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Market Power: Airports

Tomás Serebrisky

Tomás Serebrisky (tserebrisky@worldbank.org) is an economist with the World Bank Institute.

Vertical Integration between Airports and Airlines

An emerging issue in privatized infrastructure sectors is how regulators should deal with proposed mergers that could potentially increase market power and lead to anticompetitive behavior. This Note looks at the issues in the airport sector, focusing on Argentina—the first developing country to confront a vertical merger in a deregulated air transport market.

In the late 1980s and the 1990s many countries privatized airports or concessioned their operation. The United Kingdom began the trend, followed by other countries adopting new forms of infrastructure ownership and management. To control infrastructure licensing and the "natural monopoly" characteristics of some airport services, governments developed regulatory policies for airport systems.

The operation of an airport creates incentives to transfer the airport's market power to the air transport market. If the airport market is regulated but the airport operator is allowed to control at least one airline, those incentives can give rise to anticompetitive practices aimed at displacing competing airlines.

When the regulatory framework for airports lacks explicit rules about such vertical integration, that can have consequences for competition in the air transport market. Australia and Chile, for example, have an explicit prohibition on vertical integration. By contrast, Argentina has no restrictions on vertical integration, leaving it to the antitrust agency to decide whether to approve or reject a vertical merger.

The airport business and the vertical merger problem

Airlines provide air transport services by combining aircraft, personnel, airport services, and other inputs. Airports supply a series of services to air transport companies and to passengers:

- Aeronautical services (rescue, security, firefighting, infrastructure supply, runway and taxiway maintenance).
- Aeronautical-related commercial services (catering; supply of fuel and lubricants; baggage, passenger, and aircraft assistance).
- Commercial services (banks, hotels, restaurants, car rental, car parking, retail shops, duty-free shops).

A vertical relationship between airlines (downstream) and airports (upstream) can be problematic. Airports provide the "entry point" into the air transport network, through terminals and

runways. Thus for the air transport market to be competitive, airlines must have access to airports.

In the airport sector it is usually more efficient to have a single airport supplying a given volume of traffic.[1] The reason is that airports have large economies of scale: the unit costs of infrastructure supply fall as airport traffic increases, because of the high fixed costs of capital and of infrastructure and equipment maintenance. This situation implies a market configuration with a monopolist airport operator upstream and with passenger and freight air transport companies downstream operating in a competitive market.

If access to airports and tariffs for airport services are not regulated, airport operators have no incentives to pursue vertical integration. The operators can set tariffs high enough to seize all the rents generated in the competitive segment of the market. But in most countries that have concessioned airport services, tariffs and access rules are set by a regulatory agency.[2]

A merger rejected, then allowed

Argentina concessioned 33 airports as a group in 2000. By the end of 2001 the concessionaire, the airport system operator Aeropuertos Argentina 2000 (AA2000), announced plans to acquire LAPA, the country's second largest airline by volume of passengers. This vertical integration would have been the first case of an airport concessionaire operating an airline in a deregulated market. After a comprehensive and detailed analysis, the Argentine Antitrust Commission rejected the merger. It based its decision on the anticompetitive practices that the airport operator could potentially use to raise rival airlines' costs and exclude them from the air transport market. The ruling and its aftermath may have relevance in other countries.

The Argentine Antitrust Commission, in its ruling, surveyed the set of practices that the airport operator, if merged with an airline, could use to affect competition in the airline market:

- *Diminution of quality.* The operator could reduce the quality of services rival airlines can offer through its allocation of check-in space, seats in gate areas, VIP lounges, and office space.
- *Discrimination in access to ground handling services.* If the operator controls the supply of ground handling services (baggage, passenger, and aircraft assistance)—as AA2000 will for foreign airlines starting in 2009 unless they opt to self-handle—it could restrict the access of competing airlines to their supply.
- *Increases in transaction costs.* The operator could increase costs for competing airlines, such as through "administrative norms" on access to the airport.
- *Predatory practices using cross-subsidies.* Using income from the airport market as a source of cross-subsidies, the operator could reduce the tariffs for its airline below the (competitive) market cost, undermining the profitability of competing airlines. Its ability to do so would depend on the ability of the regulator, but the information asymmetries between regulators and operators (a problem in all regulated industries but more significant in developing countries) leave many openings for hidden price discounts.
- *Evasion of tariff regulation.* Because the price elasticity of demand for aeronautical services is low, the operator would have an incentive to distort tariff regulation in order to increase the regulated prices. With cost-plus tariff regulation, the operator could intentionally increase its costs to raise airport tariffs, increasing costs for competing airlines. With price cap tariff regulation (as in Argentina and Australia), the operator might try to persuade the regulator to reduce the productivity adjustment factor X. That would lead to a smaller reduction in tariffs when they are revised and thus have an adverse effect on the costs of competing airlines.

This ruling took more than a year for the Argentine Antitrust Commission to complete, compared with an average of less than four months for mergers across all sectors. The agency had to rely on partial information because AA2000 and LAPA were reluctant to provide the information required. As the agency's ruling explains, airline executives who testified as witnesses reported many instances of actual and potential anticompetitive behavior by the airport operator after it announced the merger. The uncertainties air-

lines faced and the resources the antitrust agency devoted to the merger ruling constitute significant costs.

Another cost that will have an impact in the short run, and possibly the long run as well, is damage to the reputation of the antitrust institutions. Causing the damage was a decision by the secretary of competition and consumer affairs, who has the power to modify the Antitrust Commission's rulings, to overturn the agency's ruling (though it required the airport operator to reduce its shareholding in LAPA to a minority interest). This decision shows a willingness to interfere politically in the decisions of the antitrust agency, creating a problematic precedent.

Lessons and solutions for other countries

Most countries bringing the private sector into the management of airports have no explicit provisions on vertical integration in the air transport market. But some countries, such as Australia and Chile, recognized the need to establish explicit rules against vertical integration. Australia limits an airport operator's ownership stake in an airline to 5 percent and explicitly prohibits vertical integration between an airport operator and air transport companies.[3] In Chile the bidding guidelines for airport concessions specify that the infrastructure concessionaire cannot have decisive influence over the administration or management of companies (domestic or international) offering air transport services (Chile, Department of Public Works 1997). Although the private sector does not have a significant role in the airport sector in continental Europe, the European Commission also recognized the potential problems of vertical integration in its analysis of the proposed merger between Air France and Sabena (European Commission 1992, p. 9).

Policy options for addressing potential anticompetitive practices in the air transport market fall into two main categories:

- *Vertical integration with regulation of conduct.* The regulated company (the airport) is allowed to operate competitively in competitive (nonregulated) segments, but restrictions are imposed on its conduct as a vertically integrated entity.
- *Vertical separation.* The company that operates in a regulated market segment is not allowed to participate in the competitive segment.

Vertical integration with regulation of conduct

Regulation of conduct can be ex ante or ex post. Ex ante regulation uses two types of instruments: open access and accounting separation.

Open access policies compel the operators of "bottleneck" infrastructure (essential infrastructure such as an airport) to offer access to all firms at reasonable prices. Such policies are aimed at preventing "refusal to deal," but on their own they cannot prevent access discrimination. Operators can effectively discriminate by resorting to factors other than price (such as through quality discrimination).

Accounting separation regulations require vertically integrated companies to separate the accounting of each company under their control. This compels a vertically integrated company to establish a price for each airport service it offers and to use these prices as transfer prices among the companies it controls. The transfer prices must be the same as those the airport operator offers every other airline in the market.

Accounting separation is aimed at preventing price discrimination and cross-subsidies between airport and air transport services. It cannot prevent other kinds of discrimination and must be complemented by open access regulation to prevent restrictions on airport access.

Where only ex post regulations are used, the integrated company (airport operator and airline) will be subject to the general antitrust laws. To ensure that the antitrust agency can enforce these laws effectively, rules must be established requiring information on the aeronautical services market to be made publicly available.

Vertical separation

Vertical separation of the airport operation from the air transport market bars a company from simultaneously controlling the airport operator and companies that operate in the (nonregulated) air transport market.

Vertical separation offers benefits because it prevents monopolistic practices by the airport

operator aimed at displacing competing airlines in the nonregulated air transport market. Vertical integration also offers benefits, in the form of efficiencies in infrastructure development: airlines have ample information on trends in air traffic demand that is needed to plan infrastructure investment. But with an adequate regulatory framework for infrastructure development, these benefits can be obtained without vertical integration.

Regulation of market structure—or vertical separation—offers advantages over regulation of conduct when the costs of anticompetitive behavior are very high (adversely affecting the general economic welfare) and the corrective actions needed are very difficult to carry out.[4] Structural regulation also offers the advantage of low monitoring costs, while conduct regulation requires constant supervision by sophisticated regulators. For developing countries with weak institutions and limited antitrust experience, structural regulation thus appears to be more attractive. The Argentine case illustrates the costs of not imposing structural regulation.

Conclusion

Regulating vertically integrated companies (through rules requiring open access and accounting separation) and imposing vertical separation are the least costly instruments for ensuring competition in the commercial aviation market. But to ensure that open access and accounting separation rules are effective, the sector regulator or antitrust agency must have a good information system.

International experience, including the recent ruling by the Argentine antitrust agency, suggests that developing countries designing airport concessions should include an explicit prohibition on vertical integration (or impose vertical separation) between the airport operator and airlines. This regulatory approach has several major advantages: it keeps the costs of monitoring and information gathering low, eliminates the incentives to transfer market power to the transport sector, reduces conflicts between the regulatory agency and the antitrust agency, and provides certainty to airlines.

Notes

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1. Airports are natural monopolies in most cities given the current demand for air transport. Some markets sustain more than one airport (London, New York, San Francisco), but they are the exceptions.

2. New Zealand is one country that does not regulate private airport operators, allowing them to freely set rates for the services they provide.

3. Airports Act 1996 (see http://www.scaletext.law.gov.au).

4. Requiring vertically integrated firms to disinvest may be advisable. But enforcing this action is time-consuming and requires a state that can resist private sector pressure.

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Telephone: 001 202 458 7281
Fax: 001 202 522 3480
Email: ssmith7@worldbank.org

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