

Chapter 16

Airport Market Power: Schiphol 10 Years After the Assessment



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Abstract This paper evaluates changes in the market position of Amsterdam airport Schiphol over the last decade. Assessment of Schiphol market power was conducted in 2009. Examining the key developments, we suggest that the airport has probably strengthened its position on the markets for provision of infrastructure to both origin-and-destination and transfer passengers. At the same time, several recent studies have documented increasing competition between the airports in the European context. We suggest therefore that a new investigation of market power of Schiphol airport is in order.

Keywords Market power · Competition · Policy making · Regulation · Schiphol

16.1 Introduction

We are writing this paper as the aviation is going through the biggest crisis it has ever experienced. In fact, it is difficult to imagine a more serious peacetime calamity than the current pandemic affecting commercial civil aviation. One may therefore be tempted to dismiss such issues as airport congestion, market power, and efficient provision of air navigation services as the present-day equivalent of “first world problems,” which should not be given attention at the time civil aviation is in the midst of an existential crisis. It is true that, depending on the severity of the looming global economic recession, it may take years for the commercial aviation to return to its pre-pandemic levels and resume the growth trajectory. Nevertheless, we believe aviation will return to growth, and we will need to return to addressing the pre-2020 problems.

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This chapter deals with the issue of airport market power.¹ It has been long recognized that airports should be treated as firms rather than infrastructure objects. This thinking, along with the trend towards commercialization and privatization of infrastructure industries, necessitates the application of principles of economic regulation and competition policy to the airport sector. While economic regulation of airports is rather commonplace; the issues of airport competition and airport market power are yet to make their way into policy making at any appreciable scale. Airport market power assessments are regularly conducted by the UK Civil Aviation Authority to assist in making determination on whether airports should be subject to formal economic regulation. As a result of such exercises, over the last decade, the UK CAA has determined that Manchester and London Stansted airports find themselves in a sufficiently competitive market environment, which means that direct regulation of aeronautical charges set by those airports was no longer warranted (UK Competition Commission 2009). Presently, only two UK airports (London Heathrow and London Gatwick) are subject to direct economic regulation.

Outside of the UK, the issue of airport market power has been given serious consideration by the policy makers in Ireland, Australia (note that in this country airport charges are subject to monitoring rather than direct economic regulation), and the Netherlands. In the latter case, an evaluation of the Aviation Act of June 29, 2006, was started in 2009 and a new Act has come into force as of July 1, 2017. External consultants were engaged to assist with the process.² In this connection, we were also involved in a study of the market power of Schiphol airport.³

As contributors to the original market power assessment exercise of AMS we are providing in this paper a short evaluation of the current state of affairs, addressing the question of whether Schiphol airport's market position has weakened or strengthened over the 10 years that have passed. Our evaluation of the changes that occurred over the decade since the 2009 market power assessment suggests that Schiphol has probably increased the extent of its market power on both origin-and-destination and transfer markets. The airport has likely strengthened its market position in the market for transfer passengers relative to other European gateways, and it has attracted

¹In our area study, be differentiated between market for airlines serving O&D passengers, for airlines serving transfer passengers, for local and instruction flights and for airlines offering cargo transportation

²In the preparatory phase of this legislative amendment, there were consultations with the airlines, Schiphol, the industry association for airlines BARIN and The Schiphol Airline Operators Committee (SAOC). In addition, there have been intensive consultations with the NMA, the Authority for Consumers and Markets, with a view to optimizing the feasibility and enforceability of the regulations, see Economic Regulation: Aviation Act, <https://www.schiphol.nl/en/schiphol-group/page/economic-regulation/>

³Müller, Jürgen, Volodymyr, Bilotkach, Frank Fichert, Hans-Martin, Niemeier, Erich Pels, Andreas Polk, (2010): The economic market power of Amsterdam Airport Schiphol, Study commissioned by the Netherlands Competition Authority (NMA).

services of some of the key LCCs, which have previously served the area via alternative gateways for the airlines serving O&D passengers.

On the other hand, the last decade has seen two comprehensive reports on airport competition in Europe (Copenhagen Economics 2012; Oxera 2017). Both reports have concluded that airport competition has intensified recently, owing to developments both in the European airline markets (growth of LCCs) and outside Europe (where Turkish Airlines and the Gulf Carriers have expanded their networks). These conclusions are echoed by the very recent survey of airports, reported by Bilotkach and Bush (2020). On the other hand, Wiltshire (2018) suggests that passengers' preference to travel from their local airports, coupled with the airlines' switching costs, will imply that secondary airports will not be able to provide effective competition to primary gateways in the metropolitan areas. In case of Schiphol, the nearby airports, whether operating (such as Eindhoven and Rotterdam) or planned (Lelystad) are at least part owned by Schiphol group. This can reinforce Schiphol airport's power on the origin-and-destination market.

With this in mind, we suggest the time has come for the authorities to revisit the issue of market power of Schiphol, potentially commissioning a new investigation on this topic.

16.2 Schiphol Market Power Study, 2009

The Schiphol market power assessment was commissioned in 2009 by the Netherlands Competition Authority within the framework of a scheduled review of the legislation governing economic regulation of Amsterdam Airport Schiphol.

The first issue to address in the study was defining the relevant markets. We have defined the key market as that of provision of infrastructure to the airlines. We have further divided this market into the market for provision of infrastructure to origin-and-destination passengers separately from that for transfer passengers. This approach is different from that taken by the UK CAA in its market power assessments—the UK CAA does not make such a distinction. In making this delineation, we were guided by the case of a departure tax, which has been introduced by the Dutch Government several years before we conducted our study. Analysis of the relevant data revealed that the tax has impacted (decreased) the number of origin-and-destination passengers, while having no effect on the number of transfer passengers at Schiphol (Gordijn and Kolkman 2011). This suggested to us that there is no substitutability between the two markets; thus, market for provision of services to origin-and-destination passengers should be treated separately from that for the transfer passengers. We have also separately identified the market for provision of infrastructure to the cargo airlines, along with several smaller-scale markets, which will not be covered by this study.

Our analysis included several approaches. In addition to extensive interviews with the key stakeholders, we have conducted the analysis of supply side substitutability on both origin-and-destination and transfer passenger markets; as well as

analysis of overlapping catchment areas between Schiphol and key competing airports on several segments of both passenger markets. For the origin-and-destination market, we have identified several competing airports, whose catchment areas overlapped with that for Schiphol. Those were both larger gateways, such as Brussels and Duesseldorf airports, as well as smaller airports, such as Rotterdam, Eindhoven, Charleroi, and Weeze (the latter two airports are located in Belgium and Germany, respectively). Smaller airports have at the time been extensively used by low-cost carriers (most notably—Ryanair) as alternative gateways to the respective metropolitan areas.

Our analysis (details of which can be learned from Bilotkach and Mueller 2012) has demonstrated that Schiphol was a clearly dominant airport on the market for provision of services to origin-and-destination passengers in the area. For the transfer passenger market, the three hub airports we have identified as competitors (London Heathrow, Paris Charles de Gaulle and Frankfurt) were generally found to provide some competitive pressure on Schiphol. At the same time, we discovered that around 40% of one-stop routes available via Schiphol through guided connections (defined as connections within the same airline or alliance) were not available via either of the other three hub airports. While many of those markets represented thin routes—in particular, some of the one-stop markets on which connections were available only via Schiphol were related to KLM's dominant position at UK's regional airports; we have concluded that there is a degree of market power possessed by Schiphol on the transfer passenger market. While cargo market is generally considered more competitive than the passenger market segment, due to more extensive overlaps in the airport catchment areas for cargo; discussions with stakeholders have suggested that Schiphol does possess market power on this segment as well.

Our discussions with the stakeholders suggested that the airline customers do not appear to have any appreciable degree of countervailing power against the airport. Schiphol is the only airport in the Netherlands that has the kind of infrastructure KLM requires to run its hub. Furthermore, existing regulatory environment, coupled with the attachment of KLM to its home country would make the idea of moving the airline's key hub outside of the Netherlands a non-starter. Even though KLM has been a part of Air France—KLM group since the merger between the two carriers in 2005; the carrier has retained its identity and a degree of autonomy in decision-making. The airport's largest low-cost carrier customer (easyJet) also indicated to us that it was not planning to abandon its base at Schiphol, as the airport provided very convenient access to the metropolitan area to its customers, allowing the carrier to attract both business and leisure traffic. While easyJet did have some issues with the self-connecting passengers being treated as origin-and-destination traffic (and therefore being ineligible for the transfer passenger discounts on airport charges); this did not cause the airline to consider using an alternative airport in the area.

16.3 Key Developments Since 2009

One comprehensive study of airport competition since 2009 was the report by Copenhagen Economics (2012) on the state of affairs with this issue in Europe. Among other things, the authors of the Copenhagen Economics report have identified five indications of competitive constraints for an airport.

- If many local departing passengers have a choice, they can switch away.
- If many transfer passengers have a choice, they too can switch away.
- If the airport is hosting a multi-hub carrier, there is scope for buyer power.
- If one carrier is very large, there is scope for buyer power; and
- If there are many inbound tourists, there is scope for destination switching.

In case of Schiphol, we can say that the second and the fourth of the above indicators are present to a considerable degree. Whether Schiphol can be considered an airport that is hosting a multi-hub carrier is not a very easy question to answer: as we noted above, KLM does retain a certain degree of decision-making autonomy within the Air France—KLM group. However, the alliance between operators of Schiphol and Charles de Gaulle airports could potentially limit the scope of competition between the gateways for the transfer passenger traffic.

We have noted above that our analysis in 2009 demonstrated that Schiphol was clearly a dominant airport for the origin-and-destination passengers. We will see here that over the last decade Schiphol has clearly strengthened this position.

The situation with the transfer traffic is less clear—while Schiphol has fared much better than other key European hubs, competition outside of Europe has grown stronger. Increasing share of low-cost carriers means Schiphol's traffic is a bit more diversified than it was a decade ago. If countervailing power of the largest airline was not a major issue 10 years ago, it clearly is even less of an issue now.

While Amsterdam has been developing as a major European tourist destination (around 18.5 million tourists are estimated to have visited the city in 2018); we cannot say the Schiphol is solely dependent on tourism traffic—the traffic at Schiphol is diversified in terms of both travel purpose and passenger origin. Unlike with, for instance, seaside tourist destinations, where vast majority of traffic is inbound; a decent share of origin-and-destination trips at Schiphol represent out-bound traffic.

We believe the following key facts that summarize developments over the last decade point to increasing market power of Schiphol on the origin-and-destination passenger market.

- In 2010, Schiphol handled 45 million passengers (one of course has to keep in mind that transfer passengers are counted twice, so that 45 million passengers correspond to fewer than 45 million people). In 2018, the airport reported 71 million passengers.
- In the global ranking of airports by passenger traffic, Schiphol went up from number 15 in 2010 to number 11 in 2018. This makes Schiphol the only European

airport among the global top-20 to have risen in the global ranking by passenger count.

- Over the last decade, Schiphol has moved from being Europe's fifth busiest airport to third, behind only Heathrow and Charles de Gaulle.
- Share of origin-and-destination traffic at Schiphol has increased over the last decade (from 55% in 2009 to 65 in 2019).
- European traffic has grown faster than intercontinental routes, in terms of the number of passengers. Share of European traffic increased from 66% in 2010 to 70% in 2019.

Development of Schiphol airport over the last decade has been driven to a considerable extent by the growth of the point-to-point carriers in the so-called LCC segment. At the time of the original market power study in 2009, easyJet already was Schiphol's second largest customer (third largest if we consider Transavia—an Air France–KLM-owned airline specializing in leisure traffic—a separate customer from Air France – KLM group). EasyJet has over the last decade doubled the number of seats offered on its services out of Schiphol (around 100% increase in the number of seats compared to around 65% cumulative increase in total passenger traffic at Schiphol over 2009–2019 time period). Another important development at Schiphol was the entry of Ryanair in 2015. This airline was—and remains—the key player in the smaller nearby airports competing with Schiphol for the origin-and-destination traffic. Entry of Ryanair into Schiphol suggests a higher degree of substitutability between Schiphol and nearby airports now than 10 years ago. One could suggest that higher degree of substitutability between AMS and nearby airports could be a sign of diminishing market power of Schiphol. However, we do not see the airlines relocating to nearby gateways from Schiphol.

Speaking about the transfer passenger and the cargo market segments, we should point to the following facts:

- Competition between hub airports for long-haul Europe-Australasia traffic has intensified considerably over the last decade, with the development of the hubs in Istanbul and the Gulf Area.
- On the transatlantic market, at the same time, we have seen increasing consolidation following the approval of joint ventures in 2008–2010. We can expect lower degree of competition between the airlines, and consequently the key hub airports on this segment.
- London Heathrow airport will likely become a stronger competitor on the transfer passenger segment when/if the third runway is built (currently scheduled to open by 2030, a date that can be moved further into the future by the current pandemic).
- On the cargo segment, Schiphol has moved down in the global rankings from 17th to the 20th busiest globally. However, this movement is in line with other European airports, which have all descended in the global cargo rankings as Asian and Middle Eastern cargo hubs were growing.

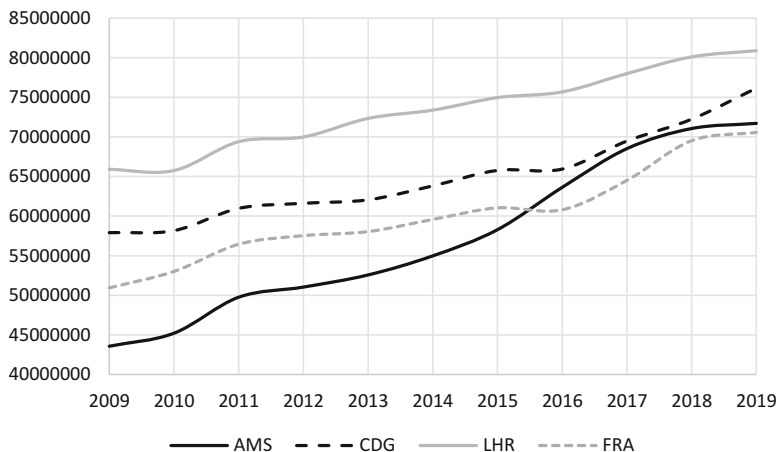


Fig. 16.1 Annual passenger traffic at Schiphol versus major European hubs

We therefore can say that on the cargo market, the situation remains largely unchanged as compared to what it was a decade ago (see also Fig. 16.3). The situation on the transfer passenger market is somewhat unclear. On the balance, we believe Schiphol's market position might have worsened; however, additional analysis using more detailed data on both airline schedules and passenger flows would be required here.

The following five figures are included to visualize the key developments we have discussed thus far. Figures 16.1, 16.2, and 16.3 show the trends in passenger numbers, aircraft movements, and cargo volumes, respectively, for Schiphol versus the three key European hubs which have been identified in our original market power assessment as Schiphol's key competitors (London Heathrow, Paris Charles de Gaulle, and Frankfurt airports). Figures 16.4 and 16.5 demonstrate the dynamics in passenger counts for most of the airports we have identified as Schiphol's competitors on the market for origin-and-destination traffic. Traffic for Brussels and Duesseldorf airports is in Fig. 16.4, while Fig. 16.5 shows the traffic for the four smaller gateways (Eindhoven, Rotterdam, Brussels Charleroi, and Duesseldorf Weeze). Differences in scales between Brussels and Dusseldorf on the one hand and the four smaller airports on the other made representation of all the six airports on a single diagram impracticable. All the diagrams cover the time period from 2009 till 2019, and use the data consolidated by CAPA Center for Aviation. The following airport codes are used in the legends:

- AMS—Amsterdam Schiphol
- LHR—London Heathrow
- CDG—Paris Charles de Gaulle
- FRA—Frankfurt
- BRU—Brussels Zaventem

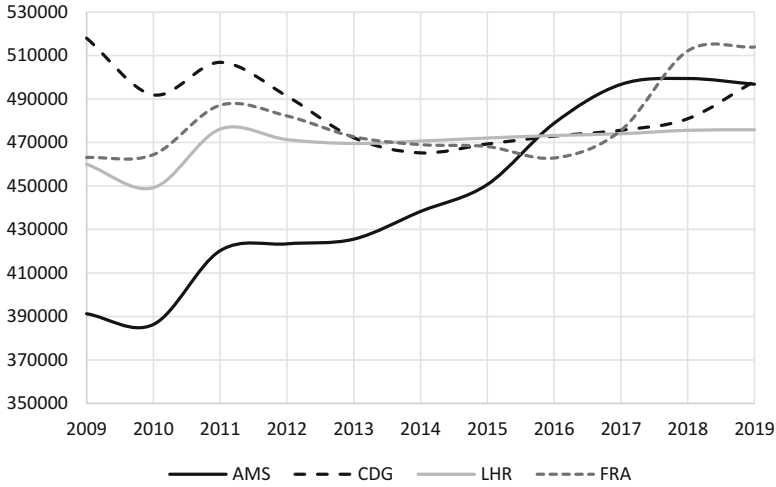


Fig. 16.2 Annual aircraft movements at Schiphol versus major European hubs

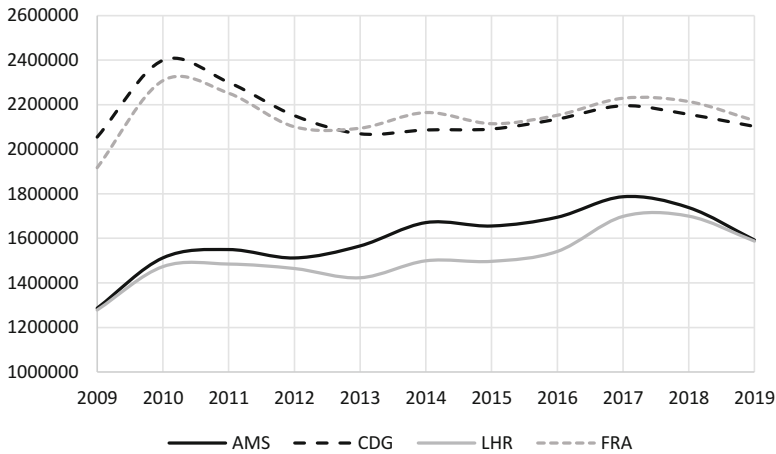


Fig. 16.3 Annual cargo volume (tons), Schiphol versus major European hubs

- DUS—Duesseldorf International
- EIN—Eindhoven
- RTM—Rotterdam the Hague Airport
- CLR—Brussels Charleroi
- NRN—Duesseldorf Weeze

Table 16.1 additionally ranks the ten airports we are covering in this short analysis by their cumulative passenger growth over the 2009–2019 time period.

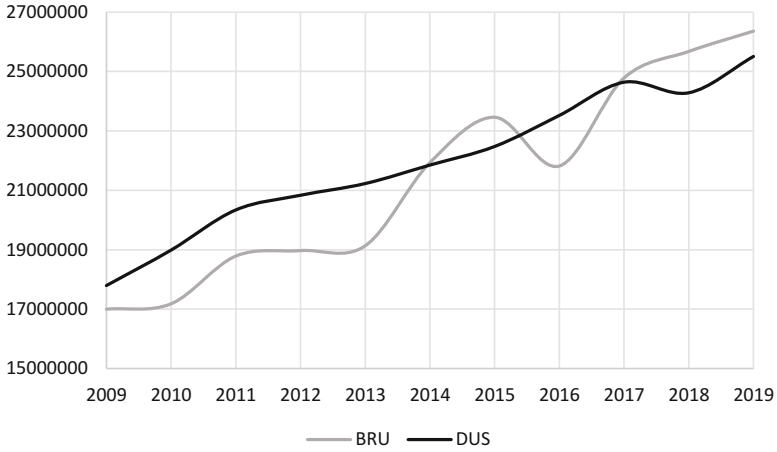


Fig. 16.4 Annual passenger traffic, BRU and DUS airports

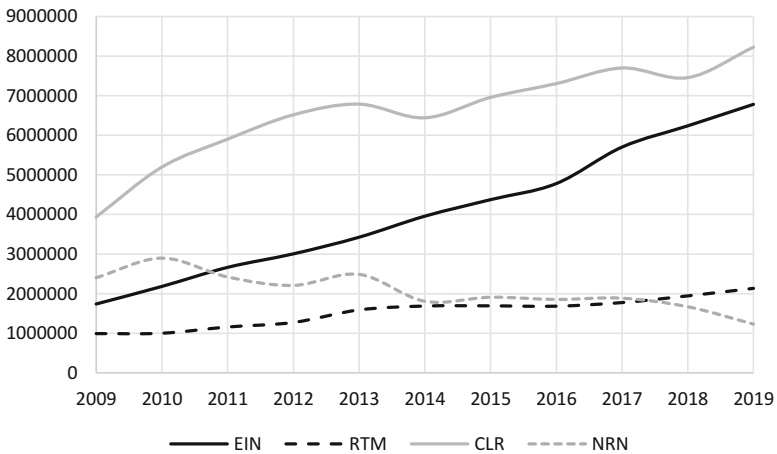


Fig. 16.5 Annual passenger traffic at small airports within AMS catchment area

We can see from the table that Schiphol has over the last decade grown much faster than other comparably sized airports. While the three smaller airports have shown remarkable growth in passenger numbers, focusing mostly on leisure traffic and taking advantage of Schiphol’s limited capacity (Eindhoven and Rotterdam) and Ryanair’s rapid development (Charleroi); the three airports combined handle less than a quarter of Schiphol’s passenger traffic. Moreover, Schiphol group partly owns both Eindhoven and Rotterdam airports; this creates the potential for Schiphol operator to limit effective competition between AMS and these two gateways for the origin-and-destination traffic. Note that UK Competition Commission’s (2009)

Table 16.1 Cumulative passenger traffic growth rates, 2009–2019

Airport	IATA Code	Passengers in 2009, millions	Passengers in 2019, millions	Cumulative 2009–2019 Passenger Growth (%)
Eindhoven	EIN	1.74	6.78	290
Rotterdam the Hague	RTM	0.99	2.13	115
Brussels Charleroi	CLR	3.94	8.22	109
Amsterdam Schiphol	AMS	43.57	71.71	64.6
Brussels Zaventem	BRU	17.00	26.36	55.1
Duesseldorf International	DUS	17.79	25.51	43.4
Frankfurt	FRA	50.94	70.56	38.5
Paris Charles de Gaulle	CDG	57.91	76.15	31.5
London Heathrow	LHR	65.91	80.88	22.7
Duesseldorf Weeze	NRN	2.40	1.23	−48.7

Source: Computed from the data compiled by CAPA Center for Aviation

decision to require BAA to divest of either Heathrow and Gatwick airports was driven by the concerns for limited competition between the two area airports under the same ownership.

Lelystad airport (LEY)—the largest general aviation airport in the Netherlands—is currently being expanded with the view of accommodating commercial passenger traffic as Schiphol is reaching its capacity. Here we again will run into the common ownership problem: as Schiphol group has owned LEY since the 1990s, its incentives to develop this otherwise well-located gateway into a commercially viable enterprise might be limited. We suggest the Dutch government should evaluate the option of requiring Schiphol group to divest of its ownership interest in Lelystad to bring about more competition between the airports in the area.

Several more interesting facts can be inferred from the figures above. First, Schiphol has increased its ranking among the European airports by both passenger volume and the number of aircraft movements. Moreover, in 2016 and 2017, Schiphol handled more aircraft movements than any other European airport. Note also how vividly Heathrow’s capacity constraints appear in Fig. 16.2. Second, while all four major hubs exhibit similar dynamics in terms of the cargo volume; the gap between Schiphol and Heathrow on one hand and Frankfurt and Charles de Gaulle on the other has narrowed somewhat over the last decade. Third, note the downfall in passenger traffic at Duesseldorf Weeze airport, which is not very surprising, given how far it is located from major metropolitan areas.

16.4 Schiphol Regulatory Environment

N.V. Luchthaven Schiphol operates/ Amsterdam-Schiphol airport under the „Schiphol Group“ trade name. It was corporatized as a limited company in the early 1950s under the form of a public company owned by the Dutch Government and the municipalities of Amsterdam and Rotterdam. Schiphol Group also controls the second and third busiest Dutch airports—Rotterdam and Eindhoven, respectively. But the latter handle less than one million passengers annually, versus more than 70 million for Amsterdam-Schiphol.

Following the merger of Air France and KLM, Schiphol engaged in an alliance in 2008 with Air France’s hub operator Aéroports de Paris (ADP). Each company acquired an 8% stake in the other.⁴ The Dutch government allowed the merger between Air France and KLM on the condition that the dual hub network is secured between the merger partners in the medium term.⁵

Traditionally, the Minister of Transport was in charge of reviewing and approving aeronautical charges. But, in the absence of clearer mechanisms and policy, this framework created some frictions between the Dutch airport operator and its users, who felt that their voice was not heard in the regulatory process. At the End of the 1990s, airlines began to criticize the increases in charges, especially at Amsterdam-Schiphol, that they considered to be an abuse of dominant position by the airport operator. These critics were further expanded by several judicial decisions, which accused the Dutch public authorities of approving alleged abuse of monopoly power by the airport operator (ICAO 2013).

The regulatory framework (Aviation Act of June 29, 2006,) designed and implemented in the 2000s, is built on the “negotiated access” or “regulated access” principle that was also implemented for other Dutch network industries.⁶ After a lengthy review, the new Aviation Act came into force July 1, 2017. The Act stipulates that the aviation charges for aircraft, passenger, and security must be set in a non-discriminatory, transparent and wholly cost-oriented way under the Authority for Consumers and Markets (CMA).

In the context of the evaluation during 2011–13, it was noted that there is room for improvement in a number of areas, but the government did not consider any major systemic changes to be necessary.⁷ The dual till system, in which only aviation

⁴The ownership structure of the Schiphol Group is thus as follows: State of the Netherlands, 70%; Aéroports de Paris, 8%; and the cities of Amsterdam and Rotterdam, 20% and 2%, respectively.

⁵The Dutch government’s sudden and unexpected acquisition of a 13% stake in Air France-KLM in February of 2019 prompted the French government to accuse the Dutch one of acting like an “unfriendly” corporate raider. Now, it has emerged that Royal Schiphol Group may consider increasing its stake in Groupe ADP, the operator of the Paris airports, during the operator’s privatization process. <https://blueswandaily.com/are-the-dutch-and-the-french-get-closer-or-further-apart-as-it-emerges-royal-schiphol-group-may-increase-its-stake-in-groupe-adp/>

⁶Information on the economic regulation of Amsterdam airport Schiphol can be found at www.nma.nl/en/regulation/transport/aviation/aviation.aspx.

⁷Letter of April 4, 2012, (Parliamentary Papers II, 2011/12, 33 231, No. 1)

activities are regulated, was retained and improved through better consultation, a multi-year plan for charges and conditions (i.e., for a 3-year period), a settlement equalization system for reducing fluctuations of charges, new efficiency incentives including regards for network quality⁸ and a mandatory financial contribution to aviation activities from non-aviation activities, with the aim of obtaining a reasonable return on invested capital.⁹ Budget overruns (difference between actual investment expenditure and the investment project budget) in a certain period will be fully absorbed by the airport operator, while cost advantages in a certain period will be shared equally between the airport operator and users.¹⁰

In accordance with the new Aviation Act governing the operation of Schiphol, the charges will no longer be fixed annually, but every 3 years. This change has taken effect for the 2019–2021 period. Another change is the introduction of a mandatory contribution from non-aviation activities to aviation activities, the level of which is determined by Schiphol's shareholders. Non-aviation activities at Schiphol are not subject to the economic regulations. This constitutes a departure from dual till to a hybrid till regulatory approach. Such a change should result in lower aeronautical charges for the airlines.

A significant sustainability element is built into the new charges structure, as Schiphol's pricing mechanism differentiates in technology. The objective is to get the best technology to reduce emissions and noise. Landing and take-off charges therefore give preference to aircraft that are quieter and more environmentally friendly.

Capacity pricing at Schiphol is currently not an issue. Most traffic in the peaks is from KLM, for which hub development and connectivity are still key. KLM even wants to increase the peak capacity at Schiphol. The biggest issue at Schiphol is instead the increase in average fleet size. Schiphol now lacks connected wide-body positions in the peak and uses the slot coordinator's mechanism to limit the number of wide bodies in the morning peak.¹¹ This according to the industry experts is far more efficient than peak pricing. However, the ministry of transport has announced it will consider the possibilities for secondary slot trading.

⁸The system of efficiency incentives for investment projects was adjusted by extending the duration of the incentive from a single 3-year charge period to two of those periods, and by introducing a percentage which must be reached before

⁹The letters of June 5, 2013, and September 2, 2013, (Parliamentary Papers II, 2012/13, 33 231, Nos. 2 and 3) elaborated on these topics in greater detail.

¹⁰This means that the efficiency incentive will be applied only for significant discrepancies (see House of Representatives, 2014–2015 Session, 34 197, No. 3). Once the difference between the actual expenditure on an investment project and the investment budget reaches or exceeds five percent (as a positive or negative amount), the efficiency incentive will apply and the differences can be fully offset (in the case of higher-than-budgeted expenditure) or partially offset (in the case of lower-than-budgeted expenditure).

¹¹For information on capacity at Schiphol: please refer to the independent slot coordinator's site. <https://slotcoordination.nl>

16.5 Concluding Comments

The issue of airport market power remains understudied. The application of the airport market power concept in policy making is also sporadic and inconsistent. Needless to say, such more subtle issues as measuring the concentration of airport markets, evaluating intensity of competition between the airports and potential anti-competitive conduct of airports have been given limited consideration in either academic or policy research. Generally speaking, the issue of airport competition has not been clearly placed by the regulators within the standard structure-conduct-performance framework used in competition policy.

The UK (and to a certain extent, Australia) remain the only two countries which implement regular analysis of the issue of airport competition, acknowledging the obvious fact that changed in the industry may necessitate a review of the previous findings. We have noted above that over the last 15 years or so, UK Civil Aviation Authority has determined that increasing competition between the airports made further economic regulation of aeronautical charges at Manchester and Stansted airports no longer necessary.

In this short paper, we are revisiting the conclusions of an airport market power study conducted 10 years ago. We then participated in market power assessment of Amsterdam airport Schiphol. We see that a series of developments over the last decade point to a potentially stronger Schiphol's market position on the market for origin-and-destination passengers. In addition to the strong position that Schiphol has retained, we note that Schiphol Group's partial ownership of nearby operating airports (Eindhoven and Rotterdam) could limit development of effective competition for origin-and-destination traffic. Over the longer term, there is a potential for turning the general aviation Lelystad airport into a commercial aviation gateway. Here we again run into the ownership problem—Schiphol Group owns Lelystad. We suggest the Dutch government take a closer look into this issue.

The situation on the transfer passenger market is a bit less clear, as the external developments (most notably, the growth of the Gulf Carriers and Turkish Airlines) have increased the hub competition on the Europe-Asia routes. At the same time, an alliance between Schiphol Group and Aeroports de Paris (operator of Paris Charles de Gaulle airport) could have softened the competitive environment in Europe on this market segment. We have not done the more in-depth analysis of competition for transfer passenger traffic, as was included in our study a decade ago. We however believe that such an investigation would have demonstrated that a certain degree of Schiphol's market power on this market has been preserved. The situation on the cargo market appears unchanged from 10 years ago.

Several studies of airport competition in Europe over the last decade have suggested that airport competition has intensified. Both Copenhagen Economics and Oxera reports suggest that large hub airports are no longer as immune from the airport competition as before. On the other hand, our quick look at the issue as it applies to Schiphol airport points to increasing market power on some market segments. This paradox clearly calls for a new market power assessment.

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