Internet Appendix A75 Aviation

A75.1 Illustrative Pitch Template Example

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(A) Working Title	Aviation-exposed risk for tourism destinations: A method for reducing information asymmetry in destination-airline relationships.				
(B) Basic Research Question	This paper develops a simple risk-ranking tool for tourism destinations (or route development teams) when negotiating with airlines for new or additional services.				
(C) Key paper(s)	Halpern, N., and Graham, A. (2015). Airport route development: a survey of current practice.' *Tourism Management*, Vol. 46, pp. 213-221. Halpern and Graham (2015) highlights that deregulation means airlines are more free to choose where to fly and, in parallel, airports are freer (and sometimes required) to expand and economically grow as they are increasingly considered to be commercial businesses rather than purely public utilities. However, to date, our paper is the first to develop a risk-ranking tool that reduces the information asymmetry between airlines and airports/tourism stakeholders.				
(D) Motivation/Puzzle	Air services are increasingly negotiated between airlines and destinations. Much of the power in route development rests with an airline, largely because their asset, unlike the destination (and the associated airport), is mobile and can be deployed elsewhere. Recognizing the value of air services, strategic initiatives from non-airline beneficiaries of air services are often necessary in order to secure and retain valuable access. Often, however, there exists a degree of information asymmetry such that airlines, but not destinations, understand all too well the financial value of a destination (or node) in their network. We develop a simple risk metric (using publicly available information) that reduces this information asymmetry, allowing a destination to measure their 'risk rank' within an airline's network. This ranking will help determine the degree of incentives/risk-share agreements that may be required to entice an airline to introduce new - or retain existing - services on a route.				
THREE	**Three** core aspects of any empirical research project i.e. the "**ID**io**T**s" guide				
(E) Idea?	The idea is to use publicly available information to gain a better understanding of an airline's capacity distribution/decisions. We use seat factors (number of seats sold divided by seats available) as the primary input. As demand for air tickets are dynamic and fluid yet the availability of seat capacity is scheduled months prior to departure, significant deviations between demand and capacity can be viewed as shocks in demand that could not be anticipated by the airline. We define a "risky" route as one where demand is unpredictable by the airline and is hence difficult to manage (uncertain profitability). We validate the measure by comparing the actual capacity distribution of an airline and an optimised capacity distribution if the airline were to minimise the risk measure. There is no problem of endogeneity as causality is not being inferred.				
(F) Data?	We use monthly inbound passenger demand and capacity numbers at the route level for an Asia-Pacific low-cost carrier. Because of the characteristics of low-cost carriers - simple network and pricing structures - it is reasonable to assume that				

	they will maximise seat factors while conveniently allowing for the testing of our risk measure and its implications. It is a balanced panel dataset with 7 routes over 55 months. Data is sourced from the Department of Infrastructure and Regional Development. This provides the study with 385 observations which is more than sufficient for the ensuing analysis.
(G) Tools?	In order to validate the risk measure, we use a simple portfolio optimisation to derive an optimal capacity distribution for the airline if it were to minimise our risk measure. We compare this to the empirical (actual) distribution to determine whether the proposed risk measure is relevant or considered by airlines in their capacity settings. We use a chi-squared test of proportions to formally test the statistical similarity of the 2 distributions.
TWO	**Two** key questions
(H) What's New?	The novelty is in the idea. The premise is that we can use a simple risk measure based on publicly available information that will reduce the informational asymmetry when airports/tourism destinations negotiate with airlines for route access. For example, AER will provide a numerical measure of a particular route's level of travel demand risk. As such, tourism destinations will be able to observe the quantitative risk ranking of their location from the airline's perspective. Moreover, AER at the portfolio level allows the calculation of changes in airline-level AER due to changes in routes served. That is, if an airline replaces route X with route Y, the implications for the airline's exposure to AER can be calculated.
(I) So What?	As a destination's air service consistency is determined by an airline's strategic decisions, our proposed risk measure can be viewed as a valid metric that captures the extent to which the origin-destination pair is exposed to possible unpredictable volatility in travel demand that is relevant to airlines. It can be useful for local stakeholder consortia (including airports, local governments, tourism marketing organisations, etc.) in assessing their level of business risk to the airlines especially when the stakeholders are not privy to the same set of full information airlines use to make network capacity and scheduling decisions. The risk-rank will help determine the degree of incentives/risk-share agreements that may be required to entice an airline to introduce new - or retain existing - services on a route.
ONE	**One** bottom line
(J) Contribution?	The first quantitative publicly available risk measure (from the perspective of an airline) for tourism destinations and airports when negotiating with airlines for route access.
(K) Other Considerations	Yes, Dr David Duval (University of Winnipeg) is an expert in tourism/aviation policy and management, and Dr Tay Koo (UNSW) is an expert at air travel behaviour and modelling. The target journal is Current Issues in Tourism as there is a Methods & Practice section that is a perfect fit for this paper. Little risk. This paper has been workshopped and the reception from the tourism and aviation community is positive.