Airport Management: a perspective article

Graham, A.

The final, published version in Tourism Review, DOI: 10.1108/TR-05-2019-0200, 2019 will be available at:

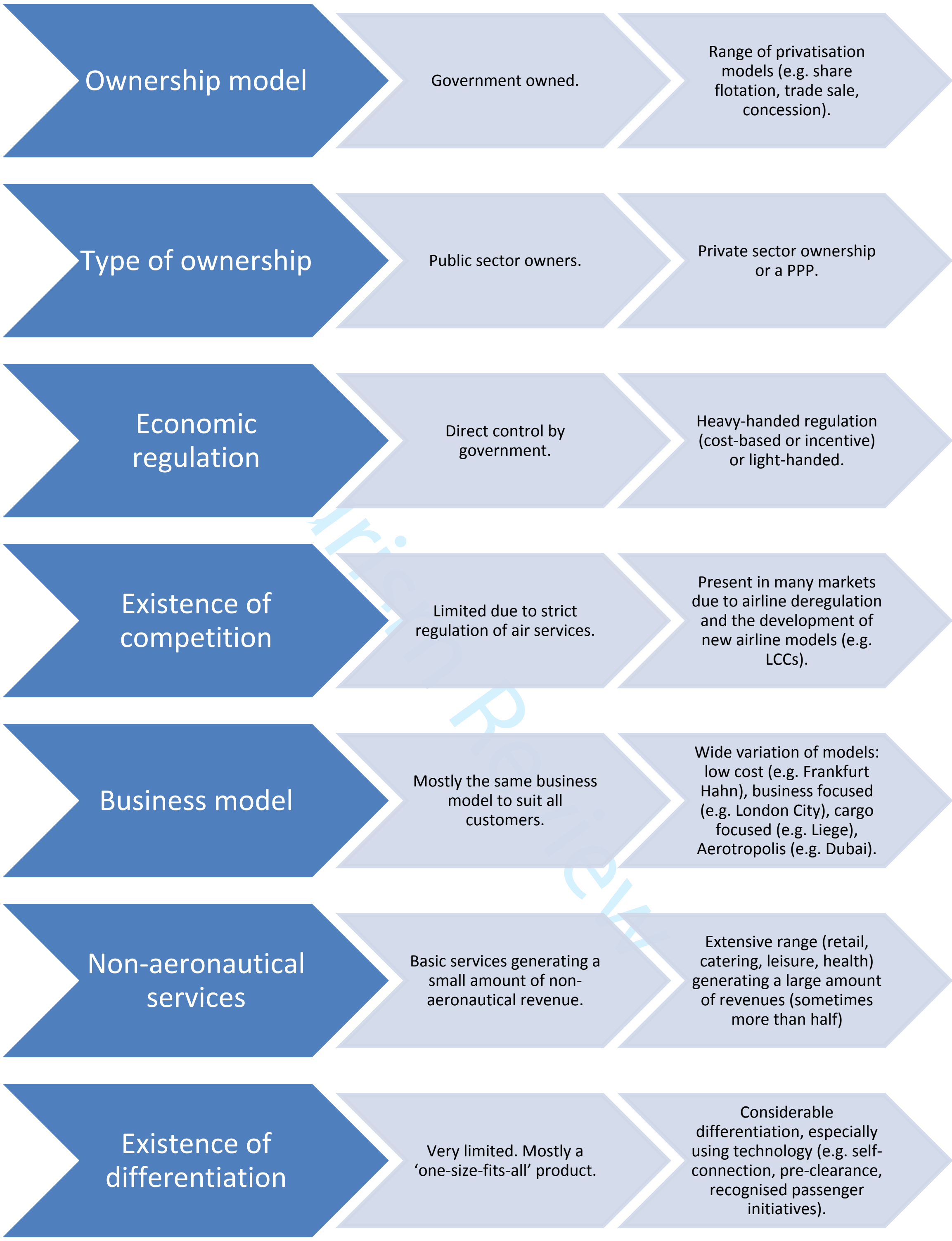
https://dx.doi.org/10.1108/TR-05-2019-0200

Tourism R

Airport Management: A perspective article

Journal:	*Tourism Review*
Manuscript ID	TR-05-2019-0200.R2
Manuscript Type:	Viewpoint
Keywords:	Airport, Management, Privatisation, Diversification

Figure 1: The evolution of airport management



AIRPORT MANAGEMENT

INTRODUCTION

The airport sector has changed dramatically since 1946, with the public service paradigm, that views an airport as a public utility, being replaced with a commercial paradigm, that considers it a business enterprise. This transformation has been partly driven by airline markets becoming increasingly deregulated, carriers being privatised, and the presense of a greater diversity of airline business models, such as low cost carriers (LCCs) and global alliances. At the same time, governments have questioned their need to financially support, or directly manage, airport operations. Therefore the aim here is to evaluate these past changes and provide some perspective on the future directions of airport management.

PAST PERSPECTIVE 75 YEARS OF DEVELOPMENTS 1946-2020

Arguably the most controversial development that demonstrates the shift in attitudes in airport management has been airport privatisation and the emergence of public private partnerships (PPPs). The first major privatisation occurred in the UK in 1987 (Doganis, 1991) and since then has become a popular trend. By 2016, 38% of the 500 busiest global airports had some sort of private sector participation, with 41% of total traffic being handled by airports with some private stakeholders (Airports Council International (ACI), 2017).

The stated objectives of these privatisations have generally focused on improvements in efficiency and performance, coupled with a need for greater investment (Graham, 2011). Yet the evidence as to whether privatised airports have achieved these objectives and been successful is far from clear - with the airport industry being far more convinced of the merits of privatisation than the airline industry (ACI, 2018a; International Air Transport Association (IATA), 2017; 2018). The academic research literature is just as inconclusive. Some studies have found no statistical link between privatisation and economic performance (e.g. Parker, 1999; Holvad and Graham, 2004; Domney *et al*., 2005; Vasign and Gorjidooz, 2006; Oum *et al*., 2003; Lin and Hong, 2006; Barros, 2009) whereas others (e.g. Marques *et al*., 2015; Vogel, 2006; Bottasso and Conti, 2012; Barros and Dieke, 2007) have observed a positive relationship.

In reality, the situation is much more complex than much of the research indicates. It may well be that in certain circumstances the underlying trend towards airport 'commercialisation' has had a positive impact, irrespective of whether privatisation has occurred. Moreover there are many different privatisation and PPP models and the exact amount of private sector involvement will certainly have an impact (Oum *et al*., 2006; Oum *et al*., 2008). Inevitably the objectives are likely to have been defined within the context of specific privatisation model, and so it is hardly surprising that not all the outcomes follow the same pattern. However it is more certain that airport privatisation has led, as Forsyth *et al*. (2011) argued, to the sector shifting from a national to a global industry with international investors and expertise. In the early stages of privatisation investors were typically established airport operators or international infrastructure companies, whereas the fastest growing segment is now financial investors (Condie, 2015).

A growing concern, often but not exclusively associated with airports that have been privatised, is their possible abuse of market power, which could lead to a hike in aeronautical charges, reductions in service quality or under-investment. This has led many to debate whether there is a need for economic regulation and, if so, what is the most appropriate type (Reinhold *et al*, 2010; Neimeier, 2002; Gerber, 2002; Forsyth, 2002; 2003; Littlechild, 2018a). In the early days of privatisation traditional heavy-handed regulation (associated with the control of profits or prices) was typically viewed as the way forward, but increasingly this has been questioned. Within the more commercial airport environment, it makes more sense, as argued by Niemeier (2009), Littlechild (2012a, 2012b), Arblaster (2014) and Bush and Starkie (2014), to adopt a more light-handed approach.

This relates to the whole argument concerning the extent to which airport markets are truly competitive (Barrett, 2000; Forsyth *et al*., 2010; Graham, 2006; Socorro *et al*., 2018, Lieshout *et al*., 2016; Littlechild, 2018b). Without doubt, the increasingly more liberal airline environment has proved challenging for airports to attract and maintain air services (e.g. Bush and Starkie; 2014; Gillen and Lall, 2004; Graham, 2013). Indeed compelling evidence produced by the European airport industry and others supports the notion of a relatively high level of airport competition (ACI-Europe, 2014; ACI-Europe, 2017; Oxera, 2017; Thelle and la Cour, 2018) even though the airline industry remains less convinced (IATA, 2013; Wiltshire, 2018).

The most widely acknowledged outcome of the early shifts in management attitudes was greater reliance on so-called non-aeronautical revenues from shops, catering and other commercial facilities. Globally the share of such revenues grew from just 30% in 1970 to 50% in 2000, but has now dropped back to around 40-45% (Graham, 2018). Whilst not experienced everywhere, this decline - recognised by a few (e.g. Beltran, 2018) but not commonly not acknowledged in the research literature – is a major concern, given the pressures on aeronautical revenues from cost-cutting airlines.

Another noticeable development, linked to greater airport competition, has been the existence more personalised services, such as targeted pricing incentives to maximise traffic development, and shifts from a ‘one-size-fits-all’ product offering to a more diversified approach. This reflects the desire of different airlines or airline groupings to have more differentiated facilities to suit their specific operating model. This may involve airports focusing on the needs of certain types of traffic, or offering something novel or unusual. Some airports have even gone further by becoming international airport companies (Koch and Budde, 2005; Bringmann *et al.,* 2018), or by expanding their scope of operations by developing into a so-called airport city/aerotropolis (Goetz, 2019) – even though the latter is rather an overused and vague concept, with too little assessment of actual impacts.

FUTURE PERSPECTIVE 75 YEARS 2020-2095

Turning now to the long-term future up until 2095, it is very difficult to predict the role of airports without consideration of much broader issues such as future demand; the structure of the airline industry; and the development of drones/autonomous aircraft, space travel and other technological innovations - many of which have yet to be envisaged. Moreover without any doubt growing environmental pressures will not only make it increasingly difficult to expand airport capacity but also make it much more socially unacceptable to fly. Very large new airports, such as those in Istanbul and Dubai, may cease to be the ideal solution, particularly with future manufacturers focusing on smaller aircraft that can bypass hubs rather than larger mega-hub aircraft such as the A380 which will no longer be built.

However, focusing on the overarching airport management themes that have been identified, some predictions at least for the nearer future can be made. Whilst remaining controversial, airport privatisation will continue, especially as traffic is predicted to expand (4.1% per year on average to 2040 – ACI, 2018b) and there will be continuing pressure on public sector spending. Ideological drivers, such as reducing state control and inducing greater efficiency, will increasingly play second fiddle to practical considerations such as the need for investment or reduction of public sector debt. As experience grows more informed decisions should be made, recognising, as argued by Assaf and Gillen, 2012; Adler and Liebert 2014, Yang and Fu, 2015 and Vasigh *et al.* ,2014, that the impacts of privatisation cannot be separated from the type of regulation and extent of competition. Financial investors seem set to remain the dominant players, in spite of concern that this encourages too much focus on short term financial gains that may not be compatable with long-term airport development objectives. Inevitably secondary sales of privatised airports which are already occuring in Europe will become much more the norm.

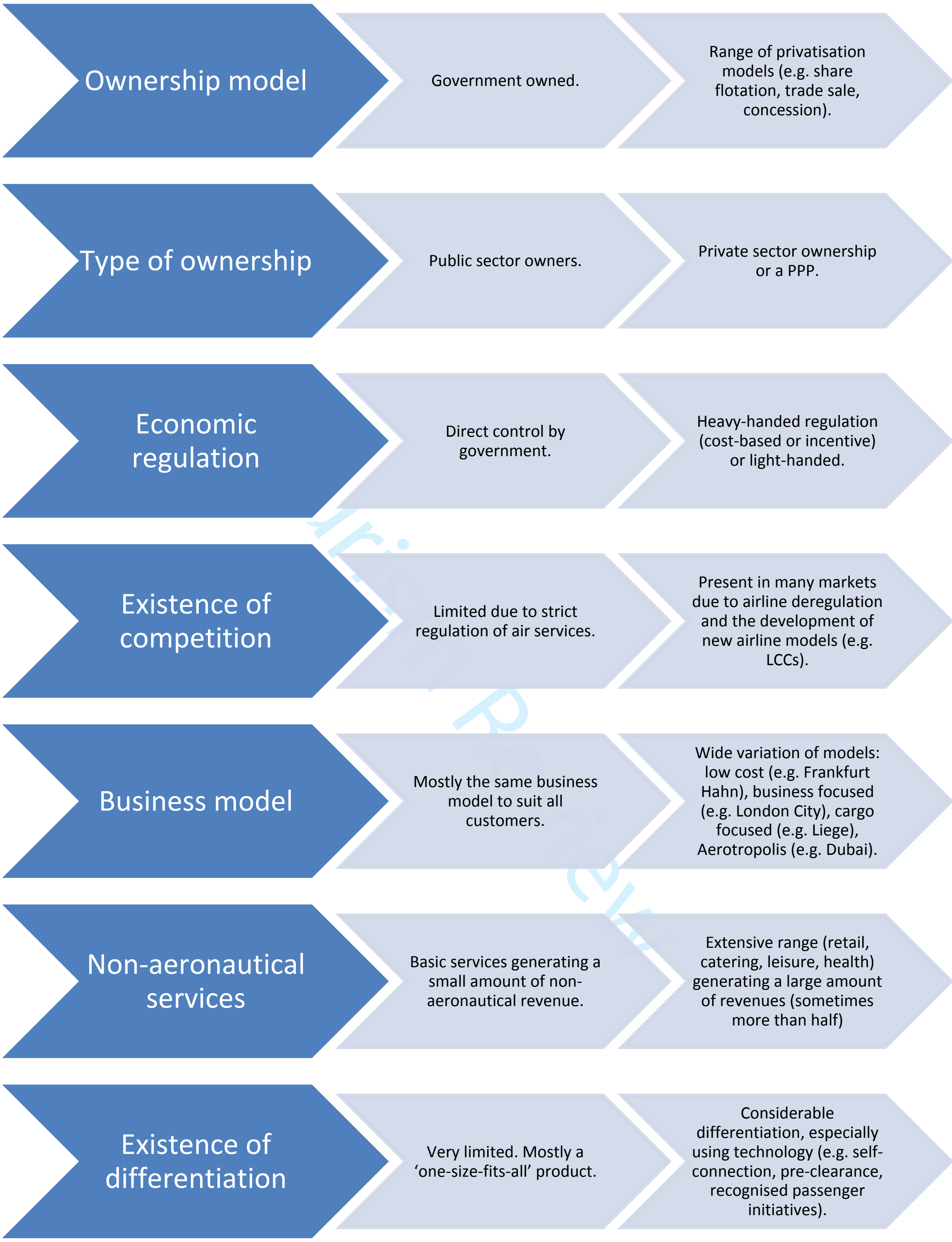
The traditional airline–airport relationship has irreversibly changed and will continue to evolve. Light-handed regulation has already resulted in commercial agreements between airport and airlines, while LCCs have agreed tailor-made airport contracts. This is the sensible way forward in the more competitive and commercially driven environment, but there is still a long way to go to achieve widespread acceptance of this approach, particularly with fierce opposition from some airlines There is likely to be the continual abandonement of the 'one-size-fits-all' airport model, with the challenge to balance this with the flexibility and financial benefits that more standardised operations bring, i.e. pure versus hybrid competitive strategies (Tavalaei and Santalo, 2019). A difficulty is that the airline industry never stands still - with the recent development of some LCCs moving from secondary into primary airports and offering connections being a case in point (Dobruskes *et al.*, 2017). Moreover the future success of the airline-airport relationship will more than ever before be very much dependent on crucial additional involvement of destination management organisations to ensure that the optimum benefits from the management of airports and tourism destinations can be achieved (Halpern, 2019; World Travel and Tourism Council, 2018).

Non-aeronautical revenue development will remain the aim of many airport operators but will be more challenging as the airport retail industry matures, passengers seek more from their airport experience, and competition from online sales and airline ancillary revenue intensifies (Moulds and Lohmann, 2016). To remain successful in this area more and more airports are likely embrace omni-channel shopping opportunities, streamline essential processes to enhance the passenger experience, and adopt other technological innovations (SITA, 2018).

CONCLUSION

In conclusion, Figure 1 summarises these developments associated with the transformation of the airport industry from a public utility to a modern enterprise. However it is misleading to suggest that this has fully occurred everywhere. Admittedly for many airports, particularly in Europe, this process is complete and it is largely business considerations that will dictate future directions in airport management. However elsewhere, especially within more developing economies, this evolution may only be just beginning.

Figure 1: The evolution of airport management



REFERENCES

ACI (2017), *Airport Ownership, Economic Regulation and Financial Performance*, ACI, Montreal.

ACI (2018a), "Privatization has proven successful in developing airport infrastructure to cope with traffic growth", *ACI Media Release*, 18 September, ACI, Montreal.

ACI (2018b), *World Airport Traffic Forecasts*, ACI, Montreal.

ACI-Europe (2014), *Competition in the European Aviation Sector*, ACI-Europe, Brussels.

ACI-Europe (2017), *The Competitive Edge: Airports in Europe*, ACI-Europe, Brussels.

Adler, N. and Liebert, V. (2014), "Joint impact of competition, ownership form and economic regulation on airport performance and pricing", *Transportation Research Part A: Policy and Practice,* 64, pp.92-109.

Arblaster, M. (2014), "The design of light-handed regulation of airports: Lessons from experience in Australia and New Zealand", *Journal of Air Transport Management*, 38, pp.27-35.

Assaf, A. and Gillen, D. (2012) "Measuring the joint impact of governance form and economic regulation on airport efficiency", *European Journal of Operational Research*, 220(1), pp.187-198.

Barrett, S. (2000), "Airport competition in the deregulated European aviation market", *Journal of Air Transport Management*, 6(1), pp.13-22.

Barros, C. (2009), "The measurement of efficiency of UK airports, using a stochastic latent class frontier model", *Transport Reviews*, 29(4), pp.479-498.

Barros C. and Dieke, P. (2007), "Performance evaluation of Italian airports with data envelopment analysis", *Journal of Air Transport Management*, 13(4), pp.184-191.

Beltran, M. (2018), "Airport operators face dilemma", Airports International, April/May, pp.28-30.

Bringmann, K., De Langhe, K., Kupfer, F., Sys, C., Van de Voorde, E. and Vanelslander, T. (2018), "Cooperation between airports: A focus on the financial intertwinement of European airport operators". *Journal of Air Transport Management*, 69, pp.59-71.

Bottasso, A. and Conti, M. (2012), "The cost structure of the UK airport industry", *Journal of Transport Economics and Policy*, 46(3), pp.313-332.

Bush, H. and Starkie, D. (2014), "Competitive drivers towards improved airport/airline relationships", *Journal or Air Transport Management*, 41, pp.45-49.

Condie, S. (2015), "Airport ownership trends in Europe", *Journal of Airport Management*, 10(1), pp.14-23.

Doganis, R. (1992), *The Airport Business*, Routledge, London.

Domney, M., Wilson, H. and Chen, E. (2005), "Natural monopoly privatisation under different regulatory regimes", *International Journal of Public Sector Management*, 18(3), pp.274-292.

Dobruszkes, F., Givoni, M., and Vowles, T. (2017), "Hello major airports, goodbye regional airports? Recent changes in European and US low-cost airline airport choice", *Journal of Air Transport Management*, 59, pp.50-62.

Forsyth, P. (2002), "Privatisation and regulation of Australian and New Zealand airports", *Journal of Air Transport Management*, 8(1), pp. 19-28.

Forsyth, P. (2003), "Regulation under stress: developments in Australian airport policy", *Journal of Air Transport Management,* 9(1), pp. 25-35.

Forsyth, P., Gillen, D., Mueller, J. and Niemeier, H.-M. (Eds) (2010), *Airport Competition*, Routledge, Abingdon.

Forsyth, P., Niemeier, H.-M. and Wolf, H. (2011), "Airport alliances and mergers – structural change in the airport industry?"*, Journal of Air Transport Management*, 17(1), pp.49–58.

Gerber, P. (2002), "Success factors for the privatisation of airports - an airline perspective", *Journal of Air Transport Management*, 8(1), pp.29-36.

Gillen D. and Law, A. (2004), Competitive advantage of low-cost carriers: some implications for Airports, *Journal of Airport Management*, 10(1), 41-50.

Goertz, A. (2019), 'The airport as an attraction: The Airport City and Aerotropolis concept" in

Graham, A. and Dobruszkes, F. (Eds), *Air Transport: A Tourism Perspective*, Elsevier, Oxford.

Graham, A. (2006), "Competition in airports", in Papatheodorou, A. (Ed.), *Corporate Rivalry and Market Power: Competition Issues in the Tourism Industry*, London, I.B. Tauris, pp.76-93.

Graham, A. (2011), "The objectives and outcomes of airport privatisation", *Research in Transportation Business and Managemen*t, 1(1), pp.3–14.

Graham, A.(2013), "Understanding the low cost carrier and airport relationship: A critical analysis of the salient issues", *Tourism Management*, 36, pp.66-76.

Graham, A. (2018), *Managing Airports: An International Perspective*, Routledge, Abingdon.

Halpern, N. (2019), "Partnerships between tourism destination stakeholders and the air transport sector", in A.Graham and F. Dobruszkes (Eds), *Air Transport: A Tourism Perspective*, Elsevier, Oxford, pp.203-217.

Holvad, T. and Graham, A. (2004), "Efficiency measurement for UK Airports: An application of data envelopment analysis", *The Empirical Economics Letters*, 3(1), pp.31-39.

IATA (2013), *Airport Competition*, IATA Economics Briefing No 11, IATA, Geneva.

IATA (2017), *Airport Privatization Fact Sheet*, IATA, Geneva.

IATA (2018), Airlines urge caution on airport privatization, *Press Release*, 5 June, IATA, Geneva.

Koch, B. and Budde, S. (2005), "Internationalisation strategies in airport companies", in W. Delfmann, H. Baum, S. Auerbach and S. Albers (Eds), *Strategic Management in the Aviation Industry*, Ashgate, Aldershot, pp.377-407.

Lieshout, R., Malighetti, P., Redondi, R., and Burghouwt, G. (2016), "The competitive landscape of air transport in Europe", *Journal of Transport Geography*, 50, pp.68-82.

Lin, L. and Hong, C. (2006), "Operational performance evaluation of international major Airports: An application of data envelopment analysis", *Journal of Air Transport Management,* 12(6), pp342-351.

Littlechild, S. (2012a), "German airport regulation: Framework agreements, civil law and the EU Directive", *Journal of Air Transport Management*, 21, pp.63-75.

Littlechild, S. (2012b), "Australian airport regulation: Exploring the frontier", *Journal of Air Transport Management,* 21, pp.50-62.

Littlechild, S. (2018a), "Economic regulation of privatised airports: Some lessons from UK experience", *Transportation Research Part A*, 114, pp. 100-114.

Littlechild, S. (2018b) "Regulation and the nature of competition", *Journal of Air Transport Management*, 67, pp.211-223.

Marques, R. Simões, P. and Carvalho, P. (2015), "The influence of the operational environment on efficiency of international airports", *Journal of Advanced Transportation*, 49(4), pp.511-522.

Moulds, J. and Lohmann, G. (2016), "An analysis of future trends in non-aeronautical revenue: A case study from Adelaide Airport", *Journal of Airport Management*, 10(4), pp.343-358.

Niemeier, H.-M. (2002), "Regulation of airports: the case of Hamburg airport: a view from the perspective of regional policy", *Journal of Air Transport Management,* 8(1), pp.37-48.

Niemeier, H-M. (2009), *Regulation of Large Airports: Status Quo and Options for Reform,* International Transport Forum (ITF) - Airport Regulation Investment and Development of Aviation, ITF, Paris.

Oum, T., Adler, N. and Yu, C. (2006), "Privatisation, corporatisation, ownership forms and their effects on the performance of the world's major airports", *Journal of Air Transport Management*, 12(3), pp.109-121.

Oum, T., Yan, J. and Yu, C. (2008), "Ownership forms matter for airport efficiency: A stochastic frontier investigation of worldwide airports", *Journal of Urban Economics,* 64(2), pp. 422-435.

Oum, T.,Yu, C. and Fu, X. (2003), “A comparative analysis of productivity performance of the world's major airports: summary report of the ATRS global airport benchmarking research report – 2002”, *Journal of Air Transport Management*, 9(5), pp.285-297.

Oxera (2017), *The Continuing Development of Airport Competition in Europe*, Oxera, London

Parker, D. (1999), “The performance of BAA before and after privatisaton: A DEA study”, *Journal of Transport Economics and Policy*, 33(2), pp.133-146.

Reinhold, A., Niemeier H., Kamp, V., Muller, J. (2010), “An evaluation of yardstick regulation for European airports”, *Journal of Air Transport Management*, 16(2), pp.74-80.

SITA (2018), *Air Transport IT Insights 2018*, SITA, Geneva.

Socorro, M., Betancor, O. and de Rus, G., (2018), “Feasibility and desirability of airport competition: The role of product substitutability and airlines' nationality”, *Journal of Air Transport Management*, 67, pp.224-231.

Tavalaei, M. and Santalo, J.(2019), “Pure versus hybrid competitive strategies in the airport industry” *Transportation Research Part A: Policy and Practice*, 124, pp.444-455.

Thelle, M. and Sonne, M. (2018), “Airport competition in Europe”, *Journal of Air Transport Management*, 67, pp.232-240.

Vasigh, B. and Gorjidooz, J. (2006), “Productivity analysis of public and private airports. A causal investigation”, *Journal of Air Transportation,* 11(3), pp144-163.

Vasigh, B., Erfani, G. and Sherman, B. (2014), “Airport performance and ownership structure: Evidence from the United Kingdom, United States, and Latin America”, *Journal of Aviation Technology Engineering*, 4, pp.40-49.

Vogel, H.-A. (2006), “Impact of privatization on the financial and economic performance of European airports”, *The Aeronautical Journal*, April, pp.197-213.

Wiltshire, J. (2018), Airport competition: Reality or myth? *Journal of Air Transport Management*, 67, pp.241-248.

World Travel and Tourism Council (WTTC) (2018), *Creating a Tourism Destination from an Airport Hub*, WTTC, London.

Yang, H. and Fu, X. (2015), “A comparison of price-cap and light-handed airport regulation with demand uncertainty”, *Transportation Research Part B: Methodological*, 73, pp.122-132.