

BRIEFING - NOVEMBER 2025

Economics of air transport in Europe

Challenging assumptions on the benefits of air transport growth

Summary

Air transport has an emissions problem. Plans for its growth are presented as bringing economic gains, while environmental losses are minimised. A New Economics Foundation study, commissioned by T&E, examines more closely the **relationship between air transport growth and economic activity**, testing the validity of these claimed benefits.

Major airport expansions are underway at Frankfurt airport; announced at Paris, Dublin, Brussels and Lisbon airports; and recently approved at multiple Spanish and UK airports, notably in Madrid and London. In this context, **assumptions underpinning policy decisions on airport expansions must be carefully scrutinised** - a general claim of economic benefit is no longer sufficient. This study does precisely that.

The study finds that only in a minority of European regions (37%) does air connectivity appear to *drive* growth, while in a majority of regions (53%), air transport demand appears to be a *response* to increasing GDP per capita - that is, income growth is mostly driving outbound air tourism, which may be a drain rather than a net source of spending flows.

What is driving this divergence? The first factor is changes in the demand for business travel. The saturation point - where additional air travel capacity no longer facilitates business growth - has now been reached in much of Europe. This new evidence means that earlier research, which established wider economic benefits driven by air transport growth based primarily upon business passengers, is now outdated.

The second factor is the nature of tourism flows. A nuanced analysis is required here, and shows that related economic growth is *moderated* by a number of factors - and that tourism value could be improved via the quality of land transport, longer stays and local accommodation, rather than the quantity of air arrivals.

Based on the findings of this study, T&E recommends that policymakers:

- Pause growth in air travel, including airport expansions, and conduct a critical review of up-to-date, regionally-specific evidence on the claimed economic benefits
- Put an end to airport expansions in regions where growth in air connectivity no longer drives growth in GDP per capita nor quality tourism value, and where business travel demand is reaching saturation
- Reconsider strategies for transport connectivity and tourism value, prioritising the
 quality of rail networks and local tourism infrastructure over the quantity of air
 tourism arrivals



1. Air transport and growth

Air transport has an emissions problem. Plans for its growth, such as through airport expansion, are presented as bringing economic gains, while environmental losses are minimised.

The Economics of Air Transport in Europe, a New Economics Foundation study commissioned by T&E, examines more closely the relationship between air transport growth and economic activity, testing the validity of these claimed benefits.

1.1 Air transport is off track to deliver decarbonisation

Europe is ramping up action to cut emissions to net zero by 2050, and sectors across the economy, such as electricity, are on track to deliver decarbonisation. In contrast, air transport is notably off track, **lacking a viable within-sector route to net zero** for the medium to long-term.

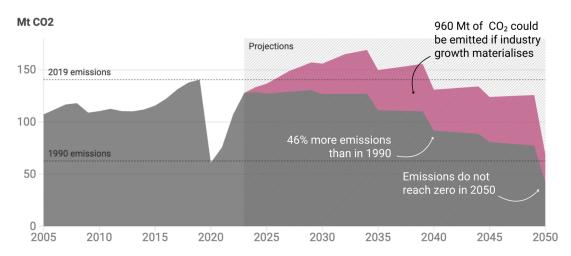
According to <u>T&E's Down to Earth study</u>, passenger air traffic at European airports will more than double in 2050 compared to 2019, if Airbus and Boeing growth projections materialise - and this trajectory would put aviation emissions at odds with EU climate targets. This finding is echoed by other analyses, such as <u>Eurocontrol's Aviation long-term outlook</u>: Flights and CO2 emissions forecast 2024-2050.

Even with a more moderate traffic growth scenario, Eurocontrol concludes that "air traffic, technical, operational and SAF-based savings alone will not be enough to meet the 'Fit for 55' objectives. Out-of-sector measures will need to be taken." Those out-of-sector measures would range between 37% and 52% of CO2 emissions by 2050.

European Commission's 2040 scenario is still not up to the decarbonisation challenge

And 960 additional million tonnes of CO2 could be emitted if traffic growth is left unchecked

- Emissions under the EC 2040 modelling scenario
- Additional emissions if the the traffic growth from the Industry High Growth materialises



Source: T&E modelling based on the European Commission 2040 Impact assessment and Airbus and Boeing market outlooks

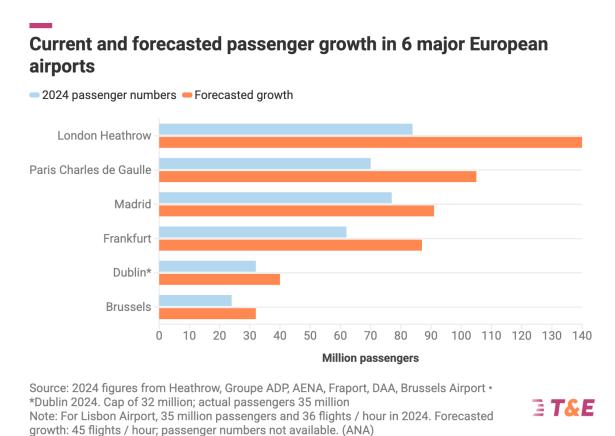




1.2 Yet significant growth is still on the cards

At the pace of passenger growth desired by industry, large airport capacity increases would likely be required.

Major expansions are underway at Frankfurt airport; announced at Paris, Dublin, Brussels and Lisbon airports; and recently approved at multiple Spanish and UK airports, notably in Madrid and London. In this context, **assumptions underpinning policy decisions on airport expansions must be carefully scrutinised** - a general claim of economic benefit is no longer sufficient. This study does precisely that.



2. The air passenger transport - growth relationship

Air transport can both create growth, and be a product of growth. The strength of this causal relationship is analysed in 274 regions, according to the European Union's nomenclature of territorial units for statistics / second level (NUTS2), across the period 2000-2023.

2.1 The direction of causality varies greatly

The study finds that **only in a minority of regions (37%) does air connectivity appear to** *drive* **growth, while in a majority of regions (53%), air transport demand appears to be a** *response* **to increasing GDP per capita** - that is, income growth is mostly driving outbound air tourism.



Industry-funded research tends to headline a *correlation* between air transport and GDP growth at the pan-European level. This study goes an essential step further, evaluating *causation* and revealing regional variation.

Regions where air transport demand appears to be a *response* to increasing GDP per capita dominate much of Northern and Western Europe. In contrast, many of the regions where air connectivity appears to drive growth are located in Eastern Europe. In Southern Europe, while there is moderate probability of a causal relationship running from air connectivity to GDP, this is tempered by factors relating to tourism discussed below.

This shows that the net impact of air transport growth on the wider economy varies greatly across Europe. Therefore, policymakers cannot rely either on 'assumed' growth benefits, or on benefits calculated using relationships based on outdated or non-regionally specific analyses.

2.2 Clustering regional characteristics

The causality analysis is further supplemented by socioeconomic factors such as population density and income levels. The study then applies a clustering process to characterise the air transport-economy relationship across European regions. Countries are assigned based upon which cluster is most prevalent among their regions. Clusters 3 and 4 are combined, as they share similar patterns: evidence of a causal link running from air connectivity to GDP growth is weak. The clusters are further characterised according to the key drivers of their divergence.

Typology: Most prevalent cluster among a country's regions

Cluster 1: Business travel demand, lower connectivity - Lithuania*, Poland, Hungary, Romania, Bulgaria, Greece

Cluster 2: Tourism-dependent, lower income- Portugal, Spain, France, Norway*, Italy, Slovakia

Cluster 3: Low business travel demand, high outbound tourism; and Cluster 4: High income, facing saturation - Ireland, United Kingdom, Belgium[†], Netherlands*, Denmark, Sweden[†], Finland, Germany, Austria, Slovenia, Czechia, Estonia, Latvia

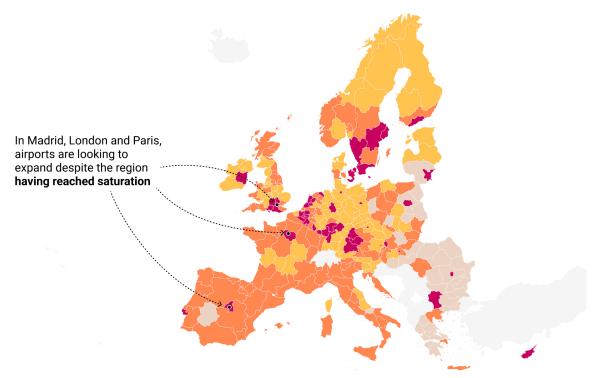


^{*} Countries where there is a tie for the most prevalent cluster are allocated based on the dominant cluster when population weighting is applied.

[†] Countries with a majority of Cluster 4 regions, and lacking complete travel data, are combined with Cluster 3.

Air passenger transport - economy relationship across European regions

- Cluster 1: Business travel demand, lower income
- Cluster 2: Tourism-dependent. Benefits undermined by declines in quality tourism*
- Cluster 3: Low business travel demand, high outbound tourism
- Cluster 4: High income / connectivity, facing saturation



Source: New Economic Foundation: "The economics of air transport in Europe" • NUTS 2016 *Tourism value could be improved via land transport, longer stays and local accommodation, rather than quantity of air arrivals



Typology: Characteristics

Cluster One: Business demand and lower connectivity

Consisting of 32 regions (12%), with 6% of total population and 3% of total GDP across Europe, this grouping is primarily found in Eastern Europe, and are not typically major tourist destinations. Incomes and air connectivity are lower, and business travel demand shows some growth, leaving room for connectivity-led improvement. There is moderate probability of a causal relationship running from air connectivity to GDP.

Cluster Two: Tourism-dependent and lower-income regions

Consisting of 105 regions (38%), representing 37% of population and 33% of GDP, this grouping is mostly found in Southern Europe, with larger-than-average tourism economies.



Incomes are slightly lower than average, however stagnation of business air travel demand is observed. While there is moderate probability of a causal relationship running from air connectivity to GDP, this is tempered by factors including the relative dependence on air transport for tourism arrivals compared with land routes and domestic tourism, tourism infrastructure, and the duration of stay. Namely, tourism value could be improved via land transport, longer stays and local accommodation, rather than the quantity of air arrivals.

Cluster Three: Low business demand and high outbound tourism

Consisting of 76 regions (28%), home to 30% of population and 28% of GDP, this grouping is most commonly found in Germany, the UK, Czechia and Scandinavia. Air connectivity is already well-developed, and there is evidence of business air travel demand saturation, or even decline. Here there is low support for a causal relationship running from air connectivity to GDP; instead causality is highly likely to run from GDP growth to air connectivity. That is to say, growing incomes are fuelling demand for outbound leisure travel, leading to tourism spending deficits.

Cluster Four: High income, high connectivity regions facing saturation

Constituted of 60 regions (22%), which host 26% of population and 36% of GDP, this grouping includes most European capitals, and most of the best-connected regions on the continent - in Southern and Western Germany, the Southeast of the UK, and much of Belgium, the Netherlands, and Sweden. With high GDP, these regions appear to be approaching a point where additional air connectivity no longer adds significant value. There is evidence of business air travel demand saturation. Support for a causal relationship from connectivity to GDP is low.

2.3 Key drivers of divergence

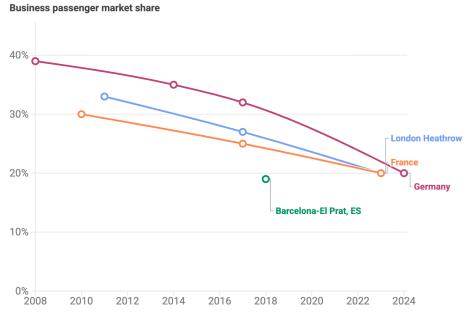
What is driving this divergence between regions? The study identifies two key factors.

2.3.1 Demand for business travel

The first factor is changes in the demand for business travel. In Clusters 2, 3 and 4, high levels of air connectivity have saturated this demand. And for a number of business sectors, the marginal benefit of air travel compared with digital alternatives has declined. Data from London Heathrow and Barcelona airports, as well as national data from France and Germany, point to a similar story of declining and/or low business shares of air trips.



Market share of business air passengers in selected locations

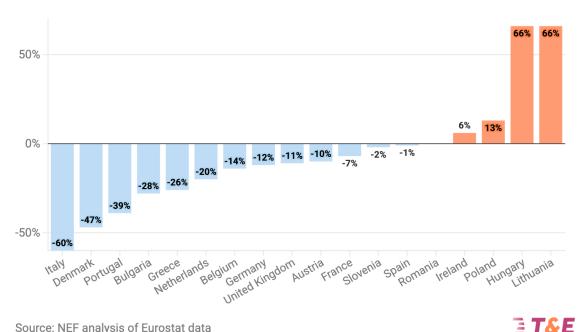


Source: NEF analysis of passenger surveys from the UK Civil Aviation Authority, the German Flughafenverband (ADV), the French Ministère Chargé des Transports, and the Spanish airports 🔁 T&E manager Aeropuertos Españoles y Navegación Aérea (AENA)

This is confirmed by national data from Eurostat, particularly since the Covid pandemic. In contrast, some countries in Cluster 1 show growth in business air travel demand.

Change in the number of trips made by air by European residents for business purposes

Data from 2019-24



Source: NEF analysis of Eurostat data



This new evidence means that earlier research, which established wider economic benefits driven by air transport growth based primarily upon business passengers, is now outdated. **The saturation point - where additional air travel capacity no longer facilitates business growth - has now been reached in much of Europe** (Clusters 3 and 4). Saturation reduces the role of air transport growth as a causal driver of GDP per capita growth - and this needs to be factored into political decisions.

2.3.2 Nature of tourism flows

The second factor driving divergence between regions is the nature of tourism flows. Clusters 1 and 2 see overall average net travel spending surpluses of 1.2% and 1.5% of GDP respectively. However **Clusters 3 and 4** show an overall average deficit of 1.2% of GDP suggesting that **air travel is a net drain**, rather than a net source of spending flows.

European nations and their net travel services balance of payments in 2024

Label number shows the proportion of GDP

Cluster grouping

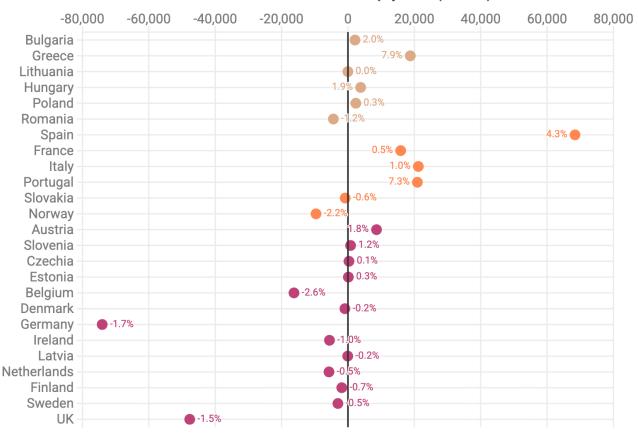
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2

3

4

Net travel services balance of payments (millions)



Source: NEF analysis of Eurostat data





Cluster 1 regions are less typically major tourist destinations, leaving some room for connectivity-led improvement. However, a more nuanced analysis is required for Cluster 2 - air transport growth can be a facilitator of GDP growth, but analysis suggests that this growth is moderated by a number of factors relating to what provides tourism value.

Among visitors to formal tourist accommodation, the average number of nights spent per trip has been falling rapidly. It seems likely that a rise of frequent flying on shorter-duration trips has increased the share of trip expenditure going to transport costs, thereby reducing the share retained by local communities.

A significant proportion of tourism activity does not rely on air travel and can be created through alternative means, such as rail infrastructure. The number of nights spent per trip can be increased with no net increase in air transport (e.g. through longer stays, land transport, or domestic tourism). The amount of value created is influenced by the quality of the local tourism infrastructure (e.g. hotel beds) and the amount of value left by visitors, not just the volume of arrivals.

Namely, tourism value could be improved via land transport, longer stays and local accommodation, rather than the quantity of air arrivals. This raises important questions about how tourism value is being created and distributed in Europe. This will be the subject of Part 2 of the study (to be published in 2026).

3. Conclusions and policy recommendations

Industry-funded research tends to headline a *correlation* between air transport and GDP growth at the pan-European level. This study goes an essential step further, evaluating *causation* and revealing regional variation.

Analysis shows that a causal relationship in which air connectivity growth drives GDP per capita growth can only be statistically supported in 37% (101) of regions, many of which are located in Eastern Europe. On the contrary, in 53% (145) of regions a causal relationship in which income growth drives air transport demand (principally outbound tourism) was found. These regions dominate much of Northern and Western Europe.

The latter appear to be approaching a point of saturation, where additional air connectivity no longer adds significant value. And yet these are the same regions where major airport expansions are underway in Frankfurt; announced in Paris, Dublin, Brussels and Lisbon; and recently approved by governments in Madrid and London. In this context, there is a need for closer scrutiny - general claims of economic benefit are no longer sufficient.

A critical review of the assumptions and underlying modelling that has thus far been guiding decisions on policies impacting air transport and tourism (e.g. airport expansion and air transport taxation) is therefore essential, to ensure that up-to-date, regionally-specific input data and models are used, in order to accurately inform political decisions.



Based on the findings of this study, T&E recommends that policymakers:

- Pause growth in air travel, including airport expansions, and conduct a critical review of up-to-date, regionally-specific evidence on the claimed economic benefits
- Put an end to airport expansions in regions where growth in air connectivity no longer drives growth in GDP per capita nor quality tourism value, and where business travel demand is reaching saturation
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Further information

Denise Auclair
Head of Travel Smart Campaign
denise.auclair@transportenvironment.org

Carlos López de la Osa García Aviation Technical Manager carlos.lopez@transportenvironment.org

