# Framing the Discussion on Regulatory Liberalization: A Stakeholder Analysis of Open Skies, Ownership and Control

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**Abstract**

This paper provides a framework for the ongoing debate over regulatory liberalization in air transportation. With a focus on the U.S. debate surrounding the Stage 2 negotiations of U.S.-EU Open Skies, it summarizes the current regulatory environment and the implications of change for various air transportation stakeholders. Stakeholders with the most direct impacts resulting from regulatory liberalization are highlighted. Literature from academic, industry and journals is used to support the stakeholder analysis alongside in-depth interviews conducted for this research. The works cited range from the theory of regulation to analyses of specific impacts to today's stakeholders. Similarly, the stakeholder reviews range from opinion editorials and anonymous executive opinions to formal positions of industry players. Finally, our stakeholder analysis leads to a discussion of vehicles for regulatory liberalization and the competitive environment looking beyond the first stage of U.S.-EU Open Skies.

Keywords: Ownership and control; Open skies agreement; Foreign investment

## 1. Introduction

Air transportation is critical to a nation's economy, which provides incentive for governments to safeguard their industry players and keep them thriving. In the U.S., the commercial aviation sector drives, directly and indirectly, approximately 5.8% of total domestic output and 5.0% of Americans' personal earnings (Campbell-Hill, 2006). Additionally, air transportation generates nearly 9% of domestic jobs, over one million direct and another ten million indirect and induced. As a result of its economic dependence upon air transportation, the U.S. government continues to regulate the industry – even moreso than other industries regarded as essential to the national interest including power, telecommunications, automotive, aerospace/defense and banking.

But what specifically is regulated? Only airlines granted a fitness certificate by the U.S. Department of Transportation (DOT) and operating certificate by the Federal Aviation Administration (FAA) are allowed to operate domestic flights (8$^{th}$ and 9$^{th}$ freedom), described in further detail in Section 2. To be granted an FAA operating certificate, an airline must be a U.S. citizen corporation, which is defined as:

*A corporation organized under the laws of the United States of which the president and at least two-thirds of the board of directors and other managing officers are citizens of the United States, which is under the actual control of citizens of the United States, and in which at least 75 percent of the voting interest (read corporate stock with voting rights) is owned or controlled by persons that are citizens of the United States.*
Source: 49 USC § 40102(a)(15)

Therefore, only U.S. citizen-controlled airlines are allowed full, unrestricted access to U.S. air transportation markets. Foreign carriers, on the other hand, have traditionally been limited by bilateral agreements that specify which city pairs they can serve, often with restrictions on capacity, frequency and fares. Foreign ownership restrictions are meant to ensure that airlines which serve the domestic market consider the national interest, yet as former U.S. Labor Secretary Robert Reich suggests, the implicit assumption behind foreign ownership restrictions is the "questionable belief" that local owners are more likely than foreign owners to consider the national interest or to serve local stakeholder interests (Carney and Dostaler, 2006).

Traditional bilateral agreements are increasingly being replaced by Open Skies agreements in which airlines are granted virtually unrestricted access to another nation's international air transportation markets (see discussion of freedoms in Section 2). A study by InterVISTAS (2006) estimated that countries that liberalized their air transportation markets experienced growth in air service of 12% to 50% or more. They estimated that the full liberalization of the U.S.-UK market alone would produce a 29% increase in traffic and generate 117,000 new jobs. The incremental GDP impact, according to the report, would be roughly $7.8 billion.

The largest Open Skies agreement to date, signed by EU and U.S. officials in April 2007, is expected to bring about tremendous change to the industry. As a prerequisite to a permanent agreement, the Europeans have made liberalized foreign ownership a focal issue in the upcoming 2$^{nd}$ Stage agreement. As a result, the

**Table 1 – Timeline of Significant Events in the U.S. Air Transportation Regulatory Environment**

| Year | Event and Impact on Air Transportation Regulations |
|---|---|
| 1919 | **Paris Convention** establishes exclusive sovereignty of a state over its airspace. Nations are given right to favor their airlines in connection with the carriage of persons and goods for hire. |
| 1926 | **Air Commerce Act** acknowledges the potential for air commerce. U.S. citizens must own >50% of any individual aircraft for it to be registered in the U.S. |
| 1938 | The **Civil Aeronautics Act** centralizes safety and commercial regulation of air transportation. It requires that U.S. citizens own or control at least 75% of the voting interests of U.S. airlines, a regulation which remains 70 years later. |
| 1944 | The U.S. convenes the **Chicago Convention**, where five "freedoms of the air" are established. The Convention prohibits scheduled international air service over or into territory without the permission of its sovereign State. This effectively begins the use of bilateral agreements. |
| 1946, 1977 | The **Bermuda Treaty/Bermuda II** establish restrictive, bilateral rights for air travel between the U.S. and UK. The bilateral becomes the blueprint for most subsequent air service agreements. |
| 1977 | The **Air Cargo Deregulation Act** is passed, clearing the way for the deregulation throughout aviation and the transportation industry over the next few years. FedEx credits its existence to its rapid expansion made possible by deregulation. |
| 1978 | The **Airline Deregulation Act** is signed by President Carter. This begins the domestic liberalization of market entry/exit, pricing and competition, and is phased in over several years until the Civil Aeronautics Board is dissolved in the mid-1980's. |
| 1979 | President Carter signs the **International Air Transportation Competition Act** which aims to reduce barriers to entry into new international markets. As a protection, the Act authorizes the President to take quick action against a foreign government that engages in discriminatory or anticompetitive practices against American carriers. |
| 1970s-2000s | Various attempts at foreign buyouts of (or merger with) U.S. airlines. Many result in divestiture after U.S. failure to approve (Nanda, 2002). The DOT establishes the practice of evaluating proposals on a case-by-case basis. |
| 1991 | The Secretary of Transportation proposes allowing an increase of foreign ownership of U.S. airlines to 49% voting stock. The proposal was made in response to heavy losses suffered by U.S. airlines in 1990-1991. |
| 2003-2006 | The Bush Administration proposes raising the 25% cap to 49%. After the proposal fails to gain Congressional support, a Notice of Proposed Rulemaking seeks to redefine "actual control" but meets strong opposition in Congress. In May 2006, DOT issues a Supplemental NPRM addressing Congressional concerns, but it is later withdrawn under continued opposition. |
| March, 2008 | Stage 1 of U.S.-EU Open Skies begins; Stage 2 negotiations begin in May 2008. EU officials have made relaxed foreign ownership a prerequisite for continuing with a permanent agreement. This comes at a time when a weak U.S. aviation industry is prompting bankruptcies and consolidation among its major players. |

debate over liberalization in the U.S. has extended beyond regulation of frequency, capacity and fares to the actual ownership and control of U.S. airlines. The two issues can no longer be de-coupled.

This paper provides a framework for the ongoing debate over regulatory liberalization. Section 2 summarizes the current regulatory environment and the debate surrounding the U.S.-EU agreement. Section 3 provides a detailed stakeholder analysis in conjunction with a summary of the issues most often cited in the debate. Section 4 presents vehicles for legislative change in the debate over foreign ownership and Section 5 concludes with a discussion of the diminishing justification for regulation in an increasingly global industry.

## 2. U.S. Aviation Policy

Table 1 summarizes the major events that have defined the regulatory environment in which U.S. airlines operate. The U.S. began restricting ownership of airlines in the 1930's for four primary reasons. First, Congress wanted to protect the then-fledgling U.S. airline industry. Second, U.S. officials were concerned about allowing foreign aircraft access to U.S. airspace. Third, international air service was regulated under bilateral agreements as a tool for foreign policy. Finally, the military relied (and continues to rely) on civilian airlines to supplement its airlift capacity, much like it does with sea-going vessels.

While protectionism increased following the Civil Aeronautics Act of 1938, attempts to deregulate the industry began immediately after the restrictive Bermuda II treaty was signed in 1977. By 1978, President Carter had signed the Airline Deregulation Act to reduce the role of government in air transportation and allow for new entrants and increased competition to provide price and service benefits to consumers in U.S. domestic markets.

While the momentum domestically has clearly been towards liberalization, the U.S. remains among the most ownership-restricted aviation markets in the world (see Table 2). Chang and Williams (2001) summarize nationality clauses and the current regulations around the

world and assess "the prospects for change in ownership rules under multilateral and plurilateral proposals." They explain that governments have traditionally designated, set up, and regulated their own airlines as a means of safeguarding their sovereignties and controlling foreign relations with trade partners.

Easing of ownership rules, according to Chang and Williams, is often accompanied by a loosening of other market restrictions. The authors point out that the recent increase in foreign investment in airlines reflects the growing globalization of the industry. They hold that "restrictive foreign ownership rules clearly no longer satisfy the demands of today's marketplace" and that "removing the nationality clauses in bilateral air service agreements (ASA's) is a vital step towards achieving a truly competitive global airline industry."

Some argue that current regulations are required to maintain the strong safety record of U.S. carriers and that removing barriers of ownership would hinder the U.S. competitive position, hurt labor, and jeopardize national security. Our research attempts to characterize the economic and security implications of the issues that are most often cited by stakeholders in the debate over regulatory liberalization.

### *2.1 Recent Trends Toward Deregulation*

After signing the first Open Skies agreement with the Netherlands (1992), the U.S. entered into Open Skies agreements individually with another 15 of the 27 EU member states. More restrictive bilateral arrangements remained with the other 11 states, most notably the UK, Ireland, Spain, Greece and Hungary. Open Skies agreements allow for increased competition on international routes as more carriers (both foreign and U.S.) are able to schedule service between cities that were previously government regulated.

Open Skies is also a prerequisite for antitrust immunity which allows partner carriers to coordinate airline operations, including pricing, scheduling, market strategy, fleet structure, and both domestic and international networks. The U.S.-EU Stage 1 Open Skies agreement does not, however, allow for increased competition on U.S. domestic routes because cabotage rights remain limited to U.S. citizen-controlled carriers.

Furthermore, it does not allow foreign carriers to merge with U.S. partner carriers or for foreign investors to purchase more than 25% of a U.S. airline's voting rights, which some argue obstructs increased competition from airlines that might otherwise become financially and operationally stronger. This restriction dates back to the 1930's and remains one of the most restrictive ownership caps in the world.

Recently, the U.S. DOT undertook an effort to relax these foreign ownership rules. In 2003, the U.S. Department of Transportation introduced a proposal to increase the foreign ownership cap to 49%. The DOT claimed significant benefits from increasing the cap, including:

- Allowing U.S. airlines greater access to global capital
- Encouraging U.S. airlines to develop more efficient, market-driven networks
- Creating opportunities for airlines to enter into new markets
- Achieving consistency with the EU and other bilateral partners' foreign investment restrictions

**Table 2 – Status of Foreign Ownership Restrictions in Select Countries**

| Country | Status of Foreign Ownership Restriction |
|---|---|
| Australia | 49% for international (25% single); 100% for domestic |
| Brazil | 20% of voting equity |
| Canada | 25% of voting equity (15% single) |
| Chile | Principal place of business only |
| China | 35% |
| Colombia | 40% |
| European Union | 49% |
| India | 26% for Air India, 49% for privately owned domestic carriers, 74% for charter and cargo |
| Indonesia | Substantial ownership and effective control |
| Israel | 34% |
| Japan | 33.33% |
| Kenya | 49% |
| Korea | 50% |
| Malaysia | 45% for Malaysia Airlines (20% single), 30% other |
| Mauritius | 40% |
| New Zealand | 49% for international; 100% for domestic |
| Peru | 49% |
| Philippines | 40% |
| Singapore | None |
| Taiwan | 33.33% |
| Thailand | 30% |
| United States | 25% of voting equity; one-third of board at maximum; cannot be Chairman of Board |

Adapted from Hsu and Chang (2005)

The DOT also noted that many U.S. carriers have entered into international alliances since 1992, and that these alliances may find mutual investment more desirable, either to solidify commercial relationships (as in the case of KLM-Northwest) or to assist alliance members experiencing financial difficulties.

The U.S. Government Accountability Office (GAO) followed up in October 2003 with a statement in which it maintained the relevance of its original 1992 report with regard to the 2003 proposal. The GAO held that (1) access to foreign capital is beneficial during the current period of financial difficulty and reduced passenger demand, (2) the DoD had no official comment on the

DOT proposal when it was announced,[1] (3) questions remain regarding the impact of additional foreign investment on domestic employment, and (4) the effect that recent legislative proposals codifying control standards could have is unclear.

The proposal was not taken up by Congress, so the DOT followed up with a Notice of Proposed Rulemaking (NPRM) in November 2005 and a modified Supplemental NPRM (SNPRM) in May 2006 which would allow the DOT to reinterpret the "actual control" of U.S. airlines. According to the DOT, the proposal would have allowed foreign investors from countries that have Open Skies agreements with the U.S. more input into fares, marketing, routing and fleet structures but would maintain the 25% ownership cap.

The NPRM and SNPRM were vigorously and effectively opposed by members of Congress, led by House Transportation Committee Chairman Rep. James Oberstar. Oberstar maintained that the DOT lacks the legal authority to limit the requirement of actual control to a requirement of control over only safety, security and military airlift assistance decisions. He stated that although U.S. courts have held that "an executive branch agency has discretion to interpret a statute, an agency does not have discretion to make interpretations that conflict with the 'plain meaning' of the law."[2] The SNPRM was subsequently withdrawn by the DOT ahead of the Stage 1 U.S.-EU Open Skies agreement.

### *2.2 EU-US Open Skies*

On April 30, 2007, EU and U.S. officials signed a 1st Stage Open Skies accord which allows EU airlines to operate direct flights between the U.S. and any EU country (and some others) and grants U.S. airlines the reciprocal right, plus the ability to fly between city-pairs in different EU countries. The new opportunities resulting from the 1st Stage U.S.-EU Open Skies agreement are summarized:

- Grants "5th freedom" rights to all U.S. and EU carriers (both cargo and passenger). For example, United Airlines is able to fly from Washington Dulles to Paris and onward to Athens carrying Paris-Athens local traffic.
- U.S. and EU carriers are able to code-share on flights to previously-restricted nations (e.g. Greece, Spain), allowing airlines to offer new routings and service to new markets.
- Elimination of the nationality clause allows EU airlines to restructure or consolidate into cross-border entities without jeopardizing their right to fly to the U.S. For example, Air France and KLM could merge their dual-hub operations to achieve economies of scale without losing their rights into the U.S. (although their traffic rights to other countries may be jeopardized).
- EU airlines are able to offer transatlantic services from any location in the EU as a result of elimination of the nationality clause. This will increase competition in many markets as every U.S. and EU carrier is eligible to compete in any U.S.-EU market. For example, AF-KLM has begun nonstop service between Los Angeles and London Heathrow, which previously was limited to four carriers (two British and two American). Similarly, Lufthansa could choose to offer nonstop service between Miami and Barcelona with no connection to Germany.
- U.S. regulators will consider foreign requests to hold larger shares of non-voting equity, including combinations in which the total of voting and non-voting equity exceeds 50 percent (U.S. DOC, 2007).

Many studies predict enormous economic growth impacts resulting from reduced regulations and Open Skies. One of the most referenced reports, The Brattle Group's (2002) assessment of "The Economic Impact of an U.S.-EU Open Aviation Area" was commissioned by the EC's Directorate-General Energy and Transport. Brattle was asked to "analyze the effects of complete U.S.-EU aviation liberalization" specifically the economic effects on airline costs and output and the resulting effect on consumer welfare and aviation employment. In the report, Brattle estimates that the potential cost savings to the airline industry from a greater productive efficiency are about €2.9 billion annually, or 4.2% of total costs. A majority of those savings would come from intra-EU operations. Furthermore, Brattle estimates that fare decreases associated with these cost savings would result in up to €370 million in added consumer welfare due to the increase in passenger traffic.

The Brattle Group also identified annual passenger traffic increases of 9% to 24%, or 4.1 to 11 million passengers, on transatlantic routes resulting from the complete elimination of commercial regulations (Brattle, 2002). In aggregate, they suggest that liberalization would result in an annual increase of over €5 billion in consumer surplus. The report then concludes that an U.S.-EU Open Aviation Area would not jeopardize national security, labor or aviation safety but that the issues that arise as a result of it "would challenge regulators."

Booz Allen Hamilton's (2007) follow-up report maintained the Brattle Group approach but used updated (and reduced) forecasts for transatlantic traffic and

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[1] The DoD has since publicly supported the DOT's efforts at reducing foreign ownership restrictions on the grounds that it will have little, if any, impact on the Civil Reserve Air Fleet program.

[2] Remarks of the Honorable James Oberstar, MC before the Senate Committee on Commerce, Science and Transportation Hearing to Review the DOT's NPRM that clarifies the rules regarding foreign investment in U.S. Air Carriers. May 9, 2006.

applied a more conservative approach to calculating consumer surplus. The report identifies opportunity for 26 million additional passengers over five years, translating to a consumer surplus of €6.4 to €12 billion over five years. Additionally, BAH estimates that 72,000 jobs will be created in the EU and U.S. and that cargo tonnage would grow 1-2% in the same period. In terms of traffic and consumer surplus, BAH forecasts lower, albeit still significant, impacts from movement to a U.S.-EU Open Aviation Area (OAA).

Proponents of the Open Skies agreement (and further liberalization) often cite the benefits identified by Brattle and BAH, despite differences between the Open Skies agreement and an OAA, as identified in Table 3. The benefits that result from the Stage 1 U.S.-EU Open Skies agreement will be less than those calculated by Brattle or BAH in an OAA, where foreign ownership/control and full cabotage rights are allowed.

Because the foreign ownership issue had not been resolved when U.S. and EU officials signed the 1st Stage agreement, EU officials made it clear that liberalized foreign ownership remains a primary objective for a permanent agreement. By agreement within the European Council, individual EU countries could demand suspension of certain rights granted by the Open Skies agreement should U.S. officials not agree by 2012 to allow increased foreign investment in U.S. airlines.

The premise for their demand is reciprocity of the EU's 49% ownership cap. However, it is clear that access to the U.S. domestic market, which comprises one third of the world's traffic, is valuable as both a standalone market and international hub-feeder. Since cabotage rights are only granted to U.S. citizen-controlled airlines, the U.S. market provides little benefit to foreign airlines that lack effective control of operational decisions (including network planning). In other words, the EU's rationale reflects that of increased control rather than equity.

### *2.3 Equity Ownership versus Control*

Foreign equity and control of U.S. airlines are differentiated under U.S. law. Although foreign investment in U.S. airlines is capped at 25% of voting stock, foreign investors are currently allowed to own up to 49% of equity stake in airlines provided that the airline is under the "actual control" of U.S. citizens and that the CEO is a U.S. citizen. The DOT uses several methods to test for "actual control" (U.S. DOT 2003), including:

- Supermajority or disproportionate voting rights
- Negative control/power to veto
- Buyout clauses
- Significant Contracts
- Credit agreements/debt
- Family ties between foreigners and U.S. officers

Other nations have experimented with variable voting rights in which no equity cap is placed on the sale of shares but the total fraction of controlling (i.e. voting) stake remains fixed. Canada, for example, has fixed its foreign ownership cap at 25% but places no limit on the number of shares foreign investors can own. Foreign

***Freedoms of the Sky***

In 1944, delegates from 52 nations met in Chicago to develop a multilateral treaty securing each nation's rights over its airspace. These "freedoms of the sky" are the fundamental building blocks of air transportation regulation and each subject to specific conditions, such as establishing the frequency of flights or airport usage. There are five basic freedoms that are recognized by virtually all countries. Freedoms 5 and 7 are less common, and typically only negotiated between stalwart trading partners. Freedoms 8 and 9 are only now entering into Air Service Agreements (ASAs), but they are still rare.

| Freedom | Description |
|---|---|
| 1st freedom | The right to fly over another nation's territory without landing (overflight) |
| 2nd freedom | The right to land in a foreign country for nontraffic reasons, such as maintenance or refueling, without picking up or setting down revenue traffic |
| 3rd freedom | The right to carry traffic (people or cargo) from own State A to treaty partner State B |
| 4th freedom | The right to carry traffic (people or cargo) from treaty partner State B to own State A |
| 5th freedom | The right to carry traffic between two foreign countries with services starting or ending in own State A (i.e. "beyond rights") |
| 6th freedom | The right to carry traffic between two foreign countries via State A. Combines two sets of 3rd and 4th freedom rights as so it is rarely specified explicitly in Air Service Agreements |
| 7th freedom | The right to operate stand-alone services between two foreign states which lie entirely outside A |
| 8th freedom | The right to carry traffic between two points within a foreign state on a service originating or terminating in State A (i.e. consecutive or fill-up cabotage). Example: Alitalia picks up passengers in Atlanta and drops them off in Boston en route to Milan (currently not allowed). |
| 9th freedom | The right to carry traffic between two points within a foreign state with no requirement to originate or terminate in State A (i.e. pure or full cabotage). Example: German-based Air Berlin flies nonstop between London and Manchester without any connection to Germany. |

**Table 3 - Summary of Restrictions in Traditional Bilateral "Open Skies" Agreements and Open Aviation Area**

| Type of agreement | Open service capacity and frequency ? | Freedom in setting fares ? | Extended traffic rights (e.g. onward 5ths)? (see Note 1) | Foreign ownership and control allowed ? | "Cabotage" (see Note 2) |
|---|---|---|---|---|---|
| Traditional Bilaterals | x | x | x | x | x |
| "Open Skies" | ✓ | ✓ | ✓ | x | x |
| Open Aviation Area (OAA) | ✓ | ✓ | ✓ | ✓ | ✓ |

Note 1: 5ths are the right to pick up passengers from a foreign country (B) and fly them to another foreign country (C).
Note 2: "Cabotage" is the right of a foreign carrier to operate purely domestic services in another country.

Source: Civil Aviation Authority (2006)

investors currently own 75% of Air Canada's holding company, ACE, but they have been issued Class A pro-rated shares which, by design, total less than 25% of the voting stake in Air Canada. Foreigners can buy as many airline shares as they'd like without ever controlling more than 25% of the voting rights of a Canadian airline.

According to Clive Beddoe, Chief Executive at WestJet, the structure "doesn't make any difference to the value of the stock. It's very rare that shareholders need to vote on any contentious issue" (Knibb, 2007). In other words, the average shareholder places little value on the voting rights of stock, and since Class A and Class B shares trade at the same price, the market has not established a price premium for voting rights.

However, other studies have found price premiums emerge as an impact of barriers to foreign investment. Bailer, Chung and Kang (1999), for example, find that when foreign ownership limits have been reached, "foreigners begin to trade local equities among themselves at a premium." They find that foreigners "often pay premiums of 20, 50 or even 100% above otherwise identical security available only to locals."

In January 2008, German carrier Lufthansa purchased a 19% stake in JFK-based carrier JetBlue. While executives from both carriers have indicated that collaboration is likely, Lufthansa has yet to exercise control over JetBlue's operations. This investment provides evidence that EU airlines do not need complete liberalization to invest in U.S. airlines.

But as we stated earlier, without control of operational decisions, route networks cannot be shaped, and there is no benefit to international carriers that could not otherwise be afforded through alliances or equity ownership. We therefore assume for this discussion that a controlling, as opposed to equity, stake is desired by foreign investors.

## 3. Stakeholder Issues in Regulatory Liberalization

It is commonly acknowledged by industry experts that increased foreign ownership and reduced operational regulations will increase competition, but they disagree on whether the resulting impacts are positive or negative. Costs and benefits are often proportioned unevenly across stakeholders in the market, and government officials feel it is their obligation to ensure that their constituency does not face a disproportionate burden. Many arguments against changes to the status quo are economically motivated. Others are more intangible in nature, attributed to impacts that are not quantifiable. For example, some fear that weaknesses in a nation's civil aviation industry, often associated with the "rapid progress of technology and continuous changes and innovations, has become a mirror reflecting the general standard of [national] society" (Gertler, 1994).

Opponents of regulatory liberalization, particularly an increased foreign ownership cap, argue that it will pose a risk to national security, reduce aviation safety, and hurt aviation labor. In order to frame our stakeholder analysis, these issues are discussed in further detail below and a summary is provided in Table 4. We then present a detailed stakeholder analysis, incorporating takeaways from our stakeholder interviews.

*Will liberalized foreign ownership change the domestic competitive landscape?*

One clear benefit of reduced ownership regulations is that airlines will gain access to additional capital,[3] and economic theory tells us that the average cost of capital

[3] While current airline ownership laws in the U.S. restrict foreign ownership of voting equity, the argument holds for debtors as well. Debtors seek a level of control in their investments that would raise concern with regulators. As Carney and Dostaler (2006) point out, "Banks typically demand 'insider status' to monitor executive decisionmaking."

**Table 4 – Issues in the Debate Over Foreign Ownership Liberalization**

| Issue | Point of Contention |
|---|---|
| Domestic Competition | Will liberalized foreign ownership change the competitive landscape? Would any such change benefit or hurt U.S. consumers? |
| National Security | Does foreign stake mean foreign control? Will the Civil Reserve Air Fleet become ineffective under increased foreign ownership? |
| Employment | Will increased foreign ownership put U.S. jobs at risk or affect the labor-management balance of power? |
| Safety | Does either foreign stake or foreign control imply lower safety standards? Would oversight of additional regulatory standards burden the FAA? |
| International Competition | Will relaxing ownership laws increase international competition? Will U.S. airlines be able to compete without changes to the domestic industry structure? |
| National Prestige & Political Intangibles | Will increased foreign presence hurt the U.S. position as a world leader? Will it present a risk of aviation system disruption? |

will decrease as its supply increases. Access to foreign capital, paired with strong leadership and responsible business plans, would strengthen U.S. airlines financially while enhancing their competitive position by retiring debt, consolidating, improving services and avoiding bankruptcy. In addition, diversifying investor risk profiles allows U.S. airlines with weaker credit ratings to seek capital. A secondary benefit is that foreign airline investors impact the culture of acquired airlines, encouraging them to adopt best practices.

However, limiting the pool of capital encourages stronger, less risky business plans. If we assume the quality and number of business plans remains constant, additional funding favors weaker plans.

Furthermore, regulators have recently raised the concern that consolidation prompted by increased competition will hurt, rather than help, consumers by reducing choice and increasing fares (Oberstar, 2008). Restricting the natural evolution of airlines, including consolidation, is a form of regulation and may prove to produce the very same undesired effects that the regulators fear. While consolidation has the potential for reductions in service, the most recent bankruptcy filings by U.S. carriers underscore the effects of high commodity prices and fragile capital markets. Consolidation can occur in many ways: consolidation through liquidation of airlines; consolidation through continued capacity reductions; and consolidation through merger and acquisition activity. Based on current proposals, capacity cuts may be minimized under a scenario of consolidation through merger and acquisition activity. Price increases will occur as the U.S. industry searches for revenue sources to offset the historically high input prices of oil. Maximizing access to the U.S. and global air transportation systems is most important for consumers and the U.S. market has proven time and time again that if prices are perceived to be too high, then a competitor will exploit that opportunity.

By strengthening U.S. carriers financially and operationally, there is little doubt that regulatory liberalization increases competition domestically.

*Will relaxing current regulations increase competition with international carriers?*

Whether through elimination of the nationality clause or by eliminating the rights granted to a limited number of airlines, movement towards a liberalized regulatory environment is likely to increase competition. Under an OAA, the most liberalized regime, competition is increased by both allowing a greater number of foreign carriers to compete and financially strengthening domestic carriers.

Even under an Open Skies regime, U.S. carriers are forced to compete internationally with strong network carriers on service while maintaining cost competitiveness with low-cost carriers. Their ability to further collaborate (and even merge) with foreign carriers enables them to realize economies of scale and operational synergies for their increasingly global networks.

*Would increased competition benefit or hurt U.S. consumers?*

When discussing the impact of regulatory liberalization on the U.S. consumer, it is important to recognize that benefits to consumers, as measured by fares, service offerings, service quality and safety, are afforded by any competition, whether foreign or domestic.

Impacts on fares and safety are discussed in later sections, so here we address service offerings and quality. For the latter, Mazzeo (2003) demonstrates that increased competition is correlated with better on-time performance, which according to the author is the most common category of customer complaints regarding service quality. Other studies, including Douglas & Miller (1974), Rupp, Owens & Plumly (2003) and Lee & Luengo-Prado (2003) support the hypothesis that increased competition is positively correlated with service quality.

Increased competition would force carriers to continue wringing cost out of their system and to improve services to capture greater market share. A liberalized regulatory environment in which U.S. carriers face direct competition from carriers such as BA, KLM-AF, Lufthansa, Emirates and Singapore Airlines would likely result in improved level of service for U.S. travelers. A financially stronger domestic industry allows U.S. airlines to invest in new services, products and aircraft while enabling competitive returns for shareholders.

Some critics point to the adverse affects of increased foreign presence on U.S. carriers and the flying public, namely that changes in the competitive landscape will hurt consumers. Some even go so far as to imply that an increased foreign carrier presence in the U.S. will reduce the number of carriers flying the U.S. flag around the world and would quickly hurt national prestige.

It is unlikely that an OAA would open up every origin-destination (O-D) market to additional competition (or less, for that matter). U.S. carriers are currently able to fly between virtually any city pair within the U.S. and EU carriers can do the same within EU boundaries. However, we have yet to see Continental schedule nonstop service between Delta's Atlanta hub and American's Dallas hub, or between US Airways' Charlotte hub and nearby Greenville. Similarly, Lufthansa has yet to operate nonstop service between BA's London Heathrow and AF-KLM's Paris CDG, or between Alitalia's Naples and Milan strongholds. Is the reason that these O-D pairs are not profitable? No, it is instead that airlines maintain domains of control where even the strongest competitors hesitate to enter.

Although most U.S. carriers welcome competition, they are careful to focus their resources where least likely to become victims of overwhelming competitive response. The reality of competition is that players can price compete in every market until neither is profitable, but the social value of preserving many weak competitors is indisputably lower than of multiple competitive carriers.

*Would relaxed foreign ownership present a risk of CRAF system disruption?*

U.S. airlines volunteer to assist the Department of Defense (DoD) with supplemental airlift capacity in emergencies through the Civil Reserve Air Fleet (CRAF) program. In return, these carriers are granted preferred access to U.S. government peacetime airlift contracts worth over $2 billion per year in revenue (Bolkcom, 2006). In the past, DoD officials have raised concerns that foreign investors might discourage continued participation in CRAF or increase the likelihood of a carrier defaulting on its promise in times of need.

The concern is based on the fact that the U.S. government has more legal leverage over U.S. carriers than foreign carriers. It is true that the government could revoke the operating certificate of a non-compliant CRAF carrier, seize the needed aircraft and call up the carrier's reservist pilots to fly them. However, a U.S. airline with minority stake foreign ownership remains a U.S. airline and must operate according to U.S. law. While there is a viable concern that an airline could re-flag its international operations overseas to substitute lower-wage pilots (thus disqualifying those pilots from CRAF), there are legal means to prevent this. And if all else fails, the President has the authority under the Exon-Florio amendment to the Defense Production Act to block any transaction that poses a threat to national security.

While the DoD concurs with the DOT's protections of CRAF, supporting the NPRM (U.S. DOT, 2006), Congressional officials still cite national security as a major concern. They often allude to the prohibitively expensive alternative to CRAF, having the DoD maintain the airlift capacity organically. A RAND study found that replacing CRAF's major theater capability of CRAF would cost about $3 billion annually (Gebman, 1994).

But as Robyn, Reitzes and Moselle reveal, "the government would save money if it paid U.S. carriers to participate in CRAF and then opened the government travel market to all qualified carriers" (Robyn et al., 2005). They are referring to the Fly America program, which provides incentive to U.S. carriers to participate in CRAF. Enacted in 1974 as part of the International Air Transportation Fair Competitive Practices Act, Fly America requires federal employees and their dependents, consultants, contractors, grantees, and others performing U.S. Government-financed foreign air travel to travel by U.S. flag carriers except where travel by foreign carrier is a matter of necessity (i.e. U.S. carrier service or codeshare is not available).

It is not clear that the government would even need to go that far. Not a single airline executive we interviewed indicated that they would withdraw from CRAF if Fly America were abolished. As one legacy airline executive put it, "CRAF is lucrative for us, and it would remain that way even without Fly America revenue. Staying in the program is an easy pitch to any Board with profits in the back of its mind." While provisions must certainly be put in place to ensure national security needs are met, the obstacle can be overcome.

*Will reduced regulations put U.S. jobs at risk or threaten the lucrative routes flown by U.S. pilots?*

Labor groups often cite the concern that increased foreign investment could put jobs at risk. The risk is particularly high for those U.S. pilots and crew on international routes who could easily be replaced by foreign, lower-wage crews. Labor unions fear that

regulatory liberalization "would tend to eliminate international flying by U.S. carriers" which is the "most remunerative, and therefore the most desired, flying performed by pilots" (Woerth, 2006). The concern here is rooted in the fact that pilots in the EU15 earn about 15% less than their American counterparts, and that the disparity in wages with the 12 states that have since joined the EU is even greater (Robyn et. al, 2005). However, U.S. carriers are not able to replace U.S. flight crews for their domestic operations, which account for over 70% of total U.S. airline revenue (MIT ADP, 2008). Therefore pilots and crews maintain significant bargaining leverage to prevent carriers from shipping the most senior (i.e. desired) jobs overseas. That, of course, assumes that domestic job losses are not significant enough to depreciate labor's bargaining power.

Others believe that additional investment in U.S. airlines would strengthen the industry and stimulate domestic aviation employment. An airline's ability to acquire capital during times of financial difficulty would allow them to retire debt, consolidate services, and to enhance their competitive position rather than resorting to drastic cost-cutting measures. Labor concessions are less likely in the environment where cash shortages can be met, in the short term, by infusion of additional capital. A sustainable, financially viable U.S. aviation industry can moderate the impact of the historical cyclicality of the U.S. industry, providing greater stability for employees.

Still others take the view that changes in foreign ownership laws would not affect labor at all. The U.S. DOT, for example, has indicated that "due to existing collective bargaining agreements and other regulatory requirements governing U.S. airlines and their employees, the administration's proposal would not affect the rights of labor or the obligation of airlines with respect to labor" (Hecker, 2003). Either way it is important to cushion labor against possible losses resulting from regulatory liberalization. Such protections should be built with cooperation from airlines and their labor unions. But labor unions are one of a number of stakeholders that must be considered in the debate over regulatory liberalization. A stronger industry could benefit labor, but we have yet to see labor support for foreign ownership relaxation. Uncertainty in the consequences of policy change provokes opposition to movement from the status quo.

*Does increased foreign stake or foreign control imply lower safety standards?*

Some labor groups and Congressional officials have warned that regulatory liberalization could hurt aviation safety by (1) increasing competition that prompts spending cuts including those related to safety and by (2) increasing the FAA's oversight burden of carriers subject to different regulatory regimes (in the case of cabotage). In response to the first concern, we are reminded that U.S. airline deregulation prompted similar concerns in the late 1970s, however numerous studies have shown that deregulation had little or no adverse impact on safety (Bier, 2003 and GAO, 1996). In fact, airline safety as measured by death risk improved from 1 in 2.6 million to 1 in over 10 million following deregulation in 1978 according to Barnett and Higgins (1989).

The second concern would require an adjustment of regulations to ensure that the inevitable globalization of aviation improves, rather than hurts, aviation safety. Currently, EU carriers operating inside of the U.S. remain the regulatory responsibility of EU authorities. Under an OAA, Congress may impose direct FAA oversight for all aircraft operating in the U.S. Some officials are concerned that oversight of multiple regulatory standards would burden the FAA. However, this could be avoided if the FAA were to maintain its Bilateral Aviation Safety Agreements with any OAA partner and require that the FAA's safety standards be applied to foreign carriers. And as is currently the case, the U.S. government has the authority to revoke the certificates of those foreign carriers and crews operating in the U.S. that fall short of safety requirements.

*3.1 Stakeholder Analysis*

Changes in legislation are generally contentious because it is difficult to build consensus for movement away from the status quo. In the United States, legislation is a product of elected officials that are accountable to constituents who seldom comprise a single viewpoint on a given issue. Legislation governing air transportation is no different, and in many respects more complex because it reflects a unique constituent makeup. Millions of Americans are air travelers, spread throughout virtually every congressional district.

Conversely, airline labor tends to be concentrated in select congressional districts, so impacts to U.S. travelers tends to dominate the conversation over regulatory liberalization. Travelers' interests are relatively simple to model – they are interested in low fares, safe and high-quality service, and an expansive network. Contention over legislation arises because the various air transportation stakeholders disagree on what action will generate the best balance of fares, safety, service quality and offerings.Table 5 summarizes the stakeholders that are considered in this research. Note that our analysis highlights those stakeholders with the most direct impacts resulting from regulatory liberalization. Stakeholders without mention are, by no means, unaffected by regulations in air transportation, but limits of time and space require a limit in scope. The following subsections present various stakeholder perspectives ranging from opinion editorials and anonymous executive opinions to formal positions of industry players.

**Table 5 – Major Stakeholders in the Debate Over Regulatory Liberalization**

| Stakeholder | Interests |
|---|---|
| **U.S. Airlines** | Have traditionally welcomed access to new markets & capital, although relaxed foreign ownership has not been unanimously supported |
| **Foreign Airlines** | Generally welcome exchange of market access and the ability to consolidate with U.S. counterparts to build stronger global networks, although there are notable exceptions |
| **U.S. and International Airports** | Welcome greater access to a wider array of destinations, including a larger volume of international flights |
| **Dept. of Transportation/ Federal Aviation Administration** | Have led increasing efforts to relax restrictions |
| **Department of Defense** | Has historically been concerned about reduced airlift capacity under CRAF, but has supported DOT's liberalization attempts since 2003. |
| **Labor Unions** | Concerned about the impact of liberalization on U.S. airline jobs |
| **Foreign Investors** | Welcome opportunity to new investment opportunities |
| **International Civil Aviation Organization** | Has led increasing support for the relaxation of restrictive bilateral agreements |
| **Organization for Economic Cooperation and Development** | Supports economic cooperation and development between nations as well as regulatory liberalization, but has played a reduced role in the debate since the late 1990's |
| **International Air Transport Association** | International trade organization supports the economic growth (and strength) of its members, officially supports regulatory liberalization |
| **European Commission** | Has made liberalized foreign ownership a prerequisite for a 2nd stage Open Skies agreement |
| **U.S. Congress** | Serves multiple constituencies but has traditionally opposed increased foreign control of U.S. airlines |
| **U.S. Travelers** | Will bear most of the consequences and benefits from increased foreign ownership, including changes to fares, service offerings, safety, and quality of service |

*Airlines*

From an operational standpoint, airlines in aggregate stand to benefit from regulatory liberalization, although some will certainly fare better than others. One impact of increased competition paired with reduced regulations may be the reduction of government handouts or bankruptcy protections to weaker players in a strong industry. [4] Handouts are a barrier to entry, an anticompetitive practice of making weak players stronger and limiting new entrants' ability to take their place. The opportunity for stronger players to buy out weaker ones (including their labor and capital assets) saves the taxpayer dollars (Dempsey, 2003) and fortifies U.S. carriers in an increasingly competitive global industry.

As we made the argument that foreign ownership and Open Skies cannot be decoupled in the movement towards regulatory liberalization, we must address the impacts of the latter. As Continental, Delta, Northwest, and US Airways begin new transatlantic service into London Heathrow, British Airways stands to lose some of its high-yield traffic. For a 10-20% fall in premium fares and 2-5% for leisure fares, BA could lose £120-260 million in profit estimated by ABN Amro in a July 2005 report. Yet BA, which ABN-Amro estimates makes 70% of its profits from the restricted transatlantic markets, has responded by identifying new profit opportunities afforded by the U.S.-EU deal. BA's *OpenSkies* subsidiary will begin operating nonstop service in June 2008 between New York and both Brussels and Paris.

In the rapidly changing airline industry, carriers must be quick to adapt to new regulatory and competitive landscapes in order to maintain profitability. The U.S.-EU Open Skies agreement has already prompted transformations from the industry's leaders, including attempts at consolidation, service improvements to attract high-yield traffic, and changes to route networks. Some executives we interviewed indicated that dollars previously spent petitioning the DOT for frequency allocations and lobbying foreign governments for liberalized access will instead be spent on maintaining competitiveness.

Apart from a few airlines concerned that recent regulatory liberalization grant competitive advantages to a few players, the industry has collectively welcomed access to new markets and capital. In June, 2003, the Air Transport Association's (ATA) Board of Directors voted unanimously to support the DOT proposal for increased foreign ownership of U.S. airlines to 49%. A majority of the executives interviewed stated that while airlines do not necessarily have a need for access to global capital, bringing U.S. foreign investment regulations in line with those elsewhere would remain a prerequisite for

[4] Note that economic recessions or the demand downturn following 9/11 are industry-wide and therefore government assistance is defensible to prevent systematic collapse of service.

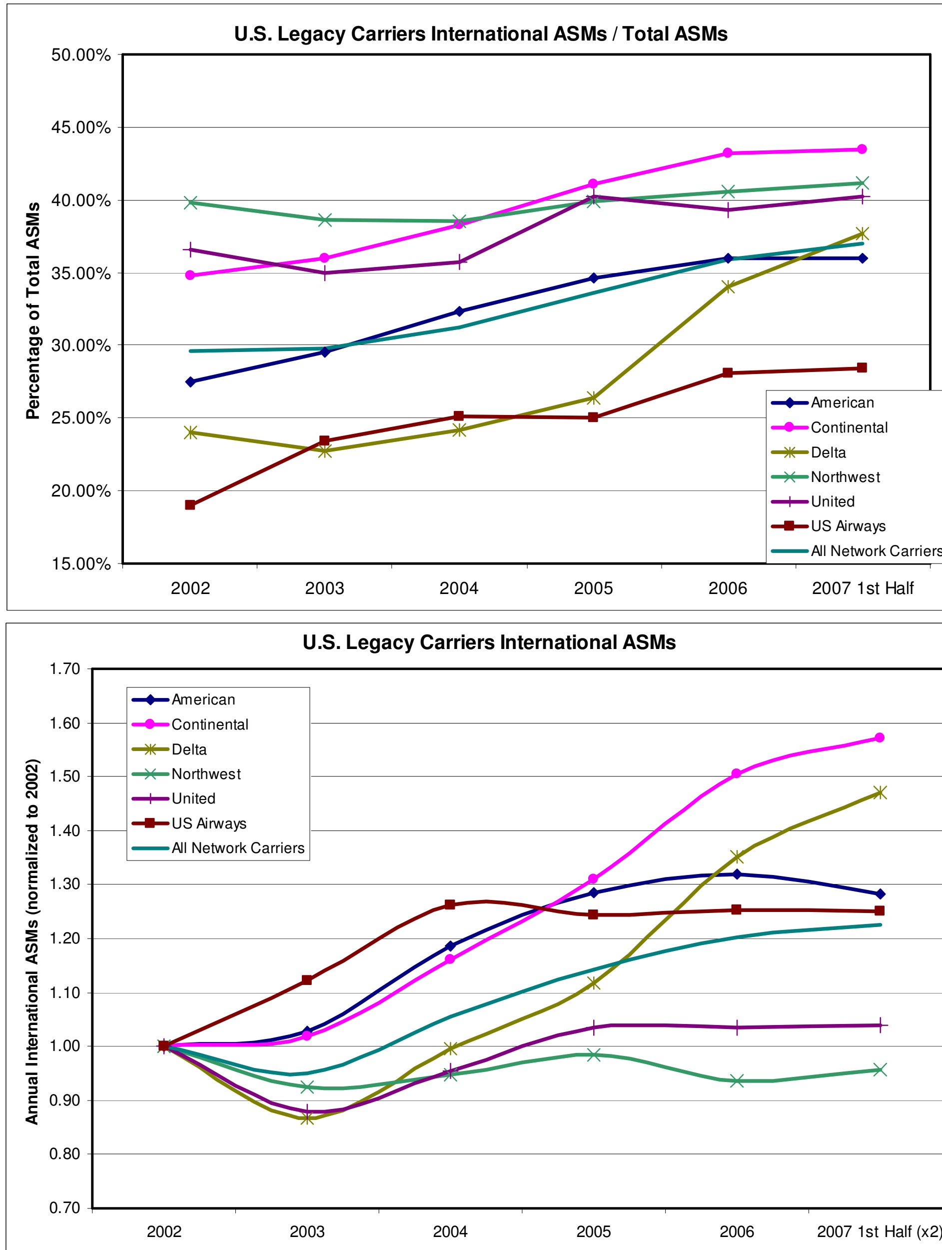


**Figure 1 – Growth in U.S. Legacy Carrier International Service Since 2002**
(Source: MIT Airline Data Project and U.S. DOT Form 41, Schedule T2 via Bureau of Transportation Statistics)

international deregulation, of great importance to U.S. carriers faced with limited growth prospects in the domestic market.

Since the return to normalcy following the terrorist attacks of 9/11, U.S. carriers have increasingly focused on international service. In aggregate, U.S. legacy carriers increased their international available seat miles[5] (ASMs) relative to total capacity from 29.6% in 2002 to 37% in 2007 (MIT ADP, 2008). As a percentage of total ASM's, all six U.S. legacy carriers have moved or added a larger portion of capacity to international service relative to domestic service, as seen in Figure 1. Given fleet limitations, the LCC sector will likely try to seek out code-share agreements to leverage international revenue opportunities in the short-term. As the trend towards international service continues, airlines recognize that liberalization is essential to maintaining growth in the transatlantic and transpacific markets.

[5] Available seat miles (ASMs) are a measure of an airline's capacity. For a given flight, the number of ASMs equals the number of aircraft seats multiplied by the number of miles flown, regardless of load factor. The ASMs used here are summed over all flights operated in a given year.

*Alliances, Partnership and Mergers*

Although arguably an extension of airlines, alliances represent important stakeholders certain to be impacted by regulatory liberalization. Many experts forecast that some of the biggest long-term changes resulting from the U.S.-EU Open Skies will be to alliances. Global strategic alliances are granted antitrust immunity by the U.S. DOT, which enables its members to cooperate in fare setting, capacity planning, and direct revenue or profit sharing. Alliances have been used as market-derived alternatives to foreign ownership restrictions and have proven that increasing integration between international carriers can lead to benefits for the consumer (GAO, 1995). A U.S. DOT (2000) report found that strong traffic growth was coincident with receipt of antitrust immunity, even for those alliance partners already code-sharing.

However, the U.S. DOT only grants antitrust immunity to carriers in nations which have an Open Skies agreement in place with the U.S. Under the new U.S.-EU Open Skies agreement, many new airline partnerships will be eligible for immunity, further strengthening these global alliances. Yet consolidation of airlines may result in airlines switching alliances, and the potential Delta-Northwest merger is a testament to the role that existing financial stakes (i.e. SkyTeam member KLM's stake in NW) will play in the future makeup of the industry.

Because of the ability to grant antitrust immunities that were previously infeasible without Open Skies agreements, the DOT will be in a position to authorize new global strategic partnerships. The U.S. Department of Justice (DOJ) suggests that capacity expansions associated with Open Skies are primarily due to expansion by immunized carriers on routes between their hubs (Whalen, 2005). DOJ predicts an increase in output for immunized alliances of 51-88% and of code-sharing by 22-45% as compared to traditional interline services. DOJ also predicts a 14-22% fare reduction for interline itineraries under immunized alliances and a 5-10% reduction for code-share itineraries.

*Airports*

One airport executive asserted to us that "airlines serve the public to make money, whereas airports make money to serve the public." In other words, although airports are rational actors who seek profitability, the role of airport managers is to develop the greatest number of service options for the public. Airlines are responsible for maintaining the profitability of that service, provided that airport managers' demand forecasts are accurate. Since most airports (particularly non-hubs) pursue international carriers, there are few airports that would not welcome additional carriers that are granted access as a result of Open Skies. As another airport manager said, "the number of service options is the most important factor for airports."

In November 2003, ACI-Europe published a position paper in support of the "full liberalization of the air transport industry." The paper highlighted twenty points in support of market determination of prices, code-sharing agreements, ground handling rights and eight other contentious issues. Most notably, however, ACI held that issues related to the granting of cabotage rights to EU carriers within the U.S. "should not in itself hold up a final agreement" for an OAA.

Some airports stand to gain more than others as a result of liberalization. Airports with heavy Fly America traffic, such as Washington Dulles, see these restrictions on government personnel travel as a major barrier to international players scheduling service to IAD. Currently, foreign airlines can only carry U.S. government traffic through a code-share with a U.S. partner or under a few exceptional circumstances. Since Fly America limits the number of options government personnel and contractors can shop for, some project that the program raises the cost of travel to U.S. government personnel (Robyn et. al, 2005). Some airports have joined the industry segment who question the necessity of Fly America.

Other airports, such as those who serve as hubs for weaker carriers, are less excited about the long-term prospects of liberalization. European flag carrier hubs such as Athens or Vienna are the most likely target for new competition after the skies are open – they have strong O-D traffic and their hub carriers may be less capable of a strong competitive response. Such airports may see a loss in number of operations if their primary operator is absorbed by other carriers with little incentive to maintain the hub's original size.

*U.S. Department of Defense*

Modifying its 1992 position, the DoD supported the DOT in its 2003 attempt to liberalize foreign ownership. A report from the Institute for Defense Analyses (Graham, 2003) supported the DoD position that it could "effectively manage the CRAF program to meet national security requirements, even if the U.S. government were to raise the current ceiling on foreign ownership and control." The group suggested that the DoD build a risk-management framework to assess proposed changes in international regulatory regimes, with the two key risk management provisions being:

1. Eligibility criteria that ensure participating airlines can reliably meet their CRAF commitments, independent of their ownership.
2. Criteria for national security reviews of individual airline applications to increase foreign ownership shares beyond the current 25 percent ceiling. Such reviews could be done under the authority of current airline fitness reviews, or under the authority of the Committee on Foreign investment in the United States.

Yet some in Congress still cite national security as their biggest concern with raising the foreign ownership cap. According to Rep. Peter DeFazio (D-OR), "during the Gulf War an EU member didn't supply [the U.S.] with a type of carrier we needed when we ran out because they didn't support the war" (Grassi, 2006). The DOT's SNPRM addressed the issue by ensuring that all decisions that could impact national security would remain under the control of U.S. citizens. The DoD is satisfied with increasing the foreign ownership cap provided that the proper provisions are in place. And this should be of no surprise, since the DoD allows the maritime equivalent of CRAF, the Voluntary Intermodal Sealift Agreement (VISA), to include foreign-owned carriers.

*European Commission*

The EC has historically been the strongest proponent for liberalization of regulations governing transatlantic flights. In response to the House Transportation and Infrastructure Committee's move to tighten the 'actual control' provisions of the foreign ownership statutes, Jacques Barrot, the European transport commissioner, stressed that Congress' actions could "dangerously impair" the ability to enter into "a meaningful dialogue" during second stage negotiations between the U.S. and EU (Done and Cameron, 2007).

The EC sponsored both the Brattle Group and Booz Allen Hamilton studies that forecast optimistic growth in the transatlantic markets over the five years following the start of Open Skies. These, as well as other often-cited reports, were initiated to garner support for a full OAA between the EU and U.S. However, in light of the opposition that the DOT faced in increasing the ownership cap to 49%, EU officials agreed to a 1st Stage agreement, but have insisted that the 2nd Stage address liberalized foreign control. By agreement within the European Council, individual EU countries could demand suspension of certain rights granted by the Open Skies agreement if U.S. officials do not agree by 2012 to allow increased foreign investment in U.S. airlines.

Again, since cabotage rights are only granted to U.S.-incorporated airlines, the U.S. market provides little benefit to foreign airlines without effective control of operational decisions (including network planning). In other words, the EU's rationale reflects that of increased control rather than equity.

*Organization for Economic Cooperation and Development (OECD)*

Kenneth J Button, former head of aviation policy at OECD, published a 1998 study for CATO's Center for Trade Policy Studies in which he points out that opening U.S. skies would inject capital and competition into the U.S. aviation market, providing the ultimate "free-market check on predatory pricing and domestic price collusion" and would "negate any arguments for imposing federal price regulations and antitrust sanctions." Research sponsored by OECD held that Congress should repeal all laws that restrict foreign participation in the U.S. air transportation market and that keeping the markets closed weakens the U.S. negotiating position abroad. Button points to the continued growth of alliances as proof that airlines have a desire to collaborate to achieve cost efficiencies and capture greater market share, which alliances only enable them to do to a degree (Button, 1998).

In a 2001 study, OECD concluded that air transport reforms aimed at liberalizing entry and prices result in "significant benefits for all categories of travelers" and that the simultaneous liberalization of domestic and international markets "encourages network optimization and cost-efficiency while reducing price-cost margins" (Gönenç and Nicoletti, 2001).

*Labor Unions*

Some believe that liberalized regulations would allow foreign carriers to direct U.S. carriers in ways that maximize their own economic objectives no matter what the cost to U.S. labor. Edward Wytkind, President of the Transportation Trades Department of the AFL-CIO, paints the picture of a European airline that has its newly acquired U.S. carrier feed traffic to its international flights rather than competing more broadly in the U.S. market or developing international services itself. Furthermore, if a foreign airline has control over the maintenance decisions of a U.S. partner, work might be shipped overseas to repair stations that fail to meet the high safety and security standards of the U.S. and EU (Wytkind, 2007).

In a letter dated September 20, 2006, six labor union leaders addressed a letter to Secretary-Designate Mary Peters on the DOT's NPRM, which they claimed gives companies "yet another tool to seek out and utilize the lowest cost labor available." They continue with their concerns that "airlines…could transfer pilot and flight attendant work to foreign partners and air carriers have already pursued aggressive plans to outsource as much aircraft maintenance work as possible to overseas contractors" (Woerth et. al, 2006).

One concern of the Air Line Pilots Association (ALPA) is that the EU has yet to resolve its labor law issue, namely that all 27 member states have their own labor laws whereas the U.S. has one. Increasing foreign ownership would allow investors to move pilot and flight attendant domiciles to the most cost-effective labor zone (Bailey, 2003). The concern is that carriers would re-flag their transatlantic operations to lower cost EU countries, much like the "flags of convenience" of the maritime industry.

The counterargument is that we have yet to see a relevant case study in the U.S. involving labor substitution or any indication that a U.S. carrier would have the desire or ability to re-flag its operations. As

discussed earlier, labor unions exercise significant leverage over management decisions and since U.S. carriers cannot replace U.S. flight crews for their domestic operations, labor maintains significant bargaining power to prevent carriers from shipping jobs overseas.

The EU itself can be used as a case study demonstrating the ability of any nation to protect its own labor against direct or indirect wage substitution. While the EU has moved towards an OAA in recent years, member states are increasingly building protections into their operating laws. France, for example, requires that any carrier maintaining a hub in France or operating full cabotage flights within French borders must obey French labor laws.[6] U.S. pilots have already negotiated similar protections against the risks that alliances and cross-border mergers have created.

Labor unions are best equipped to negotiate protections specific to their circumstances. Labor remains the enabler of, not an obstacle to, a strong U.S. airline industry. Lawmakers must work to incorporate protections that address labor's concerns and be careful not to interpret their concerns as a blanket justification for protectionism.

*U.S. Travelers*

As the end-user of the air transportation system, U.S. travelers bear most of the consequences and benefits from regulatory liberalization. Despite varying levels of enthusiasm for domestic deregulation in 1978, "nearly all economists agree…that deregulation [improves] consumer welfare" (Borenstein, 1992). However, the debate continues over what these consequences and benefits of international deregulation will be – the most frequently cited changes are to fares, service options (including network structure and secondary market access), safety and level of service. The latter two were covered in previous sections, so we discuss fares and service options.

The typical American traveler might view the U.S.-EU Open Skies agreement as an opportunity for his or her city to receive nonstop service to European cities. However, it has yet to be determined what the specific impact on networks and service levels will be. One certainty is that reduced regulation will increase competition, as the number of carriers eligible to compete in a given market increases dramatically.

One concern is that secondary and tertiary domestic market coverage may be reduced as airlines are forced to focus on their most profitable segments. This, however, is based on the assumption that capital resources are increasingly limited. According to the executives we interviewed, if a market is profitable (accounting for cost of capital), the capital is available to serve it. Carriers that have the ability to seek cheap capital and leveraging cost-cutting synergies are better equipped to serve smaller markets, provided that they produce positive returns.

According to Boeing, there are an additional 114 city pairs between the U.S. and EU that could support non-stop services with a 250-seat aircraft (GAO, 2004). However, an increase in new entrants and services may be damped by the effects of consolidation, competitor domains and slot restrictions. All three phenomena limit a carrier's ability or willingness to add capacity to new city-pairs, especially where it requires cannibalization of other profitable service.

Fares have the potential to be lower as competition increases. GAO (1996) found that between 1976 and 1990, the average fare per passenger mile declined 9%, or 30% in real, inflation-adjusted terms. According to Alfred Kahn, who chaired the CAB during the transition to deregulation, estimates that deregulated fares have been 10-18% lower, on average, than they would have been under the previous regulatory environment (Kahn, 1988). Both sources note that safety and service options increased over the same period.

However, some U.S. officials fear that fares would rise if the number of network carriers in the U.S. decreases, and that the goal of preserving competition can be met by preserving competitors. This fear is based on the assumption that a larger number of competitors is always better for the consumer. But case studies of UPS and FedEx, Coke and Pepsi, or Boeing and Airbus demonstrate that as few as two players can meet the service needs of the entire market and compete even more fiercely than a palette of six or more.

The recent increase in competition brought about by healthier carriers has prompted many airlines to consider consolidation with other carriers. Those in Congress who oppose consolidation are also those who oppose changes in foreign ownership. They often cite lost service to secondary markets as a major concern of consolidation. However, their argument presupposes that leisure passengers prefer increased frequency choices to lower fares brought about by increased competition. It assumes that those in secondary or tertiary markets are unwilling to drive 100 miles to avoid a natural price premium of hundreds of dollars. American and European low-cost carriers (LCCs) are proving otherwise.

The notion that increased competition from healthier players is bad for consumers assumes that business passengers do not prefer improved service at lower fares brought about by increased foreign competition to having a choice of three carriers over two.

Overall, the question is whether regulatory behavior that limits consolidation, international collaboration and the natural life-cycle of the industry actually preserves competition.

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[6] French Décret No. 2006-1425, November 21, 2006

## 4. Stakeholders and the Policy Debate

In debates over which policies equitably distribute the benefits and costs of change, stakeholders seldom agree and are therefore forced to compromise on issues. In the case where stakeholders do not even agree what the impacts of policy change will be, resolution over the debate becomes exceedingly difficult. In this debate over regulatory liberalization in air transportation, many studies have produced evidence suggesting that national security, employment and safety will not be harmed if the appropriate policy safeguards are used. In addition, there is consensus that competition will increase both at home and abroad. Why then, is there still debate over the appropriate policy?

The issue here is that movement away from the status quo into uncharted territory requires overwhelming evidence in support of change. In this particular case, historical precedent plays an important role in garnering support for the issue. In addition, the increasing attention paid to the issue from government, industry and academia brings the issue into the public domain, which then provides additional pressure to change legislation. At no time since deregulation have so many called for change in the industry, including lawmakers. Congressional officials are responsible to their constituencies, so in the long-term policies will change in favor of the electorate.

Figure 2 plots the stakeholders with the most direct impact and/or influence in the debate. The vertical axis represents the level of interest that a given stakeholder has in the issue, which is correlated to the level of impact regulatory liberalization will have on that stakeholder. The horizontal axis describes the level of influence that a stakeholder has over regulatory change, either through lobbying or direct legislation.

Since regulations are products of government, we can expect U.S. government agencies to bear the greatest influence in change, although the lobbying power of airlines and labor unions certainly plays an influential role in the debate. International organizations tend to have a lower aggregated interest (and influence over U.S. regulations) because it is often difficult to reach consensus across national borders.

### *4.1 Vehicles for Legislative Change*

While the U.S. DOT has attempted to revise the interpretation of existing statues to meet the demands of globalization, Congress has blocked its attempts on numerous occasions. As Nanda (2002) concludes, foreign investment laws are governed by statute and hence any change to the rule could only be made through legislative change.

In a 2003 whitepaper, Havel (2003) suggests that airline citizenship tests be replaced by a new "corporate affinity test" which separates commercial control by a foreign investor from regulatory control by the U.S. government. He develops a framework for deregulation which keeps safety and security issues in public hands. While a novel approach to addressing issues of safety and security, this policy alternative still requires movement from the status quo for the entire commercial aviation industry.

Some have suggested that regulatory liberalization be tested on a subset of the industry. The International Air Cargo Association (TIACA) and ACI support the rapid liberalization of cargo traffic (TIACA, 2003). Furlan (2005) forecasts some expected benefits should the industry liberalize ownership regulations. He recommends that air cargo be used as the "natural starting point for the process and should lead

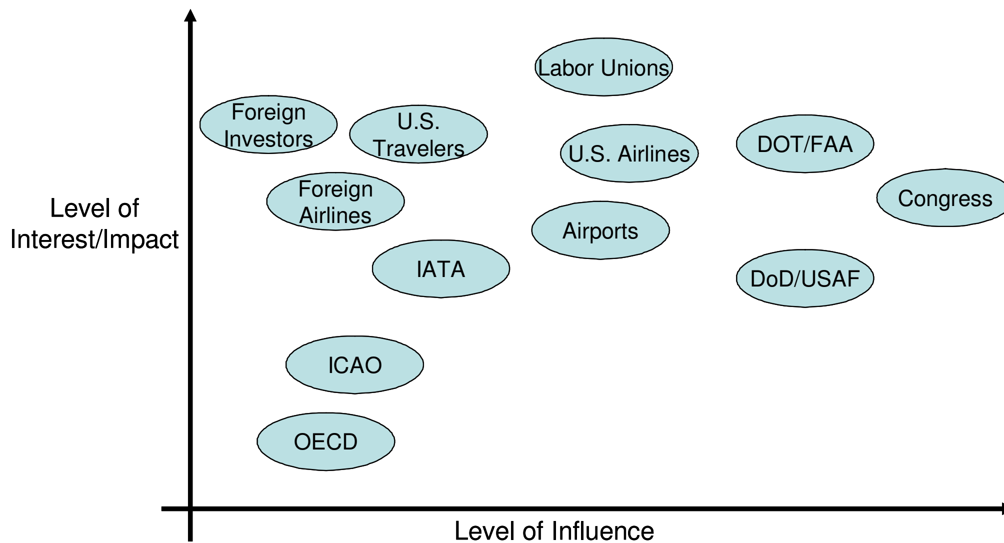


**Figure 2 – Levels of Stakeholder Interest and Influence in the Debate Over Regulatory Liberalization**

liberalization efforts," as should agreements between the U.S. and EU as comparable economic powers. Zhang and Zhang (2002) contend, however, that liberalizing the air cargo sector separately may be difficult because of the "distinctive inter-linkage of passenger and air cargo business" in some parts of the world.

In the months following the start of U.S.-EU Open Skies Stage 1, the DOT could attempt to focus its liberalization efforts on cargo carriers to generate additional evidence that liberalization is not harmful to national security, safety or employment. Alternatively, the DOT could push for piecewise liberalization that grants ownership freedoms to carriers with primarily domestic operations, such as some American LCCs. The Australian government has led the movement towards liberalization with its understated realization that benefits to the people of Australia can come from any shade of currency.

If not from the lessons of other nations, U.S. policymakers can reflect on other American industries with similar labor and security concerns as well as issues of national pride. The movement towards deregulation in auto manufacturing, banking, passenger and freight rail and utilities reflects the changing needs of the global marketplace. Rod Eddington, former Chief Executive of British Airways, once pointed out the irony that airlines, which are enablers of globalization in virtually every industry, themselves remain "stuck in a time warp of bilateral agreements" (Eddington, 2003).

No matter what the legislative vehicle, it is possible to incorporate protections against threats to national security, safety, overburdens of regulatory oversight, and disproportionate impacts to labor. The Civil Aviation Authority (CAA) included this "Pathway to Liberalization" (Figure 3) in its 2006 report on Ownership and Control Liberalization. The pathway includes checks to ensure that compliance with domestic regulations is met and that liberalization is limited to those nations willing to grant reciprocity.

This is required to ensure that U.S. carriers are granted the same rights as their international competitors. The CAA's methodology fails to address issues of labor and national security, but it provides a framework within which policy can be shaped.

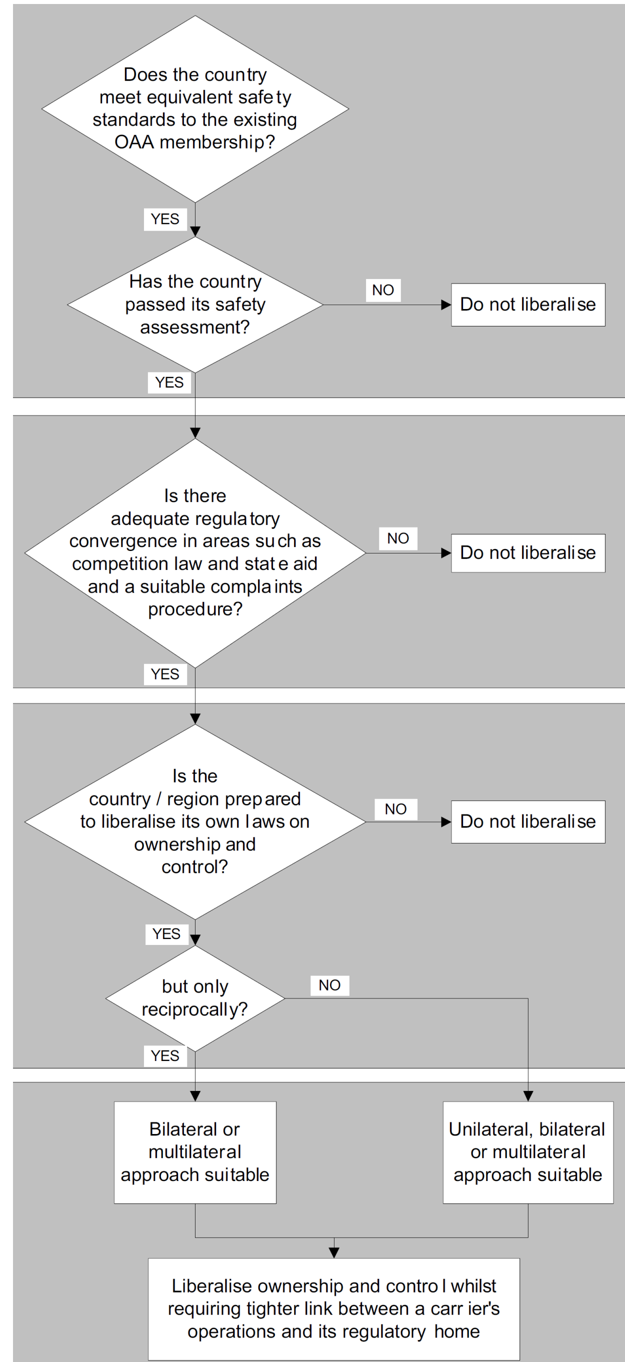


**Figure 3 – Pathway to Liberalization**
(Source: Civil Aviation Authority, 2006)

## 5. Concluding Remarks

The premise behind regulatory liberalization is not emotional. The evolution of an industry dictated by market forces, by definition, includes elements of popular interests, those which provide the greatest economic benefit and social welfare with the least deadweight loss. Opponents of reduced limitations on foreign ownership, Open Skies and consolidation cite threats to national security, safety, U.S. jobs and consumer benefits as the justification for maintaining the regulatory regime.

Numerous studies have shown that, with the appropriate legislative safeguards, removing regulations generates a social benefit that far outweighs its cost. The U.S. traveler should certainly be considered in the discussion of national interests. But policymakers must not forget about the employees of the airlines, airports and service providers that depend upon a healthy (rather

than simply large) industry. Regulators must also consider the millions of U.S. shareholders that would prefer healthy dividends from a reverse stock split over losses under the status quo.

On March 30th 2008, the U.S.-EU markets opened up to increased competition. As a result of previous protections, U.S. carriers must quickly adapt to face healthier competition from the EU. This is no longer a domestic business. The networks are global and regulations must adapt to reflect that. The markets are much better equipped than the regulatory regime in dictating how service industries should adapt to change. After all, the regulatory policies of one nation will not stop globalization.

Regulatory liberalization will allow U.S. carriers to retire debt, consolidate services, and to enhance their competitive position globally. It will allow carriers to build comprehensive, global networks to compete against international carriers entering the U.S. that are more profitable and better capitalized. Expanded global networks from financially stronger carriers will better connect U.S. businesses to the world while delivering economic synergies for investors.

Perhaps most importantly, the U.S. must grant reciprocity of the benefits afforded by others in order to allow its carriers to position themselves as global leaders. In the past decade, a struggling U.S. industry may have justified the incorrect assumption that U.S. carriers will remain on the defensive end of acquisitions. Following consolidation, we may not be far from a healthy American aviation industry that seeks controlling stakes in foreign operators to build truly global networks. U.S. carriers certainly have the faculty to return to greatness in the face of great competition. The U.S. must not be shortsighted by holding onto ancient regulations that may perhaps be reciprocated when the tables are turned.

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