Tourism Sector Report

S1 2024

Spain's tourism industry: dynamism in 2023, strength in 2024

The current state and outlook for tourism in Spain: Strength and resilience

What are the trends for international tourism? The key sensitivities to macroeconomic factors

The impact of climate change on tourism in Spain: analysis and outlook



Tourism

SECTOR REPORT Tourism First Semester 2024

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Summary S1 2024



O2THE CURRENT STATE AND OUTLOOK FOR TOURISM IN SPAIN: STRENGTH AND RESILIENCE In 2023, Spain's tourism sector

remained on the path of recovery and growth, surpassing initial expectations and breaking records, not only in terms of nominal expenditure but also in real terms.



10 WHAT ARE THE TRENDS FOR INTERNATIONAL TOURISM IN SPAIN IN 2024? CaixaBank Research has carried out a sensitivity analysis based on the macroeconomic factors that affect international tourism.



16 THE IMPACT OF CLIMATE CHANGE ONTOURISM IN SPAIN: ANALYSIS AND OUTLOOK We have observed that the warmer parts of the country experienced slower growth in tourism-related expenditure between the high seasons of 2019 and 2023 and the pattern of spending changes during heatwaves.

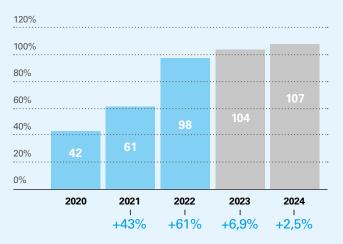
> «I haven't been everywhere, but it's on my list.» SUSAN SONTAG



CAIXABANK RESEARCH FORECASTS FOR SPAIN'S TOURISM INDUSTRY

TOURISM-RELATED REAL GDP

Index (100 = 2019)



Dynamic 2023, strong in 2024

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The tourism sector enjoyed a recordbeating 2023 and will continue to be one of the driving forces of the Spanish economy in 2024.

CaixaBank

The purchasing power of international tourists will improve.

Tourists are going to reward Spain's geopolitical stability in a turbulent year.

Spanish tourists will travel abroad more.

WHAT ARE THE TRENDS FOR INTERNATIONAL TOURISM IN SPAIN IN 2024?



HOW DOES CLIMATE CHANGE AFFECT TOURISM IN SPAIN

Growth in tourism expenditure by temperature in the municipality

Average change between July-August 2019 and July-August 2023



 40

 30

 20

 10

 0

 Below 21 °C

 21 °C

• CaixaBank point of sale card payments show that, between the high seasons of 2019 and 2023, tourist expenditure grew more in the less warm areas of Spain.

This indicates that climate change is beginning to affect the tourism sector. Investment will be key to tackling this challenge.

Source: CaixaBank Research, based on internal data and data from the National Meteorological Agency.

Executive summary

Tourism sector: dynamic in 2023, strong in 2024

After the sharp downturn in the sector caused by the pandemic, the recovery of international tourism in Spain can now be considered almost complete. Among the world's top 10 tourism destinations, Spain was the second to exceed its number of pre-COVID international tourists, behind only Türkiye. These good figures have brought the country to a very remarkable milestone: **Spain became the world's number one tourist destination in 2023**, overtaking France for the very first time. Specifically, we estimate that Spain received around 84 million tourists while France received some 78-82 million, according to estimates by the French Ministry of Tourism.

By residence country of inbound tourists, the **sharp rise in tourists from the US stands out, with almost 40% more arrivals than in 2022 and over 16% more than in 2019**, reflecting the efforts made to attract long-haul markets and higher average expenditure. Tourism from the European Union was more modestly above its 2019 levels due to weakness in the Nordic countries, affected by an unfavourable exchange rate, and Germany. In contrast, British tourism, which started the year with somewhat modest figures, has livened up throughout 2023, which is excellent news for the sector's prospects as the United Kingdom is Spain's main source of foreign tourists.

This revival in international tourist arrivals, together with high inflation, has boosted tourist spending. Between January and November 2023, **international tourist expenditure was 16.6% higher than in 2019**. Domestic tourism, meanwhile, also performed well in 2023: in the first three quarters of the year, domestic expenditure was 22.2% higher than the figure for the same dates in 2019. This is very positive and reflects the fact that Spanish tourists have taken longer to travel abroad than international tourists to return to Spain. However, it also suggests a downward trend for growth in domestic tourism over the short term, as the Spanish get back to taking foreign holidays.

In 2024 we expect the positive trend in Spain's tourism sector to continue but it should also be noted that growth rates will gradually normalise since the recovery from the pandemic is now complete. Specifically, CaixaBank Research expects tourism GDP growth to fall from 6.9% in 2023 to 2.5% in 2024.

Among the main factors that will continue to support Spain's tourism sector, and which we analyse in the second article of this Report, are, firstly, the improved purchasing power in the main residence countries of Spain's inbound tourism, thanks to a drop in inflation and a moderate increase in wages. Secondly, Spain's greater geopolitical stability compared to its rival countries will also continue to work in favour of the sector. Nevertheless, factors such as the euro area's weak economic growth and the recovery of Spanish tourism abroad will limit its expansion.

Finally, the last article of the Report examines a risk for Spain's tourism sector: **the rise in temperatures as a result of climate change**. According to the Copernicus Climate Change Service, 2023 was the hottest year in the planet's history. The analysis we have carried out of CaixaBank POS card payments during the summer heatwaves of 2023 shows how tourists reduce their spending at the hottest time of the day. Although expenditure increases at night, the overall balance is negative and suggests that the sector needs to be prepared and invest in adapting to more torrid and volatile temperatures.



Situation and outlook

The current state and outlook for tourism in Spain: Strength and resilience

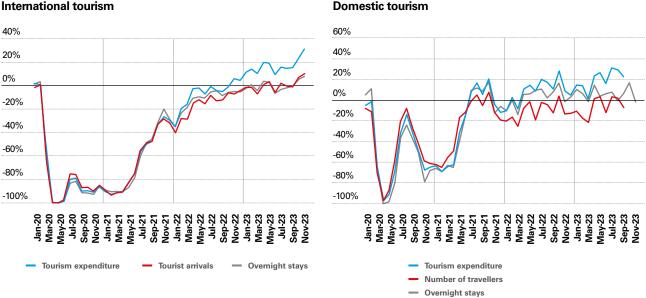
In 2023, Spain's tourism sector remained on the path of recovery and growth, surpassing initial expectations and breaking records, not only in nominal expenditure but also in real terms. International tourist arrivals continued to grow strongly, exceeding the high levels reached in the excellent 2019 season before the pandemic. Domestic tourism remained resilient in spite of inflation still being high. In 2024, we expect the positive trend for Spain's tourism sector to continue and its GDP to increase by 2.5%, with the sector outpacing the overall economy and remaining one of the drivers of the Spanish economy. This projection is the result of structural factors such as the positive income elasticity of tourism demand, as well as temporary factors, including the greater levels of security of Spain compared to some rival destinations.

Overview of the 2023 season: international tourism gets back to its pre-pandemic levels while domestic tourism shows resilience against a backdrop of high inflation

In 2023, tourism was one of the driving forces of the Spanish economy and exceeded the levels reached in 2019. Indicators published by the country's National Statistics Institute (INE) reveal that real tourism demand exceeded the 2019 figure, supported by both the resilience of domestic tourism and the boost provided by international tourism. Overnight stays in tourist accommodation in the first 11 months of 2023 exceeded those of the same dates in 2019 by 1.9%. This figure is supported by a resilient domestic tourism which exceeded its 2019 figure by 5.5%, as well as by the revival in international tourism, only 0.2% below its 2019 figure.

The resilience displayed by tourism demand is noteworthy in a context of still high inflation. On average in 2023, there was a cumulative increase in tourism service prices of 17.5% compared to the average for 2019. Of particular note is the rise in the price of accommodation, up by 26.2% since 2019. All in all, inflation in tourism services moderated throughout 2023 (7.0% year-on-year in November compared with the annual peak of 10.4% in March) and moved away from the double-digit figures of the summer of 2022.

Indicators of tourism demand



Change compared to the same month in 2019

International tourism

Note: Overnight stays by tourists in hotels, rural tourism establishments, tourist flats and campsites. Source: CaixaBank Research, based on data from the National Statistics Institute.

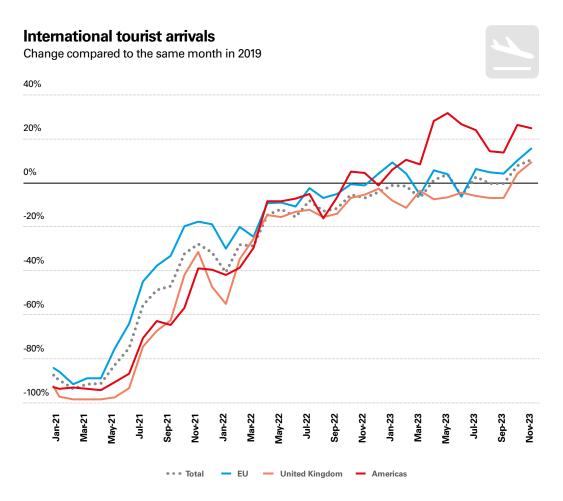
The recovery of tourism in real terms and high inflation pushed up nominal tourism expenditure, both domestic and international. In the first three guarters of 2023, domestic tourism expenditure was 22.2% higher than for the same period in 2019, while international tourism expenditure in the first 11 months of the year was 16.6% higher than for 2019.

Although growth in international tourist arrivals continued to be heterogeneous in terms of their countries of residence, 2023 resulted generally positive figures across the board. By region, there were spectacular results from tourism from the Americas, 20.7% up on the arrivals in 2019. Although more modest, the traditional markets also showed encouraging results. For instance, tourism from the European Union exceeded its 2019 levels by 4.3%. However, this figure is slightly weighed down by less positive data from countries that went through adverse macroeconomic conditions in 2023, such as the Nordic countries and Germany, posting levels that were 12.5% and 4% below 2019, respectively. In the case of the Nordic countries, it should be noted that the weakness of the Swedish krona and Norwegian krone played an important role in this poor performance.

Tourism from the United Kingdom, the largest source of foreign tourists to Spain, returned to its 2019 level in the end of 2023

Tourism

British tourism, despite not recovering in 2023 as a whole (remaining 2.7% below its 2019 level), was still a source of encouraging news in the last few months of the year. Since autumn 2022, British arrivals had been stuck at levels between 5% and 10% below those of 2019 but, in the last quarter of 2023, these picked up and surpassed the 2019 figures. Given the importance of the British market for Spain's tourism (the UK is the leading country of residence for foreign tourists to Spain), this is excellent news that improves the sector's prospects.



Source: CaixaBank Research, based on data from the National Statistics Institute.

The outlook for Spain's tourism sector in the short term: normalisation and solidity

The short-term outlook for tourism in Spain is influenced by three key factors: the full recovery of tourism after the pandemic, Spain's high degree of geopolitical stability compared with its rival destinations, and the rise in disposable income in Spain and in the countries of residence of inbound tourists.



International tourism in Spain managed to complete its recovery in 2023 following a sharp drop in the aftermath of COVID-19

As we have shown, international tourism in Spain managed to complete its recovery in 2023 after the sharp drop that occurred as a result of the COVID-19 pandemic. As can be seen from the data provided by the United Nations World Tourism Organization, this is a remarkable feat since Spain is the second fastest recovering country among the top 10 recipients of international tourism, behind only Türkiye. This full recovery is an endorsement of the competitiveness of Spain's tourism sector. On the other hand, it means that the lift to growth rates provided by the recovery to pre-pandemic levels has dissipated. It should also be noted that Spanish tourists have returned to travelling abroad more slowly than international tourists to Spain. Consequently, as Spanish tourists gradually get back to travelling abroad, the 'end of pandemic' effect will become a downside risk for domestic tourism in the short term.

This effect could still be felt in 2023, when the post-pandemic recovery pushed growth in tourism GDP to 6.9%, with the sector contributing significantly to Spain's GDP growth. In the coming years, we expect growth rates in the tourism sector to normalise as the end-of-pandemic factor wears off.

International tourist arrivals by destination country

Change compared to 2019

Country	Jan.	Feb.	Mar.	Apr.	Мау	Jun.	Jul.	Aug.	Sep.	Cumulative 2023
France	5	-2	-10	-17	-16	-25				-14
Germany	-24	-17	-19	-16	-11	-10	-8			-14
Italy	-11	-7	-16	-8	-17	-11				-12
Mexico	1	-4	-11	-8	-6	-7	-5	-9		-6
Spain	-1	-1	-7	1	4	-6	3	0		-1
Thailand	-42	-41	-36	-32	-26	-27	-25	-29		-33
C* Türkiye	30	12	4	-1	9	3	6	3	4	6
UK	2	-8	-17							-8
US	-18	-19	-17	-21	-20	-21	-16			-19
World	-20	-19	-19	-17	-14	-13	-10			-16

Source: CaixaBank Research, based on data from the UNWTOTourism RecoveryTracker.

Although this end-of-pandemic effect will no longer be a tailwind for Spain's tourism sector, it still has two other key supporting factors in the short term. The first is the country's geopolitical stability compared to some of its rival destinations. It should be noted that, during the last four months of 2023, there was increased instability and insecurity in the eastern Mediterranean region which, according to all indications, will last throughout 2024. Moreover, historically, geopolitical unrest in the Middle East has been detrimental to the main price-based competitors for Spanish tourism, such as Türkiye and Egypt. Therefore, we expect this continued geopolitical uncertainty to drive tourists from the Eastern Mediterranean to Spain.

The other tailwind for the Spanish tourism sector in the short term is the increase in gross disposable income both in Spain and in the main countries that are sources of inbound tourism. After two years in which gross disposable income has generally risen at a rate below inflation, the decline in inflation in 2023, which we expect to continue in both the euro aera and the UK in 2024, will help towards a gradual recovery in the purchasing power lost in recent years. Thus, although real GDP growth rates are expected to be weak again in both the euro area and the UK, we expect the recovery in real income to support growth in the tourism sector.



Long-term prospects for the Spanish tourism sector: dynamism and less seasonility

Short-term factors help us to determine whether growth in the near future will be above or below the long-term growth rate. But what factors determine the long-term growth of Spain's tourism sector?

The main factor is that, as income rises, consumers allocate an increasing proportion of their income to tourism.¹ In other words, tourism can be considered a «luxury» good, since its consumption increases more than proportionally as income rises. This leads us to believe that the tourism sector has the potential to be a long-term driver of the Spanish economy, as the income level of households in the home countries of growth in inbound tourists increases. In this respect, growth of the middle classes in several countries is an important source of growth for Spain's tourism sector. Moreover, in a world where social media presence is becoming increasingly important, activities that generate content on these channels, such as travelling, could benefit. This increases the likelihood that consumers will continue to allocate a growing proportion of their income to tourism in the medium term.

After the pandemic, Spain is the world's second fastest recovering tourist destination

(1) See Peng, B., Song, H., Crouch, G. I. and Witt, S. F. (2015). «A Meta-Analysis of International Tourism Demand Elasticities». Journal of Travel Research, 54(5), 611-633.



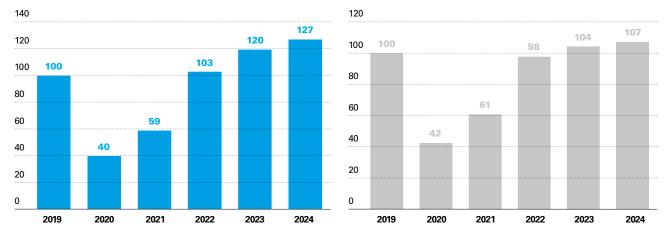


Another positive long-term factor for Spain's tourism sector is the trend towards demand becoming less seasonal. Growth in the senior population and those without school-age children, together with the increased flexibility of some workers to telework and take holidays outside the high season, is helping to deseasonalise tourism in Spain. In 2023, the country posted year-on-year growth rates that were five times larger in the second and fourth quarters (7% and 7.6%) than in the third quarter (1.3%). Demographic trends (greater life expectancy, ageing population) and the consolidation of new ways of working suggest that we will continue to see stronger growth rates in the low season than in the high season. This would help to reduce the under-utilisation of tourism infrastructures in the low season and thereby help to increase the sector's long-term growth rate, as well as improving the quality of employment in the sector (less seasonality).

However, while the income sensitivity of tourism expenditure and deseasonalisation are important factors that have the potential to increase tourism in the long term, the sector is facing a major risk: climate change. As we will see later in this report, climate change could undermine such growth and being prepared for this challenge will be key to the long-term prospects of Spain's tourism sector.

Forecasts for 2024

Having weighed up the key factors for Spain's tourism sector, the most likely scenario is that the positive trend for growth in the sector will continue in 2024. Although the tourism sector's full post-pandemic recovery will normalise growth rates in the coming years, the upturn in purchasing power in Spain and Europe together with Spain's greater geopolitical stability compared with competitor countries will help the tourism sector set new records in 2024. However, Europe's fragile macroeconomic outlook and the recovery of Spanish tourism abroad will be factors that will limit the sector's growth.



Trend in nominal (left) and real (right) tourism GDP

Index (100 = 2019)

Note: Projection from 2023 onwards.

Source: CaixaBank Research, based on data from the UNWTOTourism RecoveryTracker.

CaixaBank Research forecasts that the GDP of the tourism sector will grow by 2.5% in real terms in 2024, reaching a level 7.1% above 2019, after ending 2023 with a year-on-year growth of 6.9% and having exceeded the 2019 level by 4.5%.

As for domestic demand, we predict it will rise by 0.3% in 2024. This forecast is conservative in view of the growth in household disposable income projected for 2024 but we expect Spanish tourism to grow primarily abroad. In contrast, we believe that international arrivals will rise by 3.8% as a result of the geopolitical situation in the Middle East and the recovery of real wages in the residence countries of inbound tourists. Therefore, in 2024 we expect international tourism to remain the main driver of growth.

We also expect the growth in prices to ease, in line with the fall in headline inflation. This will moderate the growth rate of nominal tourism GDP to 6.1% in 2024, bringing nominal tourism GDP to 26.8% above its 2019 level. With these figures, tourism GDP will reach a relative share of 12.7% of the total GDP of the Spanish economy, 0.3 pp more than in 2019, according to our forecasts.

CaixaBank Research predicts that real tourism GDP will grow by 2.5% and nominal tourism GDP by 6.1% in 2024



Macroeconomic analysis

What are the trends for international tourism in Spain in 2024? A sensitivity analysis based on macroeconomic factors

Exploring the macroeconomic factors affecting the evolution of international tourism in Spain, we find the rate of income growth in the home countries of inbound tourists is the main determining factor. We also observe a close relationship between geopolitical risk in the Eastern Mediterranean and increases in international tourism in Spain. Moreover, while the exchange rates of the pound and dollar affect British and US tourism, the strength of the euro against other foreign currencies does not affect better than increase the propensity of Europeans to travel to Spain. Finally, inflation appears to be weak and heterogeneous in terms of its effects as a determinant of tourism demand. Using these sensitivities and CaixaBank Research's forecast scenario for 2024, we estimate that international tourist arrivals will increase by 3.8% in 2024, with British and US inbound tourism growing above this average.

What factors determine the arrival of international tourists to Spain?

In this article we analyse the main factors that determine the evolution of international tourism in Spain. We have used a multiple regression model in which the dependent variable is the number of tourists from the main residence countries for Spain's inbound tourism (UK, France, Germany, Italy and the US). The independent variables include the gross disposable income of households in the countries of origin, a geopolitical risk index, the exchange rate of the euro against other major currencies and inflation (both in Spain and in the countries of origin).²

2 The regression model also includes a time trend.

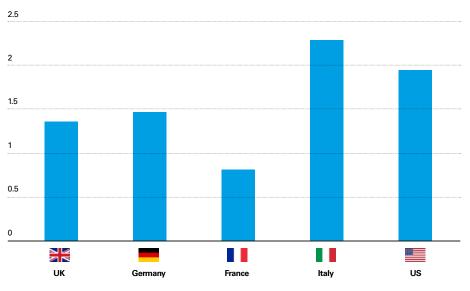


The real gross disposable income of international tourists

The main factor behind the growth of international tourism in Spain is the situation of real income in the home countries of its inbound tourism. The chart below shows the growth in the number of international tourists per country of origin for each point of real income growth in each country.³ Except for France, all coefficients are substantially above 1, a result that is consistent with the fact that international tourism in Spain is a luxury good; i.e. when income increases, tourism expenditure grows proportionally more than income.⁴ This points to a high growth potential for Spain's tourism sector as household income increases in the residence countries.

Growth in international tourist arrivals by additional point of real gross disposable income

In percentage points (pp)



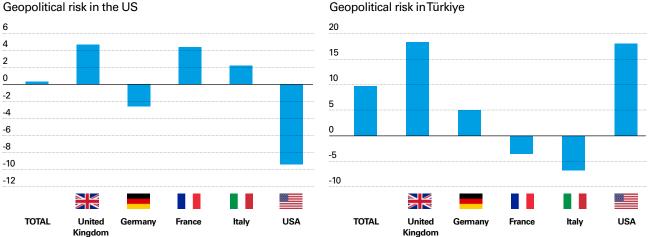
Source: CaixaBank Research, based on data from the National Statistics Institute and Thomson Reuters Refinitiv Eikon.

③ Specifically, the model includes the average growth in gross income in residence countries in the four quarters prior to the trip, adjusted for inflation in the tourists' country of origin.

A Note that this coefficient does not correspond to the elasticity of international tourist arrivals to income since we do not adjust for population growth.

Growth in international tourist arrivals per additional point of geopolitical risk index

In percentage points (pp)



Geopolitical risk in Türkiye

Source: CaixaBank Research, based on data from the National Statistics Institute and Thomson Reuters Refinitiv Eikon.

Geopolitical risk

One of the key factors in the success of Spain's tourism sector is the high perception of safety and security offered by the country. According to the World Economic Forum's Tourism Competitiveness Index, Spain scores 6 (out of a maximum of 7) in the pillar measuring safety and security,⁵ a significantly higher score than leading competitors such as Italy (5.5), Greece (5.4) and Türkiye (4.8), although somewhat lower than Portugal (6.3). We examine the trend in tourist arrivals in relation to two measures of geopolitical risk: an American index of geopolitical risk, used as a proxy (a measure that, being sufficiently close, represents the value of another in a calculation) for global geopolitical risk, and an index of geopolitical risk in Türkiye, used as a proxy for geopolitical risk in the eastern Mediterranean.⁶

Geopolitical risk perceived from the United States seems to have a negligible effect on international tourist arrivals to Spain. In fact, this index only has a statistically significant effect on arrivals from the US. In contrast, geopolitical instability in the Eastern Mediterranean seems to divert tourist flows to destinations perceived as safer, such as Spain. In particular, an increase in geopolitical risk in Türkiye leads to a statistically significant increase in the total flow of tourists to Spain, with particularly notable increases in American, British and French tourism.

5 This pillar is constructed based on several indicators, such as the safety of walking alone at night and the number of homicides per 100,000 inhabitants.

6 The geopolitical risk index is constructed from newspaper articles by searching for keywords related to geopolitical threats and tensions. Data from Caldara, D. and lacoviello, M. (2022). «Measuring Geopolitical **Risk**» American Economic Review, April, 112(4), pp. 1,194-1,225.



Exchange rates

In general, we can expect a weak euro against foreign currencies to act as a tailwind for Spain's international tourism as travel to Spain becomes more affordable for Britons and Americans, while travel to destinations outside the euro area becomes more expensive for European tourists. Since exchange rates tend to be quite volatile and long-term trends differ depending on the currency (for example, pound sterling depreciated against the euro between 2020 and 2022 while the US dollar fluctuated within a fairly stable range), we use a range of specifications to examine the behaviour of British, American and European tourists in the face of exchange rate fluctuations.

This analysis shows that, in general, growth in Spain's international tourism slows down when the euro is strong. In particular, the exchange rates of the pound sterling and US dollar affect British tourism and US tourism, respectively. However, the strength of the euro against a basket of foreign currencies⁷ does not appear to significantly change the propensity of European tourists to travel to Spain and there is no indication that an appreciation of the euro leads to a reduction in tourism from euro area countries to Spain.

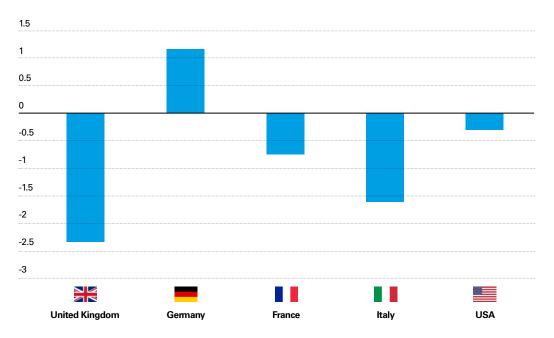
Inflation

Inflation, both in Spain and in the residence countries, appears to have a limited effect on tourist arrivals. Domestic inflation did not show any significant results either for total international tourism or for any of the main markets analysed. In contrast, inflation in the countries of origin seems to have a somewhat more negative effect on Spain's inbound tourism. However, this relationship is only significant in the case of the United Kingdom. ⑦ JP Morgan Euro Area Neer Nominal index, which includes the currencies of the euro area's trading partners adjusted by relative weight.



Percentage change in international tourist arrivals per additional point of inflation in the home country

In percentage points (pp)

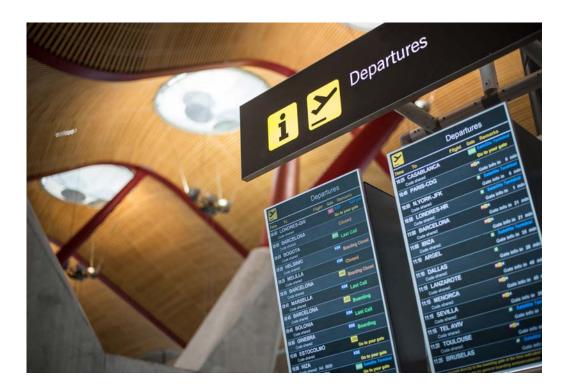


Source: CaixaBank Research, based on data from the national accounts of the respective countries analysed.

Forecasting tourist arrivals by residence country based on macroeconomic determinants

Equipped with the estimated sensitivities of the different economic factors on the number of international tourists visiting Spain, and combining these with CaixaBank Research's forecast scenario for the main economies, we can predict the number of international tourists visiting Spain in 2024. Specifically, we expect international arrivals to Spain to grow by 3.8%, a rate slightly higher than the 3.4% average over the past 20 years. Of particular note is the role played by the recovery in real disposable income in the main residence countries of Spain's inbound tourists as the inflationary shock dissipates. Likewise, the greater security offered by Spain in a context of high geopolitical instability in Eastern Mediterranean countries and a certain appreciation of the euro expected in 2024 both support this forecast.

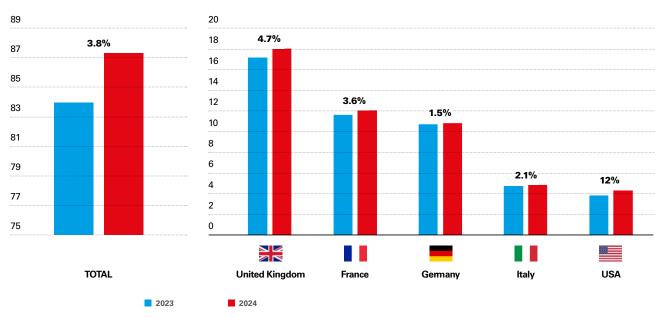
By country, in 2024 we expect tourist arrivals from the UK and the US to grow the fastest. The expected appreciation of the euro against the pound sterling and US dollar will be modest (according to CaixaBank Research the euro will rise from 1.07 dollars on average in 2023 to 1.12 in 2024, and from 0.87 pounds to 0.89). Moreover, the recovery in real disposable income and the security situation will support the flow of British and American tourists to Spain. It should be noted that, in the US, growth in real gross disposable income in 2023 was 1.2 pp above its historical average. Likewise, both the UK and the US are countries that have historically been sensitive to instability in the Eastern Mediterranean.



As for the Euro Area countries, we expect Italian, German and French tourism to post a somewhat weaker performance. French tourists are expected to perform best, with a predicted growth of 3.6%, boosted by increases in gross disposable income. Italian and German tourism will grow more slowly because of their declines in gross disposable income in 2023 and their lower estimated sensitivity to geopolitical risk in the eastern Mediterranean.

International tourist arrivals in 2023 and 2024

Number of tourists (millions)



Source: CaixaBank Research, based on data from the National Statistics Institute and CaixaBank Research estimates.



Challenge for the tourism sector

The impact of climate change on tourism in Spain: analysis and outlook

Climate change represents a first-order challenge for the tourism sector. In July 2023, the European Commission published a study that places some areas of Spain among the European regions where tourism is most vulnerable to climate change. Using anonymised and aggregated data from card payments made via CaixaBank point of sale terminals, we analysed whether there were any changes in tourist spending and found that the hottest areas of the country experienced slower growth in tourist expenditure between the high seasons of 2019 and 2023. We also found changes as well as changes in the pattern of expenditure during heat waves. Our analysis highlights the need for the tourism sector to consider climate risk and prepare for a future with more extreme temperatures.

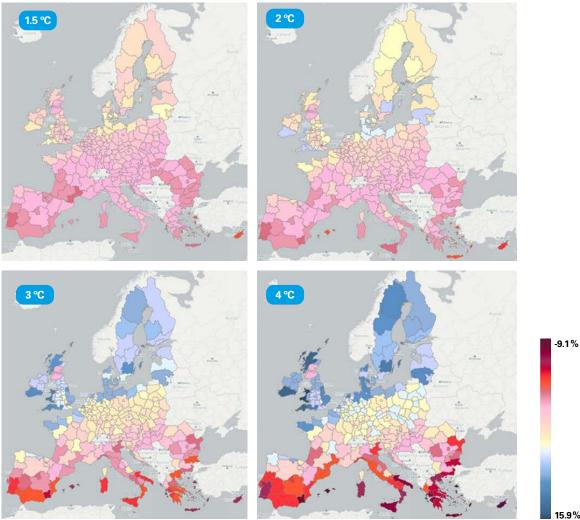
The European Commission highlights the climate risk for tourism in Spain

The study «Regional impact of climate change on European tourism demand» by the Joint Research Centre (JRC) of the European Commission, published in July 2023, includes estimates of the tourism sector's vulnerability to climate change in the different European regions. As can be seen in the maps below, Spain contains several of the regions considered most vulnerable to adverse climate scenarios. According to these estimates, in an extreme scenario with temperature gains of four degrees Celsius, the Region of Murcia and the Balearic Islands would see inbound tourism fall by more than 5% over the year as a whole.

Spain is one of the regions in Europe most severely affected by rising temperatures. Tourist flows could decrease, especially in the high season.

Tourist overnight stays at a regional level

Change from a baseline scenario without global warming



15.9%

Source: Joint Research Centre, European Commission.

The JRC's projections for Spain are particularly severe for the high season. For the year as a whole, in scenarios of a temperature gain of three and four degrees Celsius, we would see a fall in tourism demand of 1.6% and 3.1%, respectively (this estimate incorporates an increase in tourism demand between October and May). However, for the months of July and August the JRC forecasts a drop in tourism demand of almost 10% in the three-degree scenario and more than 15% in the four-degree scenario.

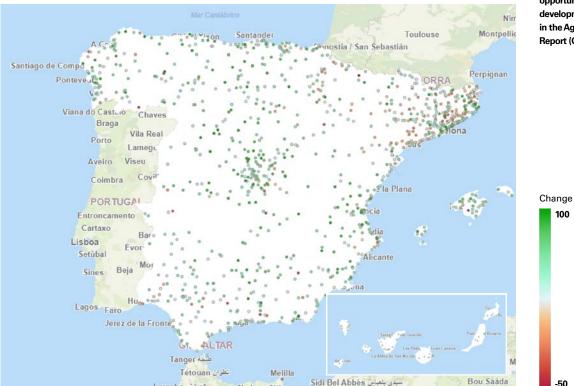


Where is tourism expenditure growing the most in Spain?

Given the results of the JRC study, CaixaBank Research has investigated to what extent changes can already be seen in the geographical distribution of tourism expenditure in Spain using CaixaBank point of sale card expenditure data, anonymised and aggregated at the level of municipality.⁸ The following map shows the percentage change in tourism expenditure between July and August 2019 and the same period in 2023 in the 500 most populated municipalities in Spain. The image shows how the Atlantic coast has seen strong growth, while this is lower in the southern part of the Mediterranean coast. Rural tourism is also performing well.9

Tourist expenditure by municipality

Change between July-August 2019 and July-August 2023



Source: CaixaBank Research, based on internal data and data from the National Meteorological Agency.

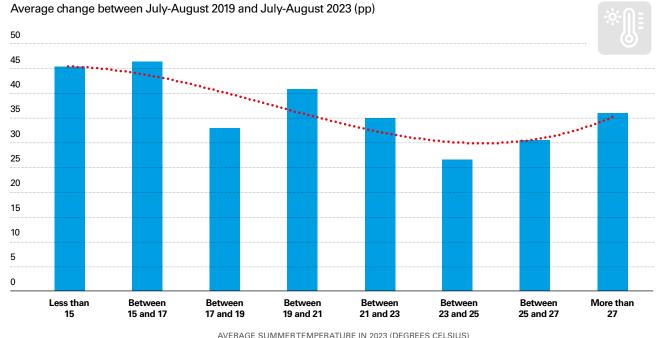
Between 2019 and 2023, tourism expenditure has seen most growth in the least hot areas of Spain.

8 Tourism expenditure corresponds to spending via cards issued by foreign entities (international tourists) and spending via cards issued by Spanish entities to carry out transactions outside their usual place of expenditure (domestic tourists), registered by CaixaBank point of sale terminals.

9 See «The rise of rural tourism in Spain: an opportunity for rural development», published in the Agrifood Sector Report (October 2023).

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In the following chart we have grouped municipalities according to their average temperature in summer 2023 and have calculated the average change in tourism expenditure between summer 2019 and summer 2023. As can be seen, there is a negative correlation between the growth in tourism expenditure and the average temperature in the summer of 2023. In other words, tourism expenditure has grown more in the less hot municipalities of Spain. In particular, tourism expenditure rose by about 45% in municipalities with lower average temperatures (below 17 degrees Celsius). In contrast, tourism expenditure increased by around 25%-35% in municipalities with higher average temperatures (above 23 degrees Celsius).



Growth in tourism expenditure by the temperature of the municipality

Source: CaixaBank Research, based on internal data and data from the National Meteorological Agency.

Coastal tourism in Spain: more vulnerable to climate change?

If we analyse the trend in tourism expenditure according to the type of municipality (coastal, urban or rural),¹⁰ and according to the average temperature in summer 2023, we can see that the greatest growth differential in tourism expenditure by temperature is observed in coastal municipalities. In other words, between the summer of 2019 and the summer of 2023, tourism expenditure grew by around 45% in coastal municipalities with average temperatures below 21 degrees, while in warmer coastal municipalities (average temperature above 25 degrees), tourism expenditure rose by 35% on average, representing a differential of 10 percentage points (pp). This differential is similar in urban municipalities (9.6 pp) but much lower in rural municipalities (4.4 pp). It should be noted, however, that these differences are also partly due to the saturation of certain coastal destinations with high temperatures and, therefore, with less potential for growth between 2019 and 2023.

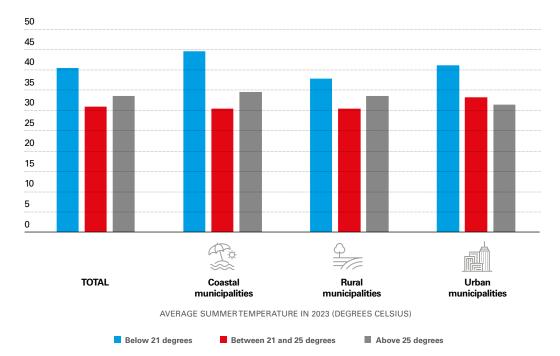
Municipalities are classified as urban if they have more than 30,000 inhabitants, or more than 100 inhabitants per km². The rest of the municipalities are classified as coastal if they have a coastline, while the rest are considered rural municipalities.

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Growth in tourism expenditure by temperature and type of municipality

Average change between July-August 2019 and July-August 2023 (pp)



Source: CaixaBank Research, based on internal data and data from the National Meteorological Agency.

The improved performance of coastal and urban tourism in cooler municipalities highlights the attractiveness of these destinations within a context of rising temperatures. This points to the need for the sector to be prepared and invest in adapting to more torrid and volatile temperatures. Urban centres tend to offer indoor options such as museums, shops and restaurants, which remain attractive regardless of the temperature as they have a better infrastructure to deal with heatwaves, such as more widespread use of air conditioning. However, coastal areas rely heavily on outdoor and beach activities which are directly affected by heatwaves.

The relatively small effect of temperatures on rural tourism expenditure is surprising, as rural tourism is also mostly outdoors and in environments with less infrastructure to alleviate the effects of heat. In fact, this impact may have been underestimated due to the boom in rural tourism during the pandemic, leading to persistent growth in rural tourism, particularly in areas close to Madrid and generally with high temperatures. It is likely that in the coming years, as rural tourism normalises, we will see climate change become a determining factor for rural tourist flows as well.



Tourism in a heatwave: how rising temperatures affect tourism expenditure

According to the Copernicus Climate Change Service, 2023 was the hottest year in the planet's history since records began. In this section we explore how one phenomenon associated with climate change – heatwaves – affects spending by tourists. Understanding changes in tourist behaviour at the height of a heatwave provides clues as to what steps the industry should take to adapt to climate change. To this end, we analyse the sensitivity of tourist expenditure to an increase sounds better in temperature relative to the historical daily average, as well as changes in spending patterns related to the distribution of expenditure throughout the day or the type of establishment.¹¹

CaixaBank point of sale card payments during the summer heatwaves of 2023 show that tourists reduce their spending during the hottest times of the day

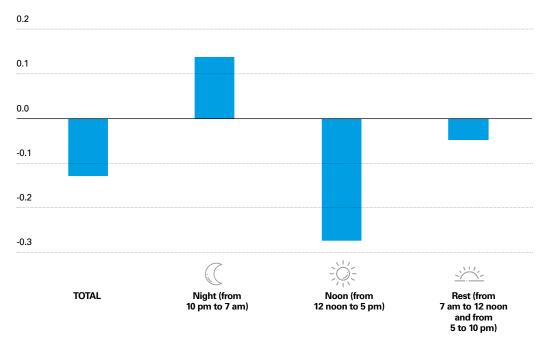
As can be seen in the chart, for the same municipality, each degree that the average daily temperature in July and August 2022 and 2023 deviates with respect to the historical average daily temperature is associated with a 0.27% drop in tourist expenditure between 12 noon and 5 pm, and with a 0.14% increase between 10 pm and 7 am. In the rest of the time slots there is no significant difference. In other words, on days with extreme temperatures we observe a drop in aggregate tourist expenditure (–0.12% for each degree) and a redistribution of expenditure towards the cooler times of the day and night.

11 A linear regression model is estimated, in which the dependent variable is tourist expenditure in each time slot during the months of July and August in a municipality. The explanatory variable in question is the difference between the average temperature on each day in 2023 and the historical average on that day. by municipality. Fixed effects are included at a municipal level to avoid problems related to omitted variables.



Tourist expenditure by time of day/night

Variation in the same municipality between July-August 2022 and July-August 2023 for each additional degree compared to historical daily temperature average (%)



Source: CaixaBank Research, based on internal data and data from the National Meteorological Agency.

In terms of the composition of spending, and as can be seen in the chart, in the same municipality heatwaves are associated with lower tourist expenditure in the main sectors of discretionary consumption by tourists, with a 0.16% drop in expenditure in restaurants for each degree above the historical average for the day, and a 0.34% drop in leisure. However, supermarkets did not benefit from this drop in restaurant expenditure, also falling by 0.13%. The only sector analysed that seems to benefit from heatwaves is pharmacies, whose turnover increases by 0.06% for each degree above the historical average.

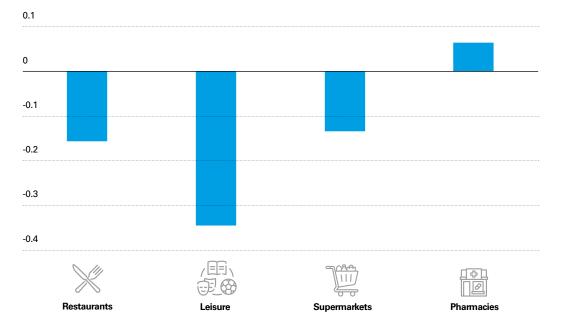
The implications of climate change for Spain's tourism sector

In light of these findings, it is crucial for the tourism sector to innovate and invest in adaptation strategies. This includes developing climate-resilient infrastructures, rethinking tourism experiences to adapt to changing tourist preferences, and ensuring tourist comfort in a wide range of temperatures, whilst also promoting sustainable practices that help to reduce the sector's contribution to global warming.

The only sector analysed that benefits from heatwaves is pharmacies, whose turnover increases by 0.06% for each degree above the historical average

Tourism expenditure by sector

Variation in the same municipality between July-August 2022 and July-August 2023 for each additional degree of temperature compared to historical daily temperature average (%)



Source: CaixaBank Research, based on internal data and data from the National Meteorological Agency.

Given the significant impact of rising temperatures in Spain's coastal regions, specific strategies such as promoting water-based activities during the hottest parts of the day, improving shade and cooling facilities on beaches, and developing evening markets and events can help mitigate the effects of the heat. For rural areas, promoting activities early in the morning or evening, and diversifying tourism to include more indoors options could help maintain tourist interest and expenditure.

Urban destinations, on the other hand, should not be complacent in spite of their resilience. Efforts made to improve urban green spaces, to offer more cultural activities in the evening and ensure that tourists are well informed about the options available during warmer periods can improve the overall experience.

Finally, the tourism sector must also continue to adopt best practices in order to mitigate its impact on the climate. It is important to note that, given the preference of a growing number of tourists for sustainability, this can be an opportunity beyond the positive impact on the climate. Offering tourists options with a low environmental impact is not only something that helps to alleviate changes in the climate that threaten tourism in Spain but also has the potential to access a growing market. Tourism

Main indicators of the tourism industry

Percentage change compared with the same period the previous year, unless otherwise specified

	Average 2000-2007 ¹	Average 2008-2014 ²	Average 2015-2019 ³	Average 2020	Average 2021	Average 2022	Average 2023⁴	Trend⁵	Date lates data
Economic activity indicators	2000 2007	2000 2011	2010 2010	2020	LULI	LULL	2020		uutu
Total GDP	3.4	-1.2	2.6	5.5	5.5	5.5	2.4	-ờ-	Q3 2023
Tourism-related GDP	1.7	-0.7	4.6	-54.9	37.4	58.6	6.9	-ờ-	2023
Labour market									
Total affiliated workers	3.5	-2.3	4.1	2.6	2.6	3.9	2.7	÷X	Dec-23
Affiliated workers in the tourism industry	4.4	-1.0	4.0	2.4	2.4	10.4	5.1	-ờ-	Dec-23
Accommodation services	4.9	-0.8	4.9	5.1	5.1	23.2	9.2	-ờ-	Dec-23
Food and beverage services	4.6	0.9	4.0	2.2	2.2	10.6	4.5	-ờ-	Dec-23
Travel agencies/tour operators	5.6	-2.8	5.7	-6.9	-6.9	7.8	9.9	-ờ-	Dec-23
Other tourism services	4.1	-3.1	3.6	2.3	2.3	6.7	4.5	÷ċ-	Dec-23
Balance of payments									
Tourism receipts (% of GDP)	4.7	4.6	5.6	1.4	2.4	5.1	6.1	-Ķ	Q3 2023
Tourism expenditure (% of GDP)	1.2	1.2	1.7	0.7	0.9	1.6	1.7	÷Ķ.	Q3 2023
Total tourism (% of GDP)	3.6	3.4	3.9	0.8	1.6	3.7	4.3	-ờ-	Q3 202
Tourism demand indicators									
International tourism									
Number of international tourists	3.8	2.2	5.2	-77.4	64.7	129.8	18.2	-ờ-	Nov-23
Origin: United Kingdom	-	4.6	3.5	-82.5	36.6	251.5	14.4	-ờ-	Nov-23
Origin: Germany	-	5.7	1.6	-78.6	117.8	87.5	9.9	-ờ-	Nov-23
Origin: France	-	11.1	1.4	-65.2	49.8	73.4	16.5	-ờ-	Nov-23
Origin: Italy	-	14.1	4.8	-79.1	79.8	135.5	20.1	-ờ-	Nov-23
Origin: United States	-	1.2	15.8	-87.9	97.8	251.1	39.4	-ờ-	Nov-23
Origin: Rest of Europe	-	-	7.6	-77.5	82.7	118.0	11.0	-ờ;-	Nov-23
Origin: Outside Europe	-	-	13.0	-79.2	6.9	205.0	44.7	-ờ-	Nov-23
Total expenditure of international tourisms	5.4	3.4	7.9	-78.5	76.4	149.7	24.0	-ờ;-	Nov-23
Average duration (days)	-	-	7.6	6.6	8.4	7.7	7.3	-ờ-	Nov-23
Average daily expenditure per person (€)	-	-	141.7	104.0	133.3	158.8	175.7	-ờ-	Nov-23
Domestic tourism									
Overnight stays	-	-	0.1	-30.6	23.7	9.1	1.1	Č.	Nov-23
Average duration (days)	-	-	3.5	4.3	3.6	3.7	3.8	Ċ.	Sep-23
Average daily expenditure per person (\mathfrak{E})	-	-	51.2	40.5	50.7	63.2	65.8	-ờ́-	Sep-23
Hotel supply indicators									
Number of available hotel places	3.3	1.2	1.3	-51.2	44.2	39.2	3.4	-ờ-	Nov-23
Category: 4 or 5-star	9.7	3.6	3.0	-53.4	53.4	42.7	3.9	-ờ-	Nov-23
Rest of categories	0.2	-0.8	-0.4	-48.7	34.8	35.2	2.9	-ờ-	Nov-23
Hotel occupancy rate (percentage points)	-0.4	0.2	1.2	-31.9	16.7	18.4	2.9	-ờ-	Nov-23
Category: 4 or 5-star	-0.6	0.6	0.7	-36.0	18.3	19.9	3.2	-ờ-	Nov-23
Rest of categories	-0.5	-0.5	1.4	-27.2	14.7	16.3	2.5	-ờ-	Nov-23
Average daily rate (ADR)	-	0.2	4.1	-28.7	31.6	20.8	9.7	-ờ-	Nov-23
Category: 4 or 5-star	-	-0.8	4.1	-25.7	30.5	17.1	8.8	-ờ-	Nov-23
Rest of categories	-	0.4	3.2	-31.6	27.5	25.9	11.4	-ờ-	Nov-23
Revenue per available room (RevPAR ⁷)	-	0.6	6.9	-60.0	61.9	67.9	18.7	-ÿ-	Nov-23
•		0.4	5.6	-60.0	60.2	66.8	17.4	-ờ-	Nov-23
Category: 4 or 5-star							17.4	<u>, , , , , , , , , , , , , , , , , , , </u>	

Notes: 1. For the indicators «Number of international tourists» and «Visitor exports», the average corresponds to 2004-2007. 2. For the indicator «Number of international tourists by origin», the average corresponds to 2013-2014. 3. For the indicator related to domestic tourism overnight stays, the average corresponds to 2016-2019. 4. Latest data available for the year 2023, except for «Tourism-related GDP» (the 2023 figure corresponds to the CaixaBank Research forecast). 5. A sun denotes above the average growth in 2015-2017 minus 1/4 standard deviation; a sun with cloud denotes above the average growth in 2015-2017 minus 1/4 standard deviation; a sun with cloud denotes above the average growth in 2015-2017 minus a standard deviation; a cloud denotes below the average growth in 2015-2017 minus 2 standard deviations; and rain denotes below the average growth in 2015-2017 minus 2 standard deviations. 6. ADR indicates average daily rate. 7. RevPar indicates revenue per available room.

Source: CaixaBank Research, based on data from the National Statistics Institute, the Ministry of Work, Migration and Social Security, and the Bank of Spain.

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problems with certain

inputs and rising production costs.

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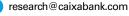
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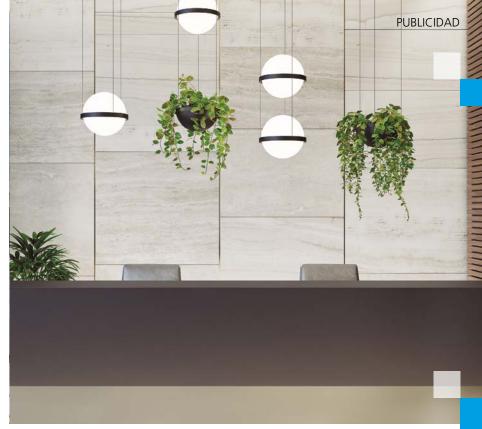
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