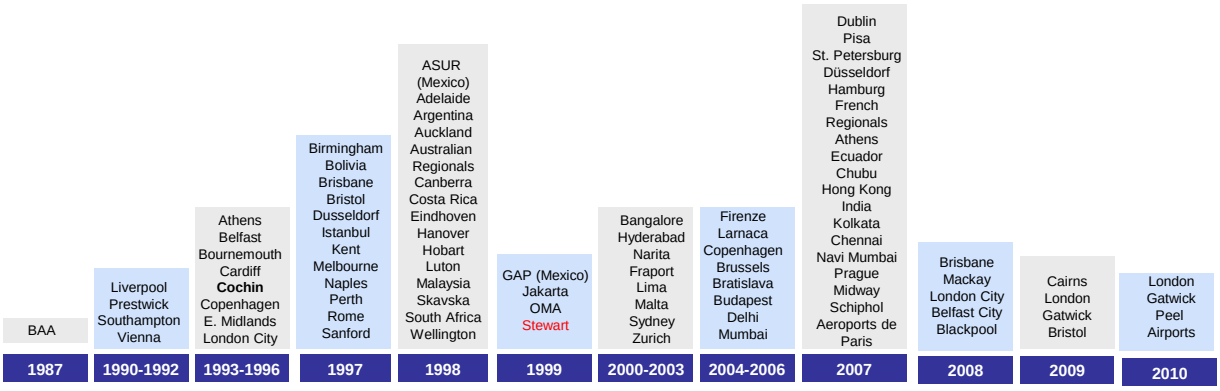
Appendix C
International Airport Privatization, Lessons Learned, and Transaction Summaries

C.1 Context and History

Full airport privatization has been much more extensive outside the U.S. and there is a significant body of information to be learned from these experiences. However, not much of it is transferable to the U.S. given the regulatory, finance, and legal framework in the U.S. as described in Chapter 3 of the guidebook. Unlike in the U.S., international airport privatization often means the full or partial transfer of airport ownership from the public sector to the private sector through very long-term leases or concessions, an outright sale, or initial public offerings (IPOs). This transfer of control and/or ownership is often accompanied by requirements to improve the airport's infrastructure and service levels and provide new capacity to keep pace with demand under a regulatory framework for aeronautical charges.

Since the privatization of the UK airports in 1987, over a hundred airports have been privatized worldwide as illustrated in Figure C.1. By contrast, only one airport in the U.S. was fully privatized -- Stewart in 1999 – which has since reverted to public operation.

Figure C.1
24-YEAR HISTORY OF WORLDWIDE AIRPORT PRIVATIZATION



Appendix C-2 provides a summary of 21 landmark airport privatization transactions reviewed by the research team, including the transaction and governance structure, political and regulatory environment, objectives of the privatization, economic and other regulation, and lessons learned. At all of these airports, there has been a direct transfer of responsibility from the government to the private sector at some stage in their development.

In this appendix, the research team provides an assessment of some of the common features of the 21 landmark airport privatizations with a focus on the lessons learned, and on aspects of these transactions that may be relevant to the U.S. airport industry. Because the context for these

privatization processes differ from that in the U.S., care must be taken in considering the whole context before evaluating the extent to which the lessons are directly transferrable.

One important distinction is the degree to which airports in other countries tend to be seen more as independent entities and businesses in their own right, with a far lower degree of airline control (contractual or statutory). Therefore, external economic regulation tends to have a far greater direct impact on airports in other parts of the world than in the U.S. – where airline rates and charges are largely driven by the terms of airline use and lease agreements. The main focus of economic regulation in other parts of the world by governments and regulators is to seek approaches that provide greater efficiency incentives.

C.2 Scale of Transaction

Of all the airport privatization transactions reviewed, either the airport is of a relatively material size in terms of passenger throughput, or the entity is a group of airports that includes smaller airports as shown in Table C.1.

Table C.1. Passenger Throughput (Enplaning and Deplaning))

Airport/Airport System	2009 Passengers (in millions)
Argentina	19
Athens	16
Auckland	13
BAA	112
BAA (Ferrovial)	112
Berlin	21
Brussels	17
Budapest	8
Copenhagen	22
Costa Rica	3
Delhi	24
Japan Air Terminal	61
London Gatwick	32
Manilla	24
Mexico	47
Naples	5
Rome	40
St. Petersburg	7
Sydney	33
Toronto	30
Vienna	18

The smallest airport in this sample is Costa Rica Airport with 3 million passengers per year. There are certainly examples of airports smaller than this being sold on a standalone basis (in the UK examples include Leeds, Exeter, Cardiff, and Bristol). However, standalone privatizations have been most common with the world's busiest airports. There are likely to be several reasons for this:

- Privatization involves significant transaction costs, including legal and investment banking advice. For a small airport, those transaction costs are likely to represent a high proportion of the transaction value.

- Many smaller airports are unviable. Although there are several examples of airports with throughput of 1 million passengers per year or even lower that generate positive Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA), they are in the minority. Although it is not impossible, it is relatively problematic to attract investors to loss-making airports.
- Larger airports tend to have lower reliance on single carriers or routes, and therefore to have relatively lower risk profiles, which helps to make them more saleable.
- The lower risk profiles of larger airports also makes the future investment frequently required easier to finance.

The privatization of an airport group is often the result of an attempt to address the concerns of the vendor. Groups of airports in Argentina, Mexico, and BAA generally consist of a handful of highly profitable international airports together with a large number of loss-making small airports fulfilling social needs. A typical public sector arrangement (practiced in Mexico and Argentina) is for the state entity to cross-subsidize the 'social' airports from the profits made by the international airports. Under privatization, a common practice is to privatize the 'social' airports together with the profitable airports, to avoid the funding of the former falling to the government. In such privatizations, a condition of sale is typically to require the continued operation of such 'social' airports.

C.3 Types of Privatization Models

There are two main aspects to the type of privatization model: the approach to selling the shares and the model of ownership. The Table C.2 summarizes the approach and model applied for the airport transactions reviewed.

Table C.2. Privatization Model

Airport/Airport System	Date	Method of Sale	Type of Privatization
Argentina	1998	Trade sale	Concession
Athens	1995	Trade sale	Concession
Auckland	1998	IPO	Freehold
BAA	1987	IPO	Freehold
BAA (Ferrovial)	2006	Public tender offer	Freehold
Berlin	2003	Trade sale	Concession
Brussels	2004	Trade sale	Freehold
Budapest	2005	Trade sale	Concession
Copenhagen	2005	Public tender offer	Freehold
Costa Rica	2001	Trade sale	Concession
Delhi	2005	Trade sale	Concession
Japan Air Terminal	2007	On market purchase	Freehold
London Gatwick	2009	Trade sale	Freehold
Manilla	1999	Trade sale	Concession
Mexico	1998-2006	Trade sale (subsequent IPO)	Concession
Naples	1997	Trade sale	Concession
Rome	1997-2007	Trade sale (previous IPO)	Concession
St. Petersburg	2009	Trade sale	Concession
Sydney	2002	Trade sale	Concession
Toronto	1993	Trade sale	Lease
Vienna	1992-2001	IPO	Freehold

There are several conclusions to be drawn from this analysis. First, there is a strong preference for a trade sale of a concession over other models. This is a preference that has become increasingly clear over time and despite the fact that several earlier privatizations adopted the BAA model, i.e. IPO of a freehold sale.

There are several reasons why a combination of trade sale and concession has become the predominant model. Trade sales are primarily attractive because of the higher receipts they yield to the seller compared with IPOs. There are a number of reasons for this:

- The trade buyer is typically an experienced purchaser, and has often gone through significant expert due diligence of the asset in a way that is not open to IPO purchasers. The risks attached to the purchase are therefore lower.
- Trade buyers can develop and implement a strategy for the company in which they are confident, and if necessary hire the required staff to implement it. Retail buyers are dependent on the company's management to develop and realize such strategies, and their confidence in the competence of the management team will impact the price they are willing to pay.
- Trade buyers have been able to apply modern financing techniques to fund their purchase, which has enhanced value.

The auction process frequently associated with trade sales means that the highest value can be secured. IPOs are priced in the absence of such clear value signals and concerns over the issue failing (leaving doubt on future sales), which means that pricing tends to be cautious with a degree

of a post-sale price rise seen as a good thing. This is particularly the case with sales involving the retail market.

There are other advantages of trade sales:

- A trade sale creates the opportunity of securing an expert buyer who may be capable of improving the operations, efficiency, and service standards of the airport concerned. Many sellers insist on an appropriate airport operator being part of the purchasing team.
- A trade sale can be based on a business and investment plan for the airport that has been scrutinized by the seller and may be the source of new impetus for the airport's progress.
- A trade sale reduces the political risk for the seller since it is protected from:
  - Accusations of selling at too low a price if the share prices arising from the IPO climb sharply.
  - Pressures to rescue purchasers if the company fails. In an IPO scenario, there will always be cases of 'widows and orphans' who have invested their 'life savings' if things go wrong.

The use of a concession has been seen as a way for governments to reassert control over assets either in the last resort or at the end of the concession lifetime. Among the benefits are:

- From the standpoint of public perception, ownership of a strategic national asset is retained. This can be a sensitive issue, particularly if foreign buyers are involved.
- The concession documentation can be a way for the sellers to maintain control over areas which it believes to be strategic. These can include, for example, investment programs, service standards, and pricing policies. Concession agreements can in some cases extend hundreds of pages.
- Concessions offer the opportunity for the seller to participate in the continuing success of the airport through rents or performance related concession payments, which may, for example be related to turnover, profit, or traffic levels. This can have strong advantages for airports which are seen as high risk or facing major initial capital expenditure requirements.

Two other trends emerge from this:

- The absence of transactions based on property type leases (such as used by U.S. airlines in leasing capacity at airports). It is likely that the concession can be drawn in a more flexible and all embracing way than the property lease.
- The linkage of trade sales and concession. Whereas most IPOs are of freehold sales, trade sales have frequently been conducted of concessions. Private companies are comfortable in managing investments with a limited lifespan and with the possibility of attempting to secure renewal. It would be likely that there would be significant issues with listing an asset with a limited lifespan, particularly in the case of retail buyers who will be aware that they lack detailed understanding of the concession and renewal process.

C.4 Transactional and Governance Structure

While the initial privatization of BAA was based in a belief in a 'hands-off' model with as much responsibility for the future of the company being transferred to the private sector as possible under regulation, such a laissez faire approach has now become relatively rare. Instead governments have structured sales in ways that allow them to retain a degree of continuing involvement.

The previous section outlined the continuing trend towards concession/lease rather than freehold sale arrangements. Other areas that have been important concerns in a number of privatizations have been:

- The maintenance of a continuing shareholding
- Controls on the identity of the new owners
- Competition issues
- Specific development plans

Maintaining a Continuing Shareholding

Airports have always been regarded as high-profile and sensitive assets conferring both economic benefits and environmental penalties on the communities they serve. As a result, national and local governments have felt pressures to retain at least some stake in the privatized airports, and in practice some form of continuing presence is very common – particularly in countries which see themselves as outside the 'Anglo-Saxon' business model.

While majority government ownership would appear to have a major effect on a company's objectives and management styles, the presence of even significant minority stakes appears to have a much lower impact. The experience of majority private sector shareholders in the airports shown in Table C.3 below is that their Government partners generally appear to adopt a policy of self-restraint in their interventions as shareholders and that following a move to majority private sector ownership tend to be content to limit their roles largely to monitoring and occasionally advising. As a result, even highly pro-active airport owners such as Macquarie appear to be content to work with significant and continuing minority government shareholdings at Copenhagen and Brussels as illustrated on Table C.3.

Table C.3. Government Holding Shares

Airport	2009 Government Holding
Athens	55.0%
Auckland	22.4%
Brussels	25.0%
Budapest	25.0%
Copenhagen	39.2%
Delhi	26.0%
Naples	25.0%
Rome	4.1%
Vienna	40.0%

This does not mean that the government presence has not been valuable, but it appears that the

main contribution has been in maintaining public confidence and ensuring good corporate practice, rather than necessarily in making the leading contribution to the airport's strategy. This suggests that the decision to retain only a minority shareholding is associated with the acceptance that the private sector will (and possibly should) take the lead.

On a less positive note, the relatively restricted role for government as part-owners of an asset might be expected to be associated with more limited support for its interests in the airport asset. For example, governments may have more concern for the health of ailing flag airlines and environmental issues than for the value of their airport holdings.

Controls on the Identity of the New Shareholders

Under normal circumstances, once a company has been sold, the previous owners have no say in the further sales which take place. In the case of the privatization of a strategic asset, this may raise concerns and governments may seek to have controls which enable them to restrict:

- The maximum stake to be held by an individual owner
- The maximum stake that can be held by overseas interests
- The maximum stake that can be held by an owner with a cross -ownership in shares in a competing airport
- The disposal of shares by specific shareholders (particularly in a trade sale where a major airport operator was sought as a strategic partner to aid the development of the airport)

Such controls are relatively easy to apply in the case of concessions where the concession contract can be with specified buyers, and government permission must be sought before the contract can be transferred.

Governments have also attempted to apply controls to trade sales, either through primary legislation or through sales contracts.

An approach that was applied to both the BAA and the Copenhagen airport IPOs was the use of a 'golden share' which had no economic value but could effectively veto decisions in specific areas, including asset disposals and maximum share ownerships. Such 'golden shares' were outlawed within the EU as a national restraint to trade, leaving both BAA and Copenhagen subject to takeover by Spanish and Australian interests, respectively.

In some countries, such controls can be applied less formally. Following Macquarie Airport's acquisition of a major stake in Japan Air Terminal (JAT), the Japanese Government made its displeasure clear, both publicly and privately, and indicated that it would not permit a stake in JAT greater than 20% of the total. Macquarie subsequently disposed of its shareholding through a buy back orchestrated by JAT.

Competition Issues

The sale of one or more airports can provide an opportunity to consider what competitive structure would be desirable, particularly if the airports concerned are members of a group with a dominant position either locally or nationally.

In the case of BAA's privatization, the UK Government was criticized for not breaking up the group's dominance of airports in the South East of England and in Southern Scotland. While some other privatizations, such as that of Argentina, have adopted a similar national approach, others used the privatization process either to sell off airports individually (Australia) or as rival groups (Mexico).

On the other hand, there have been cases where the potential opening of a competing airport has been seen as a threat to the private sector's willingness to make major airport investments. Both Athens and Delhi airports, for example, have provisions preventing the opening of a significant new airport within a defined distance from the airport being developed. In other cases – such as Sydney – the airport buyer has been given a 'right of first refusal' on any major new airport development in the Sydney region.

Specific Development Plans

One of the principal reasons for an airport privatization may be to allow major developments to take place, which the government is reluctant or unable to fund. In such cases, the government involved will clearly wish to ensure that the required developments actually take place. Once again this can be achieved through a concession agreement (as in Athens or Delhi) or –with less assurance – through regulation.

The government may also incorporate other mechanisms in the privatization process. For example they may:

- Include the production of a development plan as part of the sales process
- Require the development, publication, and regular revision of a master plan to be approved by the Government (as in Australia)
- Include a general requirement to develop the airport to meet needs at given service standards (and possibly more specific requirements) within the terms of a license to be held by the airport operator (as for example in Brussels)

C.5 Objectives of Privatization

The objectives of the earliest privatization – the BAA privatization in 1987 – can be seen in hindsight as primarily ideological (source: the Airport White Paper):

> *The Government is committed to converting as many as possible of Britain's airports into private sector companies as part of its policy of reducing the role of the State. The Government is confident that the privatization of airports will bring substantial benefits. Besides reducing the size of the public sector, privatization will assist the Government's objective of creating wider share ownership. It will also increase employee participation as, in line with previous privatizations, employees will be encouraged to buy shares at*

> *the time of sale. Privatization will also provide for greater freedom for management. For example, airports will have access to private capital. It will also encourage more innovative management, and lead to efficiency gains and greater responsiveness to customers. These benefits will have profound consequences for the future operation of airports in Britain*[1]

Implicit in these objectives is a belief in the private sector offering superior management, efficiency gains, and responsiveness to customers. An IPO was seen as offering these potential gains even though the actual management personnel and the structure of the organization remained unchanged. These objectives were set in addition to a stated belief in the importance of reducing the role of the public sector.

In sharp contrast, the objectives quoted for the most recent transaction in the airports surveyed (the 2009 privatization of St. Petersburg) are twofold. This privatization was developed by the City of St. Petersburg to (1) seek funds for upgrading infrastructure and (2) attract the services of an experienced airport operator to enhance the operations and service at the Airport. It is noteworthy that 'seeking funds' is not included in the BAA objectives, although directly or indirectly such an objective is behind many recent airport privatizations.

It is likely that the downplaying of the more ideological justifications for airport privatization has resulted from several factors. As the transaction summaries illustrate in the cases of Argentina, Manila, and Toronto, privatization is not by itself a guarantee for improved operation or greater customer focus. As discussed above, the experience of the IPO / freehold model where management, financial, and operational structure were left fundamentally unchanged is that potential benefits were left unrealized. In the case of BAA, this led ultimately to an enforced split up of the group some 22 years later and in the case of Copenhagen, to a secondary trade sale to buyers believing that further performance gains could be secured.

Furthermore, in recent transactions such as St. Petersburg and Delhi, the structure of the arrangement based on fixed capital investment programs effectively implies a coalescing of airport privatization with pre-privatization models for private sector involvement such as Build Operate Transfer.

In sum, there has been a narrowing of objectives of privatization to a focus on the fund-raising properties of airport sales.

C.6 Economic Regulatory Regimes

Privatization is frequently associated with the introduction of, or major reform to, formal economic regulation that applies to the private company.

[1] Cm 9542, *1985 White Paper*, Airports Policy, June 1985.

The most obvious form of regulation is price controls. Table C.4 provides an indication of the types of price control models employed under the surveyed transactions:

Table C.4. Regulatory Model

Airport/Airport System	Regulatory Model
Argentina	CPI-X, cost basis unclear
Athens	Accumulative profit control over long period, dual till
Auckland	Reserve powers regulation, dual till
BAA	CPI-X, single till
BAA (Ferrovial)	CPI-X, single till
Berlin	Price approval
Brussels	CPI-X, dual till, reserve powers
Budapest	CPI-X, dual till
Copenhagen	CPI-X, dual till, reserve powers
Costa Rica	CPI-X, dual till, not transparent
Delhi	CPI-X, hybrid till
JAT	Price approval
London Gatwick	CPI-X, single till
Manilla	Unclear
Mexico	CPI-X, dual till
Naples	CPI-X, hybrid till
Rome	CPI-X, hybrid till
St. Petersburg	Annual approval, unclear
Sydney	Reserve powers regulation, dual till
Toronto	Lease payments
Vienna	CPI-X, not transparent

The first major variable is the extent to which price controls are directly applied by an external regulator in the form of 'heavy-handed' price control. While this was the form adopted in BAA's regulation, it has not been universal since.

A number of countries such as Denmark, Belgium, Australia, and New Zealand employ various forms of 'light-handed regulation' where price controls are negotiated between airports and airlines, with – in some countries – reserve powers for the state or a regulator to intervene in the event of non-agreement. Experience in those countries is that despite difficult discussions, agreement is generally reached, normally founded on a shadow or informal process that parallels the formal regulatory process.

Of interest, as noted earlier in the context of London City Airport, despite the heavy-handed regulation applied to major airports in the UK, most privatized UK airports are not price-controlled: instead reliance is placed on commercial negotiations and competition. The apparent effectiveness of this competition at regional airports has led the UK to move Manchester Airport out of price controls, and to consider a similar exemption for Stansted Airport. Price controls now only apply to Heathrow, Gatwick, and Stansted, each with more than 20 million passengers, and it has been suggested that in the long run they might be limited to Heathrow.

The second variable is the form of price controls. In many cases some form of multi-year direct price control has been applied, generally related to inflation through a CPI-X formula. Such formulas are increasingly derived from a forecast of future costs and capital expenditures using what is known as a 'building blocks' methodology, although it is possible to set X through other methods (including direct estimates of the scope for improving efficiency). CPI-X price controls provide more incentives to the private operator than profit controls. Under CPI-X controls, the private operator receives the benefits of maximizing efficiency without having to share the benefits with customers in the form of a lower cost base at the next review.

An alternative approach, used in Germany and Russia, is to rely on the private operator to submit proposals for any change in prices to a regulator, who may approve, disapprove, or amend the proposal based on criteria, which are frequently not transparent. While this may be a familiar (and possibly manageable) process to the parties concerned, it may raise concerns from potential investors over the lack of stability and predictability in price setting. This is particularly an issue where major investment is being contemplated that may require substantial price rises if it is to be remunerated, or – less positively – where a major airline is facing difficulties.

At Athens, where the principal concern was with funding a major green-field airport, a form of profit control has been applied, with the concession providing controls that cover the accumulative rate of return up to the time of the price setting concerned. This provides significant comfort to investors, while allowing the private operator to set prices below the potential maximum in initial years, with the intention of recovering the lost income at a later date.

Another concern is with the use of single till or dual till approaches. Single till prices are set by setting allowable aeronautical revenue equal to all costs (including return on capital employed) minus commercial revenue. Under dual till, allowable aeronautical charges revenue is set to cover only aeronautical costs without consideration of non-aeronautical income and costs. The single till approach is broadly equivalent to residual rate-setting methods in the U.S. while dual till is seen as equivalent to compensatory rate-setting approaches.

Single till is generally preferred by airlines (supported by IATA), which see it as leading to lower charges, while dual till is seen as having greater incentives for efficiency and as facilitating investment. In practice, the case on charges is not clear since the efficiency incentives may outweigh the opportunities for a commercial subsidy. Evidence from comparisons of actual charges set is ambiguous. On the other hand, despite the supposed advantages in dual till airports in promoting investments, some single till airports – notably Heathrow – have been capable of very major capital expenditure.

In the U.S., residual approaches are seen as providing a greater degree of risk to airlines, since the airlines are contracted to cover pay charges recovering the required income to meet costs on an annual basis, and under residual approaches they face risks of annual volatility arising from passengers, costs, and commercial income. This is less apparent at privatized airports outside the U.S. where very long term contracts are rare (and not generally seen as binding on airlines) and prices tend to be set either through formulae over several years, or by an approval process which is less defined and mechanistic, or effectively to be set by market pressures. Each of these has the effect of leaving more of the risk (and benefit) in individual years with the airport. To the extent that the privatization process moves price setting approaches closer to those of international airports

(for example by fixing the price for a number of years as was proposed at Midway) the relative merits of the two methodologies are closer to those experienced elsewhere.

One point that does appear clear is that in most cases dual till controls are more attractive to investors since they do not put an implicit cap on overall profitability. As a result, a move to dual till – either at once or over time (as in Brussels or Aeroport de Paris), may be seen by government as a way of increasing privatization returns.

In addition to prices, economic regulation is also concerned with service, and with ensuring that investment efficiently meets the needs of current and future users.

- Reducing ***service*** can be regarded as having the equivalent effect on profits to a hidden price rise. As a result, the inclusion of service metrics is increasingly being linked toe price controls, with penalties for failure to achieve service targets, and (more rarely) bonuses for exceptionally good performance;
- Cost-related price formulas are generally based on a ***capital program*** (which may have been directly agreed with users as at Heathrow). Investing below this level without good reason (such as a change in user needs or technology) can also have an effect equivalent to a price rise, although it should also be noted that poorly constructed regulation can also lead to perverse incentives to 'gold plate' individual projects. In response to this, the delivery of a capital plan can be related to charges by:
  - Directly agreeing to price increases linked to individual investments once plans have been finalized (as in the Australian Necessary New Investment approach)
  - Including 'trigger' provisions in the price formula from the outset, linked to the completion of specific investments (as in the UK)
  - Directly relating charges to overall investment levels

It is also possible to have a retrospective 'claw back' mechanism which refunds the costs imposed on airlines for under spending on a capital program. However, this is normally not regarded as good regulatory practice because it fails to encourage efficient capital expenditure and penalizes users with charges higher than they need to be.

C.7 Conclusions

Because privatizations are undertaken for a variety of reasons, it is difficult to comment generally on their success, although second and third generation airport privatizations have the benefit of reviewing past experiences to better structure the process (e.g., the inclusion of service metrics). The review of transaction summaries allows one to draw a number of high-level conclusions, but each individual privatization or privatization attempt is associated with its own lessons learned. For this reason, the transaction summaries contained in Appendix C-2 each contain a lessons learned section specifically written for that privatization.

At a higher level, the following observations are worth noting:

- Generally, privatizations have involved larger airports or groups that contain both large and small airports. For a number of reasons, such privatizations are more likely to be attractive to potential investors.

- Internationally, there has been a trend towards trade sales to experienced buyers (rather than IPOs) and towards concession agreements (rather than freehold sales). Such privatizations have a number of benefits, but particularly enable the respective governments to raise higher proceeds while at the same time retaining an element of control or ownership over what is seen as an important piece of national infrastructure. Clearly under majority sale of a freehold, direct ownership and control will have been lost.

- Even minority stakes held by private investors can provide many of the efficiency and innovative business practices benefits of involving experienced private operators.

- Concessions may have the additional advantage of enabling the seller to participate in the continuing success of the airport through securing returns from rental payments or performance related payments. This may have particular advantages for some sorts of privatizations where buyers would be unwilling or unable to make high upfront payments.

- In addition to the concession agreement, governments have developed a number of ways to influence the behavior of the new airport owner. These include retaining an ongoing shareholding and including certain investment or service level specifications in the transaction documentation.

- Privatizations have occurred for a variety of reasons, ranging from financial (raising upfront or ongoing proceeds) to idealistic (belief in the benefits of private sector management).

- Economic regulation is an important tool to curb the monopoly pricing power which some airports have. A number of approaches have been pursued, but price cap regulation is increasingly common.

Subject to the specific observations made above, it is expected that some of these lessons would be potentially relevant to full airport privatization in the U.S. with appropriate modifications. However, the much lesser role for formal price regulation at U.S. airports, means that any move to price cap controls is likely to be secured in the U.S. through agreed upon modifications to the airlines' contracts rather than through decisions made by an external regulator, except under the APPP where increases to airline rates may not exceed inflation without the consent of 65% of the airlines.

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Appendix C.1

Glossary of Privatization Terms

Term	Definition
Build Operate Transfer (BOT)	An approach to development of airport infrastructure where the entity constructing it operates it over a period of time before transferring it (usually back to the public sector owner)
Building blocks	Within a CPI-X approach to regulation, a methodology where costs are defined as operating costs, and return of and on capital
Claw back	A feature of regulation where excess profits made in one regulatory period are recovered by the regulator in the subsequent period
Concession	Contract to transfer rights to manage and or operate a property for a certain period, usually without property rights
Corporatization	The process by which an airport previously subsumed within a Government agency is embodied with legal and financial person
CPI-X	A regulatory regime in which aeronautical prices increase by inflation (the consumer price index) less a specified percentage (X)
Dual till	An approach to regulation of aeronautical charges where the level of charges is set to recover aeronautical costs only
EBITDA multiple	The implied enterprise value divided by the airport's EBITDA (earnings before interest, tax, and depreciation). It should be noted that in some cases this multiple is specified publicly for a sale even though the assumptions on EBITDA and Enterprise Value are not themselves directly stated
Freehold sale	An estate in land, a form of fee simple ownership
Gold plating	A perceived problem of systems of economic regulation that incentivize over-investment
Golden share	A share held usually by Government without economic value which conveys defined voting rights over airport strategic and other decisions
Heavy handed regulation	An approach to regulation of aeronautical charges where price approval is set with maximum regulatory intervention
Hybrid till	An approach to regulation of aeronautical charges where the level of charges is set to recover aeronautical costs less a subsidy from the profits of non aeronautical activities

Term	Definition
Implied enterprise value	The total value of an airport asset implied by a particular transaction value. This is generally obtained by up-rating the transaction value to the equivalent of a 100% sale and adding the value of debt. The up-rating process for the equity may be complicated in cases where the proportion of shares owned does not reflect the economic value (for example where there are different classes of shares with different voting powers or rankings in terms of dividend distribution)
Initial public offerings (IPO)	Sale of shares (stock) in a company on its first public listing
Lease	Contract by which airport is conveyed to an entity for a specified period
Light handed regulation	An approach to regulation of aeronautical charges where price approval is set with minimal regulatory intervention, potentially through reserve powers regulation
mppa	Million passengers (departing + arriving) per annum
On market purchase	Purchase of shares/stocks on public stock exchanges
Price approval	Approval of aeronautical charges by the relevant entity
Public tender offer	An offer to qualified entities to bid for ownership of an airport
Regulatory Asset Base (RAB)	The investment base upon which the operator is permitted to earn a reason return.
Reserve powers regulation	An approach to regulation of aeronautical charges where price approval is set by agreement between airports and airlines, with an independent regulator deployed if agreement is not reached
RPI-X	A regulatory regime in which aeronautical prices increase by inflation (the retail price index) less a specified percentage (X)
Secondary sale	Sale of an airport to a party by the party making the initial purchase
Single till	An approach to regulation of aeronautical charges where the level of charges is set to recover all costs (aeronautical and non aeronautical)
Trade sale	Sale of an airport to a trade buyer (i.e., an existing commercial entity)
Transaction value	The $ amount transferred between parties in consideration of transfer of an airport asset, or part thereof
Widows and orphans	Small, usually private share (stock) holders

Appendix C.2

Worldwide Airport Privatization Transaction Summaries

Argentina Airport System

a) Transaction Summary

Item	Description
Airport	Argentina Airport System
Operational details	System of 33 airports, including the airports serving Buenos Aires. **2009 passengers:** 14 million at the two main airports serving Buenos Aires. (In 1997, there were 18.8 million passengers serving the 33 airports). **Principal airlines:** Aerolíneas Argentinas **Configuration:** Ezeiza-Ministro Pistarini International, serving Buenos Aires, has two runways. Jorge Newbery, also serving Buenos Aires, has one.
Type of privatization transaction	Trade sale. Concession.
Interest	100%.
Date of transaction	February 1998.
Valuation	**Transaction value:** US$2.2 billion investment commitment plus annual license fee of US$ 171 million. **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• Large country with network of domestic airports providing links to the capital Buenos Aires. • Chronic underinvestment prior to privatization.

b) Transactional and Governance Structure

Decree 375/97, which came into effect in Argentina in 1997, provided for the establishment of a group of airports, the management and operation of which would be offered to a private operator through a concession agreement. The Government bundled the 33 airports into a single concession because it estimated that only up to 8 airports were profitable thereby necessitating the need for cross-subsidies to improve facilities at many airports. The Argentine Government ran a bidding process and received four bids for the concession. The winning consortium was Aeropuertos Argentina 2000 S.A. (AA2000), created specifically for the purpose of acquiring and operating this group of airports in Argentina.

Initially, AA2000 had five shareholders: Corporación América Sudamericana S.A. ("CAS"); Ogden Corporation ("Ogden"); Società Esercizi Aeroportuali, s.p.a. ("SEA"); SIMEST ("SIMEST"); and Riva Construcciones S.A. ("Riva") (the "Shareholders").

AA2000 Shareholders

Shareholder	Share	Description
CAS	35%	An affiliate of a Buenos Aires-based conglomerate with business mainly in media
Ogden	28%	NYSE listed company engaged in aviation-related, energy, and entertainment services worldwide
SEA	28%	Operator of the two airports serving Milan, Italy (Malpensa and Linate airports) and provider of airport consulting services globally
SIMEST	8%	State-owned development bank located in Rome, Italy
Riva	1%	Argentine-based, turn-key construction company serving industrial and institutional clients

Ogden Corporation later sold its share to CAS in the course of divesting itself of all of its aviation companies.

The agreement between AA2000 and the Argentine Government was formally entered into on February 9, 1998, and has a term of 30 years. The Argentine Government has the option of extending the agreement for an additional 10 years, under certain circumstances. Under the agreement, AA2000 assumed development, improvement and operation responsibilities for the 33 "Group A" airports in Argentina. These airports comprise over 60% of the airports in Argentina, and include airports in Buenos Aires (Jorge Newbery and Ezeiza-Ministro Pistarini International), Cordoba, Mendoza and Bariloche. Additionally, 17 of these airports are equipped to receive international flights. Taken together, the "Group A" airports served approximately 96% of total passengers in Argentina in 2007.

The concession was based on a build-operate-transfer (BOT) arrangement with an investment commitment of US$2.2 billion (in 1998 dollars) over the concession period and a $171.2 million per year royalty (canon) fee to the Government. The terms of the concession required AA2000 to submit a master plan for each concession airport. The master plan details the amount and timing of the investment required for each facility. Most of the $2.2 billion in investments were slated for Ezeiza (the Buenos Aires international airport), Bariloche, and Cordoba Airports. AA2000 also committed to close Aeroparque Jorge Newberry (the Buenos Aires downtown airport) and to consolidate its operations at Ezeiza.

The concession contract provides AA2000 with certain rights and obligations under the terms of the concession, including the right to collect specific aeronautical fees levied upon users of the concession airports. Aeronautical charges, which are regulated by the Government, consist of aircraft landing, aircraft parking, passenger departure, and jetway usage charges. In addition, AA2000 has the exclusive right to operate and exploit commercial activities within the perimeter of each concession airport. These activities are unregulated under the concession contract and AA2000 has the right to negotiate the terms of commercial arrangements. AA2000 is also responsible for employment and supervision of airport personnel and contractors.

In 2007, AA2000 entered into a Memorandum of Understanding (MOU) with the Argentine Government, which amended the original concession agreement. The terms of the MOU led to a revision in the structure of the payments of concession fees to the government. Changes introduced

under the MOU were driven primarily by the after-effects of the severe economic contraction experienced in Argentina earlier in the decade.

c) Political and Regulatory Environment and Objectives of the Privatization

During the 1990s, Argentina underwent a period of economic reform, with a large number of public institutions privatized including telecommunications, utilities and transport infrastructure. The privatization of the airports formed part of this larger program. Considering the historic underinvestment in the airports, it is likely that attracting private financing to fund infrastructure development was one of the Government's main objectives.

d) Economic and Other Regulation

Certain key functions remained with the Government under the control of the Argentine Air Force. These duties include air traffic control, national security responsibilities, customs, police, fire, and immigration. Air traffic control is handled by the Regional Air Command and security is overseen by the National Aeronautical Police Force, both divisions of the Air Force. The Government also assumes responsibility for emergency response services in the event of a major aviation accident.

The Government established a new regulatory body, the Organismo Regulador del Sistema Nacional de Aeropuertos (the National Airport System Regulatory Body, or "ORSNA"), to monitor AA2000. ORSNA is responsible for setting aeronautical fee levels, monitoring compliance with the master plan at each airport, and monitoring the quality of services delivered by AA2000. Changes to aeronautical rates (aircraft landing, aircraft parking, airport use, and telescoping jetways) require the approval of ORSNA. The initial rate schedule of aeronautical rates was established prior to the award of the concession and AA2000 may charge rates up to those approved and established by the ORSNA. Approved rates are subject to change every three to five years (if decreed by ORSNA). As set forth in the concession contract, changes to the aeronautical tariffs are to be based on a pricing formula of "PPI-X Factor" where PPI is the producer price index in the United States and the X Factor is a number (expressed as a percentage) that incorporates a number of concession factors (increases in traffic, improvements in efficiency, level of service, projected return on investment, and rate of return). The Government increased aeronautical rates by approximately 35% prior to the privatization and instituted a number of new charges, including the jetway charge. Increases in non-aeronautical charges, including airline terminal space rental, are not subject to the aeronautical pricing adjustment formula.

The Government issued a moratorium on the construction of new airports within the spheres of influence of the concession airports for a minimum of 20 years thereby creating a natural monopoly for domestic and international air traffic for the concession.

e) Lessons Learned

The privatization of Argentina's airports resulted in a number of challenges, particularly in light of the steep downturn in the Argentine economy shortly after the privatization. The original concession agreement, which envisaged a fixed concession fee in US dollars, did not have enough flexibility to cope with these challenges, and a renegotiation was required. IATA was highly critical of the perceived high level of airline charges resulting from the privatization. Key lessons learned include:

- Any concession agreement will only work successfully in securing the development of airports if the investments required remains viable. Care must be taken in the design of concession terms to ensure that the approach is robust to adverse circumstances, or

privatized airports facing such circumstances will find it difficult to make the investments required to meet airline needs;

- The continuing problems associated with overbidding for concessions provide a case for making concession tenders dependent not only on the highest bid, but on the most convincing business plan for delivering the returns required to sustain that bid. In this case, the highest bidder's annual royalty was four times higher than the minimum guarantee in the bid documents and in the event, this level of royalties turned out to be unsustainable – ultimately requiring a renegotiation with the Government. In the meantime, AA2000 had to raise rents and fees for most facilities and services significantly to cover the Government payment, which was not well received by the airlines and other tenants. The production of a credible business plan should have helped to demonstrate to the Government seller whether the buyers were capable of meeting their obligations while also serving the needs of airlines and passengers. There may well be fewer problems with an outright sale though even there over-bidding associated with continuing problems of high leverage may not be in the long term interest of the seller or of airlines;
- Significant increases to airline tariffs may have reduced airline's ability to lower fares to increase throughput and grow the sector, in particular for domestic services; and
- Major construction is likely to entail a significant increase in charges – especially if the charges in place before the privatization were set at non-viable levels. The seller should ensure that the implications of this are understood and evaluated in the sales process, and should consider consulting the airlines in advance on the extent to which the development plans and the associated costs meet their needs.

Relevance to Privatizations in a U.S. Context

Despite the different environment, many of these lessons are relevant to U.S. privatizations. However, the strong roles envisaged for airlines in agreeing privatizations through the Pilot Program, would be likely to mitigate the concerns on the impact on airlines of new investment reflected in the final bullet point.

Athens Airport

a) Transaction Summary

Item	Description
Airport	Athens Airport
Operational details	**2009 passengers:** 16 million **Principal airlines:** Aegean Airlines, Olympic Air. **Configuration:** Two runways. One main terminal and one satellite terminal.
Type of privatization transaction	Trade sale. Concession.
Interest	45%.
Date of transaction	July 1995.
Valuation	**Transaction value:** €2.1 billion investment in new airport (approx. US$2.1 billion). **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• Greece's largest airport. • Privately financed construction of new airport.

b) Transactional and Governance Structure

In 1975, the Greek Government decided to build a new airport to serve the greater Athens area. The location of the new airport was determined in 1978, and expropriations and planning works took up a number of years after that, from 1978 until 1991.

In 1991, the designated area was available, and the Greek Government decided to run a tender process under a build-operate-own-transfer scheme, to identify a private partner for the construction of the new airport.

A consortium led by Hochtief was declared the winning party in 1993, but a change of Government in September of that year led to a suspension of the tender procedure and a redesign of the contract. The Hochtief consortium was again declared to be the winning party in 1994.

In July 1995, the consortium signed an Airport Development Agreement with the Greek Government. This agreement was subsequently ratified by the Greek Parliament through law 2338. The agreement establishes a 30-year concession granting the airport company the exclusive right to occupy and use the site for the purpose of the design, financing, construction, completion, commissioning, maintenance, operation, management, and development of the airport. No upfront payment was required. Annual concession payments were as follows:-

- First ten years nominal (€1000)
- Second ten years - €1m
- Third ten years - the greater of €15m or 15% of operating profits

In June 1996, a new company called Athens International Airport was established. Its shareholders were the Greek Government (55%) and the consortium led by Hochtief (45%) advised by Fraport. Construction of the new airport started in September of 1996. Construction was completed in 2000 and the airport officially opened in March 2001. The project costs of €2.1bn were funded through a mixture of equity, shareholder loans, EU grants, European Investment Bank loans, commercial

loans, and proceeds from an Airport Development Fund charge on passengers at the existing Greek airports.

c) Political and Regulatory Environment and Objectives of the Privatization

The main objective of the Greek Government at the time of the privatization was to attract private funding for the construction of a new airport in the Athens area. The fact that the winning consortium included a major contractor able to provide all engineering and project management services may have been an important factor for the Greek Government.

The Greek Government is currently considering an IPO of some of its remaining shareholdings to raise additional funds to reduce Government debt.

d) Economic and Other Regulation

Airport charges at Athens Airport increased significantly when the new airport opened in 2001. The charges are set on the basis of consultation between the airport, the Charges Committee of IATA and the Board of Airline Representatives.

There is, however, a backstop regulatory framework incorporated into the concession contract. This framework is based on a dual till approach, and allows a compounded cumulative return on 'air activities capital' of maximum 15% real per annum. This provides a mechanism for the airport to agree on credible charges with users at an initial stage with the opportunity to recoup the income foregone further along the line when utilization is higher and unit costs have decreased.

e) Lessons Learned

The Athens Airport privatization is generally seen as successful as the new airport was constructed in a record time and within budget. There was a significant increase in airport charges subsequent to the privatization, but these were linked to very substantial improvements in facilities and services at the new airport: the previous Athens Airport under public ownership had been notorious for its low service standards. Key lessons learned include:

- The move to the private sector can be associated with substantial enhancements in service in the right contractual and regulatory environment;
- Major construction is likely to entail a significant increase in charges – especially if the charges were previously set at non-viable levels. The seller should ensure that the implications of this are understood and evaluated in the sales process, and that, ideally the regulatory approach has sufficient flexibility to allow for losses made in the start-up phase of the project to be recouped later when traffic flows are mature (Athens is a good example of how this can work);
- Airlines will accept even substantial increases in charges provided that the need for improved/new facilities is fully understood and supported; and
- Flexibility in regulation can allow the airport and airlines to reach commercial agreements which both can accept without direct regulator intervention.

Relevance to Privatizations in a U.S. Context

This privatization was made in the context of funding a major new Greenfield development through a private public partnership – with significantly different requirements from those of most US privatizations. Nevertheless, most of these lessons appear potentially relevant to US airports, with the exception of the last bullet point: in the US the greater involvement of the airlines both in

privatization and in the process of setting prices (through their contractual agreements with airports) means that there is a relatively limited role for direct regulation in the price setting process.

Auckland Airport

a) Transaction Summary

Item	Description
Airport	Auckland Airport
Operational details	**2009 passengers:** 13 million. **Principal airlines:** Air New Zealand. **Configuration:** One runway (plus one stand-by runway usually used as taxiway). Two terminals: international and domestic.
Type of privatization transaction	Initial public offering. Freehold sale.
Interest	51.6%.
Date of transaction	July 1998
Valuation	**Transaction value**: NZ$390 million for 51.6% interest (approx. US$203 million). **Implied Enterprise Value**: n.a. **EBITDA multiple**: 13.1x.
Context	• New Zealand's largest airport. • Corporatized in 1988. • One of two airport privatizations in 1998. • The other privatization was Wellington, via a trade sale.

b) Transactional and Governance Structure

The most important phase of the privatization of Auckland Airport, the sale of a 51.6% stake by the Government, took place by means of a public flotation in July 1998. The process was a standard IPO process which took just over two months to complete: from announcement on 14 May 1998 to listing on 28 July 1998.

Subsequently, local governments have decreased their minority interests in the airport. The largest shareholder today is Auckland City Council with a 12.7% interest.

c) Political and Regulatory Environment and Objectives of the Privatization

Before it decided to publicly list a 51.6% interest in Auckland Airport, the Government conducted a scoping study that examined sale options ranging from trade sales to share floats. The criteria against which the sale options were assessed are not publicly known, however, it is known that the scoping study included preliminary sales work. This suggests that the level of proceeds was at least one of the criteria considered by the Government at the time of the privatization.

d) Economic and Other Regulation

Auckland Airport and Wellington Airport were both privatized in 1998. There was no regulation of airport charges in New Zealand at the time, and no regulation has been put in place since these privatizations, other than requirements for the provision of financial and other information by the airports to users. Reviews of prices can be undertaken by the relevant Minister at any time, and the threat of the subsequent introduction of formal regulation is deemed to be sufficient to ensure prices remain reasonable. A review of prices at major New Zealand Airports was undertaken in 2002, with the recommendation that price regulation be introduced at Auckland Airport. This recommendation was rejected by the Minister as unnecessary in 2003.

Effectively the airport operates under a form of 'shadow regulation'. The airports have agreed formulas with users typically for five-year periods, based on standard regulatory 'building blocks' calculations of costs combined with benchmarking (including the use of Jacobs Consultancy publications) to demonstrate to users that charges are not excessive.

Regulatory changes in 2010 mean that going forward, there has to be greater disclosure of information and specification of a charging methodology and this has to be monitored by the Commerce Commission. These changes are intended to make the negotiation process more effective: there is no indication of any intention of introducing formal price controls.

e) Lessons Learned

The IPO of Auckland Airport was completed successfully, but there has been subsequent dissatisfaction from airlines as to the lack of regulation of charges at the airport, which the New Zealand Government has met by requirements for greater information provision and monitoring. In particular, new regulatory changes in 2010, due to come into effect in 2011, will place increased transparency obligations on the airport. In contrast a recommendation to introduce formal price regulation was rejected by the Minister in 2003. The key lessons learned was that post privatization regulation need not necessarily require formal price controls. Information provision and monitoring, backed up by the threat of price controls if required, may be sufficient to put downward pressure on prices.

Relevance to Privatizations in a U.S. Context

The lesson with this transaction concerns a specific approach to external oversight of prices, which is less relevant to privatization in the U.S. where the role for formal external regulation is more limited.

BAA (IPO)

a) Transaction Summary

Item	Description
Airport	BAA, including in 1987 Heathrow, Gatwick, Stansted, Glasgow, Edinburgh, Aberdeen and Prestwick airports
Operational details	**2009 passengers:** 112 million (BAA total global passengers, excluding Gatwick which has now been sold). **Principal airlines:** British Airways, BMI, easyJet, Ryanair. **Configuration:** **Heathrow**: Two runways, five terminals. **Gatwick**: One runway, two terminals. **Stansted:** One runway, one terminal (three satellites). **Glasgow**: One runway, one terminal (three piers). **Edinburgh**: One main runway, one terminal. **Aberdeen**: One runway, one main passenger terminal, three helicopter terminals. **Prestwick**: One runway, one terminal
Type of privatization transaction	Initial public offering. Freehold sale.
Interest	100%
Date of transaction	July 1987
Valuation	**Transaction value**: £1.2 billion (approx. US$805 million). **Implied Enterprise Value**: n.a. **EBITDA multiple**: n.a.
Context	• UK's biggest airport group. • Between 1965 and 1986, operated as a publicly owned corporation. • Operated with many of the attributes of a private entity. • Net contributor to the public exchequer. • Intention to privatize announced in the 1985 Airports Policy White Paper.

b) Transactional and Governance Structure

The intention to privatize BAA was stated in 1985. At the time, there had been no precedents for the private ownership of major airports and some skepticism over whether it would prove practicable or attractive to investors. Nevertheless, the Airports Act of 1986 provided for the dissolution of the Authority (BAA) and the transfer of its property, rights, and liabilities to a new company. On the 1st August 1986, the Authority was transferred to a new entity, BAA plc, wholly owned by the Secretary of State. A marketing prospectus was issued in spring 1987. Share dealings in the new company commenced on the London stock exchange on 28th July 1987.

The Government offered 50% of BAA at a fixed price with 25% placed with institutions and 25% through a tender offer. It was anticipated that the tender portion of the offer would appeal mainly to sophisticated buyers, but the response was strong and there were over 88,000 applications for a total of 759.2 million shares. The fixed price part of the offer was still more successful: it received 2.47

million applications for a total of 2.1 billion shares meaning that around 5% of the UK population owned shares in the company.

The result of the IPO was to broaden share ownership of BAA. In the 1988 Annual Report, it is stated that (despite some early sales) the then number of shareholders was still 1,064,815.

An important original feature of the privatization was a limitation of the maximum stake to be held by any one party to 15%. This both encouraged a wider ownership in the company and prevented its control by sectional interests such as individual airlines, or competitor businesses. The control was protected by a "golden share". Such controls were however later declared incompatible with the free European market in capital by the EU, and the golden share provisions were dropped in 2003.

c) Political and Regulatory Environment and Objectives of the Privatization

BAA's privatization, in common with the privatizations of other UK utilities at the time – including British Telecom and British Gas – took place under the Conservative Government of 1979 onwards under the premiership of Margaret Thatcher. The privatization policy had several objectives:

- To transfer what were perceived as inefficient and overmanned state enterprises to the private sector
- To improve the service provided by those enterprises to the consumer
- To broaden share ownership

An objective which became important in later privatizations – to raise funds for Government – was not given a central role in BAA's privatization, and indeed there was widespread criticism that utilities – including BAA – had been underpriced by the Government.

A further objective of other privatizations was the creation of competition. For example, the privatization of British Telecom coincided with the licensing of another operator, Cable and Wireless, to provide access to residential and business telephony markets. Prior to this, British Telecom had acted as a de facto monopoly. However, in the case of BAA, it was concluded each of the airports it owned had strong monopoly characteristics regardless of the ownership structure.

The rationale for privatizing BAA and other UK airports is set out in the Airports Policy White Paper (9.6):

> *'The Government is committed to converting as many as possible of Britain's airports into private sector companies as part of its policy of reducing the role of the State. The Government is confident that the privatization of airports will bring substantial benefits. Besides reducing the size of the public sector, privatization will assist the Government's objective of creating wider share ownership. It will also increase employee participation as, in line with previous privatizations, employees will be encouraged to buy shares at the time of sale. Privatization will also provide for greater freedom for management. For example, airports will have access to private capital. It will also encourage more innovative management, and lead to efficiency gains and greater responsiveness to customers. These benefits will have profound consequences for the future operation of airports in Britain'*

d) Economic and Other Regulation

Previous to BAA's privatization, BAA's airport charges were not governed by a formal system of economic and other regulation. Charges were set on an annual basis with the agreement of the Minister of Transport. The Airports Act set out the new basis for regulation of charges. The significant airports in UK –the three London airports (Heathrow, Stansted, and Gatwick) together with Manchester were subject to price regulation by the Civil Aviation Authority (CAA). Since then Manchester (with over 20m passengers) has been moved out of price controls, and this was also seriously considered for Stansted.

Although the legislation provides considerable flexibility, in practice, price caps are determined for regulatory periods of five years. The methodology employed was the RPI-X model which had recently been pioneered in the context of the privatization of British Telecom.

At the time of privatization, other regulatory models were considered, including rate of return regulation. The RPI-X approach with five year review periods was favored as it was considered that it provided better incentive qualities.

Price control regulation as applied in the UK is an extended and highly consultative process, which can extend over a considerable period. While ensuring that there are high levels of transparency and scrutiny, this has led to a complex and expensive process for all parties.

This regulatory framework has recently been reviewed and it is planned that a license system, similarly to that used for utilities in the UK, will be introduced, with greater flexibility for the regulator to set terms covering issues such as service, capital expenditure and financing, and an ability for the regulator to relax controls where they prove no longer to be necessary.

e) Lessons Learned

There have been a number of criticisms of the privatization of BAA. Firstly, as maximizing proceeds to the Government was not one of the main objectives at the time of the privatization, there have been subsequent suggestions that BAA may have been sold off too cheaply. While the unfamiliarity of airports as investments may have contributed to the low returns, they may also have arisen from the fact that an IPO rather than trade sale route was followed. Secondly, there have been criticisms of the decision to privatize BAA as a whole. A recent market investigation by the Competition Commission found that to increase competition, BAA should be split up and a number of airports, including Gatwick and Stansted, should be sold. Thirdly, there has been much debate about the regulatory regime implemented at the time of the privatization. While this originally produced low charges, it has been argued that, particularly in the absence of competition, this regime did not provide enough incentives for BAA to invest and to improve service standards, and consequently airlines have been critical of the level of service provided at BAA airports. More recently, BAA has invested substantially in improving service levels, notably through the opening of Terminal 5 at Heathrow, though this has led to substantial charges increases.

Key lessons include:

- A desire to follow broader objectives through privatization may well lead to reduced returns;
- A privatization may present an opportunity to restructure the airport sector in the area / country with the objective of enhancing competition. Such competition may be of increasing importance when the airports are in private hands and may provide scope for at least partial deregulation;

- Barriers to ownership (which may have originally arisen from commendable motives) may prove to be undesirable or unsustainable in the long run. Consideration should be given to whether they are entirely necessary or in the interests of airlines and passengers and how the consequences of them being ultimately removed could be managed;
- The design of the regulatory regime is of crucial importance. As well as ensuring that adequate controls are in place this needs to ensure that:
    - The process is reasonably manageable without leading to an expensive and onerous process, which may make it difficult for airlines to participate without undue cost and management resources;
    - Charges are not minimized at the expense of other considerations such as economic efficiency, and the ability of airports to invest to meet the needs of users; and
    - The incentives created by the regulatory regime are appropriate, promoting good service and investment without incorporating perverse incentives (such as to 'gold plate' investments).

Relevance to Privatizations in a U.S. Context

The privatization of a major national group of airports through an IPO is clearly very different from, the privatizations envisaged in the U.S. Nevertheless, the majority of these lessons are relevant to the U.S., though the significance of the final bullet point is reduced by the fact that formal regulation is less relevant in a U.S. environment where an equivalent role is played by airline agreements.

BAA (acquisition by Ferrovial)

a) Transaction Summary

Item	Description
Airport	BAA, including Heathrow, Gatwick (sold in 2009), Stansted, Glasgow, Edinburgh, Aberdeen and Southampton airports, plus interests in the U.S. and Italy.
Operational details	**2009 passengers:** 112 million (BAA total global passengers, excluding Gatwick which has now been sold). **Principal airlines:** British Airways, BMI, easyJet, Ryanair. **Configuration:** Heathrow: Two runways, five terminals. Gatwick: One runway, two terminals. Stansted: One runway, one terminal (three satellites). Glasgow: One runway, one terminal (three piers). Edinburgh: One main runway, one terminal. Aberdeen: One runway, one main passenger terminal, three helicopter terminals. Southampton: One runway, one terminal.
Type of privatization transaction	Public tender offer. Freehold sale.
Interest	100%.
Date of transaction	June 2006.
Valuation	**Transaction value**: £10.1 billion (approx. US$19 billion). **Implied Enterprise Value**: £16.3 billion (approx. US$31 billion)based on total consideration paid for shares plus the value of debt. **EBITDA multiple**: 16.1x.
Context	• UK's biggest airport group. • Initially privatized in 1987. • Initial hostile takeover offer from Ferrovial, a Spanish construction company, was subsequently raised and recommended by BAA's Board.

b) Transactional and Governance Structure

As BAA was a company listed on the London Stock Exchange at the time of the acquisition, the timetable for the transaction was determined by the UK Takeover Code. This includes a number of key trigger points and dates, including:

- A shareholder increasing its interest in a public company above 29.9% must make an offer for this company.
- An offer document must be lodged within 28 days of announcing the offer.
- Any revision to the offer must be published within 46 days of the publication of the offer document.
- The 60th day after publication of the offer document is the last day on which an offer can be declared unconditional as to acceptances.

BAA was privatized with a 'golden share' which effectively gave the UK Government the final say over several types of major decisions such as takeovers or asset divestments. In 2003, the concept of a golden share was found to be illegal under EU law. Subsequently the UK Government divested itself of the BAA golden share at which point hostile takeover became possible. A similar withdrawal of a golden share led to the hostile takeover of Copenhagen Airport.

The offer made by Ferrovial in April 2006 (and increased subsequently) came with a number of conditions. The two most important of these were a minimum acceptance level of 90%, and the absence of proceedings commenced by EU competition authorities. In June 2006, Ferrovial announced that it held approximately 84% of BAA's share capital. All conditions were either complied with or waived, and the offer was declared unconditional.

At the time of the takeover battle for BAA, it was rumored that several other bidders were interested in making an offer. However, after BAA's Board decided to recommend Ferrovial's increased offer of 935-pence-per-share, no other bidders came forward.

c) Political and Regulatory Environment and Objectives of the Privatization

The transaction was a secondary sale rather than a privatization. It was not initiated or supported by the UK Government, and had originally been prevented by the "golden share" mechanism mentioned above.

The takeover offer was the result of a desire on the part of Ferrovial, the successful acquirer, to expand its interests in the airports sector. At the time of the transaction, Ferrovial explained to its investors that BAA was an attractive acquisition target as a result of its stable regulatory framework, high capital expenditure requirements and resilient revenues.

Following the acquisition, in March 2007, the Competition Commission commenced a market investigation, triggered by an investigation by the Office of Fair Trading which sought to determine whether the supply of airport services by BAA restricted or distorted competition in the UK. The UK institutions involved insist that this was not a response to foreign ownership of BAA, though at the very least the timing of the investigation appears to have been influenced by the presence of a bid. Nevertheless it may well be that the BAA precedent may make international investors more reluctant to invest in UK companies.

The findings of the investigation were published in March 2009, and included a requirement for BAA to sell Stansted and Gatwick, and either Glasgow or Edinburgh airport. BAA successfully challenged this outcome at the Competition Appeal Tribunal, on grounds of apparent bias. At the time of writing, an appropriate response to this judgment was being considered by all parties. However, BAA sold Gatwick to the Global Infrastructure Partnership prior to the Competition Appeal Tribunal Verdict.

d) Economic and Other Regulation

At the time of the transaction, three of BAA's airports (Heathrow, Gatwick and Stansted) were subject to price regulation by the Civil Aviation Authority (CAA). Price caps are determined for regulatory periods of five years. In June 2006, the CAA was consulting on price caps for the regulatory period 2008-2013. Ferrovial therefore took on the regulatory risk associated with the price cap determination process. Final price caps were announced in March 2008 for Heathrow and Gatwick, and in March 2009 for Stansted.

e) Lessons Learned

This transaction was a secondary sale, in which a Spanish construction firm launched a hostile takeover of the publicly listed BAA. It is a consequence of the initial privatization by IPO, and the ending of the "golden share" arrangement, that the Government was not able to influence the ownership of BAA shares. In the wake of the acquisition of BAA by Ferrovial, concerns have been raised both about the level of debt used by Ferrovial to fund its acquisition, and about the monopoly position occupied by BAA airports.

- Under a full IPO arrangement, with the shares freely traded in the market, there are likely to be major limitations on the ability of Governments to exercise control over the identity of the airport's shareholders, unless a "golden share" is maintained;
- Substantial care will need to be given to the design of any "golden share" or similar measure to ensure that it is sustainable into the long term;
- Any decisions to restructure the industry – for example to improve competition – are best undertaken prior to, or at the time of, privatization, where there will be no possibility of resulting loss to investors; and
- It may be desirable to include provisions on capital structure in airport regulation – as will be possible under the proposed new license based UK regulatory regime for airports.

Relevance to Privatizations in a U.S. Context

BAA was originally the subject of a 100% IPO, and the Government's clear preference was for the company shareholdings to be widely held. In the U.S. too, it may well be that the plans for an airport at the time of an original sale would be vulnerable to commercial decisions made in a free market. A number of the specific lessons are primarily related to the specific position of UK privatizations. However the need for care in any attempts to maintain control post privatization may well be relevant. The BAA experience may also indicate a need for very careful consideration of any potentially desirable long term restructuring of airport groups (for example to promote long term competition) before privatization takes place.

Berlin Airports

a) Transaction Summary

Item	Description
Airport	**Berlin Airports:** Schönefeld: To be re-opened as Brandenburg / BBI in 2011. Tegel: To be closed in 2011. Tempelhof: Closed in 2008.
Operational details	**2009 passengers:** Schönefeld: 7 million. Tegel: 14 million. Tempelhof: Closed in 2008. **Principal airlines:** Air Berlin. **Configuration:** Schönefeld: Will have two parallel runways and one terminal. Tegel: To be closed in 2011. Tempelhof: Closed in 2008.
Type of privatization transaction	Trade sale. Concession. Failed.
Interest	100%.
Date of transaction	1997 – 2003
Valuation	**Transaction value:** n.a. **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• Berlin's three main airports, Schönefeld, Tegel and Tempelhof, were pooled within a single holding company in 1991. • In 1996, a decision was taken that Schönefeld would become the main airport for Berlin. • A new, privately funded international airport would be constructed on its site. • Privatization commenced in 1997.

b) Transactional and Governance Structure

The preparations for privatization effectively started in 1991 when Berlin's airports were merged together into a single company, BBF. The location of the new airport was decided upon in 1994. In 1996, the decision was taken that this airport should be privately funded by means of the privatization of the existing BBF and the new airport company BBI. The bidding process was complex and required the bidders to put substantial resources into providing detailed master plans and designs for the airport and also to provide full business plans as part of their offers. Partly as a result of the substantial nature of these initial requirements, offers were received in 1998 from only two bidders - consortia led by Hochtief advised by Fraport and IVG advised by Vienna Airport. Hochtief is a construction company with investments in infrastructure assets including airports. IVG is a real estate and asset management company.

In 2000, after a long battle in the courts over the process followed and the conduct of the bidders, the two consortia submitted a joint bid. The privatization was abandoned in 2003 due to a failure on the part of the buyers and sellers to agree on risks and financing.

The detailed conditions of the proposed sale were not made public. It is known, however, that the successful bidder would have been required to invest substantially in the new airport.

c) Political and Regulatory Environment and Objectives of the Privatization

The main objective of the planned privatization was to obtain financing for the new airport on the Schönefeld site. Berlin was to become the first of a number of German airports to be privatized. Instead, Düsseldorf Airport became the first airport to be partially privatized, when a consortium including Hochtief and Aer Rianta acquired a 50% interest in 1997.

d) Economic and Other Regulation

In Germany, each region has a degree of discretion to determine its own approach to aeronautical charges regulation, though there is a shared general framework. In the case of Berlin, temporary price cap regulation was developed in the late nineties. The intention was that aeronautical charges would be subject to price cap regulation post privatization, but these plans were abandoned once it transpired that the privatization would not proceed.

e) Lessons Learned

This failed privatization suffered from three major setbacks. These were:

- A reluctance by potential bidders to shoulder the major costs of preparing a bid to the onerous specifications made by the company;
- A legal setback in relation to the manner in which the tender process was run. Complaints from an unsuccessful bidder, driven in part by the substantial costs they had incurred, were upheld in court; and
- A downturn in the global economy, and a subsequent failure of the buyers and sellers to agree on risks and financing. These issues may have been compounded by the fact that the construction of a new airport at significant cost was envisaged as part of this process.

Lessons learned include:

- Considerable consideration should be given to whether a complex and/or expensive and resource consuming bidding process is necessary or desirable. Substantial up front costs are likely to limit the field of bidders to the potential disadvantage of future airport users (who may be better served by a wider choice of well qualified potential new operators) as well as potentially reducing the returns to sellers;
- A tender process which will stand up to legal scrutiny is crucial to the successful completion of a privatization; and
- Privatizations can be made significantly more difficult where significant investment is required, particularly if the investment requirements are very ambitious and inflexible, and there are also substantial risks.

Relevance to Privatizations in a U.S. Context

The problems of setting up a privatization process which includes sufficient scrutiny to ensure a high quality bidder with attractive plans for the airport - without creating a process which in itself deters some good bidders and thus reduces choice -is a complex and important one. Despite the fact that most U.S. privatizations will not involve major green field airport projects, these lessons appear potentially relevant.

Brussels Airport

a) Transaction Summary

Item	Description
Airport	The Brussels Airport Company.
Operational details	**2009 passengers:** 17 million. **Principal airlines:** Brussels Airlines, easyJet. **Configuration:** Three runways (two parallel). One terminal. Two piers.
Type of privatization transaction	Trade Sale. Freehold sale.
Interest	70%.
Date of transaction	December 2004.
Valuation	**Transaction value:** €735 million (approx. US$ 977 million) as a single upfront payment. **Implied Enterprise Value:** €1.6 billion (approx. US$ 2.1 billion) derived from the implied value of 100% of the equity and adding the value of debt.. **EBITDA multiple:** 12.3x.
Context	• Pre-transaction, airport was owned by the Belgian State (64%) and Belgian financial institutions (36%). • Interest for sale was 'up to 70%', with the Belgian State wishing to retain at least 30%. • Other shareholders to base their decision to sell on the attractiveness of the offer.

b) Transactional and Governance Structure

The Belgian State and the other shareholders jointly appointed one financial advisor to conduct the sale of up to 70% of the shares. This advisor then designed the sale process, which consisted of two stages.

In the first stage, an information memorandum was produced and provided to interested parties in May 2004. Indicative bids were requested in June 2004. The Belgian State and other shareholders then compiled a shortlist of bidders who were taken into the second stage of the sale.

In this second stage, which commenced in July 2004, shortlisted bidders were given access to a data room which contained commercial, financial, and legal documentation pertaining to the airport. Final bids for the airport were due in September 2004. The Belgian State and other shareholders selected a preferred bidder, and approximately two months were dedicated to the negotiation of the final documentation, which meant the transaction was completed in December 2004.

The successful bidder was a consortium led by MAp (formerly known as Macquarie Airports). Other participating investors included the Macquarie European Infrastructure Fund and Macquarie Bank. The number or identity of competing bidders for Brussels Airport was not publicly announced as part of the sale process.

As part of the sale, the Belgian State granted the airport company an operating license for an indefinite period of time. A number of requirements were imposed upon the airport company as

part of this license, including the requirement to develop and maintain the airport infrastructure and the requirement to produce five-year business plans.

c) Political and Regulatory Environment and Objectives of the Privatization

The fact that a number of different selling shareholders were involved in this transaction means that there were a number of objectives. For the Belgian financial institutions, who owned 36% of the airport prior to the sale, it is likely that the main objective was financial. In fact, the participation of these shareholders in the sale was not guaranteed at the start of the process, and depended on the attractiveness of the transaction terms.

It is likely, however, that the Belgian State had other objectives in addition to maximizing the proceeds from the transaction. First, the Belgian State indicated its intention to retain at least 30% of the shares in the airport after the transaction. It is therefore probable that the Belgian State assessed potential acquirers of the remaining shares for their suitability as a co-shareholder: the Belgian State had to have confidence it could cooperate successfully with the winning bidder. Second, considering the importance of the airport to the Brussels region and to Belgium as a whole, it is to be expected that the Belgian State took great interest in the business plans which potential acquirers were required to develop for the airport. Likewise, the track record and experience of potential acquirers in the area of airport ownership and operation is likely to have been one of the Belgian State's selection criteria.

d) Economic and Other Regulation

The operating license also covers tariff regulation for Brussels Airport. This license provides the airport with the freedom to set charges provided these are agreed with airline users, and provided certain regulatory principles are followed. In the event of failure to agree there is provision for the regulator to require further consultation or ultimately to set prices directly.

An important principle included in the license deals with the degree to which regulated (i.e. aeronautical) activities are subsidized by non-regulated (i.e. non-aeronautical) activities. The license envisages that this cross-subsidy is reduced to zero over a period of four regulatory periods, i.e. over 20 years. It allows some scope for acceleration of this process in a scenario where charges at the airport are lower than charges at a defined set of comparable airports.

The implication of these provisions in the license is that airport charges are currently being set on a hybrid basis, and are moving to full dual till basis over time.

e) Lessons Learned

The privatization of Brussels Airport is generally seen as successful, particularly in light of the proceeds raised by the Belgian Government as a result. The regulatory regime put in place as part of the privatization appears to have had sufficient flexibility to deal with the subsequent challenges faced by the airport, which included the economic downturn and changes in the airline community using the airport. Lessons learned include:

- Privatizing under a trade sale and applying a relatively straightforward process can raise significant proceeds for a Government, particularly in a strong economic climate;
- The presence of a continuing Government stake may not be a deterrent for a successful privatization, particularly if the private sector investor is allowed a controlling stake;
- It is possible for a regulatory regime to be driven primarily by negotiations between the parties, with the regulator acting only in a fall back role; and

- A well designed, flexible and robust light handed regulatory regime, incorporating clearly set out principles can be attractive to investors while still providing protection to users.

Relevance to Privatizations in a U.S. Context

Although Brussels is a major capital city airport, its sale was a relatively simple and straightforward process in the context of privatization internationally. Although the US context may be different in a number of ways, the first of these bullet points may well be directly relevant to U.S. privatizations, while the second may become relevant in any cases where continuing stakes by cities or other agencies are considered. However, the differences in the role played by formal regulation in the U.S. may make the last two bullet points of less direct applicability.

Budapest Airport

a) Transaction Summary

Item	Description
Airport	Budapest Ferihegy International Airport.
Operational details	**2009 passengers:** 8 million. **Principal airlines:** Malév, easyJet, Air Berlin. **Configuration:** Two parallel runways. Three terminals.
Type of privatization transaction	Trade sale. Concession.
Interest	75%.
Date of transaction	December 2005.
Valuation	**Transaction value:** £1.3 billion (approx. US$2.5 billion). **Implied Enterprise Value:** n.a. **EBITDA multiple:** 29.7x (based on forecast EBITDA for 2005 at the time of acquisition).
Context	• Main airport in Hungary. • Intention to sell a majority interest announced in June 2005. • Interest for sale was 75%, with a possibility of this being increased to 100% either at the time of the privatization or subsequently. • Concession term 75 years.

b) Transactional and Governance Structure

The Budapest Airport privatization process started with a pre-qualification stage in June 2005. Once a long list of bidders had been selected, a process consisting of two further stages was announced. An information memorandum was circulated to bidders and indicative bids were requested by August 2005. A shortlist of bidders was then given access to due diligence materials in September and October 2005, with final bids due in November 2005. Transaction documentation was distributed to bidders as part of the due diligence process, allowing for swift completion post submission of final bids. BAA announced its acquisition of Budapest Airport on 18 December 2005.

The most important condition of the sale was the treatment of the 25% interest in Budapest Airport which remained with the Hungarian State post-privatization. Bidders were told that they would have pre-emption rights over this 25% interest, but also that the Hungarian State had a put-option and could force the successful acquirer to purchase this 25% interest at any time up until 31 December 2011 (subject to legislation being amended). This put option was exercisable at a price equivalent to price paid for the 75% interest, increased at 11.5% per annum.

As evidenced by the EBITDA multiple paid by the successful acquirer, this privatization took place at a time when infrastructure assets, and airports in particular, were in high demand. BAA was the successful acquirer of Budapest Airport. The number and identities of other bidders were not announced by the Hungarian State, but it is believed that many came forward at the initial stage of the process.

The asset management contract put in place as part of the privatization enabled the Hungarian State to transfer the operation of Budapest Airport to the private sector while ensuring that the fixed assets remained in State ownership, as required by law. Legislation was amended at the time of the

privatization to enable the Government to sell up to 100% of the shares in the airport if it wished to do so.

c) Political and Regulatory Environment and Objectives of the Privatization

It is likely that the Hungarian State sought to fulfill a number of objectives as part of the privatization of Budapest Airport. Maximizing the transaction proceeds to the Hungarian State can reasonably be expected to be one of those objectives, particularly considering the undertakings given to bidders in relation to the availability of up to 100% of the shares. Given the importance of Budapest Airport to the Hungarian economy, it is probable that the bidders' plans for the future of the airport were also of key importance to the Hungarian State.

d) Economic and Other Regulation

At the time of the privatization, the Hungarian State proposed a new regulatory regime for Budapest Airport. This envisaged the use of a price cap formula and an RPI-x mechanism. The value of x was to be set for six years (2006 –2011), in Euros rather than Hungarian forint. The Hungarian State indicated a preference for self- regulation beyond 2011, with a default price cap of RPI–1%. Commercial revenues were not included in the determination of the price cap.

e) Lessons Learned

The privatization of Budapest Airport occurred at a time when infrastructure was a very popular asset class with investors, and significant proceeds were raised by the Hungarian Government. The interest for sale, a majority stake with a possibility of acquiring 100% once the required legislation had been approved, proved to be attractive to investors. It should be noted that BAA subsequently sold its interest in Budapest Airport and a number of other non-UK airport assets following its acquisition by Ferrovial. Key lessons learned include:

- Privatizing using a relatively straightforward process can raise significant proceeds for a Government, particularly in a strong economic climate; and
- Mechanisms can be found to offer new owners substantially the same benefits as an outright sale while maintaining formal ownership on the part of the state.

Relevance to Privatizations in a U.S. Context

The sale of Budapest took place in a very different central European economic and political environment from that of U.S. airports. Nevertheless, both of these lessons appear potentially relevant to U.S. privatizations

Copenhagen Airport

a) Transaction Summary

Item	Description
Airport	Copenhagen Airport
Operational details	**2009 passengers:** 22 million. **Principal airlines:** SAS, Cimber Sterling, Norwegian Airlines. **Configuration:** Two parallel runways, one cross runway. Three interconnected passenger terminals.
Type of privatization transaction	Public tender offer. Freehold sale.
Interest	52.4%.
Date of transaction	October – December 2005.
Valuation	**Transaction value: Buyer's acquisition cost** A$375 million (approx. US$281 million). **Implied Enterprise Value:** n.a. **EBITDA multiple:** 10.3x
Context	• Largest airport in Scandinavia. • Incorporated as a public company in 1990 and partially privatized in 1994 with a 25% IPO, followed by further sales in 1996 and 2000.

b) Transactional and Governance Structure

Like BAA, Copenhagen had been privatized using an IPO mechanism (in this case, through successive partial sales) with ownership being protected by a mechanism equivalent to BAA's "golden share" preventing a single private shareholder from owning more than 10% of the shares. Unlike BAA, however, the Government retained a 39% stake in the company.

In May 2004 the Danish Government (like the UK Government in the case of BAA) was forced to relinquish its share ownership limits, making a takeover a possibility. In February 2005, Macquarie Airports announced that it had purchased an 11.3% stake in Københavns Lufthavn A/S through purchases in the open market. Further incremental purchases were made to take the stake to 14.7% by October 2005, when Macquarie Airports announced its intention to make a tender offer for the remainder for DKK 2,000 per share at a 31% premium to its previous share price, subject to securing majority control.

In December 2005, Macquarie Airports announced that the tendered offer had been successful and that it held 52.4% of the total shares. The Danish state chose to hold its stake in the company and remains the second largest shareholder, currently owning 39.2% of the shares.

As conditions for completing the tender offer, Macquarie Airports announced that it required more than 50% of the issued shares and voting rights and that all necessary regulatory approvals must be secured.

By moving quickly, Macquarie Airports became effectively the only party able to acquire a majority interest in Copenhagen Airport at this time. At the time of the transaction, Macquarie Airports, a fund formerly managed by Macquarie Bank, owned major stakes in Bristol Airport, Birmingham Airport (both UK), Aeroporti di Roma (Italy), Brussels Airport (Belgium) and Sydney Airport (Australia). The investment in Copenhagen Airport was seen as an opportunity to secure control of

a further major European capital city airport. The specialist airport fund was supported in its investment by other funds managed by Macquarie Bank, notably the Macquarie European Investment Fund 3 (MEIF3).

c) Political and Regulatory Environment and Objectives of the Privatization

The Danish Government did not encourage or support an acquisition of a majority of the shares in Copenhagen Airport by Macquarie Airports. However, following the loss of its "golden share" the Government did not have any powers to prevent this from happening.

d) Economic and Other Regulation

Formally the right to set airport prices lies with the Minister of Transport. Up until recently, however, prices were set for successive 3 year periods by relatively informal direct negotiations between the airport and airlines, subject to final approval by the Ministry. Subsequent to the acquisition of a majority interest by Macquarie Airports, the Danish CAA (SLV) adopted a more formal role as a regulator.

In 2008, following an extensive consultation with the airport and airlines, the SLV established a more formal framework for charges setting. This continued the previous approach of relying principally on direct negotiations to set prices, but also set out: a fixed timetable for discussions; specific requirements for information provision; and a 'fall back position' which the regulator would use to set prices in the event of non-agreement.

The fall back provisions, which would be expected to have a major influence on the expectations of parties, incorporated: 4 year pricing periods; use of a classic 'building blocks' regulatory approach; and a hybrid till approach under which aeronautical charges were subsidized by a proportion of non-aeronautical returns after all costs. In this case the proportion of commercial returns considered may vary between 10% and 50% depending on Copenhagen's continuing competitiveness with other airports.

The first price setting under this arrangement took place in 2009 and concluded in a 5.5 year agreement between the airport and airlines covering prices and capital expenditure. This will be extended to service levels by further agreement during 2010.

e) Lessons Learned

This transaction can effectively be described as a secondary sale, with Macquarie Airports purchasing the shares on the market many years after the initial privatization took place by means of an IPO. The fact that Copenhagen Airport's shares were publicly listed, coupled with the loss of ownership restrictions, meant that the Government did not have any powers to prevent this transaction from occurring. Nevertheless , no major issues appear to have arisen since the purchase. Key lessons learned include:

- In an IPO scenario, the Government may not necessarily be able to exercise long-term control over the identity of the airport's shareholders;
- The presence of a continuing Government stake is not necessarily a deterrent to investors in airports; and
- Light handed regulation can work effectively without the need for formal price controls, especially when combined with well defined fall back provisions in the event of failure to agree.

Relevance to Privatizations in a U.S. Context

The Copenhagen transaction like (that involving BAA) was a market bid for a company which had already been privatized through an IPO, and where the preference of the Government on privatization was for a continuation of widely spread shareholdings in an autonomous company. The potential difficulties in maintaining controls post privatization may well ultimately be relevant for the U.S. The possibility of U.S. cities or other agencies retaining a stake post privatization may well also make the second bullet point relevant in some cases. The third bullet point covering regulation may be of lesser importance in the U.S. where the role of formal regulation is less significant.

Delhi Airport

a) Transaction Summary

Item	Description
Airport	Indiri Gandhi International Airport, Delhi.
Operational details	**2008 passengers:** 24 million. **Principal airlines:** Air India, GoAir, Indian Airlines. **Configuration:** Three runways (one built since privatization), two main terminals (the 500,000m^2 Terminal 3 is to be inaugurated in July 2010).
Type of privatization transaction	Trade sale. Concession.
Interest	74%.
Date of transaction	December 2005.
Valuation	**Transaction value:** Rs 150 crore upfront payment (approx. US$32 million), plus mandatory capex, plus 46% revenue share. **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• In mid-2004, Airports Authority of India (AAI) invited bids for Delhi and Mumbai Airports. • Urgent need to ensure upgrading and addressing of shortage of capacity. • At Delhi, modernization required included a new international terminal.

b) Transactional and Governance Structure

When the process was first announced, the Indian Government expected to pick the winning bidders for Delhi and Mumbai Airports by the end of 2004. However, a number of delays were experienced. In September 2005, press reports indicated that five bidders had come forward for Delhi Airport, and that the successful bidder was to be selected by the year-end.

In December 2005, the Indian Government conducted a selection process by means of a technical evaluation and a financial evaluation. In the technical evaluation, the Indian Government assessed the bidding consortia's credentials in the areas of airport operation and development, and awarded scores in each area. The financial bids consisted of a revenue share percentage: each bidding consortium had been asked to propose a percentage of airport revenue which it would be willing to pass to AAI each year. In February 2006, the Indian Government announced its final decision to award the Delhi Airport project to the consortium led by GMR (a Bangalore-headquartered global infrastructure major with interests in the airports, energy, highways, and urban infrastructure sectors).

Shortly after the selection of the GMR consortium as successful bidder, the privatization was approved by the Cabinet. Once this approval had been obtained, a joint venture company was formed, with the GMR-led consortium as its majority shareholder (74%) and AAI as the minority shareholder (26%). It is interesting to note that one of the conditions of the privatization was that no foreign company could own more than 49% of the new joint venture company, which meant that all bidding consortia were led by Indian companies.

Two months after approval was received from Cabinet, in April 2006, the new joint venture company signed an operating, maintenance, and development agreement with AAI, with a total term of 60 years. This agreement covered, among other things, mandatory capital expenditure projects, service quality requirements, and details of the annual fee payable to AAI, i.e. 46% of revenues as per the GMR consortium's bid. In the same month, the joint venture company also signed a state support agreement with the Government of India. This agreement covered, among other things, the principles for tariff fixation.

Members of the GMR consortium included Fraport and Malaysia Airports Berhad. The number and identity of other bidders was never disclosed by the Indian Government, but when the proposed privatization was first announced, it was rumored in the press that ten bidders were interested in participating in the tender. Similarly, press speculation suggests that five bidders remained in September 2005. Of those five, two bidders reportedly passed the technical evaluation conducted by the Indian Government.

c) Political and Regulatory Environment and Objectives of the Privatization

In its annual reports, the Indian Ministry of Civil Aviation outlines the key objectives of the privatizations of Delhi and Mumbai Airports. Private sector funding was sought to ensure the restructuring and modernization of the two airports. This is also evidenced by the mandatory capital expenditure schedules which potential acquirers were asked to commit to as part of their bid. In the case of Delhi, this included a new runway and a new terminal, to be completed by a defined date.

At the same time, the Indian Government had to safeguard the future of the other Indian airports within the control of AAI, many of which would not be financially viable without financial support sourced from larger airports such as Delhi and Mumbai. The revenue share approach, in which the successful acquirer commits to passing a certain percentage of its revenues to AAI each year, seeks to address this issue.

d) Economic and Other Regulation

As the India's Airport Economic Regulatory Authority (AERA) had not been set up yet at the time of privatization, the state support agreement between the Government of India and Delhi Airport's new joint venture company only included relatively high-level principles in relation to the regulation of tariff. The agreement envisages a hybrid till regulation model, in which price caps are calculated based on the customary aeronautical building blocks (operating expenditure, depreciation and return on Regulatory Asset Base or RAB), less 30% of the non-aeronautical revenues generated by the airport. At the time of writing, AERA is in the process of consulting on a regulatory regime for all of India's airports. Its most recent consultation document indicates a preference for single till regulation, although there is an acknowledgment that agreements put in place at the time of the privatization of Delhi Airport will be taken into consideration.

e) Lessons Learned

The privatization of Delhi Airport (and Mumbai Airport) presented an interesting challenge as these airports historically cross-subsidized some of the smaller loss-making airports in India. In addition, significant upfront investment in the airport infrastructure was required. For this reason the privatization was structured as a revenue share arrangement, without a significant upfront payment to the Government but with a commitment to pay a certain percentage of revenue to AAI each year.

This structure and the high level of revenue share bid by the successful acquirer currently presents a challenge for the implementation of an effective economic regulatory regime, since it provides a

considerable challenge to the viability of both continuing operations and new investment. Key lessons learned include:

- Structuring a privatization in an environment where there are substantial requirements for concession payments (for example to cross-subsidize smaller airports) and significant investment is likely to be challenging;
- A tender process leading to very high levels of concession payments can potentially cause longer term problems, since it may threaten the viability of airport operations or new investment (to the detriment of airport users) and cause issues in the design of effective economic regulation. There may be advantages in such circumstances in requiring bidding parties to produce a credible business plan which makes clear how the new buyers intend to secure such levels of payment without ultimately creating potential problems for airport users as a result of excessive pressures to cut costs and minimize capital expenditure;
- The regulation process must take into account the undertakings made by Governments at the time of privatization since otherwise investors will lose confidence in the future preparedness of regulatory institutions to ensure that their investment will be remunerated. This in turn will endanger the successful future privatizations of airports and other infrastructure; and
- Unless exceptional circumstances prevail, the form and conditions of the regulatory framework should be defined before privatization rather than after the sale.

Relevance to Privatizations in a U.S. Context

The problems of dealing with the consequences of seeking high concession payments for tenders may well be relevant for the U.S. in some contexts, as might be the difficulties of dealing with over-bidding based on overoptimistic business plans. The first two of these bullet points therefore appear potentially directly relevant to U.S. privatizations. The last two are less significant since the role of formal regulation in the U.S. is relatively limited.

Japan Air Terminal

a) Transaction Summary

Item	Description
Airport	Japan Air Terminal (JAT)
Operational details	**2009 passengers:** 61 million (at the main base of Tokyo International Airport (Haneda). **Principal airlines:** Japan Airlines (JAL), All Nippon Airlines (ANA). **Configuration:** Two parallel runways, one cross runway. Fourth runway under construction. Three passenger terminals.
Type of privatization transaction	On market purchase. Freehold sale.
Interest	19.9%.
Date of transaction	July – October 2007.
Valuation	**Transaction value:** Buyer's acquisition cost A$475 million (approx. US$388 million). **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• JAT was established in 1953 with the purpose of constructing, managing and operating the passenger terminals at Haneda Airport, Tokyo. • Runways are owned and operated by an separate Government body. • JAT subsequently secured responsibility for operating the retail and food and beverage businesses at Narita, Kansai, and Chubu airports. • Haneda Airport handles the majority of domestic flights to Tokyo, with Narita Airport handling the majority of international flights.

b) Transactional and Governance Structure

JAT was originally a private company, and in 1990 listed on the Tokyo Stock Exchange. In mid-2007, a consortium led by Macquarie Airports started making on-market purchases of shares in JAT. Prior to Macquarie Airports' involvement, share ownership had been dominated by Japanese corporates (including JAL and ANA), institutional investors, and pension funds.

The consortium led by Macquarie Airports made direct share purchases in the market. No formal purchase offer was made. The share levels disclosed over time were:

- 25 July 2007 – 9.56%;
- 13 September 2007 – 12.47%; and
- 24 October 2007 – 19.9% (of which 14.9% Macquarie Airports itself), becoming the largest single shareholder.

Macquarie Airports described its investment in JAT as a long-term strategic investment. However, any ambitions to replicate the 'incremental/gradual' market approach used by Macquarie Airports at Copenhagen Airport to secure a majority shareholding were quickly dampened by the Japanese government. On the announcement of Macquarie Airports increasing its shareholding to 19.9%, the Japanese Transport Minister raised concerns about the level of foreign ownership, suggesting that a cap should be put in place.

In May 2009, JAT announced its intention to buy back 22% of its shares (at 1,000 yen each) through an off market tender offer. Macquarie Airports offered its entire 14.9% stake to JAT and exited from its investment. Following its exit, Macquarie Airports suggested that the limited stake they had been able secure effectively meant that they would not be able to adopt their preferred "active management" approach based on majority ownership.

c) Political and Regulatory Environment and Objectives of the Privatization

Japan has a reputation for caution over foreign involvement in airports, with JAT as the only airport company where foreign ownership was possible. Other large Japanese airports remained under public ownership with the debate over foreign ownership levels at Japanese airports remaining a key issue in the proposed privatization of Narita Airport until this proposal was shelved by the new government in 2009.

However, in the wake of Macquarie Airports acquiring its 19.9% stake, the Japanese Government appeared divided over how to proceed. The Foreign Minister proposed plans to limit foreign ownership in Japanese airports to less than one-third (a shareholding of greater than one-third would allow blocking rights during votes). However, the Finance Ministry rejected this proposal, arguing it was at odds with Japan's strategy to attract foreign investment to the country.

Many features of the Japanese Government involvement in JAT were informal and non-transparent. These may have resulted from a perception that the involvement of an active foreign investor would create loss of control and potential embarrassment. The subsequent departure of Macquarie is likely to have deterred at least some foreign investors from future participation in Japan.

d) Economic and Other Regulation

Haneda levies two aeronautical charges:

- A Passenger Facilitation Charge paid by the passengers; and
- A Passenger Service Facility Charge paid by the airlines and intended to cover their share of facility costs.

Formally, both of these were set by the airport and monitored by Government. JAT submits any proposed price changes to the Government together with evidence of changed costs. The company would not proceed with price changes in the face of Government disapproval. In practice, this allowed JAT to maintain charges at a constant level indefinitely, though if resulting profits were seen as clearly 'unreasonable' the company might well face pressure to reduce them.

e) Lessons Learned

The acquisition of an interest in JAT by Macquarie Airports was effectively a secondary sale which followed the initial listing of JAT on the stock exchange. It has highlighted to investors that foreign investment in airports is an area of controversy in Japan, although to date the Japanese Government has not introduced any measures to prevent it. Key lessons learned include:

- In an IPO scenario, the Government will not necessarily be able to exercise control over the identity of the airport's shareholders; and
- Investors are quite reasonably wary about investing in unfamiliar environments where there is a danger that protectionist measures may be imposed. Any such measures will inevitably impact their preparedness to invest in other airports or infrastructure more generally in the country concerned – potentially to the long term disadvantage of airport users.

Relevance to Privatizations in a U.S. Context

Although Government influence may be exercised in a very different way in Japan from that in the U.S., Governments at all levels may have strong preferences on the nature (and possibly nationality) of a future investors). Both of these lessons could therefore potentially be relevant to U.S. privatizations in some circumstances – particularly if overseas bidders seek to become involved.

Juan Santamaría , Costa Rica

a) Transaction Summary

Item	Description
Airport	Juan Santamaría Airport
Operational details	**2009 passengers:** 3.0 million. **Principal airlines:** TACA, Copa Airlines. **Configuration:** One runway, one terminal.
Type of privatization transaction	Trade sale. Concession.
Interest	100%
Date of transaction	2001
Valuation	**Transaction value:** US$170 million investment commitment plus annual fees. **Implied Enterprise Value:** n.a **EBITDA multiple:** n.a
Context	• With the privatization of Juan Santamaría Airport, the Costa Rica Government sought to achieve multiple objectives, including attracting private sector funding for expansion and renovation. • Lack of clarity in the regulatory framework combined with the global traffic downturn post 2001 led to a number of disputes and ultimately a change in ownership.

b) Transactional and Governance Structure

In 2001, a consortium consisting of Bechtel Enterprises and Airport Group International Holdings was awarded a 20 year concession to develop and manage Juan Santamaría Airport in Costa Rica. Bechtel Enterprises subsequently transferred its holding to its subsidiary Alterra Partners, a joint venture of Singapore Changi Airport Enterprise and Bechtel.

Under the concession agreements, a number of annual payments were due from the new airport operator to the Government, including passenger fees, air traffic control fees and a US$1 million per year concession fee. In addition, the new airport operator assumed responsibility for all financial obligations associated with the master plan, estimated to amount to US$170 million. The new operator was required to complete the terminal improvements based on designs and work that had been initiated by the Government.

In the period between 2001 and 2009, a number of difficulties arose. Press speculation suggests that in 2003, there was a disagreement between Alterra Partners and the Costa Rica Government about the interpretation of the economic regulatory framework of airport charges. Alterra Partners claimed that a substantial amount of revenue had been lost as a result. The company reportedly struggled to meet its financial obligations and did not complete the renovations envisaged in the master plan agreed at the time of the award of the concession.

In addition, it appears there were a number of Government agencies involved in the privatization and the subsequent management of the concession. This seems to have resulted in confusion and a relatively heavy-handed approach to oversight, with Government officials retaining many residual controls.

In July 2009, the shareholders of Alterra Partners decided to sell their interest in Juan Santamaría Airport to a consortium consisting of Houston Airport System, the Canadian company ADC and the Brazilian company Andrade Gutierrez Concessoes. The name of Alterra Partners was changed to Aeris Holding. The expansion of the airport is due to be finalised in November 2010, five and a half years later than originally planned. It is understood that the new shareholders took over the outstanding debt and penalties, but received a new 25 year concession in return.

c) Political and Regulatory Environment and Objectives of the Privatization

It appears that the Costa Rica Government was seeking to achieve a number of objectives as part of the privatization of Juan Santamaría Airport. Firstly, investment was required in the renovation and expansion of the airport facilities, and the Government wanted to attract private sector funding to realize this. Secondly, the Government wanted to retain the ultimate ownership of the airport assets. Thirdly, the Government wanted to strengthen the management of the Airport, which had a weak, decentralized management structure and a poor safety record. Finally, the Government wanted to receive ongoing revenues in the form of concession payments and other fees from the airport.

d) Economic and Other Regulation

The regulatory framework developed as part of the Juan Santamaría Airport privatization was unusual in that it was in principle a dual till framework, but additional regulation was developed to cover fees charges by the airport for non-aeronautical services.

Aeronautical charges at the airport were regulated by means of a price cap framework, with the maximum charge increasing each year by US inflation, less an efficiency factor, plus a separate allowance for capital expenditure. The efficiency factor was determined in advance for each year to 2006. There was also a provision to allow for recovery of income in subsequent years, if competitive pressures meant that actual charges were below the price cap.

In relation to non-aeronautical services, the airport operator was required to produce detailed financial reports each year to demonstrate that its fees were in line with average fees for the same services at similar airports.

It seems that there was a lack of clarity in the design of the economic regulatory framework, as it was reported in the press that in 2003, there were disputes between the airport operator and the Government in relation to the maximum tariffs the airport was allowed to charge. It is likely that the global downturn in traffic following 2001 exacerbated these difficulties.

There was also a lack of clarity in the concession agreement, which provided for detailed regulation by multiple Government agencies of operational matters that are typically delegated by the seller to the new operator. This level of oversight by multiple regulators without a clear delegation of authority and responsibility added uncertainty to the both the process and the future prospects for successful operation.

e) Lessons Learned

The privatization of Juan Santamaría Airport encountered issues similar to those encountered as part of the privatization of Argentina's airports. There was a downturn in traffic, a concession fee fixed in US dollars, and in this case the economic regulation of airport charges appears to have lacked the desired clarity. Key lessons learned include:

- Any concession agreement will only work successfully in securing the development of airports if the investment required remains viable. Care must be taken in the design of concession terms to ensure that this is the case even in adverse circumstances;

- Major construction is likely to entail a significant increase in charges – especially if the charges in place before the privatization were set at non-viable levels. The seller should ensure that the implications of this are understood and evaluated in the sales process, and consider consulting the airlines in advance.
- Airport concession agreements should include clear statements of the new airport operator's rights and obligations, and a clear statement of the roles and responsibilities of regulators; and
- A clear framework for the determination of aeronautical charges is crucial to avoid future disputes.

Relevance to Privatizations in a U.S. Context

All of these lessons are potentially relevant to U.S. privatizations, although the role of airlines on final decisions on investments and their relationship to price may mean that the concerns over the impact major construction raised in the second bullet point are mitigated within the Airport Privatization Pilot Program process.

London Gatwick Airport

a) Transaction Summary

Item	Description
Airport	Gatwick Airport
Operational details	**2009 passengers:** 32 million. **Principal airlines:** easyJet, Flybe. **Configuration:** Single runway, two terminals.
Type of privatization transaction	Trade sale. Freehold sale.
Interest	100%.
Date of transaction	December 2009.
Valuation	**Transaction value:** £1.5 billion (approx. US$ 2.5 billion). **Implied Enterprise Value:** n.a. **EBITDA multiple:** 9.4x
Context	• Second largest airport in the UK. • Previously owned and operated by BAA. • In June 2006, a consortium led by Ferrovial, acquired BAA and the company was subsequently de-listed.

b) Transactional and Governance Structure

In March 2009, the Competition Commission ruled that BAA must sell Gatwick Airport. This ruling was subsequently overturned, as described in section c), but Ferrovial had chosen to pre-empt the Competition Commission's ruling and started a sale process in September 2008.

When Ferrovial commenced the sales process, it was reported to be seeking offers in the region of £1.8bn-£2 billion, an amount in excess of the Regulatory Asset Base (RAB) of £1.6bn. However, once the sale process commenced the range of offers submitted to Ferrovial were reported to be at a significant discount to the RAB, some as low as £1.2 billion. In addition to operational difficulties at the airport, the timing of the sale at the peak of the credit crisis and corresponding drops in air traffic levels meant that many of the bidding parties had difficulty in securing the necessary financing.

Several potential bidders initially expressed interest in acquiring Gatwick Airport, including pension funds, airport investment groups, airport operators and even airlines such as Virgin Atlantic. However, only three groups made it to the final stage of bidding:

- Global Infrastructure Partners (GIP), a consortium backed by Credit Suisse and General Electric;
- A consortium including Manchester Airport Group (MAG) and Borealis; and
- Lysander, a consortium led by Citi Infrastructure Partners (who previously expressed interest in Chicago Midway).

All three final bids were reported to be at significant discounts to the RAB, ranging from £1.18 billion to £1.4 billion, and were reported to have been rejected by Ferrovial. However, on 21

October 2009, Global Infrastructure Partnership was announced as the successful party with a winning bid of £1.51bn, roughly equating to a 6% discount to the RAB.

In its 2009 annual results, BAA reported a £277.3 million loss from the sale.

Since formally taking control of Gatwick Airport on 4 December 2009, GIP has sold down equity stakes in the airport to two parties: a 12% stake to National Pension Service, a Korean pension fund and the world's fifth largest pension fund, at a value of under £100million; and a 15% stake to the Abu Dhabi Investment Authority, a sovereign wealth fund.

c) Political and Regulatory Environment and Objectives of the Privatization

In March 2009, the Competition Commission ruled that BAA must sell Gatwick, Stansted and either Edinburgh or Glasgow Airports within two years. This finding came in response to concerns raised by the Office of Fair Trading over BAA's perceived monopoly of airport services in the UK and in particular in the South East of England and Lowland Scotland. In 2008, BAA Airports handled 62% of passengers travelling in the UK and faced criticism that its effective monopoly resulted in lack of investment and compromised service levels.

Ferrovial chose to pre-empt the Competition Commission's ruling and on 17 September 2008 announced its intention to sell Gatwick Airport. It was speculated that Ferrovial opted to bring forward the sales process in order to raise funds to help repay £1billion in debt facilities held by BAA, due for repayment in March 2010.

It should be noted that following the completion of the sale process, the Competition Tribunal upheld BAA's complaint that the Competition Commission's recommendations on the break up of BAA were invalid as a result of the inclusion on the Panel of an advisor who had links with one of the potential bidders.

The Gatwick Airport transaction occurred in a period of great economic uncertainty. The airport's traffic figures had been steadily declining since the beginning of the 2008 summer season, with several airlines ceasing operations entirely. This was the result of challenging global market conditions due to high oil prices and global recession and the shift of transatlantic traffic to Heathrow airport following the Open Skies agreement. Bidders had to make difficult assumptions on how quickly they expected traffic levels to recover.

One of the key issues during the transaction was what assumptions to make on the construction of a new runway within the London airport system, with airfield capacity currently acting as one of the primary constraints on future growth. Furthermore, it was suggested that Gatwick Airport could be removed from price controls (de-designated) following its separation from BAA – a process which would be enhanced by the scope for competition following the construction of further runway capacity in the South East system (initially at Heathrow and Stansted). In practice, however, the new British Government elected to in May 2010 announced that it will not allow the building of a new runway in the London system, leaving questions over how capacity issues will be addressed, and the opportunities for competition unanswered.

d) Economic and Other Regulation

At the time of the transaction, Gatwick was subject to price regulation by the Civil Aviation Authority (CAA). Price caps are determined for regulatory periods of five years based on single till regulation.

This regulatory framework has recently been reviewed and it is planned that a license system, similarly to that used for utilities in the UK, will be introduced, with greater flexibility for the regulator to set terms covering issues such as service, capital expenditure and financing, and an ability for the regulator to relax controls where they prove no longer to be necessary. It may well be that Gatwick as a separate company competing for traffic, will be removed from regulation in due course. At the very least, there is scope for lessening the level of controls and moving towards a more light handed form of regulation

e) Lessons Learned

The Gatwick Airport secondary sale was a transaction which took place in challenging circumstances. There were uncertainties associated with the decision on the location of the next runway in the London area, and economic conditions were challenging. For these reasons, it was not possible for the seller to achieve a premium to the regulatory asset base (RAB). However, it is generally seen as a significant achievement to achieve a sale in the face of these uncertainties. The key lesson learned is:

- Where investors can be convinced of the overall quality of an asset and the strength of its regulatory institutions, transactions can be achieved even in uncertain circumstances. However, the valuation achieved in such circumstances is likely to be lower.

Relevance to Privatizations in a U.S. Context

In this case the transaction was a secondary sale between two private companies of a company which had been originally privatized some time previously. The lesson learned has been limited to the saleability of good assets even in adverse conditions – which would appear to be relevant to future U.S. privatizations.

Manila Airport

a) Transaction Summary

Item	Description
Airport	Manila Airport Terminal 3
Operational details	**2009 passengers:** 24 million. **Principal airlines:** Cebu Pacific, Philippine Airlines **Configuration:** Two runways and three terminals.
Type of privatization transaction	Trade sale. Concession. Failed.
Interest	100%.
Date of transaction	1999.
Valuation	**Transaction value:** n.a. **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• Terminal 3 at Manila Airport was approved for construction in 1997. • A build-operate-transfer contract was awarded to a private sector partner. • A contract was signed in 1999 but a series of legal disputes followed.

b) Transactional and Governance Structure

The third terminal at Manila Airport in the Philippines was approved for construction in 1997. It was the intention of the Government at that time to award a build-operate-transfer contract for Terminal 3 to a private sector partner.

In 1999, a consortium led by Fraport, which included Deutsche Bank and the Asian Development Bank, signed an agreement with the Government which envisaged the consortium funding the construction of the terminal, and in return being able to operate it profitably for a period of 25 years. Shortly thereafter, it is believed that the Philippine Government offered to buy out the consortium led by Fraport for US$400 million. Fraport turned this down as being inadequate and onerous and legal disputes began.

Terminal 3 was seized by the Philippine Government in 2004. Fraport and its consortium partners received a compensation payment which is reported to be far below the cost associated with constructing the terminal, and a further €41.9 million was paid to Fraport under a Federal government investment guarantee for capital investments outside Germany.

The names of any other bidders for the build-operate-transfer contract were not disclosed.

c) Political and Regulatory Environment and Objectives of the Privatization

The main objective of this privatization was to secure private funding for the construction of Terminal 3. The project was the first major project finance project in the Asia-Pacific region.

However, Government policy in the Philippines changed when the Government changed. For example, it is believed that the initial intention was for Philippine Airlines to relocate to Terminal 3, and that Terminal 3 should have exclusivity of international traffic. This subsequently became uncertain. An initial attempt by the Government to buy out the Fraport-led consortium ultimately resulted in a series of legal disputes. The built-operate-transfer contract was said to be incompatible

with certain aspects of Philippine law. The disputes went on for many years, and the consortium led by Fraport has incurred significant losses as a result.

d) Economic and Other Regulation

The regulatory environment in which the build-operate-transfer contract award for Manila Terminal 3 took place is not publicly known. It is believed, however, that disputes around passenger charges arose after the contract award. A departure tax of US$20 per passenger was reduced to US$11, making the project more difficult to finance.

e) Lessons Learned

The failed privatization of Manila Terminal 3 illustrates the risks associated with a change in Government during or shortly after a privatization. If the objectives of the new Government are not the same as those of the outgoing Government, and if the legal system and documentation surrounding the privatization is not sufficiently robust, significant issues can arise for investors and other airport stakeholders. Key lessons learned include:

- When privatization is being considered, where possible ensure broad political support to guarantee a stable process, particularly where the privatization process is likely to be lengthy and/or involves significant investment in the construction of new infrastructure;
- Investors are quite reasonably wary about investing in unfamiliar environments where there is a danger that protectionist measures may be imposed. Any such measures will inevitably impact on their preparedness to invest in other airports or infrastructure more generally in the country concerned to the potential long term disadvantage of airport users and the community more widely; and
- To enhance investor confidence and preparedness to bid, and thus to increase the choice of potential new operators to the potential benefit of users, the legal and contractual arrangements associated with the privatization should build in provisions to protect investors (in the form of rights to compensation) even in the event of a change of Government scenario.

Relevance to Privatizations in a U.S. Context

The general investment environment and the extent of sovereign risk are very different in the Philippines from that of the U.S. The direct lessons learned are accordingly limited. Nevertheless, overseas investors, in particular, are likely to perceive a degree of potential risk in an unfamiliar U.S. privatization program – particularly in its early stages. The Manila experience therefore dramatizes concerns which will also be felt to a more limited extent in privatizations in the U.S. (or in any other country).

Mexican airports

a) Transaction Summary

Item	Description
Airport	34 airports divided into three groups. Includes Cancun, Guadalajara and Monterrey.
Operational details	**2009 passengers:** 47 million in total. Cancun: 11 million; Guadalajara: 6 million; Monterrey: 5 million **Principal airlines:** Aeroméxico, Mexicana. **Configuration:** 34 airports in total. The largest airport, Cancun has two runways and three terminals.
Type of privatization transaction	Trade sale followed by IPO. Concession.
Interest	Initially 15%.
Date of transaction	1998, 1999, 2000, 2006
Valuation	**Transaction value:** • 15% interest in South-East Group: Ps. 1,165 million (approx. US$120 million). • 15% interest in Pacific Group: Ps. 2,453 million (approx. US$261 million). • 15% interest in North-Central Group: Ps. 864 million (approx. US $88 million). **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• As part of the privatization, the country's airports were divided into four groups. • A 15% interest in three of these groups was sold to strategic partners. • Mexico City Airport and a total of 19 small airports remained Government-owned.

b) Transactional and Governance Structure

In 1998, the Secretariat of Communications and Transport (Secretaria de Comunicaciones y Transportes – SCT) published the general guidelines for the participation of the private sector into the Mexican Airports System (Sistema Aeroportuario Mexicano – SAM). As part of this effort, the 58 federally controlled airports were regrouped into five separate administrative entities. The entities included:

- GAP – Pacific Airports Group (Grupo Aeroportuario del Pacifico)
  - 12 Airports, including Guadalajara
- OMA – Central and Northern Airports Group (Grupo Aeroportuario del Centro Norte; known as OMA from 2007 onwards)
  - 13 Airports, including Monterrey
- ASUR – South Eastern Airports Group (Aeropuertos del Sureste de Mexico)
  - 9 Airports, including Cancun
- Mexico City International Airport (Aeropuerto Internacional de la Cuidad de Mexico – AICM)

- Remaining Airports
  - 19 Airports in total
  - Less economically viable

The intent was to privatize the first four entities, which contained the airports with the greatest share of traffic and the most opportunity for growth. Airports in the fifth group were to be run by Aeropuertos y Servicios Auxiliares (ASA). Mexico City International Airport (MEX) continues to be operated by ASA, after social and political problems obstructed the transition efforts.

When the airport groups were created and privatized, the Mexican Government was the principal owner, and controlled 85% of the shares in each group. The remaining 15% of the shares were to be sold to a strategic partner, which was required to be a consortium comprised of 1) a Mexican partner, controlling at least 25.5% of the shares, 2) an Operator partner, controlling at least 25.5% of the shares, and one or more additional investor partners controlling the remaining 49.0% of the shares.

ASUR was established in December 1998, with a consortium called Inversiones y Tecnicas Aeroportuarias bidding $120 million for the 15% stake in the entity. The Mexican Government sold 74% of the company shares in September 2000, followed by another 11% in March, 2005. Ownership of the company is currently split between:

- The Consortium (comprised of Fernando Chico Pardo and Københavns Lufthavn A/S of Denmark)which owns 7.65% of the stock
- Agrupación Aeroportuaria Internacional, which owns 25.3%
- The remainder is traded on the Bolsa Mexicana de Valores (BMV) and the New York Stock Exchange (NYSE).

The winning tender for the 15% share of GAP was accepted in August 1999, at an amount of $261 million. The strategic partner is Aeropuertos Mexicanos del Pacifico, which continues to hold a 15% stake in the company, and is currently comprised of Desarrollo de Concesiones Aeroportuarias, Corporacion Mexicana de Aeroportos, and AENA International. Each of these three companies owns a 5% stake in the entity. The government controlled shares were sold in February 2006.

OMA was established in June 2000, with the strategic partner (SETA) bidding $88 million for the 15% stake. SETA is currently comprised of ICA Aeroinvest and Aeroports de Paris Management, and owns 16.7% of total stock in the company. The remainder is owned by ICA Aeroinvest, which invested further in the entity when it exercised a call option in December 2005 that it had with the Mexican Government to purchase an additional stake in the company. Today, ICA Aeroinvest owns 42% of the company, in addition to the stake that it has through SETA. The remaining shares are owned by institutional and individual investors that have purchased them on the BMV or the NYSE after the Mexican Government auctioned its remaining shares in November 2006.

c) Political and Regulatory Environment and Objectives of the Privatization

The Mexican Airport Law 1995 enables the Mexican Ministry of Communications and Transportation to grant concessions for the construction, operation, maintenance and development of public service airports in Mexico. Such concessions must generally be granted by means of a public bidding process. However, this is not required where the prospective concessionaire is a 'federal public administration' entity. This enabled the Mexican Government to grant concessions without bidding to the four groups of airports which were established in 1997-98. However, the

subsequent selling of 15% interests to strategic partners was conducted through a public bidding process, in which bidding consortia were required to have both Mexican and foreign participation.

The objective of the Mexican Airport Law and the subsequent privatization of the airports was to promote the expansion, development and modernization of Mexico's airport infrastructure by encouraging investment and competition. The Mexican Government also benefited from the sale proceeds, and from the improvements in efficiency identified by the strategic partners.

d) Economic and Other Regulation

The Mexican Ministry of Communications and Transportation is responsible for price regulation. This has been the case since 1999, when the Mexican Antitrust Commission issued a ruling that airport markets are not generally competitive. In the same year, a framework for price regulation was incorporated in the concessions for the Mexican airports.

Maximum prices are set for five-yearly periods. The methodology adopted in the regulation is a forward-looking one which does not rely on a RAB x WACC calculation. Instead aeronautical charges are set at the constant level that ensures that discounted future real aeronautical cash flows (income – operating costs – CapEx) are equal to a pre-determined reference value. The cost of capital to be used for regulatory purposes should be established using 'internationally accepted measures' though at a minimum it is should be based on the yield on long-dated Mexican US dollar denominated bonds plus a Mexican airports risk premium. Maximum prices are adjusted downward each year by applying an efficiency factor. Non-aeronautical revenues are not taken into account, i.e. the framework can be described as dual till.

e) Lessons Learned

The privatization of Mexico's airports was unusual in that the airports were divided into five groups, three of which were privatized more or less simultaneously by means of attracting strategic investors for a 15% interest in the groups. The structure of this privatization has allowed smaller, less commercially viable airports to continue to be cross-subsidized by larger airports, but within the framework of private ownership. The Mexican regulatory regime is now well-established and appears to be working well, although there have been suggestions that the regime favours airports over their airline customers. Key lessons learned include:

- It is possible to privatize a country's airports while at the same time ensuring the ongoing provision of services at airports that are less commercially viable;
- Privatization provides an opportunity for restructuring airport systems to a form which promotes competition, without subsequently disadvantaging investors after the sale has taken place; and
- A stable predictable regulatory regime has promoted substantial expenditure on the development of Mexico's airport system.

Relevance to Privatizations in a U.S. Context

Airport privatization in Mexico employed an approach that was, at the time, highly innovative, and appears with hindsight to have worked well. Although the privatizations envisaged in the U.S. are very different form the break up and sale of a national group, there are still lessons which may be relevant to U.S. privatizations of airport groups. The first two of these bullet points appear relevant to some U.S. privatizations, particularly if they involve airport groups. The last is potentially of less significance since the role played by formal external regulation in price setting in the U.S. is more limited.

Naples Airport

a) Transaction Summary

Item	Description
Airport	Naples Airport.
Operational details	**2009 passengers:** 5 million. **Principal airlines:** Alitalia, easyJet. **Configuration:** One runway, two terminals.
Type of privatization transaction	Trade sale. Concession.
Interest	70%.
Date of transaction	August 1997.
Valuation	**Transaction value:** £17 million (approx. US$ 28 million). **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• First airport in Italy to be privatized in 1997. • 70% interest sold to BAA which had already been involved in master planning at the airport. • 40 year management contract awarded in 2003.

b) Transactional and Governance Structure

In 1995, the company managing Naples Airport (GESAC) worked together with BAA to draw up a master plan for the airport. In 1997, BAA acquired 70% of the shares in GESAC from the City and Province of Naples. In 1999, BAA sold 5% of this interest to Interporto Campania of Nola. A 40 year management contract for Naples Airport was awarded to GESAC in 2003.

No competitive process was held at the time of the privatization of Naples Airport. This was the first airport privatization in Italy, and it took place before the significant increase in demand for airports and other infrastructure assets in the early 21st century. Moreover, the objectives of the state agencies involved in the privatization of Naples Airport were principally related to the realization of the master plan for the airport. As BAA had been heavily involved in the development of this master plan, the company was an obvious candidate for the acquisition of an interest in the airport.

The company remains majority owned by BAA (65%). The other shareholders are City of Naples (12.5%), Province of Naples (12.5%), SEA (5%) and Interporto Campano (5%).

c) Political and Regulatory Environment and Objectives of the Privatization

In August of 1997, the City of Naples and the Province of Naples each sold a 35% interest in GESAC, the Naples Airport management company, to BAA. The state agencies made the decision to privatize because they believed that private management was of strategic importance for the future development of the airport, and of the region around it.

BAA has been closely involved with GESAC since participating in a master planning exercise in 1995. As a result of this exercise, a twenty-year development plan was put in place. It is likely that BAA's engagement in this process gave the relevant state agencies confidence in BAA's capabilities in the areas of airport operation

In 2009, the privatization was described as a success during the opening ceremony of the new airport terminal. The associated press release states that €209 million has been invested in the airport by GESAC, including new passenger and cargo terminals, parking facilities, access roads and baggage handling equipment.

d) Economic and Other Regulation

No regulatory regime governing airport charges at Naples Airport was in place at the time of the sale of a 70% interest to BAA. Since then, regulation in Italy has been evolving, in a complex process involving a number of parties including the Italian Civil Aviation Authority ENAC. ENAC was established in July 1997 and now effectively has responsibility for the day to day implementation of the regulatory system.

The system that is now in the process of implementation at individual airports is of a CPI-X type including the following features:

- Based on building block costs – e.g. operating costs and return of and on capital;
- Four year approval periods;
- Based on the costs of the aviation till less 50% of the margin (in this case defined as returns after all costs including the cost of capital) arising from commercial activities; and
- A specific term for new infrastructure.

This is to be put into effect on an airport by airport basis in a regulatory contract which also covers investment and service requirements. Naples Airport has pro-actively taken steps to secure an early regulatory contract with ENAC leading to a 40% increase in charges between 2007 and 2012.

e) Lessons Learned

The Naples Airport privatization was one of the earlier airport privatizations in Europe. It took place in 1997, but before then the acquirer, BAA, was already closely involved in the master planning of Naples Airport. The regulatory regime in Italy has taken a long time to develop. There was a long period of uncertainty in relation to the regulatory regime, during which time aeronautical charges in Italy did not increase. A 40% increase in charges at Naples Airport has recently been agreed and is being phased in. Key lessons learned include:

- Close cooperation between the airport and its future private shareholder can smooth the way to privatization;
- Uncertainty in relation to the regulatory regime makes an airport less attractive to investors;
- The introduction of formal regulation can offer the opportunity for the airport to secure price increases to recover legitimate costs in a way which was not possible in the absence of a clear mechanism; and
- Where a regulatory regime offers the prospect of a secure, stable and predictable regulation it may be welcomed by airports and their investors.

Relevance to Privatizations in a U.S. Context

Although the context will be different in each case, the first of these lessons is likely to be relevant to some privatizations. The remainder are of less significance since the role of formal external regulation in the U.S. is more limited.

Rome

a) Transaction Summary

Item	Description
Airport	Aeroporti di Roma (AdR) consisting of Rome Fiumicino and Rome Ciampino.
Operational details	Rome Fiumicino has three interconnected terminals and three runways. Ciampino has one runway and one terminal.
Type of privatization transaction	Successively: • A partial initial public offering. • A trade sale leading to a takeover of the listed component. • A secondary sale. • A further secondary sale.
Interest	Initially 45.5%.
Date of transaction	Between 1997 and 2007
Valuation	Various.
Context	• Concession to operate and manage the two Rome airports of Ciampino and Fiumicino awarded to AdR in 1974. • Series of privatization / secondary sale transactions subsequently.

b) Transactional and Governance Structure

AdR was awarded the concession to operate and manage the two Rome airports of Ciampino and Fiumicino in 1974. In 2000, this concession was extended until 2044. In 1997, the Italian Government listed 45.5% of the shares in AdR on the Italian stock exchange. In 2000, the Italian Government sought trade buyers for a further 51% stake. Following a competitive process, the winner was Leonardo, a consortium led by Gemina, a listed Italian company. Other companies within Leonardo were Falck S.P.A, Compagna Italpetroli S.p.A. and Impregilo. Under listing rules, Gemina was required to make an offer for the listed shares resulting in it holding 93% of the total shareholding.

Subsequently, Gemina sold 44.7% of its shareholding to infrastructure funds controlled by Macquarie Bank (MAp, MAG and GIF) in 2003. In 2007, the Macquarie funds sold their stake in AdR to a consortium of Italian industrial interests.

c) Political and Regulatory Environment and Objectives of the Privatization

The objectives of the AdR company as a private entity are set out within the 1997 Prospectus. The company intended to:

- 'Maintain and secure its position within the top tier of consistently profitable airports in the world
- '…continue to develop the AdR System as a transit hub for passengers and freight
- '…continue to develop airport infrastructure…'
- '…continue an ongoing program of rationalization and restructuring with a view to achieving improved cost efficiency and service quality'
- '…fully exploit opportunities offered by major international events planned for Italy….'

The subsequent trade sales and secondary sales emphasized the need through the sales process to strengthen the AdR organization. This was done by bringing into the shareholder group a 'financial' and an 'operational' partner.

d) Economic and Other Regulation

Prior to the 1997 IPO, the airport charges of AdR were regulated on the basis of annual approvals by the Ministry of Transport to charges proposals put forward by the concession company. Within the 1997 IPO prospectus, it was argued that airport fees for AdR would 'benefit' i.e. increase as a result of a new approach set out in the 1997 Finance Bill. In actual fact, a new approach to airport charges at Italian airports has been a long time in development – only at the beginning of 2010 has a system been implemented at certain Italian airports including Naples. A new system is not expected to be implemented at Rome until early 2011.

One reason for the issues has been the long-term problems with the national flag airline Alitalia. Concerns over its well-being have led to abrupt changes in policy to the detriment of secure investment in airports. These problems have been mitigated by the sale of Alitalia in 2008.

The system that has been implemented at Naples, and is likely to be implemented at Rome, is of a CPI-X type including the following features:

- Based on building block costs – e.g. operating costs and return of and on capital;
- Four year approval periods;
- Based on the costs of the aviation till less 50% of the margin (in this case defined as returns after all costs including the cost of capital) arising from commercial activities; and
- A specific term for new infrastructure.

It is likely that the approach, when implemented at the Rome airports, will give rise to increases in charges levels.

e) Lessons Learned

AdR has undergone several changes of ownership within a thirteen year period in private ownership. It is not clear that private ownership has in many areas led to benefits to airlines or passengers. There has been little investment in infrastructure over the period. Traffic levels have not substantially improved. Senior management teams have been frequently replaced. Key lessons learned include:

- The failure to establish a system of regulation has resulted in static or falling airport charges in real terms (airport charges at Italian airports are among the lowest in Europe). This has resulted in the absence of a framework within which infrastructure development can be adequately remunerated. Not only has this deterred investment in airports themselves but it has raised investor concerns about the potential problems associated with wider investment in infrastructure; and
- The perennial economic and financial issues facing Alitalia, the national flag carrier of Italy, have negatively affected the airport and been a contributing factor to the failure to establish an appropriate regulatory regime for AdR.

Relevance to Privatizations in a U.S. Context

These lessons are likely to be of reduced importance in U.S. privatizations since the role of formal external regulation is more limited.

St. Petersburg Airport

a) Transaction Summary

Item	Description
Airport	Pulkovo, St. Petersburg.
Operational details	**2009 passengers:** 7 million. **Principal airlines:** Rossiya Airlines. **Configuration:** Two parallel runways, two terminals.
Type of privatization transaction	Trade sale. Concession.
Interest	100%.
Date of transaction	October 2009.
Valuation	**Transaction value:** €1.2 billion (approx. US$1.8 billion). **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• Only airport of St. Petersburg, Russia. • Operating company established in 2005 when the airline and airport in St. Petersburg were split into two entities.

b) Transactional and Governance Structure

The tender process for the Pulkovo PPP ran from April 2008 to May 2009. The bidding process was an onerous one with parties required to provide detailed capital expenditure and business plans, and to undertake substantial capital expenditure. There were initially nine interested parties, seven of which made it through pre-qualification but only three of which submitted final offers. The Northern Capital Gateway Consortium was announced as the preferred bidder on 25 June 2009, signing the PPP agreement with the City of St. Petersburg on 30 October 2009.

The concession requires the operator to provide €1.2bn worth of investment between 2010 and 2013 to improve the existing facilities. The most significant component of this will be spent on constructing the new terminal. Investment work at the airport is expected to commence in June 2010.

The European Bank of Reconstruction & Development (EBRD) has since agreed to provide a €100 million loan facility to the Project Company to assist in funding the planned works. The World Bank's International Finance Corporation (IFC) is also proposing to provide funds for the project, pending board approval.

Prior to the completion of the selection process, VEB, the Russian state bank, had agreed to provide a ten billion ruble ten year loan to the winning consortia.

The final three consortia which participated in the bidding were:

1. Flughafen Wien, Lider and Gazprombank;
2. Basic Element (Russian) and Changi Airport International; and
3. Northern Capital Gateway Consortium, consisting of VTB Capital, a UK based subsidiary of the Russian Bank (57.5%), Fraport AG (35.5%) and Copelouzos, a Greek investment group (7%).

c) Political and Regulatory Environment and Objectives of the Privatization

The City of St.. Petersburg linked private involvement with a demanding investment program designed to upgrade the airport significantly. Under the terms of the 30 year concession agreement, the Project Company is required to expand, finance and operate the facilities at Pulkovo Airport, including the construction of a new terminal and the provision of significant investment in both airfield and landside infrastructure.

The City had previously hired HOCHTIEF AirPort (HTA) to prepare a master plan and based on these findings Grimshaw & Partners Ltd, a UK based architecture firm, prepared a design for a new passenger terminal.

As well as seeking funds for upgrading infrastructure, the City of St. Petersburg also wanted to attract the services of an experienced airport operator to enhance the operations and service at the Airport.

The project fell under the jurisdiction of the City's PPP law introduced on 20 December 2006 (Law No.627-100 "On Participation of St. Petersburg in Public-Private Partnerships"). This project is one of the first PPP projects in Russia and has been regarded as an example to St. Petersburg and Russia of how a transparent PPP process can be implemented.

d) Economic and Other Regulation

Economic and other regulation was one of the key areas of concern during the bid process. The existing system is based on an annual approval approach with airport operators submitting applications for changes to charges, no more than once a year, to the Federal Service on Tariffs of the Russian Federation (FST). The FST takes into account several factors including operating costs and current market conditions in making its decision. This process had the potential to lead to uncertainty and lack of transparency with charges changing from one year to the next and no clear principles being applied. It was not clear what the likely regime for regulation of airport charges would be in the future.

e) Lessons Learned

The privatization of Pulkovo Airport attracted a lot of initial interest from international investors in spite of the economic downturn and the significant investment requirements between 2010 and 2013. It may be significant that a number of loan facilities were already made available or being arranged prior to the completion of the privatization. A master plan was also made available to the successful bidder. Nevertheless despite these advantages, and despite the fact the privatization is now seen as an example within the region, the number of parties making final bids was limited. Key lessons learned include:

- Offering bidders certainty in some areas, such as financing or future plans for the airport, may make the investment opportunity more attractive, though the requirement to take part in an expensive and resource consuming bidding process may still deter a number of parties, reducing the choice of qualified bidders and potentially acting to the disadvantage of users as well as the seller;
- The lack of a clearly established and transparent regulatory system is likely to deter foreign investors as they may perceive themselves as lacking the degree of protection which local companies may be able to secure. This may reduce the choice of qualified bidders to the potential disadvantage of users ; and

- Even if a number of features of the privatization are unhelpful, a privatization may still be possible in the short term if the asset itself is attractive enough. However privatizations in such circumstances may be prone to long term problems.

Relevance to Privatizations in a U.S. Context

The St. Petersburg privatization is another example of the difficulty in finding the right compromise between ensuring the presence of a well qualified bidders with attractive plans and producing a process which will generate a wide and competitive field from which to select the final buyer. As a result, the first and third of these lessons may well be relevant to some U.S. privatizations. The second lesson is likely to be of lesser importance given the lower role of external formal regulation.

Sydney Airport

a) Transaction Summary

Item	Description
Airport	Sydney Airport or Kingsford Smith Airport.
Operational details	**2009 passengers:** 33 million. **Principal airlines:** Qantas, Virgin Blue, Jetstar, Tiger Airways. **Configuration:** Three runways (two parallel), three terminals.
Type of privatization transaction	Trade sale. Concession.
Interest	100%
Date of transaction	June 2002
Valuation	**Transaction value:** A$5.6 billion (approx. US$3.2 billion). **Implied Enterprise Value:** A$5.6 billion (approx. US$3.2 billion). **EBITDA multiple:** 14.3x (based on 2002/03 EBITDA)
Context	• Australia's largest airport • Last privatization in a long process of corporatizing and privatizing the Australian airports.

b) Transactional and Governance Structure

In the 1980s, a Government Business Enterprise – the Federal Airports Corporation (or FAC) was created for the ownership and operation of 23 Australian airports, including Sydney Airport. This entity was allowed to earn a fair and reasonable return on investment for the Government. In 1996, two Acts were introduced to facilitate the privatization of these airports. The Airports Transitional Act was of particular importance, as it facilitated the lease of these airports to private sector operators.

The privatization of airports in Australia was divided into three phases. The sale of Sydney Airport to the Southern Cross consortium followed the successful sale of Phase 1 airports (Melbourne, Brisbane and Perth) and Phase 2 airports (a further 14 Commonwealth owned airports). After the sale of Sydney Airport, the privatization program was completed with the sale of the remaining three airports in the Sydney region

In March 2001, the Government announced its intention to dispose of its 100% interest in the main Sydney Airport by means of a trade sale process. The process was deferred, however, as a result of the disruptions to the aviation sector and to financial markets caused by the events of 11 September 2001. The process was resumed in March 2002, and the sale to the Southern Cross consortium was announced in June 2002.

The Southern Cross consortium was led by Macquarie Airports (40% interest). Other consortium members included the Macquarie Airports Group (12% interest), Ferrovial (20% interest) and Hochtief (15% interest). The Government did not publicly announce the number and identity of competing bidders for Sydney Airport. At the time of the privatization, press rumors suggested that there were two other bidders for the airport.

An important condition of the sale of Sydney Airport was that the Southern Cross consortium was given the first right of refusal, with a duration of 30 years, to build and operate any second major airport within 100 kilometers of the Sydney Airport.

c) Political and Regulatory Environment and Objectives of the Privatization

The Government's objectives for the privatization of Sydney Airport were publicly announced as part of the sale process:

- Optimize sale proceeds within the context of the broader Government sales and policy objectives.
- Minimize the Commonwealth's exposure to residual risks and liabilities.
- Ensure that the airport lessees have the necessary financial and managerial capabilities to operate and provide timely investment in environmentally appropriate aviation infrastructure at Sydney (Kingsford Smith) Airport.
- Ensure the sale outcome is consistent with relevant airport legislative, regulatory and policy requirements, including environmental, foreign investment, competition, access and pricing policies.
- Ensure fair and equitable treatment of employees of Sydney Airports Corporation Limited including the preservation of accrued entitlements.
- Ensure the airport lessees demonstrate a commitment to the effective development of airport services, consistent with Australia's international obligations.

d) Economic and Other Regulation

In the period from 1996 to 2002, all major Australian airports with the exception of Sydney Airport (which was Government-owned at the time and subject to significant re-development) had been subject to price cap regulation.

In 2001 the charges at Sydney were subject to a separate review by ACCC which led to a full dual till cost based system being introduced. The combination of the cost based approach with the major investments at Sydney to prepare the airport for the Olympics led to an increase in charges of close to 100%. It was intended that prices would remain at this level for 5 years. In 2002, following a review by the Productivity Commission the Government announced that it would remove price caps for the airports, in a light-handed approach under which prices and service levels would instead be monitored by ACCC. This approach was also applied to Sydney Airport, which was privatized in that year.

Under this system the airports have in practice adopted a form of shadow regulation, in which prices are agreed with airlines based on a dual till costs approached in a similar manner to that applied by the ACCC to Sydney. An issue which led to continuing debate was the revaluation of assets, which airports believed had led to unjustified opportunities for price hikes.

In 2007 after a second review of the operation of the privatized airports, the Government announced its intention to continue the monitoring approach to charges at Sydney and other Australian for a further six years when another Productivity Commission review would take place. It also resolved the revaluation issue by setting a retrospective 'line in the sand' after which no further revaluations would be accepted for monitoring purposes.

Recently the Government has announced that there were concerns over the service provided at Sydney Airport and that it intends to bring forward this review for Sydney to 2011.

e) Lessons Learned

Sydney Airport was part of the final phase of airport privatization in Australia. The process was run with a clear set of objectives from the Government, which included maximizing sale proceeds

through a trade sale process. The fact that a 100% interest was for sale is likely to have helped the Australian Government achieve this objective, although it should be noted that there was, and continues to be, a limit on foreign ownership of Sydney Airport. The regulation of Sydney Airport has taken the form of light-handed price monitoring by ACCC with periodic major reviews by the Productivity Commission. Under this approach airports have negotiated cost based charges with airlines, under what has effectively been shadow regulation.

Recently, concern – based on reports produce by the ACCC in its monitoring role - that the service quality provided at Sydney Airport may not be optimal, has led the Australian Government to bring forward the nest Productivity Commission review. One possible outcome of such a review might be an increase in service regulation in the future. It is potentially possible that more heavy-handed regulation may be introduced at least at Sydney. Key lessons learned:

- It is possible to sell a 100% interest in an airport while maintaining some control about the identify of future shareholders (i.e. the foreign ownership limit);
- Light-handed regulation under price monitoring can lead effectively to a system of shadow regulation in which cost based prices are set even without formal controls; and
- It is important that any monitoring process covers service as well as price so that any possible service problems can be identified and responded to.

Relevance to Privatizations in a U.S. Context

In Australia, unlike in the Europe privatizations at Copenhagen and BAA, the Government has been successful in applying limits to future share ownership. The first bullet point may well be of relevance in the U.S. although, care should be taken to ensure that any restrictions are watertight and achieve what is required of them. The more limited role of formal regulation in the U.S. means that both the second and third of these bullet points are less likely to be of importance in U.S. privatizations.

Toronto – T3 privatization and the failed T1/T2 privatization

a) Transaction Summary

Item	Description
Airport	Toronto Airport (Lester B Pearson Airport)
Operational details	3 terminals, 3 runways.
Type of privatization transaction	Trade sale. Lease. Partially failed.
Interest	100%
Date of transaction	1993
Valuation	**Transaction value:** n.a. **Implied Enterprise Value:** n.a. **EBITDA multiple:** n.a.
Context	• Objective of the project was to redevelop Toronto airport with the involvement of the private sector through a public private partnership.

b) Transactional and Governance Structure

The Pearson International Airport project was a public private partnership with the objective of redeveloping Toronto airport with the involvement of the private sector. The project had two phases.

Terminal 3

This project was widely regarded as highly successful. From award of the contract in July 1987, the terminal was completed after 32 months although the project costs increased from $350m to $550m as a result of a forecast increase in the traffic levels of the terminal's principal tenant, Canadian airlines.

The winner of the T3 process was chosen following a two stage process. There was an initial request for expressions of interest and qualifications. A formal request for proposals was made at a second stage. Transport Canada stated that the objectives of the project were to provide a 'world-class' terminal in the shortest period of time; provide a financial return to the Crown; and maintain acceptable levels of safety and security to air travellers in Canada.

There were eight bidders at the first stage of the Terminal 3 process – mainly consisting of international consortia of operators, constructors and others. Five consortia qualified to proceed to the second stage of which four submitted a proposal. The winner, Airport Development Corporation was a privately held airport development organization which has subsequently been responsible for project in Hungary and Ecuador.

Terminal 1/Terminal 2

The T1/T2 process was much more problematic. The original process was concertinaed into a 90 (later extended to 125) day period between issue of the RFP and submission of binding bids. Following award of the contract to Paxport, the losing bidder ADC was asked to merge with the winners, as it was determined that Paxport lacked sufficient financial resources to manage the redevelopment program.

The merged consortium (renamed Pearson Development Corporation) signed a 57 year lease with the Government for the redevelopment and operation of the two terminals. There was intense media and political criticism of the deal focussed on alleged links between Consortium principals and the ruling Progressive Conservative party. A central plank of the Liberal party campaign in the

elections of 1993 was to propose the cancellation of award of the project. On gaining power, the Liberal Government requested a report on the transaction from Robert Nixon, a former Liberal provincial cabinet minister. His report found that the project 'fell far short of maximizing the public interest'.

On December 3rd 1993, the contract was cancelled. There were attempts at negotiating a settlement. There was also an attempt to impose a financial settlement through statute which was not adopted by Parliament because of the resistance of the Progressive Conservative controlled senate.

Ultimately, a lengthy court case ensued (T1T2 Limited Partnership v Canada) over the level of compensation. Much of the court case focused on an appraisal of the likely level of future profits foregone by the Consortium as a result of cancellation. A key issue was the appropriate financial discount rate to apply to projections of earnings. The court case settled on a level of damages in significant excess of the damages that the Government attempted to impose by statute (C$30m). It is also widely believed that a side deal was done in which T3 was purchased from ADC by Transport Canada for an amount in excess of its market value in order for the airport (now restructured as a not for profit entity, the Greater Toronto Airport Authority) to complete the redevelopment of the airport under public sector terms.

Subsequent to the termination of the privatization, the redevelopment of terminals 1 and 2 is complete though the new terminal has been heavily criticized by some airlines for being an over-expensive and leading to high charges. Some support for this is provided by the fact that Toronto's charges are the highest in the sample of international charges in LeighFisher's annual 'Review of Airport Charges' by a significant margin.

c) Political and Regulatory Environment and Objectives of the Privatization

The objectives of the Terminal 3 privatization were specified by Transport Canada as follows:

- Provide a world-class air terminal facility
- Reduce government investment in airport facilities
- Increase private sector participation
- Provide a financial return to the federal government

The stated objectives of the T1/T2 privatization were broadly similar to those for T3.

d) Economic and Other Regulation

Pricing, service standard and other regulations were largely determined within the 57 year lease agreed between the Pearson Development Corporation and the Government. These included:

- Sliding scale lease payments.
- The Government was prevented from undertaking actions which could devalue the operator's franchise such as permitting an airport to be built within 25 kilometres of the airport if it would reduce passenger volume by more than 1.5 million passengers a year.
- Limitations were placed on retail and car parking prices that could be charged.

Further agreements were executed between Pearson and the major airlines – Air Canada and Canadian Airlines, inter alia specifying rental levels and performance standards.

As discussed above, the Nixon report found that Government sanctions on non performance by PDC were underspecified.

e) Lessons Learned

While the cancellation of the privatization may have been in some senses justified, it is also true that reneging on the original terms under which privatization took place would have sent strongly negative signals to investors that investment in infrastructure in Canada was potentially subject to expropriation with no guarantee that the original investment would be remunerated. There are a number of lessons learnt, which are also reflected in the Nixon report into the privatization of Terminals 1 and 2:

- The abbreviated timetable for the process significantly favoured the ability of one party to put forward a winning bid since this party was already operating T3 reducing effective choice to the potential disadvantage of users as well as the sellers;
- The contracts were perceived as containing significant shortcomings, including what was later regarded as an excessive term for the lease in the Canadian context (57 years); and
- The performance obligations appear to have been phrased too broadly, making it difficult for the Government to know when conditions had been breached, and to take appropriate action.

Relevance to Privatizations in a U.S. Context

The conditions surrounding the T1/T2 sale in Toronto were highly specific - as were the related problems. The general lessons in points one and three may nevertheless be relevant to certain U.S. privatizations. The second point appears less relevant: significantly longer concession lengths have been offered for airports in other countries such as Australia, and indeed airports have been sold freehold, without apparent problems.

Vienna Airport

a) Transaction Summary

Item	Description
Airport	Vienna Airport / Flughafen Wien
Operational details	**2009 passengers:** 18 million. **Principal airlines:** Austrian Airlines (Lufthansa), Niki **Configuration:** Two runways, three terminals.
Type of privatization transaction	IPO. Freehold sale.
Interest	Initially 27%.
Date of transaction	1992, 1995 and 2001.
Valuation	**Transaction value:** n.a. **Implied Enterprise Value:** n.a. **EBITDA multiple:** 8.4x.
Context	• Vienna was one of the first airports in Europe to be privatized, after the UK. • The privatization took place in several stages, with an IPO in 1992.

b) Transactional and Governance Structure

The partial privatization of Vienna Airport took place in several phases. Prior to 1992, the shareholders of Vienna Airport were the City of Vienna (50%), the Province of Lower Austria (25%) and the Federal Republic of Austria (25%). After the IPO in 1992, 27% of the airport was listed, and the interests of the original shareholders were reduced as follows: the City of Vienna (37%), the Province of Lower Austria (18%) and the Federal Republic of Austria (18%). After the secondary offering in 1995, 48% of the airport was listed and 1% was owned by Schiphol Airport. Original shareholders now held 17% each. Further changes occurred in the period up to 2001, when the Federal Republic of Austria ceased to be a shareholder. Currently, 50% of shares are listed, the City of Vienna and the Province of Lower Austria own 20% each, and an employee foundation owns the remaining 10%.

In anticipation of the public floatation, the corporate status of Vienna Airport had to be changed from a limited liability company to a joint stock company. The share capital had to be increased by 50%.

c) Political and Regulatory Environment and Objectives of the Privatization

The objective of the public flotation of an interest in Vienna Airport was principally to raise funds for capacity expansion. The owners of Vienna Airport wanted to expand the airport's capacity from 6 to 12 million, but did not have access to the funds required to achieve this. The first phase of the public flotation was very popular with investors and many times oversubscribed. In 1995, a secondary offering was completed raising. This time, the funds were retained by the Austrian Government.

d) Economic and Other Regulation

Aeronautical charges at Vienna Airport are regulated according to an approach, which sets individual formulas for landing, passenger and ground handling (carried out by the airport).

These formulas are calculated by multiplying volume growth by -0.35, and adding inflation. This means that charges increase more rapidly (or decrease more slowly) in the case of low volume

growth, effectively protecting the airport from volume risk to some extent. The ground handling formula also contains an adjustment for aircraft size.

The formulas were reviewed during 2006, coinciding with the opening of the new terminal building, and were renewed unchanged until the end of 2009.

e) Lessons Learned

The IPO of Vienna Airport was considered to be very successful, and the different stages of this privatization raised funds both for the airport itself and for the Austrian Government. However, it has often been suggested that there remains significant potential for achieving efficiency savings at Vienna Airport, and it may be the case that the current regulatory regime does not provide sufficient incentives for such savings to be realized. Key lessons therefore include:

- A simple progressive IPO process can be used to create a simple and popular privatization. This may not necessarily maximize the ultimate returns secured;
- Even after privatization it may be that the airport is not maximizing the efficiency of its operations, particularly if the widely dispersed shareholdings of an IPO mean that relatively little direct pressure is put on management to perform. This may be to the long term disadvantage of airport users
- If improving the efficiency of an airport, and as a result reducing charges, is one of the objectives of a privatization, it is important that appropriate incentives are put in place through economic regulation.

Relevance to Privatizations in a U.S. Context

The sale of Vienna Airport, like that of Brussels, was a relatively straightforward one in a European context. To the extent that an IPO is being considered, the first two of these lessons may well be relevant to some U.S. privatizations. The last is less likely to be relevant given the more limited role of formal regulation at U.S. airports.