

*Liberalizing the U.S.-European air transport market
would benefit both sides of the Atlantic.*

Toward Truly Open Skies

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AFTER THE U.S. DOMESTIC AIR MARKET, the Europe-North America international market is the largest air transport market in the world, accounting for 419,961 billion revenue-passenger-kilometers in 2000. It has also traditionally been one of the most profitable, and it connects the world's largest economic units — the European Union and the North American Free Trade Area. Because of its size and vitality, there have been numerous calls for the relaxation of regulation that limits U.S. and European carriers from expanding service to each other's nations.

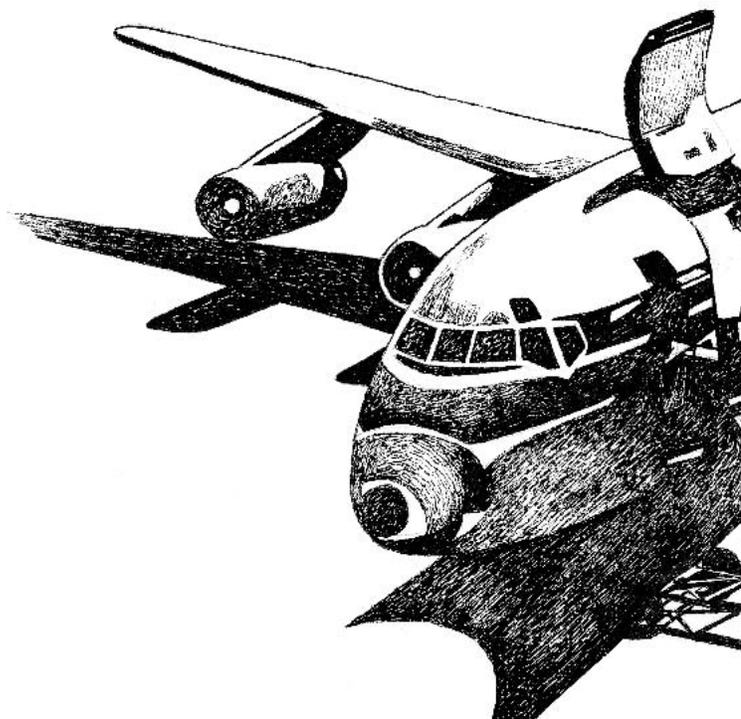
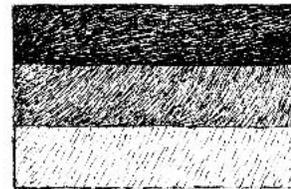
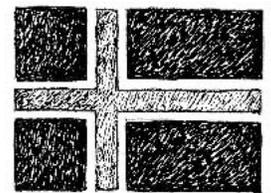
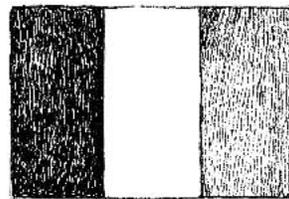
The belief that there should be free trade in services across the Atlantic is not new. There has been a steady move toward the global liberalization of air transportation markets since the late 1970s, when the United States initiated the deregulation of its domestic freight and passenger markets. However, the pattern of change has not been consistent across countries.

In recent years, a major coalition of interests involving airlines, user groups, and governments has advocated a free transatlantic market in air services. But it will not be easy to create a fully open transatlantic air transportation market. There are significant political obstacles that would need to be overcome, and they — in practice — would seem to dominate the agenda, at least in the short term.

But even if the institutional difficulties could be circumvented, EU airlines would have difficulty competing in an open

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transatlantic situation. First, EU airlines have higher costs and productive inefficiencies than U.S. airlines. The high levels of inefficiency and high costs of provision are slowly being reduced by the EU carriers, but union power and tradition still slow progress.

Second, even if EU airlines reduce their production costs, they may still be at a significant disadvantage compared to American carriers in terms of feeder networks. The geographical distribution of economic activities in Europe and its compactness offer little scope to develop viable large hub-and-spoke networks to fully integrate intra-EU services with transatlantic routes.

Third, the likelihood of EU carriers making significant inroads into the American domestic market through cabotage activities seems small given U.S. airlines' domination of many major American hubs. National ownership rules curtail greater cross-investments between airlines that would yield efficiency gains for those airlines with non-overlapping networks and inhibit the movement of capital into the airline sector.

COMPARATIVE POSITION OF EUROPEAN AIRLINES

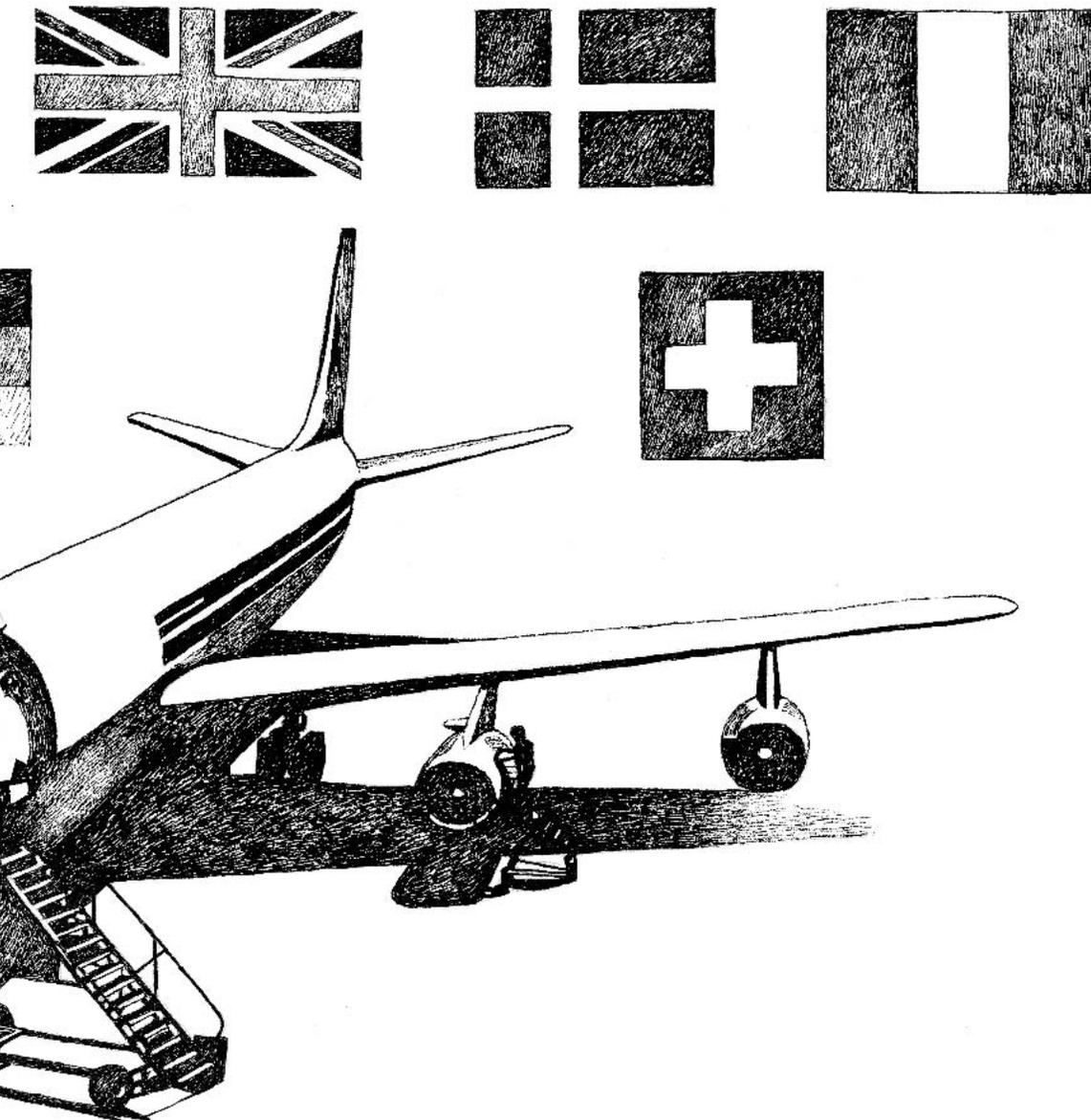
If current regulations governing transatlantic air services were

eliminated, how would European airlines fare? To answer that question, we must consider the resulting effects on airline size and efficiency.

Size European airlines are small compared to their American counterparts. The United States has the world's four largest airlines (American, United, Delta, and Northwest) in terms of passengers carried, and another two — Continental and USAir — are in the top 10. In comparison, British Airways and Lufthansa are the only European airlines in the top 10.

Although economies of scale in a narrow economic sense may not pertain to air transportation, size may be important in two other ways. First, larger airlines usually have larger reserves and easier access to finance that can be important when there are downturns in the travel market. Second, scale can be of political importance; it gives greater lobby weight and the ability to affect policy. The extent to which that is important depends on temporal context and the institutional structure of the country concerned. Certainly, U.S. air service bilateral negotiations have, in the past, been influenced by the voice of major carriers. Most EU governments, at least until recently, also have listened to their large flag carriers.

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Airline efficiency Financial cost efficiencies are not the only determining factor for success in airline markets. There are matters such as service quality, good yield management, appropriate network coverage, and reliability that can compensate for higher costs through greater revenue generation. Nevertheless, over the long term in a market with free entry, lower unit costs per unit of quality offered will prevail. The comparative cost structures of European and American carriers would thus be important in an open transatlantic market.

Much of the work on airline costs has been directed at the U.S. market. There are, however, a limited number of economic studies that have focused on international comparability of airline cost and production functions. Let us look at that data as we consider the effects that liberalization would have on cost structures.

The period after U.S. domestic deregulation saw an upturn in the relative international economic performance of U.S. airlines. Passenger costs per available seat-kilometer in 1983 were, according to International Air Transportation Association data, between 57 percent and 67 percent higher for cross-border, intra-European Civil Aviation Conference flights than for U.S. domestic flights. A study by the United Kingdom's Civil Aviation Authority estimated that the costs of European airlines were double those of U.S. domestic trunk airlines.

There are limitations in looking at those crude data. Average flights were shorter within Europe, pushing up landing and take-off costs in the overall calculus. To allow for that, and for variations in the relative sizes of different market types, British economist D. Sawers compared the costs of local European services with those of the American carriers Piedmont (which concentrated on business travel) and Southwest (concentrating on leisure travel) that offered services of similar length. According to Sawers' 1987 monograph *Competition in the Air*, European carriers in 1983 had costs per available seat mile of \$0.142 compared with Piedmont's \$0.090 and Southwest's \$0.065. S. D. Barrett, in his 1987 book *Flying High*, obtained similar results. Barrett noted that, in 1984, the productivity of U.S. airlines was 36 percent greater than in Europe in terms of traffic units per staff member.

Taking a panel of 12 European carriers and eight American carriers for the period 1982 to 1995, C. K. Ng and P. Seabright found that public ownership and market power in Europe resulted in European carriers being significantly less productive than their U.S. counterparts. In a 2001 *Economic Journal* article, the two researchers report that, for the period from 1990 to 1995, European carriers' costs would have been 26 percent lower if they had functioned as the U.S. airlines, although the differential fell towards the end of the period as EU liberalization began to take effect.

Labor Production costs traditionally have differed between Europe and the United States for a variety of reasons. Europe's scheduled airlines, while improving, use labor less productively. Seabright and F. McGowan, in a 1989 *Economic Policy* article, report that eight American majors in the late 1980s enjoyed 1.6 million revenue-passenger-kilometers per employee compared to 1.1 million for the best European carrier, British Airways. Other major European carriers, such as Sabena (0.6 million), Lufthansa (0.8 million) and TAP (0.4 million), were considerably less productive.

The efficiency differentials are partly the result of European government subsidies and the existence of niche markets. European airlines, however, also are confronted with higher costs outside of their control than their American counterparts. The International Air Transport Association, for instance, has estimated that landing fees in the United States are 10 percent to 30 percent less than the European level. And European fuel prices generally are higher.

Even controlling for those two factors, higher European costs also stem from lower productivity rather than higher unit input prices. European labor costs are higher; across the 12 EU airlines studied by Ng and Seabright, pilots on aver-

age earned \$151,200 per year, cabin crewmember averaged \$48,500 per year, and other personnel averaged \$46,000. That compares to the U.S. market where pilots averaged \$110,500, cabin crewmembers averaged \$30,700, and other personnel averaged \$37,000. Despite the higher European pay, productivity was worse: 1.33 million revenue-passenger-kilometers per EU employee compared to 1.93 million for a U.S. employee.

American deregulation resulted in substantial reductions in labor costs, mainly through lower wages, downsizing, and changes in working conditions. Such changes will occur more slowly in Europe because of different attitudes towards labor relations coupled with higher mandatory severance costs.

Transatlantic alliances The emergence of strategic alliances involving transatlantic partners provides some evidence of the benefits of relaxing at least some of the regulations governing air transportation.

In 1994, the U.S. Department of Transportation studied both the USAir/British Airways and the Northwest/KLM alliances to determine the effect of alliances on the revenues, costs, and profits of the partner carriers involved and other airlines serving common routes. It was concluded that alliances generated benefits both for the airlines and passengers. The DOT study calculated that USAir/British Airways and Northwest/KLM increased their market shares on code-sharing routes by eight percent and 10 percent, respectively. In the case of British Airways, that represented \$27.2 million of additional net revenue, and for USAir, \$5.6 million. For Northwest, the strategic alliance was estimated to benefit them by \$16.1 million annually and KLM by \$10.6 million.

A 1995 study by the U.S. General Accounting Office looked at a number of international alliances and combined accountancy and other data over relevant sub-markets with interview information and insights. The GAO concluded that participating airlines have benefited, albeit to varying degrees. Some gains came from generated traffic, but a significant amount of transfers came from non-alliance carriers. In the Northwest/KLM alliance, for instance, Continental Airlines lost about \$1 million in revenue in 1994 as a result of having to compete.

The study also describes a number of new (or reintroduced) international services as a result of alliances involving American carriers. They include non-stop services between Zurich and Cincinnati (Delta/Swissair); European services to Memphis (Northwest/KLM), non-stop services between Houston and Rome (Continental/Alitalia) and direct services between Vienna and Washington (Delta/Austrian Airways). The study also highlights that some alliances, by coordinating services of member airlines, offered more choice of carriers and routes. Three alternative services available between Indianapolis and Lyon were cited by way of illustration.

Generally, the evidence indicates the potential for significant benefits from liberalization. Although that evidence is based on improvements achieved through alliances, individual carriers on either side of the Atlantic could achieve similar improvements if they were given greater operating freedom.

IMPEDIMENTS TO FURTHER LIBERALIZATION

In recent years, some of the constraints controlling airline activities over the North Atlantic have been relaxed through “Open Skies” agreements. The bilateral agreements aim to remove the need for periodic inter-governmental negotiations over which air services routes may be served, between which airports, with how much capacity, by which airlines, and at what fares. From the governments’ perspective, the agreements save public money. From the perspective of industry, Open Skies allows greater flexibility, enhanced efficiency, and more competition in the supply of air services. For consumers, the agreements mean lower fares, more route options, and a greater choice of the airlines available.

The United States began pursuing Open Skies agreements in 1979, agreeing to very liberal terms if other countries accepted them. By 1982, the United States had signed 23 liberal bilateral air service agreements worldwide, mainly with smaller nations. That was followed in the 1990s by a burst of

tute an open market even for signatories. They still set limits on ownership of airlines, controls over market share, and cabotage rights. And there is no single arbitrator or legal authority to adjudicate over the system. Major institutional hurdles remain to be overcome before a fully liberalized transatlantic air market can materialize.

EU negotiating position The United States and the EU conduct international aviation business differently. The former has a single negotiating body while the member nations of the latter conduct negotiations separately. That has resulted in the United States having a powerful negotiating position vis-à-vis most European states, although the EU Commission is pushing for the initiation of a common negotiating position.

There are at least three difficulties with that. First, some EU members have maintained that the commission has no legal right to fulfill that role, and those members have taken their case to the European Court of Justice. Second, it is not clear that

American deregulation of the airline industry resulted in substantial reductions in labor costs. Such changes will occur more slowly in Europe.

agreements with European states including those with Switzerland, Luxembourg, Iceland, Sweden, Norway, Belgium, Denmark, Finland, and the Czech Republic. Other major agreements with the Netherlands and Germany came as a result of agreements on allowing strategic airline alliances between KLM and Northwest Airlines, and Lufthansa and United Air Lines, respectively.

The liberalization of the North Atlantic has not been entirely painless in the short term. Between 1984 and 1990, the six European countries with the most liberal bilateral air service agreements with the United States (Belgium, Denmark, France, Germany, Spain, and the Netherlands) lost market share while those with more restrictive agreements (Greece, Denmark, Italy, Portugal, and the United Kingdom) gained market share. Over the same period, American carriers took a larger proportion of the fast-growing non-U.S.-citizens traffic on the Atlantic.

More recently, France and Italy have reached agreement with the United States to open up capacity and remove fare restrictions gradually. The major transatlantic market, however, between the United Kingdom and the United States remains heavily regulated, and there is no Open Skies agreement. The Bermuda II bilateral agreement covering that market was signed in 1977 and has only been subject to minor, periodic adjustments. The agreement, for example, limits each country to two carriers out of Heathrow.

While the Open Skies and similar agreements have offered some flexibility to the North Atlantic, they still do not consti-

other nations will accept the EU Commission as the body with which to reach agreements. International agreements currently are on a bilateral basis and the other party must agree to any changes. Third, the EU has no internal mechanism in existence that would allow it to act as the negotiating body for all EU countries. That poses problems given the divergent views and interests of individual members. The evidence from the United States is that individual airlines have mechanisms for putting their positions through the political process; that process is lacking in the EU.

Ownership and control The United States and the European Union have established rules on foreign ownership that are partly designed to protect their own carriers but also for other important purposes. The U.S. military, in particular, has an interest in maintaining the Civil Reserve Air Force, which allows it to draw upon commercial fleets for airlift during times of national emergency. The airlines, as a quid pro quo, enjoy the benefits of having a priority over the carriage of military and government personnel. The military is reluctant to allow shrinkage or foreign control of the U.S. commercial air fleet. That problem is not so acute in Europe, where military demands are fewer.

Cabotage Opening markets to any carrier raises the “flags of convenience” issue. Some worry that without adequate safeguards, air transportation will become less safe and more polluting. But unlike ocean shipping for which no supranational

agency exists, the United Nations' International Civil Aviation Organization (ICAO) sets safety, security, and environmental minimums for international air transportation. The concern of some countries is that there is no way of policing that effectively. Indeed, the United States currently has in place a categorization procedure that it uses to limit access by foreign airlines to its international markets that do not meet ICAO standards. That unilateral power would be lost within an open transatlantic market.

Airport access There are significant differences in the capacities of the U.S. airport system and the EU system. Basically, the capacity of EU airports is severely strained because the four key transatlantic hubs (Heathrow, Charles de Gaulle, Amsterdam and Frankfurt) are at capacity with little expectation of large expansion. While capacity problems exist at John F. Kennedy and O'Hare airports, others U.S. hubs such as Atlanta, Dallas, and Detroit have spare capacity.

While few U.S. hubs have pure capacity problems, the main hubs generally are dominated by one of the American carriers, which makes entry by another airline difficult. The issue often is not legal (although in some cases there is virtual monopoly control over gates) but rather the difficulty of any entrant EU carrier establishing adequate feeder services at a dominated airport. British Airways, for example, only has about 38 percent of the slots at London Heathrow. At many major U.S. airports outside of New York, the dominant carrier may control as many as 90 percent of the slots.

European hubs traditionally have served a somewhat different purpose to those in the United States. Very few flights on major routes within the EU are over an hour and a half's duration and there is competition on many of those from high-speed rail. Thus, the potential for viable hub-and-spoke operations in Europe is much more limited than in the United States. Indeed, European hubs provide more of a radial pattern of services. Integration of those services into extensive feeder networks for transatlantic routes is thus more limited than in the United States and the potential scale and scope economies are fewer. That may pose serious asymmetries in the competitive position of carriers on either side of the Atlantic and foster some degree of protection within Europe.

Conflict resolution An open transatlantic market inevitably would require a common framework of antitrust policy (e.g., to protect against predatory behavior). There are differences in the legal approaches to those types of issues on either side of the Atlantic. Recent actions regarding the proposed British Airways/American Airlines alliance illustrate the differences that would need resolution. But even if the differences were resolved, there would still be the need for a common conflict-resolution structure. The United States has been reluctant to relinquish such powers in the past and in general opposes supra-national bodies to fill that role. The World Trade Organization would provide one possibility, but until now it largely has kept out of air transport matters. Without that type of structure, it is difficult to see how movement from a bilateral structure to an open multilateral structure would be possible.

CONCLUSION

The past 25 years have seen significant beneficial changes in airline regulation. Transatlantic airline markets, however, are still heavily regulated. Setting aside the realities of military considerations, the issue is not so much whether transatlantic deregulation would generate overall economic gains but the distribution of those gains. European airlines would begin the process of further liberalization across the Atlantic at something of a disadvantage in cost terms, although the gap between their efficiency levels and those of their American counterparts is getting smaller over time. The hub-and-spoke system operated by major U.S. carriers would give them a comparative advantage over EU carriers in terms of feeder services, although the operation of strategic alliances could offset some of that effect. The potential efficiency gains in the system overall, however, could well lead to traffic and revenue generation that leaves net benefits on both sides of the Atlantic even if individual carriers suffer. What is more, globalization of the industry may well lead to a blurring of the distinction between "domestic" and "foreign" carriers if barriers on ownership and investment are removed.

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