European Commission
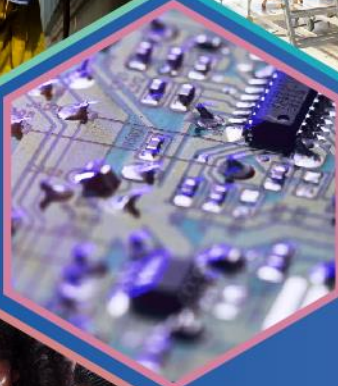
Annual Report on European SMEs 2023/2024

GROW and JRC

SME Performance Review
2023/2024

GROW and Joint Research Centre

Annual Report
on European SMEs
2023/2024

SME Performance Review
2023/2024

TABLE OF CONTENTS

ACRONYMS

AI	Artificial Intelligence
API	Active Pharmaceutical Ingredients
CCT	Carbon Capture Technology
CIR	Crédit Impôt Recherche
DG HERA	Directorate General for Health Emergency Preparedness and Response
EC	European Commission
ECA	European Court of Auditors
ECB	European Central Bank
EIB	European Investment Bank
EIC	European Innovation Council
EIF	European Investment Fund
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GTA	Global Trade Alert
GVC	Global Value Chain
HICP	Harmonised Indices of Consumer Prices
ICT	Information and Communication Technology
IMF	International Monetary Fund
IPCEI	Important Projects of Common European Interest
IPI	International Procurement Instrument
IPR	Intellectual Property Rights
IRA	Inflation Reduction Act
JRC	Joint Research Centre
KIS	Knowledge-intensive services
MS(s)	Member States
NACE	Statistical classification of economic activities in the European Union
NFBS	Non-financial business sector
NIPO	New Industrial Policy Observatory
OECD	Organisation for Economic Cooperation and Development
OSA	Open Strategic Autonomy
QuiS	Quantifying Industrial Strategies
R&D	Research and Development
SAFE	Survey on the access to finance of enterprises
SBS	Structural Business Statistics
SME	Small and Medium-sized Enterprise
SMP	Single Market Programme
SPR	SME Performance Review
UK	United Kingdom
USA	United States of America
USD	United States Dollar
WTO	World Trade Organisation

Abstract

SMEs make up over 99% of European Union (EU) businesses (defined on the <250 employment criterion only, as used in Eurostat Structural Business Statistics) and are, therefore, the central part of the EU-27 economy. This report mainly evaluates their economic performance in 2022 and 2023, and forecasts their outlook for 2024 focusing mainly on three key variables: Value added expressed in both current and constant prices, Employment and Number of firms.

In 2023, real-terms value added declined by 1.6%. Regarding 2024, a further decrease of 1.0% is expected. Employment increased in 2023 by 1.8%, and for 2024, the growth is predicted to slow down a bit, reaching 0.8%. Over the broader period of the last five years, value added in real terms increased by 9.5% and employment grew by 5.9%. Within the overall SME population, micro-SMEs performed better than small and medium-sized SMEs in both categories, value added and employment in 2023. A similar pattern is expected for the following year as well.

The report also analyses SMEs' performance through a granular breakdown of the distribution of EU-27 SMEs across the 14 industrial ecosystems. The contribution of SMEs and large enterprises to the change in value added and employment across these ecosystems varies greatly. In some ecosystems like 'digital', 'tourism', 'energy-renewables' and 'cultural and creative industries' SME growth in 2023 was significant, while their performance in 'textiles' and 'electronics' is poor. The in-depth exploration across EU-27 Member States reveals spatial patterns among neighbouring countries exhibiting similar performance.

The future SME performance may be influenced by the implementation of the Open Strategic Autonomy (OSA) paradigm, which seeks to reduce EU's dependencies with non-EU countries in strategic value chains, while remaining open and active in the globalised economy. The analysis shows that SMEs are already significantly active within specific value chains considered strategic under the OSA framework, contributing essential innovation and dynamism, developing and delivering specialised solutions, and providing crucial support services. The OSA paradigm entails risks for SMEs, but can also represent an opportunity for SMEs to improve their competitiveness and overall economic performance. The report, therefore, contributes to ongoing policy discussions by identifying key policy initiatives needed to facilitate the successful integration of SMEs into the OSA framework.

Executive Summary

European Small and Medium Enterprises (SMEs) have gone through significant challenges over the past years. Following an unprecedented pandemic and the global supply chain disruptions during the post-pandemic era, Russia's war of aggression against Ukraine and surging energy costs led to historically high inflation and put in jeopardy the economic recovery of EU SMEs. Additionally, the new European Industrial Strategy, focused on the twin transition to a green and digital economy, and the Open Strategic Autonomy paradigm (OSA) pose significant challenges and opportunities to SMEs that deserve specific attention. OSA is a concept that has recently gained prominence in EU policy discussions, primarily aimed at ensuring that the EU can pursue its own interests and values independently while remaining open to global cooperation and interdependence. It is a response to increasing global uncertainties and dependencies, seeking a balance between self-reliance and international collaboration. SMEs may enormously benefit from being part of this new paradigm for EU policies, but it also presents challenges.

This challenging economic context continues to put the brakes on EU SMEs' potential. In 2023, persistent inflationary pressures jeopardised the economic robustness of the 25.8 million SMEs in the EU-27 (Table 1). While some SMEs are able to pass price increases onto consumers, many SMEs who are not able to do so saw their real value added decline, which led to an overall real terms decline in SME value added of -1.6% due to inflation rates.

Table 1: Economic structure of enterprises per size class, in EU-27 for 2023

Class size	Number of enterprises		Number of persons employed		Value added	
	Number	Share	Number	Share	Billion €	Share
Micro	24,209,297	93.6%	40,803,310	30.0%	1,799	19.8%
Small	1,387,888	5.4%	26,770,763	19.7%	1,527	16.8%
Medium-sized	210,551	0.8%	21,156,339	15.5%	1,512	16.6%
SMEs	25,807,736	99.8%	88,730,412	65.2%	4,839	53.1%
Large	43,420	0.2%	47,355,823	34.8%	4,265	46.9%
Total	25,851,156	100.0%	136,086,235	100.0%	9,104	100.0%

*Source: Calculations by the JRC, **based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

Although inflation fell to more moderate levels during late 2023 and in 2024, it remains above the European Central Bank (ECB)'s 2% target and continues to weigh on SMEs' economic performance. This implies that even in 2024 SMEs' inflation-adjusted value added will drop by a further -1.0%. A positive aspect is that in 2024 the inflation in the EU is expected to fall further, though remaining above 2%.

SME employment increased by 1.8% in 2023, following its already significant growth in 2022, when the increase of persons employed reached 2.9%. According to the forecasts, 2024 will be another growth year, with a 0.8% increase in employment, signalling three years of consecutive employment growth. However, at the same time many SMEs have experienced a sharp rise in skill shortages. The SAFE survey (Survey on the Access to Finance of Enterprises) indicates the lack of "availability of skilled staff or experienced managers" as the most significant problem SMEs faced in 2023.

A longer-term analysis also highlights some challenges for SME productivity. While in absolute terms, SME productivity has remained largely stable over the past years and is slightly higher in 2024 than it was in 2019, their productivity growth has consistently lagged behind that of large enterprises. In 2008, SMEs were about 68% as productive as large enterprises, but in 2024 this figure had fallen to 60%. This represents a significant missed potential, and reversing this trend could lead to substantial productivity gains for the EU economy as a whole.

Regardless of the challenges, certain segments of the EU SME population have successfully overcome these tough conditions. Firstly, the group of micro-SMEs with less than 10 employees have outperformed all other SME size classes. In particular, their employment performance was impressive, with a growth of 2.3% in 2023, outpacing all other size-classes, including large enterprises. Micro enterprises showed the most resilient performance of all size classes regarding real value added. While their inflation-adjusted value still declined, with a decline of only -0.4%, their decline was less pronounced than all other size classes.

Despite the fact that the size classes of "small" and "medium-sized" businesses (i.e. enterprises between 10-249 employees) are forecasted to perform less well than large enterprises, the aggregated 'all SMEs' category will grow faster than large enterprises, thanks to the contribution of micro firms, which are predicted to grow by 1.4% in terms of employment and by 1.1% in terms of number of enterprises. Although there was the contribution of a "technical" factor, i.e. the so-called size-band effect (meaning that in times when many companies shrink, the ranks of micro firms are bolstered as previously small-sized firms are re-classified as micro firms), the data suggests that micro firms have proven their resilience in the face of current challenges.

SMEs are also proving to be engines behind the EU's industrial ecosystems. In 2023, SME employment expanded in all 14 industrial ecosystems, and in 11 out of 14 their employment growth was higher than that of large enterprises. The highest growth rates are visible in the 'tourism' and 'digital' ecosystems (4.5% and 3.8%, respectively). For 2024, SMEs are expected to outperform large enterprises in 11 out of 14 ecosystems, both in terms of employment and value added.

Even amid the current challenging environment, SME growth in real value added remains possible, as evidenced by seven Member States - Malta, Spain, Greece, Portugal, Belgium, Denmark, and Cyprus - which achieved actual growth in 2023, with two of them surpassing 4%: Malta (6.8%), and Spain (4.9%). Concerning 2024, SMEs in six Member States (Malta, Greece, Ireland, Denmark, Cyprus, Belgium) are expected to achieve real-terms value added growth.

Another positive aspect of SME performance is the fact that, when looking at the period 2021-2023, SMEs have grown on all indicators, including real value added, which was 4.5% higher by the end of 2023 than in 2021. SME employment has fully recovered from the pandemic and continues at a stable growth pace. Similarly, the number of enterprises has grown by a total of 5.4% compared to 2021. On all these indicators, SMEs have also outperformed large enterprises, showing once again that the post-pandemic recovery has been driven by SMEs, particularly micro enterprises. Over the broader period of the last five years, Figure 1 clearly shows that firms of all sizes experienced growth in both real value added and employment. The most significant increase was once again seen in micro firms, showing their essential role in driving economic growth.

Figure 1: Evolution of real value added (left) and employment (right) per size class
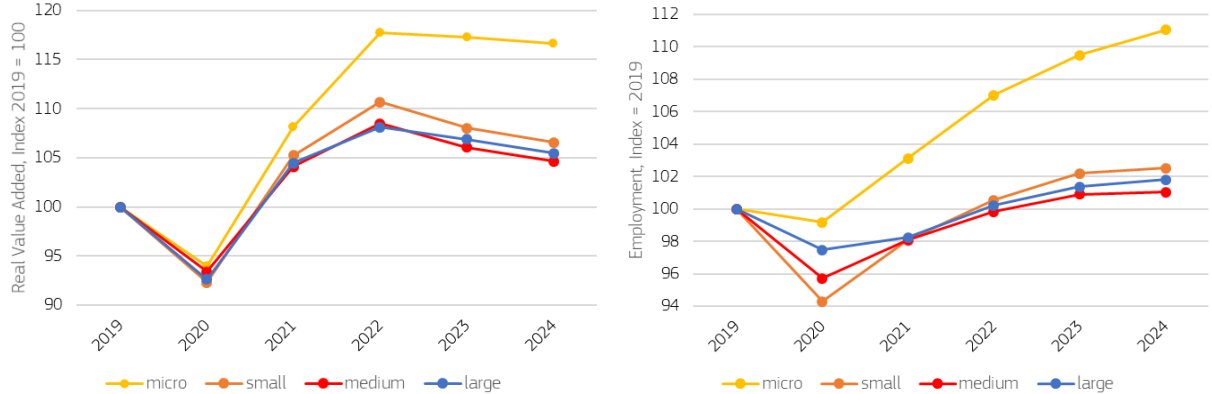
Looking ahead, strategic dependencies and vulnerabilities have been identified in several industrial ecosystems. These challenges originate from dependency on imported inputs, lack of domestic production, and low innovation autonomy and digital sovereignty. Key areas of concern include semiconductors and microelectronics, telecommunication and digital infrastructure and technologies, renewable energy technologies, pharmaceutical ingredients, drones and robotics for both civil and military applications, technical textiles, fertilisers and high-protein crops, and new technologies for clean and sustainable mobility.

An in-depth analysis of the ecosystems where such vulnerabilities have been identified revealed that SMEs are pervasive in all value chains analysed. Even if they are usually not directly involved in core value added manufacturing activities, they dominate in niche markets and ancillary services, which are essential for the smooth functioning of the market. Most importantly, SMEs are involved in essential research and development activities and in developing critical innovation in all value chains analysed. They also play an important role in some new and emerging markets, such as the recovery of critical raw materials from waste, or the development of carbon capture technologies, cybersecurity, edge computing, or very specialised solutions that compete with more consolidated ones (e.g. multi-cloud platforms and biofertilisers).

The EU, its Member States and most non-EU countries have recently implemented various policies to achieve strategic autonomy goals. These measures span from trade initiatives to traditional industrial policy instruments such as direct subsidies and loans to bolster production in strategic sectors. Notably, existing OSA policies have placed limited emphasis on supporting SMEs. However, it is clear that SMEs are essential drivers of economic recovery and competitiveness and they can contribute to the success and long-term sustainability of OSA initiatives. Policymakers need to recognise SMEs as catalysts for the change that Europe needs to meet the objectives set out by the OSA paradigm. Turning SMEs from followers into leaders of radical change necessitates embedding SME policy at the heart of EU policymaking.

Overall, moving from an SME-friendly to an SME-focused approach demands a firm commitment from all the stakeholders to preserve the European way of life and be fit, as stated by Mario Draghi in his speech on the future of European competitiveness, for today's and tomorrow's world.

1 Introduction

This report forms part of the SME performance review (SPR), which consists of two parts: an Annual report on European SMEs and SME country fact sheets. All calculations which led to the data presented on both parts are described in detail in the relevant technical report, published on the SPR website.[1]

SMEs play a key role in the EU economy, thus, the second chapter of this report provides a snapshot of the contribution of SMEs to the EU-27 economy, with the data presented referring to the year 2023. A brief description of the evolution of new business registrations and bankruptcies is also included.

The third chapter focuses on the performance of EU SMEs over the past years. It presents information on the economic environment faced by EU-27 SMEs over the last few years and the performance of SMEs during that period, regarding the key economic indicators, such as number of enterprises, employment and value added expressed in both current and real prices.

The fourth chapter presents a projection of the performance of EU-27 SMEs in 2024 focusing again on the indicators cited above.

The fifth chapter offers an overview of the study results on SMEs and OSA, and presents a list of policy actions proposed to maximise the opportunities that OSA can offer to SMEs.

Finally, ten annexes provide detailed information on a range of topics discussed in the main body of this report, like a profound analysis of NFBS industries, an overview across industries of different knowledge and technology intensity and the exploration of certain SMP countries' performance.

---

[1] All relevant publications can be found at: https://ec.europa.eu/growth/smes/sme-strategy/performance-review_en.

2 The role of SMEs in the EU

In 2023, SMEs played a crucial role in the European Union's (EU) economy, accounting for 99.8% of all enterprises in the non-financial business sector. With 25.8 million SMEs employing 88.7 million people, they contributed significantly to the EU-27 employment and value added. Micro enterprises were the most prevalent, accounting for 94% of SMEs in 2023. The strong presence of micro firms was observed across all EU-27 Member States and all 14 ecosystems. While new SME business registrations increased by 2.6% in 2023, the number of SME bankruptcies also rose by 13%, which is in line with the challenging situation of SMEs in the EU.

2.1 Snapshot of the importance of SMEs in the EU economy

According to the official European Commission (EC) definition[2], SMEs are enterprises that have fewer than 250 employees, and either an annual turnover of up to EUR 50 million or a balance sheet total of up to EUR 43 million. The analysis in this report is based only on the employment criteria, since this is the definition used by the Structural Business Statistics (SBS) database maintained by Eurostat, the main data source for the report. Within the SME population, micro-SMEs are enterprises which employ fewer than 10 staff, while small SMEs employ 10 to 49 staff, and medium-sized SMEs employ between 50 and 249 staff (see Table 6 in Annex 1 for details).

SMEs are a vibrant component of the EU society, and deeply embedded in local communities, as visualised in Map 1. Across the EU-27, for every 1,000 inhabitants, there are 57 SMEs. The Member State (MS) with the highest ratio is CZ (102 SMEs per 1,000 inhabitants). On the other hand, the lowest proportion is in DE (31 SMEs per 1,000 inhabitants).

In 2023[3], about 25.8 million SMEs were active in the EU-27, accounting for 99.8% of all enterprises in the non-financial business sector (NFBS) (Figure 2)[4,5]. These SMEs employed 88.7 million people, accounting for just under two-thirds of the EU-27 NFBS employment, and slightly more than half of the EU-27 NFBS value added.

---

[2] Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises (2003/361/EC), Official Journal of the European Union, L 124/36, 20 May 2003.
[3] The 2023 data are based on estimates derived from economic data available in December 2023.
[4] The non-financial business sector includes all sectors of the economy except the following: 'agriculture, forestry, and fishing' (NACE section A), 'financial and insurance activities' (NACE section K), 'public administration and defence; compulsory social security' (NACE section O), 'education' (NACE section P), 'human health and social work activities' (NACE section Q), 'arts, entertainment and recreation' (NACE section R), 'other service activities' (NACE section S), 'activities of households as employers; undifferentiated goods-and services-producing activities of households for own use' (NACE section T) and 'activities of extraterritorial organisations and bodies' (NACE section U). NACE is the Eurostat statistical classification of economic activities in the European Union.
[5] Information on the number of SMEs, their value added and their employment in various countries outside the EU is provided in Table 188.

Map 1: Number of SMEs per Member State on per capita basis in 2023
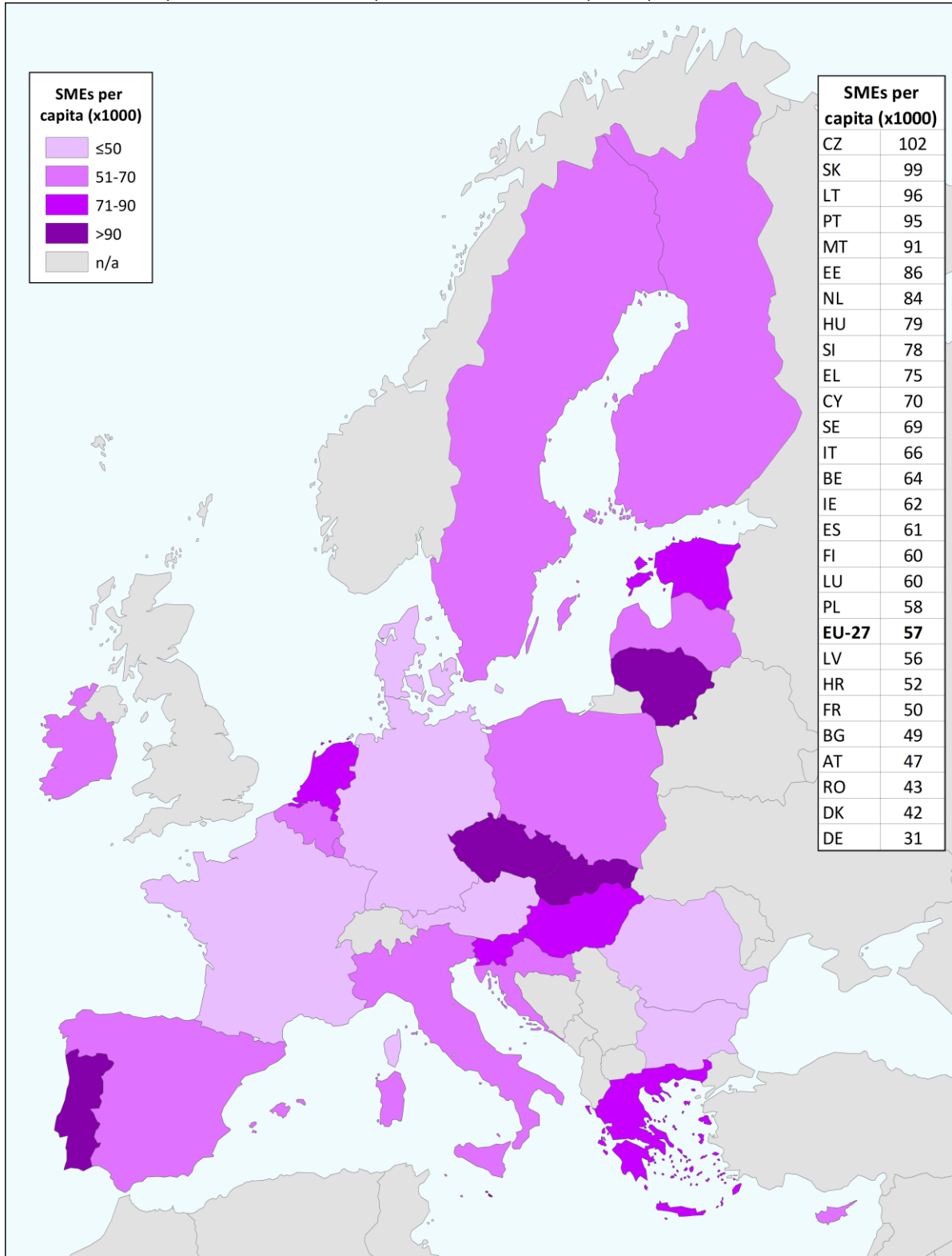
SMEs per capita (x1000)	
CZ	102
SK	99
LT	96
PT	95
MT	91
EE	86
NL	84
HU	79
SI	78
EL	75
CY	70
SE	69
IT	66
BE	64
IE	62
ES	61
FI	60
LU	60
PL	58
EU-27	**57**
LV	56
HR	52
FR	50
BG	49
AT	47
RO	43
DK	42
DE	31

Legend — SMEs per capita (x1000):
- ≤50
- 51-70
- 71-90
- >90
- n/a

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics, National Accounts Database and Population Projections

The vast majority of SMEs in 2023 were micro-SMEs (Figure 3), accounting for 37% of SME value added, and 46% of SME employment in the NFBS in 2023. In terms of employment, micro enterprises accounted for a greater share of total SME employment than small SMEs (46 and 30%, respectively), and small SMEs accounted for more employment than medium-sized SMEs (24%). The three SME size classes generated about the same proportion of SME value added in the EU-27 NFBS in 2023, with the share of value added generated by micro-SMEs (37%) being only slightly larger than the share generated by small and medium-sized SMEs (32% and 31% respectively).

Figure 2: Share of EU-27 SMEs by number of enterprises, employment, and value added within the NFBS in 2023
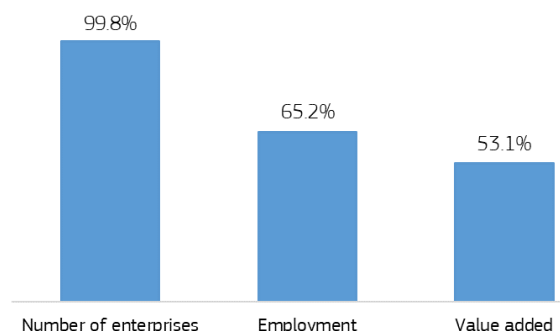
*Source: **Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database***

Box 1: SME population in the EU-27 and data provided by Eurostat

Traditionally, the annual report on European SMEs focuses on the non-financial business sector (NFBS), which includes all sectors of the economy except the following: 'agriculture, forestry, and fishing' (NACE section A), 'financial and insurance activities' (NACE section K), 'public administration and defence; compulsory social security' (NACE section O), 'education' (NACE section P), 'human health and social work activities' (NACE section Q), 'arts, entertainment and recreation' (NACE section R), 'other service activities' (NACE section S), 'activities of households as employers; undifferentiated goods-and services-producing activities of households for own use' (NACE section T), and 'activities of extraterritorial organisations and bodies' (NACE section U). NACE is the Eurostat statistical classification of economic activities in the European Union.

For many years, the statistical authority of the EU, Eurostat, provided Structural Business Statistics data exclusively for the NFBS, narrowing the population of enterprises captured by the data. Since November 2023, Eurostat has expanded the diversity of available NACE codes beyond the limitation of the NFBS, and now includes the entire NACE section K and its level 2 activities (K64, K65, and K66), NACE section P and its unique code P85, NACE section Q with all three relevant level 2 activities (Q86, Q87, and Q88) and NACE section R and codes R90, R91, R92, and R93 respectively. Regarding NACE section S, only the segment referring to activities S95 and S96 has become available. Including these additional NACE sections, Eurostat counts a total of nearly 31 million SMEs in 2021. However, for all these recently included NACE sections, data is only available for 2021, as earlier years have not been updated. Furthermore, some NACE sections like A, O, T and U are still not available.

The current report analyses nowcasted and forecasted figures for 2022, 2023, and 2024, the calculation of which is based on several factors, including the actual values of previous years. Unfortunately, the absence of relevant data, including from National Statistics Organisations, means our model could not yet be expanded to include the new NACE sections. In conclusion, the current (2021) SME population provided by Eurostat is not comparable to the population referring to previous years. In the future analysis, once we have adequate data to backcast the figures for the period 2008-2020, we will provide our aggregates accordingly.

Figure 3: Share of different EU-27 SME size classes in the number of enterprises in the NFBS and of NFBS employment and value added in 2023

211 (0.8%)	1,512.2 (31.3%)	21.2 (23.9%)
1,388 (5.4%)	1,527.1 (31.6%)	26.8 (30.2%)
24,209 (93.8%)	1,799.4 (37.2%)	40.8 (45.9%)
Enterprises (thousands)	Value Added (EUR billion)	Employees (million)

● Micro SMEs ● Small SMEs ● Medium-sized SMEs

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Additional information about the predominant share of micro-SMEs, and the different proportions of SMEs in terms of value added and employment among the EU-27 Member States (MSs), is available in Map 15 (Annex 3).

Map 2 illustrates the "productivity" of SMEs in terms of value added created per person employed. Northern and Central MSs outperform Eastern MSs, while southern MSs like IT and ES (50 and 46 thousand EUR, respectively) are close to the EU-27 average of 55 thousand EUR per person employed. The highest value added per employment is observed in IE (120k EUR), almost six times bigger than the lowest value that belongs to BG (22k EUR).

Map 2: SMEs Value added per person employed for 2023 in the NFBS of Member States in 2023

SMEs value added per employment (x1000€ per person employed)

	≤40
	40-60
	60-80
	>80
	n/a

| SMEs value added per employment (x1000€ per person employed)	
IE	119.5
LU	104.0
BE	89.5
NL	84.5
DK	80.2
FI	76.1
DE	72.7
SE	70.7
AT	70.4
FR	61.6
EU-27	**54.5**
MT	53.9
IT	50.4
SI	46.8
ES	46.2
CY	44.4
EE	36.8
CZ	36.5
PT	31.8
LV	31.2
LT	28.8
PL	27.8
RO	26.6
HR	26.4
SK	26.0
HU	25.9
EL	22.4
BG	21.6

*Source: **Calculations by the JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*
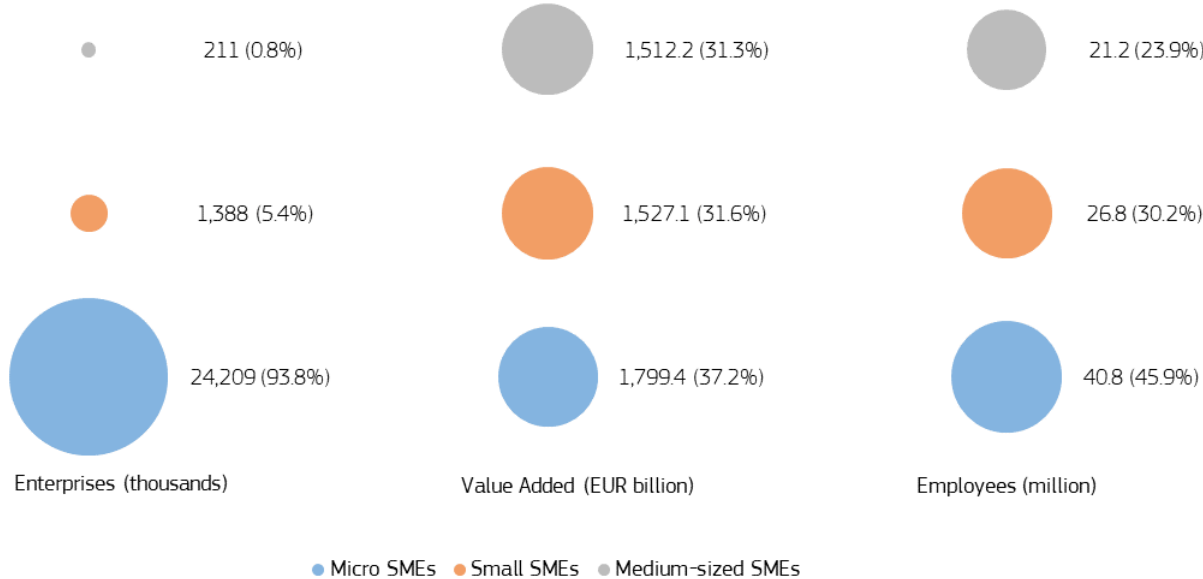
Box 2: Long-term productivity trends in SMEs

Figure 4 shows trends in real-term productivity by size class. In general, the larger the enterprise, the more productive it is. In a long-term analysis, productivity has remained fairly stable over time when adjusted for inflation. However, when comparing 2024 to 2019, a slight increase in productivity is visible across every size category. The most significant rise occurred in 2021, particularly among large enterprises. It is interesting to note that the 2021 growth was not simply a recovery catch-up from the 2020 lockdowns, but actually reached a higher level than in 2019.

Figure 4: Productivity in EU-27 by size class
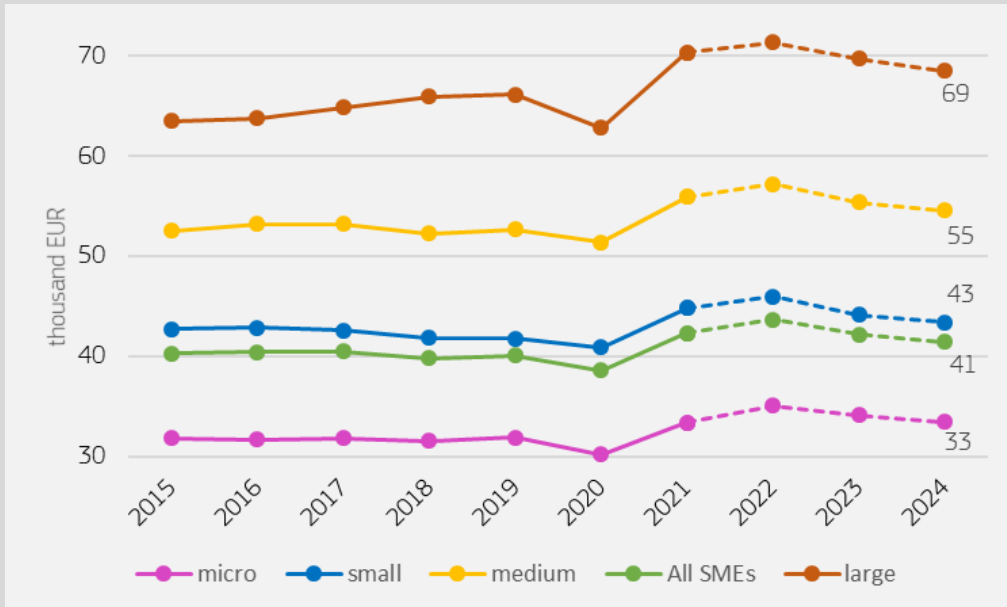
Note: Productivity is expressed as value added per person employed and refers to real values (in 2015 prices). The solid lines turn into dashed lines as data from 2022 onwards is mainly derived by now-casts and forecasts.
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 5: Productivity compared to large enterprises
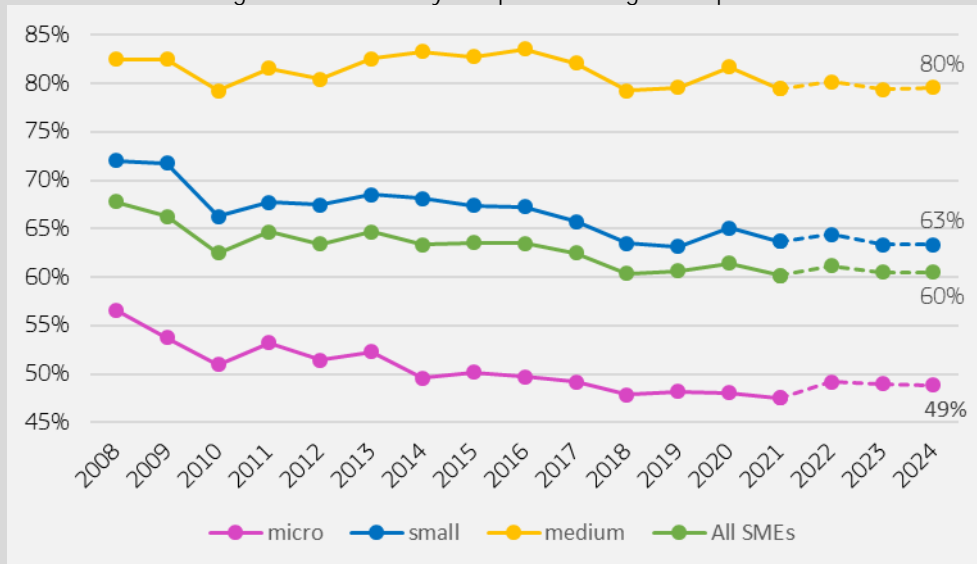
Note: Every line represents the relative productivity of a certain size class versus large enterprises which are equal to 100%. The solid lines turn into dashed lines as data from 2022 onwards is mainly derived by now-casts and forecasts.
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Despite overall stability in productivity, on a longer time scale it becomes clear that in relative terms, SMEs' productivity is declining compared to that of large enterprises (Figure 5). Whereas in 2008 SMEs were about 68% as productive as large enterprises, in 2024 this figure had fallen to 60%. This trend is most pronounced

> in micro and small enterprises. It is important to highlight that this decline is purely relative; SMEs' productivity did grow in absolute terms from 2008 to 2024, but more slowly than that of large enterprises.

Since 2020, the European Commission has decided to regroup all different industries into 14 industrial ecosystems, which are linked together and encompass all players operating in a value chain, from the smallest start-ups to the largest companies, from academia to research, service providers to suppliers[6]. Undoubtedly, SMEs play a key role in the evolution of these 14 ecosystems[7]. More information about industrial ecosystems can be found in section 3.3 and Figure 37 (Annex 10).

A more granular breakdown of the distribution of EU-27 SMEs across industrial ecosystems shows that, in 2023, SMEs were concentrated in a few ecosystems, namely 1) 'construction', in which SMEs accounted for 26% of all EU-27 SMEs, 2) 'retail' (23%), and 3) 'tourism' (15%) (Figure 6).

Figure 6: Distribution of EU SMEs across the Industrial Ecosystems in 2023
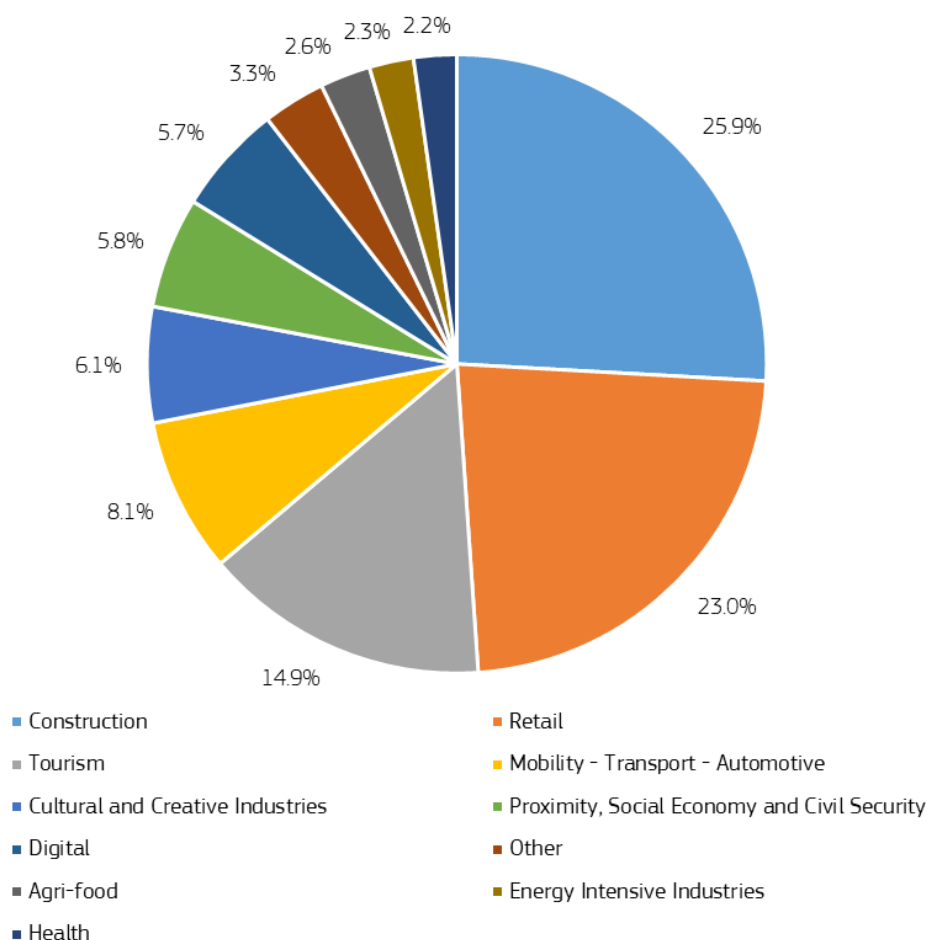
Note: Other includes 'aerospace and Defence' (1.2%), 'electronics' (0.4%), 'energy-Renewables' (0.5%) and 'textiles' (1.1%)
*Source: Calculations by the JRC **based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

As in previous years, in 2023, SMEs accounted for most of total employment in eleven out of 14 industrial ecosystems. The three ecosystems with proportions below 50% were 'aerospace and defence', 'electronics' and 'energy-renewables', while four ecosystems surpassed 70% of total employment: 'tourism' (78%), 'construction'

(76%), 'textiles' (76%) and 'cultural and creative industries' (72%). Micro SMEs accounted for the majority of employment in eight out of 14 ecosystems (Table 2).

The share of value added generated by SMEs in every EU-27 industrial ecosystem was smaller than the employment share. In six cases, the SME value added share was bigger than the value added generated by large enterprises: 'construction', 'cultural and creative industries', 'proximity, social economy and civil security', 'retail', 'textiles', and 'tourism'.

Concerning the number of enterprises, EU-27 SMEs accounted for 99% of the total number of enterprises in every industrial ecosystem. Micro enterprises accounted for most of this figure, representing more than 85% of the total number of enterprises in all ecosystems. The biggest contribution is noted in 'cultural and creative industries' (96%) and the smallest in 'electronics' (86%).

Table 2: Proportion of total value added, employment and number of enterprises accounted for by SMEs in various EU industrial ecosystems in 2023

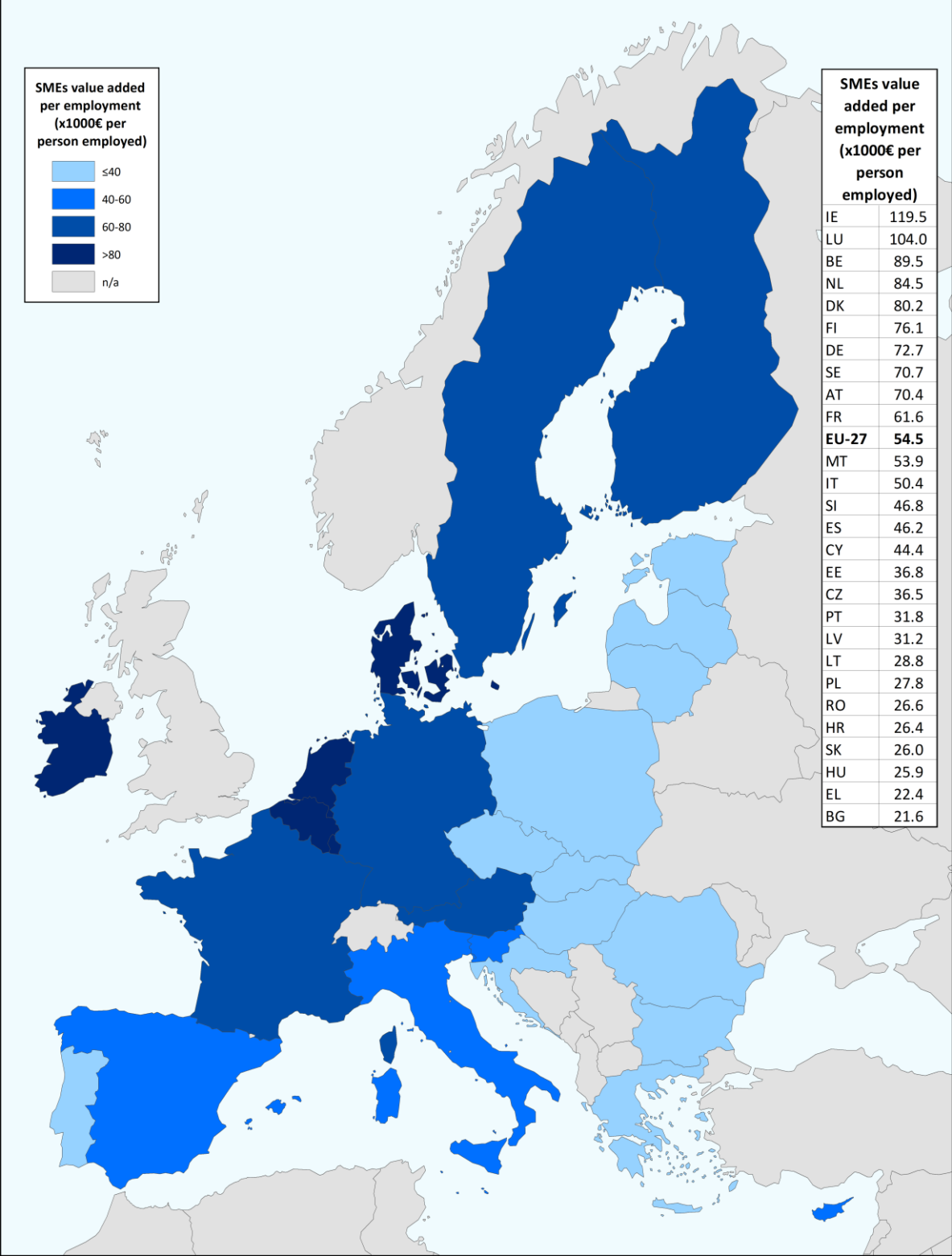|	Value Added				Employment				Number of Enterprises			
	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs
Aerospace and Defence	7.8%	11.2%	16.2%	35.1%	10.7%	13.9%	19.5%	44.2%	87.5%	9.2%	2.6%	99.3%
Agri-food	10.5%	14.3%	19.7%	44.6%	17.9%	19.6%	20.4%	57.9%	87.9%	9.7%	1.9%	99.5%
Construction	30.9%	24.3%	17.2%	72.4%	37.8%	23.6%	14.8%	76.2%	94.0%	5.2%	0.6%	99.9%
Cultural and Creative Industries	24.2%	16.0%	17.1%	57.2%	38.4%	18.0%	15.5%	71.8%	96.4%	3.0%	0.5%	99.9%
Digital	13.3%	13.2%	17.0%	43.4%	22.9%	15.6%	17.1%	55.7%	94.6%	4.3%	0.9%	99.8%
Electronics	5.2%	9.4%	16.8%	31.5%	9.8%	13.9%	21.1%	44.8%	86.0%	10.0%	3.1%	99.1%
Energy Intensive Industries	5.3%	9.9%	19.1%	34.3%	12.4%	16.0%	22.9%	51.3%	86.5%	9.9%	2.8%	99.2%
Energy - Renewables	10.9%	7.9%	12.8%	31.6%	12.7%	10.6%	16.1%	39.4%	92.7%	5.2%	1.6%	99.5%
Health	9.2%	8.2%	10.8%	28.1%	22.6%	15.4%	16.0%	54.0%	93.9%	4.9%	0.9%	99.7%
Mobility - Transport - Automotive	14.5%	15.3%	15.0%	44.6%	24.9%	17.5%	15.7%	58.1%	92.7%	6.0%	1.0%	99.8%
Proximity, Social Economy and Civil Security	29.7%	18.8%	14.3%	62.8%	34.4%	19.5%	12.6%	66.5%	94.1%	5.2%	0.6%	99.9%
Retail	22.3%	20.5%	17.4%	60.2%	31.8%	18.7%	13.3%	63.7%	94.1%	5.1%	0.7%	99.9%
Textiles	14.0%	22.0%	25.5%	61.4%	23.3%	26.6%	25.6%	75.5%	89.3%	8.7%	1.7%	99.7%
Tourism	29.7%	23.4%	16.0%	68.9%	38.3%	25.9%	13.4%	77.6%	92.1%	7.1%	0.7%	99.9%
All Industrial Ecosystems	19.0%	17.2%	16.7%	52.9%	29.8%	20.0%	15.6%	65.3%	93.3%	5.7%	0.8%	99.8%

*Source: Calculations by the JRC, based on **Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

It should be noted that the differences in the relative importance of SMEs across various industrial ecosystems do not vary much from year to year, as these differences reflect the long-term structural characteristics of the various ecosystems. A more detailed analysis of the role of SMEs in the various ecosystems is provided in chapters 3 and 4. More information about the breakdown of the EU-27 SMEs across NFBS industries in 2023 can be found in Figure 32 (Annex 7), while the role of SMEs in the NFBS of the EU-27 compared to the selected[8]

---

[8] The selected non-EU countries are: Albania (AL), Armenia (AM), Bosnia and Herzegovina (BA), Iceland (IS), Kosovo (XK) Moldova (MD), Montenegro (ME), North Macedonia (MK), Serbia (RS), Türkiye (TR), Ukraine (UA) and the United Kingdom (UK).

non-EU countries is provided in Table 18 (Annex 9). Finally, the role of EU-27 SMEs in the knowledge-intensive and high-tech fields is analysed in detail in Figure 29 (Annex 6).

2.2   The evolution of the SME population in 2023

While the previous paragraphs reviewed the significance of SMEs within the EU-27 economy, this section explores the dynamics of the SME[9] population during 2023 by focusing on new business registrations and bankruptcies, as reported by Eurostat.

The number of new business registrations in the EU-27 saw an increase of 2.6% in 2023, following a period of stagnation in 2022 (a growth rate of 0%). However, the number of business deaths also showed an increase (10.3% in 2022 and 13% in 2023), indicating an unfavourable trend in business closures. The biggest increase in registrations is experienced by DE (23.2%), while on the other end, IE showed a significant decline (-37.6%) (Figure 7). The biggest decrease in bankruptcies occurred in HR (-22.3%), while HU experienced the sharpest increase (155.3%), followed by NL and EE (54.1% and 51.7%, respectively).

Only six MSs managed to experience a growth in business registrations while also observing reduced bankruptcies. These are BG (+1.8% in registrations and -17.2% in bankruptcies), CZ (+0.2% and -6.9%), ES (8.8% and -3.5%), HR (11.1% and -22.3%), LT (9.1% and -0.7%) and SI (3.4% and -6%). On the other hand, seven MSs observed decreased registrations and increased business deaths: they were AT, BE, FR, HU, MT, PL and SE. The remaining MSs faced a mixed pattern, showing simultaneous increases or reductions in both categories. Data for CY, EL and IE did not fully cover the two analysed variables.

Figure 7: Annual percentage change in business registrations and bankruptcy declarations in 2023
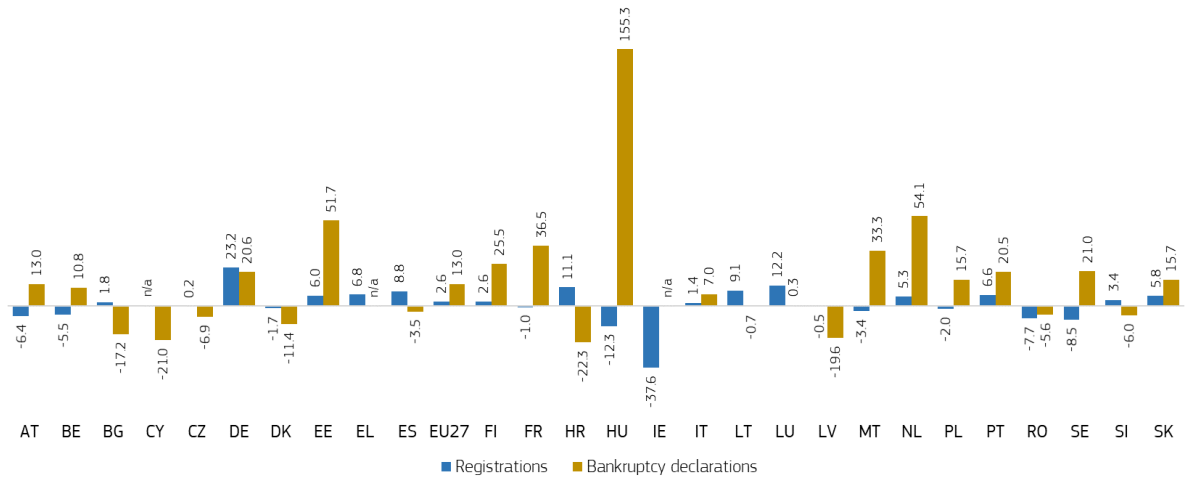
Source: Eurostat

---

3 The performance of EU-27 SMEs over the past years

SMEs in Europe and, more generally, throughout the world have faced unprecedented economic uncertainty and turmoil since 2020. The post-pandemic era was directly linked to an unexpected rebound in demand, which triggered global supply-side disruptions, while SMEs faced severe difficulties in hiring new staff. In the meantime, SMEs had to deal with sharp and rapid increases in the price of many of their inputs, and with energy prices, most notably of natural gas and electricity, which started to increase faster than the demand rebound warranted.

While 2022 saw a continued economic recovery, new impediments that jeopardised the viability of entrepreneurship and SMEs in particular emerged. Weak wind and hydropower electricity generation combined with the curtailed supply from Russia[10], the most prominent energy supplier, deteriorated SMEs' economic outlook. Furthermore, Russia's war of aggression against Ukraine impacted EU-27 SMEs directly (in a limited context through sanctions, export restrictions and interrupted supply chains) and indirectly (via broader war-related developments such as the steepened surge of gas prices with ripple effects for electricity prices). The high energy costs and the vicious cycle of inflationary pressures led to historically high inflation, measured by the Harmonised Index of Consumer Prices (HICP), to two-digit record highs by the end of 2022, which put in danger the viability of SMEs.

Additionally, the European Central Bank (ECB) has implemented the fastest increase in its policy interest rates on record, while credit flows to the private sector have significantly decelerated, partly due to reduced demand, posing a threat to the growth prospects of SMEs. Finally, the recent multifaceted conflict in the Middle East (namely the Israel-Hamas war and the Houthi ship attacks) has darkened the geopolitical climate further, with potential ramifications for the EU economy, affecting entrepreneurship directly through energy markets and disrupted supply chains.

At the same time, SMEs are indispensable for achieving progress in key EU policy areas, including innovation[11], diversity, equality[12] and the Twin Transition[13]. Accordingly, the European Commission has prepared various funding programmes and initiatives, including a dedicated SME Relief Package,[14] to protect and enhance their prosperity.

This section examines in detail the performance of EU-27 SMEs during this challenging period. It presents information on the economic environment in which SMEs operated in 2021, 2022 and 2023 (section 3.1). It then reviews the economic performance of SMEs for the same period based on the evolution of three key SME performance indicators (number of enterprises, value added and employment) (section 3.2). It analyses the achievements of SMEs per industrial ecosystem for this three-year period and, in parallel, compares the SME contribution to the EU economy with the respective performance of large enterprises (section 3.3). Finally, it provides a detailed exploration of the economic performance of SMEs in each of the EU MS (section 3.4).

3.1 The economic environment in which EU-27 SMEs operated in 2021, 2022 and 2023

The EU-27 Gross Domestic Product (GDP) increased by 0.5% in 2023, compared to the previous year (Figure 8). This means growth was subdued, especially compared to 2021 (6%) and 2022 (3.4%), when the post-pandemic economic rebound was still in full swing.

At the same time, inflation skyrocketed in 2022 to 9.2%, and remained high in 2023 at 6.4%. More information about GDP growth and HICP across MSs can be found in Table 7 (Annex 2).

---

[10] European Commission. 2023. European economic forecast: Autumn 2023.
[11] Productivity in SMEs and large firms, OECD, 2021, https://www.oecd-ilibrary.org/sites/54337c24-en/index.html?itemId=/content/component/54337c24-en.
[12] Flash Eurobarometer 486, SMEs, start-ups, scale-ups and entrepreneurship, September 2020, https://europa.eu/eurobarometer/surveys/detail/2244
[13] European Commission. 2020. 2020 Strategic Foresight Report: Charting the Course towards a More Resilient Europe.
[14] COM (2023) 535, https://single-market-economy.ec.europa.eu/publications/sme-relief-package_en

Figure 8: Annual GDP growth and inflation rates in EU-27 over the period 2015-2024
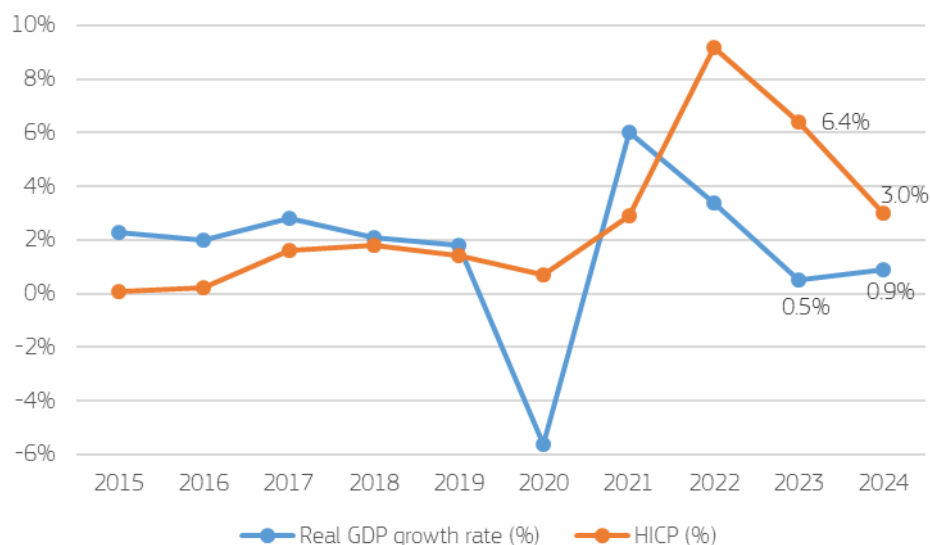
Note: Values referring to 2024 stem from European Economic Forecast, Winter 24 version
Source: Eurostat, European Economic Forecast – Winter 24

It is important to note that due to the high inflation rates in 2022 and 2023, the changes in SME value added reported in the next sections will be analysed in a dual mode. This is because SME value added data is provided by Eurostat in current prices, i.e. not adjusted for inflation, and the Joint Research Centre (JRC) nowcasted and forecasted all relevant figures in both real and current prices[15].

The challenging economic status quo throughout 2021, 2022, and 2023 is reflected in the Survey on Access to Finance of Enterprises (SAFE[16]), in which EU-27 SMEs assess the importance of the various issues and challenges they are facing. In 2023, the two issues viewed by EU-27 SMEs as the most important were "availability of skilled staff or experienced managers" and "costs of production or labour". Those two challenges also stood out as the most crucial in the two previous surveys of 2022 and 2021. More information referring to a more profound analysis of those challenges and the change of assessment about them, including the particularities of all 27 MSs, are analysed in Figure 27 (Annex 4).

3.2 *The economic performance of EU-27 SMEs in 2023*

Inflation continued to pose a major challenge to SMEs in 2023. While nominal value added increased in 2023, in real price terms every size class experienced a decline. Micro enterprises seemed to be the most resilient as their decline was limited to -0.4%, probably due to their ability to recover faster from shocks than larger companies[17]. The most significant decrease was recorded for small SMEs (-2.4%), with SMEs as a whole also declining more significantly than large enterprises (-1.6% and -1.1%, respectively). On the other hand, employment maintained a positive growth rate. Once again, micro-SMEs experienced the biggest growth, and the overall SMEs increase was 50% higher than that of large enterprises (Figure 9). Finally, the number of enterprises also increased in all categories, continuing the trend observed in 2022.

---

[15] Value added is adjusted to 2015 prices according the GDP deflator and not the HICP since it includes all goods and services in the economy reflecting better the inflationary impacts faced by SMEs. Consequently, all growth rates between these two years have been calculated based on this computation. Note that this calculation method differs from the 2022/2023 Annual Report on European SMEs, the figures can therefore not be directly compared to last year's Annual Report.
[16] For the full results of the SAFE survey see European Commission (2023) Survey on the Access to Finance of Enterprises (SAFE), Analytical Report, written by Verian, December 2023.
[17] https://www.oecd-ilibrary.org/sites/8f68434d-en/index.html?itemId=/content/component/8f68434d-en

Figure 9: Annual change (%) in 2023 of real value added, employment and number of enterprises in the EU-27 NFBS by enterprise size class
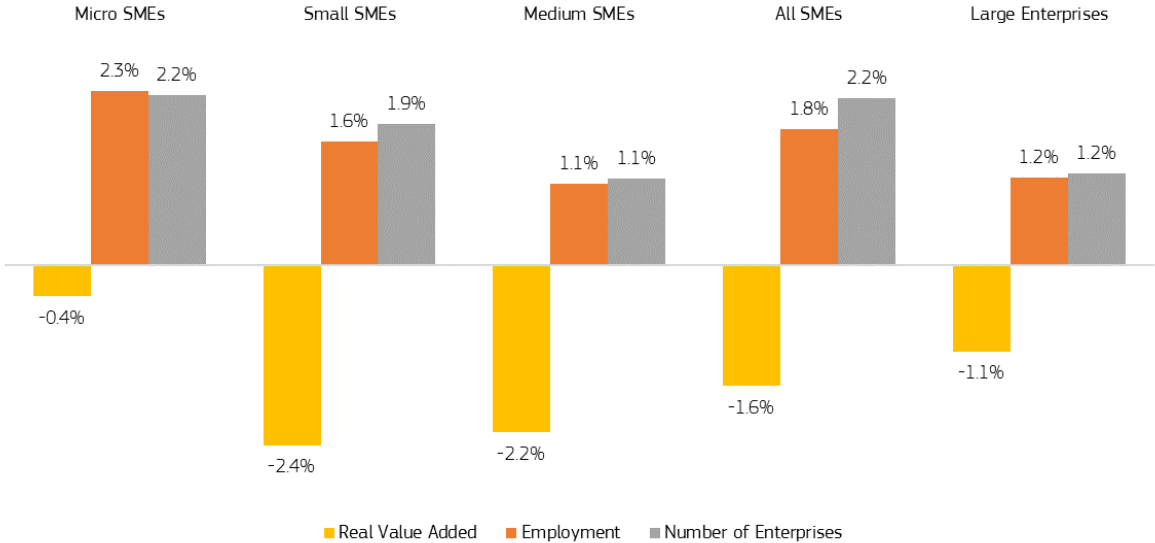
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

A more positive picture emerges when analysing SME performance from 2021 to 2023. Employment has fully recovered from the pandemic and preserves a stable pace of improvement. Similarly, the number of enterprises is growing and is closely aligned to employment growth.

Even when adjusted for inflation, value added still saw a positive growth rate for 2021-2023. This is especially true for micro enterprises, which outperform the other size classes in every indicator (Figure 10). Moreover, SMEs overall seem to be one step ahead of large enterprises as their growth rates are higher. A more granular exploration of the performance of EU-27 SMEs in different industries and the comparison between SMEs and large enterprises is provided in Figure 32 (Annex 7), while the following sections of the current chapter give a detailed breakdown of the SME performance in various indicators per industrial ecosystem and MS.

Figure 10: Cumulative change (%) in 2023 compared to 2021 of inflation adjusted value added, employment and number of enterprises in the EU-27 NFBS by enterprise size class

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

3.3   EU-27 SMEs in the industrial ecosystems over the period 2021-2023

The European industrial strategy[18] points to SMEs as the primary vehicle of innovation across ecosystems and the EU economy as a whole[19,20]. The annual monitoring of the SME evolution within the 14 ecosystems has become essential because of their major role in all key indicators, especially employment and value added.

This section provides an overview of how the EU-27 SMEs contributed to the economic performance of industrial ecosystems between 2021 and 2023. It also compares SMEs and large enterprises across ecosystems over the last two years, and finally, it analyses differences between MSs. Annex 10 presents more information about the fundamental pillars of industrial ecosystems[21], their composition, and the Statistical Classification of Economic Activities in the European Community (NACE) industries included in their structure.

---

[18] https://single-market-economy.ec.europa.eu/industry/strategy_en
[19] COM (2023) 535, https://single-market-economy.ec.europa.eu/publications/sme-relief-package_en
[20] Productivity in SMEs and large firms, OECD, 2021, https://www.oecd-ilibrary.org/sites/54337c24-en/index.html?itemId=/content/component/54337c24-en.
[21] The definitions of the ecosystems do not always match the NACE classification used by Eurostat and national statistical organisations in the EU to collect and report industry data. As a result, the currently available industry data do not always fully cover the economic activities of the 14 industrial ecosystems (see Figure 37 in Annex 10 for details).

3.3.1 Contribution of EU SMEs to the economic performance of the industrial ecosystems in 2023

3.3.1.1 Number and share of SMEs across the 14 industrial ecosystems

The 14 industrial ecosystems differ substantially in terms of the number of enterprises. 'Construction' and 'retail' were the largest industrial ecosystems, with 6.2 million and 5.5 million enterprises, respectively. In contrast, 'electronics' and 'energy-renewables' were the smallest, with 113,200 and 121,600 enterprises, correspondingly. Table 22 in Annex 10 offers detailed information.

SMEs play a key role in every industrial ecosystem, constituting 99% of enterprises in all 14 clusters. Among SMEs, micro enterprises represent the largest group at 93%, but their presence was slightly lower (below 90%) in the 'electronics', 'energy intensive industries', 'aerospace and defence', 'agri-food', and 'textiles' industrial ecosystems in 2023 as compared to the other nine industrial ecosystems (Figure 11)[22, 23].

Figure 11: Share of micro-SMEs in the number of enterprises in each of the 14 industrial ecosystems in 2023
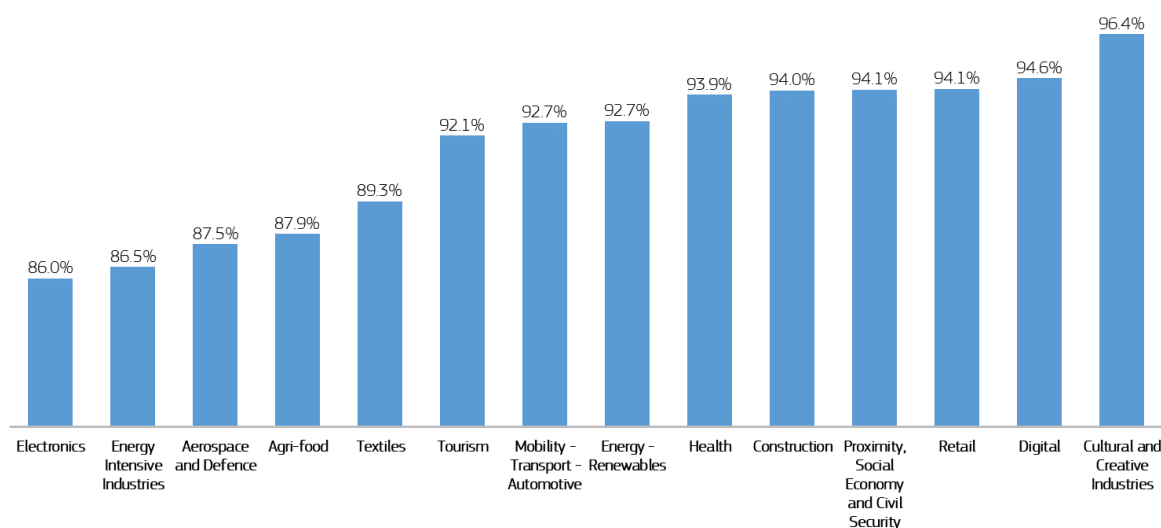
3.3.1.2 SME employment in each of the 14 industrial ecosystems

As with the number of enterprises, in 2023 the 'construction' and 'retail' industrial ecosystems emerged as the largest employers across the EU-27, accounting for 19.8% and 21.9% respectively of total employment in the 14 ecosystems (Figure 12). Conversely, the 'energy-renewables' (0.9%), 'electronics' (1.3%), and 'textiles' (1.4%) industrial ecosystems were among the smallest in terms of persons employed.

---

[22] More details on the number of enterprises by ecosystem and size class are provided in Table 22.
[23] The methodology for constructing the data used for the analysis of industrial ecosystems is provided in Annex 4 of the Annual Single Market Report 2022 (European Commission (2022), Commission Staff Working Document, Annual Single Market Report 2022, Brussels, 22.2.2022, SWD(2022) 40 final).

Figure 12: Number of persons employed (in thousands) by SMEs and large enterprises per ecosystem and percentage of employment in total employment of the 14 ecosystems - 2023
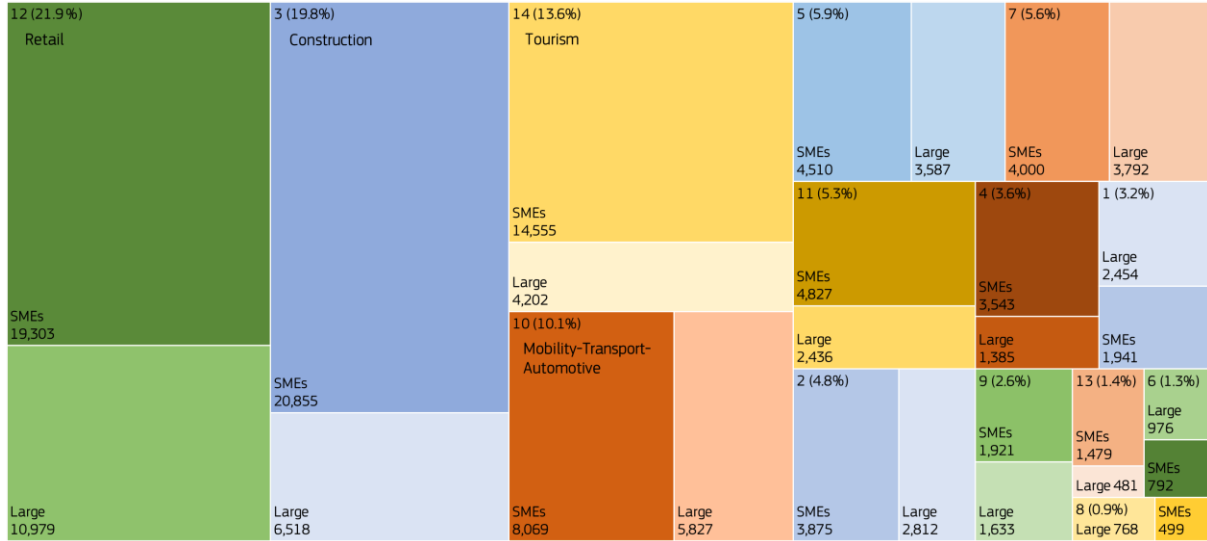
Note: Each ecosystem is represented by the same colours in Figure 12 and Figure 14, with the darkest shading showing employment by SMEs and the lighter shading indicating the number of persons employed within large enterprises for the given ecosystem. The percentages in the top left corner of each ecosystem indicate the percentage of the total SME employment accounted for by that ecosystem. The industrial ecosystems are as follows: 1 – Aerospace and Defence, 2 – Agri-food, 3 – Construction, 4 – Cultural and Creative Industries, 5 – Digital, 6 – Electronics, 7 – Energy Intensive industries, 8 – Energy-Renewables, 9 – Health, 10 – Mobility-Transport-Automotive, 11 – Proximity, Social Economy and Civil Security, 12 – Retail, 13 – Textiles, 14 – Tourism. Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
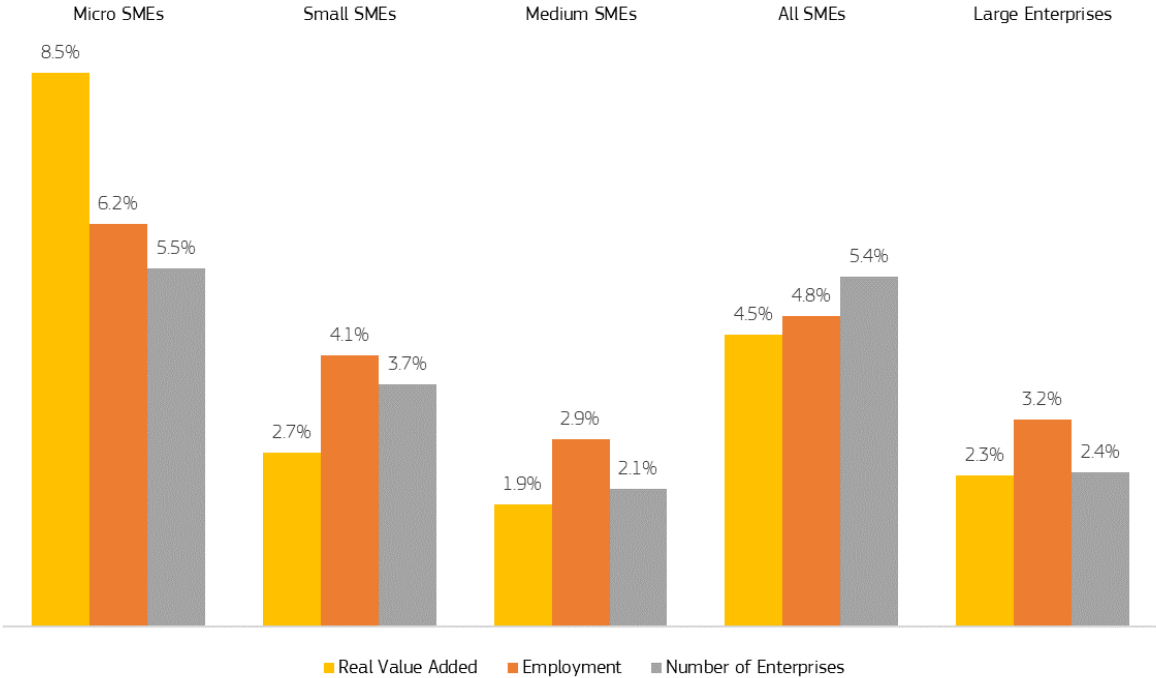**Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database

The SME size class was the largest employer in 11 of 14 ecosystems. In fact, SMEs accounted for more than 70% of employment in the ecosystems 'construction', 'cultural and creative industries', 'textiles', and 'tourism' (Figure 13). The exceptions were 'aerospace and defence', 'electronics', and 'energy-renewables', where large enterprises employ more people than SMEs. Moreover, micro-SMEs were particularly important employers in the ecosystems 'construction', 'cultural and creative industries', 'proximity, social economy and civil security', 'retail', and 'tourism', in which they accounted for 38%, 38%, 34%, 32% and 38% respectively, of total ecosystem employment.

Figure 13: Proportion of the employment of each ecosystem attributed to micro SMEs, small SMEs, medium-sized SMEs and large enterprises - 2023

Note: Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

3.3.1.3 SME value added in each of the 14 industrial ecosystems

The ecosystems with the most significant number of employees were also responsible for the largest proportion of value added generated by the 14 ecosystems (Figure 14). The 'retail' and 'construction' ecosystems generated the largest shares of the total value added of the 14 industrial ecosystems, at 21.0% and 16.4%, respectively. Moreover, as in the case of employment, the ecosystems 'electronics', 'energy-renewables', and 'textiles' were the smallest in terms of value added, creating 2.1%, 1.9%, and 1.0%, respectively, of total value added generated by the 14 industrial ecosystems.

SMEs accounted for more than 50% of value added in six out of 14 ecosystems, namely, 'cultural and creative industries' (57%), 'retail' (60%), 'textiles' (61%), 'proximity, social economy and civil security' (63%), 'tourism' (69%), and construction (72%) (Figure 15). In contrast, they accounted for only 35% or less of the value added generated by the ecosystems of 'health' (28%), 'energy-renewables' (32%), 'electronics' (32%), 'energy intensive industries' (34%), and 'aerospace and defence' (35%).

Micro SMEs drive the differences in the value added contribution of SMEs across the various ecosystems. In ecosystems with more substantive SME contribution like 'construction', 'proximity, social economy and civil security', and 'tourism', micro SMEs reach larger shares than small and medium SMEs (Figure 15).

Figure 14: Value added (in EUR million) by SMEs and large enterprises per ecosystem and percentage of the ecosystem value added in the total value added generated by the 14 ecosystems - 2023
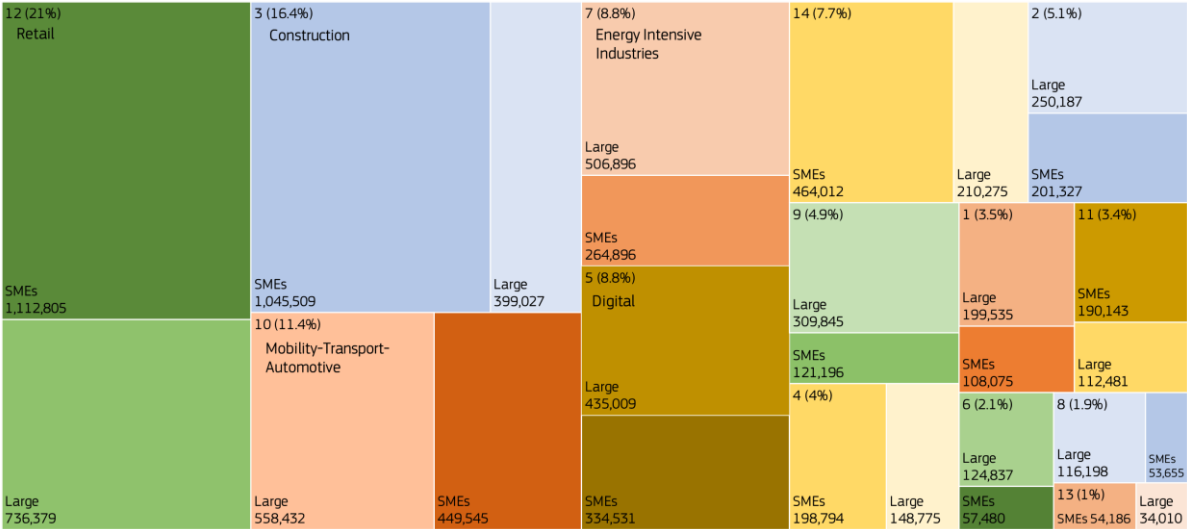
Note: See Figure 12 for related data notes
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 15: Proportion of the total value added of each ecosystem attributed to micro SMEs, small SMEs, medium-sized SMEs and large enterprises - 2023
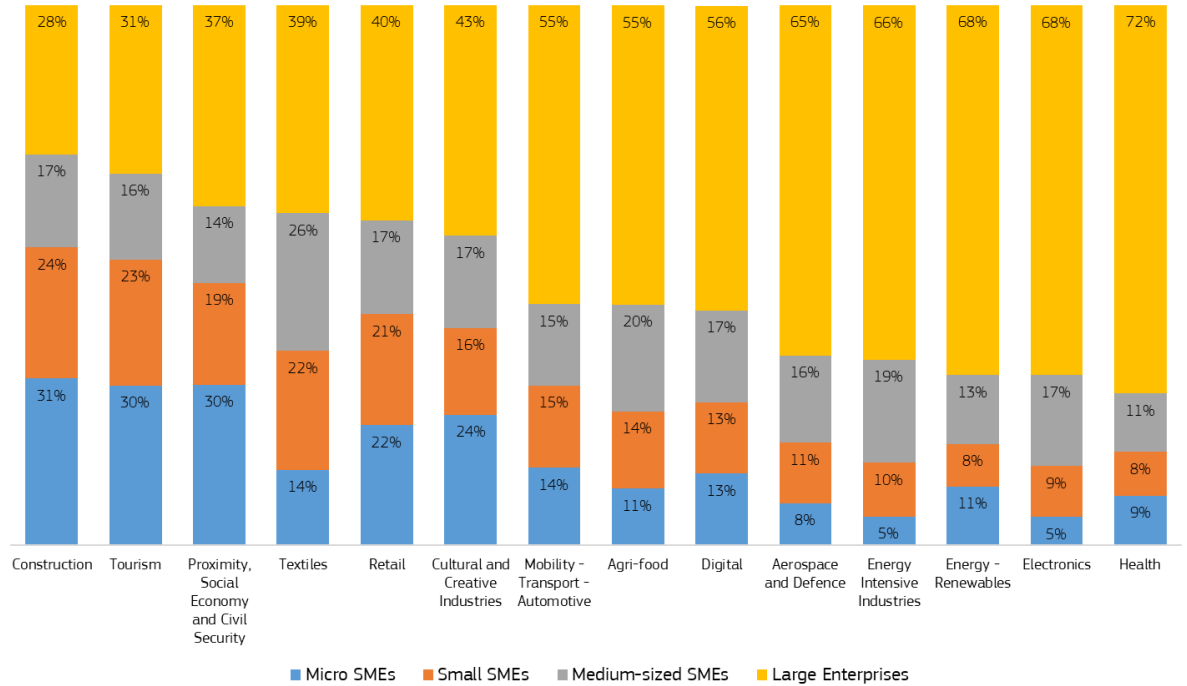
Note: See Figure 13 for related data notes
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

3.3.2 The performance of EU-27 SMEs by industrial ecosystems over the period 2021-2023

In 2023, SMEs grew in every industrial ecosystem across employment and number of enterprises, compared to previous years. Concerning value added, despite the high growth in current prices, all 14 ecosystems declined in adjusted inflation terms. In general, there is no clear pattern that a specific industrial ecosystem outperformed the others, as each one possesses its unique attributes and evolves independently.

Three ecosystems performed better than the others on at least two indicators. Compared to 2022, 'digital' experienced the highest increase rate in the number of enterprises (5.4%) and the second most considerable growth in employment (3.8%), but its value added was close to the overall industrial ecosystems average. 'Tourism' outperformed all other ecosystems in employment (4.5%) and showed the second-best performance in population growth (3.8%). Its value added performance, however, was subdued. Similarly, the third best-performing ecosystem in employment and number of enterprises was 'cultural and creative industries', with growth rates of 2.9% and 3.5%, respectively. On the other hand, the lowest growth rates in employment and SME population belong to 'textiles' and 'energy intensive industries' (Table 3).

The highest growth in value added expressed in current prices was noted by 'construction' and 'energy-renewables' (8.8% and 7.7% correspondingly). The lowest growth rates belong to 'agri-food' and 'health' (5% and 5.2% respectively). In real terms, the most "resilient" ecosystem is 'construction', with a marginal decline (-0.2%), while the worst performing ecosystem, 'agri-food', shrank by -3.7% (Table 3).

Table 3: Change (%) in SME and large enterprises value added (both nominal and real), employment and number of enterprises in 2023 compared to 2022 and 2021 in different industrial ecosystems

	Annual change (in %) in 2023 relative to 2022 (SMEs)				Cumulative change (in %) in 2023 relative to 2021 (SMEs)				Annual change (in %) in 2023 relative to 2022 (large enterprises)			
	Value Added (nominal)	Value Added (real)	Employment	Number of Enterprises	Value Added (nominal)	Value Added (real)	Employment	Number of Enterprises	Value Added (nominal)	Value Added (real)	Employment	Number of Enterprises
1. Aerospace and Defence	6.7%	-2.2%	1.2%	1.9%	17.9%	1.4%	2.9%	4.0%	7.8%	-1.2%	1.1%	1.4%
2. Agri-food	5.0%	-3.7%	1.1%	1.9%	16.9%	0.5%	2.8%	4.0%	7.1%	-1.8%	0.3%	-0.2%
3. Construction	8.8%	-0.2%	1.2%	1.4%	20.3%	3.5%	3.7%	4.5%	9.5%	0.3%	1.2%	1.3%
4. Cultural and Creative Industries	7.4%	-1.6%	2.9%	3.5%	17.3%	0.9%	6.4%	7.0%	7.5%	-1.5%	3.2%	3.2%
5. Digital	7.1%	-1.8%	3.8%	5.4%	17.5%	1.0%	8.7%	10.0%	7.4%	-1.5%	4.3%	4.5%
6. Electronics	6.2%	-2.6%	0.9%	1.8%	15.6%	-0.6%	2.4%	3.9%	7.2%	-1.8%	0.5%	0.5%
7. Energy Intensive Industries	6.1%	-2.7%	0.7%	1.2%	15.8%	-0.4%	2.2%	3.0%	6.5%	-2.4%	0.1%	-0.1%
8. Energy - Renewables	7.7%	-1.3%	1.5%	2.4%	24.5%	7.1%	3.6%	4.4%	13.8%	4.3%	0.2%	0.5%
9. Health	5.2%	-3.6%	1.7%	2.4%	16.5%	0.2%	4.0%	4.9%	3.6%	-5.0%	0.8%	0.8%
10. Mobility - Transport - Automotive	6.8%	-2.1%	1.3%	1.7%	23.1%	5.9%	2.6%	3.3%	6.0%	-2.8%	0.7%	0.6%
11. Proximity, Social Economy and Civil Security	7.2%	-1.7%	2.3%	2.4%	23.9%	6.6%	6.6%	6.2%	6.5%	-2.4%	1.1%	1.8%
12. Retail	6.5%	-2.3%	0.7%	1.5%	23.7%	6.4%	1.9%	2.8%	4.5%	-4.2%	0.4%	0.4%
13. Textiles	5.8%	-3.0%	0.8%	1.0%	15.3%	-0.8%	2.2%	2.6%	3.4%	-5.2%	0.2%	-1.0%
14. Tourism	7.3%	-1.6%	4.5%	3.8%	32.6%	14.1%	12.3%	10.5%	5.3%	-3.5%	3.3%	3.9%
All Industrial Ecosystems	7.1%	-1.8%	1.9%	2.2%	21.6%	4.6%	4.8%	5.3%	6.5%	-2.4%	1.2%	1.3%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short*-Term Business Statistics and National Accounts Database*

A longer-term analysis of the cumulative change of key indicators within the period 2021 – 2023 makes it obvious that certain ecosystems managed to bounce back from the pandemic and even achieve significant growth, while others showed a more subdued recovery. All industrial ecosystems grew in terms of both employment and the number of enterprises, but the range of growth rates is rather significant and unveils the diverging perspective.

As expected, 'tourism' experienced an outstanding increment in both indicators (12.3% and 10.5% respectively) (Table 3). The explanation behind this performance lies in the unprecedented recession witnessed during lockdown periods, so the bouncing back was well anticipated. Similarly, the 'digital' ecosystem also experienced exceptional growth rates. The emergence of new technologies and increased investment in this ecosystem have significantly contributed to the growth rates in terms of SME population (10.0%) and employment (8.7%).

Regarding value added, all ecosystems experienced double-digit increase rates in current prices, but the inflation adjusted figures reveal a drastically lower growth. Three ecosystems, namely 'textiles', 'electronics' and 'energy intensive industries' declined (-0.8%, -0.6% and -0.4%, respectively). The highest growth rates are reported for

'tourism', 'energy-renewables', and 'proximity, social economy and civil security' (14.1%, 7.1% and 6.6%). A similar analysis, reflecting the annual and cumulative change in all three key indicators per NACE industry can be found in Figure 32 (Annex 7).

3.3.3 The economic performance of EU SMEs versus large enterprises across industrial ecosystems in 2023

The complex structure of industrial ecosystems and the multifaceted nature of the three indicators under investigation make it difficult to draw simple conclusions about the performance of different class sizes. A detailed analysis is needed to assess the strengths and weaknesses of SMEs and large enterprises per ecosystem.

Concerning real value added, all SMEs in every ecosystem experienced a decline, but there are two clusters in which large businesses managed to grow (Table 3). Overall, the 'construction' ecosystem, the second largest in terms of value added, demonstrated a remarkable performance, experiencing the smallest decline for SMEs, and the second-largest increase for large companies[24]. In relative terms, large businesses outperformed SMEs in 2023 in eight out of the 14 industrial ecosystems while SMEs surpassed large enterprises in six ecosystems, including in key ecosystems such as 'retail,' the largest contributor to value added, and 'mobility-transport-automotive,' ranking third in significance.

When it comes to value added adjusted for inflation, the trends for SMEs and large enterprises were generally similar (Figure 16). The biggest changes reflecting a decline for both size classes are found in the left-bottom corner of the chart, and the largest declines are detected in three ecosystems: 'health', 'textiles' and 'agri-food'. There are, however, two exceptions to this symmetrical pattern: 'construction' and 'energy-renewables' experienced positive growth, although exclusively for large companies. 'Energy-renewables', in particular, managed to capture growth higher than 4%, making it a distinct outlier.

---

[24] https://single-market-economy.ec.europa.eu/industry/strategy/ecosystems_en

Figure 16: Annual Change (%) of SME and large enterprise value added (adjusted for inflation) in 2023, by industrial ecosystem

In 2023, employment increased in all 14 industrial ecosystems for SMEs and large enterprises. SMEs registered higher growth rates in eleven cases, while large businesses achieved larger growth in two ecosystems: 'cultural and creative industries' and 'digital'. The most noticeable increase for SMEs occurred in 'tourism', while for large companies this was in 'digital' (4.5% and 4.3% respectively). In relative terms, the SME increase rate is seven times bigger in two ecosystems: 'energy intensive industries' and 'energy-renewables'.

The employment growth rates of SMEs and large enterprises are highly correlated (Figure 17). All 14 ecosystems experienced growth in an analogous way for both size classes. In most cases, SME growth rate was marginally greater than the respective one of large enterprises. The increase didn't exceed 2% for most ecosystems in both directions, and only three of them managed to capture growth equal to or bigger than 3% in both axes: 'tourism', 'cultural and creative industries' and 'digital'.

Figure 17: Annual Change (%) in SME and large enterprise employment in 2023, by industrial ecosystem
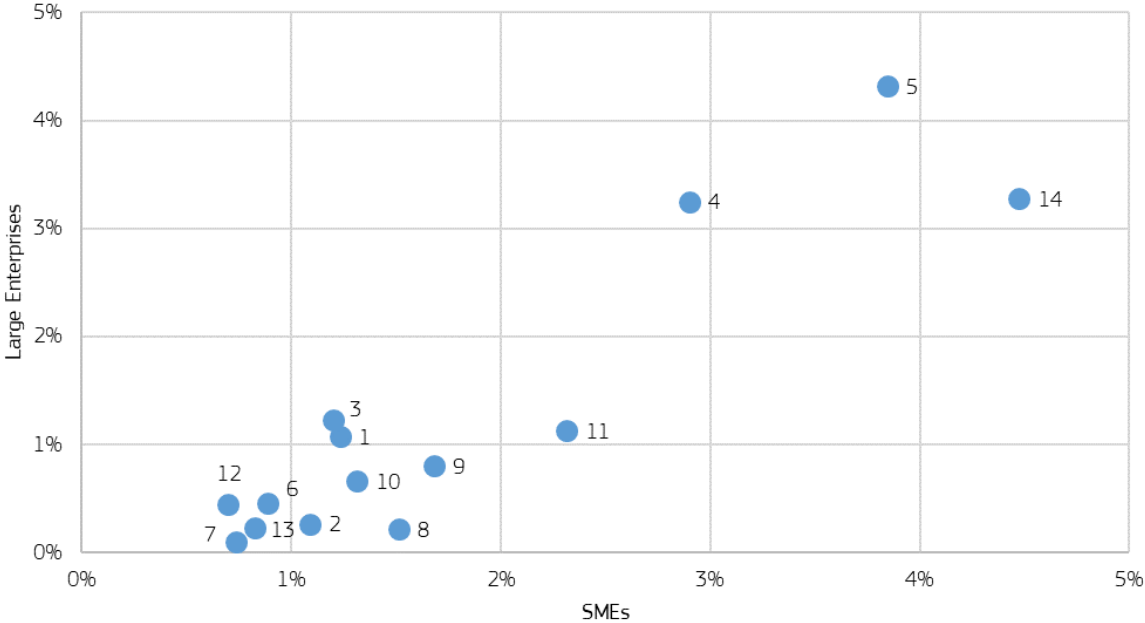
3.3.4 Contribution of SMEs to the performance of the industrial ecosystems in 2023 relative to 2021

The contribution of SMEs to the evolution from 2021 to 2023 in the value added and employment of the 14 ecosystems varied greatly. The share of cumulative change in total value added expressed in current prices terms for the period 2021-2023, shows that SMEs accounted for equal or more than 60% of the change in five ecosystems: 'cultural and creative industries', 'retail', 'proximity, social economy and civil security', 'construction', and 'tourism' (Figure 18). The contribution was less than 30% in three clusters ('health', 'electronics' and 'energy-renewables').

Figure 18: Share of the cumulative change in total value added (in current prices) between 2021 and 2023 attributed to SMEs, by industrial ecosystem
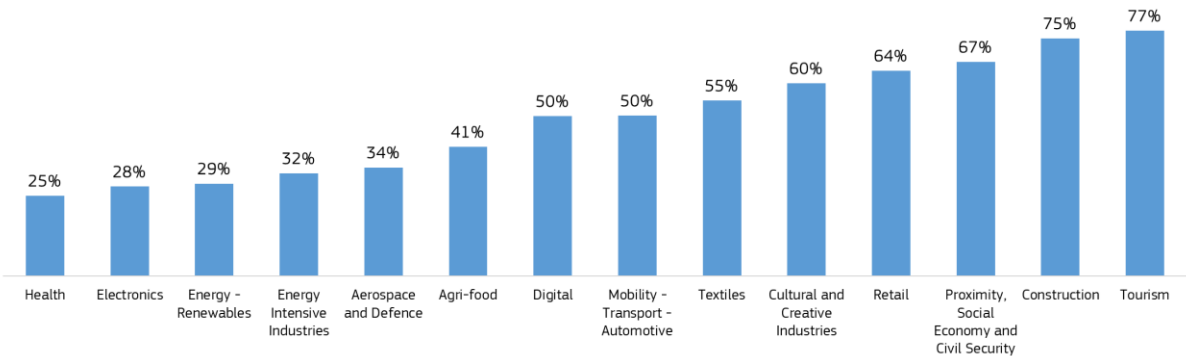
'Aerospace and defence', 'electronics', and 'digital' are the three ecosystems in which SMEs accounted for the smallest proportion of the cumulative change from 2021 to 2023 in total employment, less than 55% (Figure

19). Regarding the remaining 11 ecosystems, SME contribution varied from 63% to 86%. In two cases, it was higher than 80% ('tourism' and 'textiles', 82% and 86%, respectively). Moreover, the SME share of the employment change in 13 ecosystems is larger than their share of the change in current prices value added. The sole exception is 'construction', in which the shares are equal, 75%. A more in-depth analysis of the cumulative change in real value added, as well as a detailed examination of every indicator for each SME segment, is presented in Figure 38 (Annex 10).

Figure 19: Share of the cumulative change in total employment between 2021 and 2023 attributed to SMEs, by industrial ecosystem
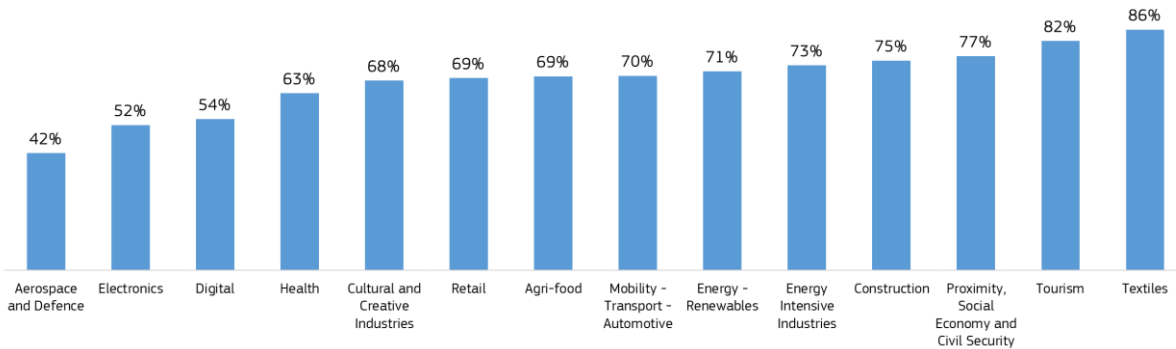
Note: See Figure 18 for related data notes
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

3.3.5 The economic performance of SMEs in EU-27 Member States in terms of industrial ecosystems in 2023

The key industries and activities per country differ depending on the availability of raw materials and other inputs, the technical knowledge expressed as human capital, the geopolitical background, etc. This section presents SMEs by focusing on booming and on less developed ecosystems at MS level.

The industrial ecosystem which experienced the highest growth in employment for 2023 across the EU-27 is 'Tourism' (+4.5%), which was the fastest-growing ecosystem in twelve countries (Map 3). the second fastest-growing in three MSs, and the third in four MSs. Another ecosystem experiencing widespread growth is 'digital', which experienced the highest growth rate in six MSs, the second highest in five MSs (among them key economies like DE, FR, IT and NL), and the third highest in six other MSs. 'Cultural and creative industries' also experienced a noteworthy growth, outperforming the other ecosystems in five MSs. 'Proximity, social economy and civil security', 'energy-renewables' and 'textiles' also left their imprint on SME employment as their growth in certain countries was quite remarkable.

Regarding the growth rates of SME value added in real prices terms, the EU-27 averages per ecosystem are negative. Nevertheless, the ranking amongst them is important as it indicates which ones were more resilient and mitigated their losses. The smallest decline belonged to 'construction', which declined by a marginal -0.2%. At MS level, 'construction' was the most resilient ecosystem in eight countries: for four of them, growth was observed (DE, EL, PL, and SI), while the remaining four (HR, LV, HU, and NL) showed a decline (Map 4). Moreover, 'construction' was the second most resilient ecosystem in two MSs and the third most in three. Another ecosystem which experienced noteworthy resilience in inflation adjusted value added terms was 'energy-renewables', the best performing ecosystem in eight MSs. On the other hand, this ecosystem also registered significant decline rates in some countries, e.g., in BG (-27%) and EE (-24%). The most contradictory performance on this ecosystem can be seen in EL, as its SME value added decrease rate (-27%, the worst rate of this country among all 14 ecosystems), coincides with the best SME employment performance in 2023, as shown in Map 3.

Regarding particularities amongst MSs, ES is the country in which the best performing ecosystems in both SME employment and SME value added are the same: 'tourism' obtained the first place in both categories, 'retail' the second, and 'proximity, social economy and civil security' was ranked 3rd in employment and 4th in value added.

Map 3: Industrial Ecosystem with the biggest annual growth rate in employment for 2023 in the EU-27 and across EU Member States
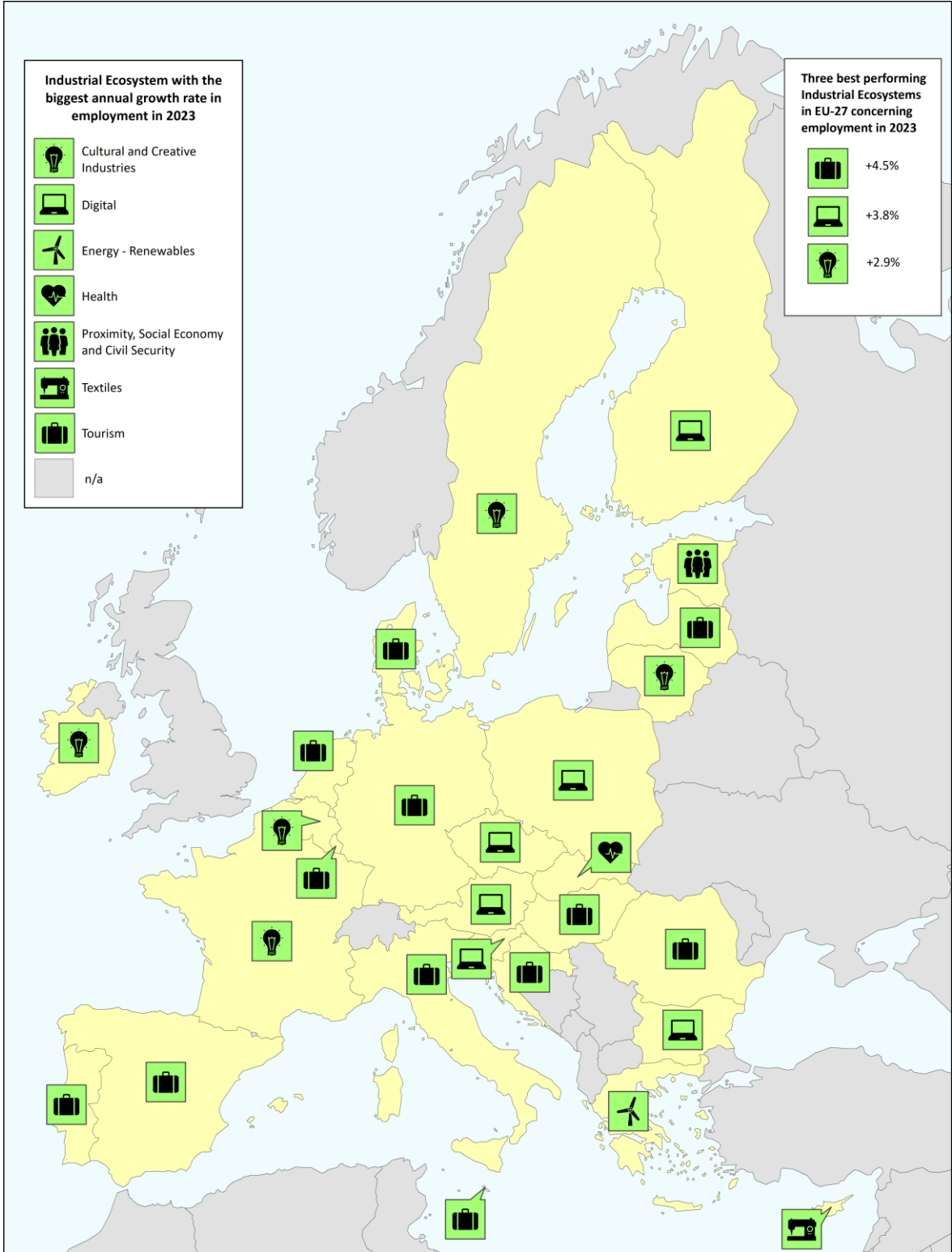
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 4: Industrial Ecosystem with the biggest annual growth rate in inflation adjusted value added for 2023 in the EU-27 and across EU Member States
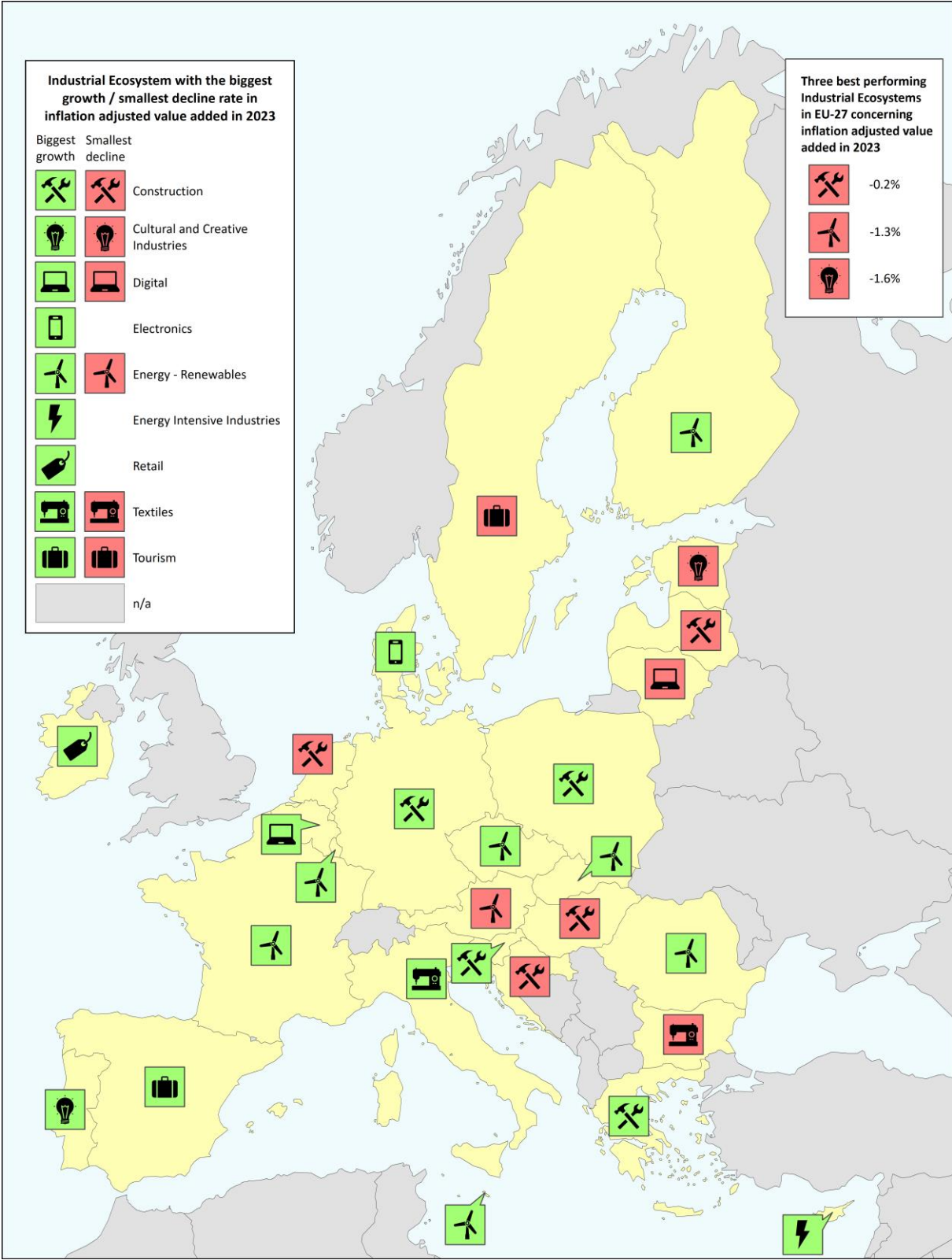
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

3.4 The economic performance of SMEs in each of the EU Member States in 2023

The spatial analysis of SMEs' economic performance, in terms of key indicators such as value added or employment, offers valuable insights into neighbouring MSs' performance and clusters formation.

In 2023, the inflation-adjusted value added of SMEs presented a mixed picture (Map 5). It grew in seven MSs, with only one growth rate larger than 5% (MT, 6.8%). In general, southern countries like MT, ES, EL, PT and CY experienced growth, while all others declined. Eastern MSs observed severe rates of decrease, often with double digits. The worst decline was observed in EE (-20.4%), followed by BG and LT (-16.5% and -15.8%, respectively), largely due to very high inflation rates in these countries. All of these countries joined the EU from 2004 onwards, and some of them may have been particularly affected by the exposure of their economies to the Russian war of aggression against Ukraine and the vicious cycle of inflation rates. Regarding the largest EU-27 economies, ES grew by 4.9%, DE and IT dropped slightly less than the EU-27 average (-1.58% and -1.60% compared to the EU average of -1.62%), while the decline experienced by NL and FR was more significant (-3.8% each). Further illustrative analysis pertaining to nominal value added and the extended period from 2021 to 2023 can be found in Map 20 (Annex 8).

Regarding SME employment, the vast majority of MSs grew in 2023. Only RO and FI experienced a decline, -1.1% and -0.6%, respectively (Map 6). The growth rate of all other countries varied from 0.2% (HU) to 8.2% (MT). Map 24 (Annex 8) presents the evolution of SME employment for the period 2021-2023. It also provides similar information on the number of SMEs across Member States.

A more granular breakdown of the performance of size classes, as presented in Map 7, shows the size class that experienced the biggest annual growth rate in inflation-adjusted value added for 2023, in every MS. Similarly to Map 4, the "biggest growth rate" does not necessarily entail that there is a proper positive rate. However, it signals which size class performed better than the others, even if still in negative terms. In total, micro enterprises performed better in ten MSs, small ones in eight, medium-sized SMEs in four and large companies in five. In the EU-27 as an average, micro enterprises are ranked first, followed by large ones. The diversity amongst EU economies is reflected in the spatial distribution, as no clear clusters of a certain size class dominate a broader region.

The narrative is much more straightforward concerning the growth rates per size class and per MS in employment terms. Firstly, all MSs except RO experienced positive growth rates. In most cases, micro enterprises performed better, while small businesses experienced the biggest growth rates in seven MSs, medium-sized in one, and large companies in five countries (Map 8). The EU-27 as a whole follows exactly the same pattern: the biggest increase in employment belonged to micro enterprises, the second best to small ones, large enterprises were ranked third, and medium-sized fourth. Finally, at a spatial analysis level, a few clear clusters emerge, like the improvement of micro employment in PT, ES, FR and the three Benelux MSs, while small enterprises ranked first in DE, AT and SI, and medium-sized and large companies performed best in DK, SE and FI.

Map 5: Annual growth rate of SME adjusted for inflation value added in the NFBS in 2023 in the EU-27 and across EU Member States

Annual growth rate (%) of SME adjusted for inflation value added in 2023	
MT	6.8
ES	4.9
EL	3.0
PT	1.0
BE	0.8
DK	0.7
CY	0.2
DE	-1.6
EU27	**-1.6**
IT	-1.6
PL	-1.7
FI	-2.8
SI	-2.8
NL	-3.8
FR	-3.8
IE	-4.2
LU	-4.7
AT	-5.3
HR	-5.9
SK	-6.6
SE	-7.9
RO	-9.2
LV	-10.6
CZ	-12.0
HU	-12.6
LT	-15.8
BG	-16.5
EE	-20.4

Legend — Annual growth rate (%) of SME adjusted for inflation value added in 2023:
- ≤-10%
- -10 - -5%
- -5 - 0%
- 0 - 5%
- >5%
- n/a
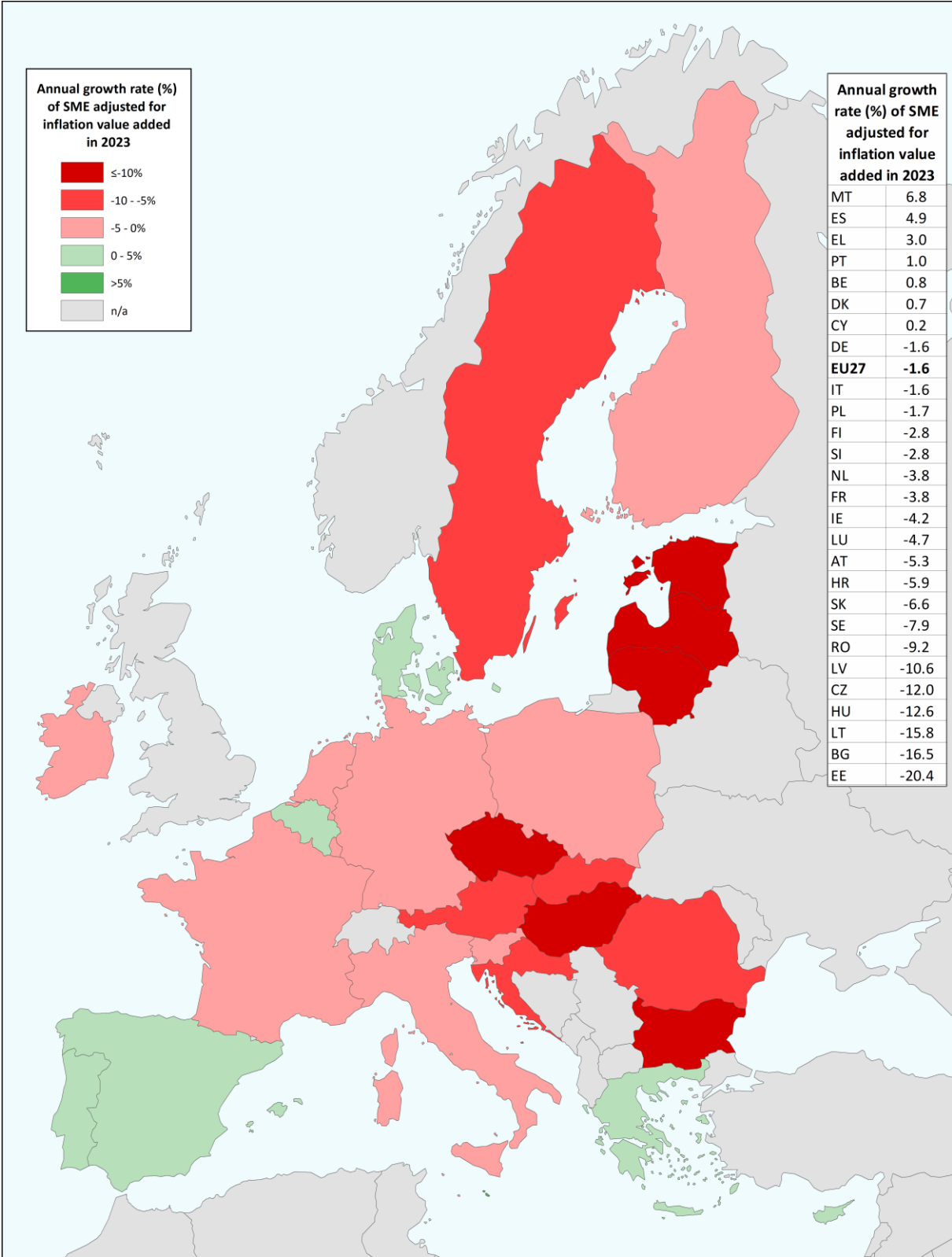
Map 6: Annual growth rate of SME employment in 2023 in the EU-27 and across EU Member States
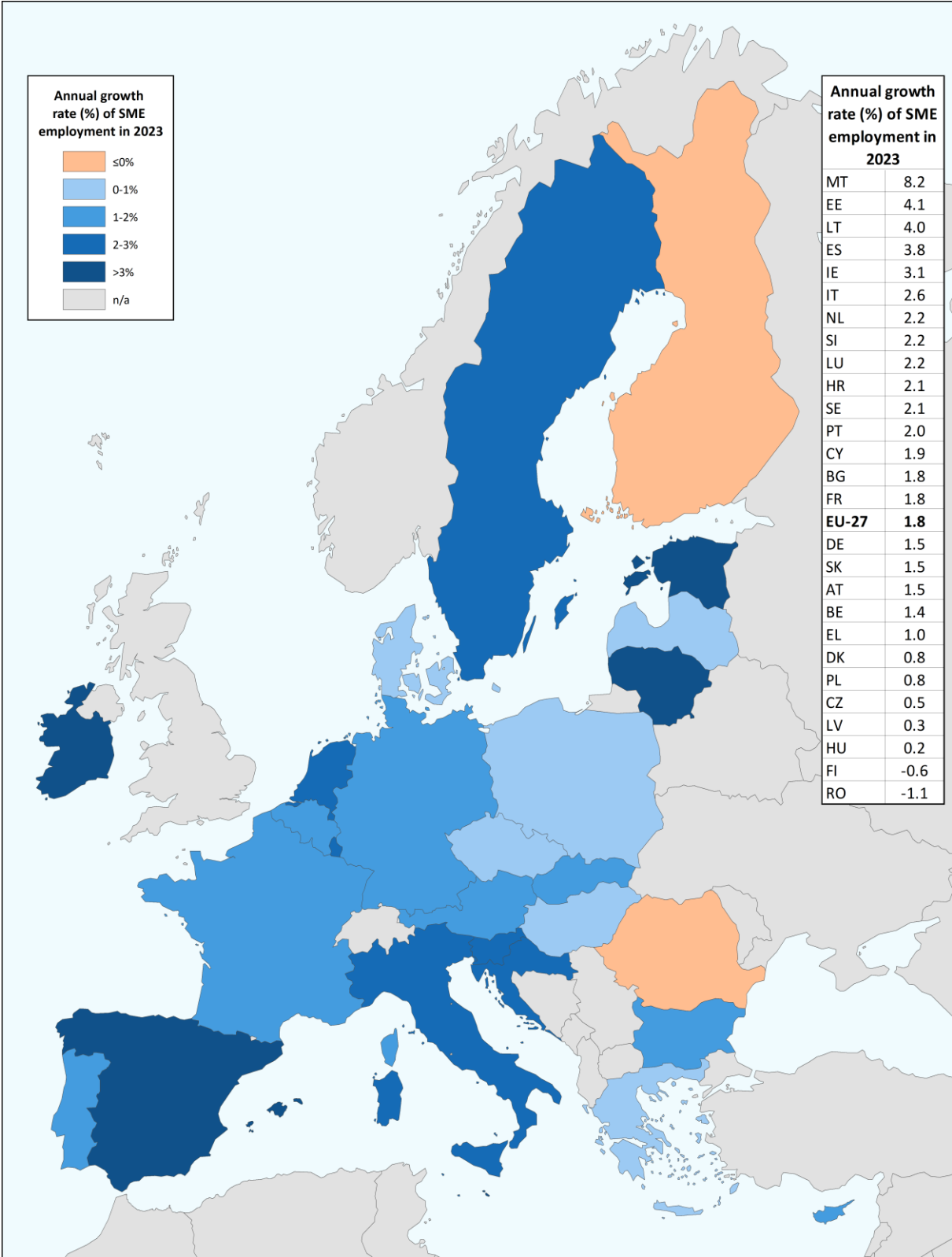
Annual growth rate (%) of SME employment in 2023	
MT	8.2
EE	4.1
LT	4.0
ES	3.8
IE	3.1
IT	2.6
NL	2.2
SI	2.2
LU	2.2
HR	2.1
SE	2.1
PT	2.0
CY	1.9
BG	1.8
FR	1.8
EU-27	**1.8**
DE	1.5
SK	1.5
AT	1.5
BE	1.4
EL	1.0
DK	0.8
PL	0.8
CZ	0.5
LV	0.3
HU	0.2
FI	-0.6
RO	-1.1

Legend — Annual growth rate (%) of SME employment in 2023:
- ≤0%
- 0-1%
- 1-2%
- 2-3%
- >3%
- n/a

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 7: Size class with the biggest annual growth rate in inflation adjusted value added for 2023 in the EU-27 and across EU Member States

Size class with the biggest annual growth rate (%) in inflation adjusted value added in 2023		
MT	small	16.5
ES	micro	15.0
EL	micro	13.2
PL	micro	11.4
SK	large	5.6
FR	large	4.7
BE	small	4.3
PT	small	3.6
DK	small	2.9
SI	small	2.1
CY	medium	2.0
FI	large	0.3
DE	micro	0.2
NL	medium	0.1
EU-27	**micro**	**-0.4**
IT	medium	-0.7
RO	micro	-1.2
IE	micro	-1.5
HR	large	-2.7
LV	small	-2.8
AT	large	-3.5
LU	micro	-3.5
HU	micro	-5.0
SE	small	-7.5
LT	micro	-10.7
CZ	medium	-10.9
BG	small	-13.6
EE	micro	-19.5

Legend — Size class with the biggest annual growth rate (%) in inflation adjusted value added in 2023:
- Micro
- Small
- Medium-sized
- Large
- n/a

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 8: Size class with the biggest annual growth rate in employment for 2023 in the EU-27 and across EU Member States

Size class with the biggest annual growth rate (%) in employment in 2023		
MT	micro	11.2
EE	micro	8.0
IE	small	6.9
LT	micro	6.3
ES	micro	4.1
SI	small	4.0
SE	medium	3.9
PT	micro	3.9
SK	micro	3.5
HR	large	3.5
EL	micro	3.4
LU	micro	3.0
IT	large	2.9
CY	micro	2.9
FR	micro	2.8
DK	large	2.7
NL	micro	2.6
EU-27	**micro**	**2.3**
BG	small	2.2
PL	micro	2.0
AT	small	2.0
DE	small	2.0
BE	micro	1.8
HU	large	1.7
CZ	micro	1.1
FI	large	0.9
LV	small	0.6
RO	small	-0.5

Legend — Size class with the biggest annual growth rate (%) in employment in 2023:
- Micro
- Small
- Medium-sized
- Large
- n/a

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

4 The expected performance of EU-27 SMEs in 2024

This chapter describes the expected performance of EU-27 SMEs in 2024. It first discusses the projected annual growth in 2024 of SME value added, employment, and the number of SMEs in the EU-27 overall. It then examines the expected evolution per industrial ecosystem and per MS.

The projections presented here are mainly based on the February's Winter 2024 Economic Forecast[25] of the EC, as the most recent forecast available at the time the projections were generated. The details of how these projections are generated are provided in a complementary *Methodology Note* available on the EC's SME Performance Review web page[26].

Sanctions against Russia are expected to remain in place. Tensions in the Middle East are also expected to persist, while the rise in shipping costs following the Red Sea trade disruptions is expected to have a marginal impact on inflation. Firms have already addressed the issue of delivery delays, so it is assumed that supply bottlenecks, which choked production and pushed up prices in the near past, will not reoccur[27]. Furthermore, the implementation of the EC's SME Relief Package[28] is expected to alleviate many of the problems faced by SMEs.

Box 3: SME Relief Package

In September 2023, the Commission presented an SME Relief Package to address the needs of Europe's SMEs in the current economic environment. It proposed new measures to provide short-term relief, boost SMEs' long-term competitiveness, and strengthen fairness in the business environment across the Single Market.

These measures included new proposals for a Regulation on late payments in commercial transactions and a Directive establishing a Head Office Tax System for SMEs. Additional initiatives aim at further boosting SMEs' access to finance, improving the business environment and supporting SMEs' growth into mid-caps to unleash their full economic potential. In total, 19 key actions have been announced, and many of them have already entered the implementation phase. An overview of the state of implementation of the SME Relief Package has also been published alongside the Annual Single Market and Competitiveness Report.

4.1 Projected annual changes in key EU SME performance indicators in 2024

According to the European Economic Forecast (Winter 2024 edition from February), in 2024, GDP is expected to grow by a moderate 0.9% compared to the previous year. All MSs are forecasted to increase their GDP (Table 7, in Annex 2), whilst eleven of them faced a recession in 2023. On the other hand, HICP rates are expected to fall to 3.0%, maintaining the downward trend observed the previous year, but will remain above the ECB inflation target.

Due to these stubborn inflation levels, in 2024, a decline in SME real value added is expected. Nevertheless, employment is expected to increase, and the number of firms is also likely to grow for most size classes (Table 4). Micro enterprises are expected to perform better across all indicators, with significant increases in population and employment, and their value added appearing more resilient with an expected decrease of only -0.5%, which is at least two times smaller than the decline expected in other size classes. Furthermore, medium-sized companies are expected to fall in terms of number of enterprises whilst their employment augmentation is negligible, at just 0.1%. Finally, small firms are expected to experience a stagnant population, with a limited employment increase of 0.3% and a decline in value added similar to that of medium-sized and large companies (-1.4%, -1.3%, and -1.3%, respectively).

---

[25] https://ec.europa.eu/commission/presscorner/detail/en/ip_24_730.
[26] https://ec.europa.eu/growth/smes/sme-strategy/sme-performance-review_en.
[27] European Commission. (2024). European economic forecast: Winter 2024.
[28] COM (2023) 535, https://single-market-economy.ec.europa.eu/publications/sme-relief-package_en.

Table 4: Projected annual growth in 2024 of value added (both nominal and real), employment and number of enterprises for SMEs and large enterprises

	Value Added (not adjusted for inflation)	Value Added (adjusted for inflation)	Employment	Number of Enterprises
Micro SMEs	4.8%	-0.5%	1.4%	1.1%
Small SMEs	3.9%	-1.4%	0.3%	0.0%
Medium-sized SMES	3.9%	-1.3%	0.1%	-0.2%
Large enterprises	4.0%	-1.3%	0.4%	0.2%
All SMEs	4.2%	-1.0%	0.8%	1.0%
Total	4.1%	-1.2%	0.7%	1.0%

*Source: Calculations by the JRC based on **the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database***

4.2 Projected EU annual changes in key EU SME performance indicators in 2024 by industrial ecosystems

This section provides a thorough analysis of the expected performance of EU-27 SMEs by industrial ecosystem in 2024. It aims to compare their projected performance with that of large companies, and to highlight all noteworthy forecasts at the MS level.

4.2.1 The performance of EU-27 SMEs by industrial ecosystems in 2024

As mentioned in the previous section, SMEs are forecasted to experience population growth in 2024. The overall increase is expected to be 1%, while the growth rates by ecosystem vary between 0.2% ('textiles') and 2.5% ('digital') (Table 5). The employment picture is practically the same. Only one ecosystem, 'electronics', is expected to drop marginally, while the other 13 will show an increase. The best performing ecosystems are forecasted to be 'digital', 'tourism', and 'cultural and creative industries'. Regarding real value added, the sole ecosystem which is expected to witness a positive growth rate is 'digital' (0.2%).

Table 5: Change (%) in SME value added (both nominal and real), employment and number of enterprises in 2024 compared to 2023 in different industrial ecosystems

	Annual change (in %) in 2024 relative to 2023 (SMEs)				Annual change (in %) in 2024 relative to 2023 (large enterprises)			
	Value Added (nominal)	Value Added (real)	Employment	Number of enterprises	Value Added (nominal)	Value Added (real)	Employment	Number of enterprises
1. Aerospace and Defence	3.8%	-1.4%	0.6%	1.0%	3.7%	-1.6%	0.6%	0.2%
2. Agri-food	3.8%	-1.4%	0.3%	0.7%	3.5%	-1.7%	-0.1%	-1.0%
3. Construction	4.2%	-1.1%	0.6%	0.7%	4.1%	-1.2%	0.7%	0.6%
4. Cultural and Creative Industries	4.8%	-0.5%	1.5%	1.8%	6.4%	1.0%	1.3%	1.5%
5. Digital	5.6%	0.2%	2.0%	2.5%	6.1%	0.7%	2.0%	2.7%
6. Electronics	3.3%	-1.9%	-0.1%	0.7%	3.4%	-1.9%	-0.3%	-1.0%
7. Energy Intensive Industries	3.5%	-1.7%	0.1%	0.4%	3.2%	-2.0%	-0.4%	-1.2%
8. Energy - Renewables	4.7%	-0.6%	0.8%	1.4%	4.0%	-1.3%	0.0%	-0.4%
9. Health	4.2%	-1.0%	0.8%	1.1%	4.1%	-1.2%	0.2%	-0.2%
10. Mobility - Transport - Automotive	3.8%	-1.4%	0.4%	0.6%	3.3%	-2.0%	-0.1%	-0.4%
11. Proximity, Social Economy and Civil Security	4.4%	-0.9%	1.1%	1.2%	4.2%	-1.1%	0.8%	1.0%
12. Retail	3.8%	-1.4%	0.4%	0.4%	3.7%	-1.5%	0.2%	0.2%
13. Textiles	3.5%	-1.8%	0.1%	0.2%	3.2%	-2.0%	-0.4%	-2.1%
14. Tourism	4.7%	-0.6%	1.6%	1.7%	4.4%	-0.9%	1.1%	1.3%
All Industrial Ecosystems	4.2%	-1.1%	0.8%	1.0%	4.0%	-1.2%	0.5%	0.3%

*Source: Calculations by the JRC based on **the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database***

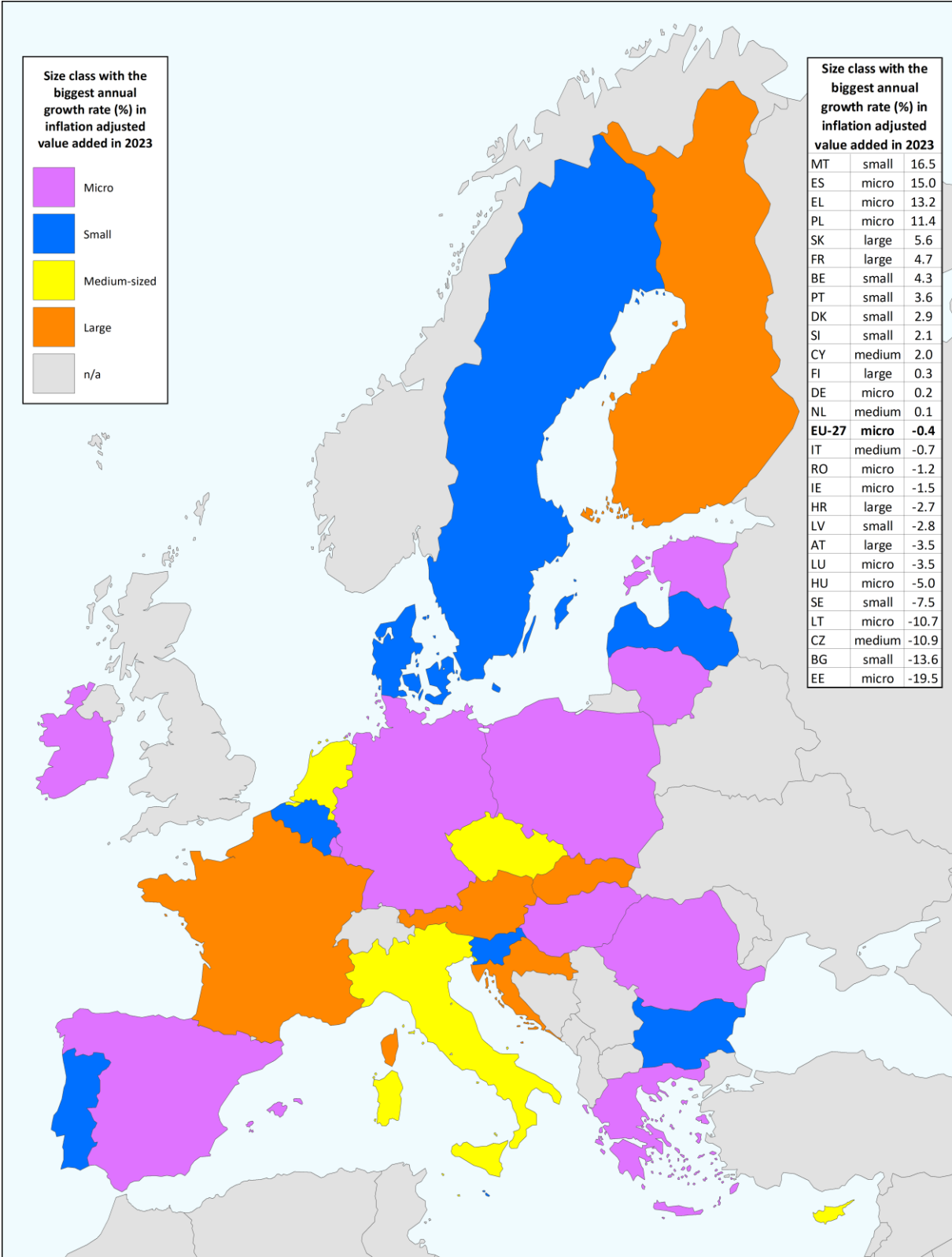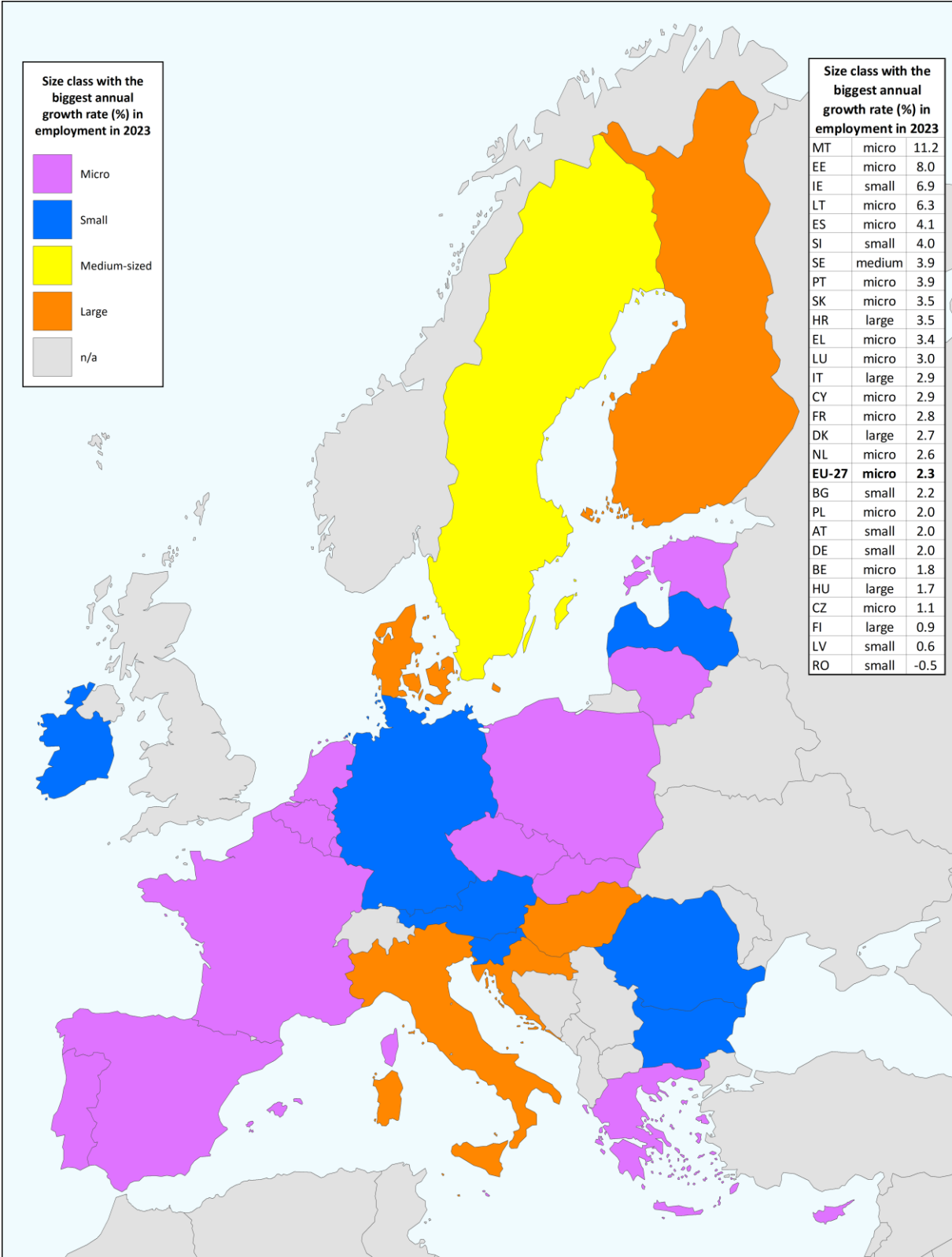### 4.2.2 The expected performance of EU SMEs versus EU large enterprises across the industrial ecosystems in 2024

The comparison between SMEs and large enterprises yields useful conclusions about their potential across the 14 industrial ecosystems. For instance, in real value added, SMEs are expected to outperform large businesses in eleven ecosystems, while large enterprises are expected to grow in two ecosystems with rates of 1% in 'cultural and creative industries' and 0.7% in 'digital'. SMEs are projected to decline in almost every industrial ecosystem, except in 'digital' where they are predicted to grow by barely 0.2% (Table 5).

In 2024, SMEs are expected to outpace large enterprises in employment terms as well. Their growth rate will be higher in eleven cases, while large enterprises are forecasted to experience marginally bigger growth in

'construction'. Additionally, large enterprises are expected to decline in five ecosystems, while the three ecosystems with the most promising forecast expect improvements for both SMEs and large firms: 'digital', 'cultural and creative industries', and 'tourism'.

More representative illustrations of forecasted changes in SMEs and large enterprises are provided in Figure 20 and in Figure 21, which display performances in inflation-adjusted value added and employment. In most ecosystems there is a strong correlation between the two size classes: a more optimistic forecast for SMEs usually entails a similar positive outlook for large firms. When it comes to real value added, however, there is an outlier (Figure 20): 'cultural and creative industries' is expected to fall in terms of real value added for SMEs, but rise for large businesses. Regarding employment changes, the correlation is even more pronounced, and all 14 ecosystems seem to be aligned without significant variations (Figure 21). Lastly, the ecosystems expected to prosper and lie on the top right corner of both charts are the same, 'digital', 'cultural and creative industries', and 'tourism'. Proportionally, the ecosystems found in the bottom left corner, with worse performances, are again the same for both indicators: 'electronics', 'textiles' and 'energy intensive industries'.

Figure 20: Change (%) of SME and large enterprise value added (adjusted for inflation) in 2024, by industrial ecosystem

Note: The industrial ecosystems are as follows: 1 – Aerospace and Defence, 2 – Agri-food, 3 – Construction, 4 – Cultural and Creative Industries, 5 – Digital, 6 – Electronics, 7 – Energy Intensive industries, 8 – Energy-Renewables, 9 – Health, 10 – Mobility-Transport-Automotive, 11 – Proximity, Social Economy and Civil Security, 12 – Retail, 13 – Textiles, 14 – Tourism. Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 21: Change (%) in SME and large enterprise employment in 2024, by industrial ecosystem

Note: The industrial ecosystems are as follows: 1 – Aerospace and Defence, 2 – Agri-food, 3 – Construction, 4 – Cultural and Creative Industries, 5 – Digital, 6 – Electronics, 7 – Energy Intensive industries, 8 – Energy-Renewables, 9 – Health, 10 – Mobility-Transport-Automotive, 11 – Proximity, Social Economy and Civil Security, 12 – Retail, 13 – Textiles, 14 – Tourism. Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

4.2.3 Expected contribution of EU-27 SMEs to the performance of the industrial ecosystems in 2024

In 2024, the expected contribution of SMEs to changes in value added and employment varies a lot across the 14 industrial ecosystems. For instance, in terms of nominal value added, all ecosystems are forecasted to experience growth for both categories. SMEs are expected to be more influential, as they will account for more than 60% of the change in five cases: 'construction', 'tourism', 'proximity, social economy and civil security', 'textiles', and 'retail' (Figure 22). On the other hand, their contribution will account for less than 30% in 'health' only.

Figure 18 in the previous chapter similarly illustrated the share of cumulative change for the period 2021-2023 that is attributed to SMEs. If we compare this to Figure 22, it can be observed that the ranking of ecosystems is practically the same and thus consistent over time. The economic performance gap between SMEs and large firms is expected to narrow in the coming years. In ecosystems where SMEs are more prominent than large firms, their role is predicted to decrease slightly by 3 to 6 percentage points. Conversely, in ecosystems where SMEs are currently less prominent, their role is anticipated to increase by an average of 5 percentage points. This indicates a trend towards convergence in the performances of SMEs and large enterprises across different sectors. The textile sector is an exception, where SMEs are projected to significantly increase their presence, growing from a 55% share during the period from 2021 to 2023 to a projected 63% share in 2024.

Figure 22: Share of the change in total value added (in current prices) between 2023 and 2024 attributed to SMEs, by industrial ecosystem
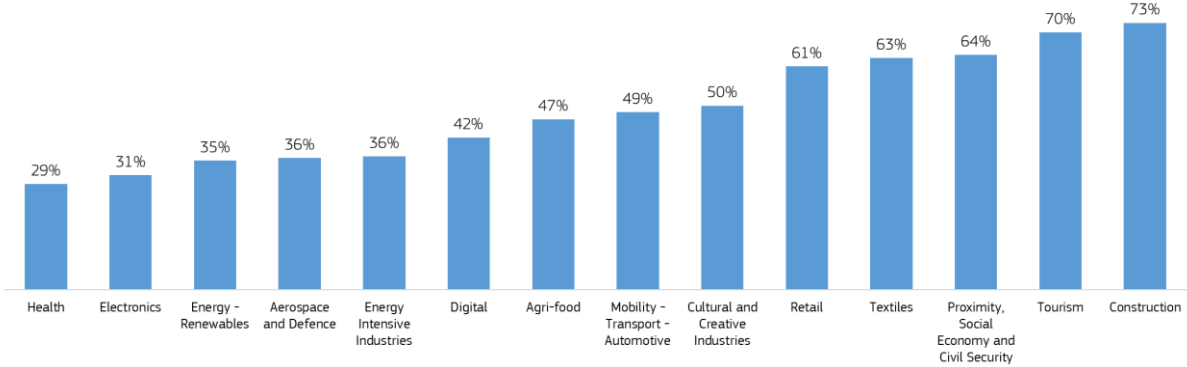
Note: Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural *Business Statistics, Short-Term Business Statistics and National Accounts Database*

In terms of employment, the proportion of the expected change for 2024 will rely on the performance of SMEs. In four ecosystems, namely 'textiles', 'mobility-transport-automotive', 'energy intensive industries', and 'agri-food', the number of persons employed by large businesses are forecasted to drop, so the entire growth in overall employment is 100% attributable to SMEs (Figure 23). The role of SMEs is visibly prominent in seven ecosystems, as their contribution exceeds 70%. The sole ecosystem that is forecast to decline entirely in employment is 'electronics', yet the decrease expected for large companies is three times bigger than that expected of SMEs. A more in-depth analysis of the change in real value added terms, as well as a detailed examination of every indicator for each SME segment is presented in Figure 39 (Annex 10).

Figure 23: Share of the change in total employment between 2023 and 2024 attributed to SMEs, by industrial ecosystem
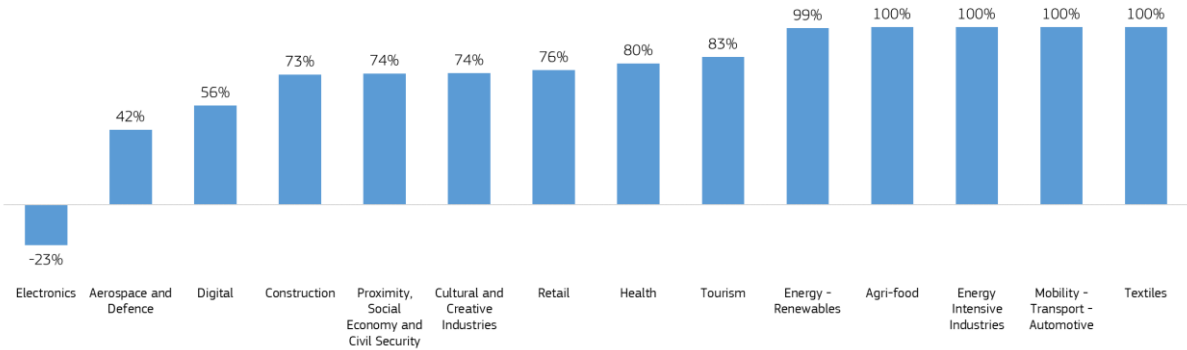
Note: See Figure 22 for related data notes
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural *Business Statistics, Short-Term Business Statistics and National Accounts Database*

4.2.4 The expected economic performance of EU Member States in terms of the industrial ecosystems in 2024

In 2024, the industrial ecosystem forecasted to experience the biggest growth rate in employment at the EU-27 level, is 'digital' (+2%) (Map 9). Up to 2023, it was ranked second after 'tourism'. At the MS level, 'digital' is expected to show the highest growth rate amongst all ecosystems in 15 MSs, the second highest in three MSs, and the third highest in other three countries. 'Tourism' is expected to continue its prosperous performance as its employment growth rate will reach +1.6%, the second highest increase. This ecosystem is forecasted to experience the highest increase in six MSs, the second highest in three, and the third highest in other three MSs. The notable growth of this ecosystem relies mainly on its outstanding forecast in some key EU economies, as

it is expected to be the fastest-growing ecosystem in ES, FR, and IT. Moreover, the outlook for 'cultural and creative industries' and 'energy-renewables' is also relatively encouraging.

Concerning the growth rates of SME value added in terms of real prices, EU-27 averages per ecosystem are mostly negative. Only 'digital', the most promising ecosystem, stands out as an exception, with an expected positive growth rate (+0.2%) and with forecasts placing it as the 2024 best performing ecosystem in eleven MSs In five of them, namely IE, CY, LT, LU, PT, an actual growth is expected, while the remaining six (BG, EE, LV, AT, PL, RO) are forecasted to drop (Map 10). Moreover, 'digital' is expected to be the second-best performing ecosystem in seven MSs, and the third best one in two. Another ecosystem which is expected to experience impressive resilience in inflation-adjusted value added terms is 'cultural and creative industries', continuing its notable performance from 2023, when it was ranked third. Its drop is expected to be limited up to -0.5% at the EU-27 level. 'Cultural and creative industries' is expected to be the best performing ecosystem in four MSs, second in nine and third in eight. The perspective of this ecosystem in terms of both indicators and its stable good performance over the years reevaluates its potential within the EU economy. 'Energy-renewables' is the ecosystem with the third best expected performance in real value added terms: its decline will not exceed -0.6%, and it will be the most resilient ecosystem in five MSs. It becomes evident that 'energy-renewables' will play a significant role in the EU economy over the following years. Finally, the analysis indicates a favourable outlook for 'tourism' and 'proximity, social economy, and civil security'.

Map 9: Industrial Ecosystem with the biggest expected annual growth rate in employment for 2024 n the EU-27 and across EU Member States

Industrial Ecosystem with the biggest expected annual growth rate in employment in 2024

- Cultural and Creative Industries
- Digital
- Energy - Renewables
- Health
- Tourism
- n/a

Three most promising Industrial Ecosystems in EU-27 concerning employment in 2024

- Digital +2.0%
- Tourism +1.6%
- Cultural and Creative Industries +1.5%

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 10: Industrial Ecosystem with the biggest expected annual growth rate in inflation-adjusted value added for 2024 in the EU-27 and across EU Member States
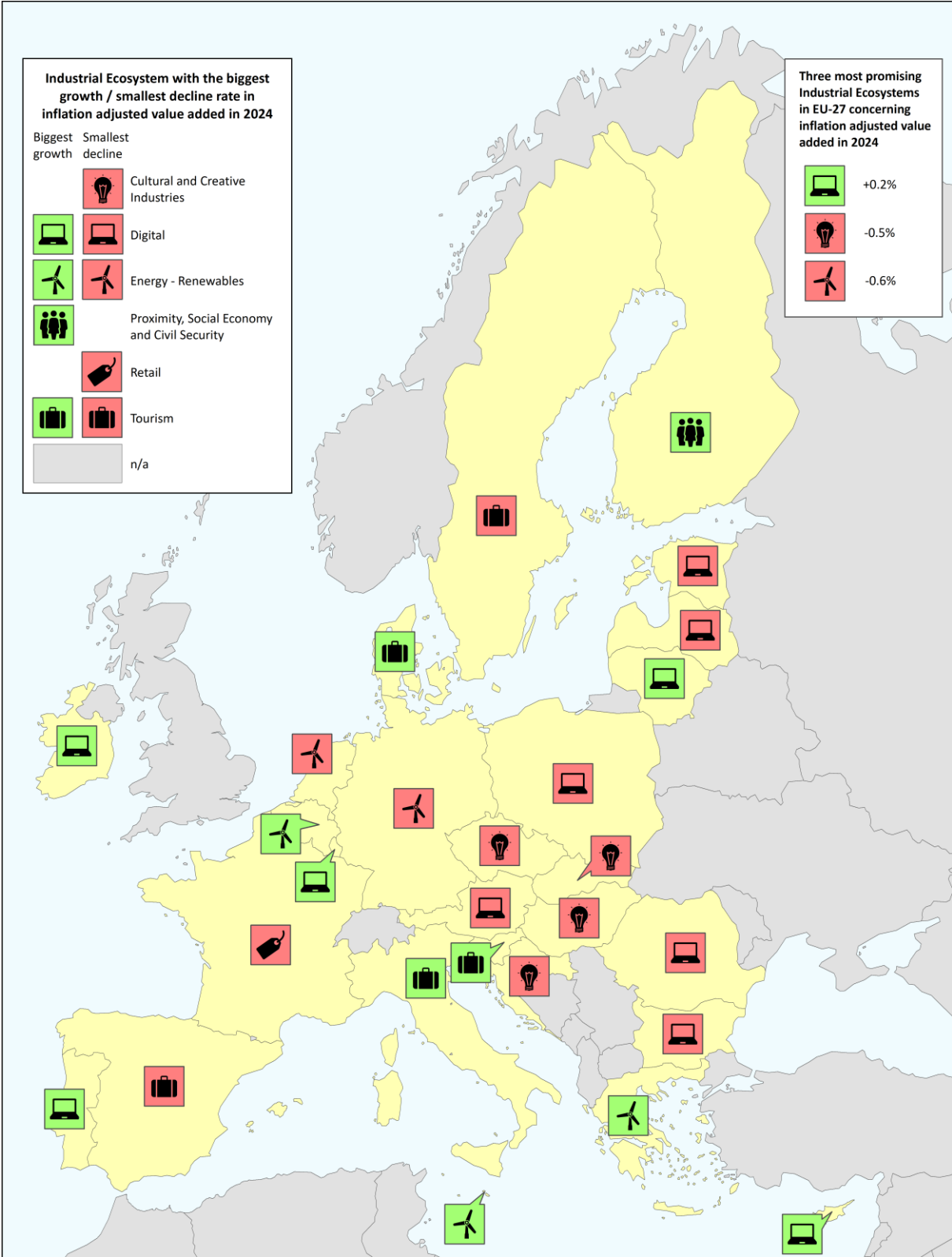
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast*, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database*

4.3 Projected annual changes in key SME performance indicators in each of the EU Member States in 2024

SMEs in most Member States are expected to experience a decline in inflation-adjusted value added in 2024 (Map 11). Only six countries are forecasted to grow on this indicator, and their growth rates vary from 0.2% (BE) to 6.9% (MT). These six MSs experienced real-terms growth in 2023 as well. On the other hand, the MSs with the expected largest double-digit drops are BG, RO, and CZ (-17.1%, -12.7%, and -10.5%, respectively). Further illustrative analysis of this indicator can be found in Map 20 (Annex 8).

SME employment is expected to continue its growth, as the majority of MSs will experience an increase in persons employed (Map 12). Only three countries are expected to face a decline in this respect, namely IT, FI, and SE. FI constitutes the sole MS that faced, and is predicted to face, such a decrease for two consecutive years, in 2023 and 2024. The most promising countries are MT (growth of 7.1%), EL (5.4%) and CY (3.1%). This south-eastern cluster is also expected to have a high growth in value added. IE and LT are two other MSs with a positive forecast, as they will retain their remarkable growth rates for multiple years. Concerning the EU-27 average, it is expected to be subdued: 0.8% for 2024, as compared to 1.8% from a year ago, due to the less impressive growth rates of key EU economies like DE (0.5%) and FR (0.2%), and a slight decrease in IT (-0.1%). Map 18 (Annex 8) provides similar information on the number of SMEs across Member States.

The size class which is expected to experience the biggest annual growth rate in real value added for 2024 in each MS, is provided in Map 13. Overall, micro firms are forecasted to outperform all other size classes in 18 MSs. At the same time, large companies would prevail in five, and small and medium-sized enterprises are predicted to experience the highest augmentation in two MSs each. Micro businesses are expected to perform better in central Europe, in the Baltics, and in the south-eastern part of the EU (RO, BG, EL, and CY). Only two broader regions will not follow this pattern: the first is composed of northern MSs (DK, SE, and FI), and the second is a cluster including AT, SI, HR and HU. The comparison between 2023 and 2024 (Map 7 and Map 13, respectively) shows that - in 2024 - micro-SMEs are expected to play an even larger role compared to 2023, while the contribution of small and medium-sized firms would decline.

Concerning the growth rates per size class and MS in employment terms, the narrative is generally the same, as micro firms are expected to experience the highest growth in 17 countries, followed by large enterprises with seven first places (Map 14). The most interesting conclusion is that the contents of Map 13 and Map 14 are almost the same, with two exceptions: large businesses in IT and DK are predicted to witness the highest growth in persons employed, but micro and medium-sized firms respectively outperform large enterprises when it comes to value added. In other words, these two key economic indicators are expected to grow symmetrically in the vast majority of MSs.

Map 11: Expected growth rate of SME adjusted for inflation value added in the NFBS in 2024 in the EU-27 and across EU Member States
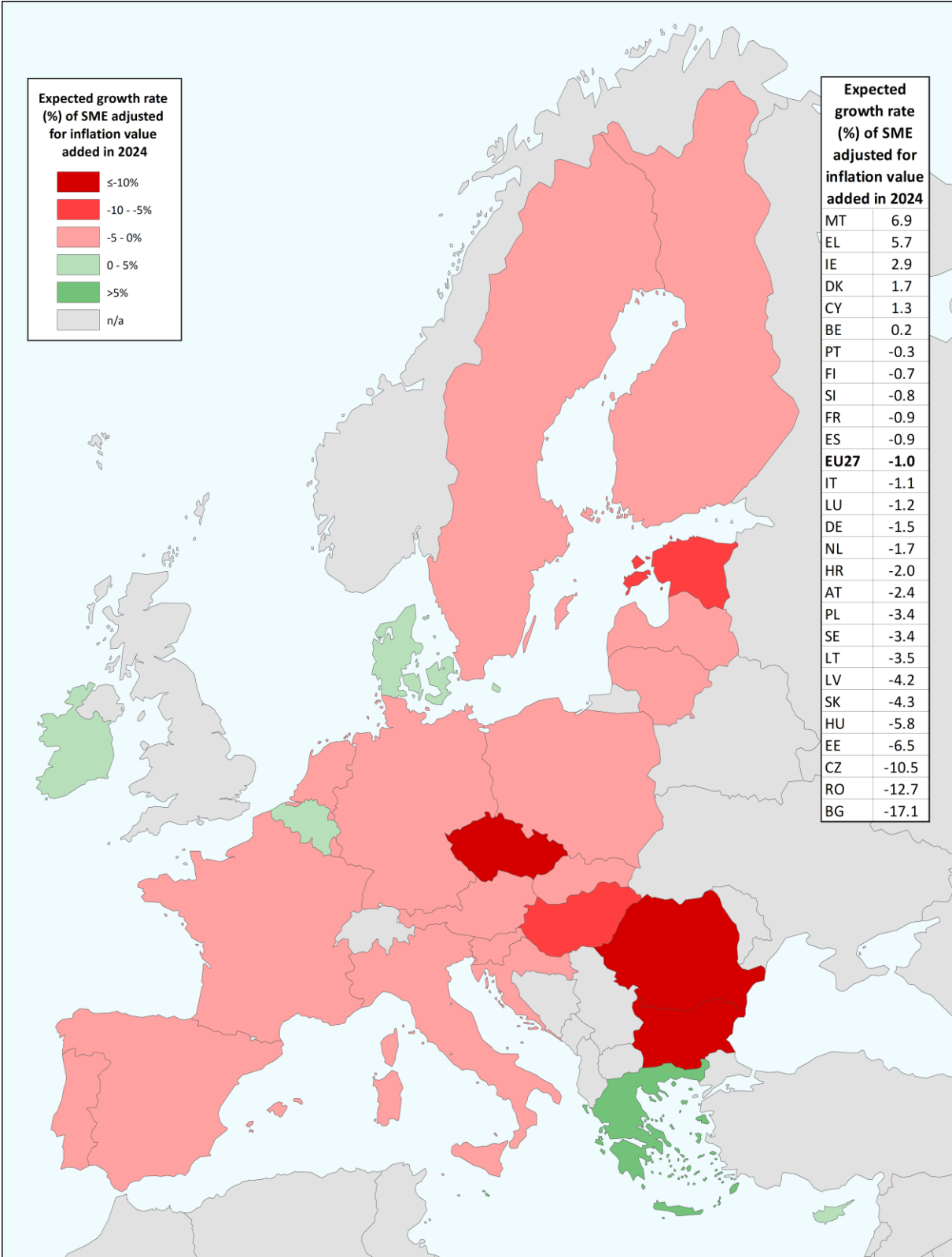
Expected growth rate (%) of SME adjusted for inflation value added in 2024

≤-10%
-10 - -5%
-5 - 0%
0 - 5%
>5%
n/a

Expected growth rate (%) of SME adjusted for inflation value added in 2024	
MT	6.9
EL	5.7
IE	2.9
DK	1.7
CY	1.3
BE	0.2
PT	-0.3
FI	-0.7
SI	-0.8
FR	-0.9
ES	-0.9
EU27	**-1.0**
IT	-1.1
LU	-1.2
DE	-1.5
NL	-1.7
HR	-2.0
AT	-2.4
PL	-3.4
SE	-3.4
LT	-3.5
LV	-4.2
SK	-4.3
HU	-5.8
EE	-6.5
CZ	-10.5
RO	-12.7
BG	-17.1

*Source: **Calculations by the JRC based on the European Commission's Winter 2024** Economic Forecast**, Eurostat's Structural** Business Statistics, Short-Term Business Statistics and National Accounts Database*

Map 12: Expected growth in SME employment in the EU-27 and across EU-27 Member States in 2024
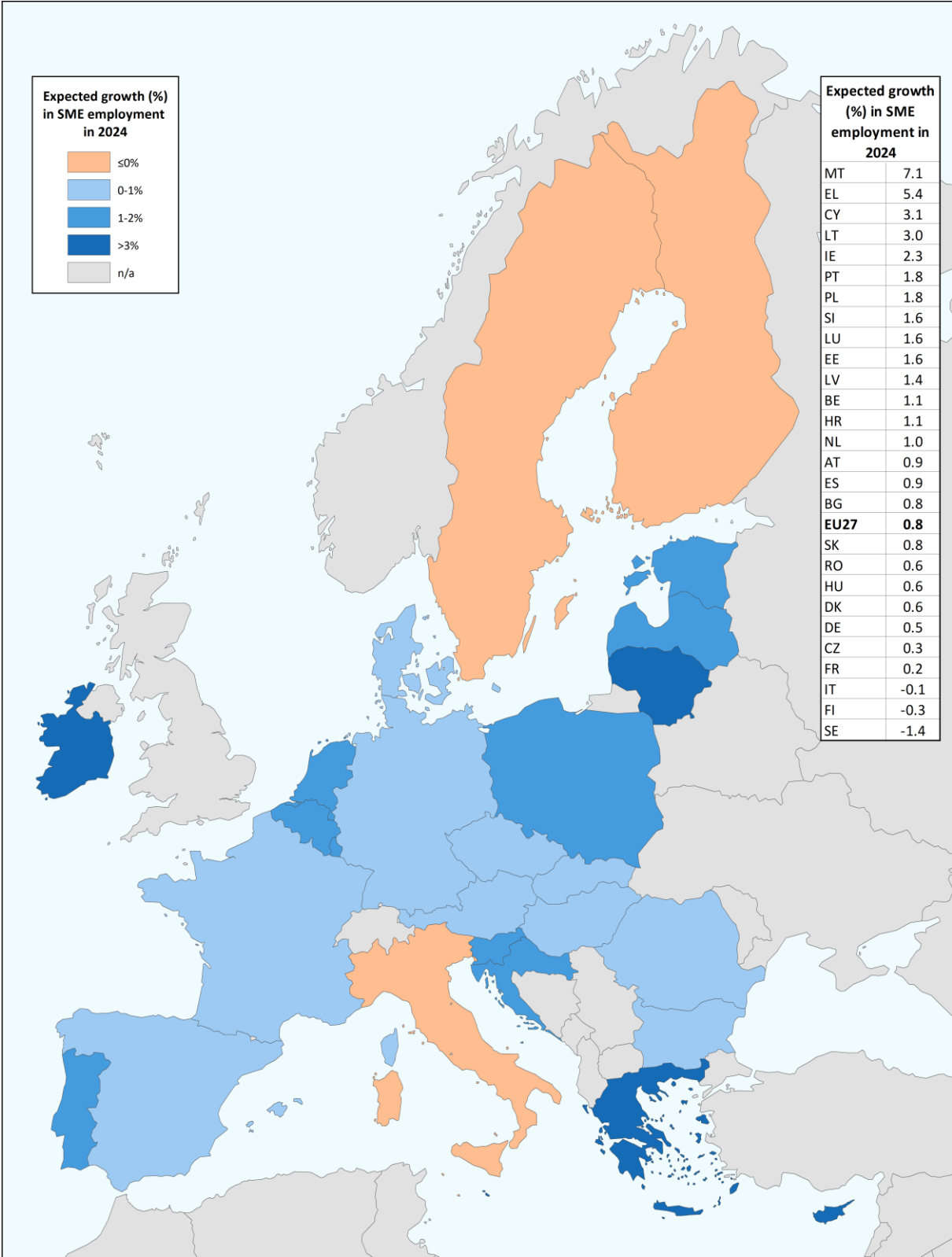
	Expected growth (%) in SME employment in 2024
MT	7.1
EL	5.4
CY	3.1
LT	3.0
IE	2.3
PT	1.8
PL	1.8
SI	1.6
LU	1.6
EE	1.6
LV	1.4
BE	1.1
HR	1.1
NL	1.0
AT	0.9
ES	0.9
BG	0.8
EU27	**0.8**
SK	0.8
RO	0.6
HU	0.6
DK	0.6
DE	0.5
CZ	0.3
FR	0.2
IT	-0.1
FI	-0.3
SE	-1.4

Legend — Expected growth (%) in SME employment in 2024:
- ≤0%
- 0-1%
- 1-2%
- >3%
- n/a

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast*, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database*
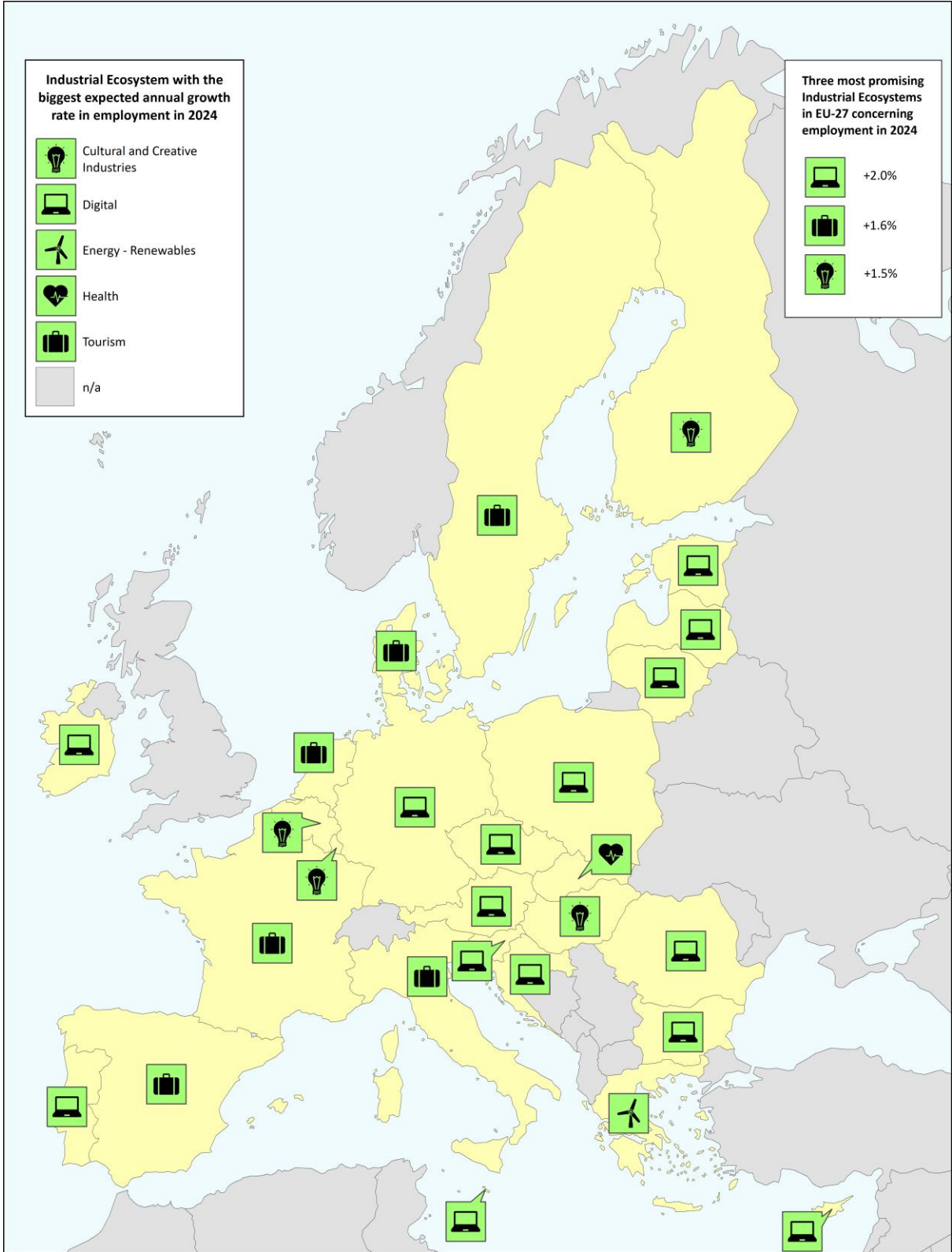
Map 13: Size class with the biggest expected annual growth rate in inflation adjusted value added for 2024 in the EU-27 and across EU Member States

Size class with the biggest expected annual growth rate (%) in inflation adjusted value added in 2024		
EL	micro	14.0
MT	micro	10.2
IE	small	5.2
CY	micro	2.7
DK	medium	2.4
PT	micro	2.2
BE	micro	1.0
FI	large	0.5
SI	medium	0.1
ES	large	-0.5
FR	micro	-0.5
EU-27	**micro**	**-0.5**
IT	micro	-0.7
LU	micro	-0.8
HR	large	-0.9
DE	micro	-1.2
NL	micro	-1.4
LT	micro	-1.5
SK	micro	-2.0
PL	micro	-2.1
AT	small	-2.1
SE	large	-2.8
LV	micro	-3.7
HU	large	-4.1
EE	micro	-4.9
CZ	micro	-9.6
RO	micro	-12.1
BG	micro	-16.8

Legend — Size class with the biggest expected annual growth rate (%) in inflation adjusted value added in 2024:
- Micro
- Small
- Medium-sized
- Large
- n/a
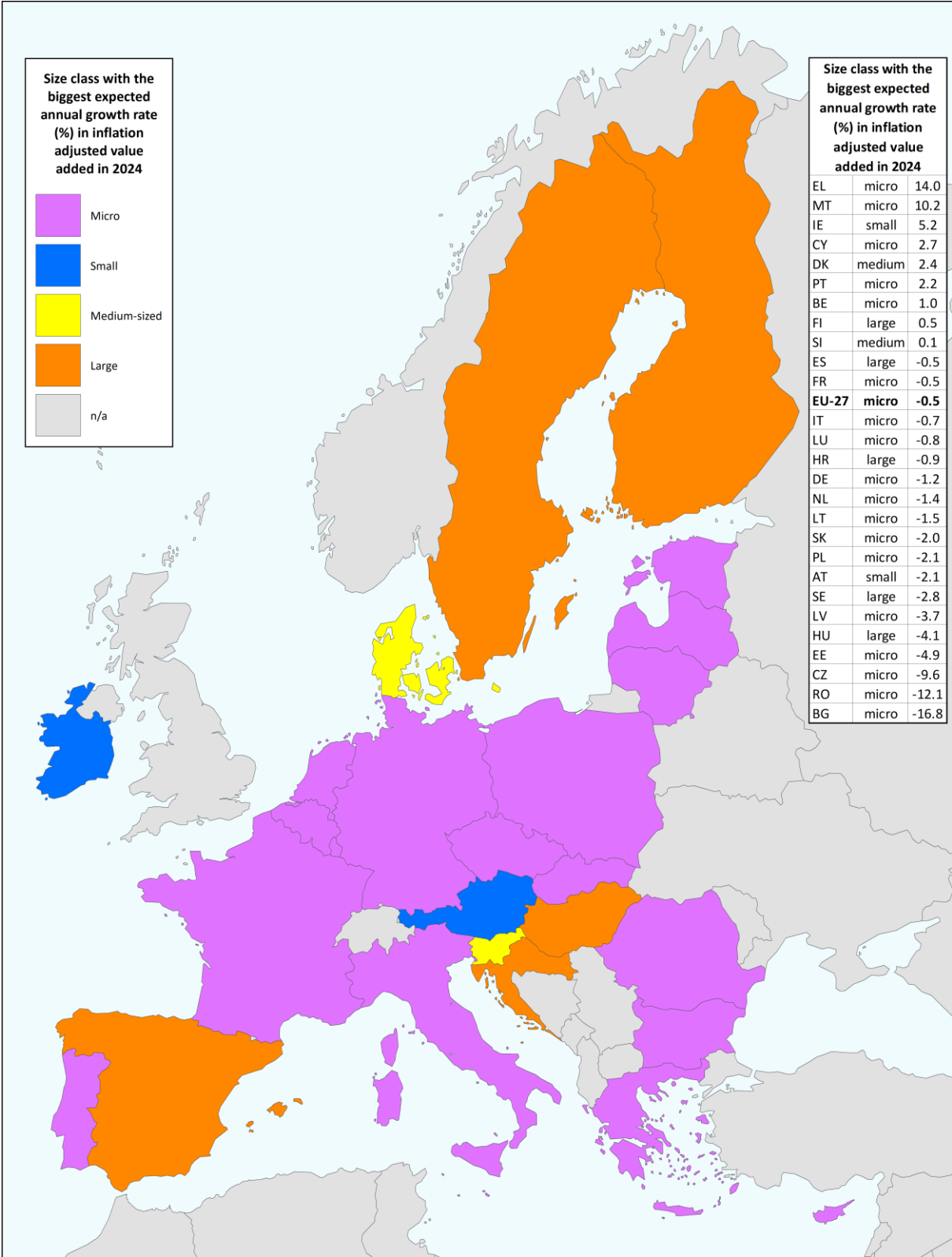
*Source: Calculations by the JRC based on the European **Commission's Winter 2024** Economic Forecast**, Eurostat's Structural** Business Statistics, Short-Term Business Statistics and National Accounts Database*

Map 14: Size class with the biggest expected annual growth rate in employment for 2024 in the EU-27 and across EU Member States

Size class with the biggest expected annual growth rate (%) in employment in 2024		
EL	micro	11.3
MT	micro	9.9
IE	small	5.2
LT	micro	4.9
CY	micro	4.3
PT	micro	3.7
EE	micro	2.9
SI	medium	2.8
PL	micro	2.8
SK	micro	2.7
HU	large	2.3
LU	micro	2.3
HR	large	2.0
LV	micro	1.9
BE	micro	1.6
EU-27	**micro**	**1.4**
AT	small	1.4
ES	large	1.4
DK	large	1.3
NL	micro	1.3
RO	micro	1.2
BG	micro	1.1
CZ	micro	1.0
FI	large	1.0
DE	micro	0.7
FR	micro	0.5
IT	large	0.3
SE	large	-0.7

Legend — Size class with the biggest expected annual growth rate (%) in employment in 2024:
- Micro
- Small
- Medium-sized
- Large
- n/a

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

5 SMEs and Open Strategic Autonomy

This chapter presents an overview of the results of a recent study conducted on behalf of the European Commission to analyse the impact that the OSA paradigm may have on SMEs, and to propose policy actions aimed at maximising SME involvement in the new framework[29]. The OSA concept refers to the need for the EU to be autonomous within strategic value chains, in the context of the open globalised economy. To effectively harness the potential benefits and mitigate the risks associated with such a paradigm for SMEs, it is imperative that adequate policy measures are implemented. Hence, the primary objective of the analysis has been to formulate policy recommendations aimed at achieving an SMEs-oriented OSA framework. A comprehensive interview programme involving more than one hundred stakeholders at both EU and national levels – including policymakers, business associations, independent experts, research organisations, and companies – was conducted between January and April 2024 to gather fresh evidence and multiple perspectives.

Upon this evidence, this chapter first discusses the reasons why SMEs need to be part of the OSA paradigm (Section 0). Second, it provides data on the economic significance of SMEs across EU strategic value chains and discusses their role (Section 5.2). Third, section 0 offers a high-level overview of existing EU and national policies that impact OSA, showing how they involve SMEs, contribute to creating opportunities for them, and highlight existing weaknesses or policy gaps.

5.1 SMEs as a key pillar of Open Strategic Autonomy

Open Strategic Autonomy (OSA) is a political concept referring to the capacity of the European Union (EU) to act autonomously in strategically important areas while aiming for multilateral cooperation wherever possible and appropriate.

The concept first appeared in the European Council conclusions in December 2013[30], but it has gained significant attention after the COVID-19 pandemic[31]. In fact, while the COVID-19 crisis demonstrated the advantages of the Single Market's integration into global value chains in terms of mitigating shocks during periods of crisis[32], it also showed the need to acquire a more comprehensive understanding of Europe's current and prospective strategic dependencies. This realisation provides the basis for a shift in trade and industrial policy that promotes the EU as a geographical region open to stable, rules-based international trade[33], and fosters domestic capacity where needed to be less reliant on foreign actors. OSA initiatives aim to boost the EU's production capabilities and diversification of supply sources, thereby reducing external vulnerabilities and promoting sustainable and strategic autonomy in key industrial sectors[34].

Various studies have recently analysed different industrial ecosystems, shedding light on the most critical products and technologies in which the EU faces significant challenges[35]. These challenges include dependency on

---

[29] European Commission (2024). SMEs and Open Strategic Autonomy. Authored by: Emanuela Sirtori (CSIL), Sara Banfi (CSIL), Giulia Canzian (CSIL), Francesco Giffoni (CSIL), Kris Boschmans (IDEA Consult), Valentijn Bilsen (IDEA Consult), Marco Schito (PPMI), Luka Klimavičiūtė (PPMI), Elitsa Garnizova (LSE Consulting).
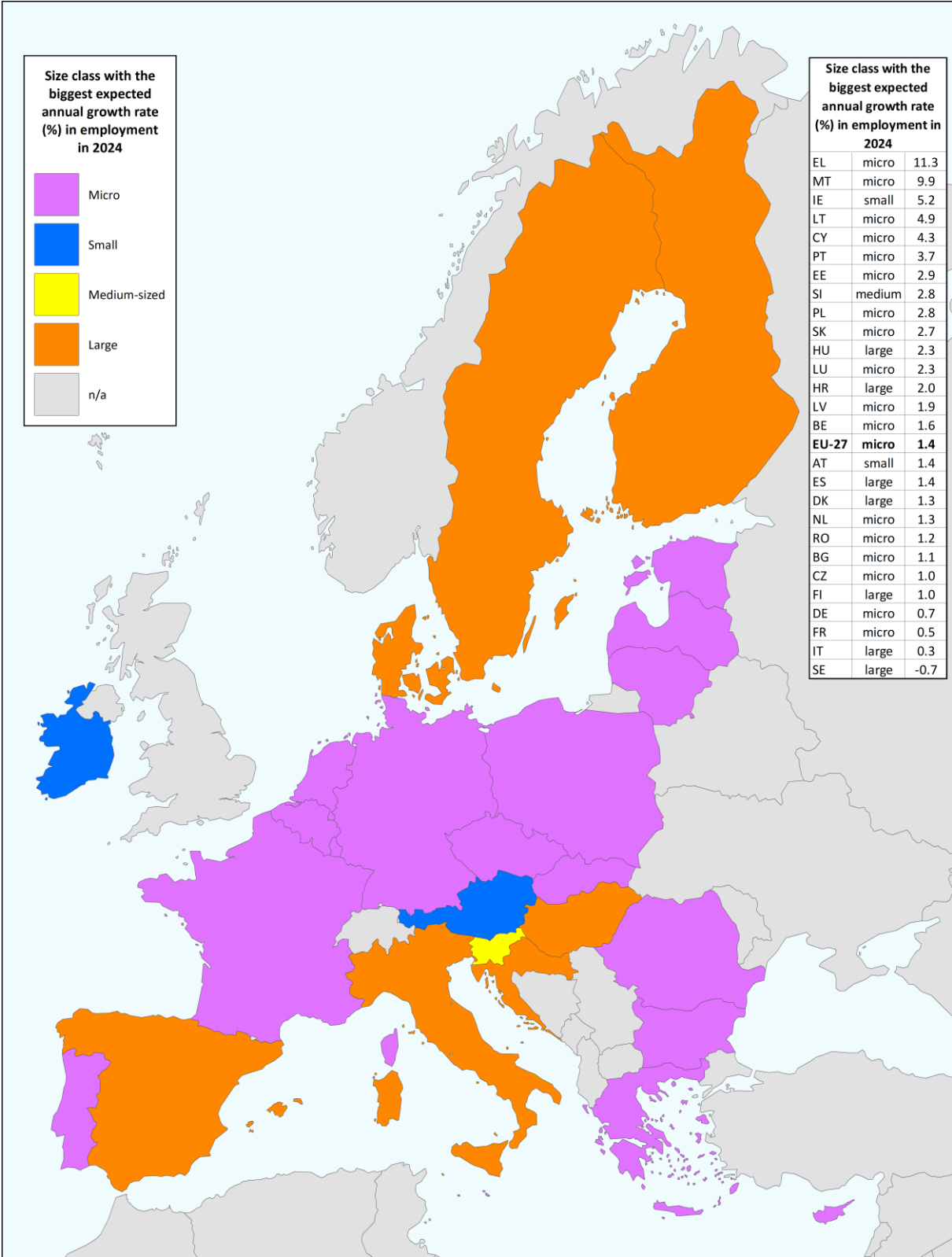
[30] European Council, Conclusions (EUCO 217/13), 19/20 December 2013. Available at: https://data.consilium.europa.eu/doc/document/ST-217-2013-INIT/en/pdf.

[31] European Commission. (2021). Commission sets course for an open, sustainable and assertive EU trade policy [online]. European Commission - European Commission [online]. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_644.

[32] OECD. (2020). Shocks, risks and global value chains: insights from the OECD METRO model [online]. Available at: https://www.oecd.org/trade/topics/metro-trade-model/. and European Commission. (2021). Trade Policy Review - An Open, Sustainable and Assertive Trade Policy [online]. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0066

[33] Access to international trade and international supply chains have proven most effective in promoting the productivity of European firms (Shu and Steinwender, 2019), their innovation (Akcigit and Melitz, 2021; European Commission, 2022b), and resilience (Baldwin and Freeman, 2021).

[34] European Commission. (2021). Strategic dependencies and capacities. COMMISSION STAFF WORKING DOCUMENT. Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery [online]. SWD(2021) 352 final. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021SC0352.

[35] Spain's National Office of Foresight and Strategy. (2023). Resilient EU2030 [online]. Resilient EU2030: a roadmap for strengthening the EU's resilience and competitiveness [online]. Available at: https://spanish-presidency.consilium.europa.eu/en/news/the-spanish-presidency-

imported inputs, lack of domestic production, and low innovation autonomy and digital sovereignty. Key areas of concern include semiconductors and microelectronics, digital infrastructure and technologies, renewable energy technologies, pharmaceutical ingredients, robotics, and telecommunications equipment, among others. These products and technologies are the focus of this study and are illustrated in Figure 24.

SMEs' involvement in the unfolding of the OSA paradigm is a crucial prerequisite for its success. SMEs are vital to local economies, contributing to job creation, innovation, and overall economic growth[36]. While OSA initiatives may tend to focus on cultivating national or EU 'champions' – i.e., large companies with the visibility and capacity to compete directly with US or Chinese rivals[37] – the participation of SMEs can help build resilient and diversified supply chains. Many smaller businesses possess critical expertise and capabilities that are important to the success of value chains. Moreover, SMEs have strong ties to local communities, and their deep understanding of local preferences and networks can add significant value, especially in sectors where localisation is essential. By integrating SMEs into their investments in OSA-aligned supply chains, larger companies can benefit from their agility, flexibility, and local knowledge, thus adapting effectively to changing market conditions and regulatory environments[38]. This embeddedness ensures that investments are economically viable and sustainable in the long term.

Figure 24. Overview of the ecosystems and products/technologies analysed in the study on SMEs and OSA
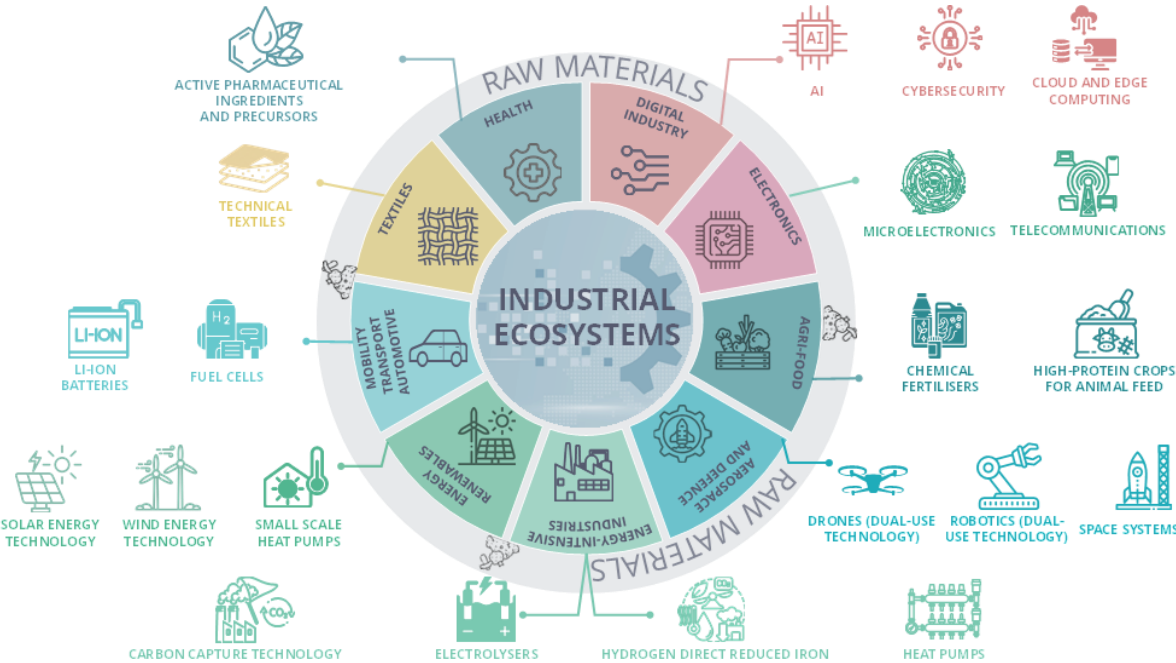
Source: European Commission (2024). SMEs and Open Strategic Autonomy.

The OSA paradigm can provide significant opportunities for SMEs involved in the value chain of strategic products and technologies. This includes increased investment and support for research and innovation, opportunities to expand market reach through access to global trade networks, and the potential to attract substantial

presents-resilient-eu2030-roadmap-to-boost-european-union-open-strategic-autonomy/.European Commission. (2023). *An enhanced methodology to monitor the EU's strategic dependencies and vulnerabilities* [online]. Available at: https://single-market-economy.ec.eu-ropa.eu/publications/enhanced-methodology-monitor-eus-strategic-dependencies-and-vulnerabilities_en.
JRC. (2024). Assessing Open Strategic Autonomy. JRC Publications Repository [online], Authored by Kroll, H., 2024. Available at: https://pub-lications.jrc.ec.europa.eu/repository/handle/JRC136359.
[36] European Commission and JRC. (2023). Annual Report on European SMEs 2022/2023 [online]. Available at: https://publications.jrc.ec.eu-ropa.eu/repository/handle/JRC134336.
[37] Friederiszick, H.W., Roller, L.-H. and Verouden, V. (2008). European State Aid Control: An Economic Framework [online]. In: Buccirossi, P. eds. Handbook of Antitrust Economics. Pp. 625-770. Available at: https://ec.europa.eu/dgs/competition/economist/esac.pdf.
[38] Morgan, T., & Anokhin, S. (2019). Sustainable economic development and the role of SMEs: Evidence from a panel of emerging economies. Journal of Small Business Management, 57(3), 906-923.

inward Foreign Direct Investments (FDI), which can benefit SMEs by establishing or strengthening their linkages with multinational companies, finding new clients, and increasing their participation in global value chains.

However, there are notable risks for SMEs, too. They require significant financial and human resources to keep pace with rapid innovation dynamics and may face difficulties in finding investors for scaling up. Strategies focused on reshoring or regionalising supply chains may disrupt existing relationships and contracts with large companies outside the EU. Furthermore, SMEs downstream in the value chain may face pressures to innovate and modernise their operations to remain competitive and align with the changing landscape shaped by OSA initiatives. The impact of OSA on SMEs extends beyond specific value chains and industrial ecosystems. A significant build-up of production capabilities can lead to competition for an already scarce workforce, exacerbating skill shortages across various sectors. Similarly, when large corporations or government entities allocate significant resources to specific projects or industries deemed important for OSA, it may reduce the available funding that could otherwise be directed towards SMEs.

5.2   The significance and role of SMEs across EU strategic value chains

A clear understanding of how pervasive SMEs in the strategic value chains are and their role is the essential precondition to proposing and designing SME-friendly OSA policies.

SMEs are highly prevalent across nearly all the value chains analysed, with many industries having SME participation exceeding 70% in terms of the number of companies active[39]. Industries, however, differ considerably in the absolute number of SMEs involved. For instance, in the robotics and drones industries, SMEs comprise nearly 95% of all firms, but the sector itself is relatively small, with only around 320-350 businesses[40]. In contrast, the technical textile industry boasts around 18,500 firms, the majority of which are SMEs[41].

Notwithstanding the pervasive presence of SMEs, they generally contribute to less than half of the value added (Figure 25). The discrepancy is strictly related to the fact that SMEs are usually not involved in core value added manufacturing activities. They dominate in niche markets and ancillary services, which are essential for the smooth functioning of the market but do not generate high value added. Many of the production processes identified are largely capital-intensive and are, therefore, more easily overseen by large firms with high capital endowments. The same manufacturing processes are also characterised by economies of scale, which lower the production cost and increase value added. It is the case of mineral fertilisers or Active Pharmaceutical Ingredients (APIs) whose manufacturing is subject to economies of scale and require vast infrastructures, limiting – if not preventing – the involvement of SMEs. It also concerns, for example, the production of battery cells that require the quality of the materials used to be consistently good in large quantities to ensure that cells are uniform or do not present cracks. SMEs can struggle to operate such large-scale and resource-intensive processes and are often left out of the manufacturing process. Even in a strongly SME-dominated ecosystem, such as textiles, medium-size firms are more present in the upstream, capital-intensive segments of the value chain.

---

[39] Eurostat. (2023). sbs_sc_ovw. Available at: https://ec.europa.eu/eurostat/databrowser/product/page/SBS_SC_OVW
[40] Idem.
[41] Idem.

Figure 25. Estimated proportion of SMEs in the manufacturing segments of strategic value chains
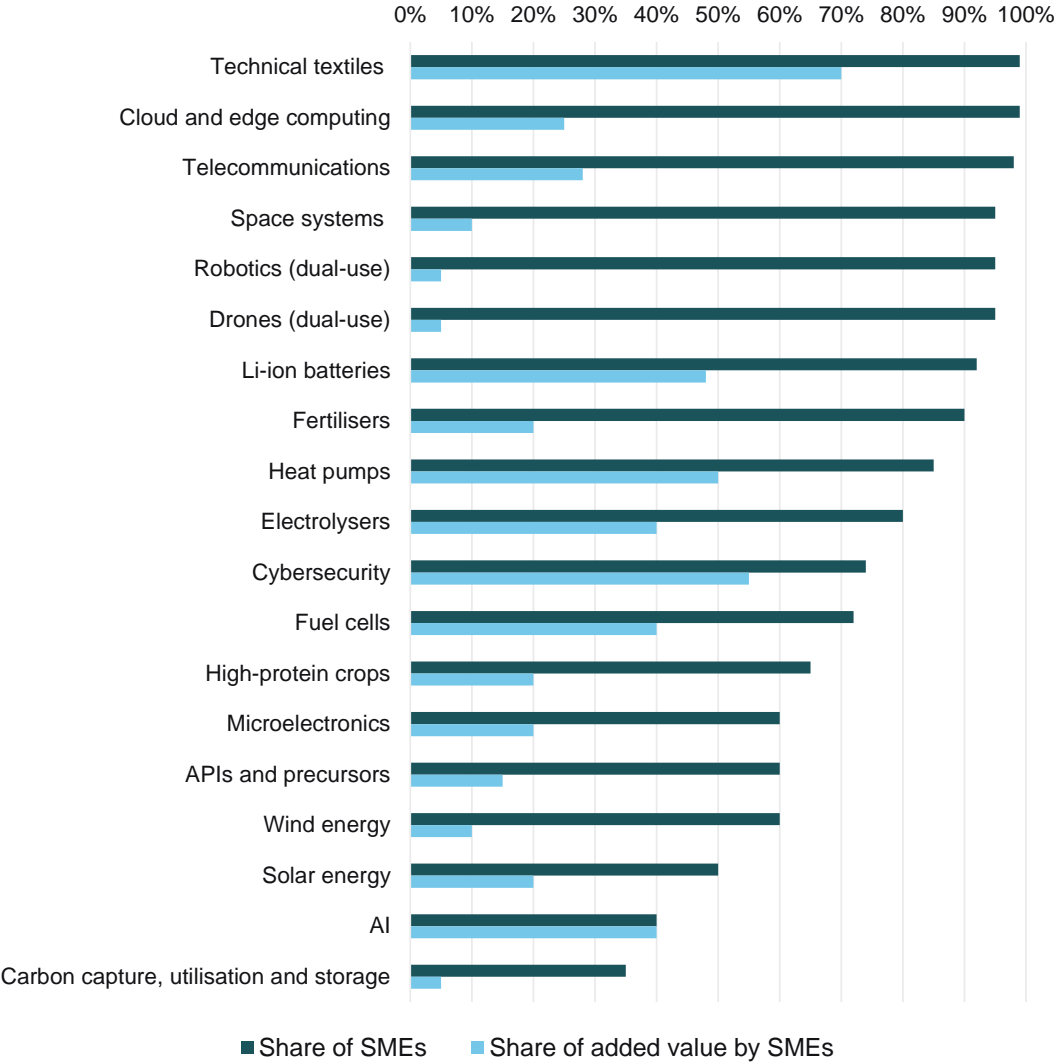
Note: Figures refer to value chain segments that lead to the production of the critical technologies/products, i.e. the manufacturing of intermediate and final products. The downstream activities using the strategic product/technologies are not considered. Figures reported in the chart are the authors' educated guesses based on a triangulation of data sources: Eurostat statistics of SMEs in the NACE sectors attributed to each technology/product, analysis of company-level data extracted from the Orbis database, existing market research reports and interviews with stakeholders. A margin of error in the range between 5-15% should be assumed.
Source: European Commission (2024). SMEs and Open Strategic Autonomy.

Notably, the relatively low share of value added SMEs produce does not signal a lack of competitiveness or relevance within the value chains. SMEs occupy different positions in the value chains analysed and they are involved in many support activities that do not necessarily rely on economies of scale to be efficient, but are crucial for the correct functioning of the industry. This is evident in niche and innovative productions and in the provision of ancillary services to large manufacturers.

A distinctive feature of European SMEs is their active involvement in R&D activities and in developing critical innovation in all the value chains analysed. In the pharmaceutical sector, SMEs conduct most of the research regarding innovative production processes for already existing APIs. The European technical textile industry is at the forefront of innovation thanks to SMEs that can count on the collaboration of research institutes for the development of new fibres and materials. SMEs are pioneers in innovation in the telecommunication sector, as well as in robotics and drones, allowing them to be responsive to new requirements and market changes. The more novel types of electrolysers are developed mainly by smaller companies. R&D activities on fuel cells are often delegated to SMEs, or large companies create joint ventures or decide to establish R&D start-ups to offset the loss of profits that R&D activities entail due to the lack of mass commercialisation of fuel cell products. When strong collaborative links between industry and research are established, SME innovation can flourish. There is fruitful collaboration among large companies, SMEs, research institutions, and government agencies in

the robotics and drones industry. This enables SMEs to leverage the strengths of these parties and access resources and markets that might otherwise be beyond their reach independently.

SMEs are important for developing innovative solutions even in industries that today are largely dominated by big extra-EU competitors. In cloud computing, for instance, SMEs provide innovative open-source multi-platform cloud solutions that contrast with the dominance of US hyper-scalers and help promote open-source software, aligning with the Commission's goal of digital sovereignty. This is paramount to overcome the lock-in effects that over-reliance on non-EU proprietary software creates.

SMEs exhibit a relatively lower presence in the supply of inputs, such as chemicals and critical raw materials (particularly metal materials, such as platinum-group metals, lithium, aluminium, etc.), primarily due to the dominance of larger companies in this capital-intensive sector. SMEs are somewhat more involved in the extraction of non-metallic minerals that are primarily used in industrial applications and processes (e.g. borates and feldspar), which are less capital-intensive.[42]

SMEs operating in the central phase of the value chain are mostly involved in niche markets and the production of tailor-made high value added solutions. In the heat pump industry, for instance, smaller companies tend to specialise in designing and implementing customised solutions or complex installations rather than more generic solutions that large companies can provide more efficiently. In the manufacturing of electrolysers, smaller firms tend to specialise in innovative and less mature technologies, as large enterprises rely more on mature technology, which leads to more price competition and the emergence of capital-intensive and large-scale production sites. In some ecosystems such as agri-food, SMEs that are hampered in the manufacture of mineral fertilisers because of the capital-intensive nature of their production have switched their productive capacity to alternative goods – organic-based fertilisers – to benefit from the proximity to raw materials and end-users (small farmers). They have also engaged in developing alternative technologies, such as biostimulants and are successful in this niche market. Overall, SMEs leverage the flexibility related to their small size to acquire in-depth knowledge of the clients' needs and offer ad-hoc personalised solutions.

SMEs dominate the lower segments of the value chains analysed in their capacity as users, distributors and installers of the technologies and products or for providing other services. SMEs in the energy renewables value chain are responsible for installing solar panels. In the agri-food sector SMEs offer consultancy services to end-users, and in the cybersecurity value chain they operate to integrate cybersecurity software within existing systems. Finally, SMEs are also active as consumers of strategic technologies such as digital tools and renewable energy solutions. In the digital ecosystem, the role of SMEs as users of key enabling technologies such as AI, cloud computing and cybersecurity is very important. The objectives set out by the European Commission for the digital transition cannot be achieved without SMEs becoming mature users of these technologies. Moreover, their role as users is essential in supplying the domestic market for these technologies and prompting their development. Along the same line of reasoning, autonomy in the energy realm may only be achieved if an increasing number of SMEs become users of renewable energy.

The very last mile of the value chain entails activities related to recovery and recycling. In this respect, the upsurge of all the activities concerned with the recovery and recycling of raw materials from waste is worth mentioning. SMEs typically play an important role in these activities. SMEs in the EU, in particular, have a strong potential to be frontrunners in the dismantling and recycling of wind turbines, solar panels and batteries.

---

[42] According to stakeholders interviewed, SMEs represent approximately 80% of the number of companies active in the extraction and processing phases of non-metal materials.

Figure 26. Overview of the activities carried out by SMEs within the main phases of the value-chains investigated

PHASE 1: R&D	PHASE 2: SUPPLY OF INPUTS	PHASE 3: ASSEMBLY OF INTERMEDIATE GOODS AND MANUFACTURING OF FINAL GOODS SERVICE DESIGN /DEVELOPMENT	PHASE 4: DISTRIBUTION, INSTALLATION	PHASE 5: CONSUMPTION	PHASE 6: RECYCLING / RECOVERY
▪ Research and innovation activities by SMEs	▪ Extraction and processing of non-metal materials ▪ Ancillary services (incl. logistics), processing and refining for metal-based materials	▪ Capital intensive industries dominated by larger size firms (incl. medium enterprises) ▪ SMEs have a role in niche markets and tailor-made high value-added solutions (small-size production) ▪ SMEs are not involved in some strategic productions, but in providing alternative products ▪ SMEs often involved as subcontractors of large companies, or subsidiaries of larger groups	▪ Installation services (e.g. solar panels) ▪ Consultancy services for end users (e.g. farming) ▪ Integration of cybersecurity systems ▪ Logistics	▪ Users of new digital technology ▪ Users of renewable energy technology	▪ Recovery of critical raw materials

Source: European Commission (2024). SMEs and Open Strategic Autonomy.

5.3   Overview of existing policies affecting OSA and SMEs

5.3.1   EU vs non-EU countries: a comparative analysis of policy approaches

The overview of main policies adopted in the OSA domain worldwide draws from three primary data sources: the OSA Policy Inventory developed specifically for this study, the International Monetary Fund (IMF) New Industrial Policy Observatory (NIPO) database[43], and the OECD Quantifying Industrial Strategies (QuiS) database[44].

Overall, major economies globally have already implemented a range of policies aimed at achieving strategic autonomy goals. The EU and its Member States have placed a strong emphasis on enhancing strategic competitiveness and bolstering the resilience and security of supply chains, with approximately 80% of OSA-related policy actions aligned with these objectives. In contrast, the USA and China's approach to strategic autonomy encompasses not only competitiveness but also a significant focus on national security concerns.

The EU, along with its Member States, demonstrates an emphasis on subsidy-related measures that reflects a preference for financial support measures. These account for about 40% of all the subsidy measures introduced by the major world economies. In contrast, non-EU countries like the USA and China display a more diverse array of policy tools including not only domestic subsidies but also a stronger emphasis on protecting domestic markets through public procurement preferences, localisation measures, and export barriers. Emerging economies like India and Brazil show a higher reliance on import barriers, which is typical for nations aiming to reduce dependency on foreign goods and boost local production capabilities.

Comparing the financial volume of policy measures across countries presents significant challenges[45]. However, the financial volume of OSA policies launched by the EU appears relatively small compared to that provided in non-EU countries. According to the IMF database, the EU27 appears to lead with a substantial allocation of over USD 330 million for subsidy measures in 2023, which exceeds the amounts allocated by the USA and China. However, in specific technology areas, such as electric vehicles, wind turbines, and railway rolling stock, studies indicate that industrial subsidies in China are at least three to four times higher, and in some cases, up to nine times higher than those in major EU and OECD countries[46]. Moreover, companies in many countries outside the EU benefit from a wide variety of measures beyond direct subsidies, such as subsidised inputs, preferential

---

[43] https://www.imf.org/en/Publications/WP/Issues/2023/12/23/The-Return-of-Industrial-Policy-in-Data-542828

[44] https://www.oecd.org/industry/industrial-policy-and-strategies/

[45] Some measures have only recently been announced and there is a lack of associated financial data. Many measures are general and do not have direct budget allocations, complicating any quantitative financial analysis. Another major obstacle is the diversity of the policies considered. Some measures listed, such as non-tariff trade barriers, do not typically provide any quantitative measurement that would enable their financial impact to be assessed, even if they may have significant economic implications. Others, such as tax credit schemes granted over multiple years, are difficult to directly compare with investment subsidies.

[46] Kiel Institute for the World Economy. (2024). Foul Play? On the Scale and Scope of Industrial Subsidies in China. Kiel Policy Brief 173. Available at: https://www.ifw-kiel.de/publications/foul-play-on-the-scale-and-scope-of-industrial-subsidies-in-china-32738/.

access to critical raw materials, forced technology transfers, strategic public procurement, and preferential treatment in administrative procedures. The economic value of these measures is difficult to quantify. Considering the value of trade affected by trade-related measures, such as export subsidies and import barriers, China and the USA stand out with the highest trade value affected by such measures, totalling over USD 1.4 billion in the case of the Chinese market and USD 1.2 billion in the USA.

One notable aspect common to OSA policies worldwide is the limited emphasis on supporting SMEs. The analysis of over 1,100 trade and industrial policy measures from the IMF database reveals a global underemphasis on SMEs within OSA policies. Only 12 policies explicitly mention SMEs (or small businesses or other synonyms) in their title, with eight of them being from EU institutions or Member States. While this simple text analysis certainly does not capture the full complexity or depth of the policy content, it is striking to observe such a limited reference to OSA policies for SMEs. This discrepancy underscores a potential gap, where the needs and contributions of SMEs may not be sufficiently addressed or prioritised in OSA-focused economic policies.

5.3.2   Main EU policies

After the above general comparative overview of political approaches across different countries worldwide, this section provides insights into the main EU policies adopted to support OSA and SMEs specifically. The main source used for this overview is the OSA Policy inventory specifically built for this study[47].

5.3.2.1   Support to R&D and innovation

The EU and its Member States offer numerous initiatives aimed at fostering fundamental research, experimentation, and innovation in areas where the EU faces economic and innovation dependencies. Many of these policies are specifically targeted at or favour SMEs over larger companies. The Horizon Europe programme provides funding opportunities across the strategic products and technologies analysed, with the European Innovation Council (EIC) Accelerator under Horizon Europe playing a crucial role in supporting start-ups and SMEs[48]. The EIC stands out due to its European dimension, substantial funding (EUR 10.1 billion), and focus on disruptive innovation and breakthrough technologies. Thanks to these features, it is deemed the only programme with sufficient breadth and scale to make a difference, generating significant benefits that similar national programmes cannot deliver[49].

The EU not only offers generalised programmes to support SMEs but also provides assistance through sector-specific programmes aimed at fostering innovation within these enterprises. Examples include the Clean Hydrogen Partnership[50] targeting electrolysers, the Chips for Europe[51] initiative's first pillar dedicated to SMEs, the European Digital Programme[52] and the AI innovation package[53]. At the Member State level, notable initiatives include Ireland's Disruptive Technology Innovation Fund, the Netherlands' SME Innovation Stimulus for Regional and Top Sectors, and France's Crédit Impôt Recherche, which provide targeted support for R&D and innovation.

Efforts from the European Commission are complemented by the support provided by the European Investment Bank (EIB). The InnovFin initiative provides loans, guarantees, and equity investments to help innovative companies and startups bridge the gap from research to market deployment. The Cleantech EIB-EIF Co-Investment

---

[47] The Policy Inventory is attached as an Annex to the Final Report of the study (European Commission (2024). SMEs and Open Strategic Autonomy.).

[48] European Innovation Council and SMEs Executive Agency (EISMEA). Official website: https://eismea.ec.europa.eu/programmes/european-innovation-council_en.

[49] European Commission, DG RTD (2022). Evaluation study on the European Innovation Council (EIC) – Pilot. Authored by CSIL. Available at: https://op.europa.eu/en/publication-detail/-/publication/e862f900-f68b-11ec-b976-01aa75ed71a1/language-en.

[50] https://ec.europa.eu/docsroom/documents/50014

[51] https://digital-strategy.ec.europa.eu/en/factpages/european-chips-act-chips-europe-initiative.

[52] EIB. (2022). *European Cybersecurity Investment Platform*. Available at: https://www.eib.org/attachments/lucalli/20220206-european-cybersecurity-investment-platform-en.pdf.

[53] European Commission. (2024). Commission launches AI innovation package. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_24_383.

Programme supports SMEs and mid-caps in the clean technology sector[54]. The HERA Invest fund, created by DG HERA in collaboration with the EIB, targets SMEs in the API value chain[55].

Despite these extensive measures, there are still some shortcomings in EU support for R&D and innovation. According to stakeholders interviewed, these shortcomings are mostly associated with: i) the high funding needs for breakthrough technologies (as also noted by a recent independent study[56]), ii) a fragmented support system with little synergy between different programmes, and resources dispersed thinly across too many small projects, iii) lack of dedicated support for some strategic products and technologies, making it more difficult for SMEs to identify and access relevant funding opportunities, iv) limited scaling-up of innovative firms, generally due to gaps in the equity and venture capital markets with respect to demand.

5.3.2.2 Support to production expansion and diversification

Introduced in 2014, Important Projects of Common European Interest (IPCEIs) are EU cross-border instruments aimed at enhancing production capacity in critical strategic sectors[57]. The projects approved thus far are in microelectronics, batteries, telecommunications, hydrogen, and cloud computing. Notably, the IPCEIs focus on innovative projects and initial industrial deployments, contrasting with US policies like the Inflation Reduction Act (IRA) or Chinese state subsidies, which emphasise mass production and commercial activities. Moreover, European support does not discriminate against foreign producers, nor does it apply any local content requirements. The 2021 Communication on State Aid rules for IPCEIs introduced provisions to facilitate SME participation by allowing public aid even with limited SME co-financing and promoting collaboration with larger enterprises[58].

While larger companies continue to be key drivers within the IPCEI framework and receive the majority of investments, the involvement of SMEs in IPCEIs has steadily increased[59]. The first IPCEI on microelectronics (2018) envisaged the involvement of only 2 SMEs among 29 participants. The second IPCEI on microelectronics and communication technologies (2023) involved 22 SMEs among which 11 qualified as direct participants, and an additional 600 indirect partners with a more marginal role[60]. SMEs play crucial roles by offering niche solutions and specialised services. Participation in IPCEIs provides SMEs with benefits beyond financial support, including enhanced visibility, new market opportunities and the possibility to collaborate with large enterprises in the development and testing of technological innovation.

Policies to support the establishment or expansion of production facilities are easier to find at the Member State level. It is the case, for instance, of German support for semiconductor plant expansions[61] and the Hungarian initiative in the battery value chain[62]. These investments in large-scale plants aim to strengthen local industrial ecosystems and create opportunities for SMEs through agglomeration effects and spillovers[63].

---

[54] https://www.eib.org/en/projects/pipelines/all/20220444.
[55] https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3775.
[56] European Policy Analysis Group. (2024). EU innovation policy. How to escape the middle technology trap. Authored by Fuest C., D. Grow, P.L. Mengel, G. Presidente and J. Tirole. Available at: EU Innovation Policy: How to Escape the Middle Technology Trap | Publication | Econpol Europe.
[57] COMMUNICATION FROM THE COMMISSION. Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest. (2014/C 188/02)
[58] European Commission. (2021). COMMUNICATION FROM THE COMMISSION C(2021) 8481 final. Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:c6681395-4ded-11ec-91ac-01aa75ed71a1.0004.02/DOC_1&format=PDF.
[59] SMEs can participate to IPCEIs in different capacities, assuming the role of direct, indirect or associated participants. For indirect and associated partners the Member States proposing the IPCEI do not ask for approval of aid under the IPCEI communication because they may concern projects that are benefitting from aid based on other legal bases (e.g. General Block Exemption Regulation).
[60] https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3087
[61] Federal Ministry for Economic Affairs and Climate Action. Press Release, "Ansiedlung von Wolfspeed im Saarland ist wichtiger Schritt zur Stärkung des Mikroelektronik-Standorts Deutschland" ["Settlement of Wolfspeed in Saarland is an important step towards strengthening Germany as a microelectronics location"] of 1 February 2023. Available at: https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/02/20230201-ansiedlung-von-wolfspeed-im-saarland-ist-wichtiger-schritt.h.
[62] SA.48556 (2018/N - 2019/C) Regional investment aid to Samsung SDI - LIP. Available at: https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_48556 European Commission, Press Release 28/02/2023.
[63] Crescenzi, R., & Harman, O. (2023). Harnessing Global Value Chains for regional development: How to upgrade through regional policy, FDI and trade (1st ed.). Routledge. https://doi.org/10.4324/9781003356141.

Other specific measures to address production capacity and take advantage of spillovers to SMEs through agglomeration effects include the creation of collaborative clusters or alliances through which SMEs can fruitfully collaborate with large firms. Examples are the strategic private-public BATT4EU partnership[64] and the hydrogen valleys[65]. Both initiatives aim at promoting collaboration with larger firms and knowledge acquisition through best practices sharing.

Favouring diversification helps the EU reduce external dependency and increase the production of strategic products and technologies, which is vital for SMEs given the high costs associated with it. In particular, moving into higher-value production, where SMEs can excel and find niches of specialisations, could offer more viable opportunities for EU SMEs.

Alongside measures to boost production capacities, initiatives at both EU and national levels are also focused on stimulating demand, particularly in emerging markets with significant SME involvement. In the agri-food domain, EU regulation has been relaxed to encourage the consumption of non-conventional protein sources. At the same time, at the national level, France has set up a comprehensive strategy to support the development of carbon capture technology[66].

Notwithstanding the great efforts in supporting production expansion, stakeholders pointed out several concerns related to: i) the complexity associated with IPCEIs' application processes, as well as the slow evaluation times, and inconsistent fund distribution across different Member States involved in the same IPCEI, which limit SME participation in IPCEIs; ii) the need of appropriate mechanisms to let FDI spillovers to spread to SMEs; iii) the high costs implied by production diversification and the fact that diversification is not always the best strategy, especially into segments facing direct competition from extra-EU countries; iv) the skill shortages that can limit production expansion and diversification.

5.3.2.3   Support to rebalance global trade

Recent trade data and studies highlight an overall increase in trade openness of the EU, larger than what recorded by other countries, such as the USA[67]. The EU fosters preferential trade relationships with numerous countries and extends unilateral preferential access to its Single Market for 65 developing nations, including 47 Less Developed Countries. The EU's trade policy also largely relies on "mini-deals" such as international agreements, protocols, exchanges of letters, conventions, and declarations[68].

The EU's preference for trade openness is further evidenced by its general reluctance to impose import bans or export restrictions on third countries, with the exception of the recent sanctions against Russia. Typically, the EU has focused on only prohibiting imports of goods that fail to meet specific EU quality and safety standards, thereby ensuring consumer protection within the EU market.

The European public procurement market is also relatively open compared to global competitors, ensuring that measures supporting domestic producers do not result in unjustified discrimination or breach legal obligations, such as the World Trade Organisation (WTO)'s non-discrimination rules. In contrast, countries outside the EU often require that products purchased through public procurement be domestically produced, limiting opportunities for European businesses. Since 2012, the EU has attempted to counteract this non-reciprocity in public procurement through proposals for an International Procurement Instrument (IPI)[69] aimed at ensuring fairness and openness in procurement markets. However, to date, the instrument has only been limitedly effective[70].

---

[64] https://bepassociation.eu/.
[65] https://h2v.eu/.
[66] https://www.conseil-national-industrie.gouv.fr/actualites/consultation-sur-la-strategie-nationale-ccus, https://www.grtgaz.com/medias/communiques-de-presse/lancement-goco2.
[67] The USA have experienced a modest increase in trade openness, reaching 28% of GDP in 2022, while the EU has seen a remarkable surge, reaching 51% of GDP in the same year. Source: WTO data, discussed and analysed by Cernat L. (2024). On the importance of trade openness. European Centre for International Political Economy. Available at: On the importance of trade openness | (ecipe.org).
[68] Cernat, L (2023), "The art of the mini-deals: The Invisible Part of EU Trade Policy", European Centre for International Political Economy, October. Available at: https://ecipe.org/publications/mini-deals-invisible-part-of-eu-trade-policy/.
[69] https://eur-lex.europa.eu/EN/legal-content/summary/the-eu-s-international-procurement-instrument-ipi.html.
[70] European Parliament. (2016). Why China's public procurement is an EU issue. European Parliamentary Research Service. Available at: https://www.europarl.europa.eu/RegData/etudes/ATAG/2016/593571/EPRS_ATA(2016)593571_EN.pdf.

The non-discriminatory principle governing EU public procurement is reflected in the absence of measures that give preferential treatment to SMEs, such as earmarking procurement shares or providing price advantages. Instead, the EU has implemented measures to "level the playing field" to ensure SME participation[71]. One such measure is dividing contracts into smaller lots. Generally, however, studies show that greater SME participation and a higher likelihood of SMEs winning contracts are more associated with a high-quality procurement process characterised by transparency, competition, administrative efficiency, and a low risk of corruption than with purely SME-friendly provisions[72].

The EU has recently undertaken initiatives on several fronts to more assertively enforce its rights, by balancing its commitment to trade openness with actions aimed at safeguarding EU security, public order, and economic interests. These include new legislative proposals and tools to address international trade and market distortions. The FDI screening regulation, adopted in March 2019, established an EU-wide framework to coordinate actions on foreign investments[73]. Within one year of enforcement, the Commission screened 400 foreign investments, primarily in manufacturing, ICT, and retail, from countries including the USA, UK, China, Canada, and the United Arab Emirates. Additionally, under the EU Export Control regime, Member States evaluated over 30,000 export requests for potentially military-use goods, such as drones, robotics, space systems, and telecommunications, to non-EU countries valued at EUR 38.4 billion. This evaluation process resulted in 603 denials, demonstrating the EU's commitment to balancing trade openness with strategic export control measures[74].

However, stakeholders warned about some limitations in the EU approach to global trade. These are mainly related to: i) the need to find a balance between measures favouring domestic production and maintaining trade openness, since overly restrictive policies may be challenging for SMEs; ii) the obstacles SMEs still face in participating in international trade due to, for example, non-tariff measures; iii) the competition with extra-EU countries that operate under less stringent regulatory frameworks and benefit from lower costs; iv) limited participation in SMEs public procurement.

---

[71] DIRECTIVE 2014/24/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. OJ L 94, 28.3.2014.
[72] *Ibid.*
On the public procurement quality score, see https://digiwhist.eu/publications/quality-of-government/.
[73] https://policy.trade.ec.europa.eu/enforcement-and-protection/investment-screening_en.
[74] European Commission. (2021). Trade and security: Commission highlights work to defend EU interests and values. Press release. Available at: https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_21_6226/IP_21_6226_EN.pdf. European Commission. (2022). Second Annual Report on the screening of foreign direct investments into the Union. Available at: https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2022)433&lang=en.
Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (recast). Available at: https://eur-lex.europa.eu/eli/reg/2021/821.

6 Conclusions

EU SMEs have gone through significant challenges over the past years. In 2023, persistent inflationary pressures jeopardised the economic robustness of the EU's SMEs. SMEs have expereinced a real-term decline in value added of -1.6%. Although inflation fell to more moderate levels during late 2023 and in 2024, it still remains above the ECB's 2% target and continues to weigh on SMEs' economic performance, meaning that even in 2024 SMEs' inflation adjusted value added will drop by a further -1.0%. A small positive aspect is that in 2024 the inflation in the EU is expected to fall further (though it will remain above 2%).

SME employment increased by 1.8% in 2023, following its already significant growth in 2022, when the increase of persons employed reached 2.9%. According to the forecasts, 2024 will be another growth year, with a 0.8% increase in employment, signalling three years of consecutive employment growth. At the same time, however, many SMEs have experienced a sharp rise in skill shortages. The SAFE survey indicates the lack of "availability of skilled staff or experienced managers" as the most significant problem faced by SMEs in 2023.

Across all indicators, micro enterprises have shown higher growth and more resilience than other size classes, showing once more the importance of micro enterprises to the European economy. Micro enterprises have been the most dynamic players in recent years not only at the EU-27 level, but also in many MSs and industrial ecosystems: Nearly 4 million jobs have been created in micro-enterprises over the last three years, significantly more than for any other size class.

There is a wide variety in the economic performance of SMEs in the industrial ecosystems. Some of them, such as 'digital' and 'tourism', have witnessed notable growth rates in both value added and employment and are predicted to perform well in the near future, while others, such as 'textiles' and 'electronics', are in 2024 expected to decline across all indicators.

The spatial analysis revealed that certain neighbouring MSs within the EU share similar features and drawbacks. Eastern MSs experienced particularly high inflation rates, which weighed on SMEs' real-terms value added, while growth rates in both value added and employment were notable for most of the southern countries. As an example, the 'tourism' ecosystem has shown significant growth, especially in Mediterranean MSs.

A longer-term analysis highlights some challenges for SME productivity. While in absolute terms, SME productivity has remained largely stable over the past years and even increased slightly since 2020, their productivity growth has consistently lagged behind that of large enterprises. Whereas in 2008 SMEs were about 68% as productive as large enterprises, in 2024 this figure had fallen to 60%. This represents a significant missed potential, and reversing this trend could lead to substantial productivity gains for the EU economy as a whole.

In the next few years, SMEs will also have to confront the implementation of the Open Strategic Autonomy paradigm, which permeates the new industrial strategy and other EU policies. This paradigm offers important opportunities for SMEs but also entails several risks that may influence their performance. Lagging productivity in SMEs can be particularly risky in the OSA context, which aims to foster domestic EU production and innovation of critical products and technologies.

SMEs have demonstrated significant activity in carrying out innovative activities within critical value chains. Despite this dynamism and the implementation of many policy initiatives to support R&D and innovation, SME productivity performance suggests that there is room for additional policy support efforts. When focusing on critical value chains, SMEs appear to play a crucial role especially in niche manufacturing and in developing emerging markets such as the recycling of raw materials from waste.

Against this backdrop, it will be all the more important for the new European Commission mandate to place SMEs at the heart of EU policymaking. Policymakers need to recognise SMEs as catalysts for the change that Europe needs and to turn SMEs from followers into leaders of radical change.

INDEX OF FIGURES AND TABLES

Index of Figures

Index of Tables

Index of Maps

ANNEX 1. DEFINITION OF SMES

The official EC definition of SMEs takes account of three different factors (i.e. level of employment, level of turnover, and size of balance sheet). SMEs are enterprises which have fewer than 250 employees, and have either an annual turnover of less than EUR 50 million or a balance sheet total of less than EUR 43 million. The analysis in this report is based only on the employment definition of SMEs, since this is the definition used by the Structural Business Statistics (SBS) database maintained by Eurostat, the main data source for the report.

Table 6: Definition of SMEs

Enterprise Category	Employees	Turnover	Balance sheet total
Micro SME	0 to < 10	< EUR 2 million	< EUR 2 million
Small SME	10 to < 50	< EUR 10 million	< EUR 10 million
Medium-sized SME	50 to <250	< EUR 50 million	< EUR 43 million

Source: Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises (2003/362/EC), Official Journal of the European Union, L 124/36, 20 May 2003

ANNEX 2. ANNUAL GDP GROWTH AND INFLATION RATES PER MEMBER STATE OVER THE PERIOD 2021 – 2024

Table 7: Annual GDP growth and inflation rates per Member State in 2021, 2022, 2023 and 2024

	Real GDP growth rate (%)				HICP (%)			
	2021	2022	2023	2024	2021	2022	2023	2024
Austria	4.2	4.8	-0.8	0.6*	2.8	8.6	7.7	4.0*
Belgium	6.9	3.0	1.3	1.4*	3.2	10.3	2.3	3.5*
Bulgaria	7.7	3.9	2.0*	1.9*	2.8	13.0	8.6	3.4*
Croatia	13.8	6.3	2.8	2.6*	2.7	10.7	8.4	2.5*
Cyprus	9.9	5.1	2.5	2.8*	2.3	8.1	3.9	2.4*
Czechia	3.6	2.4	-0.5	1.1*	3.3	14.8	12.0	2.9*
Denmark	6.8	2.7	1.8	0.9*	1.9	8.5	3.4	1.7*
Estonia	7.2	-0.5	-3.0	0.6*	4.5	19.4	9.1	3.2*
EU-27	6.0	3.4	0.5*	0.9*	2.9	9.2	6.4	3.0*
Finland	2.8	1.3	-1.0	0.6*	2.1	7.2	4.3	1.4*
France	6.4	2.5	0.7	0.9*	2.1	5.9	5.7	2.8*
Germany	3.2	1.8	-0.3	0.3*	3.2	8.7	6.0	2.8*
Greece	8.4	5.6	2.2*	2.3*	0.6	9.3	4.2	2.7*
Hungary	7.1	4.6	-0.9	2.4*	5.2	15.3	17.0	4.5*
Ireland	15.1	9.4	-3.2	1.2*	2.4	8.1	5.2	2.2*
Italy	8.3	4.0	0.9	0.7*	1.9	8.7	5.9	2.0*
Latvia	6.7	3.0	-0.3	1.7*	3.2	17.2	9.1	2.2*
Lithuania	6.3	2.4	-0.3	2.1*	4.6	18.9	8.7	2.4*
Luxembourg	7.2	1.4	-0.8*	1.3*	3.5	8.2	2.9	2.6*
Malta	12.5	8.1	5.6	4.6*	0.7	6.1	5.6	2.9*
Netherlands	6.2	4.3	0.1	0.4*	2.8	11.6	4.1	2.6*
Poland	6.9	5.3	0.2	2.7*	5.2	13.2	10.9	5.2*
Portugal	5.7	6.8	2.3	1.2*	0.9	8.1	5.3	2.3*
Romania	5.7	4.1	1.8*	2.9*	4.1	12.0	9.7	5.8*
Slovakia	4.8	1.8	1.1*	2.3*	2.8	12.1	11.0	3.5*
Slovenia	8.2	2.5	1.6	1.9*	2.0	9.3	7.2	2.9*
Spain	6.4	5.8	2.5	1.7*	3.0	8.3	3.4	3.2*
Sweden	6.1	2.7	-0.2	0.2*	2.7	8.1	5.9	1.7*

Note: All values marked with an asterisk stem from European Economic Forecast, Winter 24 version
Source: Eurostat, European Economic Forecast – Winter 24

ANNEX 3. SME PERFORMANCE INDICATORS BY SME SIZE CLASS AND EU MEMBER STATES IN 2023

Map 15: Share of SME employment in the NFBS of Member States in 2023
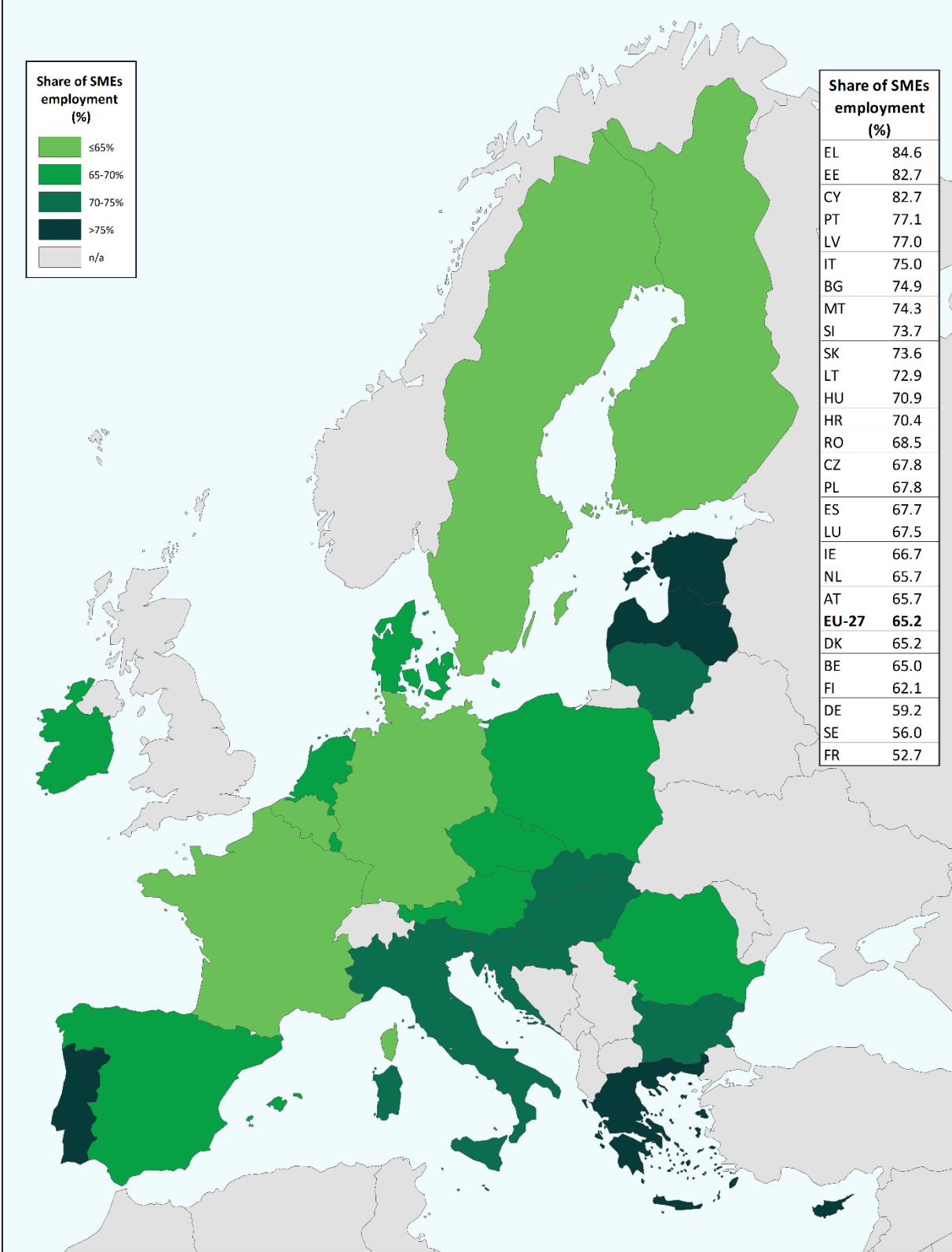
	Share of SMEs employment (%)
EL	84.6
EE	82.7
CY	82.7
PT	77.1
LV	77.0
IT	75.0
BG	74.9
MT	74.3
SI	73.7
SK	73.6
LT	72.9
HU	70.9
HR	70.4
RO	68.5
CZ	67.8
PL	67.8
ES	67.7
LU	67.5
IE	66.7
NL	65.7
AT	65.7
EU-27	**65.2**
DK	65.2
BE	65.0
FI	62.1
DE	59.2
SE	56.0
FR	52.7

Legend — Share of SMEs employment (%):
- ≤65%
- 65-70%
- 70-75%
- >75%
- n/a

***Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

Table 8: Share in total SME employment in the EU-27 NFBS of micro, small and medium-sized SMEs by Member State - 2023

	Micro SMEs	Small SMEs	Medium-sized SMEs
AT	40.5%	33.3%	26.2%
BE	54.0%	23.6%	22.5%
BG	41.2%	30.6%	28.2%
CY	48.2%	30.1%	21.7%
CZ	46.5%	26.2%	27.3%
DE	33.4%	37.6%	29.0%
DK	29.5%	37.4%	33.1%
EE	48.4%	27.7%	23.9%
EL	57.4%	28.3%	14.3%
ES	50.9%	29.5%	19.7%
EU-27	46.0%	30.2%	23.8%
FI	34.6%	34.4%	31.1%
FR	46.5%	29.6%	23.9%
HR	45.5%	30.1%	24.4%
HU	53.3%	26.1%	20.7%
IE	37.3%	33.5%	29.3%
IT	55.4%	27.4%	17.2%
LT	44.0%	27.9%	28.1%
LU	25.5%	36.1%	38.4%
LV	36.9%	33.6%	29.5%
MT	48.7%	28.2%	23.1%
NL	44.2%	28.0%	27.8%
PL	54.2%	24.4%	21.4%
PT	52.9%	26.0%	21.1%
RO	48.6%	28.1%	23.3%
SE	35.9%	32.8%	31.2%
SI	45.8%	27.7%	26.5%
SK	60.6%	19.3%	20.1%

Source: Calculations by the JRC, based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 16: Share of SMEs Value Added in the NFBS of Member States in 2023

Share of SMEs value added (%)

	≤55%
	55-60%
	60-65%
	>65%
	n/a

	Share of SMEs value added (%)
EE	81.7
MT	77.5
CY	76.9
LV	71.9
PT	69.9
EL	67.0
SI	66.4
LU	64.3
LT	64.2
IT	63.7
BG	61.8
NL	61.6
ES	59.4
BE	58.5
CZ	58.2
HR	58.2
RO	55.9
FI	55.9
AT	55.6
HU	55.5
EU-27	**53.1**
DK	53.1
SK	52.1
DE	50.3
PL	50.3
SE	49.5
FR	42.8
IE	36.2

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Table 9: Share in total SME value added in the EU-27 NFBS of micro, small and medium-sized SMEs by Member State - 2023

	Micro SMEs	Small SMEs	Medium-sized SMEs
AT	27.4%	37.3%	35.3%
BE	42.0%	30.9%	27.1%
BG	30.3%	37.7%	32.0%
CY	31.9%	36.8%	31.4%
CZ	32.3%	29.5%	38.2%
DE	34.6%	34.2%	31.2%
DK	30.0%	31.4%	38.6%
EE	39.5%	30.1%	30.4%
EL	51.8%	23.2%	25.0%
ES	43.5%	28.8%	27.7%
EU-27	37.2%	31.6%	31.3%
FI	30.9%	33.0%	36.1%
FR	40.0%	33.1%	27.0%
HR	33.0%	32.7%	34.3%
HU	40.0%	33.1%	26.9%
IE	46.1%	19.9%	34.2%
IT	40.4%	32.1%	27.5%
LT	29.7%	31.8%	38.6%
LU	32.5%	25.7%	41.7%
LV	25.7%	40.9%	33.5%
MT	37.3%	42.9%	19.8%
NL	33.0%	25.1%	41.9%
PL	38.3%	29.9%	31.8%
PT	35.2%	32.5%	32.2%
RO	37.9%	33.7%	28.4%
SE	31.9%	31.5%	36.6%
SI	37.3%	32.2%	30.6%
SK	43.3%	26.0%	30.7%

Source: Calculations by the JRC, **based on Eurostat's Structural Business Statistics, Short***-Term Business Statistics and National Accounts Database*

69

Map 17: Share of micro SMEs in the total number of Enterprises in the NFBS of Member States in 2023

Share of micro SMEs (%) in the total number of enterprises

- ≤85%
- 85-90%
- 90-95%
- >95%
- n/a

Share of micro SMEs (%) in the total number of enterprises	
SK	97.4
CZ	96.2
BE	96.1
NL	96.1
PL	95.5
PT	95.5
HU	95.4
FR	95.0
LT	94.8
EL	94.7
IT	94.6
MT	94.6
EE	94.5
RO	94.4
ES	94.3
SI	94.3
FI	94.2
SE	94.1
EU-27	**93.6**
CY	92.8
HR	92.4
BG	91.9
IE	91.7
LV	91.2
AT	90.0
DK	88.1
LU	87.9
DE	84.0

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

ANNEX 4. SURVEY ON ACCESS TO FINANCE OF ENTERPRISES (SAFE): RESULTS OF 2022 AND 2023 SURVEYS IN EU-27 AND MEMBER STATE LEVEL

Figure 27: Economy-wide assessment by EU-27 SMEs of importance (on a scale of 1 to 10) of various issues and challenges faced by SMEs in 2023
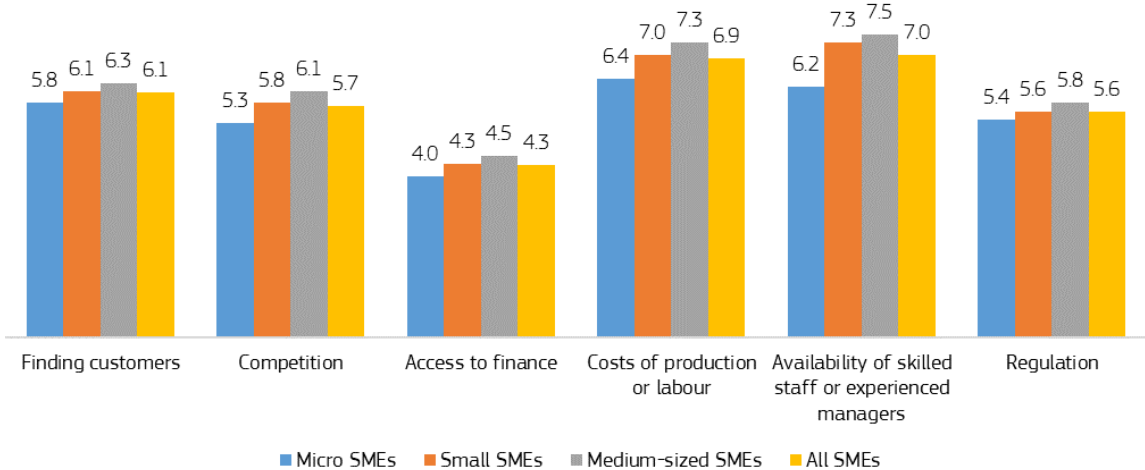
Note: The assessment reported in the figure above reflects the views of SMEs in the period of 4 September to 20 October 2023 (when the SAFE survey fieldwork was undertaken).
Source: SAFE survey

Figure 28: Change in the economy-wide assessment by EU-27 SMEs of the importance (on a scale of 1 to 10) of various issues and challenges faced by SMEs 2023 SAFE survey rating minus 2022 SAFE survey rating
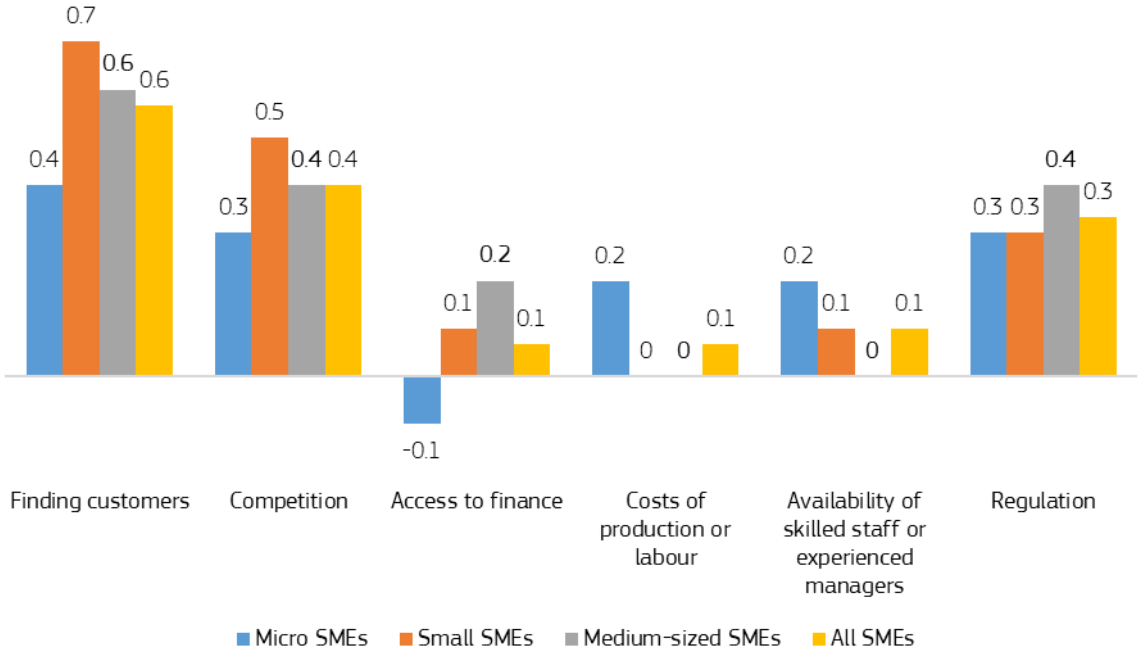
Source: SAFE surveys of 2022 and 2023

Table 10: Economy-wide assessment by SMEs in Member States of importance (on a scale of 1 to 10) of various challenges and issues faced by SMEs in 2023

	Finding cus-tomers	Competition	Access to fi-nance	Costs of pro-duction or la-bour	Availability of skilled staff or ex-perienced manag-ers	Regulation
AT	7.3	6.1	4.3	7.3	7.7	5.7
BE	5.1	5.2	4.1	6.8	7.1	5.5
BG	7.5	6.7	5.2	7.6	8.3	7.1
CY	5.1	6.2	4.8	6.7	6.3	5.2
CZ	6.4	5.7	4	6.6	6.9	5.4
DE	6.8	5.7	3.9	6.7	7.5	5.8
DK	6	5.7	4.1	6	6.3	5.1
EE	5	5.8	3.8	6.1	5.5	3.7
EL	5.4	5.9	5	6.7	6.9	5.2
ES	6.1	6	4.6	7.1	6.5	5.7
EU-27	6	5.6	4.2	6.8	6.9	5.6
FI	4.2	5.5	3.5	5.8	5.9	4.3
FR	4.7	4.9	4	6.5	6.5	4.9
HR	4.1	4.4	3.9	5.3	6.4	4.7
HU	6.1	5.2	4.8	6.5	6.5	4.8
IE	5.7	5.6	3.7	7	6.9	5.1
IT	6	5.8	4.3	7.1	6.8	5.4
LT	6	6.7	4.5	6.3	4.9	4.9
LU	5.8	5.5	3.8	6.6	7	5.6
LV	5.7	6.2	4.4	6.5	6.5	5.7
MT	6	6.4	4.8	6.8	7.4	6
NL	4.7	4.7	3	5.8	6.6	5.4
PL	6.1	5.6	4.3	7.5	6.5	6.3
PT	6.6	6.4	4.7	7.3	7.2	6.5
RO	7.4	6.5	6.1	8	7.7	7
SE	4.7	5	3.1	5.3	5.9	4.1
SI	6.3	5.4	4	6.7	6.6	5.9
SK	5.4	5	3.8	5.9	6.5	4.5

Note: The assessment reported in the table above reflects the views of SMEs in the period of 4 September to 20 October 2023 (when the SAFE survey fieldwork was undertaken). The colours in the table correspond to the following values: dark green: 0-3, green: 3-4, light green: 4-5, light yellow: 5-6, coral: 6-7, orange: 7-8, red: 8-10
Source: SAFE survey

ANNEX 5. COMPOSITION OF GROUPING OF INDUSTRIES OF DIFFERENT TECHNOLOGY AND KNOWLEDGE INTENSITIES

Knowledge-intensive services

The group of knowledge-intensive services (KIS) is classified according to Eurostat and regroups the following service industries (NACE 2 classification):

High-tech services:

- J59 Motion picture, video and television programme production, sound recording and music publishing activities
- J60 Programming and broadcasting services
- J61 Telecommunications
- J62 Computer programming, consultancy and related activities
- J63 Information service activities
- M72 Scientific research and development

Market services:

- H50 Water transport
- H51 Air transport
- M69 Legal and accounting activities
- M70 Activities of head offices, management consultancy activities
- M71 Architectural and engineering activities; technical testing and analysis
- M73 Advertising and market research
- M74 Other professional, scientific and professional services
- N78 Employment activities
- N80 Security and investigation activities

Other KIS

- J58 Publishing activities
- M75 Veterinary activities

Low knowledge-intensive services

Market services

- G45 Wholesale and retail trade and repair of motor vehicles and motorcycles
- G46 Wholesale trade, except of motor vehicles and motorcycles
- G47 Retail trade, except of motor vehicles and motorcycles
- H49 Land transport and transport via pipelines
- H52 Warehousing and support activities for transportation
- I55 Accommodation
- I56 Food and beverage service activities
- L68 Real estate activities
- N77 Rental and leasing activities
- N79 Travel agency, tour operator reservation service
- N81 Services to buildings and landscape activities
- N82 Office administrative, office support and other business support activities

Other

- H53 Postal and courier activities

High-tech industries

- o C21 Manufacture of basic pharmaceutical products and pharmaceutical preparations
- o C26 Manufacture of computer, electronic and optical products

Medium-tech industries

Medium high-tech

- o C20 Manufacture of chemicals and chemical products
- o C27 Manufacture of electrical equipment
- o C28 Manufacture of machinery and equipment n.e.c.
- o C29 Manufacture of motor vehicles, trailers and semi-trailers
- o C30 Manufacture of other transport equipment

Medium-low tech

- o C19 Manufacture of coke and refined petroleum products
- o C22 Manufacture of rubber and plastic products
- o C23 Manufacture of other non-metallic mineral products
- o C24 Manufacture of basic metals
- o C25 Manufacture of fabricated metal products, except machinery and equipment
- o C33 Repair and installation of machinery and equipment

Low-tech industries

- o C10 Manufacture of food products
- o C11 Manufacture of beverages
- o C12 Manufacture of tobacco products
- o C13 Manufacture of textiles
- o C14 Manufacture of wearing apparel
- o C15 Manufacture of leather and related products
- o C16 Manufacture of wood and of products of wood and cork, except furniture; Manufacture of articles of straw and plaiting materials
- o C17 Manufacture of paper and paper products
- o C18 Printing and reproduction of recorded media

ANNEX 6. PROPORTION OF NUMBER OF ENTERPRISES, EMPLOYMENT AND VALUE ADDED ATTRIBUTED TO DIFFERENT KNOWLEDGE AND TECHNOLOGY INTENSITIES BY MEMBER STATES IN 2023

The long-term analysis (Figure 29, Figure 30, and Figure 31) illustrates the distribution of EU-27 SMEs across industries of different knowledge and technology intensity through the last 16 years. Each figure visualises the share expressed in terms of a specific key indicator.

Figure 29: Long-term distribution of EU-27 SMEs across industries of different knowledge and technology intensity (share in terms of number of enterprises)
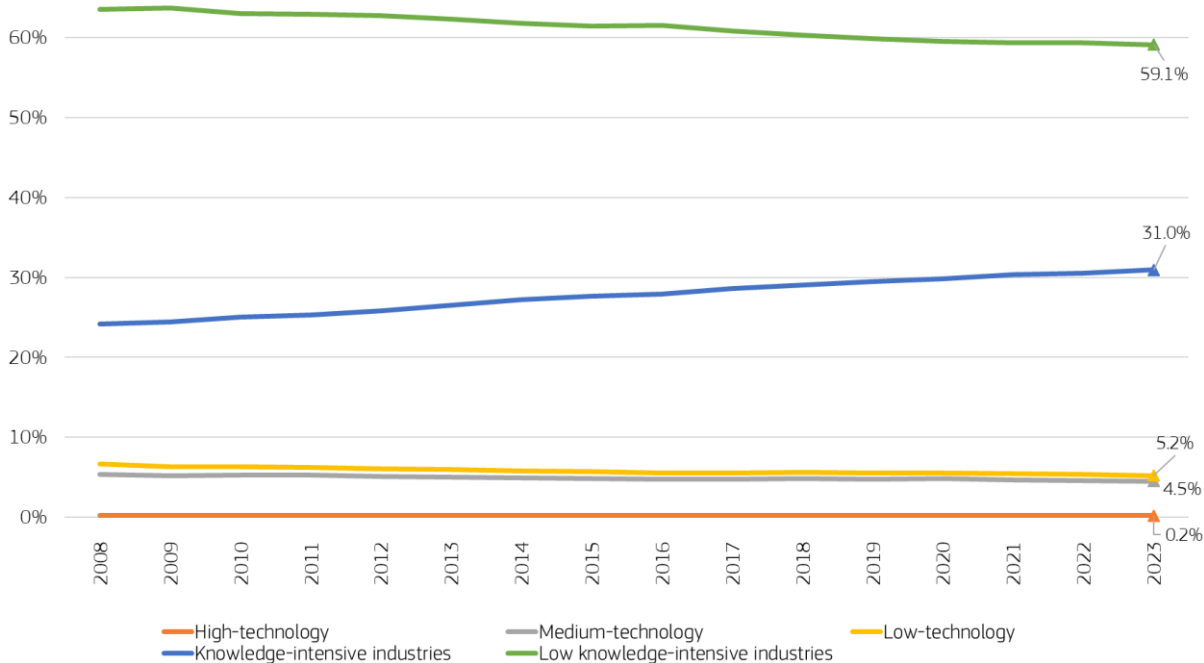
Source: Calculations by the JRC, based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 30: Long-term distribution of EU-27 SMEs across industries of different knowledge and technology intensity (share in terms of employment)
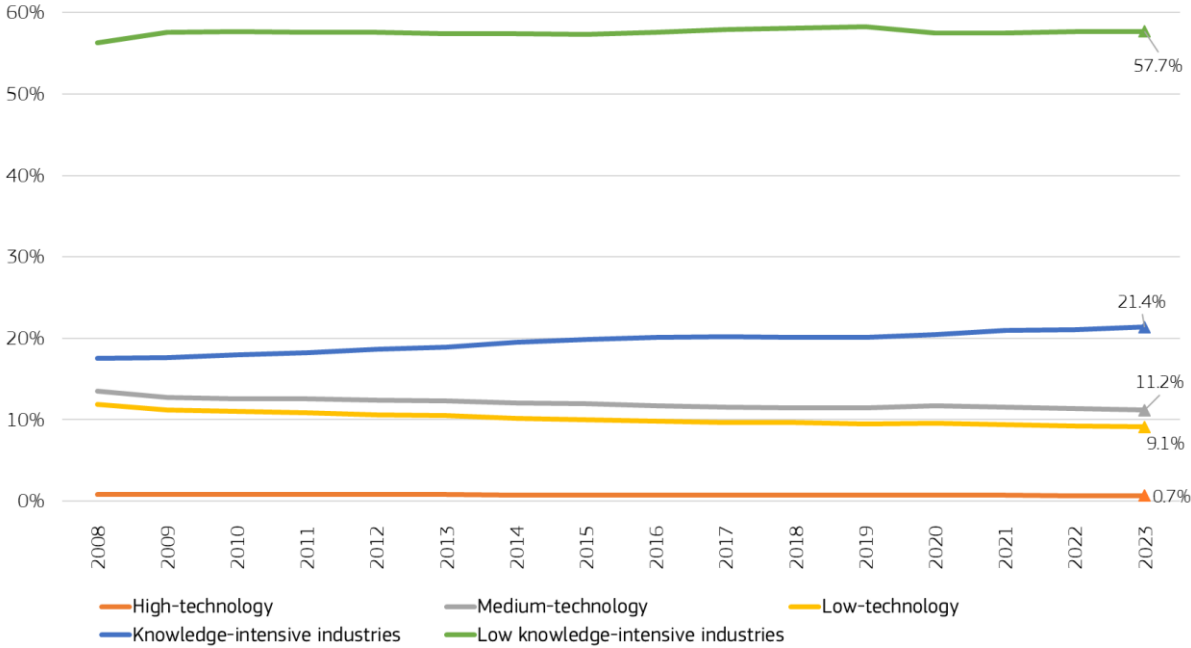
Figure 31: Long-term distribution of EU-27 SMEs across industries of different knowledge and technology intensity (share in terms of value added)

Table 11: Proportion of EU-27 NFBS SMEs in industries of different knowledge and technology intensities by EU Member State - 2023

	High-technology industries	Medium-technology industries	Low-technology industries	Knowledge-intensive services	Less knowledge-intensive services
AT	0.2%	3.2%	4.9%	34.9%	56.8%
BE	0.1%	2.9%	3.2%	40.2%	53.6%
BG	0.1%	3.4%	5.6%	21.4%	69.4%
CY	0.0%	4.1%	5.7%	28.0%	62.2%
CZ	0.4%	10.8%	9.0%	30.8%	49.0%
DE	0.4%	4.9%	4.1%	30.4%	60.2%
DK	0.4%	4.7%	2.8%	32.2%	59.9%
EE	0.1%	3.8%	5.2%	36.0%	54.9%
EL	0.1%	3.2%	5.3%	27.8%	63.5%
ES	0.1%	3.0%	4.0%	21.8%	71.1%
EU-27	0.2%	4.5%	5.2%	31.0%	59.1%
FI	0.3%	5.4%	4.9%	32.5%	57.0%
FR	0.1%	2.5%	5.7%	29.8%	62.0%
HR	0.3%	6.4%	7.4%	32.8%	53.1%
HU	0.2%	4.3%	4.8%	38.7%	51.9%
IE	0.3%	3.8%	3.8%	33.4%	58.7%
IT	0.2%	5.2%	5.7%	29.7%	59.2%
LT	0.1%	3.2%	7.3%	27.4%	62.0%
LU	0.0%	1.1%	1.1%	43.1%	54.7%
LV	0.2%	3.6%	7.5%	30.1%	58.6%
MT	0.1%	2.8%	4.2%	30.4%	62.5%
NL	0.2%	3.1%	3.2%	49.4%	44.2%
PL	0.2%	6.8%	6.2%	33.9%	52.9%
PT	0.1%	2.9%	4.7%	20.0%	72.3%
RO	0.1%	3.5%	6.9%	22.9%	66.6%
SE	0.2%	4.0%	3.7%	47.2%	44.9%
SI	0.2%	7.9%	6.9%	38.9%	46.0%
SK	0.4%	11.7%	7.4%	30.5%	49.9%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Table 12: Proportion of EU-27 NFBS employment attributed to SMEs in industries of different knowledge and technology intensities by EU Member State - 2023

	High-technology industries	Medium-technology industries	Low-technology industries	Knowledge-intensive services	Less knowledge-intensive services
AT	0.7%	9.3%	7.9%	23.6%	58.5%
BE	0.5%	8.3%	6.9%	28.3%	56.0%
BG	0.6%	9.8%	14.4%	17.4%	57.9%
CY	0.3%	6.3%	8.3%	22.8%	62.4%
CZ	0.9%	19.6%	11.2%	21.4%	46.9%
DE	1.0%	12.1%	7.3%	22.1%	57.5%
DK	0.9%	9.9%	5.2%	23.7%	60.3%
EE	0.8%	11.3%	13.7%	23.8%	50.4%
EL	0.3%	5.1%	8.7%	17.4%	68.4%
ES	0.4%	9.1%	8.4%	16.4%	65.7%
EU-27	0.7%	11.2%	9.1%	21.4%	57.7%
FI	1.1%	13.8%	6.8%	29.8%	48.5%
FR	0.5%	7.9%	8.4%	23.6%	59.6%
HR	0.4%	12.8%	12.3%	22.3%	52.1%
HU	0.8%	11.5%	8.6%	25.8%	53.3%
IE	0.8%	6.2%	5.6%	26.1%	61.3%
IT	0.7%	14.9%	10.9%	16.8%	56.6%
LT	0.6%	8.1%	13.3%	20.3%	57.8%
LU	0.0%	6.1%	3.1%	34.4%	56.4%
LV	0.6%	8.0%	13.9%	20.1%	57.4%
MT	1.6%	3.8%	4.3%	28.6%	61.7%
NL	0.5%	7.9%	5.2%	31.6%	54.8%
PL	0.5%	13.8%	12.2%	20.8%	52.7%
PT	0.3%	9.0%	13.3%	16.4%	61.0%
RO	0.5%	9.4%	14.2%	17.5%	58.5%
SE	0.7%	9.5%	4.8%	29.9%	55.1%
SI	1.0%	19.6%	9.9%	25.2%	44.2%
SK	0.9%	17.3%	10.3%	22.9%	48.6%

Table 13: Proportion of EU-27 NFBS value added generated by SMEs in industries of different knowledge and technology intensities by EU Member State - 2023

	High-technology industries	Medium-technology industries	Low-technology industries	Knowledge-intensive services	Less knowledge-intensive services
AT	0.9%	11.3%	7.0%	21.6%	59.1%
BE	0.5%	9.8%	6.0%	27.5%	56.2%
BG	1.2%	13.7%	12.0%	22.2%	50.9%
CY	0.8%	7.7%	6.2%	33.1%	52.1%
CZ	1.1%	20.5%	8.7%	22.0%	47.7%
DE	1.3%	12.5%	5.3%	25.5%	55.5%
DK	1.5%	12.6%	5.1%	27.4%	53.4%
EE	0.8%	12.7%	13.6%	23.6%	49.3%
EL	0.9%	7.7%	7.7%	22.6%	61.1%
ES	0.7%	12.6%	9.1%	17.8%	59.8%
EU-27	1.1%	13.1%	7.4%	24.6%	53.7%
FI	1.1%	15.7%	7.5%	28.9%	46.8%
FR	0.7%	9.7%	7.2%	27.8%	54.6%
HR	0.5%	12.4%	9.0%	24.4%	53.5%
HU	1.0%	13.8%	7.1%	24.6%	53.4%
IE	3.1%	4.4%	5.5%	40.7%	46.2%
IT	1.3%	22.0%	11.4%	17.5%	47.8%
LT	0.9%	8.3%	9.3%	22.0%	59.5%
LU	0.0%	4.1%	1.5%	35.9%	58.5%
LV	0.8%	9.3%	13.5%	22.3%	54.2%
MT	3.1%	3.2%	2.8%	40.1%	50.7%
NL	1.1%	11.2%	5.4%	31.2%	51.1%
PL	0.8%	16.1%	9.9%	19.9%	53.3%
PT	0.4%	11.1%	13.1%	19.8%	55.6%
RO	0.7%	12.5%	9.5%	21.2%	56.2%
SE	0.9%	11.0%	5.2%	29.2%	53.7%
SI	1.5%	21.8%	8.6%	23.8%	44.2%
SK	1.3%	20.6%	8.0%	21.4%	48.7%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 32: Distribution of EU-27 SMEs across the NFBS industries in 2023
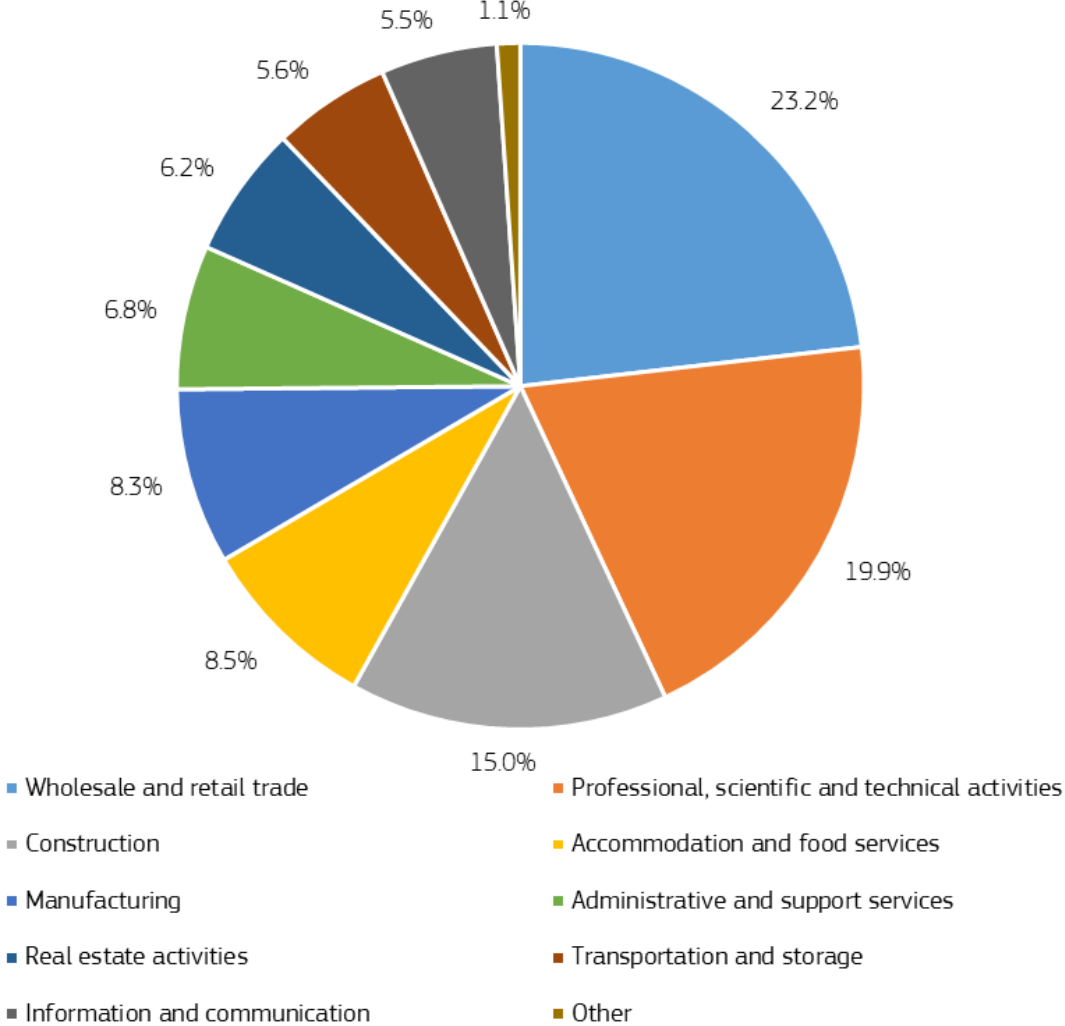
Note: Other includes 'electricity, gas, steam and air conditioning supply' (0.7%), 'water supply; sewerage, waste management and remediation activities' (0.3%) and 'mining and quarrying' (0.1%).
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 33: Distribution of SME employment and SME value added across EU-27 NFBS industries in 2023

■ Employment ■ Value Added

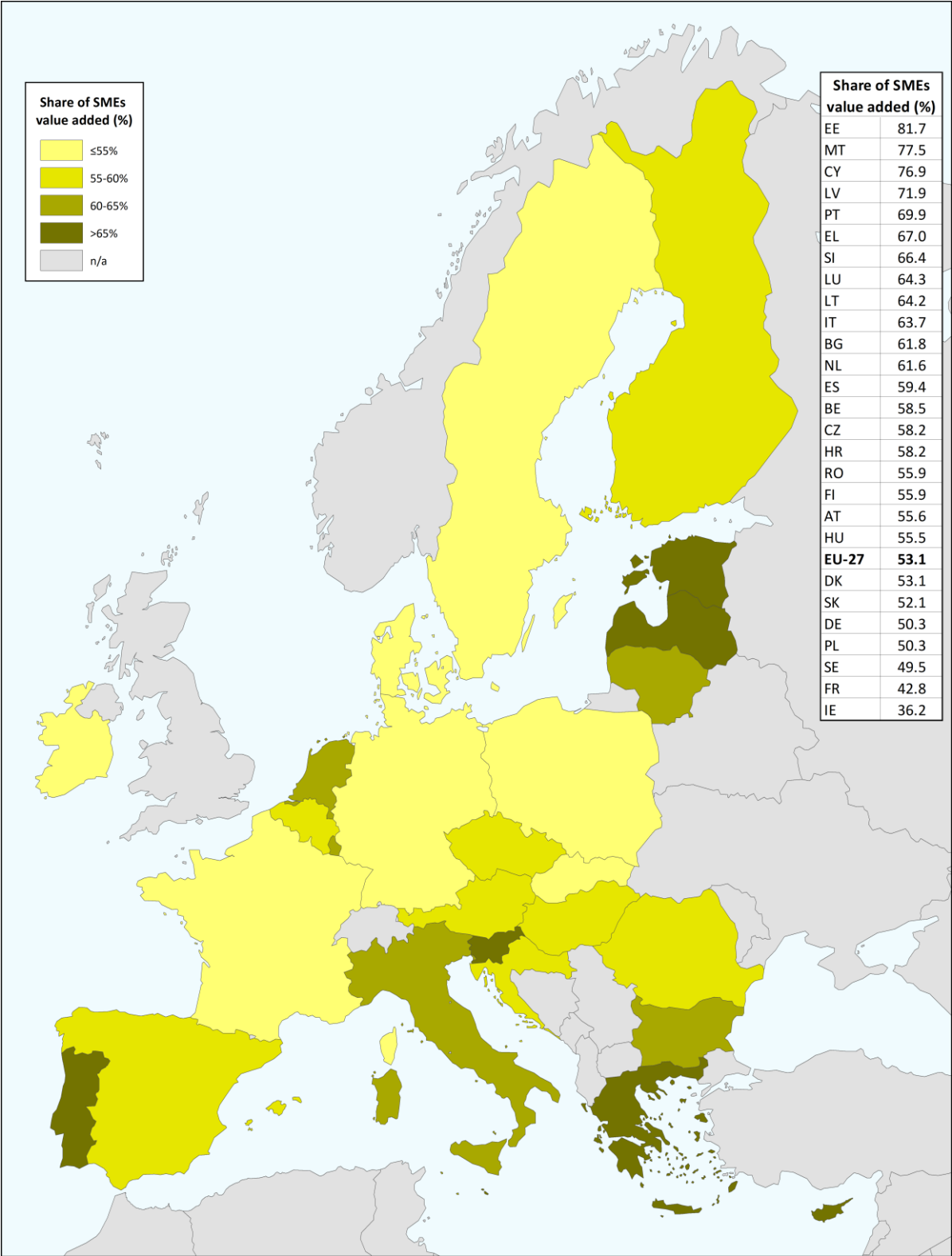|	Employment	Value Added
Wholesale and retail trade	23.0%	24.1%
Manufacturing	17.8%	18.1%
Construction	13.6%	12.4%
Professional, scientific and technical activities	11.5%	12.4%
Accommodation and food services	11.3%	5.0%
Administrative and support services	7.4%	6.1%
Transportation and storage	6.5%	6.2%
Information and communication	4.7%	6.4%
Real estate activities	2.8%	5.4%
Water supply; sewerage, waste management and remediation activities	0.8%	1.3%
Electricity, gas, steam and air condition supply	0.5%	2.1%
Mining and quarrying	0.2%	0.4%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Table 14: Proportion of total value added, employment and number of enterprises accounted for by SMEs in various EU-27 NFBS industries in 2023

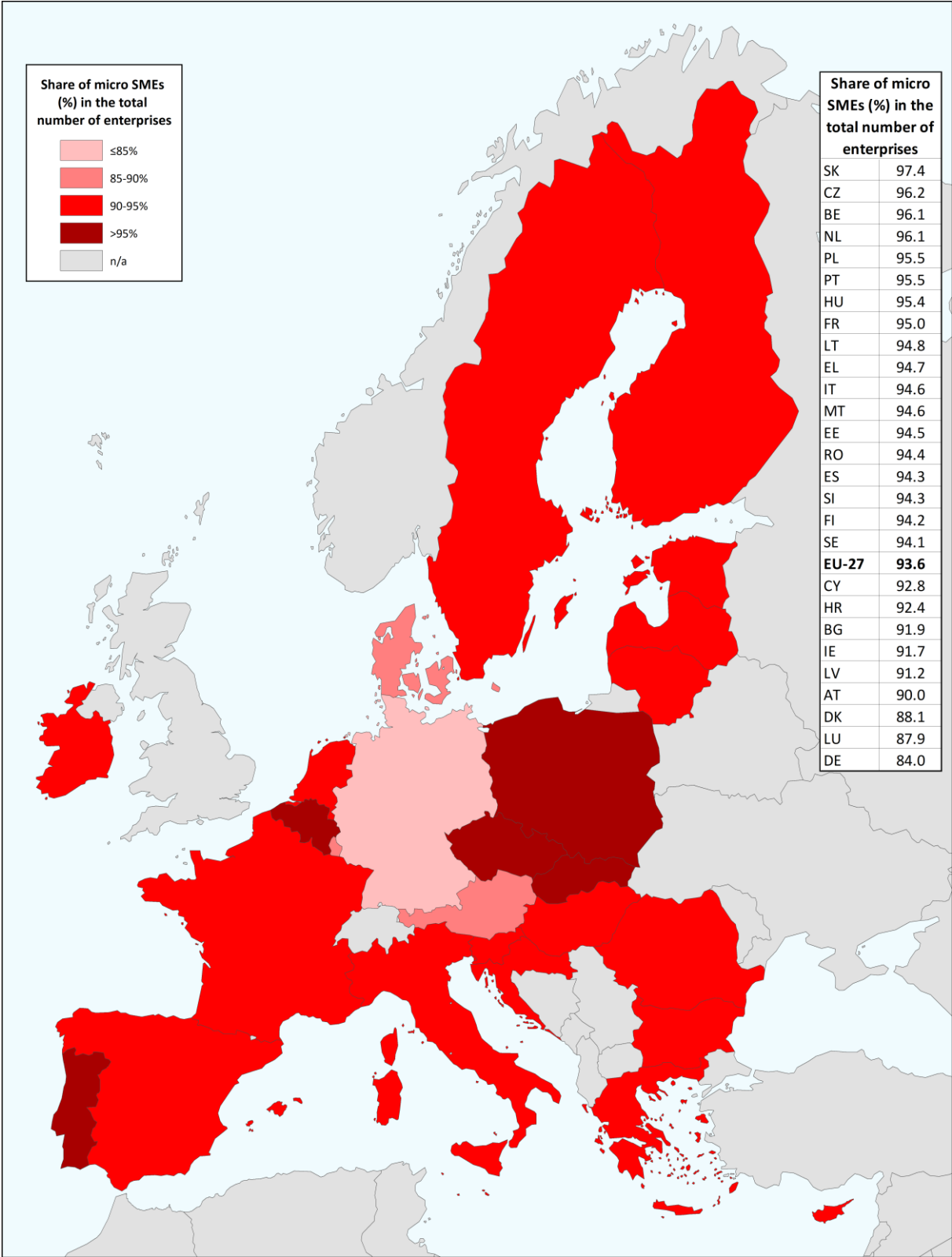|	Value Added				Employment				Number of Enterprises			
	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs
Mining and quarrying	5.7%	11.8%	21.7%	36.9%	8.9%	16.9%	17.3%	43.1%	78.7%	16.9%	3.6%	99.2%
Manufacturing	5.3%	11.0%	17.3%	33.5%	12.9%	18.0%	21.5%	52.4%	84.3%	12.1%	2.8%	99.3%
Electricity, gas, steam and air condition supply	13.4%	6.2%	10.2%	29.7%	14.6%	5.3%	10.0%	30.0%	97.1%	1.9%	0.7%	99.7%
Water supply; sewerage, waste management and remediation activities	8.7%	14.9%	21.6%	45.1%	9.0%	14.9%	22.9%	46.7%	81.6%	13.2%	4.2%	99.0%
Construction	36.2%	28.1%	15.6%	79.9%	46.7%	27.8%	12.6%	87.1%	94.1%	5.4%	0.5%	99.9%
Wholesale and retail trade; repair of motor vehicles and motorcycle	23.5%	21.9%	18.0%	63.4%	34.7%	20.0%	13.7%	68.4%	93.9%	5.2%	0.7%	99.9%
Transportation and storage	14.1%	16.2%	15.9%	46.2%	20.7%	18.1%	15.6%	54.4%	92.0%	6.6%	1.1%	99.8%
Accommodation and food services	38.9%	29.5%	14.3%	82.7%	43.9%	30.8%	11.9%	86.5%	90.0%	9.2%	0.7%	99.9%
Information and communication	13.1%	13.1%	16.8%	43.0%	23.6%	15.7%	16.9%	56.2%	94.9%	4.0%	0.9%	99.8%
Real estate activities	54.8%	15.2%	15.4%	85.4%	63.9%	14.6%	9.7%	88.2%	98.4%	1.4%	0.2%	100.0%
Professional, scientific and technical activities	39.5%	20.6%	15.5%	75.7%	52.3%	18.3%	11.4%	82.0%	97.3%	2.4%	0.3%	99.9%
Administrative and support services	19.5%	13.6%	16.5%	49.6%	16.9%	13.0%	16.5%	46.4%	93.4%	5.1%	1.3%	99.7%
All industries	19.8%	16.8%	16.6%	53.1%	30.0%	19.7%	15.5%	65.2%	93.6%	5.4%	0.8%	99.8%

*Source: Calculations by the JRC based on **Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

Table 15: Change (in %) in SME value added (both nominal and real), employment and number of enterprises in 2023 compared to 2022 and 2021 in different industries

	Annual change (in %) in 2023 relative to 2022				Cumulative change (in %) in 2023 relative to 2021			
	Value Added (nominal)	Value Added (real)	Employment	Enterprises	Value Added (nominal)	Value Added (real)	Employment	Enterprises
Mining and quarrying	7.8%	-1.2%	0.5%	0.3%	37.1%	17.9%	2.2%	2.0%
Manufacturing	6.2%	-2.6%	0.6%	0.4%	15.7%	-0.5%	2.0%	1.7%
Electricity, gas, steam and air condition supply	5.2%	-3.6%	2.7%	2.1%	32.4%	13.9%	6.7%	4.1%
Water supply; sewerage, waste management and remediation activities	6.5%	-2.4%	0.7%	0.9%	28.1%	10.2%	1.8%	2.2%
Construction	10.3%	1.1%	0.7%	0.6%	22.7%	5.5%	3.1%	3.7%
Wholesale and retail trade	6.5%	-2.4%	0.5%	1.2%	24.3%	6.9%	1.5%	2.2%
Transportation and storage	7.9%	-1.1%	2.7%	2.3%	27.7%	9.8%	3.8%	4.4%
Accommodation and food services	7.1%	-1.8%	5.6%	5.0%	43.0%	23.0%	16.6%	15.3%
Information and communication	7.3%	-1.7%	4.1%	5.6%	17.5%	1.0%	9.5%	10.8%
Real estate activities	9.2%	0.1%	1.7%	2.1%	15.7%	-0.5%	6.1%	6.7%
Professional, scientific and technical activities	7.4%	-1.5%	3.6%	3.7%	16.7%	0.4%	6.9%	7.0%
Administrative and support services	7.1%	-1.8%	0.8%	1.2%	18.9%	2.2%	3.3%	4.4%
All industries	7.4%	-1.6%	1.8%	2.2%	21.5%	4.5%	4.8%	5.4%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 34: Level of EU-27 SME and large enterprise value added, employment and enterprises in NFBS industries in 2023 as a percentage of 2021 levels.

Value added (nominal)

Industry	SMEs	Large enterprises
Mining and quarrying	137%	141%
Manufacturing	116%	119%
Electricity, gas, steam and air condition supply	132%	136%
Water supply; sewerage, waste management and...	128%	137%
Construction	123%	121%
Wholesale and retail trade; repair of motor...	124%	118%
Transportation and storage	128%	120%
Accommodation and food services	143%	144%
Information and communication	117%	112%
Real estate activities	116%	112%
Professional, scientific and technical activities	117%	113%
Administrative and support services	119%	115%
All industries	121%	119%

Value added (real)

Industry	SMEs	Large enterprises
Mining and quarrying	118%	121%
Manufacturing	100%	102%
Electricity, gas, steam and air condition supply	114%	117%
Water supply; sewerage, waste management and...	110%	118%
Construction	106%	104%
Wholesale and retail trade; repair of motor...	107%	101%
Transportation and storage	110%	103%
Accommodation and food services	123%	124%
Information and communication	101%	97%
Real estate activities	99%	96%
Professional, scientific and technical activities	100%	97%
Administrative and support services	102%	99%
All industries	104%	102%

■ SMEs   ■ Large enterprises

Employment

Industry	SMEs	Large enterprises
Mining and quarrying	102%	96%
Manufacturing	102%	101%
Electricity, gas, steam and air condition supply	107%	101%
Water supply; sewerage, waste management and...	102%	101%
Construction	103%	104%
Wholesale and retail trade; repair of motor...	124%	101%
Transportation and storage	104%	103%
Accommodation and food services	117%	119%
Information and communication	110%	111%
Real estate activities	106%	104%
Professional, scientific and technical activities	107%	108%
Administrative and support services	103%	104%
All industries	105%	103%

Number of Enterprises

Industry	SMEs	Large enterprises
Mining and quarrying	102%	96%
Manufacturing	102%	99%
Electricity, gas, steam and air condition supply	104%	99%
Water supply; sewerage, waste management and...	102%	98%
Construction	104%	102%
Wholesale and retail trade; repair of motor...	102%	101%
Transportation and storage	104%	103%
Accommodation and food services	115%	119%
Information and communication	111%	111%
Real estate activities	107%	104%
Professional, scientific and technical activities	107%	107%
Administrative and support services	104%	104%
All industries	105%	102%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 35: Projected annual growth in nominal / inflation adjusted SME and large enterprise value added, employment and number of enterprises in 2024 by industry

Value added (nominal)

Industry	SMEs	Large enterprises
Mining and quarrying	4.2%	4.0%
Manufacturing	2.4%	2.8%
Electricity, gas, steam and air condition supply	3.2%	3.2%
Water supply; sewerage, waste management...	5.7%	4.5%
Construction	4.8%	4.8%
Wholesale and retail trade; repair of motor...	4.0%	3.9%
Transportation and storage	3.7%	3.6%
Accommodation and food services	4.0%	3.7%
Information and communication	4.9%	4.8%
Real estate activities	5.7%	6.3%
Professional, scientific and technical activities	5.1%	4.0%
Administrative and support services	5.0%	5.2%
All industries	4.9%	4.7%

Value added (real)

Industry	SMEs	Large enterprises
Mining and quarrying	-1.0%	-1.3%
Manufacturing	-2.8%	-2.4%
Electricity, gas, steam and air condition supply	-2.0%	-2.0%
Water supply; sewerage, waste management...	0.3%	-0.8%
Construction	-0.5%	-0.5%
Wholesale and retail trade; repair of motor...	-1.2%	-1.4%
Transportation and storage	-1.5%	-1.6%
Accommodation and food services	-1.3%	-1.5%
Information and communication	-0.4%	-0.5%
Real estate activities	0.3%	0.9%
Professional, scientific and technical activities	-0.2%	-1.3%
Administrative and support services	-0.3%	-0.1%
All industries	-0.4%	-0.6%

■ SMEs ■ Large enterprises

Employment

Industry	SMEs	Large enterprises
Mining and quarrying	0.8%	0.4%
Manufacturing	-1.9%	-2.6%
Electricity, gas, steam and air condition supply	-0.1%	-0.5%
Water supply; sewerage, waste management...	3.1%	0.5%
Construction	1.6%	1.0%
Wholesale and retail trade; repair of motor...	0.3%	0.1%
Transportation and storage	0.3%	0.1%
Accommodation and food services	0.6%	0.3%
Information and communication	1.8%	1.6%
Real estate activities	2.2%	2.3%
Professional, scientific and technical activities	1.7%	1.0%
Administrative and support services	1.8%	1.7%
All industries	1.4%	1.4%

Number of enterprises

Industry	SMEs	Large enterprises
Mining and quarrying	1.0%	0.2%
Manufacturing	-1.7%	-4.4%
Electricity, gas, steam and air condition supply	-0.2%	-1.3%
Water supply; sewerage, waste management...	2.0%	1.2%
Construction	1.4%	0.2%
Wholesale and retail trade; repair of motor...	0.1%	-0.3%
Transportation and storage	0.3%	0.0%
Accommodation and food services	0.7%	0.2%
Information and communication	1.8%	1.4%
Real estate activities	2.6%	2.8%
Professional, scientific and technical activities	1.5%	1.2%
Administrative and support services	1.9%	2.0%
All industries	1.7%	1.8%

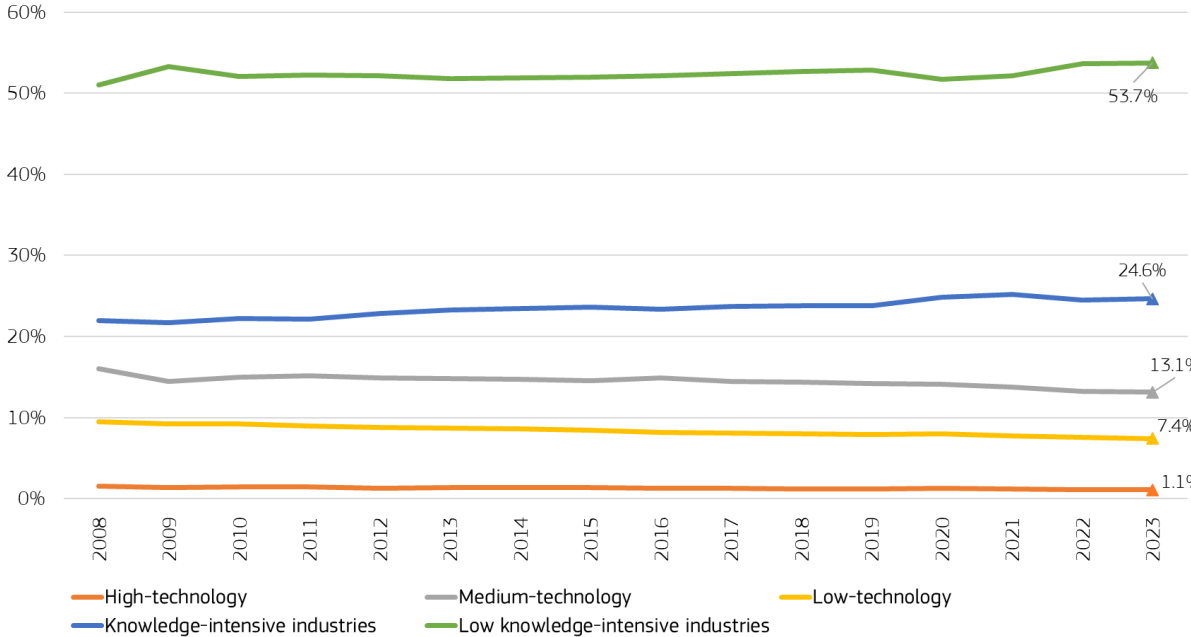*Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database*

ANNEX 8. SME PERFORMANCE INDICATORS AND 2024 PROJECTIONS BY MEMBER STATE

Map 18: Annual growth rate in the number of SMEs in the EU-27 and across EU Member States - 2023

Legend: Annual growth rate (%) in the number of SMEs in 2023

- <0%
- 0-1%
- 1-2%
- 2-3%
- ≥3%
- n/a

Annual growth rate (%) in the number of SMEs in 2023	
EE	8.5
MT	7.8
ES	4.4
LT	4.1
SE	3.3
HR	3.2
NL	3.0
LU	2.8
IT	2.7
EL	2.4
IE	2.3
EU-27	**2.2**
SI	2.1
PL	2.1
PT	2.1
FR	2.1
BG	2.0
AT	1.8
CY	1.6
DK	1.5
DE	1.5
SK	1.0
HU	0.9
CZ	0.9
BE	0.8
LV	-0.3
FI	-1.0
RO	-1.9

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 19: Expected growth in the number of SMEs in the EU-27 and across EU-27 Member States in 2024

Expected growth (%) in the number of SMEs in 2024	
MT	7.5
EL	3.5
CY	3.3
LT	2.9
LU	2.5
EE	2.5
IE	2.4
PL	2.3
PT	2.1
HR	1.8
SI	1.8
HU	1.6
LV	1.6
DK	1.5
BE	1.5
AT	1.4
BG	1.2
NL	1.2
EU27	**1.0**
ES	1.0
DE	0.8
CZ	0.7
FI	0.6
RO	0.6
SK	0.2
FR	0.2
IT	0.0
SE	-0.5

Legend — Expected growth (%) in the number of SMEs in 2024:
- <0%
- 0-1%
- 1-2%
- 2-3%
- ≥3%
- n/a

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 20: Annual growth rate of nominal SME value added in the NFBS in 2023 in the EU-27 and across EU Member States

Annual growth rate (%) of SME nominal value added in 2023	
RO	19.1
BG	18.7
MT	15.2
PL	15.0
CZ	14.5
ES	12.6
HU	11.9
PT	11.6
SI	11.2
EL	9.9
SK	9.7
HR	9.1
DE	8.3
LT	8.0
CY	7.9
NL	7.8
EU-27	**7.4**
BE	6.8
AT	6.2
LV	6.1
IT	4.7
FI	3.9
FR	3.5
LU	3.1
IE	2.5
EE	1.4
SE	-0.3
DK	-2.8

Legend — Annual growth rate (%) of SME nominal value added in 2023:
- ≤0%
- 0-5%
- 5-10%
- 10-15%
- >15%
- n/a

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 21: Expected growth in nominal SME value added in the EU-27 and across EU-27 Member States in 2024
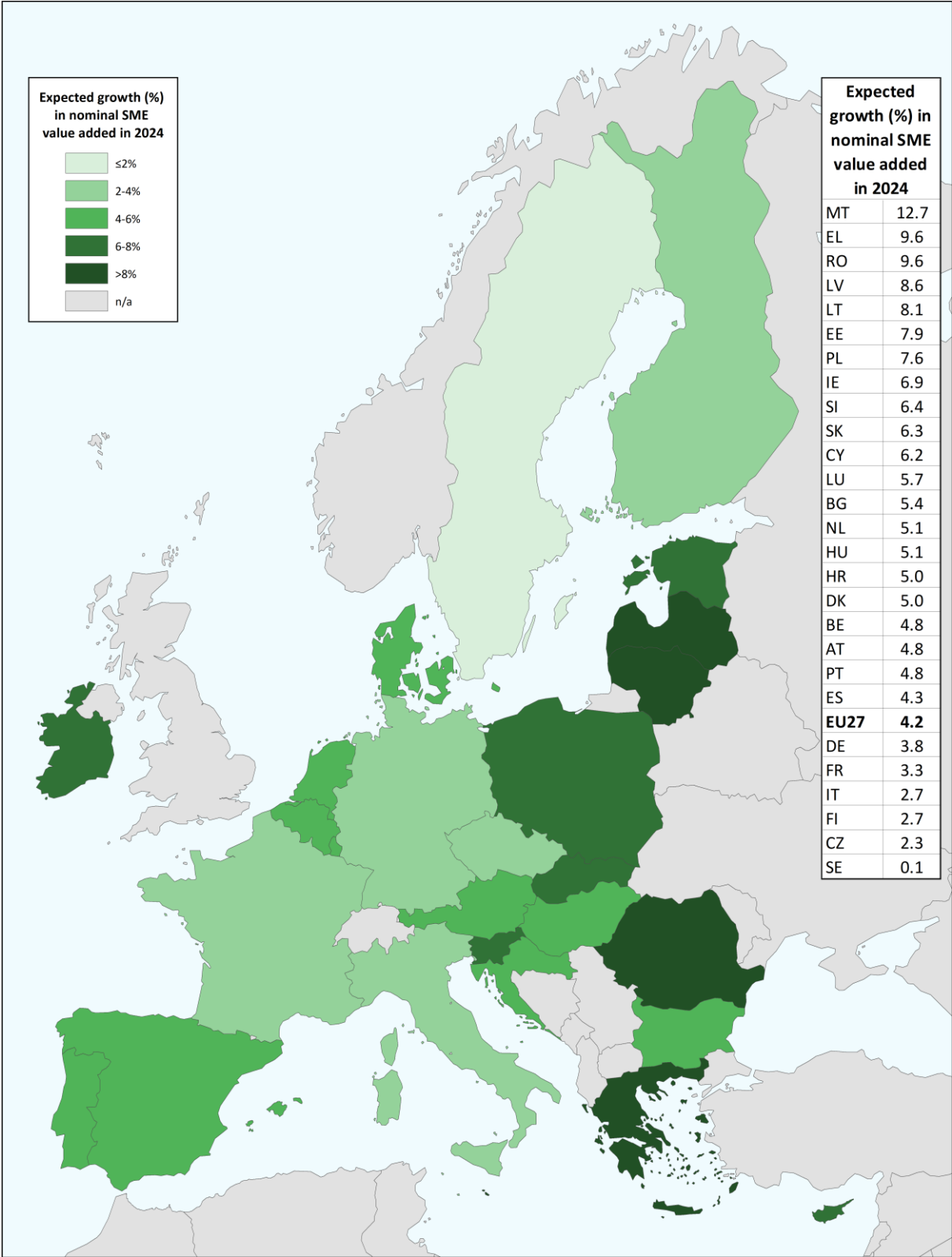
	Expected growth (%) in nominal SME value added in 2024
MT	12.7
EL	9.6
RO	9.6
LV	8.6
LT	8.1
EE	7.9
PL	7.6
IE	6.9
SI	6.4
SK	6.3
CY	6.2
LU	5.7
BG	5.4
NL	5.1
HU	5.1
HR	5.0
DK	5.0
BE	4.8
AT	4.8
PT	4.8
ES	4.3
EU27	**4.2**
DE	3.8
FR	3.3
IT	2.7
FI	2.7
CZ	2.3
SE	0.1

Expected growth (%) in nominal SME value added in 2024

- ≤2%
- 2-4%
- 4-6%
- 6-8%
- >8%
- n/a

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 22: Percentage change in SME adjusted for inflation value added in 2023 compared to 2021 in the NFBS of the EU-27 and across EU Member States

Percentage change (%) in SME adjusted for inflation value added in 2023 compared to 2021

- ≤-20%
- -20 - -10%
- -10 - 0%
- 0 - 10%
- >10%
- n/a

Percentage change (%) in SME adjusted for inflation value added in 2023 compared to 2021	
MT	33.4
EL	20.2
ES	12.1
PT	9.8
CY	6.9
DE	5.0
FR	4.6
EU27	**4.5**
BE	3.9
DK	3.6
IT	2.6
PL	1.7
NL	0.5
HR	-0.2
SI	-0.4
AT	-0.7
SE	-3.2
LU	-3.8
FI	-3.9
IE	-4.2
SK	-5.4
HU	-10.6
RO	-11.4
LV	-11.6
CZ	-18.5
LT	-25.6
EE	-28.5
BG	-30.1

*Source: **Calculations by the JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

Map 23: Percentage change in nominal SME value added in 2023 compared to 2021 in the NFBS of the EU-27 and across EU Member States

Percentage change (%) in nominal SME value added in 2023 compared to 2021	
BG	45.7
RO	45.2
MT	44.3
EL	39.3
CZ	36.4
IE	32.7
PL	30.8
HR	30.3
PT	29.4
LV	29.2
LT	28.9
ES	26.6
SI	24.0
DE	24.0
CY	23.3
SK	22.4
HU	22.3
EU27	**21.5**
NL	21.2
EE	20.6
AT	19.4
BE	19.0
FR	16.8
IT	13.0
LU	12.4
DK	10.7
FI	9.7
SE	6.1

Legend — Percentage change (%) in nominal SME value added in 2023 compared to 2021:
- <10%
- 10-20%
- 20-30%
- 30-40%
- >40%
- 0

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Map 24: Percentage change in SME employment in 2023 compared to 2021 in the EU-27 and across EU Member States

Percentage change (%) in SME employment in 2023 compared to 2021	
IE	10.7
EE	10.0
MT	9.4
LT	8.5
ES	7.4
SE	6.7
NL	6.7
LU	6.6
SI	6.6
AT	6.4
CY	5.8
EL	5.7
HR	5.5
DK	5.3
IT	5.2
PT	4.9
EU27	**4.8**
FR	4.6
DE	4.4
BE	3.9
SK	3.6
HU	3.3
BG	3.1
RO	2.3
PL	2.0
CZ	1.6
FI	-0.6
LV	-3.3

Legend — Percentage change (%) in SME employment in 2023 compared to 2021:
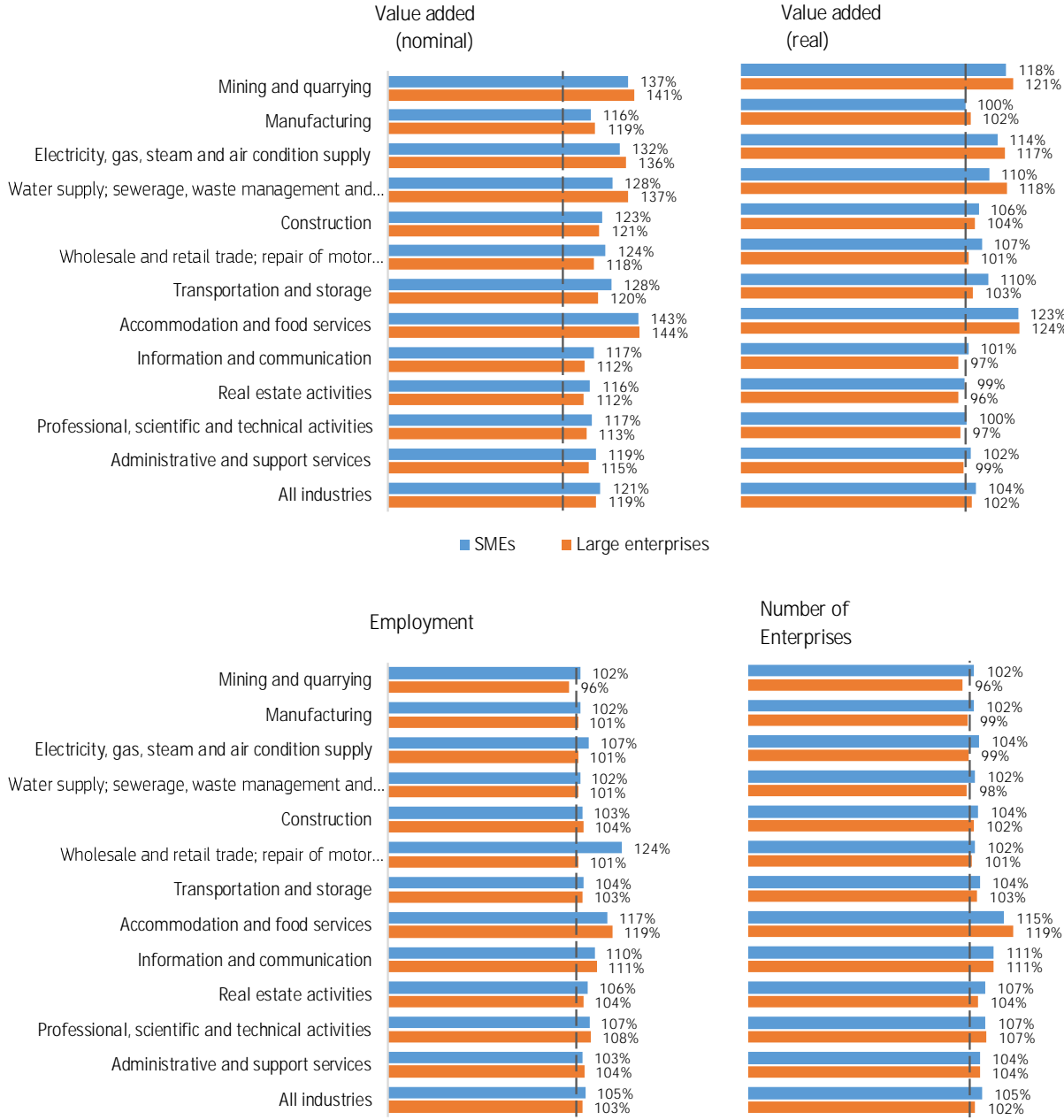- <0%
- 0-5%
- 5-10%
- ≥10%
- n/a

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Table 16: Growth rates of SME number of enterprises, employment and value added (nominal and inflation adjusted) per size class in the EU-27 and all member States in 2023

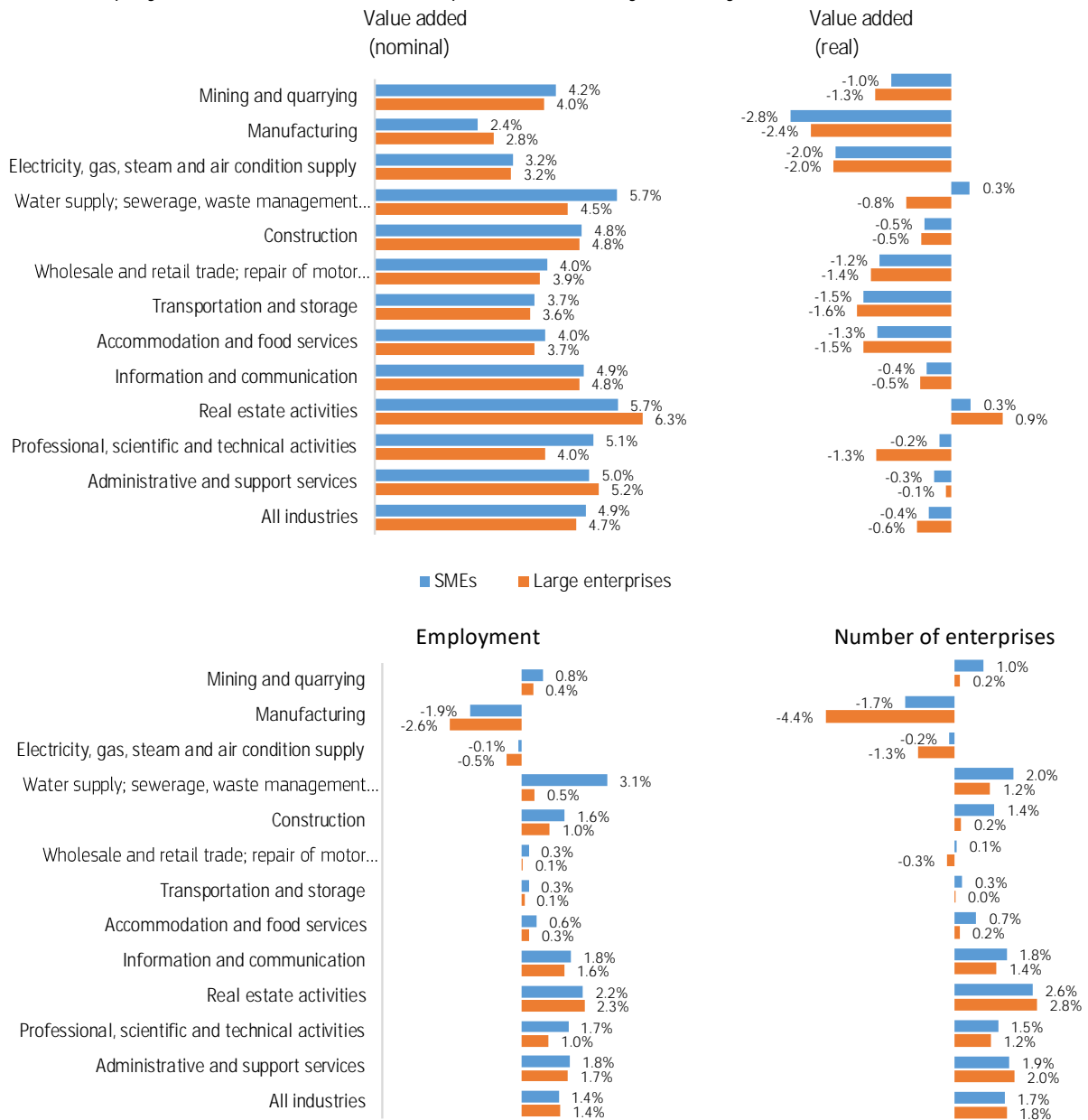| Country	Number of Enterprises				Employment				Value Added (nominal)				Value Added (real)			
	Micro	Small	Medium-sized	Large	Micro	Small	Medium-sized	Large	Micro	Small	Medium-sized	Large	Micro	Small	Medium-sized	Large
AT	1.7%	3.2%	3.1%	3.7%	0.9%	2.0%	1.6%	1.7%	4.4%	6.6%	7.3%	8.3%	-6.9%	-5.0%	-4.3%	-3.5%
BE	1.5%	0.2%	0.7%	-1.2%	1.8%	0.7%	1.4%	-0.5%	6.6%	10.5%	3.1%	1.3%	0.6%	4.3%	-2.7%	-4.4%
BG	2.0%	2.0%	0.9%	0.0%	1.9%	2.2%	1.2%	0.4%	21.4%	22.8%	11.9%	11.4%	-14.5%	-13.6%	-21.2%	-21.6%
CY	1.8%	0.1%	0.2%	0.0%	2.9%	1.1%	1.1%	1.8%	7.1%	7.0%	9.9%	9.8%	-0.6%	-0.6%	2.0%	2.0%
CZ	0.9%	-0.2%	-0.4%	0.6%	1.1%	0.1%	-0.2%	0.9%	12.0%	15.3%	16.0%	14.5%	-13.9%	-11.4%	-10.9%	-12.0%
DE	1.3%	2.6%	2.1%	1.5%	1.1%	2.0%	1.3%	0.4%	10.2%	6.5%	8.2%	9.5%	0.2%	-3.2%	-1.7%	-0.5%
DK	1.4%	2.4%	3.5%	5.1%	-0.2%	0.8%	1.7%	2.7%	-5.6%	-0.7%	-2.2%	-4.3%	-2.2%	2.9%	1.4%	-0.9%
EE	9.0%	0.4%	-1.0%	0.0%	8.0%	1.3%	0.1%	1.2%	2.5%	0.4%	0.9%	-0.4%	-19.5%	-21.2%	-20.9%	-21.9%
EL	2.4%	2.8%	-0.8%	-4.2%	3.4%	-1.7%	-3.1%	-3.2%	20.8%	0.7%	-0.3%	4.4%	13.2%	-5.6%	-6.5%	-2.2%
ES	4.4%	4.4%	3.5%	4.0%	4.1%	3.9%	3.0%	3.6%	23.5%	2.5%	8.8%	5.3%	15.0%	-4.5%	1.3%	-1.9%
EU27	2.2%	1.9%	1.1%	1.2%	2.3%	1.6%	1.1%	1.2%	8.6%	6.5%	6.7%	7.9%	-0.4%	-2.4%	-2.2%	-1.1%
FI	-1.0%	-1.2%	-0.6%	2.0%	-0.1%	-0.7%	-1.0%	0.9%	2.1%	3.2%	6.1%	7.2%	-4.5%	-3.4%	-0.7%	0.3%
FR	2.2%	0.3%	0.1%	1.0%	2.8%	1.1%	0.8%	1.7%	-1.4%	7.8%	6.1%	12.7%	-8.4%	0.2%	-1.4%	4.7%
HR	3.4%	1.8%	-0.3%	3.0%	3.3%	2.0%	0.1%	3.5%	8.9%	7.7%	10.8%	13.0%	-6.1%	-7.2%	-4.5%	-2.7%
HU	1.0%	0.3%	-0.1%	2.3%	0.6%	0.1%	-0.5%	1.7%	21.6%	15.2%	-2.9%	20.8%	-5.0%	-10.0%	-24.1%	-5.6%
IE	1.6%	10.2%	6.5%	5.4%	-0.5%	6.9%	3.7%	3.6%	5.5%	3.5%	-2.0%	-0.5%	-1.5%	-3.3%	-8.4%	-7.0%
IT	2.7%	2.5%	1.7%	2.5%	2.9%	2.5%	1.8%	2.9%	4.0%	4.7%	5.7%	5.0%	-2.3%	-1.6%	-0.7%	-1.3%
LT	4.4%	-0.6%	-1.5%	-2.2%	6.3%	2.2%	2.4%	2.4%	14.5%	7.3%	4.0%	3.1%	-10.7%	-16.3%	-18.9%	-19.6%
LU	2.9%	1.8%	2.3%	2.8%	3.0%	1.6%	2.2%	2.4%	4.4%	3.1%	2.0%	3.4%	-3.5%	-4.6%	-5.6%	-4.4%
LV	-0.3%	0.2%	-0.1%	-0.5%	-0.1%	0.6%	0.4%	-1.2%	6.1%	15.4%	-3.5%	-0.8%	-10.6%	-2.8%	-18.7%	-16.5%
MT	8.1%	2.8%	2.0%	2.9%	11.2%	6.0%	5.1%	6.4%	15.2%	25.6%	3.8%	4.6%	6.9%	16.5%	-3.7%	-3.0%
NL	3.0%	2.3%	1.5%	1.1%	2.6%	2.1%	1.8%	0.5%	4.5%	5.4%	12.1%	7.8%	-6.7%	-5.9%	0.1%	-3.7%
PL	2.3%	-1.0%	-2.5%	-1.9%	2.0%	-0.1%	-1.2%	-0.2%	30.4%	8.3%	6.2%	10.8%	11.4%	-7.5%	-9.2%	-5.3%
PT	2.3%	-1.3%	-2.6%	-0.1%	3.9%	0.4%	-0.8%	1.2%	10.2%	14.5%	10.3%	11.8%	-0.3%	3.6%	-0.2%	1.1%
RO	-1.9%	-1.2%	-2.1%	-4.4%	-1.3%	-0.5%	-1.3%	-3.5%	29.6%	18.0%	8.7%	15.2%	-1.2%	-10.0%	-17.1%	-12.2%
SE	3.3%	2.1%	5.4%	4.2%	1.6%	0.9%	3.9%	2.7%	-0.3%	0.1%	-0.7%	-3.7%	-7.8%	-7.5%	-8.3%	-11.1%
SI	2.0%	5.4%	4.6%	0.4%	0.4%	4.0%	3.5%	0.3%	11.4%	16.7%	5.6%	11.6%	-2.6%	2.1%	-7.7%	-2.4%
SK	1.1%	-4.8%	-5.0%	-7.8%	3.5%	-2.5%	-0.6%	-2.9%	17.2%	5.7%	3.7%	24.1%	-0.2%	-10.0%	-11.7%	5.6%

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database
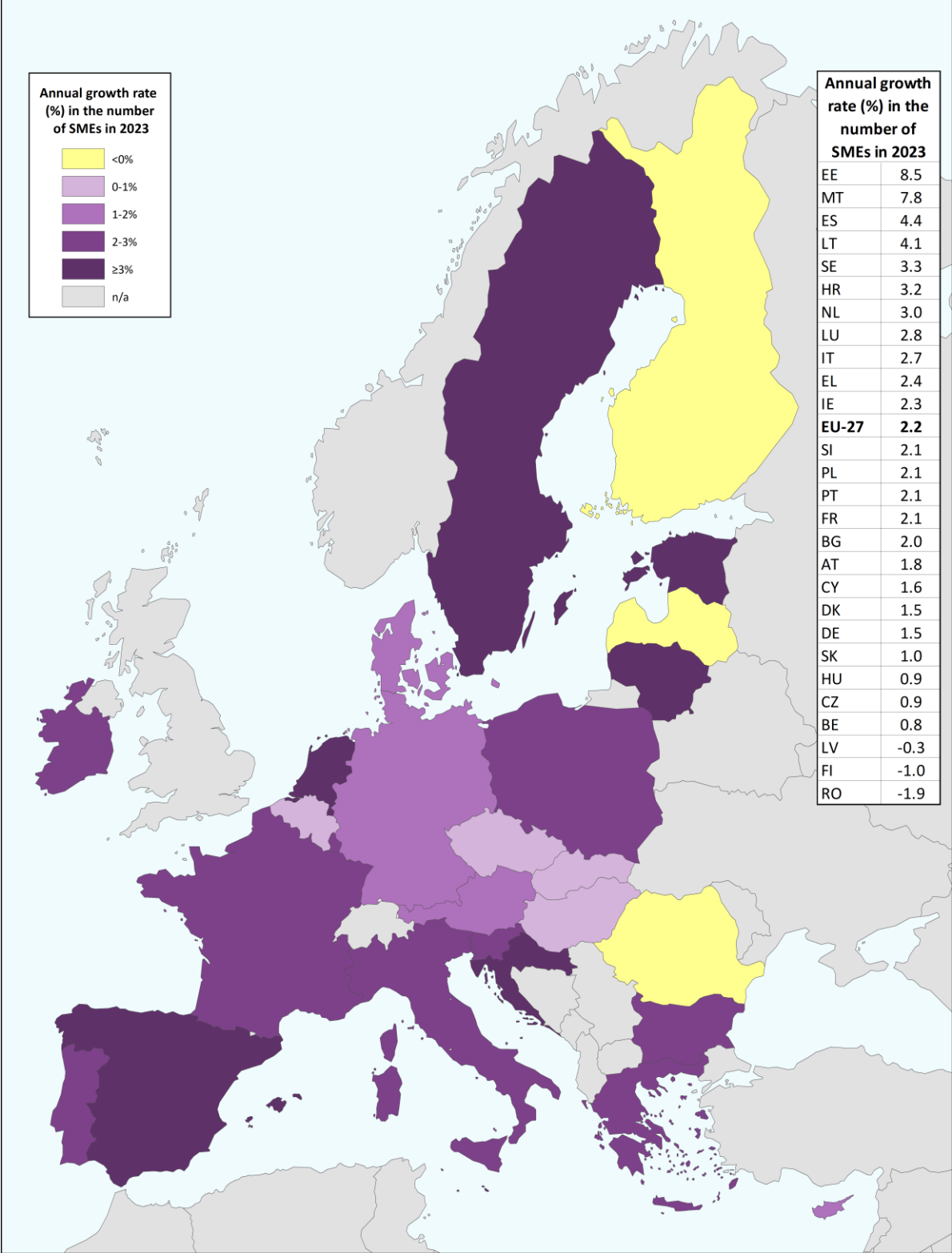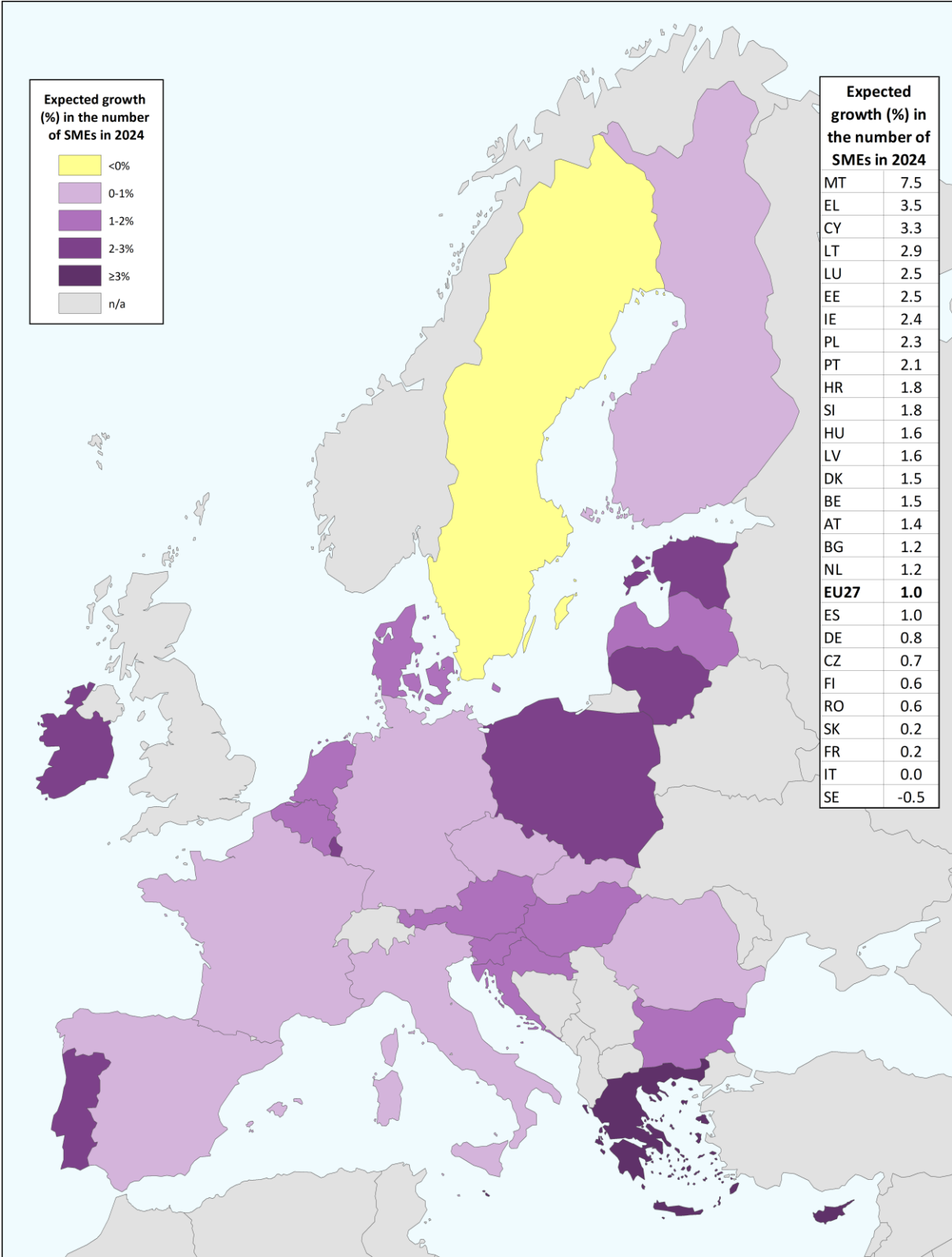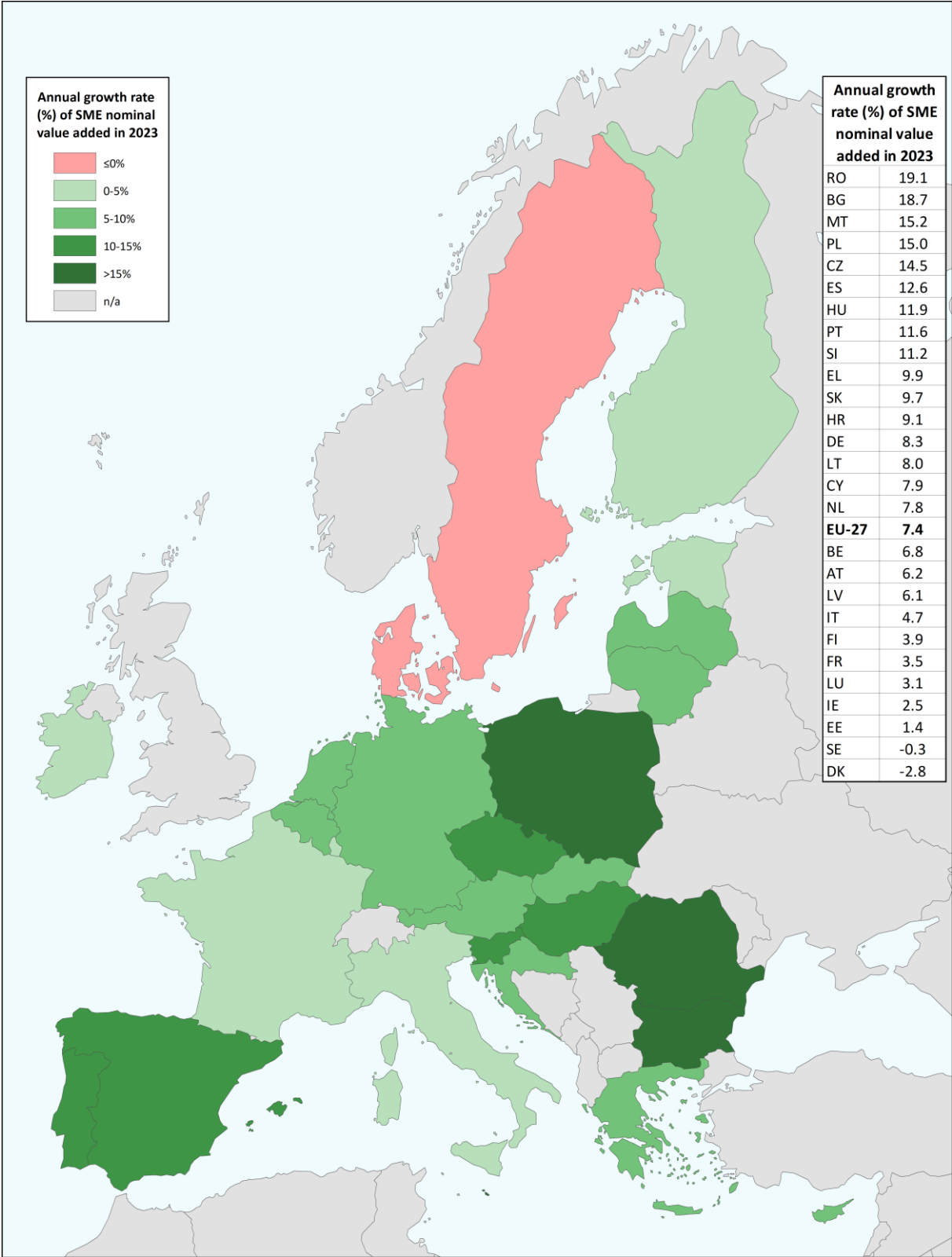
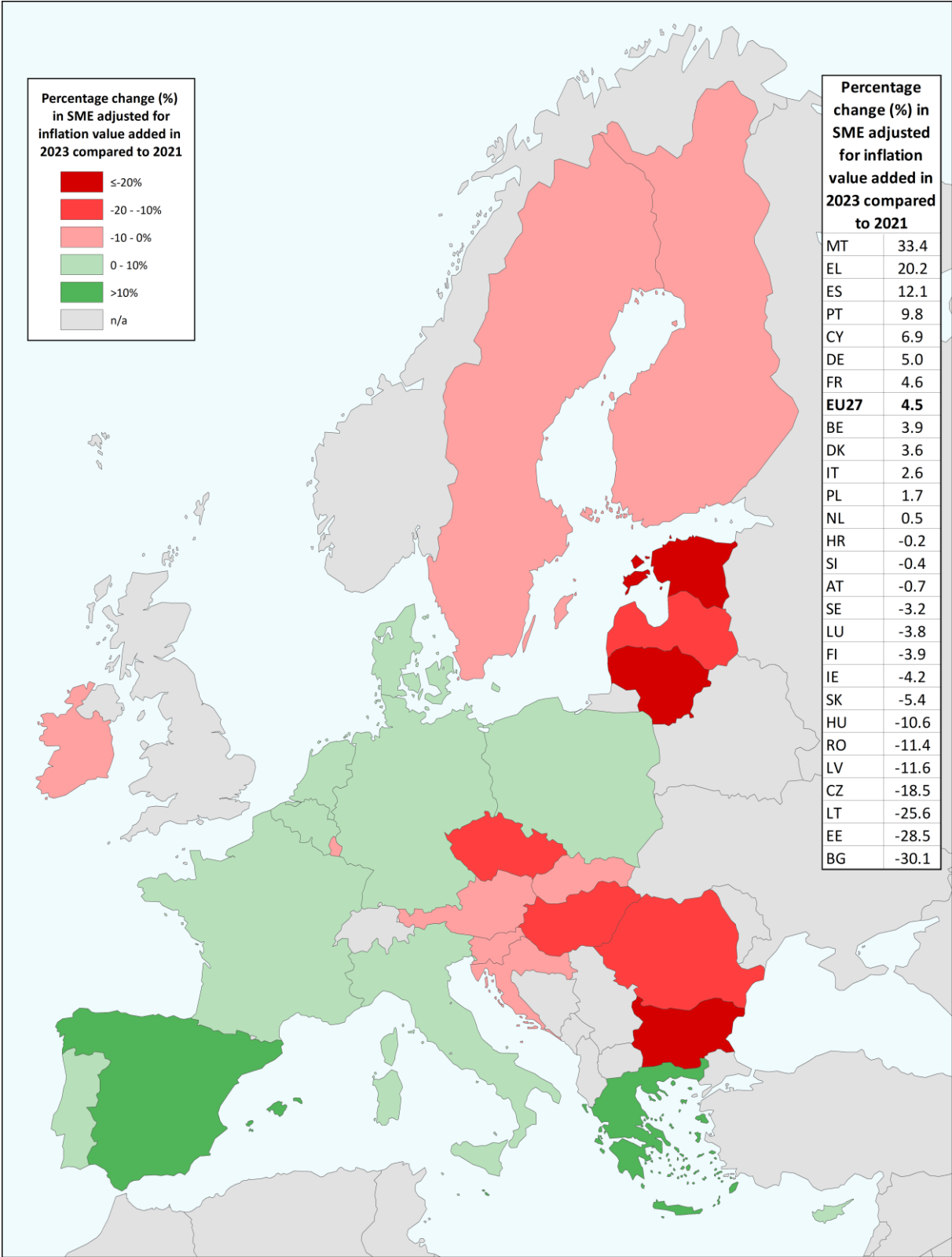Table 17: Expected growth rates of SME number of enterprises, employment and value added (nominal and inflation adjusted) per size class in the EU-27 and all member States in 2024

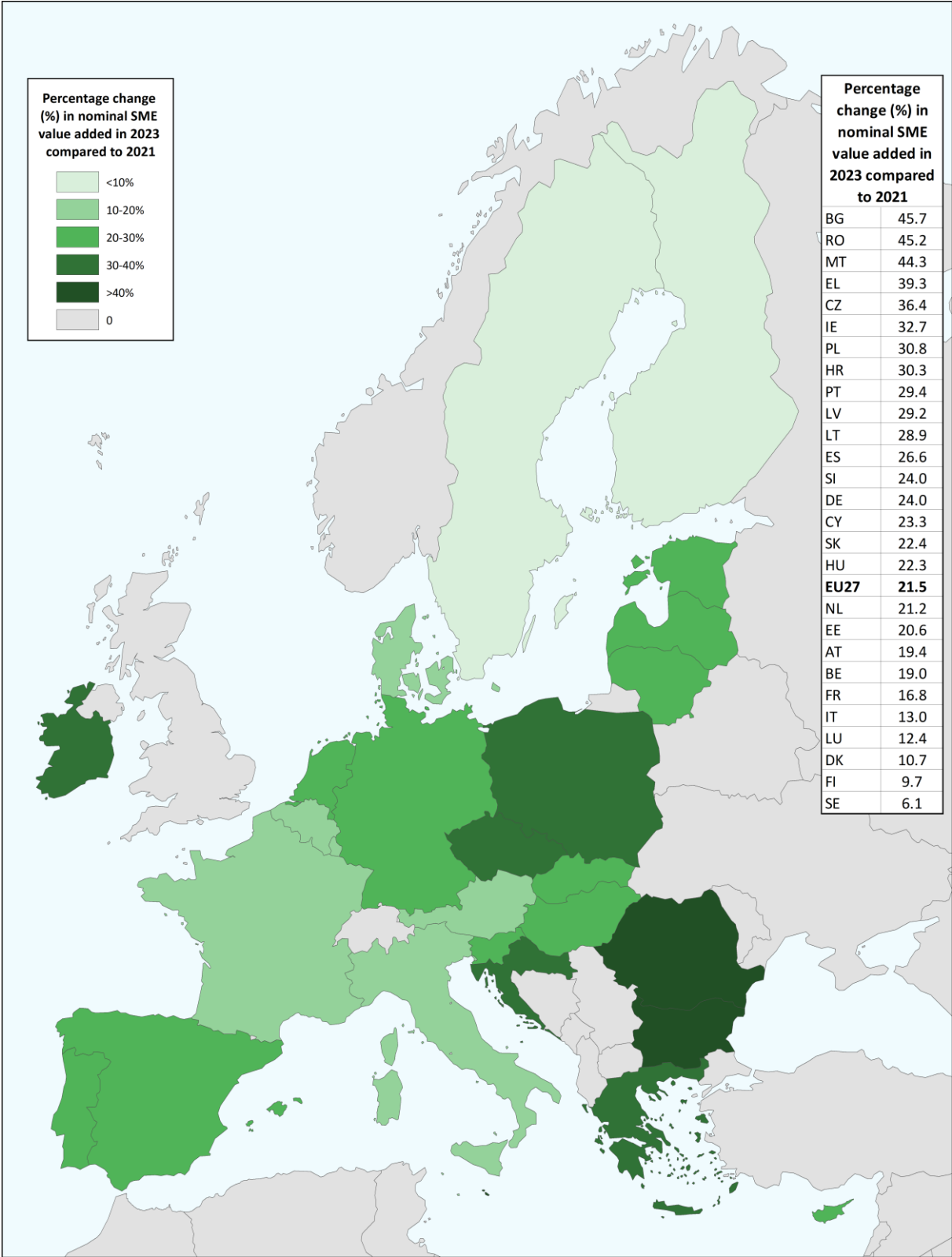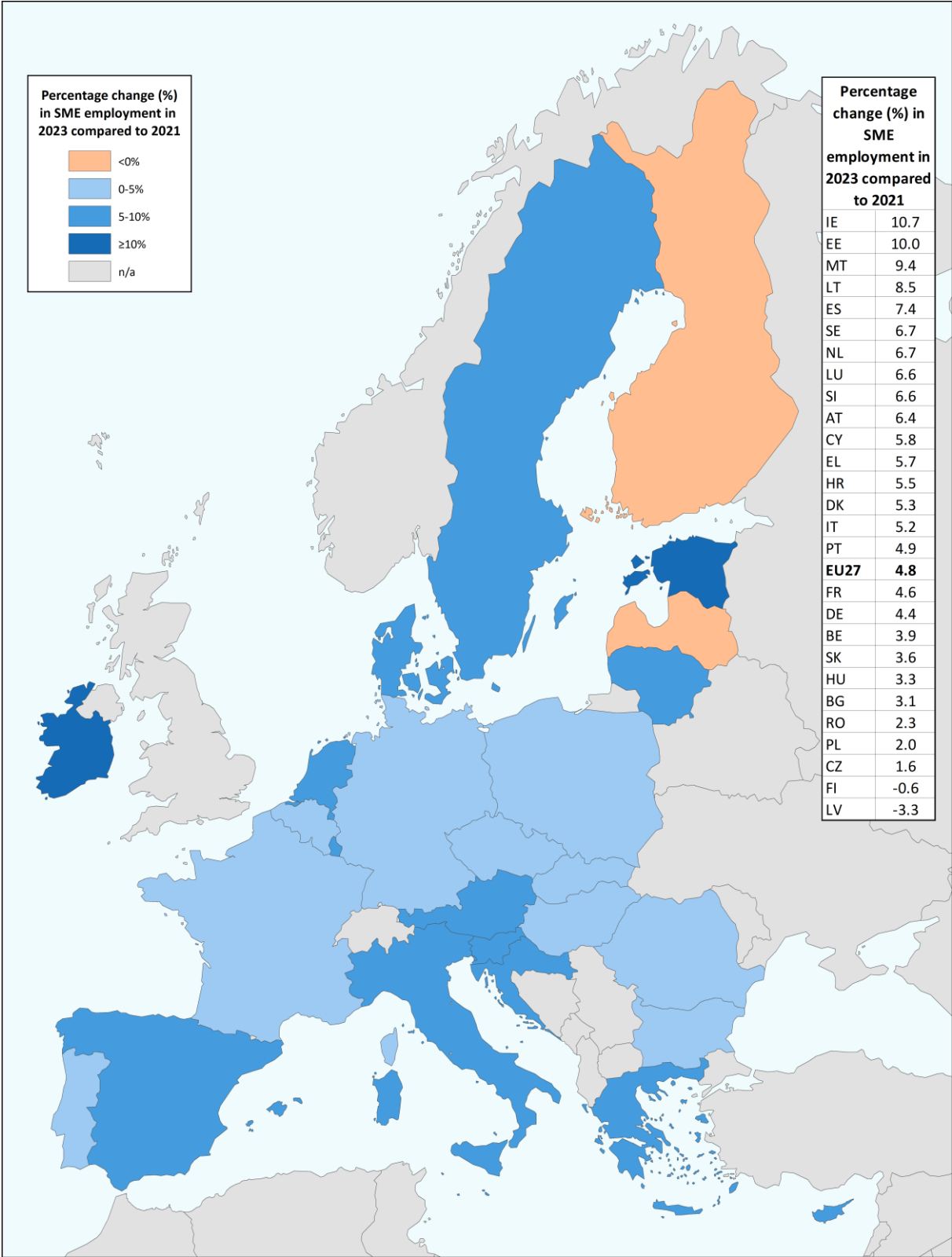| Country	Number of Enterprises				Employment				Value Added (nominal)				Value Added (real)			
	Micro	Small	Medium-sized	Large	Micro	Small	Medium-sized	Large	Micro	Small	Medium-sized	Large	Micro	Small	Medium-sized	Large
AT	1.3%	2.4%	2.6%	3.1%	0.5%	1.4%	1.2%	1.2%	4.3%	5.1%	4.9%	5.0%	-2.9%	-2.1%	-2.3%	-2.2%
BE	1.5%	-0.3%	0.3%	-1.3%	1.6%	0.2%	0.9%	-0.1%	5.6%	4.0%	4.6%	2.5%	1.0%	-0.6%	0.0%	-2.0%
BG	1.3%	0.6%	-0.3%	-0.2%	1.1%	1.0%	0.1%	0.3%	5.8%	5.6%	4.7%	4.5%	-16.8%	-16.9%	-17.6%	-17.8%
CY	3.4%	1.6%	0.7%	2.1%	4.3%	2.4%	1.6%	2.5%	7.7%	6.0%	4.9%	5.7%	2.7%	1.1%	0.1%	0.8%
CZ	0.8%	-0.5%	-0.9%	0.0%	1.0%	-0.2%	-0.5%	0.6%	3.3%	2.0%	1.7%	2.7%	-9.6%	-10.8%	-11.0%	-10.1%
DE	0.8%	0.5%	0.2%	0.0%	0.7%	0.4%	0.2%	0.0%	4.1%	3.7%	3.5%	3.1%	-1.2%	-1.6%	-1.8%	-2.2%
DK	1.5%	1.9%	2.5%	3.2%	-0.1%	0.6%	1.2%	1.3%	4.5%	4.7%	5.7%	5.3%	1.2%	1.4%	2.4%	2.0%
EE	2.6%	-0.2%	-1.2%	0.0%	2.9%	0.7%	-0.1%	0.5%	9.8%	7.0%	6.2%	6.2%	-4.9%	-7.3%	-8.0%	-8.0%
EL	4.2%	-8.5%	-11.2%	-10.5%	11.3%	-1.3%	-4.8%	-4.9%	18.2%	1.9%	-0.8%	0.5%	14.0%	-1.7%	-4.4%	-3.1%
ES	0.9%	1.2%	1.2%	1.6%	0.7%	1.0%	0.9%	1.4%	4.1%	4.4%	4.3%	4.7%	-1.1%	-0.8%	-0.9%	-0.5%
EU27	1.1%	0.0%	-0.2%	0.2%	1.4%	0.3%	0.1%	0.4%	4.8%	3.9%	3.9%	4.0%	-0.5%	-1.4%	-1.3%	-1.3%
FI	0.6%	0.1%	-0.3%	1.6%	0.1%	-0.2%	-1.0%	1.0%	3.4%	3.0%	1.9%	3.9%	0.0%	-0.4%	-1.5%	0.5%
FR	0.2%	-0.3%	-0.8%	-0.2%	0.5%	0.0%	-0.4%	0.1%	3.8%	3.3%	2.7%	3.3%	-0.5%	-1.0%	-1.5%	-0.9%
HR	1.9%	0.9%	-1.1%	2.0%	1.9%	1.2%	-0.6%	2.0%	6.1%	5.3%	3.7%	6.2%	-1.1%	-1.8%	-3.2%	-0.9%
HU	1.7%	0.7%	0.2%	3.2%	1.1%	0.4%	-0.4%	2.3%	5.8%	5.1%	4.3%	7.0%	-5.2%	-5.8%	-6.5%	-4.1%
IE	2.0%	7.7%	4.6%	5.0%	-0.5%	5.2%	2.6%	2.8%	5.2%	9.3%	7.9%	7.3%	1.2%	5.2%	3.9%	3.3%
IT	0.1%	-0.8%	-0.2%	-0.1%	0.2%	-0.6%	0.0%	0.3%	3.1%	2.1%	3.0%	3.0%	-0.7%	-1.7%	-0.8%	-0.8%
LT	3.1%	-0.8%	-1.9%	-2.2%	4.9%	1.8%	1.3%	1.3%	10.3%	7.3%	7.1%	6.6%	-1.5%	-4.2%	-4.4%	-4.9%
LU	2.6%	1.5%	1.9%	1.1%	2.3%	1.2%	1.6%	1.7%	6.1%	5.0%	5.8%	5.6%	-0.8%	-1.8%	-1.1%	-1.2%
LV	1.7%	0.4%	0.6%	0.5%	1.9%	0.9%	1.3%	1.4%	9.2%	8.3%	8.6%	8.5%	-3.7%	-4.4%	-4.2%	-4.3%
MT	7.8%	2.2%	1.7%	2.8%	9.9%	4.8%	4.1%	5.9%	16.1%	11.5%	8.8%	10.6%	10.2%	5.8%	3.2%	5.0%
NL	1.2%	0.5%	0.6%	0.6%	1.3%	0.6%	1.0%	0.9%	5.5%	4.5%	5.3%	5.0%	-1.4%	-2.3%	-1.6%	-1.9%
PL	2.5%	-0.1%	-0.8%	0.6%	2.8%	0.8%	0.5%	1.8%	9.1%	6.9%	6.6%	7.5%	-2.1%	-4.1%	-4.3%	-3.5%
PT	2.2%	-1.8%	-3.0%	-0.6%	3.7%	0.1%	-0.7%	1.5%	7.4%	3.7%	2.9%	5.3%	2.2%	-1.3%	-2.0%	0.2%
RO	0.7%	-0.7%	-1.6%	-2.5%	1.2%	0.3%	-0.3%	-1.0%	10.5%	9.4%	8.9%	7.6%	-12.1%	-13.0%	-13.4%	-14.4%
SE	-0.5%	-1.4%	-0.8%	0.1%	-0.9%	-1.9%	-1.4%	-0.7%	0.8%	-0.4%	0.0%	0.8%	-2.8%	-3.9%	-3.5%	-2.8%
SI	1.6%	3.8%	3.8%	-0.4%	0.3%	2.8%	2.8%	-0.4%	4.8%	7.4%	7.4%	4.1%	-2.4%	0.1%	0.1%	-3.0%
SK	0.4%	-4.9%	-4.9%	-7.5%	2.7%	-3.3%	-1.0%	-3.3%	8.9%	2.5%	5.9%	3.2%	-2.0%	-7.7%	-4.7%	-7.2%

*Source: **Calculations by the JRC based on the European Commission's Winter 2024** Economic Forecast, **Eurostat's Structural** Business Statistics, Short-Term Business Statistics and National Accounts Database*

ANNEX 9. SME PERFORMANCE IN NUMBER OF ENTERPRISES, EMPLOYMENT AND VALUE ADDED PER NON-EU COUNTRIES OVER THE PERIOD 2021-2023

As in the EU-27, in 2021, SMEs accounted for 99.6% or more of the total number of enterprises in the NFBS in the Single Market Programme (SMP) participating countries of Albania (AL), Armenia (AM), Bosnia and Herzegovina (BA), Iceland (IS), Montenegro (ME), North Macedonia (MK), Serbia (RS), Turkey (TR) and Ukraine (UA), and the United Kingdom (UK)[75] (Table 18). There is only one exceptional country, Moldova (MD), in which SMEs represent the 99% of the total number of enterprises.

SMEs in most of these countries also accounted for a larger share of NFBS employment than EU-27 SMEs in 2021. UK, UA, and MD constitute the sole exceptions in which SMEs accounted for a smaller share of total NFBS employment than EU-27 SMEs. On the other hand, in a few cases, namely AL, IS, ME and MK the accumulated share of persons employed by SMEs exceeds 75%.

Regarding value added, the share generated by SMEs in total NFBS, was significantly higher in all SMP countries except TR than in the EU-27. Even UK's share was marginally higher in 2021, despite its smaller proportion in 2020.

Table 18: Proportion (in %) of the number of NFBS enterprises, NFBS employment and NFBS value added accounted for by SMEs in the EU-27, the SMP countries, and the UK in 2021

Country	Number of Enterprises	Employment	Value Added (nominal)
AL	99.8%	81.3%	75.7%
AM	99.9%	69.5%	65.1%
BA	99.6%	69.3%	63.3%
IS	99.9%	78.5%	74.4%
MD	99.0%	61.5%	70.6%
ME	99.9%	76.3%	72.1%
MK	99.8%	75.5%	68.3%
RS	99.7%	65.4%	54.6%
TR	99.8%	73.5%	48.6%
UA	99.8%	61.3%	55.8%
UK	99.8%	58.9%	54.4%
EU-27	99.8%	64.9%	52.6%

Note: No data are available for XK. Value added for IS and UA refer to 2020, value added for MD to 2017, and employment for ME to 2018.
*Source: EU-**27 data is from calculations by JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database. Data for the other countries was provided by JRC, based on data from national statistical offices and estimations.*

Compared with the EU-27, the prevalence of SMEs in the NFBS in 2021, on a per capita basis, was lower in all but two of the SMP countries and also in the UK. Whereas, in 2021, there were 55 SMEs per 1,000 habitants in

---

[75] 2021 is the most recent year for which data on the performance of SMEs are available for the SMP countries. Data for XK are unavailable, alue added for IS and UA refer to 2020, for MD to 2018 and employment for ME refers to 2018

the EU-27 NFBS, the corresponding figures ranged from 21 (MD) to 43 (UA) among the SMP countries, with the exception of ME, IS and the UK (Figure 36).

Figure 36: Number of SMEs in the NFBS on per capita basis in the EU-27, SMP countries, and the UK, and value added generated by SMEs in EUR billion in 2021
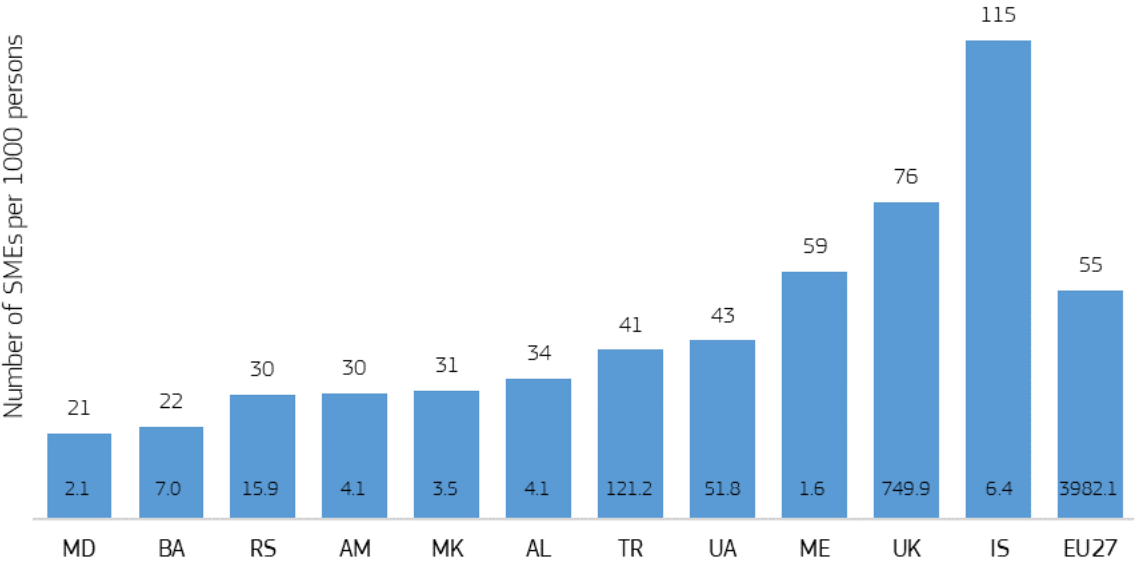
Note: No data are available for XK. The value added generated by SMEs in the NFBS is shown at the bottom of the bars.
*Source: EU-**27 data is from calculations by JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database. Data for the other countries was provided by JRC, based on data from national statistical offices and estimations. Population data was taken from Eurostat for all countries except MD and BA. Population data for UK and BA was taken from the World Bank.*

Over 90% of all SMEs in the NFBS of the EU-27, SMP countries (except BA and MD) and in the UK, were micro firms in 2021 (Table 19). Furthermore, in BA and MD, both small and medium-sized companies made up a larger proportion of the total number of NFBS SMEs in 2021 than in any of the other countries for which data are shown in Table 19.

Concerning employment, in the vast majority of countries, micro enterprises employed more workers than either small or medium-sized firms. The sole exception was MD, where micro SMEs accounted for 32% of the total SME employment, while small companies accounted for 35.6% and medium-sized ones for 32.4%. In particular, micro enterprises accounted for the majority of SME employment in the NFBS in UA (54%), UK (51.6%) and TR (50%). In the same year, medium-sized companies accounted for over 30% in the NFBS in BA (32.2%) and MD (32.4%). More generally, the proportion of NFBS SME employment accounted by medium-sized firms was lower in the EU-27 (24.3%) than in all the other countries covered, except UK, UA and TR (22.4%, 24% and 22.7% respectively).

Finally, in contrast to the EU-27, in which micro businesses generated the largest share of value added in the NFBS in 2021, this was not case for six of the SMP countries (AL, BA, MD, MK, RS, TR) listed in Table 19.

Table 19: Share of the total number of SMEs accounted for by micro, small and medium-sized SMEs in the NFBS of the EU-27, the SMP countries and the UK in 2021

| Country	Number of Enterprises			Employment			Value Added		
	Micro SMEs	Small SMEs	Medium-sized SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs
AL	94.0%	5.9%	1.3%	43.9%	27.0%	29.2%	29.4%	36.1%	34.5%
AM	94.8%	4.5%	0.8%	40.2%	31.1%	28.7%	41.1%	28.0%	30.9%
BA	89.7%	8.6%	1.8%	36.3%	31.5%	32.2%	29.3%	34.1%	35.8%
IS	95.5%	3.9%	0.6%	44.0%	29.6%	26.4%	37.0%	30.3%	32.8%
MD	87.1%	10.8%	2.2%	32.0%	35.6%	32.4%	27.6%	34.7%	37.7%
ME	95.4%	3.9%	0.7%	41.1%	31.7%	27.2%	62.9%		37.1%
MK	90.8%	7.9%	1.3%	45.5%	29.2%	25.3%	30.9%	35.1%	34.1%
RS	90.4%	8.1%	1.5%	44.3%	28.5%	27.3%	24.1%	34.6%	41.4%
TR	93.9%	5.2%	0.8%	50.0%	27.3%	22.7%	25.4%	32.4%	42.2%
UA	96.1%	3.3%	0.7%	54.0%	22.0%	24.0%	44.7%	25.9%	29.4%
UK	95.3%	4.0%	0.7%	51.6%	26.0%	22.4%	55.9%	20.6%	23.5%
EU-27	93.7%	5.5%	0.8%	45.4%	30.3%	24.3%	35.8%	32.1%	32.1%

Note: No data are available for XK. Value added for IS refer to 2020, value added for MD to 2017, and employment for ME to 2018.
*Source: EU-**27 data is from calculations by JRC based on Eurostat's Structural Business** Statistics, Short-Term Business Statistics and National Accounts Database. Data for the other countries was provided by JRC, based on data from national statistical offices and estimations.*

Table 20 provides information on the recent performance of SMEs in AM, BA, IS, MD, MK, RS, UA and the UK. Three countries, for which data was (even partially) available, experienced a decrease in employment in 2022, while two declined in 2023. Only MK witnessed a drop for two consecutive years, while RS increased in persons employed terms in both 2022 and 2023 by a stable rate, 3.8%. The most significant fall took place in UA during 2022 (-17%) because of Russia's war of aggression.

Regarding value added, the availability of data is quite limited. In nominal prices, four countries (AM, BA, MK and RS) experienced significant increase in 2022, while UK declined by -6.5%. In 2023, growth rates are calculated only for three countries. MK and RS kept growing, in a marginally less emphatic way though, while UK continued its fall. The integration of inflation within value added revises radically growth rates for certain countries. MK and RS experienced a moderate decrease in 2022 which was followed by a significant fall in 2023 (-18.4% and -20.7%) respectively. UK declined as well but in a less remarkable way, despite its drop in nominal prices. On the other hand, AM and BA managed to experience growth in inflation adjusted value added in 2022. Especially for AM, the increase rate is impressive reaching 19.7%.

Table 20: Growth rates of SME employment and SME value added (nominal and inflation adjusted) in the EU-27 and selected non-EU countries in 2022 and 2023

Country	Employment		Value Added (nominal)		Value Added (real)	
	2022	2023	2022	2023	2022	2023
AL	-	-	-	-	-	-
AM	-	-	29.1%	-	19.7%	-
BA	2.0%	-	21.8%	-	2.7%	-
IS	-4.6%	7.3%	-	-	-	-
MD	1.6%	-	-	-	-	-
ME	-	-	-	-	-	-
MK	-3.0%	-4.6%	8.9%	8.6%	-3.6%	-18.4%
RS	3.8%	3.8%	11.8%	9.5%	-6.4%	-20.7%
TR	-	-	-	-	-	-
UA	-17.0%	-	-	-	-	-
UK	0.6%	-16.5%	-6.5%	-4.3%	-10.9%	-10.3%
EU-27	2.9%	1.8%	13.1%	7.4%	6.2%	-1.6%

Note: Data for many of the SMP countries was not available, particularly regarding 2023.
*Source: EU-**27 data is from calculations by JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database. Data for the other countries was provided by JRC, based on data from national statistical offices and estimations.*

ANNEX 10. INDUSTRIAL ECOSYSTEMS: INDUSTRIAL COMPOSITION, NACE INDUSTRIES INCLUDED AND SME PERFORMANCE IN NUMBER OF ENTERPRISES, EMPLOYMENT AND VALUE ADDED

Figure 37: The 14 industrial ecosystems and their industries
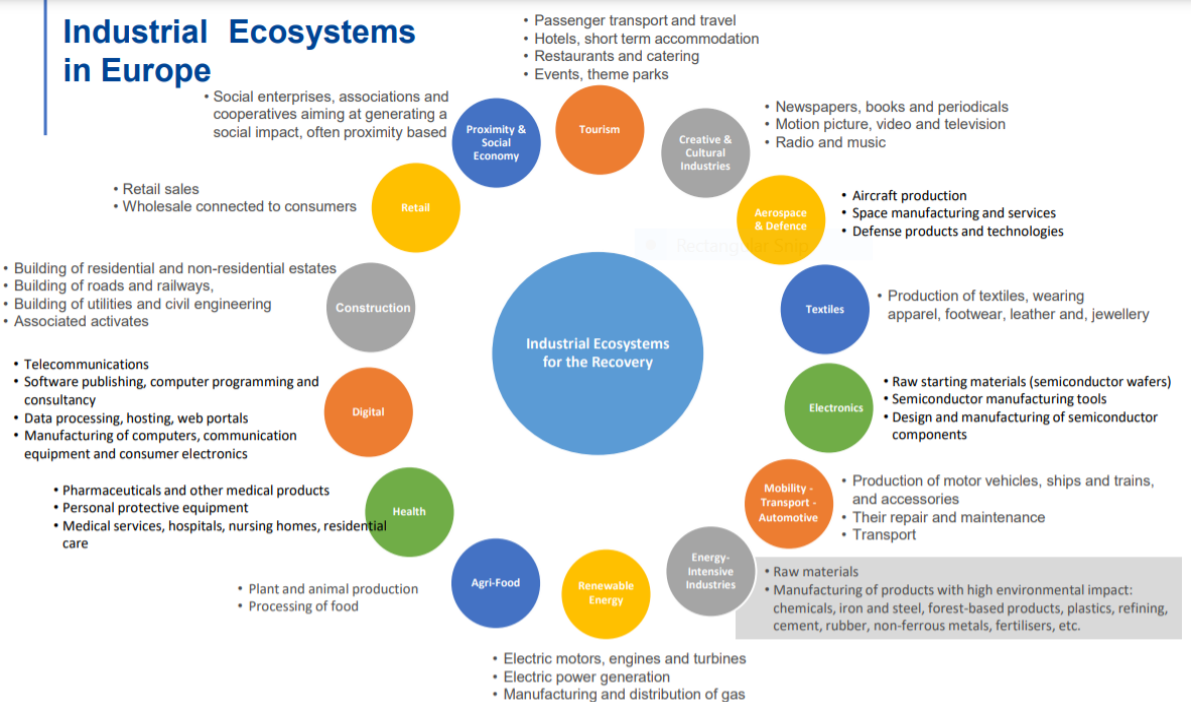
Source: European Commission

Table 21: Industrial composition of the 14 industrial ecosystems

	Industries included in the ecosystem
1 - Aerospace and Defence	C25 Manufacture of fabricated metal products, except machinery and equipment
	C26 Manufacture of computer, electronic and optical products
	C27 Manufacture of electrical equipment
	C30 Manufacture of other transport equipment
	C33 Repair and installation of machinery and equipment
	H51 Air transport
	H52 Warehousing and support activities for transportation
	J61 Telecommunications
	N80 Security and investigation activities
	Horizontal
2 - Agri-food	C10 Manufacture of food products
	C11 Manufacture of beverages
	C12 Manufacture of tobacco products
	Horizontal
	Note: Ecosystem "Agri-food" is missing NACE sector A
3 - Construction	C31 Manufacture of furniture
	F: Construction
	M71: Architectural and engineering activities; technical testing and analysis
	N81: Services to buildings and landscape activities
	Horizontal
4- Cultural and Creative Industries	C18 Printing and reproduction of recorded media
	C32 Other manufacturing
	G47 Retail trade, except of motor vehicles and motorcycles
	J58 Publishing activities
	J59 Motion picture, video and television programme production, sound recording and music publishing activities
	J60 Programming and broadcasting activities
	J62 Computer programming, consultancy and related activities
	J63 Information service activities
	M71 Architectural and engineering activities; technical testing and analysis
	M73 Advertising and market research
	M74 Other professional, scientific and technical activities
	N77 Rental and leasing activities
	Horizontal
	Note: Ecosystem "Cultural and Creative Industries" is missing NACE sectors R, P, S94 & S95
5 – Digital	C26 Manufacture of computer, electronic and optical products
	J58 Publishing activities
	J61: Telecommunications
	J62: Computer programming, consultancy and related activities
	J63: Information service activities
	S95: Repair of computers and personal and household goods
	Horizontal
	Note: Ecosystem "Digital" is missing NACE sector S95
6 – Electronics	C26 Manufacture of computer, electronic and optical products
	C28: Manufacture of machinery and equipment n.e.c.
	Horizontal
7 - Energy-intensive Industries	C16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
	C17 Manufacture of paper and paper products
	C19 Manufacture of coke and refined petroleum products
	C20 Manufacture of chemicals and chemical products
	C22 Manufacture of rubber and plastic products
	C23 Manufacture of other non-metallic mineral products
	C24 Manufacture of basic metals
	Horizontal
8 - Energy – Renewables	C27: Manufacture of electrical equipment
	D35 Electricity, gas, steam and air conditioning supply
	Horizontal
9 - Health	C21 Manufacture of basic pharmaceutical products and pharmaceutical preparations
	C32 Other manufacturing
	Horizontal
	Note: Ecosystem "Health" is missing NACE sector Q.
10 - Mobility - Transport	C27 Manufacture of electrical equipment
	C29 Manufacture of motor vehicles, trailers and semi-trailers
	C30 Manufacture of other transport equipment

	Industries included in the ecosystem
– Auto-motive	G45 Wholesale and retail trade and repair of motor vehicles and motorcycles
	H49 Land transport and transport via pipelines
	H50 Water transport
	H52 Warehousing and support activities for transportation
	Horizontal
11 - Prox-imity, So-cial Econ-omy and Civil Se-curity	G47 Retail trade, except of motor vehicles and motorcycles
	I Accommodation and food services
	L Real estate activities
	N81: Services to buildings and landscape activities
	N82: Office administrative, office support and other business support activities
	Note: Ecosystem "Proximity, Social Economy and Civil Security" is missing NACE sectors Q, S95, S96 and T.
12 - Re-tail	G46 Wholesale trade, except of motor vehicles and motorcycles
	G47 Retail trade, except of motor vehicles and motorcycles
	H53 Postal and courier activities
	Horizontal
13 - Tex-tiles	C13 Manufacture of textiles
	C14 Manufacture of wearing apparel
	C15 Manufacture of leather and related products
	Horizontal
14 - Tour-ism	H49 Land transport and transport via pipelines
	H50 Water transport
	H51 Air transport
	I Accommodation and food services
	N79 Travel agency, tour operator reservation service and related activities
	N82 Office administrative, office support and other business support activities
	Horizontal
	Note: Ecosystem "Tourism" is missing NACE sector R

Note: 'Horizontal' refers to activities which contribute to all ecosystems, such as professional services and utilities. Some sectors are hori-zontal by nature and, as such, they contribute to the well-functioning of all the ecosystems. To take into account their contribution, these sectors have been distributed across ecosystems using Input-Output tables, which can be used to calculate how much each horizontal sector is used by the rest of the ecosystems. It should be noted that the list of "Horizontal" sectors does not include financial services.
Source: Information provided by the European Commission

Table 22: Number of enterprises by industrial ecosystem and size class - 2023

	Number				Percentage of the Ecosystem's Total			
	Micro	Small	Medium	Large	Micro	Small	Medium	Large
1 - Aerospace and Defence	271,069	28,412	8,148	2,219	87.5%	9.2%	2.6%	0.7%
2 - Agri-food	588,894	64,791	12,902	3,208	87.9%	9.7%	1.9%	0.5%
3 - Construction	6,159,234	341,102	42,082	6,653	94.0%	5.2%	0.6%	0.1%
4- Cultural and Creative Industries	1,477,093	45,479	7,620	1,599	96.4%	3.0%	0.5%	0.1%
5 – Digital	1,373,854	62,071	13,713	3,303	94.6%	4.3%	0.9%	0.2%
6 – Electronics	97,367	11,364	3,469	978	86.0%	10.0%	3.1%	0.9%
7 - Energy-intensive Industries	509,206	58,480	16,453	4,459	86.5%	9.9%	2.8%	0.8%
8 - Energy – Renewables	112,762	6,310	1,898	630	92.7%	5.2%	1.6%	0.5%
9 - Health	533,430	27,899	5,395	1,580	93.9%	4.9%	0.9%	0.3%
10 - Mobility - Transport – Automotive	1,900,542	123,905	21,410	4,925	92.7%	6.0%	1.0%	0.2%
11 - Proximity, Social Economy and Civil Security	1,384,936	76,041	9,305	1,850	94.1%	5.2%	0.6%	0.1%
12 - Retail	5,481,511	294,632	40,701	7,643	94.1%	5.1%	0.7%	0.1%
13 - Textiles	256,837	25,145	4,860	725	89.3%	8.7%	1.7%	0.3%
14 - Tourism	3,481,711	267,258	26,353	4,141	92.1%	7.1%	0.7%	0.1%

Note: Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A); Cultural and Creative Industries (R, P, S94 and S95); Health (Q); Proximity, Social Economy and Civil Security (Q, S95, S96 and T); and Tourism (R).
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Figure 38: Share of the cumulative change in total value added (adjusted for inflation) between 2021 and 2023 attributed to SMEs, by industrial ecosystem
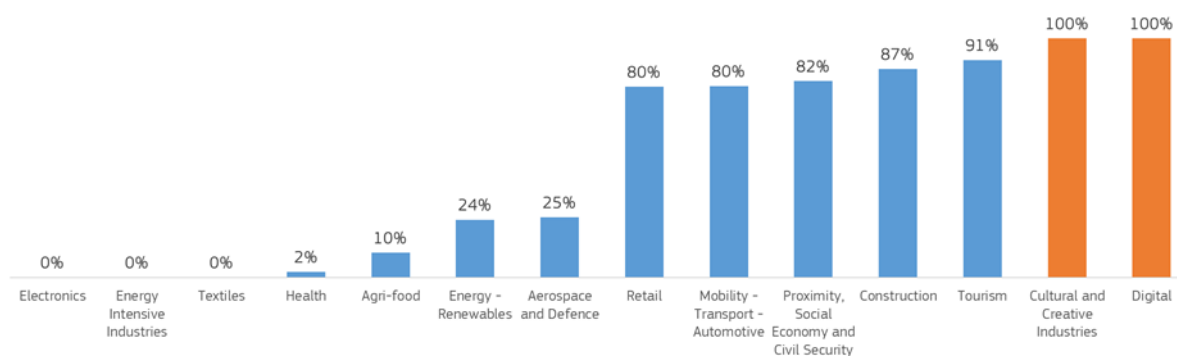
Notes: 1) Bars in orange indicate that the value added decreased in the ecosystem between 2021 and 2023, whereas bars in blue indicate that total value added increased in the ecosystem. 2) Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Table 23: Share of the cumulative change in total value added (both nominal & inflation adjusted) and employment between 2021 and 2023 attributed to all SMEs and SME size classes, by industrial ecosystem

	Value Added (nominal)				Value Added (inflation adjusted)				Employment			
	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs
Aerospace and Defence	9%	10%	14%	34%	22%	4%	0%	25%	18%	10%	13%	42%
Agri-food	10%	11%	19%	41%	4%	0%	7%	10%	44%	16%	8%	69%
Construction	37%	22%	16%	75%	71%	10%	6%	87%	51%	16%	8%	75%
Cultural and Creative Industries	30%	15%	16%	60%	100%	0%	0%	100%	42%	13%	13%	68%
Digital	18%	14%	19%	50%	96%	0%	4%	100%	26%	13%	16%	54%
Electronics	6%	8%	14%	28%	9%	0%	0%	0%	25%	14%	11%	52%
Energy-intensive Industries	7%	9%	17%	32%	43%	0%	0%	0%	45%	18%	8%	73%
Energy - Renewables	11%	7%	11%	29%	12%	4%	8%	24%	50%	9%	11%	71%
Health	9%	7%	9%	25%	9%	0%	0%	2%	37%	13%	8%	63%
Mobility - Transport - Automotive	20%	17%	14%	50%	47%	27%	10%	80%	42%	15%	11%	70%
Proximity, Social Economy and Civil Security	36%	18%	13%	67%	58%	16%	8%	82%	43%	22%	11%	77%
Retail	29%	19%	16%	64%	54%	16%	10%	80%	52%	11%	5%	69%
Textiles	16%	20%	20%	55%	51%	0%	0%	0%	63%	23%	0%	86%
Tourism	38%	25%	15%	77%	52%	28%	12%	91%	41%	28%	13%	82%

Notes: 1) Cells in light purple indicate that although the value added contributed by "All SMEs" decreased in the ecosystem between 2021 and 2023, individual SME size classes have contributed to value added growth. 2) Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database
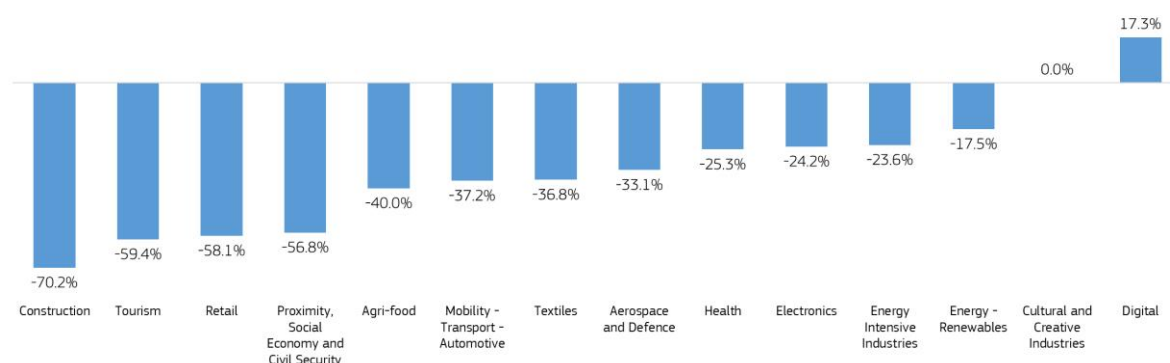
Figure 39: Share of the change in total value added (adjusted for inflation) between 2023 and 2024 attributed to SMEs, by industrial ecosystem

17.3% Digital
0.0% Cultural and Creative Industries
-17.5% Energy - Renewables
-23.6% Energy Intensive Industries
-24.2% Electronics
-25.3% Health
-33.1% Aerospace and Defence
-36.8% Textiles
-37.2% Mobility - Transport - Automotive
-40.0% Agri-food
-56.8% Proximity, Social Economy and Civil Security
-58.1% Retail
-59.4% Tourism
-70.2% Construction

Note: Data are missing for some NACE codes that correspond to the following ecosystems: Agri-food (NACE sector A), Cultural and Creative Industries (R, P, S94 and S95), Health (Q), Proximity, Social Economy and Civil Security (Q, S95, S96 and T), and Tourism (R).
Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast*, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database*

Table 24: Share of the change in total value added (both nominal & inflation adjusted) and employment between 2023 and 2024 attributed to all SMEs and SME size classes, by industrial ecosystem

	Value Added (nominal)				Value Added (real)				Employment			
	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs
Aerospace and Defence	10%	10%	16%	36%	0%	0%	0%	0%	31%	4%	8%	42%
Agri-food	14%	14%	19%	47%	0%	0%	0%	0%	100%	0%	0%	100%
Construction	35%	22%	16%	73%	0%	0%	0%	0%	69%	5%	0%	73%
Cultural and Creative Industries	23%	14%	15%	50%	0%	0%	0%	0%	52%	12%	10%	74%
Digital	13%	12%	17%	42%	35%	0%	65%	21%	29%	12%	15%	56%
Electronics	8%	8%	16%	31%	0%	0%	0%	0%	100%	0%	0%	0%
Energy-intensive Industries	8%	10%	19%	36%	0%	0%	0%	0%	100%	0%	0%	0%
Energy - Renewables	17%	7%	11%	35%	100%	0%	0%	0%	100%	0%	0%	99%
Health	11%	8%	10%	29%	0%	0%	0%	0%	78%	2%	0%	80%
Mobility - Transport - Automotive	18%	16%	15%	49%	0%	0%	0%	0%	100%	0%	0%	100%
Proximity, Social Economy and Civil Security	32%	18%	14%	64%	0%	0%	0%	0%	50%	15%	9%	74%
Retail	24%	20%	17%	61%	0%	0%	0%	0%	75%	0%	1%	76%
Textiles	20%	19%	24%	63%	0%	0%	0%	0%	100%	0%	0%	0%
Tourism	32%	23%	15%	70%	0%	0%	0%	0%	54%	21%	9%	83%

Table 25: Annual growth rate in employment for 2023 in the EU-27 and across EU Member States per Industrial Ecosystem

Country	Aerospace and Defence	Agri-food	Construction	Cultural and Creative Industries	Digital	Electronics	Energy-intensive Industries	Energy – Renewables	Health	Mobility - Transport – Automotive	Proximity, Social Economy and Civil Security	Retail	Textiles	Tourism
AT	0.5%	0.8%	0.0%	2.1%	3.6%	1.0%	0.9%	1.1%	0.5%	1.6%	1.7%	1.1%	0.2%	3.6%
BE	1.8%	2.4%	1.4%	3.0%	2.8%	2.5%	2.4%	3.0%	2.7%	1.2%	0.6%	0.3%	2.4%	1.3%
BG	-1.6%	0.7%	2.0%	3.0%	6.6%	0.5%	0.7%	0.5%	1.0%	0.4%	2.2%	1.0%	0.6%	4.0%
CY	2.3%	1.8%	1.3%	1.3%	2.9%	1.1%	2.5%	2.4%	1.3%	1.7%	2.3%	1.7%	3.5%	3.0%
CZ	1.9%	-1.2%	1.8%	0.4%	3.5%	-1.5%	-1.6%	0.0%	-0.2%	-0.5%	1.1%	0.3%	-1.4%	0.5%
DE	1.1%	0.6%	0.9%	2.2%	2.9%	0.4%	0.4%	1.1%	0.9%	0.1%	2.3%	-4.1%	0.4%	10.6%
DK	0.5%	0.4%	0.3%	1.7%	1.0%	0.3%	0.4%	0.9%	1.1%	0.6%	1.3%	0.3%	0.1%	2.8%
EE	2.2%	2.2%	3.3%	8.3%	0.1%	1.3%	0.0%	-0.1%	6.4%	-0.7%	10.7%	1.5%	0.1%	6.4%
EL	2.5%	4.2%	5.0%	2.9%	1.3%	4.4%	3.4%	17.9%	5.5%	8.9%	-3.6%	9.1%	5.4%	-12.3%
ES	2.2%	1.5%	2.4%	3.0%	2.5%	1.7%	1.5%	1.4%	2.1%	4.7%	4.4%	4.9%	1.4%	5.3%
EU27	1.2%	1.1%	1.2%	2.9%	3.8%	0.9%	0.7%	1.5%	1.7%	1.3%	2.3%	0.7%	0.8%	4.5%
FI	0.0%	0.0%	-1.1%	-0.1%	0.8%	0.0%	0.0%	-0.5%	-0.1%	-0.3%	-0.8%	-0.4%	0.2%	-1.5%
FR	1.3%	1.8%	1.5%	3.4%	3.4%	1.5%	1.4%	1.9%	2.5%	1.3%	2.0%	1.3%	1.7%	2.7%
HR	1.1%	0.9%	2.9%	2.7%	2.6%	1.2%	0.5%	0.5%	1.7%	1.1%	2.9%	1.0%	0.2%	3.8%
HU	0.3%	-0.9%	-0.2%	1.1%	1.0%	-1.0%	-1.2%	-1.1%	0.1%	-0.3%	1.3%	-0.2%	-1.1%	2.8%
IE	2.3%	2.4%	1.8%	5.0%	4.9%	2.4%	2.0%	3.5%	3.1%	2.7%	4.0%	4.6%	2.8%	4.7%
IT	2.0%	2.0%	0.4%	3.3%	5.0%	1.8%	1.8%	1.9%	2.3%	2.1%	4.1%	2.9%	1.7%	5.4%
LT	7.4%	5.7%	5.0%	9.9%	3.0%	5.3%	4.9%	5.6%	9.5%	3.5%	4.1%	-1.1%	5.2%	6.7%
LU	2.0%	1.7%	1.1%	3.5%	2.7%	2.4%	1.2%	2.7%	2.9%	2.6%	2.7%	1.7%	1.9%	4.4%
LV	2.0%	-0.5%	1.3%	-0.9%	2.3%	-0.5%	-0.6%	0.0%	-0.4%	-2.1%	2.3%	-2.9%	-0.6%	8.2%
MT	6.5%	5.3%	7.1%	11.9%	9.4%	2.1%	4.3%	6.7%	8.1%	4.7%	10.7%	5.0%	6.2%	14.4%
NL	0.9%	1.6%	2.8%	3.5%	4.0%	1.7%	1.7%	2.4%	1.9%	0.9%	2.2%	0.1%	2.0%	5.3%
PL	0.8%	-0.6%	-1.7%	6.9%	16.9%	-0.3%	-1.0%	-0.6%	1.2%	0.8%	1.1%	0.4%	-0.7%	2.4%
PT	0.7%	0.5%	2.9%	1.7%	1.1%	0.3%	0.1%	1.0%	1.3%	-0.3%	3.3%	-0.2%	-0.3%	5.5%
RO	-2.3%	-1.0%	1.1%	-4.4%	-8.2%	-1.4%	-0.8%	-2.0%	-1.7%	-1.5%	-1.0%	-2.1%	-0.9%	2.2%
SE	1.6%	1.5%	2.4%	4.2%	2.4%	0.8%	0.4%	1.7%	3.3%	1.5%	2.7%	2.6%	1.1%	1.4%
SI	3.1%	3.4%	3.5%	3.7%	6.2%	3.4%	3.3%	3.7%	3.9%	4.2%	2.1%	1.0%	2.7%	3.4%
SK	2.4%	2.2%	2.7%	3.4%	0.7%	2.7%	3.1%	2.3%	4.2%	0.5%	0.9%	-1.2%	3.0%	1.3%

Table 26: Expected annual growth rate in employment for 2024 in the EU-27 and across EU Member States per Industrial Ecosystem

Country	Aerospace and Defence	Agri-Food	Construction	Cultural and Creative Industries	Digital	Electronics	Energy-intensive Industries	Energy – Renewables	Health	Mobility – Transport – Automotive	Proximity, Social Economy and Civil Security	Retail	Textiles	Tourism
AT	-6.2%	-6.0%	-3.3%	-5.1%	-5.7%	-6.4%	-6.5%	-0.9%	-5.3%	-6.9%	-5.6%	-7.3%	-6.1%	-6.9%
BE	-1.3%	-5.2%	0.6%	0.7%	5.3%	-4.9%	-5.8%	-22.4%	-3.5%	2.4%	1.9%	4.3%	-5.3%	2.7%
BG	-16.4%	-11.7%	-13.8%	-15.8%	-16.0%	-12.0%	-11.1%	-27.2%	-14.8%	-16.3%	-17.4%	-16.8%	-10.5%	-16.8%
CY	0.4%	2.8%	1.3%	-3.1%	-2.6%	2.3%	2.9%	2.0%	-0.6%	0.7%	-0.3%	0.9%	0.6%	-0.3%
CZ	-13.0%	-12.5%	-11.2%	-11.1%	-12.0%	-13.0%	-12.9%	53.5%	-11.8%	-16.8%	-11.7%	-15.9%	-12.9%	-12.9%
DE	-2.4%	-2.9%	2.0%	-2.9%	-3.1%	-2.9%	-2.7%	-0.3%	-3.0%	-2.5%	-3.1%	-3.7%	-2.9%	-3.3%
DK	6.7%	11.3%	7.4%	9.0%	9.3%	12.9%	12.5%	-0.9%	9.7%	-4.3%	-0.1%	-10.7%	11.6%	-4.9%
EE	-21.1%	-19.9%	-21.4%	-18.1%	-20.9%	-19.7%	-19.8%	-23.6%	-19.8%	-20.8%	-19.2%	-19.1%	-19.7%	-19.9%
EL	0.9%	-1.7%	17.4%	7.3%	13.2%	0.0%	-2.5%	-26.9%	3.0%	4.6%	5.3%	3.8%	-2.0%	4.5%
ES	3.9%	3.6%	4.6%	3.8%	3.7%	3.7%	4.1%	-4.3%	3.0%	6.7%	6.7%	7.7%	4.2%	7.8%
EU27	-2.2%	-3.7%	-0.2%	-1.6%	-1.8%	-2.6%	-2.7%	-1.3%	-3.6%	-2.1%	-1.7%	-2.3%	-3.0%	-1.6%
FI	-4.1%	-3.1%	-4.2%	-1.3%	-0.7%	-3.6%	-3.4%	2.0%	-2.8%	-4.7%	-2.2%	-3.5%	-3.6%	-2.2%
FR	-2.8%	-3.5%	-3.3%	-4.0%	-4.6%	-1.7%	-1.4%	18.9%	-2.3%	-5.3%	-4.8%	-7.1%	-2.2%	-4.7%
HR	-6.8%	-9.3%	-3.6%	-4.0%	-6.7%	-9.4%	-10.9%	-6.2%	-5.8%	-5.6%	-5.9%	-5.0%	-10.6%	-8.5%
HU	-14.7%	-15.9%	-10.2%	-11.4%	-11.8%	-15.7%	-17.2%	-16.1%	-13.1%	-14.6%	-10.7%	-12.4%	-15.1%	-15.5%
IE	-12.8%	-19.8%	-3.1%	-1.6%	1.4%	-23.0%	-23.1%	-14.9%	-20.0%	-1.6%	-0.5%	2.9%	-14.4%	0.6%
IT	0.1%	0.0%	-4.5%	-2.1%	-2.9%	0.7%	0.6%	-9.1%	-1.1%	0.2%	-0.9%	0.4%	0.7%	-0.4%
LT	-20.3%	-23.7%	-11.8%	-11.3%	-9.1%	-25.0%	-26.6%	-14.8%	-18.5%	-17.1%	-13.0%	-15.0%	-26.0%	-12.6%
LU	-3.6%	-3.5%	-0.6%	0.3%	1.9%	-3.4%	-7.7%	18.3%	-0.2%	-9.2%	-5.3%	-12.2%	-3.9%	-7.7%
LV	-13.2%	-14.7%	-0.2%	-7.3%	-2.5%	-13.0%	-13.8%	-9.3%	-8.2%	-18.1%	-9.9%	-14.8%	-12.2%	-10.5%
MT	10.2%	8.8%	1.1%	8.5%	0.9%	10.5%	9.2%	14.8%	8.2%	9.8%	9.1%	7.4%	10.4%	9.5%
NL	-3.1%	-2.0%	-1.3%	-2.7%	-5.9%	-1.9%	-2.0%	-5.4%	-1.8%	-5.4%	-2.7%	-6.7%	-2.9%	-5.3%
PL	-5.0%	-7.5%	2.2%	1.3%	-0.9%	-7.0%	-8.8%	-0.6%	-1.8%	-4.6%	1.5%	-3.8%	-7.2%	-1.3%
PT	-12.1%	-26.8%	-7.2%	10.8%	0.2%	-17.6%	-19.6%	-10.5%	-17.5%	-2.5%	0.8%	4.5%	-20.8%	2.9%
RO	-13.0%	-14.7%	-6.1%	-8.1%	-9.3%	-14.9%	-17.0%	4.8%	-10.2%	-9.5%	-7.7%	-10.2%	-17.3%	-5.2%
SE	-7.3%	-7.4%	-8.7%	-7.5%	-7.0%	-6.8%	-6.9%	-14.0%	-7.8%	-7.6%	-7.3%	-6.9%	-7.6%	-6.3%
SI	-3.9%	-3.7%	3.6%	-3.6%	-12.2%	-3.6%	-3.6%	-0.5%	-3.1%	-7.5%	-3.3%	-7.2%	-5.3%	-3.9%
SK	-8.4%	-5.4%	0.4%	-6.0%	-10.3%	-5.4%	-5.6%	0.6%	-3.6%	-10.1%	-9.3%	-10.3%	-4.6%	-12.2%

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

Table 27: Annual growth rate in adjusted for inflation value added for 2023 in the EU-27 and across EU Member States per Industrial Ecosystem

Country	Aerospace and Defence	Agri-food	Construction	Cultural and Creative Industries	Digital	Electronics	Energy-Intensive Industries	Energy – Renewables	Health	Mobility - Transport – Automotive	Proximity, Social Economy and Civil Security	Retail	Textiles	Tourism
AT	-6.2%	-6.0%	-3.3%	-5.1%	-5.7%	-6.4%	-6.5%	-0.9%	-5.3%	-6.9%	-5.6%	-7.3%	-6.1%	-6.9%
BE	-1.3%	-5.2%	0.6%	0.7%	5.3%	-4.9%	-5.8%	-22.4%	-3.5%	2.4%	1.9%	4.3%	-5.3%	2.7%
BG	-16.4%	-11.7%	-13.8%	-15.8%	-16.0%	-12.0%	-11.1%	-27.2%	-14.8%	-16.3%	-17.4%	-16.8%	-10.5%	-16.8%
CY	0.4%	2.8%	1.3%	-3.1%	-2.6%	2.3%	2.9%	2.0%	-0.6%	0.7%	-0.3%	0.9%	0.6%	-0.3%
CZ	-13.0%	-12.5%	-11.2%	-11.1%	-12.0%	-13.0%	-12.9%	53.5%	-11.8%	-16.8%	-11.7%	-15.9%	-12.9%	-12.9%
DE	-2.4%	-2.9%	2.0%	-2.9%	-3.1%	-2.9%	-2.7%	-0.3%	-3.0%	-2.5%	-3.1%	-3.7%	-2.9%	-3.3%
DK	6.7%	11.3%	7.4%	9.0%	9.3%	12.9%	12.5%	-0.9%	9.7%	-4.3%	-0.1%	-10.7%	11.6%	-4.9%
EE	-21.1%	-19.9%	-21.4%	-18.1%	-20.9%	-19.7%	-19.8%	-23.6%	-19.8%	-20.8%	-19.2%	-19.1%	-19.7%	-19.9%
EL	0.9%	-1.7%	17.4%	7.3%	13.2%	0.0%	-2.5%	-26.9%	3.0%	4.6%	5.3%	3.8%	-2.0%	4.5%
ES	3.9%	3.6%	4.6%	3.8%	3.7%	3.7%	4.1%	-4.3%	3.0%	6.7%	6.7%	7.7%	4.2%	7.8%
EU27	-2.2%	-3.7%	-0.2%	-1.6%	-1.8%	-2.6%	-2.7%	-1.3%	-3.6%	-2.1%	-1.7%	-2.3%	-3.0%	-1.6%
FI	-4.1%	-3.1%	-4.2%	-1.3%	-0.7%	-3.6%	-3.4%	2.0%	-2.8%	-4.7%	-2.2%	-3.5%	-3.6%	-2.2%
FR	-2.8%	-3.5%	-3.3%	-4.0%	-4.6%	-1.7%	-1.4%	18.9%	-2.3%	-5.3%	-4.8%	-7.1%	-2.2%	-4.7%
HR	-6.8%	-9.3%	-3.6%	-4.0%	-6.7%	-9.4%	-10.9%	-6.2%	-5.8%	-5.6%	-5.9%	-5.0%	-10.6%	-8.5%
HU	-14.7%	-15.9%	-10.2%	-11.4%	-11.8%	-15.7%	-17.2%	-16.1%	-13.1%	-14.6%	-10.7%	-12.4%	-15.1%	-15.5%
IE	-12.8%	-19.8%	-3.1%	-1.6%	1.4%	-23.0%	-23.1%	-14.9%	-20.0%	-1.6%	-0.5%	2.9%	-14.4%	0.6%
IT	0.1%	0.0%	-4.5%	-2.1%	-2.9%	0.7%	0.6%	-9.1%	-1.1%	0.2%	-0.9%	0.4%	0.7%	-0.4%
LT	-20.3%	-23.7%	-11.8%	-11.3%	-9.1%	-25.0%	-26.6%	-14.8%	-18.5%	-17.1%	-13.0%	-15.0%	-26.0%	-12.6%
LU	-3.6%	-3.5%	-0.6%	0.3%	1.9%	-3.4%	-7.7%	18.3%	-0.2%	-9.2%	-5.3%	-12.2%	-3.9%	-7.7%
LV	-13.2%	-14.7%	-0.2%	-7.3%	-2.5%	-13.0%	-13.8%	-9.3%	-8.2%	-18.1%	-9.9%	-14.8%	-12.2%	-10.5%
MT	10.2%	8.8%	1.1%	8.5%	0.9%	10.5%	9.2%	14.8%	8.2%	9.8%	9.1%	7.4%	10.4%	9.5%
NL	-3.1%	-2.0%	-1.3%	-2.7%	-5.9%	-1.9%	-2.0%	-5.4%	-1.8%	-5.4%	-2.7%	-6.7%	-2.9%	-5.3%
PL	-5.0%	-7.5%	2.2%	1.3%	-0.9%	-7.0%	-8.8%	-0.6%	-1.8%	-4.6%	1.5%	-3.8%	-7.2%	-1.3%
PT	-12.1%	-26.8%	-7.2%	10.8%	0.2%	-17.6%	-19.6%	-10.5%	-17.5%	-2.5%	0.8%	4.5%	-20.8%	2.9%
RO	-13.0%	-14.7%	-6.1%	-8.1%	-9.3%	-14.9%	-17.0%	4.8%	-10.2%	-9.5%	-7.7%	-10.2%	-17.3%	-5.2%
SE	-7.3%	-7.4%	-8.7%	-7.5%	-7.0%	-6.8%	-6.9%	-14.0%	-7.8%	-7.6%	-7.3%	-6.9%	-7.6%	-6.3%
SI	-3.9%	-3.7%	3.6%	-3.6%	-12.2%	-3.6%	-3.6%	-0.5%	-3.1%	-7.5%	-3.3%	-7.2%	-5.3%	-3.9%
SK	-8.4%	-5.4%	0.4%	-6.0%	-10.3%	-5.4%	-5.6%	0.6%	-3.6%	-10.1%	-9.3%	-10.3%	-4.6%	-12.2%

*Source: **Calculations by the JRC based on Eurostat's Structural Business Statistics, Short**-Term Business Statistics and National Accounts Database*

Table 28: Expected annual growth rate in adjusted for inflation value added for 2024 in the EU-27 and across EU Member States per Industrial Ecosystem

Country	Aerospace and Defence	Agri-food	Construction	Cultural and Creative Industries	Digital	Electronics	Energy-intensive Industries	Energy – Renewables	Health	Mobility – Transport – Automotive	Proximity, Social Economy and Civil Security	Retail	Textiles	Tourism
AT	-2.9%	-3.0%	-2.3%	-1.4%	-0.7%	-3.1%	-3.3%	-3.2%	-2.6%	-2.9%	-2.0%	-2.7%	-3.1%	-2.3%
BE	0.5%	0.8%	0.7%	1.5%	0.5%	0.9%	0.3%	2.8%	1.7%	-0.7%	0.8%	-1.4%	0.6%	-0.1%
BG	-17.2%	-18.0%	-18.7%	-15.4%	-12.8%	-18.1%	-18.2%	-17.5%	-17.2%	-17.6%	-16.9%	-17.4%	-18.2%	-17.0%
CY	0.2%	0.6%	0.7%	3.9%	4.0%	0.4%	1.8%	1.9%	2.6%	0.2%	1.3%	0.0%	0.4%	1.4%
CZ	-10.8%	-11.2%	-10.5%	-9.9%	-9.9%	-11.2%	-11.4%	-10.5%	-10.7%	-10.8%	-10.1%	-10.4%	-11.1%	-10.5%
DE	-2.3%	-2.4%	-0.8%	-1.2%	-0.5%	-2.8%	-2.8%	-0.3%	-2.1%	-2.2%	-1.6%	-2.2%	-2.5%	-1.6%
DK	0.8%	0.4%	1.1%	2.0%	2.0%	0.2%	0.3%	0.1%	1.0%	1.2%	2.9%	1.5%	0.2%	3.1%
EE	-7.5%	-7.4%	-6.9%	-4.4%	-2.6%	-7.6%	-8.0%	-8.7%	-6.5%	-7.6%	-5.7%	-7.5%	-7.5%	-6.6%
EL	3.8%	4.7%	2.9%	5.3%	6.6%	5.1%	3.6%	23.4%	5.4%	4.5%	7.6%	3.6%	6.6%	8.3%
ES	-0.8%	-0.9%	-2.1%	-0.7%	-0.6%	-0.9%	-1.0%	-1.1%	-0.8%	-0.6%	-0.6%	-0.6%	-1.0%	-0.6%
EU27	-1.4%	-1.4%	-1.1%	-0.5%	0.2%	-1.9%	-1.7%	-0.6%	-1.0%	-1.4%	-0.9%	-1.4%	-1.8%	-0.6%
FI	-1.4%	-1.7%	-0.6%	0.1%	0.0%	-2.3%	-2.8%	-1.7%	-0.9%	-0.9%	0.3%	-0.3%	-1.7%	0.0%
FR	-1.1%	-1.0%	-1.0%	-0.8%	-0.9%	-1.3%	-1.4%	-1.0%	-1.0%	-0.9%	-0.8%	-0.8%	-1.2%	-0.8%
HR	-2.0%	-2.2%	-1.8%	-1.1%	-1.5%	-2.1%	-2.6%	-2.2%	-1.4%	-2.3%	-1.6%	-2.5%	-2.6%	-1.7%
HU	-6.3%	-7.2%	-4.8%	-4.7%	-5.2%	-7.2%	-7.7%	-7.0%	-5.9%	-6.2%	-5.3%	-5.8%	-7.2%	-5.2%
IE	3.7%	3.0%	3.1%	2.6%	4.0%	3.1%	3.3%	3.0%	3.6%	2.3%	2.9%	1.7%	3.4%	3.2%
IT	-1.2%	-1.4%	-1.7%	-0.4%	-0.1%	-1.6%	-1.6%	-0.8%	-1.0%	-1.1%	-0.2%	-1.0%	-1.7%	0.5%
LT	-2.2%	-3.2%	-3.6%	-1.0%	0.3%	-3.5%	-3.7%	-4.4%	-2.0%	-3.2%	-3.5%	-6.0%	-3.1%	-1.9%
LU	-0.5%	-0.8%	-1.4%	-12.4%	5.3%	-3.4%	-2.8%	-0.8%	0.3%	-1.9%	-0.6%	-1.8%	-1.0%	-1.1%
LV	-3.5%	-3.7%	-4.2%	-2.7%	-1.2%	-3.8%	-3.9%	-3.6%	-3.2%	-4.9%	-4.1%	-5.5%	-3.8%	-3.4%
MT	3.6%	3.8%	5.9%	8.1%	9.1%	-0.7%	2.3%	22.5%	5.8%	6.9%	6.8%	4.1%	5.2%	6.8%
NL	-1.8%	-1.6%	-1.4%	-1.4%	-1.0%	-1.5%	-1.5%	-0.8%	-1.6%	-2.0%	-1.9%	-2.0%	-1.5%	-1.4%
PL	-3.1%	-3.6%	-2.8%	-1.8%	-1.2%	-3.3%	-3.7%	-3.6%	-2.7%	-3.8%	-3.3%	-4.6%	-3.2%	-3.2%
PT	-0.2%	-2.1%	-1.5%	2.3%	4.8%	-1.3%	-2.2%	1.4%	-0.2%	-0.5%	0.6%	-1.0%	-2.3%	1.6%
RO	-12.4%	-12.9%	-12.9%	-11.8%	-11.1%	-12.7%	-13.1%	-12.9%	-12.3%	-12.9%	-12.4%	-13.7%	-13.2%	-11.5%
SE	-5.2%	-5.1%	-3.0%	-2.2%	-2.1%	-6.5%	-6.6%	-5.6%	-4.0%	-4.4%	-2.3%	-3.7%	-5.0%	-1.9%
SI	-3.0%	-1.2%	-0.9%	0.5%	0.9%	0.0%	-0.1%	0.2%	0.4%	-0.6%	-0.6%	-1.8%	-6.8%	1.6%
SK	-2.7%	-3.3%	-3.8%	-1.5%	-2.9%	-2.6%	-3.0%	-3.5%	-1.8%	-4.9%	-4.4%	-7.1%	-2.8%	-3.6%

Source: Calculations by the JRC based on the European Commission's Winter 2024 Economic Forecast, Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database

**Publications Office
of the European Union**