In the early 1990s Argentina restructured and privatized its port system. As part of this process the government transferred ports to the provinces, which could choose to operate, concession, or close them. The Port of Buenos Aires was divided into two ports: Dock Sud, which was transferred to the province of Buenos Aires, and Puerto Nuevo, which remained under national jurisdiction.

In 1994 Puerto Nuevo’s six terminals were offered to the private sector under long-term concessions (18–25 years), in a bidding process open to international investors. The government showed a concern for competition throughout the concession process, imposing conditions that would result in a market structure capable of sustaining competition: bidders were allowed to bid for more than one terminal, but they had to express a preference and could be awarded only one. Yet the outcome departed from this rule. The consortium that submitted the second highest bid for terminal 1 and the highest for terminal 2 appealed the award of terminal 1, arguing equity irregularities in the consortium that won the bid. To avoid a judicial delay, the government allowed the consortia to merge, then jointly awarded terminals 1 and 2.

The regulatory framework for Puerto Nuevo establishes no constraints on vertical integration. So P&O, a multinational firm that operates terminals and a maritime shipping company, could be awarded terminals 1 and 2 as part of the new consortium. But the bidding conditions imposed by the government had implied a prohibition on horizontal mergers between terminals.

After the reform—higher productivity and a demand for mergers

The restructuring of the Port of Buenos Aires, which accounts for more than 90 percent of container traffic in Argentina, has led to a notable increase in productivity (table 1). The average terminal handling price fell from US$450 a container before the reform to about US$220 in 2001.
But the port’s container traffic fell significantly from its peak in 1998 because of the recession that started that year—and fell even more after the devaluation of the currency in 2002 (figure 1). Between 1998 and 2002 container traffic in Puerto Nuevo declined by some 44 percent.

The operation of port terminals is characterized by large fixed costs and very low marginal costs. When there is excess capacity, price competition intensifies as operators seek to attract more business. Moreover, there is a worldwide trend toward concentration in the maritime transport market driven by the construction of larger container ships, which increase the risk of the shipping business. For this reason shipping firms are forming alliances that allow them to increase the number of ports served and reduce excess capacity in ships.

In 2000 the government eased the restrictions on horizontal mergers. Around the same time the Argentine Antitrust Commission had to review a proposed vertical merger between a shipping company and a terminal in Puerto Nuevo.

**Vertical mergers**

In 2001 the Argentine Antitrust Commission approved the acquisition of terminal 4 by Maersk Sea Land, one of the world’s largest shipping companies.

In a vertical merger the main competition concerns are market foreclosure (access restrictions) and price discrimination. If a maritime shipping company owns all port capacity as a result of its integration with terminals, it can deny access to rival shipping companies. The Antitrust Commission found that Maersk would not be able to foreclose the market because the terminal it acquired had only a small share (8 percent) of the total capacity in Puerto Nuevo and because nearby ports (especially Dock Sud) offer good alternatives for container shipping companies.

Price discrimination can be ruled out by regulating prices. The regulation of Puerto Nuevo sets maximum prices (price caps) for some services, though these are not binding because terminals give significant discounts to shipping companies. As long as the regulatory agency considers the price cap a fair price and market prices are at or below this price, price discrimination by an integrated firm will not hurt competition.

The vertical integration case analyzed by the Antitrust Commission did not lessen competition. But where an integrated firm has a significant share of the market and prices are regulated, the firm can still discriminate against rival shipping companies by adjusting the quality of terminal services (lengthening waiting times, allowing damage to ships and containers). Moreover, an integrated firm has access to detailed information on rivals’ strategies and customers that it can use to its advantage. To prevent such conduct, the port authority must have good-quality information and the power to credibly punish firms for any behavior that breaks the rules. Of course, not all vertical mergers are driven by anticompetitive aims. Some are motivated by a search for efficiencies—such as better coordination, lower transaction costs, and specific investments (such as in cranes or berths with special characteristics).

**Horizontal mergers**

In 2000, probably because of excess capacity, terminals 1, 2, and 3 proposed a merger. As originally designed, the Puerto Nuevo regulatory framework explicitly prohibited such horizontal mergers. But in 2000 the government issued two resolutions (215/00 and 309/00) allowing horizontal mergers, though the implementation of
the resolutions has been suspended pending a judicial decision. Is it advisable to allow mergers between port terminals? To answer this question, an antitrust agency needs to do a cost-benefit analysis assessing the effect of such mergers on competition and consumer welfare.

In the ruling on the proposed vertical merger between Maersk and terminal 4, the Antitrust Commission defined three relevant markets for Puerto Nuevo: international sea transport, port services, and land transport services.1 For ports, another key part of the definition of a relevant market is the geographic dimension—the area where there is effective competition (between ports if more than one port offers an economically feasible choice for port users). The Antitrust Commission defined the relevant market as the area of influence of Puerto Nuevo (including the neighboring ports of Dock Sud, Zárate, Campana, and La Plata) for container port services.

Once the relevant market is defined, an antitrust agency identifies the firms in the market and measures their market share. In the port sector, as the Antitrust Commission noted, market shares must be measured in terms of total port capacity and actual port utilization. Given market shares, a Herfindahl-Hirschman Index, a common measure of market concentration, is calculated. For most antitrust agencies, a significant change in the index triggers a detailed study of market characteristics to assess the potential impact of the merger on competition. Several key market characteristics determine the intensity of competition in ports.

**Barriers to entry**

When a merger increases the concentration in a market, firms are more likely to be able to exercise market power by increasing prices. But firms will not be able to raise prices if there are no barriers to entry. There are two types of barriers. One is strategic, such as when a firm signs exclusive long-term contracts with all shipping companies to prevent the entry (construction) of a new terminal. The other is legal, such as restrictions on the construction of new ports.

So, if there are no barriers to entry in the relevant market, the threat of new entry or expansion of existing competitors will prevent merging firms from raising prices. In the relevant market for Puerto Nuevo the merging firms have several actual competitors—not only the four firms operating in that port but also Dock Sud Port—as well as a potential competitor—Zárate Port.

**Excess capacity**

The analysis of excess capacity in mergers of port terminals is complicated. Port infrastructure is expensive to build, and it exhibits the problem of indivisibility: it is impossible to continually enlarge a port. Port infrastructure is built to accommodate actual and forecasted demand, and excess capacity is therefore to be expected. From the point of view of an antitrust agency, excess capacity has an ambiguous effect on competition. Excess capacity could increase competition, since it gives terminal operators an incentive to reduce prices so as to operate at full capacity. Or it could facilitate price coordination, because it can back a credible threat to punish (by greatly reducing prices) firms that deviate from a price agreement. Antitrust agencies look at this problem case by case, relying on the history of competitive interaction among firms.
Intensity of competition
Another consideration in a merger case is the type of firms that are merging. Where a merger will eliminate an innovative and intense competitor from the market, price competition is likely to decrease. The larger the market share of the “absorbed” company, the more important this effect will be. But a small firm can also be an effective competitor, especially in a dynamic market.

Potential efficiency gains
When a merger still raises competition concerns after an analysis of market concentration and the other market characteristics, the last—and decisive—step is to look at efficiency gains. Merging firms must provide sound evidence to the antitrust agency that the concentration will bring about efficiency improvements that will benefit consumers through lower prices or better quality. Economies of scale and better access to capital markets are two efficiencies that merging terminals could achieve in Puerto Nuevo.

Potential benefits and risks of a merger
In the event of a merger proposal between terminals in Puerto Nuevo, the Argentine Antitrust Commission will have a legal mandate to determine whether the merger would improve economic efficiency and consumer welfare. Some market characteristics support greater concentration: the potential for economies of scale and the possibility of rationalizing resources to cope with significant excess capacity (exacerbated by the current crisis in Argentina) and the presence of actual (Dock Sud Port) and potential (Zárate Port) competition. Supporting an argument against approval of a merger is the increased likelihood of price coordination and the change in the rules of the game. When firms competed for the market, the bidders assumed that mergers were not an option. Subsequently allowing mergers damages the government’s reputation by signaling that competition rules can be easily modified. Moreover, because the merger would increase the market power of the incumbent firms, firms participating in future concessions would have incentives to engage in strategic bidding—to win the market and then engage in renegotiations with the government to increase the value of the business.

Conclusion
Focusing on the case of Puerto Nuevo, this Note analyzes the consequences of allowing a vertical merger between a terminal operator and a maritime transport company and the pros and cons of explicitly prohibiting horizontal mergers between terminal operators.

All performance indicators show that the quality of services at Puerto Nuevo has improved since privatization, reducing the cost of international trade. This success stems in large part from the efforts to design a competitive market structure based on competition within the port. But since sea transport markets are dynamic and sensitive to economic shocks, the Argentine antitrust agency decided to allow terminal operators to request approvals of horizontal and vertical mergers. In other countries facing similar merger proposals, antitrust agencies should use the kinds of methodologies set out in this Note. And in Argentina, independent of the antitrust agency’s decision on the merger, the port regulator should have expanded powers—especially in information gathering—to guarantee open access to the terminals of Puerto Nuevo and thus to maintain a competitive market structure.

Note
1. The ruling, “Maersk Argentina Holdings SA, Terminal 4 SA y Terminal EMCYM S/ notificación art 8 Ley 25156,” was issued by the Argentine Antitrust Commission in Buenos Aires in 2000.

References