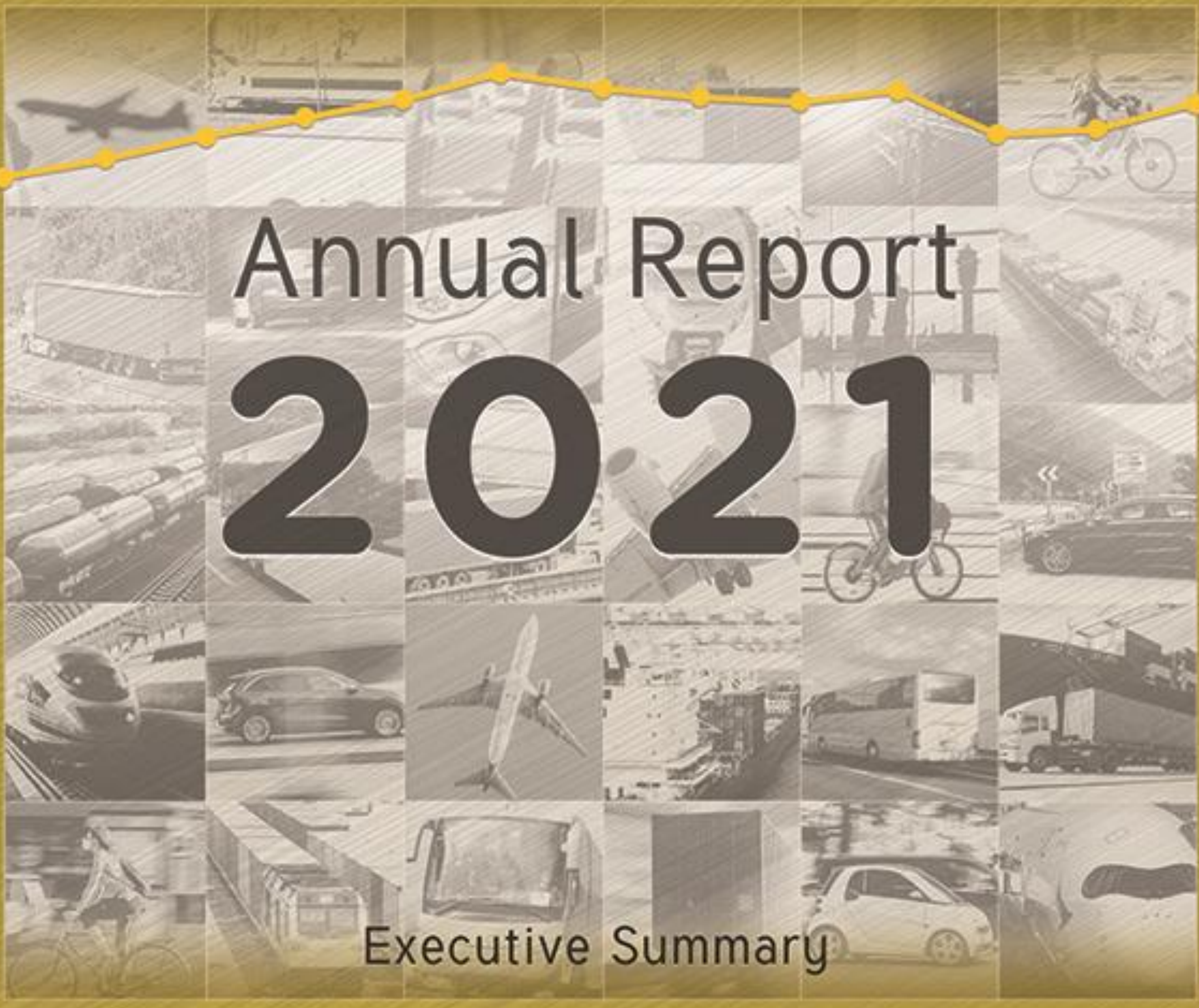
OTLE

Observatorio
del Transporte y la Logística en ESPAÑA



Annual Report 2021

Executive Summary

GOBIERNO DE ESPAÑA

MINISTERIO DE TRANSPORTES, MOVILIDAD Y AGENDA URBANA

May 2022

observatoriotransporte.mitma.es

This report has been prepared in the Division of Transport Studies and Technology of the General Secretariat of Transport and Mobility, with the collaboration of the technical group of

EXECUTIVE SUMMARY

Introduction

This annual report, corresponding to the **ninth edition of the Observatory of Transports and Logistics in Spain (OTLE)**, presents the main conclusions of the work carried out throughout 2021. In line with previous editions, we have continued to deepen our knowledge of the reality of transports and logistics, with the active participation and collaboration of the managing centres of the Ministry of Transport, Mobility and Urban Agenda, its associated companies and entities, as well as other entities of the General State Administration and other entities in general.

Since its creation in 2013, OTLE has undergone improvements both in terms of its structure and content, as well as in terms of its visualisation, making it an increasingly dynamic tool adapted to the needs of its users. In this regard, some of the **main innovations** that have been implemented over the last year include the following:

- In this edition, the process of continuous improvement has been continued, especially with regard to the **display of graphs and maps**. In particular, the software development has been modified to adapt to changes in the technologies used and the width of the modal window for displaying graphs on the maps has been enlarged, as the time frame of some of the data series displayed in OTLE exceeds 20 years.
- In the last edition, indicators were published for the first time in dynamic panels made with business intelligence tools. Thanks to them, it is possible to make customised queries through filters and selectors, also improving the graphical visualisation. In this edition, the technology used has **improved the possibilities of downloading the information available**, with a format similar to that of the tables that appear in each of the panels and which serve as the basis for the calculation of the indicators.
- As in previous editions, the annual report is presented, which interprets and analyses the situation of transports and logistics in Spain. In addition, **the reports of the two previous editions have been published in HTML format**, which allows for a more dynamic and accessible consultation of the report.
- As is the case every year, a monographic report on a specific topic is produced, with data contributions from both OTLE and other entities. In this edition, **the report will analyse the decarbonisation of transport**, providing a comprehensive review of the current situation of GHG emissions in transport, the policies and strategies adopted to address this emergency and the challenges and opportunities that lie ahead.
- As a result of the publication of the new indicators, an **update of the home screen of the website and navigation of the indicators** will soon be undertaken, which will improve and modernise access to these elements of OTLE.

General mobility and economic cycle

The **COVID-19 pandemic has had a major impact on mobility, with sharp declines** in all segments (passenger and freight), modes (road, rail, air and maritime) and areas (national and international), with the only exception of international rail freight transport. These significant **declines have been of lesser intensity in domestic mobility and in the freight segment**, although the **decoupling between GDP and inland freight mobility in the year 2020** is noteworthy.

In particular, domestic passenger mobility in 2020 recorded a decrease of -29.5 % compared to the previous year, in contrast to the smaller decrease in domestic freight transport, which experienced a decrease of -5.2 %.

At the international level, the passenger segment does not allow for an assessment of the situation in 2020 as the last year with complete figures for all modes was 2018. In this case, the trend continues to be upwards, with an increase of +3.8 % compared to the previous year.

In terms of the volume of freight to and from international destinations, the number of tonnes contracted by -6.8 % in 2020 compared to the previous year. It can be seen that, despite the disruption due to COVID-19, the maritime mode continued to be the main mode responsible for international freight mobility in 2020.

Road transport

As already noted in the previous report with provisional data, **the impact of COVID-19 on road mobility has been lower than on other modes**, although it resulted in a significant decrease in passenger mobility. Thus, in 2020, **traffic on Spanish roads decreased by -22.4 %** according to DGC data. In terms of road ownership, it was the State Road network, with 50.5% of the total traffic, which recorded the most notable decrease, with a drop of more than -25%.

In **domestic road passenger transport, which shows a decrease of -24.3 % compared to 2019**, the greater impact of collective transport stands out, with buses experiencing a drop of just over -43 % compared to -22.4 % for passenger cars. **Domestic freight transport has experienced a much more moderate decrease** (-8.8% in tonne-km according to DGC data and -1.5% according to information published by Eurostat and EPTMC).

In 2020, **international road freight** to and from Spain broke the upward trend observed in the previous seven years and **showed slightly higher decreases than those recorded at the national level**. France is once again the main international road freight transport flow, measured in both tonne and tonne-kilometres.

In summary and, as is the case for other modes, **freight performed better than passengers in road transport in 2020** due to the establishment of the necessary measures to facilitate the distribution of freight during the COVID-19 pandemic.

Railway transport

As far as rail transport is concerned, **the reduction in supply and demand has not been parallel, especially in the case of commuter trains**, where supply was maintained even at high levels at times of the strictest lockdown in order to guarantee passenger transport with the least possible crowding. Thus **the reduction in supply**, measured in seats-km, **was -9 % and passengers fell by -46 %. In medium-distance, supply fell by -30 % and in long-distance, by - 47%, while passengers decreased by -55 % and -66 % respectively**.

Rail freight, measured in net tonnes transported, falls again for the second year in a row; in 2019 it decreased by -7.9 % and in 2020 by almost twice as much (-14.8 %). All other indicators are also negative. Train-km decreased by -14.2 %, net tonne-kilometres by the same percentage, and gross tonne-kilometres towed by -17.3 %.

As for **Renfe's provisional data for 2021, an increase in demand is registered, although it is still far from pre-pandemic levels**. The recovery in Renfe's passenger services as a whole stands at +22 % in terms of passengers and +41 % in terms of passenger-km compared to 2020, although both variables are around -40 % compared to 2019. Medium- and long-distance services, which were the hardest hit by the effects of the pandemic, show the strongest rebound compared to 2020.

The rail freight segment, although affected by the pandemic, suffered more moderately than the passenger segment. In terms of tonnes, the increase in demand in 2021 is + 7% compared to 2020 (-10 % compared to 2019), while tonne-kilometres are up +12 % (-9 % compared to 2019).

Air transport

The indicators analysed for air transport in 2020 are particularly negative and, in all likelihood, the aviation sector is the most affected by the COVID-19 pandemic in terms of mobility. **In 2020, the supply of flights fell by -61.4 % and the supply of seats by -65.3 %.** The better performance of domestic flights compared to international flights should be noted; thus, the decrease in domestic seats and flights was -50.8 % and -48.1 % below average, while for international flights these values were -68.7 % and -65.8 % respectively.

Passengers in 2020 decreased by -74.6 % compared to 2019, from 231.7 million passengers to 58.8 million, a decrease of 173 million. **The decreases in passengers by type of traffic are more significant in the international sphere**, with a -75.9 % decrease in the case of the EU Schengen area and a -79.9 % decrease in other international relations. On the other hand, in national transport the decreases were slightly smaller (-60.5 %). It is worth mentioning that from mid-March to May 2020, aircraft traffic, and therefore passenger traffic, was virtually non-existent. In April 2020, operations at Aena network airports fell by -93.5 % and passengers by -99.4 %, with similar figures for May.

In 2020, air freight transport has also been affected, although to a lesser extent than passenger transport. The year-on-year variation rate was -26.4 % for all traffic. The least impacted type of operation was that relating to EU Schengen countries, which fell by -9.6 %, followed by domestic transport and other international relations, with falls of -17.5 % and -32.1 % respectively. If we analyse the variation with respect to 2008, the evolution of all traffic is positive, with +40.1 % of goods transported by air.

The three airports with the least impact on freight transport are Vitoria (-0.2 %), with hardly any change, **Seville (-2.6 %) and Santiago (-6.9 %).** At the opposite end, **the worst affected were Málaga (-70.4 %) and Tenerife South (-63.3 %)**, as well as **Lanzarote (-59.3 %)**. Vitoria airport deserves special mention, which, as it has been mentioned, hardly suffered any reduction in total freight traffic, although it did suffer a reduction in the composition, since the domestic volume increased by 4 % to the detriment of international traffic.

Finally, it should be noted that in 2021 the airline industry continues to show a slow recovery. Specifically, even with provisional figures, flight operations managed in the airports of the AENA national network have increased by +37.9 % compared to 2020, but are still far from the values of 2019, with a decrease of -35.7 %. For its part, the volume of passengers handled increased by +57.5 % compared to 2020, although it is still well below the values of 2019 (-56.4 %), in contrast to the volume of freight which, with a growth in 2021 of +26.5 %, stands at figures close to one million tonnes transported, which means being almost at the values of 2019 (just -6.6 % below).

Maritime transport

Vessels managed by the 28 Port Authorities decreased in 2020 by -53.0 % in the passenger segment and -22.3 % in the freight segment. On the **demand side, the decreases are -69.7 % for passengers and -8.0 % for freight.** In the passenger segment, it is observed that the fall in demand was much greater than the fall in supply, but this was not the case for freight, where the opposite phenomenon occurred.

Analysing the passenger segment by type of navigation, cruise ships were the most affected in relation to 2019, with **decreases in the number of passengers of -87.4 %**, followed by passenger transport in the external regime (-80.5 %) and, to a lesser but very significant extent, coastal fishing (-48.5 %).

In terms of **freight**, demand in tonnes transported contracted by -8.0 % in 2020, while supply contracted by -16.1 % measured in terms of GT units and -22.3 % in terms of operations. These variations reflect an increase in operations with larger tonnage vessels and that utilisation was higher than in 2019.

As far as the **freight demand** is concerned, the decrease shows significant differences: transhipped goods decreased by -56.3 %, fishing, victualling and domestic traffic by -20.4 %, coastal fishing by -14.3 % and finally external demand by -7.0 %. The weight of the latter is 89.2 %, so the overall decrease is mitigated by the better performance of this magnitude.

Finally, **provisional figures for the year 2021 indicate an uneven recovery**. In relation to the goods handled by the 28 Port Authorities, these increased by +5.6 % compared to the previous year, with a figure of 544 million tonnes, -3.5 % below pre-pandemic levels and with some ports even exceeding the 2019 figures. With regard to the volume of passengers handled, according to provisional data for 2021, even with a notable upturn of +34.7 %, the recovery is taking place more slowly. The volume of passengers handled in 2021 does not even reach half of the pre-pandemic levels.

Urban and metropolitan transport

According to data from the INE Passenger Transport Statistics, **in 2020, 2.7 million journeys were made compared to 5 million in 2019**. This **decrease of -46.5 %** was due to the effect of lockdown and mobility restrictions due to COVID-19, which started in mid-March 2020. At the same time, there has been a modal shift towards the use of private cars, which still continues today; on the other hand, telecommuting has become more widespread, so that public passenger transport linked to forced mobility has been severely affected.

In 2020, urban and interurban public transport increased its contribution to public transport as a whole as a result of the greater decline in the number of passengers in interurban public transport. In addition, taking 2019 as a reference year, there is a slight increase in the share of bus compared to rail modes, possibly due to the preference for less massive transport in times of pandemic.

Data from the **Metropolitan Mobility Observatory**, whose most recent values refer to **2019**, show an **increase in demand for all modes**. Supply also grew, although to a lesser extent than demand, for urban and interurban buses; however, for rail, metro and tram modes, supply contracted by -1.7 % in million vehicle-km and -0.5 % in million seat-km. The increase in demand is of greater magnitude in the case of bus than in metro and tram; thus, the indicator of million passenger-km increases compared to 2018 by +4.0 % in urban bus, +5.1 % in interurban bus and +2.4 % in metro and tram.

As for 2020, according to advance data provided by the Metropolitan Mobility Observatory, **the demand for public transport fell by an average of -46 %.** In terms of passenger-km, a decrease of -53.9 % was recorded compared to 2019; passenger-km by bus decreased by -66 % and by rail modes by -47 %. Supply variables, on the other hand, contracted less, especially in rail modes.

As for the operating costs for 2020 and 2021, data are not yet available, but it could be expected that the drastic decrease in passenger numbers due to the COVID-19 crisis and the policy of keeping supply well above demand adopted by most administrations will result in higher operating costs per passenger and subsidies.

Modal split

Before the pandemic, road transport had already established itself as the main player in domestic mobility, both in passenger transport and **especially in freight transport**, where its share in Spain is higher than that observed in the main European countries. **In 2020** and as a consequence of the search for modes with greater individuality in order to prevent the spread of the COVID-19 virus, there has been a **considerable increase in the share of road passenger transport** to 91.6 % of total passenger-km at national level.

For international passenger transport, the latest year available is 2018, so the figures are not affected by the pandemic. For the third consecutive year, air travel was the mode with the highest share, reaching 50.4 % of the total number of passengers transported. Road transport, despite its upward trend compared to the previous year, is losing its share of the total (from 47.5 % in 2017 to 47.4 % in 2018), with maritime transport (1.7 %, excluding cruise ships) and rail transport (0.5 %) lagging far behind.

Freight transport has clear modal differences depending on whether it is national or international. In the first of these, road is the dominant mode, with a share of 96 % of total tonnage in 2020, followed by maritime (3 %) and rail (1 %), with air making a negligible contribution. Internationally, 79 % of all tonnes of freight transported in 2020 were transported by ship and 20 % by road. Rail and air transport were anecdotal and their modal shares have little changed from the previous year, accounting for just under 1 % combined.

Investment and capital

In 2020, **the pandemic induced a significant increase in Gross Fixed Capital Formation by the public sector,** rising by +10.0 % year-on-year to EUR 28.75 billion and converging with the EU-15 level of investment to GDP.

On the other hand, **private sector GFCF in transport equipment fell significantly, decreasing by -27.9 % compared to the previous year.** This brought investment in transport equipment from 9.8 % of total investment (public and private) in Spain in 2019 to 7.7 % in 2020.

The content related to the investment made in transport has not been updated in 2020.

Value added and productivity

The year 2020 has had a **strong impact on the "transport and storage" sector,** which was one of the hardest hit as a result of the pandemic, with a **contraction in GVA of -26.2 % in constant terms**. This decline, which has been larger than that experienced by the Spanish economy as a whole, with a decline in GDP in constant terms of 10.8 %, represents a significant setback after the upward trend of recent years.

In relation to the number of hours worked per person, the effects of the pandemic and the consideration of the supply and distribution of goods as an essential activity have meant that the reduction in the "transport and storage" sector (-5.6 % compared with the 2019 figures) has been less intense than that recorded for the economy as a whole (-6.7 %).

The sharp fall in the GVA of the "transport and storage" sector in 2020 also affects the performance of other variables, such as apparent labour productivity, where the gap with the productivity of the Spanish economy as a whole has widened significantly.

For their part, the analysis of the **two main sub-sectors, "land transport and pipeline transport" and "storage and related activities",** whose available data only cover up to 2019, **continue to present the particularities described in previous editions,** such as their preponderance in the sector (86,5 % of GVA in 2019) or the higher intensity of hours worked and lower productivity of the "land transport and pipeline transport" sub-sector compared to the sector average, in contrast to the lower number of hours worked per person and the higher apparent labour productivity of the "storage and related activities" sub-sector.

Given the major impact of the COVID-19 health crisis on the "transport and storage" sector, it is important to monitor how the major stimulus packages contribute to the economic recovery of the sector in the coming years.

Employment

As might be expected, 2020 was not a positive year in terms of employment for the **"transport and storage"** sector as a result of the COVID-19 pandemic. Specifically, **the number of employed persons stood at 992,000, a fall of -3.8 %, higher than that recorded by the Spanish economy as a whole (-2.9 %)**. Looking at the different sub-sectors, the most affected was "air transport" (-13.5 %), as is the case with the demand magnitudes, followed by "land and pipeline transport" (-7.3 %) and "postal and courier activities" (-2.0 %). All this declines contrast with the upturns in "maritime and waterway transport" (+4.6 %) and "storage and related activities" (+6.8 %).

With regard to the **number of Social Security registrations**, the figures for the sector were similar to those observed for the number of employed persons, with a **decrease in 2020 of -2.3 % with respect to the previous year, a decrease that was slightly higher than that of the economy as a whole (-2.2 %)**. In addition, it is worth noting that the rate of self-employment increased after 6 years of uninterrupted decline to 22.2 %, mainly due to "land and pipeline transport" and "postal and courier activities".

In relation to the structure and quality of employment, it should be noted that the **figures for 2019** (most recent year with available data), **the "transport and storage" sector has both a higher productivity** (53,571 euros per employee, +0.6 % compared to the previous year) **and average personnel costs** (36,141 euros per employee, +2.9 % compared to the previous year) **than the service sector as a whole**. Among the different sub-sectors, the high productivity and high wages of "air transport" stand out, in contrast to the more modest productivity figures and wages of "road and pipeline transport".

In 2020, the net labour cost in the "transport and storage" sector fell by -5.5 % to 31,541 euros. This decline is mainly due to the decrease in the wages and salaries component (-7.8 %), as it represents more than 70 % of the total labour cost.

Prices and costs

In 2020, the price of Brent crude oil, with its usual oscillations, **recorded a downward trend**, with an annual fall of -35.9 %. This phenomenon of reduction represents a **trend change**, given that **the price of oil had been increasing since 2016**. However, the effects of the pandemic on logistic chains and global instability have once again produced a change in trend since the end of 2020, which has caused the price of crude oil to increase considerably in 2021.

It can be seen that the **evolution of the price of transport in Spain, which rose by +7.1 % in 2021**, is much higher than in previous years. In relation to the **average expenditure per person on transport at national level, in 2020 there was a significant fall of -29.5 %** compared to the previous year, a fall that was greater than the fall in total average expenditure (-10.7 %) and average per capita income (-12.4 %).

On the other hand, the analysis of **prices and costs** shows that **road transport has followed a downward trend in 2020 and an upward trend in 2021**, in line with the comments on crude oil prices. Thus, in 2020 the cost of the private vehicle recorded a decrease of -3.5 %, while the 2021 figures for coach passenger transport increased by +2.2 % on average for all vehicles. This was even higher for road freight transport, with an average growth of +5.2 % for all vehicles analysed.

As for **rail transport**, the average revenue per passenger-km for the different types of services have **performed unevenly**, despite the decline in terms of revenue for all passenger services. On the other hand, in the freight segment, the average revenue per tonne-kilometre of public operators in terms of tonne-km increased by +2.1 % in contrast to the decrease in average revenue per tonne (-0.3 %).

Air transport experienced an increase in the share of revenues from scheduled services, reaching more than 77 % of the total revenues of the main airlines analysed in 2019. **In 2020, maritime transport interrupted the upward trend of the last five years** in total revenues (-38.3 %), clearly due to the decline in demand.

Market and business structure

The structure of the **"transport and storage" sector in Spain** continues to differ from that of the main European economies. Although production and employment are in a similar proportion to the national economy as the European average, the **high number of companies** in the sector is remarkable.

Despite these differences, **2019 was a year in which the "transport and storage" sector has, in many respects, outperformed the other European countries analysed**. In no other country did the sector grow so much in terms of output (+4.9 %) and persons employed (+3.0 %). However, **the first data for 2020 show the severe drop in activity due to the pandemic**, which has caused **the sector to lose weight in the total economy** in all the countries analysed, but especially in Spain.

The sub-sectors of "land and pipeline transport" and "storage and transport-related activities" continue to be the two main ones within the sector, accounting for around 90 % of GVA, both in Spain and in the rest of the countries analysed.

The "road and pipeline transport" sub-sector continues to show productivity below the average of the main European countries (Germany, France and Italy). One of the factors influencing this low productivity is the high number of companies mentioned above, which is particularly striking in this sub-sector as it is 65 % higher than in France, the second country with the second highest number of companies in the group. On the other hand, production stands at 44.6 % of the country average, while employment stands at 66.5 % of the average. The importance of small companies in this sector can be seen in the fact that **30.5 % of turnover was generated by companies with less than 10 employees,** which in turn have the greatest competitiveness gap with their European counterparts.

With regard to the second sub-sector in economic importance, **"storage and transport-related activities" continues to gain weight in the sector in Spain, reaching 44.5 % of the total "transport and storage" sector,** but still far from the absolute figures for production (48.8 %) and employees (50.6 %).

Financing

The effects of the COVID-19 pandemic are also reflected in the level of indebtedness of the Spanish economy's productive activities as a whole. Specifically, **in 2020, the volume of debt of the Spanish economy as a whole increased by +7.6%,** breaking the downward trend observed continuously over the last 9 years. This rebound in the level of credit was strongest in the **"transport and storage" sector, where the increase was +15.1 %,** driven, among other factors, by the greater impact of the pandemic in these activities.

This increase in the level of indebtedness has not, for the time being, translated into higher non-performing loans, continuing the downward trend of recent years for the sectors analysed as a whole. This phenomenon is also observed in **"transport and storage" sector, which reached a NPL ratio of 4.0 % in 2020, lower than that of the economy as a whole** (5.0 %) as well **as the average for the services sector** (4.7 %). It should be noted that non-performing loans tend to lag behind other variables such as the volume of credit or the evolution of other socio-economic or activity variables.

Research, Development and Innovation

The COVID-19 pandemic has also left its mark on R&D activities. Thus, **in absolute terms, domestic R&D expenditure, the number of R&D performing firms and the number of R&D personnel** have all **declined in the "transport and storage" sector,** but not in the economy as a whole.

If these three variables are analysed in relative terms, **the performance in 2020 for the transport and storage sector is positive with respect to internal R&D expenditure in relation to GVA,** but negative with respect to the number of companies and workers dedicated to R&D in relation to the sector as a whole.

Expenditure on innovative activities in the "transport and storage" sector also suffered a significant decline (-13.4 %), which was again higher than that experienced by the economy as a whole (-11.9 %). However, despite this decline, the share of expenditure on innovative activities in their GVA increased significantly, narrowing the gap with the share observed for the economy as a whole.

Given the growing importance that the Recovery, Transformation and Resilience Plan is giving to aspects such as the ecological transition or digital transformation, the variables analysed on R&D&I in the "transport and storage" sector may be affected in the coming years.

Internationalisation

The year 2020, clearly marked by the pandemic, has also had an impact on foreign investment and trade. In this regard, it should be noted that, despite the decline in foreign trade in absolute terms, **the trade balance of goods in 2020 showed the lowest negative balance since the beginning of the century**, with a figure of -13,422 million euros, -57.5 % lower than the previous year, due to the better performance of exports compared to imports. The **transport services trade balance also recorded a decline**, from an average annual coverage rate of 174.2 % in 2019 to 165.7 % in 2020.

For its part, the **analysis of foreign investment**, which does not take into account the effect of COVID-19 because it shows **data for 2019**, reflects a **better performance of the net investment position of Spanish companies abroad, with a significant rebound of +16.9 %**, which contrasts with the significant decline experienced by foreign investment in Spain (-11.6 %).

Spanish foreign trade data recorded significant declines in 2020 due to the COVID-19 pandemic. These decreases were smaller in physical units (-9.4 %) than in monetary units (-11.9 %), and exports performed better (-5.4 % in tonnes and -9.4 % in euro) than imports (-12.2 % in tonnes and -14.1 % in euro). This lower contraction of physical units has resulted in the average value of goods decreasing by -2.7 % in 2020, breaking the upward trend of the last 5 years.

Safety

As mentioned above, the year 2020 is marked by exceptionally low mobility due to the COVID-19 pandemic, which has also had an impact on the reduction in the number of claims.

Firstly, with regard to **road transport safety, in 2020 accidents with casualties decreased by -29.9 % compared to the previous year**, while road **fatalities decreased by -21.9%**, with 1,370 people killed. A specific analysis of the interurban area, relating mobility to accident and fatality figures through the hazard and fatality rates, shows **a decrease in the hazard index (HI) by -8.2 % and an increase in the fatality rate (MI) by +1.6 %**by 2020.

With regard to rail safety, the year 2020 shows lower accident figures, with a decrease of -4 % compared to accidents in 2019. Serious accidents show the same trend, which fell by -43 %. Serious accidents, on the other hand, increased by +4.1 %, with 2 more accidents than in 2019.

In terms of the impact of accidents on people, the year **2020 has resulted in a decrease in fatalities and serious injuries as a result of significant rail accidents.** The decrease in these variables is not reflected in the level crossing user risk indicator, which in 2020 stands at 3.18 compared to 0.97 in 2019. Despite this significant increase, it is the second lowest value since 2007. On the other hand, the indicator of fatalities and serious injuries weighted per billion train-km shows a decrease of -22 %.

In terms of **aviation safety**, there were 41 air transport accidents and 7 incidents in 2020, an **increase of four accidents and a decrease of 18 incidents** compared to 2019. In terms of the number of **fatalities in aviation accidents**, there were 7 fatalities in 2020, significantly lower than in 2019. However, it should be emphasised that, given the low accident and casualty figures for air transport operations, small variations of just one or two units result in high percentage variations.

In the field of **maritime safety, the number of emergencies** in the Spanish SAR area **increased** in 2020 to a total of 6,958 (+5.8 %), reaching the highest number ever since the beginning of the series in 2006. This increase has been strongly marked by **irregular migration phenomena**. The number of fatalities stood at 167 people, an increase of +30.5 % compared to the previous year, to which 98 missing persons must be added, -27.4 % less than in 2019.

Environmental sustainability

Energy consumption in transport in Spain in 2019 grew by +1.0 %, with road transport accounting for more than 92 % of final energy consumption as a result of **its greater share of passenger and freight transport**. By comparison, Spain continues to be above the EU-27 average.

Rail remains the most energy efficient mode in terms of final energy, due to the high number of passengers and volume of freight that can be transported on each journey. On the other hand, the air mode is the least efficient. Rail transport also **produces the lowest direct emissions of GHGs and other pollutants**, due to the fact that it uses electricity as its main source. In road transport, there has been a change in the trend regarding the dieselisation of the vehicle fleet, with an increasing presence of petrol vehicles, which means that the consumption of conventional fuels has begun to undergo a significant change. Regarding the use of **renewable energies in transport**, it has increased **from 1 % in 2014 to almost 8 % in 2019**, although the growth experienced in the last two years has slowed slightly and is still below the EU average.

It should also be noted that the penetration of alternative energy sources is slowly but steadily increasing in recent years, although future targets in Europe are even more ambitious.

Regarding pollutant emissions from transport, the share of transport emissions in 2018 increased by 29 basis points (from 26.7 % in 2017 to 29.6 % in 2019), while in the rest of the European Union the share also increased by 13 basis points (from 22.4 % in 2017 to 23.7 % in 2019). This growth confirms the trend observed since 2016, given that from 2007 to 2015, the weight of GHG emissions produced by transport decreased. In general, for all types of pollutants (GHG, acidifying substances, etc.), the road transport mode is the one with the highest amount of emissions because, as mentioned above, it is the mode with the highest modal share in domestic passenger and freight transport.

It should be noted that rail transport still has a clear advantage in terms of direct GHG emissions per transport unit-km. In contrast, air travel produces the highest GHG emissions per passenger-km and transported tonne-kilometre.

Logistics

The analysis of the contribution of the logistics sector to both GDP and employment in the economy as a whole showed a fairly stable performance in 2019. Specifically, while the share in GDP stood at 2.91 % in 2019 (slightly lower than in the previous year), the logistics sector's share in employment increased slightly to 3.48 %.

In 2020, the **total area devoted to logistics activities** exceeded 80.5 million m^2, representing a growth of +2.3 % compared to the previous year. With regard to the distribution of logistics surface area by mode, it is observed that the facilities related to road and maritime transport, which account for more than 88 % of the total national logistics surface area, are the ones that registered the greatest growth in their infrastructures, with rates of +3.4 % and +1.2 % respectively. Regarding logistics intensity (m^2 logistics facilities/€ GDP per capita), values similar to those of 2019 are observed.

Regarding **freight transport**, in 2020 there was a **reduction of -5.7 %** as a result of the effects of COVID-19 to 1,997 million tonnes. The **most affected area was international transport**, with a fall of -6.8 % in contrast to the smaller decrease in domestic transport (-5.2 %).

Looking at each mode in particular, there are generalised falls. Specifically, in overall terms (national + international), the decreases recorded in 2020 were -4.9 % for road transport, followed by -7.5 % for maritime transport, -14.8 % for rail transport and -26.4 % for air transport. The comparatively better performance of **road transport** has again reinforced its **preponderance** in freight demand by reaching a share of 75.1 % in overall terms.

Finally, freight transport **in multimodal chains suffered a significant fall of -12.6%** in 2020, **which was lower for unimodal chains**, with a decrease of -3.4 % compared to the previous year. **Intermodal transport has been less affected by the pandemic**, with a moderate decrease of -3.0 %. This decrease, being of lesser intensity than for freight transport as a whole, has led to an increase in the intermodal transport share, which reached 13.3 % after two years of decline.