

ARC STUDY
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AIRPORT GOVERNANCE

AN INTERNATIONAL APPROACH





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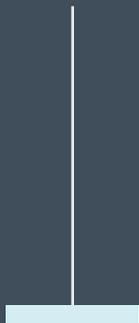
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AIRPORT GOVERNANCE | AN INTERNATIONAL APPROACH

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Erich Valentin
ARC President

When in 2019, Jordi Candela – representative of Aeroports de Catalunya and member of the Executive Committee – presented the proposal to jointly carry out a comparative study on airport governance models, especially in the European Union, the reception by all the members of Airport Regions Council (ARC) was excellent.

It was like that for two main reasons, the first because the high quality of the work carried out by Aeroports and by Jordi himself in the past is well known and, above all, because ARC has always considered this key issue to achieve our final vision: that airports located in any European region are fully integrated at all levels with the territory where they are located and, in our opinion, to which they are ultimately due. Unfortunately, an issue that is manifesting itself in all its harshness since the beginning of the pandemic involved, and will involve, significant inflows of public capital both at airports and airlines to guarantee its survival.

We firmly believe that the work developed by Dr César Trapote-Barreira is an excellent X-ray of both the current situation and its recent evolution. But for us, it is not a full stop, but rather a comma and followed since from this moment it is our responsibility to make it known, to be able to make the most of ARC's argument and lobbying activities and, Last but not least, exploring avenues of research to continue our quest to get the best out of our airports.

I hope you will enjoy as much as you will like we have had and get a better knowledge of airports' governance.

FOREWORD

Airports are no longer just infrastructures of financial assets but vital economic drivers of regional economies that contribute to the territories' social and economic development.

In the era of corporate social responsibility and the awareness about sustainability, this report aims to put a light on airport governance or how current decision-making processes can be improved considering the broader economic impact upon regional economies.

The Covid-19 has deeply affected aviation, disclosing airports' resilience as essential public infrastructures to internationally link passengers and cargo. Shareholders' theories, widely accepted before Covid-19 in most cases, should be reviewed, and airport governance should evolve towards more holistic approaches.

Environmental and social impacts, accessibility, tourism, logistics, employment and training, land planning are some topics demanding the deployment of new airports' governance models.

The Government of Catalonia, a member of the Airport Regions Council for a long time, is fully aware of this situation and aims to take the lead in the development and implementation of such governance models. To set the basis for healthier airport development of social and economic environments for the citizens of the European Union.

This report covers the different governance models and benchmarks the most relevant international cases, delivering a proposal of guidelines and becoming a valuable tool for airport regions willing to strengthen airport and regions complicities.



Isidre Gavin i Valls
Secretary of Mobility and Infrastructure
Generalitat de Catalunya

Airport governance has been a subject of interest since the early days of aviation. Today, in the midst of the health and climate crisis, it remains so. And it should be even more so, considering the close relations between commercial aviation and economic development.

Corporate governance appeared in the 16th Century. After the Second World War, two models emerged: the Anglo-American model and the Continental model. On one side, the Anglo-American model is characterised by short-term equity finance, dispersed ownership, strong shareholders rights, active markets for capital control and flexible labour markets. On the other side, the Continental model agglutinates different cases depending on the country, history, culture, and financial structure; however, it is characterised by long-term debt financing, concentrated blockholder ownership, and weak shareholder rights and inactive for capital control and rigid labour markets. Over time, both systems have been refined.

Later, Friedman and Freeman introduced a new tension between corporate governance models. Friedman (1970) stated, “the social responsibility of business is to increase its profits” for shareholders, and Freeman (1994) proposed the thesis that managers bear a fiduciary relationship to stakeholders.

Nowadays, Mazzucato (2018) considers that the states can be a tremendous force for wealth and long-term value creation, radical risk-taking, and technological innovation. This point is particularly interesting now when the pandemic urged states and public institutions to support liberalised sectors and private companies.

Furthermore, governance plays a crucial role in shaping the SDGs, and three aspects need to be considered: good governance, effective governance and equitable governance. Consistently, the European Commission puts climate emergency and sustainability at the heart of its program with the European Green Deal.

This situation urges the boards of directors to get involved in the company’s day-to-day running, defining the strategy, monitoring implementation, and communicating with stakeholders. On this horizon arises a business ethics perspective on corporate governance because ethics is a reflection about the purpose, the making decision process and how the company makes profits and contributions.

Corporate Governance can be defined as the process of leading the company to a common goal and controlling the firm with the aim of securing the long-term survival and viability of that. For this objective, governance creates a system and specifies structures to distribute rights and responsibilities among the parties

with a stake in the firm. Traditionally, there are several theories of corporate governance, but the most relevant are shareholder theory and stakeholder.

The board has a key role. The composition and the functionality are critical. It has the responsibility to see the long-term of the company. Independence is a must. The fewer members of the board could be insiders (they know the internal situation), the more of them could be outsiders (experts).

The most relevant trends in corporate governance are (1) purpose, (2) controlling investors (activism, influence, etc.), (3) achieving excellence at the boards of directors (independence, diversity, high performing) that require more and better information from the management team, (4) long term value creation -stakeholders point of view- and sustainability.

Airport governance has been researched by economists who have developed agent perspectives and economic performance assessments. Traditionally, the trend has been to move from rather public models to more market-oriented models, capturing investors and achieving higher economic performances. Currently, trends in corporate governance are well represented in airport governance, from investment activism to sustainability concern.

The evolution of airport governance can be visualized in three periods (stated by Graham): (1) initial government control (with significant public investments and developments), (2) corporation and commercialization (with Airline Deregulation Act 1978 and its effects, airports were conceived as business units), (3) privatization (looking for new investments and high economic performance).

There are two classifications to describe some characteristics of airport governance. First, attending the orientation: market-based or stakeholder-based, there are no pure models. Second, attending the elements of governance: commercialization, corporation, ownership, single/multiple airports.

The drivers of commercialization and corporatization are determinant of the need for investment expertise and resources that are not available or accessible to the public sector. As a result of more commercialization interest, in some airports, the typical functional organisational structure with different departments for finance, operations, administration, and so on, was replaced with departments or business units that were more focused on their customers' needs, airlines or passengers, because the commercial functions of the airports were gradually recognised as being equally important.

Also, airport authorities put emphasis on revenue generation, which is usually classified into two main categories: aeronautical and non-aeronautical revenues. Airlines and regulatory bodies push to keep airport charge increases to a minimum. This evolution encourages airports to take a more active and positive role. Two measures have been taken to address this situation: firstly, airports adopt a strategic approach focused on the customer and, secondly, they develop marketing departments to improve activity in this area.

In the airport industry, the main reasons for privatization are: airport efficiency and performance, providing new funds, improving the quality of management, improving service quality, producing financial gains for the public sector, and lessening the public sector influence (Graham, 2020).

Oum et al. (2006) found some interesting results related to airport performance under different ownership models. For example, airports operated by 100% government-owned corporations are almost as efficient as the airports, either 100% or a majority stake in the private sector. Particularly, in the US, only airports with majority private ownership, including 100%, achieve more efficiency than the 100% government-owned airports, but not the difference is not high. They consider that under government ownership and management, the professionals who operate the firm have an objective function that is a weighted average of social welfare (stakeholder's theory)

and their own personal agendas (agency theory). By contrast, Oum et al. argue that under private ownership, the firm maximises profit, which is a shareholder's theory.

From the perspective of public value, an airport is transport infrastructure, and its reason for being is to facilitate accessibility and support the connectivity of the territory. Therefore, it is a social utility and creates value for communities in the way of public value proposed by Moore and Mazzucato. Therefore, the agency theory has given us a vast knowledge and many arguments to move airports towards market-based governance based on financial performance. Undoubtedly necessary, but not sufficient. The analysis proposed from shareholder's theory tends to be one-dimensional, but the reality is a multidimensional system, and defining value is complex.

The airport creates shared value with the territory, promoting the creation and development of services and products of value that improve the community's well-being. Furthermore, according to ACI-Intervistas (2015), European airports contribute to the employment of 12.3 million people earning EUR 356 billion in income annually and generate EUR 675 billion in GDP each year, equal to 4.1% of Europe's GDP.

The airport is also an ethical proposal. Corporate governance trends indicate that boards of directors are increasingly concerned with ethical issues. There are some questions that could help it to focus on its purpose: What type of support must the airport give to the development of the territory? What type of relationship must the airport strengthen with society? Certainly, the Sustainable Development Goals (UN, 2015) can be a good framework to respond to these questions.

Sustainability must be a priority objective to adapt airports and aviation to the challenges of the future. There is a critical tension in this axis, "person-environment", which if we do not give it a joint and responsible response, we will jeopardise future generations. On the principle of responsibility, Hans Jonas (1979) said, "work in such a way that the effects of your actions re-

main compatible with the permanence of an authentic human life on earth" (the word "human" could be deleted, and that would make the way more non-centred).

The big step is to incorporate ethical perspective into strategy definition, and the radical challenge is to integrate a transformational vision and purpose into the organization. Stakeholder theory shows that incorporating stakeholders' opinions is valuable for improving decision making processes and project implementation. Successful engagement with stakeholders facilitates legitimation and alignment between organizations and society.

The United States, Canada or Australia present different airport governance models. All of them were revisited in the past or are in the process currently. Main airports attract the interest of investors but not small ones. Then, regional airports are owned and managed by local authorities and governments in all cases or are private if they are not focused on commercial aviation (US case). Only the USA maintain large airports as public assets, managed by airport authorities or other institutions, while Australia and Canada (reforming the system now) tend to privatization models with public control and regulation.

Europe has a strong evolution in recent years. However, the main percentage of airports remain in public hands. The European aviation sector has been one of the best performing parts of the European economy before the pandemic, and 900 million air passengers travel each year to/from and within the European Union. Airports Council International estimated the total economic impact of airport and aviation-related activities at €338 billion across the EU. Aviation can act as an 'economic multiplier' and facilitate and generate wider economic activity.

Overcoming problems such as capacity and congestion is critical to meet increased demand for flights, in particular, for large airports. Airport connectivity in Europe varies between airports: some hub airports offer hundreds of destinations while small regional airports offer just a few routes. Also, European Commission works to ensure that aviation needs to develop in a sustain-



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able way of reducing its environmental footprint and contributing to the fight against climate change.

The Council Directive 96/97 EC established the strict separation between management activity and the public function of regulating these infrastructures and the activities that take place in them. The success and rigor of the implementation vary from country to country.

A stream of privatizations has spread throughout Europe, and many airports have private stakes currently. ACI (2016) has analysed the sector, the share of fully publicly owned airports has decreased from 77% in 2010 to 53.2% in 2016 for EU28 countries. The interest of private investors tends to be focused on large airports that can attract more passengers, and then they can be more profitable.

The main publications about airport governance in Europe focus on ownership and the improvement of commercialization through full or partial privatizations. However, there is a lack of literature about mechanisms of governance of the airport as a corporation and its relation with communities.

Different country cases are exhibited. The UK is the model of early privatizations in Europe. Spain (Aena) and airports in Paris (Aéroports de Paris) show models that preserve the ownership and control of the infrastructure but put the management and governance in the hands of large corporations. Airports in Germany, the Netherlands or Belgium exhibit mature and complex models of corporate governance, with different levels of participation and ownership that take into consideration seriously the involvement and engagement of local communities. Finland and Sweden are focused on facilitating accessibility in their territories.

In conclusion, Europe has a remarkable variety of governance models, from private (more or less diversified) to public single-owner models and all possible combinations. Each airport or airport system has a model that depends on the strategy of the corporation and a set of historical, cultural, political factors, etc.

Also, the model will not converge on one type, not in general. It can happen for the main ones, not so much in ownership, but the model of relationship with management. Although the operational management of the airport has to operate with certain standards that will make them more easily comparable with each other and will transfer good practices both in this area and in the area of governance itself.

In addition, the participation of private capital in airports will continue to increase for airports with commercial interests, and

when this occurs with airport groups or investment funds, a certain standardisation and centralisation of some management is associated.

Moreover, sustainability has a greater power to standardize and accelerate change, with the relationship with the local environment being a dimension that will be strengthened in the future.

Finally, the airport is an infrastructure of public utility, at the service of the territory and society, so its governance must respond to an ethic of shared value.

Europe has a remarkable variety of governance models, from private (more or less diversified) to public single-owner models and all possible combinations. Each airport or airport system has a model that depends on the strategy of the corporation and a set of historical, cultural, political factors, etc.



This report aims to analyse the evolution of airport governance in European countries over the last years and the current practices and trends.

Since the liberalization of air transport began, the industry has changed rapidly, seeking to improve marketing. First, the airlines were transformed, with a more market orientation, which also involved a significant legal reorganization. Later, this current has spread through the value chain, reaching airports and giving rise to a more entrepreneurial perspective, well picked up by the work of Doganis (1992).

This process has had a similar development in different parts of the world but in these different periods. While Liberalization ACT 1978 began the path in the US with cases like Stewart International Airport north of New York City under the 1996 Pilot Program, until the 1980s, it did not reach Europe. The first country to propose profound changes in the governance of its air transport system in the UK. In particular, in 1987, the privatization of the BAA was considered. The rest of the continent has a later adaptation with a diversity of formulas, and the reason is in the tradition of corporate governance in Continental Europe.

The traditional approach has been to raise the issue of airport governance as an axis between the public, many airports were created with public investment in the decades of the great wars and hence their link to the public, and the private, represented by the growing participation of large sectoral groups such as Fraport, Aeroports de Paris, etc. For this reason, some of the most relevant works focus on the issue of ownership. In the property-management axis, another of the most studied approaches also appears, which is the economic approach of agency theory and the correlated performance measurement.

This work is structured in four blocks. First, a brief review of corporate governance to understand the fundamentals that are common with airport governance is exhibited. Second, a review of airport governance literature is presented to, third, enter in the most relevant examples of governance of airports and systems of airports. Finally, a set of guidelines are summarized as conclusions and reflection.

A BRIEF ON CORPORATE GOVERNANCE

Interest in corporate governance has been growing in all areas of society. In organizations -corporations, institutions or administrations- its rise is explained, obviously, by the essentiality of the concept for the management of organizations but, also, because the society is more interconnected and interdependent, affecting the development of organizations. In the academic field, attention has also grown because the different perspectives -economic, legal, sociological ...- have evolved and intersected to create a very fruitful field of work.

Development of the concept

From a historical approach, as governance comes from the Greek word “kybernan”, it reveals that ancient societies were concerned about this topic (i.e. for sure, governance was an essential question for the city or the state). Nowadays, in a more contextualized approach, the issue of governance appeared with the beginning of corporations during the 16th century and followings (i.e. East India Company, the Hudson’s Bay Company, the Levant Company) (Paine, 2019), but this field takes an important relevance in the research and professional domains in the last decades of the 20th century.

At the beginning of 20th century, Berle and Means (1932) exhibited some considerations about governance in modern corporations and private properties and their work is considered the seminal publication in the field of corporate governance. They introduce the difference in ownership and management roles in modern corporations. The work has a legal approach and argues that in all human institutions, there is a divergence of the intended and the realized, and the rules on the paper are not enough. Then, there is a “paper government” for corporations, based on ethical, legal and economic philosophies; and there is an “actual government”, which is based on the

conduct of managers and realistic facts. The authors remark that size and growth speed can introduce a large distance between these two government perspectives. In the early beginnings of the century, the corporations tended to grow, and the control moved from the shareholders (typically a small group with a common interest) to a scattered and unorganized multitude of individuals (sometimes a small group of shareholders retain the power) and management team. They agree with the growth of independent corporate control, however, they make a relevant question: if the shareholders have virtually surrendered their power and control is unregulated, to whose interests we are to recognize in attempting some form of regulation (jobs, public at large, consumers...).

After the Second World War, two clear models emerged. The first one, the Anglo-American model of corporate governance, was led by the market, this is a market-based model. For example, the US experienced a prolonged economic boom, and its leading corporations grew rapidly. However, the internal governance of companies was not a priority because the management was characterized by executive dominance. Until the 1970s, when the federal Securities and Exchange Commission (SEC) introduced a regulation with initial treatment of managerial accountability. Aguilera and Jackson (2010) summarize that this model is characterized by short-term equity finance, dispersed ownership, strong shareholder rights, active markets for capital control and flexible labor markets.

The second, continental model agglutinates different cases that depend on the country with its history, culture and financial structure. The most known cases are Germany and Japan (it is not “continental”, but it is very similar to German case). The company is considered as a public value by itself, and its interests can be different from CEO’s or shareholder’s ones. Furthermore, re-investment in the company is a priority and reporting to stakeholders is an essential activity. Then, this model tends to a stakeholder-based model (compared with market-based). In the Euro-

pean market, after WWII, states and families held the main capital, and they controlled the market, but the situation evolved with time. Currently, Aguilera and Jackson (2010) exhibit a characterization of this model which is based on long-term debt financing, concentrated blockholder ownership, weak shareholders rights, inactive markets for capital control and rigid labour markets.

Over time, both systems have been refined to fit the empirical realities better in different countries, but the dichotomous vision allows to fix a starting point. Morck (2005) proposes a visualization for understanding the control of top ten firms for each country (Figure 2.1), adapting previous contributions. The Anglo-American model tends to No Controlling Shareholder type (USA, United Kingdom, Canada, Australia...), but the continental model has a high variance of types. In the cases like France or Switzerland, for example, it appears a high percentage of No Controlling Shareholder type, similar to the USA case.

However, in cases like Germany or Spain, the percentage of this type of control is small. In Germany, due to historical reasons, financial institutions hold control of firms, while in Spain the control is concentrated in the Government, wealthy families and financial institutions.

In the 1970s, the economy took a neo-classical trend. Friedman (1970), who taught at the University of Chicago at that time, published "the social responsibility of business is to increase its profits" and he argued that the fundamental obligation of managers is to return profits to shareholders and not to do investments in projects with social benefits but that reduce shareholder's returns.

Indeed, academics and professionals came back to the notion of a corporation as the property of shareholders. Therefore, a vast production of papers and reports was published focusing on the main idea that managers are the agents of shareholders who own the corporation and expect the maximization of their benefits, contributing to the devel-

opment of Agency Theory. Traditionally, the Anglo-American model was considered very aligned with Friedman's statement related to corporate social responsibility.

The alternative line of thought is proposed by Freeman (1994), the basis of his thesis is the concept that managers bear a fiduciary relationship to stakeholders (those groups who have a stake in or claim on the firm). And Freeman specifically includes suppliers, customers, employees, stockholders, the local community and management in its role as an agent for these groups. Each of these stakeholder groups has a right (not to be treated as a means to some end) and they must participate in determining the future direction of the firm in which they have a stake. Smith (2003) clarifies, citing Hasnas (1998), the fundamental distinction between shareholder and stakeholder theories and it is that under the shareholder theory, nonshareholders can be considered as "means" to the "ends" of profitability; under the stakeholder theory, the interests of many nonshareholders are also viewed as "ends".

Without any kind of doubts, after some scandals (Enron, Global Crossing, WorldCom), crisis (i.e. oil crisis in 1979 or financial crisis in 2008) and climate emergency, the stakeholder theory has gained attention and the debate continues but with a new sense of urgency. Freeman (2020) sustains that environmental and social policies be combined with changes to corporate law that place corporate purpose beyond profit at its heart.

In this line, Paine and Srinivasan (2019) exhibit that The Purposeful Company Taskforce (UK) has urged companies to be explicit about their purpose, defined as how they contribute to human betterment and create long-term value for all their stakeholders. The U.K. Corporate Governance Code charges boards with establishing the company's purpose, values and strategy. The Pacte Law (France) provides for companies to write their purpose ("raison d'être") into their by-laws. In the US, leading institutional investors called on corporate boards for several years to clar-

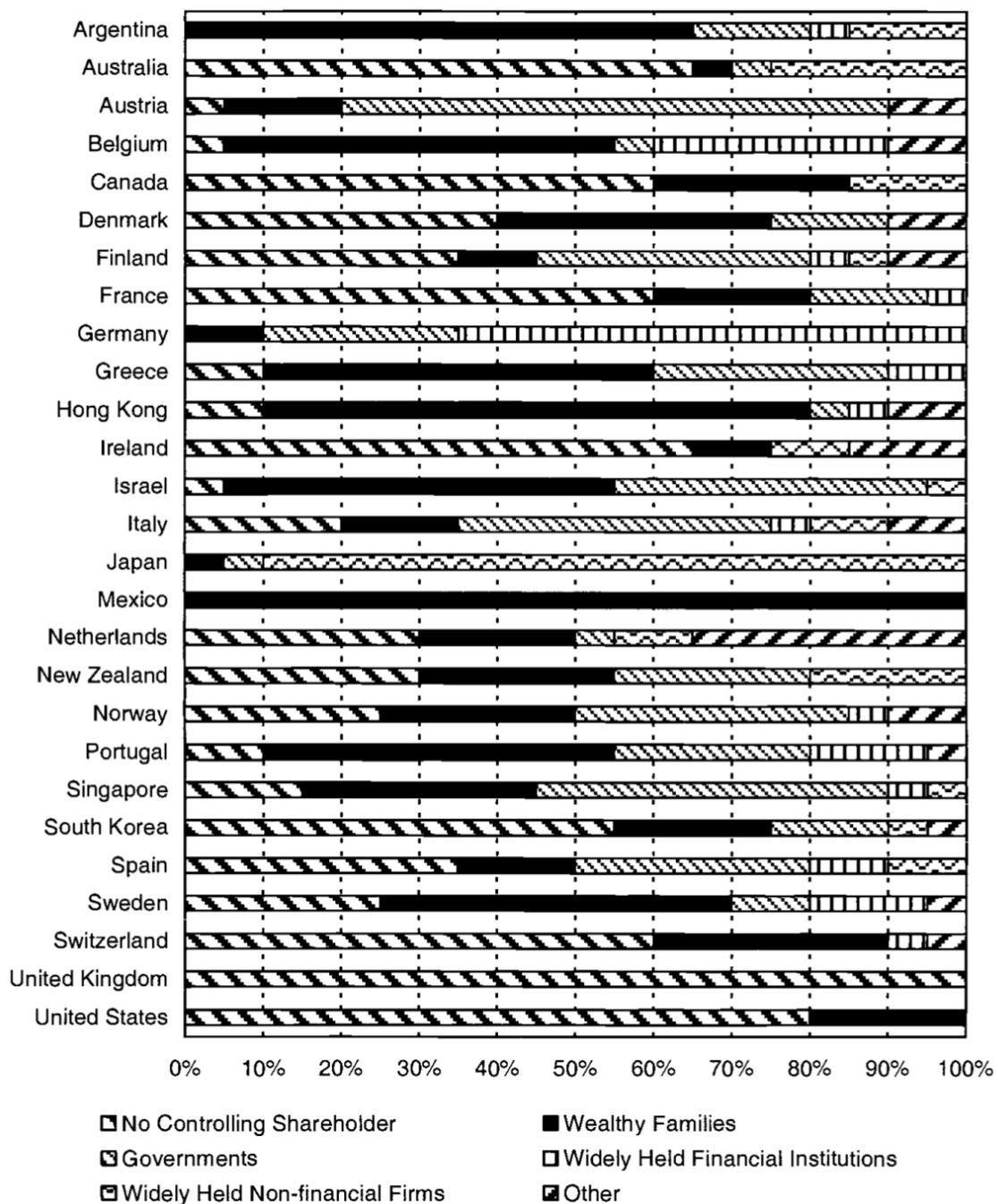


Figure 2.1. Distribution of control of great corporations for each country. Source: Morck, 2005.

Sources: Morck (2005) propose this figure using the previous work of La Porta et al. (1999), with complementary information from Morck and Nakamura (1999) and Braums (1995). Notes: The fraction of the top ten firms with different types of controlling shareholders is shown for each country. Control is assumed if any shareholder or group of shareholders believed to work in consort controls 20% of the votes in a company's annual shareholder meeting.

ify their companies' purpose and contribution to society.

In the present, the push from investors is increasing and there is a growing mind-set and behavior aligned with the idea that purpose is not the sole pursuit of profits. Profits are in no way inconsistent with purpose. There is a strong dependency on the board's support to develop and implement a strategy that enables and secures long term sustainable value creation.

Mazzucato (2018) proposes a review of the concept of value. Her point is the theory of value today emerges from neoclassical economy and it assumes that the market price reflects an economic value. A long history in the economic field and different business and governance dynamics have resulted in a set of consequences which are a disproportionate reward accruing to the assets management industry, enormous prices in some industries, tendency of shareholders to only care about short-term rewards of stock-exchange companies, etc. She advocates repoliticizing value because practices of valuation are always already social and political. Also, to focus on creating long-term value and improving public wellness. This view is well aligned with stakeholder theory and it is an argument that increases the attention on boards' role.

Furthermore, Mazzucato considers that the state itself can be, and often has been, a tremendous force for wealth and long-term value creation, also radical risk-taking and technological innovation. This point is particularly interesting nowadays when the pandemic has urged states and public institutions to support liberalized sectors and private companies.

In front of the most important crisis of this era, climate change, Mazzucato (2020) exhibits that if society really wants to redirect growth from a sustainability and inclusion perspective, and make investments in that direction, it is needed to rethink what we are doing at all levels: institutional, personal and corporate.

Clearly, addressing this crisis requires reorienting corporate governance, finance, policy and energy systems toward a green economic transformation. There are three obstacles: business that is shareholder-driven instead of stakeholder driven, finance that is used in inadequate and inappropriate ways, and government that is based on outdated economic thinking and faulty assumptions.

For example, French government conditioned its bailouts for Air France-KLM on emission-reduction commitments.

The UN Global Compact Sustainable Development Goals (SDGs) are at the heart of Agenda 2030 – a plan adopted by all 193 UN Member States, for achieving a better future for all. Business plays a crucial part in achieving ambitious goals. This places companies to take on a leading role in incorporating the SDGs into the corporate world. The state of play in company board rooms should therefore be of high interest to all concerned about protecting our planet for our future generations. Governance will play a crucial role in shaping the SDGs, and three aspects need to be considered (Bierman et al., 2015): good governance (the processes of decision making and their institutional foundations), effective governance (the capacity of countries to pursue sustainable development), and equitable governance (distributive outcomes).

Indeed, European Commission puts climate emergency and sustainability at the heart of its program with the European Green Deal.

This demands unprecedented modernization and transformation of our whole economies. Sustainable finance can play a fundamental role and management is called upon to monitor and report on social and environmental risks and improve business models to redefine how they create value.

Then, measurement of value, growth and success requires new consensus and metrics.

This situation urges the boards of directors to get involved in the day-to-day running of the company, also defining the strategy, monitoring implementation and communicating to

stakeholders. Our society lives in turbulent times and the tension between economic imperatives and social demands has never been more dramatic than nowadays. On this horizon arises a business ethics perspective on corporate governance, because ethics is a reflection about the purpose, the making decision process and how the company makes profits. Corporate governance is more than transparency and accountability, more than legal and compliance aspects, more than risk management. It refers to relationships, trust, values, culture and norms (Brink, 2011).

Definition

Defining corporate governance in a brief and synthetic way without falling into reductionism is difficult, as will be seen in this document, but it could be approximated with these formulations.

First, Shleifer and Vishny (1986) defines corporate governance as leadership and control of a firm with the aim of securing the long-term survival and viability of that firm. This definition follows the traditional understanding of the topic, however corporate governance is much more complex because it takes into consideration the primary goal, maximizing benefits of the corporation, but also considers the legitimation of stakeholders.

Second, OCDE (in the first edition of Principles of Corporate Governance, 1999) defines that corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance.

Third, Aguilera et al. (2014) synthesizes that corporate governance is about aligning the

conflicting interests of different parties, within the firm and ensuring that everyone works toward the firm's common goal. This approach is aligned with Aoki's definition in which corporate governance relates to the structure of rights and responsibilities among the parties with a stake in the firm (Aoki, 2001). In addition, Aguilera et al. (2014) consider the Board is responsible for ensuring that problems are solved attending the interests of the shareholders in the principal-agent perspective or the appropriate balance of interests in the stakeholder-based governance.

Fourth, Mannar (2016) proposes the definition: "Corporate governance is the set of processes, policies, to ensure proper management of companies for effective accountability to all stakeholders, aim to optimize economic output and protect the interest of shareholders. It includes in its orbit all implicit and explicit relationships between the corporation and its employees, customers, creditors, suppliers and all other stakeholders".

Moreover, Aguilera (2014) considers that there is an "ideal" governance and a "real" governance. In this line of thought, Paine and Srinivasan (2019) consider there are two dominant schools of thought: the corporation as "legal entity" (it is essentially a private agreement among shareholders) and the corporation as "real fiction" (enabled by law to serve the needs of society).

Theories of corporate governance

The dichotomy between shareholder's perspective and stakeholder's perspective is one of the most known debates related to corporate governance and it is considered by different excellent works (Hasnas, 1988; Smith, 2003; OCDE, 2015) and it still continues (Freeman, 2018). However, there are several interesting theories of corporate governance which are presented below and suit to understand airport governance.



Shareholder Theory

Shareholders advance capital to managers, to run a business with specific goals, as a result the shareholders receive an interest for this risk-taking

This theory exhibits that a group of people, the shareholders, agree to do business together and they advance capital to another group, the managers, to run a business with specific goals, as a result the shareholders receive an interest for this risk-taking (Afza and Nazir, 2014). The managers do not have unlimited options or unconstrained conditions to do their function, shareholders delineate purposes and rules. Then, there is a mechanism of control or supervision. Berle and Means (1932) remark the concept of separation of ownership from the management of the firms in the form of agency problem (for this reason, agency theory is the most common form to find literature related to shareholder theory).

Jensen and Meckling (1976) describe principal-agent relationship as an agreement between owners (principals) and managers (agents), in which the firsts delegate the execution of various tasks or responsibilities to the seconds. Classically, two types of problems arise in this relation. First, the agents can operate on their own agenda. Second, there is a difference between principals and agents related to risk aversion. In the background there is a problem with asymmetry of information.

The agency problem has been the main focus for researchers in the field of economics when they work in corporate governance. One of the solutions they proposed to these problems was monitoring expenditures by principals such as auditing, budgeting, control mechanism, incentives and compensation systems, bonding expenditures by the agent and residual loss due to interest difference between owner and agent (Jensen and Meckling, 1976). Also, another solution and task for boards is to define compensation policies, including right incentives to the managers that must be linked with their performance of doing best in the favor of their principals. Some authors consider managerial compensation as part of the problem and advocate, for example, for a pay-for-performance model (Afza and Nazir, 2014).

The shareholder theory states managers are obligated to pursue profit by all legal and non-deceptive means. Moreover, this theory contends that the ethical constraints society has embodied in its laws plus the general ethical tenet in favor of honest dealing constitute the ethical boundaries within which managers must pursue increased profitability. One of the misinterpretations of Friedman's sentence is that it is supposed to advocate focusing on profit at the cost of everything, including moral and legal limits, but this is not true. One of the main problems is if the current legal prescriptions do not take care of all public goods in appropriate form.

In addition, shareholder theory has come to be associated with the type of utilitarian argument which is a very common perspective in free-market economists (ideal markets). The reality says that businesses gain an advantage by obtaining subsidies, tax breaks, protective tariffs, monopoly or oligopoly status, etc. In this reality it is extremely unlikely that the pursuit of private profit will truly be productive of the public good.

Stakeholder Theory

This theory holds that effective governance requires the balanced consideration of and attention to the legitimate interests of all stakeholders (Freeman, 1984). Freeman defines that a stakeholder is anyone who has a stake in or claim on the firm. If a narrow sense is taken into consideration, the stakeholder group is limited to stockholders, customers, employees, suppliers, management and the local community (there is no conflict with Friedman statement because Freeman considers shareholders and their profit maximization, but not exclusively).

However, if a wide sense is considered, the stakeholder group includes any group or individual who can affect or is affected by the corporation (Figure 2.2).

Hasnas (1998) introduces a distinction between empirical theory of management and normative theory of business ethics.

From empirical theory, business financial success can be assured by giving the interests of the stakeholders proper consideration and adopting policies which produce the optimal balance among them. In this assumption the stakeholder management is a requirement for managers to meet their fiduciary obligation to the shareholders.

There is not any social responsibility in this view. However, from normative theory, managers should manage the business for the benefit of all stakeholders (this includes to improve profits for shareholders, but not only).

The governance model has to take into consideration all the stakeholders and their interests, but the interests, the stakeholders and the weight of each of them are different. Then, the management's fundamental obligation is not to maximize the firm's financial success, but to ensure its survival by balancing the conflicting interests of multiple stakeholders. Another point to understand the difference is a moral principle derived from Kant's principle of respect for persons (Freeman and Evan, 1988) and according to this, business may not treat their stakeholders as means to the business' ends and must recognize that as moral agents. It is not possible to consult with all stakeholders on every decision, this participation must be indirect.

For example, in practice, the Global Reporting Initiative (GRI) proposes a methodology to engage stakeholders, facilitating the communication between the organization and the stakeholders. As part of this methodology, GRI proposes Standards that help organizations understand and disclose their impacts in a way that meets the needs of multiple stakeholders. Indeed, Reporting is one of the essential tasks of Corporate Social Responsibility in the paradigm of Stakeholder Theory.

Stakeholder group includes any group or individual who can affect or is affected by the corporation



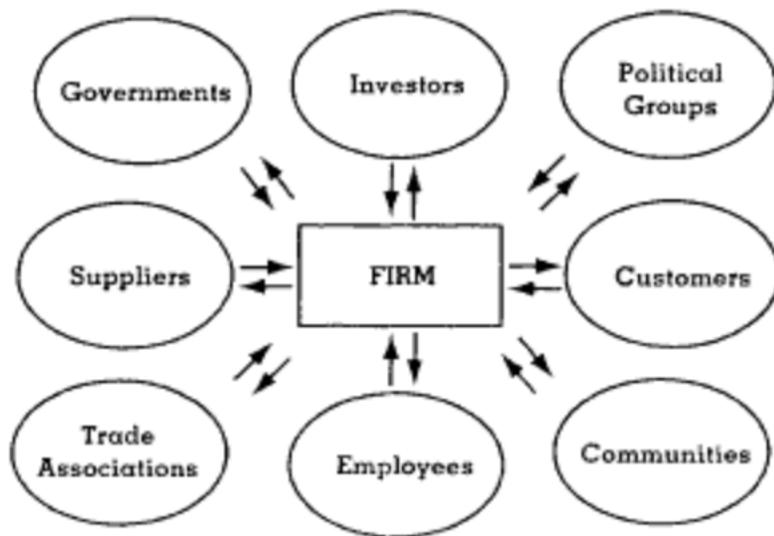


Figure 2.2. Stakeholder model. Source: Donaldson and Preston (1995).

Stewardship Theory

This theory considers that managers are hired for handling the firm's operations in a good manner and managers' achievements and success are measured by the satisfaction they get from the performance of the firm. These types of managers consider the organizational objective as their own.

Their behavior is pro-organizational because it is aligned with the wealth of shareholders rather than self-serving objectives. Here the major difference with shareholder theory is, considering that this behavior replaces the lack of trust in managers. This assumption is constitutive of stewardship theory because the theory is based on organizational psychology and sociology (Davis et al, 1997). The main issue with this theory does not consider appropriately the intrinsic nature of human condition. In fact, managers do not work with good faith and honestly in order to increase wealth of owners (moral hazard problem). Davis (2005) argues that managers may act as stewards for the good of the organization in situations where only relatively minor conflicts of interest exist.

There is a fundamental difference between a private and public sector stewardship theory model. Under the private sector the goal is to maximize shareholder wealth, whereas under the public sector the goal is to maximize social benefit.

Other relevant theories of corporate governance

There are other approximations to corporate governance that have produced theories or some kind of theoretical construction related to this concept.

Resource Dependence Theory: This theory states that a company's success is dependent upon maximizing its power over certain resources which are necessary for running smooth operations (Pfeffer, 1972). Afza and Nazir (2014) summarizes different

authors' contributions and exhibits that the board has a role that helps to achieve the crucial resources of the organization by their external linkage to the environment (i.e. information, skills, access to key constituents, public policymakers, legitimacy, etc. Aguilera et al (2008) consider this theory provides a broader view of the corporate governance that makes it connected with the diverse organizational environments, while shareholder or stakeholder over the restraining assumptions of agency perspective.

Sociological Theory: This theory focuses on the composition and structure of corporate boards. Afza and Nazir (2014) exhibit that the concentration of corporate power in the hands of few privileged members of society (director interlocking) which form business groups are considered as major challenges to the social equity and economic progress of society.

A particular example of this point is exhibited by Morck (2005) as the pyramidal business group or pyramid for short, magnifies the economic importance of this difference enough to create genuinely different economic systems. A pyramid is a structure in which an apex shareholder, usually a very wealthy family, controls a single company. This company then holds control blocks in other listed companies.

Each of these holds control blocks in yet more listed companies, and each of these controls yet more listed companies, and so on. These are the structures that permit tiny elites to control the greater parts of the corporate sectors of many countries.

Political Theory: This theory focuses on how ownership is distributed between the shareholders of a firm and may influence the decision making into the firm and its corporate structure. The role of government into ownership and corporate governance structure is very important because it has been observed to have interference into firms' decision making (Afza and Nazir, 2014).



There is a fundamental difference between a private and public sector stewardship theory model. Under the private sector the goal is to maximize shareholder wealth, whereas under the public sector the goal is to maximize social benefit

Managerial hegemony: L'Huillier (2014) exhibits a theory of corporate governance based on managerial hegemony.

The basic premise is that governing boards are tools used by professional managers to lend support to and validate their decisions. Then, the board of directors serve in a superficial role, but theorists of corporate governance say that board of directors play a support/subservient role to the professional manager.

There are three arguments to describe this situation. First, the manager appoints and reappoints board members at their discretion. Second, board members enrolled tend to have a malleable nature. Finally, the benefits derived from managerial positions discourage altering the status quo.

What does corporate governance actually mean in practice?

Dayton (1984) states that every time there is a business in trouble, it is possible to find a board of directors either unwilling or unable to fulfill its responsibilities. It is not easy to delimit where the area is for government and the area for management. He exhibits some ideas about what board of directors have to do.

The board has the responsibility to see the long term of the company and to protect the future. The management is usually captured by the day-to-day. For this reason, the board must ensure a future-oriented culture within the corporation.

The independence of the board is a must. The supervision of the management functions and acts requires the maximum independence of the board members. This is the role of board members and the way they can help to managers and this allows the board to fulfill its vital role.

There is not a normative number of board members. It depends on the company and the sector. It has to be enough to contribute with different points of view and experience, but not too large to avoid ineffective meetings. It is necessary to have mechanisms to ensure to have the best possible people in the boardroom. Some members, the less, could be insiders -they really know the situation of the company-, but most of them could be outsiders. This group of outsiders is composed of corporate executives and specialists in certain areas of value for the company, avoiding persons with conflict of interests in different companies. The board has to be evaluated and has to be subject to rotation and retirement.

Pozen (2010) summarizes similar ideas. There is a lack of independence and insufficient board oversight. A professional board with full-time dedication is necessary. These board members accompany managers on a daily basis to know and advise, because this is better than waiting for the few board meetings with partial information to make bad decisions.

In the 1980s, the OECD paid attention to corporate boards with the aim to improve the quality of governance and economic development. According to the OECD (2015), the governing body will have to perform certain key functions, including:

1. The review and orientation of the company's strategy, the main action plans, the risk policy, the annual budgets and the company's plans; setting targets for results; control of the planned plan and the results obtained by the company; and oversight of major capital expenditures, acquisitions, and divestitures.
2. The control of the effectiveness of the company's governance practices, and the introduction of the necessary changes.
3. The selection, remuneration, control, and where appropriate, the replacement of the main managers, and the supervision of the succession plans. Aligning the remuneration of senior managers and members of the Board with the long-term interests of the company and shareholders.
4. Guarantee the formality and transparency of the process of proposal and election of the members of the Council.
5. The control and management of potential conflicts of interest between directors, members of the Board and shareholders, including the improper use of company assets and abuses in related party operations.
6. Guarantee the integrity of the company's accounting and financial reporting systems, including independent auditing, and the availability of adequate control systems, and in particular, risk management, financial and operational control systems, and guarantee the adaptation of these systems to the law and applicable regulations.

7. Supervision of the data disclosure process and communications.

There are many authors that give insights about how boards can act to achieve a good performance and a good corporate governance. At the end, governance is a set of practices and processes that start in a board meeting. O'Kelley and Neal (2020) exhibit two main actions to pay attention.

First, to focus on more forward-looking, i.e. strategic planning, risk overseeing and management succession planning, because these activities create value for the future. Second, to communicate, this is essential and it takes the form in high-quality debate, giving clear and actionable feedback and being present.

In the same direction, Barton and Wiseman (2015) highlights the importance of spending quality time on shaping the strategy, particularly the long-term strategy, and communicating it to long-term shareholders. They recommend practicing dialogue, not one-way communications, because it is more effective to build trust.

Finally, Parsons and Feigen (2014) exhibit some conclusions about the effective boards. First, today board directors spent little time on previous quarter's results and moved to strategic topics and people. Attracting talent and getting board composition right is one of the main priorities. They add that the push for more-relevant experience should not come at the price of diversity because this is needed to guard against the self-confirming biases. Finally, they highlight the essential role of conversations. The quality of conversations let boards get below the surface to the key issues and to engage with management.

Trends

Trends in corporate governance respond to three factors. First, a world in disruptive transformation, in climate emergency and poverty. Until recently, this was explained as the VUCA world, but it has accelerated along three axes: globalization, technology and climate change, bringing us to a point of inflec-



Strategic planning, risk overseeing and management succession planning – these activities create value for the future

tion and awareness. In particular, now, in the middle of the pandemics, it seems difficult to talk about predictions and trends, however the crisis of health has accelerated disruptive changes that have been observed since some years ago. Secondly, in the face of this situation, all of society, from individuals to groups, demands a response at the level of organizations - public or private - that have power and responsibilities. Thirdly, the governing bodies are aware that governance is essential to navigate in times of uncertainty and complexity and want to act correctly.

First, corporate governance has elevated its level of consciousness and takes care about questions related to the purpose of the organization and how to contribute to build a better world. Also, it aims to increase the cohesion in the board and the whole organization. Furthermore, board of directors are interested in cultivating the culture of the firm and the human capital.

By the other side, boards have to manage the effort of control that investors have nowadays. There is modern activism. Funds or passive investors have increased around the world and try to influence the boards, most of them looking for short outcomes. For this reason, second, corporate governance aims to achieve excellence at the board of directors with independence, diversity -gender and ethnicity- and high performing. Regarding that, boards work on self-assessment, succession, legality, information processes and making decisions.

Third, related to the previous issue, boards require more from the management team. Principally, they ask for more and better information due to shareholder pressure for accountability, risk management and risk of governance. It is remarkable that, after the 2008 crisis, committees of risk analysis were improved at firms and nowadays this is one of the most critical tasks, however some risks are difficult to estimate accurately. This means an increased interest in technology and digitalization for governance. Moreover, one of the main tasks of boards is the CEO succession and compensation and it continues being an important question for the future.

Fourth, boards are concerned about long-term value creation currently. Creating robust business is a goal of corporate governance. Not only stakeholders are demanding for that, recognized economists argue this is the unique way for a sustainable future.

Traditionally, corporate social responsibility considered impacts and stakeholders, and many corporations have strengthened relationships with them and created good reporting systems. However, today the world is changing and communities and individuals have increased consciousness about sustainability and requires policies and actions, internalizing externalities and new forms of creating wellbeing. Definitively, they require a new form of being a firm.



AIRPORT GOVERNANCE

In the field of airports, corporate governance has been contextualized in a field of knowledge called Airport Governance. Most of the production is in the field of economics, with the perspective of agency theory and performance, precisely because in airports these two topics allow for more sophisticated analysis and have evident interest for scientific and technical publication.

In addition, the liberalization of air transport, which began with a clear focus on the airline, has spread throughout the value chain, reaching the airport. The trend has been to move from rather public models, oriented towards the common good and public policies, to more market-oriented models, particularly because the financial dimension was a matter of concern. This was because air transport was growing strongly, requiring heavy investment, and it was an industry characterised by little competition and narrow margins. The OECD was promoting a more dynamic and up-to-date framework for airport governance and management (Carney and Mew, 2003).

Today, trends in corporate governance are also represented in airport governance, from investment activism to the greater social demand to meet sustainable development goals, as it is exhibited in this section.

Historical approach to airport governance

Understanding airport governance today requires a brief introduction in historical development of airport systems in the context of each country. Currently, the airport industry is global and a lot of practices are standard, but many differences or resistances are based on historical reasons.

General overview

The Airline Deregulation Act in 1978 was a driving force in the air travel industry in the United States of America and around the

world which catalysed an airport reform in the decades that followed. The airport business, mostly controlled by the public sector, captured the attention of policy-makers after a trend of privatizing other kinds of industries around the world.

The growth of air transport caused congestion in airports and consequently investments on airport expansions were required. Also, more efforts on innovation to increase productivity was demanded. To respond to these needs, airports around the world have moved towards market-based governance models, increasing commercialization and corporatization, with the aim of copying in the industry some extended practices of private companies which operate in free markets.

The improvement of airport commercialization has been achieved through different strategies, which range from full/partial privatization to the creation of an autonomous authority among others. Usually, corporatization is the way to implement these strategies. Moreover, commercialization aims to make airports more self-sufficient, more responsive to increasing demand and requirements of investments, more cost-efficient providing their services and more dynamic on the development of their business.

Traditionally, airports have had a critical role like public utility, promoting regional development and allowing accessibility, and this function is still desirable regardless of the governance model and justifies different forms of regulation -with respect to user charges or business practices- and relation with governments and stakeholders. Economic regulation is often introduced where private-sector is involved to limit the market power or avoid monopolies, but it is also common for publicly owned and operated airports.

Airport Governance in three periods

The recent history of airports can differ from countries because governance model and deregulation has been different by areas, however the beginnings are very similar. From previous experience with the UK and US, and other

continental countries, the periodicity of airport ownership and governance evolution can be illustrated in three periods (Graham, 2008; Lai, 2013): governmental control, corporatisation and commercialisation, and privatisation.

The period of governmental control

In this period, airport ownership patterns evolved unevenly over time and space for a variety of reasons. For example, Bednarek (2001) presents an extensive work about US airports and tries to answer two main questions. The first is how airports become “municipal”, owned and operated by cities, rather than by national authorities as in many other parts of the world. Really, during or after World War I, a lot of airfields were built and those varied in their ownership and management. Some of them were owned by cities, others were privately owned and operated, and still others were leased from private owners, but all of them hold the “municipal” identity. The airport development effort varied, coming in part from local Chambers of Commerce, aviation boosters, the US Army Air Service and the Post Office.

The second question, proposed by Bednarek, is how these airports become federally funded and regulated. At the end of the 1920s and later decades, due to strong development of aviation, the Federal administration had to participate with funding programs for airport expansions. New Deal agencies such as the Civil Works Administration and the Works Progress Administration channelled work-relief funds to cities for hiring the unemployed to improve facilities. Furthermore, municipalities could not afford the continuous upgrading of their fields to adapt rapid changes in aviation technology. Also, it is relevant to the impact on airports of the Civil Aeronautics Act of 1938, the World War II and the Federal Airport Act of 1946. In addition, hundreds of military airports were handed over to the authorities of cities, counties and states for civilian aviation use (Wells and Young, 2004).

A similar evolution is revealed when reviewing the formation of airports in the UK or continental countries. During World War II,

the government of these countries assigned significant budgets to construct and maintain airports for military activity. After the war, for example, the UK government transferred the ownership and management of several airports to the Ministry of Civil Aviation (Humphreys, 1999). In Germany, the airport system was decisively marked by the domination of the Allied Powers that divided and occupied the territory after the Second World War. The German Federal State (Bund) was deprived of its functions and competences in the field of air transport and airports. As the situation became more normal, German airports were placed in the orbit of the closest territorial administrations, the municipal ones. Progressively, the Land, the Bund in minority (to be in the board of directors) and private capital were incorporated.

During this time, all airports were typically owned by the public sector and used by political bodies as a fundamental tool in the practice of establishing and reinforcing their citizens’ consensus. Graham (2008) classified airport ownership in three main patterns.

- Owned and operated by a national government: These airports served major cities (such as Tokyo, Bangkok, Paris, London, and Singapore) and were usually operated by national governments.
- Owned and operated by local governments: These were regional airports that were usually operated by local governments (at a regional or municipal level). Most of the airports in the US and some regional airports in the UK followed this pattern.
- Owned and operated by a multi-level public sector: A number of airports were controlled by both the local and national government. For example, Munich airport, which was founded in 1949, was owned by three shareholders: The Free State of Bavaria (51%), the Federal Republic of Germany (26%) and the City of Munich (23%).

The period of corporatization and commercialization

Between the 1970s and 1980s, there were two mutually reinforcing processes: the growth and maturation of the air transport industry and the first steps towards the privatization and deregulation of airlines. At this time, the US Congress approved the American Air Cargo Deregulation Act of 1976 and the Airline Deregulation Act of 1978 that developed and introduced a trend based on corporatisation and commercialisation in the air transport industry, which boosted the growth of the air transport. Moreover, the US domestic deregulation spilled over into international air transport. For example, in the UK, the Civil Aviation Authority became increasingly liberal in its decisions from 1975 onwards. Definitely there were similar winds of change in Europe (Doganis, 2002). The relevant effects of technical change and airline liberalization are manifested in downstream markets, for example, it has lowered rents placing more pressure on airports to perform in both service quality and cost efficiency.

This change arrived to the airport industry and philosophies of management began to change (Graham, 2008). Then, many airports gradually started to be considered much more as commercial enterprises, and a more business-like management criteria was adopted. There has been a transition from positioning airports solely as public utilities towards firms delivering airside services to airlines and landside services to passengers. However, most countries at this time had some sort of restrictions on public-sector engagement in commercial activities. For this reason, before moving towards commercialisation, airport corporatisation first took place.

The period of privatization

The 1990s were a decade when airport privatisation in western countries became a reality. For example, the UK government sold its seven major airports to BAA in 1987. Between 1992 and 1996, in Vienna airport and Copenhagen airport a small percent of shares were floated. Later, in 1998, Australia carried out a process of privatisation of its airports. Later,

it appears Zurich (2000), Fraport (2001) and Brussels and Paris (2005). In years that followed, other airports around the world were involved in full or partial privatizations. Recently, 2014, the Spanish government allowed private equity to enter Aena with a 49% stake. Graham (2020) exhibits that 43% of airports have some private participation, but this represents 75% of the passenger volume.

Privatisation of an airport may be defined simply as the whole or part moves from public to private ownership, with substantial involvement of private sector management and operation (Humphreys, 1999). The main reason for this privatization is to move toward a market-based model looking for better economic performance.

During the last years, with important growth of air transportation, a lot of groups and investors were interested in airports. Waves of privatization emerge when air transport grows and expansions are required. Recently, with the crisis due to Covid19, the travel industry has been damaged seriously and airlines and airports have demanded governmental support. Airports facing insolvency are mainly regional airports that serve – and are an integral part of – local communities. The potential knock-on effect on employment and local economies is clear. Pandemic has a disruptive point and the future is not clear at the moment. Governance is a key for a sustainable future, in aviation too.

Airport governance models

To understand how the literature has dealt with airport governance, two classifications of elements can be synthesized.

Firstly, strictly speaking of corporate governance in the airport environment and attending to its purpose, two ideal models appear:

- **Share-holder based or market-based.** The focus is to achieve a good economic performance. This model founded many studies on agency theory (Forsyth, 2000; Gillen, 2011), autonomous bodies or au-



thorities, commercialization and privatization.

- **Stakeholder based.** This model can be like govern-based if it is assumed that governments pursue social welfare. The airport responds to different stakeholders, including social demands, sustainability, employment, social value creation, etc.

In practice, it is difficult to find a pure model, there is a mix, which also has elements from other corporate governance models (such as resource dependence theory, political theory, etc.). In short, no matter how private and dominated by Friedman's mentality an airport is, everyone must comply with certain accountability to stakeholders and with regulation that can be severe in many cases. Nor is there a practical case where airport governance fits into the pure stakeholder-based theory model or Freeman's mentality, since even airports whose *raison d'être* is territorial accessibility or have very mature CSR practices are pressured by self-sufficiency and performance. But it is good to keep the orientations in mind because, as the OECD pointed out, these two mentalities are also in tension in airport governance and explain the evolution of it.

The second classification refers to the elements that let to implement the governance model and these elements can have different levels of:

- **Commercialization.** Airport commercialization can be defined as the transformation of an airport from a public utility to a commercial enterprise with the adoption of more business-like management philosophies, values, and approaches while the airport remains publicly owned (Humphreys and Francis, 2002a). Always there is a commercial process, it can vary from an airport that only reacts to demand from aircraft requesting to operate and applying an ICAO regulated rate (i.e. small airports in islands or rural areas), to a large international airport proactive in finding routes that maximize its aeronautical and non-aeronautical revenues (i.e. LHR, AMS, FRA, CDG...). The airport is managed in a
- **more business-like way** and this approach requires innovation in processes and some organizational developments to create a market-oriented culture.
- **Corporatization.** This is defined as the establishment of a legal and independent airport company wholly-owned and controlled by the government or local authorities (Shearman, 1992; Graham, 2008). It is an attempt to introduce the rigours of private industry while the government retains control and ownership (Graham, 2011). If more autonomy is desired or organizational structure is required to introduce practices like a company, corporatization is a good strategy. An airport authority is a particular case of corporatization, but a public company is it too. These structures can have a board of directors and can distinguish government bodies and management bodies. Aena, previous partial-privatization, was a clear example of an autonomous corporation managed as a public company.
- **Ownership.** It can vary from total public airport to full private airport, and in the middle different options of partial privatization or public-private partnerships. When privatization is total, then the set is completed with an autonomous corporation with a shareholder-based model of governance.
- **Single/multiple airports.** This does not refer to multi airport systems, just if a company carries out a single airport (individualized management) or a group of airports (then the debate of centralized or decentralized management is applicable). Some authors (Forsyth et al., 2011) exhibit the idea that the airport industry does not have synergies when a holding of airports or a system is managed together, despite a small advantage in joint purchases, if they do not share the same catchment area (when flight coordination can have some interest). However, the practice demonstrates that airport holdings have a strong interest to purchase airports around the



world (i.e. Aena has entered the Brazilian airport market, Fraport in the Greek one, etc.).

These both classifications together provide different possibilities for implementing the airport governance model in practice. Additionally, Gillen (2011) considers corporate governance is importantly affected by the institutional setting. Some institutions can establish formal rules or facilitate the development of informal rules and they can affect the payoffs of various economic activities. For example, in the field of commercial aviation and airport governance, market liberalization and international bilateral agreements.

Gillen indicates that the reform has been slow to deal with airports after air service deregulation until 1990s when the movement of change was more intensive. Especially, the move to full private ownership was slow where there was government ownership and limited jurisdictions. The author considers that privatization is the logical trend and his approach is market-based. He proposes a set of seven possible structures (Table 3.1), attending to the degree and mode of the shift of airports out of public ownership.

On commercialization and corporatization

This section aims to develop a bit more some relevant issues in the field of commercialization and corporatization. The drivers of commercialisation are determinant on the need for investment expertise and resources that are not available or accessible to the public sector. Moves toward commercialisation can be recognised through a number of different inter-related developments. Firstly, a number of airports achieved a degree of autonomy by establishing more independent airport authorities with public sector shareholding. Secondly, many airports moved towards becoming profit-orientated self-financing entities by addressing non-aeronautical activities, such as retail and concession management. Commercialisation indicates a greater emphasis on financial rather than operational issues.

Thirdly, airport commercialisation is typified

by an improvement in customer focus with improvements to airline facilities, commercial areas, and landside amenities and infrastructure (Doganis, 1992; Graham, 2008; Starkie, 2008). The most significant aspects of commercialization and corporatization effort can be structured in three areas: management organization, structure of revenue and marketing.

Management organisation

Traditionally, airports were visualized as infrastructures supporting aeronautical operations, and there was an extended engineering mentality, focused on operations and technical aspects, in which revenue plays a complementary role. Then, in order to increase non-aeronautical revenue, airports began to be organised in such a way that commercial activities were given the importance they deserve, which includes the need to be a clearly identified focus of responsibility for commercial activities.

A common practice in other industries has been that corporations implement organizational structures based on business units, which let managers and boards to monitor better the performance of each one. Then, this practice was incorporated into the airport industry, creating different business areas with a senior manager responsible for each, rather than being organised along functional divisions.

According to the dynamic environment and specificity of this industry, airports continually adapt to changing conditions. Consequently, in some airports, the typical functional organisational structure with different departments for finance, operations, administration, and so on, was replaced with departments or business units that were more focused on their customers' needs, airlines or passengers, because the commercial functions of the airports were gradually recognised as being equally important. In addition, the benchmarking of financial performance and quality management techniques also began to be accepted by a growing number of airports as essential management tools.



Government owned and operated	The government decides to retain the ownership and the operation because the main objective is to put the public utility in the forefront of the activity, then commercial objectives are secondary. These primary objectives are to provide service of transport, promotion of economic activity and development, geopolitics, etc., and the government is in charge of large investments, instead of typical problems of overinvestment or less of a long-term focus on infrastructure. Often there is a lack of consistency between aviation policy and the efficient use of airport assets. An example is the airport system of Norway.
Government owned, privately operated	The management function was effectively moved to private operators, with high degree of contracting out. This is a Public-Private Partnership form of running airports. This is a common case in USA, airports benefit from Federal grants and tax-deductible interest bonds when investment is required, but sometimes there is a lack of investment due several factors (land use restrictions, zoning laws, political pressure...). The Top 50 US airports show a remarkable interest in developing non-aeronautical commercial value. Also, these infrastructures exhibit some airline participation in the ownership and control of terminals and have long-term leases signed.
Independent non-for-profit corporations	These corporations operate airports under a long-term lease agreement (extendable), after this period, the land and assets (plus improvements and investments) revert to the federal government. This is the particular case for Canadian Airports Authorities in the 1990s, however non-for-profit corporations could be similar in the basics. The Canadian model of airport governance has been unique and it was under reform. Some of the controverted characteristics were the types and levels of investment (overinvestment that leads to higher charges for airlines and passengers) and high ground rents (that leads to higher aeronautical charges).
Fully private for-profit via IPO	Fully privatized airports have shown both a strong market orientation and a strong customer focus. BAA in UK is the oldest example of a major airport privatization implemented via the sale of all of the governments shares using initial public offering (IPO). These airports were regulated with a 'Single Till' price cap (revenues from aeronautical and non-aeronautical come together). The model produces low relative to social efficient levels and it has also led to a reduction in service quality and an apparent underinvestment in some assets when the competition is low. Furthermore, these airports have demonstrated a strong orientation to market development and strategic investments. Links between airport management and the government have remained strong and that political decision-making plays a direct role in augmenting private commercial interests.
Fully private for-profit via trade sale	Airports are sold to private interests via trade sales. An investment consortium (mix of airport management companies, infrastructure investment companies, pension funds...) decides to purchase the set of infrastructures. This sale is for a long period of time, after that the airports revert to the federal government. Australia privatized its big airports in 1996, after them were corporatized in the 1980s. However, small ones were transferred to local governments in 1980s. Australian airports exhibit a strong market focus and investors have taken a more long term perspective and a unified strategic view of how the airports should develop.
Partially private for-profit with government controlling interest	Airports are for-profit corporations where private investors are limited to a minority interest (Rome, Athens, Hamburg, Dusseldorf, Brussels...). The existence of a commercial objective and minority private interest has in general been viewed by the stakeholders as enough to cause a fundamental change in management attitude and an orientation towards developing commercial value, even though government remains the majority shareholder. In some cases, airlines were involved in strategic investments. Also, government intervention via regulation and oversight is possible.
Partially private for-profit with private controlling interest	Airport becomes a for-profit corporation with the majority of share held by a single private investor (i.e. Copenhagen Airport). This model has exhibited a more commercial orientation to airports operations and strategy. This form of privatization can raise more private capital and achieve more coherent long term investment direction. Private investors require a minimum condition that it is to hold the majority, because this condition could mitigate the potential effects of a strong regulation or oversight of government.

Table 3.1. Set of seven possible ownership/governance structures. Source: Gillen, 2011.



Structure of revenue

Airport authorities put emphasis on revenue generation, which is usually classified into two main categories: aeronautical and non-aeronautical revenues (ICAO, 2006). Aeronautical revenues (i.e. landing charges or passenger service charges from the airlines) had traditionally been the most important source. In the 1970s, aircraft landing charges represented by far the most significant part of aeronautical revenues from passenger-related charges (Doganis, 1992). Currently, the most common charging system is based on aircraft weight and time on ground. However, there is a growing interest in introducing incentives and charges that facilitate the implementation of efficiency and sustainability policies and network strategy.

For a number of airports, especially in Europe, non-aeronautical sources overtook aeronautical sources as being the most important source of revenue (Graham, 2008; Vogel, 2019) or increased the share. However, on average terms, aeronautical revenues continue to be the most important part of income for airports. Between 1883 and 2010, aeronautical revenues moved from 59% to 53% (Graham, 2008).

This trend reflects pressure from airlines and regulatory bodies to keep airport charge increases to a minimum, and the increase on commercial activities. This development was the result of greater space being allocated to retail and other non-aeronautical facilities, the quality being improved and the range of commercial activities being expanded. At world-wide level, according to the statistics which were published by Airport Council International (ACI) in 2020, in 2018, average revenue per passenger was 17.95 USD, being 56% aeronautical revenue and 44% non-aeronautical revenue plus non-operating incomes (table 3.3).

Airport marketing

Airport marketing did not appear until the 1980s. Before, the role of the airport as a public service meant that the management team would merely respond to airline requests for new slots by providing published charging and information about the use of the facilities (Gra-

ham, 2008). The view from many in industry was that airports were natural monopolies and were not in a position to influence the decisions of their target markets through marketing (Halpern and Graham, 2013). Because of commercialisation and the deregulation of the airline industry, the competition between airports has gradually increased over the last three decades (Graham, 2008; Starkie, 2012; Forsyth, 2016; Thelle and Sonne, 2018; Wiltshire, 2018).

This evolution encourages airports to take a more active and positive role. Two measures have been taken to address this situation: firstly, airports adopt a strategic approach focused on the customer and, secondly, they develop marketing departments to improve activity in this area. In fact, airlines have become more market-oriented, due to their earlier liberalization, and some practices or understanding of market forces were transferred to the airports that began to analyze route development, promotion mechanisms, passenger needs, product/service design and pricing.

On ownership, agency problem and regulation

Vickers and Yarrow (1991) exhibit that different owners pursue different goals and have different incentives and ownership influences a firm's performance then. It is possible to create a regulatory regime to induce a strategic management orientation, but this requires a number of institutional factors for their effectiveness: transparency, openness to foreign ownership and capital participation (Carney and Mew, 2003). This is the Anglo-American model of governance based on markets and well-known experiences such as reforms in the UK and Australia.

These full privatizations suggest that it can induce the adoption of strategic management orientation in the airport business, which seems able to deliver balance among conflicting and competing stakeholder claims on airport resources. Stakeholders demand span multiple criteria.



Aeronautical Revenues	Non-aeronautical Revenues
Landing charges (including lighting and approaching, and aerodrome control charges).	Aviation fuel and oil concessions (including throughput charges).
Passenger service charges.	Restaurants, bars, catering services.
Cargo charges.	duty-free shops.
Parking and hangar charges.	Car parking.
Security charges.	Other concession and commercial activities operated by the airport.
Noise-related charges.	Rentals.
Other charges on air traffic operations.	Other revenues from non-Aeronautical activities.
Ground-handling charges.	

Table 3.2. Aeronautical and non-aeronautical revenues (ICAO, 2006).

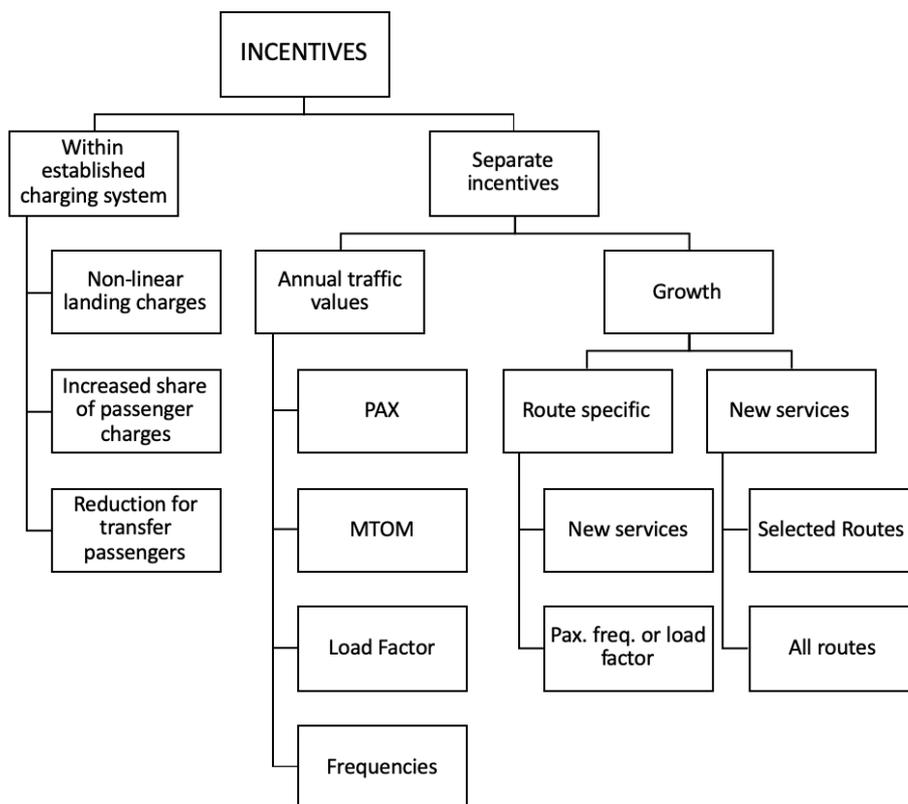


Figure 3.1. Overview of incentive schemes within airport charging systems. Source: Fichert and Klophaus (2011).

The arguments for airport privatization depend on the context of each country or airport system. The main reasons are: improving airport efficiency and performance, providing new funds, improving the quality of management, improving service quality, producing financial gains for the public sector, and lessening the public sector influence

Indicator	Value
Global industry revenue year-over-year growth (2018/2017)	4.3%
Global industry revenue	USD 178.2 billion
Revenue per passenger year-over-year growth (2018/2017)	-1.7%
Distribution of global revenues	aeronautical (55.9%)
	non-aeronautical (39.2%)
	non-operating (4.9%)
Global airport revenue per passenger	USD 17.95
Global aeronautical revenue per passenger:	USD 10.03
Global non-aeronautical revenue per passenger	USD 7.03
Total cost per passenger	USD 13.76
Ratio of aircraft-related to passenger-related charges	38:62
Distribution of non-aeronautical revenue by key source	retail concessions (28.9%)
	car parking (20.4%)
	property and real estate income or rent (14.9%)
Operating expenses to capital costs ratio	65.9% to 34.1%
Largest operating expense categories	personnel expenses (33.9%)
	contracted services (24.9%)
Global debt-to-EBITDA ratio	4.48
Global return on invested capital (ROIC)	7.1%

Table 3.3. Economic and financial indicators for 2018 financial year. Source: ACI, 2020.

However, the main research that analyses the efficiency that privatization introduces usually uses only one dimension of performance (often the indicator is related to productivity -total factor productivity measured in number of operations-). This narrow analysis based only on productivity or financial indicators is one of the factors that induce the agency problem.

The arguments for airport privatization are varied and depend on the context of each country or airport system. The main reasons are: improving airport efficiency and performance, providing new funds, improving the quality of management, improving service quality, producing financial gains for the public sector, and lessening the public sector influence (Graham, 2020).

An analysis carried out by Oum et al. (2006), using variable factor productivity, found that airports operated by 100% government-owned corporations are almost as efficient as the airports either 100% or a majority stake in the private sector. Also, 100% public airports are more efficient than the PPP airports. Contrary to initial expectations, airports owned and managed by mixed enterprises with a government-owned majority are significantly less efficient than 100% publicly owned and operated airports. Particularly, in the US, only airports with majority private ownership, including 100%, achieve more efficiency than the 100% government-owned airports, but not the difference is not high. They consider that under government ownership and management, the professionals who operate the firm have an objective function that is a weighted average of social welfare (stakeholder's theory) and their own personal agendas (agency theory). By contrast, Oum et al. argue that under private ownership the firm maximises profit, which is a shareholder's theory. Despite these observations, they do not provide causal analysis and answers for the question of which causal-effect mechanism in the governance model explains this affectation. Furthermore, Gillen (2011) permits to go deeper into the question of performance and he proposes the metric 'cost efficiency' to understand this interaction between governance

and performance. There are three types of measures to take into consideration when airports are operating efficiently:

- Airport operates on the lowest cost function for their size, traffic composition and range of products.
- Airport operates on the correct point on the lowest function, meaning they are pricing efficiently.
- Airport moves ahead in integrating technology whether embedded in capital (runway or terminal), labour, governance or systems to ensure continued cost efficiency.

Also, Vogel (2006) analyses financial performance of European airports and shows the efficiency is driven by higher asset turnover, higher revenue productivity (return on sales), higher cash flow to revenue ratio and higher operating margins. Traditionally, empirical research has focused on static efficiency and it could be interesting to focus on dynamic efficiency.

These authors exhibit that privatized airports maximize profit while public airports maximize outputs. Also, private airports incorporate constraints related to outputs to meet public responsibilities, while public airports have to achieve some acceptable level of economic sustainability.

In addition, privatisation does come along with some hazards. The theoretical arguments for and against privatisation of publicly owned organisations, particularly when a share flotation is being considered, are well known. For example, it may create a private monopoly which overcharges, may deliver poor standards of service, may invest inadequately and may give insufficient consideration to externalities and other disadvantages (Beesley, 1997). This may also happen in the airport industry. Therefore, when privatising airports, the government usually set up several regulations or regulatory bodies to manage private airports. Gillen (2011) exhibits a comparison of airport regulation (Single Till, Dual Till, Rate of Return and Price Monitoring) across different countries and jurisdictions.

Regulation is a broad concept and deserves to be studied on its own. Aspects and cases with successful results can be found and, on the contrary, cases in which it has been shown to be ineffective or counterproductive. Graham (2020) suggests that better understanding of this field is achieved when regulation and privatization are analysed together.

In addition, privatization leads to a new constellation, which makes a regulatory framework necessary in order to prevent an increase in consumer costs, to establish the basis for a system partnership based on trust (transparency) and to thus guarantee successful privatizations not against, but with, the airlines (Gerber, 2002) and citizens.

Finally, Public-Private Partnership with the government maintaining ownership has become a popular means by which to spread the risks between the private operator and government, but the concessions contracts are complex, and experience over the years has shown that achieving favourable outcomes is a challenging task (Graham, 2020).

Public value and stakeholders on new airport governance models

An airport is a transport infrastructure and its reason for being is to facilitate accessibility and support the connectivity of the territory. Therefore, it is a social utility and creates public value (Moore, 1995). In territories with a high demand for flights and airports with a long history, it has been assumed that such functions are guaranteed by the very volume of the sector.

However, in territories with low demand or, particularly, in the current health crisis, it has become evident that this assumption is not always valid. With regard to connectivity, it should not be forgotten that quantity does not replace quality. Moreover, the majority of airports in the US are public (Reimer and Putnam, 2009; Thatcher et al., 2011) and the same situation exists in Europe ACI (2016).

Therefore, the agency theory has given us a vast knowledge and arguments to move airports towards a market-based governance, based on financial performance. Undoubtedly, necessary, but not sufficient. The analysis proposed from shareholder's theory tends to be one-dimensional but reality is a multidimensional system and defining value is complex.

Moore (1995) introduced the concept of public value and he stated that the correct arbiter of value is "we", the people -citizens, taxpayers and their elected representatives-. The structures, processes and activities that transform the interests and views of citizens into a "public" that can articulate what is worth taxing and regulating is described as the authorising environment. Furthermore, Mazzucato (2018) argues that most of the most remarkable value propositions made in recent years have been made possible by public investment and development support programs. Then, the state promotes the creation of value and takes risks from long-term innovation programs. The central question is how to measure real value. She defends that public sectors have to support ambitious innovation projects and the creation of real value.

Therefore, the airport is a partly ethical proposal. Corporate governance trends indicate that boards of directors are increasingly concerned with ethical issues. There are some questions that could help it to focus on its purpose: What type of support must the airport give to the development of the territory? What type of relationship must the airport strengthen with society? For sure, the Sustainable Development Goals (UN, 2015) can be a good framework to respond to these questions.

New horizons

In short, sustainability must be a priority objective in order to adapt airports - and aviation - to the challenges of the future. According to Freeman (2016), there are three areas of global change: the economy, the climate and technology. We need to reflect on the need to manage them in a non-centered way, that is, to put people in balance with the environment. There



is a critical tension in this axis “person-environment”, which if we do not give it a joint and responsible response, we will jeopardise future generations. On the principle of responsibility, Hans Jonas (1979) said “work in such a way that the effects of your actions remain compatible with the permanence of an authentic human life on earth” (the word “human” could be deleted and that would make the way more non-centered).

Traditionally, air transport has been correlated well with economic growth, also it can be considered an advanced indicator, and both have grown in recent years, overcoming crises such as that arising from the attacks of 9/11 or the financial crisis of 2008 (Figure 3.2). Eurocontrol’s forecasts also indicate that air transport will continue to increase in the coming years, making it necessary to adapt the main infra-

structures and decentralise traffic (Eurocontrol, 2018). Globalisation and aviation have been fed back, but new geopolitical tensions and the current pandemic may affect this growth.

This evolution of traffic has been supported by continuous technological development that has allowed the production of increasingly energy-efficient aircraft, but the dependence on fossil fuel has not been solved and it cannot be done at the pace required by the emerging climate. Air transport is responsible for more than 2% of greenhouse gas emissions according to IATA (2018), but the impact on climate change is 4.9% according to researchers Lee et al. (2009).

In addition, the World Economic Forum (2019) identified several risks related to climate change and, in particular, the risk of “spread

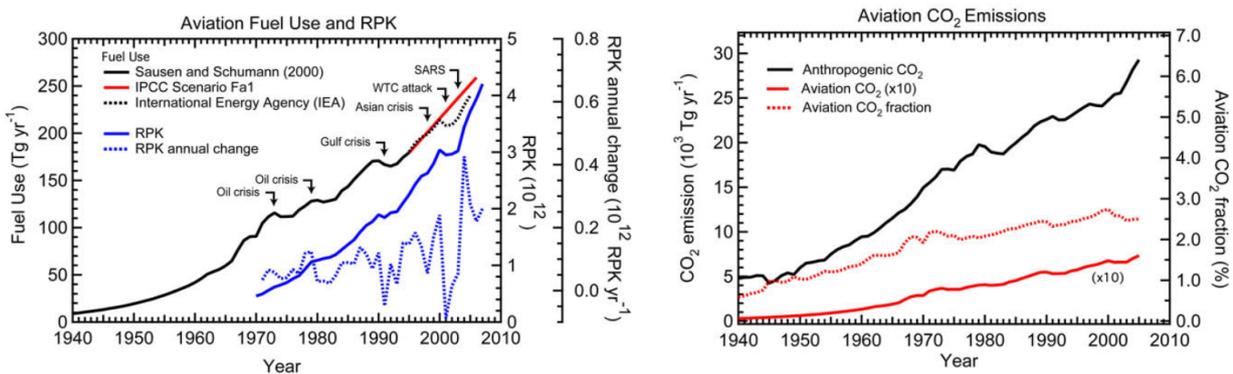


Figure 3.2. Fuel consumption and aviation emissions between 1940 and 2010. Source: Lee et al., 2019.

Continuous technological development allowed the production of energy-efficient aircraft, but the dependence on fossil fuel has not been solved

of infectious diseases”. Recently, Rifkin and other experts have linked climate change with the growing risk of pandemics due to the alteration of ecosystems. Taleb has also stated that the current pandemic is not a black swan, since there were signs, and that the exposure to risks derived from emerging dynamics in a context of complexity is higher. The need to provide adequate structures to identify and manage risks has been one of the lessons learned from the 2008 crisis and still continues being current.

The most important airports in Europe ended the year 2019 with positive bottom lines, however 2020 seems to be totally different. Air transport networks are strongly dependent on cost allocation (Trapote-Barreira, 2015). The question of pay-outs and bailouts requires a specific study, but this highlights the classic tension between shareholder and stakeholder (Smith, 2003). In addition, the socio-economic impact is one of the most important factors in airport and territorial integration and it is important to consider it in planning and management (Robusté and Clavera, 1997). According to ACI-Intervistas (2015), European airports contribute to the employment of 12.3 million people earning EUR 356 billion in income annually, and generate EUR 675 billion in GDP each year, equal to 4.1% of GDP of Europe. The airport creates shared value with the territory, promoting the creation and development of services and products of value that improve the well-being of the community.

In short, investing efforts to adapt airport governance to the challenges of the future is of interest from an economic and social point of view, and it must be a priority in terms of sustainability. The strategy must focus on people. It is necessary to encourage dialogue between stakeholders and create a shared vision, to walk together and develop an airport concept that strengthens relationships.

Airport stakeholders and social responsibility

Due to the significant socio-economic and environmental impacts inherent to their operations, airports are increasingly being managed within the framework of sustainable development as a response to the pressure received by their various stakeholders (Jordao, 2009) and international organizations (UN, 2015). Sustainability involves incorporating economic, environmental and social performance indicators which are also defined as triple bottom line or the dimensions of sustainability (GRI, 2006). In the long term, the airport which has a powerful economic structure, socially meets stakeholders expectations and minimizes negative environmental impacts could be sustainable. In the short term companies should provide competitive products and services to sustain economically and also protect the natural and human resources to provide continuity for the generation’s future needs (Artiach et al., 2010).

Under pressure from internal and external stakeholders, companies consider a variety of sustainability initiatives according to environ-

Investing efforts to adapt airport governance to the challenges of the future is of interest from an economic and social point of view, and it must be a priority in terms of sustainability



FRAMEWORK



Figure 3.3. Framework of multiplicity of airport dimensions.

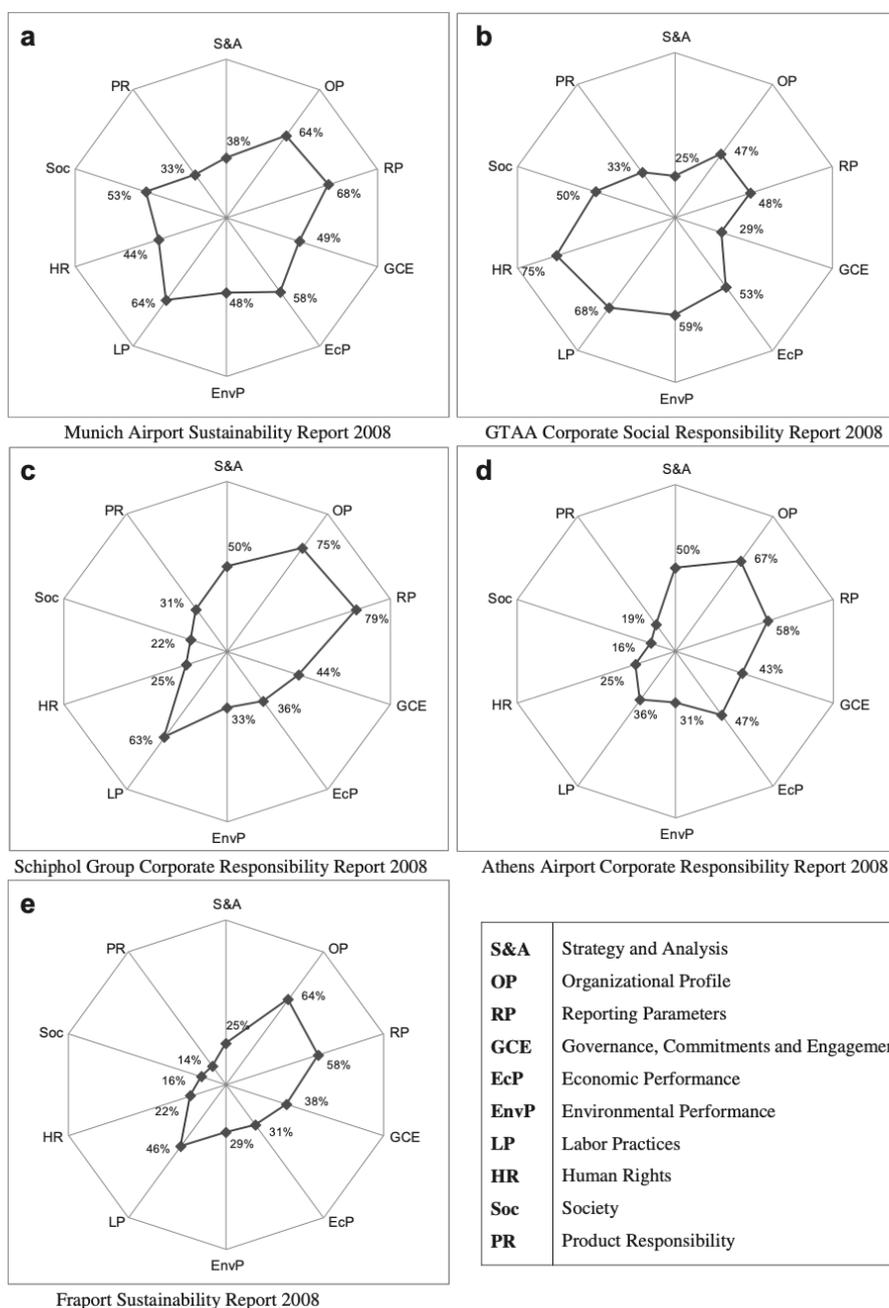


Figure 3.4. Top ranked airport CSR reports. Source: Skouloudis et al. (2012).

mental and social impacts of their operations. Corporations share detailed information about these initiatives through their sustainability reports. Airports that want to highlight their contributions, and inform their stakeholders about their activities and progresses are publishing and developing corporate sustainability reports. However, there is a relevant difference, reporting and managing risks are essential, but these are only the begging. The big step is to incorporate ethical perspective into strategy definition and the radical challenge is to integrate a transformational vision and purpose into the organization.

Stakeholder engagement is increasingly being employed by both public and private organizations as an important strategy for improving external stakeholder relations. Stakeholder theory shows that incorporating stakeholders' opinions is valuable for improving decision making processes and project implementation. In this sense, stakeholder dialogue can be a valuable resource for both goals. In addition, successful engagement with stakeholders facilitates legitimization of issues and facilitates a closer alignment between organizations and society.

Moreover, the balance scorecard (Kaplan and Norton, 1992) is a resource that can help to implement successfully the strategy not only in the business and operational area, but also in the environmental and social dimension of the airport.

Schaltegger and Lüdeke-Freund (2011) propose a methodology and a case study (Hamburg Airport) in which the Sustainable Balance Scorecard (SBSC) process helps to identify already existing environmental and social activities which were merely recognized before. As a result, transparency increases and the identification of valuable causal chains between non-market aspects and economic targets is possible. The causal hypotheses also help to define value-oriented environmental and social measures, support communication and a better integration with general management and strategic objectives. The location perspective addresses crucial non-market issues (cultural, historical, political, etc.) which are of significant importance for the legitimacy and autonomy of airport action and thus support value-oriented stakeholder management.

**Stakeholder theory
shows that incorporating
stakeholders' opinions is
valuable for improving
decision making
processes and project
implementation**



	STRATEGY	TRANSPORT	SOCIETY
PERSPECTIVES	ECONOMIC AND FINANCIAL	Economic sustainability	Catalyst of activity
	EXTERNAL - MARKET	Customer and passenger experience	Mobility and interculturality
		Demand: served, potential, dynamics.	Integration and connectivity with territory
	INTERNAL - OPERATIONAL	Network and frequencies: spatial and temporal coverage	Environment
		Operational excellence.	Added value of the service
	ORGANIZATIONAL	Model of employment as a quality driver	Talent promotion
Social impact			

Figure 3.4. Approach to integrated balance scorecard for airport governance.

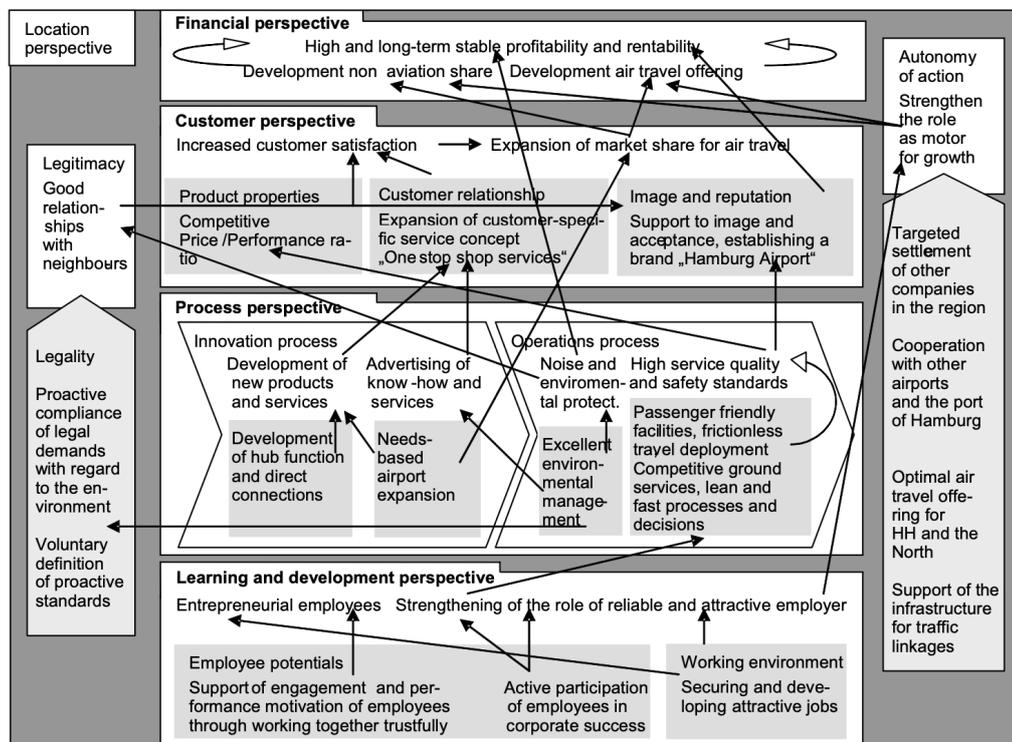


Figure 3.5. Strategy map of Hamburg Airport's SBSC (Schaltegger and Lüdeke-Freund, 2011).

INTERNATIONAL PERSPECTIVE

This section aims to present the governance model of different airport systems around the globe in order to understand the differences in the main countries and different continents. Firstly, three models out of Europe -United States, Canada and Australia- and, later, some Europeans models.

Non-European countries

United States

The development of air transport in the United States is unparalleled by any other country in terms of its history, size and social impact. Six US airports are at the top 20 of the ranking of world airports.

In 2010, there were 19,734 airports in the US. While the vast majority of these airports are privately owned and privately used, only 4,247 airports are publicly owned and publicly used (Reimer and Putnam, 2009; Tatcher et al., 2011; Ernico et al., 2012). Moreover, 3,380 of US airports are in the NPIAS. These publicly-owned airports serve scheduled passenger operations, cargo operations, general aviation, or a combination of these operations. The ownership does not distinguish them from the rest of the international models, despite they are often characterized by their ownership, but it is the governance structure that largely determines how an airport is managed, operated and developed.

Public airports in the US are owned and operated under a variety of organizational and jurisdictional arrangements. The management of the airports is mostly in the hands of local authorities, in some cases even of the city administration (Los Angeles and New Orleans). In the case of Atlanta airport and Chicago airport (the two with the highest volume of passengers), they are in the hands of specific bodies under the supervision of the municipality. Rarer are the cases of management by the counties, as is the case, for example, of Milwaukee or Detroit. State management is almost exceptional; it is practically relegated

to geographically unique cases such as Alaska or Hawaii. Finally, there are cases in which airport authorities have been created such as the PANY which manages the airports of New York and New Jersey together with the rest of the transport infrastructure; or the Washington Airports Authority which took over the management of the airports of Washington DC which was previously federal. Figure 4.1 shows the continuum for different options.

Some authors argue that selling or leasing a public airport to a private operator can optimize airport performance. The benefits of privatization in the United States are largely anecdotal, because only a few communities have attempted to fully privatize commercial service airports. Indeed, partial privatization remains the primary organizational model in the United States (there are different levels of involvement, Figure 4.2). A literature review reveals that the theoretical benefit of privatizing airports has received far greater attention than consideration of the advantages, disadvantages, and opportunities for improving the traditional airport governance structures that have been and continue to be used in this country.

The key drivers for privatization in the US have been listed (Ernico et al. 2012): capital funding, sale proceeds, competition market stimulation, innovation and organizational change, efficiency gains and customer focus, risk transfer. As all the airports in the world, funds for investments or maintenance are crucial, and the difficulty in the US case falls in the complex models of revenues, funding scheme and operator's involvement (DeNeufville and Odoni, 2003). By contrast, opponents argue that the public sector would be relinquished or a public asset by privatizing its airport and charges for users could be higher at the end at the same level of service.

The Airport Privatization Pilot Program was created to test a new method for increasing private participation, and especially private capital, in airport operations and development. Through specific legislation, Congress lowered several barriers to privatization that

AIRPORT RANKING (PASSENGERS*)						
2019	2018	AIRPORT	2019 TOTAL	2019 vs 2018 % change	Q1 2020	Q1 2020 vs Q1 2019 % change
1	1	ATLANTA GA, US (ATL)	110,531,300	2.9	20,713,627	-18.2
2	2	BEIJING, CN (PEK)	100,011,438	-1.0	9,327,109	-62.6
3	4	LOS ANGELES CA, US (LAX)	88,068,013	0.6	15,787,322	-21.7
4	3	DUBAI, AE (DXB)	86,396,757	-3.1	17,823,446	-19.9
5	5	TOKYO, JP (HND)	85,505,054	-1.7	15,064,577	-28.6
6	6	CHICAGO IL, US (ORD)	84,649,115	1.7	14,873,692	-17.3
7	7	LONDON, GB (LHR)	80,888,305	1.0	14,648,707	-18.3
8	9	SHANGHAI, CN (PVG)	76,153,455	2.9	8,077,491	-57.1
9	10	PARIS, FR (CDG)	76,150,009	5.4	13,093,454	-20.6
10	15	DALLAS/FORT WORTH TX, US (DFW)	75,066,956	8.6	14,669,491	-12.3
11	13	GUANGZHOU, CN (CAN)	73,386,153	5.2	8,386,657	-53.8
12	11	AMSTERDAM, NL (AMS)	71,706,999	0.9	12,271,241	-20.8
13	8	HONG KONG, HK (HKG)	71,415,245	-4.2	8,168,000	-56.4
14	17	INCHEON, KR (ICN)	71,204,153	4.2	10,307,810	-42.5
15	14	FRANKFURT, DE (FRA)	70,556,072	1.5	11,116,585	-24.9
16	20	DENVER CO, US (DEN)	69,015,703	7.0	13,030,066	-12.9
17	12	NEW DELHI, IN (DEL)	68,490,731	-2.0	15,618,233	-7.1
18	19	SINGAPORE, SG (SIN)	68,283,000	4.1	11,047,000	-32.7
19	21	BANGKOK, TH (BKK)	65,421,844	3.2	11,967,714	-32.2
20	22	NEW YORK NY, US (JFK)	62,551,072	1.5	11,129,965	-19.9

Table 4.1. Total passenger traffic and year-over-year percentage change. Data source: ACI, 2020.

* Total passengers planed and deplaned, passengers in transit counted once.

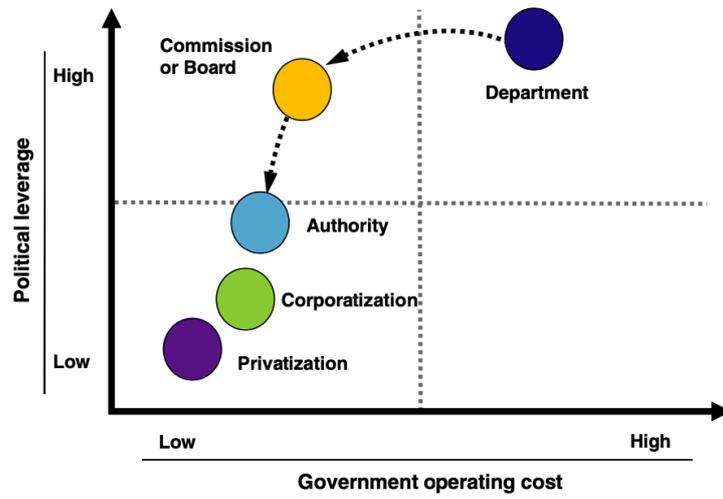


Figure 4.1. The airport governance continuum. Source: Ernico et al., 2012.

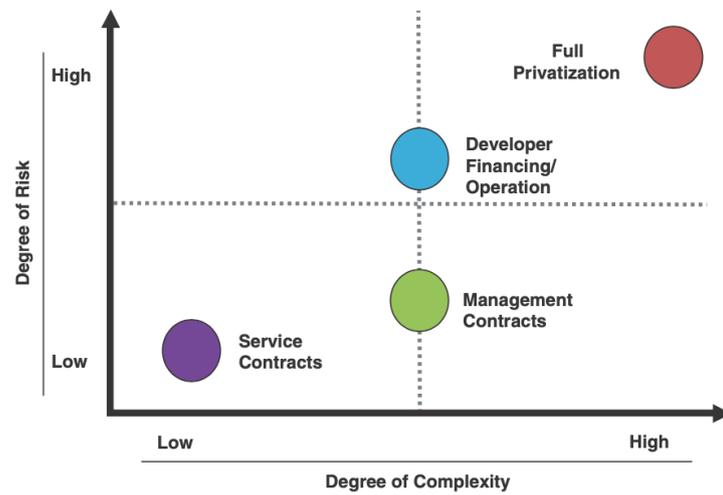


Figure 4.2. Conceptualization of complexity and risk. Source: Ernico et al., 2012.



had been identified during a debate on the subject, including the prohibition on revenue diversion. Congress limited the scope of the program and imposed certain conditions on approval, the government will retain the role of watching over issues of public interest and the FAA later adopted procedural requirements for applicants seeking to participate in the program.

Tatcher et al. (2012) exhibit a relevant fact. From 1970 to 2007, there has been about a 67% reduction in the number of privately-owned public-use airports. The contraction in this number is principally due to airport closure and redevelopment of airport property for non-airport uses. Although some privately-owned public-use airports make the transition to public ownership, the number appears to have been limited. The authors argue that National airport statistics clearly show that a privately-owned public-use airport has a better statistical chance of long-term survival as an airport if it is converted to public ownership. The FAA plays the role of supervising that a professionally executed airport feasibility study and an airport master plan, and has a highly motivated and technically competent public entity as the airport sponsor and future owner.

Some trends are observed in the US. The first one is the dominance of competition between airports and airlines. As a result of deregulation, the atmosphere is riskier and airport infrastructures tend to reduce their dependence on airlines and favour more flexible management, with the result that compensatory agreements have been imposed to the detriment of residuals that have been relegated to small airports. The large and medium-sized airports are mainly users of the private bond and opt for more entrepreneurial management formulas. However, the situation at hub airports is more complicated as they are dependent on the airlines that establish their base there, but these in turn can limit competition within the airport.

Also, the Federal role is also analysed both at the level of investment powers at airports and at the level of responsibility for air traffic control. Although its role as guarantor of public service conditions is beyond question, some issues must be resolved in order to overcome inefficiencies in revenue, resource allocation and technological development of the services it provides.

In addition, the concept that drives private enterprises toward competitive and efficient operations are becoming embraced by publicly owned and managed airports. Consequently, more efficient organisational structures and management responsibilities have resulted in more streamlined and efficient airport management organisational structures.

Finally, there is a lack of literature about the creation of public value or social impact of airports in the US. The majority of publications and research about airport governance or public utility end up talking about property but not about relationship with the environment.

Canada

The case of Canadian airports is interesting because it was subject to a major reform in the 1990s and work has continued to overcome problems that have been detected. Canada has just over 300 airports and more than 159 million of passengers have passed through them by 2018. Only four airports exceed the threshold of the 10 million of passengers: Toronto, Vancouver, Montreal and Calgary.

The airports were operated by a single system by the federal department that was not able to finance the needs of expanding the aeronautical infrastructure. For that reason, the government took the decision to transfer the airports to non-for-profit airport authorities. These authorities are the Local Airport Authorities (LAA) and the Canadian Airport Authorities (CAA), in which the degree of intervention by the federal government varies. The structure has been (Tretheway, 2006):

- Airports in the National Airports System (NAS). The main airports in the system which concentrate the most important share of the country's passenger volume and form the core of a structured network. They are airports belonging to capital cities and airports with more than 200,000 passengers per year. This group is considered essential for national accessibility and prosperity and therefore the government maintains ownership, to ensure long-term viability. However, the operation and management of these airports is local, through a lease to a CAA, in order to achieve cost efficiency and management closer to needs. They are solvent as a group, but maybe someone is not individually solvent. A condition is imposed: to be solvent within a maximum period of five years.
- Regional or local airports. These are airports with a volume of less than 200,000 passengers per year. The ownership of these is offered to provincial and local governments, airport commissions, private businesses or other interests (in this order); through the LAA. The new owners are free to establish the ownership and management solutions they consider appropriate to their needs. Due to their volume of passengers, they may not be able to guarantee their solvency in the short term, so they benefit from a 5-year subsidy period that can be extended (ACAP programme), but efficiency improvement measures are required. Local management brings the airport closer to better serving the community in terms of both services and interests. If the airport proves to be solvent and captures internal and/or international traffic, it can access the NAS.
- Small airports. These are mainly airports oriented to recreational flying and not to commercial passenger flying. Those that are satellites of international airports can be transferred to airport authorities operating the main one.

Government took the decision to transfer the airports to non-for-profit airport authorities



- Remote airports. They belong to isolated communities and are still federally supported, therefore measures of efficient management are in place.
- Airports in the Arctic Program. They are owned by the federal government although they will be progressively transferred.

The Airport Capital Assistance Program (ACAP) is a program of financial assistance to projects related to safety issues such as runways and terminals. The funds come from the NAS' profits and this subsidy is based on the thesis that part of the profits made by the major airports come from passengers who start or finish their journey at a local airport. The federal government continues to maintain the functions of implementing a regulatory framework that ensures adequate levels of security for all Canadian airports.

The differences between the LAA and the CAA lie in the role of the federal government. There is more government control in CAA than in LAA. However, in both cases, the government reserves the right to audit them to ensure that they comply with established standards. Another difference is that in the case of the LAA, the government does not take part in the board of directors as none of its members can be a public or elected official. However, the CAA's board contains two federal positions, in addition provincial and local positions. In any case, non-aeronautical activities are entirely a local responsibility.

The Airport Authorities were mandated to operate as self-sustaining businesses and to facilitate economic development in local communities. They introduced commercially focused management practices, creating a more predictable business environment for airlines and other airport users.

Nominating body	Montreal	Toronto	Ottawa	Vancouver	Calgary
Government of Canada	2	2	2	2	2
Provincial government	1	1	1	0	0
Regional and municipal authorities	5	5	3	3	4
Chambers of commerce	3	2	1	1	8
Another non-governmental organization	0	0	2	1	0
A professional association	0	2	0	2	0
Air carriers' national association	2	0	1	0	0
President and chief executive officer	1	0	0	1	0
Governance committee of the board of directors	1	4	3	5	0

Table 4.2. Composition of the boards of directors of the Montreal, Toronto, Ottawa, Vancouver and Calgary airports, according to the nominating bodies. Source: IGOPP, 2014.

However, this model was developed when there were not many references around the world. Over time, Canadian airports have lost competitiveness and the government published a review of the Canada Transportation Act in which recognises the problem created by the lease system (CTA Review Panel, 2015). The Standing Senate Committee on Transport and Communications suggested that the relatively high ground rents paid by Canadian airport authorities contribute to the high cost of flying in Canada. The committee also found that the finite nature of the leases adds constraints on raising revenues for airport investments, particularly towards the end of the leases.

The Institute for Governance of Private and Public Organizations (IGOPP, 2014) recommended that the federal government “offer provinces and municipalities the opportunity to acquire the real estate assets and equipment of Canadian airports.” Among other things, the IGOPP suggested that selling the airports to provincial or municipal governments would resolve the issue of ground rents and allow provincial and municipal governments to better integrate air transport with other modes of transportation.

CTA Review Panel (2015) recommended that the federal government move within three years to a share-capital structure for larger airports, with equity-based financing from large institutional investors. As part of this recommendation, the CTA Review Panel suggested implementing the economic regulation of fees and charges, with the Canadian Transportation Agency responsible for oversight of those regulations. In explaining the reasoning behind, these recommendations, the CTA Review Panel noted “the benefit of increased private sector discipline in the management of large airports.” Its recommendations begin with a guiding principle “a system based on competition, market forces, and the user-pay principle is the best means to deliver a robust air transport sector in most cases”.

Some stakeholders have criticized the possibility of privatizing the larger Canadian airports. Airport Authorities in Ottawa, Vancouver and Calgary have also opposed the privatization of their airports, arguing that privatizing their facilities would increase customer fees and hurt the quality of service.

Australia

Australia moved to private ownership of their major airports. Between 1997 and 2003, Australia sold 50-year leases for 22 airports to private entities, but it retained ownership of the infrastructure. Prior to commercializing some of its airports, the Australian Commonwealth (federal) Government owned all of the large international airports in Australia, with the exception of the one in Cairns, and operated them through the Federal Airports Corporation (Chong, 2017). Despite the public ownership and operation, prices charged for services at the government-owned airports were under surveillance by another federal organization, the Prices Surveillance Authority.

Until July 2002, the Australian Competition and Consumer Commission (ACCC) regulated the prices charged and the service quality provided by private, for-profit operators. After the period of formal price cap regulation, Australia joined New Zealand in implementing a light handed form of regulation (Forsyth, 2006). The Australian Productivity Commission reviewed this ACCC price regulation after five years and advocated the removal of price cap regulation. The Commission concluded that there was a significant risk that the regulator would approve airport price increases for unnecessary investments, given the information asymmetry inherent in the relationship between firms operating the airports and the regulator.

Therefore, there is no explicit regulation of prices, but regulation could be imposed if performance is considered to be poor. Then, price regulation was replaced with a price monitoring system. The monitoring agency could take external factors into account



Governments are closely involved when there are proposals for new airports or major investments, such as new runways

when evaluating a firm’s prices, and this was expected to reduce the firm’s profit volatility and risk of failure. The ACCC continues to monitor prices and service quality at the four privately leased airports (Brisbane, Melbourne, Perth and Sydney). In its 2012 report, the Australian Productivity Commission inquiry recommended that service quality monitoring continue until June 2020.

The airports in Australia and New Zealand, even those operating on constrained sites, typically have ample runway capacity. However, governments are closely involved when there are proposals for new airports or major investments, such as new runways and the environmental implications have been studied before the approval. The main direct government policy role with airports concerns their environmental impacts.

Furthermore, the governance of airports is carried out by professional, experienced and dedicated boards. For example, the board of Sydney’s Airport (the main airport in terms of passengers per year) is shown in Figure 4.3. High standards of corporate governance play an integral part of delivering strong financial performance and maximising long-term return to investors. It provides an overview of corporate governance practices in the form of a report against the Principles and Best Practice Recommendations of the Corporate Governance Council of the Australian Securities Exchange.



Figure 4.3. SYD’s corporate governance framework. Sydney Airport (2019).

Seven principles guide the activity of the SYD’s Board: Lay solid foundations for management and oversight; Structure the board to be effective and add value; Instil a culture of acting lawfully, ethically and responsibly; Safeguard the integrity of corporate reports; Make timely and balanced disclosure; Respect the

rights of investors; Recognise and manage risk; Remunerate fairly and responsibly; Additional recommendations that apply only in certain cases.

The document reflects that the attention to investors is the first level, however the collaboration with stakeholders and communities are inside the area of risk management. The statement indicates Sydney Airport is committed to responsible growth that delivers positive outcomes for customers, investors and the community in which it operates. It exhibits that as a sustainable business Sydney Airport is committed to operating fairly and responsibly, ensuring risks are identified and appropriately managed; integrating social and environmental considerations into our decision-making processes; and working in collaboration with our customers, the airport community and other stakeholders to deliver mutually beneficial outcomes.

Europe

The European aviation sector has been one of the best performing parts of the European economy before the pandemic and 900 million air passengers travel each year to/from and within the European Union (Directorate-General for Mobility and Transport, European Commission, 2020). Also, airports are essential infrastructures for connectivity and economic growth. In 2015, Airports Council International estimated the total economic impact of airport and aviation-related activities at €338 billion across the EU. Aviation can act as an 'economic multiplier', and facilitate and generate wider economic activity. It's also good for jobs. The Commission estimates that up to 2 million people are employed directly in the EU aviation sector and, overall, the sector supports 5.5 million jobs.

Overcoming problems such as capacity and congestion is critical to meet increased demand for flights, in particular, for large airports. Airport connectivity in Europe varies between airports: some hub airports offer hundreds of destinations while small regional airports offer just a few routes. Geography is not the only factor that determines the location of successful international hub airports and airlines. The availability of competitive airport services, including runways, passenger terminals and ground handling, is critical for the continued success of EU aviation. Furthermore, in 2014, the Commission adopted new guidelines on state aid in the aviation sector. These new rules aim to ensure that airports located in regions with specific air transport needs may receive public funding.

On the other hand, European Commission works to ensure that aviation needs to develop in a sustainable way of reducing its environmental footprint and contributing to the fight against climate change. The main environmental effects of aviation are those of aircraft noise and aircraft emissions. The former largely



In 2014, the Commission adopted new guidelines on state aid in the aviation sector. These new rules aim to ensure that airports located in regions with specific air transport needs may receive public funding



affects areas at and around airports, the latter can have both local effects on air quality and global effects on climate. Different actions have been promoted from EC and those have been implanted, being European airports and communities involved.

Data analysis demonstrates that European air transport is irregular by countries but it is well correlated with population and GDP. Figure 4.4 shows, using data from Eurostat for 31 European countries, that the volume of passengers by each country's airport system can be clustered into two groups. Therefore, countries such as Germany, United Kingdom, France, Spain, Italy and Netherlands are in the group which holds the main air transport share (62%), with an important GDP and population (Netherlands is included because AMS manages the main share of its air traffic). However, the rest of European countries hold the remaining 38% of passengers. The economy of networks, that airlines know very well, and the historical reasons that guided the locations decisions for hubs, explain well this concentrated distribution. Indeed, main European hubs are London Heathrow, Frankfurt, Paris Charles de Gaulle, Amsterdam Schiphol and Madrid-Barajas airports; all of them in the first group of countries. Moreover, Switzerland and Zurich Airport could be integrated in this group, however the particularities of the country and the airport recommend to be cautious.

On the other hand, European Commission works to ensure that aviation needs to develop in a sustainable way of reducing its environmental footprint and contributing to the fight against climate change

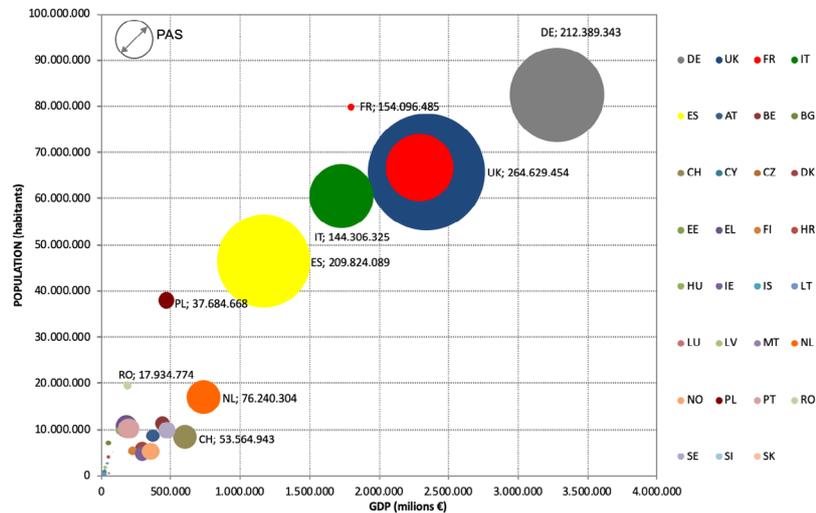


Figure 4.4. Passengers in European airports, population and GDP by country. Data source: Eurostat, 2017.

Figure 4.5 exhibits a detailed distribution of passengers by country and Figure 4.6 exhibits the distribution of passengers by airport. When the traffic is analysed by airports, the degree of concentration of passengers decreases.

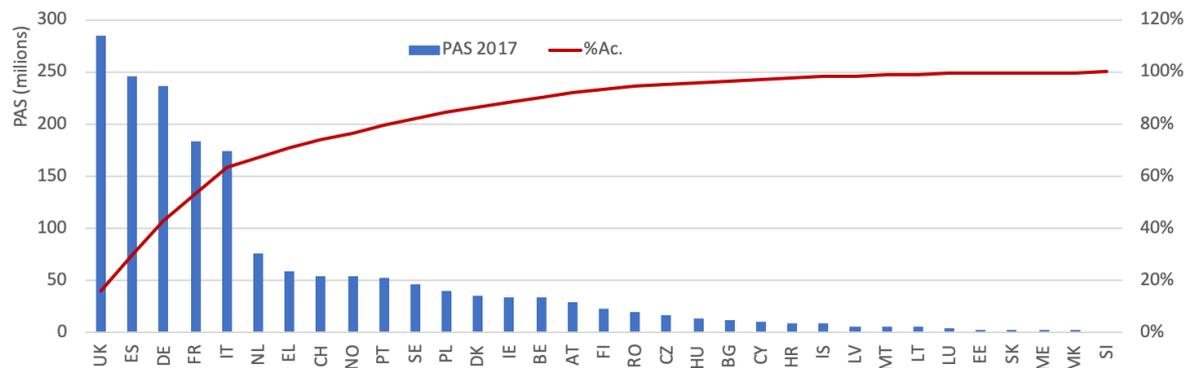


Figure 4.5. Distribution of passengers by country. Data source: Eurostat, 2017.

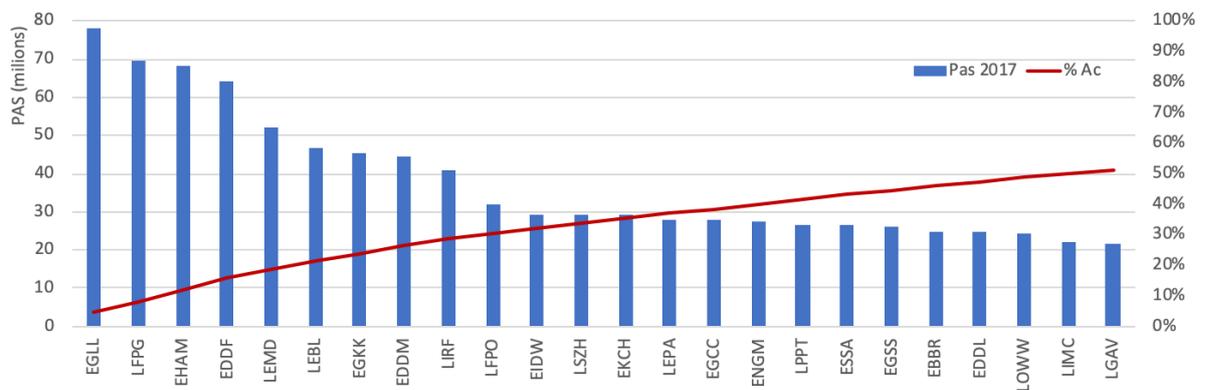


Figure 4.6. Distribution of passengers by airport. Data source: Eurostat, 2017.

Airport ownership in Europe

European Air Transport markets were deregulated in 1997, and although some routes in Europe’s peripheral areas are protected by Public Service Obligations, airlines have more freedom to enter and exit markets. This movement has been transferred to the airport industry.

Pardo (2001) summarized that the European law (Council Directive 96/97/EC), indicated that each airport had to set up its own management entity, with the only exception, already noted in the definition, is the so-called airport systems. One of these entities would be able to constitute a separate management unit, which was responsible for the management entity, defined by Community Law as: “the entity which, whether or not in conjunction with other activities, has as its task under national laws or regulations the administration and management of airport infrastructures and the coordination and control of the activities of the various operators present in the airport or airport system concerned”. (Council Directive 96/97 EC).

Also, another important rule established by the Directive was the strict separation between the management activity and the public function of regulating these infrastructures and the activities that take place in them. The inescapable consequence of this separation was that manage-

The share of fully publicly owned airports has decreased from 77% in 2010 to 53.2% in 2016 for EU28

ment and regulation must be attributed to different bodies. Indeed, this was a general rule of European law in all services and activities with an economic content, which sought to avoid the unjustified advantageous position in which companies with regulatory powers and authority would find themselves. Currently, for main airports in Europe this rule is followed, however it can be observed that the concept of system applied by the Council differs with the criteria that some states have applied finally.

Improving the performance of European airports was one of the Directive's goals. Market advocates argue that a market-based model encourages the use of management practices oriented to customers. The relationship between market orientation and the performance of airports was analysed by Gillen (2011), Vogel (2019), and Nigel and Pagliari (2007).

A stream of privatizations has spread throughout Europe and many airports have private stakes currently. ACI (2016) has analysed the sector, the share of fully publicly owned airports has decreased from 77% in 2010 to 53.2% in 2016, for EU28 countries. Moreover, both fully private and mixed ownership have doubled their share respectively. The semi-privatization of Spanish airport operator AENA S.A. (with Initial Public Offering) and the concession of Portuguese airport operator ANA explain the substantial differences. However, other single small airports such as Zagreb, Belgrade, Toulouse-Blagnac or Lyon-Saint Exupéry airports have seen differences in the structure of the equity.

The interest of private investors tends to be focused on large airports that can attract more passengers and then they can achieve better ROI and ROE. The interest of states to facilitate this movement is due to the financial situation after the crisis in 2008 in some cases and the requirement to improve the airports performance in others. However, for airports with mixed ownership, the highest percentage (71.4%) is retained by the structure whose majority capital is public. In addition, for airports with public ownership, the highest percentage (78%) represents corporatized airports (ACI, 2016).

The main publications about airport governance in Europe focuses on ownership and the improvement of commercialization through full or partial privatizations. However, there is a lack of literature about mechanisms of governance of the airport as a corporation and its relation with communities.

Selected cases

Europe has diversity in the model of governance for its airports. Each country has found its own formula of ownership, management and regulation. The European Commission has introduced some directives to draw a common framework (about regulation, aids, sustainability, etc.). Then, some cases have been selected and developed in this section. The starting point was the analysis carried out by ACI (2016), in which the capital structure was analysed for each airport, and some data are updated in the current report. In addition, some complementary literature is added and further analysis is developed.

United Kingdom

The evolution of airports in the United Kingdom is one of the most researched topics by experts and scientists in the field of transport, economics and law. Figure 4.7 shows the passenger distribution by airports for this system and the predominance of the London airport over the others, and of the London multi airport system over all others, should be highlighted.

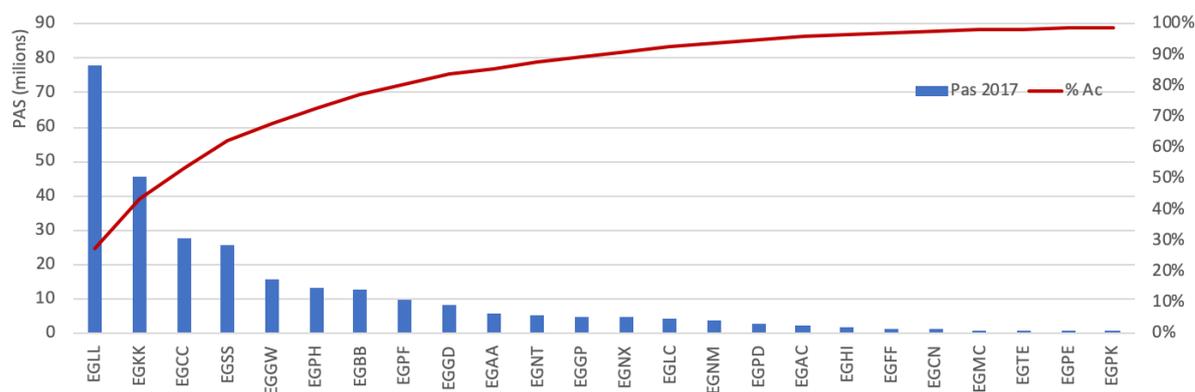


Figure 4.7. Distribution of passengers for 24 busiest airports in the United Kingdom. Data source: Eurostat, 2017.

Lai (2013) states that the UK has been the leader in the field of full airport privatisation, following the introduction of the 1986 Airport Act. Until the mid-1980s, UK airports were regarded as public utilities to be owned and subsidised by the government. Since then there has been a significant shift and most airports in the UK are now full or partly funded by the private sector.

The 1986 Airports Act privatised the airports of the British Airports Authority (BAA) and transformed UK municipal airports into commercial companies. The aims of privatisation in the UK were to improve efficiency, reduce government involvement in the industry, reduce subsidies to the public sector, reduce the financial burden on government of the Public Sector Borrowing

Rate (PSBR), provide access to private investment, widen share ownership, gain political advantage, and introduce commercially focused management.

In this process, BAA has been transformed. It passes from an airport authority focused on the domestic market to an international group that takes participation in several airports and airport business around the world. Lai (2013) summarizes the short history of BAA to explain how easily the airport ownership can be transferred to the capital market. Then, in 2006, BAA was taken over by a consortium led by Grupo Ferrovial. Consequent-

ly, the company was delisted from the London Stock Exchange in 2006, and the company name was subsequently changed from BAA plc to BAA Limited. In 2008, Gatwick airport was put up for sale. In October 2009, BAA announced that Gatwick had been bought by Global Infrastructure Partners (GIP). Furthermore, in March 2009, the UK Competition Commission ruled that BAA must sell Stansted within two years to either Glasgow or Edinburgh airport.

Table 4.3. Ownership structure for some airports in the United Kingdom. Source: ACI (2016) and website's information.

Airport	Corporation	Ownership	Shareholders
London Heathrow Airport	Heathrow Airport Holdings Limited	Private	25% Ferrovial S.A.
			20% Qatar Investment Authority
			12.6% Caisse de dépôt et placement du Québec (CDPQ)
			11.2% GIC
			11.2% Alinda Capital Partners of the United States
			10% China Investment Corporation
London Gatwick Airport	Gatwick Airport Limited	Private	10% Universities Superannuation Scheme (USS)
			50.01% Vinci Airports
Manchester Airport	Manchester Airports Group (MAG)	Mostly Public	49.99% Global Infrastructure Partners (GIP)
			35.5% Manchester City Council
			35.5% IFM Investors
London Stansted Airport	Manchester Airports Group (MAG)	Mostly Public	29% Greater Manchester local authorities
			35.5% Manchester City Council
London Luton Airport	London Luton Airport Ltd (LLAL)	Public	35.5% IFM Investors
			29% Greater Manchester local authorities
Southampton Airport	AGS Airports Ltd	Private	100% Luton Borough Council
			50% Ferrovial S.A.
Aberdeen International Airport	AGS Airports Ltd	Private	50% Macquarie Group Ltd.
			50% Ferrovial S.A., 50% Macquarie Group Ltd.

Also, user and passenger fees at UK airports are among the highest, and the passenger service is not highly rated. It is widely believed that high fees at UK airports have helped Eurozone airports like Frankfurt grow faster than would otherwise have been the case. An ad hoc sample of Heathrow compared to Frankfurt for example reveals add-on fees 40% higher for the former.

However, the most far-reaching impact of the Airports Act (1986) was to place airports under an ownership structure that enabled local authorities to sell their shares and become fully privatised companies. Although the UK government has never directly forced airports to privatise, the reduction of the money available for public sector borrowing since 1992/3 has forced most airports to seek private capital to finance expansion (Humphreys 1999). Commercial pressures have also resulted in the pattern of airport ownership becoming increasingly dynamic in the UK, with many significant changes taking place in the ownership and governance of regional airports.

In 1997, the Airports Act Part II introduced a mixed pattern of ownership structures. Since 1997, the private sector has taken an increased role in UK airport ownership structures, and along with this, the rate at which ownership has been transferred from one owner to another has also increased.

The UK government has tried to take the role of regulator. At present, the CAA's Economic Regulation Group regulates the 45 airports. The regulatory system aims to provide safeguards against distortion of the air travel market through predatory pricing or other monopoly abuses by airport operators. It also aims to incentivise cost control and efficiency (Gillen 2011). Also, Graham (2011) suggests that the nature of competition and the form of regulation is more important than ownership in achieving the economic aims of privatisation.

The UK model of privatization and commercialization has been successful in many aspects. First of all, the market-based orientation, characteristic of share-holder theory, allows English airports to reduce dependency of public funds and to have better access to capital markets. However, it is difficult to separate out the impact of commercialisation and corporatization from privatisation. On the other side, the expansion of some airports, like Heathrow with Terminals or future projects or runway extensions, or the noise impact have created some problems which neighbours have been resolved in court.

The evolution of this airport privatization process can perfectly show the translation of the Anglo-American model of corporate governance, oriented to shareholders, in the field of airports.

The 1986 Airports Act privatised the airports of the British Airports Authority (BAA) and transformed UK municipal airports into commercial companies



Spain

The Spanish airports are 46, and there are two heliports, all of which are managed by AENA S.A. This corporation was a public entity until 2015 when an IPO was carried out. The main reason was to improve the market-orientation, to facilitate the adoption of rigorous practices of private corporations, to re-shape the capital structure and obtain funds in capital markets. In addition, AENA participates in the management of other airports in Europe and America.

In the past, AENA, as a public company, exercised the functions of airport authority, assuming to a large extent the tasks of public planning and regulation of airports and, at the same time, as a company, carries out the management of airports. However, currently, the function of regulation is carried out by the Ministry of Transports and the company is focused on management. In fact, 51% of the capital is public (Enaire, public administration) and, then, the control is held by the government.

The Figure 4.8 exhibits the distribution of passengers by airports in airports managed by AENA in Spain. The high degree of traffic concentration in main airports, corresponding with big cities and tourist destinations, allows to understand why the Spanish government decided to maintain the group, in order to facilitate the economic sustainability of the system. However, the management is centralized to the extent that dialogue with local communities does not appear as one of the actions carried out in the CSR memory (AENA, 2019), which declares all kinds of activities and the alignment with SDGs. In practice, each individual airport maintains fluent conversations with councils where airports are located and other local associations, however the management is centralized.

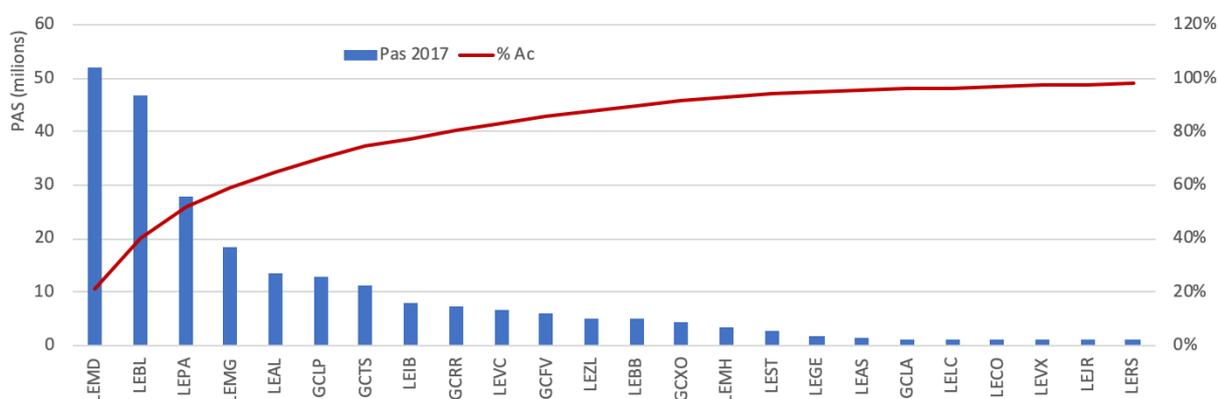


Figure 4.8. Distribution of passengers for the 24 busiest airports in Spain. Data source: Eurostat, 2017.

In 2019, the revenue was EUR 4,503 million, with a significant and growing share of the non-aeronautical side. EBITDA was EUR 2,766 million, 4.1% more than in 2018, and a debt of EUR 8,509 million (57% of liabilities). Earnings after interests and taxes were EUR 1,446 million and the share price was evolving positively and the company belongs to the IBEX35.

Aena's corporate governance information is excellent and can be consulted online. It amply demonstrates the professionalization of the governance function, which is fully aligned with the demanding trends in that function. The company is well aligned with share-holder theory because it has done structural changes to improve efficiency, market orientation and has a clear focus on investors.

Is it in practice? Certainly, yes. However, it is known that Aena maintains fluid relations with the local administrations and associations where the airports are located; however, it does not report methodology of engagement or dialogue with stakeholders.

Germany

The German country has a large number of airports in the country, but the traffic is highly concentrated in a few of them. However, this airport system has not the higher degree of concentration.

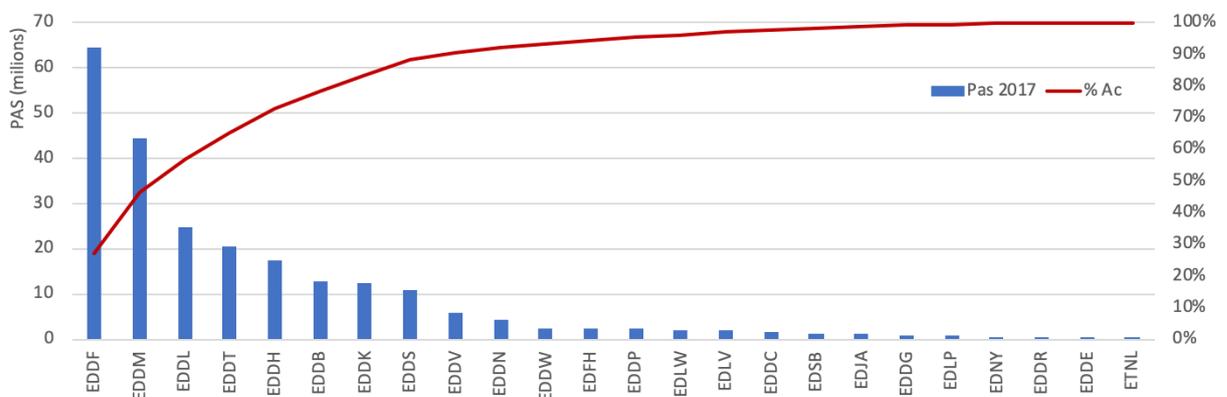


Figure 4.9. Distribution of passengers for the 24 busiest airports in Germany. Data source: Eurostat, 2017.

As mentioned above, in order to understand the formula for airport management in the framework of competence correlation between Bund and Länder, one must go back to the historical development of the country and the Bonn Basic Law in 1961 (Pardo, 2001). Airports and airport regulation in Germany have a mosaic of different structures of ownership (Bund, Länder, municipality and private) and different regulatory frameworks

(Littlechild, 2012). Germany has not been at the forefront of privatization (Gerber, 2002).

Private involvement was more successful for large airports or airports with some commercial attractiveness. In regional airports, the operating losses are mostly borne by public authorities as almost all regional airports are owned by federal states and/or municipalities. Also, most of the attempts to involve private business as investors or owners as well were unsuccessful in the long term, or private business withdrew

from the project. Frequently, still today, subsidies are needed even in cases where private are the owners or investors (Heymann, 2015).

Frankfurt Airports is the most important infrastructure in Germany. It is mostly public, with only a minor share in free float. Fraport AG is in charge of the operation, which has participation in other airports around the globe. The Corporate Governance Code of Fraport AG, available online, specifies the important principles in the management and supervision of the

Airport	Corporation	Ownership	Shareholders
Frankfurt Airport	Fraport AG	Mostly public	31,31% State of Hesse
			20,32% Stadtwerke Frankfurt am Main Holding GmbH
			8,44% Deutsche Lufthansa AG
			5,02% Lazard Asset Management LLC
			3,05% British Columbia Investment Management Corp.
			31,86% Free float
Munich Airport	Flughafen München GmbH	Fully public	51% Free State of Bavaria
			26% Federal Republic of Germany
			23% State Capital of Munich
Düsseldorf Airport	Flughafen Düsseldorf GmbH	Equal public and private	50% State Capital Düsseldorf
			20% AviAlliance GmbH
			20% Aer Rianta International cpt
			10% AviC GmbH & Co. KGaA
Berlin Schönefeld Airport	Flughafen Berlin Brandesburg GMBH	Fully public	37% State of Berlin
			37% State of Brandenburg
			26% Federal Republic of Germany
Hamburg Airport	Flughafen Hamburg Airport GmbH	Mostly public	51% City of Hamburg
			49% AviAlliance
Stuttgart Airport	Flughafen Stuttgart GmbH	Fully public	65% State of Baden-Württemberg
			35% City of Stuttgart

Table 4.4. Ownership structure for some airports in Germany. Source: ACI (2016) and website's information.

company and contains nationally and internationally acknowledged standards of good and responsible corporate management, which is based on the corporate governance code that the German federal government proposed for German stock-listed companies and provides for three control categories. The practice of corporate governance is well balanced attending the most important rights of shareholders, who supply the required share capital for Fraport AG and who bear the entrepreneurial risk, and stakeholder's demands and current governance trends.

In case of Munich Airport, the ownership is full public, despite the interest in the last years to privatize it. The chairman and the chief executive officer are the same person. Furthermore, the airport has a supervisory board that consists of eight members representing the shareholders and a further eight the employees. As the airport declares in its website, it is fully committed to its economic, ecological, and social obligations, which are inextricably linked with corporate policy. Sustainable business is therefore an integral part

of corporate strategy. The airport says that it acts as a «corporate citizen» within society, consciously acting in a responsible manner and always looking to address topics and concerns of importance to its stakeholders (Figure 4.10 shows the matrix for stakeholder's interest analysis). Moreover, Munich Airport and its subsidiaries engage in a close and frequent dialog with their key stakeholder groups. The comprehensive analysis of their stakeholder groups has taken place through systematized interviews with the in-house contacts for the dialog group in question and the information is provided in a transparent process.

The analysis of corporate governance information provided by these two airports show the excellence in governance matters. It is not only aligned with shareholders' interests; indeed, it is well aligned with stakeholders and the information provided is clear.

Figure 4.10. Munich Airport's Materiality Matrix. Source: Munich Airport (2019).



France

French airports are clearly differentiated between those serving the capital and those serving the different province because traffic is highly concentrated – only three airports sum more than 60% of the traffic (Figure 4.11). This fact has gone hand in hand with a reform of the organizational model that has been one of the last in Europe.

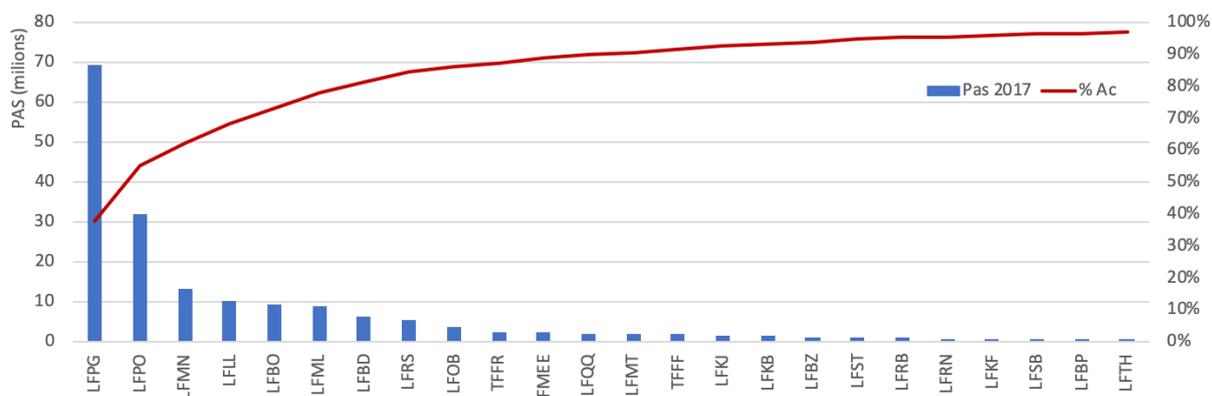


Figure 4.11. Distribution of passengers for the 24 busiest airports in France. Data source: Eurostat, 2017.

This system was subject to an organization and a regime that remained virtually unchanged for fifty years, since civil privatization and air transport were normalized and imposed on the military plans that followed the Second World War (Pardo, 2001).

In 1945 the public entity Aéroports de Paris was created, whose responsibility is all the airports inside a circle with a radius of 50km and the centre in the Eiffel Tower, forming an airport system (multiple airports serve the same area). In the remaining regional and local airports, the management is assumed by the chambers of commerce (they have the status of public establishment), which is a formula of indirect management of the state.

The *Le livre Blanc des grands aéroports régionaux français* (2002) highlighted serious dysfunctions of the model and its failure to comply with Council Directive 96/97 EC. The proposal in the *Livre Blanc* is based on the creation of airport companies with public capital but with the future prospect of opening up to private capital. This private participation will provide access to the capital needed to cover those investments which the State and public funds have not been able to make. For the same reason, the *Livre Blanc* advocates long-term contracts. The presence of chambers of commerce and local authorities in the capital of such companies is still contemplated (Cuyás, 2017).

The successive legislative developments between 2004 and 2005 promote the creation of autonomous management entities, in which the State, the territorial authorities concerned and

the chambers of commerce participate. France has set up three groups of airports: Aéroports de Paris (ADP), large regional airports with national interest, and local airports without national interest. For the first two groups, the creation of autonomous management bodies is promoted. In particular, ADP is being transformed into a public limited company, but with the capacity to incorporate private capital in a non-majority proportion. This entire transformation is aimed at future privatizations and providing the system with more flexibility. The third group, the local airports, are transferred to the territorial authorities.

The following regulations, which are intended to facilitate privatization, still leave the State as the last owner of the land. It is management that is open to privatization, even for an unlimited period. This approach is still in place in France, but it is not free of legal problems.

Different ownership structures in French airports can be observed in Table 4.4. In particular, Schiphol participates in ADP (8%) and ADP participates in Amsterdam Airport (8%) and this fact responds to an alliance between both of them. There are few alliances in the airport industry. Furthermore, the partial privatization of ADP has boosted their commercial orientation and the Group participates in several airport projects around the world. The corporatization has been successful and current trends on governance can be observed in their policies.

The partial privatization of ADP has boosted their commercial orientation and the Group participates in several airport projects around the world



Airport	Operator	Ownership	Shareholders
Paris Charles de Gaulle Airport	Aéroports de Paris	Mostly public	50,6% State of France
			21,9% Institutional investors
			8% Schiphol
			8% VINCI Airports
			5,1% PREDICA
			4,3% Individual Shareholders
			1,6% Employees
			0,5% Others
Paris Orly Airport	Aéroports de Paris	Mostly public	50,6% State of France
			21,9% Institutional investors
			8% Schiphol
			8% VINCI Airports
			5,1% PREDICA
			4,3% Individual Shareholders
			1,6% Employees
			0,5% Others
Nice Côte d'Azur Airport	Aéroports de la Côte d'Azur	Mostly private	65% Consortium of Atlantia SpA, Aeroporti di Roma SpA and EDF
			25% Chamber of Commerce and Industry of Nice Côte d'Azur
			5% Regional Council of Provence Alpes Côte d'Azur
			5% Métropole Nice Côte d'Azur
Lyon Saint-Exupéry Airport	Aéroports de Lyon SA	Mostly private	60% Consortium of VINCI Airports and Caisse des Depots and Predica
			25% Chamber of Commerce and Industry of Lyon
			7% Lyon Metropole
			5% Rhône Alpes Region
			3% Rhône Department
Marseille Provence Airport	Aéroport Marseille Airport	Fully public	60% State of France
			25% Chamber of Commerce and Industry of Marseille Provence
			5% Regional Council of Provence Alpes Côte d'Azur
			5% Bouches du Rhône Department
			4% Urban Community of Marseille Provence Métropole
			1% Town of Vitrolles
Lille Lesquin Airport	Lille Airport SAS	Fully private	Eiffage
			Marseille Provence Airport

Table 4.5. Ownership structure for some airports in France. Source: ACI (2016) and website's information.

Netherlands

The Netherlands airport system is basically Amsterdam Schiphol in terms of passengers and the reason is the combination of the size of the country and the relevance of the airport as a hub of KLM-Air France. The hinterland of this airport extends the national territory and attracts passengers from other European countries.

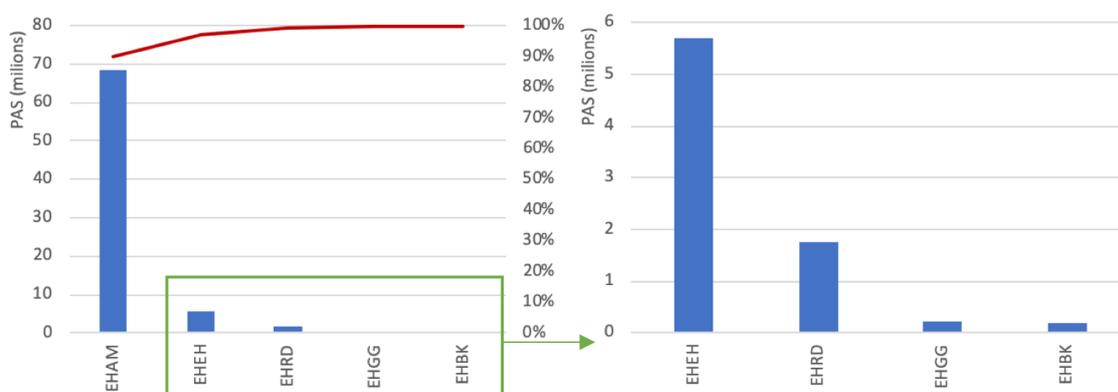


Figure 4.12. Distribution of passengers for airports in the Netherlands. Data source: Eurostat, 2017.

Airport	Corporation	Ownership	Shareholders
Amsterdam Airport Schiphol	Schiphol Group	Mostly public	70% Government of The Netherlands (via Ministry of Finance).
			20% City of Amsterdam
			8% Aéroports de Paris Group
			2% City of Rotterdam
Eindhoven Airport	Eindhoven Airport NV	Mostly public	51% Schiphol Group
			24.5% Province of Noord Brabant 24.5% Municipality of Eindhoven
Rotterdam The Hague Airport	Schiphol Group	Public	100% Schiphol Group
Groningen Airport Eelde	Groningen Airport Eelde NV	Public	30% Provincie Groningen
			30% Provincie Drenthe
			26% Gemeente Groningen
			10% Gemeente Assen 4% Gemeente Tynaarlo

Table 4.6. Ownership structure for some airports in the Netherlands. Source: ACI (2016) and website's information.

Finland and Norway

Helsinki airport concentrated 83% of the passengers in Finland's airport system. There are 25 airports and they are 100% public (State of Finland) and operated by Finavia Corporation. The specific conditions of accessibility and the particular structure of air transport networks require the airports to have an essential role of connectivity.

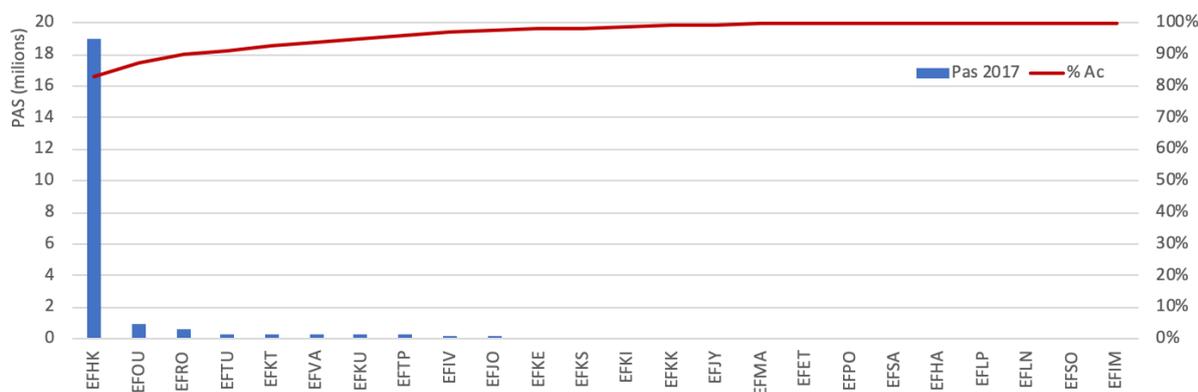


Figure 4.13. Distribution of passengers for 24 busiest airports in Finland. Data source: Eurostat, 2017.

The ownership model for 44 airports in Norway is fully public and corporatized, and the unique owner is the Department of transport of Norway. This country has a particular requirement of accessibility; therefore, air transport is essential for connectivity.

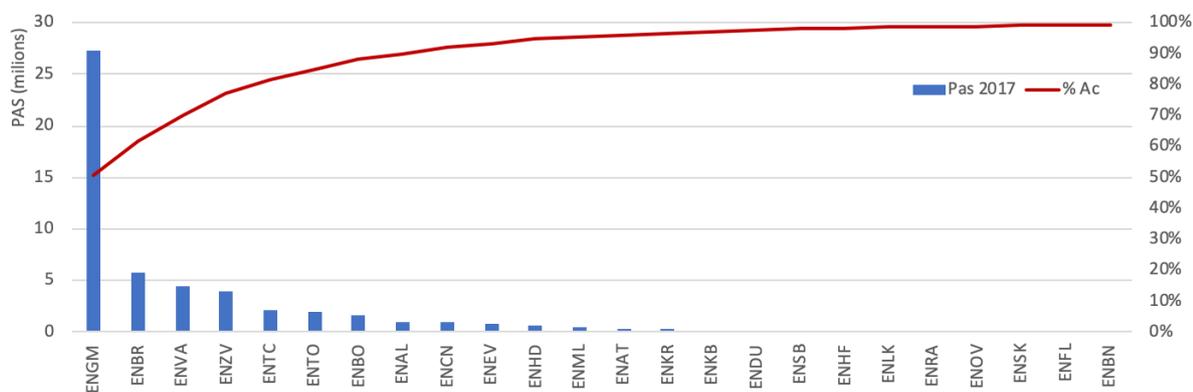


Figure 4.14. Distribution of passengers for 24 busiest airports in Norway. Data source: Eurostat, 2017.

Norway uses Public Service Obligations (PSOs) to establish air connectivity to and within remote regions. PSOs are particularly relevant for relatively large EU countries with geographies that make the use of other transport modes costly or sometimes even impossible.

CONSIDERATIONS ABOUT AIRPORT GOVERNANCE

This section sums up some considerations about airport governance for current uncertain times:

- Corporate Boards have to clarify their companies' purpose and contribution to society. This exercise also suits airports. There is a strong dependency on the board's support to develop and implement a strategy that enables and secures long term sustainable value creation.
- Corporate Boards have to define agendas aligned with SDGs, propose good-effective-equitable governance models. ethics in practice should strive for fidelity to purpose and mission, to pay attention to decision-making and to be aware of how the company makes profits.
- New Airport Governance models have to be focused on high performance in aviation activity (which will be good for shareholders), long-term value creation, stakeholders' engagement and sustainability.
- In aviation there is not high profitability without high risk. The effects of the pandemic are proof. Then, for the future, it is mandatory to strengthen public-private partnerships looking for the common good and shared value creation, for all the shareholders and stakeholders.
- The composition and functionality of the Board of Directors is a critical question in Airport Governance. The Board has to be designed carefully, attending all the aspects mentioned.
- The recommendation is to consider the relationship with stakeholders as a key aspect to be developed by corporate governance. In particular, with the territory, since the stakes will be fundamentally territorial (environmental issues like noise impacts and emissions, qualified jobs, economic and activity development, urban planning and integration, regional accessibility and global connectivity, human rights, etc.).
- Management must be in expert hands, as sustainability is also economic. Governance must be in committed hands. The commitment must be to a long-term sustainable vision.
- When the airport is small, with very local impacts, this close relationship is given because the ownership model usually entails this characteristic. If this is not the case, it must be sought. Even if the airport is small, the global perspective cannot be lost, because airports in Europe operate in the network dynamics that derive from airlines and Single European Sky. The environmental perspective is also global independently of the airport size.
- When the airport is large, there is often interest from more territorial levels. State interests come from geostrategic issues and local interests from the impact of the activity. There can only be effective governance if they are well integrated. Reducing these interests to a stakeholder dialogue is the least that can be envisaged, but it will be insufficient. The right thing to do is to integrate them into the governing body, because it is about purpose and the creation of shared value in the long term.
- The future in airport governance is based on collaboration, purpose and sustainability. Boards have to be consistent with that.
- Improve transparency, accountability and social dialogue. Boost corporate culture and regional integration.

CONCLUSIONS



The two most referenced corporate governance models, shareholder and stakeholder model, are still in place. The tension between both perspectives remains, but the evolution of corporations and the social environment has brought positions closer together. Financial sustainability is an issue of great importance and the return on investment is fundamental for operating in capital markets, but social and environmental sustainability are at the same level of demand. In fact, they have become urgent issues, not so much because of aesthetics, but because of a growing concern on the part of boards of directors who prioritise the long-term value and purpose of the company.

Airports are becoming more professional, either because of privatisation or because of commercialisation. But also, the theory of the creation of public value pulls managers in that direction. Therefore, the models of corporate governance are perfectly applicable to the airport environment, bearing in mind that it is a highly specialised sector with its own dynamics and that there is a notable difference between large and small airports.

The trends in corporate governance are present in the airport environment and are, fundamentally, financial performance and the urgency for sustainability. This is such a relevant issue that it has been the cause of preventing the expansion of some airports.

In particular, both in the USA and in Europe, most airports are public or mostly public. Private airports or those with private capital participation are large infrastructures, often hubs, and/or have a relevant commercial attraction, but most passengers pass through them. These are dynamics typical of the microeconomics of logistics networks. However, small airports, where the main reason for their existence is the provision of connectivity, lack options for the entry of private capital.

Therefore, there is no single model of governance, nor can one speak of an optimal one. Each airport or airport system has a model that depends on the strategy of the corporation and a set of historical, cultural, political factors, etc.

It follows, therefore, that corporate and airport governance has a strong relationship with strategy. To the extent that it is a trend that boards of directors are increasingly involved in defining it and monitoring its implementation. In addition, both have a strong relationship with business ethics which is also a topic of interest to the board and is spread throughout the corporation/airport, with more or less success depending on the case. This is shown by the work in the field of CSR and the proposals of SBSC.

At the same time, it is impossible to think about the implementation of the strategy or the ethical reflection without considering that the cultural environment has a determining weight. In fact, the success of such proposals depends largely on this factor. Furthermore, it will be one of the relevant factors to consider when analysing the evolution of a corporate governance model and its strengths and weaknesses.

When researching airport governance and accessing specific literature one tends to find many studies on the relationship between ownership models and financial performance, as they are the product of an era when economists worked thoroughly with agency theory. Increasingly, however, the approaches are broader, although there is still a lack of development in this field to relate corporate dynamics to its governance model. Undoubtedly, the fact that the practice of boards of directors is not as public or as present in the media, moves this approach away from analysis. However, it will be a growing area of study as compliance and transparency will make it easier to access this information.

This will be possible both for private airports, which already fully incorporate business prac-



tices, and for public airports since commercialisation and corporatization are practices that are fully widespread.

Europe has a remarkable variety of governance models, from private (more or less diversified) to public single-owner models, and all possible combinations. The model will not converge on one type, not in general. It can happen for the main ones, not so much in ownership, but the model of relationship with management. Although the operational management of the airport has to operate with certain standards that will make them more easily comparable with each other and will transfer good practices both in this area and in the area of governance itself.

The participation of private capital in airports will continue to increase for airports with commercial interests and when this occurs with airport groups or investment funds, a certain standardisation and centralisation of some management is associated. However, sustainability has a greater power to standardize and accelerate change, with the relationship with the local environment being a dimension that will be strengthened in the future.

The airport is an infrastructure of public utility, at the service of the territory and society, so its governance must respond to an ethic of shared value.

In the USA and in Europe, most airports are public or mostly public. However, small airports, where the main reason for their existence is the provision of connectivity, are lacking options for the entry of private capital

REFERENCES

- Abenoza, S. and J.M. Lozano (2011). La RSE ante el espejo. ESADE Business School.
- ACI (2016). The ownership of Europe's airports.
- ACI (2020). Airport Economics Report 2020.
- ACI-Intervistas (2015). Economic Impact of European Airports. A Critical Catalyst to Economic Growth.
- AENA (2015). Información Analítica de Cuenta de Resultados Ejercicio 2014 por Aeropuertos de Aena S.A. (Individual, según PGC).
- AENA (2019). AENA Corporate Responsibility Report 2019.
- Afza, T. and M.S. Nazir (2014). Theoretical perspective of corporate governance: A review. *European Journal of Scientific Research*, 119, 255-264.
- Aguilera, R. V., I. Filatotchev, H. Gospel, G. Jackson (2008). An organizational approach to comparative corporate governance: costs, contingencies and complementarities. *Organization Science*, 19:3, 475-492.
- Aguilera, R.V. and I. Griffiths (2014). An introduction to Corporate Governance. Center for Professional Responsibility in Business and Society. College of Business. University of Illinois at Urbana-Champaign. US.
- Artiach, T., D. Lee, D. Nelson, J. Walker (2010). The determinants of corporate sustainability performance. *Accounting and Finance*, 50:1, 31-51.
- Barton, D. and M. Wiseman (2015). Where boards fall short. *Harvard Business Review*. Jan-Feb 2015 Issue.
- Bednarek, J.R.D. (2001). *America's Airports: Airfield Development, 1918-1947*. College Station: Texas A&M University Press.
- Beesley, M. (1997). *Privatization, Regulation and Deregulations*. 2nd ed. Routledge. London.
- Berle, A.A. and G.C. Means (1932). *The modern corporation and private property*. The Macmillan Company. New York.
- Bierman, F., C. Stevens, S. Bernstein, A. Gupta, N. Kabiri, N. Kanie, M. Levy, M. Nilsson, L. Pintér, M. Scobie, O.R. Young (2015). Integrating governance into the sustainable development goals. Post2015/UNU-IAS, Policy Brief #3. United Nations University.
- Brink, A., et al. (2011). *Corporate Governance and Business Ethics*. Springer.
- Carney, M. and K. Mew (2003). Airport governance reform: a strategic management perspective. *Journal of Air Transport Management*, 9, 221-232.
- Chong, J. (2017). Airport governance reform in Canada and abroad. Publication No.2017-17-E. Legal and Social Affairs Division. Library of Parliament. Ottawa. Canada.
- CTA Review Panel (2015). *Canada Transportation Act Review. Pathways: Connecting Canada's Transportation System to the World*. Department of Transport. Canada.
- Cuyás, M. (2017). Algunas reflexiones sobre la privatización aeroportuaria en la experiencia francesa. *Revista Aragonesa de Administración Pública*, 49-50, 318-342.
- Davis, J.H., F. D. Schoorman and L. Donaldson (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22:1, 20-47.
- Davis, G. F. (2005). New directions in corporate governance. *Annual Rev. Sociol.*, 31:1, 143-162.
- Dayton, K.N. (1984). Corporate governance: the other side of the coin. *Harvard Business Review*. Jan-Feb, 1984.
- De Neufville, R. and A. Odoni (2003). *Airport systems. Planning, design and management*. McGraw-Hill.
- Doganis, R. (1992). *The airport business*. Routledge.
- Doganis, R. (2002). *Flying off course: The economics of international airlines*. 3rd Edition Routledge. London.



Donaldson, T. and L.E. Preston (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*, 20:1, 65-91.

Esteve, J. (2001). *El régimen jurídico de los aeropuertos. Servicio público y explotación comercial*. Tirant Lo Blanch. Valencia.

Eurocontrol (2018). *European aviation in 2040. Challenges of growth*.

European Commission (2019). *The European Green Deal. COM(2019) 640 final*. Brussels.

Evan, W.M. and R.E. Freeman (1988). A stakeholder theory of the modern corporation: Kantian Capitalism, in *Ethical Theory and Business*, edited by T.L. Beauchamp and N.E. Bowie. Prentice Hall.

Fichert, F. and R. Klopheus (2011). Incentive schemes on airport charges -theoretical analysis and empirical evidence from German airports. *Research in Transport and Management*, 1, 71-79.

Forsyth, P. (2000). Models of airport performance. In: Hensher, D.A. and K.J. Button, ed. *Handbook of Transport Modelling*. Elsevier. Oxford.

Forsyth, P. (2006). Airport Policy in Australia and New Zealand: Privatisation, light handed regulation and performance. Conference "Comparative Political Economy and Infrastructure Performance: the case of airports". Fundación Rafael del Pino. Madrid.

Forsyth, P., H.M. Niemeier, H. Wolf (2011). Airport alliances and mergers – Structural change in the airport industry? *Journal of Air Transport Management*, 17, 49-56.

Forsyth, P., D. Gillen, J. Müller and H.M. Niemeier (2016). *Airport competition: the European experience*. Routledge.

Freeman, R.E. (1984). *Strategic management: A stakeholder approach*. Pitman, Boston, MA.

Freeman, R.E. (1994). A stakeholder theory of the modern corporation, in *The Corporation and its stakeholders: Classic and contemporary readings*, edited by M.B.E. Clarkson. *Ethical Theory and Business*. Prentice Hall.

Freeman, T.L. (2016). *Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*. Ed. Farrar Strauss & Giroux.

Freeman, R.E. and H. Elms (2018). The social responsibility of business is to create value for stakeholders. *MIT Sloan Management Review*.

Friedman, M. (1962). *Capitalism and Freedom*. University of Chicago Press.

Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, Sunday, Sept. 13, 1970.

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

Gillen, D. (2011). The evolution of airport ownership and governance. *Journal of Air Transportation Management*, 17, 3-13.

Global Reporting Initiative (GRI) (2006), *Sustainability Reporting Guidelines*.

Graham, A. (2008). *Managing airports: An international perspective*. 3rd Ed. Elsevier. Oxford.

Graham, A. (2011). The objective and outcomes of airport privatisation. *Research in Transportation business & management*, 1:1, 3-14.

Graham, A. (2020). Airport privatization: A successful journey? *Journal of Air Transport Management*, 89.

Halpern, N. and A. Graham (2013). *Airport marketing*. Routledge.

Hasnas, J. (1998). The normative theories of business ethics: A guide for the perplexed. *Business Ethics Quarterly*, 8:1, 19-42.

Heymann, E. (2015). *Germany's regional airports under political and economic pressure*. Deutsche Bank Research.

Humphreys, I. (1999). Privatisation and commercialisation change in UK airport ownership patterns. *Journal of Transport Geography*, 7:2, 121-134.

- Humphreys, I. and G. Francis (2002a). Airport privatization. *British Economy Review*, 31:2, 51-56
- Humphreys, I. and G. Francis (2002b). Performance measurement: a review of airports. *International Journal of Transport Management*, 1:2, 79-85.
- IATA (2018). Fact Sheet Climate Change and CORSIA.
- IGOPP (2014). The Governance of Canadian Airports: Issues and Recommendations.
- Jensen, M.C. and W.H. Meckling (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3:4, 305-360.
- Jonas, H. (1979). *Das Prinzip Verantwortung*. Insel Verlag, Frankfurt and Main.
- Jordao, C. (2009). A sustainability overview of the best practices in the airport sector. Scientific papers of the University of Pardubice, Series D. Faculty of Economics and Administration.
- Kaplan, R.S. and D.P. Norton (1992). The Balanced Scorecard—Measures that Drive Performance. *Harvard Business Review*.
- Lai, P. (2013). A study on the relationship between airport privatization and airport efficiency. PhD Thesis. Cardiff University.
- Lee, D. et al. (2009). Aviation and Global Climate Change in the 21st Century. *Atmospheric Environment*, 43.
- Littlechild, S.C. (2012). German airport regulation: Framework agreements, civil law and the EU Directive. *Journal of Air Transport Management*, 21, 63-75.
- L'Huillier, B.M. (2012). What does "corporate governance" actually mean? *Corporate Governance*, 14:3, 300-319.
- Mannar B. R. (2016). Corporate governance: Bibliography of unclassified literature. *International Journal of Applied Research*, 2:4, 484-496.
- Mazzucato, M. (2018). *The value of everything: making and taking in the global economy*. New York: Public Affairs.
- Mazzucato, M. (2020). Avoiding a climate lockdown. *Project Syndicate*, 22/09/2020.
- Moore, M. (1995). *Creating public value: Strategic management in government*. Harvard University Press.
- Morrison, S.A. and C. Winston (2000). The remaining role for government policy in the deregulated airline industry. In S. Peltzman and C. Winston, eds.: *Deregulation of Network Industries: What's the Next?* Brookings Institution. Washington, D.C.
- Munich Airport (2019). *Munich Airport Integrated Report 2019*. What a difference.
- Nigel, H. and R. Pagliari (2007). Governance structures and the market orientation of airports in Europe's peripheral areas. *Journal of Air Transport Management*, 13, 376-386.
- OECD (2015), *G20/OECD Principles of Corporate Governance*, OECD Publishing, Paris.
- Oum, T.H., N. Adler and C. Yu (2006). Privatization, corporatization, ownership forms and their effect on the performance of the world's major airports. *Journal of Air Transport Management*, 12:3, 109-121.
- O'Kelley, R. and P.J. Neal (2020). Top boards do these 4 things differently. *Harvard Business Review*.
- Paine L. S. and S. Srinivasan (2019). A guide to the big ideas and debates in corporate governance. *Harvard Business Review*.
- Parker, D. (1999). The performance of BAA before and after privatisation: A DEA study. *Journal of Transport Economics and Policy*, 33:2, 133-146.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: the organization and its environment. *Administrative Science Quarterly*, 17:1, 218-228.
- Pozen, R. C. (2010). The case for professional boards. *Harvard Business Review*.
- Reimer, D.S. and J.E. Putnam (2009). *Airport Governance and Ownership*. The National Academies Press. Washington, DC.
- Robusté, F. and J. Clavera (1997). *Impacto económico del aeropuerto de Barcelona*. Editorial Civitas.



Schaltegger, S. and F. Lüdeke-Freund (2011). The sustainability Balanced Scorecard. Concept and the Case of Hamburg Airport. Center for Sustainability Management. Leuphana Univesität Lüneburg.

Shearman, P. (1992). Air transport: Strategic issues in planning and development. Pitman Publishing. London.

Shleifer, A. and R. Vishny (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94:3, 461-488.

Skouloudis, A., K. Evangelinos, S. Moraitis (2012). Accountability and stakeholder engagement in the airport industry: An assessment of airports' CSR reports. *Journal of Air Transport Management*, 18, 16-20.

Smith, H. J. (2003). The shareholders vs. stakeholders debate. *MIT Sloan Management Review*, 44:4.

Starkie, D. (2008). Aviation market. Ashgate. Surrey.

Starkie, D. (2012). European airports and airlines: Evolving relationships and the regulatory implications. *Journal of Air Transport Management*, 21, 40-49.

Sydney Airport (2019). Corporate Governance Statement SYD.

Tatcher, T. P. and L.R. Kimball (2011). A Guidebook for the preservation of Public-Use Airports. ACRP Report 44. Airport Cooperative Research Program. Transportation Research Board. Washington, D.C.

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

Trapote-Barreira, C. (2015). Methodology for optimal design of efficient air transport networks in a competitive environment. PhD Dissertation. ETSECCPB-UPC. Barcelona.

Tretheway, M.W. (2006). Airport Policy in Canada: Limitations of the not-for-profit governance model. Conference "Comparative Political Economy and Infrastructure Performance: the case of airports". Fundación Rafael del Pino. Madrid.

UCCEGA (2002). Le Livre Blanc des grands aéroports régionaux français.

United Nations (UN) (2015). The 2030 Agenda for Sustainable Development.

Vickers, J. and Yarrow, G. 1991. Economic perspectives on privatization. *Journal economic perspectives*, 5, 111-132.

Vogel, H.A. (2019). Foundations of airports economics and finance. Elsevier.

Wells, A. T. and S.B. Young (2004). Airport planning and management. 5th ed. McGraw-Hill. London.

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

World Economic Forum (2019). Global Risks Report 2019. 14th Edition. Geneva. Switzerland.

Wright, M., D.S. Siegel, K. Keasey and I. Filatotchev (2013). The Oxford Handbook of Corporate Governance. Oxford University Press.

