

Chapter 1 : Rio Grande Trading | RETAIL

The secondary slot trading market in the United States has received much attention and provoked much debate about the question of whether alleged manipulative or strategic control of slots by slot-holding carriers resulted in restricted market entry and service expansion by rival carriers at the four HDR airports.

Charles Tyler examines the pros and cons of potential solutions. No airline wants a slot management system. In an ideal world, airlines would be able to fly where they wanted, when they wanted. There are four major pillars to the process; certainty, flexibility, sustainability and transparency. Stanton says airlines need certainty because they have invested billions of dollars in aircraft. They must be certain they will have access to the infrastructure for the next years and this is why historic grandfather rights are appropriate. Airlines also need flexibility so they are free to use their slots as they see fit. Airlines should not have to pay exorbitant fees to get slots at congested airports. Finally, transparency in the system is vital. All the airlines seeking access to coordinated airports and all the slot coordinators should attend the bi-annual IATA Scheduling conferences. As a result, slots at one airport are useless without corresponding slots at the destination airports. Consistent global standards. The Scheduling Conference works well, but the World Scheduling Guidelines WSG, which are meant to govern the process need to be applied consistently across the world. This creates difficulties for airlines. Certain states still have some way to go before their slot coordination systems meet international standards. By this time, it is too late for new slots to be made available to international carriers. This makes for added complexity, which translates into higher costs. The airport is operated by the city, which sets its own standards. This has created difficulties for our scheduling. They argue that airlines that already have slots—particularly those at the congested peak times—have some sort of unfair advantage. They suggest that because of the inherently high value of peak time slots at the most congested airports, airlines may sometimes be operating flights to guard their slots and keep out competition. In Europe, Air France decided to cut back some services at Paris Charles de Gaulle during the economic crisis and another carrier came in and took up the slots. But the decision came too late. The concepts of peak-load pricing and slot auctions have been examined in a number of studies. This will provide extra capacity and enhance safety. It has recently launched an impact assessment. Other Non-EU countries will be watching the development closely. Governments are under pressure to show that their infrastructure is being used in the most efficient way. In other words, the playing field would become distorted. There is also the question of where the money raised from slot auctions would go? A slot is nothing more than the right to operate a service at a particular time, and there is little certainty about who is the legal owner. Airports own the runways and the terminals. And airlines counter that since they have put the effort and investment into buying aircraft and building up routes, and as slot allocation rules currently give them the right to continue using them, they should be entitled to recoup any increase in the value.

Chapter 2 : Slots and Exemptions | US Department of Transportation

A landing slot, takeoff slot, or airport slot is a right granted by an airport owner which allows the slot holder to schedule a landing or departure during a specific time period. Landing slots are allocated in accordance with guidelines set down by the IATA 's Worldwide Airport Slots Group.

Slot-trading and landing fees can both be used to address airport congestion. Air travel delays have hit new highs in the US since , although passenger traffic and airport congestion have temporarily fallen during the current recession. Similar delays continue to plague European airlines. Although weather is a major source of delays, US Department of Transportation data show that the volume of traffic is also a major cause. What can be done about this airport congestion and the resulting delays? One remedy is to invest in infrastructure, but new runways take a considerable amount of time to build, and they are expensive. A third remedy is demand management, either through congestion pricing or restrictions on airport slots rights to land and take off. Current landing fees paid by airlines depend only on aircraft weight and do not vary by time of day. Under congestion pricing, the landing fees paid by airlines would rise at peak hours, and in response, airlines would move some flights to off-peak periods. Under a slot system, by contrast, flights cannot exceed the total available number of hourly slots, so that a cap on slots limits peak congestion. One way to set up a slot system is to distribute the slots among the airlines and then allow trading, a system analogous to the cap-and-trade approach to pollution reduction. Another possibility is to distribute the slots via an auction mechanism. The airlines strongly objected they were being asked to pay for something they now hold for free , and the FAA recently withdrew its auction proposal. Although this recent defeat for government policymakers darkens the near-term prospects for adoption of new demand-management approaches, airport congestion is a long-term problem that will eventually require systematic intervention to control demands on airport capacity. As a result, it is important to gain a better conceptual understanding of the different approaches to congestion management.

Congestion Pricing The theory of congestion pricing was developed for roads. Economists recognized that peak road usage is excessive because individual users do not take into account the delays imposed on all other users. Charging a congestion toll equal to the cost of the external delays each user generates will appropriately restrict peak use. Congestion pricing follows the same logic when applied to airlines, with one important difference. Individual road users are atomistic; each driver is a small part of the total traffic on the road. By contrast, the airlines using a congested airport are typically nonatomistic; most individual airlines account for an appreciable share of the total traffic at the airport. This difference matters for airport congestion tolls, since a nonatomistic airline, unlike an atomistic driver, takes into account a portion of the congestion caused by each of its flights. Specifically, the airline considers the congestion each flight imposes on all the other flights it operates. In other words, it recognizes that scheduling an extra peak-hour flight will slow down its existing flights, possibly making the airline reluctant to add the flight. The overscheduling of flights is thus not as excessive as the overuse of a rush-hour freeway. As a result, airport congestion tolls can be less punitive than in the context of road congestion tolls. Just as with road pricing, the airport toll is based on the marginal congestion damage MCD from an extra flight, which equals the increase in operating cost for all the affected airlines plus the value of the lost time for their passengers. But because the airline internalizes some of its congestion, the toll does not equal the full MCD, as it would in the road case. The formula thus charges the carrier only for the congestion it imposes on other airlines, exempting the congestion it imposes on itself. The airport toll is based on the marginal congestion damage MCD from an extra flight, which equals the increase in operating cost for all the affected airlines plus the value of the lost time for their passengers. MCD varies over the day, being high at peak hours and low even zero in the off-peak periods. Thus, the toll computed by this formula will vary over the day, disappearing when the airport is not crowded. This toll rule produces a surprising result when applied at an airport where carriers control different flight shares. By contrast, because a small carrier feels only small portion of the congestion created by its operation of an extra flight, it will pay a high toll. While this toll pattern is justified on the grounds of economic efficiency, it might be politically infeasible. Small carriers would fiercely oppose a rule that appears

to subject them to an unfair burden, regardless of the economic logic. As a result, any practical implementation of congestion pricing might have to adopt a second-best approach, levying the same toll on all carriers. While a uniform toll would approximate an efficient pricing system at airports where flight shares are similar across most carriers. Since the congestion penalty placed on large carriers would be too high, they would be under pressure to shrink or reorganize their operations more than they should. Small carriers, meanwhile, with congestion penalties being too low, would not feel enough pressure to change their operations. All these ideas apply, however, only if airlines do in fact internalize their own self-imposed congestion, and not everyone believes they do. Economist Joseph Daniel, for instance, has written a number of papers with a variety of coauthors suggesting that the airlines do not internalize congestion costs. Daniel argues that if a large carrier cuts back its flights to reduce self-imposed congestion, then small fringe carriers will fill the resulting gap, leaving overall congestion unchanged. Since the large carrier reaps no benefits from limiting its peak flights, it will have no incentive to do so. In effect, the carrier will seem to behave irrationally, appearing not to recognize that it congests itself. But given the potential offsetting response of the fringe carriers, such behavior is rational. So do airlines internalize congestion or not? The empirical evidence is mixed. Some studies find no evidence of internalization, while others including some of my own work suggest the opposite. If internalization does not occur, then all carriers should be charged the same congestion toll regardless of their size. In effect, the road-pricing model reasserts itself, with each carrier charged MCD per flight, unadjusted for flight shares. Thus, the toll rule is immune to the unfairness critique levied against the previous formula, given that it will not generate asymmetric tolls. But, if congestion is indeed internalized, the toll liabilities faced by the carriers under this formula are too high, and they will excessively shrink and reorganize their traffic. Slot Systems Rather than deciding what congestion toll to charge, the airport authority under a slot system decides on how many slots to make available. This decision must be made for each time interval over the day usually in 30 minute increments. Under a trading system like those in place at some congested US airports, the chosen slot total is distributed without charge among the carriers according to some allocation rule, with reallocations possible via trade. Initial slot allocations in the US were determined years ago, but continuous trading usually involving leases, not sales, of slots has redirected many slots to new users. Before making any decisions about flight volumes and slot trades, carriers know that the overall congestion level at the airport is fixed and independent of their choices. By contrast, since carriers under congestion pricing are free to operate as many flights as they like provided they pay the toll, the overall level of airport congestion will respond to their choices. The overall flight volume, and thus the level of congestion, is not fixed in advance. As long as the airport authority distributes the right total number of slots, the trading process guarantees that the slots are distributed correctly among carriers. A single slot-trading price suffices, with no need for prices tailored to individual airlines. Theoretically, the same conclusions apply to a slot-auction system. Assuming the airport authority auctions the same number of slots as it would have distributed for free under a trading system, the two systems result in the same allocation of slots and flight volumes across carriers. The auction price is also the same as the equilibrium slot-trading price, which turns out to equal MCD. Note, however, that while the auction revenue accrues to the airport, no revenue is earned when slots are freely distributed though money does change hands between carriers. A further virtue of both slot systems is that their performance does not depend on whether the airlines internalize congestion. By contrast, the correct toll structure depends crucially on whether internalization occurs. Economist Joseph Daniel identifies one potential downside to slot systems, however. He argues that, given their wide minute time window, slots are too crude an instrument to properly attack airport congestion. Daniel argues that small scheduling changes at hub airports such as spreading out clustered departures by 10 minutes can greatly reduce congestion. Congestion tolls that vary minute by minute, he argues, would most effectively generate such changes. Implications What do we learn from this discussion? One important lesson is that the current slot system for congestion management at airports may be better than recognized. Provided that airport authorities have chosen the right slot totals, and provided that the slot-trading system works in the manner envisioned in the theory, the outcome is equivalent to the one emerging under a more elaborate congestion-pricing system. Whether slot totals are correctly set is a matter of debate. In the recent decision for New York airports, the

airlines argued that the FAA chose hourly totals that were too restrictive. Generally, conservative slot decisions may limit congestion too much, excessively restricting peak-hour airport access to travelers who need it, and policymakers should bear this principle in mind. Whether the slot-trading system works properly is also a matter of debate. In proposing its partial auction scheme for the New York airports, the FAA acted on a suspicion that trading volumes are inadequate and slot allocations need to be scrambled via an auction. A recent study by Hideki Fukui of slot-trading patterns over the late s, however, did not find clear evidence of anti-competitive behavior, which casts some doubt on the existence of a major problem. Nevertheless, proposals for enhancing the performance of the slot market are welcome, including the replacement of bilateral trading with a web-based, central clearinghouse that hides identities of buyers and sellers. With such improvements and the proper choice of slot totals by policymakers, the current system may be adequate for airport congestion management as air travel resumes its long-run upward trend.

Chapter 3 : Las Vegas airport slot machines - Fodor's Travel Talk Forums

*Slot Trading at United States Airports: A Report for the Director General for Transport of the Commission of the European Communities [Hayes & Bartlett Ltd. Putnam, David Starkie] on www.nxgvision.com *FREE* shipping on qualifying offers.*

Airport slots are required at many busy locations worldwide, and request formats differ depending on the destination. Best practice is to operate within the approved slot times and deviations and avoid multiple airport slot changes, particularly during high seasons and special event periods. Be aware of penalties and consequences that may occur from missing an airport slot or operating without one. Here are nine tips to help you navigate the world of airport slots: Some airports also have generic airport slot requests. A generic slot request can be an online request, without special formatting, made to an airport slot coordinator. In some cases, these generic requests are just messages with information such as the tail number and schedule which are forwarded to the ground handler who, in turn, contacts the airport slot coordinator. Each airport slot format is unique. Generic online requests usually include a basic schedule for arrival and departure, along with type of aircraft and tail number. GCR is a coded request containing aircraft type, tail number, schedule and number of seats on the aircraft – using four-letter International Civil Aviation Organization ICAO airport codes. Where airport slot requests are sent An operator or 3rd-party provider may send a request either to the airport slot coordinator or local ground handler. Some airport slot coordinators prefer to receive slot requests from the ground handlers rather than end users. Certain airports have websites – with restricted logins and passwords – that only local ground handlers may have access to. Airport slot requests are normally submitted manually or online. Some airports still use SITA and AFTN to receive and confirm airport slot requests, while others prefer slot requests be submitted by fax or phone. The trend, however, is toward airport slot requests and confirmations to be sent via e-mail – using either online forms or generic request information. At some airports, there may be an after-hours department to process requests that are submitted after their office is closed. An example of this would be the local Air Information Service that can be reached via phone. For short-notice airport slot requests, if there is no after-hours department, you may be able to obtain assistance from the ground handler or the air traffic control tower. Airport slot requests require confirmations. Confirmations of airport slot requests are provided and are usually done so via the same method of communication used to request the slot. Also, note that airport slot deviation time varies by airport. Kennedy KJFK, for example, allows a one-hour slot block time. If you request a departure, you may receive an airport slot period covering the whole hour: Airport slots should be requested early. For locations that experience higher traffic during certain seasons or special event periods, it may be best to request airport slots months in advance. For the highest success rate in obtaining specific airport slots in Japan, slot requests should be submitted by the 15th of the previous month. For this reason, we always recommend that airport slots are requested in advance, once a firm schedule is known. This confirmation should always be carried with you onboard the flight. Some locations, such as Hong Kong VHHH, are somewhat lenient in terms of delays affecting airport slots, while other locations like Turkey may fine you if you miss an assigned slot. Many airports in Europe will not allow you to operate if you do not have a confirmed airport slot for your estimated time of arrival or departure. Additional information on airport slots In the European Union EU, an airway slot will override an airport slot, which is due to management of congested airspace. At some locations, such as Ciampino Rome LIRA, airport slots are only required for charter non-scheduled commercial and commercial scheduled flights. If you do not receive your requested airport slot time, typically you will have the opportunity to accept an alternative airport slot and negotiate something better at a later time. Conclusion Airport slots allow airports to better plan for traffic anticipated on a particular day. As global air traffic continues to grow, more and more locations will require airport slots for arrivals and departures. Best practice is to know before you go. Be aware of airport slot restrictions, deviations and request formats. Work with your 3rd-party provider, and local ground handler, to achieve best results in the airport slot request and management arena. If you have any questions about this article or would like assistance planning your next

trip to Israel, contact Christine Vamvakas at christinevamvakas univ-wea.

Chapter 4 : Airport Slots - The Building Blocks of Air Travel | Airlines.

An empirical analysis of airport slot trading in the United States. The purpose of this paper is to examine whether the manipulative or strategic behaviors of slot-holding carriers have resulted in restricted market entry and service expansion by other carriers, especially rival carriers, at the four US airports that have secondary slot markets.

Chapter 5 : Airport Congestion Management: Prices or Quantities? â€ ACCESS Magazine

Fukui () investigates airport slot trading at US slot-constrained airports to assess whether the strategic behavior of major carriers may have impeded effective functioning of slot markets and.

Chapter 6 : Landing slot - Wikipedia

Slot Trading in the Reform of the Council a couple of slots at Gatwick Airport belonging to 10 The chapter on the United States of America is an integration.

Chapter 7 : South Trading Post - United States | Home

Downloadable (with restrictions)! The purpose of this paper is to examine whether the manipulative or strategic behaviors of slot-holding carriers have resulted in restricted market entry and service expansion by other carriers, especially rival carriers, at the four US airports that have secondary slot markets.

Chapter 8 : Airports in the USA | List of United States Airports - Guides & Information | Cheapflights

An empirical analysis of airport slot trading in the United States An empirical analysis of airport slot trading in the United States Fukui, Hideki The purpose of this paper is to examine whether the manipulative or strategic behaviors of slot-holding carriers have resulted in restricted market entry and service expansion by other carriers, especially rival carriers, at the.

Chapter 9 : 49 U.S. Code Â§ - Availability of slots | US Law | LII / Legal Information Institute

Slot allocation and use at hub airports, perspectives for secondary trading season. 4 Slot allocation may play a role at either partially congested airports during specific periods of the day, such as Amsterdam Airport, or fully congested airports during the whole day.