Comunidad de Madrid

Economic Situation in the Community of Madrid

Subdirectorate General for Economic Analysis
Directorate General for Economic Affairs

I /2023

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Disclaimer:

The Community of Madrid does not make its own predictions about the growth of the regional economy. Those included in this report have been published by various independent sources and are cited as such.

Note on the analysis of the evolution of economic indicators in this report.

An assessment of how economic indicators have recovered following the COVID crisis is based on a comparison with the usual levels in the reference months prior to the outbreak of the pandemic. This report, therefore, sheds light on monthly indicator values from March 2019 to February 2020 and the variations in 2023 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 particularly relevant in the current context in which the performance of the economy is conditioned by multiple factors, some of them non-economic, with a great disruptive capacity.

Close date: 23/5/23

I. Overview of the economic situation

Developments in economic activity in Q1 2023 proved to be markedly more buoyant than forecasts had initially suggested. Global, national and regional growth data indicate levels of activity that seem to be warding off the spectre of recession, or even stagnation, triggered by the sharp rise in prices, whose persistence prompted the most drastic global monetary policy reversal in recent history.

GDP grew in the first quarter in all major economic areas, with particular momentum in the emerging countries. China is gaining steam after the removal of all restrictions linked to the spread of the pandemic; the USA is reported to have grown by 0.3% quarter-on-quarter (QoQ), the EU by 0.2% and the Eurozone by 0.1%, hampered by Ireland's 2.8% fall and stagnation in Germany, as the country continues to stave off recession.

It should also be noted that these levels of activity come in a context of the ongoing Ukraine conflict as the risk of escalation is still present. This quarter also revealed the fragility of some parts of the US banking system when faced with rising interest rates. Tightening financial conditions seemed to jeopardise not only the banks that crashed, but also many smaller institutions, and the spill-over to Europe, at the hands of Credit Suisse, triggered bouts of high volatility on the stock markets and anxiety in the markets which, to date, and at least in the European environment, seem to have been overcome.

Now that this financial turbulence has subsided, and after ruling out the temporary advance of the rate correction that it might have brought with it, both the Federal Reserve and European Central Bank have begun a gradual increase in the rate of increase of the price of money. Both raised their benchmark rates by "only" 25 basis points (b.p.) at their May meetings and continue to indicate that they will persist in their restrictive policy as long as inflation remains relatively uncontrolled, relegating activity indicators to a second line in the monetary policy dictate.

Thus, while official core inflation indicators already seem to be showing clear signs of moderation on the other side of the Atlantic, the decline in Europe is still very much incipient. There is also a noticeable difference in how much monetary measures filter through to the real economy, a key factor behind the current slowdown in the pace of interest rate hikes. Nevertheless, markets are anticipating the first interest rate cuts in the US in the second half of the year, but not before 2024 in Europe.

Buoyant activity in the first quarter was underpinned by the good performance of labour markets, which fed back into positive outlooks voiced by economic agents, backed by healthy balance sheets. A warmer than usual winter helped to bring down energy prices, especially for natural gas in Europe, where reserves are full and consumption was lower than estimated.

In light of this global context, the Q1 2023 regional economy performance can be described as highly satisfactory. Strong activity levels continue to translate into a dynamic labour market and high levels of consumption and, while prices have risen strongly, inflation stands out as the best performer in the Spanish regional environment. There was also a noteworthy normalisation of international trade flows in goods in the first quarter of the year.

The first GDP growth estimate for the Community of Madrid (CoM) projects QoQ growth at 1.3% and year-on-year (YoY) growth at 3.9% in Q1 2023, versus 0.5% and 3.8%, respectively, in Spain. Regional activity levels are already 2.2% above pre-pandemic levels, and the breakdown by supply and demand components points to progress in recovering pre-crisis levels in all of them. The aggregates with the largest pre-pandemic gap have performed significantly better this quarter such as housing investment (up 1.1% in the quarter and 4.7% in the year), though activity levels remain 18.3% lower than Q4 2019 levels.

Household final consumption expenditure held steady in the quarter and continues to decelerate over the year. In terms of supply, the QoQ GVA growth of 2.5% in construction was particularly encouraging, and more than one point above the estimate for industry and services, though admittedly the YoY growth range is considerably narrower than in previous periods, with GVA exceeding 3.5% in all major sectors.

The dynamism of the regional labour market, as mentioned above, remains a key factor in maintaining consumption levels and boosting activity. The indicators in this regard are unmistakable: Q1 2023 LFS flows show job growth with decreasing unemployment, an unusual synchronic movement for a first quarter of the year. In fact, employment is now at over 3.2 million, close to the all-time high posted in Q2 2022, while unemployment has dropped to 11% of the labour force.

An analysis of the flows driving these variations further underscores the positive momentum of the labour market: in addition to encouraging employment-unemployment transitions, there is also the effect of the age structure of the working-age population on the flows of unemployed and employed into inactivity (refer to the relevant annex).

Registry data also point in the same direction, with growth in the number of enrolments in Q1 2023 of 3.9% YoY and a drop in the number of registered unemployed of 9.4% compared to the previous year, vastly improving on pre-pandemic figures in both cases. The April data reinforce the dynamism of new enrolments and perpetuate the slowdown in the decline in the number of unemployed, while the performance of permanent contracts stabilised once the staggering effect brought about by the entry into force of the labour reform was overcome.

Base effects are also essential when analysing recent developments in consumer price indicators. Headline inflation, which had hit 9.6% YoY in July last year, entered a subdued trajectory that was particularly visible in March, when its growth eased by 2.6 points to 2.6% in the region, before rising by 0.8 points in April to 3.4%. These swings are directly related to the year-on-year dynamics of energy prices and the effect of the corresponding "corrective" measures had on them.

The pass-through of higher energy prices to other goods and services in the economy, a global phenomenon, renders core inflation the key indicator for monitoring price behaviour. Excluding energy and unprocessed food, the basket of goods and services consumed in the region became 6.6% more expensive year-on-year in January 2023, 6.4% in the first quarter, tapering off to 5.5% in April; systematically below core inflation in Spain as a whole, it has shown the most contained growth of the Spanish regions in nearly every month. However, it should be noted that this tapering of headline or core inflation is far from being based on lower prices, but rather on price growth lower than last year.

Moreover, consumer-perceived inflation, which is closely linked to more frequent purchases, may not even participate in this tapering off, given how important food prices are in shaping subjective inflation. The *Foodstuffs* subgroup thus posted its highest inflation in February 2023, when it stood at 16.7% (6% headline inflation) and then 12.8% in April. However, of the 21 items in the price index, only 3 (dairy products, fresh fruit and sugar) actually experienced a price reduction between February and April, as prices rose in the remaining 18 (eggs, potatoes and pork increased by over 5% in April versus February).

The price effect is also behind the moderation in the growth rates of goods exports in the first quarter and the very moderate fall in imports in the same period (19% and -3.9% respectively). It should be borne in mind that there are no deflated series for international trade by region. Fuels and mineral oils, which drove the growth of these transactions in 2022, is slowing down at the beginning of the year because, together with the normalisation of the YoY performance of exports and imports, the composition of these flows is also reverting to previous patterns. 'Motor vehicles' and 'Machinery and Mechanical Appliances' are gaining prominence, with a reconfiguration of the international mix of main customers and suppliers.

The region's degree of openness and economic interdependence explains the knock-on effect of the generalised upward revision of EU and Spanish growth estimates for 2023 on regional GDP growth forecasts. A better than expected first quarter defers the adverse effects of persistent inflation and rising interest rates on consumption and investment to the second half of the year. Independent forecasting agencies project an average growth of 1.7% for the Community of Madrid for the year as a whole, and predict an increase in activity by 2024, which could be around 2.5%. However, uncertainty remains and downside risks remain latent.

II. International context

Concerns persist, even though the year began better than expected.

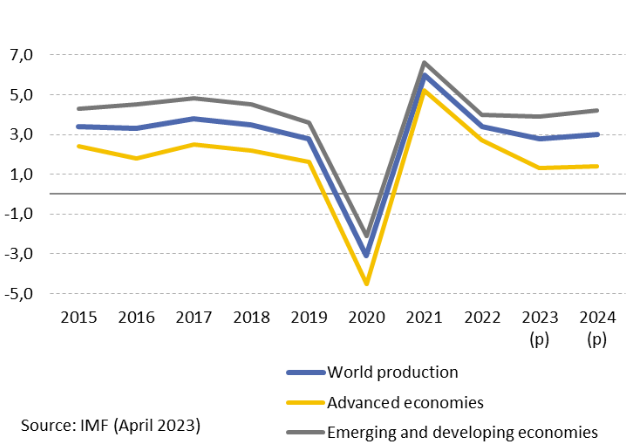
The USA grew by 0.3% QoQ, the Eurozone by 0.1%, and China surprised with 2.2%. This upturn implies an upward bias for 2023 growth forecasts. However, the risk of a weaker second half of the year, as aggressive rate hikes eventually feed through to activity, may drag down expectations for growth in 2024. This lesser economic dynamism, in a context in which, a priori, no worrying tensions are anticipated in the energy markets, will allow inflation to ease, especially in terms of the core inflation components, which for the time being are showing resistance to falling.

The Eurozone grew by 0.1% QoQ in Q1 2023, though this was again affected by Ireland's highly volatile data (down 2.7%, subtracting more than 0.1 p.p. from growth in the Eurozone as a whole). Italy and Spain (+0.5% quarter-on-quarter) were particularly buoyant among the primary economies. France posted a modest 0.2% growth while Germany stalled at the beginning of the year (0%). In terms of component breakdown, the external sector made a significant positive contribution in Q1, boosted by a good start of the global economy in 2023 thanks, in part, to the full reopening of the Chinese economy. Domestic demand trends are rather inconsistent: consumption fell in Germany and Spain; stagnated in France; but proved to be particularly dynamic in Italy.

In 2022, the dramatic spike in energy prices for European consumers became the main cause of high inflation rates, both directly and indirectly. However, due to both base effects and easing energy prices which consolidated in recent months, this upward pressure on energy prices is now fading. Consequently, headline inflation in the Eurozone fell sharply to 6.9% (-1.6 p.p.) in March, with the first negative contribution from energy prices since 2021. This dynamic should persist for the remainder of the year, leading to a rebalancing of European inflation, with foodstuffs, non-energy goods and services now playing a greater role. In this regard, inflation excluding energy and foodstuffs accelerated to 5.7% (+0.1 p.p.). The narrowing gap between headline and core inflation resembles what happened in the USA, where headline inflation fell to 6% YoY in February while core inflation stood at 5.5%.

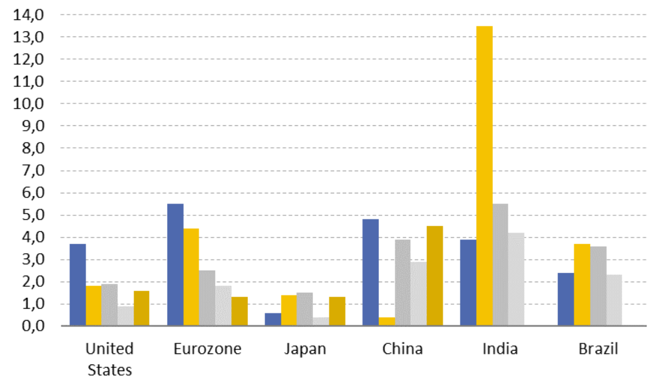
While low gas prices and the high level of reserves are a relief for businesses and households, as reflected in positive indicators, the strength particularly lies in services. Meanwhile, the Manufacturing Purchasing Managers Index (PMI) fell to 45.8 (contracting for the tenth consecutive month) and some industrial surveys are beginning to show incipient signs of lower orders, in a context of still high inventories of finished goods. Moreover, given the ECB's monetary tightening, the coming months will be marked by the transmission of higher interest rates to the economy as a whole. Consequently, despite the good start to the year, there are still important challenges to overcome and it would be unwise to be overconfident.

World economic growth 2015–2024



Source: IMF (April 2023)

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



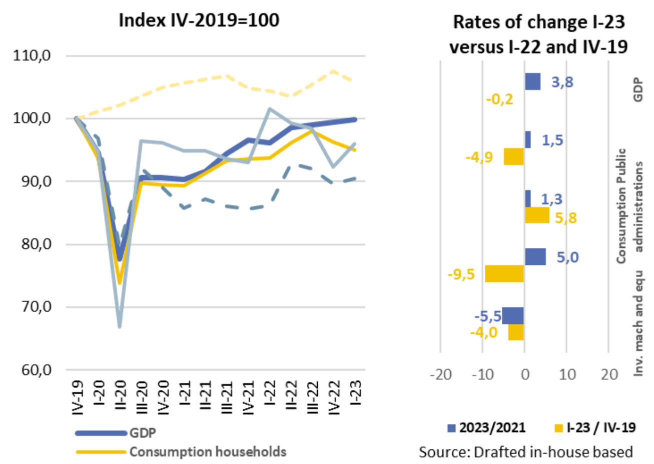
Source: OECD and Eurostat (March 2023)

III. National framework

1. Growth

The Spanish economy's first quarter performance was better than expected, based on the results of the Quarterly National Accounts Forecast (QNA Forecast) published by the INE. Accordingly, GDP grew by 0.5% against the previous quarter, whose growth has been revised upwards by two-tenths of a percentage point to 0.4%. The better than expected performance at the beginning of 2023 stems from the dynamism of the foreign sector and investment, while consumption is contracting again, weighed down by household and public sector consumption.

Evolution of GDP, consumption and investment in Spain



Source: Drafted in-house based on CNTR, INE

The YoY growth rate breaks with the slowdown it underwent in the second half of 2022 and rebounds to 3.8%, from 2.9% in the fourth quarter. Spain's economic recovery thus continues, with GDP already very close to reaching the pre-pandemic level, just 0.2% below Q4 2019 levels.

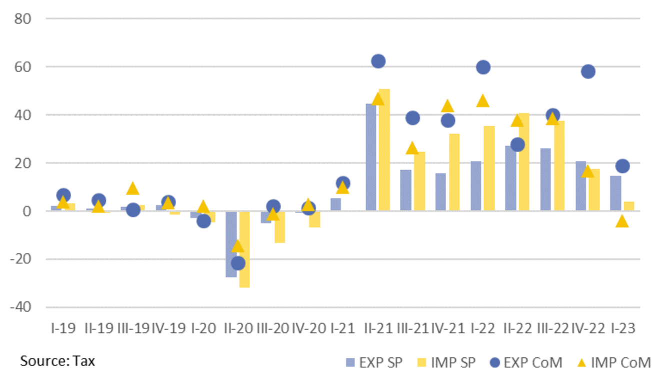
Year-on-year growth in the first quarter is mainly driven by the contribution of external demand, which rose by six tenths of a point to 2.5 points. Domestic demand contributed 1.3 points to GDP growth, three-tenths of a point more than in the previous quarter, an improvement exclusively due to the recovery of investment, which went from a 5% YoY fall in the fourth quarter to a 0.7% increase; investment in construction, which increased by 5%, boosted the aggregate, while investment in machinery and equipment contracted by 5.5%.

Final consumption expenditure, on the other hand, has seen its YoY growth rate weaken from 2.8% to 1.4%, with household consumption increasing by 1.5% and general public sector consumption by 1.3%, both experiencing a similar deceleration, though the former is still 4.9% away from recovering its pre-pandemic level.

2. Foreign sector

In the first quarter of 2023, the YoY rate of Spain's international flows of goods continued to moderate gradually, although volumes remained very high. Spanish exports of goods thus grew by 14.6% in Q1 2023 against the same period in 2022, with a recorded volume of €102,683 million, a figure similar to the previous quarter and also a new record for that period. Imports increased to €109,262 million, 4% more than in the same period of 2022. The trade balance for the first quarter thus recorded a deficit of €6,578 million.

Foreign Trade Quarterly year-on-year rates



In terms of volume, exports increased by 3.5% YoY, as their prices, approximated by unit value indices, rose by 10.7%, and imports declined by 3.2% YoY, owing to a 7.5% increase in their prices.

The sectors that contributed the most to the increase in exports in Q1 2023 were *Capital goods* (contribution 3.9 p.p.) and the *Automotive sector* (3.7 p.p.), *Chemical products* (2.7 p.p.) and *Food, beverages and tobacco* (2.4 p.p.). The leading sub-sectors were *Automobiles and motorbikes* (2.3 p.p.), *Automotive components* (1.4 p.p.), *Medicines* (1.3 p.p.) and *Organic chemicals* (1.1 p.p.). The destinations with the greatest positive contributions to the rate of change in sales were France, Germany and Italy.

In the analysis of the contributions to the YoY rate of national exports in Q1 2023 (14.6%), the region with the second highest positive contribution was the Community of Madrid, with 2.8 percentage points and sales representing 15.2% of the total, with an increase of 19% in this quarter.

3. Labour market

The labour market proved solid in the first quarter of the year.

The LFS results reveal a reduction in jobholders and an increase in unemployment with respect to the previous quarter. With 11,100 fewer jobholders (the smallest decline in employment in a first quarter since 2008) and 103,800 more unemployed, the active population increased by 92,700 in the quarter, in a context of an increase in the working-age population, which is why the activity rate rose by one-tenth of a point to 58.6% and the unemployment rate rose by four-tenths of a point to 13.3%.

This development has led to an acceleration in YoY employment growth: 1.8% compared to 1.4% in the previous quarter, while unemployment has slowed down its rate of decline from -2.6% in the last quarter to -1.5% at present.

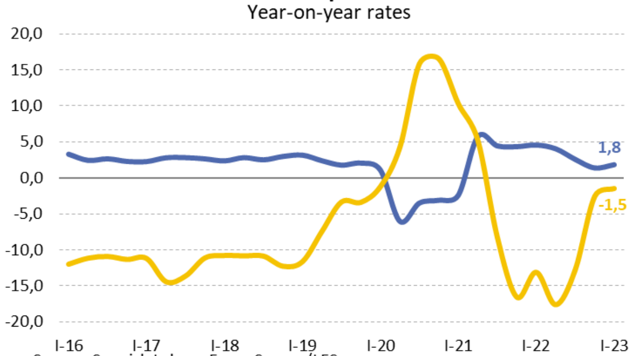
The seasonally adjusted series are unlikely to continue the change in the behaviour of the last two quarters of the two main series, which pointed to a possible change in the phase of the business cycle. Job growth has resumed and the reductions in unemployment are hardly significant compared to the previous quarter.

However, current employment, at 20,452,800, is 5% higher than Q1 2019, and unemployment is 6.7% lower than Q1 2019.

Registry statistics reveal record high enrolment levels for a first quarter of the year, as well as YoY growth which, despite some deceleration, remains high at 2.5%. Registered unemployment, meanwhile, stood below 2.9 million with a slowing YoY pattern, still falling by 7.1% in Q1 2023 and by 11.7% versus the same period of 2019.

Evolution of employment and unemployment in Spain

Year-on-year rates



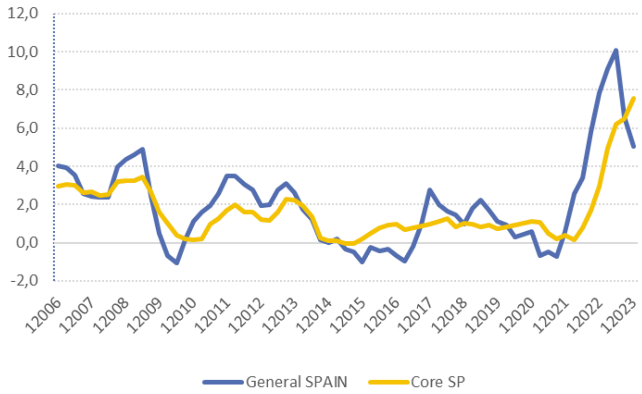
Source: Spanish Labour Force Survey (LFS; also referred to by its Spanish acronym EPA -Encuesta de Población Activa), INE

4. Prices

Inflation in Q1 2023 continues to trim the high levels reached in 2022, thanks to the staggering effect and subdued energy prices; core inflation remains on an upward path.

CPI inflation reached an average rate of 5.1% in Q1 2023, 1.5 p.p. lower than in the previous quarter. The most recent data published, corresponding to April 2023, places it at 4.1%, eight-tenths of a percentage point more than in March, the month in which it recorded the largest fall in its history (2.7 p.p.)

Quarterly General and Core Spain



Similar to the previous quarter, subdued inflation in the first quarter of the year is due to reductions in two groups, 'Housing' and 'Transport', which are directly affected by fluctuations in energy products. Thus, 'Housing' registered in the first quarter an average rate of -10.4%, and transport 0.7%, a year ago the average rates of these same groups were 25.5% and 14.3% respectively.

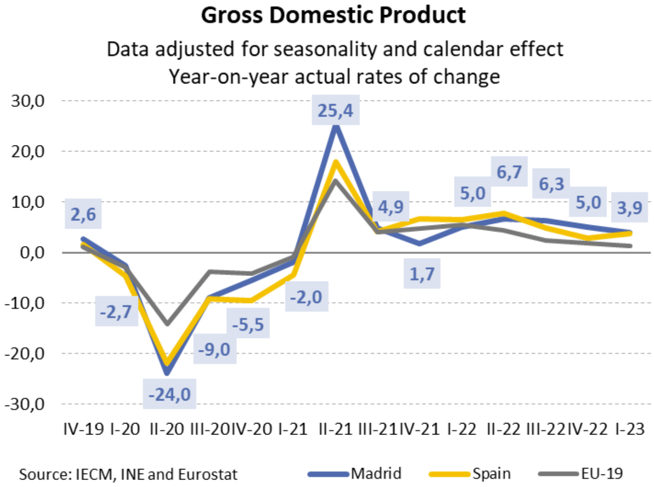
The remaining groups all stood out for their high inflation in Q1 2023: 'Food and non-alcoholic beverages' posted an average inflation rate of 16.2%, the highest in its history (15.5% in Q4 2022); 'Alcoholic beverages and tobacco' by 8.4%, a rate not seen in a quarter since 2011; 'Restaurants and hotels' posted 7.8%, stable since the second half of 2022; and 'Furniture and household goods' recorded an average rate in the first quarter of 7.6%, slightly lower than in the previous quarter. Thus, the underlying rate continues to rise and increased in the first quarter of the year to 7.6%, surpassing the general rate; while the latest figure published was 6.6% in April 2023, nine tenths of a percentage point lower than in March.

In the international context, the harmonised indicator in the EU cuts inflation to 8% in the first quarter. By April 2023, the growth rate dipped to 7%.

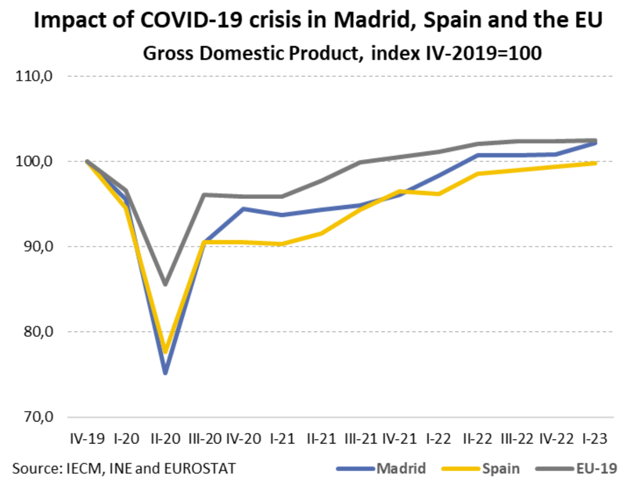
IV. Economic growth and forecasts

IV.1. Economic growth

The regional economy continues gathering momentum, based on the most recent data from the Regional Accounts of the Community of Madrid. Q1 2023 results beat forecasts, despite the persistence of risk factors still present in the global economic context, such as high inflation levels for many months, interest rate hikes, which have moderated slightly, and the consequences of the war in Ukraine, which are still unforeseen.

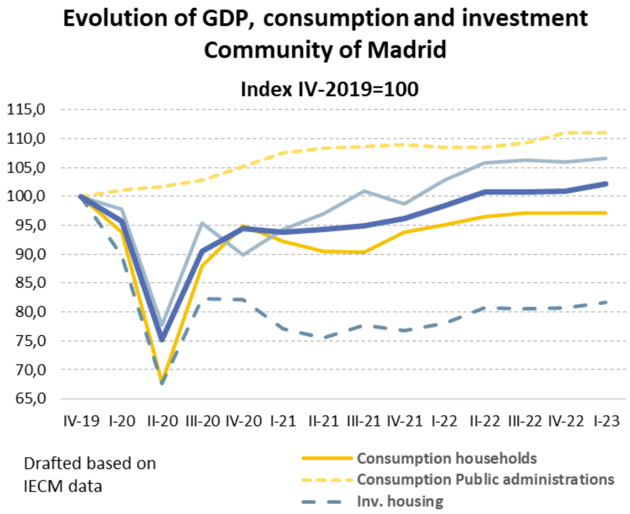


Significant growth in Madrid's economy in the first quarter, driven by external demand. The Community of Madrid's GDP grew by 1.3% QoQ, a much higher rate than that recorded in the previous period. In Spain, the INE's initial estimate for April puts GDP growth at 0.5% in this period, while growth in the Eurozone, according to Eurostat, stagnated at 0.1%. In YoY terms, Madrid's GDP increased by 3.9%, 1.1 p.p. below the pace achieved in the previous quarter (5%). In Spain, growth in the Eurozone decelerated by 0.9 percentage points to 3.8% and in the Eurozone by 0.5 percentage points to 1.3%.



For the fourth consecutive quarter, Madrid outperformed pre-pandemic GDP in terms of volume (Q4 2019), consolidating a 2.2% increase in the first quarter. Spain is still a long way from recovering to pre-COVID levels, at 99.8% of GDP in the fourth quarter of 2019. Eurostat data show a better performance for the Eurozone as a whole, which regained the pre-pandemic level of activity in Q4 2021 and now stands 2.5% above Q4 2019.

A weaker regional demand compared to the previous period was offset by the positive external sector contribution. In terms of the composition of growth compared to the previous quarter, consumption stagnated; public sector consumption fell by 0.1% and household consumption continued not to contribute for the second consecutive quarter. Investment got the biggest boost in the last three quarters, growing by 0.8%; housing investment, in particular, increased by 1.1%. As a result, regional demand as a whole cut the already contained growth of the previous quarter by three-tenths of a percentage point to 0.1%. The key to this strong performance in the period came almost exclusively from external demand, which contributed 1.2 points to GDP growth, regaining momentum after two quarters with negative contributions of 0.3 and 0.4 points.



The slower YoY GDP growth stems from slower private consumption, despite the strong momentum of investment. In year-on-year terms, the slowdown in the year-on-year growth of Madrid's GDP is explained by the fall in the relative contribution of regional demand, while external demand remained at 1.6 points. Household consumption decelerated its rate of growth to 2.2%, while public sector consumption grew again to

2.3%. Private consumption continued to be 2.9% below its pre-pandemic level, though public sector consumption was 10.9% above its pre-pandemic level. Investment slowed to 4% after a few months of sharp recovery in a comparatively weak environment due to the effects of the pandemic; housing investment grew by 4.7% and other investment advanced by 3.7%. However, the former is still a long way from recovering its pre-COVID level, still 18.3% below, while other investments exceed it by 6.7%.

On the supply side, there was year-on-year growth in all sectors. Agriculture gained 1.9%; services increased by 3.8%, 1.4 points below the Q4 rate; construction accelerated its growth by 1.3 points to 3.5%; and industry grew by 4.2%, 1.1 points below the previous period. This sector is the best positioned in relation to its pre-COVID position, 3.7% higher; services also exceeded it by 1.7%, although asymmetrically among its branches; construction recovered its pre-COVID value in this quarter, exceeding it by 2.3%.

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

Drafted based on IECM data

In terms of tertiary activities, distribution and hotel and catering services again recorded the strongest YoY growth, albeit moderating from the previous period, with a rate of 5.1%, returning to a growth path less affected by the circumstances that influenced the previous periods; however, they are still 2.9% below the pre-COVID level. Business and financial services grew by 3.6% year-on-year, slowing down from the previous quarter and exceeding the pre-COVID value by 3.5%. Other services remained stable at 3% and consolidated its recovery, already exceeding the pre-pandemic level of activity by 3%.

QUARTERLY ACCOUNTS OF THE COMMUNITY OF MADRID BASE 2013
(Volume indices, seasonally and calendar-adjusted data)

			Quarter-on-quarter rate of change (%)							
	2021	**2022**	**II 2021**	**III 2021**	**IV 2021**	**I 2022**	**II 2022**	**III 2022**	**IV 2022**	**I 2023**
Agriculture	-	-	2,4	0,0	-2,7	0,5	0,1	1,9	0,1	-0,2
Industry	-	-	3,1	0,3	-0,1	2,6	3,8	-0,9	-0,3	1,5
Construction	-	-	0,3	-0,3	1,5	1,3	1,5	-0,2	-0,3	2,5
Services	-	-	0,6	0,9	1,0	2,5	2,3	0,2	0,2	1,1
GVA	-	-	0,8	0,8	0,9	2,4	2,4	0,1	0,1	1,3
GDP	**-**	**-**	**0,6**	**0,5**	**1,3**	**2,4**	**2,3**	**0,1**	**0,1**	**1,3**
Final Consumption Expenditure	**-**	**-**	**-1,1**	**-0,1**	**2,8**	**0,8**	**1,1**	**0,6**	**0,5**	**0,0**
- households	-	-	-1,8	-0,2	3,8	1,4	1,5	0,6	0,0	0,0
- Public sector and NPISH	-	-	0,7	0,2	0,3	-0,5	0,0	0,7	1,7	-0,1
Gross Capital Formation	**-**	**-**	**1,2**	**3,6**	**-1,8**	**3,4**	**3,0**	**0,3**	**-0,1**	**0,8**
- Investment in housing	-	-	-1,9	2,8	-1,2	1,6	3,4	-0,1	0,2	1,1
- Rest of investment	-	-	2,8	4,0	-2,2	4,3	2,8	0,5	-0,3	0,7
Regional demand	**-**	**-**	**-0,7**	**0,5**	**2,0**	**1,2**	**1,4**	**0,6**	**0,4**	**0,1**
External demand (1)	**-**	**-**	**1,3**	**0,0**	**-0,6**	**1,2**	**1,0**	**-0,4**	**-0,3**	**1,2**
GDP COMMUNITY OF MADRI	**-**	**-**	**0,6**	**0,5**	**1,3**	**2,4**	**2,3**	**0,1**	**0,1**	**1,3**
SPAIN GDP	**-**	**-**	**1,4**	**3,1**	**2,3**	**-0,4**	**2,5**	**0,4**	**0,4**	**0,5**
			Year-on-year rates of change (%)							
	2021	**2022**	**II 2021**	**III 2021**	**IV 2021**	**I 2022**	**II 2022**	**III 2022**	**IV 2022**	**I 2023**
Agriculture	3,6	0,1	4,5	6,0	2,9	0,1	-2,1	-0,2	2,7	1,9
Industry	5,3	5,9	17,1	5,3	3,9	6,0	6,7	5,5	5,3	4,2
Construction	8,6	3,3	33,2	5,6	0,6	2,8	4,0	4,1	2,2	3,5
Services	6,0	5,8	24,1	4,5	1,5	5,0	6,8	6,0	5,2	3,8
GVA	6,1	5,6	23,8	4,7	1,6	5,0	6,7	5,9	5,1	3,9
GDP	**6,5**	**5,7**	**25,4**	**4,9**	**1,7**	**5,0**	**6,7**	**6,3**	**5,0**	**3,9**
Final Consumption Expenditure	**6,2**	**3,9**	**24,4**	**3,5**	**0,1**	**2,4**	**4,7**	**5,4**	**3,1**	**2,2**
- households	6,5	5,2	33,6	2,6	-1,2	3,1	6,7	7,5	3,6	2,2
- Public sector and NPISH	5,5	0,8	6,6	5,6	3,6	0,8	0,1	0,6	1,9	2,3
Gross Capital Formation	**3,7**	**6,6**	**20,2**	**1,8**	**3,9**	**6,5**	**8,3**	**4,9**	**6,7**	**4,0**
- Investment in housing	-4,5	4,2	11,8	-5,5	-6,6	1,2	6,7	3,7	5,1	4,7
- Rest of investment	8,3	7,7	24,8	5,7	9,8	9,1	9,1	5,4	7,3	3,7
Regional demand	**5,8**	**4,3**	**23,7**	**3,2**	**0,7**	**3,1**	**5,3**	**5,3**	**3,7**	**2,5**
External demand (1)	**1,1**	**1,7**	**3,2**	**1,9**	**1,1**	**2,1**	**1,8**	**1,3**	**1,6**	**1,6**
GDP COMMUNITY OF MADRI	**6,5**	**5,7**	**25,4**	**4,9**	**1,7**	**5,0**	**6,7**	**6,3**	**5,0**	**3,9**
SPAIN GDP	**5,5**	**5,5**	**17,9**	**4,2**	**6,6**	**6,5**	**7,7**	**4,8**	**2,9**	**3,8**

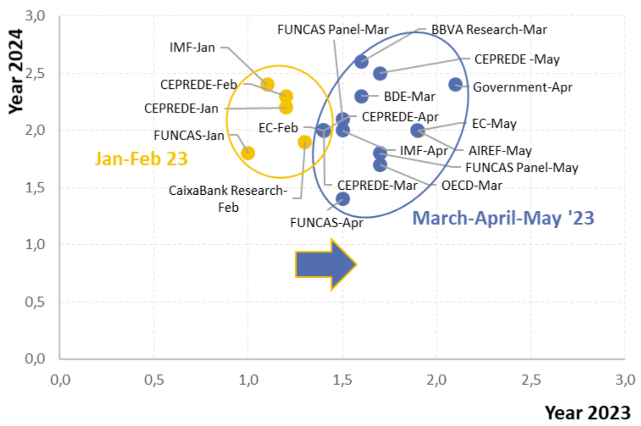
(1) Contribution to GDP growth

Source: Institute of Statistics of the Community of Madrid

IV.2. Forecasts

Domestic growth expectations for 2023 have improved. A first quarter that has far exceeded forecasts, together with a pace of growth in the second half of 2022 that the INE has raised to 0.4% for the last two quarters, are reflected in a new wave of upward revisions in expected growth for 2023, also favoured by the encouraging developments in some of the risks jeopardising the recovery (easing inflation, normalisation of supply chains, reopening of the Chinese economy, etc.). In this regard, compared to the average estimate of around 1.2% in January and February, this average figure has risen to 1.7% between March and May.

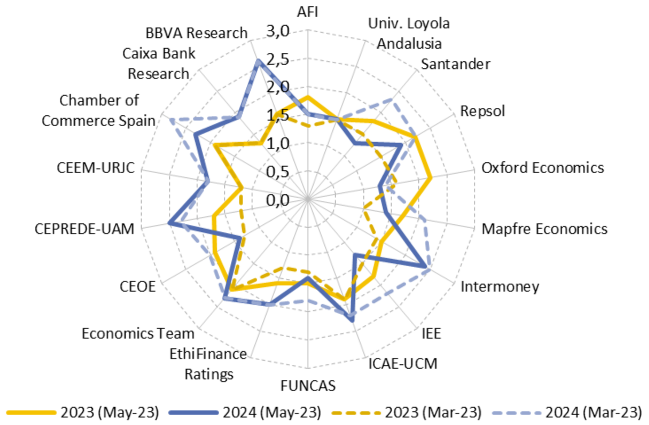
Evolution of national GDP growth forecasts 2023 and 2024



However, many analysts warn that activity in the second half of the year may be strongly conditioned by other factors, such as the still high core inflation or the effects of interest rate hikes. Consequently, a significant slowdown in growth is unanimously expected for 2023 as a whole compared to 2022.

Some of the most recent forecasts, from the Spanish Government, AIReF and the European Commission, estimate that the Spanish economy will grow by around 2% in 2023. The scenario published in April in the Spanish Government's Stability Programme has not entailed changes in the projections set out in the October State Budget, with an expected GDP growth of 2.1% in 2023 and 2.4% in 2024. AIReF's forecasts are along the same lines, albeit somewhat more moderate: 1.9% for 2023 and 2% for 2024. The European Commission, in its spring forecasts, raised the growth forecast for Spain from 1.4% to 1.9% for 2023 and maintained the forecast for 2024 at 2%, in a European context that has also shown a better performance than expected at the beginning of the year and for which growth is estimated at 1.1% this year and 1.6% next year.

Growth forecasts for Spain
FUNCAS Panel

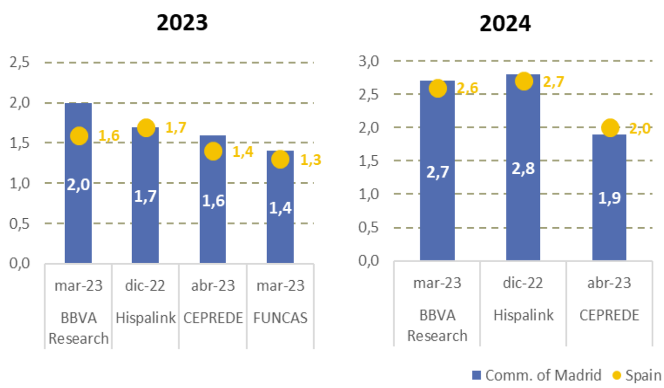


This year's forecasts in the FUNCAS panel for May have also been revised upwards, although they are on average a few tenths of a percentage point lower than the official forecasts. The 2023 forecasts range between 1.2% and 2.2%, although most lie between 1.5% and 1.9%, bringing the average of all forecasts to 1.7%, two-tenths of a percentage point above the March consensus. Looking ahead to 2024, the panellists forecast growth rates between 1.3% and 2.6%, with the average at 1.8%, three-tenths of a percentage point lower than the results of the panel two months ago.

The Community of Madrid is expected to continue performing more dynamically than the Spanish economy as a whole this year, according to the latest estimates. The risks and uncertainties that are present in the global context are reflected in the forecasts available for the region, which stand at an average of 1.7%, compared to the 1.5% projected by the same analysts for Spain. By 2024, growth in Madrid is projected to accelerate to 2.5% on average (2.4% for the country as a whole).

GDP growth forecasts. Community of Madrid and Spain

Actual GDP growth rates



V. Recent developments in Madrid's economy

V.1. Demand and production

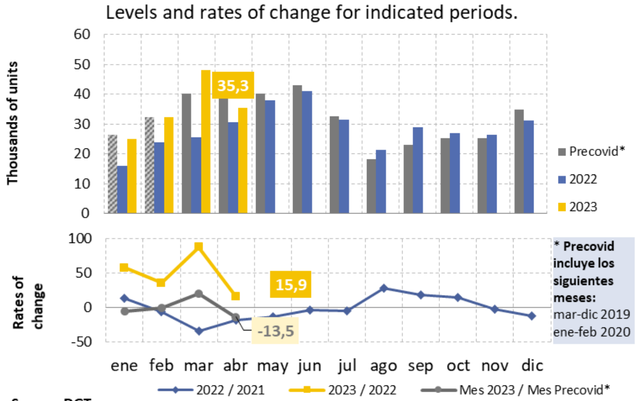
V.1.A. Domestic demand

Passenger car registrations in the first quarter of 2023 hit the second highest volume for this quarter in the series. According to the Directorate General of Traffic, Q1 passenger car registrations stood at 105,560 units, which is 40,147 units and thus 61.4% more than last year. It should be noted that the comparison is made with the second lowest volume for the same period in the series; compared to the first pre-pandemic quarter, it is 3.5% higher.

After closing 2022 with negative figures, the year 2023 began with significant increases in the four months for which information is available, due to the comparison with some complicated months for this sector, affected by the semiconductor crisis, which slowed down car production, the bottlenecks generated by the lack of trucks to transport vehicles to the dealerships, and the economic situation linked to the armed conflict.

The most recent figure, April 2023, grew for the fourth consecutive month, although it slowed down with respect to previous months and failed to surpass the pre-pandemic April.

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 April is slowing down potentially due to growth in January, February and March. This is due to an increase in vehicle procurement and operations from the end of 2022. By channels, companies and rental companies performed the most dynamically.

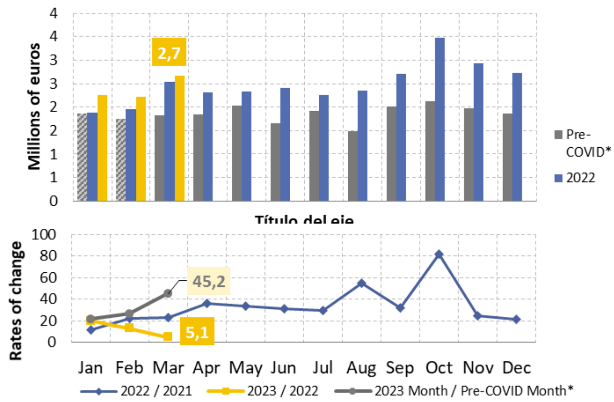
The 18,468 lorry and van registrations in Q1 2023, up 54.1% compared to the same quarter in 2022 and 9.6% more than the same period in 2019. Registrations of this type of vehicle began to grow in December 2022 and have now been on the rise for five months; The most recent data from April amounted to 6,168 units, 23.5% more than in the same month of the previous year, though it slowed down the increase of previous months.

The comparison with April 2019 is positive, with a 3% increase in registrations compared to April 2019.

Petrol consumption in the first quarter reached the highest volume for this period since 2007. This indicator grew by 5.1% versus 2022, and 17% versus 2019. The most recent figure for March reflects the highest consumption for this month since 2007, growing and accelerating to 10.2% YoY, 2.3% in January and February and also exceeding pre-pandemic consumption by 21%.

Diesel consumption in this quarter fell by 5.9% versus 2022 and by 17.2% versus 2019. The most recent data for March shows the fourth lowest consumption in the series for this month, persisting in negative year-on-year rates for the third consecutive month, after the respite in December, although its downward trend is slowing, falling by 1.4%, after January's drop of 10.3% and February's 6%, and fails to exceed pre-pandemic levels, falling by 9.9% compared to the same month in 2019. The rising cost of diesel fuels has led to a downward trend in the consumption of these fuels, which have not recovered despite government subsidies and even the recent timid drop in prices.

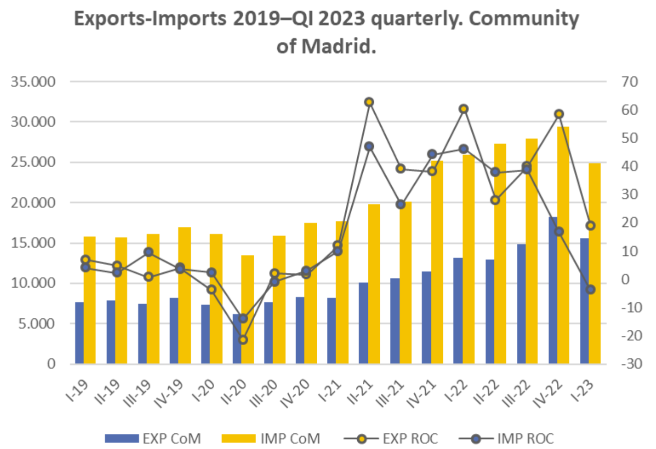
Capital goods imports
Community of Madrid
Levels and year-on-year rates of change.



Imports of capital goods in Q1 2023, the highest for this period; standing at €7,143.8 million, an increase of 12% compared to the same period of the previous year, albeit decelerating from Q4 2022 growth of 40.3%; outperforming Q1 2019 by 37.8%.

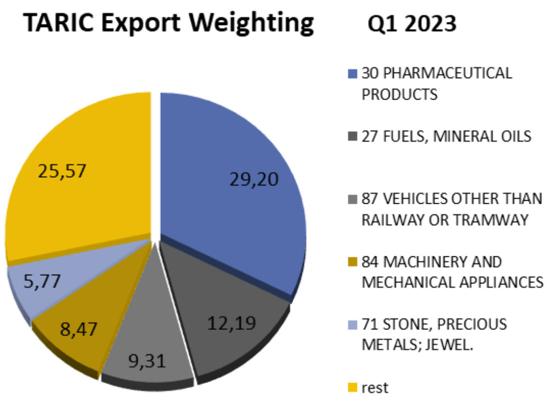
V.1.B. External demand

The year-on-year rates of the Community of Madrid's trade balance back to normal in Q1 2023. Community of Madrid exports rose 19% year-on-year, compared to the 58.4% growth in the previous quarter, standing at €15,633 million, the second highest figure for sales in a quarter, after Q4 2022.



Community of Madrid purchases abroad in Q1 2023 stood 3.9% lower than a year ago, compared to +16.7% in the previous quarter. At €24,920 million, the impressive purchasing figures are the second best in the series, after the peak in Q4 2022.

With the normalisation of the rates of both flows comes the changeover of the main chapters in 2022 in trade balance dynamics. Accordingly, the category that contributed most to increased Q1 2023 exports is *Motor vehicles; tractors* with a contribution of 4.6 p.p., posting sales of €1,455.6 million, a record high in the quarterly series, 14.5% higher than Q4 2022, which had set the previous ceiling. This was followed by *Pharmaceuticals*, leading with a contribution of 4.4 p.p., owing to the manufacture of coronavirus vaccines, which, despite the containment of the pandemic, continues to be the largest item; of the 4,565 million exported in this chapter by the Community of Madrid, 3,155 million corresponds to code 30024110, *Vaccines against coronaviruses*, to a virtually single destination: Belgium. The weight of this category has gone from 38.75% in Q4 2022 to 29.2% in Q1 2023. *Organic chemicals* came third with 3.9 p.p., yet this was due to a stellar performance in January 2023, which, after a 2,023% YoY increase, contributed 14.4 p.p. that month to the increase in the rate, altering the quarterly computation.



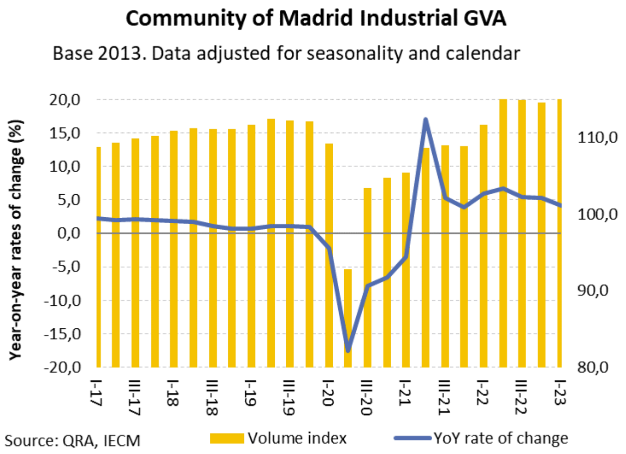
As for Madrid's imports, the contribution that most depressed the rate is *Fuels and mineral oils* with -6 p.p., the 3,838 million bought in the first quarter reduces by 29% the figure of a year ago, favoured by the decrease in the prices of energy products. This was followed by Pharmaceuticals, of which we spent €3,414 million, 25% less than a year ago, which translates into a contribution of -4.3 p.p. to the decline; A 99% reduction in the purchase of coronavirus vaccines linked to the normalisation of the health situation explains this decrease (1,675 million in Q1 2022 vs. 25 million in Q1 2023). In contrast, the most significant contribution, as in the case of sales, comes from *Motor vehicles; tractors,* with €2,363 million in purchases during Q1 2023. This is the second highest figure in the last 15 years after Q4 2022, contributing 1.5 p.p. to the increase in purchases in Madrid. *Stones, precious metals; jewellery* comes next, adding 1 p.p. to the rate and posting the record figure of the quarterly series with €886 million imported.

Ireland is particularly salient in terms of the countries driving the change in exports in the first quarter (Irish contribution of 4 p.p.), for receiving almost the entire January shipment of *Organic Chemicals,* more specifically *Heterocyclic compounds with nitrogen heteroatoms only*. This was followed by Italy and Belgium with contributions of 3.5 p.p. and 2.8 p.p., respectively. In contrast, Portugal was the country subtracting the most points overall: -3.4 p.p. As for purchases, the countries contributing most to the descent are the USA (-4.3 p.p.) and Switzerland (-3.7 p.p.). On the upside, the most notable contributions in the quarter came from Germany (1.4 p.p.), Italy (1.4 p.p.) and the United Kingdom (0.7 p.p.).

V.1.C. Manufacturing

1. Industry

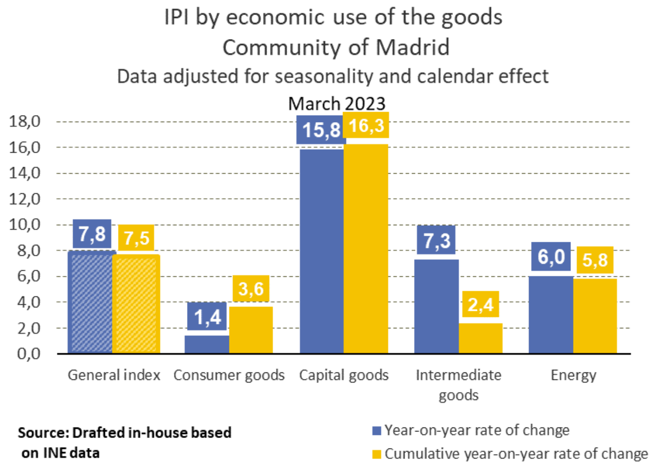
The Industrial Gross Value Added growth rate eased slightly. The year-on-year growth of Madrid's industrial GVA in 2022 as a whole stood at 5.9% (0.6 percentage points higher than in 2021), ending the year with a year-on-year rate of 5.3% in the fourth quarter of the year. The regional industry maintained its expansionary pace, though its growth tempered to 4.2% YoY, according to the Community of Madrid's Quarterly Regional Accounts for Q1 2023.



The Industrial Production Index reasserted its dynamic tone in Q1 2023. After a seasonal and calendar adjustment (SCA), the Community of Madrid IPI reasserted itself with a YoY growth of 7.8% in March, with the momentum carried over from all of 2022, standing at 6.2%. This indicator advanced strongly in the first quarter of the year, posting YoY growth of 7.5%, four percentage points higher than the cumulative growth recorded in the first quarter of 2022. The average first-quarter growth recorded by the Community of Madrid IPI (SCA) is the strongest in the series for all the first quarters of the year since 2006.

The IPI performance in Spain is less favourable than Madrid, with a YoY increase of 4.5% in March, clearly higher than in the past few months. Average growth for the first quarter of the year was 1.5%.

The four components of the Community of Madrid IPI (in year-on-year and SCA terms) had positive year-on-year variation rates in the average of the first quarter of 2023 and all equal or improve the growth of the preceding quarter. The growth of capital goods is particularly strong, with a growth of 16.3%, along with consumer durables 7.3% and energy 5.8%. Non-durable consumer goods grew, albeit less strongly, by 3.5%, while intermediate goods grew by 2.4%.

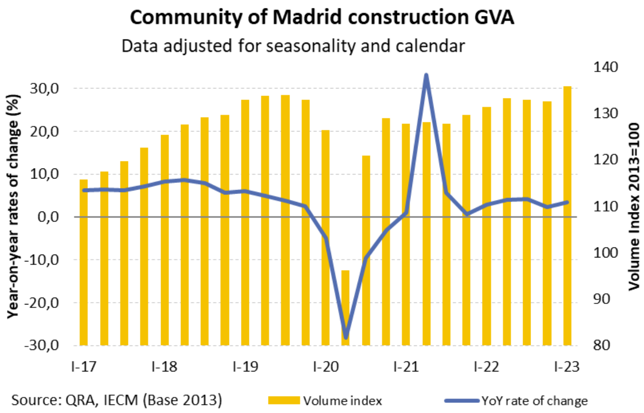


The Turnover Index also performed fairly well, though there was a certain slowdown in the last few quarters. The Industrial Turnover Index (ITI) of the Community of Madrid recorded positive YoY variation rates for 24 of the last 25 months, normally high, although showing signs of deceleration throughout 2022, a deceleration that persists in the first three months of 2023.

Consequently, the Madrid ITI reaffirmed its slowdown in Q1 2023, growing by 6.6% YoY, which was 8.1 p.p. lower than in the previous quarter and below the 20.3% growth recorded in Q1 2022. The Q1 2023 growth of the Madrid ITI proved to be the weakest since Q1 2021 in which Madrid industry turnover shrank by 3.3%, the YoY growth of the remaining quarters of the series since Q1 2021 all exceeded double digits. All monthly YoY growth rates since November 2021 resulted positive and in double digits, except for February and March 2023, which, although positive, were the lowest, which can be analysed as a normalization of rates in a framework of less volatile increases in activity.

2. Construction

Construction GVA continued its strong YoY growth in the first quarter. In 2022 as a whole, regional construction GVA grew by 3.3% year-on-year. This growth was particularly dynamic in the second and third quarters, moderating slightly in the fourth quarter to 2.2%. According to data from the Community of Madrid's Quarterly Regional Accounts for Q1 2023, the sector reaffirmed its growth rate to register a year-on-year growth rate of 3.5%.

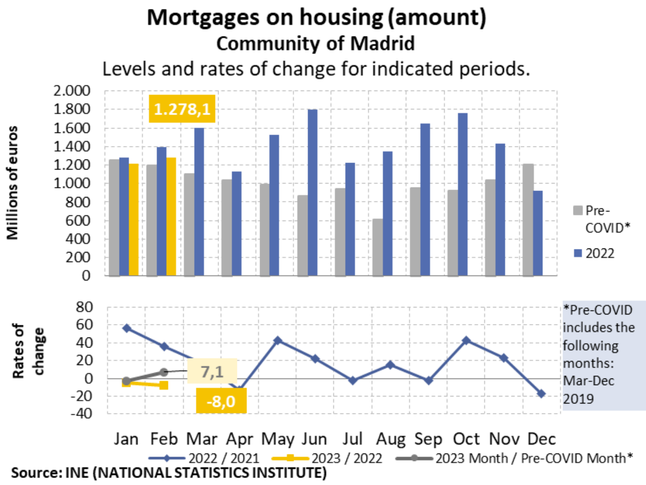


Total tenders in 2022 hit the best level since 2006, contracting in the first quarter of 2023. After the magnificent performance of public tenders in construction recorded in 2021 and 2022, the latter year showing the highest level of activity since 2006 with a total volume of €4,526.6 million, it contracted in the first quarter of 2023, down 54.6% from a year ago. This year-on-year decline is explained by the negative performance of the civil engineering segment, which fell by 81% year-on-year and accounted for 33.6% of total tenders in the first quarter of the year, while the building segment grew by 51.3% compared to the same quarter of the previous year and accounted for 66.4% of total tenders in the quarter.

The other leading indicators, with data through February 2023, all contracted year-on-year. Thus, in the January-February accumulated period, building permits fell by 47.6%. The number of housing permits fell by 3.4% YoY in the first two months of the year. The total surface area with permits fell by 8.8% and the total amount of surface area with permits fell by 2.8%. In the same cumulative period, completion certifications, a lagging indicator, grew strongly, by 23.9%.

The residential market flexed downward in the first quarter of the year. The INE (National Statistics Institute) reports that home sales and purchases accelerated significantly in 2021 as a whole, growing by 38.3% YoY versus 2020. This expansionary trend in 2021 continued in a more moderate fashion in 2022 as a whole, which showed a more modest year-on-year growth of 2.7%, marking a clear deceleration caused by the new housing segment, whose sales fell by 12.6% in 2022, while used housing grew by 8.1%.

Home sales contracted significantly in Q1 2023, with a year-on-year decrease of 11.1%, 14.2% in the new homes segment and 10% in the pre-homed segment.

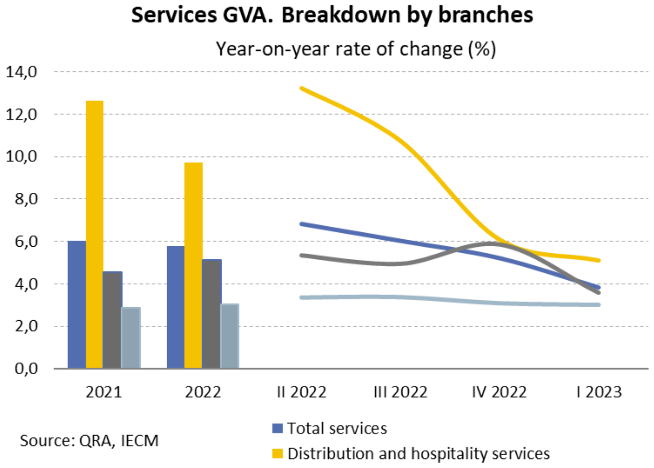


Mortgage statistics have improved significantly in 2021 and 2022, with year-on-year growth in the number of residential mortgages (19.4% in 2021, 10% in 2022) and in equity (30.9% and 16.2%). At 80,710 home mortgages, 2022 marks the year with the highest volume of home mortgages taken out in Madrid since 2010, while, at €17,061 million, it has the highest volume of capital loaned since 2008. This excellent performance was cut short in the January-February 2023 accumulated period, with negative year-on-year variation rates of 7.6% in the number of home mortgages and 6.6% in capital constituted.

These results are consistent with the new interest rate framework, which undoubtedly provided an additional boost to mortgage indicators in the second half of 2022 by bringing forward transactions.

3. Services

Annual GVA growth in the services sector persists in Q1 2023 in the region. The real GVA of services (SCA) grew 1.1% in Q1 2023, up 1.1% from the previous quarter, or 3.8% year-on-year. This trend consolidates the annual GVA figures for services, which grew by 5.8% in 2022.

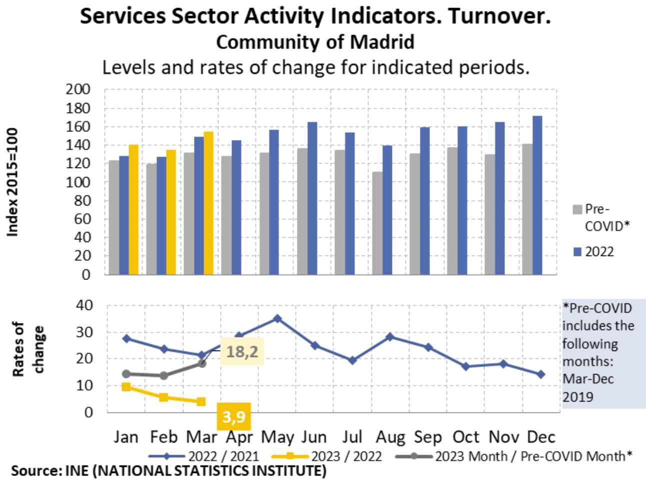


All branches in the services aggregate posted growth in real GVA (SCA) versus the previous quarter. Particularly salient was the 2.5% increase in *Distribution and Hospitality Services*, while *Other services* grew by 0.8% and *Business and Financial Services* nudged up by 0.5%. All branches grew year-on-year in Q1 2023: *Distribution and hospitality* by 5.1%, *Business and Financial Services* by 3.6% and *Other services* by 3%.

The Services Sector Activity Indicators (SSAI) kept up an annual growth above pre-pandemic levels. In Q1 2023, SSAI revenue grew 6.2% YoY in the Community of Madrid, 10.1% in Spain, thus extending the pattern that began in Q2 2021. This index level stood at 18% above Q1 2019 in Madrid and 22.4% in Spain. Please note that this indicator is not deflated.

The latest available data for March reveal a year-on-year growth of 3.9% in the Community of Madrid and 9.8% 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. Year-on-year growth in the Community of Madrid in Q1 2023 was 3.1%, up from 1.9% in Spain and, like business, has been growing steadily since Q2 2021. Moreover, the indicator in this first quarter of 2023 exceeded pre-pandemic levels, advancing 4.2% in the region and 2.1% in Spain compared to the first quarter of 2019.



The latest available data for March reveal a year-on-year growth of 3.3% in the Community of Madrid and 2.1% in Spain.

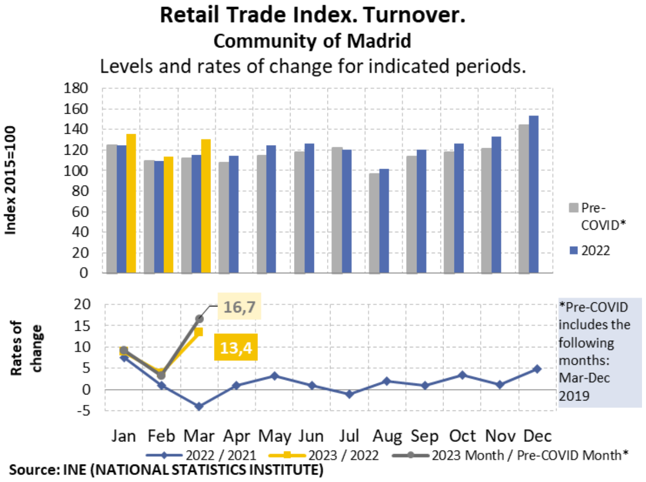
Air passenger and freight traffic and metro and urban bus transport improved their performance, nearing pre-pandemic levels. Passenger flows at Adolfo Suarez Madrid Barajas Airport increased in Q1 2023 to 13,420,241 passengers, versus 9,120,107 in Q1 2022, and are now nearly at the 13,436,185 passengers registered in Q1 2019.

Additionally, freight traffic at Madrid airport increased by 7.5% YoY in Q1 2023, and is 15% above Q1 2019 levels.

In Q1 2023, urban transport in Metro de Madrid posted a significant year-on-year increase of 24.7%. Urban bus transport also posted similar growth, with a 20.6% year-on-year increase. However, recovery is still incomplete (3.5% and 7% below pre-pandemic levels respectively).

Turnover and Employment figures in the Retail Trade Index (RTI) continued to rise in the Q1 2023. The Q1 2023 deflated RTI turnover index in the Community of Madrid was 8.8% higher than in the same quarter of 2022, continuing the progress initiated in Q3 2020. Since then, quarterly data have exceeded the pre-pandemic level. The most recent figure, from March 2023, grew by a remarkable 13.4% year-on-year, thus eight consecutive months of increase.

In Spain, the index grew by 7% year-on-year in the first quarter, the second consecutive increase and 1.6% above the pre-pandemic level.



In turn, in Q1 2023, the regional employment rate returned to the growth path that began in Q2 2021, after a slight decline in the previous quarter, rising 0.2% year-on-year in the region and 1.2% in Spain. Similarly, and in relation to the first quarter of 2019, it posted a similar increase.

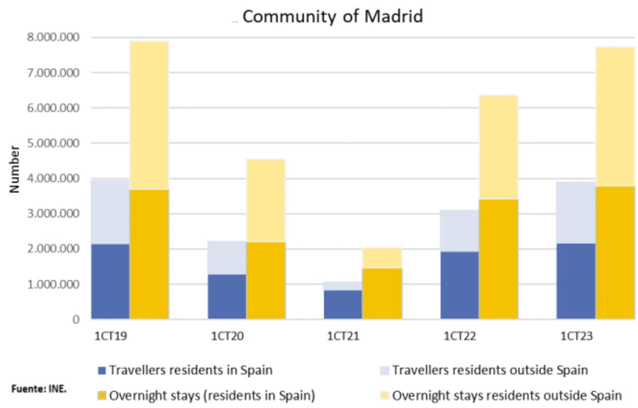
Hotel activity in the Community of Madrid continued to improve in Q4 2023,[1] and advanced to a nearly complete recovery of pre-pandemic levels. In 2023, slightly more than 3,890,764 passengers were welcomed compared to 3,091,565 in the same quarter of the previous year, continuing the upward trend that began in Q2 2021. However, the level is still below the pre-pandemic data; in Q1 2023, 1.3% fewer tourists came than in the same quarter of 2019, when the number of travellers exceeded 3.9 million.

Overnight stays paralleled the behaviour of incoming travellers. In the first four months of the year, 7,720,164 travellers stayed overnight, surpassing the total for the same period of the previous year by more than 1.3 million, and coming close to the 2019 total of 7,901,826 overnight stays. It should be noted that the number of travellers and overnight stays in April topped the pre-pandemic figures for the same month for the first time.

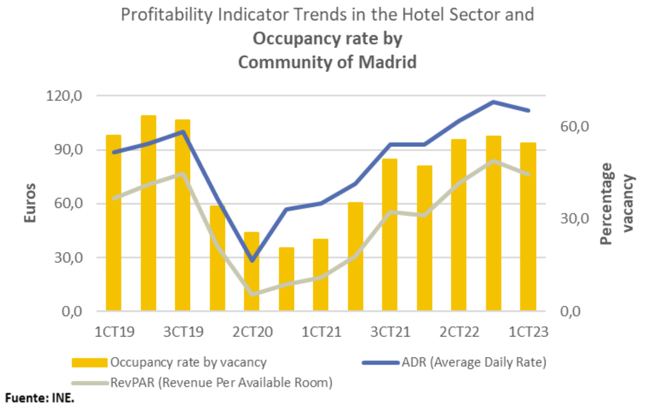
By markets, the influx of travellers to the Community of Madrid, this four-month period again corresponds mostly to residents in Spain (56.1%), nearing the pre-pandemic weight (54.8% in the first four months of 2019). The later recovery of international demand means that the number of travellers in this segment remains below pre-pandemic, though the number of residents is already above pre-pandemic. Overnight stays by foreigners exceeded nationals for the second four-month period, with 50.9% of the total in 2023 (53.3% in the first four-month period of 2019), although they are still 6.6% lower than the corresponding pre-pandemic figures.

With regard to the occupancy rate, the average of 54.6% for the first four months of 2023 is an improvement on the 47% of the first four months of 2022 and is close to the levels of the first four months of 2019, when it reached 57.1%.

Travellers and overnight stays per origin in Q1 2019–2023



With regard to the profitability indicators of the hotel sector, in the first four months of 2023, the Average Daily Rate (ADR) per occupied room stood at €112.10 in the Community of Madrid, 26.2% higher than the average rate in the first four months of 2019. The regional daily average for Revenue Per Available Room (RevPAR) was €76.10 in the first four months of 2023, 20.9% higher than in the same four-month period of 2019.



[1]This period enables an analysis regarding the indicators of the Hotel Tourism Situation Survey, given the effect caused by the calendar variation of the Spanish Semana Santa holidays (Easter week).

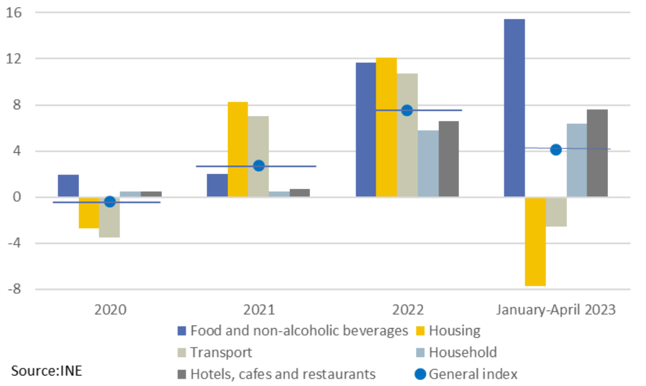
V.2. Prices and wages

Headline inflation continued to contain Q1 2023 increases, while core inflation remains on the rise. Falling fuel prices, a tempered rise in electricity and gas prices, and the staggering effect of the sharp increases of a year ago continue to contain the rise in inflation in Q1 2023. After opening the year with a 5.3% inflation rate, slightly higher than in December, the rate was held back by one-tenth of a percentage point in February, and in March, affected by the sharp rise in energy products a year ago, ultimately moderating the rate considerably to 2.6% year-on-year. Thus, average CPI inflation in the Community of Madrid was 4.4% in Q2023 versus 5.7% in Q4 2022. However, the most recently published inflation figure for April is eight-tenths of a percentage point higher than the previous month, at 3.4% year-on-year.

The favourable comparison of energy products in Q1 2023 regarding the electricity and fuel price hikes a year ago have "deflated" this inflation. The directly affected groups 'Housing' and 'Transport' made the clearest downward contribution in this period. Between the two groups, they drained more than 2.7 p.p. from the variation in the year-on-year rate. In March, 'Housing' posted a rate of -12.1% and 'Transport' -8.1%, the lowest in years. Thus the special group *Energy Products*, which had accumulated 52.1% inflation since February 2023 (peaking in July 2022), is gradually easing to reach a cumulative inflation of 17.8% in February 2020–April 2023.

Average inflation performance of the most inflationary groups

Community of Madrid

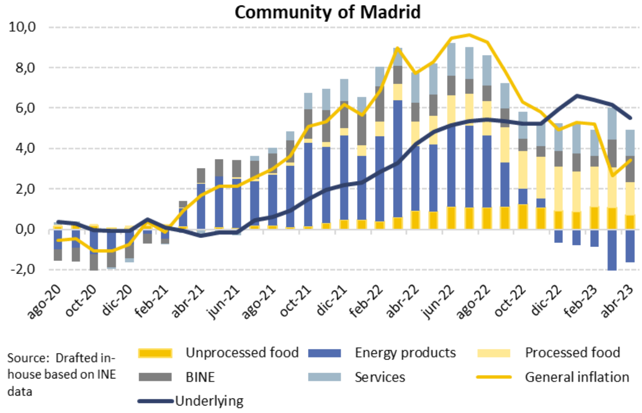


Source:INE

Of the remaining groups, 'Food and Non-alcoholic Beverages' is particularly noteworthy for its high inflation, with an average inflation rate in the first quarter of 16.3%, the highest in the history of the series. In 2022, the average inflation in this group was 11.7%. The most recent figure for April shows a moderation to 12.9%, although not due to a drop in prices, but rather to a favourable comparison. Restaurants and Hotels' slightly contained the average rate of the previous quarter and posted 7.6%, though the latest figure for April was three-tenths of a percentage point higher than in March and stood at 7.5%. The 'Furniture and Household Goods' group, which closed 2022 with a rate of 7.4%, seems to be moderating and the latest data for April shows a rate of 5.5%. Finally, mention should be made of 'Other Goods and Services', where inflation has been above 5% in all months of 2023. The trajectory of core inflation is conditioned by the behaviour of these groups, which in principle are far removed from the increases in energy products.

Contribution to inflation by components

Community of Madrid



Source: Drafted in-house based on INE data

Core inflation, in which only the more structural and less volatile components are involved, **has been more subdued in 2023, after peaking in January at an all-time high of 6.6%**. The rate has gradually declined to 5.5%, the latest figure published in April. However, the Community of Madrid has remained, since July 2022, the region with the lowest rate of all Autonomous Communities.

The chart above shows how, from the end of 2022, the contribution of energy products changes sign, with the fall in the last two months accentuated by the pass-through effect. Nonetheless, *Processed Foods*, *Non-Energy Industrial Goods* (NIEG) and *Services* have exerted the most significant upward influence in recent months, justifying the differential between headline and core inflation.

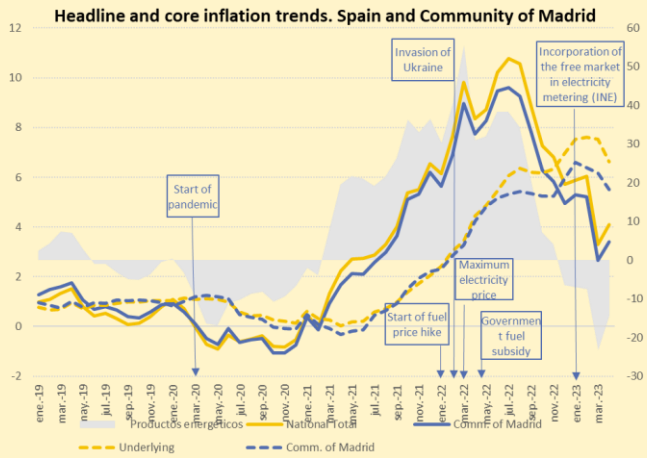
General inflation in the Community of Madrid since the beginning of the pandemic, February 2020-April 2023, is 13.3%, the lowest of all the Autonomous Communities. By groups, the inflation of the 'Food and non-alcoholic beverages' group stood out with 27%, followed by 'Clothing and footwear' with 17.3% and 'Restaurants and hotels' with 13.8%. Housing' and 'Transport' accumulated inflation of 9.6% in both cases. At the other end of the spectrum we find 'Communications', down 0.9%, and 'Health' with a slight increase of 0.7%.

Sidebar I. Inflation trends in the Community of Madrid since the start of the pandemic

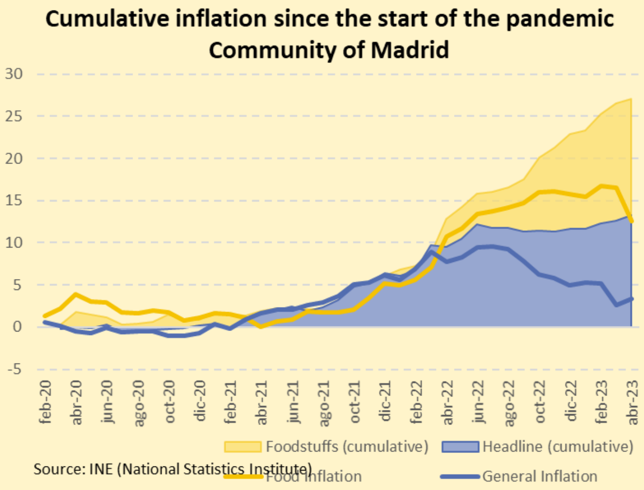
Scenario of the unfolding inflation.

Our consumption habits were altered in part by the outbreak of the pandemic in February 2020. An early one was the increase in the consumption of goods, especially durables. Businesses and households had to adapt their environment to teleworking and remote learning, which resulted in increased consumption of technological goods. Meanwhile, restrictions on leisure of a more social nature had a major impact on passenger transport and tourism companies and also led to an increase in savings that were subsequently channelled into higher consumption, first of durable goods and then, where possible, of the leisure restricted during the pandemic.

Supply tried to cope with the increase in demand for durable goods, but the increase in production proved to be insufficient. Major bottlenecks arose at the largest seaports, resulting in a shortage of containers, causing a sharp rise in container costs and bottlenecks that led to a lack of supply in the production lines. These developments, together with the zero COVID-19 policies in China and other Asian economies, added pressure on supply through the second half of 2021, extending into 2022. In late February, the invasion of Ukraine added to the year, putting further stress on international markets, particularly with regard to raw materials and energy supplies. By March 2022, the price of Brent crude oil topped 133 dollars/barrel while the price per megawatt/hour of electricity exceeded 294 euros, both record highs.



A combination of favourable weather conditions, lower gas prices, government fuel subsidies, and the VAT rebate on electricity, aided by the pass-through effect that became acute in March 2023, managed to reduce the price of energy products and cut overall inflation. However, core inflation, which began to rise more gradually, alternated between periods of rising inflation and periods of some stability.



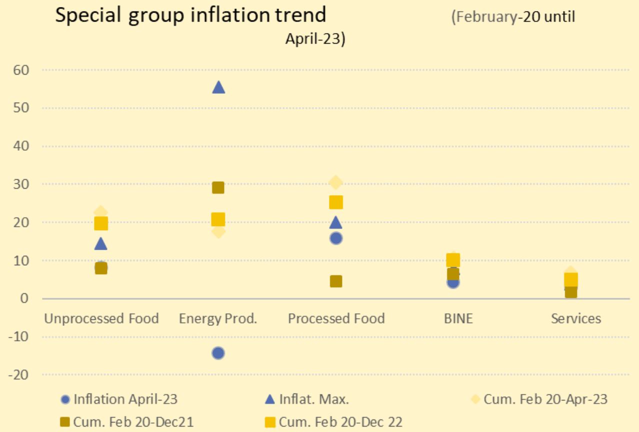
Cumulative inflation since Feb 2020. The chart shows that headline inflation and the food subgroup were stable from the beginning of the pandemic until July 2021. From that month onwards, a parallel upward climb began in general and also the *Foodstuffs* subgroup. However, their trajectories diverge from April 2022 onwards, with the *Foodstuffs* subgroup continuing on an upward trajectory, while the overall trajectory shows a gradual containment. This tendency is reflected in both cumulative inflation rates, which in the case of *Foodstuffs* soared to 27% in April, while headline inflation stabilised and stood at 13.3% in April.

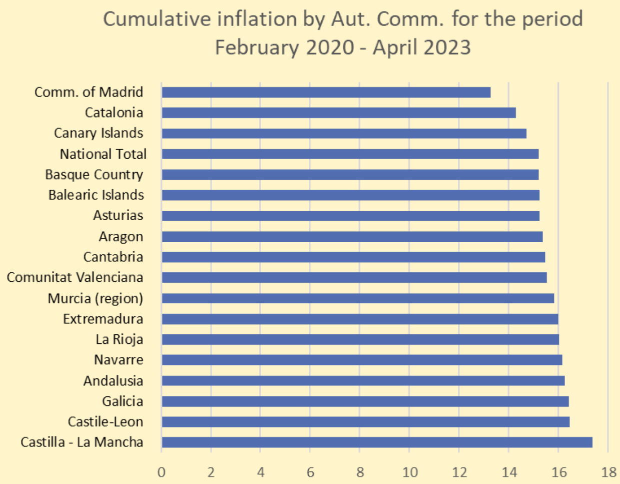
Several factors have contributed to this rise in the subgroup *Foodstuffs*: the pass-through of higher energy prices to production and distribution costs, feed and fertilisers key to agricultural costs and higher farm gate prices dependent on international market quotations (such as sugar or cereals), prices affected by the war in Ukraine and by a major drought that substantially reduced harvest yields.

While other groups have also shown a progressive rise, the rise in *Foodstuffs* is the most intense and the one that has contributed most to a more expensive shopping basket. In fact, it is the group with the highest weighting in the basket and whose consumption is essential in our daily lives.

Considering the division by special groups, the following chart shows how the cumulative inflation of the different groups has been trending. *Energy Products* reflect the decline in their cumulative inflation as we move forward in time, with the cumulative up to December 2021 reaching its maximum at 29.1%. Cumulative inflation up to April 2023 (latest data) fell to 17.8%, which together with the latest inflation data shows the downward trend of this group.

However, *Processed Food* clearly reflects how cumulative inflation has been increasing over time, bringing the cumulative rate Feb 20-Apr-23 to 30.6%. This is also the case for *Unprocessed Food*, albeit with less dispersion in the differences between the data, with the cumulative rate Feb 20-Apr-23 standing at 22.5%. NIEG and Services showed greater stability, albeit slightly upward.





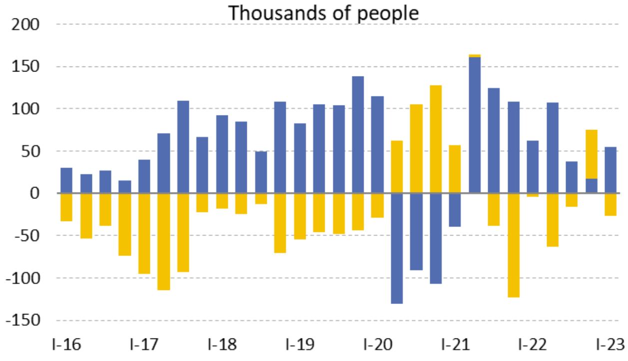
In terms of Autonomous communities, Madrid has performed the best in this inflationary period. From April 2021 to July 2022, with the exception of July and September 2021, it has been the region with the lowest cumulative inflation only above the Canary Islands, and from August 2022 onwards, the Community of Madrid has been the least inflationary region, both in cumulative and year-on-year terms. All of them depict a smooth upward profile of their cumulative inflation.

The *Foodstuffs* subgroup, which has contributed the most to the increase in headline inflation from August 2022, has the least weight in the Community of Madrid.

V.3. Labour market

1. LFS

Promising LFS results in Q1 2023: Significant gains in jobs, a substantial reduction in unemployment and a new peak in the labour force. The Q1 LFS reveals increases in employment and reductions in unemployment, both quarter-on-quarter and year-on-year, resulting in the number of active workers reaching its highest level ever and a notable reduction in the unemployment rate.



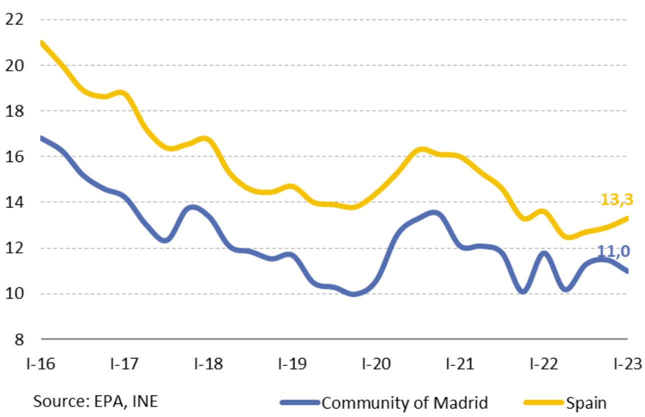
Source: Spanish Labour Force Survey (LFS; also referred to by its Spanish acronym EPA -Encuesta de Población Activa), INE

The YoY growth of the employed population accelerates and unemployment returns to year-on-year declines, with the pace of YoY growth in the labour force headcount slowing down. Let's look at how the figures depict this. The jobholder tally increased by 31,400 in the first quarter of the year, 1.7% more than a year ago and 1.2 p.p. higher than the year-on-year growth in the fourth quarter. This brings the total figure to 3,224,300 employed, a record for a first quarter and very close to the employment figure for Q2 2022, the current all-time high of 3,231,000.

In the first quarter, the number of unemployed people in the region decreased notably, by 16,100 people and once again fell below the 400,000 mark, 3.9% less than in the previous quarter, with 399,110 unemployed in the Community of Madrid. This is a very positive figure, as it is the second largest reduction in unemployment in a first quarter since 2004, second only to 2021, a year with an atypical comparison. When coupled with the sharp increase in unemployment a year ago, this translates into a year-on-year decline of 6.3%, compared with a year-on-year increase of 16.1% in the fourth quarter of 2022.

Given that the increase in jobholders exceeds the decrease in the unemployed in the quarter and in the year, the labour force in the Community of Madrid rose to 3,623,400 people, a record high in the series, 15,200 more active than in the fourth quarter, 0.4% more than in the previous quarter. This increase is notably more subdued than the exceptionally high growth recorded a year ago and, as a consequence, the year-on-year increase in assets has slowed from 2.1% in the last quarter of 2022 to 0.8% at present.

The activity rate rose by one-tenth of a percentage point in the quarter, but fell by six tenths of a percentage point over the year to 66.3% of the population aged 16 and over. This is the result of a more dynamic behaviour of the labour force than of the working-age population in the quarter, but not in the year.



Source: EPA, INE

Nevertheless, the unemployment rate in the Community of Madrid fell half a point from the previous quarter to 11% of the labour force, eight-tenths of a point lower than a year ago. The regional unemployment rate thus widened its differential with the national rate to 2.3 p.p.

In the Autonomous Community context, Madrid is the third in terms of labour force headcount, jobholders and the unemployed, behind Catalonia and Andalusia. The activity rate was once again the highest in Spain this quarter, while the unemployment rate was the eighth lowest in the country.

It also recorded the second largest increase in the number of jobholders in the quarter and the fourth largest increase in the year. It also took a leading role in the fall in unemployment, with the largest reduction in unemployment in the quarter, only behind Andalusia, and the third largest in the year. In year-on-year terms, employment increased in fourteen Autonomous Communities and unemployment fell in nine. Employment rose while unemployment fell in five regions in the quarter and in eight regions in the year, including Madrid in both groups.

Sidebar II. Q1 2023 LFS Flows

A.- Q1 2023 LFS Flows at a Glance

Image 1

Diagram of flows between quarters IV-22 and I-23

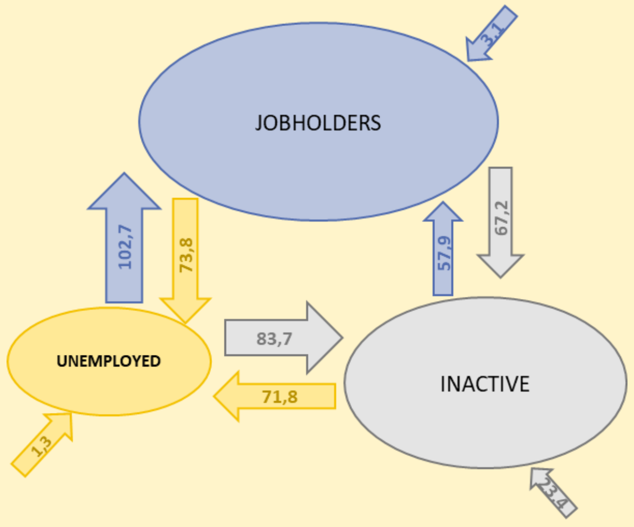


Image 2

Employment (E), Unemployment (U) and Inactivity (I) transitions from IV-22 to I-23 (thousands of people).						
		I-23	Employment 3.224,3	nemployme 399,1	Inactivity 2.101,6	Outflows (b)
IV-22		Bilateral flows	ENTRIES			
			J	P	I	
Employment	3.201,8	OUTFLOWS J		73,8	67,2	141
Unemploym	438,6	P	102,7		83,7	186,4
Inactivity	2.056,9	I	57,9	71,8		129,7
No data	-	ND	3,1	1,3	23,4	
Inflows (a)			163,7	146,9	174,3	
Net balance (a)-(b)			22,7	-39,5	44,6	

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

Image 3

LFS Flows I-23. Breakdown of inflows, outflows and balances

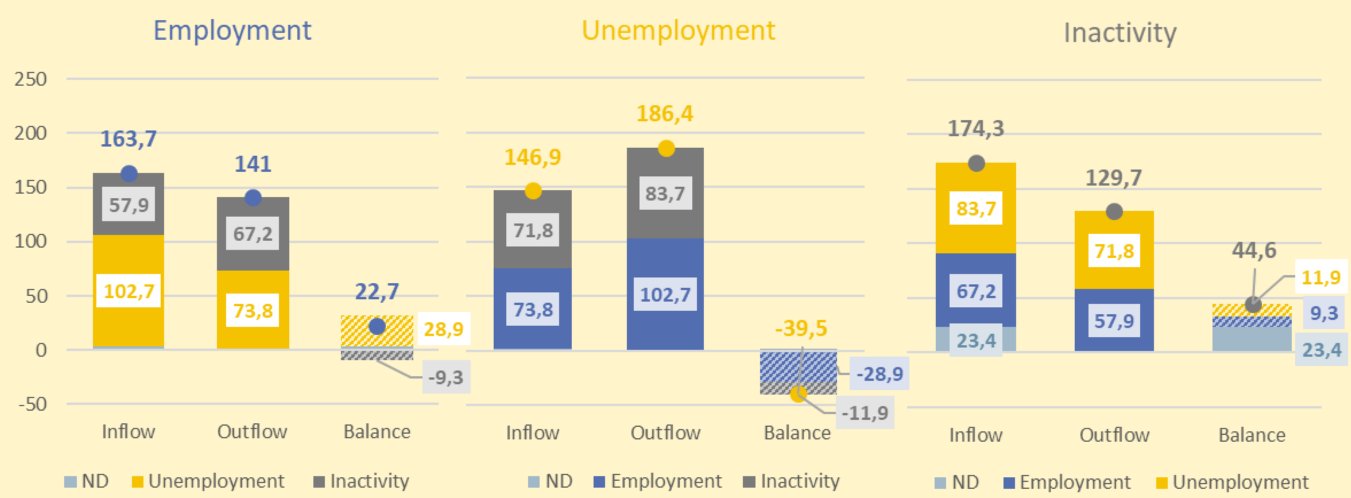


Image 4

Transition from IV-22 to I-23 data through flows between employment, unemployment and inactivity				
		Thousands of people		
		Employment	Unemployment	Inactivity
IV-22 Data from LMSF		3.201,8	438,6	2.056,9
Flow balance	- between Employment and Uner	28,9	-28,9	-
	- between Employment and Inac	-9,3	-	9,3
	- between Unemployment and Ir	-	-11,9	11,9
No data		3,1	1,3	23,4
I-23 Data		3.224,3	399,1	2.101,6

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

Image 5

Square using data from Flow Survey (LMSF) with LFS data in I-23			
	Thousands of people		
	Jobholders	Unemployed	Inactive
I-23 (LFS=LMSF)	3.224,3	399,1	2.101,6
IV-22 (LMSF)	3.201,8	438,6	2.056,9
Quarterly difference per LMSF (A)	22,5	-39,5	44,7
IV-22 (LFS)	3.193,0	415,2	2.100,4
Quarterly difference per LFS (B)	31,3	-16,1	1,2
(B) - (A)	8,6	23,4	43,4
LMSF-EFS data difference in IV-22	8,8	23,4	43,5
Unexplained difference	0,2	0,0	-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 a comparison of the first quarter with the fourth quarter so we can gain a better understanding of the components involved in rising employment, falling unemployment and increased inactivity in this first quarter of the year.

We will therefore look at the determinants of the differential behaviour of employment and unemployment in this first quarter, which has seen a particularly favourable performance of the labour market. Only four years in the past two decades have recorded increases in employment with reductions in unemployment in a single first quarter: 2004, 2007, 2018 and 2021; and now 2023.

As we shall see below, there are two key factors behind this behaviour: employment-unemployment transitions, and the age structure of the population (explaining the net balances in favour of inactivity in the bilateral flows of inactivity with employment and unemployment).

A first overview of the flows is given in Image 1. The largest is the number of people exiting unemployment and entering employment in Q1 2023 (102,700 people), which is decisive in explaining the promising quarterly performance of jobless and jobholders (image 3). Remarkably, its value is the fourth highest in the series for a first quarter.

This flow, together with the incorporations into employment from inactivity (57,900), constitute the **inflow into employment**, with a total of **163,700** in Q1 2023, the third highest number of new entrants to employment in a first quarter.

Transitions in the opposite direction, **job outflows**, are almost equally divided between workers who become inactive (67,200), and those who lose their jobs (73,800). This flow is particularly contained (the fifth lowest in the first quarter of the year). Overall, 141,000 people were no longer in employment in the quarter, a limited number in the light of the historical comparison of the first quarters.

The difference between the inflows and outflows of employment quantifies the increase in employment in the quarter, which grew by 22,700 people according to the flow statistics, the second largest increase for a first quarter, only surpassed by 2006.

Images 3 and 4 show that this quarterly growth in employment was the result of a positive balance of 28,900 more persons in favour of employment in the employment-unemployment transition, which was held back by the negative balance of 9,300 persons for employment in the bilateral flows with inactivity, as a result of the greater outflow of employed persons into inactivity (67,200) than of incorporations into employment from inactivity (57,900).

We may therefore conclude <u>that employment growth in Q1 is driven by the noteworthy incorporation of previously unemployed people and dampened by the net outflow of people into inactivity</u>. 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 two main ones show very similar levels in this quarter: the inactive population in the previous quarter (71,800), which the historical comparison shows to be very contained, in addition to the 73,800 workers who lost their jobs already mentioned above. This total (146,900) is the third lowest number in the series for a first quarter.

In addition to the most significant flow this quarter (transition of 102,700 unemployed into employment), the **unemployment outflow** entails an elevated outflow into inactivity (83,700 unemployed). Altogether, 186,400 people are no longer counted as unemployed, the fifth largest flow for a first quarter.

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 39,500. Given the encouraging performance of unemployment inflows and outflows in this quarter, it is not surprising that the current reduction in unemployment was only exceeded in the first quarter by the 2021 figures.

Images 3 and 4 show that this decline in unemployment is the result of the net outflow of unemployed persons into employment (28,900 already mentioned) and a net outflow of 11,900 persons into inactivity.

<u>This net outflow of unemployed into inactivity</u> of 11,900 persons, coupled with the net outflow from employment (9,300), and the incorporation of inactives whose situation was not known in the previous quarter (23,400), pushed the number of inactive persons to 44,600 in the quarter, the third highest in the series of first quarters.

The <u>quarterly change in LMSF flows regarding employment, unemployment and the inactive workforce points in the same direction</u> but fails to match in quantities, with <u>the quarterly change in these variables</u>

according to the LFS[2] (broken down in image 5). The flow analysis thus helps to explain the quarterly variation of the three main variables.

In terms of jobholders, the discrepancy in the quantities this quarter is relatively small, as depicted in table 4, and the appendix to this sidebar. LMSF and LFS recorded employment increases in the first quarter of 22,500 and 31,300 respectively. Therefore, employment flows help to explain the variation in the number of jobholders reported in the LFS.

The quarterly difference between the LMSF and LFS is growing in terms of unemployment and especially inactivity. Unemployment flows show a significant fall in unemployment in the first quarter (the already analysed 39,500 less unemployed), while the LFS posted lower decrease of 16,100 unemployed. The inactivity flows indicate an increase of no less than 44,700 inactive persons in the first quarter, a growth that the LFS limits to 1,200 individuals.

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 fourth quarter.

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

B.- Q1 2023 flows, year-on-year comparison and historical perspective. A graphic overview.

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 first 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 Q1 2023 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 first quarters of the series according to the flow statistics. They also show the reconciliation of LMSF/LFS data.

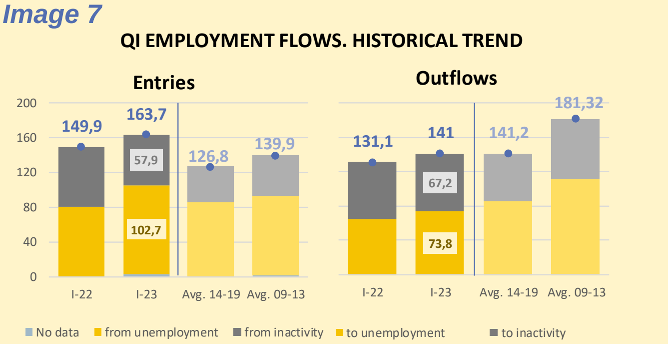
Image 6

Labour market flows CoM

	I-23		Historical comparison (thousands of people)	
	Thousands of people	Yearly variation (%)	I-22	Avg QI 14-19
Employment inflows	163,7	9,2	149,9	126,8
Employment outflows	141,0	7,6	131,1	141,2
Unemployment inflows	146,9	-9,7	162,6	177,2
Unemployment outflows	186,4	35,7	137,4	174,2
Inactivity inflows	174,3	18,5	147,1	159,9
Inactivity outflows	129,7	-21,3	164,7	132,1

Source: Labour force flow statistics (LMSF, INE)

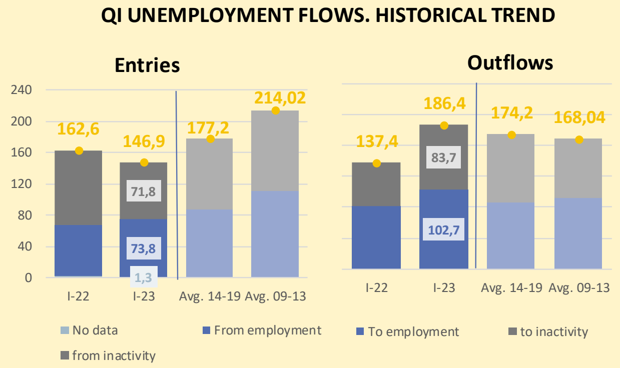
Image 7



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

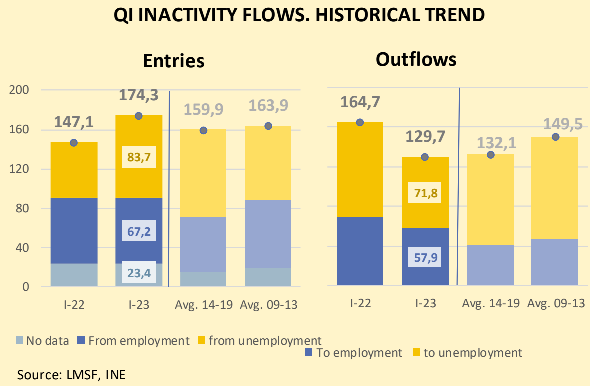
[2] The INE commented on the discrepancy between LFS and LMSF, stating "due to the compiling methodology, the results do not necessarily match the net balances of the quarterly LFS, with the differences primarily explained by the 'no data recorded' groups (people turning 16 at the changeover from one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

Image 8



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

Image 9



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

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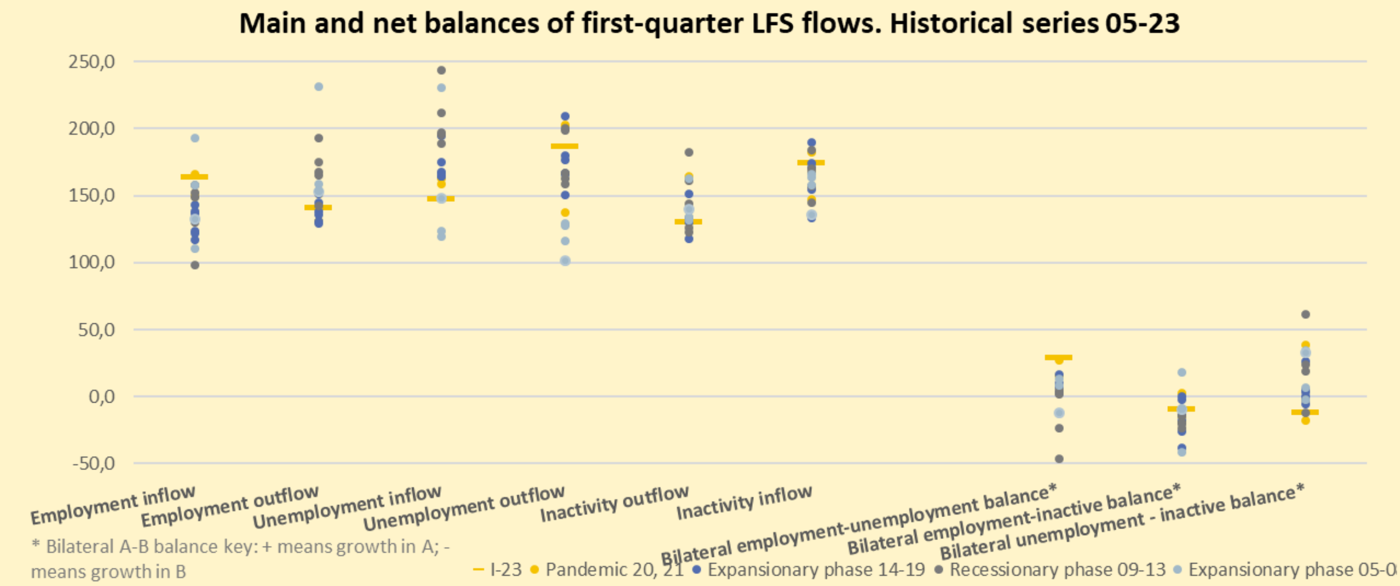
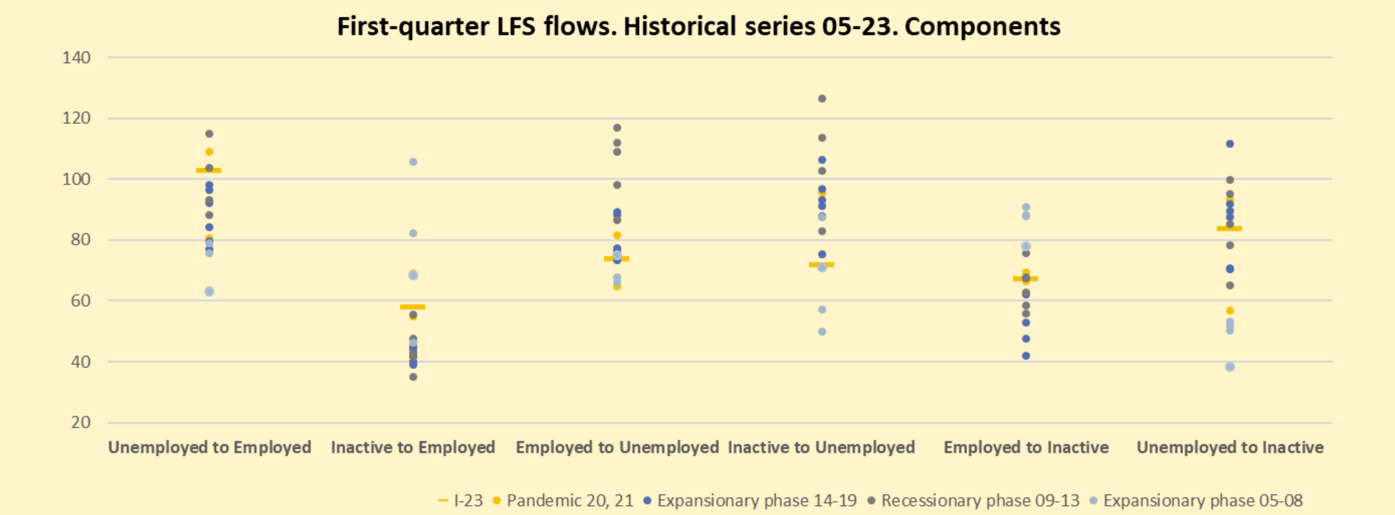
Image 10



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

Image 11



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

C.- 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 2006–2023 for the first quarters based on their constituent bilateral balances, thus rendering a synthetic overview of the flows described so far.

The growth in employment in Q1 2023 (image 12) is exclusively due to the net incorporation of previously unemployed, whose volume is the highest in the series.

Its second component, the net flow with inactivity, continues the trend it has historically shown, draining employment gains in the first quarters of the year.

The third bilateral flow that factors into labour market dynamics is the net balance between unemployment and inactivity (refer to Image 13), which, contrary to the trend observed a year ago, contributed to reducing the number of unemployed, reducing unemployment by 11,900 individuals. Larger bilateral balances tipping towards inactivity were only recorded in the first quarters of 2021 and 2014.

D.- Conclusions

The Q1 2023 LFS results have been more encouraging than expected, combining increases in employment with reductions in unemployment, an unusual synchrony in the performance of a first quarter.

The LFS flow statistics provide insight into the origin of these quarterly variations, and identify particularly favourable flows between employment and unemployment as the main drivers.

Thus, the volume of unemployed who become employed in 2023 stands out for its high number, 102,700, the fourth highest value for a first quarter of the year (the series begins in 2005).

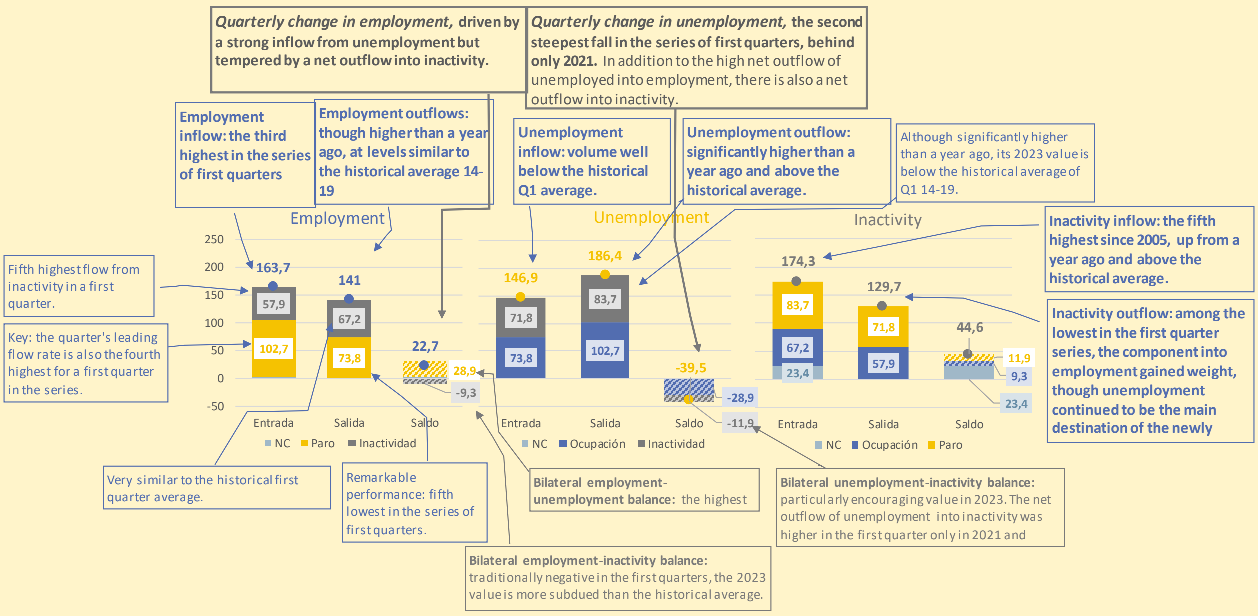
This factor is compounded by the weakness of the flow of employed people who lose their jobs and become unemployed, limited to 73,800 people, and which, despite growing in year-on-year terms (in Q1 2022 it reached its lowest level for a first quarter), is notably lower than the historical average.

Both factors have led to the bilateral employment-unemployment balance reaching its highest value in a first quarter in 2023, and the transition between employment and unemployment is the key factor explaining the increase in employment, which would have been higher if it had not been held back by the net outflow of jobholders into inactivity.

With regard to the reduction in quarterly unemployment, the strength of the bilateral flow with employment is coupled with a net outflow of unemployed into inactivity.

Behind this increase in inactivity, fuelled by the bilateral balances with employment and unemployment, the age structure of the current population over 16 years of age cannot be ignored, with an increase in the number of retirements currently being recorded which is not being fully offset by the incorporation of young active people into the labour market.

Graphical summary of conclusions



Appendix - LMSF-LFS variable matching. A historical perspective

Image 12

QUARTERLY CHANGE IN EMPLOYMENT IN THE FIRST QUARTER. HISTORICAL TREND

Driving factors of the quarterly change in flows (LMSF) and stock (LFS)

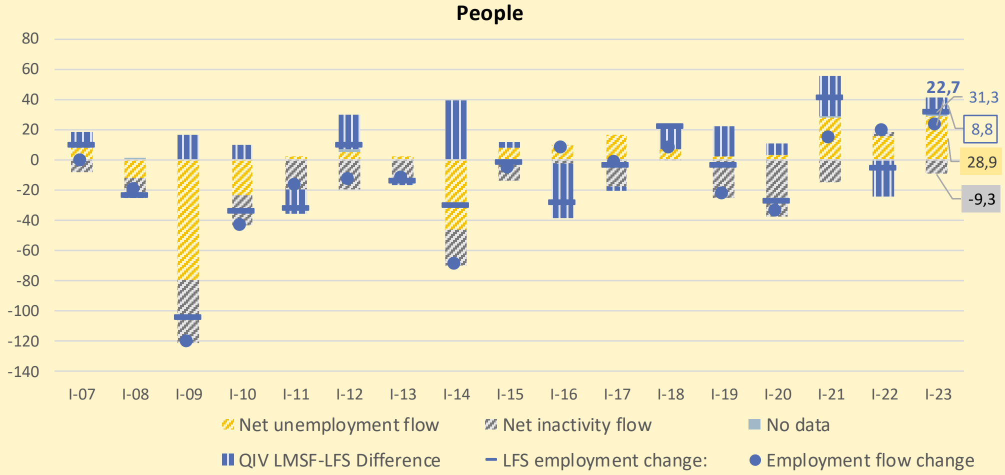


Image 13

QUARTERLY CHANGE IN UNEMPLOYMENT IN THE FIRST QUARTER. HISTORICAL TREND

Driving factors of the quarterly change in flows (LMSF) and stock (LFS)

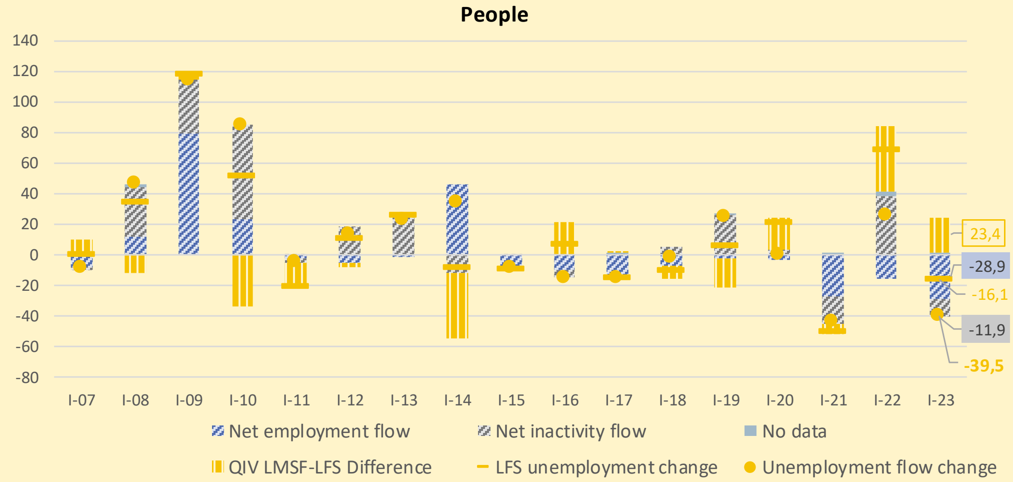
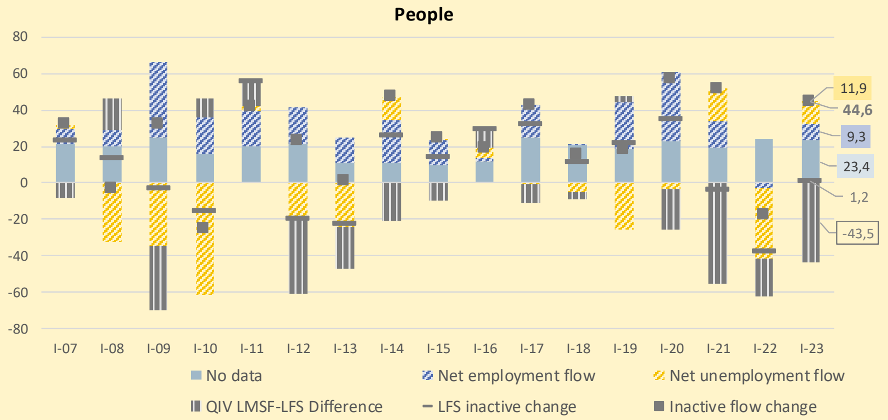


Image 14

QUARTERLY CHANGE IN INACTIVITY IN THE FIRST QUARTER. HISTORICAL TREND

Driving factors of the quarterly change in flows (LMSF) and stock (LFS)



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

2. Social Security Enrolment

Social Security enrolment continued its excellent performance in Q1 2023. At an average of 3,512,721 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 3.9% decelerates the growth of Q4 2022 by 2 tenths of a percentage point.

Both genders and the general scheme have the highest number of employees for the quarterly series, while the self-employed have the highest number of employees for the first quarter. The performance of female enrolment and of the general scheme continued to be more dynamic, with year-on-year increases in the Q1 of 4.2% and 4.4% respectively. The self-employed regime grew at a more muted rate of 0.4%, two-tenths of a percentage point below the increase in Q4 2022.

A seasonal performance of the first quarter, similar to its 2022 counterpart, underpins the stability of year-on-year growth. Both genders and the general regime followed the same patterns, while the self-employed, after months of slight slowdowns, showed signs of stability.

The analysis of the general scheme, excluding the special agricultural and domestic workers' schemes, is decisive in determining the distribution by activity of total enrolment. In the first quarter of the year, it accounted for 85% of the total, with 87.7% of enrolment in the services sector in this regime. It should be noted that all sections of this sector in this period experienced year-on-year increases and increases in enrolment versus Q1 2019, particularly *Public administration and defence*, and *Information and communications*, which stood respectively 29.7% and 23.6% higher than the pre-pandemic levels, compared with an 11.5% increase in total enrolment in this scheme over the same period. The most recent data available from April 2023 (3,547,671 contributors), represents a new all-time high and three months in a row above 3.5 million enrolments. A seasonally adjusted month-on-month increase of 0.4% was observed, slightly higher than a year ago, so that the year-on-year increase accelerated by two-tenths of a percentage point to 4.2%. This growth is significant because the comparison is made with the historical maximum of enrolment until then.

With regard to pre-pandemic enrolment, the region has not ceased to recover volume month by month since February 2021 and the figure for April 2023 is 10.1% higher than that of the same month in 2019.

While total enrolment set a new record high in April, 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 reached its ceiling in December 2021. However, seven of its sections, which account for 42.4% of total enrolment in the scheme, are not the ones showing the greatest volume of enrolment in the sector in this month. These include record highs in *Professional, Scientific and Technical Activities*, *Information and Communications*, and *Public Administration and Defence*.

The self-employed reached the highest level in the historical series in December 2022. In April 2023, none of the major sectors reached record highs, although within the tertiary sector, six of its thirteen sections, which account for 37.1% of total registrations, exceeded historical highs.

Average quarterly affiliation to the General Scheme (not autonomous/household employees) by sections. Structure and changes. Community of Madrid.

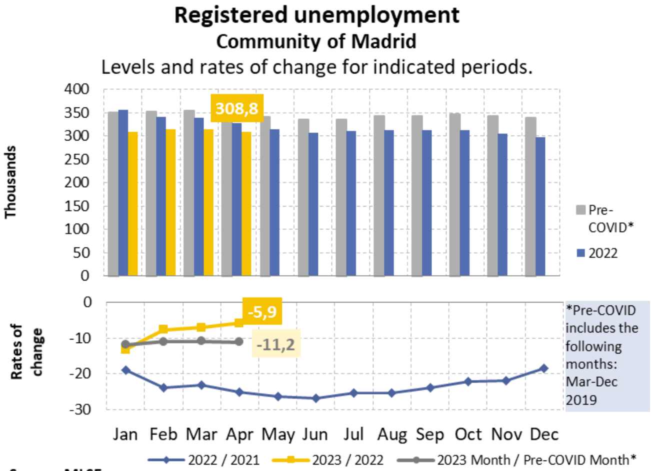
CNAE Sections 2009	Q1 2023			Q1 2022			Q1 2019			Rates of change			
	Level	Weight	COM/SP ΔTN	Level	Weight	COM/SP ΔTN	Level	Weight	COM/SP ΔTN	23/22		23/19	
	No.	(%)	(%)	No.	(%)	(%)	No.	(%)	(%)	COM	Spain	COM	Spain
A - Agric. Livest. Fore. Ar	**2.451**	**0,1**	**0,0**	**2.648**	**0,1**	**0,0**	**2.489**	**0,1**	**0,0**	**-7,4**	**3,5**	**-1,5**	**12,7**
B … E - Industry	**205.246**	**6,9**	**1,3**	**198.524**	**7,0**	**1,3**	**192.032**	**7,2**	**1,3**	**3,4**	**1,9**	**6,9**	**4,6**
F - Construction	**158.894**	**5,3**	**1,0**	**149.844**	**5,2**	**1,0**	**141.543**	**5,3**	**1,0**	**6,0**	**5,8**	**12,3**	**12,7**
G - Comm. Rep. Vehicles	426.167	14,3	2,7	417.673	14,6	2,7	412.412	15,4	2,9	2,0	1,8	3,3	3,6
H - Transport. Storage	165.605	5,5	1,1	153.905	5,4	1,0	143.613	5,4	1,0	7,6	5,9	15,3	11,7
I - Hospitality	197.265	6,6	1,3	183.465	6,4	1,2	189.814	7,1	1,3	7,5	8,8	3,9	6,1
J - Inform. Commun.	265.871	8,9	1,7	247.959	8,7	1,6	215.148	8,0	1,5	7,2	8,5	23,6	26,9
K - Act. Finance & Insur	116.284	3,9	0,7	111.336	3,9	0,7	109.099	4,1	0,8	4,4	1,6	6,6	-2,7
L - Act. Real Estate	27.672	0,9	0,2	26.574	0,9	0,2	24.533	0,9	0,2	4,1	3,9	12,8	7,8
M - Actv. Prof. Tech. Sci.	279.199	9,3	1,8	261.076	9,1	1,7	236.037	8,8	1,6	6,9	6,4	18,3	17,8
N - Actv. Admt. Serv. Auxil.	325.512	10,9	2,1	319.990	11,2	2,1	305.636	11,4	2,1	1,7	0,0	6,5	6,3
O - Public Adm Defen., SS	211.359	7,1	1,3	198.599	7,0	1,3	162.926	6,1	1,1	6,4	2,3	29,7	11,1
P - Education	215.887	7,2	1,4	206.230	7,2	1,4	188.100	7,0	1,3	4,7	3,7	14,8	14,3
Q - Actv. Health Serv. Social	258.733	8,7	1,6	252.588	8,8	1,7	228.283	8,5	1,6	2,4	2,0	13,3	17,8
R - Actv. Artis. Rec. & Ent	52.365	1,8	0,3	49.020	1,7	0,3	47.928	1,8	0,3	6,8	9,0	9,3	11,7
S … U - Rest of Serv.	77.825	2,6	0,5	76.522	2,7	0,5	78.810	2,9	0,5	1,7	2,6	-1,3	-0,9
Total services	**2.619.743**	**87,7**	**16,6**	**2.504.938**	**87,7**	**16,4**	**2.342.339**	**87,5**	**16,3**	**4,6**	**3,6**	**11,8**	**10,0**
Total	**2.986.334**	**100,0**	**18,9**	**2.855.953**	**100,0**	**18,8**	**2.678.403**	**100,0**	**18,6**	**4,6**	**3,5**	**11,5**	**9,4**

(*) The average quarterly data are calculated on the basis of the average monthly data.

Source: Ministry of Inclusion, Social Security and Migration

3. Registered unemployment

A normalisation in the reduction of the number of unemployed was observed in the first quarter of the year, with levels improving on pre-pandemic values. The recent performance of registered unemployment has been positive in the first quarter of the year. Unemployment fell from 345,122 in Q1 2022 to 312,627 in Q1 2023.



Source: MLSE

Registered unemployment data for the region reflect a normal attenuation in the pace of unemployment decline in Q1 2023, with a fall of 9.4% YoY, compared to 21% in Q4 2022. Thus, the number of registered unemployed in the region is 12.1% lower than in Q1 2020.[3], with 43,175 fewer people unemployed. On average for the year 2022, the decline in registered unemployment stood at 23.5%.

With the latest published data for April 2023, the unemployment rate declined by 5.9% year-on-year and by 11.2% compared with April 2019.

Both genders have participated in the year-on-year decreases in unemployment in the region and improve the pre-pandemic data. Male unemployment continued to show the largest year-on-year fall of 9.7% in Q1 2023, while female unemployment fell by 9.2%. Compared to the pre-pandemic situation, unemployment is below the levels in Q1 2020, 15.4% and 9.7% lower, respectively. The most recent data published, from April 2023, shows a year-on-year decrease of 5.9% in male unemployment and 6% in female unemployment.

The year-on-year decreases observed in the first quarter also occurred in all sectors of activity: 13.6% in agriculture, 11.7% in construction, 11.2% in industry, 9.5% in services and 3.2% in the "previously unemployed" group.
This fall is also evident in comparison with the first quarter of 2020 in all sectors, although with different intensity: 18.8% in construction, 17.1% in industry, 14.1% in agriculture, 11.5% in services and 6.6% in "previously unemployed".

In April 2023, regional unemployment fell year-on-year in all sectors: 11.7% in agriculture, 9.3% in industry, 8.5% in construction, and 5.9% in services. The "previously unemployed" group recorded the most moderate reduction (-0.4%).

Registered unemployment by sections
Community of Madrid

CNAE Sections 2009	QI23					Pandemic max		Pre-pandemic variation: QI20		
	Level	Weight (%)	Diff Annual	ARC (%)	Rep. (1)	Level	Date	Difference	RC (%)	Rep. (1)
A - Agric. Livest. Fore. And Fis	**2.436**	**0,8**	**-383**	**-13,6**	**-0,1**	**3.470**	**QI21**	**-401**	**-14,1**	**-0,1**
B ... E - Industry	**17.783**	**5,7**	**-2.254**	**-11,2**	**-0,7**	**24.732**	**QI21**	**-3.679**	**-17,1**	**-1,0**
F - Construction	**22.785**	**7,3**	**-3.018**	**-11,7**	**-0,9**	**33.085**	**QI21**	**-5.279**	**-18,8**	**-1,5**
G - Comm. Rep. Vehicles	43.338	13,9	-4.557	-9,5	-1,3	59.641	QI21	-4.706	-9,8	-1,3
H - Transport. Storage	12.041	3,9	-1.498	-11,1	-0,4	17.971	QI20	-2.270	-15,9	-0,6
I - Hospitality	26.994	8,6	-2.449	-8,3	-0,7	43.980	QI21	-5.604	-17,2	-1,6
J - Inform. Commun.	11.759	3,8	-639	-5,2	-0,2	16.165	QI20	-1.215	-9,4	-0,3
K - Act. Finance & Insur	5.535	1,8	-72	-1,3	0,0	6.028	QI21	174	3,2	0,0
L - Act. Real Estate	2.717	0,9	-141	-4,9	0,0	3.582	QI21	-148	-5,2	0,0
M - Actv. Prof. Tech. Sci.	31.331	10,0	-4.274	-12,0	-1,2	47.878	QI21	-7.600	-19,5	-2,1
N - Actv. Admt. Serv. Auxil.	51.919	16,6	-7.183	-12,2	-2,1	74.986	QI21	-8.272	-13,7	-2,3
J - Public Adm Defen., SS	12.361	4,0	-952	-7,2	-0,3	15.366	QI21	376	3,1	0,1
P - Education	10.256	3,3	-1.542	-13,1	-0,4	16.956	QI21	-146	-1,4	0,0
Q - Actv. Health Serv. Social	15.606	5,0	-1.062	-6,4	-0,3	20.185	QI21	-526	-3,3	-0,1
R - Actv. Artis. Rec. & Ent	6.073	1,9	-658	-9,8	-0,2	9.458	QI20	-1.169	-16,1	-0,3
S ... U - Rest of Serv.	18.402	5,9	-1.099	-5,6	-0,3	26.142	QI21	-1.210	-6,2	-0,3
Total services	**248.330**	**79,4**	**-26.126**	**-9,5**	**-7,6**	**350.569**	**QI21**	**-32.315**	**-11,5**	**-9,1**
No previous employment	**21.293**	**6,8**	**-715**	**-3,2**	**-0,2**	**31.547**	**QI21**	**-1.500**	**-6,6**	**-0,4**
Total	**312.627**	**100,0**	**-32.496**	**-9,4**	**-9,4**	**442.805**	**QI21**	**-43.175**	**-12,1**	**-12,1**

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

[3] 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 breakdown by activity section of the services sector (CNAE 2009) shows that, unemployment fell year-on-year in Q1 2023 in all sections, with notable differences as tertiary activity recovered or increased after the pandemic, with the greatest drop in registered unemployed in relative terms affecting *Education (-13.1%); Administrative Activities and Auxiliary Services* (-12.2%); *Professional, scientific and Technical Activities* (-12%); and *Transport and Storage* (-11.1%).

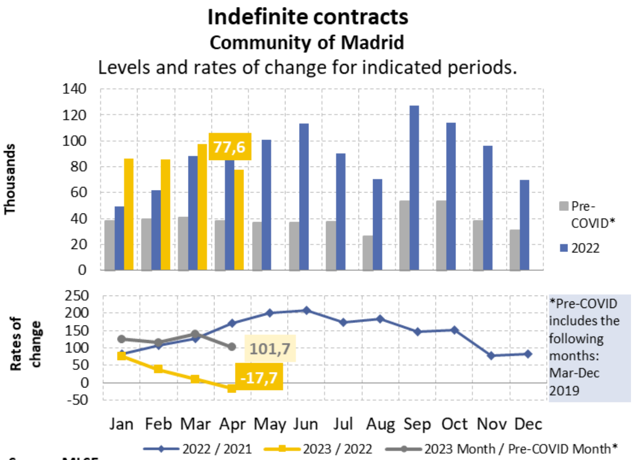
Against this generalised year-on-year reduction, the comparison of Q1 2023 levels with Q1 2020 (pre-pandemic in this indicator) shows a more favourable pattern in sectors that have benefited the most from the end of the restrictions associated with the pandemic, such as hotels and restaurants and leisure, while it increases in those that played a more active role in managing the pandemic.

The most recently published from April 2023 on the regional comparison in year-on-year terms pointed to a generalised decrease in registered unemployment in all the Autonomous Regions, varying widely from a 26% reduction in the Balearic Islands to a 3.6% reduction in Murcia. The Community of Madrid is the region with the fourth largest decline in unemployment in absolute terms. Similarly, all regions show current levels of registered unemployment lower than in April 2019, with the Community of Madrid ranking third in absolute terms.

Stabilised hiring data after the shock of the labour reform. Hiring continued the downward trend that began in Q3 2022, falling by 18.7% in Q1 2023. In a pre-pandemic comparison, the number of registered contracts is 11.7% lower than contracts signed in Q1 2020. The most recent data from April 2023 places the number of registered contracts at 146,659, a year-on-year decrease of 18.9% and 32.6% less than in April 2019.

Permanent hiring, the highest in a first quarter, lost momentum year-on-year in April. Since the entry into force of the labour reform, quarterly permanent contracts have broken records. In contrast, temporary hiring has already shown year-on-year declines since April 2022, when the transitional period for some types of temporary contracts, established in the 2022 Labour Reform, came to an end.

Thus, year-on-year permanent hiring levels in Q1 2023 show a 34.7% YoY increase, albeit at a slower pace than in Q4 2022, when they posted a year-on-year growth of 102.7%. 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 43.9% in Q1 2023 (47.2% in Q4 2022). The pre-pandemic gap equated to 54.8% fewer temporary contracts than in Q1 2019. The most recent data for April 2023 show a 17.7% YoY decrease in permanent contracts and a 20.3% decrease in temporary contracts for the first month, with 101.7% more permanent contracts and 61.4% fewer temporary contracts than in April 2019.



Source: MLSE

The impact of labour market reform 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 10,662 in April 2023, of which 9,755 were in the services sector. They increased by 168.7% YoY in Q1 2023.

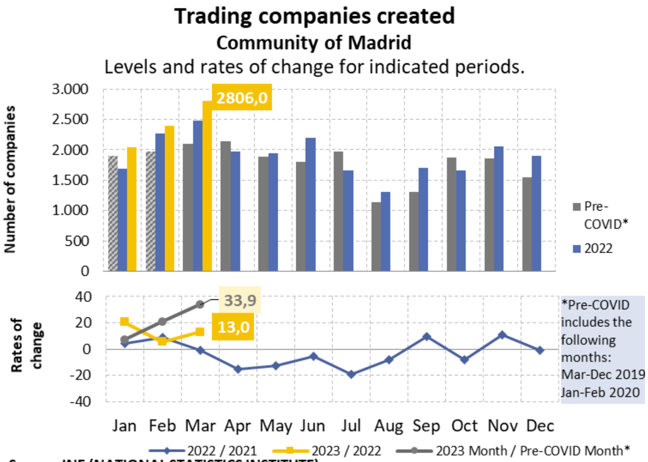
The trend in the number of discontinuous fixed jobseekers, registered as jobseekers after having signed a discontinuous fixed contract, should also be taken into account; the figure for April 2023 is 22,727 discontinuous fixed jobseekers.

V.4. Business environment

Entrepreneurship activity began 2023 on an upward trend, growing by 20.6% YoY in January and thus overcoming the 0.8% decline in December 2022, also increasing in February and March, but more moderately.

Thus, the first quarter of 2023 posted a record number of company incorporations for this period since 2007, with the creation of 7,237 entities, 12.4% more than in the same quarter of 2022, when the highest values for this period since 2007 were achieved. An additional 799 companies were created compared to a year ago compared to the same quarter in 2019. The number of companies incorporated also increased by 967, which is also 15.4% higher.

There were 2,806 new companies created in March, the latest data available, the highest number for this month since 2007, 17.5% more than in February, the third highest month-on-month rate in the last ten years and higher than the average for the whole series (5.9%), and the average for the period 2010–2019 (3.3%). In year-on-year terms, it increased by 13%, a remarkable growth considering that the comparison is made with the second highest volume in the series for a month of March since 2007 and exceeds the volumes of the same month of 2019 by 33.9%. The Community of Madrid topped the regional ranking in terms of incorporations for the month and over Q1 2023. The relative figures for the creation of new companies are very significant; 23.2% of the total number of companies created in Spain in March and 22.8% of those created in the first quarter.



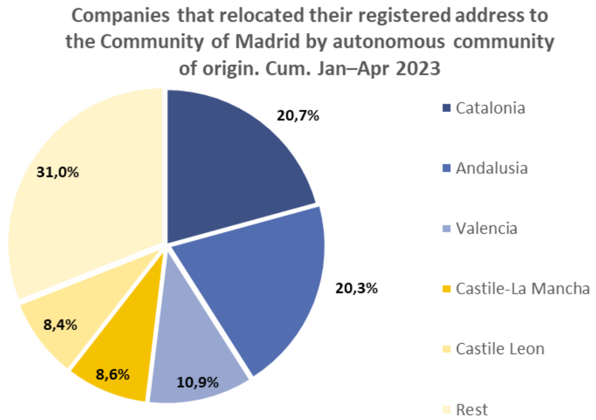
Source: INE (NATIONAL STATISTICS INSTITUTE)

Capital subscribed in the first three months of 2023 alternated from positive in January (6.8%), to negative in February (-83.3%), with the lowest amount for a February in the last six years and the year-on-year comparison was the most for a February since 2014, and then again to positive in March. First quarter investment by new companies came in at €364.8 million, 42.8% less than in Q1 2022, which posted the highest volume for this quarter since 2016; though the 2023 figures are 16.4% higher than pre-pandemic figures.

The March figures for investment amounted to €177.2 million, the highest volume in the last seven years for this month. This is 132.4% more than February and 126.1% more than a year ago, when investment was at its lowest on record since 2009. This is nevertheless an 83.3% increase on March 2019. These figures make the Community of Madrid the region where most capital has been subscribed in both March and the first quarter of the year, with 33.7% of the total national investment in this month and 25.6% in the year to date. The average capitalisation per company was 45% higher than the national average in March and 12.2% higher in Q1 2023.

In Q1 2023, dissolutions hit an all-time high for a quarter in the series, increasing by 11.8% versus 2022 and 30.8% versus 2019. In March they fell by 21.2% year-on-year, but rose by 25.9% compared to 2019. The dip in dissolutions in March reflects judicial inactivity until the end of this month due to a strike by the lawyers in the justice administration.

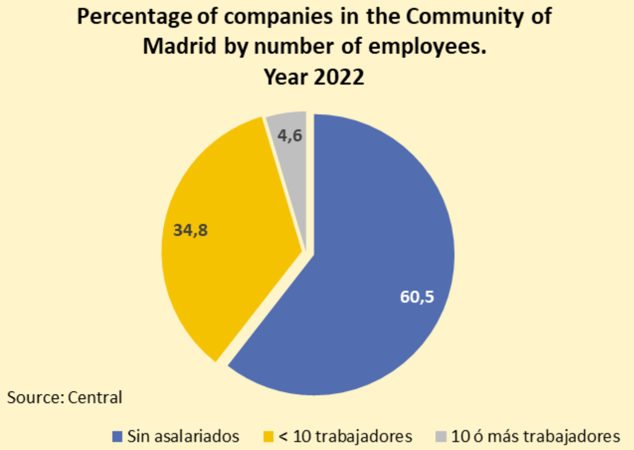
The Community of Madrid continues to be a host region for companies from other Autonomous Communities. Experian reports that in the period January-April 2023, 651 companies changed their registered office to the Community of Madrid; the most represented sector is *Industry* (21.2% of the transfers), followed by *Financial Activities, Insurance and Real Estate* (18.1%) and then *Commerce* (16.6%). The predominant origin of companies relocating to our region is once again Catalonia and Andalusia, both accounting for 41% of the total number of relocations, followed by the Community of Valencia, which accounts for 10.9% of arrivals. The balance with companies relocating out of the Community of Madrid in this period is positive, with 34 companies opting for the region.



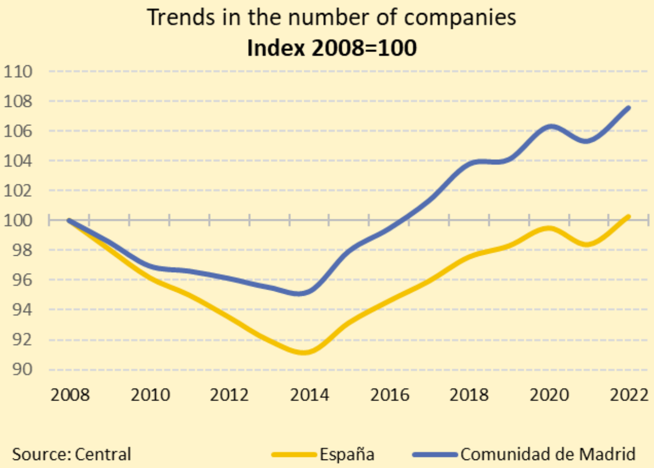
Sidebar III. Operations of the Central Business Directory in the Community of Madrid

The Central Business Directory contains aggregated information on companies operating in Spain with reference to 1 January 2022.

On the aforementioned date, 558,607 companies remain active in the Community of Madrid (2.1% more than the previous year), and 3,430,663 in Spain (1.9% versus 2021).



The first thing that stands out concerning the size of these entities is the **large number of companies with no employees** (60.5%), and a significant number with less than 10 employees (34.8%) which means that **over 95% of the companies have less than 10 or no employees at all**. Following the recommendations of the European Union, considering companies with fewer than 250 workers as SMEs, **99.7% of companies in the Community of Madrid in 2022 will be SMEs**. The proportions in Spain are similar, 56.6% with no employees and 39.1% with less than 10 workers; in turn, 99.9% of Spanish companies are SMEs.



An analysis by **sections of the CNAE 2009** classification, the **highest concentration of companies** in the Community of Madrid in 2022 **were registered under "Professional, scientific and technical activities" (16.9%** in CoM and 12.5% in Spain), followed by **"Wholesale and retail trade; repair of motor vehicles and/or motorcycles"** (**16.7% in the CoM** and 20.8% in Spain), and **"Construction"** (**11.1% in the CoM** and 12.4% in Spain). The rest of the sections account for less than double-digit percentages, in both the Community of Madrid and Spain.

When turning to the changes in the number of companies (shown in the attached chart) since the 2008 crisis and the subsequent recovery in 2014, the **Community of Madrid performed better** than the national average in terms of falls and rises. Moreover, in 2017 the region had recovered the number of companies of 2008 and it was not until 2022 that the national total achieved recovery.

NUMBER OF COMPANIES BY CNAE 2009 SECTIONS AND EMPLOYEE STRATUM.
COMMUNITY OF MADRID. 2022

CNAE Section	Total	salaried employ	1 – 9	10 – 49	50 – 249	over 250
Total	**558.607**	**338.228**	**194.468**	**20.235**	**4.207**	**1.469**
Mining and quarrying	**151**	71	56	19	5	
Manufacturing	**17.341**	6.810	7.855	2.154	376	146
Electricity, gas, steam and air conditioning supply	**2.525**	2.118	306	66	24	11
Water supply; sewerage, waste management and decontamination activities	**536**	160	237	95	23	21
Construction	**61.834**	37.898	20.844	2.729	311	52
Wholesale and retail trade; repair of motor vehicles and/or motorcycles	**93.205**	47.969	41.365	3.053	627	191
Transport and storage	**36.131**	23.257	11.657	951	181	85
Hospitality	**30.302**	9.391	19.039	1.580	220	72
Information and communications	**21.902**	13.661	6.425	1.268	404	144
Financial and insurance activities	**16.597**	11.871	4.069	422	164	71
Real estate activities	**35.310**	24.428	10.526	293	48	15
Professional, scientific and technical activities	**94.507**	64.244	27.141	2.507	456	159
Administrative or auxiliary service activities	**42.742**	28.232	12.053	1.810	450	197
Education	**21.936**	14.744	5.632	1.010	453	97
Health services and social work activities	**32.634**	22.567	8.801	916	217	133
Arts, entertainment and recreation	**19.962**	13.386	5.635	795	109	37
Other services	**30.992**	17.421	12.827	567	139	38

Source: Central Business Directory. INE (National Statistics Institute)

Annex Company relocations to the Community of Madrid

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

Most recent data: April 2023

Cumulative: January – April 2023

Companies that relocated their registered address to the Community of Madrid														
By autonomous community of origin and sector of activity. April 2023														
Aut.Com./Sector	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**s/d**	**Total**	**%**
Andalusia		7	4	3	2	1		3	2		1	1	**24**	15,8
Aragon	1	2		2				1					**6**	3,9
Asturias		1	1	2									**4**	2,6
Balearic Islands		1						2					**3**	2,0
Canary Islands	1		1						1				**3**	2,0
Cantabria			2							2			**4**	2,6
Castile-La Mancha		2	1	2	1			2	4	2	1		**15**	9,9
Castile Leon		3	6	1			1	1		2	1		**15**	9,9
Catalonia	1	1	3	3	1	1	1	7	5	1			**24**	15,8
Extremadura				2						1			**3**	2,0
Galicia				2			1	1	1	1			**6**	3,9
La Rioja														
Murcia			1	1	1		1		2		1		**7**	4,6
Navarre		2						4					**6**	3,9
Basque Country		2		1		2		1	2		1		**9**	5,9
Valencia	1	3	3	1	1		1	8	2				**20**	13,2
Others				3									**3**	2,0
Total	**4**	**24**	**22**	**23**	**6**	**4**	**5**	**30**	**19**	**9**	**5**	**1**	**152**	100,0
%	2,6	15,8	14,5	15,1	3,9	2,6	3,3	19,7	12,5	5,9	3,3	0,7	100,0	
Balance. Inputs - Outputs													**22**	

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-Apr 2023														
Aut.Com./Sector	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**s/d**	**Total**	**%**
Andalusia	3	60	15	14	4	1	5	16	9	1	3	1	**132**	20,3
Aragon	1	3	4	4		1		7	3				**23**	3,5
Asturias	1	2	4	2		1		3	4				**17**	2,6
Balearic Islands		2	2	3				6	2				**15**	2,3
Canary Islands	1	1	2			1	1	2	1		1		**10**	1,5
Cantabria			2							3	1		**6**	0,9
Castile-La Mancha		8	8	11	3	1	5	6	9	3	2		**56**	8,6
Castile Leon		9	11	12	1	1	3	6	7	3	2		**55**	8,4
Catalonia	1	17	9	27	3	5	9	33	22	8	1		**135**	20,7
Extremadura		2	2	7				1	1	1			**14**	2,2
Galicia		2	2	4	2		2	4	2	2			**20**	3,1
La Rioja			1	1					2				**4**	0,6
Murcia		3	6	5	1		3	2	5		1		**26**	4,0
Navarre		10		1	1			4					**16**	2,5
Basque Country		4	4	7		4	4	8	10	1	5		**47**	7,2
Valencia	1	15	9	7	2		4	20	10	1	2		**71**	10,9
Others			1	3									**4**	0,6
Total	**8**	**138**	**82**	**108**	**17**	**15**	**36**	**118**	**87**	**23**	**18**	**1**	**651**	100,0
%	1,2	21,2	12,6	16,6	2,6	2,3	5,5	18,1	13,4	3,5	2,8	0,2	100,0	
Balance. Inputs - Outputs													**34**	

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.

[4]Source: Experian, with information from the Official Gazette of the Companies Registry (in Spanish: Boletín Oficial del Registro Mercantil, or BORME).

Companies that relocated their registered address from the Community of Madrid[5]

Most recent data: April 2023

Cumulative: January – April 2023

Companies that move their registered office outside the Com. of Madrid														
By autonomous community of origin and sector of activity. April 2023														
Aut.Com./Sector	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**s/d**	**Total**	**%**
Andalusia	1	4	1	8		1	1	5	3				**24**	18,5
Aragon				1									**1**	0,8
Asturias			2				1		1				**4**	3,1
Balearic Islands		4							1				**5**	3,8
Canary Islands						1		2	2	1			**6**	4,6
Cantabria								1					**1**	0,8
Castile-La Mancha				1		2	1		1	1			**6**	4,6
Castile Leon		8	2	1			1	3	4				**19**	14,6
Catalonia		1		5		1	4	5	6	1	2	1	**26**	20,0
Extremadura				1									**1**	0,8
Galicia			1	1				2	4				**8**	6,2
La Rioja		1							1				**2**	1,5
Murcia	1		2					4					**7**	5,4
Navarre			1										**1**	0,8
Basque Country	1		1	2				1	2		1		**8**	6,2
Valencia		2	1			1	1	6					**11**	8,5
Ceuta														
Melilla														
Total	**3**	**20**	**11**	**20**		**6**	**9**	**29**	**25**	**3**	**3**	**1**	**130**	100,0
%	2,3	15,4	8,5	15,4		4,6	6,9	22,3	19,2	2,3	2,3	0,8	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 move their registered office outside the Community of Madrid														
By autonomous community of origin and sector of activity. Cumulative. Jan-Apr 2023														
Aut.Com./Sector	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**s/d**	**Total**	**%**
Andalusia	4	11	6	16	3	3	4	19	16	5	2		**89**	14,4
Aragon		4	1	2			3	8	3			1	**22**	3,6
Asturias		1	4	1		1	1	1	2				**11**	1,8
Balearic Islands	1	4	1			1	2	2	4				**15**	2,4
Canary Islands		3	2	5		1	1	4	5	2			**23**	3,7
Cantabria		1						2	1				**4**	0,6
Castile-La Mancha	2	5	8	5		3	2	2	4	3		1	**35**	5,7
Castile Leon	5	20	11	16	3	3	5	14	13		3		**93**	15,1
Catalonia		7	7	32	2	4	11	35	22	3	4	2	**129**	20,9
Extremadura	1	4	5	2		1			1				**14**	2,3
Galicia	3	3	5	6		1	3	7	9		1		**38**	6,2
La Rioja		1							2				**3**	0,5
Murcia	1	1	4	1				8	1		1		**17**	2,8
Navarre		10	1	2			1	4	1				**19**	3,1
Basque Country	1	2	5	5		2	5	9	8		1		**38**	6,2
Valencia		6	4	11	2	2	8	20	10	2	1		**66**	10,7
Ceuta											1		**1**	0,2
Melilla														
Total	**18**	**83**	**64**	**104**	**10**	**22**	**46**	**135**	**102**	**15**	**14**	**4**	**617**	100,0
%	2,9	13,5	10,4	16,9	1,6	3,6	7,5	21,9	16,5	2,4	2,3	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.

[5]Source: Experian, with information from the Official Gazette of the Companies Registry (in Spanish: Boletín Oficial del Registro Mercantil, or BORME).

Concepts, sources and abbreviations used

Frequently used abbreviations and acronyms

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
CRTR	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).

If you are not receiving our reports and they are of interest to you, you can request them by emailing us at estudios@madrid.org or consult them on the web page of the Community of Madrid Economic Reports.

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