economic growth and integration. Recently more attention has been given to Japanese corporate activities in Asia.[1] According to several studies, Japanese investments are promoting intra-industry trade and vertical integration in Asia, particularly in the manufacturing sector. Japanese firms have integrated their Asian affiliates on a regional scale, invested in complementary production or assembly operations in different countries, and many have established their regional headquarters in Singapore. Japanese firms' global production and trading activities are supported by networks of suppliers in Asia. These networks, especially prominent in electronics and auto industries, are often intended to serve the regional markets as well as export bases and "are hierarchically organized, with much of the decision-making authority, technological capabilities, and sourcing remaining in Tokyo."[2]

A central question about the movement of Japan's production networks[3] offshore is whether the organizational structures and practices of Japanese corporate groupings (keiretsu), are in evidence in those Asian markets with extensive Japanese investments. If so, what are the likely economic implications, particularly regarding market access? and for U.S.-Japan relations? While previous research has largely focused on upstream manufacturer-supplier relations, there is also a possibility that the keiretsu, integrated across borders and operating in downstream distribution channels, could become exclusive or closed to non-keiretsu companies. If so, from an international trade policy viewpoint, this could constitute a "transplanted trade barrier" or TTB. A TTB is a measure, policy or practice which, when transferred from one economy to another, singularly or in combination with others, may have the impact of impeding imports or market access to outside firms.[4]

There are divergent views among economists, industrial organization and management specialists, antitrust or legal specialists, and international trade analysts about the implications of Japanese corporate organization and operations (including keiretsu) for performance and market access.[5] The debate among

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[1] See Wendy Dobson, *Japan in East Asia* (Singapore: Institute of Southeast Asian Studies, 1993) and Richard Doner, "Japan in East Asia: Institutions and Regional Leadership," Workshop on Japan in Asia, Cornell University, March 31-April 2, 1995.

[2] Eileen M. Doherty, with Dieter Ernst, Michael Borrus, Stephen S. Cohen, and John Zysman, "Production Networks in Asia: International Production Networks in a Rapidly Changing World" (Berkeley University of California at Berkeley: Berkeley Roundtable on the International Economy, September 1994).

[3] Doherty has defined networks as "the organization across borders of research and development activities; product definition and design manufacturing; distribution; and service activities".

[4] This paper focuses on the structures and practices associated with keiretsu. However, TTBs could also include discrete items such as standards or design specifications or packages of assistance such as financial incentives, administrative guidance and other policies which support firms' overseas activities.

[5] Paul Sheard, "The Economics of Japanese Corporate Organization and the Structural Impediments Debate: A Critical Review," *Journal of Japanese Economic Studies* (Summer 1991): 30-77.

representatives of these various disciplines centers on whether the interdependent, long-term relationships and practices of keiretsu firms result in efficiencies and welfare enhancement with pro-competitive consequences, or inefficiencies, exclusivity and market closure.[6] The tradeoffs, however, are not mutually exclusive, i.e., some practices may be efficiency enhancing in the short-run, yet exclusionary. With regard to downstream distribution operations, research has shown that certain business practices associated with keiretsu operations, at least within Japan, may be efficiency enhancing in terms of providing assured supplies, increased customer service and accurate product information to consumers. However, these same practices (particularly exclusive dealings, territorial restrictions, refusals to deal and rebates) may also have exclusionary effects for non-keiretsu firms, both foreign and domestic.[7] Japanese manufacturers utilize such practices in order to control distribution and supply activities and to support their sales and pricing policies. The result of these practices, in many industries characterized by keiretsu relations is that Japanese suppliers and purchasers are less likely to switch to new suppliers solely on the basis of price. Vertical and horizontal practices have the effect of raising the costs and risks of doing business for outsiders.

Keiretsu structure and organization have been the subject of previous trade negotiations between the United States and Japan. During the Structural Impediments Initiative (SII) from 1989 to 1991, U.S. negotiators raised specific aspects of keiretsu buyer-supplier relations and Japanese competition policy.[8] In response, Japan agreed "to make keiretsu relationships more open and transparent" so that they will not hinder fair competition and the entry of foreign firms into the Japanese market. Subsequently, short-term or limited changes were made with regard to stricter enforcement of the Antimonopoly Law. However, many of the same issues resurfaced during the Framework talks which began in 1993 and more recently during the Kodak-Fuji film dispute. In general, U.S. negotiators remain concerned about the perceived non-transparencies and potentially exclusive effects of keiretsu relations for non-keiretsu firms in Japan and

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[6] According to one set of views, Japanese corporate organization and behavior (specifically long-term, buyer-supplier relations) are recognized as potentially efficiency enhancing, encouraging long-term adjustment, promoting innovation and contributing to higher economic growth. Aoki [1984] and Dore [1986] are among those who have pointed to certain Japanese management corporate practices such as life-time employment, close inter-firm ties, quasi-integrated subcontracting networks, and long-term trading arrangements as providing positive benefits such as provision of information and risk-sharing. The theory of industrial organization suggests that the effects of buyer-supplier relationships among keiretsu members are comparable to full vertical integration and therefore should not be objectionable from a foreclosure perspective. [Williamson, 1985] Another set of views, however, holds that many of the same characteristics of Japanese corporate organization and operation result in exclusionary behavior that make it difficult for outside firms to enter the markets in which Japanese keiretsu operate and lead to distorted trade patterns and markets. Tyson and Zysman [1989] have argued that long-term contractual arrangement associated with Japanese corporate organizations make it difficult to gain access to Japan's market and give Japanese industry a type of "natural immunity" to imports. Lawrence [1991] has examined the impact of keiretsu on intra-trade flows to Japan and found that while vertical keiretsu tend to increase exports, the horizontal keiretsu lower imports.

[7] The existence of such practices has been well-documented in studies by Japanese government agencies including the Japan Fair Trade Commission (JFTC), the Ministry of International Trade and Industry (MITI), and the Economic Planning Agency (EPA). Other scholars who have examined the role of both horizontal and vertical business practices and the legal system in Japan include: Matsushita [1978], Yamamura [1982], Ishida [1983], Hahn [1984], Iyori [1995], Batzer and Laumer [1989], and Young [1990].

[8] See for example, *Joint Report of the U.S.-Japan Working Group on the Structural Impediments Initiative*, June 1990.

elsewhere. A major question for consideration is which, if any, keiretsu business practices are employed in Asia and whether similar effects regarding limitations on access to distribution channels or supplier opportunities might be expected. Given the different conditions of competition within industries and legal systems in each country, the impact of such practices would necessarily have to be evaluated on a country-by-country, industry-by-industry basis. To the extent that keiretsu structures and exclusive interfirm transactions are found to be associated with Japanese FDI in Asia, these concerns may be heightened and U.S. policymakers may be pressured by U.S. businesses to respond.

This paper seeks to provide additional insight into several of the topics above relating to Japan's role in Asia. Most importantly, it analyzes the potential implications of Japanese corporate activities, particularly those associated with keiretsu in selected Asian economies, from an international trade policy viewpoint, for U.S.-Japan relations and foreign market access. Based on an analysis of statistical information and other evidence, it appears that a majority of Japanese affiliates in selected Asian economies are associated with one or more keiretsu. In industries where there is an extensive keiretsu presence, there may be a high degree of intra-keiretsu purchasing. Anecdotal evidence suggests that some exclusive business practices associated with the keiretsu in Japan are being replicated in Asia. These practices may affect market opportunities and access for non-keiretsu suppliers and distributors.

Overview of Keiretsu Structure and Operations

Keiretsu in Japan's economy

The structure and operations of the keiretsu in Japan's market and their importance to Japan's economy has been studied extensively.[9] Certain characteristics of keiretsu organization and behavior may also be applicable to an analysis of the impact of their activities on market access in Asia. The keiretsu are a key feature of Japan's economy, directly or indirectly affecting economic transactions in both upstream and downstream channels, within and across industries.[10] According to the Japan Fair Trade Commission

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[9] For a comprehensive analysis of keiretsu structure and operations see, Michael Gerlach, *Alliance Capitalism* (University of California: Berkeley, 1992) and Kenichi Miyashita and David Russell, *Keiretsu: Inside the Hidden Japanese Conglomerates* (New York: McGraw-Hill, 1994). Some of those scholars who have analyzed keiretsu and Japanese corporate behavior in general from a transactions cost, risk-sharing, or sociological approach are as follows: Richard E. Caves and Masu Uekusa, *Industrial Organization in Japan* (Washington, D.C.: The Brookings Institution, 1976); Michael Yoshino, *Japan's Multinational Enterprises* (Cambridge, MA: Harvard University Press, 1976); Masahiko Aoki and Ronald Dore, *The Japanese Firm* (New York: Oxford University Press, 1994); Masahiko Aoki, ed. *The Economic Analysis of the Japanese Firm* (New York: Oxford, 1984); and Rodney Clark, *The Japanese Company* (New Haven, Conn.: Yale University Press, 1979). See, also, various chapters of *Inside the Japanese System*, eds. Daniel I. Okimoto and Thomas P. Rohlen (Stanford: Stanford University Press, 1988) including Rodney Clark, "Industrial Groups," Hiroshi Okumura, "The Closed Nature of Japanese Intercorporate Relations," and Kenichi Imai and Itami Hiroyuki, "Allocation of Labor and Capital in Japan and the United States."

[10] Although some variations have been suggested by observers, in general, keiretsu can be categorized into three types. The first type is known as the intermarket, horizontal, or financial keiretsu which are descended from the prewar zaibatsu and are typically organized around a major bank, trading company, insurance company, (continued...)

(JFTC), almost 20 percent of Japan's capital was held by the six major corporate groupings (Mitsui, Mitsubishi, Sumitomo, Fuyo, Sanwa and Dai-Ichi Kangyo or DKB) and their subsidiaries in JFY 1992.[11] By another estimate, approximately 50 percent of Japan's capital is controlled by all of the keiretsu.[12] The keiretsu are composed of firms from a wide range of commercial and industrial fields, including trading companies, banks, suppliers, distributors and retailers. The groupings often have overlapping relationships with members of their own group, other groups and nominally independent firms. Approximately one-half of small and medium-sized manufacturing firms serve as subcontractors to large manufacturers associated with a keiretsu.[13] Through their extensive networks of affiliated firms, few areas of Japan's economy are untouched by keiretsu activities.

Keiretsu members are linked together through various formal and informal practices. Some of the most common means of integrating firms in the horizontal keiretsu or in controlling subsidiaries or affiliates in the other two types of keiretsu are: stable shareholding and cross-shareholding; networks of debt capital; shared directorships and mutual appointment of key personnel;[14] and common traditions and practices. Even in cases where capital or equity ties are absent or minimal, business transactions serve to link the companies together. A firm may own only 10 percent of a smaller company's stock, but still manage to wield control over the small company as if it were a subsidiary through control of parts or supplies, loaning of debt capital or personnel.[15]

By several measures, despite press reports to the contrary, keiretsu ties appear to have strengthened somewhat rather than weakened in recent years. The ratio of cross-shareholding for the six keiretsu groups rose from 43.3 percent in JFY 1989 to 44.1 percent in FY 1991 and then declined slightly to 44.0 percent in JFY 1992 (table 1).[16] The ratio of stock held by members of the same group ranking among the top 50 stockholders rose from 35 percent to 36 percent during JFY 1989 to 1992. The intra-group business relations ratio for the major horizontal groups in 1992 ranged from a high of approximately 64 percent for Sumitomo to a low of just over 30 percent for Sanwa and Fuyo. Mitsubishi and Mitsui exhibited relatively high intra-business relations ratios of 51.3 percent and 45.3 percent

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[10] (...continued)
and large manufacturing company. The second type, variously known as intramarket, industrial, production or vertical keiretsu (firms representing successive stages of production or closely connected industries) are usually organized around a large independent company and its subsidiaries and affiliates. These types of keiretsu are generally found in the auto, steel, and electronics industries and are characterized by extensive subcontracting networks. The third type, distribution or marketing keiretsu include distribution, sales, and marketing firms in the wholesale and retail sectors. For additional information on the different types of keiretsu, see USITC (1990), Caves and Uekusa (1976) and Douglas Ostrom, "Keiretsu and Other Large Corporate Groups in Japan," *Japan Economic Institute Report* (January 12, 1990).

[11] Japan Fair Trade Commission, *FTC/Japan Views*, No. 20, March 1995, 31.

[12] David W. Edgington, *Japanese Business Down Under* (London: Routledge, 1990), 23.

[13] Gerlach, xvii.

[14] In addition, high-level government and public corporation officials are often employed by keiretsu firms upon their retirement. According to Miyashita and Russell, the Minister who supervises an industry is actually a member of its keiretsu. Miyashita and Russell, 182.

[15] Miyashita and Russell, 80.

[16] Japan Fair Trade Commission, *FTC/Japan Views*, No. 20, March 1995, 31.

Table 1. Cross-shareholding ratio of major keiretsu, JFY 1989, 1991, 1992.

	JFY	Mitsui	Mitsubishi	Sumitomo	Fuyo	Sanwa	DKB	Average of Six Major Groups
Ratio of Intra-Group Stock Shareholding Relations (percentage)	1989	59.6	72.7	93.6	45.4	27.0	29.5	54.6
	1991	58.1	75.1	94.5	46.6	27.4	30.4	55.3
	1992	57.6	75.3	94.5	46.8	27.5	29.4	55.2
Ratio of Intra-Group Stock Shareholding (percentage)	1989	19.5	35.5	27.5	16.4	16.5	14.6	21.6
	1991	19.3	38.1	28.0	17.1	16.8	14.6	22.3
	1992	19.3	38.2	28.0	16.9	16.7	14.2	22.2
Ratio of Intra-Group Stockholding: Cross-Shareholding (percentage)	1989	46.1	59.7	83.7	34.7	17.6	17.8	43.3
	1991	46.1	61.0	85.3	36.0	18.2	18.4	44.1
	1992	45.8	61.2	85.3	36.0	18.3	17.3	44.0

Source: Japan Fair Trade Commission, *FTC/Japan Views 20* (March 1995): 47.
Note: Averages have been rounded.

respectively (table 2).[17] A majority of intra-group transactions involve the trading companies, according to the JFTC.[18]

In general, the relationships among keiretsu members, and other Japanese companies for that matter, can be characterized as being long-term and mutually beneficial, based on loyalty and obligation.[19] The benefits of membership in the group include insulation from external market forces,

[17] In JFY 1992, the ratio of dependence on borrowing from financial institutions of the same group ranged from a low of 13 percent for DKB to a high of 29 percent for Sumitomo. The ratio of companies receiving executives dispatched from other keiretsu members ranged from a high of 100 percent for Mitsubishi to a low of 34.6 percent for Mitsui in JFY 1992. Japan Fair Trade Commission, *FTC/Japan Views*, No. 20, March 1995, 50.

[18] Japan Fair Trade Commission, *FTC/Japan Views,* No. 20, March 1995, 49.

[19] Long-term transactional business relations also exist outside of the keiretsu where there are no equity or personnel linkages.

Table 2. Intra-Group Business Relations Ratio, JFY 1989 and JFY 1992.

(percentage)

	Mitsui	Mitsubishi	Sumitomo	Fuyo	Sanwa	DKB
JFY 1992	44.2	51.7	60.8	29.3	27.6	32.8
JFY 1989	45.3	51.3	64.2	30.8	30.9	34.5

Source: Japan Fair Trade Commission, *FTC/Japan Views 20*, (March 1995):49.

sharing of risks, easy access to funds, and stabilizing corporate performance.[20] The sharing of information about developments in technology and management provides members with benefits under changing competitive conditions.[21] While keiretsu members may not experience improved profitability or efficiency in the short-term, they may benefit from stability in performance over the long-term. Various business practices that may be economically rational or efficient, but nonetheless exclusionary and nontransparent, are employed by keiretsu firms to ensure allegiance to the group. These practices include, but are not limited to, abuse of purchasing power, reciprocal transactions, exclusive dealings, paying of rebates, resale price maintenance and purchasing codes of conduct. Non-price considerations, including a preference for Japanese products and firms, appear to play an important role in purchasing and other types of business decision-making. In industries dominated by keiretsu, the net effect of keiretsu business practices and relations is to maintain stability and prices, to lower the costs and risks of doing business for those inside the "group" and to raise them for other "outside" firms. Foreign firms, in particular, may be excluded or limited in their ability to buy or sell to keiretsu firms.

For both Japanese buyers and sellers, the opportunity cost of ending their long-term business dealings are high.[22] In order to break into a keiretsu relationship, according to the Tokyo Chamber of Commerce and Industry, an outside firm must offer a product or service to the parent that is not offered by the existing supplier. According to anecdotal evidence, sometimes even price discounts of 30 to 40 percent are not enough to convince parent companies to switch to a new supplier.[23] A major question for consideration is which if any of the practices discussed above are employed in Asia and what are the effects of such practices on market access.

Trading Companies

The trading companies, along with the banks and insurance companies, provide leadership and integrating functions to the keiretsu, both horizontally and vertically. The role of Japanese trading companies within Japan's economy in serving as intermediaries in trade, investment, distribution, finance,

[20] Miyashita and Russell, 197.

[21] Ibid.

[22] Hisashi Yaginuma, "The Keiretsu Issue: A Theoretical Approach," *Japanese Economic Studies* 21 (New York: M.E. Sharpe, 1993), 3:33.

[23] Tokyo Chamber of Commerce and Industry, "Building a New Corporate Network," *World Trade Materials*, (April 1993), 48.

resource development, business organization and information collecting has been well-documented.[24] There are approximately 10,000 companies in Japan classified as trading companies, including the 17 largest ones, known as *sogo shosha* or general trading companies. The six largest general trading companies are Mitsui, Mitsubishi, Sumitomo, Marubeni, Nissho Iwai and Itochu. Their total sales amounted to $772.4 billion in JFY 1993 (table 3).[25]

With ties to tens of thousands of Japanese companies, including the keiretsu, the trading companies play a significant role in Japan's exports and imports, including domestic distribution activities. They are essentially gatekeepers for Japan's economy. In JFY 1993, the nine top trading companies (includes Tomen, Nichimen and Kanematsu, in addition to the six largest companies) handled $123.8 billion or 34.8 percent of Japan's exports and $134.2 billion or 60.8 percent of Japan's imports. Their total trade accounted for $258.0 billion or 44.7 percent of Japan's total worldwide trade of $577.03 billion (table 4). The share of Japan's trading companies in Japan's overall trade declined, on a fiscal year basis, from 72 percent in FY 1989 to 45 percent in FY 1993. The major trading companies' involvement in Japan's total imports declined from a high of almost 95 percent in JFY 1989 to 61 percent in JFY 1993. The trading companies share of Japan's total exports declined steadily from a high of 54 percent in JFY 1989 to 37 percent in JFY1990 and 1991, to 36 percent in JFY 1992, and to 35 percent in JFY 1993.[26]

Both advantages and disadvantages have been cited by foreign companies regarding the use of trading companies to access Japan's capital and consumer goods markets. The trading companies are able to save their foreign clients time, effort and costs. They internalize and minimize transactions costs through their long-term, close relationships with other companies within their own keiretsu and with other inter-market groups.[27]

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[24] See for example, M.Y. Yoshino and Thomas Lifson, *The Invisible Link: Japan's Sogo Shosha and the Organization of Trade* (Cambridge: Westview Press, 1986); Kunio Yoshihara, *Sogo Shosha: The Vanguard of the Japanese Economy* (Oxford: Oxford University Press, 1982); Alexander Young, *The Sogo Shosha: Japan's Multinational Trading Companies* (Cambridge: Westview Press, 1979); and Kiyoshi Kojima and Terutomo Ozawa, *Japan's General Trading Companies: Merchants of Economic Development* (Paris: OECD, 1984).

[25] Calculated from data of Japan Foreign Trade Council, Inc. in Keizai Koho Center, *Japan 1995, An International Comparison.*

[26] Calculated from data of Japan's Foreign Trade Council, Inc. as reported in Keizai Koho Center, *Japan An International Comparison*, various years.

[27] The trading companies also maintain ties to subsidiaries and affiliated firms, including small and medium-sized firms in Japan's distribution sector. According to one study, about two-thirds of subsidiaries of trading companies were located in Japan while the rest were located abroad. The JFTC has concluded that the trading companies exert significant influence over their affiliates' fiscal and managerial policies through financial and personnel ties. By providing financing to affiliates and non-affiliates, the trading companies are able to create a situation of mutual dependency by which the companies depend on the trading company for loans while the trading company must help the firms earn profits and avoid defaults. Japan Fair Trade Commission, "Survey on the Present State of Business Activities of the Sogo Shosha," Antimonopoly Law Colloquium 97-4 (April 1983):111; and Michael R. Czinkota and Jon Woronoff, *Japan's Market: The Distribution System* (Praeger Special Studies, 1986), 35-36.

Table 3. Sales and trade of Japan's nine major trading companies, JFY 1993.

(millions of dollars)

Trading Company	Total Sales	Sales in Japan	Exports From Japan	Imports to Japan	Offshore Trade
Itochu	145.1	77.4	15.9	13.4	38.4
Mitsui	142.6	70.9	18.0	19.1	34.7
Marubeni	136.3	70.0	19.8	15.6	31.0
Sumitomo	135.2	69.6	20.5	19.4	25.6
Mitsubishi	127.0	62.2	20.4	21.3	23.9
Nissho Iwai	86.2	39.3	10.0	15.8	21.1
Subtotal	772.4	389.4	104.6	104.6	174.7
Tomen	58.7	27.9	6.1	6.9	17.8
Nichimen	49.4	23.2	4.3	3.5	18.3
Kanematsu	47.4	12.7	8.8	19.2	6.7
Total	927.9	453.2	123.8	134.2	217.5
Share of Trading Companies Total Sales (percentage)	100.0	48.8	13.3	14.5	23.4

Source: Figures calculated from Japan Foreign Trade Council, Inc. as reported in Keizai Koho Center, *Japan 1995: An International Comparison*.

Note: Yen/dollar exchange rate = Y111.2=$1.00

Table 4. Involvement of Japan's nine major trading companies in Japan's trade, JFY 1989-1993

(billions of yen)

	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993
Exports of Nine Major Trading Companies From Japan	20,836	15,412	15,639	15,384	13,768
Japan's Total Exports[1]	38,883	41,877	42,696	43,055	39,616
Trading Companies Share of Japan's Exports (percentage)	53.6	36.8	36.9	35.7	34.8
Imports of Nine Major Trading Companies to Japan	28,736	23,077	20,010	18,241	14,926
Japan's Total Imports	30,407	34,171	30,972	29,224	24,550
Trading Companies Share of Japan Imports (percentage)	94.5	67.5	64.6	62.4	60.8
Trading Companies Total Trade (Exports and Imports)[2]	49,572	38,489	35,649	33,625	28,694
Japan's Total Trade	69,290	76,048	73,668	72,279	64,166
Trading Companies' Share of Japan's Total Trade (percentage)	71.5	50.6	48.4	46.5	44.7

Source: Figures were calculated from Ministry of Finance and Japan Foreign Trade Council, Inc. data, as reported in Keizai Koho Center, *Japan: An International Comparison* (various years).

[1]Customs clearance basis, exports, f.o.b., imports, c.i.f.
[2]Total does not include trading companies involvement in third country trade.

However, these very relationships and affiliations may also affect the volumes, prices and types of imported foreign products which are handled by trading companies. Nonetheless, many foreign companies with inadequate knowledge of, or experience in, Japan's market employ the trading companies' services to gain at least limited entry to Japan's markets.

In addition to their predominant position within the domestic economy, Japanese trading companies play a leading role in supporting the overseas activities of Japanese firms, including those in Asia, and in facilitating trade between third countries. They serve as the linchpin linking supply and demand points worldwide. Through their efficient and extensive global communications and information-gathering networks, the trading companies provide key services (sourcing, financing and marketing) to

companies with fewer resources and capabilities. The net effect of trading companies' assistance is to minimize the risks associated with changing prices, exchange rates, and local regulations for Japanese firms. They also help to lower the transaction costs associated with the physical distribution of products in foreign markets.[28]

In Asia, as in other overseas markets, the trading companies serve as project organizers on large-scale engineering and construction contracts.[29] They facilitate Japan's overseas development assistance, secure sales contracts and financing, act as the plant supplier, and provide technical advice and consulting services to all stages of the project.[30] There is a "tight corporate hierarchy" between the trading company and its banks, and the trading companies' branch networks. Typically, the parent companies in the networks retain research and development, marketing, and financial analysis functions. The subsidiary, while restricted in its ability to sign contracts or to initiate a new project, is responsible for local shipping and supervisory functions. By maintaining strong interfirm linkages, the trading companies serve as important intermediaries between local suppliers, parent companies and customers in Japan.[31]

Keiretsu Presence in Selected Asian Economies

Given the information about keiretsu activities in Japan, a key question is: how much of a presence do they have in Asia? In order to provide additional understanding of the extent of keiretsu involvement in selected Asian countries (Indonesia, Malaysia, and Thailand), a data base of Japanese affiliates and their respective keiretsu was developed, according to the following methodology. First, the Japanese firm and host country for investment were identified using Japan External Trade Organization's (JETRO) 1994-1995 *Directory of Japanese Affiliated Companies in Asia*. The survey, while not a complete listing, provides extensive coverage of Japanese affiliated firms operating in various business fields in Asia. The 1994-95 survey lists 3,574 companies operating in Hong Kong (299), Korea (218), Brunei (3), Indonesia (348), Malaysia (557), the Philippines (237), Singapore (1,244) and Thailand (668). The survey covers those Japanese affiliated companies in which "10 percent or more ownership is held by one or more Japan-based companies." Local subsidiaries and subsidiaries of subsidiaries are also included in the survey coverage. All 1,573 companies in Indonesia, Malaysia, and Thailand that are listed in the JETRO survey were included in the data base.

Secondly, the parent company for each Japanese affiliate and its related corporate grouping was identified by cross-referencing the JETRO directory with Dodwell's *Industrial Groupings in Japan 1994/1995*. Dodwell's categorization of keiretsu (horizontal, vertical, production and distribution) was used for purposes of identifying the affiliated grouping for each Japanese firm investing in the selected countries. However, the survey focuses mainly on the horizontal and vertical keiretsu. The six major horizontal keiretsu are: Mitsubishi, Mitsui, Sumitomo, Fuyo, DKB and Sanwa. IBJ and Tokai are considered to be medium-sized keiretsu. Thirty-eight vertical groups were profiled by Dodwell and used for purposes of this data base. A broad based set of criteria was used to match each overseas investor with its affiliated grouping in Japan. If the parent firm of the overseas affiliate was listed as a Presidential

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[28] Katano, 59, 68, and 72.

[29] Mitsui & Co., Ltd., *Service Guide*, 1995, 7.

[30] Robert M. Orr, Jr., *Japan's Foreign Aid Power* (New York: Columbia University Press, 1994), 60-61.

[31] Edgington, 98-108.

council member, as having equity ties,[32] or as having personnel ties to one of the groups, it was considered to have an affiliation with that group.[33]

According to table 5, the highest number of affiliates associated with one or more keiretsu (both horizontal and keiretsu) in Japan, as a proportion of the total sample size occurred in Indonesia (61 percent), followed by Thailand (48 percent) and Malaysia (45 percent).[34] In Thailand, 295 affiliates were associated with one of the horizontal keiretsu, compared with 212 in Malaysia and 211 in Indonesia. (The totals include firms that belong to more than one keiretsu, either vertical or horizontal). Those horizontal keiretsu with the highest number of affiliated firms in the three countries were: DKB (128), Mitsui (116), Sumitomo (109) and Mitsubishi (104). The six major keiretsu had the largest numbers of affiliates in all three countries compared to the two medium-sized keiretsu. By country, DKB, Mitsui and Mitsubishi exhibited the highest numbers of affiliates in Thailand, compared to keiretsu affiliates in the other two countries. Of note, Mitsubishi had relatively fewer numbers of affiliates in Malaysia (23) compared to its presence in Indonesia (31) or Thailand (50) and compared to the other keiretsu with affiliates in Malaysia.

There were 76 affiliates associated with vertical keiretsu in Thailand, 66 in Malaysia and 31 in Indonesia. The vertical keiretsu with the highest numbers of affiliated firms were: Hitachi (26), Toyota (24), Matsushita (19), Toshiba (16), Nippon Steel (14), and Nissan (12). By country, Hitachi and Matsushita's affiliates in Malaysia and Toyota's affiliates in Thailand and Indonesia were the most noteworthy in terms of numbers. Other keiretsu with a moderate presence were Toshiba and Nippon Steel in Malaysia and Thailand (table 6).

When examined by industry, keiretsu were found to have invested in 40 industries in Indonesia, 43 in Malaysia, and 49 in Thailand. Japanese affiliates with ties to keiretsu in Japan were involved in producing or distributing both capital and consumer goods (furniture, housewares, cosmetics, and

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[32] Previous research has indicated that equity ties of even less than 10 percent may be enough to affect the behavior of Japanese firms regarding their relationships with other Japanese firms or groups. As such, a minimum threshold for share-holding was not designated as a criteria for determining a firm's keiretsu affiliation.

[33] The term "affiliation" is defined here as meaning to have some type of equity or personnel ties or other business relationship to the group. Although Dodwell provides some indication of the "degree of inclination" of firms to their related keiretsu, no attempt to assess or to quantify the strength of the ties between the investing firm, the parent firm and the group was made. However, in general, it can be said that in many cases the inclination of the parent firm to the group is quite strong. The purpose of presenting information on the Japanese affiliates in East Asia and their related grouping is to indicate the scope and extent of keiretsu presence, regardless of the strength of the ties among members, in the selected countries. The degree of control and closeness of the linkages among firms differs among various keiretsu groups. In addition, individual firms may have relations with more than one keiretsu or have their own vertical group while belonging to a horizontal group, for example. In many cases, the parent firm of the Japanese affiliate could not be identified through available reference sources. Due to incomplete coverage of the actual number of investments in the JETRO survey and difficulties in tracing the identification of the parents or other firms affiliated with the Japanese investments in the selected countries, the totals for the number of firms affiliated with keiretsu is likely understated.

[34] For purposes of this data base, in cases where a parent firm was identified as having relations with more than one keiretsu, the multiple affiliations are included in table, but were only counted once in the summary statistics provided above.

Table 5. Japanese affiliates in Indonesia, Malaysia and Thailand associated with keiretsu

	Indonesia	Malaysia	Thailand
Number of affiliates associated with vertical keiretsu	31	76	67
Share of total number of affiliates (percentage)	9	14	10
Number of affiliates associated with horizontal keiretsu	188	212	295
Share of total number of affiliates (percentage)	54	38	44
Number of affiliates associated with keiretsu	212	251	320
Share of total (percentage)	61	45	48

Source: Data was compiled from JETRO's *Directory of Asian Affiliated Companies in Asia* and *Dodwell's Industrial Groupings in Japan 1994/1995*.

Table 6. Japanese affiliates in Asia associated with keiretsu, by name of group

Name of keiretsu	Indonesia	Malaysia	Thailand
Horizontal			
Mitsubishi	31	23	50
Mitsui	33	31	52
Sumitomo	32	36	41
Fuyo	23	35	39
Sanwa	25	38	37
DKB	37	36	55
Tokai	19	11	15
IBJ	11	2	6
Vertical			
Toyota	9	4	11
Hitachi	3	18	5
Bridgestone	1	1	1
Nippon Steel	2	7	5
Fujitsu	1	3	0
Tokyu	1	1	2
Honda	3	3	3
Kajima	2	1	0
Matsushita	2	10	7
Shimizu	1	1	0
Sony	1	2	3
Mazda	1	0	0
Nissan	1	5	6
Toshiba	1	8	7
Sharp	0	2	2
Sanyo	0	1	1
Taisei	1	1	0

Table 6–Continued. Japanese affiliates in Asia associated with keiretsu, by name of group.

Name of keiretsu	Indonesia	Malaysia	Thailand
Isuzu	2	2	5
Kobe Steel	0	1	0
Aeon	0	0	1
NEC	0	5	5
Ito-Yokaido	0	0	1
Kintetsu	0	0	1
Canon	0	0	1
Total	242	288	362

Source: Data was compiled from JETRO's *Directory of Asian Affiliated Companies in Asia* and *Dodwell's Industrial Groupings in Japan 1994/1995*.

jewelery, for example) and services (banking, insurance, trading, shipping and freight forwarding). In Indonesia, those sectors with the greatest number of keiretsu affiliates included automotive parts and accessories; banking; chemicals; construction; construction materials, textiles and trading. In Malaysia, those sectors with high keiretsu affiliation included: electrical and electronic appliances; audio and video products; metals; automotive parts and accessories; and trading. In Thailand, the sector with the highest keiretsu affiliation was electrical and electronic appliances while other sectors with large numbers of keiretsu affiliates included automotive parts and accessories; freight forwarding and warehousing; chemicals; construction; textiles; and trading (table 7). Based on this information, it appears that the keiretsu are involved in a wide variety of manufacturing, distribution and transportation activities in these economies.

Keiretsu Operations in Asia

Given this information about the extent of keiretsu presence in Asia, what are some of the other characteristics of Japanese investments in Asia, including affiliates associated with keiretsu? Surveys of

Table 7. Japanese affiliates in Indonesia, Malaysia and Thailand associated with keiretsu, by industry.

	Indonesia	Malaysia	Thailand
Advertising	0	0	1
Architects and engineers	0	0	4
Audio and Video products	1	15	8
Automobiles	1	2	11
Automotive parts and accessories	20	11	21
Banking	20	12	6
Bearings	0	0	3
Bicycles and Parts	1	2	0
Chemicals, paints, pigments and related	11	3	16
Clocks and watches	0	0	2
Communications and telecommunications	1	2	3
Computer parts and software	1	6	4
Construction	15	10	15
Construction equipment	3	0	3
Construction materials	9	1	1
Consultants	3	3	1
Cosmetics	1	0	2
Design	0	0	1
Department stores	2	1	5
Electric power and equipment	1	0	7
Electrical and electronics appliances and parts	10	46	40
Feedgrains	1	0	0
Food and beverages	0	2	8
Fishing	5	0	0
Freight forwarding and warehousing	2	2	17
Furniture	0	1	0

Table 7–Continued. Japanese affiliates in Indonesia, Malaysia, and Thailand associated with keiretsu, by industry.

	Indonesia	Malaysia	Thailand
Gas appliances	0	0	1
Garments and accessories	3	0	3
General merchandise	0	0	2
Glass and glass products	1	4	3
Golf courses	1	0	0
Hotels	3	1	0
Housewares	0	1	0
Industrial Ceramics	0	1	0
Insurance	3	9	5
Jewelry	0	0	1
Leasing	8	3	6
Machine parts and components	0	2	0
Machinery	6	4	4
Medical equipment	0	0	1
Metals	10	18	19
Mining, oil and gas extraction	1	0	1
Motorcycles and parts	1	5	3
Office Equipment	0	5	1
Optical and photographic equipment	0	2	3
Petroleum refining	0	1	2
Pharmaceuticals	4	0	
Plastics, resin and molds	2	6	8
Real estate	8	0	2
Restaurant	0	0	1
Securities	2	0	6
Semiconductors	0	1	3

Table 7–Continued. Japanese affiliates in Indonesia, Malaysia, and Thailand associated with keiretsu, by industry.

	Indonesia	Malaysia	Thailand
Shipbuilding	2	0	3
Shipping	3	2	3
Textiles	11	4	16
Tires and rubber materials	2	1	0
Tools	0	1	2
Trading firm	22	32	24
Transportation Services	0	2	0
Trucks and industrial vehicles	0	1	2
Wood products	1	3	0
Products, others	6	11	4
Services, others	2	1	4
Others	2	1	4

Source: Data was compiled from JETRO's *Directory of Asian Affiliated Companies in Asia* and *Dodwell's Industrial Groupings in Japan 1994/1995*.

Japanese companies conducted by the Ex-Im Bank and statistics published by the U.S. Department of Commerce and Japan's Ministry of Trade and Industry provide some insight into Japanese investments with regard to ownership, type of investment, reason for investment, and their sales and procurement behavior. The survey evidence suggests that Japanese firms are not just shifting their production bases to Asia to secure lower-cost wages and to export to third markets, but that they are also very interested in gaining local market shares, especially for transport machinery, iron and steel, other manufacturing and chemical products. "Preservation or expansion of market share" is the leading reason given by Japanese firms surveyed for investing in ASEAN or the NIEs while "development of new market" is the main reason for investing in China.[35] According to MITI data, 66 percent of total sales by Japanese affiliates in Asia are directed at the local market. As such keiretsu practices employed in downstream distribution channels could have an affect on market opportunities. At the same time, Japanese affiliates in Asia continue to import almost 38 percent of their inputs from Japan for manufactured goods.[36]

There is increasing statistical and anecdotal evidence that at least some business practices associated with keiretsu in Japan, are also employed in Asia. For example, in some cases Japanese auto firms have demanded lower prices for parts and higher quality standards from their suppliers during economic downturns. The local suppliers, who are locked into producing products according to the Japanese manufacturers specifications, have no choice but to comply.[37] As in Japan, the parent or dominant firm supplies the capital, technology, managerial expertise and a market, through established distribution networks. The dominant firm is able to maximize the benefits resulting from quasi-integration and long-term relations and minimize its risks. In exchange, the supplier is expected to produce parts, investment in production equipment and provide training to employees in accordance with the parent's criteria.[38] As in Japan, the effect of such relations may be to limit outside suppliers' opportunities.

There are indications that "buy Japanese" preferences, prevalent in Japan, also appear to be favored by Japanese firms in Asia. Japanese auto producers in Asia, for example, continue to purchase high-end parts from Japan or from Japanese affiliates that have followed them offshore. In Singapore, Japanese electronics firms purchase almost 80 percent of their audio video components from other Japanese companies located there. In fact, Japanese affiliates in Asia continue to import almost 38 percent of their inputs from Japan for manufactured goods.[39] Anecdotal evidence suggests that the effects of these practices and close manufacturer-supplier relations in Asia may be exclusionary. For example, U.S. auto producers claim that they have already experienced difficulties in finding local firms willing to supply them in Asia because of ties to Japanese producers.

This information regarding the characteristics of Japanese investments in Asia, when viewed in the context of the keiretsu affiliate data suggests that for manufactured goods and other industries where there is a keiretsu presence, there may be a high degree of intra-keiretsu purchasing and distribution. A high proportion of overall transactions by Japan's Asian manufacturing affiliates takes the form of intra-firm trade. The most recent statistics available indicate that 59 percent of all sales and 63 percent of all

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[35] *Ex-Im Review*, Vol. 14, No. 1, 1994.

[36] MITI, *Kaigai Toshi Tokei Soran*, No. 5, 1994.

[37] Hatch and Yamamura, p. 31.

[38] Ibid, p. 57.

[39] MITI, *Kaigai Toshi Tokei Soran*, No. 5, 1994.

purchases for manufacturing affiliates are intra-firm transactions (Tables 8 and 9).[40] Local and foreign firms, including U.S. companies, are likely to face keen competition in these product areas and face difficulties in accessing both upstream and downstream channels where there is a predominant keiretsu presence.

Implications for U.S.-Japan Relations

While more research is required to fully understand the practices of individual companies, some conclusions can be drawn based on the available evidence regarding the implications of the keiretsu in Asia for U.S.-Japan economic relations, including market access. Entire Japanese manufacturing and distribution channels have relocated to Asia -- including manufacturers, suppliers, retailers, banks and trading companies. Based on a limited sample, a majority of these companies, in at least the selected countries of Indonesia, Malaysia and Thailand, have ties to the keiretsu in Japan. The companies surveyed are involved in numerous industries, producing and distributing both capital and consumer goods. The "keiretsufication" of those industries where Japanese firms have made extensive investments such as electronics, autos and parts, chemicals, banking, construction and metals, may affect market opportunities for non-keiretsu suppliers and distributors, including both domestic and foreign firms. To the extent that Japanese firms in Asia are duplicating their home-market organizations and practices, there is reason to expect that foreign firms, including U.S. companies, may experience difficulties in entering markets in Asia. This includes purchasing components, becoming keiretsu suppliers or marketing products to local consumers.

Despite some of the potential problems for foreign firms, there may be several advantages for local economies associated with the replication of Japanese keiretsu in Asia. To the extent that some local firms are brought into the keiretsu and transfers of managerial and technological skills occur, there may be gains to the Asian economies in terms of raising productivity, quality control, and production management. Consumers could benefit from the introduction of new products and improved service. Localities adjacent to Japanese production facilities and industrial estates have already witnessed improvements to infrastructure, such as new highways that are built by the investing firms.

From a U.S. perspective, if American firms are found to be excluded from supplier/distributor or other contracting opportunities as a result of Japanese business relationships in Asia, the U.S. or other governments may be pressured to seek negotiations with host countries. However, it may not be that easy to determine the appropriate negotiating partner because the distinction between perceived local barriers to trade and investment and "transplanted trade barriers" is likely to become blurred. The interlinkages between Japanese keiretsu and local economies will make it more difficult to distinguish the actual origins of market access problems which could either be attributed to transplanted keiretsu practices, indigenous practices, or the practices of local firms that have been integrated into the keiretsu. It will therefore be very important that accurate and complete information about any problems that U.S. firms face in Asian markets be relayed to U.S. negotiators in order to minimize misunderstandings and to avoid unnecessary trade negotiations.

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[40] MITI, *Basic Research on Business Activities Abroad,* reported in *Vision for the Economy of the Asia Pacific Region in the Year 2000 and Tasks Ahead* (August 1992).

Table 8. Ratio of transactions (procurements) in the same group (proportion of intra-firm transactions to total transactions), JFY 1989.

(percentage)

Procurements	Local	Japan	Third Country	Total
All industries	10.3	63.2	3.7	18.0
All manufacturing	4.1	62.6	23.9	29.1
Chemicals	2.8	83.8	33.6	33.7
Industrial machinery	0.6	79.1	32.3	35.3
Electrical machinery	5.1	65.3	29.8	35.1
Transportation machinery	2.3	48.9	0.7	21.8

Source: MITI, *Basic Research on Business Activities Abroad* reported in *Vision for the Economy of the Asia-Pacific Region in the Year 2000 and Tasks Ahead Report* (August 1992).

Table 9. Ratio of transactions (sales) in the same group (proportion of intra-firm transactions to total transactions), JFY 1989.

(percentage)

Sales	Local	Japan	Third Country	Total
All industries	4.4	34.3	14.8	16.1
All manufacturing	6.5	58.9	37.2	21.0
Chemicals	4.2	40.2	35.1	11.5
Industrial machinery	0.6	98.5	45.4	29.6
Electrical machinery	12.9	60.3	43.9	36.7
Transportation machinery	6.2	35.7	8.5	6.8

Source: MITI, *Basic Research on Business Activities Abroad*, reported in *Vision for the Economy of the Asia-Pacific Region in the Year 2000 and Tasks Ahead* (August 1992).

In general, researchers are divided in their views about whether the keiretsu and production networks are opening to outside firms in Japan and overseas. According to one view, keiretsu networks are indeed facing pressures to open up as the costs of maintaining less productive group members increases. In addition, as firms are inclined to enter into more cross-national alliances, keiretsu interfirm ties may weaken.[41] However, in the short term, there is less of a chance that keiretsu member ties will ease. It appears that keiretsu firms are likely to switch to new suppliers only as a strategy of last resort. There are not yet enough internal and external pressures to reverse decades of closed purchasing behavior and preferential business relations. This is because the underpinnings of the close firm relations, such as the emphasis on loyalty, obligation, long-term stability and "buy national" preferences have not disappeared even as the economic pressures to do so have. Nor have many of the financial and non-financial incentives which help to cement in-group ties fallen into disuse. For example, a 1996 JFTC report indicates that such practices as rebates and restrictions on non-OE parts sales continue to be prevalent in the Japanese auto industry.

The first step toward addressing market access issues associated with keiretsu overseas is to identify specifically the extent and types of business practices underlying their production and distribution networks. Over the long-term, both regional (APEC) or multilateral fora (OECD, WTO) could address issues regarding differences in competition policy, business organization, and economic structures among countries, beginning with joint studies.

In the meantime, there is no reason to expect complete convergence between Japanese and U.S. economic systems. Significant differences are likely to remain. It is highly likely that Japan will not abandon the keiretsu in the short-term, despite current economic or political pressures. Their activities will continue to highlight the contraposition of industrial policy and competition law, both overseas and in Japan.

[41] Ernst, pp. 33-34.

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Comments by Edward Lincoln on

Japanese Group Boycotts and Closed Government Procurement as Barriers to Trade
by Mark Tilton
and
Japanese Corporate Activities in Asia: Implications for U.S.-Japan Relations
by Diane Manifold

MR. LINCOLN:

I will make some broad comments about the papers, and a bit about how they relate to APEC. Let me start with the paper of Mark Tilton.

He describes market behavior in Japan that I think has very disturbing implications for the future of APEC as a regional mechanism for moving toward more open markets. Japan is a country where the reduction in border barriers, the easing of tariffs, and other measures, do not seem to have made the market more open, or more open at least in certain industries.

We must ask to what extent his case studies, cement and steel, are generalizable to the rest of the Japanese economy? That is not an easy question to answer. I am just going to answer with anecdotes. Generalizing from anecdotes is even more dangerous, but I thought I would give you the flavor of some of the things that go on in Japan.

We had an interesting episode in glass within the last 2 years in Japan. Glass is another market in Japan that has been closed, and there has been pressure from American glass companies to open it up. We have a bilateral agreement that is supposed to make the market more open.

Central Tokyo has a new performing arts center. It is a Tokyo municipal government project, and the Japanese construction company has close ties with a particular Japanese glass company. The Americans lobbied to put in a bid. The Americans had both the lower price and higher quality glass. The arts center required a great deal of specialty glass.

The construction company's initial attempt was to go with their traditional supplier. After pressure had mounted, the construction company's final solution was to cut and to paste. It divided the building into halves. The Japanese glass company got one-half of the building, the American company got the other one-half. The Japanese glass side of the building faces the bank that the Japanese construction company has a relationship with. I find that really wonderful.

I have a second anecdote. Tokyo Steel, as Mark mentioned, is the minimill in Japan that is not in the same cartel with the integrated steel producers. There is a rumor that I heard from a representative of one of the integrated mills in Japan, that the cartel members in Japan, over the last 6 months to a year, have been trying to buy up scrap steel in Japan to drive up the price. And this scrap is the raw material input for Tokyo Steel, and the cartel members do so to drive Tokyo Steel thereby out of business. At this point, the summer of 1997, this maverick steel company is apparently tottering on the verge of bankruptcy.

A third anecdote involves airline deregulation in Japan, one of the more successful things we have already done in the United States. Every Japanese Government official will tell you that Japan is

now carrying out domestic airline deregulation. The proof is that they will allow a newcomer to the market, probably next year.

It is true that prices have been at least partially deregulated in Japan, with the effect that prices have gone up at least on some routes. The fact that prices went up is presumably the reason why this new company is coming in. It wants to service the busiest route in Japan: Tokyo to Sapporo, which is one of the routes where prices did go up. And so the Japanese tell us that this is the symbol of deregulation.

However, in contrast to U.S. conditions, the Ministry of Transportation retains control over the allocation of routes, frequencies, and timing of landing slots at the airports. Such newcomers to the market as this one airline will be granted six landing slots at Honeida Airport. I cannot imagine trying to run an entire airline with six landing slots. In essence, this company will serve Sapporo only and with only six round trips a day. In essence, the Ministry has guaranteed that this company will have high operating costs, because it is going to have fixed investment in its gates and sales infrastructure. It will have high operating costs, and therefore be unable to cut prices in the market very much. In my opinion, the cartel in domestic airlines remains largely intact.

From an APEC standpoint, we should specifically worry about Japan. Here we have an organization trying to push forward a generally more liberal regime for all countries for market access. I think this the evidence we have on behavior in domestic Japanese markets raises serious doubts as to whether Japan will actually live up to whatever commitments it makes in APEC.

On any of the topics that we have talked about--steel, cement, airlines, or glass--the Japanese Government tells you the market is open, that there is no problem. It asks, What are we? What is there to negotiate about? What is your problem? Your problem must be inferior quality of your product. You do not try hard enough to get into the market.

We are likely for a long time to see token gestures towards complying with any APEC principles as they evolve over the years, but we will see far less real change on the ground. I hope that other panels this afternoon and tomorrow ask whether this example of Japan we have been looking at represents a kind of “Asian way,” as Mahatier would like to put it. The Asian way is one of cartels, secret deals, price gouging, mutual back scratching, and other kinds of state-condoned private exclusionary practices. I think that these are probably the conditions. Japan may be a little more sophisticated, subtler than other countries. But I think that this kind of behavior is not exactly an “Asian way” alone. It is simply the way of most of the world.

Perhaps we do not observe it as much around the region because wages are very low. If they are conspiring to hold prices up, they are holding them up from a lower level. Mark's example of cement, for example, focuses on Korea as the potential supplier of cement to Japan. I do not think competition in the cement industry in Korea is probably any better than the competition in the cement industry in Japan, but at least the Koreans have a lower wage structure. So the Koreans are in a position to undercut prices in really high-price markets like Japan.

Certainly I think we should worry about the Japanese example. We should worry about whether we are going to see similar problems in other countries, where there is a visible process of moving forward with token gestures of market opening, where we see far less real reform when we really look

carefully. This is important because now Japanese firms are moving into the rest of Asia, taking their notions of market behavior along.

That note brings me to Diane Manifold's paper. I think Ms Manifold has done some very important work here in identifying trends: To what extent have Japanese companies moved into Asia, and to what extent does this represent an export of keiretsu structures around the region?

There are two questions here. One is whether some of the numbers we see are high or low? Diane mentioned the percentage of sales and purchases of Japanese manufacturing firms in Southeast Asia, and the extent to which those transactions are intrafirm transactions. It would help if we could frame those data and pin those data down in a more comparative context. Is this or figure really high, relative to what American and European firms do in Southeast Asia?

And in some sense, you could argue that virtually every firm in Japan that invests elsewhere in the world is in some form or shape a member of a keiretsu. Even a small Japanese textile firm that chooses to move into China is likely to take explicit advice and help of a Japanese trading company, and probably the bank that the trading company deals with.

And so in a sense, they are going with a set of real ties that lock them into working with whomever that trading company works with, even though they may not show up in the data as belonging to the big recognizable keiretsu. So the keiretsu question asks to what extent these long-term ties that push a company towards dealing with the same firms that it would have dealt with in Japan, even though they are thousands of miles away, may apply to nonkeiretsu firms to some extent as well.

The other question here is how much these relationships affect American and other foreign firms trying to do business in the region? As Diane put it, U.S. companies may experience difficulty in entering markets in Asia. In essence, this process is still an unknown for us. We do not have a lot of anecdotes yet. We have not looked very carefully at this issue yet. We assume that such problems do exist and are likely to become more serious, but we do not really know all that much.

I can give you a couple of small instances of the difficulty. For example, several years ago Indonesia was to undertake a major upgrade of its telephone system, and invited foreign bids to supply the equipment. AT&T lost the bid, even though it had superior equipment at presumably a competitive price. AT&T lost the bid because the money to finance the upgrade of the telephone system was from the Japanese Government. The Indonesian Government decided--either on its own or perhaps with a little subtle or not-so-subtle pressure-to buy the equipment from Japan. After the U.S. Government made a big protest about it (much like the example I gave you on glass), the Indonesian Government decided to play "cut and paste." It divided the contract into two halves, between AT&T and the Japanese.

For another example, Japan has a two domestic standards for cellular telephone service. It has its peculiar standard, and it has also adopted the Motorola-generated standard in wide use in the United States and Europe. AT&T developed the Japanese peculiar standard, and the standard has now been adopted for the first time by a foreign company. Cambodia has adopted it for cellular telephones in Cambodia. And the financing for the construction of the cellular telephone industry in Cambodia is coming from Japanese foreign aid money.

These minor anecdotes suggest that connections of one sort or another have disadvantaged American firms. So this kind of difficulty is certainly a topic we want to think about although we really do not know yet how much of a problem there is.

In a broader context, this difficulty of entry is a problem for APEC. As a process, APEC is supposed to be moving all of the countries in this region towards more openness. But maybe we have Japanese companies coming in with their greater openness, and closing some of these markets back off by importing their own exclusive practices.

How the rest of the region feels about this is something, again, that I do not think we know very much about. My perception is that Asian economies have welcomed the flood of Japanese firms over the past decade. The firms often brought with them large amounts of ODA money to provide the supporting infrastructure for industrial development. The firms brought jobs and higher wages with them. So why should they complain if the Japanese want to do business with themselves? Whether the countries will maintain that attitude in the future is something I do not think that we know very much about. So as we think more broadly about APEC, I think the issues raised in this panel were important ones.

For autos, the cost of the basic materials--the steel and the chemicals that are expensive--are 10 to 15 percent of total cost. And those costs are absorbed and made up for. When you talk to people in the auto industry, they say that the Japanese steel industry has invested money in producing very innovative, high-quality stainless steel. A kind of compact exists that the auto industry buys almost all of its steel from domestic steel companies--in exchange for the steel companies making this investment in new forms of steel.

The domestic steel companies certainly benefit from having a portion of the steel produced of very high quality. In a more fluid, competitive market, the auto companies could very easily buy a lot of their lower grades of steel from Korea, but there has been an industry decision not to do that.

Other industries in construction have very high prices. That makes it easy for construction firms to absorb expensive steel and cement. Construction costs in Japan are about twice what they are in the United States. It appears that construction then cross-subsidizes industries like shipbuilding that get small discounts. The steel industry also gives small discounts, for instance, to the shipbuilding industry, because it is under intense competition. It gives small discounts even to the electronics industry. These little deals are made to bring these prices down somewhat for exporting, so that exporting industries that are then cross-subsidized by nonexporting industries.

So there is really just a tendency here to deal with "who you know." We can get a cultural explanation of this tendency, but the people are the people you know you have dealt with in the past, and those people have adapted to your needs. You know that if future adaptations need to be made, they can make them. On the other hand, someone who offers you a 10-percent lower price may be a person whose product may not be exactly adapted to your needs, and you may not know furthermore whether he can make any future adaptations as technologies change, as the markets change, and as markets demand different products from you.

So I do not see this pattern as pernicious, and I will extend it to discussion of ethnic Chinese networks in trade later on. Dealing with whom you know, who has proven to fit your needs in the past, is a business practice worldwide, including this country's firms. It is not Japan-specific or pernicious.

I think I agree with that. Maybe we can draw a distinction between consumer products and industrial products, where the nature of competition tends to be somewhat different. It is a little harder to control consumers than it is to control a small number of buyers in an industry. But even with consumer products, there is positive change.

My favorite story is beer. The price of beer has come down from roughly 220 yen per can to about 190 yen per can. That works out at current exchange rates, to 7 or 8 dollars a six-pack. And people think that is cheap. And yet the price of beer came down and then seemed to level off at that point. A lot of excess profit was still sitting in the industry that I would have thought would need a much more competitive market, and which would wring out the system. But that is not happening yet. But still, progress is progress. You take it where you can get it.

Let me just add one [more] comment. One thing we have already seen in the APEC context is that we should not anticipate that Japan will play much of a real leadership role. There are few areas where the Japanese really want to be the force for making things more open; that is not in their interest at home.

But I would add that there are some areas where maybe the Japanese do have an emerging interest in having things more open. If not at home, the Japanese are interested in greater openness at least around the rest of the region, certainly so in an area like intellectual property right protection, where Japan's own record at home is not the greatest. But they are far beyond China at the present time. And one would like to believe that on some of these issues Japan would at least be an ally in helping others, like the United States, if we choose to push hard on some of these issues.

Comment by Steve Parker on

Japanese Group Boycotts and Closed Government Procurement as Barriers to Trade
by Mark Tilton

Professor Tilton presents a convincing story of how Japan has used private sector cartels supported by government administrative actions to keep domestic prices well above world prices while simultaneously limiting imports and propping up exports for two key industries -- cement and steel. These practices contribute to the widely held presumption that "Japan Inc" (a set of common national objectives implemented through cooperation (collusion?) among businesses and government) uses informal trade and investment barriers to restrict imports and to subsidize indirectly exports even while formal trade barriers decline to insignificant levels.

Furthermore, and quite importantly, he documents why there has been limited domestic pressure to break these cartels, either from local competitors and consumers or government regulators. His argument falls back on "Japan-Inc's" dedication by producers, consumers and government officials alike to support key elements of the manufacturing sector, even when high domestic prices result. Critically, however, he also shows how underlying the Japan Inc consensus is a web of personal interest stories ranging from financial support by cartelized sectors for government political activities, the practice of hiring retired bureaucrats in cushy jobs often through support from formerly regulated firms, and the use of business associations to enforce cartels, sometimes involving organized crime and other strong-armed methods.

Since cartels are by nature secretive and opaque, his research relies largely on newspaper articles and generally unattributed personal interview sources to tell a story of how firms and government officials enforce the cartels, splicing in real data on prices, output, and trade flows that exhibit cartel-like results -- significant differences between domestic and foreign prices, limitations on output levels, and constrained imports matched with higher than expected exports.

Although Tilton's story line is compelling, and certainly provides enough circumstantial evidence to rile a trade negotiator, I'm left with several questions. First, his argument on how downstream industries absorb the high prices of key inputs is weak. One can see how this works in the construction sector, given that foreign competition is limited and that government (and thus taxpayers) ultimately foot much of the bill. As an aside, this may also explain the ineffectiveness of Japan's fiscal policy expansion in 1994 through 1997, since higher but inefficiently employed government spending on public works yield limited long-term economic stimulus. Tilton's argument on how highly competitive auto and electronic sectors can absorb the high prices for inputs (up to 40 percent on steel) are less well developed. Secondly, he does not describe well how Japanese firms are able to presumably cross-subsidize high levels of exports from these cartelized sectors that exhibit domestic prices at much higher levels than foreign competition. Thirdly, little attention is paid to the swings in exchange rate levels over the last fifteen years that have significantly affected Japanese pricing and market share strategies. Fourth, there is an implicit presumption in the paper that cartels similar to those described for cement and steel permeate the Japanese economy. Is the entire Japanese economy a web of price-fixing cartels supporting mercantilistic tendencies?

Lastly, especially since Tilton's research and data are somewhat sketchy for the last several years, are things changing? What about the new Japan? Is the intensity of foreign competition throughout the Japanese economy and in international markets breaking down the economic and political basis for cartels?

My personal view is to accept Tilton's analysis of cartels in these two sectors (and probably more but not necessarily all sectors), but to raise a hypothesis that considers whether the dynamics of change in Japan are affecting these types of practices, especially as the Asian financial crisis exposes weaknesses in the Asian development model that hold in many cases as strongly for Japan as for Southeast Asia and Korea. This is important for U.S. trade negotiators, who obviously would welcome greater domestic pressure for change in Japan, but also who should be focusing on issues as they evolve in the future rather than as the existed in the past.

Over the last several years, even though Japan's overall economy has been stagnating, import levels have increased substantially. Although far from an ideal market environment, U.S. and other non-Japanese firms now complain less about informal restrictions to entry into the Japanese markets. Hard economic/market realities -- slow growth, high domestic costs, attractiveness of less developing economies catching up to Japan -- seem now to dominate trade and investment decisions with Japan.

Some of this market opening resulted from tough negotiating primarily by Americans (gaiatsu), but Japanese producers were severely stressed by the high Yen period in 1995 and 1996 (reaching around 80 Yen per dollar), which combined with weak domestic markets to dramatically lower profit levels and to push many of the smaller firms that support the Japanese keiretsu systems off shore for survival. The banks that generally form the core of the keiretsu systems are burdened by non-performing loans. Few Japanese firms have been able to maintain international marker leadership, especially in the rapidly developing high-tech and information technology sectors.

Although it has frustrated U.S. negotiators, Japan seems to have been content with their system that produced remarkable economic and social advances since World War II, and countries rarely make fundamental changes when it is not perceived to be in their own self interest. But have things changed? Are domestic pressures building up for real economic change that will reduce systems frictions between Japan and other economies, especially the United States?

Although recent weakening of the Yen to the 110 to 130 range per dollar has ameliorated price pressure, the effects of the Asian financial crisis has countered with further pressure that limits export demand and dramatically increases price competition from Asian competitors. Many from the outside (and in Japan) are surprised by the slow and weak response by the Japanese government to the weak domestic economic conditions and by Japanese firms to strong competitive pressures. Professor Tilton notes in his conclusion that Japanese businesspersons acknowledged the continuation of cartel behavior during his trip to Japan early in 1997. As we are learning, this behavior is part of a wider system of interests that permeate Japanese government and business institutions, and to some degree Japanese values. The Asian financial crisis poses particular difficulties, and opportunities, because it in many ways deals with a set of systematic political and economic issues that are embedded in the Asian development model. Whether these types of cartels diminish in influence will depend significantly on how Japan responds to the pressures and lessons learned from the Asia crisis, which only adds to the domestic pressures for change arising from lackluster economic performance in the Japanese economy.

Comment by Nagesh Kumar on

Japanese Corporate Activities in Asia: Implications for US - Japan Relations'
by Diane Manifold

The paper by Manifold deals with an important topic. It examines if the Japanese production networks in Asia are characterised by traditional keiretsu practices as prevailing in Japan and whether transplantation of these corporate practices acts like a trade barrier for non-keiretsu enterprises. Manifold attempts to answer this question with a survey of Japanese companies in three Asian countries viz. Indonesia, Malaysia and Thailand. The Japanese industry is known to be dominated by keiretsus covering operations in wide range of manufacturing and services. The bulk of smaller companies are also linked with larger keiretsu enterprises as subcontractors. A large part of the dealings of keiretsu enterprises are conducted within the group. This means that outside firms are at a disadvantage in dealing with the keiretsu firms.

Manifold found that 61 per cent of Japanese affiliates in Indonesia, 48 per cent in Thailand and 45 per cent in Malaysia had keiretsu links. Japanese affiliates in Asian countries tend to buy a large part of their requirements of parts or components either from sources in Japan or from established network of Japanese affiliates within the host country. Manifold sees the close manufacturer-supplier relationship practised by Japanese affiliates in Asian countries as exclusionary or as a transplanted trade barrier in that it potentially affects the ability of US firms to sell to Japanese affiliates. This exclusionary behaviour explains 59 per cent of all sales and 63 per cent of all purchases of manufacturing Japanese affiliates represent intra-firm transactions. Manifold concludes the paper with implications for bilateral trade policy negotiations between the two countries.

The analysis presented in the paper is interesting and highlights the concerns of US firms which find it difficult to penetrate the Japanese production networks, in Asia or other host countries. The practice, however, raises concerns for the host country's developmental prospects too. These are related with the diffusion of technology and know-how brought in by foreign companies in the host economies. The recent developmental literature has highlighted the importance of vertical inter-firm linkages that foreign affiliates establish with national firms as an important source of spillovers of knowledge or diffusion of technology in the host country. If foreign firms transplant their entire networks of suppliers and do not develop local sources of supply in their host countries, the diffusion of knowledge would be minimal. Therefore, this issue is important for determining the developmental impact of the FDI on the host economies.

The other point I would like to make is that multinational enterprises are known to internalize transactions within the organization to save transaction costs all over the world. The bulk of international trade of US MNEs is also conducted on intra-firm basis. For instance, in manufacturing, nearly 50 per cent of US exports were made to overseas affiliates of US MNEs with 87 per cent of them being shipped by US parents on intra-firm basis in 1994. The proportion of US imports that are conducted on intra-firm basis is even higher at 66 per cent. That does not, however, necessarily indicate a high proportion of purchases of US affiliates being made on intra-firm basis from other US affiliates within the host country. The source wise break up of purchases of US affiliates abroad is not reported in the Department of Commerce's Benchmark Surveys. On the basis of what is reported, it is clear that 19.5 per cent of purchases of majority owned US affiliates in manufacturing are imported from the US, largely from their parents. In addition, they buy some proportion from other local affiliates and import from affiliated firms in third countries. Lipsey (1998) has worked out the proportion of purchases of US affiliates in developing countries from

other local affiliates and imports from other affiliates in third countries in affiliate sales. Using those proportions to workout the magnitude of affiliated purchases by majority owned affiliates in manufacturing in all countries and compute their proportion to their total purchases yielded 13.1 and 7.28 per cent respectively for affiliated third country imports and affiliated local purchases. Adding up all the affiliated purchases gives us a figure of 39.84 per cent. Therefore, US affiliates may also be buying nearly two-fifths of their purchases from affiliated sources. Although lower than the figure for Japanese affiliates, it still calls for an explanation. The major difference is that in the Japanese case, relocation of Japanese firm assembling the final product is followed by its supplier of components in the home country as well, while in the US case probably some components are purchased within the host countries but a considerable proportion is continued to be bought with affiliated sources of supply.

The modern industries are characterised by a high degree of product competition, which in turn involves a high extent of product specificity and a high element of proprietary knowledge in the component design. These factors tend to raise costs of dealing with unaffiliated suppliers. MNEs tend to lower these transaction costs by internalizing them. Japanese corporations reduce the transaction costs by building a long term relationships and bondage with their suppliers. Whatever be the explanations, these practices do tend to reduce the diffusion of knowledge in host countries and act as trade barriers for unaffiliated enterprises.

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