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AIR TRAVEL BANKS: A VIABLE PUBLIC-PRIVATE PARTNERSHIP APPROACH TO AIRPORT ROUTE DEVELOPMENT?

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Abstract

Financial incentives to develop air services at smaller airports are scrutinized by regulatory authorities. This is especially true within the European Union with its new guidelines on state aid and consequent rulings on the repayment of subsidies provided by airports to airlines that violate state aid rules. Private funds used to develop air services are not state aid. For this reason, air travel banks (ATBs) might be a promising route development tool for smaller airports. This concept builds on the idea of binding monetary pledges from air transport users that constitute a revenue guarantee for new or expanded air services. This paper describes the ATB public-private partnership approach and offers advice to airport authorities and regional development agencies considering this approach to airport route development without public financing.

Key words: airport route development, air travel bank, public-private partnership

1. INTRODUCTION

Many airports offer package deals containing financial and non-financial incentives to attract new air services. Such incentives are offered to airlines by publicly owned as well as by privately owned airports. Incentives may be offered for the initial start-up of scheduled services at a smaller airport, but also for adding new routes, additional frequencies or operations with larger aircraft. A common route development objective at smaller airports is access to a hub

airport, i.e. an airport used by an airline as a transfer point for air travel within a hub-and-spoke network. Hub access offers the communities in the surroundings of a smaller airport not only a point-to-point service into the hub airport, but also connecting services to various destinations beyond the hub.

A common source for monetary incentives is public funding, leading to regulatory issues such as a potential violation of state aid rules. Financial incentives to develop scheduled air services could also include a guaranteed ticket purchase program which is basically a financial commitment of a business community to support an air service initiative for a limited time period. Such a program requires the formation of an air travel bank (ATB). This paper describes the ATB public-private partnership approach to air service development and also provides implementation guidelines to airport managers and regional development agencies.

There is related literature on airport route development. STRAIR (2005) provides a comprehensive manual on different route development approaches which the manual refers to as air service development. Nolan et al. (2005) examine various schemes to attract air services in smaller markets, including guaranteed revenue approaches like ATB. Each approach is evaluated in terms of social welfare and underlying agency costs. For this evaluation, Nolan et al. assume the demand for a new air service to be insufficient to allow for a supply-and-demand based market solution, while in the present paper, sufficient demand is assumed to exist, but a start-up aid as temporary incentive is required to allow this latent demand to become actual demand. An overview of current airport route development practices is given by Halpern/Graham (2015) based on a survey of 124 airports worldwide. They point out the importance of incentives and risk sharing initiatives offered by airport operators, not only to low-cost airlines, but to all types of airlines. Allroggen et al. (2013) employ a probit instrument variable approach to a sample of 194 European airports to study the factors influencing the presence of such incentives. In an earlier study, Martin (2009) surveyed 41 smaller airports in the US. A more general perspective on marketing tools available to small airports is given by Kramer et al. (2010). Discounts on airport charges as frequently used financial incentives are analyzed by Fichert and Klophaus (2011) and Jones et al. (2013). Núñez-Sánchez (2015) assesses factors affecting the willingness of regional public authorities to support route and traffic development. Wittman (2014) studies public funding of airport incentives in the US with a focus on the efficacy of the Small Community Air Service Development Grant Program (SCASDP).

The present paper describes ATB programs as a public-private partnership approach to airport route development and provides success factors for this route development tool that may also serve as guidance to airport managers and regional development agencies. It concentrates on the start-up of new services at smaller airports. The focus on smaller airports is quite common in the literature on airport route development. “Arguably, it is these airports that face the greatest challenges in, but also rewards from, attracting airlines and

improving the provision of air services" (Halpern/Graham, 2015, p. 215). A small airport in the context of the present paper does not mean a general aviation airport, but an airport with sufficient infrastructure to offer scheduled air services. Further, it is assumed throughout the paper that the considered airport operator is a publicly owned entity which is still a valid proposition for most airports around the globe.

2. Guaranteed ticket purchase program with air travel bank

A guaranteed ticket purchase program with an air travel bank (ATB) builds on the idea of obtaining binding monetary pledges from air transport users (businesses and individuals) that constitute a revenue guarantee for new or expanded air services. The local community is pre-purchasing airline tickets for future use. This financial commitment also serves as a signal to prospective airlines that there is local support for a specific air service initiative.

2.1. Stakeholders

Table I outlines the involved stakeholders and their roles. The ATB holds the escrow account with the monetary pledges, where the money is safely held in trust until it is deployed to pay for provided air services. Escrow generally refers to money held by a neutral and financially trusted third-party in a blocked account on behalf of transacting parties.

An ATB program typically builds on a public-private partnership (PPP) as some stakeholders belong to the public sector, while others come from the private sector. Air services from a publicly owned airport are developed through a partnership with private businesses. To facilitate a PPP involving partners from the business community, the airport operator ought to get the support of the local chamber of commerce and/or a regional development agency.

Table 1

Stakeholders and their roles

Stakeholder	Primary role
Bank (ATB)	Holder of escrow account
Local business community	User of air service; pay money into escrow account
Airline	Air service provider; receives money from escrow account
Airport operator	Service provider to airline; receives aeronautical non-aeronautical revenues (e.g. airport charges)
Regional development agency and/or chamber of commerce	Facilitator, acts as intermediary between airport operator and local business community

Source: own representation

2.2. ATB execution

The execution of a guaranteed ticket purchase program with ATB typically involves the following steps:

- Private businesses (and individuals) interested in supporting an air service initiative pledge money.
- The money is deposited in an ATB. Funds are held by a commercial bank. Interests are paid.
- ATB participants can use their funds to purchase tickets with the partner airline.
- Airline ticket purchases with the partner airline made through the ATB are paid from ATB deposits.
- ATB funds are restricted to payments for tickets with the partner airline.
- The ATB program lasts for a specified period (e.g. 12 months).
- Unspent funds are paid out to the airline at the end of the agreed period and in turn, the airline will issue travel vouchers.
- If the airline pulls out before the end of the agreed travel period, the remaining funds are returned.

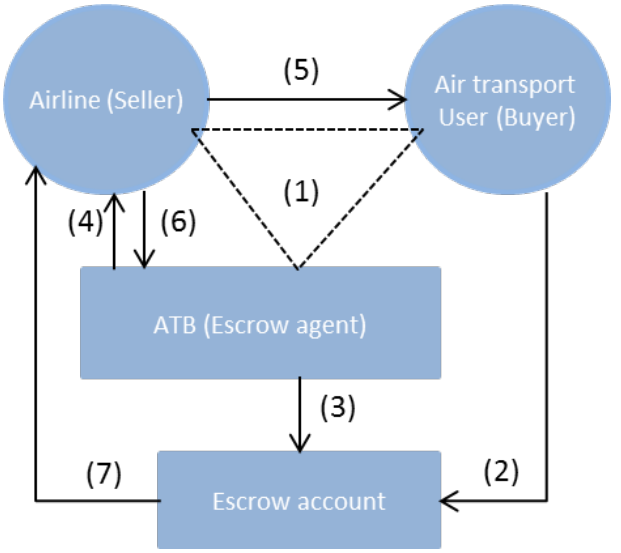

Figure 1: Execution of a guaranteed ticket purchase program with ATB

Source: own representation

Figure 1 visualizes the ATB approach. (1) The escrow agreement is signed between an air transport user (buyer) and an airline (seller) with the ATB acting as escrow agent. (2) The buyer deposits money in escrow. (3) ATB manages the account and (4) confirms to seller that the money has been received. (5) The required services are performed and (6) proof of delivery is sent to ATB. Finally, (7) ATB releases the money in escrow to seller after the release conditions described in the escrow agreement have been met. Hence, the seller is sure that the buyer has made the money available to the trusted third party. The buyer can be sure that the money will only be released as agreed in the escrow agreement.

3. Alternative airport route development tools

Airport route development is done through close co-operation between airports and airlines. The establishment of new or expanded air services is often accompanied by some form of incentive offered by airports to airlines. This includes a wide range of non-financial incentives to the airline - from the provision of market information to promotional activities by the airport operator - but also different types of financial incentives (see Figure 2).

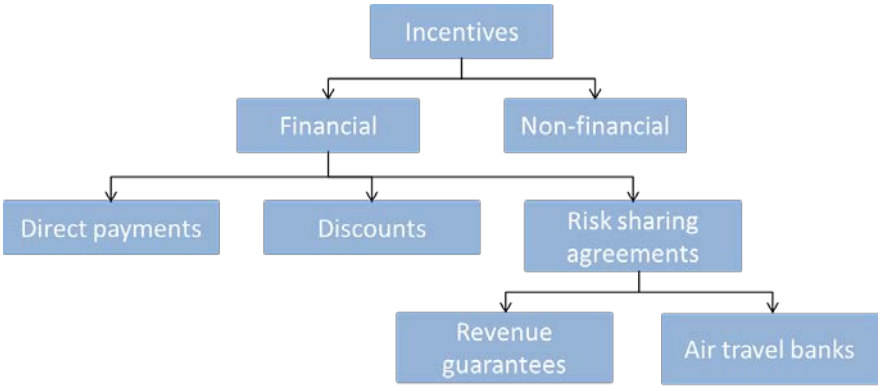

Figure 2: Overview of incentives for airport route development

Source: own representation

3.1. Short-term impact on airport profits

Financial incentives can be divided into direct payments (payments per flight or passenger, marketing budget), discounts on airport charges and risk sharing agreements (STRAIR 2005, Fichert/Klophaus 2011). The short-term impact of direct payments as well as discounts on airport charges is negative on the operating result of an airport operator. Losses of publicly owned or financed airport operators are typically covered by some sort of taxpayer-funded resources.

Such use of public money can be an area of controversy. An advantage of well-structured risk sharing agreements is to avoid this negative influence on airport profits. Tools in risk sharing between airports and airlines are revenue shortfall guarantees and guaranteed ticket purchase programs with air travel banks (ATBs). A revenue shortfall guarantee only leads to payments when the airline's revenue for a specified time period is less than the minimum revenue established by contract. The ATB approach avoids payments between airports and airlines altogether.

3.2. Regulatory issues

Financial incentives may lead to operating losses of airport operators, if not covered by some sort of funding. Public funding, i.e. the use of taxpayer-funded resources, as a state aid to airports is scrutinized by regulatory authorities. Start-up aid and permanent aid can be distinguished. Permanent aid might be justifiable for the provision of so-called "essential" air services. Examples for such support programs based on public funding to support a minimal level of scheduled air service to rural communities are the Essential Air Service (EAS) program and the Small Community Air Service Development Program (SCASDP) in the US and the Public Service Obligation (PSO) program in the EU. Such government intervention in form of financial assistance to small communities in order to enhance the level of air service is based on the assumption that routes from these communities cannot be profitable in a free market and are therefore not viable. The present paper departs from this basic assumption, claiming that there is latent demand and revenue that is adequate for a continued air service once started. Hence, the deployment of ATBs for the start-up of new routes avoids communities lobbying for public financial support which inherently leads these communities to overstate demand.

Start-up aid is scrutinized by authorities for distorting effects on competition. In February 2014, the European Commission adopted new guidelines for state aid to airports and airlines, designed to ensure the mobility of citizens while minimizing distortions of competition in Europe's Single Aviation Market (European Commission, 2014). According to the new EU guidelines, start-up aid with public money may be granted for the launch of new routes from airports with annual passenger traffic of less than 3 million, if certain compatibility conditions and notification requirements are met. The compatibility conditions include that the amount of aid received represents only up to 50% of the airport charges and also the existence of an ex ante business plan, showing profitability of the route after at least 3 years. On a case-by-case basis, start-up state-aid may also be granted to airports with between 3 and 5 million passengers. Only in peripheral regions, start-up state-aid may be granted irrespectively of the airport size.

There is much uncertainty about the legal practice of these guidelines. Notification procedures, i.e. the process of getting approval for state aid, are time-consuming and often involve costly legal advice. The ATB approach promises to avoid many of the aforementioned time-consuming regulatory and legal issues associated with public financing and state aid which also represent a significant financial risk to the involved parties.

4. Economic success factors

While a plethora of economic impact studies have emphasized the value of air services as a location factor for business development (see, for instance, Button et al., 2010), the use of public money for developing air services is still an area of controversy. In addition, public financing might simply be unavailable or only available in conjunction with restrictive conditions. A guaranteed ticket purchase program with ATB does not use public money if all entities that pre-purchase tickets belong to the private sector. However, sometimes it is difficult to determine whether a business is part of the public sector or the private sector. Besides legal ownership, economic ownership also matters as a criterion, i.e. how the business is controlled and mainly financed needs to be considered. This is not necessarily determined by the shares held by the government (Lienert, 2009). Most regional development agencies, including tourism authorities, are controlled and financed by federal, state or local government and, thus, belong to the public sector. It may be more advisable if such entities do not pre-purchase tickets as part of the ATB concept in order to avoid issues with state aid regulation, resulting from mixed financing of money pledges.

4.1. ATB indicates lower limit for demand

Not only the raised amount of pledges is important, but an ATB initiative as such is a signal to a prospective airline that conveys some information on local interest and demand for an improved air service. Only if a business community has a true interest in a given route development, will an ATB receive significant amounts of money pledges, as the money in the ATB is lost to the private businesses (and individuals) if not used for air travel. Unspent money at the end of the agreed period is typically paid out to the airline. That is why rather conservative pledges are to be expected, even if the escrow agreement requires the airline to issue travel vouchers at the corresponding value of the remaining deposit. Hence, the total amount of money in the ATB gives a lower estimate of revenue which the airline can expect during the period (e.g. 12 months) specified in the escrow agreement. It is also unlikely that the level of demand represented by the money pledges will disappear after the end of the contract period.

4.2. Avoidance of the public goods dilemma

Even if there is a strong community interest in expanded air transport services to strengthen local business and economic activity, the success of an ATB initiative still depends on the avoidance of a public goods dilemma, linked to the free rider problem. The required commitment of a business community is an outcome based on the individual decisions of private businesses asked to pay money into an ATB. These businesses will weigh up individual interests against the collective interest in scheduled air services which can be considered as public goods in a broader sense, as scheduled air services are open to use by the general public, i.e. any business has access in principal, without reducing the availability to other businesses. Any participation in an ATB is time-consuming and involves transaction costs on top of the payments for tickets. Hence, potential users of new or expanded air services can save time and money by not contributing and expecting other businesses (or individuals) to provide the necessary money pledges.

To overcome the free rider problem as a hindrance to the success of an ATB initiative, the following measures by the airport operator, the regional development agency and/or the chamber of commerce are conceivable:

- Address only businesses in the surroundings of an airport known to be heavy air transport users,
- Provide simple execution procedures and efficient communication in order to reduce transaction costs for businesses,
- Appeal to companies' social responsibility,
- Arrange for matching contributions with public funds.

The presence of companies with significant year-around air travel demand in the airport's vicinity is probably the most basic prerequisite for any successful ATB initiative. It is less promising to target heavy users at the opposite end of a projected air route as the inclusion of businesses, which might even be located in a different country, increases transaction costs for ATB agreements. Further, for obvious reasons, it is more difficult to appeal to a company's social responsibility in connection with a distant community.

4.3. Support by regional development agency and/or chamber of commerce

In order to properly address the relevant companies within a region and to appeal to their social responsibility, the airport operator should try to get the support of the local regional development agency and/or chamber of commerce. These institutions can facilitate the establishment of an ATB by acting as intermediaries between the airport operator and the local business community.

For example, a chamber of commerce can make use of regular meetings and established communication channels within its network of chamber members. Beyond their coordinating role, these institutions might arrange for matching contributions with public funds. However, such mixed funding of start-up aid for route development might cause the regulatory issues that the ATB approach promises to avoid with solely private financing.

4.4. Value proposition to the local businesses community

On the outset of an ATB initiative, not all parameters of an aspired new or expanded service are fixed. For example, there might be uncertainty as to the amount of tickets a pledge will buy, but also other services attributes. Clearly, it is easier to provide reliable information on ticket prices and service attributes such as frequencies, arrival and departure times or aircraft types for stand-alone point-to-point routes. However, the key route development objective at smaller airports is often to gain access to a hub airport. Hub access offers the business community surrounding a smaller airport not only a point-to-point service into the hub airport but also connecting services to various destinations. Average fares will differ with the respective travel destination. Hence, providing hub access offers greater benefits to the local business community than a stand-alone point-to-point service, but the additional benefits resulting from connecting flights are more difficult to assess for prospective users.

4.5. No nearby airports with competing scheduled air services

The success of any ATB initiative also depends on existing travel alternatives. There should be no nearby airports with competing scheduled air services. For short-haul travel, the availability of other modes of transportation also needs to be considered. In practice, some discussion might result from answering the question on what constitutes a nearby airport and/or competing scheduled air services. Start-up aid with public funding is not compatible with the new EU Guidelines on state-aid to airports and airlines when a connection which will be operated by the new air route is already operated by a high-speed rail service or is available from another airport in the same catchment area under comparable conditions (European Commission, 2014). According to the EU guidelines, the catchment area of an airport is defined as a geographic market boundary that is normally set at around 100 kilometers or around 60 minutes traveling time by car, bus, train or high-speed train. If another airport with competing scheduled air services can be reached in less than 60 minutes by car, it is unlikely that a local business community will support an ATB initiative.

4.6. Sufficient financial commitment to influence airline network planning

The financial commitment by a local business community needs to be significant from an airline's point of view. In order to have an impact on airport route development, a total amount of €100,000 in an ATB will probably not be sufficient as the following simple calculation shows: If an average return fare of a voucher of €300 is assumed, €100,000 corresponds to less than one passenger on a new year-around service with two daily frequencies. Even an amount of €2,000,000 corresponds only to approximately 10 passengers per flight which is not much for an aircraft the size of a Boeing B737 or an Airbus A320. There are airlines operating small twin-turboprop (e.g. the British Aerospace Jetstream 31, having a seat capacity of 19 seats). However, these airlines require high yields for return tickets to allow for route profitability and, subsequently, a sustainable operation. Alternatively, starting a route offering hub access and long-haul connections might not require as many daily frequencies as a stand-alone service. For example, Turkish Airlines offers access to its Istanbul hub from German regional airports starting with three frequencies per week. An escrow amount of €2,000,000 and an assumed average return fare of €600 - as a result from the mix of fares for travel into the hub and beyond to long-haul destinations - would then correspond to more than 20 passengers per flight to/from the airport of the ATB community. This might influence airline network planning considering that the ATB gives a lower limit for the revenue the airline can expect from its service offering. Therefore, ATBs might be more promising for routes offering hub access than for stand-alone point-to-point services.

5. CONCLUSIONS

A guaranteed ticket purchase program with air travel bank (ATB) is based on the financial commitment of the business community surrounding an airport. It is a form of private financing of airport route development contrary to, for example, cost subsidies like discounts on airport charges covered with taxpayer-funded resources. Hence, it is especially appealing for airport operators when public funding for route developments is not available or if the acquisition of public financing is considered to take up too much time or to consume too many resources. ATBs as public-private partnerships with the local business community may give airport managers some leverage in the struggle to develop air services while at the same time, it is no state aid as no public money is spent for route development.

In comparison with offering revenue guarantees as another type of risk sharing agreement that in principal can be funded completely with private money an ATB has several advantages as a financial incentive to develop air services from a smaller airport: it is less risky for businesses depositing money in escrow accounts, as they get air travel for their money and there is a clearer connection

between costs and benefits that tends to diminish a potential free rider problem. A guaranteed ticket purchase program also indicates existing demand for new air services. There are fundamental success factors for ATB initiatives such as receiving support from the regional development agency and/or the local chamber of commerce, a clear value proposition to the targeted businesses from the beginning of an ATB initiative, no nearby airports with competing scheduled air services and a total amount of money pledges that is sufficient to actually influence airline network planning.

The ATB concept is appropriate if there is confidence in the level of latent demand that - once revealed - sustains the new air services. Documented failures of guaranteed ticket purchase programs with ATB may be the result of an overestimated demand which leads air services to be discontinued at the end of the ATB contract period. Nevertheless, financial commitments by potential users of new or expanded air services are certainly more reliable predictors of commercially viable air services in competitive markets than government subsidies.

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