# Economic Situation in the Community of Madrid

IV /2022

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# Index of Sidebars

**Note on the analysis of the evolution of economic indicators in this report:**

An assessment of how the economic indicators have picked up in 2022 is based on a comparison with the usual levels in the pre-pandemic reference months. This report, therefore, sheds light on monthly indicator values from March 2019 to February 2020 and the variations in 2022 levels relative to pre-pandemic levels, alongside the usual year-on-year rate of change. They are all geared towards spotting possible shifts in recent normalisation patterns, which are of particular relevance in the current context of high uncertainty about economic developments.

**Close date: 23/2/23**

# I. Overview of the economic situation

One year after Russia's invasion of Ukraine, which began on 24 February 2022, there is unfortunately no end in sight to this open war in Europe. The consequences of this severely disruptive episode extend globally and link together with the effects of the pandemic, as economic and social conditions have yet to return to pre-crisis levels, adding to the incomplete and asymmetric recovery a level of geopolitical instability unknown since the end of the Second World War.

In terms of the economic environment, the concatenation of the two historical shocks is the key to explaining the changes over the past year and the current state of affairs. In scarcely a year, the lax monetary policy of the main central banks, which they claimed they would maintain until economic activity had fully recovered, has become highly restrictive, driving the fastest rise in interest rates in history, driven by inflation, which seemed to spiral out of control and which has once again become the sole objective around which monetary policy decisions revolve.

A gentler fiscal policy change nonetheless proved to be possible, especially in Europe, with the deployment of a significant part of the Next Generation EU (NGEU) funds in 2022, in addition to the extraordinary measures adopted to counteract the effect of energy price hikes on citizens' pockets, in a context that is still favourable to financing public accounts. These conditions will nevertheless soon undergo major changes, particularly in the short term, with the negotiation of the new fiscal rules as an example of this transition.

Uncertainty and inflation prevail in the current global economic outlook, but they are particularly threatening activity dynamics in the EU, and therefore also in Spain and in our region. Shifting expectations of agents and the performance of the labour market will play a key role in the short term in determining whether the measures adopted to control inflation will lead to a slowdown, stagnation or recession in these economies.

In this regard, the initial results coming to light on the growth of activity in 2022 are salient, given how activities were compromised by the aforementioned combination of effects. One year ago, shortly before the outbreak of the war, which had fallen outside the core prediction scenarios, all analysts were forecasting GDP growth of 5.9% for Spain and 6.1% for the Community of Madrid. The preliminary official figures that have just been released show GDP growth of 5.5% and 5.7%, respectively. Both results surpass analysts' expectations in the wake of the outbreak of the war and the onset of a shift in monetary policy.

With regard to Q4 2022, examined here in this report, the revision of the Quarterly Regional Accounts series places regional recovery at pre-pandemic levels in the second quarter, as the tempered growth in the third quarter continued into the fourth quarter, after a singularly dynamic first half of the year.

Regional GDP thus grew by 0.1% quarter-on-quarter and by 5% year-on-year in the fourth quarter, a period where advances of 0.2% and 2.7%, respectively, were posted in Spain. These results determine that the current levels of activity are virtually one point above the pre-pandemic levels in the Community of Madrid, though still 0.9% below in the national set and remains far from the results of the Eurozone, whose recovery began earlier, in the last quarter of 2021, and more intensely, with current levels 2.4% higher than the pre-pandemic levels.

As regards the composition of year-on-year growth in the Community of Madrid, regional demand remains the primary driver of activity in the region. The significant increase in non-residential fixed capital investment, which now stands more than 5% higher than before the health crisis, is accompanied by household consumption which, although slowing compared to previous quarters, continues to show notable increases of more than 3%. External demand increased its contribution and added 1.6 points to the regional GDP growth in the fourth quarter, boosted by the significant reactivation of tourist flows.

A decisive role in sustaining household final consumption levels can be attributed to a resilient labour market, which is performing remarkably well in this environment of high uncertainty and restrictive macroeconomic conditions.

Fourth quarter figures include a record number of affiliations by gender and regime, as the registered jobless number dipped below pre-pandemic levels while permanent contracts rose, nearly a year after the labour reform came into full effect. The Spanish Labour Force Survey (LFS) indicates an active worker volume higher than ever before as employment and unemployment both rose during the quarter.

Substantial economic, social and legal developments in the labour market since the outbreak of the crisis have warranted a need for a fresh look at labour market indicators to complement the traditional labour market analysis outlined in the previous paragraph. Monitoring the number of hours worked or the effective duration of permanent

contracts signed after the legislative change, when this information is available, will be some of the key indicators when assessing labour market performance, together with the change in its classical indicators.

Thus, the enrolled number is now 6.6% higher than in Q4 2019, corresponding with LFS employment levels that are 0.6% higher, while the volume of effective hours worked in this fourth quarter is 2.5% lower than that quarter, as the average effective hours worked per week per jobholder were trimmed by one hour to 35.8.

Moreover, the apparently unfavourable unemployment results of the Q4 2022 LFS, where the regional unemployment rate rose to 11.5% of the labour force, are significantly nuanced by the results of the LFS flow survey, which contains indications that include, yet are not restricted to, the strength of the outflow from unemployment to employment or how part of the increase in unemployment lies in the low flow of unemployed people who become inactive that quarter.

Several sidebars in this report analyse the results of these less commonly used variables used in labour market analysis. The dynamics of the labour market underpin not only household spending capacity, but also their expectations. In this respect, the resilience of enrolment and employment figures will be decisive in the profile of the increase in activity that finally materialises in 2023, insofar as a deterioration in the market's capacity to maintain employment could have, as in previous recessions, multiplicative effects on domestic demand, production and investment and growth expectations.

Price dynamics will also be one of the key variables to be monitored. Easing energy supply tensions, to which climatic factors have contributed, have been visible for some months now in the behaviour of headline inflation, which has flexed downwards from its highest levels in decades, roughly 10.5% in the Monetary Union and Spain, or 9.6% in the Community of Madrid, to 9.2%, 5.7% and 4.9%, respectively, in December. Headline inflation rose two tenths and four tenths respectively in January in the national and regional aggregate, and stood at 8.6% in the Eurozone.

Beyond this further pick-up in headline inflation in January, what is worrying is the tenacity with which core inflation is rising, soaring to levels not seen before since the adoption of the euro as the single currency. Core inflation stood at 7.5% in Spain and 6.6% in the Community of Madrid in January, though it was under 2.5% in both regions a year ago.

The spillover of the rise in energy prices to other goods and services, together with the second-round effects linked to the partial updating of wages, contribute to this rise in core inflation, which has greater inertia than headline inflation and is therefore more difficult to correct in the short term. This behaviour is not only a challenge for monetary policy, but also a major problem in terms of the social asymmetry of its impact. Even more so regarding the monetary policy of the central banks themselves, particularly the European central bank, where we should seek the primary source of the soaring consumer prices, which followed on the heels of surging financial markets, in particular equities, debt (especially government debt, artificially propped up by ECB monetisation) and commodities.

Price distortion also lies behind the exceptional performance of the region's external trade in goods in 2022, which also had a unique impact on the figures for the Community of Madrid within the national framework, as analysed in the first sidebar. The amounts of international trade flows set an all-time high in the fourth quarter in the region and the figures for the year, as a whole, far exceeded previous years.

Regional exports in the fourth quarter exceeded €18 billion, with imports approaching €30 billion, for an overall total in 2022 of €59 billion and €110 billion respectively. These figures correspond to a year-on-year increase of 56.4% for exports and 17.9% for imports in Q4, compared to 48.2% and 35.6% for the year as a whole. In addition to the aforementioned price effect, the recent imputation to Madrid of all national gas exports, in addition to the already existing electricity exports, is a factor explaining these increases. Fuels and mineral oils are thus the most important imports for Madrid, accounting for 21.5% of purchases of goods abroad in 2022, compared to only 2.9% in 2019. Pharmaceuticals is the second most imported category in 2022 and continues to lead exports, accounting for nearly 30% of exports.

At the beginning of this overview, we highlighted the small discrepancy between the growth projected for 2022 before the outbreak of the war and what the first estimates for 2022 show today. This similarity would have been due to the accumulated savings, the total normalisation of healthcare and the arrival of part of the NGEU funds, the amount and materialisation of which, moreover, has been the subject of newspaper headlines over the last few days.

However, the most significant difference between the pre-war and current projections is undoubtedly in the 2023 growth forecast. Thus, while a year ago it was estimated that GDP growth would show a slight deceleration with

respect to 2022, current forecasts show a substantial containment of growth, with a wide range of variation, although the forecasts for the first two months of 2023 are being revised slightly upwards.

Behind this slight upward shift is a somewhat better than expected performance in Q4 2022, and the factors behind this seem to be continuing at the beginning of the year. However, the uncertainty, volatility, complexity and ambiguity of current economic conditions continue to temper agents' expectations. Hopefully, similarly to last year, downside risks will find offsetting upside forces, and reality will outweigh expectations.

The experience with which the sciences of human action have to deal is always an experience of complex phenomena. No laboratory experiments can be performed with regard to human action.

Ludwig von Mises, *Human Action*

# II. International context

**Pervasive inflation and uncertainty remain.**

A global struggle with inflation, Russia's invasion of Ukraine and the resurgence of COVID-19 in China hampered global economic activity in 2022, and the first two factors will certainly continue to weigh on 2023. Notwithstanding these headwinds, economic growth fared better than expected in Q3 2022 in many economies, including the United States, the Eurozone and major emerging market and developing economies. These unexpected results were in many cases due to domestic factors: greater than expected private consumption and private investment in a context of labour shortages, and stronger than expected fiscal support. Households spent more to fill pent-up demand, especially for services, drawing in part on their savings as economies reopened. Business investment ramped up to meet demand. On the supply side, commodity price pressures eased as bottlenecks abated and transport costs declined, thereby stimulating a revival of previously constrained sectors. Energy markets have adapted earlier than expected to the shock of Russia's invasion of Ukraine.
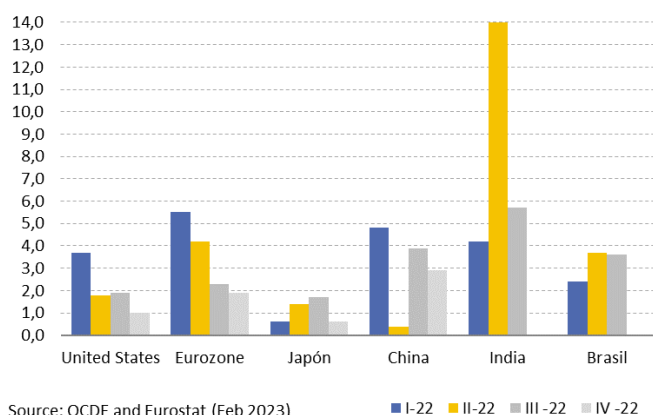
However, in most, if not all, major economies, this upturn is estimated to have faded by Q4 2022. Growth in the United States was stronger than expected. Elsewhere, however, high-frequency activity indicators generally point to a slowdown.

Economic activity in China slowed in the fourth quarter amid multiple major outbreaks of COVID-19. Lockdowns also resumed with the outbreaks until the COVID-19 restrictions were eventually loosened at the end of the year, paving the way for a full reopening. Real estate investment continued to shrink. Ultimately, China's slowdown weakened global trade growth and international commodity prices.
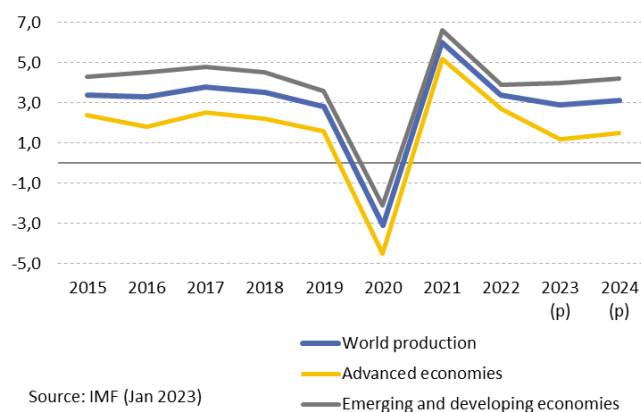
However, monetary policy is starting to have an effect. There are already signs that policy tapering has begun to cool demand and inflation, but the full impact is unlikely to materialise before 2024. Headline global inflation appears to have peaked in Q3 2022. However, core inflation has not yet peaked in most economies, and remains well above pre-pandemic levels. These circumstances prompted central banks to raise rates faster than expected, especially in the United States and the Eurozone, and to signal that they will remain high for longer.

Risks regarding the outlook remain high and skewed upwards. The year 2022 initially promised a return to normality, but was affected by a series of unprecedented events: the war in Ukraine and the ensuing energy crisis, global inflation at record peaks, and the abrupt end of the free money era. These elements will continue shaping the economy in 2023, where the Eurozone faces the most challenging outlook among the major advanced economies. Inflation is also likely to remain central this year, since its dynamics, particularly core inflation, will dictate how central banks shape their agendas. At any rate, great uncertainty is looming in 2023, and geopolitics remains a key element driving the performance of financial markets and the economy, especially with the war in Ukraine as one of the main forces at play.

**Evolution of main economies**
(Year-on-year rates of change)



Source: OCDE and Eurostat (Feb 2023)    ■ I-22  ■ II-22  ▨ III-22  ▨ IV-22

**World economic growth 2015–2024**



Source: IMF (Jan 2023)

World production
Advanced economies
Emerging and developing economies

# III. National framework

## 1. Growth

**Fourth quarter data published by the Quarterly Spanish National Accounts [QNA] reiterate a weaker recovery in the Spanish economy,** with GDP growth of 0.2% versus the previous quarter, which already showed a significant slowdown. Both household consumption and investment have fallen versus the third quarter, with domestic demand subtracting 0.9 points from the meagre increase in GDP, the result of a sharp contraction in imports.

### Evolution of GDP, consumption and investment in Spain



Source: Drafted in-house based on CNTR, INE
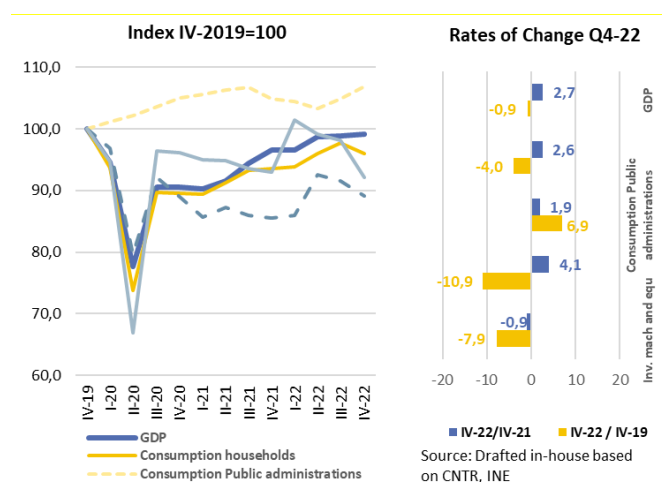
**Year-on-year growth continues to decelerate to 2.7% year-on-year**, 2.1 points lower than in the third quarter. While the recovery continues, it has lost some of its intensity, and the Spanish economy is still 0.9% below the level of the fourth quarter of 2019.

Fourth quarter restraint is the result of domestic demand weakened by the 0.9% fall in investment in machinery and equipment, the deceleration of the rest of the components of gross capital formation and a change in inventories that subtracts 1.5 points from the increase in GDP. Household consumption slowed by 2.2 p.p. to 2.6% year-on-year, partly offset by a rebound in general government consumption. Domestic demand thus reduced its contribution to GDP growth to 0.6 points, two points less than in the third quarter, as external demand was the main source of growth, contributing 2.1 points to the overall increase.

**A difficult 2022 comes to a close, in which pandemic risks were replaced by others that have complicated and delayed recovery**. Even so, a better than expected first half of the year has enabled a significant increase of 5.5% in the Spanish economy for the year as a whole, similar to the growth posted in 2021.

## 2. Foreign sector

**In Q4 2022, Spain's trade in goods slowed down, though values remained very high.** Spanish exports of goods thus grew by 18.3% in Q4 2022 versus the same period in 2021 (provisional data), compared to 24.4% in the previous quarter, with a recorded volume of €102,536 million, a record figure for a single quarter. Imports surged to €117,211 million, similar to the previous quarter and 17.7% higher than in the same period of 2021, up from an increase in the previous quarter of 38.1%. The fourth quarter trade deficit stood at €14.675 billion.

In terms of volume for the year as a whole, exports increased by 3.9% year-on-year, as their prices, approximated by unit value indices, rose by 18.3%, and imports rose by 7.4% year-on-year, as their prices increased by 24.2%.

### Foreign Trade Quarterly year-on-year rates



Source: Tax
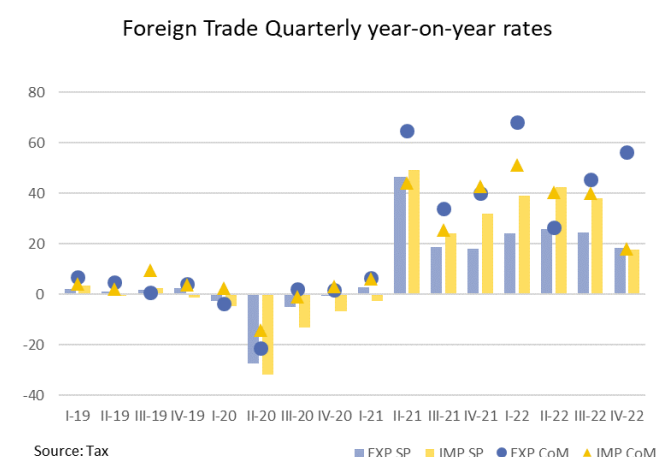
The sectors that made the greatest contribution to increased cumulative exports in 2022 are *Chemicals* (contribution: 5.9 p.p.), *Energy products* (5.4 p.p.), *Capital goods* (2.9 p.p.) and *Food, beverages and tobacco* (2.3 p.p.). The leading subsectors were *Petroleum and derivatives* (3.7 p.p.), *Medicines* (3.1 p.p.) and *Coal and electricity* (1.4 p.p.). France, Belgium, Portugal and Germany had the highest positive contributions to the rate of change in sales.

In the analysis of the contributions to the year-on-year rate of national exports in 2022 (22.9%), the Community of Madrid was the region with the highest positive contribution, i.e. 6.1 points and sales representing 15.2% of the total, constituting the second highest increase (48.2%) behind the Canary Islands (71.3%).

## 3. Labour market

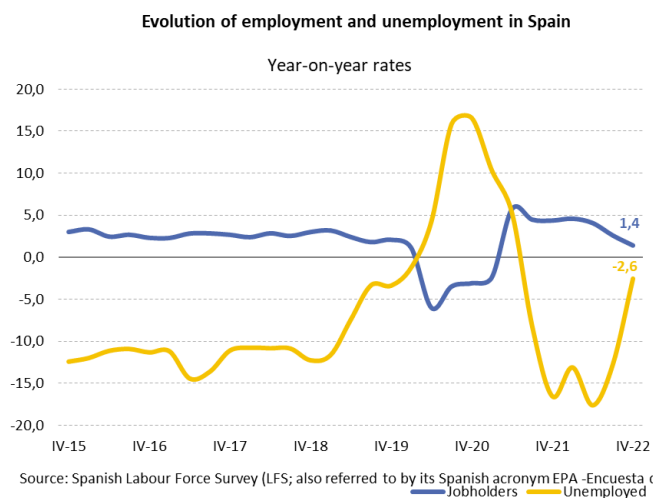**Signs of fatigue in the expansionary cycle.**

The Q4 results of the Labour Force Survey (LFS) have shown greater weakness than could be anticipated from register variables. Employment fell for the first time since 2017, and unemployment rose in the fourth quarter compared with the previous quarter. With 81,800 fewer jobholders and 43,800 more unemployed, the active population fell in the quarter in a context of an ageing workforce, which is why the activity rate fell four tenths of a point to 58.5% and the unemployment rate rose two tenths of a point to 12.9%.

These developments have led to a further weakening of year-on-year employment growth, while unemployment has fallen from double-digit declines to -2.6% at present.

The seasonally adjusted series reveal a shift in the behaviour of the two main series, which may be indicative of a change in the phase of the business cycle: a stable number of employed persons and an acceleration in the growth of unemployment compared to the previous quarter persist in the dynamics that began in the third quarter, breaking with 8 consecutive quarters of rising employment and 6 quarters of falling unemployment.

However, compared to Q4 2019, current employment was 2.5% higher, standing at 20,463,900; while unemployment was 5.3% lower.

**Registry statistics indicate record highs in enrolment in Q4 2022**, and year-on-year growth which, despite some deceleration, remains high. Registered unemployment, meanwhile, stood below 2.9 million in the same period, 9.5% lower than the same period in 2019.

Evolution of employment and unemployment in Spain



Year-on-year rates

Source: Spanish Labour Force Survey (LFS; also referred to by its Spanish acronym EPA -Encuesta de
Jobholders    Unemployed

## 4. Prices

**Energy price cuts, together with the pass-through effect, contained inflation in Q4 2022; and core inflation jumped ahead and continued to rise.**

CPI inflation reached an average rate of 6.6% in Q4 2022, ending the year with an average rate of 8.4%. The most recent data published, covering January 2023, bring this figure up by two tenths of a percentage point to 5.9%, thus snapping the string of declines in growth in the last few months. Inflation was contained in the last quarter of the year, accompanied by moderation in the two groups 'Housing' and 'Transport', with a direct impact of fluctuations in energy products. 'Housing' thus ended the year with negative rates, -4.5% in December, though in August it recorded a year-on-year increase of 24.8%. Similarly, 'Transport' posted 3.3%, while in June it reached a rate of 19.2%.

The remaining groups held stable or rising growth rates; thus, 'Food and non-alcoholic beverages' posted a 15.7% increase in December, the highest of the year, while 'Alcoholic beverages and tobacco' rose by 7.2% in December, also its highest figure of the year. The most recent published data corresponding to January 2023 reveals less growth for the 'Housing' group as electricity decreased; and 'Food' was contained by a lower rise than a year ago. Transport', on the other hand, rose due to the increase in fuels, and 'Communications' posted its first positive rate after an entire year of negative rates.

**Quarterly General and Core Spain**



General SPAIN    Core SP
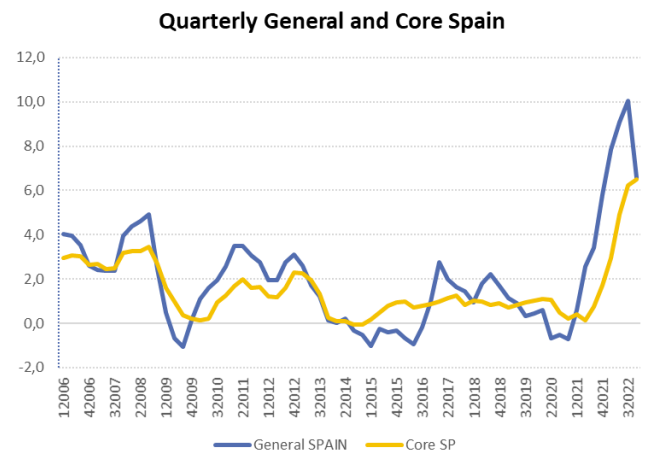
Core inflation, which has been following the headline inflation rate at some distance in its upward profile, takes off to 7% in the last month of the year, outperforming the headline rate, while the latest published figure brings it up to 7.5% in January 2023, the highest since December 1986.
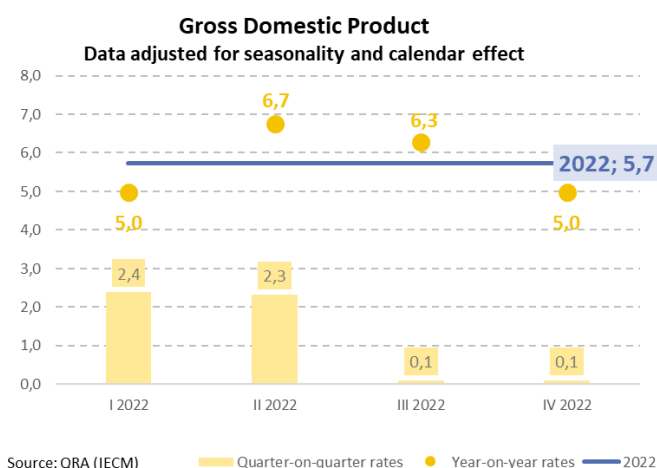
In the international context, the harmonised indicator in the EU slackened its upward trend in the fourth quarter to 10%. The growth rate in early 2023 tapered off to 8.6%.

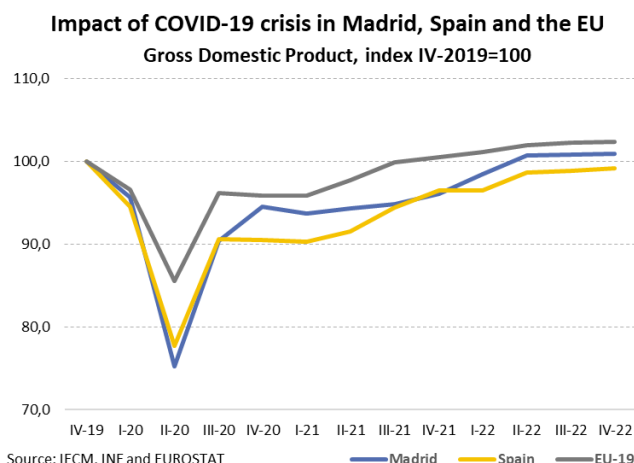# IV. Recent developments in Madrid's economy

## IV.1. Economic growth

**The Madrid economy resumes its recovery in an uncertain global context.** With the publication of the Q4 results of the Quarterly Regional Accounts, 2022 comes to a close, a year that has been conditioned by several factors that have complicated a global environment still shaken by the consequences of the pandemic, including high and persistent inflation, interest rate hikes or the invasion of Ukraine and its consequences. Madrid's economy thus grew by 5.7% over the year as a whole, outpacing the Spanish economy, which grew at an average rate of 5.5%.

Following the usual revision of the series, it appears that the recovery process after the impact of COVID-19 culminated in Q2 2022, when activity levels were similar to Q4 2019 figures.
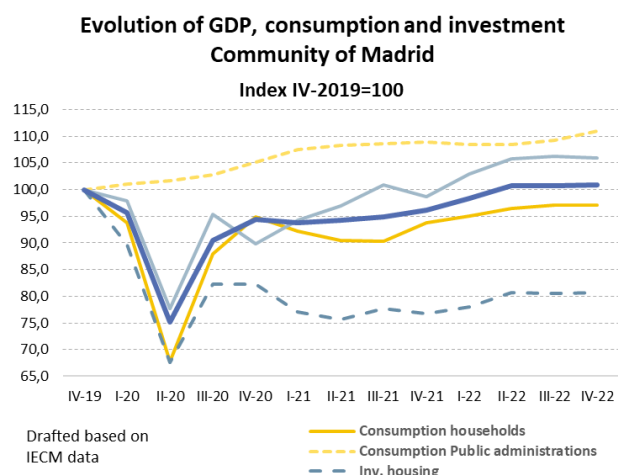
**Impact of COVID-19 crisis in Madrid, Spain and the EU**
**Gross Domestic Product, index IV-2019=100**



Source: IECM, INE and EUROSTAT — Madrid — Spain — EU-19

**Regional demand and the external sector portend a more complicated period ahead.** Consumption grew by 0.5% versus the third quarter, driven exclusively by public administrations (general government), while household consumption stagnated. Investment faltered slightly, shrinking by 0.1%, despite investment in housing, which failed to offset the fall in the rest of investment. Regional demand as a whole shaved two tenths of a point off the already contained growth of the previous quarter, to 0.4%, and was also reduced by external demand, which drained 0.3 points from GDP growth.

**Gross Domestic Product**
**Data adjusted for seasonality and calendar effect**



Source: QRA (IECM) — Quarter-on-quarter rates — Year-on-year rates — 2022

**Solid growth in the first half of the year faltered in the second half of the year**, tempered by the risks of the current difficult environment, which increased uncertainty, especially from September onwards. Accordingly, the limited increase in Madrid's GDP in the third quarter, in real terms and adjusted for seasonal and calendar effects, was maintained in the fourth quarter, at 0.1% quarter-on-quarter. As mentioned above, the rate of growth at the national level is equally tepid, at 0.2%.

In year-on-year terms, regional GDP grew by 5% in Q4 2022, 1.3 points below the growth of the previous period, although it remains more dynamic than the national average, which, according to the INE (National Statistics Institute), grew by 2.7%. Madrid thus continued consolidating its return to pre-COVID levels, as year-end 2022 GDP was nearly one point higher than in Q4 2019. Spain is still almost one point below the pre-COVID level, while the Eurozone as a whole is 2.4 points above it.

**Evolution of GDP, consumption and investment**
**Community of Madrid**
**Index IV-2019=100**



Drafted based on IECM data
— Consumption households
---- Consumption Public administrations
-- - Inv. housing

**The strong year-on-year momentum of investment failed to offset the slowdown in private consumption.** The slowdown in the year-on-year growth of Madrid's GDP is explained by a lower contribution from regional demand, while external demand increased its contribution by three tenths of a percentage point to 1.6 points. More specifically, household consumption slowed down by nearly four percentage points to 3.6%, while general government consumption accelerated to 1.9%; private consumption

thus remained 2.9% below the pre-COVID level, while general government consumption was 11% higher. Investment was particularly buoyant, accelerating to 6.7%, housing investment grew by 5.1% and the rest advanced by 7.3%. However, the former is still a long way from recovering its pre-COVID activity level, still 19.2% below, while other investments already exceed it by 5.9%.

**The regional economy has already fully recovered to pre-pandemic values in activities accounting for 72% of GVA in 2022.** On the supply side, year-on-year growth was observed in all sectors, albeit more subdued than in the previous quarter. Services and industry were the most dynamic, with rates of 5.2% and 5.3% respectively; construction grew by 2.2%. Industry was the best positioned sector, 2.2% above its pre-COVID level, which is also 0.5% above the services sector as a whole, although with significant asymmetries in its branches; construction is still 0.2% below.

**Evolution of GVA of major industries Community of Madrid**
*Index IV-2019=100*



Drafted based on IECM data

- - - Industry
——— Construction
- - - Distribution and hospitality
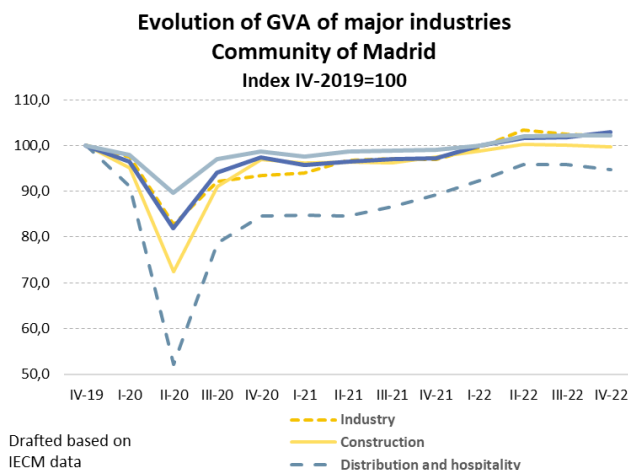
Tertiary activities, distribution services and hotels and restaurants are still the most dynamic, although their growth eased to 6.1%; however, they are still 5.3% below the pre-COVID level. *Business and financial services* accelerated to 5.9% year-on-year. *Other services* increased by 3.1% and consolidated its recovery, already exceeding the pre-COVID activity level by 2.2%.

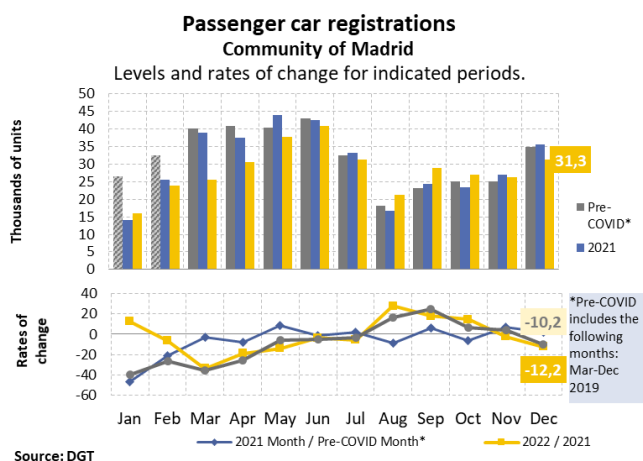| QUARTERLY ACCOUNTS OF THE COMMUNITY OF MADRID BASE 2013 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **(Volume indices, seasonally and calendar-adjusted data)** | | | | | | | | | | |
| **Quarter-on-quarter rate of change (%)** | | | | | | | | | | |
| | 2021 | 2022 | I 2021 | II 2021 | III 2021 | IV 2021 | I 2022 | II 2022 | III 2022 | IV 2022 |
| Agriculture | - | - | 3,3 | 2,4 | 0,0 | -2,7 | 0,5 | 0,1 | 1,9 | 0,1 |
| Industry | - | - | 0,6 | 3,1 | 0,3 | -0,1 | 2,6 | 3,8 | -0,9 | -0,3 |
| Construction | - | - | -0,9 | 0,3 | -0,3 | 1,5 | 1,3 | 1,5 | -0,2 | -0,3 |
| Services | - | - | -1,0 | 0,6 | 0,9 | 1,0 | 2,5 | 2,3 | 0,2 | 0,2 |
| GVA | - | - | -0,9 | 0,8 | 0,8 | 0,9 | 2,4 | 2,4 | 0,1 | 0,1 |
| **GDP** | **-** | **-** | **-0,8** | **0,6** | **0,5** | **1,3** | **2,4** | **2,3** | **0,1** | **0,1** |
| | | | | | | | | | | |
| Final Consumption Expenditure | **-** | **-** | **-1,5** | **-1,1** | **-0,1** | **2,8** | **0,8** | **1,1** | **0,6** | **0,5** |
| - households | - | - | -2,9 | -1,8 | -0,2 | 3,8 | 1,4 | 1,5 | 0,6 | 0,0 |
| - Public sector and NPISH | - | - | 2,3 | 0,7 | 0,2 | 0,3 | -0,5 | 0,0 | 0,7 | 1,7 |
| **Gross Capital Formation** | **-** | **-** | **0,9** | **1,2** | **3,6** | **-1,8** | **3,4** | **3,0** | **0,3** | **-0,1** |
| - Investment in housing | - | - | -6,3 | -1,9 | 2,8 | -1,2 | 1,6 | 3,4 | -0,1 | 0,2 |
| - Rest of investment | - | - | 4,9 | 2,8 | 4,0 | -2,2 | 4,3 | 2,8 | 0,5 | -0,3 |
| **Regional demand** | **-** | **-** | **-1,1** | **-0,7** | **0,5** | **2,0** | **1,2** | **1,4** | **0,6** | **0,4** |
| **External demand** [(1)] | **-** | **-** | **0,3** | **1,3** | **0,0** | **-0,6** | **1,2** | **1,0** | **-0,4** | **-0,3** |
| **GDP COMMUNITY OF MADRID** | **-** | **-** | **-0,8** | **0,6** | **0,5** | **1,3** | **2,4** | **2,3** | **0,1** | **0,1** |
| **SPAIN GDP** | **-** | **-** | **-0,2** | **1,4** | **3,1** | **2,3** | **0,0** | **2,2** | **0,2** | **0,2** |
| **Year-on-year rates of change (%)** | | | | | | | | | | |
| | 2021 | 2022 | I 2021 | II 2021 | III 2021 | IV 2021 | I 2022 | II 2022 | III 2022 | IV 2022 |
| Agriculture | 3,6 | 0,1 | 1,1 | 4,5 | 6,0 | 2,9 | 0,1 | -2,1 | -0,2 | 2,7 |
| Industry | 5,3 | 5,9 | -3,6 | 17,1 | 5,3 | 3,9 | 6,0 | 6,7 | 5,5 | 5,3 |
| Construction | 8,6 | 3,3 | 1,1 | 33,2 | 5,6 | 0,6 | 2,8 | 4,0 | 4,1 | 2,2 |
| Services | 6,0 | 5,8 | -2,3 | 24,1 | 4,5 | 1,5 | 5,0 | 6,8 | 6,0 | 5,2 |
| GVA | 6,1 | 5,6 | -2,2 | 23,8 | 4,7 | 1,6 | 5,0 | 6,7 | 5,9 | 5,1 |
| **GDP** | **6,5** | **5,7** | **-2,0** | **25,4** | **4,9** | **1,7** | **5,0** | **6,7** | **6,3** | **5,0** |
| | | | | | | | | | | |
| Final Consumption Expenditure | **6,2** | **3,9** | **0,5** | **24,4** | **3,5** | **0,1** | **2,4** | **4,7** | **5,4** | **3,1** |
| - households | 6,5 | 5,2 | -1,7 | 33,6 | 2,6 | -1,2 | 3,1 | 6,7 | 7,5 | 3,6 |
| - Public sector and NPISH | 5,5 | 0,8 | 6,4 | 6,6 | 5,6 | 3,6 | 0,8 | 0,1 | 0,6 | 1,9 |
| **Gross Capital Formation** | **3,7** | **6,6** | **-7,4** | **20,2** | **1,8** | **3,9** | **6,5** | **8,3** | **4,9** | **6,7** |
| - Investment in housing | -4,5 | 4,2 | -14,1 | 11,8 | -5,5 | -6,6 | 1,2 | 6,7 | 3,7 | 5,1 |
| - Rest of investment | 8,3 | 7,7 | -3,6 | 24,8 | 5,7 | 9,8 | 9,1 | 9,1 | 5,4 | 7,3 |
| **Regional demand** | **5,8** | **4,3** | **-0,9** | **23,7** | **3,2** | **0,7** | **3,1** | **5,3** | **5,3** | **3,7** |
| **External demand** [(1)] | **1,1** | **1,7** | **-1,2** | **3,2** | **1,9** | **1,1** | **2,1** | **1,8** | **1,3** | **1,6** |
| **GDP COMMUNITY OF MADRID** | **6,5** | **5,7** | **-2,0** | **25,4** | **4,9** | **1,7** | **5,0** | **6,7** | **6,3** | **5,0** |
| **SPAIN GDP** | **5,5** | **5,5** | **-4,4** | **17,9** | **4,2** | **6,6** | **6,9** | **7,8** | **4,8** | **2,7** |

(1) Contribution to GDP growth

Source: Institute of Statistics of the Community of Madrid

## IV.2. Demand and production

### IV.2.A. Domestic demand

**The figures for passenger car registrations in the fourth quarter of 2022 returned to negative rates.** According to the Directorate General of Traffic, Q4 passenger car registrations stood at 84,541 units, 1,502 units and 1.7% less than a year ago, and 0.8% below the same period in 2019; the significant increase of 14.6% in October was not enough to neutralise the falls in November (2.2%), and December (12.2%). In 2022, 340,763 passenger cars were registered, 6.1% less than a year ago and 11.6% less than in 2019. The latest data, corresponding to the month of January 2023, reflects a year-on-year increase of 57.7%, after two months of continuous declines; it should be noted that the comparison is made with the second worst month of December since 2013; with respect to January 2020, it falls by 5%, failing to overcome pre-pandemic levels.

**Passenger car registrations**
**Community of Madrid**
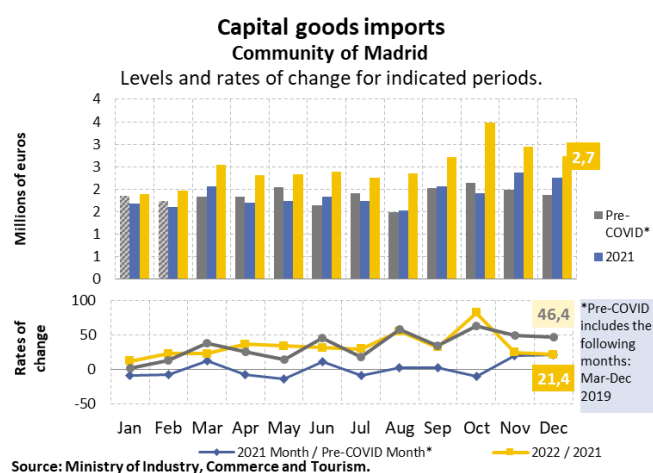Levels and rates of change for indicated periods.



Source: DGT

According to ANFAC, the year-on-year increase in January should be placed in perspective; the adverse effects of the pandemic coupled with storm Filomena in the previous months of January distort the reality; it is genuinely relevant that the January 2020 levels were not exceeded; sales to the retail channel remained low, and the rise in January was due to not being able to distribute vehicles purchased in the last months of 2022 because of transport problems from factories to dealers, together with the fall in real sales due to high inflation, interest rate hikes and geopolitical uncertainty.

The 18,137 lorry and van registrations in Q4 2022 amounted to 852 units and 4.7% more than in the same quarter of 2021, and 11.1% more than in the same period of 2019. The significant increase of 29.2% in December managed to bridge the quarter, after the falls in October and November. In 2022 as a whole, registrations for this type of vehicle closed with a drop of 13.8% compared to 2021, the largest since 2012, remaining 9.4% below pre-pandemic levels. The 56.3%

growth this past January is the second straight increase after three months of declines, compared to the lowest January volume of registrations since 2016. When compared to January 2020, this represented a 16.2% increase.

**Petrol consumption in the fourth quarter reached the highest volume for this quarter since 2006, growing by 5.9% versus 2021**, and up 7.4% versus 2019. The most recent figure for December reveals the highest consumption for this month since 2005, growing by 16.5% year-on-year and also exceeding pre-pandemic consumption by 16.4%. Diesel consumption in this quarter fell by 6.3% versus 2021 and by 19.6% versus 2019. The most recent data for December shows the third lowest consumption in the series for this month, however, it did return to positive rates, 1.3%, after a seven-month downward slide, though it still did not manage to exceed pre-pandemic levels, dropping 9.6% versus the same month in 2019. Diesel price hikes altered the consumption of these fuels. In 2022, petrol rose by 12.4% y-o-y, and by 10% versus 2019, while diesel fell by 0.8% y-o-y, a loss of 14.4% versus 2019.

**Capital goods imports were the highest in the quarterly series,** growing and accelerating to €9,153.8 million, up 40.3% versus the same period in 2021 and 52.3% higher than Q4 2019 figures. December set record highs for the month, increasing by 21.4% year-on-year, with a volume that is already 46.4% higher than in 2019. It reached an all-time high in volume in 2022, growing by 33.1% year-on-year and 34.6% versus 2019
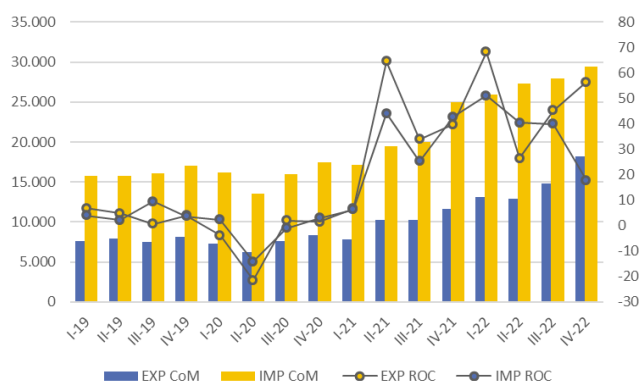
**Capital goods imports**
**Community of Madrid**
Levels and rates of change for indicated periods.



Source: Ministry of Industry, Commerce and Tourism.

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## IV.2.B. Foreign demand

**The Community of Madrid's trade balance in the final quarter of the year accelerated the rate of increase in exports versus the previous quarter, while imports slowed down, albeit with record figures for purchases.**

In Q4 2022, Community of Madrid exports climbed 56.4% versus the same period in 2021, versus growth of 45.3% in the previous quarter, amounting to €18,176 million, a single quarter sales record in the history of the series.

**TARIC Export Weighting          Q4 2022**



- 30 PHARMACEUTICAL PRODUCTS
- 27 FUELS, MINERAL OILS
- 87 VEHICLES OTHER THAN RAILWAY OR TRAMWAY
- 84 MACHINERY AND MECHANICAL APPLIANCES
- 85 ELECTRIC APPLIANCES AND MATERIAL
- rest

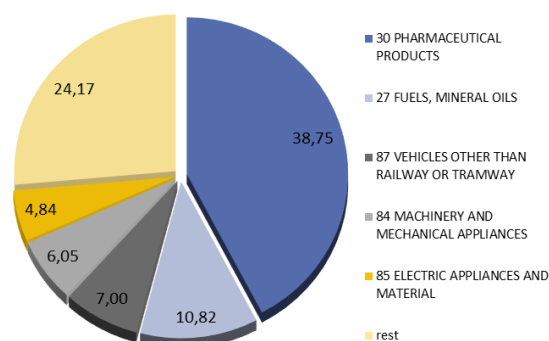2019-2022 Quarterly Exports-Imports. Community of Madrid.



Community of Madrid purchases abroad in Q4 2022 stood 17.9% higher than a year ago, compared to 39.9% in the previous quarter. Purchasing figures stood salient at €29,437 million, hitting a new series record for a quarter.

**There are two central players in the dynamic trade balance of the Community of Madrid: *Pharmaceuticals and Fuels; mineral oils.*** Pharmaceuticals took the lead in exports by TARIC headings in Q4 2022, with a contribution to export growth of 37.1 points, accounting for sales of €7,043 million, 158% more than a year ago. Over 81% refers to HS Code 30024110, *Vaccines against SARS-related coronaviruses (SARS-CoV species)*, where we exported 243% more than in Q4 2021, with a virtually single destination: Belgium. A distant third in terms of contribution (3.8 p.p.), *Vehicles, automobiles; tractors* posted €1,272 million, 7% of total Madrid sales in this quarter, mainly to Italy, and 53% more than a year ago. This was followed by *Organic Chemicals*, accounting for 2.25 p.p., the category with the highest year-on-year growth (311%), and representing 1.9% of the total sold by the Community of Madrid.
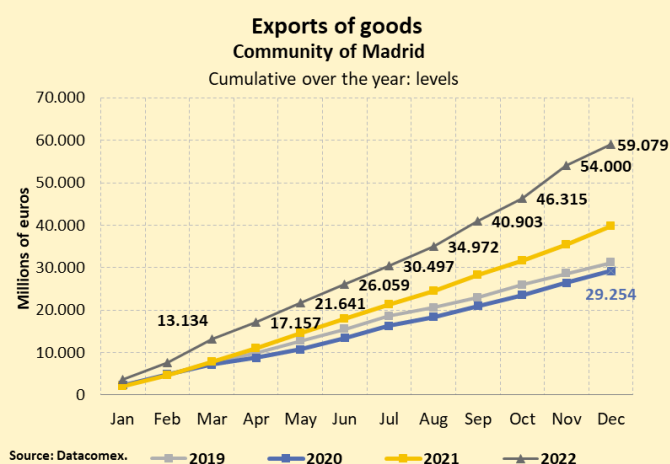
In terms of Madrid's imports, the most notable contribution to their growth comes from the heading *Fuels; mineral oils*, where we purchased €5.4 billion in Q4 2022, the third ranked single-quarter record after the second and third quarters of 2022, and 23% higher than the same period in 2021. It contributed 4.0 p.p. to the increase in Madrid purchases, and represents more than 18% of the total imported by the Community of Madrid in that quarter. The most prominent tariff is 2711 *Petroleum gas and other gaseous hydrocarbons*, which includes Liquefied Natural Gas (LNG), of which we imported €4,060 million this quarter, 26% more than a year ago and 77% of the total acquired by Spain in the fourth quarter. The two main suppliers in this period are the USA, Russia and Nigeria. This is followed, in terms of contribution to the increased imports in this quarter, by *Aircraft; spacecraft*, with a contribution of 3.25 points and purchases of €1,266 million, 180% more than in the same quarter of 2021. Finally, it is worth mentioning *Pharmaceuticals*, which has been playing a leading role due to its contribution to the variation of imports in previous months and which, for the third consecutive quarter, has made a negative contribution to the growth of imports. This quarter subtracts 1.85 p.p. from the rate and is the only chapter among the top 15 in the ranking that slows down the advance.

In terms of countries accompanying the variation in exports, Belgium is particularly prominent (contribution: 35.5 p.p.) for receiving a large part of *Pharmaceuticals*, followed by Italy (4.4 p.p.), the main destination of *Vehicles, automobiles; tractors*. In terms of purchases, sorted by positive contribution, Italy (3.56 p.p.) for *Vehicles and railway equipment*, France (3.22 p.p.) for *Aircraft* and then the USA (2.81 p.p.) for *Pharmaceuticals*.

# Sidebar I. Trade balance of the Community of Madrid in 2022.

### A. Exports.

Despite the uncertainty in the international context, data published by the AEAT revealed that the Community of Madrid's trade balance in **2022 closed with an all-time record high. Madrid's exported goods accounted for €59,079 million in 2022**, 48% more than in 2021 and 89.5% higher than in the year before the pandemic (2019). **In 2022, imports of goods amounted to €110,618 million**, 35.6% more than in 2021 and 71.3% higher than in 2019. These trends lead us to a coverage rate of 53.4% in 2022, the lowest among all Autonomous Communities.

**Exports of goods**
**Community of Madrid**
Cumulative over the year: levels



Source: Datacomex. ━ 2019 ━ 2020 ━ 2021 ━ 2022

**The increase in Spanish exports** reached 22.9% year-on-year, and **Madrid was the region that most boosted this growth, with a contribution of 6.1 p.p**.

There are two clear protagonists in this extraordinary advance in Madrid's exports: **Pharmaceuticals**, the leader for over a decade, of which we have sold **€17,145 million** in 2022, slightly more than double of 2021 and four times more than in 2019. In this regard, €12.307 billion corresponded to HS Code 30024110, *Vaccines against SARS-related coronaviruses (SARS-CoV species)*, associated with the extension of the collaboration between Rovi and Moderna to manufacture the COVID-19 vaccine, which is filled and finished at the San Sebastián de los Reyes facility.

This is followed by **Fuels; mineral oils**, which moved up to second position from eighth in 2019. Of these, we sold **€8,698 million**, 151% more than in 2021 and 672% more than in 2019. Of the total, €6,578 million relates to tariff 2716 *Electricity*; underlying this increase is the sharp rise in electricity prices that has taken place since the second half of 2021 and has started to moderate in the second half of 2022. These two categories together contribute 35.1 p.p., or 48%, to year-on-year export growth, and 66.5 p.p., or 89.5%, to cumulative growth over 2019. In terms of weight of total exports in 2022,

both categories account for 43.7%, while in 2021 they accounted for 29.8%.

The next three categories in the ranking all register positive year-on-year rates and, except for *Vehicles, motor vehicles*; tractors, accelerate the pace of growth recorded in 2021: *Machinery and mechanical appliances* (19.8%), *Motor vehicles; tractors* (12.8%) and *Electrical appliances and equipment* (6.5%).

| Exports of the top 5 TARIC of the Comm. of Madrid | | | | |
|---|---|---|---|---|
| CUMULATIVE TO DEC 2022 | Volume | nnual Rate of C | Contrib. | %total |
| 30 PHARMACEUTICAL PRODUCTS | 17.144,7 | 104,3 | 22,0 | 29,0 |
| 27 FUELS, MINERAL OILS | 8.698,1 | 150,8 | 13,1 | 14,7 |
| 84 MACHINERY AND MECHANICAL APPL | 4.187,7 | 19,8 | 1,7 | 7,1 |
| 87 VEHICLES OTHER THAN RAILWAY OR | 4.005,9 | 12,8 | 1,1 | 6,8 |
| 85 ELECTRIC APPLIANCES AND MATERIA | 2.994,8 | 6,5 | 0,5 | 5,1 |
| TOTALS | 59.079,3 | 48,2 | | |

*Source: AEAT*

The third highest contribution comes from category 99 *Set of other products*, which doubled the volume in 2021 and contributed 3.0 p.p. to the year-on-year rate. Finally, a new category this year enters the ranking of the top 15 best sellers, in 11th position. In this regard, it is category 29, *Organic Chemicals*, which triples its sales volume in a single year, experiencing the highest growth.

In terms of destination countries for our sales in 2022, **Belgium** stood out as the largest recipient of COVID-19 vaccines, contributing 20.7 p.p. to the increase in exports in 2022 and becoming the leader with **€13,108 million** sold, 171% more than in 2021. This was followed by **France**, our main client in previous years and relegated to second position in 2022, with an annual total of **€8,044 million**, contributing 5.4 p.p. to the increase in exports and, lastly, **Portugal**, which contributed 4.5 p.p. with **€6,595 million** sold; these last two countries are the main recipients of *Electricity* exported from the Community of Madrid.
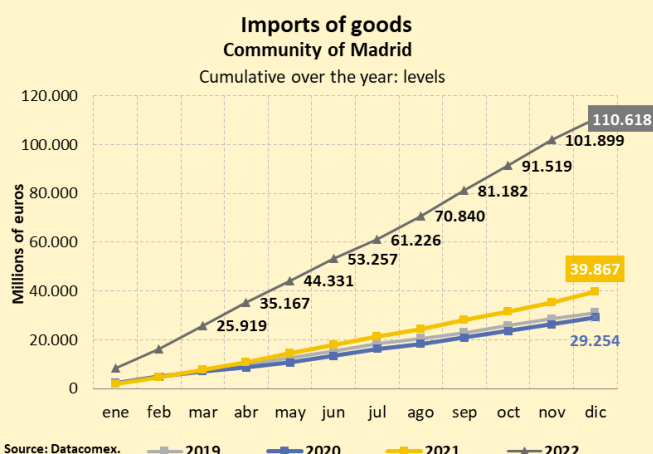
### B. Imports

At a national level, Madrid was the leading contributor region, with 8.5 p.p. to the increase in purchases in 2022 for the country as a whole, which was 33.4%.

| Imports of the top 5 TARIC of the Comm. of Madrid | | | | |
|---|---|---|---|---|
| CUMULATIVE TO DEC 2022 | Volume | (Rate of Chan | Contrib. | %total |
| 27 FUELS, MINERAL OILS | 23.741,7 | 156,1 | 17,7 | 21,5 |
| 30 PHARMACEUTICAL PRODUCTS | 15.585,6 | 2,9 | 0,5 | 14,1 |
| 85 ELECTRIC APPLIANCES AND MATERIA | 12.446,9 | 30,1 | 3,5 | 11,3 |
| 84 MACHINERY AND MECHANICAL APPL | 10.675,5 | 19,0 | 2,1 | 9,7 |
| 87 VEHICLES OTHER THAN RAILWAY OR ' | 9.083,7 | 24,7 | 2,2 | 8,2 |
| TOTALS | 110.618,4 | 35,6 | | |

Source:AEAT

For the first time in its history, **the region's imports of goods exceeded the €100 billion mark in a single year**, a fact that has been greatly influenced by the rise in the price of energy products, as well as the European commitment to bring gas reserves to 95% by winter, in order to be able to do without Russia, one of our main gas suppliers.

**Imports of goods**
**Community of Madrid**
Cumulative over the year: levels



Source: Datacomex.

Madrid's imports were thus clearly led by **Fuels; mineral oils** this year, which, after moving up two positions, is the leader in 2022, with **€23,742 million**, 21.5% of total imports, with a contribution of 17.7 p.p. to the increase in 2022, which was 35.6%. This amount is 156% higher than what was purchased in 2021 and over 200 times higher than 2019 imports. Of the total accounted for in this category, €17,554.4 million corresponded to 271111 *Natural gas, liquefied* (LNG), and a further €3,390 million to 2716 *Electricity*.

LNG bunkering is 207% higher than in 2021. The **top three LNG suppliers in 2022** were the **USA** (40% of the total), followed by **Russia** (almost 21%) and **Nigeria** (just under 13%). The following chart depicts performance figures of the main suppliers of *Petroleum gas and other gaseous hydrocarbons*, including LNG and the fundamental role of the USA, which increased LNG shipments by 263% versus 2021, via LNG tankers to Spanish regasification plants at a higher price than Russia, which was our second supplier in 2022. Rising gas prices, which peaked around March, had also been a determining factor in the sharp increase in the monetary value of gas purchases.

Electricity imports grew by 43.8% in 2022 versus 2021. Our main suppliers are: France supplies 61% and Portugal 34% of total imports.

**Performance of the main suppliers of heading 2711 Petroleum gases and other gaseous hydrocarbons (millions of euros)**
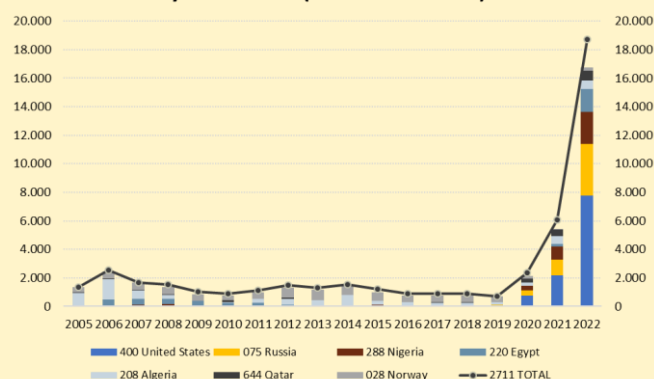


All the other 14 categories in the ranking make upward contributions to the rate, albeit less intense. Some of the more salient include: *Electrical appliances and equipment* (3.5 p.p.), as the next largest contribution, where we purchased 30% more than a year ago; followed by *Vehicles, automobiles and tractors* (2.2 p.p.), where we purchased 25% more than a year ago; and *Machinery and mechanical appliances* (2.1 p.p.), raising the change in imports, where we purchased 19% more than in 2021. *Pharmaceuticals*, ranked as the most demanded product in 2021, ultimately ranked second (€15,586 million purchased), 2.9% higher than in 2021 and with a slight contribution of 0.5 p.p.

**Imports from RUSSIA into the Community of Madrid (millions of euros)**
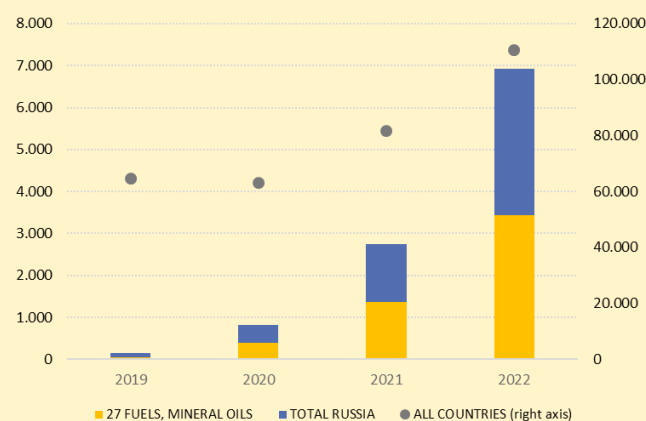


In terms of countries, the **USA** ranked first with **€16,140 million**, which after ranking fourth in 2021, slid up to first in 2022 and drove purchases up (10.6 p.p.), followed by **China** with **€12,084 million** (4.3 p.p.) and then **Russia**, the third largest contributor (2.8 p.p.) with **€3,705 million**, from the eighth position (twelfth in 2022), and is the country with the highest growth: 165.6%.
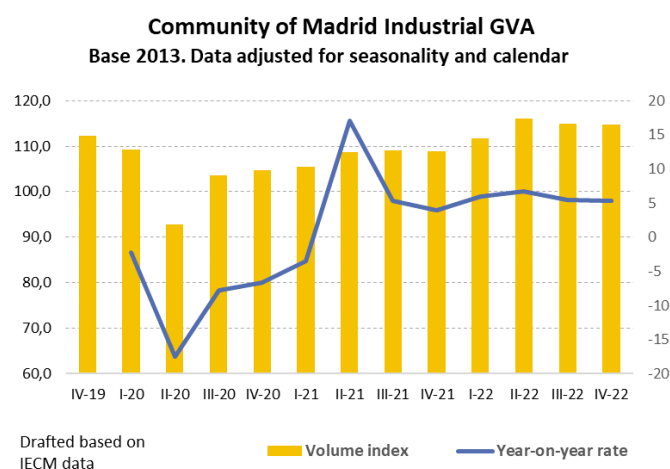
## IV.2.C. Manufacturing

### 1. Industry

**Industrial Gross Value Added continued to grow.**

The Quarterly Regional Accounts of the Community of Madrid for 2022 confirmed the interannual growth of industrial GVA for the year as a whole, with a variation rate of 5.9%, 0.6 points higher than the interannual growth of the previous year. The GVA of the regional industry grew evenly in all four quarters of 2022, with 6% in Q1, 6.7% in Q2, 5.5% in Q3 and 5.3% in Q4.

**Industrial Production Index dynamics persisted throughout 2022**.

**Community of Madrid Industrial GVA**
**Base 2013. Data adjusted for seasonality and calendar**



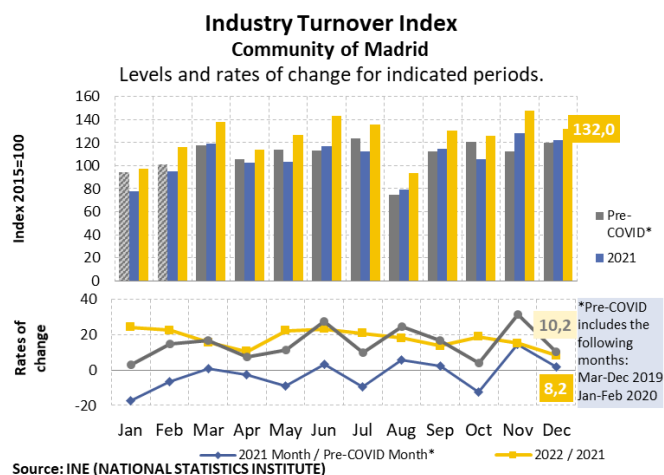Drafted based on IECM data — Volume index — Year-on-year rate

The Community of Madrid IPI in December, with a seasonal and calendar adjustment (SCA), sustained the momentum of the previous eleven months, with a growth of 8.3%, which was 8.4 points higher than the growth of December 2021. On average so far this year, the IPI in the Community of Madrid (SCA) improved throughout 2022 versus the solid year-on-year performance already recorded in 2021, presenting a year-on-year growth of 6.2%, which is 0.7 points higher than the previous financial year. This year-on-year growth is the strongest in the SCA IPI series as an annual average of all Decembers since 2006. In Spain, the annual average IPI performance in 2022 was less favourable, with a year-on-year increase of 2.9%, 4.4 percentage points lower than in 2021.

The four components of the IPI in the Community of Madrid (in year-on-year and SCA terms) had positive year-on-year variation rates in 2022 as a whole; thus, the rate is 9.4% in capital goods, 7.2% in consumer goods, 6.8% in intermediate goods and 2.8% in energy. These four components show positive rates of change in all four quarters of 2022 versus the same quarter of 2021, except for energy, which contracted by 3.8% in the first quarter of the year. In the fourth quarter of the

year, the year-on-year growth of 8.7% in capital goods was prominent, followed by 6.9% in the production of consumer goods as a result of the dynamism of non-durable goods, which offset the slight contraction of durable and intermediate goods. Energy is the component with the lowest growth, at 3.5%.

**The Turnover Index also exhibited a favourable progression, with very significant growth in 2022 as a whole.**

The Industrial Turnover Index of the Community of Madrid posted high year-on-year rates of change for 21 of the last 22 months, though during the last six months of the year it has shown signs of deceleration, registering in December 2022 a year-on-year growth of 8.2% which, although it represents a significant growth, is 9.2 points lower than that of the same month of the previous year. The last seven quarters yielded double-digit year-on-year growth rates. In 2022, quarter-on-quarter year-on-year growth gradually decelerated, with 20.3% in Q1, 18.9% in Q2, 17.5% in Q3 and 13.9% in Q4 of the year. On an annual average basis and for the whole of 2022, turnover grew by 17.5% year-on-year, up from 11.6% growth in 2021 and 13.8% in the same period of 2019.
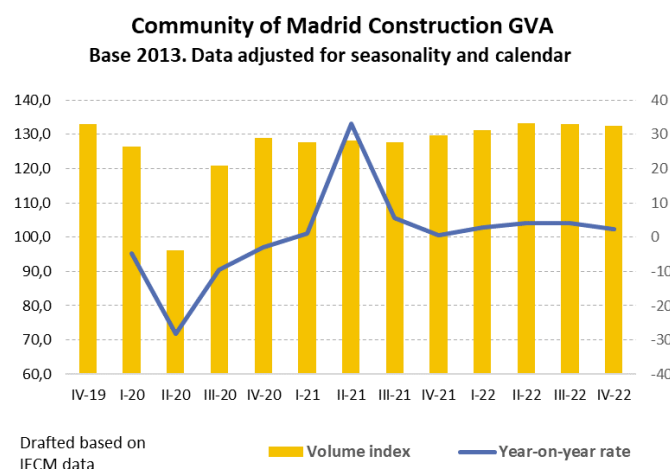
**Industry Turnover Index**
**Community of Madrid**
Levels and rates of change for indicated periods.



Source: INE (NATIONAL STATISTICS INSTITUTE)

## 2. Construction

**GVA in construction continued to grow at a solid year-on-year rate for the year as a whole.**

In 2022, according to the Quarterly Regional Accounts of the Community of Madrid, Madrid's construction GVA tempered its year-on-year growth with a rate of 3.3%. Counterintuitively, this is a very impressive performance following the strong recovery of 8.6% in 2021, which was the highest in the 2011-2021 series. Regional construction GVA grew evenly in all four quarters of 2022, by 2.8% in Q1, 4% in Q2, 4.1% in Q3 and 2.2% in Q4.
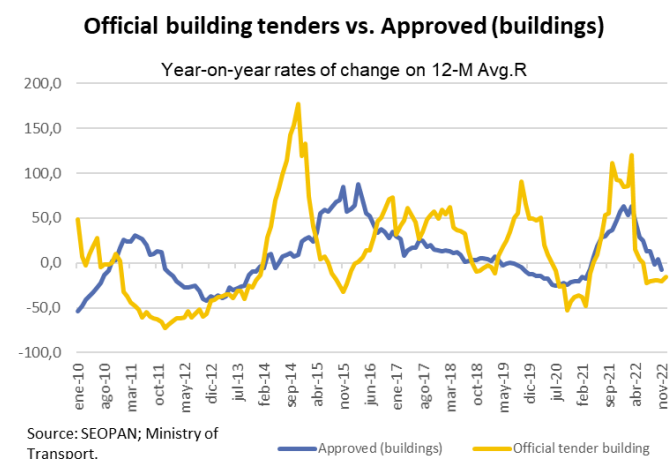
**Total tenders throughout 2022 at its best level since 2006.** The high bidding volumes recorded in every quarter of 2022 attest to the remarkable dynamism of this variable. After a solid performance in public construction tendering in the previous year, 2022 posted the highest level of activity since 2006 with a total tender volume of €4,648 million. The first quarter was the most dynamic with a year-on-year growth of 186.5%; the second quarter showed a more moderate growth of 46.9%, while the third quarter showed a year-on-year contraction of 18.8% and the fourth quarter grew again by 49.1% year-on-year.

**Community of Madrid Construction GVA**
**Base 2013. Data adjusted for seasonality and calendar**



Drafted based on IECM data — Volume index — Year-on-year rate

This exceptional performance is explained by the rise in civil tenders, which grew by 105.2% year-on-year and accounted for 70.2% of total tenders, while building tenders contracted versus the previous year by 15.8%.

With regard to the rest of the leading indicators with data up to November 2022, all of them have grown in year-on-year terms in the accumulated period since January, except for building permits, which have contracted by 15.1%. Housing approvals grew by 19.1% year-on-year in the first eleven months of the year, the total surface area approved by 15.5% and the total amount of surface area approved by 24.0%. The lagged indicator of work completion certifications declined by 9.7% year-on-year in the January-November period.

**The excellent performance of the residential market, which has been underpinned by the recovery in construction, moderated.** The post-pandemic performance of the residential segment has proved to be differential, ahead of the recovery of the overall economic activity driven by the investment of part of the savings accumulated during confinement. According to the INE ((National Statistics Institute), home sales and purchases accelerated significantly in 2021 as a whole, growing by 34.8% versus 2020. This expansionary trend in 2021 continues more moderately in 2022 as a whole, with a more modest year-on-year growth of 14.7%, marking a slight quarterly deceleration throughout the year in both the new and used housing segments. Accordingly, new home sales and purchases in 2022 fell by 12.3% in year-on-year terms, while used homes sales grew by 8%.

**Official building tenders vs. Approved (buildings)**



Source: SEOPAN; Ministry of Transport. — Approved (buildings) — Official tender building

In December, the mortgage statistics show year-on-year decreases in terms of both the number of mortgages on homes, down 18.3%, and the capital constituted, down 17.2%; this behaviour contrasts with the quarterly evolution, which shows year-on-year growth in both series in all four quarters of the year. The fourth quarter showed year-on-year growth of 11% in the number of mortgages and 17.1% in capital provided, making it the fourth quarter of the series with the highest volume of capital lent since 2007. With 80,416 mortgages on homes in 2022, Madrid reached the highest volume since 2010 and grew by 9.6% year-on-year, while, with €17,045 million, it had the highest volume of capital lent since 2008 and grew by 16.1% versus 2021.

# 3. Services

**Annual GVA growth in the services sector continued in Q4 2022 in the Community of Madrid.** According to the Community of Madrid's Quarterly Regional Accounts, the real GVA of services (SCA) grew by 0.2% in Q4 2022, with respect to the previous quarter, and by 5.2% year-on-year. This performance underpins the annual performance of services GVA, which grew by 5.8% in 2022 after a fall of 10.1% in 2020.

### Services GVA. Breakdown by branches
Year-on-year rate of change (%)



Source: QRA, IECM
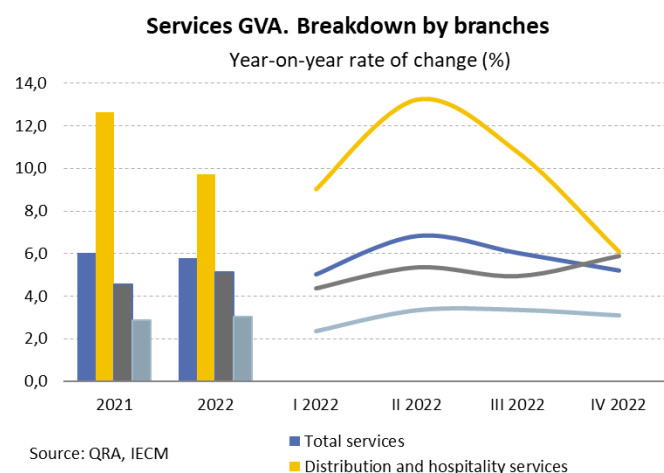
Not all branches in the services aggregate posted growth in real GVA (SCA) versus the previous quarter; of note was the 1% increase in *Business and Financial Services*; *Other Services* increased by 0.1%, w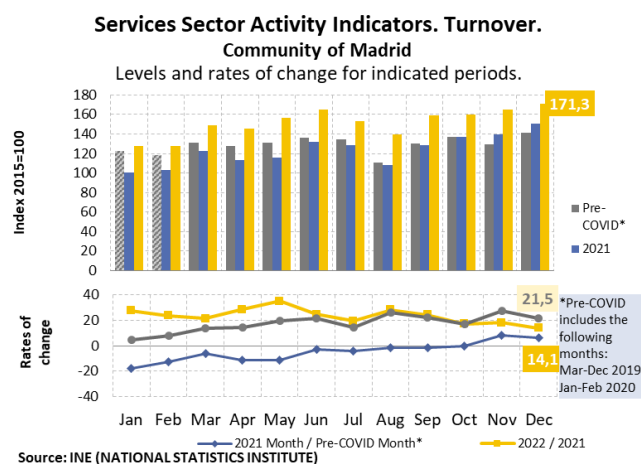hile *Distribution and Hospitality Services* declined by 1.2%. In year-on-year terms, all branches showed significant growth in Q4 2022: *Distribution and hospitality* grew by 6.1%, *Business and financial services* by a further 5.9% and *Other services* by 3.1%.

**The Services Sector Activity Indicators (SSAI) kept up an annual growth above pre-pandemic levels.** In Q4 2022, the quarterly average of the SSAI relative to turnover in the Community of Madrid grew by 16.5% versus the fourth quarter of the previous year, slightly more than the 13.5% in Spain. That was the seventh consecutive increase continuing a pattern that began in Q2 2021, breaking with the pandemic-induced falls in the index that began in Q1 2020. The level of the index is 22% above Q4 2019 for our region and 19.8% for Spain.

The latest available data for December reveal a year-on-year growth of 14.1% in the Community of Madrid and 11.1% in Spain.

The SSAI employment index points to a recovery similar to the business index in both the Community of Madrid and Spain, albeit at a slower pace. Average growth in the Community of Madrid in Q4 2022 versus Q4 of the previous year was 3.2%, compared to 2.3% in Spain and, similar to business, it was increasing since Q2

2021. The average quarterly level in this third quarter stands above pre-pandemic levels, advancing 2.5% in the region and 1% in Spain with respect to Q3 2019.

### Services Sector Activity Indicators. Turnover. Community of Madrid
Levels and rates of change for indicated periods.



Source: INE (NATIONAL STATISTICS INSTITUTE)

The latest available data for December reveal a year-on-year growth of 2.9% in the Community of Madrid and 2% in Spain.

**Performance improved for air passenger and freight traffic, and also metro and city bus transport, though they remain below pre-pandemic levels, except for freight**. Passenger flows at Adolfo Suarez Madrid Barajas airport rose in Q4 2022 to around 13,800,000 passengers, compared to 9,231,783 in Q4 2021, but failed to reach the 15,133,277 passengers recorded in Q4 2019.

Additionally, freight traffic at Madrid airport decreased by 2.7% year-on-year in Q4 2022, and is still 2.3% below Q4 2019 levels.

In Q4 2022, urban transport in Madrid's metro service shows a significant year-on-year growth of 19.2%. The same behaviour is observed in urban bus transport, growing by 17.8% versus Q4 2021. However, the figures are still below Q4 2019 figures by 11.5% and 9.9%, respectively.

**Turnover continued to increase in Q4 2022, while employment in the Retail Trade Indices (RTI) fell back.** The Q4 2022 average of the deflated RTI turnover index in the Community of Madrid is 3.2% higher than in the same quarter of 2021, continuing the progress started in Q3 2020; since then, it exceeds the pre-pandemic level in terms of quarterly averages. The most recent data, from December 2022, grew by 4.7% year-on-year, after falling by 1.1% in July.

**Retail Trade Index. Turnover.**
**Community of Madrid**
Levels and rates of change for indicated periods.



Source: INE (NATIONAL STATISTICS INSTITUTE)

**Traveller inflow**
**Community of Madrid**
Levels and rates of change for indicated periods.



Source: INE (NATIONAL STATISTICS INSTITUTE)
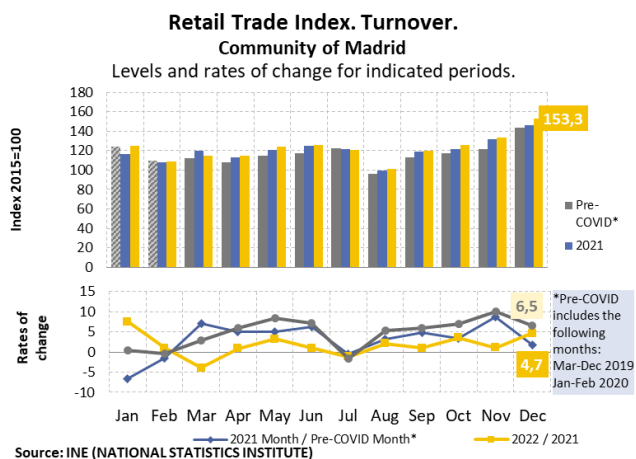
In Spain, the quarterly average of the index in Q4 2022 rose by 1.5% versus the same quarter of 2021, breaking the decline of the previous quarter and is 1.4% below the pre-pandemic level.

In turn, in Q4 2022 the RTI employment rate in the Community of Madrid broke with the growth path that began in Q2 2021 and fell by 0.1% year-on-year in the region, and by 1.1% in Spain. Moreover, compared with the same quarter of 2019, it was down 1.4% year-on-year in the region, while it was up slightly by 0.02% in Spain. These developments are confirmed by the latest data for December.

**Hotel activity in the Community of Madrid continued to improve in Q4 2022, still below 2019 levels.** In Q4 2022, slightly more than 3,000,000 passengers were welcomed compared to 2,479,084 in the same quarter of the previous year, continuing the upward trend that began in Q2 2021. However, the level is still below the pre-pandemic data; in Q4 2022, 5.3% fewer tourists came than in the same quarter of 2019, when the number of travellers exceeded 3.2 million. 58.4% of travellers received in the Community in Q4 2022 were domestic travellers.

The most recent data published for January 2023 of 877,240 passengers were 54% better than the same month of the previous year, with more than 307,773 additional passengers; however, it is still 5.5% below the figure for January 2020, which registered an entry of 928,608 passengers.
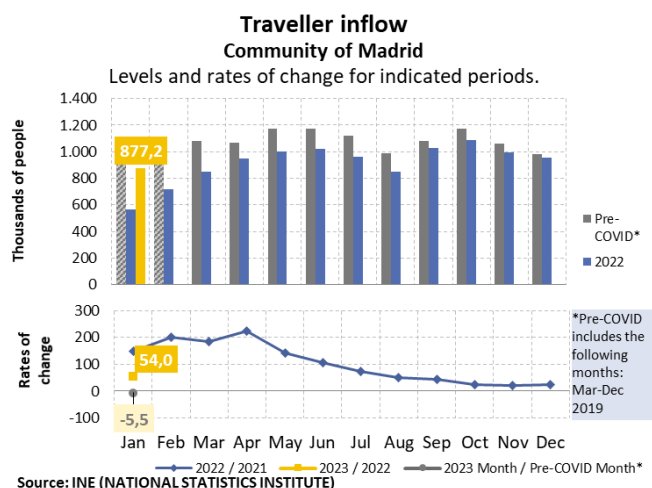
Overnight stays in the Community of Madrid paralleled the behaviour of incoming travellers. In Q4 2022, 6,030,540 travellers stayed overnight, nearly one million more than in Q4 2021, when only 5,095,032 overnight stays were tallied, and already nearly five hundred thousand less than in Q4 2019, which posted 6,511,255 overnight stays.

The most recent data, published in January 2023, puts overnight stays in the Community of Madrid at 1,715,282, 43.8% more than a year ago, although 8.8% lower than January 2020 figures.

With regard to the occupancy rate, the Q4 2022 average of 56.2% is a clear improvement on the 50% of Q4 2021 and is close to the levels of Q4 2019, when it reached 61%.
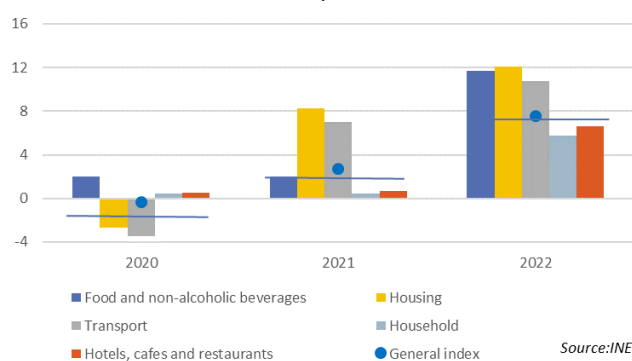
In January 2023, the occupancy rate rose to 47.1%, improving on the 34.6% of the previous January, but still below the 52.2% of January 2020.

The trend clearly remained positive in the fourth quarter, inching closer to pre-pandemic levels.

# IV.3. Prices and wages

**Headline inflation was subdued in Q4 2022, while core inflation continued rising, reaching a 30-year high.** Falling fuel prices and subdued electricity and gas price hikes, together with the staggering effect of the sharp rises of a year ago, managed to limit the rise in inflation in the second half of the year. After peaking in July at 9.6% year-on-year, it began a path of progressively lower growth until December's 4.9%. Thus, average CPI inflation in the Community of Madrid in 2022 as a whole was 7.5%, versus 2.7% in 2021. However, the most recent inflation data published, corresponding to January, broke the downward trend of the last five months and added four tenths of a percentage point to reach 5.3% year-on-year.
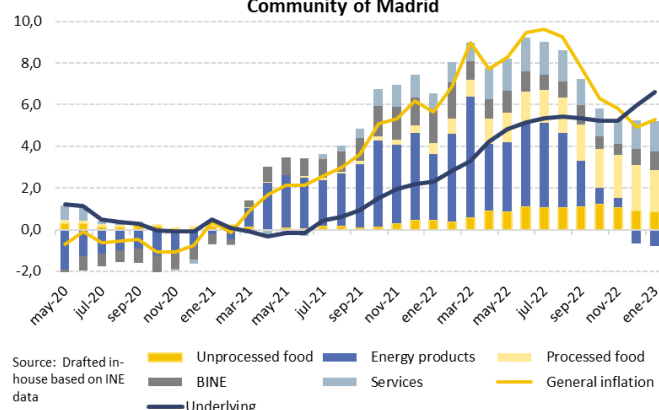
Average inflation performance of the most inflationary groups in 2022. Community of Madrid.



Food and non-alcoholic beverages • Housing • Transport • Household • Hotels, cafes and restaurants • General index

*Source:INE*

The sharp spike in inflation, beginning in mid-2021, peaked in July 2022. This largely corresponded to the energy crisis, which exacerbated the distortions caused by the expansionary monetary policy of the European Central Bank; the simultaneous rise in oil, gas and electricity prices accelerated an inflationary process already observed since 2021. Additional factors, including the post-pandemic recovery, bottlenecks in production processes or the invasion of Ukraine, contributed to generalised price increases of all components in the basket of goods. Accordingly, tempered energy prices in the last quarter directly affected the 'Housing' and 'Transport' groups; the former posting a 25% year-on-year increase in March but ended the year with a 3.3% fall as compared with December 2021. The latter group, in contrast, posted an average inflation in 2022 of 12.1% with a peak of 18.7% in June, becoming 0.5% in December, for an average inflation rate of 10.7% for the year. However, the other groups continued trending upwards, such as 'Food and non-alcoholic beverages', which opened the year with

an inflation rate of 4.7% and then gradually climbed to 15.7% in December, posting an average inflation rate in 2022 of 11.7%, very similar to the average of the 'Housing' group. Restaurants and hotels', ended the year at 8.1% after starting at 4%. The 'Household furniture' group, in turn, increased its rate over the course of 2022 to 7.4%, an all-time high for this group, from 1.9% in January. Finally, 'Other goods and services' should be mentioned for its persistent slow upward profile that climbed by 4.6% in December. Consequently, core inflation is on a trajectory of its own.

Contribution to inflation by components
Community of Madrid



Source: Drafted in-house based on INE data

Unprocessed food — Energy products — Processed food — BINE — Services — General inflation — Underlying

**Core inflation**, entailing only the most structural and least volatile components, **had been stabilising in the last few months of the year, though it rose again in December and continued rising in January, the most recent data to be published.** It stabilised at 5.2% in the first two months of the last quarter, only to rise again in December to 6%, a 30-year high. The most recent data for January shows a further rise to 6.6%. However, it remains the lowest rate of all the autonomous communities.

The chart above illustrates an important contribution of energy products until mid-year, disappearing in the last quarter and then changing course in the second half of the year. However, *Processed Food*, *Unprocessed Food* and *Services* are gradually increasing their contribution, justifying the upward trend of core inflation.

Cumulative headline inflation since the start of the pandemic (February 2020-January 2023), is estimated at 11.7%, most notably the inflation of 23.3% in 'Food and non-alcoholic beverages', 11.5% in 'Transport', 10.8% in 'Housing', 10.6% in 'Furniture and household goods' and 10.3% in 'Restaurants and hotels'. At the other end of the spectrum we find 'Communications', down 1.5%, and 'Health' with a slight increase of 0.2%.

## IV.4. Labour market

### 1. LFS

**The relatively weak fourth quarter results are accentuated in year-on-year terms by the comparison with a unique fourth quarter.** The fourth quarter LFS revealed quarterly increases in employment, but also in unemployment, from which the active workforce hit its highest level ever and increases were observed in both the activity rate and the unemployment rate.

Just a year ago, the employment increase of this quarter was nearly twice the current rate, with a reduction in unemployment of historic proportions; as the drop in unemployment almost equalled the expansionary phase minimum of the pre-pandemic cycle.
The year-on-year comparison thus pointed to a further slowdown in jobholders in Q4, together with the first increase in jobless numbers and a notable boost in the rate of increase in the active workforce.



**Year-on-year change in employed and unemployed Community of Madrid**
Thousands of people
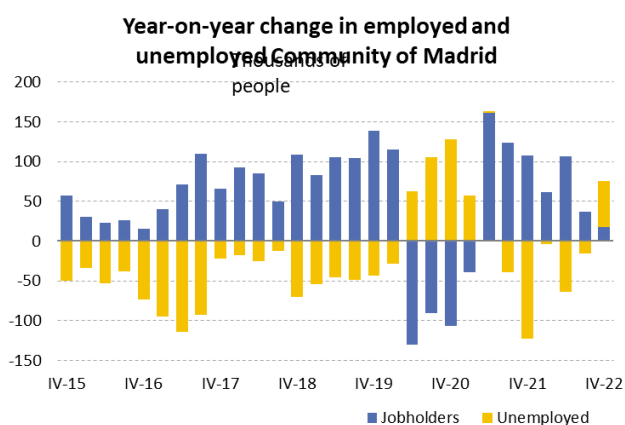
Source: Spanish Labour Force Survey (LFS; also referred to by its Spanish acronym EPA

The employed headcount increased by 26,500 in the Q4, 0.8%, bringing the total number of employed to 3,193,000. This increase lags behind the employment figures of the second quarter, the all-time high.
This is revealing since, where in previous periods the record number of employed persons was reached in the second quarter, the results of the fourth quarter exceeded it; this change may be indicative of a change of cycle. In year-on-year terms, this relative weakness in employment growth in the quarter, once again, slowed year-on-year employment growth to 0.5%, the most contained since employment began its post-COVID recovery.

Joblessness rose by 10,600 to 415,200, up 2.6% quarter-on-quarter. These dynamics are more similar to the behaviour of the series in the recessionary phase of the previous cycle than to that observed in the pre-COVID periods of expansion. The year-on-year comparison was affected by the extraordinary drop in

unemployment a year ago, the sharpest in the historical series: in Q4 2022, the unemployment increased by 57,700 (16.1%), compared with a reduction of 122,500 (25.5%) year-on-year, in Q4 2021. Consequently, unemployment posted its first year-on-year increase since 2021.

As both the employed and the unemployed grew in the quarter, the labour force rose to 3,608,200 people, an all-time high for the series. The 1% uptick in the region's active workforce (37,000 more) versus Q3 is in line with the usual seasonal dynamics for Q4, contrasted a year ago by the exceptionally sharp drop in unemployment, as already pointed out. As a result, the active workforce increased year-on-year by 75,100 (2.1%).

The activity rate thus returned to growth, adding three-tenths in the quarter and one-tenth in the year, standing at 63.2% of the over-16 population, reflecting a more dynamic trend in the active workforce than in the working-age population.



**Unemployment rate (%)**

Source: EPA, INE — Community of Madrid — Spain
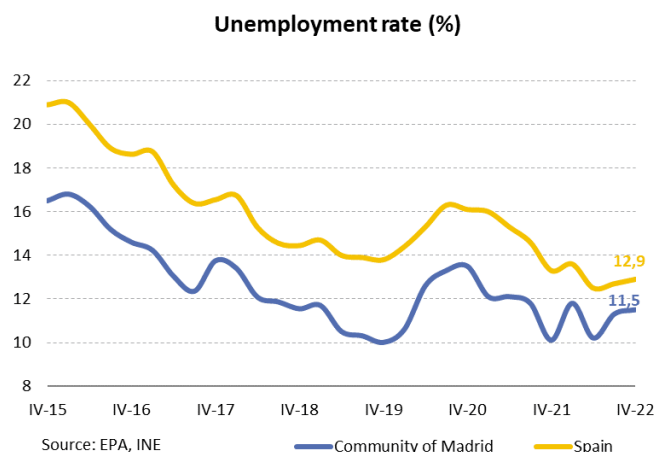
Nevertheless, the unemployment rate increased by two tenths of a percentage point versus the previous quarter to 11.5% of the labour force, 1.4 points higher than a year ago. The regional unemployment rate, however, remained 1.4 p.p. lower than the national rate.

In the regional context, Madrid ranks third in terms of active workforce and jobholders, and second in terms of unemployment, behind Andalusia. This quarter recorded the highest activity rate in the national context, and the tenth lowest unemployment rate.

# Sidebar II. Q4 2022 LFS Flows

## A.- An Initial Glimpse at Q4 2022 LFS Flows

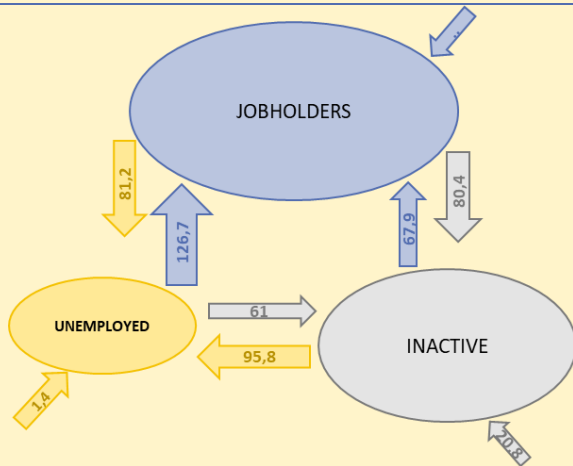### Image 1



### Image 2

| Employment (E), Unemployment (U) and Inactivity (I) transitions from III-22 to IV-22 (thousands of people). | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | **IV-22** | Employment | Unemployme | Inactivity | | **Outflows (b)** |
| | | | 3.193,0 | 415,2 | 2.100,4 | | |
| **III-22** | | Bilateral flows | **ENTRIES** | | | | |
| | | | J | P | I | | |
| Employment | 3.160,0 | J | | 81,2 | 80,4 | | 161,6 |
| Unemploym | 424,7 | P | 126,7 | | 61 | | 187,7 |
| Inactivity | 2.101,8 | I | 67,9 | 95,8 | | | 163,7 |
| No data | - | ND | .. | 1,4 | 20,8 | | |
| Inflows (a) | | | 194,6 | 178,4 | 162,2 | | |
| Net balance (a)-(b) | | | 33 | -9,3 | -1,5 | | |

Source: Drafted in-house based on LMFS data (INE)

### Image 3

LFS Flows IV-22. Breakdown of inflows, outflows and balances
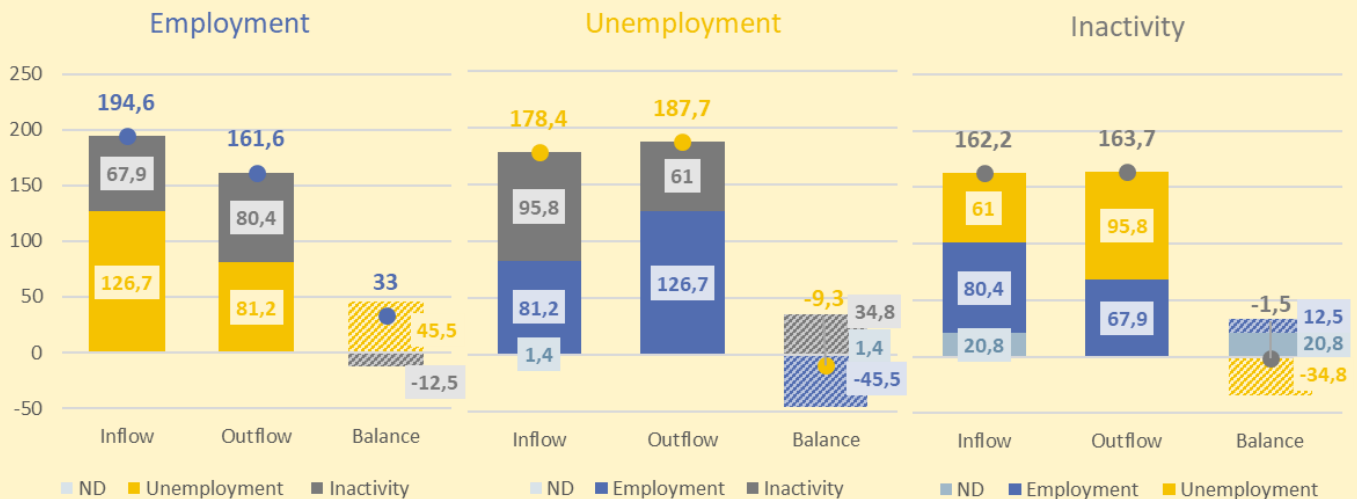


### Image 4

| Transition from III-22 to IV-22 data through flows between employment, unemployment and inactivity | | | |
|---|---|---|---|
| | Thousands of people | | |
| | **Employment** | Unemployme | **Inactivity** |
| **III-22 data per LMSF** | **3.160,0** | **424,7** | **2.101,8** |
| - between Employment and Unemployment | 45,5 | -45,5 | - |
| - between Employment and Inactivity | -12,5 | - | 12,5 |
| - between Unemployment and Inactivity | - | 34,8 | -34,8 |
| No data | .. | 1,4 | 20,8 |
| **IV-22 Data** | **3.193,0** | **415,2** | **2.100,4** |

Source: Compilation based on LFS flow survey data (INE)

### Image 5

| Sidebar using data from Flow Survey (LMSF) with LFS data in IV-22 | | | |
|---|---|---|---|
| | Thousands of people | | |
| | **Jobholders** | Unemployed | **Inactive** |
| IV-22 (LFS=LMSF) | 3.193,0 | 415,2 | 2.100,4 |
| III-22 (LMSF) | 3.160,0 | 424,7 | 2.101,8 |
| Quarterly difference per LMSF (A) | 33,0 | -9,5 | -1,4 |
| III-22 (LFS) | 3.166,5 | 404,6 | 2.106,1 |
| Quarterly difference per LFS (B) | 26,5 | 10,6 | -5,7 |
| (B) - (A) | -6,5 | 19,9 | 4,2 |
| LMSF-EFS data difference in III-22 | -6,5 | 20,1 | 4,3 |
| Unexplained difference | 0,0 | 0,2 | -0,1 |

Source: Drafted in-house based on LMFS data (INE)

The Labour Market Flow Statistics (LMFS) facilitate a detailed analysis of the observed transitions between employment, unemployment and inactivity. This sidebar covers the transitions occurring in Q4 compared with Q3, and, as the first to be published on these data, it will focus on the "didactics" of the meaning and implications

of flows, balances and matching, beyond the explanation of the specific data. Image 1 presents an initial overview of these transitions.

The largest of these is the flow of 126,700 people exiting unemployment and entering employment in the fourth quarter, which is decisive in explaining the quarterly performance of jobless and jobholders (image 3).

This flow, together with the incorporations into employment from inactivity (67,900 individuals), constitute the **inflow into employment**, with a total of 194,600 this quarter.

Transitions in the opposite direction, **job outflows**, are almost equally divided between workers who become inactive (80,400), and those who lose their jobs (81,200). A total of 161,600.

The difference between the inflows and outflows of employment quantifies the increase in employment in the quarter, which grew by 33,000 according to the flow statistics.

Images 3 and 4 show that this quarterly growth in employment was the result of a positive balance of 45,500 more persons in favour of employment in the employment-unemployment transition, which was held back by the negative balance of 12,500 persons for employment in the bilateral flows with inactivity, as a result of the greater outflow of employed persons into inactivity (80,400) than of incorporations into employment from inactivity (67,900).

We may therefore conclude that employment growth in Q4 is driven by the incorporation of previously unemployed people and dampened by the net outflow of people into inactivity. This last factor could be linked to the retirement of the large cohort of those born in the second half of the 1950s.

With regard to **unemployment inflows**, the largest volume relates to the inactive population in the previous quarter (95,800), in addition to the 81,200 workers who lost their jobs, as mentioned above. An overall headcount of 178,400.

In addition to the top flow this quarter (transition of 126,700 unemployed to employed), the **unemployment outflow** includes the exit into inactivity of 61,000 unemployed; altogether, 187,700 people are no longer counted as unemployed.

The difference between the total inflows and outflows of unemployed is the variation in the number of

unemployed in the quarter, which, according to the flow statistics, fell by 9,300.

As shown in images 3 and 4, this drop in unemployment is the result, therefore, of the net unemployment outflow into employment, a total of 45,500, which is slowed down by a net incorporation from inactivity of 34,800, given the limited volume of unemployed who become inactive in this quarter (61,000), which will be broken down in the next section. The containment of this flow from unemployed to inactive, which could be interpreted as a "flow of discouraged", would be related to the perception of the labour market (less, the more dynamic it is) but could also be linked to the economic momentum (the rising cost of living would keep people actively seeking work).

In this regard, the reduction in unemployment in the quarter, albeit limited, would have a composition that could be described as favourable, due to the high net outflow of unemployed towards employment and the net incorporation of people from inactivity.

This net balance favouring unemployment from inactivity, which absorbed 34,800 inactive workers, determined the **inactive workforce variation that quarter**
(-1,500), a decrease cushioned by the incorporation of 20,800 new inactive workers whose previous situation is not recorded, and the net balance of the bilateral flow with employment, which contributes 12,500 workers to inactivity, as mentioned above (images 3 and 4).

The quarterly change in LMSF flows regarding employment, unemployment and the inactive workforce fails to match the quarterly change in these variables according to the LFS[1] (broken down in image 5).

In terms of jobholders, the discrepancy this quarter is relatively small, as depicted in the appendix to this sidebar. LMSF and LFS recorded employment increases in the fourth quarter of 33,000 and 26,500 respectively. Therefore, employment flows help to explain the variation in the number of jobholders reported in the LFS.

However, while unemployment flows had a contained fall in unemployment in Q4, the already 9,300 fewer jobless analysed, the LFS registered an increase of 10,600 in the same period. For this variable, the flow analysis fails to shed light on the origin of the rise in unemployment.

[1] The INE commented on the discrepancy between LFS and LMSF, stating "due to the compiling methodology, the results do not necessarily match the net balances of the quarterly LFS, with the differences primarily explained by the 'no data recorded' groups (people turning 16 at the changeover from one quarter to the next and those who were not resident in Spain in the previous quarter)".

Image 5 shows that the quarterly discrepancy between LMSF and LFS is almost entirely explained by the differences in the values of the variables for the third quarter.

Thus, the figures for employed and the inactive workforce are very similar in both operations. Moreover, quarterly variations in the flows match the LFS, i.e. growth in employment and limited falls in the number of inactive workers. Unemployment, as we have already seen, differs because of the jobless volume, standing at 404,600 according to LFS in the third quarter, 20,100 fewer than the number reported by LMSF.

However, these LFS-LMSF discrepancies are not unique to this quarter, nor are they now of any significant size compared with the fourth quarters of the historical series. The appendix to this sidebar illustrates these differences over time.

## B.- Q4 2022 flows, year-on-year comparison and historical perspective

As the LFS shows a marked seasonal behaviour, the analysis of the most recent flows will be limited to the flows observed in the same quarter of previous years.

Image 6 provides a quick snapshot of inflows and outflows into employment, unemployment and inactivity in year-on-year terms and in relation to the fourth quarters of the expansionary phase prior to the health crisis (2014-2019). Images 7 to 9 specify the composition of these flows and include the average of the values in the recessionary phase of the previous cycle. Images 10 and 11 position the data for Q4 2022 in the historical series, segmented according to cyclical phases.

Images 12 to 14, included in the appendix to this sidebar, provide a summary of the latest determinants of the quarterly change in employment, unemployment and inactivity in the fourth quarters of the historical series according to the flow statistics. They also show the matching of LMSF and LFS data for each of the three disjoint sets into which the over-16 population is divided (employed, unemployed and inactive).

For the assessment of the current levels of flows, the information contained in these images will be used to zoom in on the main data analysed so far.

This graphical display aims to highlight the base effects and composition effects, thus displaying the possible distortions that one-off comparisons may have for data analysis, and identifying the ultimate components underlying the trends in the variables.

An isolated analysis of the year-on-year behaviour of flows in Q4 2022 could lead to the wrong conclusion about the current state of the labour market in the region, since inflows into employment and outflows from unemployment are falling, while outflows from employment and inflows into unemployment are both growing. These variations, as will be discussed below, are rooted in the exceptional performance of the LMSF (and the LFS) a year ago. The composition of the variations in these flows, as will be seen, also qualifies the valuations that a priori appear to be derived from the aggregates.

*Image 6*

| Labour market flows CoM | | | | |
|---|---|---|---|---|
| | IV-22 | | Historical comparison (thousands of people) | |
| | Thousands of people | Yearly variation (%) | IV-21 | Average QIV 14-19 |
| Employment inflows | 194,6 | -6,4 | 208,0 | 168,7 |
| Employment outflows | 161,6 | 11,5 | 144,9 | 153,1 |
| Unemployment inflows | 178,4 | 19,5 | 149,3 | 190,3 |
| Unemployment outflows | 187,7 | -13,5 | 216,9 | 173,3 |
| Inactivity inflows | 162,2 | -11,7 | 183,7 | 150,1 |
| Inactivity outflows | 163,7 | 9,8 | 149,1 | 164,7 |

Source: Labour force flow statistics (LMSF, INE)

### 1. Employment flows

The **current employment inflow**, at 194,600 despite falling in year-on-year terms, stood at high incorporation levels. In fact, in the expansionary phase of the pre-pandemic cycle, only 2018 posted slightly higher inflows than Q4 2022 (image 10).

*Image 7*

FLUJOS DE LA OCUPACIÓN EN EL IV TRIMESTRE. EVOLUCIÓN HISTÓRICA
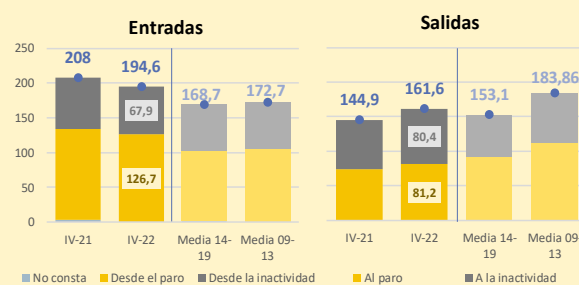


Source: Compilation based on LFS flow survey data (INE)

A breakdown of the inflow reflects the fact that job incorporations from unemployment are high for a fourth quarter, both when compared with the average for the same quarter in the expansionary phase and in the recessionary phase of the previous cycle. In fact, the current volume of 126,700 was the third highest for this quarter, with a peak in 2021 (image 11). The level of the flow from inactivity is very similar to the historical level.

The relative weakness of employment performance in the quarter lies in a slightly elevated outflow of 161,600 individuals, both year-on-year and relative to the

average value for the fourth quarters of 2014-2019. <u>We will see that their composition partly mitigates the warning that these growths could unleash.</u>

The <u>employment outflow was equally divided between unemployment and inactivity</u>. The volume of <u>former jobholders who became inactive</u> in Q4 2022 stood out in relation to the periods considered, and, as we have already pointed out, this could be linked to the age structure of the employed population. The 2022 figure is the fifth highest in the series of fourth quarters. The opposite is true for workers who lost their jobs in the quarter (moving from employment to unemployment), the volume of which is among the lowest in the series (image 11).

The <u>growth in employment in Q4 2022</u> is exclusively due to the <u>net incorporation of previously unemployed</u>, whose volume, although lower than a year ago, is the second highest in the series after the previous quarter (image 11).

### 2. Unemployment flows

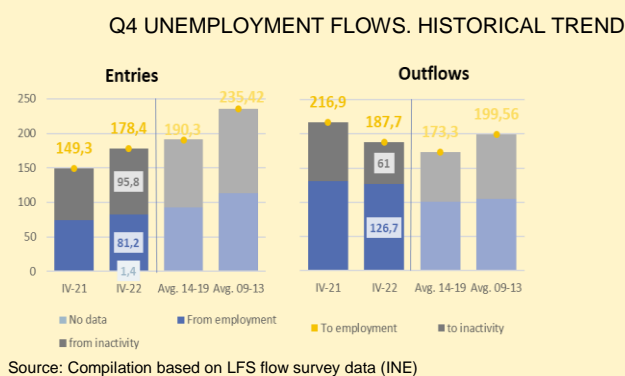In the analysis of **unemployment flows, inflow**, although 19.5% higher than a year ago, remained at moderate levels (178,400) versus the levels for 2014-2019, and well below the average of the recessionary period 2009-2013.

*Image 8*



Q4 UNEMPLOYMENT FLOWS. HISTORICAL TREND

Source: Compilation based on LFS flow survey data (INE)

This year-on-year increase is driven by the rise in the number of previously inactive unemployed, which is nevertheless very similar in 2022 to the average level of the 14-19 upswing. Meanwhile, the flow from employed

to unemployed remains at historically low levels, as we have already seen.

**Unemployment outflows** <u>were high</u>, exceeding average levels for 2014-2019, despite a substantial year-on-year fall of 13.5%.

The unemployment outflow breakdown is particularly salient, where <u>the containment of outflows from unemployment to inactivity limited the flow, not the dynamics of unemployment flows into employment</u>.

### 3. Inactivity flows

The **inactivity inflow (activity outflow)** was 162,200 in Q4 2022. Though down 11.7% versus a year ago, it remains above the average outflow for the 2014-2019 reference period. <u>Its main current component comprised jobholders in the previous quarter, inactive in this one</u>, though a year ago it was dominated by those coming from unemployment. On average, in the fourth quarters of the 2014-2019 pre-pandemic expansionary phase, the source of the inflow into inactivity had also been unemployment, and not employment as in 2022.

*Image 9*



Source: LMSF, INE

Source: Compilation based on LFS flow survey data (INE)
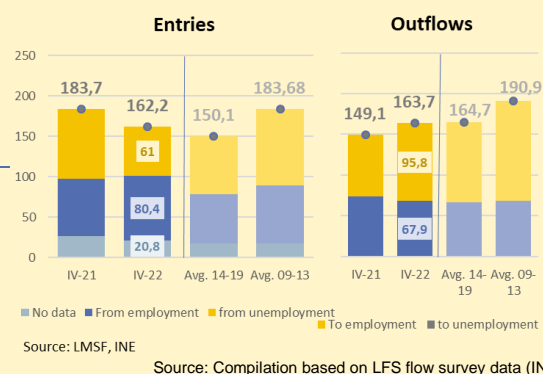
Thus, it is noteworthy that the <u>inactivity inflow from employment</u> in this Q4 hit its <u>highest value since Q4 2010</u>, while inflow <u>from unemployment</u> was currently <u>the second lowest</u> since Q4 2008.

The **inactivity outflow**, depicted a year-on-year increase of nearly 10%, with the current level closely resembling the fourth quarters of 2014-2019. The <u>year's momentum stems from the increase in inactives</u> joining the labour force, while the number of people entering the labour force declined versus a year ago.
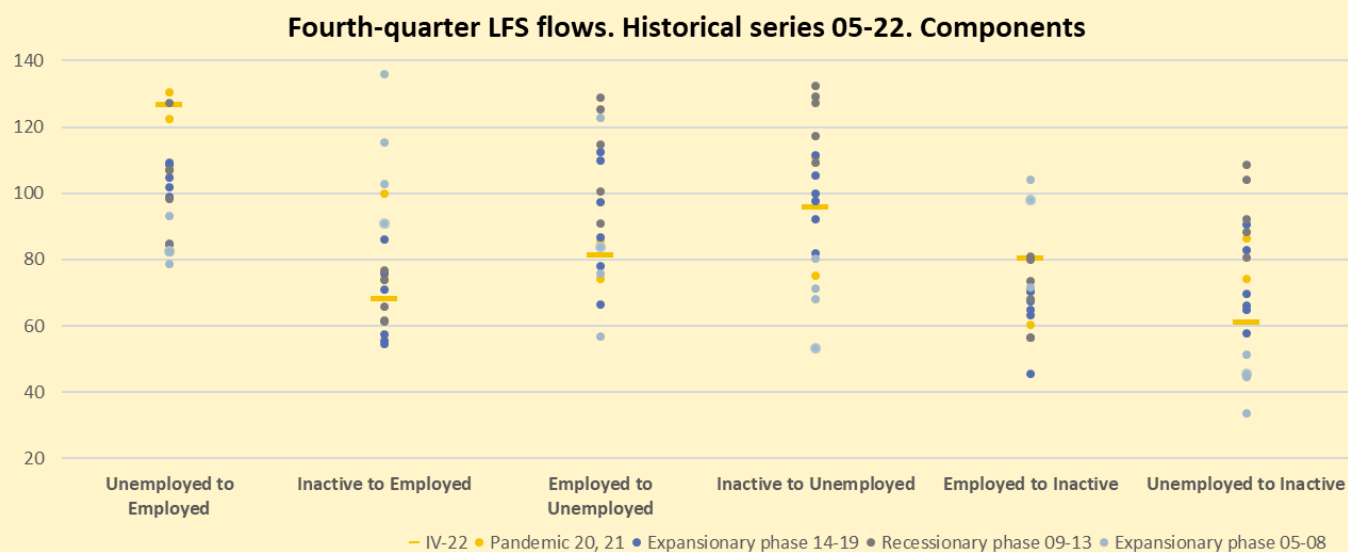
**Fourth-quarter LFS flows. Historical series 05-22. Components**



— IV-22 ● Pandemic 20, 21 ● Expansionary phase 14-19 ● Recessionary phase 09-13 ● Expansionary phase 05-08

Source: Compilation based on LFS flow survey data (INE)

*Image 11*

**Main and net balances of fourth-quarter LFS flows. Historical series 05-22**



\* Bilateral A-B balance key: + means growth in A; -
means growth in B

— IV-22 ● Pandemic 20, 21 ● Expansionary phase 14-19 ● Recessionary phase 09-13 ● Expansionary phase 05-08
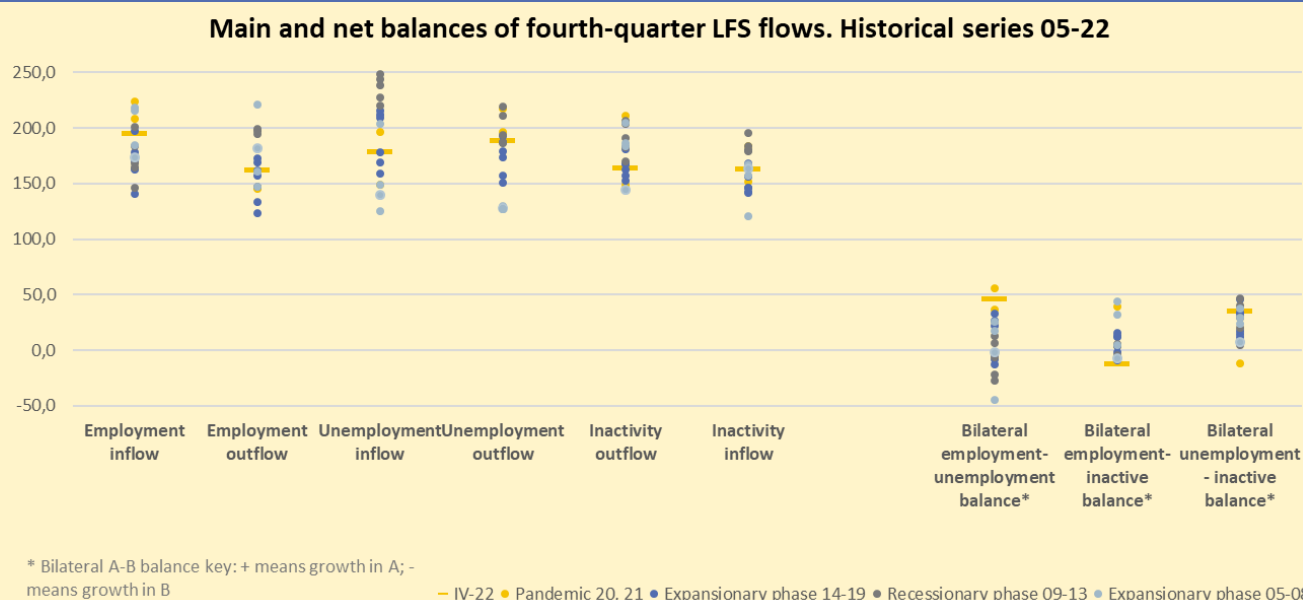
Source: Compilation based on LFS flow survey data (INE)

## 4. Net flows (inflows-outflows) of employment, unemployment and inactivity in the historical context.

The appendix below summarises employment, unemployment and inactivity trends for the period 2006-2022 for the fourth quarters based on their constituent bilateral balances, thus rendering a synthetic overview of the flows described so far.

The growth in employment in Q4 2022 (image 12) is exclusively due to the net incorporation of previously unemployed, whose volume, although lower than a year ago, is the second highest in the series after the previous quarter.

Its second component, the net flow with inactivity, which had driven employment increases in the fourth quarters over the past five years, dragged any advance in the jobholders, and drained a headcount of 12,500 in 2022. It had never before subtracted so much employment in a single fourth quarter.

The third bilateral flow that determines the evolution of the labour market is the net balance between unemployment and inactivity (image 13), which in this quarter boosted the growth of unemployment by 34,800 persons, the sixth highest value in the series of fourth quarters.

## 5. Conclusions

Just as the LFS results for Q4 are not what they seem at first glance, neither are the behaviour of the flows between their statuses, employment, unemployment and inactivity.

**Employment**: very high volume of inflows from unemployment, the third largest for a Q4 since 2005, overshadowed in the year-on-year comparison when compared with the historical high of the series. The opposite flow, from employment to unemployment, remained low, below the average for the fourth quarters of 2014-2019.

The negative balance of the bilateral flow with inactivity slowed the increase in employment (never as much in a Q4), which could be related to the age structure of the population.

**Unemployment**: decreases in the quarter according to the flow statistics because the inflow was lower than the outflow.

The year-on-year growth in the inflow of those who were inactive in the previous quarter is decisive, although its current level remains below the 2014-2019 average.

It is the particularly low level of the unemployed who become inactive in the quarter that determines the important role of inactivity as a factor pushing up unemployment and which overshadows the outstanding net outflow of unemployed into employment already noted in the employment conclusions.

**Inactivity**: the inactive workforce fell in the quarter, contributing to the number of active workers reaching an all-time high in Q4 2022.

The outflow from inactivity was particularly low, among the five lowest in the historical series. However, this flow is sustained by inactive workers turning unemployed and not by those who get a job. The weakness of this inactivity-employment flow is perhaps the most negative aspect of this quarter's flows, although its level is very similar to the average of the fourth quarters 2014-2019.

It is therefore the net flow into unemployment that determines the inactivity reduction, which would have been greater had it not been for the unusual positive balance of the flow from employment, the fifth largest in the historical series.

### *Graphical summary of conclusions*
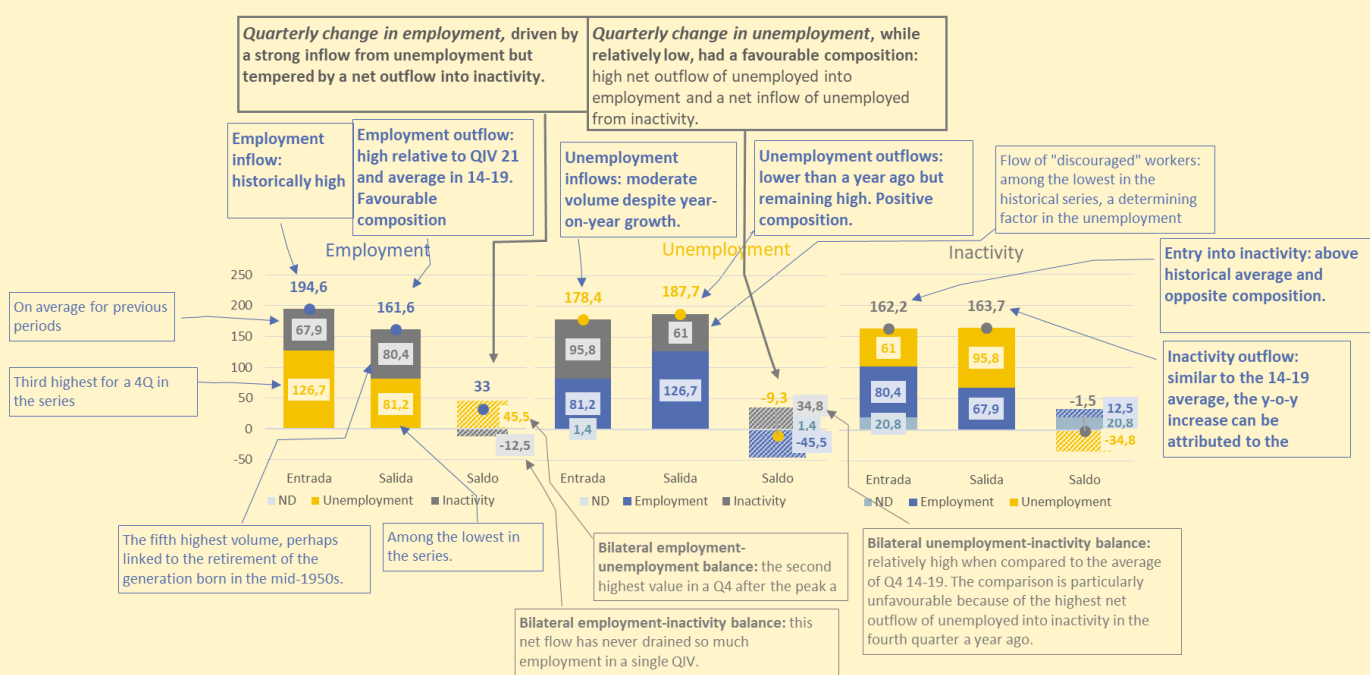


Source: Compilation based on LFS flow survey data (INE)

*Image 12*

## QUARTERLY CHANGE IN EMPLOYMENT IN THE FOURTH QUARTER. HISTORICAL TREND
### Driving factors of the quarterly change in flows (LMSF) and stock (LFS)
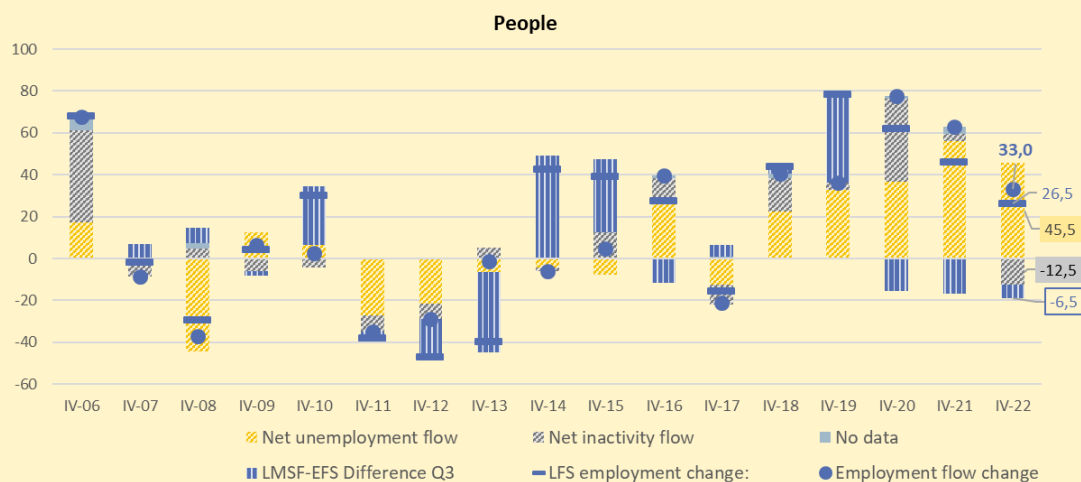


*Image 13*

## QUARTERLY CHANGE IN UNEMPLOYMENT IN THE FOURTH QUARTER. HISTORICAL TREND
### Driving factors of the quarterly change in flows (LMSF) and stock (LFS)
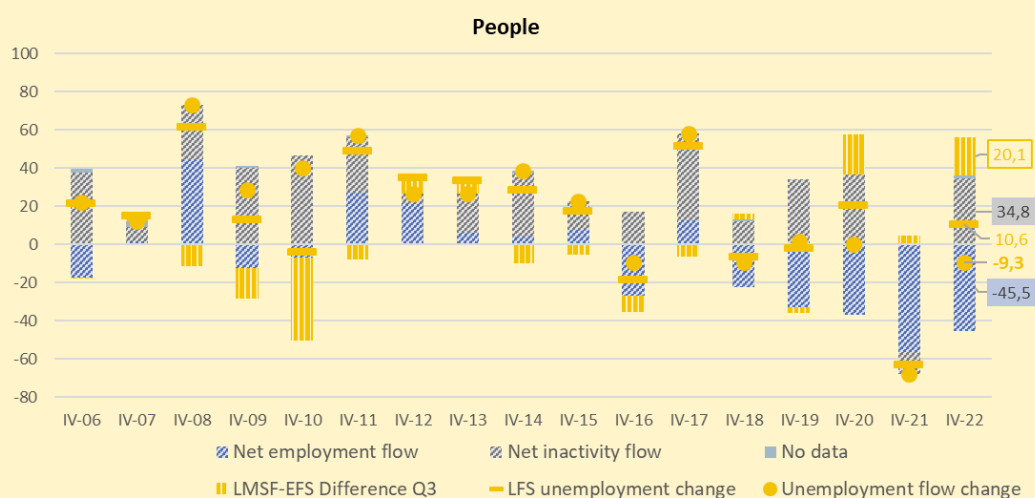


*Image 14*

## QUARTERLY CHANGE IN INACTIVITY IN THE FOURTH QUARTER. HISTORICAL TREND
### Driving factors of the quarterly change in flows (LMSF) and stock (LFS)



Source: Compilation based on LFS flow survey data (INE)

## Sidebar III. Employment situation of households in the Community of Madrid according to the LFS, recent trends and pre-pandemic comparison

The Labour Force Survey for Q4 2022 puts the total number of households in the Community of Madrid at 2,681,200, with just over one in four (27.7%) being single-person households.

The total number of households has increased over the quarter and in the year, and is more than 50,000 higher than before the pandemic. The rise in the number of single-person households explains a very large part of these increases; its relevance is particularly striking in the year-on-year and pre-pandemic comparison, when the increase in the number of single-person households equals or even exceeds the growth recorded for households as a whole.

The aforementioned trend in the number of employed and unemployed in Q4 differs from the trend resulting when the analysis of the employment situation is shifted from the individual to the corresponding household. The number of households with all active members in employment fell in Q4 2022 to 1,686,400 households, accounting for 62.9% of all households, both magnitudes below those observed in the previous quarter, a year ago, and in Q4 2019.

The number of households with all their active members unemployed increased to 115,600, exceeding those recorded in the three usual comparative periods, quarter-on-quarter, annual and pre-pandemic, both in number and in share of total households, which rose to 4.3% in the fourth quarter.

Households with all members inactive also increased to 641,700 households (23.9% of all households), more than in all three periods of the comparison, and only slightly less than a year ago. However, it is far from the levels that this typology recorded in the quarters affected by the COVID crisis.

**Single-person households** are split almost 50% between employed and inactive persons. In Q4 2022, there were 363,800 households, 49% of single-person households, with an employed component, and 336,400 households, 45.3%, with an unemployed member.

Unlike the total number of households with all members in employment, the segment of single-person households does show a year-on-year and pre-pandemic increase, with 25,000 more households than in Q4 2019. The limited reduction in their number in the quarter must reflect the fact that this is when the highest number of employed single-person households in the series was reached.

The year-on-year and pre-pandemic increase has been insufficient to maintain the weight of this type of household in the total number of single-person households, i.e. the creation of single-person households has been more dynamic than that of the employed segment compared to a year ago and Q4 2019.

The number of households with an inactive component also grew in year-on-year terms and in relation to Q4 2019, but fell by 8.2% in relation to the previous quarter, while, as noted, the number of households with all members inactive grew in relation to the three comparatives, i.e., the corresponding group.

There is no doubt that the most disappointing figures this quarter (41,800) concern the number of single-person households with an unemployed member, which is the highest since at least the first quarter of 2019, growing by 51.1% over the quarter. The weight of the total number of single-person households is now 5.6% (roughly 6% in Q2 and Q4 2020).

| HOUSEHOLDS COMMUNITY OF MADRID (thousands and %) 2022 Q4 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Households whose active members are all employed | Households whose active members are all unemployed | Households whose members are all inactive | All households | Single-person households whose members are all | | | All single-person households |
| | | | | Jobholders | Unemployed | Inactive | |
| Level (thousands) [% / total households] | | | | | | | |
| **1,686.4 [62.9]** | **115.6 [4.3]** | **641.7 [23.9]** | **2.681,2** | **363.8 [49.0]** | **41.8 [5.6]** | **336.4 [45.3]** | **742,0** |
| 1,704.6 [63.7] | 98.2 [3.7] | 634.9 [23.7] | 2.674,8 | 365.0 [49.5] | 27.7 [3.8] | 344.5 [46.7] | 737,2 |
| 1,695.8 [63.9] | 99.3 [3.7] | 637.4 [24.0] | 2.652,4 | 350.4 [49.1] | 28.7 [4.0] | 334.0 [46.8] | 713,2 |
| 1,706.5 [64.9] | 89.9 [3.4] | 614.5 [23.4] | 2.627,8 | 338.4 [49.7] | 32.7 [4.8] | 309.9 [45.5] | 681,0 |
| Difference (thousands) | | | | | | | |
| -18,2 | 17,5 | 6,8 | 6,4 | -1,2 | 14,1 | -8,2 | 4,7 |
| -9,4 | 16,3 | 4,3 | 28,9 | 13,4 | 13,1 | 2,4 | 28,8 |
| -20,1 | 25,7 | 27,1 | 53,4 | 25,4 | 9,1 | 26,5 | 61,0 |
| Variations (%) | | | | | | | |
| -1,1 | 17,8 | 1,1 | 0,2 | -0,3 | 51,1 | -2,4 | 0,6 |
| -0,6 | 16,5 | 0,7 | 1,1 | 3,8 | 45,4 | 0,7 | 4,0 |
| -0,9 | 22,9 | 3,5 | 1,6 | 6,0 | 22,3 | 6,8 | 7,2 |

(Row labels, left margin: Level — 2022Q4, 2022Q3, 2021Q4, 2019Q4; Difference — 2022Q3, 2021Q4, 2019Q4; Variations — 2022Q3, 2021Q4, 2019Q4)

Source: Compilation based on microdata from the LFS (INE).

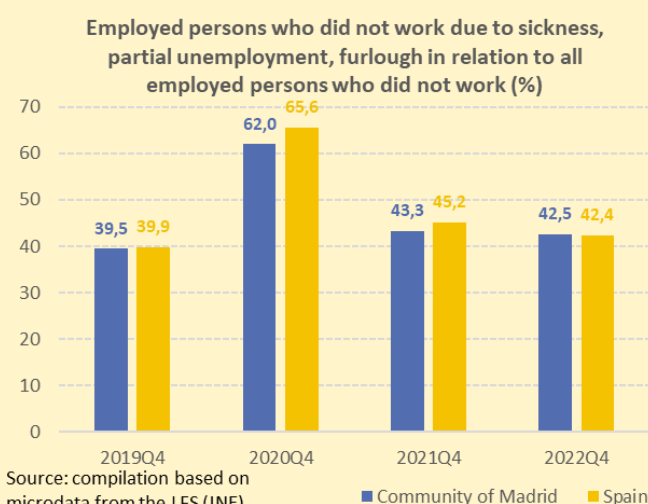## Sidebar IV. Analysis of other employment-related LFS variables

### Employed persons who did not work in the reference week.

In the fourth quarter of 2022, 260,000 individuals were in this situation in the Community of Madrid, which is 53,900 less employed than in the same quarter of the previous year and 55,500 more than in the fourth quarter of 2019. The number of jobholders not working in the reference week is now slightly above Q4 2020, a time still heavily affected by the pandemic.

| JOBHOLDERS NOT WORKING IN REFERENCE WEEK BY REASON FOR NOT WORKING (thousands) Community of Madrid | | | | |
|---|---|---|---|---|
| Reason | 2019Q4 | 2020Q4 | 2021Q4 | 2022Q4 |
| Holidays or leave | 89,7 | 68,2 | 143,3 | 130,9 |
| Childbirth | 23,9 | 20,9 | 22,9 | 11,4 |
| Illness or accident | 80,1 | 107,7 | 131,2 | 108,6 |
| Partial lay-off for technical or economic reasons | 0,6 | 13,4 | 2,7 | 1,2 |
| Furlough scheme | 0,0 | 36,0 | 2,1 | 0,8 |
| Strike or labour dispute | 0,0 | 0,0 | 0,0 | 0,0 |
| Other reasons | 10,1 | 3,5 | 8,1 | 6,1 |
| Unknown | 0,0 | 0,0 | 0,0 | 0,0 |
| Unclassifiable | 0,0 | 3,9 | 3,6 | 1,1 |
| Total | 204,5 | 253,7 | 313,8 | 260,0 |

Source: compilation based on microdata from the LFS (INE).

The proportion of jobholders who did not work versus total jobholders in the fourth quarters of the year since 2019, is slightly lower in the Community of Madrid than in Spain, except in 2021. They accounted for 8.1% of the total number of employed in the region in Q4 2022, 9.5% in Spain, both higher than a year ago, 9.9% and 9.6% respectively. The pre-pandemic gap is particularly wide: in Q4 2019, only 6.4% of those employed in the region and 7.3% of those employed nationally did not work in the reference week.



Employed persons who did not work due to sickness, partial unemployment, furlough in relation to all employed persons who did not work (%)

Source: compilation based on microdata from the LFS (INE).

■ Community of Madrid  ■ Spain

The majority of jobholders in the region not working in Q4 2022 (50.3% or 130,900 individuals), belong to the *Holidays or leave* category, thus returning to the pre-pandemic pattern, when this reason was the main explanation for absences from work, 43.9% of jobholders not working in the reference week in Q4 2019.

In Q4 2022, this factor is closely followed, with 41.8%, by jobholders who were *ill or injured*, which amounted to 108,600. This is 35.5% higher than before the pandemic, but lower than a year ago.

The once key categories, *Partial lay-off for technical or economic reasons and furlough scheme (ERTE/ERE),* play a very residual role in Q4, in contrast to the worst quarters of the pandemic.



Jobholders not working in relation to all jobholders (%)

Source: compilation based on microdata from the LFS (INE).

■ Community of Madrid  ■ Spain
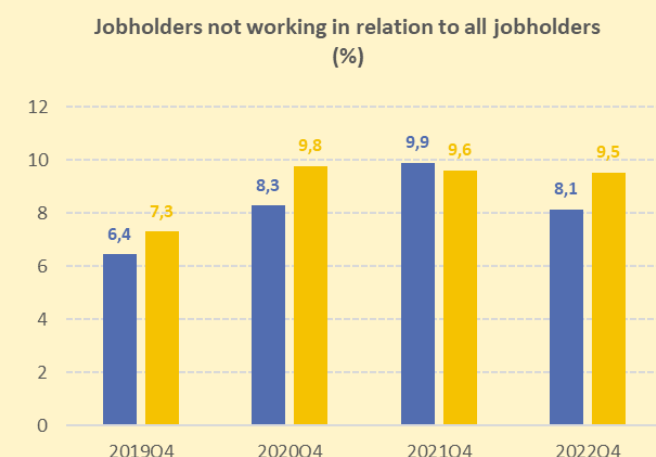
Thus, the sum of workers who did not work due to illness, partial unemployment or ERTE or ERE, which in Q4 2020 reached 62% of jobholders who had not worked, now accounts for 42.5%. However, current engagement still exceeds pre-pandemic values, and the performance of the three components suggests that, although the health effects of the pandemic are still palpable, albeit very muted, the persistence of employed persons in the mechanisms set up to deal with its effects on the employment relationship is residual. The situation in Spain is similar, reflected in the accompanying chart.

## Effective hours worked.

The **total number of effective weekly hours** worked by all employed persons (main employment) in the Community of Madrid in Q4 2022 neared 102 million, lower than the number recorded not only in the first half of this year, but also in Q4 2019. However, they grew by 3.9% versus the same quarter of the previous year and, as usual in the fourth quarters, outperformed the third quarter.

**Effective hours worked. Community of Madrid**

Source: compilation based on microdata from the LFS (INE).
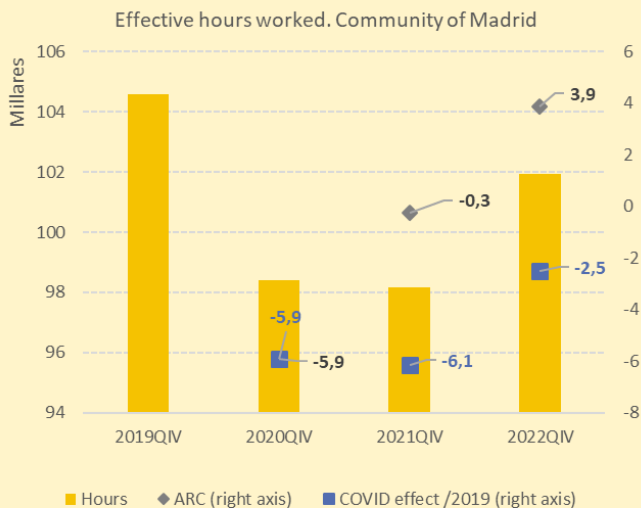
Examining the hours worked in relation to pre-pandemic hours, the results for the second half of the year, and especially for the current Q4, reveal declines that break the solid results of the first half, which were well above the pre-COVID levels.

**Effective hours worked. Annual changes**

Source: compilation based on microdata from the LFS (INE).
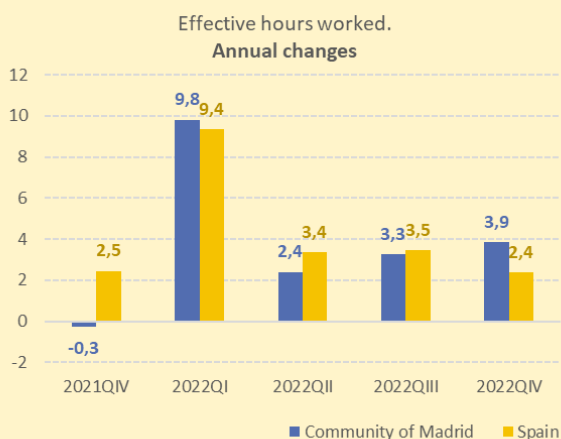
In Spain, this variable grew by 2.4% year-on-year in Q4 2022, although it is below pre-COVID crisis levels,

breaking with the gains recorded in the first three quarters of 2022.

**Effective hours worked. Variation compared to 2019.**

Source: compilation based on microdata from the LFS (INE).
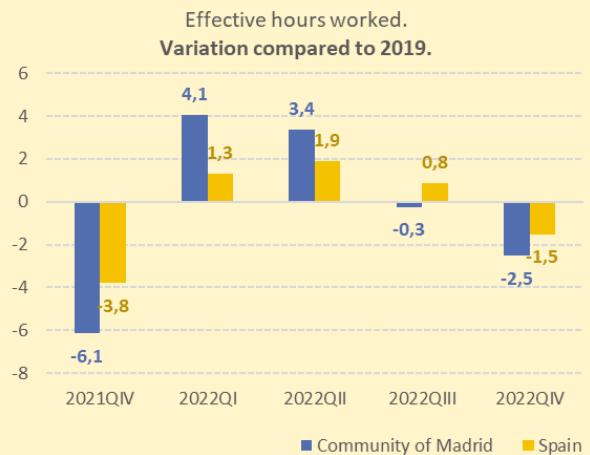
**Average weekly effective hours per employee**, which had returned to pre-pandemic levels in Q1 2022, continue to flex downwards and are moving away from pre-crisis levels.

Across the region, 35.8 hours per week were worked in Q4 2022, 35.6 a year ago, a far cry from the 36.8 hours in Q4 2019. The country's economy as a whole has progressed similarly in recent periods, although in this area the pre-crisis levels have not been recovered at any time.

The chart below shows that average weekly effective hours per employee in the region remained above the national average in the fourth quarters of the year since 2019; in fact, the number of average weekly effective hours per employee in Spain exceeded the regional average only in the third quarter of 2020.

**Average effective hours per week per jobholder**

Source: compilation based on microdata from the LFS (INE).
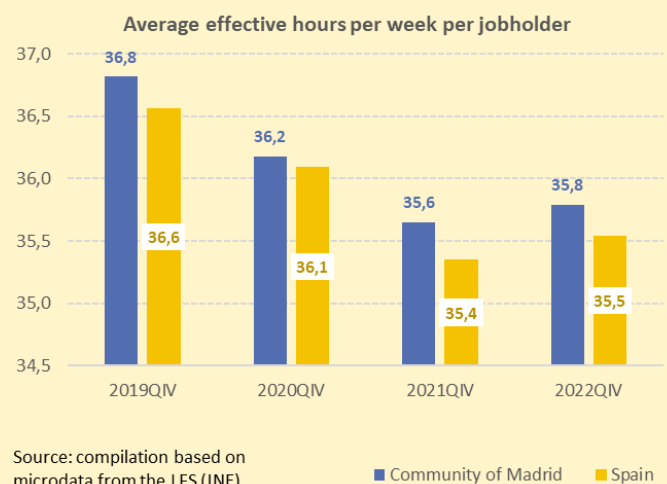
# 2. Social Security Enrolment

**Exceptional Q4 Social Security Enrolment.** At an average of 3,502,444 new enrolments, it is the highest in the historical quarterly series, with data since 2004. These high volumes are still evidence of a singular year-on-year dynamism, although the increase of 4.1% decelerates the growth of the third quarter by 3 tenths of a percentage point.

Both genders and the two main schemes have the highest number of employees for a fourth quarter in the series. The performance of female enrolment and of the general scheme continued to be more dynamic, with year-on-year increases in the Q4 of 4.4% and 4.6% respectively. The self-employed regime grew at a more muted rate of 0.7%, two tenths of a percentage point below the increase in the third quarter.

**The seasonal increases in the three months of the Q4 helped enrolment levels to reach consecutive record highs, exceeding 3.5 million in November and December.** The seasonal advance in the months of Q4 2022 has been stronger than those recorded in the pre-pandemic decade (2010-2019). However, the monthly increases in these months of 2022 have been more moderate than in 2021, which is why there has been a contained slowdown in the year-on-year growth of Social Security enrolment, from 4.3% in October to 3.9% in January. The most recent data available, January 2023 (3,497,041 registered contributors) is the highest for a January in the series, showing a seasonally adjusted month-on-month fall of 0.8%, in line with that recorded a year ago, with the year-on-year increase remaining at 3.9%.

With regard to pre-pandemic enrolment, the January figure exceeded January 2020 by 7.0%.

Looking at December 2022, the month in which enrolment reached its highest level in the historical series (3,524,372 contributors), it is 6.7% higher than the figure for December 2019, the ceiling for enrolment until October 2021; in relation to 2019, there is an acceleration in the increase from August to January 2023. In year-on-year terms, growth showed signs of stability in the last three months. Both genders and the general regime followed the same patterns, while the self-employed, though continuing to grow, remained on a decelerating path versus 2019 and 2021.

While total enrolment set a new record high in December, together with the general scheme, excluding the special agricultural and domestic workers' schemes, an analysis by activity reveals no peak in enrolment in any of the three main sectors. The tertiary sector peaked in December 2021, although eight of its sections did: including two that concentrate the highest volume of enrolment, namely *Trade and repair of motor vehicles*

and A*dministrative and support service activities*, which, together with the other peaked six sections, account for nearly 45% of total enrolment in the scheme.

| Enrolment leves in main regimes Z13by branches in december 2022 and historical leves") Community of Madrid | | | | | | |
|---|---|---|---|---|---|---|
| CNAE Sections 2009 | General (excluding agricultural and domestic work systems) | | | Self-employed regime | | |
| | Nivel dic 22 | | Weight (%) | Historic high | Nivel dic 22 | Weight (%) | Historic high |
| A - Agric. Livest. Fore. and Fis | 2.475 | 0,1 | jul.-09 | 2.645 | 0,6 | jun.-22 |
| B ... E - Industry | 205.279 | 6,8 | ene.-09 | 16.793 | 4,0 | ene.-09 |
| F - Construction | 156.819 | 5,2 | ene.-09 | 47.708 | 11,4 | ene.-09 |
| G - Comm. Rep. Vehicles | 431.643 | 14,4 | dic.-15 | 82.983 | 19,8 | dic.-15 |
| H - Transport. Storage | 164.888 | 5,5 | dic.-22 | 34.306 | 8,2 | mar.-21 |
| I - Hospitality | 197.445 | 6,6 | dic.-19 | 27.626 | 6,6 | jun.-19 |
| J - Inform. Commun. | 264.074 | 8,8 | nov.-22 | 18.355 | 4,4 | dic.-22 |
| K - Act. Finance & Insur | 115.281 | 3,8 | dic.-22 | 8.684 | 2,1 | dic.-21 |
| L - Act. Real Estate | 27.559 | 0,9 | dic.-22 | 9.487 | 2,3 | dic.-22 |
| M - Actv. Prof. Tech. Sci. | 277.085 | 9,2 | dic.-22 | 61.925 | 14,7 | dic.-22 |
| N - Actv. Admt. Serv. Auxil. | 340.955 | 11,4 | dic.-22 | 26.056 | 6,2 | ene.-09 |
| J - Public Adm Defen., SS | 210.836 | 7,0 | dic.-22 | 193 | 0,0 | ene.-21 |
| P - Education | 212.124 | 7,1 | nov.-22 | 16.908 | 4,0 | feb.-20 |
| Q - Actv. Health Serv. Social | 258.812 | 8,6 | ago.-22 | 23.093 | 5,5 | dic.-22 |
| R - Actv. Artis. Rec. & Ent | 53.355 | 1,8 | dic.-22 | 13.921 | 3,3 | dic.-22 |
| S ... U - Rest of Serv. | 78.352 | 2,6 | feb.-09 | 29.387 | 7,0 | dic.-22 |
| Total services | 2.632.409 | 87,8 | dic.-21 | 352.925 | 84,0 | dic.-22 |
| **Total** | **2.996.981** | **100,0** | **dic.-22** | **420.071** | **100,0** | **dic.-22** |

SEA: Special Agri System SEEH: Special domestic work system
Source: Ministry of Inclusion, Social Security and Migration

| Changes in the sectoral structure of enrolment on the last day of the month December - 2022 vs December - 2019 | | | | |
|---|---|---|---|---|
| | Contribution | RC | Current Weight** | Weight variation (p.p) |
| **Branches* with the greatest (positive) contributions to growth in affiliation** | | | | |
| Programming, consulting and other IT-related activ | 1,1 | 25,2 | 4,4 | 0,8 |
| Public administration and defence; compulsory so | 1,0 | 19,5 | 5,4 | 0,6 |
| Education | 0,6 | 9,1 | 6,3 | 0,1 |
| Health activities | 0,4 | 8,3 | 5,2 | 0,1 |
| Headquarters activities; business and other manag | 0,3 | 23,8 | 1,3 | 0,2 |
| Construction of buildings | 0,3 | 16,2 | 1,8 | 0,2 |
| Specialized construction activities | 0,3 | 8,4 | 3,4 | 0,0 |
| Architectural and engineering activities; technical t | 0,3 | 12,5 | 2,2 | 0,1 |
| Warehousing and support activities for transporta | 0,3 | 22,1 | 1,2 | 0,2 |
| Office administrative, office support and other bus | 0,3 | 8,6 | 3,1 | 0,1 |
| **Branches* with the greatest (negative) contributions to growth in affiliation** | | | | |
| Retail trade, except of motor vehicles and motorcyc | -0,2 | -1,8 | 8,8 | -0,7 |
| Activities of households as employers of domestic | -0,1 | -3,1 | 3,7 | -0,3 |
| Food and beverage services | -0,1 | -1,4 | 6,2 | -0,5 |
| Rental activities | -0,1 | -7,4 | 0,7 | -0,1 |
| Travel agency, tour operator and other reservation | 0,0 | -9,2 | 0,5 | -0,1 |
| Repair of computers and personal and household g | 0,0 | -11,8 | 0,4 | -0,1 |
| Wholesale and retail trade and repair of motor veh | 0,0 | -1,7 | 1,6 | -0,1 |
| Manufacture of machinery and equipment n.e.c. | 0,0 | -3,8 | 0,4 | 0,0 |
| **Pro memoria: TOTAL AFFILIATION** | **6,9** | **6,9** | **100,0** | **-** |

* Segment of branches with more than 10,000 affiliations on the last day.
**Contribution of total affiliation on the last day of the month.
Source: drafted in-house based on MISSyM data

The self-employed also reached the highest level in the historical series in December, when enrolment in the tertiary sector also climbed to its highest level ever, with record enrolment in six of its thirteen services sections, particularly *Professional, scientific and technical activities*.

This regional increase in registered contributors was highly asymmetric by branch of activity, signifying substantial changes in the structure of the labour market with respect to 2019 (refer to the following table).

# 3. Registered unemployment

**The reduction in the number of unemployed in the last quarter of 2022 declined in intensity, albeit at levels that improve on pre-pandemic values.** The recent performance of registered unemployment was positive, despite some loss of momentum in the last quarter of the year. Unemployment fell from 312,158 in the third quarter of 2022 to 304,896 in the fourth quarter.

Registered unemployment data for the region reflect a 21% year-on-year decline in Q4 2022, compared to 24.8% in Q3 2022. Accordingly, the registered jobless count in the region stood 11% lower than in Q4 2019, with 37,920 fewer people unemployed, and 14.3% lower than in Q1 2020. In the average year 2022, the decline in registered unemployment stood at 23.5%.



**Registered unemployment**
**Community of Madrid**
Levels and rates of change for indicated periods.

Source: MLSE.
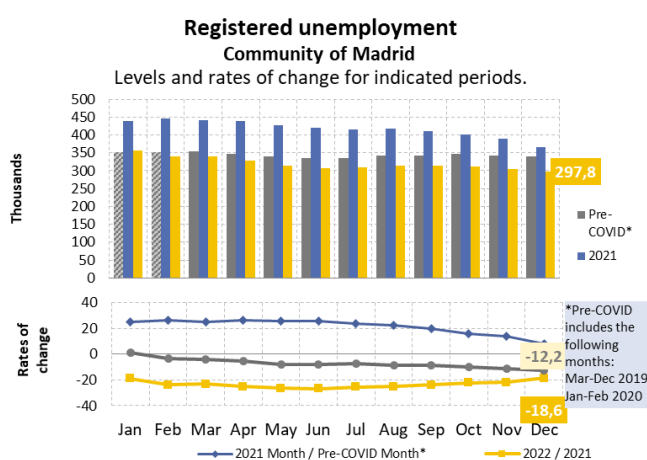
The most recent data published in January 2023 shows a year-on-year decline in the unemployment rate of 13.2%, or 11.9% in the pre-pandemic comparison.

Both genders have participated in the year-on-year declines in unemployment in the region and the consequent narrowing of their pre-pandemic gaps. Male unemployment continues to show the largest year-on-year fall of 22.7% in Q4 2022, while female unemployment fell by 19.8%. Compared to the pre-pandemic situation, unemployment lags behind the levels in Q4 2019, at 13.9% for men and 9% for women; compared to Q1 2020, the figures are 18.2% and 11.4% lower, respectively. The most recent data published for January 2023 reports a decrease in year-on-year rates of 14% for male unemployment and 12.6% for female unemployment.

The decreases observed in the fourth quarter also occurred in all sectors of activity; 18.7% in industry,

20.4% in services, 21.8% in construction, 24.5% in agriculture, and 27.6% in the "previously unemployed" group. This decrease is also evident when compared with Q1 2020[2], with current levels of registered unemployment 14.3% lower than they were then, or 50,906 fewer people. All sectors recorded a reduction in unemployment, albeit with varying intensity: 10.5% in "previously unemployed", 13.8% in services, 15.4% in agriculture, 18% in industry and 19.3% in construction.

In January 2023, regional unemployment fell year-on-year in all sectors: 15.8% in agriculture, 15.3% in construction, 13.3% in industry, and 13.1% in services. Something similar happened in the "previously unemployed" group, which, however, recorded the most moderate reduction, 12.1%.

| Registered unemployment by sections Community of Madrid | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Q422 | | | | | Pandemic max | | Pre-pandemic variation: Q120 | | |
| CNAE Sections 2009 | Level | Weight (%) | Diff Annual | ARC (%) | Rep. (1) | Level | Date | Difference | RC (%) | Rep. (1) |
| A - Agric. Livest. Fore. and Fi | 2.401 | 0,8 | -779 | -24,5 | -0,2 | 3.470 | Q121 | -436,00 | -15,37 | -0,12 |
| B ... E - Industry | 17.602 | 5,8 | -4.036 | -18,7 | -1,0 | 24.732 | Q121 | -3.860,67 | -17,99 | -1,09 |
| F - Construction | 22.648 | 7,4 | -6.300 | -21,8 | -1,6 | 33.085 | Q121 | -5.416,00 | -19,30 | -1,52 |
| G - Comm. Rep. Vehicles | 41.780 | 13,7 | -10.129 | -19,5 | -2,6 | 59.641 | Q121 | -6.263,67 | -13,04 | -1,76 |
| H - Transport. Storage | 11.139 | 3,7 | -3.445 | -23,6 | -0,9 | 17.971 | Q220 | -3.171,00 | -22,16 | -0,89 |
| I - Hospitality | 25.860 | 8,5 | -7.490 | -22,5 | -1,9 | 43.980 | Q121 | -6.738,00 | -20,67 | -1,89 |
| J - Inform. Commun. | 11.191 | 3,7 | -2.648 | -19,1 | -0,7 | 16.165 | Q220 | -1.782,67 | -13,74 | -0,50 |
| K - Act. Finance & Insur | 5.479 | 1,8 | -180 | -3,2 | 0,0 | 6.028 | Q321 | 117,67 | 2,19 | 0,03 |
| L - Act. Real Estate | 2.591 | 0,8 | -600 | -18,8 | -0,2 | 3.582 | Q121 | -273,67 | -9,55 | -0,08 |
| M - Actv. Prof. Tech. Sci. | 30.416 | 10,0 | -10.594 | -25,8 | -2,7 | 47.878 | Q121 | -8.514,00 | -21,87 | -2,39 |
| N - Actv. Admt. Serv. Auxil. | 49.755 | 16,3 | -13.346 | -21,1 | -3,5 | 74.986 | Q121 | -10.436,33 | -17,34 | -2,93 |
| J - Public Adm Defen., SS | 12.898 | 4,2 | -2.278 | -15,0 | -0,6 | 15.366 | Q321 | 912,67 | 7,62 | 0,26 |
| P - Education | 11.073 | 3,6 | -2.969 | -21,1 | -0,8 | 16.956 | Q121 | 671,67 | 6,46 | 0,19 |
| Q - Actv. Health Serv. Social | 16.051 | 5,3 | -2.188 | -12,0 | -0,6 | 20.185 | Q121 | -80,00 | -0,50 | -0,02 |
| R - Actv. Artis. Rec. & Ent | 5.795 | 1,9 | -1.747 | -23,2 | -0,5 | 9.458 | Q320 | -1.447,00 | -19,98 | -0,41 |
| S ... U - Rest of Serv. | 17.813 | 5,8 | -4.371 | -19,7 | -1,1 | 26.142 | Q121 | -1.799,00 | -9,17 | -0,51 |
| Total services | 241.842 | 79,3 | -61.984 | -20,4 | -16,1 | 350.569 | Q121 | -38.803,33 | -10,91 | -10,91 |
| No previous employment | 20.403 | 6,7 | -7.791 | -27,6 | -2,0 | 31.547 | Q221 | -2.389,67 | -10,48 | -0,67 |
| **Total** | **304.896** | **100,0** | **-80.890** | **-21,0** | **-21,0** | **442.805** | **Q121** | **-50.906** | **-14,3** | **-14,3** |

(1) Impact is the contribution of each section to total growth
Source: Directorate General of the Public Employment Service. Ministry of Economy, Taxation and Employment

The breakdown by activity section of the services sector (CNAE 2009) shows that unemployment fell year-on-year in Q4 2022 in all sections, with notable differences as tertiary activity recovered or increased, with the greatest drop in registered unemployed affecting *Professional, scientific and technical activities* (largest decrease in registered unemployed at -25.8%), *Transport and Storage* (-23.6%), *Arts, Recreation and Entertainment* (-23.2%) and *Hotels and Restaurants* (-22.5%).

Against this generalised year-on-year reduction, the comparison of Q4 2022 levels with Q1 2020 shows a more favourable pattern in sectors that have benefited the most from the end of the restrictions associated with the pandemic, such as hotels and restaurants and leisure, while it increases in those that played a more active role in managing the pandemic.

The most recent data published in January 2023, on the regional comparison in year-on-year terms, pointed to a generalised decrease in registered unemployment in all

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[2] The Community of Madrid closed some of its employment offices in the first half of March 2020 in response to positive cases, which had a differential impact on the activity of the offices and led to an increase in unemployment due to the pandemic in the following months.

Therefore, for this indicator, the figures for the first quarter of 2020 can be considered representative of the pre-pandemic situation.

the Autonomous Communities of Spain, ranging widely from -34.7% in the Balearic Islands to -0.7% in Castile-La Mancha. The Community of Madrid is the region with the second largest year-on-year decline in unemployment. Similarly, all Autonomous Communities show current levels of registered unemployment lower than in January 2020, with the Community of Madrid ranking third in absolute terms.
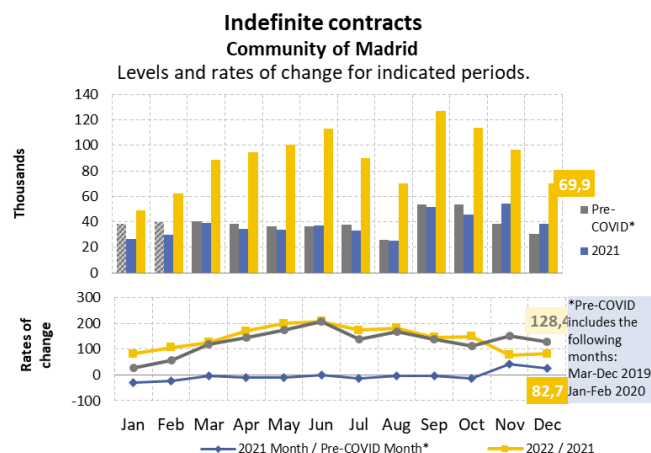
**Registered contracts**
**Community of Madrid**
Levels and rates of change for indicated periods.



Source: MLSE.
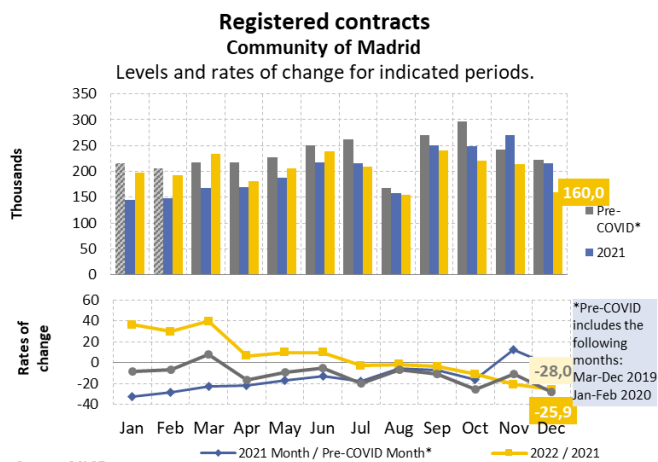
**Permanent hiring continues at record highs, well above pre-pandemic, though it lost momentum in Q4.** Hiring showed significant year-on-year increases of 35.3% in Q1 2022, moderating in Q2 to 8.7%, before falling first by 3% in Q3 and then by 19% in Q4. In a pre-pandemic comparison, the number of registered contracts is 21.7% lower than contracts signed in Q4 2019, with 198,365 contracts. The most recent data from January 2023 places the number of registered contracts at 166,413, a year-on-year decrease of 16.1% and 23.2% less than in January 2020.

Permanent hiring continues at record highs while temporary hiring has already shown year-on-year declines since April, when the transitional period for some temporary contract modalities came to an end.

Thus, year-on-year permanent hiring levels in Q4 2022 stood at 102.7%, moderating versus the second and third quarters, when they stood at 193.4% and 162.2%, respectively. This is not the case for temporary hiring, which, moreover, took a sharp dip in its recovery since Q2 2022, with a year-on-year decline of 32.6%, 47.2% in Q4 2022. The pre-pandemic gap equated to 50.6% fewer temporary contracts than in Q4 2019. The most recent data for January 2023 show a 76.1% year-on-year increase in permanent contracts and a 46.4% decrease in temporary contracts, with 125% more permanent contracts and 55.1% fewer temporary contracts than in January 2020.

The impact of labour market reform in 2022 resulted in a reclassification of contracts, whereby discontinuous fixed contracts that were merely residual become more prevalent in the labour market.

Accordingly, the number of discontinuous fixed contracts has risen from 2,261 in January 2022 to 13,823 in January 2023, of which 12,727 were in the services sector. A year-on-year rate increase in the fourth quarter of the year of 658.3% and 958%

**Indefinite contracts**
**Community of Madrid**
Levels and rates of change for indicated periods.



Source: MLSE.

compared to Q4 2019. The trend in the number of discontinuous fixed jobseekers, registered as jobseekers after having signed a discontinuous fixed contract, should also be taken into account; the figure for January 2023 is 23,652 discontinuous fixed jobseekers.
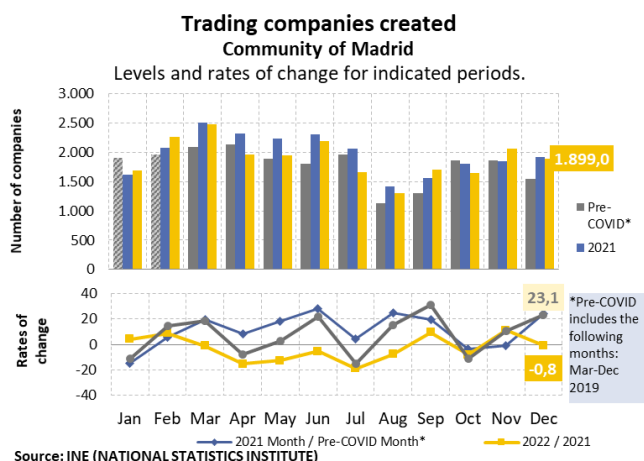
# IV.5. Business environment

Entrepreneurship during 2022 fluctuated year-on-year, with eight months in decline and four in positive territory.

The fourth quarter of 2022 posted a record number of company incorporations for this period since 2007, with the creation of 5,613 entities, 0.8% more than the same quarter of 2021, whereas, in the comparison quarter, the highest values for this period since 2007 were achieved. This means that 45 more companies were created than a year ago; compared to the same quarter of 2019, 334 more companies were created and there was an increase of 6.3% versus those registered then.

Company start-ups reached 1,899 in December, the most recent data available, the second highest number for this month since 2006 and after December 2021, which explains the 0.8% year-on-year decline. However, this is 23.1% higher than in the same month of 2019. The Community of Madrid topped the regional ranking in terms of incorporations, both for the month and for 2022 as a whole. The relative figures for company start-ups are very significant; 23% of all companies created in Spain in December were created in the region.

Capital subscribed in the months of 2022 alternated between seven negative year-on-year rates and significant increases in February, September, October and December. Fourth quarter investment by start-ups reached €282.7m, 29% higher than in the same quarter of 2021, when the lowest amount was reached for this quarter; importantly, it is still 4% less than in the same period of 2019.

increasing 24% versus 2021 and 39.7% versus 2019. In December, they are up 24.4% year-on-year and 35.3% versus 2019. In 2022[3], the loss of companies is 19.9% year-on-year and 26.2% for 2019.

Overall data for 2022 reveals very high levels of company start-ups; at 22,834 units, this is the second highest annual figure since 2007, second only to 2021. This explains why the year ended on a negative note, dropping by 3.6%, which is 857 companies less than in the previous year, but managing to surpass pre-pandemic levels with the creation of 1,050 more companies than in 2019, an increase of 4.8%. The region accounted for 23% of all companies incorporated in Spain in 2022. In terms of capital subscribed, the results beat the previous year and, with €1,475 million subscribed, this is the highest amount since 2016, exceeding the 2021 investment by €473.3 million, up 47.2% year-on-year and 42% versus the capital subscribed in 2019. The Community of Madrid accounted for 28.4% of total national investment in 2022.

For the year as a whole, the region led the way in entrepreneurship and investment.

**The Community of Madrid kicked off 2023 as a host region for companies from other communities.** Experian data revealed that 134 companies changed their registered office to the Community of Madrid in January 2023; the most represented sector is Industry, with 20.1% of the transfers, followed by Financial activities, insurance and real estate, with 19.4%; the predominant place of origin is, once again, Catalonia and Andalusia, both accounting for 42.5% of the total number of arrivals. The balance with firms moving out of the Community of Madrid this month is negative, with 36 fewer firms moving into the region.



**Trading companies created**
**Community of Madrid**
Levels and rates of change for indicated periods.

Source: INE (NATIONAL STATISTICS INSTITUTE)

December's figure puts investment at €124.8 million, 131.8% more than a year ago, unchanged versus December 2019; these figures make the Community of Madrid the region where most capital was subscribed in December, with 23.7% of total national investment. The average capitalisation per company was 2.9% higher than the national average in December and 23.4% higher in 2022 as a whole.

In Q4 2022, dissolutions reached the second highest value for a quarter, second only to Q1 this year,
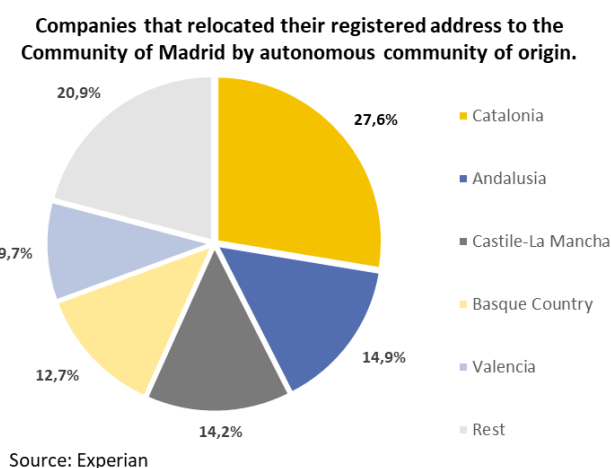


**Companies that relocated their registered address to the Community of Madrid by autonomous community of origin.**

- Catalonia — 27,6%
- Andalusia — 14,9%
- Castile-La Mancha — 14,2%
- Basque Country — 12,7%
- Valencia — 9,7%
- Rest — 20,9%

Source: Experian

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[3] To understand these figures correctly, some context will be needed, as the moratorium on insolvency proceedings came to an end on 30 June this year.

# V. Forecasts

**Forecasts which predicted a possible downturn in the Spanish economy in Q4 2022 proved unfounded**, with an initial GDP growth of 5.5%, clearly higher than most analysts' forecasts. Notwithstanding the prevailing uncertainty regarding energy market and inflation dynamics, monetary policy developments and the conflict in Ukraine, this improved performance in 2022, together with somewhat more positive notes in some aspects, could be contributing to a timid improvement in the expectations now published for 2023. The results once again remind us of the validity of the Mises quote that opens this Report, reminding us how the behaviour of individuals very easily escapes economic models.

The scenario projected by the European Commission in its winter forecast put forward a number of developments at the European level enabling greater optimism than three months ago, including falling gas prices to pre-war levels, a stronger-than-expected second half of 2022 for the European economy, a resilient labour market and improving confidence. All this leads the agency to improve its forecast for the Eurozone for 2023 by six tenths of a percentage point to 0.9%.
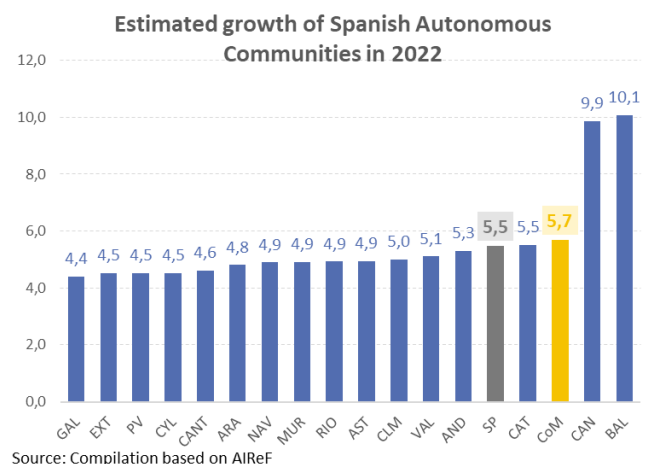
**Revision of the European Commission's forecast**



Based on European Commission forecasts

● Spain  ■ Eurozone
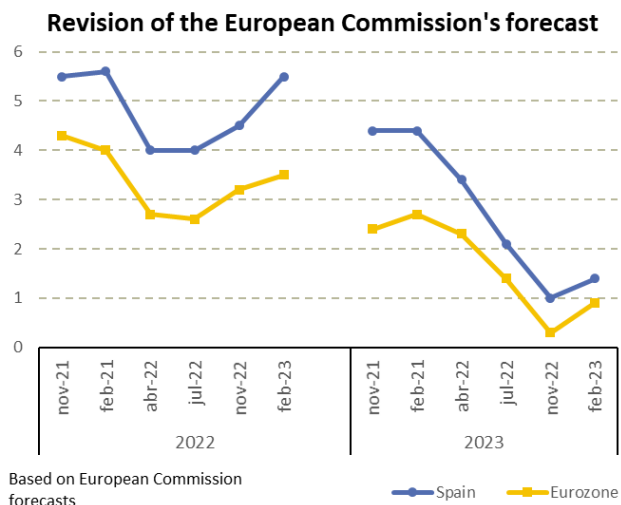
**The European Commission also expects a gradual recovery of the Spanish economy throughout 2023**, as it is set to gain momentum in the second half of the year, with growth likely to stand at 1.4%, four tenths of a percentage point higher than in the autumn forecast. This gradual recovery will be based on an improvement in consumption (which will come about as inflation tempers off), a return to business as usual for tourism and a boost to investment thanks to NGEU funds, especially in construction and equipment. The risks identified by the agency include the impact on households and businesses of a prolonged tightening of financing conditions, and a weakening of the labour market.

**Upgraded projections for national growth in 2023 are becoming more widespread among analysts**. The first revisions announced in January continued into February, so that, in the first two months of the year, national growth forecasts for this year stand, on average, at 1.3%, one tenth of a percentage point higher than those announced during the last quarter of the year.

**Evolution of national GDP growth forecasts 2022 and 2023**
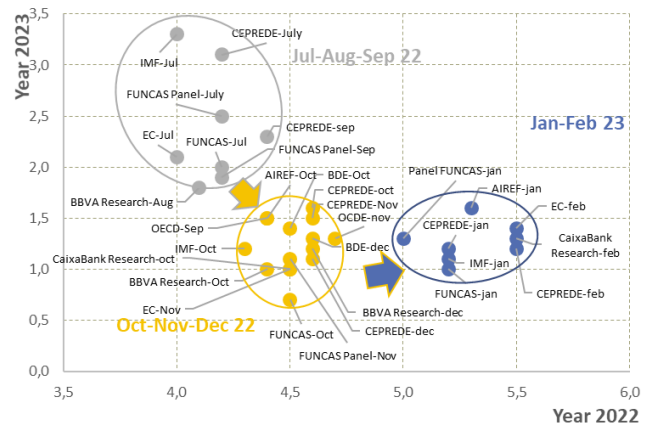


**The Community of Madrid is among the fastest-growing regions in the Spanish economy in 2022, within the complicated context of the Spanish economy**. That is what can be gleaned from the data published by AIReF on the quarterly performance of the Spanish regions, according to which the Madrid economy grew by 5.7% in 2022, the same as the quarterly regional accounts published by the Community of Madrid and the third most dynamic, after the Canary Islands and the Balearic Islands, the most affected by the restrictions in 2020 and 2021 given their particular productive structure, exhibiting growth rates in 2022 consistent with their more severe downturn in previous years and the return of tourism.

**Estimated growth of Spanish Autonomous Communities in 2022**



Source: Compilation based on AIReF

**Additional regional projections also point to the greater dynamism of the Community of Madrid compared to the national average in 2022**, with a higher differential than observed in AIReF's data of at least half a point and which could reach seven tenths of a point, according to CEPREDE. This institution, in its January estimates, together with BBVA Research and Hispalink, in their December forecasts, place Madrid's growth at over 5.0% and it is very likely that this figure will be revised upwards in the coming months as new national data published by the INE are incorporated into their models.

**The 2023 projections assume a significant and generalised deceleration in growth in the Autonomous Communities, in line with expectations for Spain.** The rate of growth in the Community of Madrid could hover around 1.6%, averaging the forecasts of these three analysts, in a range between 1.3% and 1.7%, which is somewhat more optimistic than the one used in the autumn. This would maintain a favourable differential for the region versus the national average of two tenths of a percentage point.

GDP growth forecasts. Community of Madrid and Spain
Actual GDP growth rates
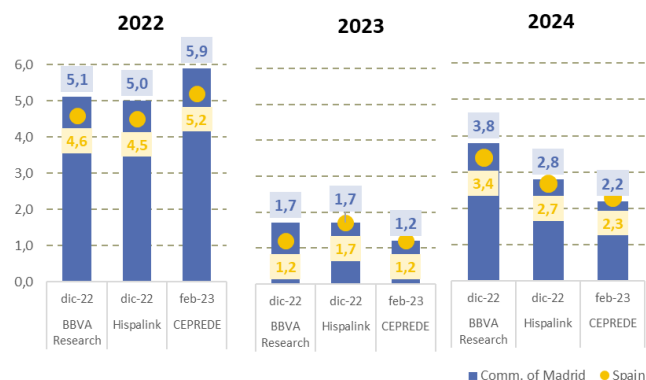


2024 is still a long way off and current projections, in such an uncertain and changing environment, are subject to a much higher degree of variability than normal. Under these assumptions, it seems that growth expectations for both the Community of Madrid and Spain prevail, currently standing at 3% and 2.8% respectively, taking the average of the forecasts of CEPREDE, BBVA Research and Hispalink. In any case, as we have pointed out in our recent reports, the models fit poorly with the reality they are trying to anticipate, and forecasting beyond three months is, in general, extremely risky.

# Annex Company relocations to the Community of Madrid

**Companies that relocated their registered address to the Community of Madrid[4]**

**Latest: January 2023**

**Cumulative: January – December 2022**

| Companies that relocated their registered address to the Community of Madrid | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| By autonomous community of origin and sector of activity. January 2023 | | | | | | | | | | | | | | |
| Autonomous comm | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | n/d | Total | % |
| Andalusia | 2 | 3 | 2 | 3 | 1 | | 2 | 2 | 4 | 1 | | | 20 | 14,9 |
| Aragon | | | | | | | | 2 | | | | | 2 | 1,5 |
| Asturias | | | 1 | | | | | | 1 | | | | 2 | 1,5 |
| Balearic Islands | | | 2 | | | | | | | | | | 2 | 1,5 |
| Canary Islands | | | | | | | 1 | | | | | | 1 | 0,7 |
| Cantabria | | | | | | | | | | | 1 | | 1 | 0,7 |
| Castile-La Mancha | | 1 | 4 | 5 | 1 | | 4 | 2 | 1 | | 1 | | 19 | 14,2 |
| Castile Leon | | | 1 | 1 | | | 1 | 1 | 2 | | | | 6 | 4,5 |
| Catalonia | | 4 | 5 | 7 | | | 4 | 12 | 4 | | 1 | | 37 | 27,6 |
| Extremadura | | | 1 | 2 | | | | | | | | | 3 | 2,2 |
| Galicia | | | 1 | | 1 | | | 2 | 1 | 1 | | | 6 | 4,5 |
| La Rioja | | | | 1 | | | | | | | | | 1 | 0,7 |
| Murcia | | 1 | 1 | 1 | | | | | | | | | 3 | 2,2 |
| Navarre | | | | | | | | | | | | | | |
| Basque Country | | 2 | 2 | 2 | | 1 | 2 | 2 | 4 | 1 | 1 | | 17 | 12,7 |
| Valencia | | 2 | 1 | 2 | | | 2 | 3 | 2 | | 1 | | 13 | 9,7 |
| Others | | | 1 | | | | | | | | | | 1 | 0,7 |
| Total | 2 | 13 | 22 | 24 | 3 | 1 | 16 | 26 | 19 | 3 | 5 | | 134 | 100,0 |
| % | 1,5 | 9,7 | 16,4 | 17,9 | 2,2 | 0,7 | ## | 19,4 | 14,2 | 2,2 | 3,7 | | 100,0 | |
| Balance. Inputs - Outputs | | | | | | | | | | | | | -36 | |

01: Agriculture; 02: Industry; 03: Construction; 04: Commerce; 05: Transport and storage; 06: Hospitality; 07: Information and communications; 08: Financial, insurance and real estate activities; 09: Professional and administrative activities; 10: Public administrations, health and education; 11: Artistic activities and other services; n/d: no data.

| Companies that relocated their registered address to the Community of Madrid | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| By autonomous community of origin and sector of activity. Cumulative Jan-Dec 2022 | | | | | | | | | | | | | | |
| Autonomous comm | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | n/d | Total | % |
| Andalusia | 9 | 75 | 29 | 41 | 11 | 6 | 23 | 45 | 39 | 6 | 8 | | 292 | 16,4 |
| Aragon | 1 | 78 | 6 | 8 | 3 | 2 | 2 | 15 | 12 | 1 | 2 | | 130 | 7,3 |
| Asturias | | 2 | 3 | 5 | 1 | 1 | 1 | 5 | 10 | 1 | 2 | | 31 | 1,7 |
| Balearic Islands | 1 | 16 | 7 | 5 | 1 | 5 | 1 | 9 | 28 | 2 | 1 | | 76 | 4,3 |
| Canary Islands | 4 | | 3 | 10 | 1 | 2 | 5 | 5 | 12 | 1 | | | 43 | 2,4 |
| Cantabria | 1 | 1 | 1 | 4 | | 2 | | 5 | 6 | 1 | | 3 | 24 | 1,3 |
| Castile-La Mancha | 8 | 34 | 15 | 33 | 6 | 2 | 7 | 18 | 21 | 9 | 8 | | 161 | 9,0 |
| Castile Leon | 3 | 33 | 13 | 25 | 3 | 8 | 7 | 24 | 18 | 5 | 7 | | 146 | 8,2 |
| Catalonia | | 55 | 31 | 58 | 12 | 11 | 28 | 77 | 69 | 9 | 15 | | 365 | 20,5 |
| Extremadura | 3 | 16 | 2 | 2 | | 2 | 3 | 2 | 8 | | 1 | | 39 | 2,2 |
| Galicia | | 7 | 3 | 11 | 3 | 4 | 4 | 21 | 13 | 6 | | | 72 | 4,0 |
| La Rioja | | 9 | 2 | 2 | | | | 2 | 3 | 4 | | | 22 | 1,2 |
| Murcia | 1 | 4 | 6 | 6 | 1 | | 2 | 7 | 10 | 5 | 2 | | 44 | 2,5 |
| Navarre | | 12 | 1 | 9 | | 1 | 4 | 3 | 3 | | | 3 | 36 | 2,0 |
| Basque Country | | 9 | 7 | 9 | 1 | 3 | 6 | 16 | 18 | 1 | 7 | | 77 | 4,3 |
| Valencia | 2 | 35 | 21 | 29 | 4 | 8 | 24 | 58 | 30 | 6 | 5 | | 222 | 12,5 |
| Others | | | | | | | | 1 | | | | | 1 | 0,1 |
| Total | 33 | 386 | 150 | 257 | 47 | 57 | 117 | 313 | 300 | 57 | 64 | | 1.781 | 100,0 |
| % | 1,9 | 21,7 | 8,4 | 14,4 | 2,6 | 3,2 | 6,6 | 17,6 | 16,8 | 3,2 | 3,6 | | 100,0 | |
| Balance. Inputs - Outputs | | | | | | | | | | | | | 311 | |

01: Agriculture; 02: Industry; 03: Construction; 04: Commerce; 05: Transport and storage; 06: Hospitality; 07: Information and communications; 08: Financial, insurance and real estate activities; 09: Professional and administrative activities; 10: Public administrations, health and education; 11: Artistic activities and other services; n/d: no data.

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**Companies that relocated their registered address from the Community of Madrid5**

**Latest: January 2023**

**Cumulative: January – December 2022**

| Companies that move their registered office outside the Community of Madrid | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| By autonomous community of destination and activity sector. January 2023 | | | | | | | | | | | | | |
| Autonomous comm | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | n/d | Total | % |
| Andalusia | 1 | 2 | 1 | 4 | 1 | 2 | 1 | 4 | 3 | | | | 19 | 11,2 |
| Aragon | | 1 | 1 | | | | | 4 | 1 | | | | 7 | 4,1 |
| Asturias | | | | 1 | | | | 1 | 1 | | | | 3 | 1,8 |
| Balearic Islands | | | | | | | 1 | | 2 | | | | 3 | 1,8 |
| Canary Islands | | 1 | 1 | 2 | | | | 1 | | | | | 5 | 2,9 |
| Cantabria | | | | | | | | | | | | | | |
| Castile Leon | 2 | 3 | 3 | | | | | 1 | 3 | | | | 12 | 7,1 |
| Castile-La Mancha | 3 | 5 | 5 | 4 | | 1 | 1 | 5 | 4 | | 1 | | 29 | 17,1 |
| Catalonia | | 2 | 3 | 4 | | 1 | 3 | 17 | 5 | | 1 | 1 | 37 | 21,8 |
| Extremadura | | 1 | 2 | | | 1 | | | | | | | 4 | 2,4 |
| Galicia | 1 | 1 | | 1 | | 1 | | 3 | 1 | | 1 | | 9 | 5,3 |
| La Rioja | | | | | | | | | | | | | | |
| Murcia | | | 1 | | | | | | | | 1 | | 2 | 1,2 |
| Navarre | | 7 | | | | | | 2 | | | | | 9 | 5,3 |
| Basque Country | | 2 | 2 | 2 | | | | 5 | 1 | | | | 12 | 7,1 |
| Valencia | | 1 | 2 | 5 | 1 | | 2 | 4 | 4 | | | | 19 | 11,2 |
| Ceuta | | | | | | | | | | | | | | |
| Melilla | | | | | | | | | | | | | | |
| **Total** | **7** | **26** | **21** | **23** | **2** | **6** | **8** | **47** | **25** | | **4** | **1** | **170** | 100,0 |
| **%** | 4,1 | 15,3 | 12,4 | 13,5 | 1,2 | 3,5 | 4,7 | 27,6 | 14,7 | | 2,4 | 0,6 | 100,0 | |

01: Agriculture; 02: Industry; 03: Construction; 04: Commerce; 05: Transport and storage; 06: Hospitality; 07: Information and communications; 08: Financial, insurance and real estate activities; 09: Professional and administrative activities; 10: Public administrations, health and education; 11: Artistic activities and other services; n/d: no data.

| Companies that relocated their registered address from the Community of Madrid | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| By autonomous community of origin and sector of activity. Cumulative Jan-Dec 2022 | | | | | | | | | | | | | |
| Autonomous comm | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | n/d | Total | % |
| Andalusia | 9 | 26 | 21 | 52 | 5 | 16 | 20 | 44 | 46 | 8 | 11 | 2 | 260 | 17,7 |
| Aragon | | 9 | 4 | 6 | | 1 | | 19 | 9 | 3 | 1 | | 52 | 3,5 |
| Asturias | | 2 | 3 | 10 | | 2 | 3 | 3 | 8 | 2 | 1 | | 34 | 2,3 |
| Balearic Islands | | 2 | 8 | 5 | | 4 | 2 | 11 | 7 | 1 | 4 | | 44 | 3,0 |
| Canary Islands | | | 8 | 7 | | 2 | 15 | 6 | 11 | | 5 | | 54 | 3,7 |
| Cantabria | | 2 | 2 | 3 | 1 | | 1 | 1 | 4 | 1 | 1 | | 16 | 1,1 |
| Castile Leon | 5 | 17 | 9 | 28 | | 5 | 6 | 8 | 10 | 3 | 5 | | 96 | 6,5 |
| Castile-La Mancha | 7 | 21 | 26 | 39 | 5 | 4 | 6 | 17 | 22 | 4 | 7 | | 158 | 10,7 |
| Catalonia | 2 | 30 | 15 | 53 | 5 | 10 | 22 | 101 | 76 | 9 | 9 | 3 | 335 | 22,8 |
| Extremadura | 1 | 1 | 1 | 9 | | 1 | 1 | 3 | 2 | 2 | 1 | | 22 | 1,5 |
| Galicia | 2 | 9 | 2 | 10 | 3 | 1 | 7 | 10 | 17 | 3 | 6 | | 70 | 4,8 |
| La Rioja | | 1 | | 2 | | | 2 | | 2 | | | | 7 | 0,5 |
| Murcia | 1 | 8 | 4 | 11 | | 1 | 3 | 6 | 6 | 2 | 4 | | 46 | 3,1 |
| Navarre | | 8 | 1 | 2 | | 1 | | 1 | 1 | 1 | 3 | | 18 | 1,2 |
| Basque Country | | 11 | 3 | 13 | 3 | 2 | 6 | 13 | 10 | 1 | 7 | 1 | 70 | 4,8 |
| Valencia | 1 | 23 | 16 | 31 | 4 | 5 | 16 | 46 | 35 | 4 | 4 | | 185 | 12,6 |
| Ceuta | | | | 1 | | | 1 | | 1 | | | | 3 | 0,2 |
| Melilla | | | | | | | | | | | | | | |
| **Total** | **28** | **170** | **123** | **282** | **26** | **55** | **111** | **289** | **267** | **44** | **69** | **6** | **1.470** | 100,0 |
| **%** | 1,9 | 11,6 | 8,4 | 19,2 | 1,8 | 3,7 | 7,6 | 19,7 | 18,2 | 3,0 | 4,7 | 0,4 | 100,0 | |

01: Agriculture; 02: Industry; 03: Construction; 04: Commerce; 05: Transport and storage; 06: Hospitality; 07: Information and communications; 08: Financial, insurance and real estate activities; 09: Professional and administrative activities; 10: Public administrations, health and education; 11: Artistic activities and other services; n/d: no data.

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# Concepts, sources and abbreviations used

| | | | |
|---|---|---|---|
| P. A. | Public Administrations | ETVE | Foreign Securities Holding Entities |
| Tax Authority | State Tax Administration Agency | IMF | International Monetary Fund |
| H&MHT | High and Medium High Tech | FUNCAS | Foundation of the Federated Savings Banks |
| ECB | European Central Bank | IECM | Institute of Statistics of the Community of Madrid |
| BDE | Bank of Spain | INE (National Statistics Institute) | National Statistics Institute |
| AA. CC | Autonomous Communities | MAEYTD | Ministry of Economic Affairs and Digital Transformation |
| EC | European Commission | MISSYM | Ministry of Inclusion, Social Security and Migration |
| CoM | Community of Madrid | MITMA | Ministry of Transport Mobility and Urban Agenda |
| CNTR | Quarterly Spanish National Accounts | OECD | Organisation for Economic Cooperation and Development |
| QUARTERLY REGIONAL ACCOUNTS (QRA). | Quarterly Regional Accounts of the Community of Madrid | OPEC | Organisation of Petroleum Exporting Countries |
| SPRC | Strategic Petroleum Products Reserves Corporation | GDP | Gross Domestic Product |
| CRE | Regional Accounts of Spain | SEOPAN | Association of Construction Companies at a National Scale |
| SCA | Seasonal and calendar adjustment | TARIC | Code for the integrated tariff of the European Union |
| TC | Trend-cycle component | EU | European Union |
| DGT | Directorate-General for Traffic | EMU | Economic and Monetary Union |
| EUROSTAT | Statistical Office of the European Union | GVA | Gross value added |

**Non-centred moving average of order 12 (MM12).**

Series constructed from the original by means of successive arithmetic averages, where each data point is obtained from the average of the last twelve months of the original series. The purpose of constructing a series of moving averages is to eliminate possible seasonal or erratic variations in a series, so that an estimate of the trend-cycle component of the variable in question is obtained.

**Trend-Cycle (TC)**

A trend is one of the unobservable components into which a variable can be broken down, according to classic time series analysis. It can be extracted or estimated using a variety of techniques and represents the solid evolution underlying the observed evolution of the variable, once seasonal variations and irregular or short-term disruptions are removed. It therefore reflects the long-term evolution of the series. Normally, the trend includes another component, the cyclical component, which includes oscillations that occur in the series over periods of between three and five years, but due to the difficulty of separating them, they usually appear in the so-called trend-cycle component.

**Seasonal and calendar adjustment (SCA)**

A high-frequency time series analysis technique applied to remove both seasonality (movements that form a pattern and are repeated approximately every year) and calendar effects (representing the impact on the time series due to the different structure of the months or quarters in each year, both in length and composition). The aim of adjusting a variable for seasonality and calendar is to eliminate the effect of these fluctuations on the variable, and thus facilitate the interpretation of the economic phenomenon.

Surveys

These aim to measure the attitude of the subjects to whom the survey is addressed (consumers, the business world, etc.) towards a variable (consumption, production or employment, etc.) in order to anticipate whether in the following months this variable will increase, decrease or remain stable.

**Balance of responses**

In surveys, the results for the variables under investigation are basically obtained through the differences or balances between the positive and negative responses, although depending on the survey, there are different calculation methods.

**Rate of change**

A rate of change compares the value of a variable at one point in time with its value at another point in time. Various types of rates of change can be calculated. Among the most common are the following:

- *Month-on-month (quarter-on-quarter, etc.) rate:* Compares the value of a period (shorter than a year: month, quarter, etc.) with that of the immediately preceding period (month, quarter, etc.).

- *Year-on-year rate:* Compares the value of a period with that of the same period in the previous year (same month for monthly data, similar quarter for quarterly data, etc.).

- *Year-to-date cumulative rate of change:* Compares the cumulative value of a period (sum or average, depending on the type of data, of the elapsed months, quarters, etc. of a year) with the same cumulative period of the previous year.

# Other periodical publications of the Economics Area

- Notes on the Economic Situation in the Community of Madrid (monthly)

- Foreign Trade Report (monthly)

- Note on EU regional GDP (annual)

- Individual monitoring notes on the main economic indicators of the Community of Madrid (monthly or quarterly depending on the nature of the data):

Social Security Enrolment, Registered Unemployment, Industrial Production Index (IPI), Consumer Price Index (CPI), Mercantile Companies, Retail Trade Indices (RTI), Services Sector Activity Indices (SSAI), Mortgages on homes, Hotel Tourism Situation (HTS), Labour Force Survey (LFS), Foreign Direct Investment (FDI) and Quarterly Regional Accounts (QRA).

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