

Deregulating International Markets: The Examples of Aviation and Ocean Shipping

Jose A. Gomez-Ibanez†

Ivor P. Morgan††

During the past ten years, the United States has loosened economic regulation and increased competition in many domestic industries, including banking, telecommunications, airlines, railroads, trucking, and intercity busing.¹ Although early signs suggest that domestic deregulation will be a success,² U.S. firms still face substantial barriers to competition in many international markets. In ocean shipping and international aviation, for example, the U.S. government has signed treaties that limit service between the United States and foreign countries and that divide markets between the national carriers of each country.³ In both industries, the U.S.

† Professor, John F. Kennedy School of Government and Graduate School of Design, Harvard University.

†† Associate Professor, School of Management, Boston University.

This article is based on a study originally prepared for the Office of the Secretary, U.S. Dept. of Transportation. The views expressed are those of the authors and not those of the Department. The authors wish to thank John R. Meyer, Lawrence Phillips and Robert Church for their advice and comments.

1. For accounts of deregulation to date, see Moore, *The Record on Rail and Truck Reform*, REGULATION, Nov.-Dec. 1983, at 33; Johnson, *Why Local Rates Are Rising*, REGULATION, July-Aug. 1983, at 31; Cornell, Pelcovits & Brenner, *A Legacy of Regulatory Failure*, REGULATION, July-Aug. 1983, at 37; BREAKING UP BELL: ESSAYS ON INDUSTRIAL ORGANIZATION AND REGULATION (D. Evans ed. 1983); D. GRAHAM & D. KAPLAN, COMPETITION AND THE AIRLINES: AN EVALUATION OF DEREGULATION (forthcoming 1984); AIRLINE DEREGULATION: THE EARLY EXPERIENCE (J. Meyer & C. Oster eds. 1981) [hereinafter cited as THE EARLY EXPERIENCE]; AIRLINE DEREGULATION: REBIRTH OF THE ENTREPRENEURS (J. Meyer & C. Oster eds., forthcoming 1984) [hereinafter cited as REBIRTH OF THE ENTREPRENEURS].

2. In the airline industry, for example, deregulation appears to have reduced fares on routes and improved the frequency of service to many small and medium-sized communities. Although some of the established carriers suffered financial losses at first, several of the new low-cost air carriers are profitable. The established carriers are recovering their financial health as the economy improves and they reduce their costs to more competitive levels. For a more detailed review of the recent experience under airline regulation, see THE EARLY EXPERIENCE, *supra* note 1; THE REBIRTH OF THE ENTREPRENEURS, *supra* note 1.

3. For a comparison of the treaties and regulations that govern international air service and international ocean shipping, see BOOZ-ALLEN & HAMILTON, INC., COMPARISON OF THE COMPETITIVENESS OF U.S. INTERNATIONAL AIRLINE AND MARITIME POLICIES (1978) (draft report to the U.S. Dept. of Transportation).

government also tolerates cartels that attempt to set prices and control capacity.⁴

Many analysts of international markets concede that pro-competitive policies are sensible for domestic industries, yet they argue that such policies are poorly suited for international industries in which foreign countries control major elements of the market.⁵ This Article examines two specific arguments against pro-competitive policies in international markets. The first is that some form of market restraint or regulation is unavoidable because many foreign governments strongly favor restraint or regulation and have the power to impose it unilaterally.⁶ U.S. resistance to foreign restrictions ultimately will prove futile, this argument runs, and may lead to even more onerous forms of regulation than those currently proposed. The second argument contends that U.S. companies will suffer from various forms of unfair competition if the U.S. government opposes regulation:⁷ If the United States insists on open competition, then foreign companies may subsidize competition against U.S. companies with profits earned in other protected markets.

This Article assesses the plausibility of these arguments in the context of the international aviation and ocean shipping industries. The international aviation industry is examined first (in Section I) because it offers the opportunity to examine a shift in U.S. policy toward increased competition. Section II examines recent, anti-competitive developments in ocean shipping and discusses how tactics similar to those pursued in aviation could thwart those developments. Our analysis of both industries strongly suggests that the first argument discussed above has little force. With sufficient determination, the United States often can successfully resist foreign efforts to limit competition. The strength of the second argument—that U.S. companies will suffer from unfair competition if the

4. See *id.* at vi-x.

5. See, e.g., Ellsworth, *Competition or Rationalization in the Liner Industry?*, 10 J. MAR. L. & COM. 497, 511 (1979) (discussing ocean shipping); *The Crisis in International Aviation* (May 4, 1981) (memorandum submitted to the Reagan Administration by Braniff International, The Flying Tiger Line, Northwest Airlines, Pan American World Airways, and Trans World Airways) (paper on file with the *Yale Journal on Regulation*).

6. For a discussion of arguments in favor of regulating international aviation, see Hammarskjöld, *Trends in International Aviation Since World War II and Governmental Policies with Respect to Routes, Rates, Charters, Capacity and Deregulation*, (1979). PROC. INT'L AVIATION SYMP. 23, 23-25 (held at Kingston, Jamaica).

Restraints can be imposed unilaterally through the use of practices which discriminate against U.S. carriers. For example, Japan allegedly excludes U.S. carriers from the U.S.-Japan airline market by unilaterally imposing quota restrictions on U.S. carriers. *International Air Transportation Competition: Hearings before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 96th Cong., 1st Sess. 340 (statement of Edward J. Driscoll, President, National Air Carrier Association).

7. See *The Crisis in International Aviation*, *supra* note 5, at 32.

International Markets

United States pursues a quixotic, pro-competitive policy—is less certain. Although pro-competitive policies almost always help U.S. consumers and the economy in general, they do not always help U.S. companies.⁸ U.S. airlines as a group, however, enjoy a strong competitive position and appear to have been helped rather than hurt by U.S. policy. Even U.S. shipping lines, whose competitive position is weaker, do not seem much threatened by exclusion from protected markets or by other unfair practices.

I. The Experience with International Aviation

Although the United States traditionally has resisted pressures for restrictive international aviation agreements, it recently has shifted toward a decidedly pro-competitive policy. In this section we review the history of U.S. international aviation policy and discuss the basis—primarily benefits to consumers—for this recent policy shift. We then advance a variety of reasons for the recent success of the United States in negotiating liberal, pro-competitive bilateral agreements. Finally, we suggest that U.S. airlines have not become victims of unfair competition from other countries.

A. A Brief History of U.S. Policy

Near the close of World War II, representatives of the Allied Powers met in Chicago to discuss the future of international aviation.⁹ The U.S. government hoped the conference would produce a multilateral agreement on “open skies,” or unrestrained competition, in international aviation. Their hopes were shattered,¹⁰ largely because the United Kingdom, the second ranking civil aviation power, wanted closer government regulation of international air service, including controls over prices and capacity.¹¹ The Allies’ failure to agree on an “open skies” policy made it necessary to negotiate a special bilateral agreement before aviation service could begin

8. Weak U.S. companies would prefer protected markets over open competition.

9. For a description of the dispute at the Chicago conference and the subsequent Bermuda I agreement, see Stoffel, *American Bilateral Air Transport Agreements on the Threshold of the Jet Transport Age*, 26 J. AIR L. & COM. 119, 120-23, 130 (1959). The United States proposed at Chicago a multilateral agreement on five “freedoms of the air” modelled after the “freedoms of the sea.” These five freedoms were: (1) the right to fly through the airspace of another country without landing; (2) the right to land in another country for servicing or other non-commercial purposes; (3) the right to put down, in another country, passengers and cargo taken on in the home country; (4) the right to pick up passengers and cargo in another country that are destined for the home country; and (5) the right to pick up or set down passengers and cargo in another country that are destined for or originate from a third country. A sixth freedom was later identified, which might be considered a combination of the third and fourth freedoms. This freedom governs passengers that have neither their origin nor destination in the home country but who stop in the home country for a period of time.

10. See Stoffel, *supra* note 9, at 121-22.

11. *Id.* at 121.

between any two countries.¹² Many such agreements have been negotiated since 1944. U.S. policy toward these agreements has passed through three distinct stages: the Bermuda I period (1946-77), the Bermuda II period (1977-78) and the "open skies" period (1978-present).

1. *Bermuda I (1946-1977)*

The United States and the United Kingdom finally compromised in 1946 with the signing of the Bermuda I agreement. That agreement, which governed civil aviation only between the two countries, also served as a model for other bilateral agreements for the next thirty years.¹³ Such agreements are therefore referred to generically as "Bermuda I" agreements.

Bermuda I agreements usually restrict the number of air carriers that can serve the signatory countries and specify a number of "gateway" airports where the airlines pick up or discharge international passengers.¹⁴ They usually restrict carriage of passenger traffic bound to or from countries other than the two signatory countries, known as "fifth freedom" traffic.¹⁵ Bermuda I agreements also grant the International Air Transport Association (IATA), an association of international airlines with open membership,¹⁶ substantial authority to negotiate and establish fares.¹⁷ IATA's regional "Traffic Conferences" set airline rates by unanimous agreement.¹⁸ Countries usually retain, for their civil aviation authorities, the right to review and approve the rates established by IATA.¹⁹ In practice, however, IATA rates are routinely accepted.²⁰

Bermuda I agreements also provide some incentives for competition. For example, they do not limit capacity by restricting the number of

12. In ocean shipping, by comparison, bilaterals are not usually needed because the freedom of ships to call at any port has been widely accepted. BOOZ-ALLEN & HAMILTON, INC., *supra* note 3, at 53.

13. See *International Aviation: Hearings Before the Subcomm. on Aviation of the Senate Comm. on Commerce, Science and Transportation*, 95th Cong., 1st Sess. 88 (1977) (statement of Julius Katz, Assistant Secretary for Economic and Business Affairs, Dep't of State) [hereinafter cited as *Hearings*].

14. See Stoffel, *supra* note 9, at 127-30.

15. *Id.* at 128-29.

16. Gazdik, *Rate-Making and the IATA Traffic Conferences*, 16 J. AIR L. & COM. 298, 298-300 (1949).

17. See Stoffel, *supra* note 9, at 134.

18. See Gazdik, *supra* note 16, at 321. Recommendations for change in this procedure were made at a special general meeting of IATA (Montreal, July 1978) and subsequently adopted so that the unanimous approval procedure no longer applies. See IATA, *Recommendations of the Executive Committee on Traffic Conference Procedures and Objectives 8* (July 1978); IATA, *IATA REGULATIONS*, Section F, *Traffic Conferences*, at 8 (1978).

19. See *id.* at 303.

20. For a description of the IATA and ICAO rate-setting machinery in the period of Bermuda I, see Gazdik, *supra* note 16.

International Markets

flights or the type of aircraft.²¹ At the same time, they do not specifically preclude agreements which effectively restrict capacity competition.²² As a concession to the British, for example, the original Bermuda agreement contained provisions for bilateral consultations on capacity if one party found that the activities of foreign carriers injured its carriers.²³ The United States interpreted the Bermuda principles liberally, however, and with few exceptions (mainly among communist bloc countries) successfully resisted the imposition of capacity controls.²⁴

Until the early 1960's, the international aviation system established by Bermuda I bilaterals and IATA fare regulation worked smoothly. Because IATA functioned as an effective fare-setting cartel, competition focused on service, many aspects of which were eventually regulated by IATA as well.²⁵ Price competition came only from a few non-IATA airlines, such as Icelandic, and a small number of charter operators.²⁶ The development of jet aircraft and the subsequent reduction in real airfares, however, eventually undermined the IATA fare structure and the profitability of many foreign airlines. Lower fares made international vacations more affordable and encouraged the expansion of low-cost charters.²⁷ At the same time, many of the rules restricting charter operations were gradually liberalized, often under pressure from the U.S. government.²⁸ The explosion in charter operations, many of which the scheduled airlines operated in self-defense,²⁹ drew passengers away from scheduled services and forced IATA to authorize a variety of discount fares.³⁰

IATA's problems were further complicated when many of the newly

21. See Stoffel, *supra* note 9, at 129-33. See also Doganis, *Air Transport—A Case Study in International Regulation*, 7 J. TRANSPORT ECON. & POL'Y 109, 110-11 (1973).

22. See Doganis, *supra* note 21, at 111.

23. See Stoffel, *supra* note 9, at 129.

24. See *id.* at 129-30.

25. Because of service competition, IATA eventually was forced to set standards and prices for drinks, headsets, in-flight movies, and the like. For example, one IATA service restriction which received considerable publicity required that only "simple, inexpensive cold sandwiches" could be offered to economy class passengers. This restriction became the subject of a complaint by Pan Am and TWA against Air France, Scandinavian Airways System, Swissair and KLM. McGoldrik, *Regulation of Service Competition in International Air Travel*, 8 HARV. INT'L L.J. 78, 101-02 (1967); Friedlander, *Sandwich Settlement*, N.Y. Times, Apr. 27, 1958, § II, pt. 2, at 1, col. 4.

26. See Smithies, *The Changing Demand for Air Transport: The North Atlantic Case*, 1 J. TRANSPORT ECON. & POLICY 231 (1973). This article provides a breakdown of North Atlantic passenger travel over the 1960-1961 period. Most international airlines were IATA members at this time and the CAB and the Congress were actively promoting the role of charters. *Id.* at 231, 234.

27. See Muti and Murai, *Airline Travel on the North Atlantic*, 11 J. TRANSPORT ECON. & POL'Y 45, 45-50, 51 (1977).

28. See Hammarskjold, *supra* note 6, at 32, for a brief history of U.S. support for charter competition.

29. Smithies, *supra* note 26, at 239. IATA non-scheduled operations exceeded those of the non-IATA non-scheduled operators from 1960 until 1967 on the North Atlantic routes. *Id.*

30. For a description of the growth of the charter market, see *id.* at 234-39.

independent and developing countries established their own national airlines and extended their routes into international markets.³¹ These new airlines often provided more extensive service than normal commercial considerations could justify, in part for the prestige of showing the national flag.³² Maintenance of these politically motivated operations, particularly when run inefficiently, required substantial government subsidies.³³ As competition grew, an increasing number of European and third world governments thought it foolish to pay subsidies to their national airlines when capacity controls on foreign competition might reduce or eliminate the need for subsidies altogether.³⁴

2. *Bermuda II (1977-1978)*

Shortly after the 1973 oil crisis began, the United States agreed to temporary capacity restrictions on flights to and from the United Kingdom as a way to conserve fuel.³⁵ When the U.S. Civil Aeronautics Board (CAB) rejected a British request to extend these controls in 1976,³⁶ the British, suffering from serious losses on government-owned British Airways, gave the required one-year notice to terminate the Bermuda I agreement.³⁷

Negotiations led to a new agreement, referred to as Bermuda II, in June 1977.³⁸ The Bermuda II agreement broke precedent by limiting the number of scheduled flights between the United States and the United Kingdom and by giving each country an effective veto over changes in market shares or number of flights. Although the agreement did not govern charters and raised the number of U.S. gateway airports from six to fourteen, it also reduced the number of U.S. carriers allowed to serve each gateway airport and curtailed U.S. carriers' right to carry "fifth freedom" traffic.³⁹

31. For a discussion of airlines in the developing countries, see M. STRASZHEIM, *THE INTERNATIONAL AIRLINE INDUSTRY* 13, 15, 26 (1969).

32. *Id.* at 15-16.

33. *See id.* at 24, 25.

34. The United States-United Kingdom market provides a good example of the imbalance brought about by the competition allowed under the relatively unrestricted capacity clause of the Bermuda I agreement and the multiple carrier designation then in effect. In 1976, the British informed the U.S. government that, according to British calculations, the revenues of U.S. airlines under Bermuda I were more than double those of U.K. airlines. *See Hearings, supra* note 12, at 94-100 (statement of Chester C. Davenport, Assistant Secretary for Policy Plans and International Affairs, Dep't of Transportation).

35. For a discussion of the history of the Bermuda II agreement, see N. TANEJA, *U.S. INTERNATIONAL AVIATION POLICY* 20-25 (1980).

36. *See id.* at 20.

37. *See id.* at 20-21. *See also* Barnum, *Carter Administration Stumbles at Bermuda*, *REGULATION*, Jan.-Feb., 1978, at 20.

38. Agreement on International Aviation, July 23, 1977, United States-Great Britain, T.I.A.S. No. 8641.

39. *See Hearings, supra* note 13, at 72-74 (statement of Alan Boyd, Special Ambassador to the

International Markets

3. *Open skies (1978-present)*

Critics quickly attacked the Bermuda II agreement as a reversal of past U.S. policy and as inconsistent with efforts to deregulate the domestic airline industry.⁴⁰ In 1977, Alfred Kahn, newly appointed CAB chairman, decided that the Bermuda II agreement would not serve as the model for future U.S. bilateral agreements and that the United States would return to its "open skies" policy of promoting competition.⁴¹ The CAB then negotiated a bilateral agreement with Belgium in 1977-1978 which contained no capacity controls and extremely liberal provisions relating to charter flights, gateway airports, and "fifth freedom" traffic.⁴² Congress also signaled its displeasure with Bermuda II and its support for Kahn's position by passing the International Air Transportation Competition Act of 1979,⁴³ which established liberal agreements on fares, operations, gateways, and charters as goals of U.S. aviation policy.⁴⁴

B. *The Policy Behind "Open Skies"*

The renewed U.S. interest in an "open skies" policy resulted not simply from tradition, but also from a belief that restrictive aviation agreements harm air travellers and the economy in general. By controlling fares, in-flight services, and capacity, restrictive agreements reduce competitive pressures for carriers to improve efficiency or to offer more attractive services and fares.⁴⁵ Nevertheless, foreign governments often favor such agreements, particularly if their national carriers are so weak or inefficient that the airlines might otherwise require a subsidy to maintain their market positions.

Recent research, conducted as part of the Harvard University Airline Deregulation Project, supports the view that liberal bilateral agreements benefit aviation travellers. Using a recently developed classification scheme which ranks agreements according to their degree of liberality in pricing, capacity, "fifth freedom," and charter provisions,⁴⁶ the bilateral aviation

United States-United Kingdom Bilateral Air Transport Negotiations).

40. See Barnum, *supra* note 37, at 18-30.

41. See Hearings, *supra* note 13, at 4 (statement of Alfred Kahn, Chairman, CAB).

42. Agreement on International Aviation, Oct. 24, 1977, and Nov. 16, 1977, United States-Belgium, T.I.A.S. No. 8923.

43. Pub. L. No. 96-192, 94 Stat. 35 (1980) (codified in scattered sections of 49 U.S.C.).

44. *Id.* § 2, 94 Stat. 35-36 (codified at 49 U.S.C. § 1302(a) (1982)) ("Declaration of Policy").

45. For arguments in favor of reduced regulation, see N. TANEJA, *supra* note 35, at 55. For arguments regarding the U.S. domestic market, see C. BARNEKOV, INTERNATIONAL AIR FARE LEVELS: AN EVALUATION AFTER THREE DECADES OF IATA RATEMAKING 6 (1978) (report prepared for U.S. Dep't of Transportation under Contract DOT-P-50-78-47).

46. In a forthcoming book on U.S. international aviation policy, Ivor Morgan uses an index of liberality giving two points for agreements that require mutual disapproval before tariff rejection, one point if fares may be disapproved by the country of flight origin, and one point each for the absence of

agreements between the United States and many third world countries are not very liberal.⁴⁷ Neither are those with Japan and several major European countries, including Spain, France, and Italy.⁴⁸ Nevertheless, the United States has been able to negotiate liberal bilateral agreements with countries in every major part of the world, including such key European nations as Belgium, Netherlands, West Germany, and even Britain.⁴⁹

One measure of the consumer benefits produced by liberal agreements is the rapid growth of air travel in markets governed by those agreements. Table 1 shows that between 1975 and 1981, for example, air travel between the United States and three European countries with liberal bilateral agreements grew by 72 percent, but travel between the United States and three European countries with restrictive agreements grew by only 21 percent.⁵⁰ Similarly, air travel grew by 194 percent between the United States and Korea and the United States and Singapore, where liberal bilateral agreements were in force, but by only 49 percent between the United States and Japan, where a more restrictive agreement was in effect. Moreover, as Table 1 shows, the growth rates in the two types of markets diverged only during the years when the liberal bilateral agreements were in force.

capacity restrictions, liberal fifth freedom rights, and liberal charter rights. The points are added to form an index number, giving a maximum of five points for a "liberal" agreement. The weighting of the points in this fashion is subjective. Weight could also be given to language in bilateral agreements specifically aimed at removing discriminatory practices. However, such clauses are invariably present in bilaterals with index scores of more than three. These unpublished calculations are on file with Ivor Morgan at the School of Management, Boston University.

47. *Id.*

48. *Id.*

49. *Id.*

50. These calculations were based on data found in U.S. DEP'T OF TRANSPORTATION, U.S. INTERNATIONAL AIR TRAVEL STATISTICS (1975-1981).

International Markets

TABLE 1
Annual Percentage Growth Rates In Air Travel Markets

	1975 -1976	1976 -1977	1977 -1978	1978 -1979	1979 -1980	1980 -1981	1976 -1980
<u>Europe-U.S.</u>							
Three liberal bilaterals (Belgium, Netherlands, W. Germany)	13.7	4.0	9.4	18.6*	11.0	1.3	72
Three restrictive bilaterals (France, Spain, Italy)	4.7	5.0	9.4	6.8	(4.3)	(1.9)	21
<u>Far East-U.S.</u>							
Two liberal bilaterals (S. Korea, Singapore)	8.7	0.5	3.5	65.2*	50.9	4.5	194
Restrictive bilateral (Japan)	4.0	1.9	6.7	19.9	4.3	5.5	49

*Year that liberalized bilateral agreement was negotiated. The Korean agreement was negotiated in 1979 while the Singapore agreement was negotiated in 1977.

SOURCE: Calculated from U.S. Immigration and Naturalization Service data by Ivor P. Morgan.

Air travel increased where liberal bilateral agreements were in force largely because of the fare reductions spawned by liberal agreements. Table 2 compares estimates of international airfares in various regions of the world and for various distances with U.S. domestic coach fares for the same distances.⁵¹ During the period from 1976 to 1980, international fares declined relative to domestic fares in a large number of markets and mileage blocks. All but one of the markets in which fares declined by 10 percent or more involved the United States and were influenced by the open skies policy. By contrast, international fares did not decline relative

51. U.S. domestic airfares were calculated using the CAB formula for the Standard Industry Fare Level (SIFL).

to domestic fares for markets, such as those within Europe, in which U.S. policy has little influence.

International Markets

TABLE 2
Ratio Of International Economy Air Fares To Domestic Fares
To Similar Distances

Area and distance	1976	1977	1978	1979	1980	Percent Change 1976-1980
<u>Group 100-2000 km</u>						
Between Canada/US/ Mexico	1.13	1.06	1.01	.87	.87	(23)
Between North and Central America and Caribbean			1.29	1.11	1.10	
Local South America Between and Within Central America and Caribbean	1.19	1.16	1.24	1.08	1.18	(1)
Local Middle East	1.76	1.77	1.81	1.44	1.49	(15)
Local African	1.77	1.79	1.88	1.70	1.82	3
Local Europe	2.03	2.03	2.31	2.17	2.10	3
<u>Group 3000-4000 km</u>						
Between North/Central and South America	1.52	1.51	1.50	1.26	1.25	(18)
Local Asia/Pacific	1.65	1.73	1.82	1.50	1.51	(9)
Between Europe and Middle East	2.23	2.21	2.43	2.05	2.09	(6)
Between Europe/Middle East and Africa	2.16	2.19	2.34	2.06	2.16	0
<u>Group 7000-10,000 km</u>						
North Atlantic	1.49	1.56	1.53	1.28	1.21	(19)
North and Mid Pacific	1.61	1.32	1.54	1.20	1.06	(34)
South Pacific	1.72	1.73	1.68	1.29	1.13	(34)
South Atlantic	1.64	1.78	1.85	1.65	1.67	2
Mid Atlantic	1.81	1.66	1.81	1.66	1.73	(4)
Between Europe/Middle East/Africa and Asia/Pacific			1.91	1.64	1.68	

SOURCE: Based on International Civil Aviation Organization data.

The declining importance of the charter market also reflects the effects of the open skies policy on regular fare levels. In 1977, charter travel reached a peak of 16 percent of all U.S.-foreign air travel and 27 percent of all air travel between the United States and Europe.⁵² After scheduled airlines began discounting, however, charter passenger travel fell to only 5 percent of all U.S.-foreign trips and 6 percent of all U.S.-European trips in 1981.⁵³ The charters' share of the critical North Atlantic market in 1981 was lower than it had been since the late 1950's.⁵⁴

C. *The United States' Success in Fostering Competition*

The United States has not found much foreign support for liberal aviation agreements, despite the apparent benefits for travellers. The United States, however, has been able to insist successfully on liberal bilateral terms even with some countries which would have preferred restrictive agreements. The history of U.S. aviation policy during the open skies period suggests several factors which aid in negotiating a liberal agreement and affect its subsequent administration: a free-market ideology, a competitive national airline, and the threat of diverting air traffic to other modes or countries. The first two factors come into play only occasionally; in Europe, for example, only Iceland and Luxembourg have steadfastly supported the competitive market philosophy embodied in the U.S. open skies policy.⁵⁵ Furthermore, only a few countries, such as Singapore, have such aggressive and profitable national carriers that they would benefit unambiguously from more competition.⁵⁶ In most cases, therefore, the key to successful negotiation appears to be the threat that a restrictive agreement might raise airfares and thereby divert travellers away from the scheduled carriers of the bilateral market under negotiation. The rapid growth of markets governed by liberal bilateral agreements, as shown in Table 1, demonstrates the potential power of traffic diversion.

The vulnerability of a particular country to this threat depends, of course, on the particular characteristics of its air travel markets. For example, the threat of diversion is higher where competing charter air service is available. Although some governments have thought that charters

52. See U.S. DEP'T OF TRANSPORTATION, U.S. INTERNATIONAL AIR TRAVEL STATISTICS, CALENDAR YEAR 1977 (REVISED) Ia-1, Ia-2, Id-1, Id-2 (1978).

53. See U.S. DEP'T OF TRANSPORTATION, U.S. INTERNATIONAL AIR TRAVEL STATISTICS, CALENDAR YEAR 1981, at Ia-1, Ia-2, Id-1, Id-2 (1982).

54. Charter shares have increased since 1981. See IATA, WORLD AIR TRANSPORT STATISTICS 10 (1983).

55. Doganis, *supra* note 21, at 117.

56. See, e.g., Kraar, *Flying High With the "Singapore Girls"*, FORTUNE, June 18, 1979, at 132, 132-33.

International Markets

serve a different market segment,⁵⁷ studies of the demand for international air travel demonstrate that the cross elasticity⁵⁸ between charter and scheduled carriers is extremely high.⁵⁹ Charter service also played a central role in limiting IATA's fare-setting ability during the Bermuda I period.⁶⁰ Charter operations have fallen off dramatically since the scheduled airlines began to offer competitive discount fares,⁶¹ but the threat of their return helps keep scheduled airline fares in check.

Even where no charter service exists, there is often a significant risk that higher airfares will divert travelers to other countries or out of the market altogether. Airfares are a large portion of total travel costs, particularly for long distance travel, and much vacation and business travel is sensitive to transportation prices.⁶² Many Americans vacationing in Europe, for example, may regard landing in Brussels as a close substitute for landing in London or Paris.

Another market characteristic which affects the vulnerability of a country to the threat of diversion is the importance of tourism to the country's economy. Vacations in the Caribbean, or even at home, can substitute for vacations in Europe. The more a country depends on tourism, the more sensitive it will be to the threat of diversion. Even many categories of business travel are relatively sensitive to price;⁶³ hence non-tourist economies are not completely safe from diversion.

U.S. experience in negotiating bilateral agreements illustrates the importance of these market characteristics in implementing pro-competitive policies. The United States has been relatively successful in obtaining liberal agreements in Europe because tourism is important there; the threat that higher airfares might divert travelers to charter service—or to other countries—is extremely effective. Even the United Kingdom has agreed to

57. Some countries, for example, have allowed relatively liberal charter rules while restricting scheduled air service. This was a response to pressure from their tourist industries and was based on the belief that charters serve a different market segment. Charter travel within Europe is reported to be 55% of the total market measured in revenue passenger kilometers. Association of European Airlines, *Traffic and Operating Data of AEA Airlines 1977-1979*, at 18 (1980). This high percentage further increases pressures on European governments to maintain liberal charter rules. In addition, scheduled air carriers may view charter service as their only opportunity for expansion when scheduled service is governed by capacity controls.

58. Cross elasticity of demand is defined as the absolute value of the percentage change in the quantity demanded of one good in response to a one percent increase in the price of another. See R. LIPSEY, P. STEINER & D. PURVIS, *ECONOMICS* 92 (7th ed. 1983).

59. See Straszheim, *Airline Demand Functions in the North Atlantic and the Pricing Implications*, 12 J. TRANSPORT ECON. & POL'Y 179 (1978); see also Muti & Murai, *supra* note 27, at 49-51.

60. Smithies, *supra* note 24, at 237; N. TANEJA, *supra* note 35, at 80.

61. See *supra* text accompanying notes 52-54.

62. Self-employed professionals or independent businessmen, for example, are likely to be conscious of travel budgets if they are paid from their gross profits.

63. See *supra* note 62.

liberalize the Bermuda II agreement several times since 1978,⁶⁴ after the United States negotiated liberal agreements with neighboring Belgium and the Netherlands.⁶⁵ On the other hand, the failure of the United States to negotiate liberal bilateral agreements with Japan and many African nations probably reflects the insensitivity of these markets to diversion. With few exceptions, tourism is not very important to these countries' economies.⁶⁶

The threat of diversion thus largely explains the pattern of U.S. bilateral agreements. The evidence suggests that this threat can be employed to persuade other countries to adopt similar pro-competitive policies. This clearly contradicts the argument that regulation and restraint are inevitable in international markets.

D. *The Absence of Unfair Competition*

The airline experience also casts doubt on the second argument against U.S. efforts to promote competition in international markets: that other countries might successfully engage in unfair competition against U.S. firms. Although the evidence is too limited to permit a firm conclusion, research suggests that U.S. airlines generally have benefited from open skies policies through increased market shares and improved profitability.

Table 3 gives data on market shares for the period 1976-1981. It shows that, despite the slight decline in the average market share of U.S. carriers, liberal agreements led to increased shares. In four of the six European and Far Eastern markets governed by liberal agreements, the U.S. share increased—significantly in some cases. Moreover, in Singapore, one of only two liberal markets where the U.S. share declined, the decline occurred because a foreign carrier destroyed a monopoly previously enjoyed by a U.S. carrier.

64. For example, on March 17, 1978, the agreement with the United Kingdom was amended to include further innovation in fares, particularly low-cost fares. On April 1, 1978, a liberalized charter agreement was reached between the countries concerning country-of-origin pricing. In November 1978, the earlier low-cost fare experiments were extended, and reduction of government intervention was made an aim of the agreement. In December 1980, the agreement again was amended to open more routes between the two countries to service by multiple U.S. carriers. See Amendment, Nov. 9, 1978, United States-United Kingdom, 30 U.S.T. 979, T.I.A.S. No. 9231; Amendment, Dec. 27, 1979, United States-United Kingdom, 32 U.S.T. 525, T.I.A.S. No. 9722.

65. See, e.g., Agreement on International Aviation, *supra* note 42.

66. For statistical information on international tourism, see generally STATISTICAL OFFICE, U.N. DEPT. OF INT'L ECON. AND SOC. AFF., 1981 STATISTICAL Y.B., 1041-44 (1983).

International Markets

TABLE 3
Market Shares Of U.S. Air Carriers

	1975	1976	1977	1978	1979	1980	1981
All U.S.-Foreign markets	50.2	50.2	50.4	50.0	50.8	49.1	48.7
All U.S.-European markets	44.0	45.4	45.4	43.9	44.2	42.1	41.0
All U.S.-Far East markets	41.0	45.1	43.7	41.3	44.3	41.4	39.0
U.S.-European markets with liberal bilateral agreements:							
Belgium	29.4	30.8	22.1	21.2*	36.5	44.5	39.1
Netherlands	14.2	8.6	8.6	11.6*	23.4	12.3	7.3
W. Germany	43.2	50.5	49.1	44.4*	45.3	50.6	46.4
U.K.	57.8	56.9	55.5	53.4	52.6	47.8*	50.0
U.S.-Far East markets with liberal bilateral agreements:							
Singapore	99.6	99.5	97.5*	96.5	21.5	22.6	18.0
S. Korea	18.7	21.1	11.8	6.5	13.2*	18.5	20.7

*Year that liberalized bilateral agreement was negotiated.

SOURCE: Calculated from U.S. Immigration and Naturalization Service data by Ivor P. Morgan.

Liberal agreements also appear to have helped, or at least not hurt, the profitability of U.S. airlines. Although several major U.S. international carriers lost money during the 1981-1982 recession, many of the newer U.S. entrants were profitable.⁶⁷ Recently, moreover, the two largest traditional carriers also have shown considerable improvement in profitability.⁶⁸ These facts suggest that unfair competition, if it exists, has not undermined the long-run competitive position of U.S. airlines.

67. CIVIL AERONAUTICS BOARD, INCOME STATEMENT OF CERTIFICATED ROUTE CARRIERS 13, 31 (1980).

68. Pan Am went from an operating loss of \$115 million in 1981 to an operating profit of \$240 million in 1983 on its international routes. See PAN AMERICAN WORLD AIRWAYS, INC., 1983 ANNUAL

II. The Prospects for Ocean Shipping

Trade restrictions, known as "cargo reservation" agreements, have been proposed for international shipping.⁶⁹ Those who urge U.S. acquiescence to this proposal have marshalled the same arguments which we have examined in the aviation context. As the U.S. experience with aviation restrictions suggests, however, the United States can successfully resist new restrictions on shipping and would benefit from doing so.

This section describes how and why the United States should resist these restrictive agreements. It first provides background information on the shipping industry, recent cargo reservation proposals, and U.S. maritime policy. It then explains why the United States should not accept these proposals and, applying the lessons of the aviation experience, describes how the United States can prevent or neutralize cargo reservation agreements. Finally, it explains why the United States probably should not fear retaliatory measures by other countries or their carriers.

A. *The Movement for Cargo Reservation*

Ocean shipping and international aviation differ in several relevant respects. It is thus important to understand the characteristics and regulatory environment of the ocean shipping industry before attempting to apply the lessons of the aviation experience to U.S. maritime policy.

1. *Liner Shipping and Conferences*

Recent pressure in the ocean shipping industry to reserve or allocate cargo among the vessels of different nations has focused largely on one segment of the industry: cargo liners.⁷⁰ Liners are the common carriers of the ocean shipping industry, selling space for high-value general cargo (rather than bulk commodities) moving on regular schedules and along established routes.⁷¹ Liners carry about 40 percent by value (although less than 10 percent by weight) of oceanborne U.S. imports and exports.⁷² In addition to cargo liners, there are three other types of ocean carriers: pro-

REPORT 42 (1984). TWA international operating income improved from \$62 million in 1981 to \$160 million in 1983. See TRANS WORLD AIRWAYS, INC., 1983 ANNUAL REPORT 2, 37 (1984).

69. The United Nations Conference on Trade and Development (UNCTAD) has adopted anti-competitive measures relating to "cargo reservation" which may soon go into effect, *UNCTAD Code Nears Force; Need for U.S. Action Cited*, CONTAINER NEWS, June 1981, at 28, and many developing countries have announced their intention to apply certain restrictive provisions unilaterally to their trades with other countries. See *infra* text accompanying notes 102-03.

70. E. BENNATHAN & A. WALTERS, THE ECONOMICS OF OCEAN FREIGHT RATES 1-4 (1969).

71. For a general description of the ocean shipping industry, see B. ABRAHANSON, INTERNATIONAL OCEAN SHIPPING (1980); E. FRANKEL, REGULATION AND POLICIES OF AMERICAN SHIPPING (1982).

72. See E. FRANKEL, *supra* note 71, at 121-22.

International Markets

prietary ships—such as oil tankers and ore ships—that are owned by individual companies to carry their own goods; independent ships—primarily bulk carriers—that are leased by a company for a limited period; and tramp ships—either general cargo or bulk carriers—that travel particular routes like liners, but are not limited to a regular schedule or to one type of cargo or one company.

Since the turn of the century, liner shipping throughout the world has been organized into conferences that coordinate rates and schedules among companies.⁷³ A separate conference governs each trade route, or “trade,” and different conferences may control inbound and outbound cargo on the same route.⁷⁴ Some of the approximately 400 liner conferences worldwide have as few as two members, while others govern several dozen companies.⁷⁵ Most liner companies belong to more than one conference, but some remain independent and gain business by charging lower rates.⁷⁶ Conferences compete against independents by offering more frequent service and by giving a discount—usually 15 percent—to customers that agree to deal exclusively with their ships.⁷⁷

Liner conferences behave like cartels in that they establish uniform rates, set schedules, allocate markets, and sometimes pool cargo or revenue.⁷⁸ Although such practices normally are illegal under U.S. law,⁷⁹ the Shipping Act of 1916⁸⁰ granted liners in U.S. trade routes special antitrust immunity in return for Federal Maritime Commission (FMC) authority to regulate their behavior. The Shipping Act, as amended, gives the FMC power to review conference agreements,⁸¹ prohibits certain predatory behavior,⁸² and requires “open” conference membership,⁸³ (i.e., any carrier can join or quit any conference). The Act also allows the

73. For descriptions of the conference system, see *id.* at 214; B. DEAKIN & T. SEWARD, *SHIPPING CONFERENCES: A STUDY OF THEIR ORIGINS, DESTINATIONS, AND ECONOMIC PRACTICES* (1973); Bennathan & Walters, *Shipping Conferences: An Economic Analysis*, 4 J. MAR. L. & COM. 93 (1972).

74. E. BENNATHAN AND A. WALTERS, *supra* note 70, at 3.

75. See B. DEAKIN & T. SEWARD, *supra* note 73, at 225-251.

76. *Id.* at 53-64, 175-179.

77. Under the Shipping Act of 1916, 46 U.S.C. § 813(a) (1982), the maximum loyalty rebate that could be charged in a U.S. conference was 15%. A U.S. Department of Justice survey conducted in the mid-1970's revealed that most rebates in U.S. trades were set at the legal maximum. See U.S. DEP'T OF JUSTICE, *THE REGULATED OCEAN SHIPPING INDUSTRY* 30 (1977).

78. Most economists characterize shipping conferences as cartels. See, e.g., Bennathan & Walters, *supra* note 73, at 93.

79. The antitrust laws include the Sherman Antitrust Act, 15 U.S.C. §§ 1-7 (1982); the Clayton Act, 15 U.S.C. §§ 12-27 (1982); and the Federal Trade Act, 15 U.S.C. §§ 41-58 (1982). For a description of the specific conference activities that would be prohibited under these acts, see U.S. DEP'T OF JUSTICE, *supra* note 77, at 240-42.

80. Shipping Act of 1916, 46 U.S.C. §§ 801-42 (1982).

81. *Id.* § 814.

82. *Id.* §§ 815-817.

83. *Id.* § 814.

United States and the FMC to play a pro-competitive role. Although liner conferences for U.S. trade routes can fix their rates, the FMC has the power to review these rates to determine if they are unjust or discriminatory.⁸⁴ Moreover, the open conference requirement makes it harder for conference members to control capacity and thus maintain administered rates.⁸⁵ Most non-U.S. trade routes, by contrast, are controlled by closed conferences and secret agreements.⁸⁶

2. *The UNCTAD Code and Bilateralism*

Ocean shipping would become less competitive and more highly regulated under a proposal advanced by the less developed countries (LDCs) through the United Nations Conference on Trade and Development (UNCTAD). The UNCTAD proposal⁸⁷ would establish a system of cargo reservation designed to increase the share of liner cargo carried by LDC flag ships at the expense of the traditional maritime nations, including European Economic Community (EEC) members and Scandinavian countries.

UNCTAD was established in 1964 with a mandate to use trade to eliminate the economic disparities between developed and developing countries.⁸⁸ Liner shipping became an early focus of UNCTAD because many LDCs asserted that the developed countries dominated the conference system. These LDCs also charged that the developed countries penalized the developing economies by excluding LDC liners from confer-

84. *Id.* § 813(a).

85. Most independent economists agree that closed membership makes it easier for a conference to agree on and defend administered rates, and leads to higher rate levels. For a theoretical discussion of this point, see E. BENNATHAN & A. WALTERS, *supra* note 70, at 8-9, 32-33. The presence of open conferences may make it difficult for the conference to prevent members from dissipating the potential profits available under administered prices by engaging in service (i.e., sailing frequency) competition to increase their market share. See Devanney, Livanos & Stewart, *Conference Ratemaking and the West Coast of South America*, 9 J. TRANSPORT ECON. & POL'Y 154 (1975).

The high levels of service competition under open conferences have led some FMC economists to argue that rates might be lower if services could be "rationalized" (i.e. reduced) under closed conferences. Although shippers might prefer a combination of slightly less service and lower rates, such a combination is less likely to result from closing conference membership than from maintaining open membership and eliminating the antitrust immunity for collective ratemaking. For an argument in favor of closed conferences, see Ellsworth, *supra* note 5, at 497, 502, 515-17. See also Hanson, *Regulation of the Shipping Industry: An Economic Analysis of the Need for Reform*, 1980 L. & POL'Y INT'L BUS. 973, 980-81, 987-91. *But see* U.S. DEPARTMENT OF JUSTICE, *supra* note 72, at 32-33; E. BENNATHAN & A. WALTERS, *supra* note 70, at 32-33; and the studies of U.S.-Brazil trades cited in notes 113 through 116.

86. E. FRANKEL, *REGULATION AND POLICIES OF AMERICAN SHIPPING* 214 (1982).

87. U.N. Conference of Plenipotentiaries on a Code of Conduct for Liner Conferences, *Final Act and Annexes*, Annex I, TD/CODE/11/Rev. and Corr. 1 (1974).

88. For a concise discussion of the establishment of UNCTAD and its goals for the shipping industry, see E. FRANKEL, *supra* note 86, at 197.

International Markets

ence membership and by charging more to ship raw materials than manufactured goods.⁸⁹

Pressures from the developing world led to a 1973-1974 UNCTAD conference that adopted a Code of Conduct for Liner Conferences over the opposition of the developed countries.⁹⁰ The code affirms the right of LDC shipping lines to join conferences governing their home trade routes.⁹¹ It also establishes a "40/40/20 rule," which assures the national carriers of each trading partner at least 40 percent of the cargo, while carriers from other countries ("third flag" carriers) can carry up to 20 percent.⁹² Other provisions give national shipping lines effective veto power over all conference matters related to their trades,⁹³ establish vague standards against discriminatory tariffs,⁹⁴ require "consultation" with shipper organizations on rates,⁹⁵ and mandate minimum notice periods for general rate increases.⁹⁶

The UNCTAD Code was to have been implemented among its signators on Oct. 6, 1983,⁹⁷ when it satisfied the requirement that it be signed by at least twenty-five countries representing at least 25 percent of the world's liner tonnage.⁹⁸ None of the nearly 60 developing and communist bloc countries⁹⁹ that have signed the Code, however, has passed the domestic legislation to implement it.¹⁰⁰ Although no developed countries outside the communist bloc have agreed to the code, the EEC in 1979 announced its intention to sign if three modifications were made. Those

89. For an excellent discussion of the developing countries' complaints against the conference system, see 2 TRG WASHINGTON GROUP, INC. & MANALYTICS, INC., *THE IMPLEMENTATION OF THE U.N. CODE OF CONDUCT FOR LINER CONFERENCES: A STUDY OF U.S. OPTIONS* 11-15, 41-42 (1981) (report prepared for the U.S. Department of Transportation Maritime Administration) [hereinafter cited as U.S. OPTIONS].

90. The UNCTAD Code can be found at United Nations Conference on Trade and Development, Secretariat, *Convention on a Code of Conduct for Liner Conferences* (1974). For a description of the provisions of the code, see E. FRANKEL, *supra* note 78, at 221-39; U.S. OPTIONS, *supra* note 89, at 15-28.

91. United Nations Conference on Trade and Development, *supra* note 90, at art. 1.

92. Although the code does not advocate a specific cargo reservation formula, the 40/40/20 split can be inferred from Article 2 of the Code, which states that the national carrier groups shall receive a "dominant" share of the cargo and that third country shipping lines, if any, shall have the right to acquire a "significant part, such as 20 percent." See U.S. OPTIONS, *supra* note 89, at 20.

93. United Nations Conference on Trade and Development, *supra* note 90, at art. 3.

94. *Id.* at art. 13.

95. *Id.* at art. 11.

96. *Id.* at art. 14.

97. *Code Agreement, Sea Trade*, Oct. '83, at 11.

98. E. Frankel & P. Read, *Cargo Reservation Agreements: Problems and Alternatives* 19-20 (May 1983) (report prepared for U.S. Dep't of Transportation, Transportation Systems Center).

99. Many of the communist bloc signatories have ratified the code subject to the reservation that it not interfere or replace any bilateral agreements establishing joint shipping line services. Because most communist bloc trade takes place under such joint shipping agreements, this condition effectively negates the application of the code to communist bloc trades. *Id.* at 21.

100. Telephone conversation with Thomas Marchessault and Lawrence Phillips of the U.S. Dep't of Transportation, Nov. 2, 1984.

modifications are: (1) that the cargo reservation provisions not apply in trades among EEC countries or between the EEC and members of the Organization of Economic Cooperation and Development (OECD), including the United States and Japan; (2) that the lines of the EEC countries be considered as a group in calculating cargo shares with LDCs; and (3) that limitations be placed on the veto power of national shipping lines.¹⁰¹ UNCTAD has not yet indicated whether it will accept these conditions. Whether or not the code is implemented, however, many developing countries have announced their intention to apply cargo reservation and other code principles on a bilateral basis. Indeed, Argentina and Brazil unilaterally applied cargo reservation to their trade routes with the United States in the 1970's.¹⁰² Several countries—including Venezuela, Korea, and the Philippines—have made similar requests.¹⁰³

Widespread application of the code or similar bilateral agreements would produce dramatic changes. Shipping lines of the LDCs undoubtedly would increase their shares of cargo, whereas shares of developed countries, particularly the EEC and Scandinavian countries, would probably decline. The United States stands as something of an exception among developed countries in that its shipping industry might gain from cargo reservation. Because of higher wages and more restrictive work rules, U.S. flag lines capture only a modest 28 percent of liner cargo in United States trade (whether measured by weight or value).¹⁰⁴ The code would ensure that U.S. lines receive at least 40 percent.¹⁰⁵

101. U.S. OPTIONS, *supra* note 89, at 47-48.

102. E. G. Frankel, Inc., *The Impact of Bilateral Cargo Access Agreements on the U.S./Brazil and Argentina Liner Trades 7* (1983) (report prepared for the U.S. Department of Transportation, Office of the Secretary).

103. Telephone interview with Lawrence T. Phillips, Office of Industry Policy, U.S. Dep't of Transportation (May 1983).

104. U.S. DEPT OF TRANSPORTATION, FEDERAL MARITIME ADMINISTRATION, UNITED STATES OCEANBORNE FOREIGN TRADE ROUTES 283 (1983) [hereinafter cited as FOREIGN TRADE ROUTES].

105. See *supra* text accompanying note 92.

International Markets

TABLE 4

Percentage Of Cargo Carried By National Carrier Groups In Trade Routes Between The U.S. And LDCs, 1979

National carrier group	Not adjusted for flag of convenience	Adjusted for flag of convenience ^a
Less developed countries ^b		
As national flag	14.7	21.1
As third flag	<u>6.6</u>	<u>9.6</u>
Subtotal	21.3	30.7
United States	31.0	31.4
Scandinavia and Europe	27.7	32.7
Japan	3.1	3.4
Other OECD	0.2	0.2
Centrally planned	1.7	1.7
Flags of convenience	<u>15.1</u>	<u>—</u>
Total	100.0	100.0

^aThe nationality of the owners of ships registered under flags of convenience was estimated on the basis of a sample of ships.

^bIncludes all countries which are not in Europe, OECD members, or centrally planned.

SOURCE: TRG WASHINGTON GROUP, INC. AND MANALYTICS, INC., 3 THE IMPLEMENTATION OF THE U.N. CODE OF CONDUCT FOR LINER CONFERENCES: A STUDY OF U.S. POLICY OPTIONS 7, 19 (1981) (prepared for the U.S. Department of Transportation, Maritime Administration).

The UNCTAD Code or bilateral cargo reservation agreements are most likely to govern trade routes between developed and developing countries. Table 4 shows that in trade routes between the United States and the LDCs, for example, U.S. carriers average 31.0 percent of the cargo carried and LDC carriers average 21.3 percent, of which 14.7 percent is in their home trade routes and 6.6 percent is in trade routes between the U.S. and other LDCs ("cross trades"). Carriers from other countries, mainly from Scandinavia and the EEC, capture the remaining 47.7 percent of the market. If ships registered under flags of convenience (such as Panama and Liberia) are allocated to the national carrier groups of their owners, the LDC share of U.S.-LDC trades jumps to 30.7 percent (21.1 percent in home trades and an additional 9.6 percent in cross trades). These statistics may exaggerate the shares of the less developed world, however, because all countries outside the OECD, Europe, and the Communist bloc are counted as LDCs, including South Africa and Taiwan. Regardless of this exaggeration, the LDC share in U.S.-LDC trade

routes falls short of the 40 percent target incorporated in the UNCTAD Code.

3. *U.S. Maritime Policy*

Despite the possible advantages to U.S. liners from the Code or bilateral cargo reservation agreements, the United States has steadfastly resisted such agreements as part of its generally pro-competitive policy toward international shipping.¹⁰⁶ U.S. maritime policy is not completely and consistently pro-competitive, however, since even more than in aviation, maritime policy serves multiple and conflicting objectives. As in aviation, one key concern is to ensure low rate and reliable service for U.S. shippers and consumers; this objective is usually pursued by promoting competition among carriers. But U.S. maritime policy also is concerned with a second objective of maintaining a sufficiently large U.S. fleet to meet emergency national defense needs.¹⁰⁷ The goal of promoting an efficient market conflicts with the objective of protecting the domestic industry for defense purposes more in maritime than in aviation policy. U.S. liners, unlike U.S. air carriers, tend to have relatively high costs and frequently cannot survive in a highly competitive environment.¹⁰⁸

Thus, despite its generally pro-competitive policy and largely in the name of national defense, the U.S. government protects the American shipping industry through a variety of anti-competitive mechanisms. Like most other nations, the United States has "cabotage" laws that restrict domestic and coastal shipping to its own ships.¹⁰⁹ U.S. "cargo preference laws" also require that certain U.S. government agencies ship their freight on U.S. vessels. These laws cover all military cargos,¹¹⁰ goods bought with government loans,¹¹¹ and half of all foreign aid and military assistance shipments.¹¹² In addition, the U.S. government offers operating and construction subsidies to offset the difference between the cost of building and

106. For a comprehensive but somewhat dated overview of U.S. maritime policy, see S. LAWRENCE, *UNITED STATES MERCHANT SHIPPING POLICIES AND POLITICS* (1966). For a more recent but less complete discussion, see E. FRANKEL, *supra* note 67, at 37-38 (1982); U.S. CONGRESSIONAL BUDGET OFFICE, *U.S. SHIPPING AND SHIPBUILDING: TRENDS AND POLICY CHOICES* 5 (1984).

107. See Hazard, *A Competitive U.S. Maritime Policy*, 22 *TRANSP. J.* 32, 34-37 (1982); U.S. CONGRESSIONAL BUDGET OFFICE, *supra* note 106, at 45.

108. *Id.* at 23-32.

109. "Cabotage" is a French term for coastal trade. Cabotage laws restrict trade between two points on the coast of the same nation to ships of that nation. Foreign vessels engaged in U.S. coastal trade were subject to discriminatory tariffs in 1789, Act of July 20, 1789, ch. 3, 1 Stat. 27 (repealed 1790), and such trade became a monopoly for U.S. shipping in 1817, Act of Mar. 1, 1817, ch. 31, 3 Stat. 351. Since the development of aviation, the term cabotage has been extended to include air travel between any two points within a nation.

110. See 10 U.S.C. § 2631 (1982); and 46 U.S.C. § 1241(b)(1) (1982).

111. See 46 U.S.C. § 1241-1 (1982).

112. See 46 U.S.C. § 1241(b)(1) (1982).

International Markets

operating a ship in the United States and in a foreign country.¹¹³ Only ships serving selected, "essential" trade routes are eligible for these subsidies, however, and the current Administration has announced its intention not to award further long-term subsidy contracts.¹¹⁴

Despite these market interferences, U.S. maritime policy is considerably more pro-competitive than that of most other nations, including the traditional maritime powers of Europe. The United States supports open conferences and encourages third flag participants.¹¹⁵ The review of conference agreements and rates by the Federal Maritime Commission also contributes to this pro-competitive stance.¹¹⁶ As part of its pro-competitive strategy, the United States has traditionally opposed cargo reservation agreements, whether in the form of the UNCTAD Code or individual bilateral agreements. The only exceptions to this policy are agreements with most of the United States' communist trading partners and with Brazil and Argentina. These agreements, however, were signed only because cargo reservation is the general policy of the communist bloc and an inevitable price of communist bloc trade. The Brazil and Argentina agreements were unilaterally imposed by those countries.¹¹⁷

The United States has found it easier to resist restrictive bilateral agreements in ocean shipping than in international aviation because most countries recognize the freedom of a ship to call at any port. This recognition makes it unnecessary for two countries to negotiate a bilateral agreement before ocean shipping service between them can begin.¹¹⁸ Moreover, because bilateral agreements are seldom used, ocean shipping is also seldom subject to restrictions like those on gateway airports and passenger traffic found in aviation. The U.S. government is increasingly isolated in

113. There are more than a dozen programs that provide operating and construction subsidies for U.S. flag ships. For a brief description of these programs, see U.S. CONGRESSIONAL BUDGET OFFICE, *supra* note 106, at 61-63. See also E. FRANKEL, *supra* note 71, at 109-18.

114. Because the operating subsidy contracts made with ship owners have terms as long as 20 years, the U.S. government will continue to pay substantial subsidies for many years after it stops signing new subsidy contracts.

115. For a discussion of past U.S. policy and the rationale for greater support for open conferences, see H. REP. NO. 53, 98th Cong., 2d Sess. 13, *reprinted in* 1984 U.S. CODE CONG. & AD. NEWS 178.

116. For recent reviews of U.S. policy toward conferences, see Hazard, *supra* note 107; R. Kyle, *Review and Evaluation of Analyses on Economic Impact of Rate and Service Competition by Ocean Liner Companies* (June 1983) (report prepared for the U.S. Dep't of Transportation, Transportation Systems Center).

117. The origins and terms of the Brazil and Argentina agreements are explained in E.G. Frankel, Inc., *supra* note 102; and Manalytics, Inc., *The Impact of Bilateral Shipping Agreements In The U.S. Liner Trades* (May 1979) (report prepared for the U.S. Dep't of Commerce, Maritime Administration).

118. BOOZ-ALLEN & HAMILTON, INC., *supra* note 12, at vi, 53.

its opposition to cargo reservation, however, and U.S. shipping interests are pressing the government to change its position.¹¹⁹

B. *The Policy Argument Against Cargo Reservation*

Despite its popularity in much of the international community, cargo reservation would not be a desirable U.S. policy. Most proponents of cargo reservation argue that it would aid the U.S. shipping industry and thereby enhance our national defense. They reason that if the United States were to adopt cargo reservation rather than provide direct aid to shippers, foreign citizens would bear some of the expense of aiding U.S. shipping (in higher shipping charges) and none of the costs would appear in the government budget. Nevertheless, because a 40/40/20 rule would increase the shares of LDC as well as of U.S. carriers, U.S. shippers (i.e., customers of shipping companies) would be forced to subsidize (through higher rates) the inefficiencies of both U.S. and LDC carriers. This double subsidization could make the real cost of cargo reservation to the U.S. economy as high as that of direct aid, if not higher.¹²⁰

Cargo reservation is not only an expensive method of promoting national defense, but also encourages artificially high shipping rates. One reason to expect higher rates is that cargo reservation reduces the incentives for shipping lines to compete with each other for traffic. U.S. liners currently capture only 31 percent of the cargo in U.S.-LDC trade routes because of their higher rates, and some of this cargo moves on U.S. vessels only because of preference laws and operating subsidies.¹²¹ If the proposed 40/40/20 rule were in effect, more commodities would have to move on expensive U.S. merchant ships, reducing the need for U.S. liners to compete for traffic. Similarly, cargo reservation would reduce the incentives for LDC carriers to become or remain efficient, or to offer high-quality service to attract cargo. Liner companies therefore might not retire or re-

119. See CONTAINER NEWS, July 1981, at 13.

120. The defense benefits from increasing U.S. liner shipping through cargo reservation might also be modest. Although the U.S. merchant marine has a long history of supporting the national defense, dating from privateers of the Revolutionary War to the Liberty and Victory-type ships of World War II, it may not play an essential role in future wars. The threat of nuclear conflict has reduced the likelihood of protracted and large-scale conventional warfare. The development of military air cargo and forward logistics systems has also reduced the need for merchant shipping in more limited engagements. Most importantly, the container revolution in shipping is undermining the close relationship between military and commercial shipping technologies. The old, small general cargo vessels that could unload anywhere are being replaced by larger and more specialized ships that require special shoreside loading facilities. Although there may be military defense benefits from an expanded merchant marine, the recent changes in strategy, air cargo costs, and commercial shipping technologies have reduced the benefits significantly. See Hazard, *supra* note 116, at 34-37; U.S. CONGRESSIONAL BUDGET OFFICE, *supra* note 106, at 45.

121. See *infra* text accompanying notes 110-113.

International Markets

place ships as often. They might also eliminate service to smaller ports, thereby forcing local shippers to pay additional freight charges and to suffer delays in moving cargo overland to larger ports.

Cargo reservation also tends to raise shipping rates because it prevents liner companies from using their ships and crews as efficiently as possible. Most bilateral trade routes have more cargo moving in one direction than the other,¹²² and some minor routes generate volumes of cargo too low to support frequent or convenient liner schedules by themselves.¹²³ Liner companies solve this problem by scheduling the same ship to serve several trade routes on a single voyage, often operating the ship as a third flag carrier for part of the journey.¹²⁴ By restricting the market shares of third flag carriers, cargo reservation agreements make these cost-saving practices much more difficult.¹²⁵

Any increase in shipping rates harms the economies of both trading parties in much the same manner as high import or export duties. Both countries suffer, because liner imports become more expensive for domestic consumers and because liner exports become less competitive in foreign markets.¹²⁶ The LDCs may be particularly vulnerable because exports and imports make up larger shares of their domestic economies.¹²⁷

The experience with existing bilateral agreements lends some support to the predictions of higher rates and poorer service. The three available analyses of such agreements—all of which examine U.S.-Brazil trade—are incomplete and reach conflicting conclusions.¹²⁸ Each study found, however, that liner trade with Brazil has stagnated since the restrictive agreement was signed in 1970.¹²⁹ Two of the studies argue that the average Brazil-U.S. tariff has increased at about the same rate as average tariffs in several other comparable trades in the past decade.¹³⁰ The third and more convincing study, however, found that tariffs per ton-mile

122. FOREIGN TRADE ROUTES, *supra* note 104, at 315.

123. See L. KENDAL, THE BUSINESS OF SHIPPING 41 (1973).

124. See *id.* at 127-44.

125. *Id.*

126. See generally P. SAMUELSON, ECONOMICS 627 (11th ed. 1980).

127. 1983 INT'L FIN. STATISTICS Y.B. 72, 76, 84, and individual country tables; R. LIPSEY, P. STEINER & D. PURVIS, *supra* note 58, at 796.

128. E.G. Frankel, Inc., *supra* note 102; Manalytics, Inc., *supra* note 118; Kearney Management Consultants, The Impact of Bilateral Shipping Agreements: An Analysis of Service, Rates, and Shipper Responses (Jan. 1983) (report prepared for the Danish Shipowners Association, the General Council of British Shipping, the Norwegian Shipowners Association, and the Swedish Shippers Association) (paper on file with the YALE JOURNAL ON REGULATION).

129. See E.G. Frankel, Inc., *supra* note 102, summary and conclusions at 2. Unfortunately, there is no way to determine with certainty whether this stagnation was caused by the agreement or by other factors.

130. *Id.* at 89-91; Manalytics, Inc., *supra* note 118, at 9.

are substantially higher in Brazil-U.S. trade routes.¹³¹ Two of the three studies also found that the quality of service on Brazil-U.S. routes has declined, as evidenced by older ships and less containerization.¹³²

The theoretical fear that cargo reservation leads to an inefficient market thus appears to be borne out in practice. Regulated shipping reduces competition and generates inefficiencies, thereby leading to higher costs and lower quality service. As a result, U.S. consumers and shippers clearly would benefit from a more pro-competitive government maritime policy, even if U.S. shipping lines faced more uncertain prospects as a result.

C. *Preventing or Neutralizing Cargo Reservation*

Cargo reservation is not inevitable, despite its popularity in many quarters. As in the case of international aviation, the United States stands in a strong position to block the movement toward increased regulation of international shipping. By using market forces as well as its own trading strength, it can discourage LDCs from implementing cargo reservation or other restrictions and can undermine the restrictions that are implemented.

1. *Dissuading the LDCs Directly*

LDCs sometimes insist on cargo reservation, as the U.S. experience with Brazil and Argentina demonstrates. Moreover, given the benefits to the United States of trade with developing countries, accepting a restrictive bilateral agreement is almost certainly better than completely eliminating commerce with LDC trading partners.¹³³ Nevertheless, just as the United Kingdom eventually conceded that aviation restrictions were not in its best interests,¹³⁴ the LDCs pressing for cargo reservation may realize that shipping restrictions may not work to their benefit. The United States might dissuade some LDCs from adopting restrictive policies by demonstrating that such agreements will divert cargo to other modes of trans-

131. Kearney Management Consultants, *supra* note 128, at 13-18. This study is more convincing than the others because it does a more detailed, commodity-by-commodity comparison of U.S.-Brazil trade before and after the 1970 agreements. The results of the study have been criticized, however, because one of the five comparison trades was the North Atlantic, which is denser and better balanced than the Brazilian trade. The comparison also used data from 1982, an economically weak year when stronger than usual competition in conferences without cargo reservation agreements may have occurred. Telephone interview with Robert Christensen, U.S. Dep't of Transportation, Federal Maritime Administration (May 24, 1983).

132. Kearney Management Consultants, *supra* note 128, at 1, 25; E.G. Frankel, Inc., *supra* note 102, summary and conclusions at 3.

133. Trade is voluntary. If trade persists despite the higher rates brought about by cargo reservation, then the two countries must be better off with trade than they would be without it.

134. See *supra* note 64 and accompanying text.

International Markets

port, other countries, or other products, and by observing that such diversion would hurt them more than it would hurt the United States.

a. *The threat of diversion.*

If a small number of nations institute cargo restrictions unilaterally, market forces normally will divert trade away from the liners serving these nations because of the higher cost of doing business with them.¹³⁵ At first glance, however, the threat of cargo diversion might not appear great, since shipping charges amount to only 10 to 20 percent of the total delivered cost of most liner-carried commodities.¹³⁶ Even if estimates include measures of the quality of service, such as the costs of inventory in transit or unreliable delivery dates, transportation probably accounts for no more than 30 percent of the delivered cost of most liner goods. If cargo reservation raised the transportation costs to a shipper by 50 percent, for example (not a wholly implausible figure given the experience in aviation),¹³⁷ the landed price of the commodity would still rise by only 15 percent.¹³⁸

Nevertheless, a modest price increase may have significant effects if substitute modes of transportation or sources of supply are readily available. Several transportation alternatives might play the pro-competitive role in shipping that charter airlines play in aviation. Tramp shipping is the most obvious alternative because tramps have the capacity to carry liner goods. Bulk shipping is also a likely substitute, especially because some bulk ships take containers on their decks. Finally, air cargo provides potential competition to liner shipping for commodities with a high value-to-weight ratio.

These alternative transportation modes already carry some of the commodities carried by liners. The extent of this involvement provides one measure of the potential competition these alternative modes offer. Table 5 gives data on the 20 standard industrial commodity groups that account for the largest volume of U.S. imports. As the table shows, liners carry less than 60 percent of all imports in 10 of the top 20 commodity groups, 60 to 80 percent of imports in 7 of the top 20 groups, and more than 80 percent in only 3 of the 20 groups. Most of the competition comes from tramp or bulk shipping, especially in iron and steel, motor vehicles, fruits

135. This diversion away from higher cost suppliers will be most significant for the commodities which have high elasticities of demand; i.e., those commodities for which close substitutes are available from other foreign sources of supply or from domestic producers. E. BENNATHAN & A. WALTERS, *supra* note 70, at 19.

136. J. Gomez-Ibanez & I. Morgan, *Is A Competitive Maritime Policy Workable? Lessons from International Aviation* 32-33 (Aug. 1983) (report to U.S. Dep't of Transportation).

137. See *supra* Table 1.

138. J. Gomez-Ibanez & I. Morgan, *supra* note 136, at 31-33.

and vegetables, and metal scrap. Air transportation is a significant competitor in certain commodity groups, such as electronics, clothing, and textiles. Ground transportation is also important for commodities imported from Canada and Mexico.

International Markets

TABLE 5

Percentage Of Top Twenty Commodities Imported To The U.S. By Liner And Other Modes, 1980

Commodity group, ranked by tonnage of liner shipments	Percent of all U.S. imports arriving by				Imports from largest LDC ^a	
	Ocean liner	Tramp or other vessel	Air	Ground	Percentage of total	Name of LDC
Iron and steel	22.8	61.5	0.2	15.5	5.0	South Korea*
Alcoholic and non-alcoholic beverages	74.0	1.5	0.1	24.4	0.1	Israel
Manufacturers of metal	66.2	5.8	7.5	20.5	10.7	Taiwan
Coffee, cocoa, tea and spices	85.7	7.4	0.4	6.5	23.7	Brazil*
Fruits and vegetables	47.7	22.5	0.6	29.2	6.4	Honduras*
Road motor vehicles and parts	17.8	50.7	0.5	31.0	0.4	Brazil*
Nonmetallic mineral manufactures	28.6	2.8	31.1	37.5	15.7	South Africa
Misc. manufactured articles	39.0	3.9	48.1	9.0	11.5	South Africa
Meat and meat preparations	85.1	4.5	0.2	10.2	5.4	Argentina*
Nonferrous metals	33.8	7.4	23.3	35.5	9.6	South Africa
Textile yarn, fabric and products	72.5	3.0	18.5	6.0	8.1	India*
Rubber, crude and synthetics	64.2	14.1	2.6	19.1	8.8	Taiwan
Metalliferrous ore and metal scraps	22.7	61.2	3.3	12.9	3.2	Brazil*
General industrial machinery and equipment	62.2	2.6	14.7	20.5	3.0	Taiwan

Table 5, continued

Commodity group, ranked by tonnage of liner shipments	Percent of all U.S. imports arriving by				Imports from largest LDC ^a	
	Ocean liner	Tramp or other vessel	Air	Ground	Percentage of total	Name of LDC
Clothing and accessories	66.2	1.4	27.6	4.8	25.9	Hong Kong
Telecommunications, recording, and reproduction equipment	70.6	1.4	12.8	15.2	14.4	Taiwan
Specialized machinery for industry	54.1	8.1	12.3	25.5	1.0	Taiwan
Fish and fish preparations	47.0	15.6	3.8	33.6	3.3	Brazil*
Electrical machinery, apparatus, and appliances	26.0	1.1	56.2	16.7	10.9	Malaysia*
Tires and tubes	80.3	1.6	0.2	17.9	8.4	South Korea*

*Country is a signator to UNCTAD Code of Conduct for Liner Conferences or has a bilateral cargo sharing agreement with the United States.

^aIncludes all countries other than European countries, OECD members, and countries with centrally planned economies.

SOURCE: The percentage of imports arriving by all ocean vessels, air, and ground transportation is calculated from U.S. BUREAU OF THE CENSUS, *U.S. General Imports: World Area by Commodity Group, Annual 1980*, report no. FT-155 (1981). The relative shares of imports arriving by liner and non-liner shipping are assumed to be the same as the relative shares of imports and in-transit shipments arriving in the U.S. by liner and non-liner shipping; data on imports arriving by vessel are from unpublished figures supplied by the U.S. Department of Transportation, Maritime Administration, Division of Statistics. The top twenty liner commodity groups are taken from U.S. DEPARTMENT OF TRANSPORTATION, MARITIME ADMINISTRATION, UNITED STATES OCEANBORNE FOREIGN TRADE ROUTES, 1980-1981, at 190 (1983).

If the commodity groups are further subdivided, one can find some specialized products for which liners account for nearly 100 percent of shipments. Nonetheless, tramp, bulk, or air shipping do not have to compete in every market segment to put significant competitive pressure on liners. In fact, the alternative modes need only capture some marginal markets and nibble at a few traditional liner specialties to pose a substantial threat.¹³⁹ As discussed above, charter airlines caused significant problems

139. Economists have long understood that a market served by only one firm (or, in this case, one

International Markets

for the scheduled international airlines in the late 1960's and early 1970's by capturing only 15 to 30 percent of the North Atlantic air market.¹⁴⁰

The potential diversion of trade to other countries that supply the same or substitute commodities provides an even greater threat to the LDCs. The statistics in Table 5 indicate that, in 13 out of the top 20 liner commodity groups, no single LDC supplies more than 10 percent of U.S. imports. In many commodity groups, moreover, the most important suppliers are not signatories to the UNCTAD Code¹⁴¹ and therefore are not necessarily committed to cargo reservation. Using more detailed commodity classifications, it is also easy to identify commodity groups for which a single LDC is the dominant source of supply. For example, Brazil supplies 78 percent of the coffee imported to the United States and the Philippines supplies 96 percent of imported mahogany veneers.¹⁴² Trade in these goods could easily be diverted to other countries: Venezuela, Colombia, and the countries of Central America are also major coffee exporters and easily could become alternative suppliers to the United States. Similarly, other Asian and African countries might become sources for U.S. imports of mahogany. Moreover, these import figures understate the possibilities for substitution because they ignore domestic sources of supply for many commodities.

Estimated price elasticities¹⁴³ of imports and exports in international trade further confirm the potential for substitution. Several studies based on relatively broad commodity classifications indicate that the price elasticities of imports to a developed country exceed one for most commodity groupings, and that elasticities of two or more are relatively common.¹⁴⁴ Moreover, because the estimates assume that the prices of all foreign sources of supply rise at the same rate, they understate the potential for diversion from a single country. The elasticities also would be higher if

cartelized industry) still may be extremely competitive if there is easy entry to and exit from that market by other firms. See Baumol, *Contestable Markets: An Uprising in the Theory of Industry Structure*, 72 AM. ECON. REV. 1 (1982); Bailey & Friedlaender, *Market Structure and Multiproduct Industries*, 20 J. ECON. LIT. 1024 (1982).

140. Smithies, *supra* note 26, at 238.

141. Table 5 shows that Taiwan, for example, supplies about 10% of U.S. imports of metal manufactures and rubber. Hong Kong supplies about 26% of U.S. clothing imports. Neither of these countries is a signatory to UNCTAD.

142. U.S. BUREAU OF THE CENSUS, U.S. GENERAL IMPORTS: WORLD AREA BY COMMODITY GROUPING, ANNUAL 1979, at 1-2, 1-6, 3-239, 3-505 (Report No. FT-155).

143. The price elasticity of demand is defined as the absolute value of the percentage change in demand for a good in response to a one percent increase in the good's price. The higher the elasticity, the more demand is sensitive to price. See R. LIPSEY, P. STEINER & D. PURVIS, *supra* note 58, at 84.

144. See, e.g., Stone, *Price Elasticities of Demand for Imports and Exports: Industry Estimates for the U.S., the E.E.C. and Japan*, 61 REV. ECON. & STAT. 305, 312 (1979); Houthakker & Magee, *Income and Price Elasticities in World Trade*, 51 REV. ECON. & STAT. 111, 125 (1959); Goldsborough, *International Trade of Multinational Corporations and Its Responsiveness to Changes in Aggregate Demand and Relative Prices*, 28 INT'L MONETARY FUND STAFF PAPERS 573, 573-99 (1981).

they were estimated for more narrow commodity groups for which the opportunities for substitution are greater. In short, the price elasticities for imports from a single country specializing in a few commodities probably are very high, indicating a high degree of substitutability those between commodities and alternative commodities.

b. *Relative risks to LDCs and the United States*

Taken together, the possibilities for substituting other transportation modes, sources of supply, or alternative commodities suggest that the threat of diversion may be at least as effective in liner shipping as it is in international aviation. Moreover, these significant opportunities for diversion imply that cargo reservation may impose very different risks on different countries: If an LDC insists on cargo reservation with all or most of its trading partners while the United States generally resists such reservation, the LDC risks substantial harm to its economy with little chance of offsetting benefit. The United States, on the other hand, risks relatively little.

The principal benefits to the LDC from cargo reservation are possible increases in shipping revenues and in the size of its shipping lines. The major costs of such a policy are potential losses of export trade and possible increases in the prices that domestic consumers pay for imports. These benefits and costs vary in importance depending on whether the LDC predominantly exports or imports commodities carried by liners.

Most LDCs that have significant liner trade with the United States are primarily importing U.S.-made liner commodities.¹⁴⁵ Cargo reservation can help the carriers of importing LDCs, but only under circumstances that entail serious costs for the LDCs' consumers. Assuming that the LDC pursues a consistent policy of cargo reservation with all its trading partners, consumers in that country cannot avoid higher liner charges by importing from other countries. If the LDC consumers can substitute other transportation modes or domestic commodities, however, the LDC liners will not gain any traffic. And, in the unlikely event that there are no substitute modes or domestic commodities, the LDC carriers will benefit from cargo reservation, but only at the expense of increasing prices for the LDC's consumers. To add insult to injury, the LDC's consumers will

145. In 1981, liner imports from the United States exceeded liner exports to the United States for 14 of the 19 LDCs with the highest volume of oceanborne liner trade with the United States. For 11 of these 14 countries (including Hong Kong, Korea, and Argentina), liner exports to the United States were at least half as large as liner imports from the United States. The only LDCs where liner imports vastly exceeded liner exports were the oil-producing states of Venezuela, Saudi Arabia, and Nigeria. FOREIGN TRADE ROUTES, *supra* note 104, at 315.

International Markets

be forced to subsidize U.S. shipping as well as their own national carriers because both lines will be guaranteed a share of the cargo.

A significant minority of LDCs export more liner goods to the United States than they import.¹⁴⁶ Cargo reservation may be even more risky for these LDCs because, in the absence of substitute transportation modes, it almost certainly will increase shipping prices. Given the trade statistics and elasticities cited above, buyers of the LDCs' exports probably will switch to alternative sources of supply or substitute commodities. Both exports and shipping volumes will drop, providing the national carriers little gain from higher prices. Moreover, the drop in exports will harm the export sector of the economy. Thus, the country's economy will suffer substantial loss with no offsetting benefits.

The United States, by contrast, faces relatively little risk from a policy of resisting cargo reservation regardless of the predominant direction of its liner trade with the LDC. If an LDC insists on cargo reservation, U.S. exporters and importers will face higher shipping costs for trade with that LDC. This will not place U.S. exporters at a great disadvantage, however, because the LDC's policy of imposing cargo reservation on all its trading partners will penalize competing exporters in similar fashion. Moreover, if the United States resists cargo reservation wherever possible, U.S. consumer prices will not rise substantially because U.S. importers will be able to shift to trading partners with no restrictive agreements.

One can argue, of course, that by not supporting cargo reservation the United States is missing an opportunity to help its national carriers. If the United States took such a position, however, it would put itself in the same unhappy position as the LDCs. There is no guarantee that the reservation scheme actually would help U.S. carriers and, if it did, it could only do so by seriously damaging the rest of the U.S. economy.¹⁴⁷

2. *Promoting Competition Despite Cargo Reservation*

Some LDCs probably will insist on cargo reservation for symbolic or political reasons, even though such a policy works against their economic

146. In 1981, liner exports to the United States exceeded liner imports to the United States for 5 of the 19 LDCs with the highest tonnage of oceanborne liner trade with the United States. These five countries were Taiwan, Brazil, South Africa, the Philippines, and Ecuador. *Id.* at 315.

147. Cargo reservation agreements could be designed in ways that mitigate some of the usual negative impacts. Sufficient competition within each national carrier group, for example, would maintain incentives for low rates and high service. Similarly, the maintenance of some minimum third flag rights, perhaps at the 20% level suggested in the UNCTAD Code, might allow fairly efficient use of ships and crews. Regional or multilateral cargo reservation, in which each national group is guaranteed a minimum share of the cargo for an entire region rather than for their particular trades, might also permit more efficient ship operation than simple bilateral agreements. Multilateral cargo reservation has been proposed in E. Frankel & P. Read, *supra* note 98, at 55-56.

interests. The aviation experience suggests that the United States still could maintain a level of shipping competition by encouraging cargo diversion and by adopting strategies designed to undermine enforcement of cargo reservation agreements.

To encourage diversion to other shipping modes, for example, the United States should resist any attempts to extend the UNCTAD Code or other forms of cargo reservation to cover tramp and bulk shipping. The United States might also increase the degree of competition among liners by negotiating for large third flag market shares, for the formation of several competing national carrier companies, and for the use of competitive bidding to allocate cargo reserved for the national carrier group among the liner companies.

To maintain the threat of diversion to other suppliers or countries, the United States should explicitly play one trading partner off against another. If forced to accept cargo reservation with one LDC, the United States should resist such agreements with LDCs that export similar commodities.¹⁴⁸ The possibility of increasing their exports should give the other LDCs a strong incentive to cooperate with the United States.

The United States also might undermine enforcement of cargo reservation agreements by insisting that liner conferences, rather than national governments, take responsibility for policing and enforcement. If the liner conference is the responsible enforcement agency, investigations or sanctions for violations of the agreement may not have the force of law.¹⁴⁹ More important, individual conference members may have such divergent interests that the conference as a whole cannot agree on an effective investigative strategy or meaningful sanctions. The aviation experience illus-

148. Such a policy by the U.S. government also may be essential to avoid regional or multilateral cargo reservation agreements. These agreements may discourage or even prevent trade diversion. A regional cargo reservation agreement with Latin America, for example, would substantially reduce the opportunity for U.S. coffee importers to avoid high shipping costs by switching suppliers. Some industry observers advocate regional or multilateral agreements as a means of improving vessel and crew utilization despite cargo reservation. Because most trades are imbalanced and some are thin, carriers would gain enormously from the flexibility in routing and scheduling that regionalism would permit. In effect, such agreements would allow a limited amount of third flag carriage (although only by regional carriers) and thereby improve shipping efficiency. *See id.* at 56.

This argument for regional or multilateral agreements is most plausible, however, only in a world where most or all countries have adopted the UNCTAD code. If cargo reservation applies only to a fraction of the trades, a comprehensive regional reservation system might bring only modest improvements in liner efficiency at the cost of major losses in the potential for trade diversion. Some of the efficiency benefits might be gained in bilateral agreements, moreover, simply by insisting on a significant share for third flag liners. Finally, multilateral or regional agreements may place the United States at a serious bargaining disadvantage because agencies such as UNCTAD tend to operate on the "one nation, one vote" principle. In a regional conference supervising a cargo pool, for example, blocs of smaller LDCs are likely to outvote the United States.

149. Under the UNCTAD Code, enforcement is left up to the conferences, with no government involvement. Conferences are free to adopt lists of improper practices but there is no government review to ensure enforcement. E. FRANKEL, *supra* note 86, at 229.

International Markets

trates the problems of conference enforcement. IATA members whose marginal costs were low enough to make discounted fares profitable had strong incentives to cheat on conference tariffs (e.g., by offering hidden rebates to travel agents) in order to capture a larger share of the market. Cheaters publicly defended IATA fares and supported some nominal enforcement efforts in the hope of deterring other members from cheating.¹⁵⁰ These members, however, did not support effective enforcement or severe sanctions for fear that they might be applied to themselves.

Shipping conferences would face similar cheating problems in attempting to enforce cargo reservation. Each national carrier group or line would have an incentive to carry more than its share, especially if each thought that other carriers were not doing so. These potential cheaters would support enforcement measures effective enough to deter other carrier groups, but not stringent enough to make cheating difficult or impossible. Thus, by insisting that cargo reservation agreements not be enforced by national governments, the United States could undermine the agreements and thereby foster competition.

D. *The Problem of Unfair Competition*

Even if the United States government can resist or undermine cargo reservation, some analysts argue that it should not do so because such action would subject U.S. carriers to various forms of unfair competition.¹⁵¹ According to this argument, widespread adoption of cargo reservation by countries other than the United States will induce the LDCs to increase their own capacity and thereby create excess capacity worldwide. This excess shipping capacity, it is feared, will be “dumped” in U.S. trade routes. In retaliation for U.S. policy, moreover, U.S. liners might be excluded from third flag participation in non-U.S. trade routes—participation which may be needed to fill U.S. ships on many routes.¹⁵² Because U.S. shipping lines are less competitive than U.S. air carriers, the international aviation experience provides little guidance on these threats to U.S. liners. Other evidence suggests, however, that neither the fear of dumping nor the fear of exclusion is well grounded.

The fear of dumping is unwarranted because cargo reservation is un-

150. For a discussion of IATA's attempts to deal with the cheating problem, see Tauber, *Enforcement of IATA Agreements*, 10 HARV. INT'L L.J. 1, 7-17 (1969).

151. See Ellsworth, *supra* note 5.

152. U.S. carriers do not enjoy as strong a position in shipping as they do in aviation. See U.S. CONGRESSIONAL BUDGET OFFICE, *supra* note 95, at 23-32. In addition, the problems of dumping and third flag exclusion are not as serious in aviation. Restrictive bilaterals have long been the rule rather than the exception for air routes not involving the United States, and any excess capacity that might have occurred has long been dissipated. In addition, aircraft are small enough and air travel volumes large enough that air carriers can often operate direct flights and do not depend on “third flag” traffic.

likely to produce significant excess capacity. There are three reasons for this. First, the LDCs already carry around 38 percent of the cargo in trade routes between LDCs and developed countries,¹⁵³ which is close to what their market share would be under the 40/40/20 rule. Not every LDC achieves the average of 38 percent, of course, and only 26.5 of the 38 percentage points are in home trade routes (the remaining 11.4 being in cross trades).¹⁵⁴ Nevertheless, the LDCs as a group clearly do not have to increase their shipping tonnage by very much to carry 40 percent of their own cargo. All that might be needed is some modest reshuffling of shipping capacity among the LDCs. The second reason that cargo reservation is unlikely to cause a significant increase in worldwide capacity is that some excess capacity will be absorbed through the normal retirement and replacement of ships. Assuming a 20-year average life for a ship, 5 percent of total tonnage must be replaced annually. Actual replacement rates are probably even higher, however, because containerization is making some current liner tonnage technologically obsolete. The third reason not to expect an increase in worldwide capacity is that the LDCs probably will lease or buy excess ships from other countries. Indeed, LDCs already have approached several U.S. and European lines about chartering space, in order to gain entry to a trade conference without buying and operating their own ships.¹⁵⁵ If such arrangements become widespread, implementation of the UNCTAD Code might proceed with little or no dumping.

The second threat, that of LDC's excluding U.S. companies from operating as third flag carriers in non-U.S. trades, is more difficult to assess. Even if the United States accepted cargo reservation, it is unclear whether U.S. third flag rights would be preserved. The UNCTAD Code contains no guarantees that third flag carriers would be able to continue operating.¹⁵⁶ The U.S.-Brazil agreement, for example, explicitly excludes other third flag nations in the absence of a waiver.¹⁵⁷

Moreover, some evidence suggests that third flag traffic is not important to U.S. carriers, although the data are far from conclusive. One study of the capacities of national carrier groups in non-U.S. trade routes found that U.S. liners operating as third flag carriers accounted for 3.3 percent of the capacity in trades between LDCs and developed countries other than the United States.¹⁵⁸ If this figure is correct, U.S. third flag opera-

153. See 3 U.S. OPTIONS, *supra* note 89, at 29-31, 48.

154. *Id.*

155. See *id.* at 80.

156. See E. FRANKEL, *supra* note 86, at 221-39; U.S. OPTIONS, *supra* note 89, at 15-28.

157. See E.G. Frankel, Inc., *supra* note 102, at 7.

158. U.S. OPTIONS, *supra* note 89, at 31.

International Markets

tions with LDCs would account for perhaps 22 percent of all the cargo carried by U.S. liners.¹⁵⁹ The actual figure is probably substantially lower than 22 percent, however, and may be as small as 4 percent.¹⁶⁰ Of course, third flag trade may be more important for U.S. carriers than the third flag share of total U.S. cargo suggests. Some U.S. companies may be more heavily dependent on third flag traffic than others. Third flag cargo also may make the difference between profits and losses because it may “top up” the liners’ holds. Nevertheless, the small percentages involved suggest that the loss of third flag cargo, if it occurs at all, will not be crippling.

Thus, the possibility that other countries might engage in unfair competition against U.S. carriers in retaliation for pro-competitive U.S. policies poses no greater threat to the U.S. shipping industry than to the U.S. international aviation industry.

Conclusion

The experience of U.S. aviation policy strongly suggests that the United States can and should resist pressures for international agreements which restrict competition by stabilizing market shares, limiting capacity, or fixing prices. The United States traditionally has encouraged competition in aviation by avoiding agreements that restrict airline capacity and by liberalizing the rules governing charter competition. More recently, pro-competitive U.S. policies have forced a review of international pricing mechanisms, and the U.S. government has used the threat of diverting traffic to neighboring countries to establish more liberal bilateral agreements for aviation. As a result, prices and services have generally improved.

Similar strategies can be employed to resist the growing pressure for

159. According to these estimates, U.S. carriers’ third flag capacity between LDCs and developed countries is about 50% as large as U.S. carriers’ capacity between the United States and LDCs. Maritime Administration cargo statistics show that trade with the LDCs accounts for 58% of all U.S. carrier cargo in trades with the United States. Assuming the U.S. carriers do not operate as third flag carriers between LDCs, the percentage of all U.S. carrier cargo from third flag trades would amount to 22%: $(58 \times 0.5) / (100 + [58 \times .51]) = 22\%$. See *id.* at 3, 29-31.

160. Twenty-two percent probably is too high because the rule used for assigning capacity to trade routes overstates U.S. third flag capacity. The study discussed above, see *supra* text accompanying note 141, assigned the capacity of a vessel making multiple stops to the trade between the last port of call in a developed country and the first port of call in a less developed country. Using this approach, 84 percent of the U.S. third flag operations are either between Japan and the East China Sea area or between Mediterranean Europe and the Persian Gulf. See U.S. OPTIONS, *supra* note 89, at 32-33. In reality, most of these vessels are primarily involved in carrying cargo between the United States and either the East China Sea area or the Persian Gulf. See *id.* The vessels probably make intermediate stops in Japan or in Mediterranean Europe because it is easy to do so, but carry relatively little cargo between those countries and the less developed world. See *id.* If these two routes are ignored, third flag operations would account for only 4 percent of all cargo carried by U.S. liners. This figure was calculated using the method described *supra* note 159.

cargo reservation in international shipping. Tramps, bulk ships, and air cargo could provide the same type of competition for liner shipping that air charters do for scheduled airlines. In addition, international trade appears to be extremely sensitive to price; hence higher ocean shipping rates pose a great risk for diverting trade to other countries and commodities. Indeed, if substitute commodities and shipping modes are as readily available as they appear to be, the LDCs risk far more serious damage to their economies by insisting on cargo reservation agreements than the United States does by opposing them.

Moreover, it appears that the benefits of competition can be achieved at little, if any, cost to domestic carriers. U.S. airlines do not appear to have suffered much, if at all, from U.S. opposition to restrictive airline agreements. The risk of unfair competition resulting from opposition to maritime cargo reservation agreements also seems small since there is little excess shipping capacity to dump in U.S. trades and since U.S. liners do not depend so heavily on third flag traffic that they would suffer greatly by exclusion from non-U.S. trades.

The lessons of the airline and shipping industries may extend beyond transportation to other international markets governed by bilateral agreements. Diversionary possibilities similar to those found in transportation may exist in the telecommunications, clothing, footwear, auto, and steel industries. Because resistance to restrictive trade agreements may be unpopular in the short run, efforts to increase competition will require energetic U.S. government support. In the end, however, increasing competition should prove to be the best policy both for the United States and for world trade.