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An Economic Analysis of Extraterritoriality

by

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Abstract

Extraterritorial application of national laws are regarded as an infringement of national sovereignty and against the interests of the nations affected by these actions, who frequently oppose their enforcement as a consequence. This paper examines extraterritorial application of national competition laws, and identifies an additional issue. Extraterritorial action by national competition authorities acting alone and in pursuit of their national interests may not eliminate distortions in global markets. A model of mergers is constructed which shows that national authorities which veto mergers in other countries may act against the interests of the world as a whole. Thus extraterritorial action may not remedy the problems it addresses, even if it is enforceable.

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1 Introduction

Some governments apply national laws extraterritorially and these applications are increasing but they are always controversial. The governments of the nations whose natural persons or corporations are affected by the application of another country's laws normally regard this practice as an infringement on their own national sovereignty. Furthermore, these governments will normally regard it as an action which will be against the interests of the natural persons or corporations being pursued and, therefore, against their own national interest.

There is a substantial legal literature on extraterritoriality but no economic analysis of this practice to our knowledge. Economics will generally have little to say on national sovereignty, except perhaps to note aspects that may be amenable to cost-benefit analyses. It may have something to say about the nature and measurement of the net welfare gains to both the applying country and the affected country or countries when the application of extraterritoriality relates to economic activities. However, perhaps the most important contribution the discipline of economics can make to the analysis of this practice is to examine its effectiveness in achieving the intended goal. In this respect, the analysis of extraterritoriality is much like the analysis of tax-subsidy instruments which are proposed to correct externalities or other market failures or to target particular low-income households. Complications peculiar to extraterritoriality arise because of the cross-border aspects and especially the problem of enforcement across national borders.

As an example of the extraterritorial application of laws, we consider national competition laws, where it has been suggested that such applications might be used to correct distortions in global markets. Competition (or antitrust) law is an area where extraterritorial applications have been increasing in recent years and have given rise to some notable instances of conflict between nations; for example, the *Boeing/McDonnell Douglas* merger which was examined by both the US Federal Trade Commission (FTC) and the European Union Directorate-General IV(DG IV).

Section 2 outlines the way in which laws in general and competition laws in particular are applied extraterritorially by some countries and the problems of national sovereignty and national interest to which this has given rise. Section 3 specifies the nature of the competition policy failure as a distortion in the world economy. Section 4 takes mergers as a particular example of this distortion which a nation might seek to address through

extraterritorial application of its laws. We show that extraterritoriality cannot generally correct distortions in the world economy because national laws usually ignore the interests of other nations. Section 5 considers alternative approaches which might be used to correct cross-border policy failures. These include bilateral cooperation and the development of binding multilateral laws carried out by some multilateral competition authority.

2 Extraterritoriality

Nation states have the competence to prescribe laws that apply to persons and resources within their own territory. Persons comprise natural persons and other legal entities such as corporations. This is the doctrine of territoriality. This doctrine is universally accepted and uncontroversial. Indeed, this competence is an essential attribute of nationality.

Controversy arises when one nation seeks to apply its laws to persons located within the territory of another nation. This practice is extraterritoriality. It arises mainly in two circumstances. First, when a nation's laws are applicable to its own persons whether they reside or are located within the territory of their home state or in that of another state. This is the doctrine of nationality. The laws of some nations are framed to apply to nationals, irrespective of where they reside or are located. Secondly, laws may apply to persons located in another jurisdiction if the actions of these persons have effects on persons residing or located within the home jurisdiction. This application may be written expressly into legislation or arise through court interpretation. In both cases, the extraterritorial application of the laws of one nation has the consequence that the jurisdiction of the nation in which a person is located ceases to be exclusive.

Problems of extraterritoriality occur within several areas of legislation because many actions of persons located in one place do produce effects on persons located in other jurisdictions. These can vary from effects on the national security or national political interests, to effects on the wealth or well being of individual persons or corporations.

Extraterritoriality is sometimes used to pursue political or national security objectives. For example, the US Export Administration Act authorises the control of exports in certain circumstances for reasons of national security or foreign policy (see Jackson, Davey and Sykes, 1995, Section 20.4). In implementing these controls, the US Government has taken a broad view of what is subject to US jurisdiction. At times it has sought to regulate not only exports originating in the US but exports from other countries which are produced by

subsidiaries of US corporations[1] or of foreign goods which have incorporated US goods or were made under licensing agreements with US companies. The US has used its export control measures to restrict international trade with the former Soviet Union, China and other countries with which it has been at odds politically.

Foreign direct investment may be subject to extraterritoriality in a similar way. The Iran and Libya Sanctions Act, passed by the US Congress in 1996, requires the US President to impose sanctions on companies that invest more than US$40 million in one year in Iran or Libya to develop their petroleum resources or on firms which act in violation of Resolutions 748 or 883 of the Security Council of the United Nations regarding trade with Libya. The list of sanctions include withdrawal of Export Import Bank assistance or eligibility for export licences, prohibition of loans from US financial institutions, exclusion from US government procurement and import restrictions. The sanctions against Libya and Iran are designed to correct the behaviour of governments that is regarded by the US government as unacceptable.

Economic sanctions may be designed to redress legal problems deriving from the confiscation of foreign-owned assets. One well-known example of this is the Cuban Liberty and Solidarity (LIBERTAD) Act, popularly known as the Helms-Burton Act, passed by the US Congress in 1996. Under Title III of this Act, US citizens may claim damages in a US Court from non-US companies which own, manage or use property "wrongfully" confiscated from US nationals by the Cuban Government after 1 January 1959. Under Title IV, the State Department may bar executives and shareholders of companies using confiscated property in Cuba, and their minor children, from entry into the US. The Act also codified prior restrictions on US trade with Cuba. Passage of the Helms-Burton Act followed Cuba's downing of two civilian aircraft registered in the US but it is designed to put pressure on a Cuban Government regarded as unacceptable and hostile to the US.

All these applications of extraterritoriality have generated objections from the other nations affected. The Helms-Burton Act in particular has not been supported by other nations. Cuba has protested to the WTO (see the address by the President of Cuba to the WTO on the occasion of the 50th anniversary of the multilateral trading system reported in WTO (1998)). Canada and Mexico requested consultations with the US under Chapter 20 of the NAFTA Agreement. The EU requested consultations under the WTO dispute settlement

procedures and establishment of a panel was averted only by the US President exercising his discretion to delay implementation of Titles III and IV. The UN General Assembly has passed resolutions condemning the US trade embargo on Cuba. Franken (1998) argues that the Act breaches the international trade law of the WTO and of NAFTA.

3 Extraterritoriality and Competition Policy

The area we focus on in this paper is the extraterritorial application of competition policy to regulate the effects of actions by producers or sellers in one nation, on buyers or sellers in other nations, where these actions raise issues of anti-competitive conduct. Such cross-border effects arise simply because markets for goods and services and assets are increasingly international markets. The laws of some countries allow courts or competition authorities to seek to redress such conduct by the extraterritorial application of their national laws. This area is one of the most frequent and controversial areas of application of extraterritoriality.

The US Government has been the most active in the application of national competition laws extraterritorially. The reach of US antitrust law is not limited to conduct located within the US. Under the Sherman Act, conduct relating to US imports that harms consumers in the US may be subject to the jurisdiction of US antitrust laws irrespective of where such conduct occurs or the nationality of the parties involved. Conduct relating to non-import foreign commerce is subject to US law only if it has a "direct, substantial or reasonably foreseeable" effect on non-import trade or commerce. This application of extraterritoriality is known as the "effects doctrine", a reference to the effects of conduct outside the US on US persons. This doctrine was established in *United States v. Aluminium Co. of America* in 1945. Under the Clayton Act, mergers and acquisitions involving parties outside the US are similarly subject to the jurisdiction of US law.

The US enforcement procedures are set out in the Antitrust Enforcement Guidelines for International Operations, last amended in 1995, and issued jointly by the Department of Justice (DOJ) and the FTC. The Guidelines set out a number of factors which are to be taken into account. The first of these is "the relative significance to the alleged violation of conduct within the United States, as compared to the conduct abroad". They also include the presence or absence of a purpose to affect US consumers, markets or exports, the degree of conflict with foreign national law, and the effectiveness of foreign enforcement as compared with US enforcement.

The DOJ has considerable discretion in enforcing the laws extraterritorially. In 1992, the DOJ announced an expansion of enforcement policy to cover conduct occurring overseas which violates US antitrust laws and where US courts have jurisdiction, where it is clear that the conduct has a direct, substantial and reasonably foreseeable effect on exports of goods and services from the United States. This represented a change from the earlier guidelines which required harm to US consumers before action could be taken. It effectively brought conduct in other countries which affects US exports within the scope of the extraterritorial application of its competition laws. The DOJ generally applies the "direct, substantial or reasonably foreseeable" standard to mergers and acquisitions.

In enforcing the antitrust laws, there are some restrictions on extraterritorial action. Foreign sovereigns and their instrumentalities are generally immune from suit in US courts. In relation to private actions, the DOJ recognises the considerations of comity among nations. Traditional comity is the consideration of the interests of other nations. It has committed itself to consider the legitimate interests of other nations in accordance with the OECD Recommendations relating to bilateral cooperation agreements and with bilateral agreements between the US and foreign governments or bodies where applicable. It carries out a comity analysis before taking action. It considers whether the significant interest of any foreign government or body would be affected. This includes circumstances in which the conduct is prohibited under the laws of the nation or nations in which it occurs, or where the conduct is not prohibited but is not encouraged under the laws or policies of the nation or nations concerned.

In the European Union, extraterritoriality appears to apply quite widely as the Treaty of Rome states that conduct which affects trade within the Community is subject to the law, irrespective of whether the conduct originates in the EU and of the nationality of the parties. The European Commission has made it clear that the law applies to agreements between EU and outside parties which affects imports (but not exports) and to parties wholly outside the EU jurisdiction (Rose, 1994, chapter 2). This has been confirmed by the European Court. In the *Wood Pulp* case, the Court ruled that Article 85 (1) applied to foreign companies selling into the Community without any presence in its territory whatsoever. The Court has required proof of the implementation of the conduct within the EU by selling the products directly to purchasers within the Union. This is known as the "implementation" doctrine. The doctrine is more limited than the US explicit "effects"

doctrine in that it does not apply to conduct wholly outside the EU and it does not apply to exports.

While the EU has been less aggressive in its application than the US, it has applied the doctrine from time to time (Banks, 1998). It has been applied to mergers as well as to horizontal and vertical restraints (see Sleuwaegen, 1998). The Merger Regulations apply explicitly to companies which have their headquarters outside the EU.

There is provision in the competition law of some other countries for extraterritorial application. Some sections of the Canadian Competition Act apply only to conduct in Canada but other sections do not expressly limit the application in this regard. Canada has occasionally applied its merger laws extraterritorially when Canadian markets are affected only through a Canadian subsidiary (Goldman, Bodrug, and Warner, 1998). This is similar to the EU “implementation” doctrine. Both the Australian and New Zealand competition statutes, the Trade Practices Act and the Commerce Act respectively, give expression to the general extraterritorial provision which covers conduct engaged in outside Australia and New Zealand respectively by any person resident or carrying on business in one of those countries to the extent that such conduct affects a market in that country. These provisions follow the US "effects doctrine". In practice these provisions have been applied mostly to mergers or takeovers and more particularly in Australia where detailed procedures are set out in their legislation. Melz (1996) advocates wider use of these powers.

Competition law cases involving extraterritoriality have raised the same issues of national sovereignty and conflict of interests as other applications. The extraterritorial application of US antitrust laws and in particular attempts to order production or disclosure of documents outside the US have been vigorously opposed by the governments of some of the nations involved, including the UK, France and the EU, and its NAFTA partner, Canada. They see the interests of their persons or trade as being adversely affected and object to what they see as an infringement of national sovereignty.

These applications have led to a range of reactions from the governments of other countries (see Griffin, 1998). One response has been the enactment of blocking statutes against discovery of evidence relevant to a case. Most of these have been directed against US actions. There are also statutes to render certain types of judgments unenforceable in foreign courts. Later legislation created a statutory cause of action to recover damages paid

in satisfaction of US antitrust judgments. Commonwealth Law Ministers called in 1980 for coordinated resistance to US treble damage judgments. In 1980 French legislation made it a crime to request certain types of information located in France. The extraterritorial application of EU law by the Commission in the Boeing-McDonnell Douglas merger led to a threat of a trade war between the US and the EU. This was averted after intensive discussions between the European Commission and the FTC under the terms of the bilateral competition agreement between the EU and the US.[2]

There is also an inconsistency in the actions of some governments: they are not prepared to have other governments act upon their citizens or corporations in the same way as they act upon the citizens or corporations of other nations. The US Government has protested when its citizens or corporations have been the subject of extraterritorial action by the authorities or governments of other nations. Franken (1998, p. 169), commenting upon the Helms-Burton Act, concluded "it is highly unlikely that the United States would passively accept similar legislation targeting *its* nationals." Similarly, the EU has protested when its citizens or corporations have been the subject of extraterritorial action by the authorities or governments of other nations. Canada has been affected by a number of cases in which the US antitrust authorities have acted against companies in Canada. It has protested in several such cases. In some of these cases, the US action may have been in the interests of Canada and, in the words of one commentator, Canadians "don't so much complain about the injury as the insult." (Goldman, Bodrug, and Warner, 1998, p. 65). The consequence of this asymmetry is that extraterritoriality is an instrument that is used principally by large and powerful nations. Small nations cannot risk the antipathy of large and powerful nations.

That national competition laws do not reach anti-competitive conduct originating in other jurisdictions but affecting the national economy may be regarded as a national policy failure. The extraterritorial extension of national laws is one mechanism to regulate the cross-border effects of anti-competitive conduct. A number of US academic lawyers have defended the extraterritorial application of US antitrust laws in the context of a lack of alternative options to counter adverse effects from conduct originating in other countries (for example, Baker *et al*, 1997).

Recently, economists have begun to look upon the problems of extraterritoriality in antitrust or competition law as more a global than a bi-national problem. Markets for many

goods, services and assets are now international or global markets. Concern for global markets raises a broader policy issue. Anti-competitive conduct may be harmful wherever it occurs and whoever it affects. There is a global policy failure.

The WTO and economists at the WTO have recently examined competition laws from a global perspective (see Bacchetta, Horn and Mavroidis (1997) and the WTO (1997, Chapter 4.III.2). The WTO distinguishes between two effects of the decisions of national competition authorities: for example, a decision to block a cross-border merger or to break up an international cartel. These are *negative spillover effects* and *distortions.* Negative spillovers occur when the competition authority of one nation chooses an action which lowers the welfare of residents of foreign countries. By contrast, a distortion arises when the authority's choice is not the choice which would maximise global welfare. In order to eliminate distortions in the global economy, competition law should act so as to maximise global welfare, not national welfare. Actions which are necessary to eliminate distortions in global markets may have negative spillover effects on other countries. Hence, as the WTO emphasised, a decision by a national competition authority may have negative spillovers but not be a distortion. This is a most important distinction.

Some competition specialists have advocated that national authorities adopt a global welfare view (Crampton and Witterick, 1996 and Fox and Ordover, 1997). However, the "effects doctrine", and related principles such as the EU "implementation doctrine", are all concerned with the effects of some extraterritorial act on the residents of the country in which the "effects" occur.

The question we address in the next section is whether extraterritorial action by one nation can correct these distortions in global markets. Will the extraterritorial actions by national authorities acting alone and in pursuit solely of the interests of the residents of the home jurisdiction be in the interests of the global economy, that is, in the interests of all countries combined? Some economists and lawyers appear to believe that they will; Baker *et al* (1997, p. 442) conclude "Thus, absent a seamless international antitrust code, global allocative efficiency is better served by overlapping jurisdiction (e.g. based on an "effects test") than by gaps in jurisdiction which would allow anti-competitive conduct to fall between the cracks of domestic competition law regimes." The answer to this question requires some formal analysis.

4 Mergers

The issues in the regulation of competitive behaviour which crosses over national borders are complex and many of the concepts are novel. To explore these issues, we focus on mergers, which have been the most debated example in the small literature dealing with anti-competitive cross-border conduct (see Horn and Levinsohn, 1997 and Falvey, 1998 and the references therein)[3].

From the perspective of a particular country (the "home" country say), merger proposals fall into three categories; (a) those where the participating firms are all located in the home country, (b) those where only some of the participants are located in the home country, and (c) those where all participants are located in foreign countries. Only (b) and (c) can involve extraterritoriality. Case (c) is closest to the typical concerns with extraterritoriality and consequently we focus on it, assuming for convenience, two merging firms both located in the same foreign country (the "originating" country). As will be become apparent, the following analysis requires little modification to apply to case (b).

Our model of mergers, based on Falvey (1998), is a version of the cross-hauling model frequently used in oligopoly theory. We consider a world market in which firms differ in their technologies and hence their unit costs but sell a single homogeneous good. Decisions to merge are endogenous, but subject to approval. A merger of two firms with different unit costs will result in the closure of the firm with the higher costs. The consequent reduction in competition will drive up prices. Consumers in the market will lose and remaining producers will gain.

Social welfare is taken to be the sum of consumer surplus and producer profits. The reduction in consumer surplus and in the loss of profits of the firm which closes are welfare losses, but these may be offset by a potential reduction in overall average unit costs since it is the relatively inefficient merger partner that has closed. This efficiency gain will be distributed among the continuing firms as part of the profits on their increased output. This introduces an "efficiency" defense of a merger[4]. From a global perspective, welfare could rise or fall. If all firms had identical constant unit costs, the anti-competitive effects of the merger would certainly reduce global welfare. But where firms have different technologies, the increased efficiency in production could lead to an increase in global welfare, if the departing firm is sufficiently inefficient.

The effect of the merger on <u>national</u> welfare in any individual country depends on the balance between consumer losses and producer gains. If global welfare rises (falls), at least one country must be made better (worse) off and all might gain (lose) or some might gain and others might lose. Issues of extraterritoriality arise when the welfare effects of the merger have opposite signs in different countries, in particular where the originating country gains, and hence will approve the merger, but some other country loses. The circumstances where this is likely to occur, and the possible outcomes, are now illustrated.

Consider a completely integrated world market for a single homogeneous good that is composed of national markets in T countries. Suppose there are a small number of firms in each country (n_t in country t), and that these firms have unit costs that are constant but differ among firms (c_{jt} for firm j in country t) and no fixed costs. Firms are Cournot competitors, choosing outputs (x_{jt}) so as to maximise profits (π_{jt}). The national demand functions (D_t) are linear and have the same unitary slope. This yields the world demand function

$$D = \sum_{t=1}^{T} A_t - T.p \qquad (1)$$

where p is the single world market price, and $A_t > 0$ for all t=1, ..,T. The slope of the inverse demand curve is thus $1/T$, and firm (j, t) therefore takes $dp/dx_{jt} = -1/T$ when selecting its output. Solving the first order conditions for optimal firm outputs, summing the outputs from all sources ($X = \sum_{t=1}^{T} X_t$) and equating this with total demand gives the equilibrium market price and the solution values for the other endogenous variables.

If two firms merge in this market they become a single decision making unit. Assuming that the merger itself leaves the technology of the participants unaffected, cost minimisation by the new merged firm implies the abandonment of the less efficient firm's technology. The new market equilibrium is simply that which would obtain in the absence of this firm. This type of merger is sometimes referred to as "lockup".

In these circumstances, a merger between two firms in country r, which sees the closure of firm (k, r) changes the equilibrium values of the endogenous variables in a simple way.

Given linear demand and constant unit costs, the output of each of the remaining firms rises by the same absolute amount, z/N, where N is the total number of firms in the initial equilibrium, and $z(=x_{kr})$ is the closing firm's original output. World demand and output fall by the same amount, distributed as an equal fall in consumption in all countries. This implies a fall in output in the originating country, and a rise in output in all the others. These changes (denoted by Δ) are summarised as follows:

$$\Delta p = \frac{z}{TN}; \ \Delta x_{jt} = T.\Delta p; \quad \Delta D_t = -\Delta p; \qquad (2)$$
$$\Delta X_t = n_t.T.\Delta p, \ t \neq r \ ; \Delta X_r = [n_r - 1 - N].T.\Delta p$$

Global (net) benefits (B) are the sum of the national benefits (W_t) and can be written as

$$B = \sum_{t=1}^{T} W_t = \sum_{t=1}^{T} [CS_t + \sum_{j=1}^{n_t} \pi_{jt}] \qquad (3)$$

where CS_t denotes consumer surplus in country t. If the merger takes place, the reduction in consumer surplus in each country is composed of two terms - a transfer from consumers to producers (as a result of the higher price on output that continues to be consumed) and a consumption deadweight loss. Letting superscript m denote post-merger values, we have

$$\Delta CS_t = -\Delta p.D_t^m + \Delta p.\frac{\Delta D_t}{2} = -\Delta p.\overline{D}_t \qquad (4)$$

where $\overline{y} \equiv [y^m + y]/2$ denotes the average of the pre- and post-merger values of a variable y. The increases in total profits can similarly be decomposed so as to highlight the sources of welfare changes. For non-originating country t these are the transfer from consumers plus the profits on the output redistributed from the closed firm, i.e.

$$\Delta \Pi_t = \Delta p.X_t^m + \sum_{j=1}^{n_t} [p - c_{jt}].\Delta x_{jt} = 2.\Delta p.\overline{X}_t \qquad (5A)[5]$$

For the originating country, in addition to these sources, there is the loss of profit of the closed firm, i.e.

$$\Delta\Pi_r = \Delta p.X_r^m + \sum_{\substack{j=1 \\ j\neq k}}^{n_r}[p - c_{jr}]\Delta x_{jr} - \pi_{kr} = 2.\Delta p.\{\overline{X}_r - [1+N]\frac{z}{2}\} \qquad (5B)$$

Total profits increase in all countries because the price rises and the outputs of all non-merging firms have increased. The combined profits of the merging firms must have increased for them to propose the merger[6].

These expressions for the changes in consumer surplus and profits can then be combined to give the national and global welfare effects

$$\Delta W_t = \Delta p.\overline{E}_t + \Delta p.\overline{X}_t; \quad t = 1,..,T; t \neq r \qquad (6A)$$

$$\Delta W_r = \Delta p.\overline{E}_r + \Delta p.\{\overline{X}_r - [1+N].z\} \qquad (6B)$$

$$\Delta B = \Delta p.\{\overline{X} - [1+N].z\} = \Delta p.\{X - b(N).z\} \qquad (6C)$$

where $b(N) = 1 + N + 1/2N$, and $\overline{E}_t (= \overline{X}_t - \overline{D}_t)$, denotes "average" net exports of country t. All three of these expressions are ambiguous in sign, in general.

The change in global welfare is shown in equation (6C). This reflects two components; the efficiency gain and the deadweight loss of consumer surplus. As noted above, this merger can increase global welfare if the closing firm is so relatively inefficient that its pre-merger market share is less than 1/b(N) (see Lahiri and Ono, 1988).

The distribution of this net global welfare change among the countries is indicated by the second terms on the right-hand side of equations (6A) and (6B), and depends on their average national outputs. In addition, the changes in national welfare include a conventional terms of trade effect which is positive (negative) for a country which is a net exporter (importer) on average. While this effect merely redistributes income and welfare among the countries, and cancels in the aggregate, it can play a decisive role in determining merger approvals. A non-originating country that is a net exporter on average ($\overline{E}_t > 0$) will clearly gain from the merger. A non-producer will clearly lose ($\Delta W_t = -\overline{D}_t$).

A proposed merger that is profitable to the participants, and raises originating country welfare, would be expected to be approved by an originating (country) government that uses national "efficiency" (welfare) as its criterion for approval. Indeed if either of these

conditions fails to be met, then actions by other countries would be irrelevant as the merger would not take place.

If the proposed merger is also global welfare improving, then its approval by the originating government is not distortionary, in the sense discussed above. However, the merger itself can have positive or negative spillover effects on other countries, depending on their outputs and whether they are net exporters or importers of the product on average. In the latter case, other governments may attempt to use extraterritorial powers to block the merger. If successful, such an action will have a negative spillover effect on the originating country and it will lower global welfare.

Alternatively the merger may reduce global welfare. If (6C) is negative then the second term on the right of (6B) will also be negative. Originating country welfare can still increase as a result of the merger, but only if this country is an exporter. In such a case the originating government's approval of the merger both distorts the market and generates a negative spillover for some importing countries. Extraterritorial action by the latter that prevented this outcome would be global welfare improving but would again have a negative spillover effect on the originating country.

In short, when other countries choose to take action, there will be a negative spillover effect on the originating country: otherwise that country would have found the proposed merger against its own national interests and would have blocked it.

It is important to recognise the role played by terms of trade effects here. Absent such effects, extraterritorial action is either unnecessary or ineffective. If the originator gains, each country in the world gains. If the originator loses, the merger does not take place and extraterritorial action by other countries is irrelevant. Although the terms of trade effects are purely redistributive, they give rise to an allocation of the gains among countries that may lead some to take extraterritorial action. These actions may be for or against the interests of the world as an entity. Extraterritoriality itself does not prevent distortionary policy actions. We can go further. The increasing globalisation of markets implies that a blanket acceptance of extraterritoriality will likely result in fewer mergers being approved regardless of their consequences for global welfare. It is almost inevitable that some country will suffer a welfare loss from any price-raising merger.

This example also illustrates the importance of the objective function applied by competition authorities. Here this has been assumed to be the welfare of interests in the relevant nation. If, instead, national authorities adopt global welfare as their objective, there would be no need for the extraterritorial application of their laws. Given the apparent significance of terms of trade effects, it is interesting to note the bias that is introduced by excluding such effects from the objective function. If (6C) is negative, so is the second term on the right of (6B). A merger that is globally welfare reducing will not be approved by an originating authority operating under this abbreviated criterion. But there may be cases where (6C) is positive, and the production term in (6B) is negative, in which case a merger that is global welfare improving is rejected by the originating authority. As noted above, extraterritorial action can do little in such a case.

As an alternative objective, national authorities might act in the interests of producers alone, ignoring the interests of consumers, either because this is the objective written into national legislation or because the producer interests succeed in capturing the authority. In this case, the outcomes of decisions by merger authorities could go against the national interest. A producer orientation would increase the likelihood that price-raising mergers will be approved, regardless of their effects on global welfare.

Although the example examined here is confined to a particular case of mergers it will apply more widely. Particular assumptions relating to the nature of competition are not crucial. Other models of non-cooperative oligopolistic behavior will yield the result that a reduction in the number of firms through merger increases prices and leads to the same qualitative results as above. Price reducing mergers are more likely to raise global welfare, but still generate terms of trade effects although it is exporters that are harmed in this way. More generally, the issues raised in this merger example are similar to those that arise in cartels, market allocation schemes and other horizontal restraints that also raise prices in world markets.

5 Conclusions

Section 3 identified two traditional problems with extraterritorial applications of competition laws. First, they are regarded as an infringement of national sovereignty. Secondly, they are regarded as being against the national interests of the countries in which the persons or corporations are located. These perceptions make it difficult to enforce actions outside the territory of a jurisdiction.

Section 4 identified a third problem with extraterritoriality. It does not lead generally to a correction of distortions in the global economy, even if extraterritorial applications are enforceable outside the jurisdiction. The primary cause of this problem is that national governments take actions that are in the interests of the national economy, which may conflict with the interests of the world economy as a whole. Until countries can be persuaded to adopt a global welfare view, other solutions to cross-border spillovers which distort production and consumption in the world economy must be pursued.

The WTO (1997, Chapter 4.III.2) sees the existence of distortions to the world economy resulting from the actions of national competition authorities as a motive for international cooperation or coordinated action on a competition issue. This could be done at the bilateral, regional, or multilateral level.

Some competition specialists advocates bilateral cooperation in place of the conflict-generating unilateral application of laws. The extraterritorial extension of national laws is a unilateral act and does not involve cooperation with the government or competition authority of the foreign country or countries in which the conduct took place. Indeed, it is the antithesis of cooperation. There is an expanding network of bilateral competition agreements, most of them involving the US as one party. Bilateral cooperation is difficult when there is a conflict of interests between the two nations and it cannot handle the interests of third countries which may also be affected by the anti-competitive conduct of producers in one of the countries. (Lloyd and Vautier, 1999, chapter 3 review these agreements).

The other alternative which has been discussed is the establishment of a supra-national multilateral competition authority with powers to investigate and prosecute private anti-competitive conduct (see Lloyd and Vautier, 1999, chapter 10 for a review of these suggestions). This addresses the problem directly in the international or global markets. It is the analogue of a national authority acting in a national market. There has, however, been little enthusiasm for this solution, again primarily on the grounds that it would reduce national sovereignty and secondarily on the grounds that it is not feasible at present given the diversity of views among nations on competition laws.

The national sovereignty issue is a real one. We have seen that there are instances in which the maximisation of global welfare requires action which is against the national interest of

the nation in which the anti-competitive conduct originates. In the long run, however, multilateral actions are a repeated game. Each country would benefit from cooperative multilateral actions taken by other countries, acting in their combined interests. As the long run gains would be positive for the world as a whole, there is an expectation that positive spillover effects of these actions would outweigh negative spillover effects and all countries would gain by this cooperation.

Thus, it may be in the interests of nations to cede some powers to a supra-national authority in some circumstances. If agreement could be reached among nations on rules for such a multilateral authority and if this authority operated to reduce distortions in the world economy and thereby to increase the welfare of nations bound by this authority, the establishment of such an authority would increase the welfare of nations individually and collectively. As markets become more globalised, the relative advantage of supra-national solutions versus national or bi-national solutions to market failures will increase.

Footnotes

1. The Restatement (Third) of the Foreign Relations Law of the United States, prepared by the American Law Institute, examines the question of the jurisdiction over the activities of foreign subsidiaries and branches: "A state may not ordinarily regulate the activities of corporations organised under the laws of a foreign state on the basis that they are owned or controlled by nationals of the regulating state." However, it provides that it may not be unreasonable for a state to exercise limited jurisdiction over such entities in certain exceptional cases, such as where a "major national interest" is at stake, or where a national program "cannot be carried out effectively" unless it is applied to such entities.
2. In this case the two merging companies were located outside the EU jurisdiction but the only other competitor remaining, Airbus, was an EU company. The case was examined simultaneously by the US and EU authorities. They reached different conclusions with the European Commission opposing the merger and the FTC deciding not to oppose it. The European Commission believed that the merger would affect competition in EU markets but eventually approved it subject to conditions on Boeing. (For the views of the European Commission, see European Commission Directorate-General IV, 1997, chapter III).
3. Our concern here is to evaluate the potential effectiveness of the extraterritorial applications of merger regulations in achieving the goal of removing distortions in the global economy. We do not investigate the issue of enforcement, although this is clearly important for their actual effectiveness.
4. A similar effect is introduced if there are firm-level economies of scale due to, say, fixed costs. In this event a merger eliminates one set of fixed costs.
5. Since $\Delta\pi_{jt} = \Delta p.x_{jt}^{m} + [p - c_{jt}].\Delta x_{jt} = \Delta p.[x_{jt}^{m} + x_{jt}]$, using $\Delta x_{jt} = T.\Delta p$, and $p - c_{jt} = x_{jt} / T$.
6. The gain from a merger between foreign firms h and k in country r, is given by $G = \Delta\pi_{hr} - \pi_{kr} = \Delta p.[x_{hr} - z.g(N)]$, where g(N) = N/2 –1/2N.

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