

Turnaround time: Airport financial recovery and restart following COVID-19



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The rapid spread of the novel coronavirus (COVID-19) has required drastic measures to be taken by governments and businesses worldwide resulting in pronounced financial markets disruption including an increase in liquidity needs and a noticeable impact on employment conditions. Despite the lack of available data, it is already clear that there has been an unprecedented decline in economic activity. The assumptions, estimates and findings in this Paper are based on information and experience which pre-dates the coronavirus outbreak and do not account for a potential “subsequent wave”. As such the Paper contains a level of uncertainty, might be subject to variances and change as the impact of the coronavirus (and/or a subsequent wave) on the relevant business becomes evident.

Foreword



The unsettling reality of a pandemic world is here. Aviation has been one of the worst affected sectors in our previously hyper-connected, hyper-mobile society, with airports heavily impacted.

Airports in Europe have been emptied of the crowds of joyous tourists and focused businesspeople. Airports have been cut off from the purpose that they serve: to provide connectivity for people and serve as economic engines for their communities. But airports stand ready to rekindle this joy and mission.

Dramatically reduced revenues means that our normal efficiency is working against us. Instead of finding benefits through economies of scale, we are suffering from diseconomies. Instead of planning for a sustainable and digital future with continuing investment, we are having to deal with yesterday's payments and debt loads financing current operations – with limited financial support from states, especially compared to what airlines have benefitted from.

To face these unprecedented challenges and support the recovery of connectivity and travel for society, we need to reset our business model with a new look at revenue generation and – above all – new policy and regulatory approaches.

Airports are businesses in their own right, but they are neither typical infrastructure, nor travel service providers – so unique solutions are required.

We asked AlixPartners to look at the challenges that airports face in this time of extreme financial stress. AlixPartners interviewed airport operators and drew on their advisory work in the air transport ecosystem to set out a way forward.

Europe's airports stand ready to play their part. But it will also be up to governments, regulators and also industry stakeholders equally to do theirs – so as to ensure the viability of the entire air transport ecosystem.

Olivier Jankovec,
Director General ACI EUROPE

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Executive Summary

The impact of the COVID-19 pandemic on the air travel industry has been well-documented. However, while there has been widespread coverage of the challenges facing airlines, many European airports also find themselves in a risky financial situation. Nearly 200 have been identified as being at risk of insolvencyⁱ. This is concerning as airports are critical infrastructure that will play a crucial role in enabling social and economic connectivity post-pandemic.

This report analyses the hurdles that airport operators must overcome in order to restore financial sustainability, and the role that governments, regulators and other stakeholders can play in supporting the recovery of the air travel industry. It also includes insight from European airport operators themselves, who explain the misconceptions around airport operations that risk holding back this recovery.

Airports face urgent challenges today, without a clear timescale to recovery

1.74 billion fewer passengers travelled through Europe's airports in 2020 than in 2019, and volumes in 2021 have consistently been less than 20% of the equivalent 2019 figure. Many airports do not expect volumes to return to 2019 levels until 2024 at the earliestⁱⁱ. Recovery hinges on two factors – vaccine deployment and consumer behaviour – and both remain mired in uncertainty.

The potential for a long-term shortfall in passenger numbers presents an urgent challenge for the industry, as it has a direct impact on overall airport revenues. While total revenues across Europe's airports have fallen by around 60% year-on-year, costs have only fallen by around 24%ⁱⁱⁱ. Fundamental misconceptions exist regarding airports' ability to reduce costs during the pandemic. Airports face a myriad of fixed costs, the bulk of these relate to keeping infrastructure up and running, in line with regulatory and safety requirements, many of which cannot easily be eliminated or deferred.

Fully reopening terminals and generally restarting as traffic returns will result in higher costs but still low revenues, meaning greater cash burn in the second half of 2021. As a result, European airports will not generate sufficient profits to meet capital expenditure and capital costs from net income until at least 2032^{iv}.

In addition, given liquidity was used to fund operating costs during the pandemic, there will be a need for additional debt of around €10 billion to be borrowed in 2023 if airports are unable to recoup pandemic losses as part of revenue^v.

Airports have taken sensible and necessary measures – but need support

Airports have acted quickly and decisively to mitigate the impact of the pandemic. In addition to using the capital markets, airport operators have taken a variety of measures to restrict expenditure or create efficiencies, which are explained in detail in this report. However, mitigation alone will not be enough and airports will require support from key stakeholders to aid their recovery while passenger numbers return gradually between now and 2024.

- 1 Assistance from regulators to recover past losses necessary to maintain and enhance airports in the future**
- 2 Collaboration from concessionaires and airlines to provide the best customer experience at the airport and drive non-aero revenues.**
- 3 Buy-in from stakeholders and lenders to implement environmental sustainability for a green recovery and innovative future revenue streams**

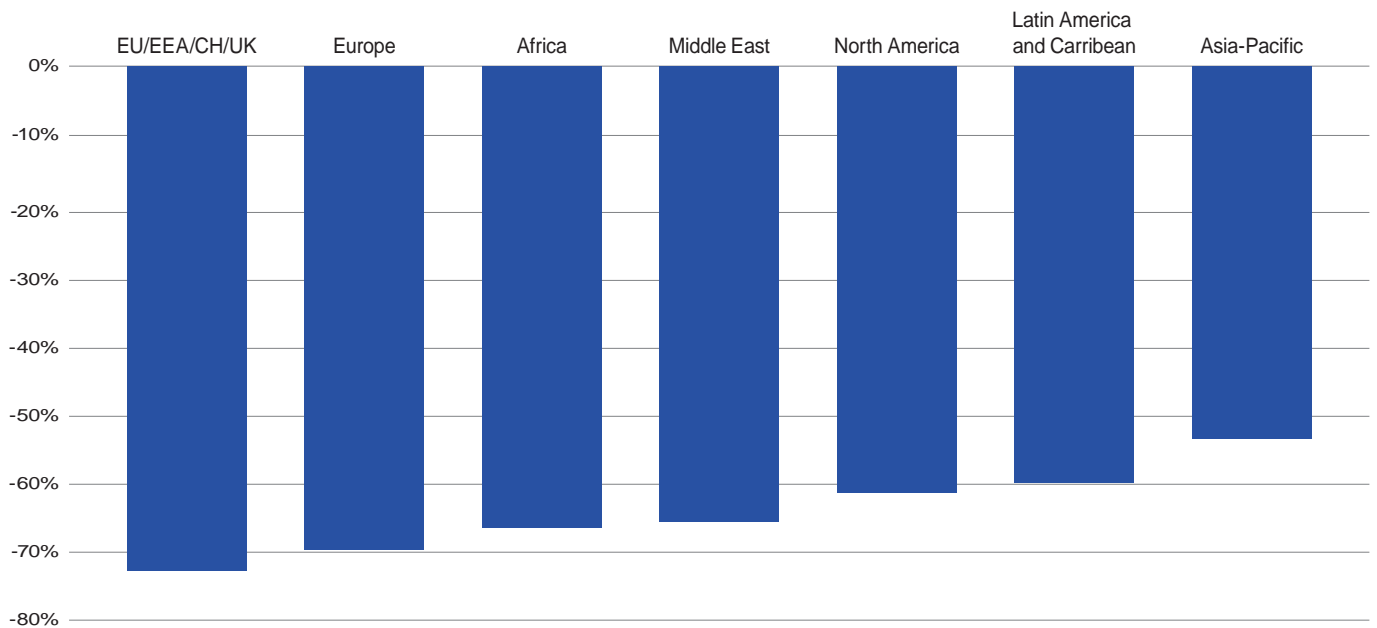
This report provides a breakdown of the key areas where these different groups of stakeholders will have a crucial role to play, with specific recommendations that will require input from policymakers, regulators, airlines, concession holders, lenders and shareholders.

Introduction

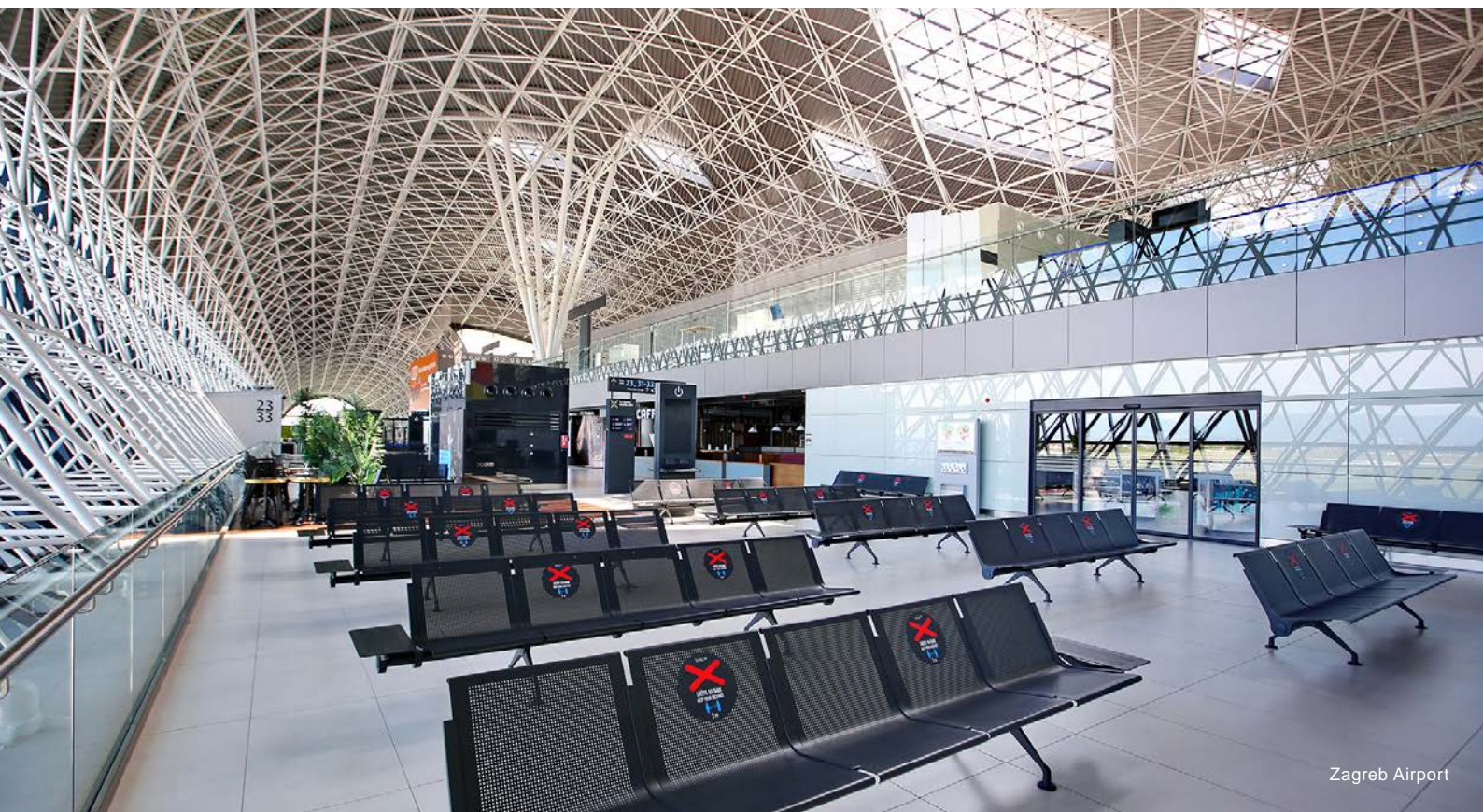
Since its outbreak, the global COVID-19 pandemic has paralysed air transport, which in turn has exacerbated the economic shocks experienced by nations worldwide. As a result, Europe's airports have experienced a massive and systemic shock as the sudden collapse of air traffic resulted in revenues drying up. This has equally affected all segments across the airport industry, from the Majors (5 busiest European airports) down to smaller regional airports. Every single airport in Europe ran a net loss in 2020, except the handful of airports that already specifically focused on the cargo or aircraft parking business.

GLOBAL AIRPORT TRAFFIC

Total passengers; 2020 vs 2019 (% change)



Source: ACI EUROPE Airport Traffic 2020



Airports will have a crucial role in enabling a global economic recovery post-pandemic. However, they are facing enormous economic challenges of their own. The situation is particularly acute in Europe, whose highly integrated market has seen one of the sharpest declines in air connectivity since the pandemic began^{vi}.

Europe's airports responded in a number of different ways, but nearly all had to remain operationally open because of statutory obligations.

Airports immediately took a wide range of pragmatic and necessary steps to mitigate the initial impact of the pandemic, such as deferring or cancelling investments, reviewing and reducing staffing costs, renegotiating supplier contracts, refinancing debt and sourcing additional capital.

In doing so, the priority was clearly on protecting liquidity – so that they could continue to operate and fulfil their role as essential infrastructure. State financial support for airports was very limited, especially in contrast to airlines in Europe. Furthermore, regulated airports face limitations in their ability to recover pandemic-related losses in future years, with impacts on future financing costs. Challenges are plenty for airports in the years ahead – with potentially far-reaching consequences not just for their communities and European cohesion, but also for European economies.

Airports know that they will need to be innovative and adaptable in deploying their restart plans as air connectivity resumes. Collaboration with stakeholders across the sector will also be necessary. First, to identify and implement sustainable cost reductions and efficiencies, and secondly to develop new revenue streams to enhance recovery plans across the sector.

At the same time, there must be a greater understanding of why airports find themselves in such a precarious position, and a recognition that governments, regulators, airlines, concessionaires and lenders all have a role in aiding airport recovery post-pandemic. This white paper aims to inform and educate stakeholders and the media about airport cost structures and cost recovery, as well as highlight the impacts that airport recovery will have on the wider transport market following COVID-19.

Air connectivity is critical to the European economy. In normal times, it is estimated that air transport supports



13.5M
jobs and



\$886B
in European economic activity

That is



3.6%
of all employment and



4.4%
of all GDP in European
countries in 2018^{vii}

While airports act as transportation hubs, they also provide crucial services to the communities in which they operate. Beyond facilitating the movement of people and goods, airports bring specialist jobs and revenue to their local area and facilitate the provision of supplies and support to isolated communities. Airports also set the context for the culture of their region, being the first and last place many travellers see.

COVID-19 impact on European air traffic and revenues

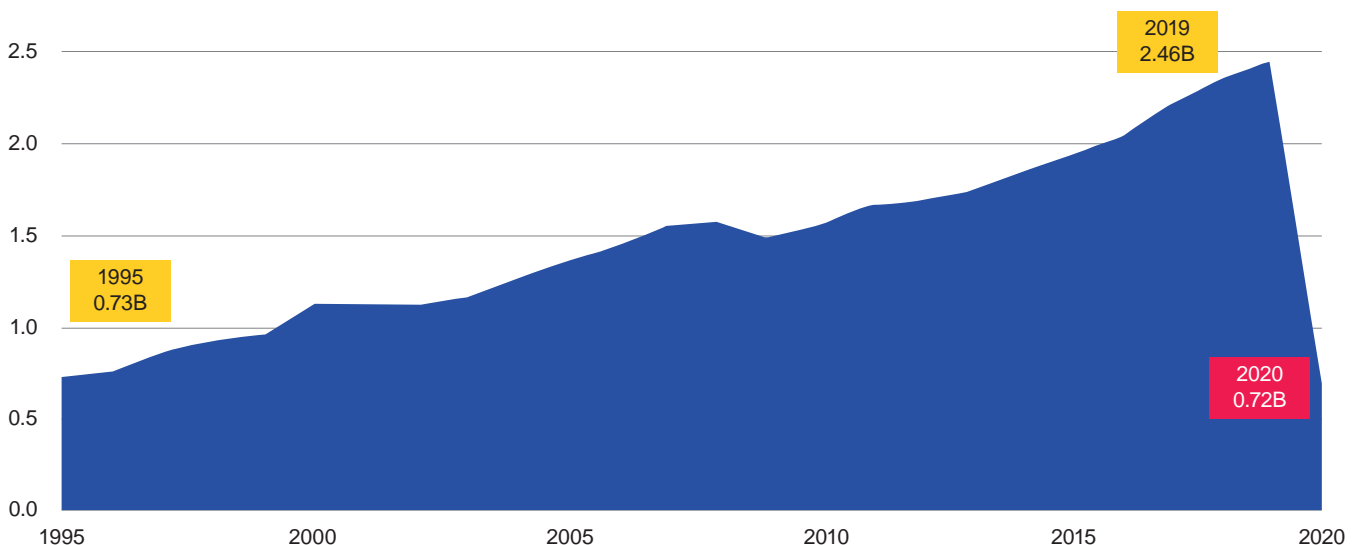
Collapsed air traffic volumes

By mid-March 2020, many European countries had introduced strict nationwide lockdown measures to reduce the spread of COVID-19. On 17th March, passenger volumes at Europe's airports collapsed to just 34% of the total from the same Tuesday a year earlier. Passenger volumes would hardly rise above one-third of their equivalent 2019 figure at any point during the remainder of 2020.

By the end of the year, 1.74 billion fewer passengers had travelled through Europe's airports than in 2019 – bringing passenger volumes below 1995 levels. Unsurprisingly, given the persistence of lockdown measures and travel restrictions across much of the continent, passenger volumes remained low in the first quarter of 2021, with traffic around 80% lower than two years prior. While cargo volumes were comparatively stable due to the resilience of international trade and rise in e-commerce, they still fell 19% on average in 2020 as passenger planes carry a major share of global air freight.

THE COLLAPSE OF AIR TRAVEL IN 2020 SAW PASSENGER TRAFFIC IN EUROPE'S AIRPORTS FALL BACK TO 1995 LEVELS

1995-2020: European Airport Traffic (billion passengers per year)



Source: ACI EUROPE

Collapsed airport revenues

While the financial challenges faced by other stakeholders during the pandemic are widely understood, there has been less coverage of the difficulties experienced by airports. Declines in passenger volumes have resulted in significant reductions in revenue for airports across Europe. Total revenues fell by €30 billion year-on-year, or around 60%^{viii}.

Airports primarily generate revenue from sources directly associated with the aeronautical use of the airport and so are highly dependent on the volume of passengers travelling through the airport. These include various aircraft-related charges such as landing, parking, airbridge fees and passenger-related charges, including sometimes a separate security charge. These charges are predominately pass-through in nature; they are charged by the airport to airlines which, in turn, pass them on to passengers, but not on a one-to-one basis. The level of these charges is set as part of the regulatory process and these charges are not paid in advance, so airports have no ability/flexibility to vary their revenues base to compensate for the decrease in passengers, nor can they generate revenue now from future flights and passengers.

An airport's average aeronautical income per passenger – including airline-related and passenger-related charges – is €11. The cost of airports in airlines' total cost structure is very low at around 6%^{ix}.

Further, taxes and Air Passenger Duties are charged by some governments or municipalities of the departure and arrival locations, in addition to surcharges for fuel, noise and emissions. This tax and duty revenue goes to the government, and not the airport operator.

Airports have also invested considerably to generate non-aviation revenues, such as income from car parking on airport land, concessions for car rentals, retail, food and drink, and from real estate. Larger airports – which receive at least 25 million passengers per year – typically earn around 45% of their overall revenue from non-aviation activities. For smaller airports, non-aviation revenues rarely exceed 35%^x. Airports earning a higher proportion of revenue from non-aviation sources may be able to reduce charges paid by airlines. As many airports within Europe compete for the same passengers, this flexibility ensures that airports remain competitive.



Decline in revenues unable to be matched by a decline in costs

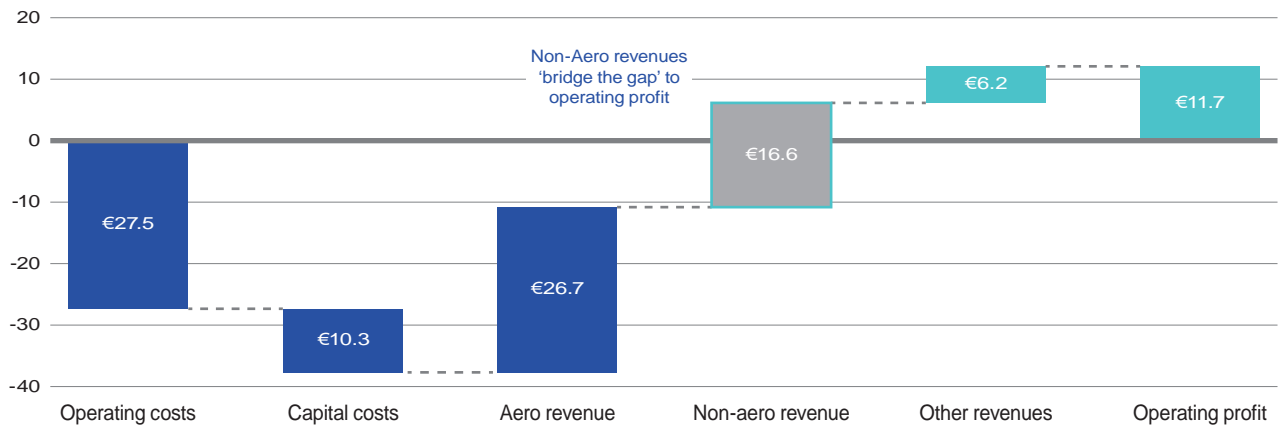
Aviation and non-aviation revenue streams have very different cost structures, and each has been affected differently by the consequences of the pandemic.

Like many other transport and infrastructure industries, airports face a high proportion of fixed costs. The bulk of these relate to keeping infrastructure up and running, in line with regulatory requirements including in relation to safety. Many European airports have shut down entire parts of their infrastructure, reducing the number of check-in desks and security lanes, consolidating baggage halls, and even closing terminal buildings to reduce costs. However, fixed costs can also include concession fee payments to governments, alongside interest payments and taxes.

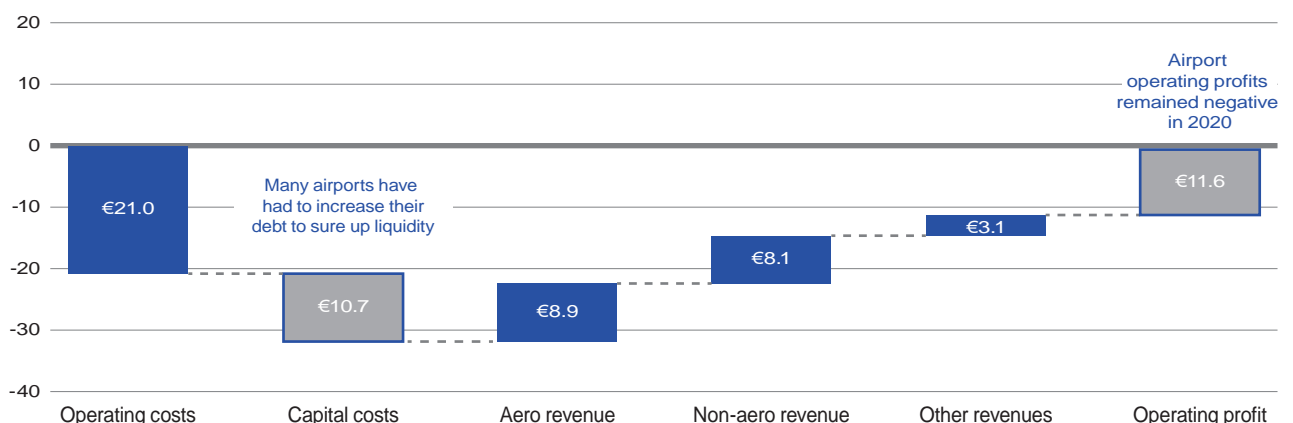
Airports have been burdened with most of the fixed costs they faced pre-pandemic, with exceptions including the deferral by some EU member states of airport concession fee payments. In most instances, airports have had to continue paying regulatory fees along with concession payments and rates to governments, while making their own staff redundant. The situation in Europe stands in stark contrast to other parts of the world, notably the United States, where a \$10 billion support package was announced for airports within weeks of the first confirmed cases of COVID-19^{xi}.

WHILE AIRPORTS WERE ABLE TO REDUCE OPERATING COSTS DURING THE PANDEMIC, THE REVENUE FALLS FORCED AIRPORTS TO INCREASE DEBT

2019: The role of commercial revenues in European Airport Viability (€ Billion)



2020: The impact of the pandemic on capital costs and revenue affecting European Airport Viability (€ Billion)



Year on year % change

-24%

+4%

-67%

-51%

-50%

-200%

Source: ACI EUROPE Economics Survey

Testing Centre



 **Testing Centre**
Welcome desk

esk

 COLLINSON

Cost of restart

The next few months will be more painful for most European airports, even as traffic levels increase. In addition, the cost of re-opening terminals and general restart is going to result in greater cash burn for airports that had managed to reduce expenses by those closures.

It remains extremely difficult for airports to curtail their fixed costs in proportion to reduced revenues, for three key reasons:

1

As highly capital-intensive businesses, airports depend on economies of scale to manage costs and achieve profitability; maintenance expenses remain high regardless of passenger traffic and asset decommissioning, due to regulatory requirements and safety standards – daily checks are often required on key airside and landside systems that could rupture or deteriorate without attention.

2

Airports have also been required to make significant and expensive adjustments to ensure the safety of staff and passengers, including implementing physical distancing and cleaning procedures amidst enhanced immigration and health check processes complicating the passenger journey.

3

Air traffic has compressed into fewer slots as the recovery begins, creating traffic peaks in early and late slots when airports are operating near full capacity, with most of the associated costs of security, staff, utilities, and cleaning.



The airports' perspective:

Key misconceptions about airport operations and cost structures

”

Our research has found that consumers don't realise they are paying for the airport in their tickets but when they find out how much the airport charge actually is, they seem to think we're good value.”

“The public don't understand the fixed costs and financial burden airports have. During the crisis, we were open the whole time and the fixed costs were still there, like general maintenance, utility expenses and security.”

“We are operating a largely empty airport, however at two points in the day we are very busy. This situation is undermining cost-saving opportunities, which most people do not understand.”

“Governments are much more inclined to bail out airlines than airports. This indicates a lack of understanding of the various parts of the value chain.”

“This crisis has exposed the myth of profitability – that if you own an airport, you own a cash cow under all circumstances. Because of their more variable cost structures, airlines have to some extent been able to survive the crisis better than airports.”

“People don't realise that airports help local economies better when we can invest in our infrastructure. We need to be able financially to have capital projects at the airport to have major impacts. This is not well-understood by national authorities when trying to navigate the dynamics between airports and airlines.”

“Some of the analysts and regulators think it's a risk-free, real estate business but there are many things not in our power. Also, lots of money is always needed, not just for growth but also maintenance. You need positive cash flow to make up for these investments.”

“Airport operators have lived in a world of false security, thinking governments understand how important our industry is to society. We've had no cut-through to governments across the globe on the importance of aviation, to import-export connectivity for example. Somehow during the pandemic all this has been lost. People think we can switch the industry back on overnight.”

How airports are mitigating the economic impact

The drop in passenger numbers in Europe has not been matched by a decline in operational costs. Analysis of more than 175 airports across Europe shows 2020 operational costs have fallen on average by 24% compared with 2019, versus revenue declines of 60%^{xii}. This is despite airports taking significant measures to reduce their fixed and variable costs.

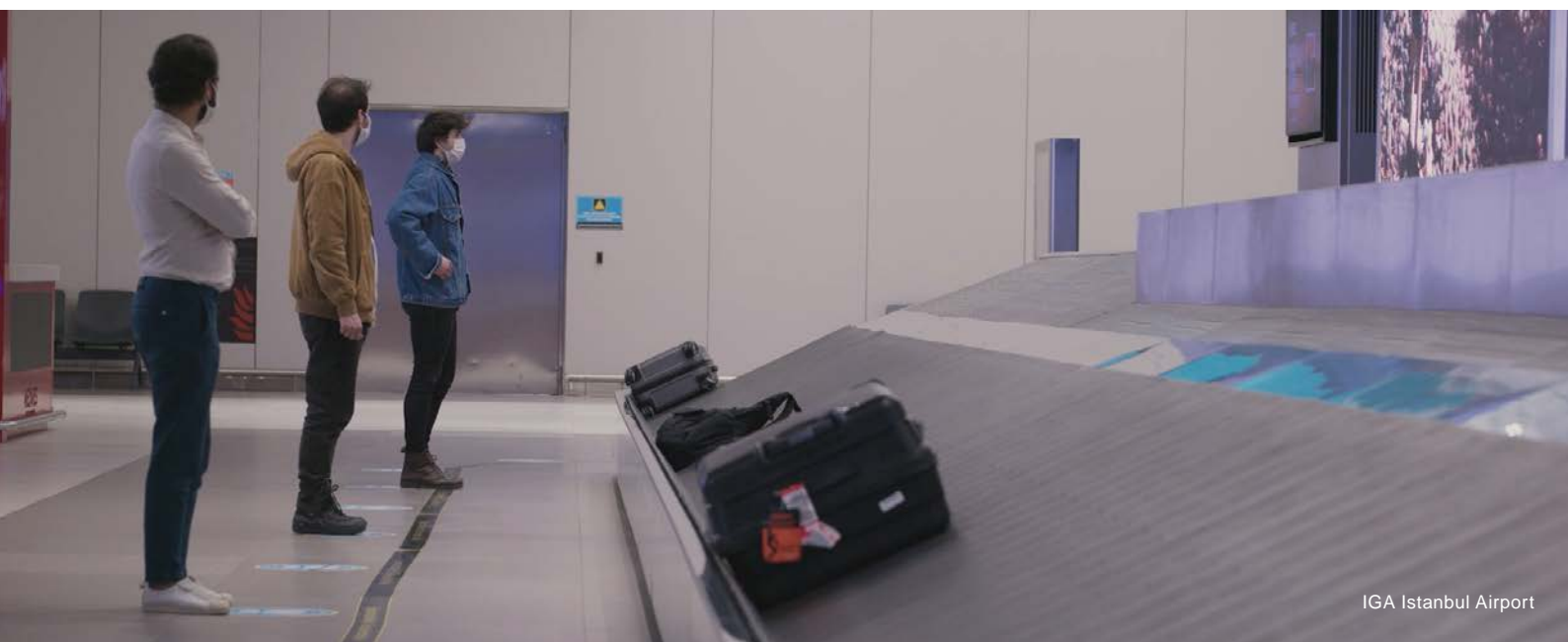
Staffing and other operational costs

On average, staff and contracted services costs make up nearly two-thirds of an airport's total operating costs^{xiii}. The remaining costs are split across a range of categories, including: lease, rent and concession fees; utilities, waste and energy; general and administrative costs for HR, finance, sales and marketing; maintenance (excluding contracted services); and insurance claims and settlements.

Reducing staffing costs has, therefore, been essential to minimising operating expenses during the pandemic. Across Europe, airports have curtailed personnel costs by around 19% on average^{xiv}. While this reduction has been enabled partly by wage subsidy schemes in certain countries that allow airports to retain staff on furlough, a number of airports have significantly reduced their headcounts. Savings have also been achieved through negotiations with workers and unions to reduce or suspend bonus payments and annual salary indexation, and by transitioning staff to more flexible contracts.

At the same time, many airports reviewed the mix of services they outsourced and those they undertook with their own staff. Historically, outsourcing models have varied across airports, partly airline-driven, partly airport operator-driven, but primarily to provide certainty around forecasting costs. With reduced passenger volumes, bringing certain services in-house while outsourcing others has resulted in cost savings. This balancing act has allowed airports to exercise greater control over a business that has traditionally operated with around 80% of costs fixed^{xv}.

As the pandemic stretched into 2021, operators reviewed the cost structures underpinning their restart plans to ensure that the flexible cost structures put in place during the peak of the pandemic could remain in place. New ways of working will be applied to achieve this as passenger numbers are expected to grow again in the second half of 2021. Approaches include more flexible staff rosters and cross-terminal working for front-line employees, greater digitalisation and automation of services such as baggage handling, implementing centres of excellence for head office roles, and reskilling and upskilling staff to achieve effective, efficient and more agile teams.



Renegotiating key contracts

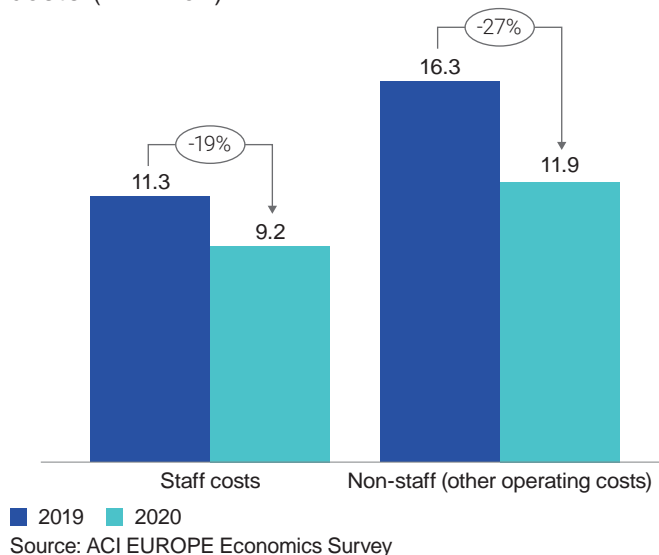
Most airports have been successful in reducing the cost of major contracts, car park management, maintenance, and cleaning. Major contracted and supplier costs have been reduced by around 25% on average, although by up to 38% in some cases^{xvi}.

However, these cost reductions have largely been the result of emergency negotiations. Renegotiating more fundamental changes to contractual structures and service levels is often possible only at pre-agreed break points or contract renewal dates. The ability to further reduce contracted costs is impacted by the limited availability of suppliers in a market with a high barrier to entry. It is also impacted by the capacity of those suppliers – whose businesses are often linked to passenger numbers and have faced similar demand reductions as the airports – to reduce costs themselves, while making the investments needed to digitalise or automate key services. In addition, renegotiating service levels often requires agreement from airlines, given the pass-through nature of these services.

While airports were trying to renegotiate their contracts, airlines, food and beverage providers and retail concession holders were seeking rent holidays from the airports themselves. Many have also suffered significant economic hardship, with some airlines and concession holders appointing administrators and receivers, further impacting the offerings at airports post-pandemic. In response, airports have sought opportunities to partner with tenants to help them manage the financial impact of the pandemic. Airports have also been extending the length of contracts to allow concession holders to prepare for the future.

ACROSS EUROPE, AIRPORTS HAVE CURTAILED PERSONNEL COSTS AND SOUGHT TO REDUCE OPERATING COSTS THROUGH TERMINAL CLOSURES

2019-2020: Reduction in operating costs (€ Billion)



The airports' perspective:

Reducing operational costs

"We have reduced our headcount and we are a more centralised and efficient organisation now. We won't go back to the old levels when passengers return – we want to increase automation and productivity of staff and assets. We are embracing a 'building back better' mentality."

"We will try to maintain the changes in our cost structure. The aim is not to make our costs proportionate to increasing traffic. The goal is to re-engineer processes with our staff, to increase overall operational efficiency. For example, everyone is responsible for the quality control process and staff know they are accountable as there are not people to perform second or third checks as in the past."

"We have outsourced everything that's non-core. This leaves less room for cutting or ramping up depending on volume. Security has higher cost variability based on volume, but they still need to be there regardless of whether or not we have passengers."

"We have some major contracts, such as for cleaning and for passengers with reduced mobility. Emergency contract renegotiations were in place for the short- to medium-term on the basis that service would resume in the same way when passengers return. As time moves on, we are having more structural and long-term negotiations. We have stringent provisions and can't easily change scope on a contract that's in place."

"Our cleaning costs have been much higher than before the pandemic, despite an enormous decrease in traffic."

Reducing investment

Many European airports have reviewed their capital expenditure programmes in light of the pandemic.

The overwhelming first action of airports was to postpone, reduce or defer investment. This is seen in the 26% decrease compared to the prior year in capital expenditure reported by ACI EUROPE in the 2020 Economics Report. In reality, the decrease in capital expenditure on a rolling basis was probably greater, as the true impact of COVID-19 only became clear at the start of the second half of 2020, and many investment programmes were at a stage where cancellation was not an option.

Many non-essential capital works have been delayed, including the construction and inauguration of terminals at three of Europe's largest airports (Frankfurt, Heathrow and Schipol). Capex deferrals have resulted in significant cash outflow avoidance, which have generally been proportionate to the size of the airport in terms of passenger volumes, with some of Europe's largest airports identifying several hundred million euros in capex reduction to shore up liquidity.

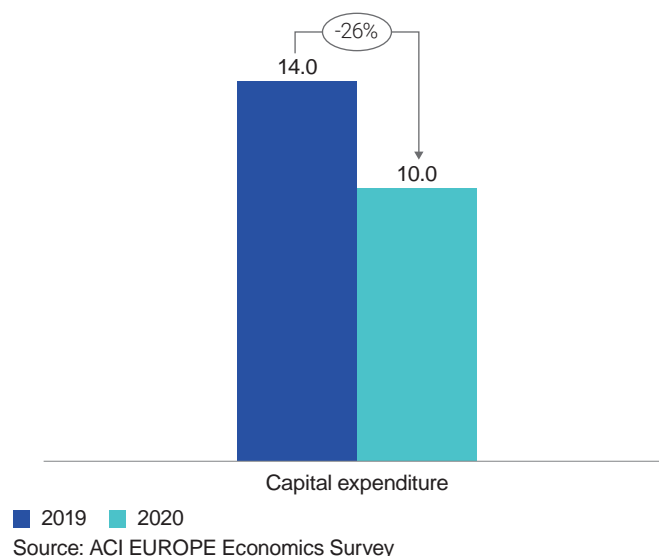
Some airports have taken the opportunity presented by the drop in air traffic volumes to bring forward planned works, such as runway maintenance. Others have restricted capital expenditure to essential works, including the purchase or upgrading of hold baggage screening equipment to comply with European regulations (EU Regulation 1087/2011 stating that all Hold Baggage must be screened with Explosive Detection Systems (EDS) Standard 3 equipment by 1 September 2020), or programmes where delays would have increased costs or resulted in financial penalties for breach of contractual obligations.

With most airport capital programmes taking five to 10 years from seeking approvals to completion, airports are used to employing a long-term view on capital. The pandemic has allowed airports to review processes and ways of working, resulting in many seizing the opportunity to 'build back better'. Looking ahead, key themes include long-term initiatives in digitalisation, automation, and sustainability, rather than increasing capacity. However, the immediate focus remains on maintaining the airport to be ready for restart and, in the medium-term, a focus on protecting recovery efforts.

Considering that many congested airports accelerated investment projects to find some positives from the fact that the terminals and aprons were less used, the quantum of reduction in European airport investment during 2020 is dramatic.

THE OVERWHELMING FIRST ACTION OF AIRPORTS WAS TO POSTPONE, REDUCE OR DEFER INVESTMENT IN ALL BUT ESSENTIAL CAPITAL PROJECTS

2019-2020: Capital expenditure (€ Billion)



The airports' perspective:

Reducing and/or deferring capital expenditure

"When the pandemic began, we were halfway through our largest-ever project in terms of capital expenditure. Shareholders decided there were too many long-term costs to stop the development, so we finished the complex civil engineering elements and kept building."

"Some airports reduced capex by a much greater percentage than we did, but we had big projects and a backlog."

"We implemented an immediate capex freeze, with each and every capex line going through the CFO. We stopped projects that were possible to stop and kept capex to a bare minimum, although we were also able to implement some capital projects that normally aren't possible (because of reduced passenger volumes)."

"We put most of our infrastructure projects for 2020 and 2021 on hold except for maintenance. We had a big expansion project planned but we don't expect to start it next year. The goal is to start some small works in 2023-24."

"Essentially, security standards kept capex far higher than it would have been in absence of the EDS Standard 3 and hold baggage screening regulatory deadlines."



London City Airport



Larnaca International Airport / Hermes Airports



Valencia Airport / Aena

Challenges ahead

The burden of debt

Despite the measures that airports have taken to reduce cash burn, the length of the pandemic and uncertainty around when restrictions will ease globally make it difficult to model future cash flows and liquidity requirements. In October 2020, ACI EUROPE identified nearly 200 airports at risk of insolvency^{xvii}. Many have seen their credit ratings downgraded by the ratings agencies Standard & Poor's and Moody's.

Shareholders and other investors have historically been comfortable with high debt levels because they understand that airports traditionally offer stable cash flows year after year, and that facilities that are expensive to build – such as new runways – are relatively inexpensive to maintain, meaning they can be relied upon to provide returns on upfront investment.

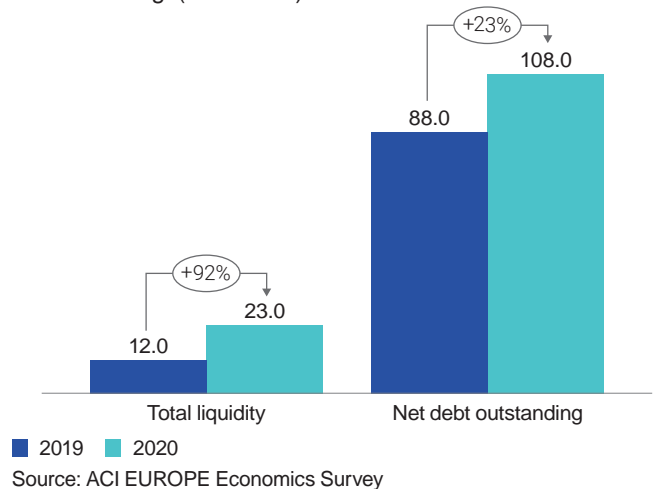
However, the sudden and prolonged decline in passenger volumes has changed this dynamic in ways few could have predicted. Even when fully utilising government support schemes, deferring capital expenditure and implementing drastic cost reduction programmes, many airports quickly burnt through their cash reserves in the early months of the pandemic. To bolster their balance sheets, the sector has raised huge amounts of liquidity through the capital markets.

Analysis of several of Europe's largest airport operators shows an average increase in total financial liabilities of 35%^{xviii}. This new debt has led to significantly higher interest payments, which will need to be met from future earnings that are well below pre-pandemic earnings, assuming passenger numbers do not recover sufficiently before 2024. As the post-COVID liquidity profile of the sector takes shape, the more highly leveraged players may find the existing debt stack too large to manage, with a restructuring a material possibility.

Airports have largely been able to raise and refinance debt within their existing terms, albeit with increased interest rates, benefitting from extremely liquid capital markets. However, if investors' assessment of the sector changes, based on revised and lower traffic forecasts or a worsening of the macroeconomic environment, including inflationary pressures, this could raise the finance costs of airports further and impact the secondary market for privately held airport assets.

TO BOLSTER THEIR BALANCE SHEETS AND CASH BURN, EUROPEAN AIRPORTS HAVE RAISED HUGE AMOUNTS OF DEBT THROUGH THE CAPITAL MARKETS

2019-2020: Liquidity & net debt outstanding (€ Billion)



Medium-term impact of deferred capital projects

As well as the additional debt burden, airports will need to address the capital works delayed as part of the pandemic after a period of suppressed investment to preserve cash, during which many drew down existing capex facilities to shore up liquidity.

Whilst many terminal expansions and additional runways are on hold, there is a level of replacement and maintenance capex that cannot be avoided to ensure the safety of airports and compliance with regulations, such as EDS Standard 3 and new cybersecurity regulations. Primarily reduced capital and a focus only on essential works will affect the ability of airports to invest strategically in sustainability, digitalisation and capacity for the long-term.

“Green” is a key priority for policymakers, and so airports will also face increased capex in the years ahead to enhance the sustainability of their operations and support the efforts of their business partners.

Decarbonisation in particular will be a major challenge as Europe's airports have committed to achieve Net Zero CO₂ emissions by 2050 at the latest. Postponing sustainability-related capex could affect an airport's long-term business plan by delaying the investment needed to make airport infrastructure resilient to climate change and meet sustainability requirements for capacity expansion, and leading to higher operating costs from less efficient infrastructure.

This includes investments in renewable power and energy efficiency for terminal buildings, the use of electric and hydrogen-powered ground vehicles and, further into the future, accommodations for electric aircraft. Such investments in aviation decarbonisation will be essential to support the EU's Sustainable and Smart Mobility Strategy and industry pledges such as Destination 2050, an initiative of five European aviation associations.

The airports' perspective:

Future capital expenditure

“The financial health of the company will dictate when capex will return, but it also depends on the charge increases to airlines. We need good-value investment, higher returns on the non-aviation side and we also need assets. 2027 will be the first year we will see increased investment, given good financial performance potential.”

“We will have a few years of just doing the capex to keep the airport running, given our increased debt levels.”

“Passenger numbers will be the main driver of future capex.”



creating an
EXCITING NEW
airport experience

Liquidity and investment crunch

Liquidity is important to airports for two reasons. Firstly, while airlines collect airport charges from passengers at the time of booking, these are not paid to airports until after passengers have undertaken their flight. Secondly, airports have high capital expenditure requirements and associated capital cost given the nature of the infrastructure that they maintain.

The combination of higher interest costs, operational cash burn and delayed non-essential capex all serve to produce a gloomy outlook for the liquidity of the sector. Overall liquidity has been strong for airports in the 16 months following the start of the pandemic, as they had substantial cash reserves and have found it relatively easy to raise capital in the immediate aftermath of COVID-19.

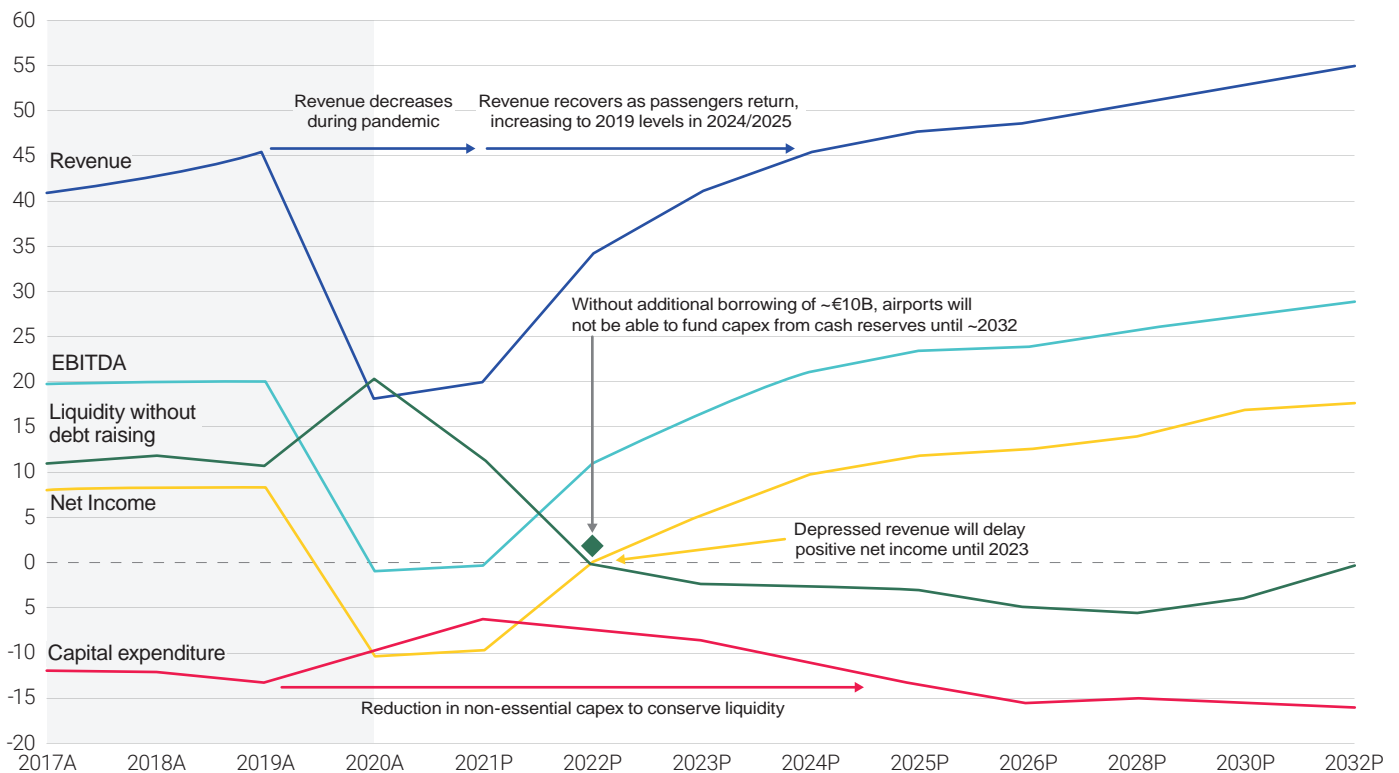
In Europe, airports spend approximately 55% of total revenue on operating costs and 20% of total revenue on capital costs, on average. An equivalent of 27% of total revenue is spent on capital expenditure projects every year, although part of this is funded by debt^{xi}. Capital cost relates to the cost of financing the airport, including interest on debt, depreciation of assets and the costs of long-term leases. Capital expenditure on works includes everything from repairing a roof to building a new terminal building or runway and are funded either from cash reserves from previous years or through project finance.

While it is anticipated that airport revenue will increase as passenger numbers return from 2022, it will take until at least 2024, if not 2025, for passenger numbers and thus revenues to return to 2019 levels^{xx}. During this time, the majority of airports will be able to cover operating costs from revenue but will find it challenging to fund capital costs and capital expenditure. Given the prolonged pandemic, airports are in a cash negative position.

A high-level analysis suggests that on an aggregated basis, European airports may not generate sufficient profits to meet capital expenditure and capital costs from net income until at least 2032. In addition, given liquidity was used to fund operating costs during the pandemic, there will be a need for additional debt of around €10 billion to be borrowed in 2023 if airports are unable to recoup pandemic losses as part of revenue^{xxi}.

CAPEX AND A LACK OF LIQUIDITY WILL FORCE AIRPORTS TO RAISE MORE DEBT IN 2023, WITH LIQUIDITY NOT EXPECTED TO BE POSITIVE UNTIL 2023

Key financials (€ Billion)



Source: ACI EUROPE Economics Survey, IATA, IMF, AlixPartners analysis



Recovery projections

When will passenger volumes return to pre-pandemic levels?

Future travel volumes will be shaped by two decisive factors: vaccine deployment and consumer trends.

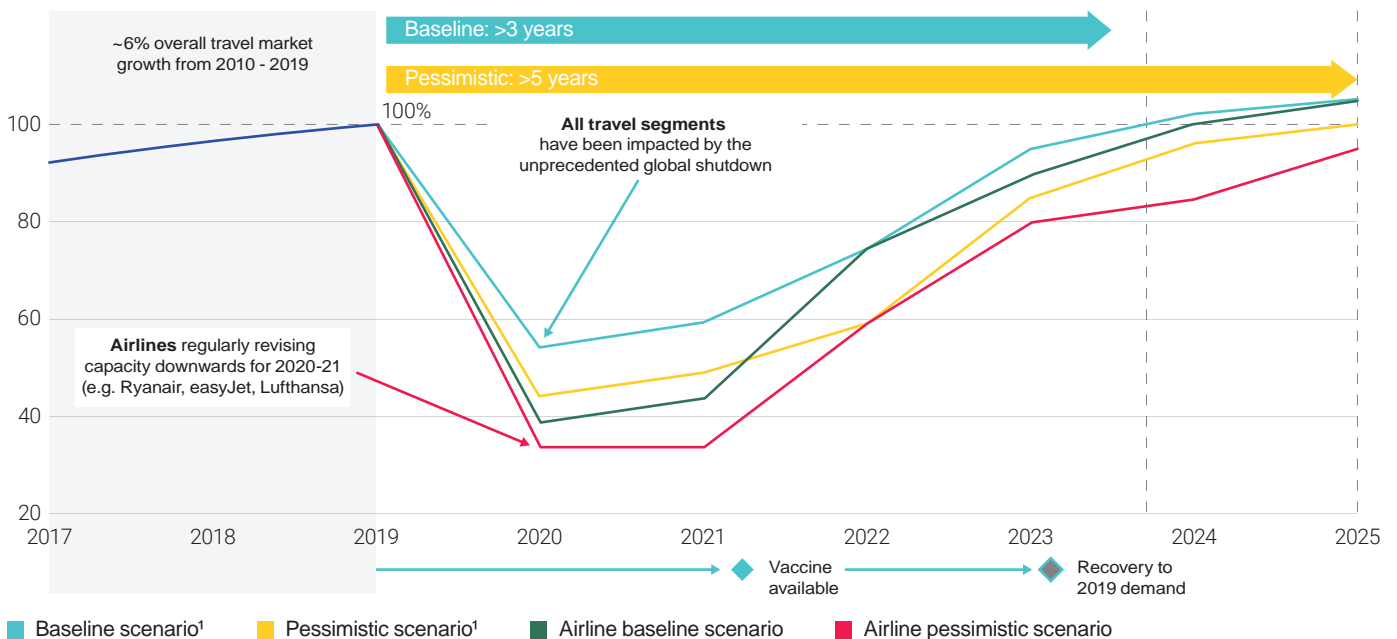
First, in terms of vaccine deployment, the European air travel industry is heavily reliant on the success of global efforts to contain the spread of COVID-19. Unlike the large domestic air travel markets of the United States and China, the European aviation sector is powered by international flights highly susceptible to disruption due to outbreaks of the virus. The ability of vaccination programmes to keep pace with the reopening of economies and emergence of new variants will therefore be critical.

Second, consumer attitudes to travelling by air for leisure and business will impact the magnitude and scope of the recovery. Easing travel restrictions will not necessarily alleviate travellers' concerns, which – alongside fears about contracting the virus – are likely to include proof of vaccination requirements, testing and quarantine obligations and their associated costs, rules about mask wearing and social distancing, and increasingly, the climate impacts of flying.

While there is pent-up demand among leisure travellers for foreign holidays and visits to friends and relatives, there remains significant uncertainty about how quickly or permanently demand for leisure travel will return to pre-pandemic levels. The return of business travel volumes to pre-pandemic levels is more doubtful still. Spending on business travel fell by 52% globally and 58%^{xxii} in Western Europe in 2020. The Global Business Travel Association (GBTA) has predicted a full recovery as early as 2025, based largely on the rebound under way in China and elsewhere in Asia. However, the long-term impacts of virtual conferencing technology, corporate cost-cutting initiatives, and companies' carbon footprint reduction commitments remains to be seen.

CONTINUED DISRUPTION IS PUTTING HUGE PRESSURE ON DEMAND LEVELS, WHICH COULD TAKE AROUND THREE TO FIVE YEARS TO RECOVER TO PRE-CRISIS LEVELS

Global market forecast [% vs. 2019]

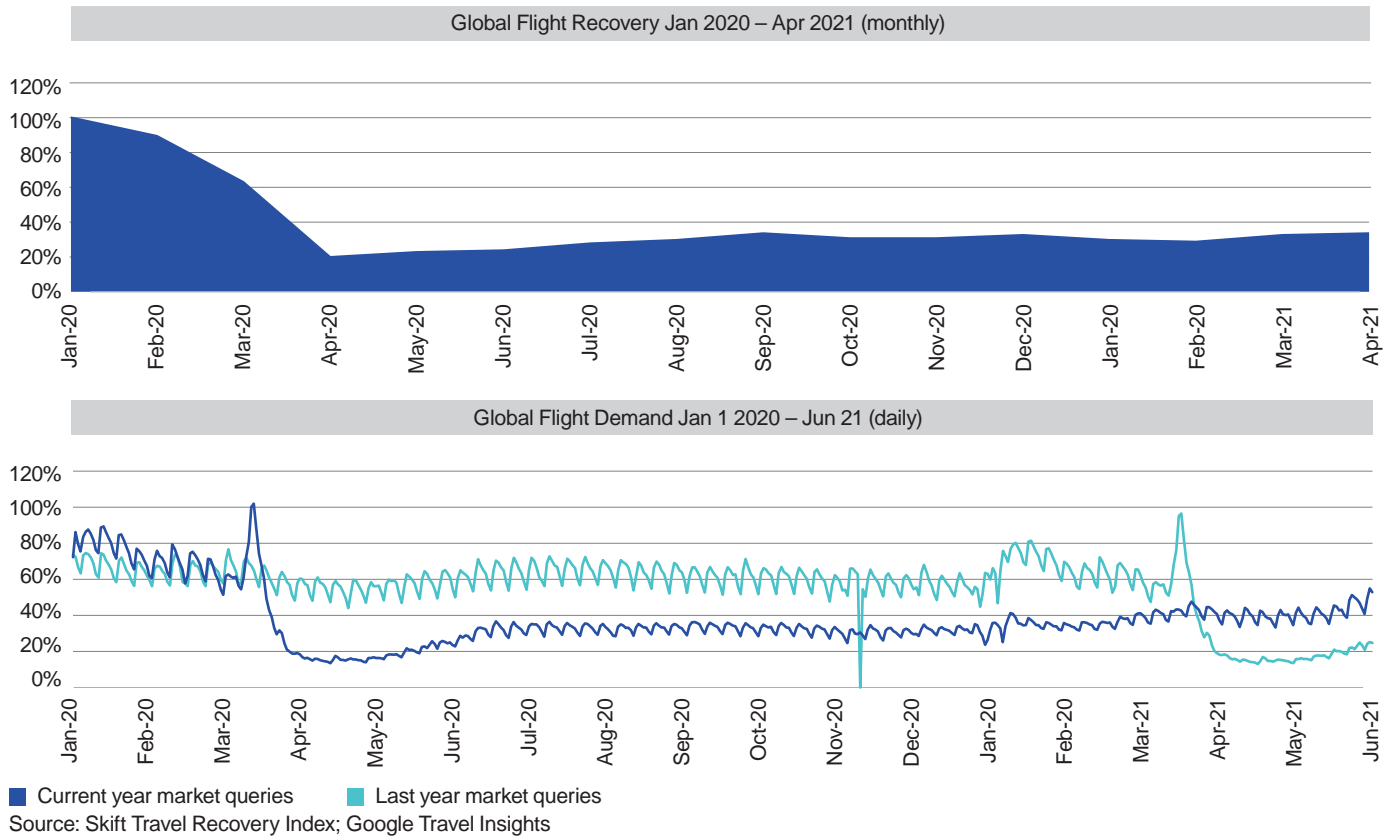


1. Methodology: IATA Airline Demand Curve (estimate on Revenue Passenger Kilometers) used as a starting point, adjusted for other travel & leisure spend (e.g. domestic travel) based on Euromonitor data as well as country-specific macro-economic indicators (e.g. Private Consumption, Economic Growth)

Source: IATA, Euromonitor International, IMF, AlixPartners analysis

GLOBAL FLIGHT RECOVERY HAS STAGNATED IN 2020 AND INTO 2021, WITH DEMAND FOR FUTURE BOOKINGS GRADUALLY INCREASING

Flight recovery and demand in 2020 and 2021 [%]



The airports' perspective:

Future travel trends and recovery

W *We expect 2019 levels to return in 2024. The long-haul market will take longer to recover, especially given the situation in emerging markets like South America and India.*

“Historically, we have had a significant component of ‘Visiting Friends and Relatives’ travellers, so we anticipate a big return, although in the short term, we expect a lower risk appetite among travellers. Some have written off 2021 for travel, even when restrictions are lifted.”

“There will be a smaller pool of airlines. Hopefully it won't impact the range of destinations we serve, but it is currently reducing frequency.”

“We expect a return to 2019 levels in 2024-5. We don't think it will be a linear recovery but expect it will grow quite quickly. People want to travel and have saved money. They want to meet friends and family they haven't seen in two years.”

“Airlines expect less recovery for business and more for leisure. Thus, business class ticket sales will fall, and perhaps economy ticket prices will go up and the grandeur of flying could return. This could lead to higher expectations of airports among customers.”

“Leisure and domestic will lead the recovery, followed by business and long-haul. I don't buy the idea that all meetings will be virtual from now on. If you have a deal that needs to be done, you're not going to risk it by not taking a flight.”

“We have a lot of carriers and we expect that post-pandemic, not all will return. We don't expect this to impact our offering, as the airlines that remain will be able to recover the traffic.”

“All the airlines are suffering but some are stronger than others and this is contributing to increased competitive behaviour. I think there will be more competition within aviation systems – hub airport and flag carrier pairings, against others – but currently it's about domestic consolidation.”

“Some of the flag carriers will consolidate and take fewer chances, which is one of the reasons we have to diversify revenue sources on both the aero and non-aero sides.”



Airport recovery requires support from multiple stakeholders

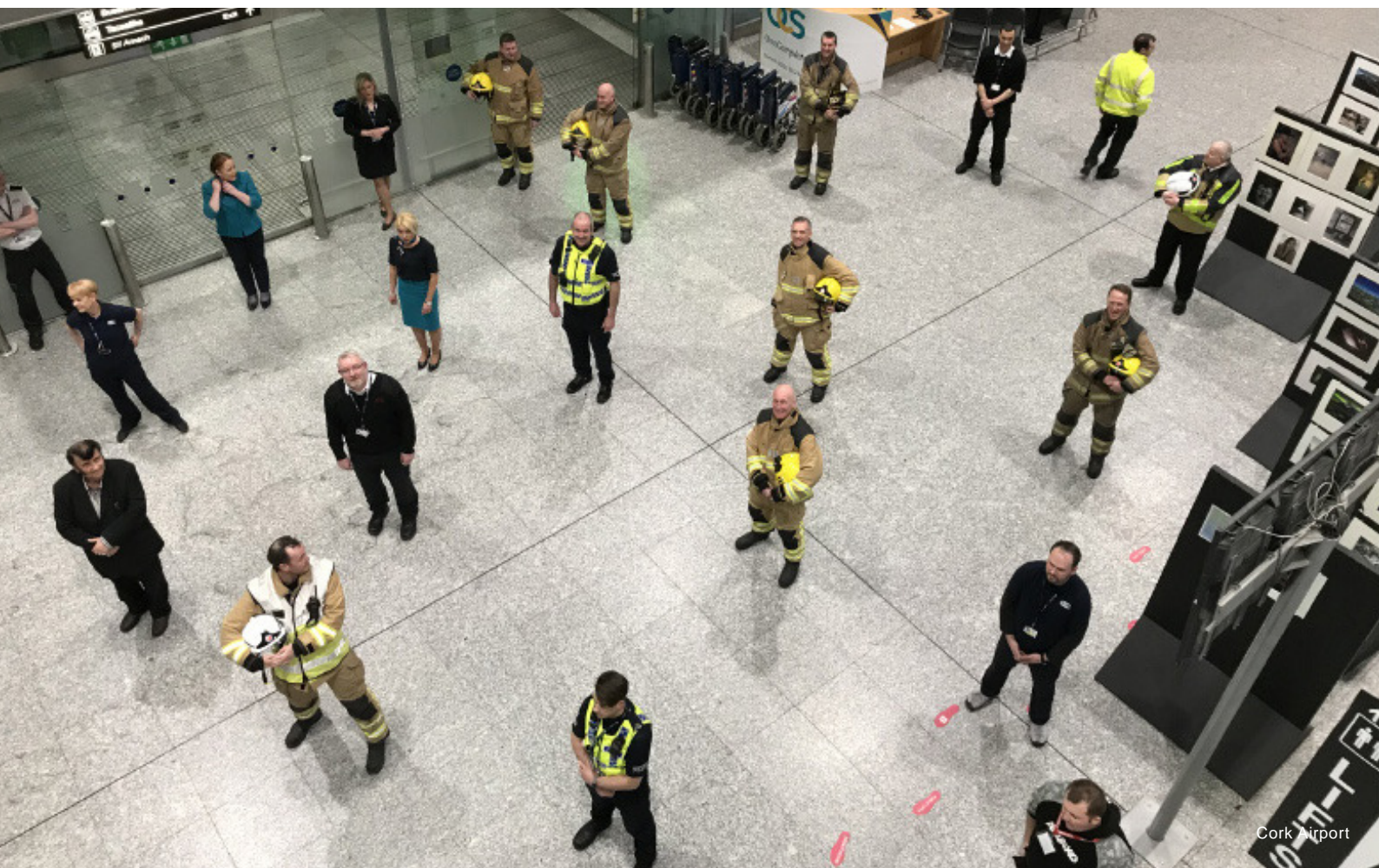
Years of lost profits

Airports have weathered the pandemic with limited assistance from their governments and municipalities. While airports responded to the sudden and extended reduction in passenger volumes by undertaking significant cost-cutting initiatives, this has been insufficient to offset the collapse in revenue. Liquidity reserves have been severely impacted as a result, forcing airports to repurpose capex reserves to fund operations, take on extra debt, and seek assistance from shareholders.

However, cost reduction alone will not be enough as it is estimated that it will take airports beyond 2024 to recover to 2019 net income based on current losses and passenger volume projections.

Airports will be crucial enablers of Europe's economic recovery post-pandemic. To recover faster, airports will require support from key stakeholders while passenger numbers recover gradually between now and 2024:

- 1 Assistance from regulators to recover past losses necessary to maintain and enhance airports in the future.**
- 2 Collaboration from concessionaires and airlines to provide the best customer experience at the airport and drive non-aero revenues.**
- 3 Buy-in from stakeholders to implement environmental sustainability for a green recovery and innovative future revenue streams.**



Regulatory structures supervising airport charges are struggling to meet current demands

Many airports, particularly larger airports, are regulated on multi-year pricing agreements, where charges – or a formula determining charges – are set for three or five years, based on forecast traffic levels and costs over that period. Pre-pandemic, this structure benefited airlines by providing price certainty and helped airports by encouraging revenue growth and cost efficiency.

However, this traditional regulatory model is generally not designed to govern pricing in extreme circumstances such as we are seeing today, with traffic volumes having fallen far below the levels forecast when existing regulatory agreements were made.

International Civil Aviation Organisation (ICAO) policies, on which airport charging regulations are generally based, state that airlines – and ultimately passengers – should bear their full and fair share of the cost of providing an airport and its essential ancillary services^{xxiii}. A 2019 European Commission evaluation of the EU's Airport Charges Directive notes there has never been a finding of excessive charges made against any airport within the EU^{xxiv}.

Because airports' operational costs have not fallen in line with revenues, a strict interpretation of ICAO's charging principle could see drastic increases in individual airport charges paid by airlines and passengers. At this time, however, the market is unable to sustain such sharp changes in charges.

Airport charges set at annual cost recovery levels could also lead to airlines deciding to operate elsewhere. This would have ramifications for an airport's passenger base and, subsequently, its wider commercial strategy.

Many airlines are demanding lower airport charges in response to their financial challenges. Given airports' high fixed cost bases and critical role in global connectivity, airport operators should be allowed to recover the full costs of providing the airport infrastructure and services. This is important to enable airports' recovery and to support investment needed for the future. These increases can be implemented reasonably to support the recovery of the wider aviation value chain, in line with the track records of many European airports.

Further, there is scant evidence that moderate increases in airport charges would weaken passenger demand. Beyond the aviation industry, there is little understanding of what constitutes a typical airport charge. However, recent research^{xxv} conducted by airports shows that when passengers are made aware that even a relatively large increase in the average airport charge in percentage terms – such as 10% – would only translate to a maximum increase on their ticket price of €1, assuming airlines fully pass on the cost which is infrequently the case, they rarely see it as a barrier to travel.

The airports' perspective:

Charges and regulations

“Unlike airports in other countries, we cannot recover past costs in airport charges. It's a big handicap.”

“We are currently 20% below our price cap, so we could increase our charges, but we want to stay competitive.”

“Even if we could recover losses over the next 5 years, at best the losses we can recover are theoretically around 50% of total losses.”

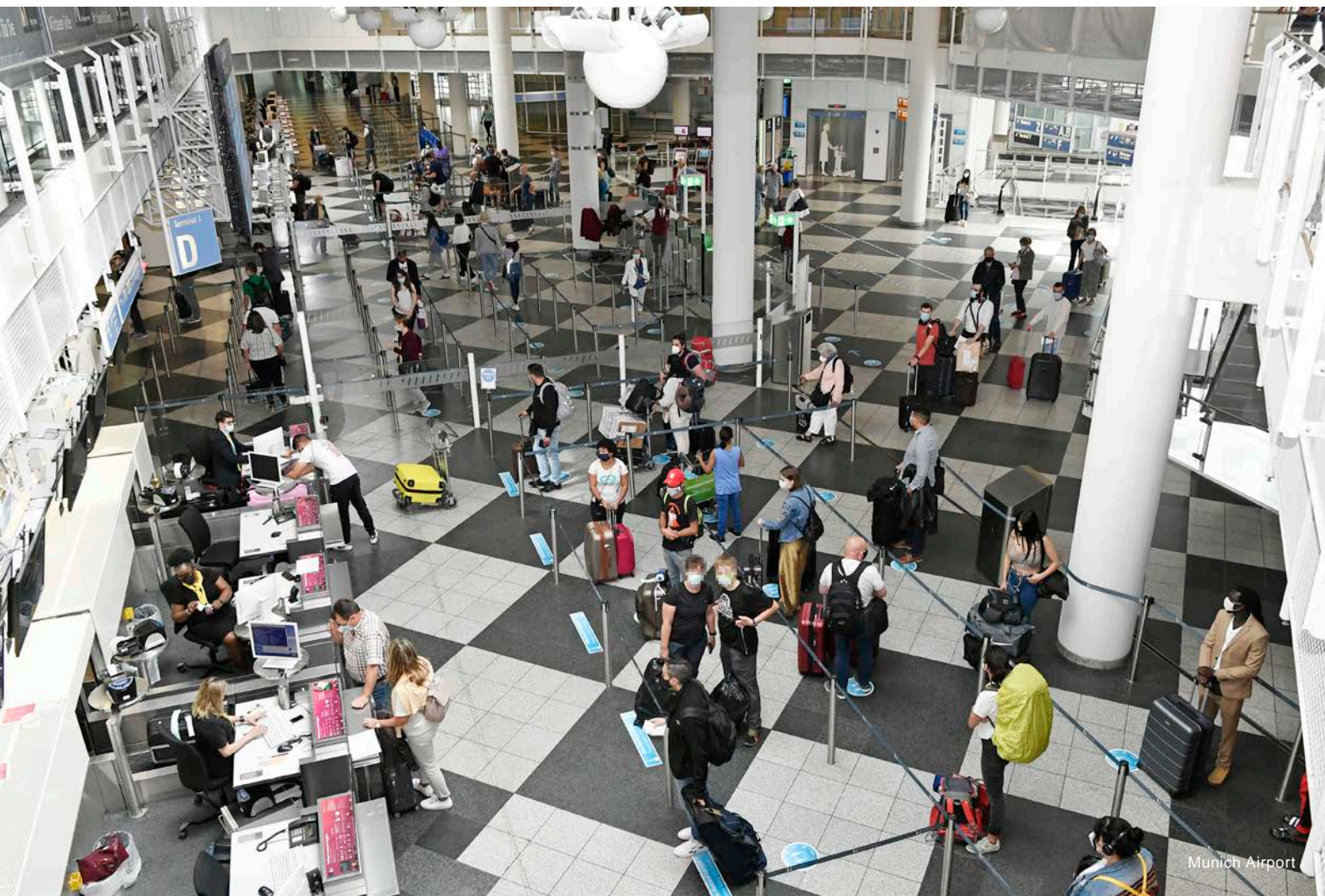
“There will be a cost to consumers if governments and regulators focus support on fragile airlines; rather than allow airports to achieve the financial sustainability required to support future investment.”

More flexible regulatory charging structures

While regulatory approaches to the recovery of costs from previous years differ considerably between countries, many of Europe's airports will see their multi-year regulatory charging agreements expire in the next two years. There is, therefore, an opportunity to encourage regulators to adopt a more flexible approach. Three areas stand out, where regulators could take action to support the sector's recovery:

- 1**
Re-profile cost recovery to future years given passenger numbers are forecast to only recover gradually between now and 2024. Unrecovered costs to enter the Regulated Asset Base (RAB) where this mechanism is used.
- 2**
Recognise that in the post-pandemic era, airport investment has a higher risk perception. First, in the cost of capital or the anticipated return that investors are permitted to receive on airport assets. Second, in the allocation of traffic risk, such as moving away from a pure price cap towards an allowance for a degree of adjustment in the event of traffic shortfalls or excess.
- 3**
Evaluate allowing future charges to recover losses in previous periods where additional cash flow is necessary to maintain and enhance airports in the future.

Some economic regulators have seemed to suggest that it is for the airport owners, investors or operators to bear the burden of financial losses. However, this will challenge the investment case for airports and their stakeholders when considering returns on future investment projects. Ultimately, travellers will suffer as a result of this underinvestment as charges usually need to be increased to finance new investment.



Informació Information Información

Salidas		Salidas	
Hora	Destino	Hora	Destino
12:20	LONDRES/BRN BA 483 20:30	14:00	ROMA
12:30	MENORCA	14:00	SANTIAGO
12:30	AMSTERDAM KL 1679 02:48	14:00	MADRID
12:30	MADRID	14:00	MADRID
14:00	FILIKHELICA	14:00	MADRID
14:00	BRUSSELS/BRN	14:00	DOHA
14:20	ISTANBUL/BRN	14:00	COPENHAGEN
14:30	ZURICH	14:00	FRANKFURT
14:40	BURGOS	14:00	MADRID
14:40	IBIZA	14:00	MADRID
14:40	ZURICH	14:00	GINEBRA
14:40	LUXEMBURGO	14:00	RENTON/BRN
14:40	FLORENCIA	14:00	MANTER
14:40	BRUSSELS/BRN	14:00	AMSTERDAM
		14:50	MALAGA

Informació important
Información importante
Important information

Limitacions a la mobilitat dictades per les autoritats.
Información a las autoridades.
Limitaciones a la movilidad dictadas por las autoridades.
Información en español.

Travel restrictions imposed by the authorities.
Travel passengers are not affected.

info | COVID-19

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Reimagined retail and services

Non-aeronautical services such as retail, car parking and food and drink are vital to the passenger experience and deliver value for airports, concession holders and airlines alike. Historically, passenger profile has been more important in generating non-aero revenue than the location or assortment of products on offer at an airport. If flying habits change permanently, thereby shifting the passenger profile at airports, this may affect demand for different groups of concessionaires. In addition, passengers' consumption behaviours have changed during the pandemic, with many having higher expectations of airport experiences while others are more anxious, both driving very different shifts in buying behaviours.

The relationships between airports and concession holders will remain critical as both adapt to changes in customer profile and demand. Fewer than one in two passengers bought a retail product at the airport pre-pandemic^{xxvi}. There was also a trend for passengers to favour more exclusive and localised products that reflected the place that they were visiting. Regardless, brands increasingly see airports as important locations to promote and launch their products given the high dwell time and emotional connection that comes with travelling. It is important that airports and concession holders acknowledge their interdependence and the mutual benefits that come from collaborative optimisation of the customer journey and of each passenger's revenue-generation potential. Gate announcements, gate allocations, security checkpoint openings, maintenance works, destination networks and even access roads to the airport can all influence the turnover of a concession outlet.

At the same time, airports acknowledge concessionaires have been affected by the pandemic to differing extents. Research indicates that food and beverage has been the most resilient category, followed by news and magazine stores and alcohol, with apparel and luxury goods outlets affected to a much greater degree. The size and corporate structure of concessionaires will further affect their resilience. Large, diversified retail groups that generate much of their revenue outside of airports may have greater resilience than those that depend entirely on airport outlets, for example. While airport parking is expected to increase in the short term, given health concerns, in the long term it is expected that parking revenue will decrease, given climate initiatives and new transportation incentives.

These are important considerations for airports when considering both their near- and long-term concessionaire mix. From a broader perspective, it is also crucial that there is enough variety in an airport's overall asset base to allow it to diversify revenue streams and reduce risks to its income. To that end, airports are considering how spare retail space could be used to inform and engage passengers by working with brands to showcase certain products, offer exclusive and local products, as well as provide space for more experiential and leisure use that passengers can benefit from. Preparing for restart has allowed many airports to collaborate with partners in revisiting the passenger experience by viewing a traveller's transit through the airport as a single journey, rather than multiple points of interaction.

Sustainability will also be a key consideration when reimagining the passenger experience and concessionaire mix. Many airports are already working with concessionaires to reduce waste and environmental footprint by promoting biodegradable packaging in stores, as well as supporting food and beverage providers seeking to use more locally sourced produce^{xxvii}. However, in the long term, digitalisation of the passenger experience will be key to non-aero revenue generation.

Improved customer journeys through digitalisation

Customer journeys at the airport are already shifting faster than before with developments accelerated given the need to reduce physical touchpoints for safety purposes. Some airports have enhanced their customer-facing mobile apps to guide passengers through the airport once they have accessed the airport's network, while limiting touchpoints with staff and enabling social distancing by indicating less congested areas around bottlenecks like security and immigration. Commercial examples include app-based food ordering; online shopping with click and collect points at gates; scan, pay and go technology; and virtual reality applications to test products.

Further progress will depend on greater integration and coordination between airports, airlines and retailers and the willingness of passengers to share their data in exchange for personal marketing, customised advice to transit the airport and the opportunity to make pre-arrival purchases through a central point. Investment, however, will be key, and few airports have investment capital at the moment.

The airports' perspective:

Innovation and digitalisation

”

We want to leverage digital channels to upsell products and services. We get very limited data access unless passengers are booking fast-track, lounge access, or parking. A lot of data-leveraging is already taking place but it's about accessing it from stakeholders like airlines, which is tricky.”

“Generating our own energy is a priority. Remote towers are another key innovation in terms of airside innovations. In three to four years we should be in the position of landing planes remotely. Drones are also important in serving our remote regions.”

“Digital retail is becoming increasingly important. There is potential to work with airlines, where people order via their laptop or iPad in-flight and their purchases are waiting for them upon arrival. There is potential to make that buying experience easier for passengers. Investment is one stumbling block, but the biggest is making it work with the airlines.”

“We've digitalised the full airport journey for passengers on our website, so they can see not only where they have to go and when, but also access retail promotions like coffee vouchers or duty-free discounts.”

“We want to facilitate better ways of doing things through digitalisation, especially in terms of passenger data and journey info.”

Increased innovation

The many steps airports have already taken, such as reducing staffing costs and renegotiating contracts with suppliers and concessionaires, are measures that would be expected of any business facing a sudden economic shock. However, the prolonged impact of the pandemic and the significant obstacles to recovery mean there will also be a need for more innovative, 'outside-the-box' solutions to reduce costs, generate additional revenue, and meet sustainability targets.

We are already seeing myriad examples of airport innovation, from developing solar parks to reduce carbon generation and testing autonomous vehicles to increase safety airside, to adopting digital air traffic towers. The latter can help improve safety and operations resilience while diversifying services, such as drone distribution networks, and thus providing new revenue streams. As with any investment decision, capital and the support of airport owners will be required to launch new initiatives.



Conclusion

Europe's airports have reacted decisively and creatively to mitigate the threats to their businesses posed by COVID-19, while bearing in mind their responsibilities to employees, airlines, travellers, airlines, concessionaires, and other stakeholders. However, the reality of inflexible cost structures and regulatory regimes constrains airports' capacity to rebuild their businesses and meet the future needs of travellers and national economies alike.

It is impossible to imagine a global economic recovery without a resurgence in air connectivity. Airports will have a crucial role in enabling social and connectivity recovery post-pandemic, however they require support on three key areas while passenger numbers recover gradually between now and 2024:

- 1** More flexible regulatory charging structures are required to allow airports to recover pandemic-related losses over the next few years, where additional cash flow is necessary to maintain and enhance airports in the future.

- 2** Collaboration with concessionaires and airlines will be important to ensure the best customer experience is provided to enhance non-aviation revenues for retailers, food and beverage operators, airlines, and air service providers as well as airports.

- 3** Buy-in from lenders and other stakeholders will be needed to implement a sustainable recovery and innovative future revenue streams.

On a continent that values mobility, there must also be greater understanding by policymakers, media, and travellers of how airports operate, the economic forces they are exposed to, and the impact that airport recovery will have on the local communities and the wider transport market following COVID-19. Without this, the recovery process for airports will be long and slow, instead of airports working with stakeholders as a crucial enabler of Europe's economic recovery post-pandemic.

References

- i. ACI EUROPE, "Almost 200 European airports facing insolvency in coming months" (27 October 2020), accessed from: <https://www.aci-europe.org/media-room/279-almost-200-european-airports-facing-insolvency-in-coming-months.html>
- ii. AlixPartners analysis and airport operator interviews (April, May and June 2021); ACI EUROPE, "European Airports' Passenger Traffic - 1 March 2020 - 23 May 2021", accessed from: <https://www.aci-europe.org/european-airports-passenger-traffic>
- iii. AlixPartners analysis; ACI EUROPE, "ACI EUROPE Annual Economics Survey of the European Airport Sector's Financial Results" (June 2021).
- iv. ACI EUROPE, "ACI EUROPE Annual Economics Survey of the European Airport Sector's Financial Results" (June 2021); International Air Transport Association; International Monetary Fund; AlixPartners analysis
- v. AlixPartners analysis of European airport group financial statements
- vi. International Air Transport Association, "International Air Connectivity Crisis Threatens Global Economic Recovery" (30 November 2020), accessed from: <https://www.aviationpros.com/airlines/press-release/21164517/international-air-transport-association-iata-international-air-connectivity-crisis-threatens-global-economic-recovery>
- vii. Air Transport Action Group, "Aviation: Benefits Beyond Borders" (30 September 2020), accessed from: <https://aviationbenefits.org/downloads/aviation-benefits-beyond-borders-2020/>
- viii. ACI EUROPE, "COVID-19 & Airports: Traffic Forecast & Financial Impact" (20 January 2021), accessed from: https://www.aci-europe.org/downloads/resources/210120%20COVID-19%20Airports_2021%20Traffic%20Forecast%20%20Financial%20Impact.pdf
- ix. Airports Council International, "ACI Airport Economics Report 2020" (2020).
- x. AlixPartners analysis of European airport group financial statements
- xi. International Civil Aviation Organization, "Guidance on Economic and Financial Measures to Mitigate the Impact of the Coronavirus Outbreak on Aviation" (December 2020), accessed from: https://www.icao.int/sustainability/Documents/COVID-19_Economic_and_Financial_Measures/ICAO_Guidance_on_Economic_and_Financial_Measures.pdf
- xii. ACI EUROPE, "ACI EUROPE Annual Economics Survey of the European Airport Sector's Financial Results" (June 2021).
- xiii. AlixPartners analysis of European airport group financial statements
- xiv. ACI EUROPE, "ACI EUROPE Annual Economics Survey of the European Airport Sector's Financial Results" (June 2021).
- xv. AlixPartners European airport operator interviews
- xvi. AlixPartners analysis of European airport group financial statements
- xvii. ACI EUROPE, "Almost 200 European airports facing insolvency in coming months" (27 October 2020), accessed from: <https://www.aci-europe.org/media-room/279-almost-200-european-airports-facing-insolvency-in-coming-months.html>
- xviii. Ibid.
- xix. ACI EUROPE, "ACI EUROPE Annual Economics Survey of the European Airport Sector's Financial Results" (June 2021).
- xx. AlixPartners analysis of European airport group financial statements
- xxi. Ibid.
- xxii. Global Business Travel Association, "Business Travel: Full Recovery Expected by 2025" (1 February 2021), accessed from: <https://www.gbta.org/blog/business-travel-full-recovery-expected-by-2025/>
- xxiii. International Civil Aviation Organization, "ICAO's Policies on Charges for Airports and Air Navigation Services" (2009), accessed from: https://www.icao.int/publications/Documents/9082_8ed_en.pdf
- xxiv. European Union, "Directive 2009/12/EC of the European Parliament and of the Council of 11 March 2009 on airport charges" (11 March 2009), accessed from: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0012&from=EN>
- xxv. AlixPartners European airport operator interviews
- xxvi. AlixPartners global retail concessionaire interview (May 2021).
- xxvii. ACI EUROPE, "Sustainability Strategy For Airports" (Second Edition, November 2020), accessed from: <https://www.aci-europe.org/component/attachments/attachments.html?id=1252&task=download>

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ABOUT ACI EUROPE

ACI EUROPE is the European region of Airports Council International (ACI), the only worldwide professional association of airport operators. ACI EUROPE represents over 500 airports in 55 countries. Our members facilitate over 90% of commercial air traffic in Europe. Air transport supports 13.5 million jobs, generating €886 billion in European economic activity (4.4% of GDP). In response to the Climate Emergency, in June 2019 our members committed to achieving Net Zero carbon emissions for operations under their control by 2050, without offsetting.

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For more than 40 years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges – circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line – a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference, it's how we do it.

Tackling situations when time is of the essence is part of our DNA – so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.