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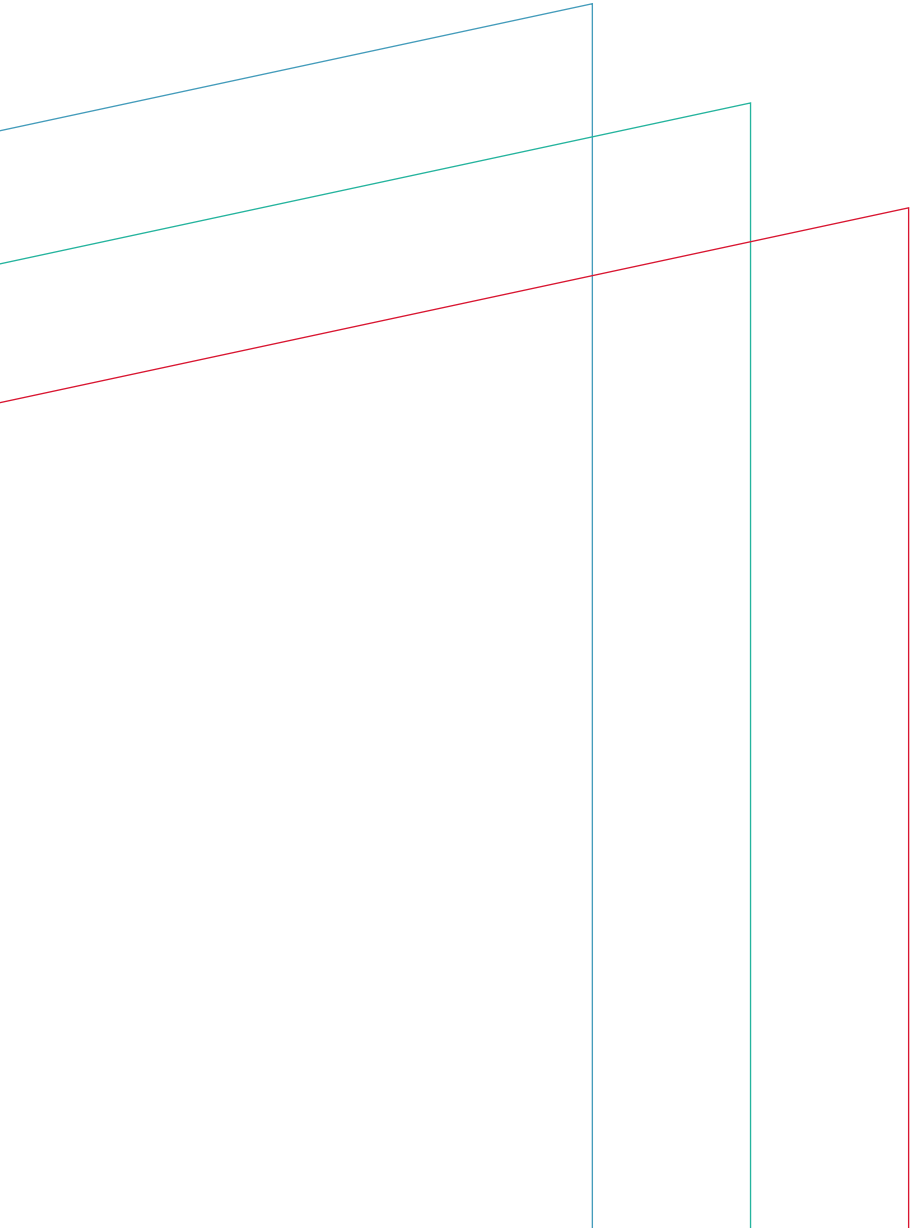
# THE ECONOMICS OF AIR TRANSPORT IN EUROPE

PART TWO:  
AIR TRANSPORT AND TOURISM

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## EXECUTIVE SUMMARY

Since 2010, tourist numbers have grown rapidly across Europe, primarily enabled by growth in air passenger transport. Significant further growth is forecast, with movements by air likely to grow by around 10% over the next five years. This growth is facilitated by airport expansion and generous tax arrangements for the aviation sector. The air transport industry claims the positive economic impacts that tourists can bring as its own, but rarely, if ever, takes responsibility for the economic downsides.

This report dissects the economic impacts caused by rising international air tourist arrivals. It is NEF's second report, taking a deeper look at the economic impacts of air transport growth in Europe,<sup>1</sup> and focusing particularly on whether the economic impacts of air transport are beneficial and fairly distributed among regions and social groups.

Our original contribution is a new model of the house and rent price effects of incoming air tourists across 12 major European economies. Using relationships informed by recent academic research and original modelling, we present projected impacts on house and rent prices resulting from international air tourism over the period 2019–31. We evidence a wealth transfer where property owners benefit at the expense of renters, with real annual rents in some of Europe's largest tourism economies expected to rise by more than €150 per year over the next five years. These rises, which represent national average increases, will be concentrated in tourist hotspots and will primarily burden lower-income households.

Residents of social housing and those in rent-controlled accommodation likely experience some level of short-term protection against direct price increases. But, on the open market, rent prices are highly sensitive to house prices (with close to 100% pass-through). Over the long term, most of the house price impacts of air tourism growth are likely to pass through to renters. Even where they do not, e.g. as a result of government policy action, renting households can become trapped in their home (ie experience an opportunity cost as their ability to move or buy their first home is limited by rising prices).

**TABLE 1: MODELLED ANNUAL LOSS TO RENTERS RESULTING FROM TOURISM GROWTH ASSOCIATED WITH FORECASTED GROWTH IN AIR TRANSPORT BETWEEN 2026 AND 2031, IN 2026 PRICES.**

Country	Change in tourism arrivals	Average house price change	Annual household rent change	Proportionate average rent change
Austria	4.1%	€ 2,300	€ 93	0.6%
Belgium	4.3%	€ 1,100	€ 63	0.4%
Denmark	6.9%	€ 2,700	€ 103	0.6%
France	5.0%	€ 2,000	€ 95	0.7%
Germany	5.4%	€ 1,300	€ 39	0.3%
Greece	13.0%	€ 4,100	€ 163	1.7%
Ireland	10.2%	€ 5,500	€ 251	1.4%
Italy	9.0%	€ 2,300	€ 132	1.2%
Netherlands	2.5%	€ 1,700	€ 61	0.3%
Poland	7.7%	€ 900	€ 30	0.4%
Portugal	12.6%	€ 4,100	€ 193	1.7%
Spain	11.8%	€ 3,500	€ 217	1.6%

## THE ECONOMICS OF AIR TRANSPORT IN EUROPE

### PART TWO: AIR TRANSPORT AND TOURISM

We also present evidence that the upward pressure on house prices from growth in tourism arrivals may lead to negative productivity outcomes in the wider economy. In countries such as Spain, Portugal, and Italy, the misallocation of capital caused by property price spikes from 2019 to 2031 would be expected to result in around a 0.4–0.5% reduction in whole-economy business investment. An industrial strategy that overemphasises tourism could reasonably weaken higher-productivity sectors, harming the long-term viability of industries and jobs.

Having identified the distortive wealth transfers of air tourism growth, the remainder of our analysis looks at the extent to which communities (particularly lower-income) are compensated for the losses they experience. This means looking at how more traditional impact domains of job creation, wages, and business ownership dividends are shared across the population.

Alongside a historical rise in air tourist arrivals, jobs in hospitality have grown rapidly, suggesting that inbound tourism has made an important contribution to bringing down unemployment rates in many major tourist destinations. Yet, evidence shows that air tourism growth has failed to deliver real wage growth and that the largest tourism-receiving countries are among the worst performers.

All the countries in the group that saw real wages decline still saw large rises in aggregate gross value added (GVA), but all bar the Netherlands saw a decline in productivity (GVA per employee). Italy, France, and Spain were the worst performers. The large overall rises in real GVA point to the creation of value somewhere in the economy, but living standards for the majority of tourism workers have not improved. Business owners in many European nations are capturing large aggregate and proportionate shares of the value created through inbound air tourism.

The share of GVA captured by large businesses (250+ employees) has changed over time. In the accommodation services sector, where large businesses are more dominant, very large increases in the large-business share were seen between 2013 and 2023 in Greece, Spain, and France.

Interestingly, while large businesses concentrate ownership and profits, there is little evidence that consolidation has increased productivity or wages. In Poland and Portugal, where the large-business share has been in decline, productivity and wages have improved.

Europe's extensive reliance on air-tourism-led growth presents a range of major social and environmental risks. Those risks amplify as physical, environmental, social, and cultural saturation points for unabated tourist inflows are reached. We evidence weakness in the quality and reality of promised economic gains when factoring in wealth and welfare transfers away from low-income local communities. We show that over the long term, the air tourism industrial strategy not only costs the environment dearly but may also disadvantage wider business sectors and reduce productive investment in favour of rent seeking and extraction.

# 1. INTRODUCTION

**T**he EU's tourism sector is at a crossroads. The conflict among tourism-driven economic growth, the affordability of housing, and the saturation of public services and spaces, as well as its wider impacts on the climate, is becoming an urgent area for policy intervention.

Air transport is the principal enabler of international tourism growth, particularly following a recent decline in business use of air travel. But, despite air transport's essential role in European tourism, economic and political arguments that justify support for the aviation industry largely sidestep the economic impacts of tourism. At best, impacts are described in broad-brush macroeconomic terms focusing on benefits to gross domestic product (GDP) and jobs and ignoring issues such as additionality (net impact), the distribution of impacts, and their sustainability.

In Part One of this series,<sup>2</sup> we applied a critical lens to the macroeconomic impacts of air transport growth. We showed that GDP impacts vary greatly in their spatial distribution, both among types of economy and among development stages. We highlighted that in some parts of Europe, there was little to no evidence of any positive economic growth (GDP per capita) benefit from air transport growth, particularly where business demand for air travel was low and where nations and regions were sending rather than receiving tourists. These include parts of Germany, the UK, and Scandinavia.

We did, however, highlight the causal contribution air transport growth has made to GDP per capita growth in major tourism-receiving regions, particularly in countries like Spain, Italy, and Portugal. Tourism-led growth strategies made important contributions to job creation, particularly coming out of the 2007–08 global financial crisis. However, rises in indicators such as GDP, and even jobs, do not necessarily mean improvements in quality of life. Headline changes can also

mask the unequal distribution of impacts and the unsustainability of impacts that have more pervasive costs to societies. Here, we focus on how positive and negative impacts are distributed among social groups, with a primary focus on what we call the 'tourism channel', the principal impact of air transport on most economies.

This report begins with a brief qualitative review of some of the key questions facing the air transport and tourism sectors. We present an original analysis of the wealth distribution impacts of air travel tourism growth, specifically via house and rent prices. We also consider the broader productivity impacts across sectors arising from higher property prices in wider tourist-receiving economies. We then explore the size and distribution of air tourism growth impacts on the everyday economy, including jobs, wage growth, and labour productivity. Finally, we consider the distribution of economic impacts in the tourism sector across workers and owners, and large and small businesses.

## 2. REVIEW: THE WINNERS AND LOSERS OF TOURISM-LED GROWTH

### 2.1 TOURISM'S CLIMATE IMPACT

Europe is the fastest-warming continent in the world, heating up at a rate almost twice the global average.<sup>3</sup> Europeans experience more frequent climate events, including floods, wildfires, extreme heat, and droughts.<sup>4</sup> This threatens infrastructure, energy and food security, ecosystems, water resources, financial stability, and people's health across the continent. At the same time, Europe continues to be the world's largest tourism destination, receiving over 50% of all global tourist arrivals, a sector that grew by 4% between 2024 and 2025.<sup>5</sup> These two trends are closely interconnected. Tourism growth – supported in large part by the expansion of air transport – plays an important role in shaping the trajectory of emissions and associated climate risks across the continent.

The tourism industry was responsible for 8.8% of global carbon emissions in 2019, with a growing rate of 3.5% per year.<sup>6</sup> If maintained, tourism emissions are set to double every 20 years. In particular, the aviation sector is responsible for an estimated 52% of the tourism industry's direct emissions and much of the industry's emissions growth,<sup>7</sup> yet the expansion of the aviation industry continues to dominate national economic outlooks and strategies in many European countries. Policy support continues, despite accelerating tourism demand growth appearing incompatible with the Paris Climate Agreement to limit warming to 1.5 degrees.

### 2.2 SIGNS OF DISCONTENT WITH TOURISM'S ECONOMIC FOOTPRINT

More often than not, policy support for air tourism growth is attributed to economic benefits in the domains of jobs and growth. Precisely identifying the tourism contribution to headline economic indicators such as jobs, gross domestic product (GDP), and gross value added (GVA) can be difficult, as tourist spending blends in with ordinary domestic retail, hospitality, and leisure spending, and flows both in and out of nations. However, the sector remains hugely important for employment and business activity in some of the most popular destination nations in Europe, such as Spain, Portugal, Italy, and Greece. Yet, it is in these same destinations that protests by residents have become standard in the high-season summer months. Key protest calls relate to the strain on affordable housing and pressure on public services and spaces.

Unsurprisingly, studies have shown that growth in air transport, and a region's relative air transport intensity, is highly correlated with indicators of overtourism.<sup>8a</sup> Rising numbers of visitors, as well as the capacity of localised resources to withstand them – from a physical, economic, environmental, or social perspective – have been associated with a rise in protests against overtourism in many European cities and regions. Many of these protests have focused on the inequity between the local winners and losers from tourism growth. Regions experiencing anti-tourism protests in recent years almost always receive some of the highest levels of foreign tourist arrivals on a per-resident basis (Table 2), with the vast majority arriving by air.

The impacts of tourism go beyond traditional economic benefits, particularly for regions where tourist demand is near or beyond the saturation point, where local resources and infrastructure are unable to respond to the growing number of visitors, and where residents are priced out of urban centres or their places of work.

a The cited report for the European Commission defines overtourism as such: "Overtourism describes the situation in which the impact of tourism, at certain times and in certain locations, exceeds physical, ecological, social, economic, psychological, and/or political capacity thresholds."

**TABLE 2: SELECTED EUROPEAN REGIONS THAT HAVE BEEN HOST TO TOURISM-RELATED PROTESTS IN THE PAST FIVE YEARS AND FOREIGN TOURIST ARRIVALS PER RESIDENT (NUMBER AND RANK)**

Region code	Country	Region (NUTS2)	Foreign arrivals per resident	Rank /273
EL42	Greece	Notio Aigaio	19.0	1
ES53	Spain	Illes Balears	9.2	8
ES70	Spain	Canarias	4.9	13
PT30	Portugal	Região Autónoma da Madeira	3.9	16
NL32	Netherlands	Noord-Holland	3.8	18
ITH3	Italy	Veneto	2.7	26
PT17	Portugal	Área Metropolitana de Lisboa	2.0	32
ES51	Spain	Cataluña	2.0	33
<b>EU 27 countries</b>			<b>0.9</b>	

Source: NEF analysis of news sources and Eurostat data.

Regional and national European governments have tried to curb the adverse impacts on local communities through policies such as restrictions on short-term rentals, tourist taxes, and limits on organised tourist group sizes. But at the same time, decisions, particularly those related to aviation tax and airport expansion, encourage rapid growth in arrival numbers.

The EU has long considered tourism expansion as an essential strategy for competitiveness and regional development. More recently, a focus on sustainability, not only regarding natural assets, but also regarding the protection of cultural assets, infrastructure, housing, and the experience of local communities, has moved to the forefront.<sup>9</sup> In 2025, the EU announced its first tourism strategy, emphasising sustainability and tackling overcrowding in tourist hotspots.<sup>10</sup> In December 2025, the EU also announced a legislative initiative on short-term rentals for areas under housing stress as part of the first European Affordable Housing Plan.<sup>11</sup>

However, addressing the direct impacts of the persistent growth in the arrival of more tourists without acknowledging the role of air transport in the tourism economy risks a narrow and inefficient policy response. Indeed, it appears that air transport policy and tourism policy are operating in siloes, at times in direct contradiction of each other, as we will explore further.

### 2.3 ASSESSMENT FAILURE

Policy tensions are enabled and reinforced by the limits and silos of economic impact assessment itself. Despite growing concern over the impacts of tourism on local populations and spaces and the increasing climate risks to the region, governments in major European tourism-receiving nations continue to double down on arguments for the need for tourism-driven growth of the aviation sector. In Spain, a commitment of €12.9bn for airport improvement and expansion across the country made headlines in September 2025, including the expansion of the Barcelona and Madrid airports.<sup>12</sup> In Lisbon, improvements to both terminals at the city airport to boost capacity, while a replacement airport gets final planning sign-off, are currently underway.<sup>13</sup> Athens is also preparing to increase its annual capacity by 25% through a €1.3bn expansion programme to commence this year.<sup>14</sup>

Across Europe, air transport is expected to grow rapidly over the next five years – though the ongoing disruption caused by the USA and Israel’s attacks on Iran could yet dampen this growth. Few decisions provide any indication that policymakers are critically reviewing the net economic implications of that growth, barring perhaps some recent, limited moves to increase ticket taxes. Where airport expansion has been reviewed or refused, this has usually been

driven by environmental rather than economic considerations, such as in the recent debates at Paris Charles de Gaulle and Amsterdam Schiphol airports.

A range of economic impact assessment approaches has been applied in recent years, both in the service of policy/scheme promotion and evaluation. Most approaches sidestep tourism as a discrete impact area. Typical examples include the study promoted by KLM/Air France, which claims to examine its “economic and social contribution”<sup>15</sup> and the study by Intervistas for Dublin Airport.<sup>16</sup> These studies look primarily at the size of the aviation supply chain as measured in direct and indirect jobs and GDP. Tourism impacts are an afterthought, and the air transport sector is seen largely in isolation, its interactions with the dynamics of the wider economy ignored.

A similar approach is taken by Oxford Economics for the Air Transport Action Group (ATAG) in its global Aviation: Benefits Beyond Borders 2024 study.<sup>17</sup> Oxford Economics does supplement its study with an approach (used extensively in the consultancy literature), which assesses the high-level correlation between air transport growth and GDP. This approach packages tourism impacts with air transport’s net impact on the economy. Distributional impacts are ignored, particularly regarding wealth. A similar approach to tourism was taken in a 2024 study by SEO Amsterdam for ACI Europe. An assessment was also included on the issue of equality, but was limited to a single page discussing gender equality. Major issues, such as house and rent price impacts, were ignored.

Studies fail to consider house and rent price impacts even when such impacts are at the very top of the political agenda, examples being the study commissioned by Aena into Barcelona El Prat airport<sup>18</sup> and the aforementioned Dublin airport study. In the Barcelona case, catalytic effects on local tourism revenues made up the largest component of the economic impacts (around 30–40% of benefits), which the report claims will result from the proposed expansion of passenger capacity from 60 million per year to 72 million. Yet the study fails to mention the large wealth/welfare transfer likely to result from the proposed scheme and its tourism impacts, particularly through its rent and property price impacts.

## **2.4 TOURISM-DRIVEN PROPERTY WEALTH TRANSFERS**

It is well established that increased tourist arrivals can ultimately lead to higher house and land prices, higher rents, and less affordable housing. While much recent research focuses specifically on the impact of peer-to-peer accommodation platforms (eg Airbnb),<sup>19</sup> the relationship predates these services.<sup>20</sup>

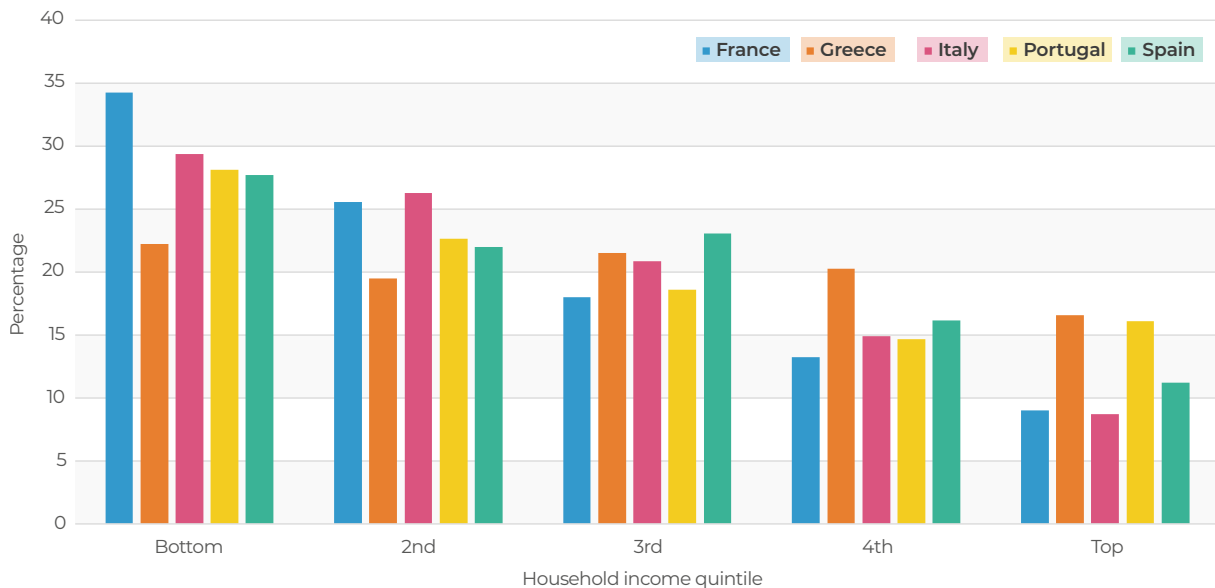
Indeed, these impacts can be very strong in tourism hotspots, particularly following housing policy liberalisation, as demonstrated in Lisbon and Porto, Portugal, where researchers evidence 27% and 16% increases in house prices, respectively, resulting from just a one percentage point rise in the housing market’s share of short-term rental accommodation following market liberalisation.<sup>21</sup> The relationship between tourist arrivals and house and rent prices is non-linear, growing stronger as the tourism sector’s footprint in the local economy grows.<sup>22</sup> However, recent studies have characterised the relationship, suggesting a 10% increase in tourism receipts can increase house prices by around 2–4% on average in the long run.<sup>23</sup>

In general, a rise in house prices will lead to a commensurate rise in rent prices, although this theoretical relationship can be moderated in the real world by a range of factors, including social housing programmes and government policies. In Spain, for example, several rent controls and measures have been attempted, such as setting a national limit on the annual rent increase applicable, introducing obligations to renew contracts on initial conditions in stressed housing market areas, and setting out a rental price reference system.

Even when regulations are present, rent rises can still pass through to households. This happens as contracts are renewed, and as properties change hands or are reclassified for recreational, tourist, or leisure use. Even where loopholes are closed, rent-capped households and non-house-owning individuals experience a notional loss, or opportunity cost, as they move further away from being able to afford to move home or purchase a property.

**FIGURE 1: RENTING HOUSEHOLDS ARE CONCENTRATED IN THE LOWER-INCOME GROUPS**

Renting households distributed across the income distribution



Source: NEF analysis of OECD HM1.3.A3.

Generally, renting households are concentrated in the lower-income segments of the population (Figure 1).<sup>24</sup> In Austria in 2022, only 23% of the bottom quintile of households were homeowners, in contrast with over 50% of the top half. In France, the equivalent numbers were 33% at the bottom and over 65% among richer households. In southern Europe, house ownership is more prevalent, but still unequal. While in some nations the cost exposure of renting households might be slightly reduced by larger shares of social housing (eg France), the unequal distribution across income groups of rent price increases is still significant.

Higher house and rent prices, not matched by commensurate rises in incomes, can lead to affordability problems. These are documented extensively, such as in Croatia, where the seasonality of tourism is highlighted as a compounding factor.<sup>25</sup> Perhaps unsurprisingly, the impact on affordability is stronger in economies with higher tourism dependency.<sup>26</sup> It is also stronger in places where income inequality is higher.<sup>27</sup>

Models, discussed in our last report,<sup>28</sup> have shown the historic causal contribution of air transport growth to economic indicators such as GDP, labour productivity, and employment in some locations. These models almost entirely ignore the local price

effects of air transport growth. The studies, which measure aggregate changes in economic flows, hide the redistribution of those flows and the resulting transfers of wealth stocks. Most models of GDP impact, for example, are blind to the transfer of income or wealth from poorer households to richer ones because, nominally, this has no (or minimal) impact on gross GDP.<sup>b</sup>

## 2.5 ALTERNATIVE ASSESSMENT APPROACHES ARE AVAILABLE

Academic research has explored the net social welfare change resulting from tourism. Approaches such as ‘carrying capacity’ assessments,<sup>29</sup> the ‘limits of acceptable change’ framework,<sup>30</sup> and others attempt to consolidate diverse quantifiable impacts into comparable metrics and scenarios. Examples include studies of Barcelona<sup>31</sup> and Sardinia.<sup>32</sup> These approaches attempt to recognise that the social good of tourism growth is nuanced, and that traditional economic impacts, overfocused on indicators like GDP and job creation, can miss serious socially and environmentally unsustainable trends. While recognised in the tourism evidence and policy spheres, these concepts and their findings do not feature when it comes to the appraisal of air transport policy.

<sup>b</sup> Widening inequality can actually worsen economic outcomes as spending is redistributed from individuals with a high propensity to consume to wealthier individuals with a lower propensity.

Academic studies also show that a more nuanced assessment of the equity impacts of tourism growth is possible. Income inequality has typically been the primary indicator of interest. Incera and Fernández (2015) highlighted that higher-income groups benefited more than low-income groups from tourism in Galicia, Spain, in the early 2000s.<sup>33</sup> Their paper highlighted tourism revenues flowing more into profits and self-employed earnings than into wages, and suggested that even after factoring in the redistributive policies of government, tourism was worsening income inequality.

But study results on the income inequality issue vary by place and time. More recently, Castilho and Fuinhas (2025) found that tourism capital investment and international tourist arrivals contributed to a reduction in within-country income inequality in EU nations – likely a result of tourism’s contribution to employment.<sup>34</sup> Zhang and Yang (2023) looked at the distributional effects of tourism growth in Iceland and found similar positive results regarding income equality.<sup>35</sup>

Rarely, however, do studies consider the thorny issue of the impacts of wealth distribution and interactions. Zhang and Yang (2023), in their study of the Icelandic tourism boom, looked at wealth inequality and identified a widening of wealth inequality.<sup>36</sup> The key pathway through which the impact of tourism growth on wealth equity is considered is through impacts on house and rent prices.

Many studies look at the impact of airports and air transport growth on house prices, though more commonly focusing on the negative price (and productivity) effects on housing in proximity to an airport and its noise envelope.<sup>37</sup> Some have looked at broader price effects, particularly studies in New Zealand, such as from Tsui et al. (2019)<sup>38</sup> and Ngo et al. (2023),<sup>39</sup> which evidence strong positive effects running from air transport to house prices. In Europe, however, there appears to be a gap in the research whereby air transport policy is considered only as a driver of negative house prices in proximity to the airport and not as a driver of increased house prices through its facilitation of tourism in the wider economy. While the linkages between European tourism and house prices are addressed in a separate academic literature base, they are largely detached from air transport policy questions.

## 2.6 REVIEW CONCLUSIONS

A large body of economic impact assessments aims to promote and evaluate policies associated with growth in passenger air transport volumes. These studies underpin a policy environment highly supportive of leisure passenger air transport growth. Assessment of the income and wealth inequality impacts of air transport growth is almost absent in this literature, with virtually no consideration given to the wider economic impacts of air transport on house and rent prices. There is a void between the world of air transport economics and tourism studies, where such considerations are more prominent. This gulf manifests most obviously in key airport expansion decisions in highly ‘touristified’ cities such as Barcelona and Dublin, where economic impact studies produced by the air transport sector appear detached from the everyday realities of life in such places.

### 2.6.1 Assessment framework

In this report series, we are working with a simple assessment framework which guides our analysis of the economic impacts of air transport growth:

1. Does air transport growth have an impact on economic activity, and if it does, is that impact positive, and where, when, and why does it occur?
2. Are the economic impacts of air transport usefully and fairly distributed among regions and social groups?
3. Are claimed economic impacts robust when considering climate and environmental damages and ecosystem tipping point risks, and are there lower-impact alternatives?

This report focuses primarily on (2): Are the economic impacts of air transport usefully and fairly distributed among regions and social groups? To explore this question, we turn the typical order of impact assessment on its head. We first introduce novel analysis measuring the house and rent price impacts of air transport growth. Having set out the unequal and distortive impacts in this domain, we then review the use and distribution of impacts through the more traditional routes of jobs and wages, and also consider some implications of business ownership patterns.

# 3. ANALYSIS: HOUSE AND RENT PRICE IMPACTS

## 3.1 OUR METHOD

Here we seek to measure the house and rent price impacts of air transport growth, and to quantify the welfare transfer between property owners and renters. Several academic studies are available that provide routes to quantifying this impact. Our analysis focuses on updating, applying, and interpreting established relationships in the contemporary policy context, particularly building out the often-ignored connection with air transport policy. We provide an indication to policymakers of the potential size of the impact and its sensitivity to

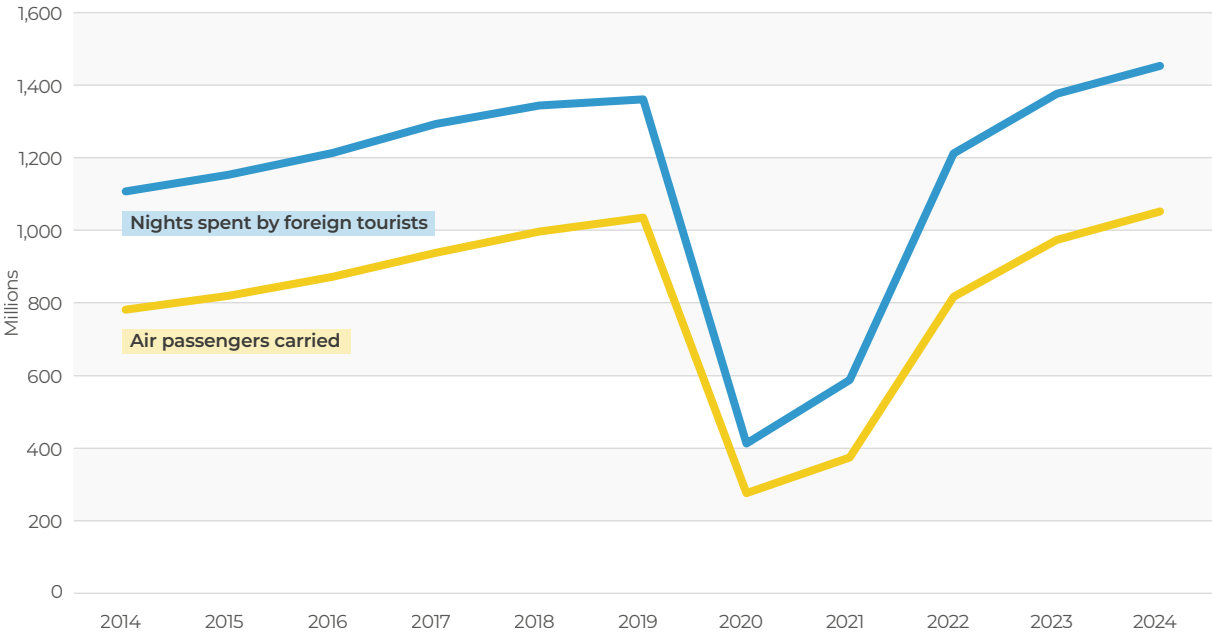
policy decisions. Due to data availability limitations, our analysis focuses on just 12 major European nations: Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Poland, Portugal, and Spain.

### 3.1.2 Forecasts of tourism growth

Following a period of relative stability in the first decade of the millennium, the number of nights spent by foreign residents in tourist accommodation grew rapidly from 2010. Between 2014 and 2024, nights in formal tourism accommodation rose by 31% across the EU (Figure 2), equivalent to 345m nights per year. Some of the largest proportionate rises were seen in Portugal (+67%) and the Netherlands (+78%), while in absolute terms the increase was led by Italy (+67m) and Spain (+63m), which contributed the majority of the growth seen in Western Europe. If the rise in nights spent in informal, collaborative/platform-economy accommodation (eg Airbnb) were considered, the growth rates would likely be higher still, but low data quality prevents accurate tracking.

**FIGURE 2: NIGHTS IN FORMAL TOURISM ACCOMMODATION IN THE EU HAVE INCREASED BY NEARLY A THIRD SINCE 2014**

Nights spent by foreign tourists in formal accommodation establishments and air passengers carried in EU27 countries



Source: NEF analysis of Eurostat.

These trends in tourism nights were facilitated, in part, by growth in air passenger numbers. Air passenger numbers (including both inbound and outbound passengers) rose 35% across the EU over the same period. Among the major tourist recipient nations, Portugal (+97%) and Greece (+77%) saw the fastest growth, but again Spain (+94m passengers) and Italy (+61m passengers) saw the largest absolute increases.<sup>c</sup> Though correlated, the relationship between air passengers and tourist nights is not perfect. As described in our previous report, there is evidence of some major tourist destinations experiencing declines in length of stay per trip, leading to air passenger growth outpacing growth in nightly stays.<sup>40</sup>

In our analysis, we estimated the notional house and rent price impacts resulting from recent and forecasted increases in tourist arrivals via air. We use the Eurocontrol historic record and forecast of air traffic movements over the period 2019–31. We present the retrospective, modelled, impact over 2019–25, the forecast impact over 2026–31, and the impact over the full period 2019–31.

As house and rent prices are sensitive to international tourism arrivals regardless of their mode of transport, we isolated the air transport contribution to the total rate of tourist arrivals. This varies significantly by country, from Greece and Portugal, where 90%+ of (overnight) international arrivals travel by air, to France and the Netherlands, where the equivalent figure is closer to half (50%) of overnight arrivals.

### **3.1.3 Converting arrivals into house price impacts**

Underpinning our model are estimates of average house prices, which derive from national government datasets, Eurostat estimates of household rent burden, and individual disposable income levels, also sourced from Eurostat. We cross-checked our figures against equivalent Organisation for Economic Co-operation and Development (OECD) datasets. To dynamically connect these variables, we then applied elasticities derived from academic literature and/or calculated from Eurostat data.

At the core of our analysis is the relationship established by Anastasiou et al. (2024).<sup>41</sup> A strength of Anastasiou et al.'s work is that they provide disaggregated elasticities for tourism-dependent and non-dependent European economies. Their research suggests that in tourism-dependent economies, a 10% increase in tourist arrivals can produce a 1.6% increase in the house price-to-income (affordability) ratio. This falls to 0.65% for non-tourism-dependent economies. For robustness, we tested three other tourism-house price relationships established in the academic literature.

In Table 3, we present the various results for the Spanish case (2019–2031). This analysis highlights a reasonable level of agreement between studies on the magnitude of the impact. Our subsequent results used the relationship established by Anastasiou et al. (2024), which sits in the middle of the range of impact levels. Our analysis looked only at high-level national average impacts. In reality, impacts will vary significantly between cities and regions based on levels of tourism demand.

### **3.1.4 Converting house price impacts into rent price impacts**

From a theoretical perspective, house prices and rents are tightly connected. Rental income potential is one of the core indicators of a property's value. In the real world, their relationship is complex and volatile, at least in the short term. Government policies that control rents complicate the relationship, and such controls are widespread in Europe. The financialisation of housing and the cost of capital can also distort the relationship. That is, contemporary house prices are inflated and deflated not only by the supply and demand for housing, but by the demand for property as a financial asset and the cost of borrowing to fund purchases.

Over the past two decades, house prices have been on a rollercoaster ride, crashing through the 07/08 financial crisis, then surging back up. Rapid house price rises, particularly over the last 5–6 years, have outpaced rent price rises, at least as measured in key inflation indices. Long-term, however, such trends lead to the overvaluation of housing, and market corrections that bring house prices back to levels more aligned with their 'real' value are likely. Overvaluation is a major concern across Europe today.<sup>42</sup>

<sup>c</sup> NEF analysis of Eurostat data series avia\_paoc.

**TABLE 3: SELECTED STUDIES ON THE RELATIONSHIP BETWEEN INCREASED TOURISM AND HOUSE PRICES, AND THEIR IMPLICATIONS FOR THE RISE IN HOUSE PRICES RESULTING FROM A 26.3% INCREASE IN TOURIST ARRIVALS IN SPAIN.**

Study	Relationship described	Implied house price impact in Spain
Anastasiou et al. (2024)	A 10% increase in tourist arrivals can produce a 1.6% increase in the house price-to-income (affordability) ratio in tourism-dependent economies	4.3% increase
Skrabic et al. (2021) <sup>43</sup>	A 1 million increase in arrivals can produce a 0.3-point increase in the house price index across EU27	5.1% increase
Fuinhas et al. (2025) <sup>44</sup>	A 10% increase in tourism receipts can produce a 1.5-point increase in the house price index	2.7% increase
Cró and Martins (2022) <sup>45</sup>	A 10% increase in tourist receipts can produce a 2.9% increase in house prices in the long run and 1.3% in the short run for tourism-dependent economies	3.5% increase in the short run and 8% in the long run

Source: NEF analysis, see methods in-text

The tourism impact channel, through which air transport influences house and rent prices, has unique properties that can lead to direct house and rent price rises. A key tourism impact is to constrain supply in key locations, with homes moved from ordinary rental to tourist rental, and new builds targeted at tourists instead of locals. These dynamics have been documented in major cities such as Berlin<sup>46</sup> and Barcelona.<sup>47</sup>

We explored several approaches to arrive at a reasonable approximation of the level of ‘pass-through’ (the ratio of change in rent to change in house price) that would result from an increase in house prices. We first analysed Eurostat’s house and rent price inflation indices. This data was considered quarterly between Q1 2005 and Q4 2025. While the rent price series was complete, only 1,888 datapoints (94%) were available out of 2,016 in the house price series. From this dataset, we estimated an average pass-through rate of 62–82%, with variation depending on the treatment of outliers (Figure 3). This is a simple descriptive analysis of a known bi-directional causal relationship, and all findings should be treated with caution.

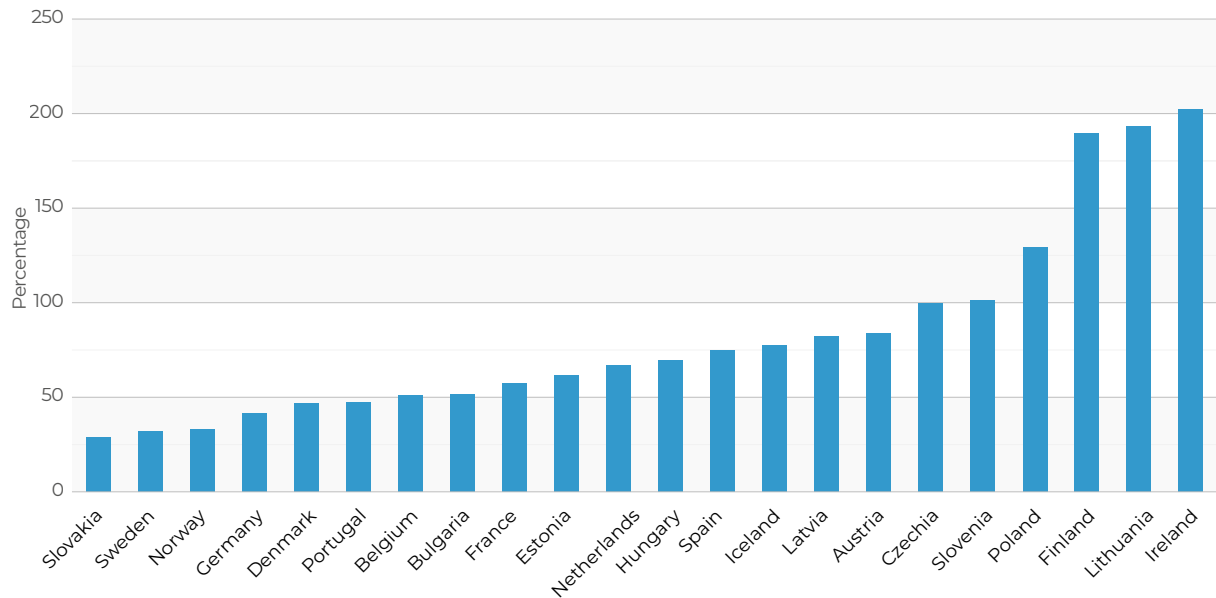
By analysing the past 20 years in Figure 3, we smoothed over what was, in fact, an incredibly volatile period for house prices. As shown in Figure 4, in Spain, one of Europe’s most volatile markets, rents have grown much more slowly than house prices in recent years. Over the full period, however, rent and house prices have risen by similar proportions, leading to the pass-through estimate above of 75%.

Inflation indices are imperfect indicators. A paper by the Spanish central bank explains the issue in the Spanish context.<sup>48</sup> Evidence suggests that the inflation index tends to overrepresent pre-existing fixed-rental contracts and underrepresent new entrants to the market. The stability in the rental price series shown in Figure 4 might not be reliable. The Bank’s alternative measure, derived from tax return data, when analysed by NEF, suggested a pass-through over the period 2015–22 at least twice that suggested by inflation data alone.

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**FIGURE 3: THE AVERAGE RENT-TO-HOUSE PRICE GROWTH RATIO IN THE EU WAS 68–82% OVER THE LAST TWO DECADES**

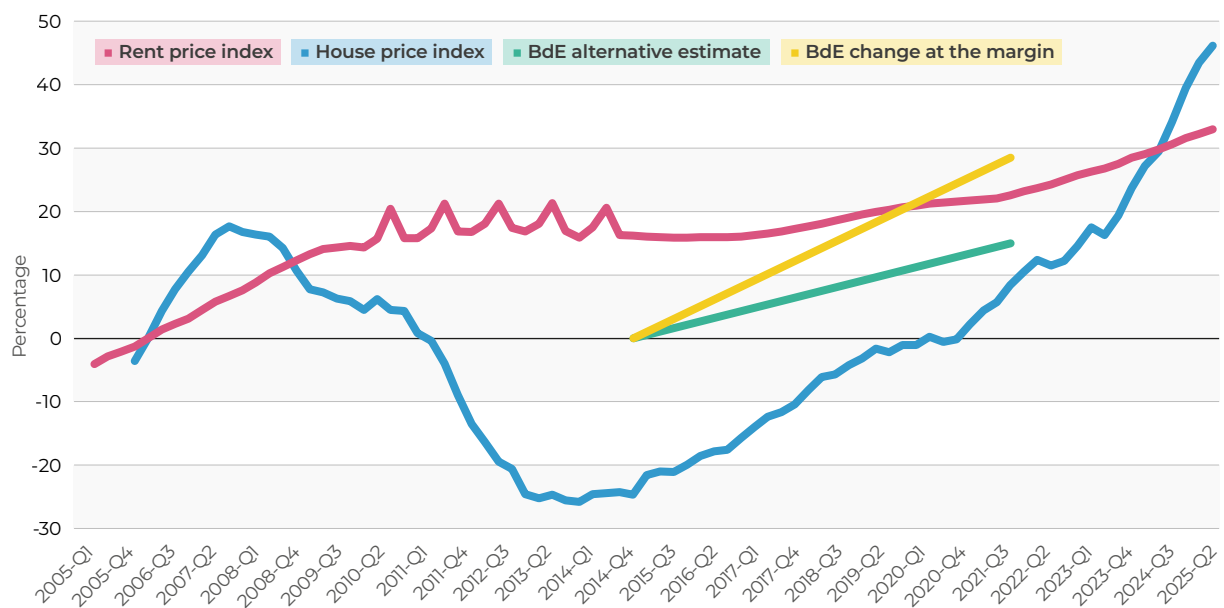
Pass-through ratio of rent to house price growth between Q1 2005 and Q4 2025 (or nearest available data point)



Source: NEF analysis or Eurostat inflation indices.

**FIGURE 4: SPAIN'S RENT-TO-HOUSE PRICE GROWTH RATIO HAS VARIED CONSIDERABLY SINCE 2005, AVERAGING 75%**

House and rent prices indexed to Q1 2006 in Spain, and alternative estimates



Source: NEF analysis of Eurostat and Banco de España.

Indexes of advertised rental accommodation serve as a guide to what is happening at the margin. The Banco de España estimate for 2015–22 is shown in Figure 4. We analysed representative data from online real estate agents in Spain, Portugal, and France on the level of advertised rents. This identified house-price-to-rent pass-through in the range 88–106% in Spain and Portugal, and 73% in France. These levels highlight that, given enough time, market churn will see rent prices catch up with house prices (and vice versa). How fast that churn takes place is variable and context specific. The bigger the gap between advertised rents, actual rents, and incomes, the harder it will be for households to move into new accommodation. Households become trapped in their home. For these households, the increase in market rents is experienced partly as a direct financial cost and partly as an opportunity cost of moving home.

For this analysis, we assumed an 80% pass-through rate. The true figure will vary depending on local government policies and over time. Our analysis first assessed the impacts on a per-household basis. We then aggregated impacts up to the national level using household population estimates. We recognise tourism inflows and, consequently, impacts on rental prices may be concentrated at the regional or even city level. Our aggregation should not be taken to imply that impacts will be felt equally across the country. The results must be interpreted as indicators of a wider, national-level average, rather than attributed to specific regions. At this point, we controlled for the prevalence of social housing, which likely creates a level of protection against tourism-driven price rises. To do so, we used Eurostat data on household tenures to provide a second aggregated figure which excludes all social-rented households.

### 3.2 MODELLING AND RESULTS

Table 4 presents the average house price change and the average annual rent change per household in each modelled nation in our retrospective analysis. As of 2025, air transport passenger numbers had not fully recovered in all of our sampled nations. As a result, Table 4 includes five cases in which the net house and rent price contribution of air transport actually declines over

the period. In Europe's key tourism-receiving nations, however, prices rise significantly. The highest costs are typically seen in nations with a combination of the highest increase in tourists, and the highest house prices and rent prices relative to income.

In our retrospective analysis, the biggest losers on a per-household basis were renters in Greece. Tourists arriving by air transport increased notional household rents in our model by a national average of €342 per year, or 3.6% (Table 4). Italian, Portuguese, and Spanish households also saw major rent increases driven by air tourist arrivals. The aggregate rent burden in Italy increased by €1.0bn and by €700m in Spain, falling to €830m and €590m, respectively, if we assume that social-renting households were protected from these rises. Our results align with the findings of Cró and Martins (2023) that a very strong impact of tourism on house prices prevails in Greece, Portugal, and Spain.<sup>49</sup>

To sense-check our results, Table 4 also includes the real historic rent price increase derived from OECD data. This represents the rise in rents after controlling for Consumer Prices Index (CPI) inflation over 2019–25. The period in question was turbulent, marked by significant inflation driven by fossil fuel prices. As household rents are not directly linked to fossil fuel prices, our baseline expectation should be that rents would rise more slowly than wider inflation. This was the case in 7 out of 12 of our sample nations.

In Ireland, Greece, and Portugal, our modelling suggests that air-tourism-driven rent rises may have contributed to net real rent rises. In other cases, our results are counterintuitive. Despite expected tourism-driven rises in real rents in Spain and Italy, large real rent reductions were actually delivered over the period. Multiple factors may have contributed to this discrepancy, but we can speculate that government policy and social structures may have played a role in protecting households. In Spain, wide-reaching rent control policies were implemented to blunt the inflation-driven rises, and in Italy, widespread prevalence of long fixed contracts and a much greater housing supply may have calmed the inflationary pressure.

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In Table 5, we forecast changes over the next five years. In absolute terms, the largest house price increase is seen in Ireland at €5,500, leading to an average household rent increase of €250 per year. In relative terms, the largest increases are seen in Greece and Portugal (both 1.7%). The Irish case is a particularly interesting one. Widespread public dissatisfaction with rental price rises (evidenced in the OECD data presented in Table 4) has been met with policy action from the Irish government to attempt to cap rents. The initial policy response, however, was widely criticised, both for the

loopholes that see it circumvented and for its unintended negative impacts on the supply of rental properties. In 2025, Ireland introduced new measures to address some of these concerns.<sup>50</sup> Given the acute pressure on renters in Ireland and the political urgency behind rent control, the plans currently being pursued to expand Dublin airport look likely to make an already highly strained market worse.

**TABLE 4: MODELLED ANNUAL LOSS TO RENTERS RESULTING FROM TOURISM GROWTH ASSOCIATED WITH FORECASTED GROWTH IN AIR TRANSPORT BETWEEN 2019 AND 2025, IN 2026 PRICES**

Country	Change in tourism arrivals	Average house price change	Annual household rent change	Proportionate average rent change	Change in total rent burden	Change in total (non-social) rent burden	Real rent rise (OECD)
Austria	5.7%	€ 3,200	€ 128	0.8%	€ 231m	€ 177m	-1.1%
Belgium	-0.6%	-€ 200	-€ 9	0.0%	-€ 16m	-€ 11m	0.6%
Denmark	-3.7%	-€ 1,500	-€ 56	-0.3%	-€ 74m	-€ 53m	-5.0%
France	2.3%	€ 900	€ 44	0.3%	€ 639m	€ 469m	-6.1%
Germany	-4.6%	-€ 1,100	-€ 33	-0.2%	-€ 734m	-€ 341m	-8.9%
Greece	27.2%	€ 8,500	€ 342	3.6%	€ 364m	€ 364m	2.9%
Ireland	5.5%	€ 2,900	€ 135	0.7%	€ 70m	€ 61m	9.5%
Italy	13.7%	€ 3,500	€ 202	1.8%	€ 1,023m	€ 834m	-6.6%
Netherlands	-1.3%	-€ 900	-€ 31	-0.2%	-€ 104m	-€ 95m	-6.0%
Poland	-6.0%	-€ 700	-€ 23	-0.3%	-€ 70m	-€ 56m	2.4%
Portugal	14.4%	€ 4,700	€ 220	1.9%	€ 202m	€ 156m	5.8%
Spain	12.8%	€ 3,800	€ 236	1.7%	€ 703m	€ 587m	-9.5%

Source: NEF analysis, see methods in text

**TABLE 5: MODELLED ANNUAL LOSS TO RENTERS RESULTING FROM TOURISM GROWTH ASSOCIATED WITH FORECASTED GROWTH IN AIR TRANSPORT BETWEEN 2026 AND 2031, IN 2026 PRICES**

Country	Change in tourism arrivals	Average house price change	Annual household rent change	Proportionate average rent change	Change in total rent burden	Change in total (non-social) rent burden
Austria	4.1%	€ 2,300	€ 93	0.6%	€ 168m	€ 129m
Belgium	4.3%	€ 1,100	€ 63	0.4%	€ 117m	€ 79m
Denmark	6.9%	€ 2,700	€ 103	0.6%	€ 136m	€ 97m
France	5.0%	€ 2,000	€ 95	0.7%	€ 1,387m	€ 1,019m
Germany	5.4%	€ 1,300	€ 39	0.3%	€ 875m	€ 406m
Greece	13.0%	€ 4,100	€ 163	1.7%	€ 174m	€ 174m
Ireland	10.2%	€ 5,500	€ 251	1.4%	€ 129m	€ 113m
Italy	9.0%	€ 2,300	€ 132	1.2%	€ 667m	€ 544m
Netherlands	2.5%	€ 1,700	€ 61	0.3%	€ 205m	€ 188m
Poland	7.7%	€ 900	€ 30	0.4%	€ 90m	€ 72m
Portugal	12.6%	€ 4,100	€ 193	1.7%	€ 178m	€ 137m
Spain	11.8%	€ 3,500	€ 217	1.6%	€ 648m	€ 542m

Source: NEF analysis, see methods in text

**TABLE 6: MODELLED ANNUAL LOSS TO RENTERS RESULTING FROM TOURISM GROWTH ASSOCIATED WITH FORECASTED GROWTH IN AIR TRANSPORT BETWEEN 2019 AND 2031, IN 2026 PRICES**

Country	Change in tourism arrivals	Average house price change	Annual household rent change	Proportionate average rent change	Change in total rent burden	Change in total (non-social) rent burden
Austria	10.4%	€ 5,800	€ 235	1.4%	€ 425m	€ 326m
Belgium	3.6%	€ 1,000	€ 54	0.3%	€ 99m	€ 67m
Denmark	2.8%	€ 1,100	€ 42	0.2%	€ 55m	€ 39m
France	7.6%	€ 3,000	€ 143	1.0%	€ 2,095m	€ 1,540m
Germany	0.5%	€ 100	€ 3	0.0%	€ 76m	€ 35m
Greece	44.1%	€ 13,800	€ 553	5.9%	€ 588m	€ 588m
Ireland	16.4%	€ 8,800	€ 403	2.2%	€ 207m	€ 180m
Italy	24.2%	€ 6,200	€ 354	3.2%	€ 1,799m	€ 1,466m
Netherlands	1.1%	€ 800	€ 28	0.2%	€ 94m	€ 85m
Poland	0.9%	€ 100	€ 3	0.0%	€ 9m	€ 7m
Portugal	29.0%	€ 9,500	€ 443	3.9%	€ 409m	€ 314m
Spain	26.3%	€ 7,700	€ 484	3.5%	€ 1,445m	€ 1,207m

Source: NEF analysis, see methods in text

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Over our forecast period, the largest aggregate rent burden increase is seen in France at €1.4bn per year, and €1.0bn per year after adjusting for social housing. France is vulnerable due to its very large renter population, at around 40% of households, compared with just 18%, for example, in Spain. This, along with France’s higher average house price and much larger number of households in general, leads to a much larger aggregate loss. Again, these considerations look relevant in the context of ongoing discussions around the expansion of Paris airport.

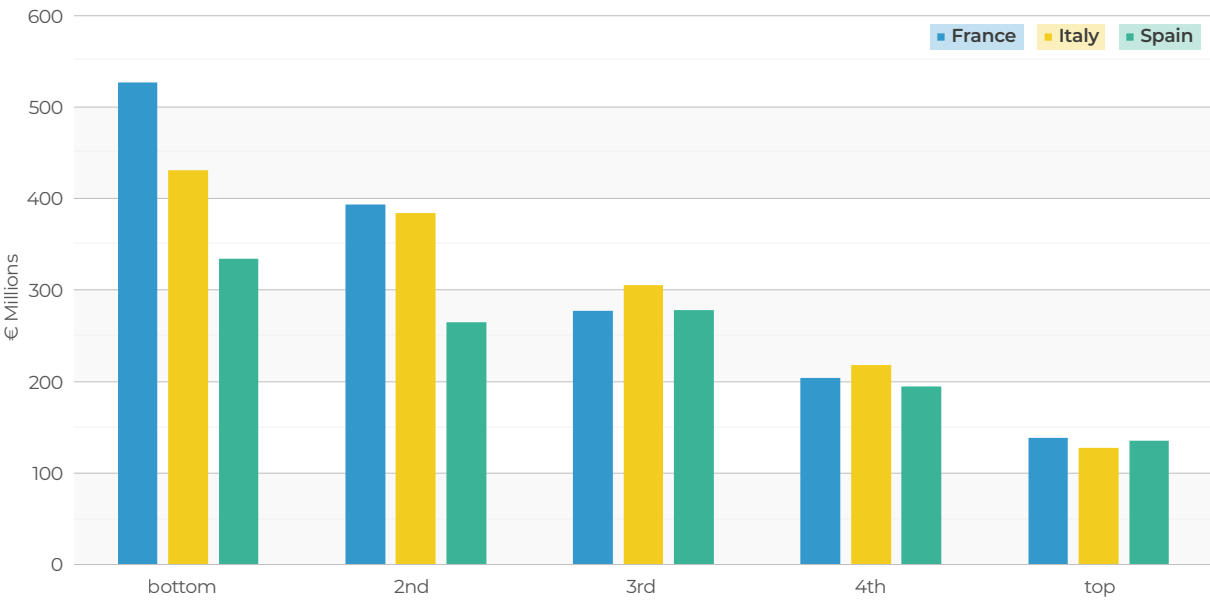
Adjusting our aggregate impacts for social housing/renting provision makes a minimal difference in countries like Spain, Greece, and Italy with low rates of social housing, but makes a meaningful difference elsewhere, particularly Germany and Belgium, where much higher levels prevail. As noted earlier, even in the presence of such policies, there would still be a notional loss that all renters experience (social or private) as a result of home ownership, and potentially relocation, moving further out of reach.

The aggregate impact on non-social renting households over the full period, 2019–31, falls hardest on France, Italy, and Spain (Table 6). More specifically, it falls hardest on low-income households. Figure 5 shows how this burden is distributed. In France, €530m of annual costs fall on the lowest income group, while just €140m fall on the highest income group. Meanwhile, the highest income groups benefit most from the increased capital value of properties.

Our results should be taken as indicative only. We rely on generalised high-level relationships and do not grapple with the full array of local institutions and regulations. However, we illustrate with this analysis that the distributional impacts, through the rent-price pathway, of forecast growth in air tourism are potentially highly material for households. Consideration of these impacts is almost entirely missing from the present debate and is ignored in virtually every mainstream economic impact assessment produced by the aviation industry and government.

**FIGURE 5: THE FINANCIAL BURDEN FROM TOURISM GROWTH FOR NON-SOCIAL RENTING HOUSEHOLDS WOULD FALL HARDEST ON THE LOWEST INCOME GROUPS IN FRANCE, ITALY AND SPAIN OVER 2019–31**

Aggregate non-social housing rental burden over 2019–31 across household income quintiles



Source: NEF modelling distributed as per OECD.

**3.3 WIDER PRODUCTIVITY IMPACTS OF RISING PROPERTY PRICES**

Europe is in a productivity slump, which began around the time of the 2007–08 financial crisis and may have worsened since the pandemic (Figure 6). This period of stagnation has been characterised in many countries by surging house prices, and a nuanced relationship between house prices and productivity has emerged. A leading school of thought argues that while rising house prices might generate some short-term economic growth wins, in the longer term, they are a significant contributor to productivity stagnation.<sup>51</sup>

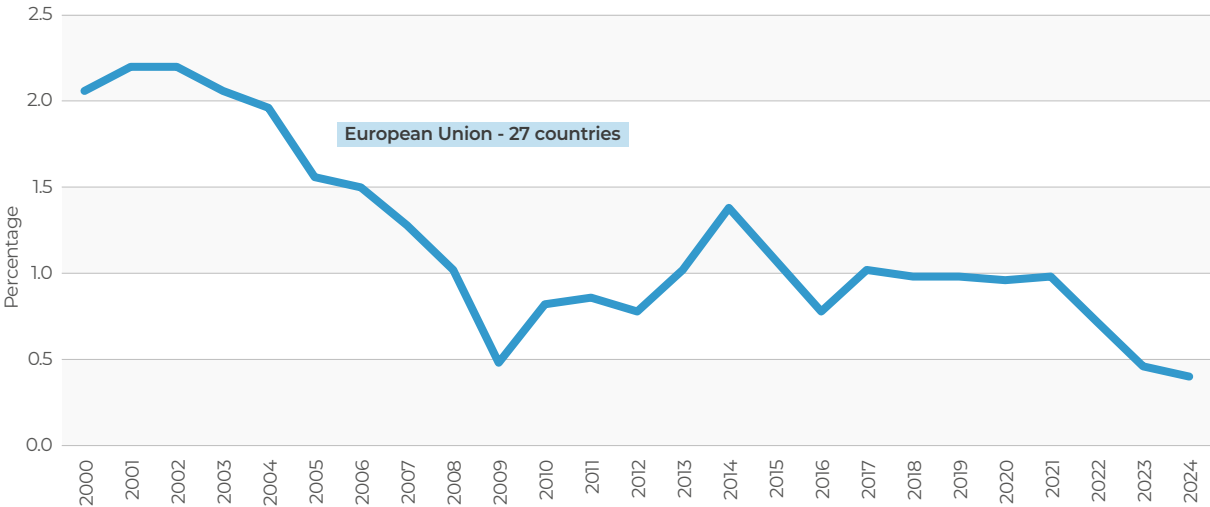
Research suggests that this relationship is moderated by the nature of the national economy in question. In particular, the ‘complexity’ of the economy.<sup>d</sup> Gholipour et al. (2023) argue that economies with higher complexity suffer less pronounced productivity depression as a result of rising house prices.<sup>52</sup> Among this group are countries including the UK, Germany, and Austria. The second group, where house price rises are associated with strong and statistically significant productivity losses, includes countries like France, Italy, Ireland, Belgium, Denmark, the Netherlands, Spain, and Portugal.

The relationship described by Gholipour et al. (2023) sees a one standard deviation increase in a country’s real house price index deliver a 0.8 percentage point decline in labour productivity over the examined period (1972–2019) among the ‘lower complexity’ group of countries. This productivity cost should be seen as very large in terms of its potential impact on a nation’s economic performance.

There are three main routes through which researchers argue that higher house prices can hamper productivity. First, higher prices incentivise investors to direct capital towards property rather than towards productive and innovative sectors.<sup>53,54</sup> Chege et al. (2025) present evidence that a 10% increase in real house prices can reduce total business investment by around 1.1%. Beneath this is a reallocation. In response to a 10% increase in real house prices, business investment in dwellings rises 2.5%, investment in other buildings and structures rises 1.2%, and investment in intellectual property rises 2.5%. At the same time, business investment in transport equipment falls 3.6%, and investment in information technologies falls 4.2%.<sup>55</sup>

**FIGURE 6: EUROPE’S PRODUCTIVITY GROWTH HAS STAGNATED SINCE THE 2007–08 FINANCIAL CRISIS AND MAY HAVE WORSENE SINCE THE PANDEMIC**

Percentage change in real labour productivity per hour worked, five-year unweighted smoothed average

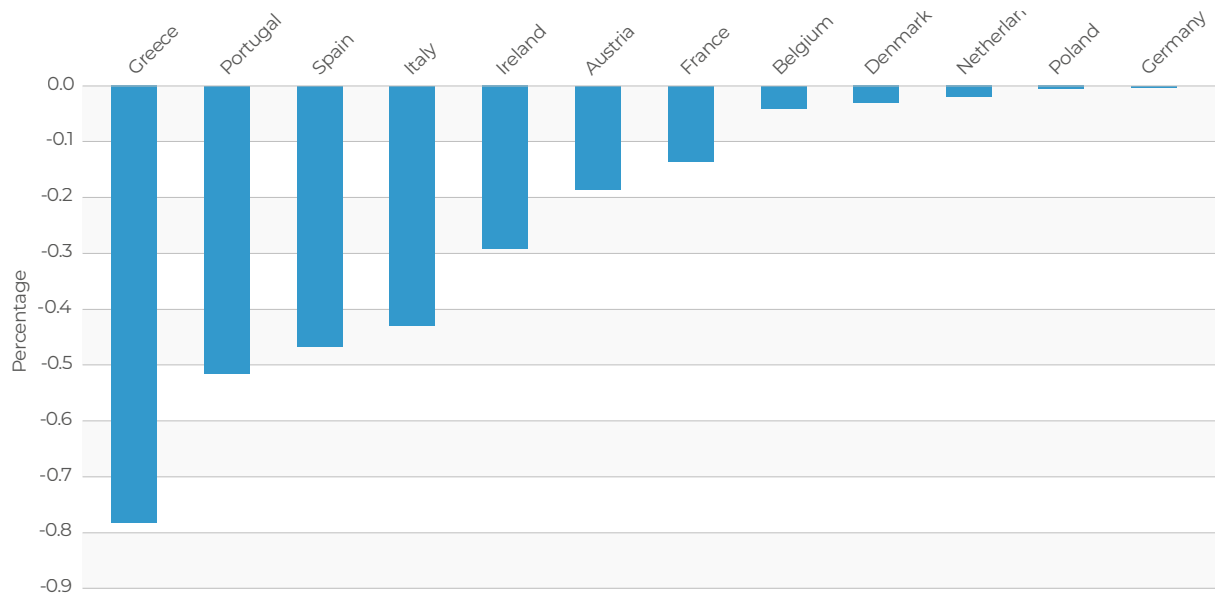


Source: Eurostat.

<sup>d</sup> Based on average scores of Economic Complexity Index (ECI) developed by the Growth Lab at Harvard University, whereby countries with lower complexity produce a lower diversity of exports and their ubiquity.

**FIGURE 7: SOUTHERN EUROPEAN NATIONS ARE PROJECTED TO EXPERIENCE THE LARGEST LOSSES TO BUSINESS INVESTMENT OVER 2019–31**

Net impact on total business investment of house price growth through the air tourism channel over the full 2019–31 period



Source: NEF analysis.

Applying the relationship established by Chege et al. to our model outputs gives a crude estimate of the potential wider business investment impact of house price growth driven through the air tourism impact channel. As shown in Figure 7, which assesses the full 2019–31 period, business investment can be expected to fall sharpest in Greece, Portugal, Spain, and Italy. The largest losses in absolute terms hit Italy and Spain, which lose €1.1bn and €1.0bn in annual investment, respectively.

The second key impact channel is how higher house and rent prices make workers less mobile, restricting their ability to match with their most suitable job.<sup>56</sup> The third is the way higher house prices reduce the cash available to households for them to invest in their own skills and resources (often termed ‘human capital’). Future work is required to quantify these additional impact channels.

Through the chain of linkages described, there is a strong case that the upwards pressure placed on house prices by growth in tourism arrivals may lead to negative productivity outcomes. Indeed, beyond this house price mechanism, there is an argument that an industrial strategy that favours tourism could weaken potentially higher productivity

sectors. An industrial strategy focused on tourism development encourages limited capital and labour into an unproductive sector, that in many cases is not improving its productivity, and is actively undermining the productivity (through property prices) of other sectors.

Other unintended negative consequences of tourism-focused industrial strategy have been discussed in the academic literature but are not covered in depth here. ‘Beach disease’ – a term playing on the economic concept ‘Dutch disease’ – describes another, similar, form of economic distortion, or imbalance that can be created from an overreliance on tourism for economic growth. In short, it describes how tourism dominance can push spending into low productivity sectors and goods that are non-tradeable, and cause exchange rate fluctuations that ultimately lead to ‘deindustrialisation’ – ie an economic environment in which other industrial sectors cannot thrive.<sup>57</sup> Some authors have argued that the phenomenon is widely prevalent in Mediterranean nations, though there is some evidence that membership of the eurozone common currency can mitigate some of its risks.<sup>58</sup> Nonetheless, recent research has emphasised the importance of tourism-dependent economies pursuing diversification.<sup>59</sup>

Another contemporary route to negative wider impacts of overreliance on tourism growth, which needs further exploration, is through the misallocation of remaining carbon. The consumption of a large share of the remaining carbon budget might not only deliver costs to society and economic sectors via climate damages, but also increase the price of scarce resources desired by other sectors, including carbon permits, agricultural land (demanded for production of aviation biofuels), energy (demanded for production of synthetic aviation fuels), and carbon capture (demanded to capture residual, unabated, emissions). The most direct of these impacts comes through the EU's Emissions Trading System (ETS). Higher demand for emissions from air travel and tourism increases the price for all sectors in the carbon market. Through this channel, air transport growth can reduce the competitiveness of the industrial production of essential products to achieve the EU's climate targets, such as metals, chemicals, minerals, and power.

## 4. WHO BENEFITS FROM TOURISM INFLOWS?

### 4.1 QUANTIFYING INCOMING TOURISM SPEND

Having established that tourism arrivals create costs for the renting subsection of society, widen wealth inequality, and create potential productivity losses in the wider economy, an obvious question remains: Is it worth it? To dissect this question, we must look at where tourism spending flows and who benefits.

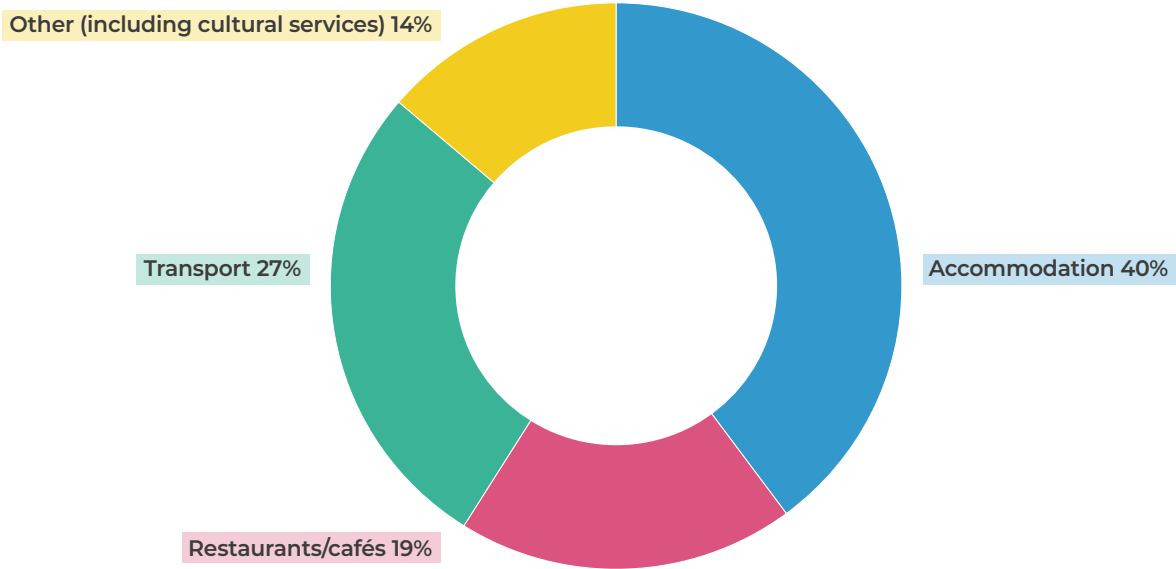
Arriving tourists spend their money in a range of sectors of the host country. The best data available relates only to European residents, who make up over 80% of the nights spent by foreign residents in European tourist accommodation. Their spending, in 2023, was dominated by accommodation services

(40%), transport (27%), and food and beverage services (19%), as shown in Figure 8. Much of the remaining 14% was spent on retail, cultural, and entertainment services. Together, the combined accommodation and food service sector (or hospitality) is the largest impacted sector, receiving an estimated 59% of all spending.<sup>e</sup>

Spending by incoming foreign residents is seen as a positive and usually as a creator of jobs. But to fully understand the net economic impact international tourism has on a nation or region, it is important to consider flows in both directions. Higher incoming tourist flows can also be associated with higher outgoing flows. This happens both due to improved transport links, but also due to the reduced desirability of local spaces for local people created by factors such as congestion and price inflation. Spending goes in and out of a region, potentially leading to both the creation and the destruction of jobs. While this is usually seen as a 'welfare' gain for both the incoming and outgoing traveller, it does not necessarily imply a net economic gain, at least on traditional indicators of employment or gross domestic product (GDP), nor a net welfare gain, when externalities (such as climate and air quality impacts) are considered.

**FIGURE 8: TOURISTS ARRIVING IN EU COUNTRIES SPENT THE MOST IN ACCOMMODATION, FOLLOWED BY TRANSPORT AND FOOD AND BEVERAGE SERVICES IN 2023**

Share of expenditure by the broad category of EU residents on overnight tourism in 2023

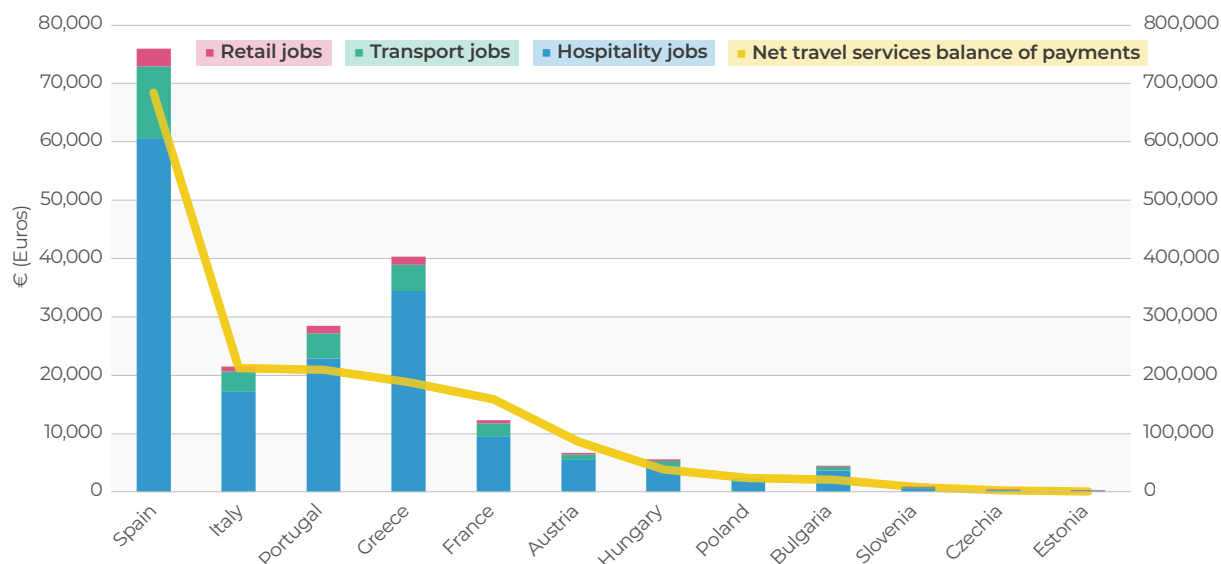


Source: NEF analysis of Eurostat.

<sup>e</sup> NEF analysis of Eurostat 'Expenditure by duration, purpose, main destination of the trip and expenditure category'.

**FIGURE 9: GAINS IN EMPLOYMENT AND GDP IN TOURISM-LINKED SECTORS ARE FELT MORE STRONGLY IN COUNTRIES WITH A NET TRAVEL SPENDING SURPLUS**

European countries with travel spending current account surpluses in 2024, ranked by surplus size in €m, and the corresponding number of people employed in each tourism sub-sector



Source: NEF analysis of Eurostat.

To understand whether positive economic impacts in these domains will result, we have to consider the counterfactual and the ‘substitution’ of spending. In other words, some overseas spending by outgoing residents might otherwise have been done locally, creating a loss in the net impact equation. Indeed, some studies have suggested that, from an employment perspective, domestic tourists may be of greater value to an economy than international arrivals.<sup>60</sup>

Caution and investigation should be applied before assuming that more tourists will result in a net gain in employment or GDP in tourism-linked sectors. Such a claim is most defensible in nations with a net travel spending surplus. In 2024, large surpluses were achieved in Greece, Spain, France, Italy, Austria, and Portugal.<sup>61</sup> In 2024, Spain stood out, as shown in Figure 9, with the largest surplus (€68bn), larger than the next three nations combined (€61bn). Much smaller surpluses were also achieved in several Eastern European nations. In other nations, where deficits prevail, particular sub-regions may still achieve large, and relevant, surpluses.

The nations on the left-hand side of Figure 9 are, broadly speaking, those pursuing a tourism-led growth strategy. Such strategies have been shown to succeed in driving short-term economic

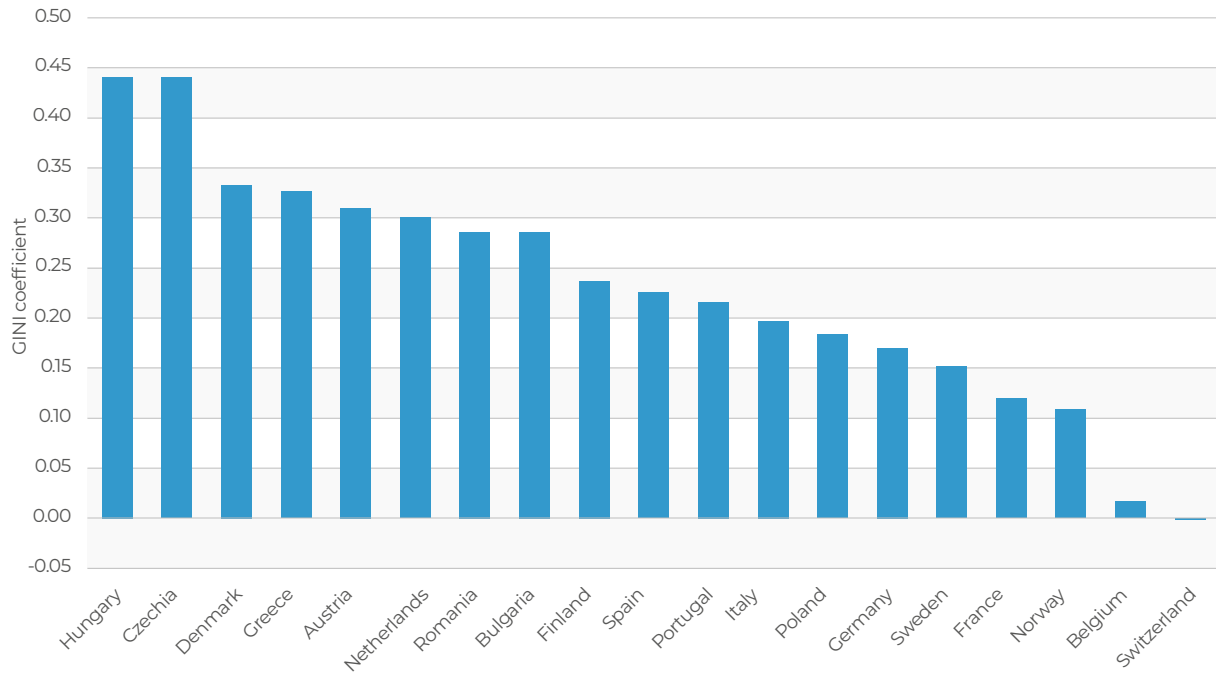
growth,<sup>62</sup> though some evidence suggests that this contribution weakens during boom-and-bust periods in the European economy, and creates economic costs and externalities over the longer term.<sup>63</sup>

#### 4.2 HOW THE SPEND IS DISTRIBUTED

A key challenge facing the air tourism-led growth strategy is the spatial distribution of tourism flows. Air tourism growth not only sees spending concentrate in the most desirable hotspots but, through the lost spending of domestic tourists, can see spending decline in regions of a country favoured by domestic travellers. To illustrate this exchange, we took Eurostat data on the nights spent by foreign (the majority travelling by air) and domestic tourists (the majority travelling by land) by sub-region (NUTS2). We first analysed the spread of tourism spending (via nights) through the lens of each nation’s tourism distribution GINI coefficient. A lower GINI coefficient implies a more equal distribution across a set of regions, and a higher GINI a less equal distribution. In every nation in our sample, bar Switzerland, domestic tourists had a far more even distribution of overnight stays (our proxy for spend) than their foreign counterparts (Figure 10).

**FIGURE 10: DOMESTIC TOURISTS HAVE A MORE EVEN DISTRIBUTION OF OVERNIGHT STAYS ACROSS REGIONS IN THE COUNTRY THAN FOREIGN TOURISTS**

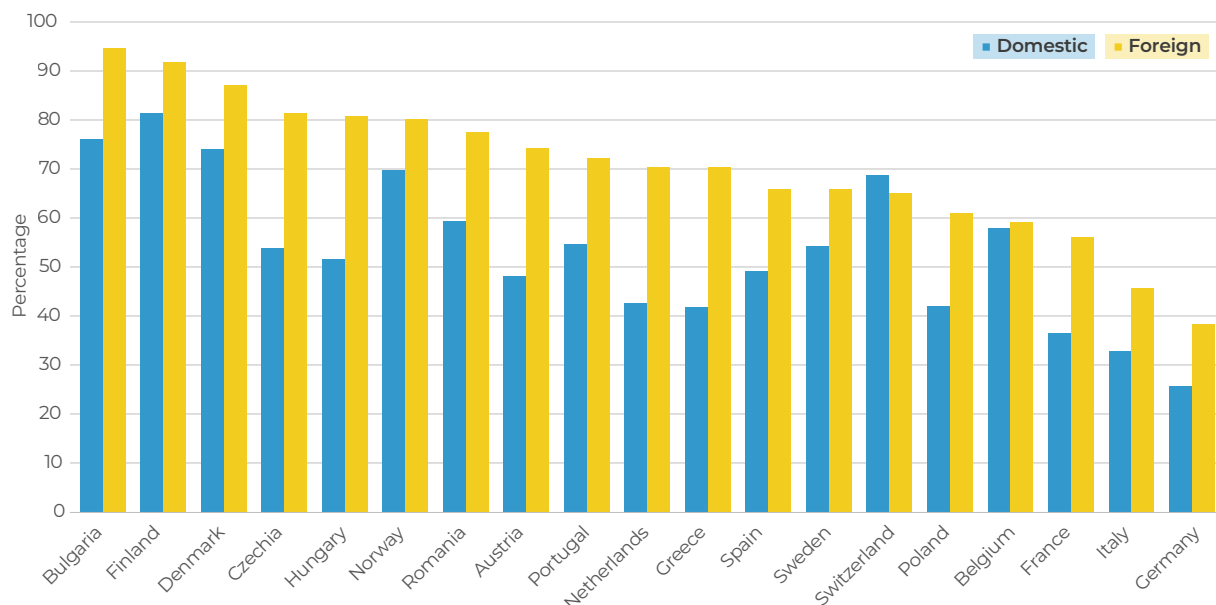
The difference between the GINI coefficients of foreign versus domestic overnight stays between regions (NUTS2) of a country. Nations with fewer than five NUTS2 regions are excluded. A higher coefficient indicates a less equal distribution, from 0 (completely equal) to 1 (completely unequal).



Source: NEF analysis of Eurostat.

**FIGURE 11: FOREIGN TOURISTS ARE MORE CONCENTRATED IN POPULAR DESTINATIONS THAN DOMESTIC TOURISTS**

Share of all visitor nights captured by the top three most visited sub-regions (NUTS2) of each country, grouped by foreign and domestic tourists. Nations with fewer than five NUTS2 regions are excluded.



Source: NEF analysis of Eurostat.

However, as GINI coefficients are difficult to interpret, we also looked at a simpler metric. Figure 11 shows the share of tourist nights spent in a nation's top three most popular regions. This figure shows there is much higher concentration of tourist nights among the top three regions visited by foreign visitors than by domestic residents. For example, in Austria, foreign visitors concentrate 74% of their nights in the top three most visited regions, while domestic travellers spend just 48% of theirs.

Not only is domestic tourist spending more widely distributed, but more of it is spent in high-poverty areas. Across a sample of 22 nations, domestic residents visited regions with a higher average poverty rate than those visited by foreign visitors in 19 nations. International air tourism often concentrates spending in a small number of regions, usually regions with lower poverty rates. In France, the rates were approximately equal, while the exceptions to the rule were found in the Netherlands and Belgium.

#### **4.3 UNDERSTANDING AIR TOURISM-LED JOB CREATION**

Assessments of job creation linked to tourism and air transport use different approaches, but several use tourism-related spending as a proxy for economic impact. Many simply measure the total volume of spending in tourism-linked industries. This approach, however, fails to distinguish spending made by domestic residents in those same industries. Other approaches isolate the total spend by incoming tourists, but this approach misses the potential substitution effect in which rising connectivity simultaneously encourages residents to spend their holidays overseas rather than domestic destinations.

To arrive at the employment estimates in Figure 9, we isolated jobs created through the country's net travel services spending surplus. Air transport facilitates the large majority of these surpluses. Taking this approach means focusing on the net job creation created by the strategic advantage held by tourism-receiving nations, ie the jobs they receive thanks to their tourism specialisation. In macroeconomics, this is described as the 'export' of tourism. Tourism-specialised economies export tourism in the sense that they sell it to the world, and receive foreign spending inflows and jobs as a result.

Through this approach, and assuming a sectoral breakdown of tourism spend as shown in Figure 8, we can estimate that Spain's tourism advantage directly contributes around 760,000 jobs to the domestic economy. Greece, the second largest tourism economy on this metric, receives 400,000 jobs (Figure 9). Due to its large share of spending and its labour-heavy nature, the hospitality industry dominates the employment estimate, providing 80% of employment linked to tourism exports. From here on, we focus primarily on the hospitality industry.

Looking at the sector as a whole, jobs in hospitality have grown particularly rapidly over recent years (Figure 12). This rise was seen both in major tourist-receiving nations and other nations. Jobs in the (much smaller) air transport sector developed very differently, with the majority of European nations actually seeing a decline, despite the large rise in passenger numbers.

When appraising the role of the air transport sector in countries pursuing air tourism-led growth, the principal way in which its employment impacts will be felt in the population is in hospitality jobs. While some would point to the rise in hospitality job numbers as a marker of success, there are signs that many communities do not consider the provision of a hospitality job, on its own, to be an acceptable return on a tourism influx – as demonstrated in recent anti-tourism protests. Issues raised in these protests include the distribution and equity in the benefits and costs that tourism brings, low wages, and price inflation.

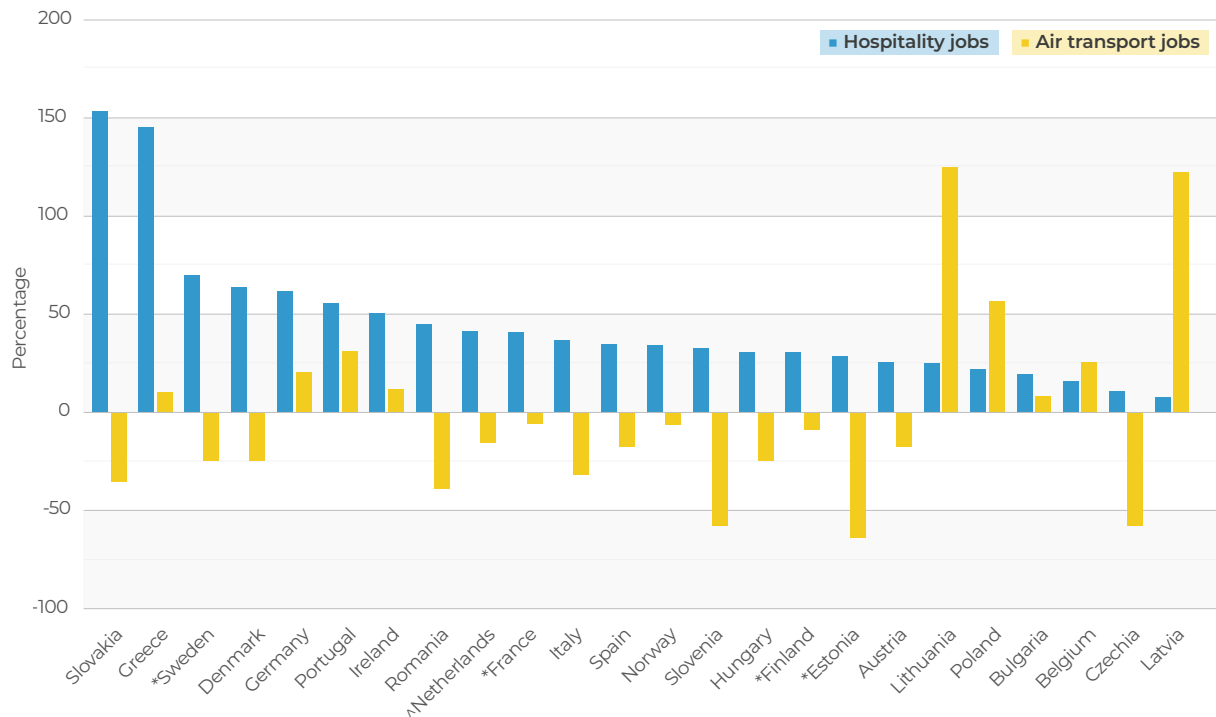
#### **4.4 THE TRAJECTORY OF GVA, PRODUCTIVITY, AND WAGES**

Facilitated almost entirely by air transport growth, the surge in tourist arrivals to southern Europe has seen the hospitality sector dominate the working hours of locals. In Greece, Spain, and Portugal, the hospitality sector constituted 22%, 10%, and 10% of hours worked in 2023, respectively, the three largest contributions to hours worked in Europe. However, in those same countries, hospitality accounted for just 9%, 5%, and 6% of gross value added (GVA – the main component of GDP) respectively (Figure 13).

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**FIGURE 12: HOSPITALITY JOBS ACROSS EUROPEAN COUNTRIES HAVE RISEN RAPIDLY SINCE 2008, WHILE THE MAJORITY OF COUNTRIES HAVE SEEN A DECLINE IN AIR TRANSPORT JOBS DESPITE GROWTH IN PASSENGER NUMBERS**

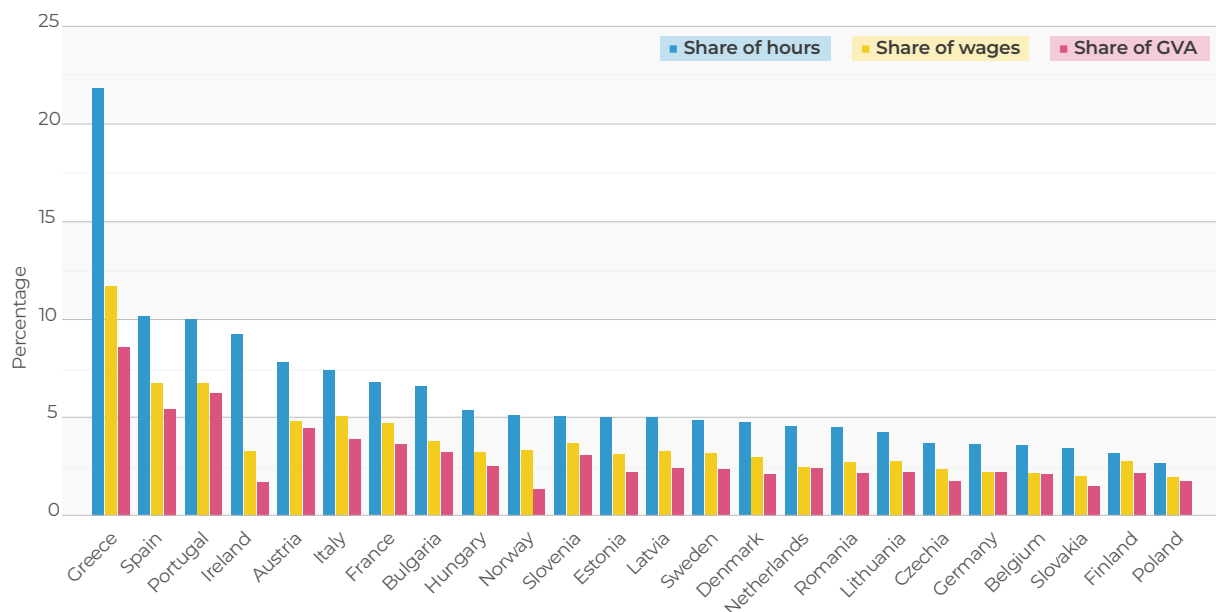
Changes in the number of employees in food and accommodation services and in air transport between 2008 and 2024



Source: NEF analysis of Eurostat \*missing 2008 data, 2007 used instead. ^missing 2008 data, 2009 used instead.

**FIGURE 13: ACROSS EUROPE, THE ACCOMMODATION AND FOOD SERVICES SECTOR PAYS A SIGNIFICANTLY SMALLER SHARE OF WAGES AND SALARIES THAN ITS SHARE OF HOURS WORKED**

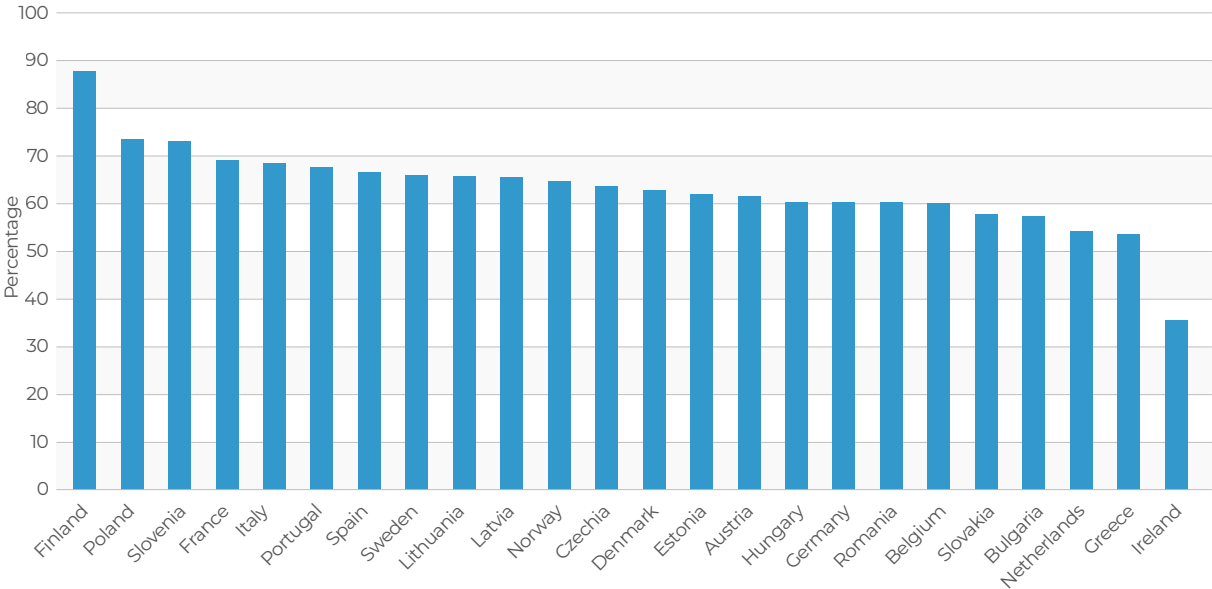
Accommodation and food services' share of hours, wages, and GVA in 2023



Source: NEF analysis of Eurostat.

**FIGURE 14: WAGE DIFFERENCES BETWEEN HOSPITALITY WORKERS AND THE WIDER ECONOMY VARY BY COUNTRY, WITH THE LARGEST GAPS SEEN IN GREECE AND IRELAND**

Hospitality hourly wages as a share of the wider economy average in 2023



Source: NEF analysis of Eurostat.

A mismatch between the size of the employment and GVA shares can be seen across all European countries (Figure 13) and reflects the generally lower productivity nature of the sector. One of the largest gaps can be seen in Ireland. While Ireland might not typically be considered a tourism-dependent economy, with just under 2% of GVA stemming from the hospitality sector, Ireland’s unusual economic model skews this data. The high share of hours worked in the sector, at 9% of all hours worked, suggests that in the everyday economy, Irish residents will perceive their economy as hospitality (if not tourism) dominated.

Low productivity is usually associated with lower wages, though the association is not inevitable and can be influenced by government policy. Figure 13 highlights that the accommodation and food services sector pays a significantly smaller share of wages and salaries than its share of hours worked, ie the hourly wage is significantly below average. This metric does not measure final income, which would take into account government income support measures and could be influenced by factors such as tipping culture. It also does not account for the security of jobs in the industry, which is characterised by volatility (ie part-time and seasonal contracts) and precarity of employment

(ie atypical or excessive working hours), as well as vulnerability to shocks (ie Covid-19).<sup>64</sup> More so, these conditions remain more prevalent for women and young people.<sup>65</sup>

The size of the gap between hospitality wages and the wider economy varies by country (Figure 14). The largest gaps prevail in Ireland and Greece, where wages are just a third (35%) and a half (54%) of the economy’s average, respectively. The smallest gap can be found in Finland, where wages are 88% of the wider economy’s average. Finland operates very strong collective bargaining systems, with very high union density and universally binding agreements. Poland performs second best in our sample, at 73% of the average. Both Finland and Poland are notable, however, for the very small role played by hospitality in the overall economy, with GVA shares of around 2%. This implies, perhaps, that maintaining competitive wages is easier in an economy less dependent on the hospitality sector.

At the whole economy level, the period since the 2007–08 financial crisis has been marked by diverging trends in real (ie post-inflation) wages across European nations. Some countries, such as Italy, Spain, and the United Kingdom, have seen declines and stagnation. But some saw significant increases, mostly eastern European nations, but

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notably also Portugal.<sup>f</sup> With large increases in the overall volume of travellers seen in recent years, an interesting question to explore is whether the rise in air tourist arrivals has helped improve relative real wage performance in tourism-linked sectors.

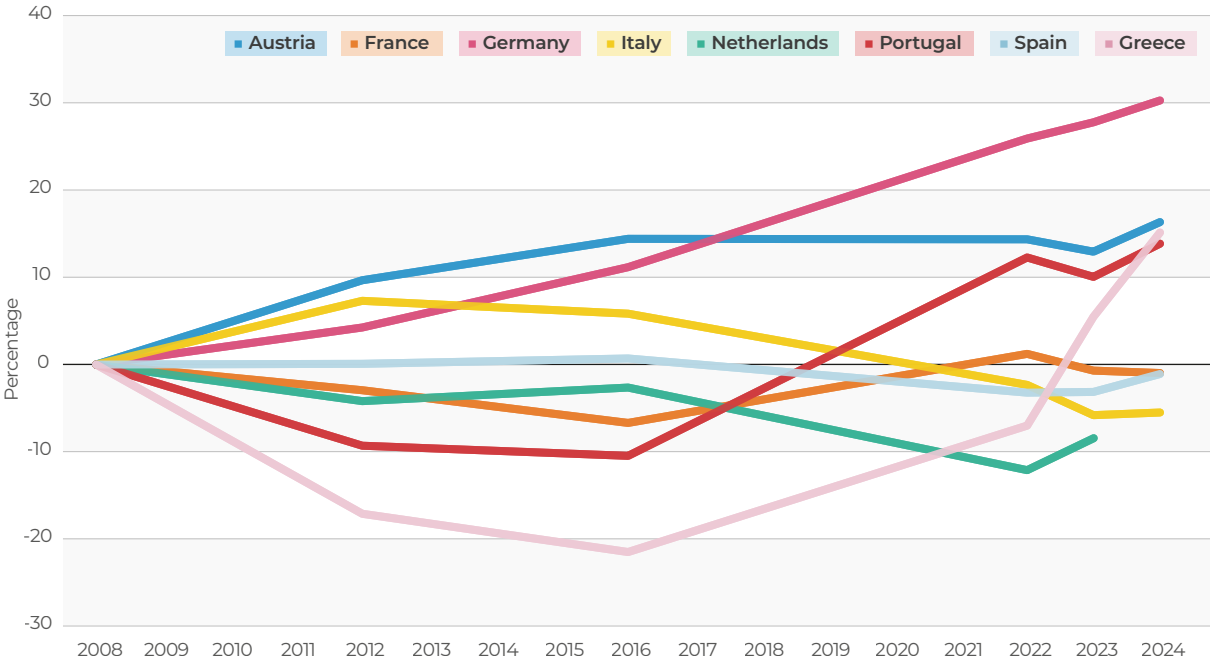
Wages in the accommodation and food services sector also show a mixed performance across Europe. Some of the most tourism-intensive economies are among the worst performers. Hospitality in Spain, France, Italy, and the Netherlands saw real wage declines over the period 2008 to 2024 (Figure 15), albeit only small reductions in Spain and France. Those countries delivering increases over the period, such as Germany, Austria, and Portugal, attribute some of

their success to minimum wage (or other types of wage floor) policies, usually negotiated with unions, that have driven above-inflation increases over the past two decades.

There appears to be little connection between the rise in foreign tourist arrivals and the net change in real wages. Among those nations that saw a decline in real wages, all saw very significant increases in foreign tourist arrivals, ranging from a 40% increase in France to a 111% increase in the Netherlands between 2008 and 2024. Figure 16 highlights, indeed, that the nations with the highest volumes of tourist arrivals have generally performed the worst when it comes to real-terms wages for tourism-sector workers.

**FIGURE 15: REAL WAGE GROWTH IN THE HOSPITALITY SECTOR HAS SHOWN A MIXED PERFORMANCE SINCE 2024 ACROSS EUROPEAN COUNTRIES**

Wages and salaries component of labour costs (hourly average) in accommodation and food services, growth after inflation (CPI) since 2008 in selected European countries

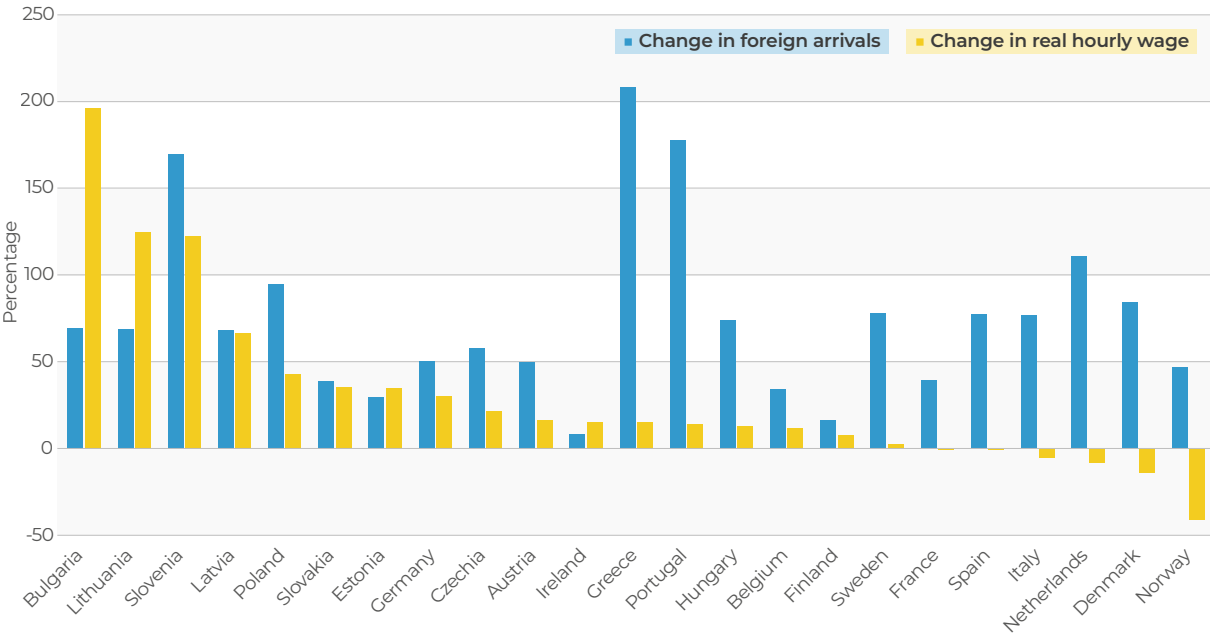


Source: NEF analysis of Eurostat; prior to 2020, data is only available in four-yearly intervals and was unavailable for some countries.

<sup>f</sup> NEF analysis of International Labour Organization (ILO) wage data.

**FIGURE 16: EUROPEAN NATIONS WITH THE HIGHEST VOLUME OF TOURIST ARRIVALS GENERALLY SHOW LOWER LEVELS OF REAL WAGE GROWTH IN THE TOURISM SECTOR**

Proportionate changes over the period 2008 to 2024 in the volume of foreign arrivals at formal tourist accommodation and the real terms value of the spending by businesses in the accommodation and food services sector on wages and salaries (per hour)



Source: NEF analysis of Eurostat. The Eurostat data series in question had a methodology change in 2020-21, which could affect comparisons drawn between time periods. We have checked the changes seen over the period 2008–19 (a period unaffected by the methodology change) and confirmed that the headline trends remain robust. Shifts in the value of domestic currency versus the euro (the unit of measure) may also affect the result.

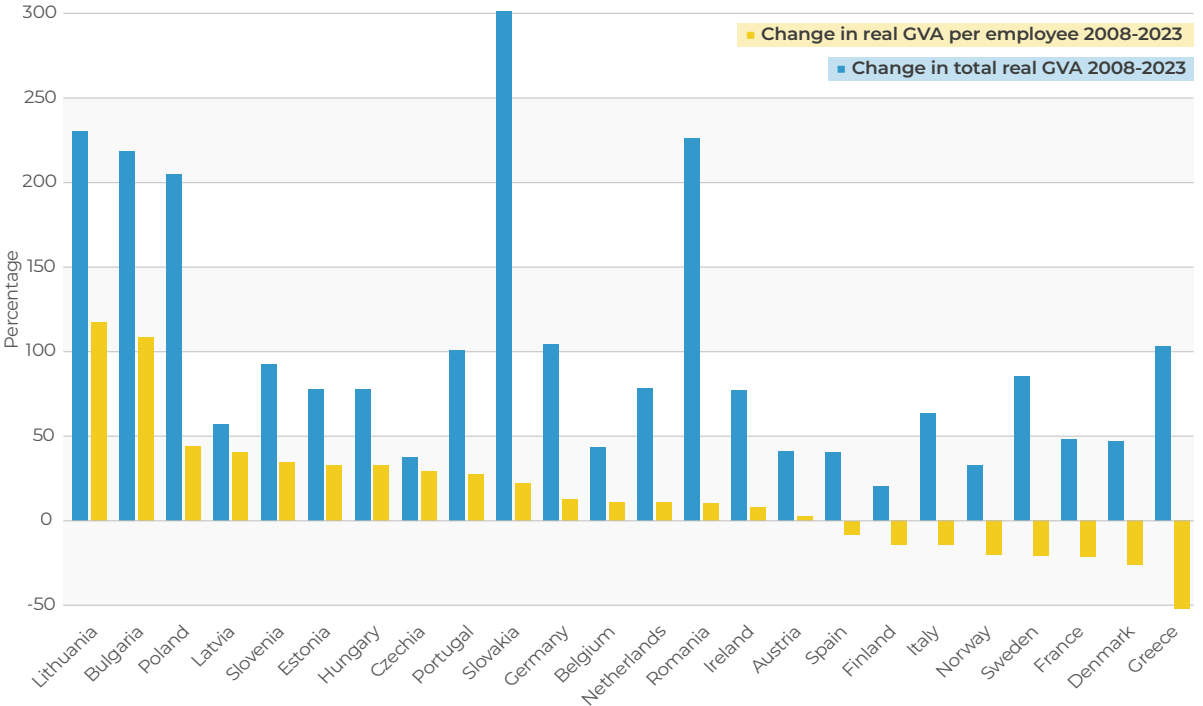
All countries in the group that saw real spending on wages and salaries decline also saw large rises in aggregate GVA (Figure 17), but all bar the Netherlands saw a decline in GVA per employee. In other words, many hospitality sectors across Europe have delivered declining productivity over the past two decades, and increasing volumes of tourism and hospitality have not improved efficiencies or outcomes. Italy, France, and Spain were the worst performers. In Greece, where there was the largest rise in tourist arrivals of any country, there was a large decline in the GVA per employee. Despite this, Greece secured a modest increase in real

pay. In the Netherlands, the opposite was true: productivity modestly improved while real wages declined.

The large overall rises in real GVA nonetheless point to the creation of value somewhere in the economy. The poor performance of wages highlights that while this influx of value, facilitated by air transport, has created jobs, it has not improved living standards in the sector. Indeed, if other channels, such as real rent price increases, are accounted for, living standards may have declined.

**FIGURE 17: THE HOSPITALITY SECTOR HAS SEEN DECLINING PRODUCTIVITY ACROSS EUROPE OVER THE PAST TWO DECADES**

Change in GVA and GVA per employee in the accommodation and food services sector between 2008 and 2023, ranked by change in real GVA per employee



Source: NEF analysis of Eurostat; \*note the graph may be influenced by minor changes in the average numbers of hours worked per employee. The Eurostat data series in question had a methodology change in 2020–21, which could affect comparisons drawn between time periods. We have checked the changes seen over the period 2008–19 (a period unaffected by the methodology change) and confirmed that the headline trends remain robust.

**4.5 THE LABOUR SHARE OF INCOME**

Over the period 2008–23, among the 24 countries included in our sample (Figure 18), an additional €106.6bn of GVA was created in the hospitality sector. Of this, €58.4bn accrued to workers (54.8%), leaving €48.2bn in operating surplus. The labour share of *additional* income this implies, of 55%, is very low given how labour-intensive the industries are, but many countries in the sample are lower still. Spain (52%), Italy (45%), Portugal (44%), and the Netherlands (40%), four of Europe’s largest tourism economies, achieve labour shares of *additional* income well below the average.

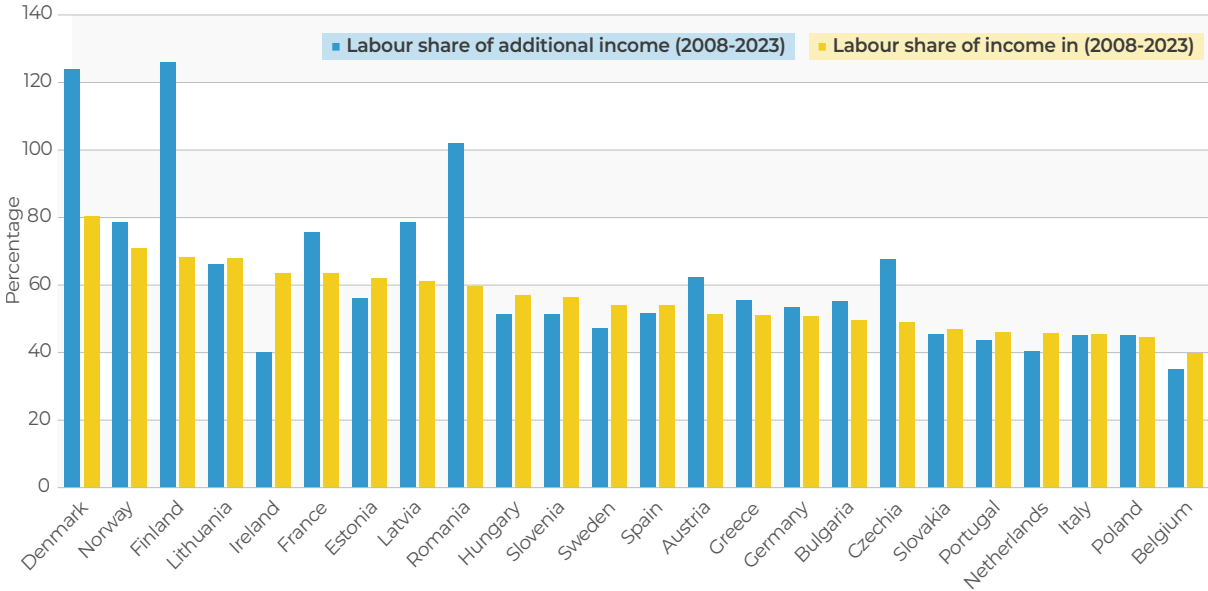
By comparing the labour share of *additional* income over 2008–23 with the labour share of all income in 2023 (Figure 18), we can also discern the general trend over time. Where the share of additional income is higher than the share of total income in 2023, we can discern that the labour share has generally been increasing. Once again,

we note that several major tourist economies have been delivering low and declining labour shares of income, notably Spain, Italy, Portugal, and the Netherlands. By contrast, in countries like Finland, Denmark, Norway, Romania, and France, workers have retained a much larger share of the value created by the sector, and their share seems to be increasing. The labour share of additional income is instructive when we consider who the beneficiaries of further tourism growth might be.

While the additional operating surplus we identified (€48bn) is not the same as profit, which would require deducting factors like taxes, we can nonetheless conclude that business owners in the sector have accumulated significant returns (profit) on their capital. Given that we often see stagnant productivity (Figure 17), this profit arises from increasing volumes of spending rather than from improved efficiency.

**FIGURE 18: SEVERAL TOURIST ECONOMIES HAVE SEEN LOW AND DECLINING LABOUR SHARES OF INCOME, NOTABLY SPAIN, ITALY, PORTUGAL, AND THE NETHERLANDS**

Labour share of income in 2023, and labour share of additional income generated from accommodation and food services between 2008-2023



Source: NEF analysis of Eurostat.

The hospitality sector can be disaggregated into accommodation and food services. Doing so reveals that the accommodation sector is dragging down the labour share of income, with an EU average of 45% compared to 57% in food services. On the one hand, this points to poor labour conditions in the accommodation sector, but it can also relate to the nature of the business. Very small businesses, in which much of the labour is completed by the owner, may present with a low labour share of income due to the way this owner-operator labour is accounted for. Owner-operators may take their income from the businesses via mixed income (as self-employed workers) rather than in wages. This underscores the importance of considering business size and type in any analysis.

**4.6 HOSPITALITY BUSINESS OWNERSHIP**

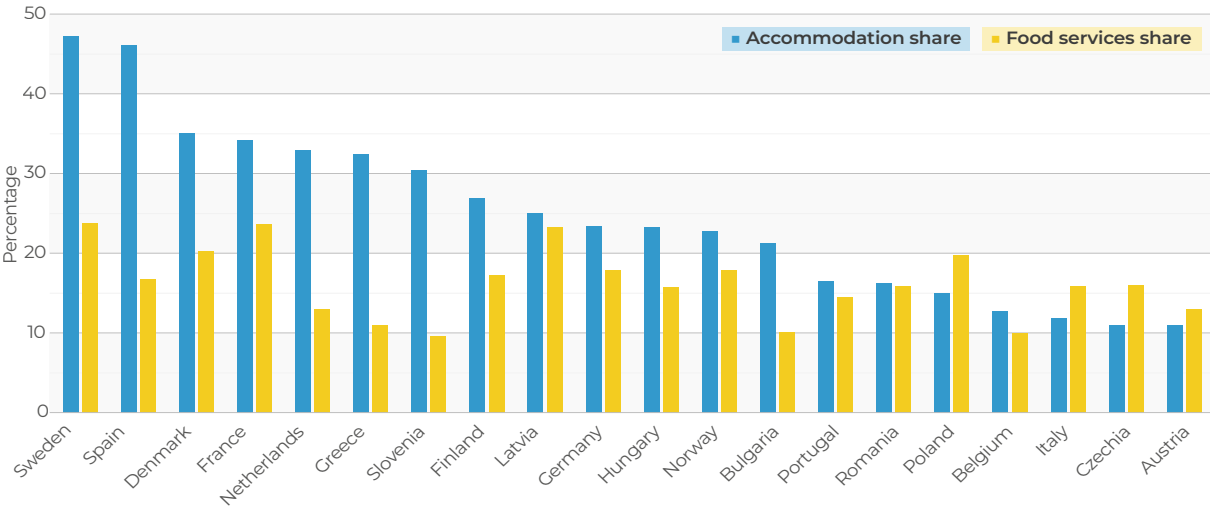
Having established that large shares of the value created through inbound air tourism are captured by business owners (ie capital) in many European nations, we now look at how (or whether) that value is retained in the local economy, and by

whom.

Figure 19 shows the proportion of revenue flowing through hospitality businesses with over 250 employees. In the food service sector, large businesses are rare, capturing between 10% and 20% of revenues across most European nations. Among accommodation services, there is significantly more variability. The share of accommodation services revenues accruing to large businesses is especially high in Sweden (47%) and Spain (44%), and fairly high in Denmark (35%), France (34%), the Netherlands (33%), and Greece (32%). This compares with just 11% in Austria, 12% in Italy, and 17% in Portugal. It points to a very different distribution of revenue flows among social groups and communities between countries. It is important to note that these figures undercount revenue accruing to platform accommodation rentals like Airbnb.

**FIGURE 19: THE SHARE OF REVENUE HELD BY LARGE BUSINESSES IN ACCOMMODATION AND FOOD SERVICES VARIES BY COUNTRY, WITH LARGE FOOD SERVICES BUSINESSES CAPTURING ONLY 10–20% OF THE REVENUES**

Share of tourism-adjacent service sector GVA that was generated by businesses with 250+ employees in 2023



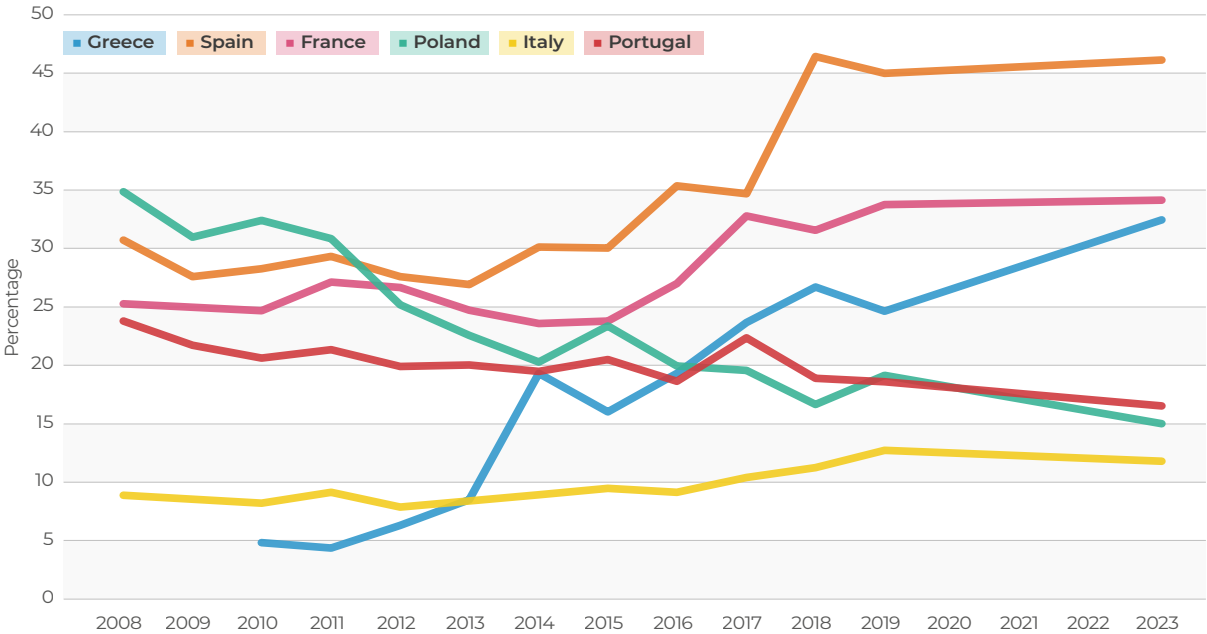
Source: Eurostat \*Incomplete data in Lithuania, Slovakia, Estonia, and Ireland prevents disaggregation at this level.

As well as varying significantly among countries, the share of GVA produced by very large businesses has been changing over time. In the accommodation services sector, where large businesses are more dominant, very large increases in the large-business share were seen between 2013 and 2018 in Greece, Spain, and France (Figure 20). This trend is not inevitable, however, as some countries saw falling shares, notably Portugal and Poland. Interestingly, while large businesses have been capturing a growing share of the Spanish, French, Greek, and (to a lesser extent) Italian tourism markets, sector productivity has not improved (Figures 16 and 17). In Poland and Portugal, where the large-business share has been in decline, productivity has improved. The same trends apply for wages (with the notable exception of the improvements in Greece). From this, we can conclude that consolidation of the sector in the hands of fewer large operators is not a precondition to improving the welfare of workers, nor is it a necessity for efficiency improvement.

To further dig into the distributional impacts of business ownership in tourism, we also considered ownership categories. Eurostat data allows disaggregation into three categories: Sole proprietorship; Partnership, co-operative, association, etc., (partnerships); and Limited liability enterprise (LLE). In hospitality, sole proprietors tend to be the smallest businesses, with an average employment of just 2.7, and make up around 26% of total employment. Partnerships have an average employment of 6.9, but make up just 13% of total employment. LLEs tend to be the largest, with an average employment per enterprise of 9.3. They make up 61% of all employment. While there is scope for other forms of collective ownership among LLEs, such as ownership by pension funds or mutuals, they generally represent less equally held wealth and less locally rooted wealth.

**FIGURE 20: THE SHARE OF LARGE BUSINESSES IN THE ACCOMMODATION SECTOR INCREASED IN GREECE, SPAIN, AND FRANCE, WITHOUT DELIVERING MAJOR IMPROVEMENTS IN THE WELFARE OF WORKERS OR PRODUCTIVITY**

Change over time in the share of GVA generated by accommodation services sector businesses with 250+ employees in selected European nations



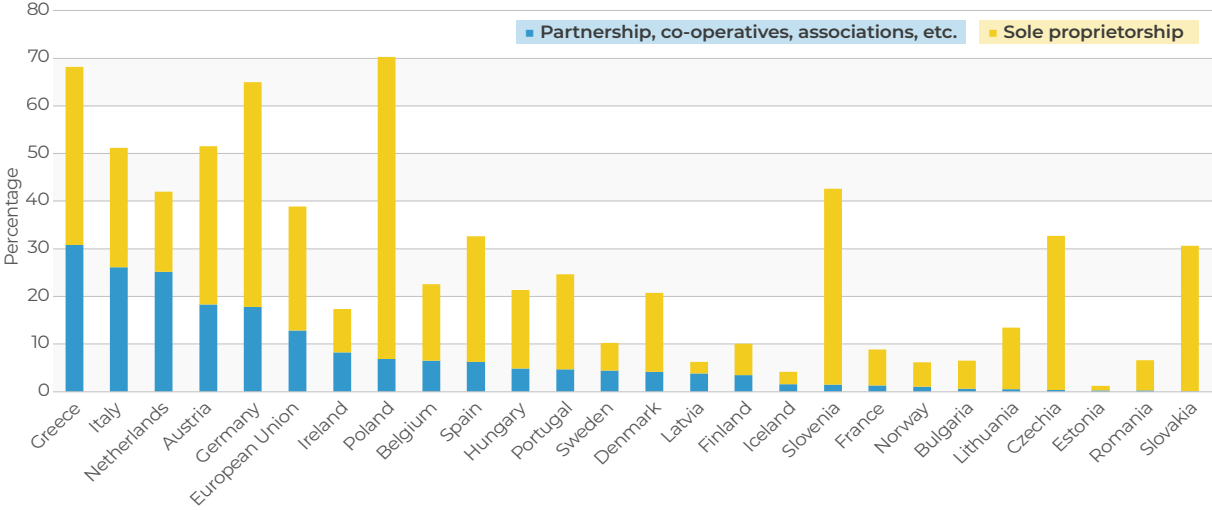
Source: Eurostat \*data between 2020 and 2022 is usually missing or unreliable and, therefore, has been omitted. The Eurostat data series in question had a methodology change in 2020–21, which could have a minor effect on the robustness of trends over time.

Across Europe, we see very significant variation in the prevalence of different ownership structures in hospitality. Some large tourism-receiving nations actually show very high prevalence of more distributed ownership models (Figure 21). Greece, Italy, and the Netherlands lead the way with the highest rates of partnership ownership, at over 25% of employment. Austria and Greece also report very high rates of sole proprietorship, both at over a third of total employment. In stark contrast, Portugal and Spain show very low rates of more distributed ownership models, with 75% and 67% of employment housed in LLEs, respectively.

To fully understand the distributional implications of these business ownership statistics further, deeper research is needed. However, given that the academic literature (albeit very limited) points towards higher rates of economic leakage from private, large, and chain hotels,<sup>66</sup> there is a clear need to consider the role that more distributed models of ownership can play in securing sustainable economic and social value from tourism.

**FIGURE 21: LARGE TOURISM-RECEIVING REGIONS SHOW MORE DISTRIBUTED OWNERSHIP MODELS, EXCEPT PORTUGAL AND SPAIN, WHICH DISPLAY LLE OWNERSHIP PREVALENCE**

Share of employment in hospitality by ownership category



Source: NEF analysis of Eurostat.

A further extension of the ownership question is the role of foreign ownership. Data on foreign ownership in the tourism sector is relatively limited. Eurostat data suggest levels of foreign ownership in the accommodation and food services sector vary significantly across European nations, ranging from 3% to 16% when weighted by employment. These levels have also changed over time and are likely linked to structural trends in the sector, including the expansion of large multinational hotel and restaurant chains. There is evidence of growth in these areas,<sup>67</sup> but complex corporate structures, use of local subsidiaries, and partial ownership stakes cloud the true scale of foreign ownership.

## 5. CONCLUSIONS AND RECOMMENDATIONS

**G**rowth in hospitality, the principal recipient of tourism spending, facilitated by air transport, creates jobs and profits but has failed to deliver either productivity improvements or real wage increases. Rather, it has delivered aggregate growth in returns to capital (particularly large businesses), land, and property owners, at the expense of renters, local communities, small businesses, and the environment.

Critically overlooked is the broader economic cost of high property prices resulting from mass air tourism. Higher rent prices can meaningfully erode the welfare of low-income households, increase their costs, and trap them in undesirable accommodation. Moreover, research shows that distorted property prices can harm the productivity of other sectors of the economy and encourage misallocation of finite capital and labour into rent-seeking and low-productivity sectors.

As such, for regions relying on economic growth driven by air travel and tourism, yet approaching their physical, social, and cultural saturation point for unabated tourist inflows, there exists not only a direct conflict between promised economic gains and the welfare of local communities and the environment, but also a tension between the short-term economic benefits of an industry and the long-term health of the economy.

There is an overwhelming case for much of Europe to rethink its industrial strategy for air transport and tourism. This applies as much to the tourism-sending regions as the receiving regions, as both appear to be accepting a very high environmental and social cost in exchange for a relatively limited, and unequally distributed, economic and social return. We recommend the following.

### IMPLICATIONS FOR ECONOMIC IMPACT ASSESSMENT:

- Air transport interventions (particularly tax policy and airport capacity management) must be assessed as part of the wider tourism ecosystem. Assessments must critically review key tourism impact domains, such as property and rent prices, and local economic value creation.
- Impact assessments should consider the distribution of impacts across social groups, highlighting where beneficiaries are capital owners or renters, large or small businesses, in shared or concentrated ownership, with an equity lens.

### RECOMMENDATIONS FOR POLICYMAKERS:

- Explore mechanisms aimed at increasing the labour share of income and improving productivity growth rates in the hospitality sector.
- Consider air transport policy as part of a suite of policy tools that can slow the rise of house and rent prices faced by households and increase private investment in productive non-tourism sectors.
- Consider how tourism strategy can incentivise useful value creation, including reducing air arrivals where saturation is approaching, and focusing spending in locally and co-operatively owned businesses, and small businesses.
- Ensure aviation taxes are socially aligned, contributing revenue for social protection and infrastructure in tourism and housing.
- Ensure airport capacity management is sensitive to risk, and follows local socioeconomic goals rather than the vested interests of large aviation and tourism businesses.

**DATA AND RESEARCH NEEDS:**

- Improve the granularity of EU and national data collection to enable better research into the social and economic outcomes linked to different types, sizes, and ownership models of business operating in the EU tourism sector.
- Develop understanding of the key issues of:
  - The relative socioeconomic impacts of domestic, European, and international tourists.
  - The rates of profit shifting out of local economies (economic leakage) associated with large, small, and foreign-owned businesses operating in the tourism sector.
  - Economic productivity losses associated with house and rent price rises driven by international tourism.

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**PUBLISHED:**

June 2026

NEF is a charitable think tank. We are wholly independent of political parties and committed to being transparent about how we are funded.

**WRITTEN BY:**

Dr Alex Chapman and Paula Castro Rodriguez

**SPECIAL THANKS TO:**

Special thanks to Denise Auclair, Alicia Fajardo, Chaitanya Kumar, Carlos López de la Osa, Stefan Gössling and the wider NEF team for their insightful feedback. Thanks also to T&E for funding this research.

