

Globalization of Airport Management Groups

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Abstract

The Airports have a significant role in boosting the economic activity of one region. Thus, the quality of airport policies, infrastructure, facilities, multi-modal link development or quality assurance and customer satisfaction are reflected in key performance/economic indicators. In this regard, the consortiums responsible for airport competitive management that have evolved progressively for the last 30 years, but especially since 2010, show sustainable business involvement and support local economies. In order to provide a thorough examination of the leading airport investors, an analysis on their evolution, specificity and major contributions is performed, highlighting their commitment on the social, economic and environmental priorities.

The paper presents the ownership, organization, innovative strategies and programs, investments and global activities of airport management companies, impacting the development of airports. The authors study not simple financial investors, but managing groups showing responsible business commitment. However, financial results support the analysis and reflect the development of global airport operators indicating their strengths and weaknesses, but also highlighting the threat of economic/sanitary crisis. By collecting data from multiple airport organizations or groups, but also from academic sources, the authors analyze the opportunities offered by airport top investors, taking a look in their business philosophy for cultivating innovative market oriented solutions or brand development strategies. This way, the realities and perspectives of modern airport management are reflected.

Keywords: Airport globalization, brand development, competitiveness, internationalization, ownership, privatization.

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Introduction

The gradual liberalization of air transport profoundly impacted the market structure, airline strategies, but also airport operational models. Jarach (2001) indicated that the airport business proved proactive, capable of serving various demands and showing a marketing-driven approach. Pitt, van Werven and Price (2011) showed that in order to be a major player, airports need to focus on capacity, the development of low-cost carriers and privatization. Outlining the importance of airline-airport relationship, the airports become rivals in their will to attract air carriers which can drive business development (Zaharia, et al. (a), 2020).

After 34 years from the beginnings of airport privatization (Graham, 2020), studies indicate this is a measure of ensuring airport success. In 2016, 41% of European airports had private shareholders (Sadler, 2016) and in 2018, this was the case for more than half of the airports, doubling the number

from 2010 (ACI, 2018), (Future Travel Experience, 2018). Thus, the difference between individual operators and managing groups lies in the amount and variety of resources (human, financial, technological, etc.) that have the power to increase profit, the quality of the services and adaptability. This phenomenon is widely represented in all continents, transforming airport management groups into global ones. The international expertise of the investors was capable of shifting the airport industry from a national to a global one (Forsyth, et al., 2011).

Following airport investors expanding plans, seeking business opportunities in international markets reflects in growing the connection between states. In this sense, the relation between globalization and tourism is improved by the increase in passenger mobility.

Methodology

Using qualitative and quantitative analysis, and mainly a review of secondary data, the authors study how the changes in airport management have introduced essential alterations in the aviation industry, and analyze competitive airport business models developed in the last ten years, revealing the specificity of airport private investors. The financial results evolution support the analysis and give indications on development opportunities and investment criteria prospects/expanding plans.

After the examination of documentary information from multiple academic sources citing aeronautical associations and regulators like International Air Transport Association (IATA) or International Civil Aviation Organization (ICAO), but also from airports and airport organizations such as Airports Council International (ACI), results regarding airport management targets will be quantified by the instrumentality of achieved goals analysis and expected performance defined in the mission statement of the airport groups.

The global airport investors are analyzed considering different criteria. First, the characteristics of the 6 major global investors are displayed, then the analysis will be narrowed to the European level and the target group of the analysis will contain key management groups/operators from 6 countries (France, Germany, Spain, Switzerland, Netherlands and Italy). For each of the countries, the investors with most performances are analyzed in terms of their values, goals and results.

Analysis of leading airport investors

The development of specialized airport management groups has a long tradition (Figure no. 2), but many of the groups can be considered simple financial investors. The success of a global airport consortium (Table no. 1), however, seems to be determined by a holistic approach, implying not only financial involvement, but developing a management system that ensures the optimization of responsible business processes.

The distribution of the 6 top airport investors/operators (Table no. 1) places Spain's group AENA as the leading consortium with regard to the number of airports in portfolio, while Group ADP from France has penetrated most countries. In the case of Fraport AG, although penetrated a number of countries double than its competitor from Spain, serves less than half of AENA's airport number.

Table no. 1. Top global airports investors/operators by number of airports served-2019

Crt.	Airport investor	Airports	Countries	Employees	Pax (mil)	Revenue (bil €)
1.	Aena (Spain)	69	6	13,000	293.4	4.5
2.	Capital Airport Holding (China)	54	1	38,000	206	5.4
3.	Corporación América Airports (America)	52	7	6,299	84.2	1.6
4.	Vinci Airports (France)	45	12	15,000	255	48.1
5.	Fraport AG (Germany)	31	12	22,514	70.5	3.3
6.	Group ADP (France)	26	15	26,122	243.2	4.7

Source: based on data from Lioutov, 2019; Bates, 2020

Capital Airport Holding (CAH), founded in 1988, but established in 2002 in its current version, is one of the few groups representing Asia, serving just one country. However, occupies the second place in the rankings regarding the number of airports served. CAH shows a few particularities, being governed by China’s Civil Aviation Administration and providing a wide range of airport services, but also real estate or hotel/accommodation facilities. Although it isn’t among the top 6 airport investors, a good model is provided by an Asian group: Changi Airports International (CAI), representing 10 airports in 7 countries. It has time to catch up, since it was only founded in 2004. CAI’s aim as a strategic investor is to “create world-class airports worldwide”, considering them a vital part of a country, being connected to economic growth and development (CAI, 2021). CAI’s expertise is firmly outlined by the management of Changi International Airport, globally recognized as one of the best airports (CAI, 2021).

The largest private airport operator in America and the third one in global rankings also by the number of airports, was also established in 1998. It shows the smallest number of passengers served before the pandemic crisis (84.2 million pax. in 2019) and also the lowest revenue in the same year (i.e. 1.56 billion \$) (CAAP, 2021), focusing on an organic growth strategy.

Data of all airport investors (Figure no.1) indicates a decrease in all financial and non-financial indicators. For Fraport, the year 2020 ended with a reduction of 1350 employees and more than 50% reduction in its revenues. For AENA, the pandemic situation induced even more problems: in 2020 figures show a reduction of 71% in passenger traffic and the revenues reduced by half. Surely, the pandemic context has determined notable decrease in all performance indicators for all airport groups; in 2020, Group ADP only reached 39.6% of the passenger traffic from the previous year (Figure no. 1).

The other European managing groups on positions 4 to 6 (Table no. 1) have a rich history and experience, Group ADP showing 76 years seniority and Fraport 97 years (Figure no.2). Vinci Airports (established 21 years ago) climbed the charts in 2015, becoming the 5th airport operator, at that year looking after 3.5% of the global commercial traffic (Vinci Airports, 2021). Nowadays, it climbed one more position in the rankings, showing the biggest consolidated revenues (4 times higher than Capital Airport Holding and 37 times higher than the American group Corporación América Airports) and the largest number of passengers after AENA; however the Spanish group had a 9 year time before to establish its position.

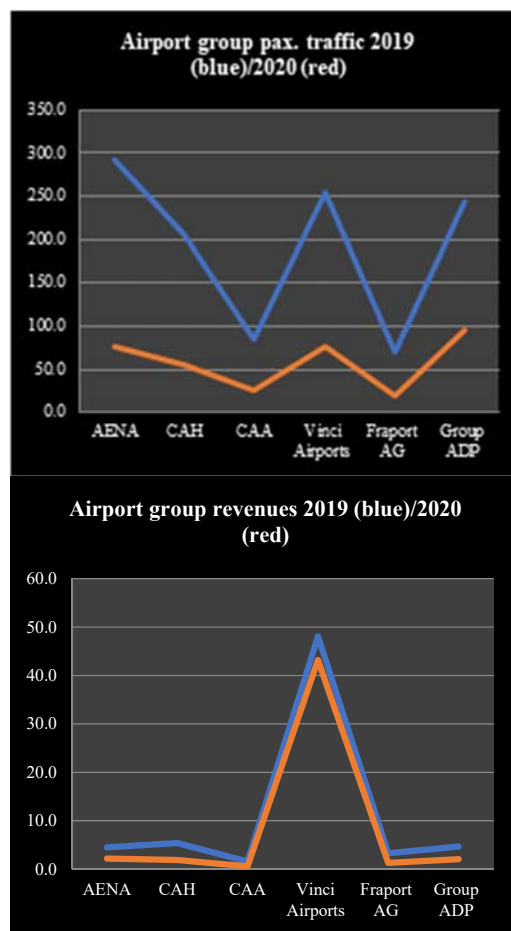


Figure no. 1. Leading airport groups revenues and traffic (2019/2020)

Source: based on data from AENA, 2021; CAH, 2021; CAA, 2021; ADP, 2021

In the light of the above mentioned, figures show that the proficiency of one airport investor pales in front of the results offered by a good team of airport service management professionals. Groups like AENA or Vinci Airports, although with a shallow experience, have proved best outcomes, offering services of the highest quality to their clients. On its website, Vinci exposes 10 reasons for joining the group, excelling in its marketing strategy, emphasizing on the benefits they are offering as a way of optimizing airport's business development.

Airport management groups – improving efficiency through responsible business commitment

Airports are enhancing international competitiveness, accelerating economic development and optimizing regional traffic layout (Chen, 2020). It is very hard for an airport group on the market for 21 years to compare with another one that has an experience of 100 years; however, as stated previously, figures show no direct connection between market experience and performance (Table 1, Figure no. 2). Likewise, the mission and vision of an airport, although may be well defined, do not assure that they will reach their goals or be competitive. Hereinafter, the performances of the rewarding European airport consortiums will be studied in terms of their values, goals and results (Table no. 2).

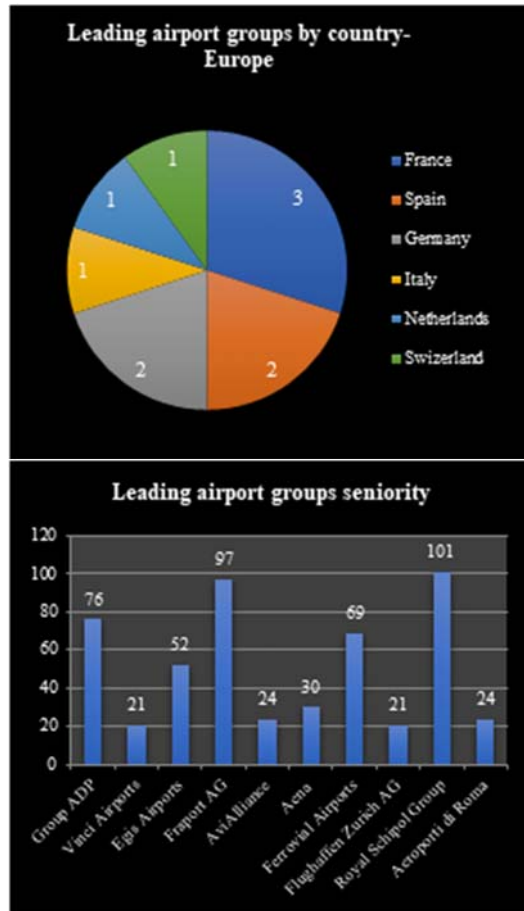


Figure no. 2. Leading European airport groups characteristics (2021)

Source: based on data from ACI, 2018; Lioutov, 2019 and Rates 2020

Table no. 2. Vision of top 10 airport investors/operators in Europe

Crt.	Country	Operator	Vision
1.	France	Group ADP	Worldwide leader in the airport industry
		Vinci Airports	Provide a true experiential journey. Committed for positive mobility
		Egis Airports	A holistic vision of airports; from preliminary planning through to operation
2.	Germany	Fraport AG	Europe's best airport operator, setting standards worldwide
		AviAlliance	Identifying potential, creating value
3.	Spain	Aena	Be a leading, benchmark company in the airport infrastructure management sector worldwide
		Ferrovial Airports	Creating value for society customers, investors and employees
4.	Switzerland	Flughafen Zurich AG	Constantly developing the airport as a high-quality travel hub
5.	Netherlands	Royal Schiphol Group	Creating the world's most sustainable, high-quality airports
6.	Italy	Aeroporti di Roma	Concentrates its commitment on the environmental, social and economic priorities

Source: based on data from the global airport groups declared vision

The world's leading airport operator by numbers of passengers - AENA, with 30 years of expertise, outlines the importance of international competitiveness, exclusively managing 47 airports in Europe

(46 in Spain and one in UK), but also having shares in other airports in America (12 in Mexico, 6 in Brazil, 2 in Colombia and 2 in Jamaica) (AENA, 2021). In other words, in 2020, AENA has fully owned and operated 67% of its airports (the largest number of airports 100% owned), while having interests in the other airports from America, Africa or the European one outside Spain. The group has 51% share in London Luton Airport, half of the shares in Cali Alfonso Bonilla Aragón and between 30-40% interests in Cartagena de Indias, Aeropuertos Mexicanos del Pacífico, etc. (Bates, 2020). Although, it seems that no one can compete with the Spanish group, its mission aims to increase its presence as a “global aeronautical infrastructure operator” (AENA, 2021). AENA shows special attention on environmental issues, having an office specialized in assisting the enquiries on this subject and has implemented an integrated model for quality and environmental management. No wonder that it is the most performant airport consortium, since its responsible business commitment means that unlike all the other investors, it offers a special employment site, showing one more time care for people/employees.

The Spanish Ferrovial Airports, with 69 years of seniority, but only 23 in the aviation industry, does not have the same results as the rewarding group from the same country (AENA); however, it is very involved in UK’s airports and bounces about being included in prestigious sustainability indexes.

On the other hand, the German operator AviAlliance doesn’t fully own any of the airports managed, but has a share of up to 55.44% (e.g. in Budapest Airport), while for the other airports, data show shares less than 50% (49% in Hamburg, 40% in Athens and respectively 30% in Düsseldorf) (Bates, 2020). AviAlliance did a great job during the 20 years of operation of Athens Airport, and so did for the German Hamburg and Düsseldorf airports, turning them into “user-friendly enterprises” (AviAlliance, 2021). In the same country, Fraport AG declares it is “a global player”, having 22,514 employees on 4 continents, 12 countries and 31 airports (Fraport, 2021). 27% of Fraport’s activity is international business, the German group committing to environmental protection, responsibility and transparency, ethical aspects and gender equity, outlining that 31,6% of the management positions are held by women. Fraport is also committed to the principles of the UN Global Compact and supports development goals defined by the UN in its 2030 Agenda (Fraport, 2021).

From the statement of its vision, Egis Airports could have been on a higher position among the top airport managing groups. Egis considers itself creative, developing a holistic approach to airport management, concerned about operation, consulting and development (Egis Airports, 2021). For the moment, its network comprises 16 airports from 7 regions, but among its employees, only 6,100 are in operations, the other 8,750 are in engineering (Egis Airports, 2021).

Group ADP, founded in 1945 outlines an integrated managerial model, sustains collaboration with its partners and differentiates itself by the involvement in all aspects of the airport value chain (ADP, 2021) and seems to be committed to education. Focusing on the development of its employees, ADP emphasizes on future skills requirements and interdisciplinary qualifications: aviation, computing, telecommunications – as required by the evolving status of the aviation labor market. The requirements of future air transport market will generate new categories of jobs and occupations, asking for interdisciplinary qualifications in order to cope with the technological and social changes brought by Aviation 4.0 (Zaharia, et al. (b), 2020).

In the same responsible managerial manner, Vinci Airports from the same country, is keen on providing career opportunities and prospects for its employees and declares that its approach to corporate management is designed specifically for the passengers.

Just like Vinci Airports, Flughafen Zurich AG is “on the market” for 21 years, and although is not on the podium among the most prolific airport investors, it defines itself as a successful operator and outlines a strong code of conduct, ensuring the care for its 1,700 employees in all its business areas. In the same manner, one of the oldest airport groups globally - Royal Schiphol Group (Figure no. 2), emphasizes on socio-economic aspects. For the 71.7 mil passengers transported in 2019, the investor sets aspirational goals through its “Vision 2050”, assuring the continuous improvement of the fundamental qualities it offers by being a sustainable business.

For an airport to be competitive it must offer quality, safe and efficient services and must be adaptable to new technologies. The way to achieve this state is through modern and performant management.

Efficient airport management is extending the concepts of Airport Collaborative Decision Making (A-CDM) and Total Airport Management (TAM) (Classen, et al., 2017) as a proactive approach for optimizing operations. Aeroporti di Roma (ADR), a winner of Customer Experience Award in 2019 and 2020, outlines the expected gains of CDM, ensuring that all its airport partners will obtain benefits from implementing this operational procedure. Although parsimonious with declaring its results, ADR shows 6 areas of interest (ADR, 2021), commencing from company innovation, providing excellent service to clients, its commitment to quality and the wellbeing of people/employees, to paying attention to the region and environment. Always considering the impact on people and environment, Aeroporti di Roma's business philosophy defines the key points of responsible business. But it's not just the case of this last investor analyzed, the study was meant to outline that all the airport groups reviewed seem to be committed to responsible business, mirrored in shaping a bright future of the airports in their portfolio.

Conclusions

The paper showed that competitiveness of airport groups is not directly linked to their seniority, but influenced by the ability to understand and adapt to the business environment. Also, the key to airport managing group's success is determined by a merger between financial investment, know-how and innovation leadership, sustained by the values that drive the consortium.

The detailed examination of global airport group reports reflected that 67% of the leading airport investors that are also operators are from Europe. Considering the number of airports in portfolio, the numbers of countries in which they invested or the traffic statistics, management groups from France, Germany or Spain are rated as the most prolific airport investors. The fact that nowadays more than 50% of European airports have private shareholders indicates market availability, with still important possibilities for expansion.

Uncertainties for the aviation industry in the pandemic context persist, determining notable decrease in all performance indicators of airport groups, inducing operations and financial risks.

Future demands for the development of global airport groups take into consideration innovative solutions for sustainable business commitment, enhancing international competitiveness and comprising an integrated business model.

References

- ACI, 2018. *Privatization Can Provide a Viable Solution to Global Airport Infrastructure Gap*, [online] Available at: <<https://aci.aero/news/2018/06/19/privatization-can-provide-a-viable-solution-to-global-airport-infrastructure-gap/>> [Accessed 16 March 2021].
- ADP, 2021. *Our activities*, [online] Available at: <<https://www.parisaeroport.fr/en/homepage-group>> [Accessed 6 April 2021].
- ADR, 2021. *Our areas of commitment*, [online] Available at: <<https://www.adr.it/web/aeroporti-di-roma-en/our-areas-of-commitment>> [Accessed 26 March 2021].
- AENA, 2021. *Company profile*, [online] Available at: <<http://www.aena.es/en/corporate/company-profile.html>> [Accessed 3 March 2021].
- AviAlliance, 2021. *Company portrait AviAlliance*, [online] Available at: <https://www.avialliance.com/avia_en/2.jhtml> [Accessed 2 March 2021].
- Bates, J., 2020. *The A-Z of global airport operators*, [online] Airport World, Available at: <<https://airport-world.com/the-a-z-of-global-airport-operators/>> [Accessed 3 March 2021].
- CAI, 2021. *Changi Airports International*, [online] Available at: <<https://www.cai.sg/>> [Accessed 20 February 2021].
- CAAP, 2021. *Corporate profile, Corporación América Airports*, [online] Available at: <<https://www.caap.aero/about.php>> [Accessed 2 April 2021].
- Chen, Z., 2020. Research on the Guangdong-Hong Kong-Macao Airport Group: International Experience and China's Path. In: *Proceedings of the 4th International Conference on Culture*,

- Education and Economic Development of Modern Society (ICCESE 2020)*. [online] 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020). Moscow, Russia: Atlantis Press. <https://doi.org/10.2991/assehr.k.200316.302>.
- Classen, A.B., Werner, C. and Jung, M., 2017. Modern airport management – fostering individual door-to-door travel. *Transportation Research Procedia*, 25, pp.63–76.
- Egis Airports, 2021. *Airport development, operation and consulting*, [online] Available at: <<https://www.egis-group.com/activites/airport-development-operation-and-consulting>> [Accessed 25 February 2021].
- Forsyth, P., Niemeier, H.-M., Wolf, H., 2011. Airport alliances and mergers – structural change in the airport industry? *Journal of Air Transport Management*, 17(1), pp.49–58.
- Fraport, 2021. *Our group*, [online] Available at: <<https://www.fraport.com/en.html>> [Accessed 6 April 2021].
- Future Travel Experience, 2018. *Vinci Airports' vision to provide "a true experiential journey"*, [online] Available at: <<https://www.futuretravelexperience.com/2018/06/vinci-airports-vision-to-provide-a-true-experiential-journey/>> [Accessed 9 January 2021].
- Graham, P.A., 2020. Airport privatisation: A successful journey? *Journal of Air Transport Management*, 89, Article number: 101930.
- Jarach, D., 2001. The evolution of airport management practices: towards a multi-point, multi-service, marketing-driven firm. *Journal of Air Transport Management*, 7(2), pp.119-125.
- Lioutov, I., 2019. *Global airport groups: A rising value proposition for the aviation industry*, [online] Available at: <<https://blog.aci.aero/global-airport-groups-a-rising-value-proposition-for-the-aviation-industry/>> [Accessed 9 January 2021].
- Pitt, M., van Werven, M. and Price, S., 2011. Airport facilities management alliances: Problems of competition and complexity. *Journal of Retail and Leisure Property*, 9(5), pp.391–400.
- Sadler, K., 2016. Private ownership of European airports increases significantly. [online] *International Airport Review*, Available at: <<https://www.internationalairportreview.com/article/22335/private-ownership-european-airports-increases/>> [Accessed 15 March 2021].
- Vinci Airports, 2021. *Reasons for joining Vinci Airports*, [online] Available at: <<https://www.vinci-airports.com/en/10-reasons-join-vinci-airports>> [Accessed 15 March 2021].
- Zaharia, S.E., Pietreanu, C.V, Pavel, A.P. and Boc, R.E., 2020. Major Trends in the Development of Airports From Central and Eastern Europe and Baltic Countries. In: R. Pamfilie, V. Dinu, L. Tachiciu, D. Pleşea, C. Vasiliu eds. *6th BASIQ International Conference on New Trends in Sustainable Business and Consumption*. Messina, Italy, 4-6 June 2020. Bucharest: ASE, pp.753-760.
- Zaharia, S.E., Pavel, A.P. and Pietreanu, C.V, 2020. Increasing employability in air transport through new interdisciplinary qualifications, *Proceedings of EDULEARN20 Conference*, pp. 5398-5408.