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JobMatch 2020

Fondo Europeo di Sviluppo Regionale
European Regional Development Fund

JOBMATCH 2020. THE BLUE ECONOMY AND CIRCULAR ECONOMY IN THE ITALY-MALTA CROSS-BORDER COOPERATION FRAMEWORK: AN EMPLOYMENT OPPORTUNITY.

Report on the Italy-Malta Labour Market

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Acknowledgments

The JobMatch 2020 project has identified Sicilian and Maltese NEETs as its target groups, in order to create, through its activities, tools and opportunities for the latter and to favour an increasing Matching between labour supply and demand in the Italy Malta cross-border area, within the two sectors of reference of the project: the BLUE and the CIRCULAR ECONOMY.

This brief definition clearly shows the key role of this project in the Mediterranean area, where the most precious asset is human resources. The critical issues afflicting this region, which is their cradle, as well as the whole world, stem precisely from the crisis of the model of society and development based on people, due to the prevalence of unrelated and imposed models, marked by the financialization of society and the regression of the individual to a number and a mere consumer, a slave to the almighty market.

The consequence is unemployment and/or underemployment in the weakest areas, where even the hopes of young people are dwindling to the point where they no longer even try to improve their condition with work. First of all, governments, and in particular the European Union, must address these issues, with programmes that also enhance the other "natural resources" of the Mediterranean: the sea and the environment. A Mediterranean "alternative development" can revolve around this triangle. This is why JobMatch 2020 hits the targets of EU policies, rekindling the hope of young people, a crucial driver for all progress.

This is the reason why, its authors should be congratulated and thanked, starting from the person who coordinated the publication, Croce Monica Segretario, to the Project Managers, Giuseppe Rallo, Alessandro Pernice, Croce Monica Segretario and Giancarlo Amato of Arces, Leonardo Martorana and Giuseppe Cantone of Arancia ICT s.r.l., Marco Arcella and Valentina Pecora of Malta Vocational Centre, Denis Borg and Enry Di Giacomo of the Maltese Italian Chamber of Commerce, who have now reached the highest European levels. Special thanks also go to the authors of the publications and market analyses, Enrico Camilleri and the staff of M&D, Alfred Triganza and Alessandro Messina.

If, as we hope, the new course of Europe will project it towards the Mediterranean, joint work experiences such as this, which enhance its core resources and reaffirm its universal values, are going to account for a milestone.

The President of Arces

Mr Francesco Felice Maria Attaguile

Summary

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PART I

The Labour Market in Sicilia and Malta: a Qualitative and Quantitative Analysis.

Prospects for the Circular Economy and the Blu Economy

1. GREEN ECONOMY, BLUE ECONOMY AND CIRCULAR ECONOMY FOR A NEW ECONOMIC PARADIGM

Sustainable Development. The term is far from being new, as it first appeared in the 1970s thanks to a multidisciplinary team of scientists known by the name of the Club of Rome[1]. Nevertheless, we've only recently witnessed the rise in popularity of the concept of Green Economy in response to the social-economic struggles triggered by the global financial crisis of 2008, affecting the social sphere as well as the environment in countries all over the world.

The transition to a sustainable economic model involves shifting economic policies towards providing incentives for the safeguarding of natural resources, reinforce environmental infrastructures, introduce new market-based mechanisms to promote ecotechnology, make investments, and retrieve aid for environmental-threatening interventions through effective reforms.
The misconception among emerging and established economies for which environmental policies would have inhibited economic growth is now being replaced progressively by a new narrative based on the reflection for which the new Green Industry represents a significant opportunity for investments, growth, and occupation in the whole production system.

The pillars of the new model are: reducing the consumption of energy and the exploitation of natural resources, drastically cutting down greenhouse gas emissions, reducing pollution, and promoting sustainable consumption and production models towards adopting a zero-waste policy.
At the intergovernmental level, we can find the foundation of the model in the United Nations Environmental Program (UNEP), based on the adoption of a Global Green New Deal (GGND), which objective is to analyse the outcome of investments concerning the transition to the Green Economy: results are assessed against the benefits in terms of climate change, new technologies, and the energy industry.
To sum up, the objective is to create a new model for a global economy that generates wealth and promotes social wellbeing, together with charging all nations with the responsibility to leave a healthy and productive Earth behind for the youth and generations to come. With this said, the Circular Economy and the Blue Economy are the cornerstones of the Green New Deal.

1.1 The Circular Economy

The Circular Economy is a branch of microeconomics. Its objective is to progressively establish a zero-waste economy model by optimizing the production and consumption processes through the 'reuse' imperative.
The starting point resides in the production schemes, which should rely on qualified human resources and new technologies to reach the set of objectives as follows:

1 Durable goods must be resistant and easily repaired;

2 Consumer goods must be entirely recyclable;

3 Craps and shrinkage must be reusable for energetic, commercial use or other purposes.

The above will allow the product to extend its lifecycle even after fulfilling its primary function. For instance, the production cycle of the olive oil is rather explicative of this concept.
Olive oil is made by pressing the olives: when using the residue in animal feed or cogeneration plants for energy production, it re-enters the economy upon fulfilment of its primary function -i.e. produce olive oil- thus avoiding waste.
Therefore, by closing the cycle, we produce what we've called a zero-waste circular economy.

1.1.1 EU Strategies and the Circular Economy

In December 2015, the European Commission presented its Action Plan for the implementation of the Circular Economy in an official communication to the European Parliament, the Council, the European Economic and Social Committee, and the European Committee of the Regions through a document called: **Closing the loop – An EU action plan for the Circular Economy**.
The document underlines the role of the Circular Economy to support the economic transition towards reducing CO_2 emissions, yet maintaining its competitiveness in international markets: this represents not only one of the three pillars of the Europe Strategy 2020, but also one of the focuses of the European Regional Development Fund.
Moreover, Circular Economy also has positive effects on society, education, health conditions of the population, and the creation of new and better job opportunities for European youth and adults[2].

Also, the Action Plan aims at Goal 12 of the UN's SDGs -i.e. Ensure sustainable consumption and production patterns. Those interventions are part of the values of the 1.000 million euros plan for the Green Deal promoted by the EU, aimed at defeating climate change for the whole continent by 2050, thanks to a positive transition to inclusive and fair zero-impact production schemes.

1.1.2 Circular Economy in production and consumption systems

The Circular Economy model must be relevant throughout the entire lifecycle of the product: from the project layout -which affects the supply of the resources and materials, to the use of the product itself, as well as monitoring the generation of waste during the whole production and consumption cycle.
At the same time, consumers' choices can affect the success of the Circular Economy in positive or negative ways. Although those choices should be concerned with minimizing household waste, they strongly depend on the set of information that consumers have, as well as on the range of products on the market, their prices, and the normative aspect concerning Circular Economy.
However, imposing the transition from a destructive economy towards the Circular Economy would be counterproductive if not approached from a global perspective: our continent is a pioneer in this area, though a rapid, short-term plan would likely affect the competitiveness of European products in the international market. That is why the EU is working to regulate Circular Economy through normative actions in the Educational sphere while integrating all stakeholders.

1.2 The Blue Economy

The concept of Blue Economy appeared in the early 90s when Belgian entrepreneur Gunter Pauli founded Zeri (Zero Emissions Research and Initiatives), a network of successful entrepreneurs dealing with environmental issues: the expressions referred to sustainable business models that could have a positive long-term impact on seas and oceans.
The Blue Economy interests all sectors directly or indirectly concerned with the sea and, therefore, includes fishing and fish processing -i.e. the most intuitive ones- as well as the reuse of fish processing waste and the shipbuilding industry.
The dangers of an unhealthy marine environment -i.e. reduction of the marine biodiversity, habitat destruction and degradation, sea and ocean acidification, piling of marine debris, and temperature rise- are no longer a secret: effective policies promoting the use of recyclable materials, as well as the adoption of circular business models

which include the reuse of products, packaging, and scraps, however, could curb the effect of such dangers.
The fact that 90% of the fishery reserves are either overexploited or used to their maximum limit, markedly damages the sustainability of the marine ecosystem. Moreover, fish is one of the largest sources of livelihood for 20% of the global population and represents the only source of protein for some. Besides, its demand is rising in what we call *emerging markets*[3]. The fishing industry is, therefore, one of the most productive ones and, as such, it does, indeed, require a more substantial effort in the adoption of sustainable production schemes; such measures should be regulated at, both, the national and supranational level for two reasons: the lack of borders at sea, as well as the global dimensions of the phenomena.

On the other hand, because the transition towards sustainable practices would involve long-term financial strategies as well as short-term aid for enterprises, it would undoubtedly require an effort from the international economic community. However, "OSCE predicts that the Blue Economy will overperform the overall global economic growth creating an added value from an economic and an occupational perspective"[4].
The above-mentioned shift from destructive production and consumption processes to conservation and regeneration-driven paradigms, however, requires an effort on both sides of the spectrum: that is why the transition will mainly concern the cultural sphere involving both producers and consumers.

1.2.1 EU strategies and the Blue Economy

The introduction of the Blue Economy in the EU agenda dates back to September 2012, and thus, precedes the Circular Economy. It employs 5.4 million human resources, and it generates almost 500 billion euros gross per year as an added value, though some sectors also have a growth potential.
The strategy outlaid by the EU is structured in three items with three sub-sections each one, divided as follows[5]:

1. Specific measures for integrated marine policies.
   a. Oceanographic knowledge to facilitate access to information regarding seas and oceans,
   b. Planning maritime space to guarantee effective and sustainable management of maritime activities,
   c. Integrated marine surveillance to allow the authorities to have a complete overview of maritime space.
2. Strategies for sea basins to secure the best possible measures for the promotion of sustainable growth considering climatic, oceanographic, economic, cultural, and social factors for all the Community basins:
   a. The Adriatic Sea and the Ionian Sea,
   b.The Arctic Ocean,
   c. The Atlantic Ocean,
   d. The Baltic Sea,
   e. The Black Sea,
   f. The Mediterranean Sea,
   g. The North Sea.
3. Shape and personalize the approach for each activity:
   a. Aquaculture,
   b. Coastal tourism,
   c. Marine biotechnologies,
   d. Ocean energy,
   e. Deep-sea mining.

The following industries have been identified as the five heralds for generating value:

1. Blue Energy,
2. Aquaculture,
3. Cruise, maritime and coastal tourism,
4. Marine mineral resources,
5. Blue biotechnology.

Those areas, however, shouldn't be considered permanent, as future IT developments will likely enable the implementation of a new strategy and new economic assets.

2. A QUANTITATIVE ANALYSIS OF THE LABOUR MARKET IN THE ITALIAN AND MATESE ECONOMIC SYSTEMS

2.1 An Overview of the Sicilian and Maltese Economic Systems

Comparing the economies of Malta and Sicily is not an easy task for many reasons -i.e. population, institutional systems, urban development. However, their common ground as EU members, their proximity, collocation, and frequent exchanges make it easy to imagine a complete integration between the two systems.
Please find attached the statistical tables for details concerning the methodology adopted in the study.
This study started before the incidence of the global COVID-19 pandemic that, we believe, will have negatively affected all the EU social-economic assets, thus also Italy's.

2.1.1 The Sicilian Economic System

To give an overall picture of the island's economy, we need to start by considering the non-so bright EU annual report on regional competitiveness[6].

	score (EU28=0)	peers comparison
Basic dimension	-0.48	
Institutions	-1.45	
Macroeconomic Stability	-0.57	
Infrastructure	-0.38	
Health	0.40	
Basic Education	-0.39	

	score (EU28=0)	peers comparison
Efficiency dimension	-1.55	
Higher Education and lifelong learning	-1.82	
Labour Market Efficiency	-2.08	
Market Size	-0.76	

	score (EU28=0)	peers comparison
Innovation dimension	-0.90	
Technological Readiness	-1.38	
Business Sophistication	-0.41	
Innovation	-0.90	

Overperforming with respect to its peers
Similar to peers
Underperforming with respect to its peers

Figure 1 Retrieved from RCI Score Cards, Sicily ITG1

From the above chart, we see that Sicily not only places 241st on 268 -and 230th for GDP per capita, EU28- yet it scores among the lowest compared to both Europe and the benchmark regions -i.e. those with 2 out of 5 development points[7]. The island falls behind in all the basic categories, from institutions and infrastructures to education and the job market. However, one aspect stands out: the quality of healthcare, which success, we presume, is a direct product of the national healthcare system.

The following table shows the overall value generated by the local economy, followed by a second table reporting figures (related to the same categories) concerning the comprehensive national value-added[8].

Table A. Value-added on current prices per industry, Sicily

Value-added on current prices in Sicily (Meuro)	2016	2017	2018
Total economic activities	77.836,6	79.273,9	79.825,6
Agriculture, forestry, and fishing	3.061,2	3.258,9	3.077,8
Vegetable and animal production, hunting and services in the supply chain, forestry	2.838,8	3.075,7	..
Fishing and aquaculture	222,4	183,2	..
Mining, manufacturing, electricity supply, gas, steam, air conditioning, waste processing, refurbishment, and construction	10.189,2	10.140,8	10.540,0
Mining, manufacturing, electric energy supply, gas, steam, air conditioning, waste processing, and refurbishment	6.912,5	6.983,9	7.273,7
Mining	115,1	123,5	..
Manufacturing	4.565,2	4.573,4	..
Food, beverage, and tobacco industry	1.089,9	1.087,2	..
Textiles and tailoring of clothing, leather goods, and other	130,9	120,1	..
Woodwork, pulp and paper, and the publishing industry	281,8	250,3	..
Oil refinery and coke derived products, chemical and pharmaceutical production	874,7	923,7	..
Rubber and plastic products, and other non-metal derived products	485,4	464,3	..
Metallurgic activities, production of metal products except for tools and machinery	422,8	413,3	..
Production of computers, electronic and optical devices, electronic equipment, and production of uncategorized machinery and equipment	562,9	608,1	..
Production of means of transport	155,1	133,6	..
Carpentry, other manufacturing industries, refurbishment and installation of machinery and equipment	561,7	572,7	..
Electricity, gas, steam, and air conditioning supply	1.208,1	1.213,2	..
Water supply, sewerage system, and waste processing and recovery activities	1.024,2	1.073,7	..
Construction	3.276,7	3.156,9	3.266,3
Services	64.586,2	65.874,2	66.207,7
Wholesale and retail businesses, automotive and motorcycle repair, transport and stoking, hospitality, information and communication services	18.237,9	19.103,6	18.934,5
Wholesale and retail businesses, automotive and motorcycle repair, transport and stoking, hospitality, information and communication services	16.764,7	17.468,2	..
Wholesale and retail businesses, automotive and motorcycle repair	9.480,7	9.873,6	..
Transport and stocking	4.327,0	4.487,3	..
Hospitality	2.957,0	3.107,3	..
Information and communication services	1.473,2	1.635,4	..
Financial and insurance activities, real estate, professional activities, scientific and technical businesses, administration, and support	20.956,3	21.300,1	21.224,1
Financial and insurance activities	2.831,6	2.764,4	..
Real estate	12.640,5	12.839,6	..
Professional activities, scientific and technical businesses, administration, and support	5.484,1	5.696,1	..
Professional activities, scientific and technical businesses	3.682,3	3.807,6	..
Administration and support	1.801,9	1.888,5	..
Public administration, public defence, mandatory social insurance, education, social assistance, healthcare, art, entertainment, household goods repair, other services	25.392,0	25.470,5	26.049,2
Public administration, public defence, mandatory social insurance, education, social assistance, healthcare,	21.586,1	21.783,6	..
Public administration, public defence, mandatory social insurance	9.431,4	9.466,7	..

Value-added on current prices in Sicily (Meuro)	2016	2017	2018
Education	5.572,6	5.615,2	..
Healthcare and social assistance	6.582,1	6.701,6	..
Art, entertainment, household goods repair, other services	3.805,9	3.686,9	..
Art, entertainment	1.033,1	1.025,7	..
Other services	1.742,0	1.691,5	..
Family-employed caregivers, family-based production of goods and services for self-consumption	1.030,8	969,6	..

Table B. Value-added on current prices per industry, Italy

Value-added on current prices in Italy (Meuro)	2016	2017	2018
Total economic activities	1.522.917,1	1.557.832,8	1.583.357,5
Agriculture, forestry, and fishing	32.702,2	34.109,9	34.256,5
Vegetable and animal production, hunting and services in the supply chain, forestry	31.691,3	33.178,8	..
Fishing and aquaculture	1.010,8	931,1	..
Mining, manufacturing, electricity supply, gas, steam, air conditioning, waste processing, refurbishment, and construction	359.935,0	369.230,9	377.856,4
Mining, manufacturing, electric energy supply, gas, steam, air conditioning, waste processing, and refurbishment	294.336,4	304.035,4	311.062,1
Mining	3.649,3	4.144,5	..
Manufacturing	250.915,1	259.627,0	..
Food, beverage, and tobacco industry	27.913,3	28.060,8	..
textiles and tailoring of clothing, leather goods, and other	24.437,4	25.171,9	..
Woodwork, pulp and paper, and the publishing industry	15.019,7	15.104,4	..
Oil refinery and coke derived products, chemical and pharmaceutical production	23.813,5	24.615,6	..
Rubber and plastic products, and other non-metal derived products	22.429,7	23.208,9	..
Metallurgic activities, production of metal products except for tools and machinery	38.412,1	40.283,7	..
Production of computers, electronic and optical devices, electronic equipment, and production of uncategorized machinery and equipment	55.411,1	57.270,6	..
Production of means of transport	21.191,4	23.319,8	..
Carpentry, other manufacturing industries, refurbishment and installation of machinery and equipment	22.286,8	22.591,3	..
Electricity, gas, steam, and air conditioning supply	23.966,4	24.412,4	..
Water supply, sewerage system, and waste processing and recovery activities	15.805,6	15.851,5	..
Construction	65.598,6	65.195,5	66.794,3
Services	1.130.279,9	1.154.492,1	1.171.244,5
Wholesale and retail businesses, automotive and motorcycle repair, transport and stoking, hospitality, information and communication services	378.306,6	392.600,7	398.488,8
Wholesale and retail businesses, automotive and motorcycle repair, transport and stoking, hospitality, information and communication services	320.912,9	333.259,8	..
Wholesale and retail businesses, automotive and motorcycle repair	178.670,1	186.202,2	..
Transport and stocking	84.964,7	86.747,2	..
Hospitality	57.278,1	60.310,4	..
Information and communication services	57.393,7	59.340,9	..
Financial and insurance activities, real estate, professional activities, scientific and technical businesses, administration, and support	433.960,2	440.159,9	444.941,1
Financial and insurance activities	80.953,7	78.038,1	..

Value-added on current prices in Italy (Meuro)	2016	2017	2018
Real estate	207.395,1	210.645,2	..
Professional activities, scientific and technical businesses, administration, and support	145.611,3	151.476,7	..
Professional activities, scientific and technical businesses	97.465,4	99.875,4	..
Administration and support	48.146,0	51.601,2	..
Public administration, public defence, mandatory social insurance, education, social assistance, healthcare, art, entertainment, household goods repair, other services	318.013,1	321.731,4	327.814,6
Public administration, public defence, mandatory social insurance, education, social assistance, healthcare,	255.375,9	257.867,4	..
Public administration, public defence, mandatory social insurance	100.661,0	100.791,0	..
Education	63.365,9	64.328,0	..
Healthcare and social assistance	91.349,0	92.748,4	..
Art, entertainment, household goods repair, other services	62.637,2	63.864,1	..
Art, entertainment	17.669,0	17.850,5	..
Other services	26.528,2	27.909,7	..
Family-employed caregivers, family-based production of goods and services for self-consumption	18.440,1	18.103,9	..

The comparison of the two tables brings to light the marginal entity of the former compared to the latter. Moreover, it shows the inability of the island to generate added value, notably with regards to the advanced sectors: such data is evidence of the fact that structural interventions are needed to balance out old discrepancies within the system and be able to thrive.

Surely, Sicily's economy represents a symbol of what Italians call "*La Questione Meridionale*" (the Southern Question), which first appeared in the early years of the Italian unification of 1861. Policies by the EU, the state, and the region haven't been entirely successful in solving the issue because of the deep reasons behind such a backward and underdeveloped economy.

Furthermore, the overall Community downturn -which mostly affected the end of last year (2018)[9]- slowed down the island's economy as well as the comprehensive national system throughout the whole of 2018.

From a **corporate** perspective, the steep decline in productivity represents a large gap between the island and the national average, affecting each industry.

The emergence of value-added is served by the sole industrial sector, which, however, is in decline since 2017.

The service industry halted its expansion, whereas the construction sector is suffering a severe recession from a GDP perspective, as well as a decline in the number of organizations, despite the high number of open tenders issued in the last years: it is the lengthy gaps between the steps of the projects that negatively affect the organizations.
On a positive note, export has grown in all major branches of the regional specializations.
Overall, the financial and economic conditions of Sicily's enterprises have improved since 2008's crisis: the reasons rely on an increased generation of revenue for self-financing and a reduction of the trend of resorting to financial leverage, due to difficult access to credit.
For what concerns the **labour market**, the regional occupation rate remains stable since 2017, mainly due to the lack of employment in the service industry.

However, the employment level is still the lowest among Italian regions, and the rehabilitation into the job market appears remarkably reduced after the loss of employment: indeed, an unemployed in Sicily has fewer probabilities of finding a job after a year of unemployment, compared to other regions of Italy. Surely, the above data affects **household** income. Consumption and revenue are growing steadily, yet slowly. Moreover, in absolute figures, the geographical distance with the most developed areas of the EU -and of the Country itself- constitute a relevant aspect.
The consumption of goods didn't halt completely, thanks to personal savings, though, there are strong perplexities for what concerns future predictions: indeed, growth in Sicilian households has been lower compared to the national landscape, and appears to be more linked to the financial paradigms than the production processes.

It's relevant to spend some words concerning the **public administration** for the sake of this argument. Although expenditures have remained stable overall, they lost qualitative value: in fact, the rise of current expenses has been balanced out by an unwelcome contraction of capital expenditures (CAPEX). Among the most frequent entries, we find the regional healthcare services in which pharmaceutical expenses have grown the most, alongside personnel expenditures.
From a **production** perspective, the 2008 crisis -triggered by the collapse of the US financial market due to subprime mortgages- caused a dramatic reduction of the regional added value (-13.7% between 2007 and 2014) which, compared to the national average of -7.7%, is almost double the figure.

At the same time, the underdeveloped economic and productive systems of the region didn't allow a prosperous recovery (only 1.4% in 2014 and 4.6% in 2018). Indeed, the production level of the island in late 2018 was still 12.3% less than pre-crisis figures -much worse than the national average.

Thanks to careful analysis, we can outline the reasons behind such contraction and the fracture between Sicily and the national average:

1. A steeper decline in employment numbers;
2. A decreased level of the productivity of existing jobs;
3. Reduced growth of the population.

Out of the three points, the last indicator is the most affected by the population, as well as a minor incidence of migrants compared to the rest of Italy -especially for what concerns qualified 25 to 44-year-olds with completed post-16 education or higher. This data is crucial in assessing the development gap because it is the loss of human capital (the so-called brain drain) that's causing Sicily to lose its productive potential.

However, data is uneven if we compare different sectors together: manufacturing, for example, had a significant decline during the crisis, but a good rise during the recovery phase; in agriculture, instead, no recovery has been recorded; whereas, the construction and the service industries have registered no substantial changes in neither of the phases -i.e. during or after the crisis.

The average size of the production plants compared to the national average also seems relevant to the discussion: recent regional-based data from ISTAT (the Italian National Statistics Institute) shows that 96.5% of the plants employ less than ten workers, whereas the average number of workers per local unit is of 2.7, with a national average of 3.5.
Although the difference diminishes in larger-sized establishments, the average production level of Sicily's local units is 29.2 percentage points less than the national average.

Once more, the service industry displays poor development of advanced service, displaying a higher productivity gap than in the manufacturing industry.

It is the whole region to be concerned with low productivity: around 40% of local municipalities are among the lowest ranks in the national production distribution, whereas only 5% places in the first quintile.

The **production industries** usually mirror the struggles of the socio-economic context: during 2018, for instance, agricultural production was reduced by 4.9% at current prices[10].

The ground surfaces dedicated to traditional crops -i.e. cereals and vegetables- have been reduced. At the same time, nevertheless, the 2017 recovery, the harvest of olives and the production of citrus (the symbol of the region's agri-food production) have decreased as well.

The only growing branch of the primary sector seems to be viticulture, especially for what concerns PDO and PGI variants. This sector can rely on the financial support of the Rural Development Plan (RDP) thanks to a total of 2.2 billion euros, co-financed by the European Community. The completion rate of the plan was over 26% on 12/31/2018. The figure was in line with the southern standard and slightly under the national average.

The 3.45% rise of the value-added in the **industrial sector** in 2017, dropped to 1.8% in 2018[11] -in line with the national standard. This data was confirmed by the annual INVIND (Industrial and Services Sector) study conducted by the Bank of Italy in 2018[12], which showed that, after a feeble spark in the previous year, the revenue at constant prices cessed completely.

A better faith was registered for medium-sized companies (more than 50 workers) and for those with export businesses. It's reassuring to see that expenditures for investments have been growing steadily since 2016: the best performances, however, are registered in larger enterprises.

Although the service industry is the most prosperous for what concerns the generation of added value, the sector slowed down during 2018: the reduction of private consumption caused the modest growth of 2016 and 2017 to stop.

Apart from financial services, the **trade** branch[13] is the utmost player in the industry. In 2018, however, the revenue of the sector came to a rest. It has been under transformation ever since the implementation of community regulations concerned with market liberalization, as well as the economic crisis.
According to the last available distributed statistics, the trade industry accounts for 12.3% of the regional value-added, in line with the national and community averages: retail businesses surpass the national counterpart by more than 50 percentage points, whereas Mass Market Retail's (MMR) figures are slightly lower than the national figures.

Although the average size of the local unit for retail businesses has grown to a little under ten workers, and it implies around 75% of the overall sectoral workforce, it is still below the national average.

In 2017 Sicily still strongly relied on local retail, however, mid to bigger-sized activities are becoming increasingly relevant, though the 2017 MMR store size to population ratio was lower than in the south-central region and the national average.

The **tourism industry** has been growing steadily over the last ten years. The natural and cultural assets of the region are among the main reasons behind such growth. The improvement of air and waterborne connections, on the other hand, helped support the expansion as well.
The latest consolidated data of the regional offices[14] show that, in 2018, the presence of tourists grew

by 2.9% (in decline compared to the +7.3% of the previous year). Incoming foreign tourists seem to have increased as opposed to national tourists. Furthermore, the most significant growth has been registered in the cities of Palermo (+10.3%) and Ragusa (+13.2%).

Like other Italian regions, non-hotel facilities have recorded higher growth levels compared to hotels. This trend has brought the hospitality industry to adapt to the new lodging options linked to the rise of the sharing economy model over the last years.

Considering equal lengths of stay, the average spending[15] for foreign tourists has decreased, confirming the trend of the previous years.

In 2019, *Assoeroporti*'s[16] (Italian association of airport managers) data show that air passenger traffic in Sicilian airports has increased by 3.8%. Such an increase was mostly affected by international flights and layovers in Palermo. The city of Trapani, on the other hand, has suffered a reduction of operating flights. The city of Catania, instead, confirms its position as the prime air transport hub.

Also, the decreased local tourism and the reduction of ferry rides affected waterborne passenger travel, while cruise ship traffic has maintained its growth (which accounts for almost 8% of the maritime traffic).

Waterborne cargo transport is also facing a contraction (-6%), one which can be attributed to the reduction (over 65%) of liquid bulk cargo-mainly oil-based products. For what concerns intermodal transit, ro-ro transport has shown a slight growth compared to container traffic, which is not as used on the island.

Between the years 2000 and 2017, Sicily offered tourists over 60% more beds than in the previous years, which, compared to the overall national growth, resulted more than doubled. Nevertheless, the supply in the tourism department is still lower than the national average: a little over 400 beds per 10,000 inhabitants, against over 800 beds as the overall national average of 2017.

Low-cost hauls allowed for smaller non-hotel structures to grow more (i.e. B&B) which account for 60% of the structures and 25% of the beds in the non-hotel department (national average of, respectively, 20% and 6%), whereas all-inclusive resorts and camping sites have decreased drastically.
During the same timeframe, the island's hotel industry confirmed the growing trends, recording an increase of 50% in the number of hotels and a 57.9% increase in the number of beds. The success of the tourism sharing economy has pushed hotels to shift their offer towards higher-end services: indeed, over 55% of the beds in the hospitality industry in 2017 were provided by 4 and 5-star hotels -which is almost triple compared to the year 2000, and over 17 percentage points more compared to the national average.

In absolute figures, the total number of activities for lodging services in the hospitality industry in 2016 was 2,750, and it employed around 12,500 workers. In the same year, the hotel industry accounted for one-third of the overall lodging structures and two-thirds of the employment against the national average of, respectively, 47% and 75% -considering that the average size of Sicilian's hotels closely resembles the overall national average. The non-hotel department, however, sees a reduction of the employability and average size.

The growing offer of the last years has consequently reduced the gross occupation index number (i.e. the number of stays per number of available beds ratio), which measures the level of consistency between the supply and the demand, as well as giving an idea of the internal market. In the year 2000, the figure

amounted to 40.6% in Sicilian structures and 34.4% as the national average. In 2017, the percentage dropped to 26.1%, whereas the overall national level was almost the same. These figures are evidence of a possible craze generated around tourist services in that period.

Like in the rest of the *Mezzogiorno* region (Southern Italy), the occupation rate is usually very modest during winter, whereas it reaches the peak season during the summer: this represents a seasonality issue that is yet to be overcome. On a monthly basis, however, the rate seems more constant, and the reasons behind this are attributed to two main factors: cultural travel, and the extension of the tourist season -which now starts in mid-April and ends in mid-October.

For what concerns **foreign markets**, the recovery trend of 2017 continued in the following year, recording a 15.3% increase for current prices.

The first nine months of 2019[17] had a fluctuating tendency, with a contraction over the first two quarters and a recovery in the last quarter. By comparing 2017 data with 2018 -i.e. the last-available year-round record- we find no significant change in the export of either oil or non-oil products. The many refineries make the petroleum industry one of the most performing for the region.
Non-oil industries performed above average in the electronics sector, whereas the agri-food department recorded a weaker growth compared to the previous year (2.6% against 5.2%) caused by a lower production rate.

For what concerns end markets -represented by the USA and the Eurozone-, exports registered an increasing trend in the EU, whereas it's decreasing in non-EU markets, compared to 2017.

The contraction in the production of oil products caused exports to decrease in France (-17%), which represents the first commercial partner of the region. Nevertheless, exports towards the USA and North Africa show an increase, whereas Asian imports decreased as well, especially for what concerns the Middle East.

2.1.2 The Maltese Economic System

2.1.2.1 Introduction

Malta joined the European Union (EU) in 2004 along with five other Central European States, three Baltic countries and Cyprus. It was a time of adjustment for all these countries for different reasons.
Malta submitted its application to join the European Union in July 1990. The authorities were fully aware of the need to restructure and modernise the economy in preparation to integrate with the European single market after membership. It started with a programme overhauling public utilities. This was followed by a programme of government divestiture from ownership of economic activities not strictly related to the government's primary functions of planning and regulation.
Industry in Malta had operated for a long number of years behind a wall of high tariffs and quotas providing considerable protection from foreign competition. The level of tariffs was phased out over a period of five years apart from the shipbuilding and ship repair where a ten-year programme was introduced for the industries to turn to profitability. Firms operating in basic value operations such as textiles, clothing, and footwear were closed or relocated to North Africa. Other firms operating simple, basic processes to produce industrial goods were no longer deemed to be viable.

A new investment package to attract foreign firms to Malta was introduced. The results were slow at first but with the prospect of Malta's joining the European market, these intensified with new industries attracted to the country in automotive parts, medical devices, edible preparations, toys and games and many others.

It could be seen the fifteen years prior to membership of the EU were a time of constant change for Malta. Despite the significant changes as a result of the economic restructuring and modernisation, the Maltese economy grew at an accelerated rate. The collective impact of public and private investment; the creation of new industries together with the demand for more productive and higher paid employment brought in its wake a sense of regeneration in the general public.
Since the global recession of 2008-9, Malta registered a more favourable economic performance than most other euro area countries. It was slow for a few years, but it started to gain ground around the year 2012. It is difficult to reconcile Malta's relatively high rate of economic growth with the openness of a small economy facing a hostile external environment. However, this divergent performance could partly be explained by the pronounced structural changes that occurred in the Maltese economy in the years preceding the crisis, which gave a new impetus to the economy.

At the same time, the emergence of a swathe of new service sectors, catalysed the economy into a much higher potential output. The boundaries of the economy were pushed outward and could absorb much higher levels of activity.
In order to make a better assessment behind these developments, one can analyse a number of aggregate data. There are a number of ratios to Gross Domestic Product which could be used to assess the extent and strength of the changes made in the process. An element of benchmarking will be used to better reflect the extent of the changes.
Please find detailed tables in the statistical annex, Maltese economic structure section.

2.1.2.2 GDP trend

The measurement of Gross Domestic Product (GDP) in real terms is a favourite with most economists even though it is acknowledged to be flawed. The GDP encompasses all captured data related to output, expenditure and income. Some data is certainly not captured or left with gaps in relation to the extent of the use of cash-based economic activities.

Table 01 provides data published by Eurostat on the GDP and its main components for the years 2010 to 2018 (the last full year the data has been compiled) based on chain linked volumes for all twenty-seven Member States (MS). The chain linked basis helps to simply the comparison.
Countries which fared badly during the recession of 2008 to 2009 emerged with strong output. Soon after the end of the recession in 2011, Malta registered a GDP growth rate which was ranked a joint nineteenth with Denmark among the MS. Malta's GDP rate was lower than the average for all MS.
It started to change soon after. Its rate of economic growth claimed the top position in 2014 overtaking even the breath-taking advances of the Baltic States and remained in second place at 159.3 in 2018 just behind the Irish economy. Malta's economic growth was consistently strong. The rapid expansion in Malta's GDP largely reflected the increase in the relevance of the services sector to the economy. The full impact of the new sectors such as financial and internet banking took hold at the same time that the tourist sector went through another sharp trajectory. These will be discussed at a later stage.
Preliminary estimates from the Eurostat for 2019 indicate the chain linked volumes for the GDP for Malta is estimated at 166.0 which compares extremely favourable to other partial data.

The second yardstick to be used to assess the structural development of the Maltese economy is closely related to the first. It is called the GDP per capita in purchasing power standards. **Table 02** provides the volume index of the GDP expressed in relation to the EU average set to equal 100. If the index of a country is higher than 100, the country's level of GDP per head is higher than the EU average and vice-versa. Basic figures are expressed in purchasing power standards, that is, a common currency that eliminates the differences in price levels between countries.
Malta's GDP per capita in 2010, stood at 84.6 well below the European average of 100. It stood in fifteenth place jointly with Slovenia among the MS. The top position at 260, that is more than two-and-a-half times the EU average was held by Luxembourg well ahead of the Netherlands at 134. The most recent figures for 2018 show Malta's standing rising to 98.3, very close to the EU average at 100, and moving up to the eleventh position overtaking Greece, Italy, Spain and Cyprus.
The table highlights the progressive development of the economy in the last six years. The authorities used EU and national funding to modernise the infrastructure and spruce up the national heritage. It internationalised Malta's medical services; sought an early position in artificial intelligence and blockchain technology and tied its passport services with domestic investment.

There were two important factors which need to be addressed. Following the sharp recession of 2008-09, it was noted there were regions which were left practically unscathed by the international recession or fared with minimal negative impact such as parts of Asia and Africa.
The second factor was the ramping-up of the domestic services sector due to local and international considerations. Following the successes of the first internet gaming companies in Malta, a number of other big firms in the industry relocated part of their operations locally. The vast financial credit lines created by several central banks to stave-off an international banking collapse needed to be recycled. The financial markets entered into a massive lucrative business in recycling trillions of credit issued by the respective central banks. Malta's financial institutions were well positioned to become a small niche in that market.

These factors in combination catapulted a small, open economy like Malta into very high growth rates for successive years and helped to close the gap with the EU average within a short time-frame.
Table 03 also published by Eurostat provides data on the real GDP per capita in euros. The GDP per capita in real terms for MS stood at around €25,000 in 2010. It stalled for two of the first three years and took off from 2014 onwards reaching €27,600 by the end of 2018.
Malta managed a growth rate of 36 percent during the same nine-year interval starting from €15,900 in 2010 reaching a per capita level of €21,700 in 2018. There was a further increase last year. Malta's position moved up two places in the list of MS reaching fifteenth position.
There are two basic elements in the calculation of the GDP per capita which need to be assessed. One, is the population increase and the other is the impact of inflationary prices.
Eurostat publishes the total population for MS as of January each year. The population of the EU increased by 1.4% in the past decade rising from 440.7 million in 2010 to 446.8 million last year. More than 85% of the population increase was accounted for by four countries namely, Belgium (0.7 million), Germany (1.2 million), France (2.3 million) and Sweden (0.9 million). The rest of the MS had smaller increases or even declines. Both Luxembourg and Malta had relatively large percentage increases in their respective populations: 20% to 600,000 in the case of Luxembourg and 25% to 0.5 million for Malta. In numerical terms, the increases in population in both countries were deemed negligible.

A rise in population increases the denominator with the effect the resultant GDP per capita result is smaller. A rise in population has a complex impact on the national economy. It creates its own demand for goods and services resulting in higher GDP. Depending on the level of skills of the foreign employees,

the resultant GDP would be enhanced provide their levels of income are higher than average.
In the case of Malta, the influx of foreign workers certainly had a positive impact on GDP growth in view they were recruited for the financial and internet gaming sectors with higher than average salaries. Other foreign workers with low skills and employed in some services sectors such as construction, home maintenance and the hotel industry, may have contributed to GDP at lower level than average.
The authorities in Malta believe the influx of foreign workers is essential to maintain Malta's economic expansion.
The other element influencing the rate of growth in the GDP per capita is the rate of inflation or the way it is measures in the EU as the Harmonised Index of Consumer Prices (HICP).

Table 05 on the Contributions to the Retail Price Index (RPI) provides details on all the sub-sectors for the past 5 years. The RPI fluctuated between 1.0% in 2016 and 1.3% last year. The major contributors to the rate of inflation were food and non-alcoholic beverages, education and, to some extent, energy.
Food inflation is mainly driven by developments in the prices of fresh fruits and vegetables particularly due to seasonality and weather conditions. Education in Malta is free at government schools but paid for in private schools. The cost of energy has averaged around 1.9% in the past 5 years compared to the overall RPI of 1.2%. Energy consumption is partly influenced by the production of edible water through a process of reverse osmosis in view there is limited rainfall and water reserves are low compared to other countries.
The rate of consumer inflation in Malta has largely converged with that of the average for the EU based on the HICP in **Table 06**.

2.1.2.3 Unemployment Rate

Details on the unemployment rate in the EU are provided in **Table 07**. Malta's unemployment rate in 2008, before the international recession, stood at 6.0% behind Bulgaria, Czechia, Denmark, Estonia, Cyprus, Lithuania, Luxembourg, Netherlands, Austria, Romania and Slovenia. The corresponding turnaround in the economic fortunes around the world pushed the rate of unemployment at varying times to a more acceptable level with the EU average declining to 6.8% by the end of last year. The economically benign international environment and the Maltese government's drive to promote new industries and services pushed the local economy to new heights bringing down the unemployment rate to 3.5% percent, their lowest levels since 1995. As a result, Malta's unemployment rate last year had improved to fifth position after that of Czechia, Germany, Netherlands and Poland.

Table 08 provides data on Employment Rate by Age group 20-64 based on the EU Labour Force Survey. The European Commission set targets for each MS on their employment rates for 2020. In the case of Malta, the target for the employed persons as a percentage of total employment was set at 70%. Malta's employment rate was last calculated at 75.5 in 2018, four years ahead of schedule.
The increase in female employment was facilitated by a number of government initiatives aimed at increasing the participation rate of women in the labour market. Measures include back-to-work fiscal incentives for women, new income tax computations, an increase in maternity and adoption leave, tax credits for self-employed and exemptions of means-testing for income earned by women working part-time. Self-employed women working on a part time basis, as in the case of employed persons, were given the opportunity to choose to pay a 15% pro rata contribution on their income. Childcare facilities were made more available and affordable. A number of public child care centres were introduced and their operational hours extended to be more effective for working parents. The introduction of after-school care services in a number of schools also helped to bridge the gap between day school and regular

working hours of parents in employment. Other initiatives were targeted to provide care for children before schools' official opening hours to allow additional flexibility to working parents.

2.1.2.4 Consumption

Table 09 on final consumption expenditure of households and non-profit institutions serving households for the years 2008 to 2018 provides an insight into the expenditure patterns of households. Private consumption expenditure in Malta in 2008 stood at 58.8 percent of GDP, higher than the European average at 54.9 and above the mid-point of the EU range of 45.1 percent for Sweden and 67.4 percent for Greece if one had to exclude the data for Luxembourg as it stands way out of the range.
The rate of consumption expenditure of households in Malta fluctuated for a couple of years but it steadily declined as from 2013 as the economy surged and the level of unemployment declined continuously. The consumption outlays declined all the way down to 43.6 percent of GDP by 2018 well below the European average of 53.4. This means that consumption expenditure of households in Malta was not growing as fast as the rate of growth of GDP.

Table 10 on the final consumption expenditure of general government as a percentage of GDP provides details of the public sector outlays for the years 2008-18 inclusive. The consumption expenditure of general government in Malta has been consistently lower that the average for the EU. At 16.2 percent of GDP in 2018, the general government consumption expenditure in Malta was the third lowest among MS with only Ireland at 11.9 percent of GDP and Cyprus at 14.9 percent experiencing lower rates.

Table 11 on the gross fixed capital expenditure (investments) as a percentage of GDP for the years 2008-18 inclusive provides details on resident producers' acquisitions less disposals of fixed tangible or intangible assets. No data is published on private savings in Malta.
The government's investment expenditures fluctuated significantly over the years within a range higher or lower than the European average. Capital expenditure in the private sector is influenced by a number of factors. The economic environment in the country is of paramount importance as this is likely to influence the final demand. The cost of credit is very low indeed for those firms with the appropriate credit rating. As a result, it is likely Malta will continue to rely on occasional bursts of capital expenditures in some years as the implementation of the infrastructural plans are intensified followed by other lean times.

2.1.2.5 Balance of payment

The current account provides information about the transactions of a country with the rest of the world. **Table 12** provides data on the current account of the balance of payments of all MS for the years 2008-18 inclusive. The table does not include data for the EU. But one should note, the region collectively is renowned for its high current account balances with the rest of the world. Several countries have very well developed export markets based on long traditions of dealing with foreign countries going back several centuries.
In 2008 and prior to the start of the recessionary period, Malta faced a deficit in the current account. Malta's trade in goods has always been hugely negative as imported most of its needs for processed goods, fruits and meats, machinery and al sorts of supplies. It relied to a large extent on net income from tourism, and more recently, net exports of electrical machinery, to offset its imbalances in its trade in goods with the rest of the world.

The shift in the provision of services other than tourism enabled the country to narrow the imbalances in its foreign transactions. The setting up of financial, maritime and logistical services and internet gaming at a later stage, started to shift the foreign balances to Malta's favour.
The turnaround in the current account of the balance of payments occurred in 2013 with a surplus of €11.2 million or 0.1 percent of GDP. The surpluses grew quickly and strongly in the following years and developed into double-digit figures as a percentage of GDP. These surpluses were second only to the Netherlands in 2017 and third behind the Netherlands and Ireland in the following year. The ever growing contributions from the services sector more than offset the deficits arising from traded goods.

Table 13 provides details of Malta's trade in goods by major commodity groups for the past five years. On the import side, the largest commodity group is machinery and transport equipment. This includes the raw and semi-finished goods for the manufacturing industry as well as imports of commercial and business aircraft. Other imports include chemicals semi-manufactured goods, tobacco and beverages.
Maltese exports are largely made up of energy, machinery and transport equipment, edible foods, toys and games, medical instruments, chemicals among others. It may seem strange for Malta to export mineral fuels in view it has no mining of any sort. Malta, however, managed to create a two-way traffic in trade in mineral resources as it imports large volumes well in excess of its consumption needs and re-exports the surpluses.

Table 14 on the Current Account Geographical Breakdown provides details on the geographical spread of the current account. In the trade in goods, invariably Malta faced very large net deficits over the years largely sourced from the EU. In 2018, the net deficit in the trade in goods reached €1,154 million mostly sourced from the EU. Malta imports more than twice as much as it exports to the EU. Trade in goods with non-European countries was almost balanced with a net deficit of €57 million. One should note, Malta exports far more manufactured and processed goods to the rest of the world than to European countries. This means that an economic slowdown in the EU would not affect the Maltese economy as it would have been in the past. Malta is partially shielded from the economic fallout in Europe particularly in view the Asian economies tend to remain relatively buoyant in times of hardship.
The services sector surged in the past thirty years or so. It started from a low base but gradually expanded and spread worldwide. Funds management grew dramatically worldwide particularly following years of credit creation. Several new financial centres were created to manage the sharply increased private wealth including one in Malta.
Malta managed to achieve very large net balances in the services sector both within the European Union as well as with the rest of the world. At the end of 2019, Malta managed a net surplus of €2,400 million with MS and €900 million with the rest of the world.

Table 15 on the balance of payments provides a broader picture of the foreign dimension of the Maltese economy in net balances. Over the past few years, direct investment in Malta has been in a net borrowing position since acquisition of financial assets from abroad has been on a constant negative trend, while the net incurrence of liabilities has been consistently positive. This means that foreign companies are engaging in direct investment in Malta.
Portfolio investment is in a net lending position meaning that Maltese companies are investing in foreign assets especially in the form of equity and investment fund shares coupled with debt securities. The net acquisition of financial assets of portfolio investment has been largely positive, though such acquisitions have declined in 2018 when compared to the previous year.
Table 15 provides data on Malta's net international position (NIIP) since 2004 calculated at 38% of GDP. Malta was listed in sixth position in 2012. The sharp turnaround in the current account of the balance of payments as a result of very large contributions from the financial, i/gaming, tourism and other services

since 2012 has contributed to more than tripling of Malta's net position in 2018 reached 63 percent of GDP. The Table shows the evolution of the NIIP for Malta, which has been in a net lending position for more than a decade. A net lending position would suggest that there are more foreign assets then there are foreign liabilities held in Malta. The NIIP balance is essentially the asset less the liabilities stock. These were assessed in the balance of payments section.

2.1.2.6 The Manufacturing Sector

Malta followed the same economic processes like most other countries. It started with low value-added industrial firms in the 1950s largely in the textile, clothing and footwear industries. This sector has been a vitally important one since the early days of the country's industrialisation in the 1950s. What started off as a low cost sector six decades ago has now developed into one producing goods with a high added value, constantly innovating its processes and products in order to remain highly competitive. Today the sector contributes over 13 percent to the gross value added making it one of the main pillars of our economy.
Malta's advanced manufacturing sector is well diversified into automotive components, electronic components, injection moulding, precision engineering, medical devices, pharmaceuticals, edible preparations among others. The client list of Malta based operations includes globally firms within a wide variety of industries.

Table 16 on Industrial Production provides the shares of various sectors of the manufacturing industry in Malta for the years 2014 to 2018 inclusive as well as the percentage changes in the gross value added for each of the sub-sectors for each year.
Industrial production decreased by 1.6% in 2018 compared to an increase of 4% in the previous year. The contraction in activity in 2018 reflected developments within the manufacturing which declined by 1.9% whilst the quarrying sectors, although the latter has a very small eight in the overall industrial production index rose by a large 13.8% reflecting the level of activity in the construction industry.
The sub-sector with the best industrial output in 2018 was the printing and reproduction of recorded media with a sharp rise of 35.9% compared to a three-year decline 18.3%. Production of energy and water collection and treatment continued to expand. Production of beverages, however, went through the first decline in several years. The remaining sub-sectors reversed their growth positions from the previous year.

2.1.2.7 The Services Sector

Table 17 provides data on Contribution of Sectoral Gross Value Added to Nominal GDP underlining the growth of the services sector and its relative importance in the Maltese economy. The strength of the sector should be seen in the context of the strong expansion of the economy in the past few years. The services sector has been growing at a faster rate than the rest of the other sectors and is progressively adding to its importance in the economic expansion.

Agriculture in Malta is small although a very important component of the economic structures. It provides excellent qualities of fresh fruits and vegetables and supports other government policies such as the environment and recreational activities.

Fishing activities have increased in importance with the introduction of fish-farming in Malta. Several fish-farming projects have been set up around Malta's internal waters. The industry has four tuna ranches that produce over 80 percent of Malta's aquaculture production through capture-based aquaculture, and two closed cycle species farms that produce sea bream, sea bass and meagre.
According to the National Statistics Office, in 2017 the industry produced a total of 15,700 tons of fish with a total value of €180 million largely made up of blue-fin tuna and the remainder was sea bass, sea bream and other species.

Quarrying rose at a rate higher than in the past as the construction industry in Malta increased significantly in the past few years.
The manufacturing industry has lost some ground as far as its share of nominal GDP with the loss of productivity which will be discussed under the Real Effective Exchange Rate. The manufacturing sector is still a very important contributor to the gross value added of the GDP despite its fluctuating fortunes. It underlines if anything its relative decline in the gross value added of the GDP.

The services sector has grown tremendously for several decades. One could say Malta is a service-based economy providing support in financial management, internet gaming, logistics, education, health, computer software and the internet of things. The most important sub-sectors with the highest contribution to the gross value added of the GDP in 2018 were wholesale and retail trade, repair of motor vehicles, transportation, accommodation and related activities; arts, entertainment, household repair and related activities; public administration, defence, education and health and professional, scientific and administrative activities.
The services sector in Malta evolved soon after Malta tendered its application to join the European Community in 1991. The prospects of membership permitted the authorities to look at the services sector from a community perspective.

The growth in credit to finance business grew strongly in the 1980s as new large markets were opened for international trade. The credit markets expanded to serve the new markets and smoothen the flow of funds in the financial mechanism. New financial centres cropped up in many countries to participate in the movement of financial assets and funds across the world.
Following the introduction of legislation to provide a secure and stable framework for prudential supervision, consumer protection, market surveillance and the prevention of money laundering created a market for funds management in Malta. The market started slowly, but grew exponentially over a short period of time. It is currently estimated at around €175 billion.

The local tourism industry was practically exclusively reliant on the United Kingdom in the 1960s. The sector declined significantly in the 1980s and, as the authorities responded with diversification strategies aimed at reversing the decline, the composition of tourists from different regions began to change significantly during the 1990s.

Malta breached the one million mark in the number of tourist arrivals in 1992 and edged up slowly in the following twenty years reaching 1.4 million in 2012 with just over 30% originating from the United Kingdom. The process of expansion and diversification was vigorously promoted since then reaching in the space of six years a record high of 2.6 million visitors largely as vacationers. The number of visitors from the United Kingdom dropped to just under 25% of the total whilst opening up the market to other visitors from Eastern Europe, the Middle East and North America. The decreased reliance on few source markets is largely credited to increasing airline connectivity, but also the authorities' ability to diversify the Maltese tourism product.

The earnings from tourism surpassed the €2 billion mark in 2018 providing a strong stimulus to the economy and supporting thousands of jobs in many sectors.
The number of Maltese visitors overseas has also been growing strongly for many years as a result of improved airline connections, cheaper flights and higher disposal incomes. Italy remains the favoured destination among Maltese visitors perhaps not because of its proximity but more importantly the absorption of Italian culture and heritage through communication networks for many decades.
The net contribution from tourism has been consistently on the rise for several years. In the past four years alone, the value of net income from tourism has grown by almost 150 percent to €514 million. The growth in the number of visitors from Poland and Spain has been impressive in recent years whilst the growth of business such countries as Australia, China and the United States of America is very promising indeed. The tourist sector is well positioned to maintain its relative importance in the Maltese economy particularly in view the winter and should months in Malta are not yet well known.

2.1.2.8 Public Finance and monetary issues

Malta's public debt took a turn for the worse during and after the recession of 2009 as it increased from 63% in 2008 to 70% of GDP by 2011. It started on a declining path thereafter as the services sector rose strongly. Government income taxation increased substantially in the following years. The introduction of the Individual Investor Programme also supported the growth in government revenue.
In the space of five years and in the absence of any stringent financial conditions but prudent management of resources, Malta reduced its level of public debt to 46% of GDP by 2018 improving its standing to a tenth position within the group of member states. It was in seventeenth position at the end of 2011. According to estimates, public debt as a percentage of GDP in Mala is expected to decline further reaching around 42.5% by the end of last year. Further declines are estimated for a number of years.

The decline in public debt levels is a constituent of two factors: the improvement in national finances and the growth of the economy. Malta and Ireland enjoyed much higher growth in their GDP during the period under review which rendered the final results more attractive.
Closely related with the general government public debt levels is another, **Table 20** dealing with the general government deficit or surplus for the period 2010-18.
Malta's government deficit reached 4.2% of GDP in 2008 and fluctuated within a narrow range for the following four years. It started to decline thereafter and reached 3.4% of GDP in 2017. It dropped in the following year but remained in positive territory.

The real effective exchange rate (REER) is a weighted average value of a country's currency relative to the exchange rate of its main trading partners adjusted for inflation. The table shows the developments in the REER for Malta with respect to 42 trading partners using the Consumer Price Index as deflator. The REER for Malta increased after 2014, marking a decrease in competitiveness relative to its main trading partners. Malta's rate in particular has risen (its productivity decreased) since 2014 against that for Germany, France and Italy, its three leading export/import markets.
It is to be noted that the REER has one important limitation, in that the weights are computed using solely trade in goods. This is especially an issue for Malta given the importance of the services industry. Hence, other indicators may better reflect Malta's external competitiveness such as trade volume indices.

Malta's export/import volume ratio has steadily declined since 2010 as can be seen from **Table 22**. Its imports are rising at a faster rate than its exports thus the decrease in the ratio. And it is the rapidity in the decline in the ratio which is of concern. This could explain the decline in relative importance of the manufacturing industry to the GDP.

2.1.2.9 Conclusion

The transformation of the Maltese economy is the result of the appearance of a large swathe of new service operators rather than the disappearance of existing industrial operators.
Growth in the services sector in Malta surged ahead after accession to the EU. While Malta traditionally had a large services sector owing to the presence of an established British naval base prior to 1979 and the necessitated several ancillary services, liberalisation measures, the higher availability of better educated labour resources and a targeted strategy to attract foreign direct investment opened up further services sectors. Besides the traditional areas of tourism, education, health, retailing and banking activities, the services industry expanded to include higher value added activities generated by the financial services sector, specialised forms of tourism – like language schools and dive centres – maritime activity, professional services, back-office administration, information technology and gaming.

The increase in female employment facilitated by a number of government initiatives together with the increasing engagement of part-timers offering more flexible employment opportunities were among the main factors which changed the economic structure. Part-time employment accounted for half of the overall increase in employment since 2008, with females accounting for around two-thirds of that rise during this period.

Another important factor that boosted the island's labour market resilience has been the significant influx of migrant workers, mostly from the EU. The availability of skilled foreign workers has helped the development of new industries, which otherwise would be bottlenecked by skills shortages. These new sectors, in turn, led to a more diversified economy, less subject to industry-specific shocks and to cyclical fluctuations.

The structural changes in the Maltese economy are leading to a higher utilisation of labour resources and to a much improved position on the external account. Diversification, both towards new sectors as well as specific niches within established ones, has increased the flexibility and the resilience of the economy, making it less subject to industry-specific disturbances and to cyclical fluctuations. The increased supply of labour, driven by a higher female participation rate and an influx of foreign workers, addressed possible shortages in the labour market, both in the low and highly skilled sectors and prevented an increase in wage growth that would have adversely affected the country's competitiveness. Potential output growth has recovered strongly after the crisis, exceeding the growth rates registered during the 2000s. Current projections by international organisations suggest that the rate of domestic economic growth will persistently exceed that of the euro area, which bode well for the country's catching-up process.

2.2 The Labour Market in Sicily and Malta: the Figures

Before we dive deeper into the matter, it's, again, necessary to stress that the comparison between the two is not as straightforward as we would expect.
The demographics and institutions, together with the normative structure and production chain, make the two contexts very different. However, given their proximity, collocation, and frequent trade, we'll provide a review of the two systems to underline their differences and similarities.
The analysis will allow us to define potential areas and industries for institutional interaction, as well as outline and promote the adoption of best practices.

2.2.1 The Labour Market in Sicily

From an economic perspective, employment rates are the leading evidence of the discrepancy between the island and the overall National context.
The table below offers an overview of the gap between the two employment and productive structures.

Table C. Employed per Economic Activity, Italy - Sicily[18]

Employed per sector (thousands)	Italy			Sicily		
	2016	2017	2018	2016	2017	2018
Total economic activities	24.848,6	25.138,1	25.358,8	1.536,1	1.529,7	1.516,8
Agriculture, forestry, and fishing	937,4	920,9	926,6	122,9	122,0	128,0
Vegetable and animal production, hunting and services in the supply chain, forestry	909,0	892,3	..	115,5	114,4	..
Fishing and aquaculture	28,4	28,6	..	7,4	7,6	..
Mining, manufacturing, electricity supply, gas, steam, air conditioning, waste processing, refurbishment, and construction	5.739,5	5.752,1	5.804,4	220,2	214,9	222,1
Mining, manufacturing, electric energy supply, gas, steam, air conditioning, waste processing, and refurbishment	4.189,3	4.216,1	4.272,8	128,6	126,8	132,3
Mining	22,6	22,5	..	2,0	2,1	..
Manufacturing	3.866,8	3.891,1	..	100,8	98,9	..
Food, beverage, and tobacco industries	462,6	469,7	..	30,1	30,3	..
Textiles and tailoring of clothing, leather goods, and other	497,8	499,0	..	4,4	4,1	..
Woodwork, pulp and paper, and the publishing industry	276,3	275,3	..	8,4	7,9	..
Oil refinery and coke derived products, chemical and pharmaceutical production	188,4	191,9	..	7,6	7,8	..
Rubber and plastic products, and other non-metal derived products	348,9	347,0	..	11,6	10,8	..
Metallurgic activities, production of metal products except for tools and machinery	657,2	662,7	..	12,0	11,9	..
Production of computers, electronic and optical devices, electronic equipment, and production of uncategorized machinery and equipment	733,9	739,5	..	9,1	9,2	..
Production of means of transport	260,5	264,7	..	3,2	2,3	..
Carpentry, other manufacturing industries, refurbishment and installation of machinery and equipment	441,2	441,3	..	14,4	14,6	..
Electricity, gas, steam, and air conditioning supply	83,5	82,8	..	4,7	4,7	..
Water supply, sewerage system, and waste processing and recovery activities	216,4	219,7	..	21,1	21,1	..
Construction	1.550,2	1.536,0	1.531,6	91,6	88,1	89,8
Services	18.171,7	18.465,1	18.627,8	1.193,0	1.192,8	1.166,7
Wholesale and retail businesses, automotive and motorcycle repair, transport and stoking, hospitality, information and communication services	6.969,3	7.161,4	7.209,1	416,7	422,3	409,4
Wholesale and retail businesses, automotive and motorcycle repair, transport and stoking, hospitality	6.366,3	6.550,8	..	398,1	403,2	..
Wholesale and retail businesses, automotive and motorcycle repair	3.692,5	3.734,2	..	255,9	253,8	..
Transport and stocking	1.158,3	1.185,3	..	59,6	60,6	..
Hospitality	1.515,5	1.631,3	..	82,6	88,8	..
Information and communication services	603,0	610,6	..	18,6	19,1	..

Employed per sector (thousands)	Italy			Sicily		
	2016	2017	2018	2016	2017	2018
Financial and insurance activities, real estate, professional activities, scientific and technical businesses, administration, and support	3.818,7	3.894,4	3.980,4	185,7	186,5	180,5
Financial and insurance activities	659,6	648,5	..	31,2	31,3	..
Real estate	181,8	181,1	..	6,1	6,3	..
Professional activities, scientific and technical businesses, administration, and support	2.977,3	3.064,8	..	148,4	148,9	..
Professional activities, scientific and technical businesses	1.657,0	1.659,3	..	78,8	78,1	..
Administration and support	1.320,3	1.405,5	..	69,6	70,8	..
Public administration, public defence, mandatory social insurance, education, social assistance, healthcare, art, entertainment, household goods repair, other services	7.383,7	7.409,3	7.438,3	590,6	584,0	576,8
Public administration, public defence, mandatory social insurance, education, social assistance, healthcare,	4.745,1	4.749,5	..	406,6	404,2	..
Public administration, public defence, mandatory social insurance	1.279,6	1.247,7	..	129,1	126,9	..
Education	1.544,9	1.559,1	..	135,9	133,7	..
Healthcare and social assistance	1.920,6	1.942,7	..	141,6	143,6	..
Art, entertainment, household goods repair, other services	2.638,6	2.659,8	..	184,0	179,8	..
Art, entertainment	327,2	343,2	..	22,3	22,9	..
Other services	739,1	738,2	..	48,8	47,8	..
Family-employed caregivers, family-based production of goods and services for self-consumption	1.572,3	1.578,4	..	112,9	109,1	..

Nevertheless, the above solely concerns the employment rate it succeeds in giving a vivid picture of the dualism embedded in our country.

Although we've decided to attach the regional data in the statistic tables for conciseness, a reflection based on the macro-regions of the country -i.e. North, Center, South, and Islands- would leave no doubt in identifying the discouraging gap between regions.
The labour market of the island is a considerable Gordian Knot, which is both the cause and the symptom of the general condition of the underdevelopment of Sicily -which is also the first region by size.

Although the issue has long-established roots, the 2008 crisis has drastically increased the gap between the region and the rest of Europe. Furthermore, the inefficiency of public interventions (sometimes totally absent) has worsened the ever-so-slow recovery process.

The data from the last two years show a clear weakness in the employment department, which, however, is dictated by the general economic system. Throughout 2018, the employment rate diminished by 0.3%, against the 0.8% growth of the nation-wide and southern data.

It saddens to say that the island has yet to approach the pre-crisis levels of employment[19].
Predictably enough, it is the service industry that suffered the most from the decreasing rate, as it is also the biggest provider of employment.

From a gender perspective, male employment has not suffered major changes, however, after steady growth in the previous four years, female decreased.

Although the decreased employment rate of 2019, the incidence of full-time contracts has risen. At the same time, the total number of hours worked increased alongside the number of hours per worker.
Among part-time workers, the rate concerning those who cannot access a full-time job (against those who voluntarily work part-time) is constant, though still higher by 15 percentage points compared to 2008.

The sole responsibility for the reduction of the overall employment rate is self-employment, which keeps on following a decreasing trend.
Moreover, the resort to *Cassa Integrazione Guadagni* (CIG- Italian redundancy fund) decreased after the reduction of the resort to extraordinary CIG and waiver CIG -upon concession. The ordinary one, instead, has recorded a slight increase in the construction industry.

Although it is still lower than in 2018, occupation in non-agriculture sectors has increased.
Whereas, thanks to the number of transformations and previously signed agreements, permanent contracts now reached a positive trend. This trend can be attributed to tax breaks for permanent employment mainly. Over 22% of new employment agreements and the transitions to permanent contracts have benefited from regional incentives: because this set of incentives only applies to the implementation of permanent jobs, it caused the rate of fixed-term contracts to rest -which, in 2017, had been the main reason for the growth of the employment rate itself.

The employment rate for the 15 to 64 age bracket remained stable at 40.7%, though it's still 20% lower than the national average. Such consistency is mainly due to the decreasing number of residents, which, in turn, balances out the unemployed workforce.

It saddens to say that the incidence of employed human resources on the active population is the lowest in the county. Non-occupied workers' (i.e. unemployed and non-active -of which belonging to NEETS) mobility is drastically lower than the national average.
It saddens to say that the island has yet to approach the pre-crisis levels of employment.

Table D. Sicily's Labour Market Indicators[20]

Socio-economic indicators in Sicily	Measurement unit	2000	2008	2016	2017
Residents on official records	thousands	4.978,1	5.038,2	5.056,6	5.027,0
Employed in agriculture	thousands	138,7	125,0	119,6	125,4
Employed in the industrial sector	thousands	281,1	325,7	214,5	211,2
-Factories	thousands	163,6	165,3	125,9	130,3
-Constructions	thousands	117,5	160,4	88,6	80,9
Employed in the service industry	thousands	1.102,1	1.201,2	1.196,2	1.200,8
Overall employment rate	thousands	1.521,9	1.651,9	1.530,3	1.537,4
Overall people looking for an employment	thousands	445,7	234,5	383,0	374,0
Workforce	thousands	1.847,9	1.712,8	1.734,4	1.740,8
CIG[21], Ordinary Measures	thousand hours	–	4.600,0	3.144,6	2.749,2
CIG, Extraordinary Measures	thousand hours	–	2.675,6	11.452,4	9.446,9
CIG, Waiver	thousand hours	–	1.458,4	4.667,2	1.276,3
CIG, Total	thousand hours	–	8.734,0	19.264,2	13.472,4
GDP per capita	Euro (2010)	17.972,4	18.566,1	16.238,2	16.386,0
GDP per person employed	Euro (2010)	58.875,9	56.468,7	53.750,2	53.736,9
Total unemployment rate	%	24,1	13,7	22,1	21,5
Male unemployment rate	%	18,9	11,8	21,0	20,4
Female unemployment rate	%	34,1	17,1	24,0	23,4
15-24 age bracket unemployment rate	%	51,1	52,9	57,2	52,9
15-64 age bracket total employment rate	%	41,9	44,1	40,1	40,6
15-64 age bracket male employment rate	%	59,9	59,5	52,1	52,3
15-64 age bracket female unemployment rate	%	24,6	29,3	28,3	29,2
15-64 age bracket activity rate	%	55,4	51,2	51,7	52,0
% of GDP per capita, North-Central	%	55,9	56,1	53,3	52,9
% of GDP per employed person, North-Central	%	81,8	80,4	79,6	79,3

Youth unemployment is another very negative figure that affects the island and amounts to nearly 53%. The rising migration of the under 30 demographics is leaving Sicily with less and less qualified and educated human resources, the price of which will only be clear in the next years. This migration is mainly affecting the public administration sector, evidence of which is the halted turnover rate of state dependents. Moreover, an incompetent ruling class is not sustainable in Sicily: the public sector should be a key player in evening out the failures of the market by managing structural funds, alongside implementing infrastructures.

The GDP per capita rate in Sicily is a little over 50% of the total figure of the north-central regions, whereas the GDP per employee rate is only at 80% of the country's advanced areas. This information shows that the private sector is paying as well, for the structural and infrastructural limits of the region.

However, the development of the labour market is only as strong as the competitiveness of the region it belongs to. In this case, Sicily's competitiveness is very low in all the relevant dimensions, as per the figure below:

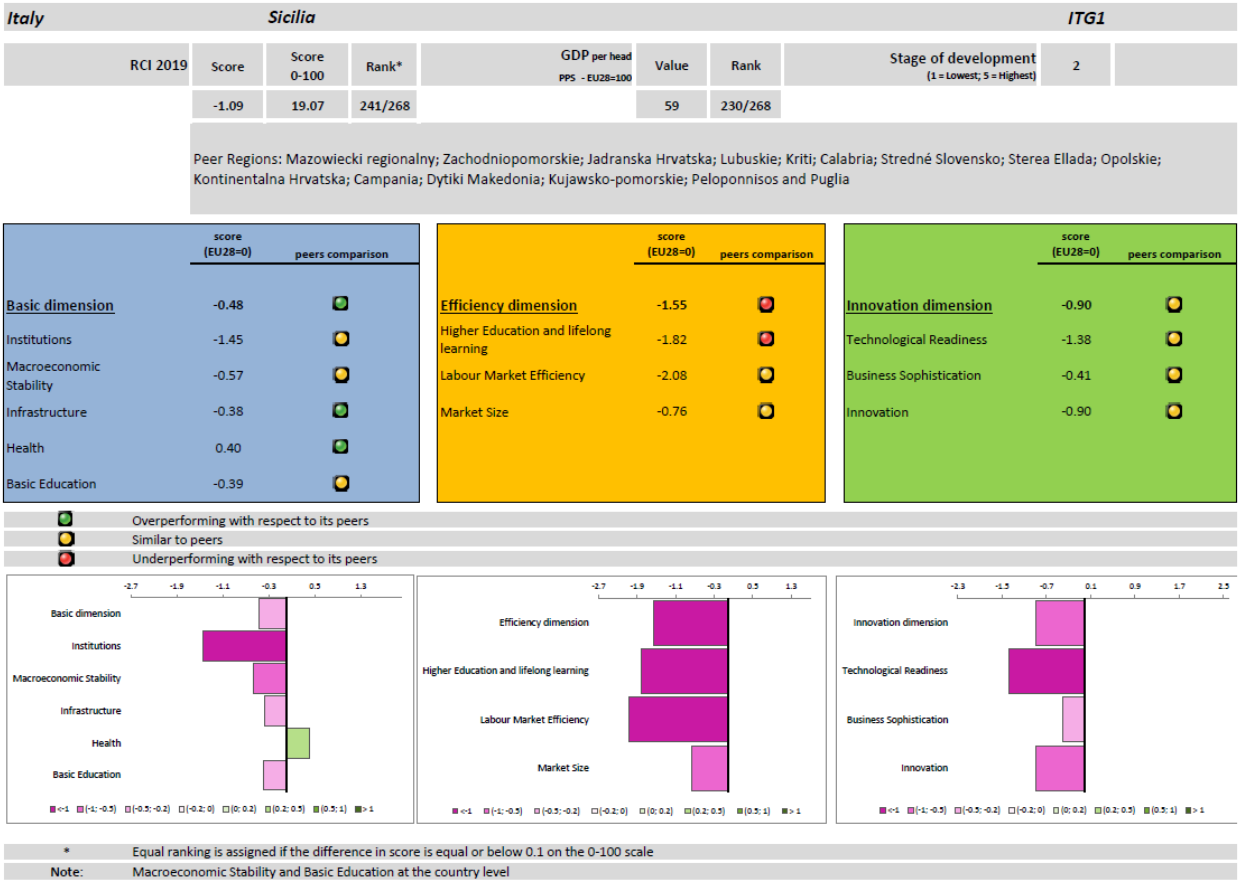

Figure 2. Regional Competitiveness Index 2019, Sicily Scorecard[22]

From the table, we see that Sicily scores 241st on the total number of 268 European regions. Furthermore, the data concerning Labour Market Efficiency is among the lowest compared to the EU 28 average.
In conclusion, Sicily requires changing its economic, productive and labour paradigms. Therefore, we believe that the transition towards the Blue Economy and the Circular Economy will support the reformation of our region within the Green New Deal framework.

2.2.2 The Labour Market in Malta

For a long number of years in the past, there was a mismatch in the labour market in Malta characterised by a high rate of employment for males simultaneously with a low rate of female employment. It was government policy at the time for females to leave the labour force after marriage. The policy was completely reversed in the mid-1980s when a new administration encouraged females to enrol for tertiary courses in view of the opening of new job opportunities particularly in the services sectors.
The paper will address the structures and the state of the labour market in Malta for the years 2013 to 2018 (full years) together with notes on the latest data available.

All data is sourced from the National Statistics Office and is based on the Labour Force Survey. The Eurostat figures for the EU 28 were extracted from Eurobase on 1st October 2019. The survey is based on European methodology and is considered as an important monitoring tool to assess progress made on employment rates and educational attainment. The Survey is used to monitor three headline indicators across Europe, namely the employment rate, early leavers from education and training rate and the tertiary educational attainment rate. All three indicators are included in the Tables at the end of the paper.

There are two points which need to be emphasised. First, the period under review was a time of an unprecedented economic expansion when the demand for labour was very strong throughout to the extent there was the need for the first time to hire employment from European and other countries.
The second point is the catching-up process of female employment. As indicated earlier the level of female employment was very low particularly compared to the average of the European level. The opening up of new market opportunities and other social considerations underpinned the movement of higher female participation in the work force.

Table 01 provides details on the activity rates by gender and age group. The activity rate is defined as the number of persons in the labour force falling within a particular as a percentage of the working population in the same age bracket. The activity rates include the employment as well as the unemployment rates. In view the unemployment rate in Malta is at several decades low, one could emphasise the activity rate which for this period under review is closely aligned with the employment rate.
The activity rates for males were always strong for all age groups and continued to strengthen during the period under review. At the end of 2018, the participation rates for males of all ages stood at 84.8 well ahead of the European average of 79.2. It strengthened to 85.9 at the end of the third quarter of last year rising by almost six percentage points over the level in 2013.

The major contribution to the increase in the male participation rate was the number of retired persons in the 55 to 64 years bracket who opted to remain in employment. There was an 11.2 percentage point increase to 69.4 percent during the period under review. The rate fell by 5.4 percentage points by the end of the third quarter of last year to 64.0 per cent. No details are available on the decline in the participation rate in this age bracket last year.
The male participation rate at the 25-54 years bracket continued to grow but at a slower rate rising by 1.6 percent to 96.4 percent during the period under review. The rate of growth in the male participation rate continued to rise in the first nine months of last year reaching 97.2 percent.

The male participation rate in the 15-24 age bracket fluctuated with a downward bias for most of the period under review with a decline of 0.8 per cent by the end of 2018 to 55.7 percent. There was a sharp turnaround, however, in the first nine months of last year as the male participation rate for the 15-24 age bracket increased by 8.5 percentage points to 64.2. A number of training and re-training programs financed by Jobsplus, the government agency, came to fruition practically simultaneously. The growth in this age bracket, apparently, took the slack left by the 55-64 age bracket as the net balance improved.

The improvement in the female participation rate for all ages was more impressive. The female participation rate rose steadily throughout the years reaching 63.8 percent in 2018, an increase of 11.8 percent or almost two percentage points a year. The possibilities of working from home together with free child care centres and other family orientations all contributed to attracting more females to participate in the work force. The rate of increase continued to surge in the first nine months of last year as the female participation rate increased by two percentage points to 65.8 percent still lower than the average European rate at 68.2 at the end of 2018.

The major contribution to the improving female participation rate occurred in the 25-54 age bracket (in numerical terms) with an increase of 11 percentage points to 74.6 percent at the end of the period under review. And the rate of growth continued in the first nine months of last year with a further increase of 2.1 percentage points to 76.7 percent. The female participation rate in Malta is still well behind that of the European average at 80.1 percent, but it is catching up fast.

The total participation rate for both males and females for Malta was expected to reach 70 percent of the population by 2020. The improvements in the social, economic and educational levels in the past two decades together with the sharp increase in economic growth enabled the country to surpass the 70 percent threshold four years in advance. Malta even managed to surpass the European average level by the end of 2018.

In the same process, the activity gender gap declined by seven percentage points to 21 percent which is well below the European average of 11 percent. It could be very difficult for the gender gap in Malta to decline to the European average level in the medium term.

Table 02 provides data on the employment rates by gender and age. The data on employment in Table 02 is strongly correlated with the activity rate in Table 01 as one would expect at a time of strong economic growth as happened in Malta during the period under review. As the economy progressed at a strong rate, the unemployment level as a percentage of the labour force gradually declined. If one could compare the data between the activity rates in Table I and the employment rates in Table 02, the correlation becomes clear. For example, the activity rates for males in 2013 stood at 80.0 percent while the employment rate was at 75.1 percent in the same year. In 2018, the activity rate for males stood at 84.8 percent giving a rise of 4.8 percent whilst the employment rate was reported at 81.5 percent or 6.4 percent higher than in 2013. The difference between the activity and the employment rate of 1.6 percent is the rate of decrease in unemployment for males during the period under review.

In the case of females, the difference in the activity rate between 2013 and 2018 stood at 11.8 percent (the difference between 52.0 percent in 2013 and 63.8 at the end of the period) the gap in the employment rate was 12.7 percent. As a result, the decline in unemployment among the female population declined by a more marginal 0.9 percent.
The employment rates for males for all groups increased by 6.4 percentage points during the period under review reaching activity 81.5 percent in 2018. The rate for males was well ahead of the European average of 73.8 percent. The difference may have continued to widen as the rate for male employment at the end of September last year increased by a staggering 4.4 percent to 85.9 percent.

The male employment in the 15 to 24 age bracket increased only marginally during the period under review as it rose by 1.3 percentage points to 49.5 percent. The lack of growth during that period was reversed in the first nine months of last year as the male employment increased by a sharp 7.9 percentage points to 57.4 percent although no explanations were given for such a big change.

The male employment in the 25 to 54 age bracket increased by 3.4 percentage points to 93.6 percent at the end of the period under review. It continued to improve in the first nine months of last year by a further 1.3 percentage points to 94.9 percent.
The male employment in the 55 to 64 age bracket increased by a large 8 percentage points in the six-year period under review. It may have been underpinned by a new government policy for pensioners to remain in employment after reaching their retirement age. The rate of employment in this male bracket dropped sharply in the first nine months of last year as it declined by 4.1 percentage points to 63.2 percent.

The male employment levels in all age brackets were higher than the average for the European Union at least until 2018.

The female employment levels for all the group ages increased by a large 12.7 percentage points reaching 61.5 percent by the end of 2018 or slightly more than2 percentage points a year. The rate of growth in employment continued to rise thereafter increasing by 3.7 percent to 65.8 percent at the end of September 2019.

The rate of employment growth was uneven between the different age brackets. In the case of the 15 to 24 years age bracket the rate of growth was rather limited to 7.4 percent for the whole period under review reaching 52.5 percent. The employment growth rate stalled in the first nine months of 2019 managing only a marginal o.1 percent increase to 52.6 percent.

The rate of employment growth in the 25 to 54 age bracket increased by a large 12.2 percentage points during the period under review reaching 72.5 percent. The growth rate continued to rise in the following nine months rising by a further 1.9 percent to 74.4 percent by September 2019.

The highest rate of employment growth occurred in the older group of 55 to 64 year olds which increased by a hefty 13.9 percentage points to 32.8 percent. There was a further 2.4 percentage point increase in the first nine months of last year reaching 35.2 percent.
As mentioned earlier the rise of female employment growth rates continued to benefit from the strong economic conditions, the availability of jobs and the preparedness of this gender to meet the expectations of modern labour conditions.

Table 03 relates to the growth in employment in the services sector during the period under review. The services sector has been the major engine of growth for the Maltese economy for many years. It transformed the Maltese economy in such a way that permanent deficits in the current account balances as a result of large imbalances in the trade in goods over services, has been transformed into surpluses. The transformation did not occur as a result of lower trade in goods but as a result of a sharp increase in services exports.
The major contribution to the sharp growth in the services sector was the level of female employment in the sector. This has risen by 13 percentage points to 55.9 percent during the period under review. The male employment levels in the sector increased by a more modest 6.7 percent during the same time frame.
The total employment of both males and females in the sector rose by 9.9 percent during these years or around 1.5 percent a year. One should note the widening gap between the services sector in Malta at 57.8 percent of employment and the European average at 49 percent.

Table 04 relates to the self-employed as a percentage of total employment population separated on a gender basis. The Table underlines the point that the percentage of the self-employed for both males and females has nudged higher by 0.6 percentage points during the period under review and is in line with the average for the European Union at 14.3 person.

The male population among the self-employed fluctuated within a range of 17.7 and 19.2 percent of the male total employment and finished almost unchanged at 18.4 percent at the end of the period under review. The percentage of self-employed in Malta compared to the total employment population was higher than the average for the European Union at 17.9 percent in 2018.
The female population among the self-employed increased by two percentage points rising to 8.2 percent

of total employment. Despite the rise, the female self-employed population in Malta is still lower than the European average at 10.1 percent.
Part-time employment as percentage of total employment declined during the period under review.

Table 05 provides the data on part-time employees as percentage of total employees underlining the fact that both males and female part-time employees switched to full-time work.
In the case of male part-time employees, the data fluctuated within a range of 8.3 percent in 2014 and 6.2 percent in 2016, ending the period under review at 6.9 percent. This rate is well down on the European Union average of 9.2 percent. This is understandable in view of the impressive economic growth experienced during the period under review and the strong demand for labour. One should note, the country resorted to advertise for the first time, for large intakes of foreign labour to fill the gaps in the human resources supply.

The demand for part-time work among the female labour force followed the same pattern as for males. It fluctuated within a range of 27.5 percent in 2014 and its low point of 21.5 percent where it ended in 2018. Compared to the rest of the European Union Member States, female part-time work as a percentage of total employees is way down underlining the availability of jobs and the willingness of employers to meet all liabilities.

The sum total of all part-time employees as percentage of total employees declined for most of the years ending in 2018 at 13.2 percent compared to a European average of 20.3 percent.
In the first nine months of last year, part-time male employees rose to 7.8 percent of total male employees compared to 6.9 percent in 2018. In the case of female part-time employees rose marginally to 21.7 percent as percentage of total employees compared to 21.5 percent at the end of the previous year. For both males and females, part-time employment as percentage of total employees also increased marginally from 132 percent in 2018 to 13.5 percent in September of last year.

Table 06 refers to the proportion of employees as percentage of total employees who are employed on fixed term contracts on a gender basis. Fixed-term contracts refer to all those persons working with a definite contract or on a temporary basis. The rate is worked out as a percentage of total employees.
Fixed-term contracts in Malta are far from popular. Such contracts do not appeal to most employees in view of the problems that could arise in raising bank loans particularly for home ownership. Foreign nationals could view fixed-term contracts as beneficial to them as such contracts provide higher rates than indefinite contracts and are in line with their time expectations.

The proportion of employees as percentage of total employees who are employed on fixed term contracts was stable for most of the years during the period under review. There was a substantial drop in the proportion of employees on fixed-term contracts as percentage of total employees in 2017 which was reversed in the following year and went even higher. The proportion is thus more contained in Malta and is unlikely to reach the European average in the medium-term.

Table 07 provides data on the average number of hours worked normally per week. The average weekly number of hours usually worked per week is the sum of hours usually worked by full-time employees divided by the number of full-time employees. The average excludes persons working variable hours.
From the data available, one could underline the stability in the time spent at work which happens to be slightly higher than the European average throughout.

Table 08 refers to time-related under-employment by type of employment. Time-related under-employment refers to the number of persons having a main job but willing or wishing to work more than the number of hours currently worked in their job. The rate is calculated as a percentage of total employees.
The data clearly shown the downward path of under-employment as the Maltese economy revved up during the period under review. This is a normal pattern. No further comments could be made as data on time-related under-employment for Europe is not available. One should also note from Table 07 the Maltese worker on average works a slightly higher number of hours than their average counterparts in Europe.

Table 09 refers to the unemployment rate in Malta on the basis of gender and age group for the period 2013 to 2108. The unemployment rate is defined as the number of unemployed persons aged within a particular age bracket as a percentage of the labour force in the same age bracket.

For the total age group, that is the 15 to 74 bracket, the decline in unemployment for both genders was closely correlated with some small variations during the period under review. The range in the rate of decline of male unemployment was spread between 6.1 percent in 2013 and 3.8 percent in 2018 whilst that for the female gender varied between 6.1 percent in 2013 and 3.5 percent at the end of the period under review. The sum of the unemployment gender gap is zero for the six-year period.

The improvement in the unemployment rate continued and by September 2019, the rate of decline had reached 3.2 percent for the males and 3.6 percent for the females. As one could note, there was an uptick in the rate of unemployment among females be the end of September 2019. Overall, the unemployment rate declined by 0.3 percentage points to 3.4 percent by the end of September 2019.

In the young age bracket, that is the 15 to 24 age bracket, the situation is different. Male unemployment is consistently higher than female unemployment with the exception of 2016. The decline in percentage terms for the period under review is fairly close at around 3.5 percent for both genders. The only exception is the rate of female unemployment in 2016. The discrepancy arose following an unusually sharp decline in male unemployment with an equally strange rise in female unemployment for that particular year. There were no explanations given to underline this double contrarian movement in one year.
The third bracket refers to the age-group 25 to 74 which shows the closing gap between gender unemployment. The 0.4 gap in 2013 was reduced to a 0.1 difference in 2018.

The gap between unemployment in all age-brackets in Malta is consistently lower than the average unemployment rate in Europe for both genders. This partly reflects the strong economic growth rates in Malta during the period under review compared to the variable rates experienced by European countries. There were Member States with stronger economic growth rates than in Malta. But there were others with far weaker rates. This is the problem with using averages.

Table 10 refers to youth unemployment in the 15 to 24 age bracket on a gender basis. The youth unemployment ratio refers to the number of unemployed persons aged 15 to 24 as a percentage of the total population falling in the same age bracket. The difference between unemployment under **Table 09** and that in this Table is the denominator. In **Table 09** it is the labour force whilst in this Table it is the level of total population in that particular age bracket. In view the total population in any age bracket is larger than the labour force, the data in **Table 10** are slightly smaller.

Otherwise, one gets the same conclusions with the male unemployment rate consistently higher that for the female gender. The anomaly in 2016 is also included but the result is neutral in this Table compared to the negative difference in **Table 09**. One should note the sharp difference in female unemployment in 2018 compared to the European average. The result for the male unemployment rate compared to the European average is more subdued.

Table 11 refers to what is termed as the NEET which refers to the number of persons aged 15-24 years who are not in employment, education or training as a percentage of the total persons in the same age bracket. This is an important Table as it reflects on the spare capacity in the labour resources which are or could not be utilised. The rate could never drop to zero as in every country there is a percentage who could not work for health reasons. The Table shows a better improvement in the rate for male NEET than for the female for the period under review. The male NEET declined by 2.9 percentage points whilst that for the female NEET was 2.3 percentage points lower.

Table 12 provides data on the long-term unemployed on a gender basis. The long-term unemployment rate refers to the number of persons who were out of employment for twelve months or more aged in the bracket 15 to 74 years and calculated as a proportion of the labour force in the same age bracket.
The Table shows clearly the rate of long-term female unemployment to be consistently lower than the male rate. The result is arrived at despite the larger decline of 1.8 percentage points for the male long-term unemployed compared to a decline of 1.5 percentage points for females.

As mentioned earlier the female working population has risen fast in the past two decades particularly among the younger generation. The older female population is finding it more difficult to become employed. Females have achieved the same education levels like their male counterparts and could fulfil most job requirements. There are only a few work places where the female population are not yet prepared to consider for the time being.

Table 13 provides data on persons aged between 18 to 24 who cease from continuing with their education and training. The early leavers from education and training rate refers to the percentage of persons aged 18 to 24 who achieved secondary education or less (equal to or less than ISCED 2) and are not pursuing further education or training.
Malta has been facing this problem for decades. The problem has been particularly acute among the young male population. It has been on the mend since Malta joined the European Union in 2004 but the rate is still far too high compared to the average among European Member States. Malta has been given a national target by the European Commission for the rate of early leavers from education and training to decline to 10 percent of persons in that age bracket.

The decline of 4.5 percent among the young male early leavers from education and training has been relatively strong in the past six years but the resulting balance at 18.8 percent is still very high compared to the average European rate. This is particularly worrisome in view of the need for high levels of education and/or training to fulfil work requirements. In a world of artificial intelligence, the internet of things and blockchain technology, computer skills have become basic requirements.

Table E. Early leavers from education and training (18 to 24 years) by gender

Year	Males	Females	Total (%)
2013	23.3	18.1	20.8
2014	22.5	19.2	20.9
2015	23.3	16.9	20.2
2016	23.1	15.0	19.3
2017	20.9	14.3	17.7
2018	18.8	15.8	17.4
EU 28 (2018)	12.2	8.9	10.6
National Target			*10.0*

The decline in the young female early leavers from education and training has been lower than that for the males during the period under review. The decline among females was equivalent to 2.3 percentage points over a six-year period compared to a 4.5 percentage point drop for males in the same time frame. The female rate of early leavers from education and training is almost 7 percent higher than for the average of the European Union. The rate for males is slightly higher.
It is unlikely Malta would be able to bridge the gap with the rest of the European countries in the short term. It will need several years before the catch-up could be achieved.

Table 14 deals with youth educational attainment for persons aged between 20 and 24 years. The youth educational attainment rate refers to the percentage of persons within the age bracket of 20 to 24 years who have achieved at least upper secondary education equivalent or greater than ISCED3.
The educational attainment among males aged between 20 and 24 years has been improving for most of the period under review although it has not reached the average European level. The educational attainment among females in the same age bracket fluctuated within a range of 77.7 per cent in 2014 and 82.3 percent in 2017. The fluctuations in the rate during the period under review were bad enough. The considerable drop in the rate of female youth educational attainment in 2018 compared to the previous year is worrisome. At a time when the country was making efforts to bridge the gap with the rest of the European Union, renders the situation of considerable concern.

Table F. Youth educational attainment (20-24 years) by gender

Year	Males	Females	Total (%)
2013	72.8	80.1	76.4
2014	72.4	77.7	75.0
2015	72.4	82.0	77.1
2016	72.5	82.0	77.0
2017	74.1	82.3	78.0
2018	76.5	78.5	77.4
EU 28 (2018)	80.8	85.9	83.3

Table 15 provides data on the lifelong learning of people aged between 25 and 64 years. The life-long learning rate refers to the percentage of persons aged between 25 and 64 of the total population who are participating in regular education or in non-formal training such as courses, seminars and conferences. Students on holidays are considered to be part of the population in the life-long learning.

Table G. Lifelong learning (25-64 years) by gender

Year	Males	Females	Total (%)
2013	7.4	8.0	7.7
2014	7.3	8.1	7.7
2015	6.9	7.9	7.4
2016	7.0	8.7	7.8
2017	9.5	11.9	10.6
2018	9.4	12.5	10.9
EU 28 (2018)	10.1	12.1	11.1

The Table on lifelong learning makes a clear distinction between the genders. Both genders made inroads in the difference between the Maltese percentage rate undergoing lifelong learning and the European average level. There was an improvement of two percentage points in the male rate of lifelong learning but 4.5 percentage point increase among the female population. As a result the improvement in the female lifelong learning population has surpassed the European average level which is not the case with the male population. On a positive note, at least the gap between Malta and the European average level has narrowed satisfactorily during the period under review.

Table 16 provides details on persons who managed to attain tertiary educational level before their thirty-fourth birthday. The tertiary educational attainment rate refers to the percentage of persons within the age bracket of 30 to 34 years having achieved at least tertiary level of education equivalent to or greater than ISCED 5.

Table H. Tertiary educational attainment (30 to 34 years) by gender

Year	Males	Females	Total (%)
2013	25.0	32.6	28.7
2014	24.1	33.3	28.6
2015	24.2	34.4	29.1
2016	29.0	35.2	32.0
2017	32.2	35.0	33.5
2018	32.0	37.9	34.8
EU 28 (2018)	35.7	45.8	40.7
National target			*33.0*

As mentioned earlier, this is one of the Tables used to monitor three headline indicators across Europe, namely the employment rate, early leavers from education and training rate and the tertiary educational attainment rate. All three indicators are included in the Tables at the end of the paper.
The introduction of new tertiary courses more than three decades ago opened the way for young people to extend their education and training years and better prepare themselves for their careers. New industries and services sectors provided a multitude of opportunities for young people but required higher educational levels and orientations.

The trend for more young people entering tertiary educational institutions to prepare for work within the new sectors became the norm. The trend has been far more pronounced among the young female population than for the male gender.
The number of females attaining tertiary educational levels before 1987 was much lower than their male counterpart. The young female progression has been far more impressive to the extent they now surpass the level of young males who attained tertiary educational levels by almost six percentage points. The percentage of young females who attained tertiary educational levels is higher than the national target of 33 percent but still below the European average. One should note, however, the European average is very high indeed at almost 50 percent.

The young male population who attained tertiary educational levels increased by 7 percentage point to 32 percent during the period under review edging closer to the European average of 35.7 percent. It was a commendable performance which requires, however, some more effort at least to reach the set national target of 33 percent.

CONCLUSION

The labour market in Malta has followed the trends set by the high levels of economic growth by expanding the production/supply boundaries outward. High levels of economic growth brought in their wake almost full employment, much higher net disposal incomes together with very low unemployment rates. The success of the economic expansion was to such an extent the country needed to hire workers from European and other countries to satisfy the increasing demand for labour.

Malta managed to attain its employment levels well ahead of schedule although there is still some leeway with the female rate. The rate of unemployment is very good indeed.
The only problems left for Malta to achieve its objectives lie in all educational levels. Considerable progress has been achieved since much earlier the period under review. The level of early leavers from education and training is proving more intractable than envisaged and may need a longer time-frame to be resolved or the gap with the European average to be attained.

3. QUALITATIVE SURVEY OF THE LABOUR MARKET IN SICILY AND MALTA

This study intends to provide not only a quantitative overview of the labour market in Malta and Sicily, yet also a picture from a qualitative perspective.
Keeping in mind the differences between the two systems, our objective resides in collecting the opinion of the stakeholders to identify the current and prospective training needs of the human resources involved in the implementation of the blue economy and the circular economy frameworks.
This analysis has been carried out by administering in-person and distance questionnaires to previously identified stakeholders.
Although the study started before the global Covid-19 pandemic, it's been notably slowed down by the national measures taken by the institutions in Malta and Sicily -i.e. the lockdown.

3.1 The qualitative survey questionnaire: structure and mode of administration

Please find below the structure of the questionnaire. It has been edited in Italian for the Sicilian demographics, and in English for the Maltese counterpart.
The questionnaire has been administered to XX companies (XX in Sicily and XX in Malta) both in person and digitally through Google Forms.

QUALITATIVE SURVEY ON BUSINESS NEEDS (WP 3)

General Information

1. Business Name
2. Adress
3. City
4. Nation
5. Phone
6. Email
7. Contact person
8. Business Activity Business Information
9. Firm size (micro, SMEs, Great Enterprise)
10. Which of those business phases are managed? (more than one option)

- Production
- Trasformation
- Sales
- Service
- Other (pls specify)

Waste and Energy Management

11. Are you aware of Blue Economy?

12. Are you aware of Circular Economy?

13. Does your business produce relevant business waste/scrap?

14. Does your firm improve waste management procedures?

15. Does your firm obtain ISO certificates or similar? If the answer is yes, which ones?

16. Does your firm improve risk management procedures? Do you have compliance procedures in your firm? (i.e. compliance officer)

17. How does your firm manage energy needs?

18. What is the relevance of energy costs in your firm? (% turnover)

19. What is the relevance of waste management costs in your firm? (% turnover)

20. Does your firm produce special waste?

Education and training needs

21. Does your firm ever join or organized a training programme? And your employees? If the answer is yes, in which field of activity?

- New technologies
- Quality management
- Job security
- Managerial training
- Entrepreneurial Training
- Change management
- Communication Skill
- Marketing/Sales skill
- Foreign Languages (please specify)
- IT (please specify)
- Other (please specify)

22. Do you believe that continuous training programme could be an opportunity/need for your firm? (please explain in any case)

23. Which is the educational level of workers actually occupied in your firm:

- Post degree % (please specify)
- Degree %
- High School Diploma %
- Comprehensive School Diploma %
- Professional qualification %
- Primary School Diploma %

24. In which field do you believe your firm/employees/workers has a training gap (more than one answer is allowed)

- Environment and job security
- Business and Organization Innovation (i.e. Change management)
- Privacy, Data protection and security
- Technological Innovation (product and/or process)
- Hi Tech skills (if the answer is yes, which ones)
- Management skill
- Internationalization
- Logistic
- Marketing
- Sales Marketing
- R&D
- Big Data and Business Intelligence
- Energy
- Renewable energies
- Waste Management and reuse
- Marketing
- HR
- Managerial training
- Foreign languages
- other (pls specify)

25. How your staff is composed?

% women

% under 40

26. Which % of your personnel could be involved in a training programme?

% women

% under 40

27. Do you consider useful/needed refreshing/qualification/retraining programme for you staff members? If the answer is yes, in which field

28. In past three years, did you have any problem of recruiting?

YES NO

29. If the answer is yes, for which position? Why?

Position:

- lack of competences (training and/or working experiences)
- candidates had higher wage expectations
- candidates had too much expectations about their role or working condition
- no candidatures
- other (pls specify)

30. How did you react to those problems of recrutiment?

- postponing candidatures deadline
- using internal solution upgrading already structured staff members with similar skills
- spreading new position tasks between a larger number of structured staff
- abandoning that recruitment process
- using external resources (free agent consultancy, external companies, etc.)
- other (pls specify)

31. Did you plan to hire new human resources? If the answer is yes, in which field of your business

32. Are you interested in hiring one or more workers/professional for one or more of field of activity listed at question 24? If the answer is yes, in which field?

33. If you have already planned to hire new human resources, please specify the reason:

business growth	YES	NO
seasonality/temporary peaks of demand	YES	NO
substitution for resign	YES	NO
Temporary substitution	YES	NO
other (pls specify)		

34. If you are interested in a training programme, which teaching methods do you prefer?

- practical training
- theoretical training
- work related learning
- training on the job
- on the job
- e-learning
- classroom
- esxternal courses

35. Are you willing for hosting some external resources for a traineeship programme in your firm? YES NO

36. If the answer is yes, which HR profiles would you prefer:

1

2

3

As we can see, the survey questionnaire is divided in three parts: the personal data section, which is followed by a set of questions regarding the awareness of the stakeholders about the benefits and opportunities provided by the Blue Economy and the Circular Economy, as well as a section concerned with the needs analysis for current and potential corporate training needs.
The following paragraphs are dedicated to explaining the data retrieved from the questionnaires.

3.2 The SWOT Analysis of the labour market in Sicily and Malta from a general, territorial, and sectorial perspective.

3.2.1 Defining the strategic assets of the Sicilian and Maltese labour markets.

The SWOT Analysis of the Labour Market in Sicily

The following paragraphs are concerned with a discussion over the results obtained by the qualitative survey questionnaire. The questionnaire has been administered to 23 companies from different domains to assess the degree of awareness about the opportunities given by the Blue Economy and the Circular Economy, and identify current and prospective training needs.
As mentioned, the questionnaires have been administered in the pre-pandemic time.
The companies involved belong to the following categories:

- Fishing: **3** Companies,
- Conservation and Transformation of products from the Primary Sector (Fishing and Agriculture): **6** Companies,
- Wholesale of products from the primary sector: **3** Companies,
- Construction and Implantation: **4** Companies,
- IT: **2** Companies,
- Tourism: **1** Company,
- Other Services: **4** Companies.

The interviewed companies are SMEs (100%), 43% of which are considered Micro companies.

STRENGTHS

Over 80% of the companies know and are aware of the **Circular Economy** and the **Blue Economy**. Waste Management procedures are in place in all the companies which produce waste.

Energy costs less than 3% of turnover in about 50% of the companies. It represents 10% for 25% of them and over 20% in the fishing industry. The implementation of blended measures for energy supply would help reduce the figures above.

Waste Management costs less than 1% of turnover in 60% of the enterprises, while the maximum cost has been recorded within 3%. The surprising element is that over 45% of the surveyed enterprises produce **special wastes**.

The interest in investing in human resources through **Continuing Professional Development (CPD)** is proven by the 80% incidence of the implementation of Personnel Learning and Development actions. The training usually concerns Health and Safety, New Technologies and Machineries, Quality Assessment, Marketing, and Management Styles and Techniques.

STRENGTHS

60% of the companies employ personnel with completed higher education. The highest numbers are found in the IT sector, where the incidence of graduate workers may represent 100% of the employees.

Some reassuring data for the Labour Market: 40% of the companies **look at increasing its workforce** in the near future. The most sought-after profiles are concerned with Marketing, Innovation, and Organizational Development, alongside qualified technical support in all the specific fields. The reasons behind this increase depend on diverse factors, such as the expansion of the demand (90%), seasonality peaks (80%), and, residually, companies forecast to be replacing staff in case of employee turnover (20%), or for temporary leave (10%).*

** More options were available for this entry*

WEAKNESSES

Only one of the surveyed companies has a **Risk Management** Model, compliant with the Legislative Decree 231/2001.

Over 45% of the companies in the study generates **Special Wastes** during production, which mainly regards food transformation and the disposal of used cooking oil in the food industry.

Energy is supplied through traditional channels in almost 100% of the cases, while only one company blends traditional **energy supply** with renewable energies through photovoltaic plants.

Nearly all companies recognize a **Training Gap** in one or more departments, most of which focus on the Marketing, Sales, Energy/Renewable Energy, Internationalization, Foreign Languages, Transformation and Waste Management departments. However, the gap would have to be filled **by *ad hoc* training courses**, feasible through subsidies from interprofessional funds or training vouchers, instead of traditionally used ways.

From the **Equal Opportunities** perspective, less than 40% of the companies employ women. Nevertheless, women represent more than 50% of the employees in 70% of the above companies. This represents an enormous gap with both the national and the overall European average.

Things look brighter for what concerns the Age factor, where 60% of the companies **employ workers under 40**.

OPPORTUNITIES

For over 80% of the companies, CPD programmes are both an opportunity and a need/requirement of the enterprise: the areas of interest may include Research & Development (R&D) innovation, while, for what concerns the **Training Methods**, about 95% prefers **Experiential Learning**, followed by job shadowing and on-the-job training (over 68%), whereas traditional learning is preferred by a little over 25% of the surveyed companies.*

Triggered and fueled by national and community subsidiaries, Energy Supply can be a remarkable opportunity in the fishing sector thanks to the implementation of blended systems that include photovoltaic panels, cogeneration plants or biofuels.

75% of the companies express the openness to implementing Traineeships, especially for what regards the hard-to-recruit profiles. The schemes would represent an opportunity for the company to employ human resources while also taking advantage of the incentives that are available for such projects at the national level.

** More options were available for this entry*

THREATS

For what concerns Recruitment, 30% of the surveyed enterprises has opened vacancies in the past and, almost all of them reported having problems in finding human resources: the issues mainly involved specialized skills gaps -due to the lack of experience or training- (75%) or having unreasonable expectations compared to their skills (30%); in 25% of the cases, the candidates didn't show up to the job interview.*

Companies have opted for internal restructuring and role distribution within existing employees to account for the lack of professional profiles.

** More options were available for this entry*

If used appropriately, the results of the survey could represent a useful tool for training and development purposes, as well as for energy effectiveness. Moreover, the results could help implement all-round Circular Economy based business models.
We forecast that the implementation of new measures connected to the recent emergency will likely modify most companies' internal procedures alongside the increase of the prices of, mainly, special waste disposal.
We invite companies to pay close attention to risk management models (Legislative Decree 231/2001), which, however, are now only implemented by companies working with the Public Administration. Those measures are beneficial for companies to safeguard the enterprise from health and safety crimes.

The SWOT Analysis of the Labour Market in Malta

The qualitative survey questionnaire report on the **Maltese Labour Market** has as main objective the evaluation of 20 companies from different activity domains, regarding current and prospective training needs and analysis particularly in the Blue Economy and Circular Economy.
Malta is one of the European countries that prioritize the Blue Economy, considering it a vital sector because of its geographical position and the importance in the economy. The blue economy employs around 10,400 people and represents a 4.7% contribution to Malta GDP.
For the Maltese Labour Market **20 questionnaires were filled in** by companies from different business activity, to have a general view over the industries and market:

- **3** companies from Insurance Business
- **3** companies from IT
- **2** companies from Real Estate Business
- **2** companies from Tourism
- **1** Governmental Institution
- **1** company from Construction
- **1** company from Trade
- **7** companies from Other services

As expected, the biggest number of interviewed companies are Micro (60%), while SMEs (30%) and Large (10%) companies summing 40% of the companies.

STRENGTHS

Manage the business phase of **Service** (70% of the companies). This could be an advantage on the market because the company can take control of the quality of the service provided to the clients and be able to preserve and increase the number of clients during business life.

In an active and dynamic commercial market, companies chose to manage the business phase of **Sales** (55% of the companies). Dealing internally with sales, offers a faster response to client's requests, a better understanding of the changing needs and trends, but also a direct contact with competition's steps in the process.

The companies are aware of **Blue Economy** and **Circular Economy** (60% of the companies), which could be a good foundation to rise practical involvement in the future. The incentives and regulations set up by Maltese government and the European Union help the system to make companies abide the rules, even if maybe some of them are not aware or familiar with the terminology.

The existence of **Waste Management** procedures for an important number of companies (70% of the interviewed economic actors) show that the Institutions and private waste collecting companies offers clear guidelines for commercial Waste and take measures when needed.

Risk Management/ Compliance Procedures (60% of companies)

STRENGTHS

Regarding the **management of energy needs**, there is an important percent of companies (50%) that use combined measure (local supply, efficient energy usage, solar panels). Together with a reduced cost for energy beneficial for the company, it comes also with positive impact on the climate, having as a result a decrease in the carbon footprint.

Energy cost less than 3% of turnover at an extended level (90% of the companies). The European Commission report from January 2019 on the Energy Prices and Costs in Europe shows that "energy costs for businesses fell from 2008 to 2015 in most of the sectors studied, with the most significant declines appearing in some energy intensive sectors". The same report mentions that "wholesale energy prices have fallen in recent years due to increasing competition on wholesale markets from greater amounts of renewable energy, improved interconnections and a more integrated internal electricity market".

Waste Management costs less than 2% of turnover (95% of the companies). This could be a strength from a firm's point of view, but also could show that the companies are not investing in developing new, ecological and climate-friendly ways of managing the waste. In order to find detailed reasons about this result we should go deeper to find if governmental or other national/ international measures helps to keep the costs at this level, or there are other reasons.

Join or organize a training programme (80% of the companies) – the interest in the continuous development of their employees show involvement and constant concern about the level of services provided. The most used training programs are: Communication skills, New technologies, Managerial training, Change Management, and job-related training.

The educational level of workers with **Degree Level**- 35% of the companies have more than 40% of the employees with a Degree level, depending on the business activity, with a better representation in services companies.

WEAKNESSES

At an extended level, the companies do not manage the business phase of **Transformation** (only 5% of companies manage it).

Relevant business waste/scrap (50% of the companies). This consists of waste/scrap related to direct activity (such as oil from food industry, toluene mother liquor, ICT equipment, Construction waste, amalgam, sharps (dental industry) that are managed due to the national regulations.

None of the interviewed companies owns **ISO Certificates**. There is a mention made by one of the companies, that within the group another company is ISO9001 and ISO27001 certified. The advantages of implementing ISO standards (better internal management, less wastage, increase in efficiency, productivity and profit, improved customer retention and acquisition, globally recognized standard, the benefits for customers) are not used by the companies on the local and international market. As per internationalization of the businesses, the certification with the ISO standards would give firms access to new markets and business opportunities globally.

WEAKNESSES

The educational level of workers with **Post degree Diploma** – 90% of the companies have less that 15% employees with Post Degree Diploma.

Training gap is related to fields like Business and Organization Innovation (35%), Management skill (45%), Internationalization (30%), Renewable Energy/ Energy/ R&D/ Big Data (15%), Foreign Languages/ Environment and job security (25%), Privacy, Data Protection and security/ Sales Marketing (30%), Technological Innovation (20%).

Following the EU statistic, we observe that women in Malta are less present in the labour market than men (50% of the companies have less than 40% of women employees). The same situation is regarding the number of employees under 40 years (50% of the companies have less than 40% employees under 40 years).

To cope with the recruitment problems, the companies tried combined measures: Postponing vacancy application deadline (25%), Using external resources (40%), Breaking down responsibilities amongst employees (20%), Recruiting internally 20%). Also, other solutions were to recruit from a very limited pool of candidates, on the job training or recruiting non-EU national, which involves a long and difficult process.

OPPORTUNITIES

Extending the number of firms that use combined measures to manage the energy needs (renewable energy technologies, photovoltaic installations, solar water heaters, waste-to-energy, heat pumps, biomass imports and biofuels). The companies could apply for EU funding schemes or make own investments in technologies to be self-sustainable in terms of energy.

Join or organize a **training program** related to the gap findings, could be a solution to counteract the problems with recruitment processes had over the last three years. National schemes or private initiatives are welcomed to train and prepare the possible candidates for the labour market needs.

Continuous training/ development is considered an opportunity/need by most of the companies (95%). Some of the needs are related to the mandatory annual training regulated by the activity sectors, others are valuable for keeping a high standard for the services/products offered or to improve client's experience within the company.

Considering the employment rate of the young people under 40 years, the labour market could access these human resources, to cover the existing lack. With measures oriented directly for these employee categories, the economy will be able to attract new and qualified candidates.

All categories of Personnel could be involved in training programme, depending on the business activity, but also general training as Management Skills, Innovation, Internationalization

At great extent the companies consider that **refresher and retraining programs** are useful for their staff members (85% of the companies). Some of the business activities have annual mandatory training for the sector (eg. Insurance), others consider that customer service is an important value for service providers and the success of a business.

OPPORTUNITIES

The companies that are interested in hiring new staff are looking for positions in Hi-Tech, Management, Innovation, Environment and job security. New training programmes in these fields could prepare the human resources for the needs of the labour market and determine the increase of the employees with degree diploma in the total number of employees per company.

Teaching methods preferred are Practical training (45% of the companies), Work-related learning (40% of the companies), Training on the job (60% of the companies).*

**More than 1 option was allowed*

THREATS

Labour market is challenging for the employers in Malta, as 90% of the companies mentioned that had **recruitment problems** in past three years, due to Lack of competences (65% of companies), Higher **wage expectations (50% of companies), No applications (45% of companies)***.
The most problematic positions are Managerial positions, Sales/ Development, Administration, IT and workers.

Despite the existing recruitment problems in the last 3 years, only 55% of the companies are **planning to hire** new human resources in the future, and mainly in Management positions and Hi-Tech. The reason for hiring is Business growth (45% of the companies) and substitution of resignation (10%). For the other 45% of the firms, the economic situation and the evolution of the business over the last years seem to be static or decreasing.

Only a small percent (35%) of interviewed companies are interested in **hosting external resources** for a traineeship programme (internship). Because of the employment rate for people under 40 years, the unavailability of the employers to train on the job and prepare the young generation for the market's needs, it's one of the obstacles for the inclusion of this category on the labour market. The interested companies for these programme are willing to accept students for different fields, IT, Marketing finance and insurance profiles. Negative experience with previous internships or lack of knowledge of such trainship programmes could be some of the reasons for the results in the interviews.

**More than 1 option was allowed*

4 HUMAN CAPITAL NEEDS IN THE ITALIAN AND MALTESE LABOUR MARKETS

4.1 21st century jobs and the Italian-Maltese Labour Market

4.1.1 The drivers of the occupational shift in the 21st century

The following represent the main phenomena connected to the transition towards a low carbon-emission economy. This change will affect several dimensions of the labour market, including the need for new job profiles and new skills[23].

- **Climate and Environmental Change**: Global warming and weather phenomena require the implementation of transformed economic measures aimed at environmental risk management through relevant skills and professionalism,
- **Normative Policies and Activities**: The growing urgency of the current environmental question within the international political agenda has resulted in normative actions, especially in the most developed countries: this triggered more and more demand for professional roles and skills connected to the new regulations,
- **Technology**: IT innovation has considerably affected the increase of the so-called green jobs in the productive cycles internationally. Such a revolution has transformed the demand in the job market. Indeed, experts forecast that, in 2050, there will be a similar impact to the Second Industrial Revolution.
- **Consumer Behavior**: The rise of green jobs is also strongly related to the shift in consumer behavior, which, in turn, affects the creation of new markets.

4.1.2 Professional needs analysis per macro-industry

We feel that it's necessary to specify that the following analysis, too, has been made before the COVID-19 incidence. The lockdown will have inevitably affected the economy, thus, the uncertainty concerning any growth perspective.
In a Business as Usual (BAU) scenario, it's the Digital Transformation and Eco-sustainability sectors that will be most affected by the new training needs[24]. The main reason behind this shall be the rising demand for such profiles, which will account for 30% of the employment needs in Public Administration until 2023.
It is estimated that the Public Administration will recruit around 300.000 new professionals in the digital transformation area. The required skills involve mathematics, IT, digital skills or industry 4.0-related competencies.
The most sought-after profiles will be data analysts, cybersecurity officers, AI specialists, and market research experts. Those figures will need skills regarding:

1. Organize and assess qualitative and quantitative information through mathematic and IT scripts and methods
2. Solve organizational issues through innovative solutions using robotics, Big Data Analytics, the Internet of things -in line with the 4.0 Industry plan.

The most requested profiles in this domain will be Data Scientist, Big Data Analyst, Cloud Computing Expert, Cybersecurity Expert, Business Intelligence Analyst, Social Media Marketing Manager, Artificial Intelligence Systems Engineer.
Apart from the birth of those new professions, we'll witness a generation handover that, thanks to the skills of the newly employed workforce, will drastically change the content and methodologies used on-the-job.

The need for digital skills will, therefore, not only be limited to specialized technical jobs (IT, Design, R&D), yet it'll extend to the management and administrative roles, including staff and HR. Indeed, the recruitment of nine out of ten profiles today already require IT skills.
Companies struggle to find candidates with the required digital skills. The reasons reside not only in an insufficient offer but also in inadequate training level, caused by antiquate educational policies and curriculum that lag behind, compared to the structural change of the economic system.
Needless to say, the Digital Transformation would affect the whole production system, generating a diffused digital ecosystem thanks to the use of advanced technologies throughout the supply and production chains, as well as the after-sales support.

For what concerns environmental sustainability, according to the Excelsior analysis (Italian National Informative System for Employment and Education), the Circular Economy sector appears the most dynamic.
In this sense, Italy has developed a number of policies that allow it to take first place in the EU for circularity rate -i.e. the percentage of material resources used that came from recycled products and recovered materials- as well as being a pioneer with regards to enforcing community measures.
In the next five years, Italian enterprises will recruit about 580,000 workers with 'green' skills at all levels, from highly specialized roles to technicians, from employees to commercial and tourism services operators, from workmen to artisans.
Energy management experts, green chemists, waste cycle experts, green sales specialists, environmental marketing specialists, and low impact plant technicians are only some examples of green jobs in demand in the enterprises.

4.1.3 Professional needs analysis in the most relevant industries

All researches agree that the transition towards a Green Sustainable Economy will affect the labour market in all productive sectors, though consequences may not be linear and equal.
Indeed, most literature agrees that there will be a positive net effect of the transition (new vacancies vs job loss) on direct, indirect, and induced employment levels.
Most vacancies will appear in domains connected to green products, services, and production processes. Activities concerned with the supply of intermediate goods or semi-finished products linked to the above-mentioned processes, services, and products will also be involved.
On the other hand, the positive trends will be paired by a reduction in the employment rate in the high-intensity environmental-impacting sectors.

International and national studies, including the ones conducted in developed and developing countries[25],confirm that no sector will be left out from the Green transformation. The reason resides in the fact that reducing the consumption of energy, climate-altering emissions, as well as developing different and more effective waste management, indirectly affect the production processes of all economic sectors. Because of the specific nature of their production cycles, some industries will be more affected by the

paradigm shift than others[26] -i.e. agriculture, renewable energy production and supply, the waste cycle, construction, transport-, favouring the birth of new professions to be recruited through innovative training schemes and retraining of the existing human resources.

Agriculture

For what concerns agriculture, the key activities to the transformation of the industry are the effective management of soil fertility, efficient and sustainable use of water, crop-livestock diversification, the development of biological crop-livestock methods and techniques, and adequate automation levels for agriculture.

Low-impact agricultural activities require greater work units and workforce, compared to traditional agriculture methods[27]. Consequently, if we compare them at equal production levels, the green transition in the sector will have a more positive influence on the occupation than traditional ways.
The public sector could also play a key role in increasing the vacancies throughout the 'greening' process, mainly for what concerns the design, planning and management of the new policies and incentive plans, as well as the implementation tools to support conservative and organic agriculture, while also developing aid plans and environmental taxation schemes (i.e. Pigouvian tax), and the design of training and consulting initiatives.
The implementation of the green transformation seems to be more complex for what concerns the Forestry and Fishery industries. Indeed, the necessary limitation to exploiting natural resources and the subsequent reduction of the occupational levels will have to be balanced out by the development of activities that safeguard, conserve and protect the environment and natural assets. Balancing effects can be generated by the diversification of traditional businesses -i.e. fishery- in favour of the tourism industry, as well as the adoption of circular economic paradigms that involve the recovery of waste to power biomass implants, the adoption of innovative packaging, logistics, and conservative fishing methods.

Public Utility

Among the public utility sector, the energy industry will be the most affected by the transformation. The production of renewable energy requires greater working units compared to hydrocarbon-based energy supply systems[28].Moreover, effective retraining of the workforce will likely balance out the loss of job places in the conventional energy supply sector[29].
The photovoltaic system appears to be the most performing one within the renewable energy department. Apart from the production of the panels, the distribution, monitoring and post-sales services represent other areas that can positively affect the employment rate[30].
The international goals concerning the production of renewable energy and the reduction of greenhouse gas emissions will be able to generate considerable job vacancies, reaching up to 23.5 million units by 2030.

The direct and indirect employment levels related to renewable energy may amount to 22.8 and 24 million on a global scale, with a 6% annual growth according to the technology mix in place among bioenergy, hydroelectric energy, solar energy and wind power.

The leading sectors will be the bioenergy (creating around nine million more job vacancies in 2030), followed by solar power (over six million), hydroelectric power (over 5 million) and wind power (over 3 million)[31].

At the community level[32], the CE informs that renewable energy will account for about one-third of the total energy supply for EU-28 in 2030 (in 2011 the percentage was 13% of the total).

Keeping in mind the decreasing employment rate in the traditional sector, such figures will result in increased vacancies for the energy industry (BAU estimate at the end of 2020) accounting for 2 million more people working in wind and solar power divided in: bioenergy -including tools and machinery industries-,

design and development activities, the building, installation, maintenance and management of the plants. Needless to say, although a total decarbonization scenario would result in even higher employment levels, its potential varies from country to country, and it depends upon its capacity to implement normative and administrative innovation towards the objectives of the international treaties.
For what concerns wind-power[33], for instance, we forecast that the increase in the employment levels will be as expected in all the EU, with Italy placing among the first five countries per growth index. Malta, however, would have to deal with orographic and dimensional problems, though recent developments concerning offshore wind farms allow brighter expectations.
The diffusion of Smart Grids -i.e. networks which optimize the exploitation of existing electrical infrastructure, regulate the flux during demand peaks and allow the use of energy during excesses of demand thanks to decentralized producers and the development of a reasonable consumption of electric power from the side of the end consumers by installing consumption-monitoring and control instruments- also allows for bright perspectives. The demand is likely to grow, alongside the production of technological devices for their management, together with satellite installation and maintenance activities[34].

Environmental Industry

This industry is the most affected by the management of the high volume of waste generated by the production and consumption cycle. Waste collection and waste management (i.e. landfills, waste-to-energy plants), together with the recycle and recovery of materials (which includes their collection and transport towards the transformation and recovery plants to obtain new products) have been in constant growing ever since the implementation of norms in the public sector, and the rising environmental awareness of the last decades.
According to the most accredited data[35], the rise of recycling rates to 70-75% could generate 1.8 million direct-access job vacancies in the next two decades in Europe and the USA only. If we, then, consider satellite activities -i.e. the IT sector- the figure could increase by ten percentage points.
In the EU, there is elevated growth potential in nations with low current recycling rates mainly -i.e. Mediterranean countries and former Iron Curtain countries.

Construction

For what concerns the labour market, construction is another highly promising industry if we consider its green transition and upgrading of existing real estates to terminate greenhouse gas emissions.
Reuse is one of the imperatives of environmentally sustainable construction, which mainly -but not solely- relies on the use of eco-compatible construction materials, and the design of low environmental impact integrated energy and water systems. Take, for instance, the dust from ELTs (End-of-Life Tires) used in the building of insulating panels.
The green transition of the construction industry generates employment on a number of activities: this includes the construction of new buildings, the renovation of pre-existing ones, the production of thermal insulation materials, environmental-friendly construction materials, eco-compatible products, devices, and components, the development of low-consumption management and maintenance activities, the diffusion of renewable energy, and the development of satellite activities, such as recycling and waste management[36].
Every million dollars invested in this industry will generate twelve -direct and indirect- job vacancies. A BAU estimate sees the creation of 1.1 million jobs per year in Europe alone, until 2050. The adoption of specific re-skilling and up-skilling measures, implemented with the support of the public sector, would mitigate the potential decrease in the traditional construction industry and the derived effects in the labour market.

Transport

The transport industry is widely affected by the green transition of the economy, mainly concerning the rise of electric vehicles, and for a positive impact on employment, there need to be policies in place to support the retraining of the current workforce.
Moreover, the rising popularity of battery-electric vehicles (BEV) and hybrid plug-in vehicles (PHEV) implies the necessity of creating and installing infrastructures to charge the batteries of the above.
The development of an electric mobility network, in which the users can safely and conveniently charge their vehicles, requires the development of new professional roles, vacancies, and specific production and management skills[37].

4.1.4 The New 21st century Green Professions[38]

INDUSTRY	ROLES
Agriculture	Organic Agronomist. Energy Manager. Project Manager for incentive management.
Public Sector	New normative and regulation Advisor (technical, judicial-economic profiles). Green New Deal Program Management Advisor.
Utilities	Renewable Energy Plants production and maintenance (technical profiles). Environmental engineers. Biotechnologist. Bioenergy and Bio architecture Specialist. Project and Smart Grid Expert. Smart Grids and IT device production specialist (i.e. monitoring switchboard, new generation electric meters).
Integrated waste cycle	Waste transformation and disposal implant Design Engineer. Waste collection and transformation technicians, and Environmental recovery and remediation technicians.
Blue Economy	Aquaculture technicians. Coastal tourism experts. Marine biotechnology experts. Energy Engineers and technicians specialized in Ocean Energy. Mining Engineers and Technicians specialized in Seabed Mining. Marine and Agrifood, Technology Experts. Environmental Health and Safety Experts.

The following table shows the skills required by the professional roles related to the integrated waste cycle and the Blue Economy.

INDUSTRY	ROLES	SKILLS
Integrated waste cycle	Waste transformation and disposal implant Design Engineer. Waste collection and transformation technicians, and Environmental recovery and remediation technicians. Waste recovery and recycle implants operators.	The roles in this unit deal with procedures, norms and technologies aimed at controlling and guaranteeing waste cycle efficiency -i.e. collection, selection, transformation, and disposal-. Those profiles support in the assessment and implementation of recovery and remediation plans for polluted areas, monitoring and management of digital control systems, appliances, incineration, as well as waste-to-energy plants, recovery, and recycle plants.
Blue Economy	Technical experts in shipbuilding, Waterborne and intermodal transport experts. Energy Engineers and technicians specialized in Ocean Energy. Mining Engineers and Technicians specialized in Seabed Mining. Marine and Agrifood Technology Experts. Environmental Health and Safety Experts.	The skills required for these new roles are (in order): marine biology and biotechnology, marine resources management, and fishing technology. Tourism management, management of marine protected areas, shipbuilding and repair, naval design and architecture, hydrodynamics, marine technology, national and international maritime law. Waterborne transport and customs policy. Maritime and ocean engineering concerned with the energy and the environmental sector, Food product safety norms, environmental engineering and on-the-job health and safety.

CONCLUSION

National governments' and supranational organizations' agendas already include measures for a global transition to the Green Economy. In September 2015, over 150 international leaders signed the UN's ten-year plan to promote global development, human wellbeing, and protect the environment.

Member States approved the 2030 Agenda for Sustainable Development: at the core of the agenda are the 17 Sustainable Development Goals (SDGs) and the 169 targets aimed at reducing poverty, fighting inequality, promoting social and economic development, and build peaceful societies by 2030.
UN SDGs have universal validity, and, therefore, all countries shall contribute towards gaining the goals according to their capacity.
Following, a list of the SDGs, explained:

Goal **1**: No Poverty: End poverty in all its forms everywhere.

Goal **2**: Zero Hunger: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

Goal **3**: Good Health and Wellbeing; Ensure healthy lives and promote wellbeing for all at all ages.

Goal **4**: Quality Education; Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Goal **5**: Gender Equality; Achieve gender equality and empower all women and girls.

Goal **6**: Clean water and sanitation; Ensure Availability and sustainable management of water and sanitation for all.

Goal **7**: Affordable and Clean Energy; Ensure access to affordable, reliable, sustainable and modern energy for all.

Goal **8**: Decent work and economic growth; promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Goal **9**: Industry, innovation, and infrastructure; Build resilient, infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Goal **10**: Reduced inequalities; Reduce inequality within and among countries.

Goal **11**: Sustainable cities and inequalities; make cities and human settlements inclusive, safe, resilient, and sustainable.

Goal **12**: Responsible consumption and production; Ensure sustainable consumption and production patterns.

Goal **13**: Climate action; Take urgent action to combat climate change and its impacts.

Goal **14**: Life Below Water; Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Goal **15**: Life on land; protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Goal **16**: Peace, Justice and Strong Institutions; Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective accountable and inclusive institutions at all levels.

Goal **17**: Partnership for the goals; Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Nevertheless, all the goals are indispensable and related to each other some of those share the same focus of the present work, namely SDGs 6, 7, 9, and 11-16.

The transformation of entire economic and social systems may not be painless, thus the need for effective management towards the Green economy to avoid negatively affecting the employment.

Training and reskilling workers are not short-term processes because they require thorough analysis and meticulous planning. Also, such measures are to be shared at the global level either because climate change has no political borders, and because natural resources are, indeed, shared. This has been harshly vivid in the light of the most recent events influencing global health.

The objective of this work package -within the JobMatch 2020 framework- is to identify economic and employment opportunities of two emerging industries -i.e. the Circular Economy and the Blue Economy- connected with the transition towards the Green Economy, thus, the analysis presented in the document. The collected data is, not only based on the most recent and accredited literature and up-to-date statistics, yet, it sprouted by the interaction with all the actors in the market: identifying the attitude towards the new models and the needs in the matter of human capital helps in defining specific and personalized educational and training actions to be implemented in another step of the projects.

From the effectiveness of the training perspective, this approach has two advantages:

1. it relies on actual skill gaps and current needs of the workforce,

2. it focuses on corporate demand for the identification of needed skills.

Again, the identification of new or renewable professional roles through the needs analysis of the companies involved in the study confirmed the effectiveness of the approach.

Note

[1] Club of Rome, The Limit to Growth, Potomac Associated Book, 1972.

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[3]https://www.credit-suisse.com/about-us-news/it/articles/news-and-expertise/the-blue-economy-a-sustainable-future-for-the-ocean-201805.html.

[4]*Ibidem.*

[5] https://ec.europa.eu/maritimeaffairs/policy/blue_growth_it.

[6] https://ec.europa.eu/regional_policy/en/information/maps/regional_competitiveness/.

[7] Peer to peer regions: Mazowiecki regionalny; Zachodniopomorskie; Jadranska Hrvatska; Lubuskie; Kriti; Calabria; Stredné Slovensko; Sterea Ellada; Opolskie; Kontinentalna Hrvatska; Campania; Dytiki Makedonia; Kujawsko-pomorskie; Peloponnisos, and Puglia.

[8] Data from Istat 2020, http://dati.istat.it, *Conti e Aggregati Economici Territoriali, Conti Economici Nazionali (Regional Economic Accounts and Economic Aggregates, National Economic Accounts).*

[9] The data and the evidence in the paragraph are retrieved from: *Banca d'Italia Eurosistema, Le economie regionali – L'economia della Sicilia* (the Bank of Italy Eurosystem, Regional Economies - Economy of Sicily), n. 19, June 2019.

[10] ISTAT, 2018.

[11] Last available year-round data for Regional Disaggregation of National Data, ISTAT, Prometeia, Forecast Report, December 2019.

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[13] Data from Bank of Italy, *Economie Regionali* (Regional Economies), Sicily, n. 19, June 2019.

[14] Data from Dati.istat.it under the menu *servizi/turismo* (services/tourism).

[15] Bank of Italy, Regional Economies.

[16] Figures retrieved by processing the data from *Assoeroporti*, https://assaeroporti.com/dati-annuali/.

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[18] We processed the data retrieved from *Istat, http://dati.istat.it, Dati Istat, Conti e Aggregati Economici Territoriali, Occupazione Regolare, Irregolare e popolazione* (ISTAT Data on Regional Economic Accounts and Economic Aggregates, Legal and Illegal Employment and Population).

[19] The data and the evidence in the paragraph are retrieved from: *Banca d'Italia Eurosistema, Le economie regionali – L'economia della Sicilia* (the Bank of Italy Eurosystem, Regional Economies - Economy of Sicily), June 2019.

[20] Svimez, *Rapporto sull'economia del Mezzogiorno* (Report on South-Central Italy's Economy), 2018.

[21] CIG *(Cassa integrazione Guadagni)* -i.e. the Italian National redundancy fund for employed workers (NdT).

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[36] ILO, (2012) cit.

[37] CEDEFOP, OECD (2015), cit.

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PART II

Circular Economy and Sustainability in Europe

The cases of Italy and Malta

1. THE CIRCULAR ECONOMY
2. EUROPEAN UNION PROMOTION ACTIVITIES FOR THE CIRCULAR ECONOMY
3. THE EUROPEAN UNION'S OBJECTIVES AND FUTURE PRIORITIES
4. THE CIRCULAR ECONOMY AND SUSTAINABILITY BETWEEN ITALY AND MALTA

FOREWORD

Human activities account for the major reason causing climate change, and we can now clearly see its influence on the Planet Earth.
Developed and developing countries alike adopt linear economies in which the production of goods and services creates a great deal of waste.
The scientific community agrees that the foot foundation of linear economy is in profound contrast with the needs of the environment, as it contributes to climate change.
The massive exploitation of natural and environmental assets has effects on several geographical areas that aren't, indeed, able to sustain such exploitation of their resources.
Currently, for instance, one of the most significant changes related to climate is the expansion of desertification. The phenomenon is not only affected by temperatures rising, yet also by the reduction of rainfall. We can witness this change in many parts of the world, including highly developed countries -i.e. USA, Canada, Australia, Europe[1] - and developing areas -i.e. Central and South America[2], and Asia[3]- and underdeveloped regions -i.e. Sub Saharan Africa[4] and other African countries[5].

For what concerns the effects of the desertification process, we can identify them as follows:
A worrying drought in a crucial area, one that serves and nourishes hundreds of millions of people, causing a drastic reduction of the crops;
Glacier melting;
Reduced availability of water in densely populated areas;
Risk of desertification for an increased number of areas[6];
Malnutrition caused by an increased risk of diseases;
Damages to crops and ecosystems due to the diffusion of insects in areas they don't belong to[7];
A global social and economic disruption that is hardly sustainable by the world's economy.

In light of the above, it appears much clearer why many scholars involved in economic and social sciences agree that the desertification phenomenon is one of the main reasons behind the African migration towards European countries[8]. Moreover, the social, legal and economic effects of such migration represent the core debate of recent years.
Nevertheless, this may not be the proper place for the discussion of such complex matters, it behoves us to illustrate some scientific hypothesis concerning the origin of the new Sars Covid-2 (also known as COVID-19).
Part of the global scientific community considers COVID-19 possible evidence of the consequences caused by the indiscriminate exploitation of the natural resources and the destruction of the habitats to some wild species[9].
Indeed, some scientific research shows that the Sars Covid 2 virus is genetically similar to the typical virus affecting Malaysian pangolins: some specimens would have been illegally imported to China to be sold in Chinese wet markets as food[10]. This is how the virus would have been in contact with human beings, though obliged to employ the necessary genetic mutations to survive. In other words, the Sars Covid 2 virus would have been created (or induced) by the destruction (or change) of the pangolin's natural habitat.

Furthermore, the evident social-economic consequences linked to the current pandemic will likely have repercussions in the future[11]. Indeed, it is undoubted that the world is undergoing an unprecedented recession able to hit entire industrial sectors and nearly halt their productive capacity.
The reason behind this preoccupying situation is the structure of the modern economic system itself. It is an intricate network of elements (i.e. workforce, enterprises, banks, financial intermediaries) in which the failure of one part would inevitably generate a crisis.

In light of the above, we must underscore the urgency of interventions concerning the environment and sustainability, to prevent sanitary, social, economic and legal risks linked to a no-longer sustainable development scheme.

Therefore -although we make no claim to be exhaustive- the following pages aim at explaining the legal-economic foundations underpinning the desirable implementation of sustainable development systems, covering legal foundations and possible supranational harmonization scenarios by analysing the *de-facto* preconditions and perspectives for European normative policies aimed at promoting a rapid transition between the two economic models.

We will conclude with an analysis and a comparison of the general principles operating in the Italian and Maltese systems.

INTRODUCTION

The ever-more vivid shortage of the planet's natural resources and their overexploitation, together with the ecosystems being overburdened, constitute a limit to the growth of global economies. Economic systems are characterized by inefficient linear models that rely on the exploitation of non-renewable resources, creating wealth through squandering natural assets and producing manufacturing waste, causing high levels of instability[12].
The above imposes a global reflection concerned with a transition towards economic models that allow more efficient use of the resources[13] bringing environmental, economic, and social benefits[14].

The Circular Economic model is a promising option. It can optimize the use of resources through a global redesign of the production and supply chains of goods and services. This strategy implies waste management procedures so that production scraps are reused in new production cycles. Also, there should be shared utilization of material assets, digitalization of processes, and the mere reuse of goods and materials.

Such a scenario requires the implementation of technological processes aimed at limiting the consumption and extraction of new resources, alongside putting in place prevention strategies for the management and reuse of production scraps.

The Circular Economy model would, thus, guarantee increased socio-economic safety and stability at the global level by reducing the necessity to rely on external supply and on the destruction of natural habitats, as well as opening up to new and diverse growth opportunities and business models.

1. THE CIRCULAR ECONOMY

The traditional economic system (the so-called Brown Economy or Linear Economy) is implemented following a diachronic paradigm in accordance with the Mechanical Philosophy based upon the scheme 'extract, produce, use, dispose'. This paradigm is in clear juxtaposition with the typical environmental logic, in which the scraps and wastes of a natural cycle represent a resource for another one.
On the other hand, the Circular Economy is much more in line with the systematic green logic, which interprets the world as a unified network[15].

This economic model has been at the core of the scientific and socio-economic debate among experts of the Hard Sciences and Social Sciences alike. This has been a reality ever since the incidence of the environmental emergency -i.e. global warming, ozone depletion, waste management-[16] as well as thanks to the awareness concerning the limits to the current economic development.

The above-mentioned debate gave birth to diverse and fascinating economic theories, among which the redesign of economic processes supported by positive soft law and hard law actions on single units and strategic industries[17].

For instance, one theory includes the implementation of norms concerning renewable energy supply, the energetic eco-efficiency of buildings[18] and the implementation of waste management in the industrial production processes[19].
The Circular Economy is, thus, part of the conversation. It aims at the complete integration and synergy between the environment and the economy.
This model implies effectively recovering production or service-derived residue and scraps which still maintain their intrinsic value, by using them as a starting point for new productive cycles[20].

This implies a structural change and redesign of the production process -as well as satellite processes- aimed at optimizing the use of the employed goods and materials to avoid value loss, together with postponing or eliminating the need to consume new resources.

The transition towards the circular economy would imply studying and implementing new measures and solutions such as the digitalization of production processes, the regeneration and recovery of natural assets -i.e. soil, energy-, and the elimination of the inefficiencies in maintaining, reusing, and recycling products[21].
This economic paradigm would prove to be a useful strategy towards a more stable system in terms of the availability of resources needed for the functioning of the system itself.
The current economic systems are based on a linear model that necessitates non-renewable resources, hence the constant exposure to import-derived risks. Indeed, only a few countries can count on the supply and sediments of finished resources.
On the contrary, by promoting the recovery of the production scraps and the optimization of inefficiencies, the circular model would reduce the need and supply of raw materials and externally produced energy thanks to a diverse and distributed management of the local resources present within the systems, converting waste into resources, rethinking production logistics and promoting safer and diverse growth[22].
After having outlined the importance of such a perspective, the following paragraphs will deal with a short analysis of the most relevant legislative and economic interventions at the European as well as the national level -i.e. Italy and Malta.

2. EUROPEAN UNION PROMOTION ACTIVITIES FOR THE CIRCULAR ECONOMY

Many projects in the world that attempt to, partially or totally, redesign the current economic model towards a concrete sustainable dimension. The concept of environmental sustainability of human activities is being rethought by scholars, Nations, and international organizations. To confront this challenge, the European Union and its Member States have decided to undergo a transformation process from the take-make-dispose linear economic paradigm towards a circular system. The strategy entails paying closer attention to the extraction processes and use of raw materials, as well as the effective use of the resources -i.e. substances, products, or scraps- during both production and satellite activities. The sustainable reuse of materials is another important point of the plan. Indeed, the goal is not only to safeguard the resources, yet also to correctly manage waste by minimizing and controlling the environmental and health-related impact of the production processes.

Moreover, sustainable development is now a principle within the Treaties of the European Union (article 3, § 3, TEU) concerning community and internal law. Such principle, together with the one covering environmental quality protection, represents the main objective of the European Union that, therefore, promotes and supports the adoption of international measures[23]. All in all, we can consider this as one of the cornerstones for the EU's economic development since its origins.
Although Community Treaties of the past never explicitly concerned to environmental rights and sustainability, we shall remind the reader that the protection of economic development and social wellbeing of European citizens has always been a key objective of the EU. Indeed, the Union has always expressed wide support to the cause of environmental protection and economic development.
We recall the agenda of the early Action Plans of 1972. They dealt with general principles, development goals, and high priority sectors -those which required political and normative actions- able to affect the development of the internal market, as well as regulating measures for air and water pollution areas.
The harmonization of national environmental laws has always played a key role in promoting seamless intra-community trade and prevent unequal competition rules, as well as safeguarding human and environmental health. As time went by, the European Community has deemed necessary to intervene in environmental matters with *ad hoc* measures to effectively challenge the environmental emergency[24].

Furthermore, environmental matters have been a prime concern within the EU thanks to the Treaty of Lisbon[25]: this treaty allows the EU to take concrete normative community actions concerning the environment, internal markets, and Member states solidarity.

As evidence of the above statements, the arrangements provided by the Treaty are coherently aligned with the legal positions of the community.
Article 191 section 1 of the TFEU explicitly states that Union policy on the environment sets the following goals:
preserving, protecting and improving the quality of the environment, protecting human health, prudent and rational utilization of natural resources, promoting measures at the international level to combat climate change.

The European Union is, therefore, one of the leading international players explicitly engaged in developing sustainable economic models aimed at improving the environmental sustainability of the community and international production processes, as well as the social, judicial, and economic progress of its citizens (see article 191 section 2 TFUE). The norm also identifies the tools through which the EU shall develop its environmental policy.
The political agenda of the EU shall take into account the available scientific and technical data, community

regions typical environmental conditions, advantages and responsibilities that may derive from the action or absence of action, and, finally, the overall socio-economic development of the European Union, joint with the progressive and balanced one of the individual regions (see article 191, section 3 TFUE).
The norm identifies the guidelines for achieving the policy goals of the European Union. In other words, it expresses the will to promote international measures concerned with global or regional issues regarding the fight against climate change. This matter is not new to the European jurisdiction, though it's reiterated in the Treaty of the Functioning of the European Union[26].
Subsequently, article 194 TFEU introduces the jurisdiction over the energy industry, which must be created in high accordance with the needs of the environment, as well as the internal market, creating solidarity among the Member States. Again, this confirms the concern of the EU for environmental matters, as well as its position with regards to the normative policy -which had already been defended in the past by the Union and the Member States. On the other hand, some criticism has been made upon the fact that Brussels has been invested in new powers. However, a close reading of the Treaty helps understand that there have not been any changes from a legal/judicial perspective. Indeed, the Treaty is a mere reiteration and explanation of the jurisdiction of the EU in the matter of climate change which was already in place.
Furthermore, nevertheless, the Charter of Fundamental Rights of the European Union never entered into force[27], it is now an essential part of the Treaty of Lisbon: this confers the Charter of Nice Treaty status, acquiring definite binding powers for European institutions and the Member States. Consequently, its content has full binding judicial power.
Article 37 of the Chart of Nice explicitly states that "A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured under the principle of sustainable development". The principles of the article are based upon articles 2, 6 and 174 of the EC -now replaced by article 3, section 3 of the Treaty of the European Union and articles 11 and 191 of the TFEU.
Sustainable integration and development are core elements for the provision of a high level of environmental protection[28]. Following the above-mentioned principles, the EU intervened multiple times to, directly or indirectly, influence the political and economic agendas of Member States through specific normative actions.
Bearing in mind the aim of this work, it would appear useful to linger on outlying some examples to account for the effort and the range of the measures taken by the EU.

In 2015, the European Commission presented a wide political framework, designed specifically to promote and stimulate Sustainable Economy, published in the so-called, Circular Economy (CE) Package. The CE Package is a set of political position papers and legal initiatives concerning waste management, aimed at supporting the transition towards Circular Economy in the EU[29].
The Closing the loop - An EU action plan for the Circular Economy of 2nd September 2015 of the European Commission, includes guidelines to promote the shift of the EU towards the Circular Economy model through the following objectives:

- **P**romote the reparability, upgradability, durability, and recyclability of products under the Ecodesign Directive,
- **P**repare an independent testing program to help the identification of issues related to possible planned obsolescence,
- **P**ropose product design and marking requirements to make it easier and safer to dismantle, reuse and recycle electronic displays,
- **P**ropose the differentiation of financial taxation of producers for a diffused responsibility framework based on product disposal. This disposition acts as an economical incentive to produce reusable and recyclable products,

Examine harmonization perspectives for community policies towards the circular economy.

Promote eco-compatible product design favouring its reparability,

Promote innovative projects for the reuse of production scraps,

Improve the legal criteria regulating product warranty,

Take action in the matter of Green Public Procurement (GPP) by promoting circular economy values and support its diffusion[30].

To reach the above-mentioned goals, the European Commission announced it will take the following actions:

The commission will include guidance on best waste management and resource efficiency practices in industrial sectors in Best Available Techniques reference documents (BREFs),

And will issue guidance and promote best practices on mining waste and recovery of raw materials,

The Commission is proposing (in the revised legislative proposals on waste) to clarify rules on by-products to facilitate industrial symbiosis and help create a level-playing field across the EU,

The Commission will promote the production of more easily repairable products,

The Commission will require the efficient use of materials in the process of eco-compatible design,

The Commission will assess and identify horizontal requisites for the diffusion of information concerning the repair of the products,

The Commission will prepare an independent testing program concerning the programmed obsolescence process[31],

The Commission will modify the law to allow recycled materials to be re-categorized as non-waste -upon confirmation of some general conditions.

The four guidelines that make up the CE Package have been published in 2018[32].
The new regulation aims at reducing the quantity of waste and scraps produced, as well and increasing the recycling of urban waste and packaging waste. Furthermore, it underscores the principle for which the Member States must prioritize the prevention, recovery, and recycle of waste, as opposed to incineration and landfill.

Along the same lines, the European Parliament and the European Council reached a political agreement on a new directive concerning single-use plastic. The legislation aims at reducing the production of waste and promotion of new circular approaches to privilege non-toxic, sustainable, and reusable products and systems. By doing so, we will reduce plastic consumption as well as promote the recycling of all plastic packaging in the internal market by 2030[33].

The paper concerning the Blue Economy appears equally relevant. It includes all sustainable activities involved with seas and coastal areas -i.e. fishing or ocean energy.
From a political perspective, the main step has been the call of the Commission to the Member States for a prosperous and competitive, yet climate-neutral economy by 2050. The same strategy has then been presented by the Union at the UN Conference on climate in Katowice. The participants outlined a set of normative actions to enforce the Paris Agreement.
Climate change is not the sole focus of Community policies. The transformation of European energy systems also required the adoption of some measures as we can see in the 'Clean Energy for All Europeans' package among others. The agreement concerns reducing greenhouse gas emissions by about forty-five percent by 2030, alongside implementing a concrete transition towards clean energy[34]. We also like to

mention the new regulations concerning the emissions and the absorption linked to soil exploitation that integrate the legal framework for the economic decarbonisation[35].

In conclusion, we mention how the EU has recently drafted legislation concerning the Circular Economy, environmental rights, and health and sustainability protection.
We hereby indicate the most recent news concerning the above as an example:

- Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionizing radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom[36];
- For what concerns the marine economy, we shall highlight the new Council Directive (EU) 2017/159 of 19 December 2016 implementing the Agreement concerning the implementation of the Work in Fishing Convention, 2007 of the International Labour Organisation, concluded on 21 May 2012 between the General Confederation of Agricultural Cooperatives in the European Union (Cogeca), the European Transport Workers' Federation (ETF) and the Association of National Organisations of Fishing Enterprises in the European Union (Europêche) [37];
- About sustainability, health, and environmental protection we report Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU[38] on the restriction of the use of certain hazardous substances in electrical and electronic equipment[39];
- Directive (EU) 2017/2398 of the European Parliament and of the Council of 12 December 2017 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work[40];
- Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814[41];
- Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency[42];
- Directive (EU) 2018/849 of the European Parliament and of the Council of 30 May 2018 amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment[43];
- Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste[44] as well as Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste[45];
- Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste[46];
- Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency[47].

2.1 Environmental protection in the European Law: European Court of Human Rights (ECHR) and the Court of Justice of the EU (CJEU)

The EU Charter of Fundamental Rights expresses a strong interest in the environment by promoting integration and sustainable development principles. The Charter attributes such high value to the environment in the framework of social life that its protection may justify limitations to other rights within

the same Charter, as well as actions from the State.The Strasbourg Court believes that environmental protection is key to reaping the benefits of some of the fundamental rights. The logic behind the argument is similar to the case law ruled by the Supreme Court that guarantees the so-called Right to a Healthy Environment -based on a creative interpretation of paragraphs 32, 9 and 2 of the Constitution. In this case, although the environment is not at the core of the matter, it's considered a crucial component of the mandatory rights. In other words, we shall guarantee the quality of the environment to benefit from individual rights by balancing all core values.
By analyzing the ECHR case law, we can identify two main thematic areas regarding:

1. the urgency to identify environmental protection needs that may justify limitations to other fundamental rights foreseen in the Charter. Both the Court and the Commission do not agree in forcing absolute restrictions to those fundamental rights, though, they highlight the suitability of pursuing the protection of some values, without requiring unreasonable limitations to other ones such as the freedom of residence and property protection;
2. the importance of stating the relationship between the State of the Environment and the entitlement to the rights guaranteed by the European Convention on Human Rights. Indeed, the ruling of ECHR tries to balance public health interests and productive needs. This happens by considering the collective interest in the existing system to reduce the overall pollution level and increase the local economy, while at the same time considering the interest of the individuals inhabiting the neighbouring areas to maintain a healthy environment without perturbing private and family life as well as enjoying one's household[48]. Furthermore, the Court underscores the responsibility of public authorities in doing their best to contain risks deriving from polluting activities, while also highlighting the principle of corporate responsibility concerning production -i.e. the company undertakes full liability of risks derived by its productive activity and waste disposal.

The above-mentioned principles are the object of a long and articulated legal debate at both the supranational and national levels. This ultimately shows a focus on development and sustainability from the side of judicial bodies.

In the effort of interpreting the secondary law of the EU[49], the CJEU expressed its opinion about the main objective of the Council Directive 92/43/CEE of 21 May 1992 for the conservation of wild fauna and flora[50]. It is on that occasion that the Court recognized the existence of the sustainable development principle that emerged by the expressed by the directive.

In more recent times, the Judges of Luxemburg examined the principle of sustainability and its criteria when the Council of State issued a preliminary ruling[51], with the object being the interpretation of paragraph 18 of the Parliament and Council Directive 2009/28/CE of 23 April 2009 about the promotion of renewable energy use[52]. In the above case, a point was made that requiring mandatory environmentally sustainable certifications for the products -foreseen in the National Law- conflicted with the free movement of goods within the EU. The European Court of Justice pronounced itself against and refused the appeal by applying the principle of proportionality: the judicial limits derived from the national norm in the matter of sustainability seemed justified by general interest imperatives.

The Court itself declared that "the use of renewable energy sources for the production of electricity [...] is useful for environmental protection in the measures for which it contributes to reducing greenhouse gas emissions, which are part of the main causes for climate change which the Union and its Member States are fighting against".

Consequently, the judicial orientation would seem to confirm the existence of a general principle concerning environmental protection able to institute a limit to the free movement of goods in the EU market.

3. THE EUROPEAN UNION'S OBJECTIVES AND FUTURE PRIORITIES

The European Environment Agency[53] is the European body in charge of environmental protection and safeguarding. It periodically provides guidelines and technical-scientific focus aimed at directing the political, legislative and economic choices of the EU and the Member States. The body publishes a technical report every five years, in which it analyses the available scientific data concerning environmental matters, identifying new mid-to-long-term objectives for the EU. Recently, the Agency published the SOER 2020 named 'The European environment: state and outlook 2020'[54]. The report offers a general idea over the economic, social, and environmental situation in Europe, highlighting the importance of the environmental question and its abiding link to social, economic, technological, and legislative aspects within the EU.

The SOER 2020 draws upon the same conclusion of the previous edition -published in March 2015[55]. Nevertheless, there have been advantages thanks to the implementation of the environmental policy, the SOER 2015 showed that the EU has yet to face important environmental challenges connected to production and consumption systems. Although the advantages brought about by the EU environment and climate policies are undeniable, the loss of biodiversity, the use of resources, the impact on climate change and healthcare risks remain. However, the EU declared the objective of achieving full environmental sustainability by 2050[56]. By 2050, development and growth in the EU will be marked by low carbon emissions, as well as being free and independent from the use of raw materials, protecting the natural assets of the European Union and making the economy sustainable and competitive while protecting the health and wellbeing of the citizens.

To reach this objective, the EU has adopted a series of normative measures to support sustainable economic policies for the long-term. Regarding renewable energy and sustainable mobility, the EU implemented a scheme of incentives for the implant of public and private photovoltaic plants and wind farms. The Union issued economic incentives to private citizens and companies for energy-driven improvement in agrivoltaic, biological agriculture, and technological and scientific R&D industries. Nevertheless, we cannot confirm that Europe has finished its mission, and the next five years will be crucial for the transition towards a sustainable economy.

The SOER 2020 assessment sends a clear message: recent policies have been more effective in reducing environmental pressures than protecting biodiversity, ecosystems, and the health and wellbeing of human beings. Therefore, nevertheless, some success, the rooted issues concerning the environment in Europe account for discouraging perspectives[57] and long-to-be-reached objectives.

The EU aims at strengthening the implementation, integration, and the coherence of its policies to reach the environmental goals of 2030. It also aims at implementing the policies through specific local plans, which would be financially supported by citizens and corporations, local, national, and regional authorities, and develop long-term political frameworks marked by binding general values for the Member States. This would also result in a diffused systematic approach, promoting a simple transition towards a low-emission circular economy and supporting the implementation of normative actions to influence the growth of strategic developing sectors such as agriculture, food and wine, the chemical industry, or land and soil exploitation. All stakeholders should be involved -i.e. companies, consumers, National Authorities- to mirror all European organizations and maximize common environmental, social and economic advantages. Diplomatic and economic influence should be used to promote internal activities to reach ambitious deals in strategic sectors with concerns over sustainability. The diffusion of ICT innovation would be the foot foundation for the development of this ambitious project. More

and more citizens, companies, researches, local administration, and communities are experimenting with different ways of producing and consuming goods and services to reduce costs, consumption and pollution. Furthermore, the spread of smart working caused by the COVID-19 emergency forced public and private European employees to experiment alternatives to traditional work methods -at times, without limitation to productive capacity.

This has led to experience positive and negative aspects of it, for instance: employees and enterprises working in the services industry experienced a better quality of life as well as a relevant reduction of the costs; at the same time, discussions are taking place on whether smart working should have a place in the life of the workers as per the "right to smart working"[58]. The environment could, indeed, benefit from the diffusion of remote working thanks to the reduction of city traffic and, thus, the consumption of fuel and the increase in the quality of city life. Although this new phenomenon represents an innovation for society and will trigger debates in the future, it will also demand cohesive interventions in the areas of research, innovation, industrial and sectorial policies, education, wellbeing, trade, infrastructures, and employment.

Those objectives call for financial investments: indeed, states will have to rely on public funding to support research and innovation and invest in natural and sustainable solutions to promote the social and economic transition. Private and public expenditure will have to be addressed wisely through investment and consumption schemes that engage the financial sector in sustainable investments by implementing the EU sustainable investment action plan. We can imagine that some -or parts of- industrial sectors will need public aid and investments to face shutdowns or progressive reformation. Issues and opportunities brought about by technological innovation will have to be timely identified through experimenting, monitoring, and learning through a flexible and adaptable approach. All productive areas and disciplines will have to implement new knowledge collaboratively by rapidly exchanging information to create a coalition between the public and private sector through a tight collaboration of research institutes, enterprises, professionals, workers and public institutions. We should generate, share, and maximize the use of the evidence we own, which will likely require a change in the current knowledge system, though without forgetting the development of new skills[59].

The EU and the Member States are already rethinking development policies and identifying economic support schemes for the technological development of the Member States for transitioning towards a sustainable economy. Financial aid in the strategic sectors of sustainable agriculture, energy efficiency, sustainable mobility, infrastructures, new technology and development have already been hypothesized. On the other hand, enterprises, professionals, and consumers have been rethinking their own production models and consumer behavior in favor of recycled materials, renewable energy or the neglect of polluting materials and substances. The following pages will deal with an analysis of the main orientation and major normative actions concerning the circular economy and the blue economy in Italy and Malta.

4. THE CIRCULAR ECONOMY AND SUSTAINABILITY BETWEEN ITALY AND MALTA

Member States of the European Union have been actively involved in the conversation concerning the transition towards a sustainable circular economy. The debate developed away from the typical modes of interventions of the judicial system. General observations have been made around the fact that the implementation of wide-range environmental objectives will, in the long run, drive technological innovation.

Part of the international experts[60] deem necessary the following measures:

- guarantee the freedom of researching innovative solutions in the technological sectors,
- promote continuous development without aiming at specific objectives,
- assure maximum predictability and security of the judicial and economic systems to prevent any uncertainty shall arise to influence institutional and entrepreneurial decisions.

In other words, the judicial framework isn't but one of the necessary elements for promoting innovation. Other factors can be identified in the efficiency of the infrastructures, access to financial aid schemes, or capability and skills of workers and professionals to support companies in the technological transition.
Italy has a long-established judicial tradition with regards to environmental protection and sustainable development, derived from its constitution and the principles underlying the Treaties of the EU -which have overflown into the community's secondary law and, thus, into the nation's internal law.

Speaking about the Italian law, the above-mentioned general principles are found in the legislative decree of 3 April 2006, No. 152, Article 3, which states that "environmental, natural ecosystems and cultural assets' protection must be guaranteed by all public and private authorities, and natural and legal persons through adequate and informed actions to the principles of precaution, preventive action, and overriding correction of the harm caused to the environment and to the 'polluter pays principle' which, according to article 174, section 2 of the EU Treaty, rule over environmental community policies".
The Decree was given two interpretations at the national level. The first emphasizes the bond between past and future generations through a constitutional reading of the norm, connected to the principle of solidarity expressed in Article 2 of the Constitutional Bill. This reading of the norm also focuses on the space-time and generational aspects of sustainability.

The other interpretation integrates the first with the belief that economic growth and development are limits to safeguarding ecosystems and the environment, though they should maintain their fundamental function. The judgement of the Court No 81 of 2007[61] has confirmed the regional jurisdiction over the matters of the fishing industry as well as identifying the need for uniform regulations about the protection of the ecosystems. Indeed, the reasons underlying such decisions arise from the factual assumption that fishing resources are not unlimited and, thus, legislation in that regard must, inevitably, be inspired by sustainable supranational criteria. In other words, there's a need of guaranteeing maritime fishing, yet preventing irreversible impoverishing of the fishing resources. Indeed, we shall avoid depleting collective resources as well as generating negative externalities. For instance, these are the cases of abuses of water bodies caused by pollution and over-exploitation of water for domestic and agricultural usage.

More recent jurisdiction has confirmed those arguments. The Italian Constitutional Court (Corte Costituzionale) has stated the legitimacy of section 72, subsection 1, of the regional law of Friuli-Venezia Giulia of 8 April 2016, No 4 ('Dispositions for the reorganization and simplification of the norm concerning the tertiary sector for its promotion and economic development' «Disposizioni per il riordino e la semplificazione della normativa afferente il settore terziario, per l'incentivazione dello

stesso e per lo sviluppo economico»). The above-mentioned norm foresees the possibility to allow the introduction of autochthon and allochthon marine species in natural and artificial water bodies to promote sportfishing. The opinion of the Government focuses on the fact that, contesting the norm could undermine the natural balance of the ecosystems. The introduction of a new allochthon specimen would have caused a dangerous overpopulation and a blend of species. The norm would have violated the European boundaries, ex article 117, section 1 of the constitution, and the limits set by the regional jurisdiction, directly affecting the protection of the environment and the ecosystem. The Judges of the Italian Constitutional Court asserted the appeal of the Government, sharing the above argument and judging against the regional norm, which was deemed constitutionally invalid[62].

The Court reopened the case a third time during an appeal of the Prime Minister against some determinations of Sicilian Regional Law No 16 of 11 August 2017, concerning articles 3, 9, 81, sections 3, 117, subsections 1, 2, letter l) and s), and 3, of the Constitution, as well as articles 14 and 17 of the Regional Decree of 15 May 1946, No 455, passed into constitutional law on 26 February 1946, no 2[63]. In the matter of local development, the Court denied absolute restrictions to landscape development plans, implying that such constraints would jeopardize the aims of landscape protection.
Landscape development programs imply a local survey of the land. These plans not only concern the protection of the landscape but also the promotion of sustainable development and conscious use of the earth. It appears that urban development must be integrated within the framework of sustainable development norms.
It is through the above arguments that the Constitutional Court judged the constitutional invalidity of Article 48, section 1 of the regional law, contested by the violation of Articles 135, section 4, letter d), 143, section 2, letter h), and 146 of the Decree of 22nd January 2004, No 43.

The above-mentioned judicial interventions give a hint about the Italian concern over environmental sustainability and circular economy. Indeed, the two have had increasing relevance within the judicial, economic, political, and social debates. With this in mind, we shall mention that the Italian Government is the subject of a parliamentary enabling act[64] aimed at receiving the new European directives concerning -among others- the circular economy. The measures aim at implementing supranational laws concerning the circular economy and environmental protection, executing the normative tools in effect, following the internal judicial system[65].
For simplicity's sake, we won't get to the heart of the matter, though we wish to cite that Article 11 of the above-mentioned law allows the Italian Government to transpose the European norms concerned with the protection of plants, foodstuff and animal feed, health, seeding, and fruit plants from harmful organisms. Article 12 deals with the same topics, whereas Article 13 authorizes the Government to transpose the 2018/410 EU directive in the matter of reducing emissions and promoting investments in favour of low carbon emissions, with special regards to air transport. Article 14 deals with the first EU 'Circular Economy' directive -i.e. number 849/2018, which amends directives 2000/53/EC about end-of-life vehicles and which section 1, letter a) is dedicated to; 2006/66/EC about batteries and accumulators -section 1, letter b), and dir. 2012/19/EU concerning electric and electronic waste -WEEE, in section 1, letter c).
Article 15 receives the EU 2018/850 directive concerning landfill, eligibility criteria for waste and mud usage. In addition, it receives the ER directive 2018/851 over waste and 2018/852 over packaging, concerning the extended responsibility of the producer, the IT and waste traceability systems, as well as End of Waste authorizations. More recently, the Legislative Decree No 34 of 19 May 2020 published on the Official Journal of the Italian State concerning 'Urgent measures in the matter of health, support to labour, and economy, in addition to the social policies connected to the epidemiological emergency of COVID-19'.

Article 119 of the above-mentioned decree provides a financial bonus of 110% for refurbishment and energy-efficiency works for private and households and condominiums implemented between 01/07/2020 and 31/12/2021[66]. The norm concerns a tax break to support interventions aimed at reducing fossil-energy consumption and dependency, in favour of more efficient use of the energy in buildings and the diffusion of renewable energy production. The decree conforms to the national and European policies in the matter of the energy industry, though it's still awaiting dispositions concerning the implementation. In the matter of environmental sustainability and circular economy, the law of Malta has substantially transposed the positions of the European Union's normative policies.

The main relevant Maltese law is the Malta Environment and Development Planning Act (EDPA), which came into force in 2010 as a measure for the implementation of the European normative. By substituting the Environmental Protection Act (EPA) and the Development Planning Act (DPA), the EDPA aims at bringing together the seemingly opposite concepts of environmental protection and economic development. The EDPA stands out for identifying a series of main principles of the Maltese environmental law. The text explicitly states that environmental protection is a duty of the State, which uptakes the responsibility to implement prevention and correction measures for the safeguarding of the environment and the sustainable management of natural resources. The state must act in the protection of the environment at the benefit of present and future generations. We remark that the above-mentioned law has been followed by important regulation that challenges the various aspects of environmental law, ranging from wild rabbit protection to more complex matters such as integrated prevention and control of pollution. Moreover, this bill is supported by the DPA -or Structural Plan- which has been working since 1990 as a base for future consumption and exploitation of the soil in the Isles of Malta[67]. It aims at optimizing the use and the physical development of the soil while respecting the environment and responding to the basic social needs. The Government of Malta is, therefore, in charge of preparing an annual strategic environmental plan (SPED) supported by the authorities for environmental planning (MEPA). SPED was first approved in 2015 to face the spatial challenges of the islands in Malta, however, the current SPED provides a local strategy for both the environment and the development until 2020, replacing the structural plan of 1990. Its foundations are based upon an integrated program that guarantees sustainable management of the resources on the land and at sea, together with environmental protection, and a guide for sustainable development and exploitation of the soil and sea alike.

In 2016, EDPA was formally abrogated by a new series of bills. The following three were passed:

- the Development Planning Act, 2016,
- the Environment Protection Act 2016 (New Environment),
- and the New Review Tribunal Act 2016.

The new environmental law simplifies the content of the former legal framework without significant changes of the preexisting general principles which, instead, will still be implemented by the regulations which were proclaimed by the EDPA in the past. The new law is limited to creating a new Planning Authority (PA) responsible for regulating and administering the planning with regards to urban and healthcare development. On the other hand, the MEPA remains as the environmental protection act and maintains all its initial jurisdiction.

In light of the above, we shall state that, like the Italian one, the Maltese system promotes and incentives the transition towards a sustainable economy through the use of financial and fiscal tools aimed at the diffusion of a circular economy[68]. The information concerning fossil fuel subsidies is very little, whereas aid for petrol and diesel is still active[69]. The state of Malta promotes the Green Economy through the

allocation of public competitions aimed at environmental protection. One of the projects aims at increasing the quality of the management of green areas, the supply of services, and the reduction of the State's environmental impact. Thanks to the EU structural funds -and in collaboration with the EU- Malta invested in the sustainable development of the rural and maritime areas.

According to the above data, we shall state that the Maltese Legal System has undergone ample changes in the form of normative interventions derived by the European model, aimed at a transition towards greater environmental protection and competitive as well as sustainable circular economy[70].
In light of what has been said in the matter of sustainability and circular economy, we can detect the existence of similar legal principles inspired by similar legal traditions as well as supranational perspectives of harmonization between Italy and Malta.

CONCLUSION

The EU -thus, all Member States alike- are working to create a sustainable economy to limit climate change and reduce the typical risk factors connected to linear economies. We still have a long way to go before the actual transition. This delay is the reason why actions in that direction must be an urgent priority.

In the following years, we are likely to witness increasingly salient social and economic policy interventions to support the paradigm shift for consumers, professionals, and enterprises in the direction of sustainability and circular economy.

IT development and innovation will play a key role in promoting this process, thus the need to promote scientific research and the diffusion of new technologies -i.e. AI, blockchain, and renewable energy- within the EU and the Member States.

Notes

[1] Areas with a Mediterranean climate such as Southern California, Italy, Greece, Spain in particular.

[2] *i.e.* Mexico, Brasil, Paraguay, Argentina.

[3] *i.e.* China, India and Pakistan.

[4] i.e. Mali, Niger, Chad, Sudan.

[5] Northern Nigeria, Southern Algeria, Southern Libia, Southern Egypt, Zambia, Malawi, Botswana, Zimbabwe, Mozambico, Angola, Congo, and Namibia.

[6] It is estimated that, by 2080, Africa will have between 60 and 90 million hectares more of arid land.

[7] *Ex multis*, Iannetta Massimo, *Rendiconti Accademia Nazionale delle Scienze detta dei XL Memorie di Scienze Fisiche e Naturali 12* (2007), Vol. XXXI, P. II, t. I, pp. 277-295.

[8] *Ex multis*, see IPCC, Intergovernmental Panel on Climate Change http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#1. In International Organization for migration http://www.iom.int/jahia/Jahia/migration-climate-change-environmental-degradation. UNFCC - http://unfccc.int El-Hinnawi, E.1985 Environmental refugees. United Nations Environment Programme, Nairobi. Myers, N. & Kent, J. 1995 *Environmental exodus: an emergent crisis in the global arena.* Washington, DC: The Climate Institute; Biffi, Cogliati Dezza, Pisacane 'Climate and Poverty. The Keys to Globalization. (*Clima e povertà. Le chiavi della globalizzazione*), Legambiente Onlus 2003 Piguet, E, (2008); 'Climate change and forced migration' UNHCR Research Paper No. 153. "Future floods of refugees. A comment on climate change, conflict and forced migration"- Vikram Odedra Kolmannskog, April 2008 - Norwegian Refugee Council "Climate change and Migration" studio del German Marshall Fund of the United States of June 2010; Valerio Calzolaio *Human Rights and Desertification* - United Nations Convention to Combat Desertification 2008 'Environmental and Climate Refugees – Forced migrations of the past, present and future' (Ecoprofughi- Migrazioni forzate di ieri, di oggi, di domani) Valerio Calzolaio 2010 - NdA Press.

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[12] Ellen Mac Arthur Foundation, Circular Economy Overview, https://www.ellenmacarthurfoundation.org/circular-economy/overview/concept. see. Ellen MacArthur Foundation (2015), Growth within: a circular economy vision for a: competitive Europe. In https://www.ellenmacarthurfoundation.org/assets/downloads/publications/EllenMacArthurFoundation_Growth-Within_July15.pdf.

[13] European Commission, *A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy.* (2011) Available at: http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52011DC0021&from=en

[14] European Environment Agency, *Waste prevention: where do European countries stand?* European Environment Agency. (2015) Available at: https://www.eea.europa.eu/highlights/waste-prevention-wheredo-european.

[15] F. Capria U. Mattei, *The Ecology of Law: Toward a Legal System in Tune with Nature and Community*, Berrett-Koehler Publishers, Inc., 2015 p. 40 ff (Ecologia del diritto, Aboca, Sansepolcro, 2017).

[16] See A. Giddens *Climate Change* (Il cambiamento climatico), Milano, 2015. G. Ragozzino, 15,000 scientists from 184 countries issue a 'Warning to Humanity' to promote new -public and private- behaviours to improve environmental policies at www.sbilanciamoci.info.

[17] One of the theories is the Green Economy one. It developed in 2007 following the global economic-financial crisis.

[18] In the matter of energy see C. Viviani '*Energy and the Environment*' in '*Treaty on environmental law (Ambiente ed energia in Trattato di diritto dell'ambiente)* dir. R. Ferrara M. A. Sandulli part I edited by R. Ferrara e C.E. Gallo Milano 2014 p. 503 ff. -which also contains a complete outline of the national and European supply system; see also directive 2009/28/EC received in Italy through the Legislative Decree of 03rd March 2011 number 28 on renewable energy, and Directive 2012/27/EU of 25th October 2012 in the matter of energy efficiency.

[19] It is in the sector of waste management that Green Economy and Circular Economy principles meet in a more timely manner. Since its first appearance in political and scientific rhetoric, it has been clear that, however, Circular Economy doesn't end with waste management, which is only part of the system.

[20] F. De Leonardis, *Circular Economy: essay on its three diverse judicial aspects. Towards a Circular State? (Economia circolare: saggio sui suoi tre diversi aspetti giuridici. Verso uno Stato circolare?)*, in administrative law 2017, Giuffré editore in http://hdl.handle.net/11393/246703; P. Lombardi, Hydrogeological risk and mitigation measures: science and law (La mitigazione del rischio idrogeologico tra scienza e diritto), in Journal of urbanism and law, 2016, 58 ff.

[21] It's beneficial to cite that EU's import of raw materials is six times higher than its exports. Japan imports almost 100% of the oil it uses -alongside other liquid fossil fuels and natural gas. India imports 80% of the oil it needs and 40% of natural gas (Ellen MacArthur Foundation, 2015). The risks with exports are connected to supply halts, discontinuity, and price instability which can weaken the economic growth, discouraging investments (Ellen MacArthur Foundation, 2015).

[22] It's relevant to report the two 'packages' of the European Union, 'package of the European Commission of 2nd December 2015 Closing the loop - An EU action plan for the Circular Economy, and the package on the package on Circular Economy approved by the European Parliament on 14th March 2017. See also 'Towards a Model of circular Economy for Italy – Overview and Strategic Framework. Ministry for the Environment, Land and Sea Ministry of Economic Development: https://circulareconomy.europa.eu/platform/en/strategies/towards-model-circular-economy-italy-overview-and-strategic-framework#:~:text=%E2%80%9CTowards%20a%20Model%20of%20Circular,G7%20Communiqu%C3%A9%20and%20within%20EU. (*Verso un modello di economia circolare per l'Italia. Documento di inquadramento e di posizionamento strategico. Ministero dell'ambiente,* at www.miniambiente.it).

[23] Art. 21 section 2 sub d) and f) TEU.

[24] On the first of July 1987, the EEC Treaty is modified by the Single European Act that explicitly mentions the environment in article 100A (internal market, now article 114 TFEU) and in a separate title, article 130R-T (now art. 191-193). Environmental protection still is not, however, formally recognized among the EEC objectives. The coming into force of the Treaty of Maastricht of the 1st of November 1993 marks the date when environmental protection receives formal status among the EC objectives at art. 2 of the Treaty of the European Community (which, from then on, will be called the Formal European Economic Community). From that moment on, the Union existed alongside the Community. The Treaty of Amsterdam enters into force on the 1st of May 1999. The EC Treaty is renumbered. The principle of integration -ex article 130R- is moved elsewhere. Now, article 6 requires environmental protection to be added to the definition and to be considered for the implementation of community policies and activities concerning article 3, especially with the aim of promoting sustainable development. Article 95 (ex 100A, after Lisbon 114 TFEU), that disciplines the internal market, allows the possibility to maintain more strict national measures, nevertheless the harmonization measures of the Community. Lastly, it behooves us to underscore that the co-decision -through which the Parliament holds veto power in some cases- is now applicable to the orders based on article 95 (art. 2114 TFEU) and 175 (art. 192 TFEU). In terms of Environmental Protection, the Treaty of Nice has not brought about substantial progress. Nevertheless, the agenda of the Intergovernmental Conference did include the environment, they did not reach the set objectives. The greatest disadvantage of Nice is that environmental procedures remain unaltered. Unanimous vote has not been replaced by qualified majority -as proposed, thus, aspects concerning, i.e.,

the so-called ecotax face difficulties in the procedure of acceptance, especially in view of the forthcoming widening of the measure. Another potential problem is that the disposition concerning the environment will be modified in 'measures on... the availability of water resources' instead of the former 'measures concerning'. The new and broader measure implies that a greater number will be included in it and, thus, will have to be voted unanimously. The four parts of the agreed text contain various dispositions in the matter of the environment. In part I is made clear that environmental development -based, among others, on an improvement of the quality of the environment- is included within the objectives of the Union (article I-3, section 3) as well as its promotion at the global level (article I-3 section 4). It becomes concurrent jurisdiction (article I-13). In the introduction of part II (Charter of Fundamental Rights of the EU), the Union is charged with the responsibility of promoting balanced and sustainable development. Part II (article II-37) and Part III on the Policies and Functioning of the European Union (III-4) express the need of integrating environmental protection with EU policies. The instruction of article III-4 is almost identical to ex article 6 EC. Article II-37 orders to guarantee high levels of environmental protection and to improve the quality of the environment 'in conformity to the principle of sustainable development'. Article II-3 paragraph 1 concerns the right to respect physical (and mental) integrity. Article II-7 contains the right to respect for private and family life. Those instructions shall be relevant in facing strongly polluting phenomena. Articles from III-129 to III-131 are dedicated to the environment and are identical to ex articles 174-176 EC.

[25] The Treaty of Lisbon entered into force following the failure of creating the European Constitution. It is made up of two Treaties: the TEU and the TFEU, entered into force on the 1st of December 2009.

[26] In other words, the sole change to the instructions of the past that rule specifically over environmental protection is a brief addition to article 191 section 1 TFEU. The Union could already promote intranational-level measures concerning global or regional issues. The Treaty of Lisbon only specified that such measures can be adopted to combat climate change.

[27] The Charter of Fundamental Rights of the European Union (Charter of Nice) was proclaimed in Nice on 7th December 2000 by the European Council.

[28] See European Commission, COMMUNICATION OF THE EUROPEAN COMMISSION. *Communication on Guidelines on State aid for environmental protection and energy* 2014-2020 (2014/C 200/01).

[29] The EC Package includes a communication on the action plan, an attachment, and four bills to amend a series of EU directives on waste. See European Commission, Closing the loop-an EU action plan for the circular economy COM (2015) 614 (EC action plan); European Commission, Attachment to the communication Closing the loop-an EU action plan for the circular economy COM (2015) 614/2; European Commission, proposal that amends directive 2008/98/EC concerning waste, COM (2015) 595; European Commission, Proposal that amends directive 94/62/EC concerning packaging and packaging waste, COM (2015) 596; European Commission, Proposal that amends directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators, and waste from batteries and accumulators, and 2012/19/EU on electric and electronic appliances waste , COM (2015) 593; European Commission, Additional analysis to complete the assessment of the Impact Assessment SWD (2014) 208 to support the revision of the objectives of the EU in the matter of waste management, SWD (2015) 259; and European Commission implementation plan, SWD (2015) 260, respectively.

[30] See COMMUNICATION OF THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE OF THE REGIONS, *A new Circular Economy Action Plan for a cleaner and more competitive Europe*, Brussels, 11.3.2020 COM (2020) 98 final, at : https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0020.02/DOC_1&format=PDF

[31] According to the most recent data, the European Union wastes 600 million tons of potentially recyclable or reusable material by putting it into the garbage every year. Only about 40% of the waste generated by families in the EU is recycled, with recycling figures ranging from 5% to 80%, depending on the area. In a more resource-efficient perspective, the transformation of the waste in resources is key to creating a more circular economy. The Commission intends: - to fix the joint EU objective of recycling 65% of the urban waste by 2030; - fix the joint EU objective of recycling 75% of the packaging waste by 2030; - fix the binding objective to reduce landfill use by setting its capacity to the maximum of 10% of all waste by 2030; - strengthening the collaboration with the Member States to improve waste management concretely; - simplifying and improving the definition of the terminology concerning waste and harmonizing calculation methods; - guarantee that structural funds are used to support the Union's law on waste, keeping in mind EU's hierarchy on waste (priority is set on the basis of the results achieved concerning the environment: from prevention to disposal in the landfill, after the preparation for the reuse, recycle, and energetic recovery); - propose minimal criteria concerning an extended responsibility of the producer regime that foresees a compensation for producers who trade greener products and promote recycling and recovery at the end-of-life stage.

[32] The regulation is made up of four directives of the European Parliament and of the Council of 30th May 2018 -directives (EU) 2018/849-851, in OJEU, L. 150 of 14th of June 2018, that amend six directives on waste, packaging, landfills, electric and electronic waste, end-of-life vehicles, and batteries.

[33] Regulation (EU) 2018/644 of 18th April 2018 concerning trans-border delivery services of the packages, in OJEU L. n. 112 of 2nd May 2018.

[34] See the summary offered on the webpage: http://europa.eu/rapid/pressrelease_ IP-18-6870_en.htm.

[35] EU Regulation 2018/841 of 30 May 2018 concerning the inclusion in the 2030 framework for the climate of: at page 31 of 33, emissions and the absorption of greenhouse gases resulting from the use of the soil, of the change in the use of the soil, and from forestry, and the energy, carrying modification by the regulation (EU) number 525/2013 and the decision number 529/2013/EU, in the OJEU L 156 of 19th June 2018.

[36] Implementation deadline: 6 February 2018.

[37] Implementation deadline: 15 November 2019.

[38] Implementation deadline: 12 June 2019.

[39] Text with EEA relevance.

[40] Implementation deadline: 17 January 2020.

[41] Implementation deadline: 9 October 2019.

[42] Implementation deadline: 10 March 2020.

[43] Implementation deadline: 5 July 2020.

[44] Implementation deadline: 5 July 2020.

[45] Implementation deadline: 5 July 2020.

[46] Implementation deadline: 5 July 2020.

[47] Implementation deadline: 25 June 2020.

[48] *Ex multis* see Case ECHR Lopez Ostra v. Spain (n. 16798/1990); 2) Guerra and others v. Italia (n. 14967/1989); 3) Taskin and others v. Turkey (n. 46117/1999); 4) O. Neryildiz v. Turkey (n. 48939/1999); 5) Fadeyeva v. Russia (n. 55723/2000); 6) Giacomelli v. Italy (n. 59909/2000); 7) Martinez Martinez and Marı´a Pino Manzano v. Spain (n. 61654/2008).

[49] In accordance with article 267 TFEU.

[50] See Conclusioni dell'Avvocato Generale Juliane Kokott del 30 novembre 2006 1, Causa C342/05, Commissione delle Comunità europee contro Repubblica finlandese, in http://curia.europa.eu/juris/document/document.jsf?text=&docid=65994&pageIndex=0&doclang=IT&mode=req&dir=&occ=first&part=1&cid=11535861.

[51] Ex article 267 TFEU.

[52] See Court of Justice of the European Union, section II, sentence 4 October 2018, C-242/17 – L.E.G.O. SpA/Gestore dei servizi energetici (GSE) SpA and others.

[53] The European Environmental Agency (EEA) is an EU agency established according to the council regulation (EEC) No 1210/90. Furthermore, the regulation established a European information and observation network in the matter of the environment (Eionet) to be regarded as a partnership network for the 33 Member States (2) and six cooperating countries (3). The EEA mandate is involved with collaborating with Eionet to provide knowledge so that the institutions involved with the EU and Eionet Countries can make informed decisions on how to improve the quality of the environment in Europe and promote sustainability. One of the main tasks of the EEA is to publish a report on the status, trends, and perspectives concerning the environment every five years.

[54] EEA, 2020, The European environment — state and outlook, European Environment Agency, Copenhagen. Lussemburgo, Publications Office of the European Union, SBN 978-92-9480-124-1 doi: 10.2800/834592. Available in .pdf format at https://www.eea.europa.eu/publications/soer-2020.

[55] EEA, 2015, The European environment — state and outlook 2015: synthesis report, European Environment Agency, Copenhagen. Luxembourg: Publications Office of the European Union, 2015 ISBN 978-92-9213-515-7 doi:10.2800/944899. Available online at https://www.eea.europa.eu/soer/2015/synthesis/report/action-download-pdf-old/view.

[56] See the Seventh Environmental Action plan (7th EAP) at https://ec.europa.eu/environment/action-programme/.

[57] See EEA, The European environment — state and outlook – executive summary 2019 — 11 ff. — 210 x 297 cm, ISBN 978-92-9480-124-1doi: 10.2800/834592. According to the European Environmental Agency: «Policy measures targeted at natural capital have delivered benefits in some areas, but many problems persist and some are getting worse. For example, reduced pollution has improved water quality, but the EU is far from achieving good ecological status for all water bodies by 2020. Land management has improved, but landscape fragmentation continues to increase, damaging habitats and biodiversity. Air pollution continues to impact biodiversity and ecosystems, and 62 % of Europe's ecosystem area is exposed to excessive nitrogen levels, causing eutrophication. The impacts of climate change on biodiversity and ecosystems are expected to intensify, while activities such as agriculture, fisheries, transport, industry and energy production continue to cause biodiversity loss, resource extraction and harmful emissions. Europe has made more progress in relation to resource efficiency and the circular economy. Material consumption has declined and resource efficiency improved as gross domestic product has increased. Greenhouse gas emissions declined by 22% between 1990 and 2017, due to both policy measures and economic factors. The share of renewable energy sources in final energy consumption increased steadily to 17.5 % in 2017. Energy efficiency has improved, and final energy consumption has declined to roughly the level in 1990. Emissions of pollutants to both air and water have been reduced, while total EU water abstraction decreased by 19 % between 1990 and 2015. More recent trends are less positive, however. For example, final energy demand has actually increased since 2014 and, if that continues, the EU's 2020 target for energy efficiency may not be met. Harmful emissions from transport and agriculture have also risen, and production and consumption of hazardous chemicals have remained stable. The outlook to 2030 suggests that the current rate of progress will not be sufficient to meet 2030 and 2050 climate and energy targets. In addition, addressing environmental pressures from economic sectors through environmental integration has not been successful, as illustrated by agriculture's continued impacts on biodiversity and pollution of air, water and soil».

[58] It is along those lines that large enterprises have stated their will to introduce smart working in their production system. Fujitsu, for instance, has recently announced the closure of half of its offices in 3 years, granting the employees the right to smart working, aiming at improving productivity and organizational competitiveness at the global level, as well as its employees' quality of life.
See https://www.fujitsu.com/fi/Images/XpressWay_Smart%20Working.pdf.

[59] See EEA, SOAR 2020, The European environment — state and outlook 2020, page 443 ff published at the following link https://www.eea.europa.eu/publications/soer-2020 on 04/12/2019.

[60] *Ex multis*, M.E. Porter, C. van der Linde, *Toward a New Conception of the Environment- Competitiveness Relationship*, Journal of Economic Perspectives Vol. 9, 1995, p. 97 ff.

[61] Constitutional Court, judgement No 81 of 05 March 2007, filed on 16 March 2007, President Franco Bile, Editor Alfonso Quaranta, in: https://federalismi.it/ApplOpenFilePDF.cfm?artid=7327&dpath=document&dfile=20032007103138.pdf&content=Corte%2BCostituzionale%2C%2B%2BSentenza%2Bn%2E%2B81%2F2007%2C%2Bin%2Bmateria%2Bdi%2Battivit%C3%A0%2Bdi%2Bpesca%2Be%2Bacquacoltura%2B%28Regione%2BToscana%29%2B-%2B%2B-%2B%2B-%2B, *Rivista di diritto pubblico italiano* (Italian public law journal), No 6 - 20/03/2007.

[62] Constitutional Court, Judgement No. 98 of 10 May 2017, President Paolo Grossi, editor Augusto Antonio Barbera, available at http://www.giurcost.org/decisioni/2017/0098s-17.html.

[63] Constitutional Court, Judgement No. 172 of 05 June 2018, President Giorgio Lattanzi, editor Giulio Prosperetti, hearing of 05 June 2018, decision of 05 June 2018, filed on 23 July 2018, available at https://www.cortecostituzionale.it/actionSchedaPronuncia.do?anno=2018&numero=172.

[64] Law 04 October 2019, No 117 orders the receipt of the following European directives: COUNCIL DIRECTIVE 2013/59/EURATOM of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (implementation deadline: 06 February 2018); Council Directive (EU) 2017/159 of 19 December 2016 implementing the Agreement concerning the implementation of the Work in Fishing Convention, 2007 of the International Labour Organisation, concluded on 21 May 2012 between the General Confederation of Agricultural Cooperatives in the European Union (Cogeca), the European Transport Workers' Federation (ETF) and the Association of National Organisations of Fishing Enterprises in the European Union (Europêche) (Text with EEA relevance) (implementation deadline 15 November 2019); Directive (EU) 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement (Text with EEA relevance) (implementation deadline: 10 June 2019); Council Directive (EU) 2017/1852 of 10 October 2017 on tax dispute resolution mechanisms in the European Union (implementation deadline: 30 June 2019); Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (Text with EEA relevance) (Implementation deadline: 12 June 2019); Directive (EU) 2017/2108 of the European Parliament and of the Council of 15 November 2017 amending Directive 2009/45/EC on safety rules and standards for passenger ships (Text with EEA relevance) (Implementation deadline: 21 December 2019); Directive (EU) 2017/2109 of the European Parliament and of the Council of 15 November 2017 amending Council Directive 98/41/EC on the registration of persons sailing on board passenger ships operating to or from ports of the Member States of the Community and Directive 2010/65/EU of the European Parliament and of the Council on reporting formalities for ships arriving in and/or departing from ports of the Member States (Implementation deadline: 21 December 2019); Directive (EU) 2017/2110 of the European Parliament and of the Council of 15 November 2017 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service and amending Directive 2009/16/EC and repealing Council Directive 1999/35/EC (Text with EEA relevance) (Implementation deadline: 21 December 2019); Directive (EU) 2017/2397 of the European Parliament and of the Council of 12 December 2017 on the recognition of professional qualifications in inland navigation and repealing Council Directives 91/672/EEC and 96/50/EC (Text with EEA relevance) (implementation deadline: 17 January 2022); Directive (EU) 2017/2398 of the European Parliament and of the Council of 12 December 2017 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Text with EEA relevance) (Implementation Deadline: 17 January 2020); Council Directive (EU) 2017/2455 of 5 December

2017 amending Directive 2006/112/EC and Directive 2009/132/EC as regards certain value added tax obligations for supplies of services and distance sales of goods (implementation deadline: 31 December 2018 for Article 1 and 31 December 2020 for Articles 1 and 2); Council Directive (EU) 2018/131 of 23 January 2018 implementing the Agreement concluded by the European Community Shipowners' Associations (ECSA) and the European Transport Workers' Federation (ETF) to amend Directive 2009/13/EC in accordance with the amendments of 2014 to the Maritime Labour Convention, 2006, as approved by the International Labour Conference on 11 June 2014 (Text with EEA relevance) (Implementation deadline: 16 February 2020).

[65] Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (Text with EEA relevance) (Implementation deadline: 9 October 2019); Directive (EU) 2018/645 of the European Parliament and of the Council of 18 April 2018 amending Directive 2003/59/EC on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers and Directive 2006/126/EC on driving licences (Text with EEA relevance) (Implementation deadline: 23 May 2020); Council Directive (EU) 2018/822 of 25 May 2018 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation in relation to reportable cross-border arrangements (Implementation deadline: 31 December 2019); Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU (Text with EEA relevance) (Implementation deadline: 10 January 2020); Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency (Text with EEA relevance) (Implementation deadline: 10 March 2020); Directive (EU) 2018/849 of the European Parliament and of the Council of 30 May 2018 amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment (Text with EEA relevance) (Implementation deadline: 5 July 2020); Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste (Text with EEA relevance) (Implementation deadline: 5 July 2020); Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste (Text with EEA relevance) (Implementation deadline: 5 July 2020); Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste (Text with EEA relevance) (Implementation deadline: 5 July 2020); Directive (EU) 2018/957 of the European Parliament and of the Council of 28 June 2018 amending Directive 96/71/EC concerning the posting of workers in the framework of the provision of services (Text with EEA relevance) (Implementation deadline: 30 July 2020); Directive (EU) 2018/958 of the European Parliament and of the Council of 28 June 2018 on a proportionality test before adoption of new regulation of professions (Implementation deadline: 30 July 2020); Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency (Text with EEA relevance) (Implementation deadline: 25 June 2020 and 25 October 2020 for points 5 to 10 of Article 1, and points 3-4 of the attachment); Directive (EU) 2019/692 of the European Parliament and of the Council of 17 April 2019 amending Directive 2009/73/EC concerning common rules for the internal market in natural gas (Text with EEA relevance) (Implementation deadline: 24 February 2020).

[66] To read the full text, please visit the Official Journal of the Italian Government https://www.gazzettaufficiale.it/eli/id/2020/05/19/20G00052/sg.

[67] Malta's territory is one of the most densely populated if we consider its size. The Isles of Malta is one of the smallest states in the world with only 316 km2 extension. Moreover, the Maltese economy is historically linked to agricultural activities, thus the need for an environmental plan aimed at avoiding abuse and over-exploitation of the territory, state the authorities of Malta.

[68] According to the EU data, the average of the State's tax revenue is higher than the average in other EU countries. Environmental taxation represented 2.68% of Malta's GDP in 2017 (EU-28 average: 2.4%), whereas energy taxation represented 1.36% of the GDP (EU average 1.84%). However, some cases demonstrate the implementation of major fiscal environmental measures.

[69] See Eurostat, Environmental tax revenues, 2018; European Commission, Taxation Trends Report, 2017; Institute for European Environmental Policy, Case Studies on Environmental Fiscal Reform, Water pricing in Malta. European Parliament and IMF, Fossil Fuel Subsidies, 2017, pp. 10-11.

[70] For an economic perspective, we suggest the reading of the following report EUROPEAN COMMISSION The EU Environmental Implementation Review 2019 Country Report - MALTA, COMMISSION STAFF WORKING DOCUMENT, Brussels, 4.4.2019, SWD (2019) 127 final. See also Mark Anthony Camilleri, Closing the Loop for Resource Efficiency, Sustainable Consumption and Production: A Critical Review of the Circular Economy, International Journal of Sustainable Development, (2018).

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PART III
Annexes Statistical Table

SOCIOECONOMIC STATISTICAL ANNEX SICILY/ITALY – TABLES
SOCIOECONOMIC STATISTICAL ANNEX MALTA – TABLES

INTRODUCTION

This appendix contains the database from which -joint to the data within the text- we developed the above information.

Given the high quantity of tables and figures, we've drafted and attached this document to ease the reading of the above.

The analysis focuses on the most relevant industries of the study -i.e. the labour market, the tourism industry, and the environmental policies.

The indicators we've adopted are inspired by EU's Thematic Objectives (TO) for an up-to-date factor, as well as to be able to assess the time-factor:

TO **3**: Enhancing the competitiveness of small and medium-sized enterprises (SMEs).
TO **4**: Supporting the shift towards a low-carbon economy in all sectors.
TO **6**: Preserving and protecting the environment and promoting resource efficiency.
TO **8**: Promoting sustainable and quality employment and supporting labour mobility.

SOCIOECONOMIC STATISTICAL ANNEX SICILY/ITALY - TABLES

APPENDICE STATISTICA SOCIO ECONOMICA SICILIA/ITALIA - Tabelle

SOCIOECONOMIC STATISTICAL ANNEX MALTA - TABLES

APPENDICE STATISTICA SOCIO ECONOMICA MALTA - Tabelle

SOCIOECONOMIC STATISTICAL ANNEX SICILY/ITALY - TABLES

APPENDICE STATISTICA SOCIO ECONOMICA SICILIA/ITALIA - TABELLE

01.
Forze di lavoro anno 2018 per popolazione superiore a 15 anni di età
2018 Labour Force Survey (LFS) for people aged 15 and over

sesso	maschi	femmine	totale
licenza di scuola elementare, nessun titolo di studio			
Italia	597	271	868
Sicilia	73	28	101
licenza di scuola media			
Italia	4.949	2.568	7.516
Sicilia	424	160	585
diploma			
Italia	6.786	5.093	11.879
Sicilia	446	291	736
laurea e post-laurea			
Italia	2.566	3.140	5.706
Sicilia	146	167	313
totale			
Italia	14.899	11.072	25.970
Sicilia	1.089	646	1.735

Fonte: ns. elaborazione su dati Istat

02.
Forza lavoro per SLL Sicilia
Labour Force per SMA (labour market area) Sicily

			Specializzazioni produttive prevalenti			Dati di base 2011 (Censimento)				Valori assoluti (migliaia) Media anno 2018						Tassi		
PROVINCE	Denominazione	Distretto	CLASSE	SOTTO-CLASSE	GRUPPO	Numero di Comuni 2011	Superficie (kmq) 2011	Popolazione residente 2011	Classe dimensione	Occupati	In cerca di occupazione	Forze di lavoro	Non forze di lavoro in età15 anni e più	Popolazione di 15 anni o più	Popolazione totale	Tasso di attività	Tasso di occupazione	Tasso di disoccupazione
TRAPANI	**Alcamo**	0	**A**	**A**	**A1**	4	451,8	70.288	3	19,5	4,3	23,8	36,5	60,3	69,6	39,5	32,3	18,1
	Castelvetrano	0	**A**	**A**	**A1**	6	498,1	62.533	3	17,0	4,4	21,4	32,1	53,5	61,1	40,0	31,8	20,5
	Marsala	0	**B**	**BB**	**BB2**	3	563,2	137.943	4	37,4	8,9	46,3	75,4	121,7	141,2	38,1	30,7	19,3
	Salemi	0	**A**	**A**	**A1**	3	238,1	17.229	2	4,8	1,2	6,0	8,6	14,6	16,5	40,9	32,8	20,0
	Trapani	0	**D**	**D**	**D3**	9	757,1	144.986	4	40,2	10,7	50,9	73,6	124,5	143,1	40,9	32,3	21,0
PALERMO	**Alia**	0	**A**	**A**	**A1**	5	287,9	13.353	2	2,9	0,8	3,7	7,1	10,8	12,3	34,3	27,0	21,5
	Bagheria	0	**B**	**BB**	**BB2**	4	102,1	83.267	3	19,9	12,3	32,2	40,2	72,4	85,8	44,4	27,4	38,3
	Bisaquino	0	**A**	**A**	**A1**	6	338,6	14.545	2	3,5	0,8	4,4	7,6	12,0	13,5	36,4	29,5	19,0
	Castelbuono	0	**A**	**A**	**A1**	2	111,8	10.740	2	3,1	0,5	3,7	5,4	9,1	10,2	40,2	34,6	13,9
	Cefalù	0	**A**	**A**	**A1**	6	287,3	32.855	2	9,8	2,0	11,8	17,4	29,2	33,2	40,3	33,5	16,8
	Corleone	0	**A**	**A**	**A1**	9	494,4	36.361	2	8,6	2,0	10,6	20,1	30,7	35,7	34,7	28,1	19,0
	Gangi	0	**A**	**A**	**A1**	3	355,2	10.813	2	2,9	0,5	3,4	5,5	8,9	10,0	38,6	32,9	14,8
	Lercara Friddi	0	**A**	**A**	**A1**	5	391,5	16.241	2	3,6	1,0	4,7	8,7	13,4	15,3	34,9	27,2	22,2
	Palermo	0	**B**	**BA**	**BA3**	18	1.159,7	879.526	5	234,1	72,9	307,0	454,8	761,8	895,2	40,3	30,7	23,7
	Partinico	0	**A**	**A**	**A1**	6	167,5	56.709	3	13,0	3,2	16,2	32,4	48,6	57,0	33,3	26,8	19,5
	Petralia Sottana	0	**A**	**A**	**A1**	8	604,7	20.366	2	5,8	1,1	6,8	9,9	16,8	18,6	40,8	34,3	16,0
	Prizzi	0	**A**	**A**	**A1**	3	243,8	9.176	1	2,2	0,6	2,7	4,9	7,6	8,5	36,0	28,6	20,7
	Termini Imerese	0	**D**	**D**	**D1**	10	564,3	64.571	3	17,1	3,5	20,5	34,2	54,7	63,2	37,6	31,2	17,0

			Specializzazioni produttive prevalenti			Dati di base 2011 (Censimento)				Valori assoluti (migliaia) Media anno 2018						Tassi		
PROVINCE	Denominazione	Distretto	CLASSE	SOTTO-CLASSE	GRUPPO	Numero di Comuni 2011	Superficie (kmq) 2011	Popolazione residente 2011	Classe dimensione	Occupati	In cerca di occupazione	Forze di lavoro	Non forze di lavoro in età15 anni e più	Popolazione di 15 anni o più	Popolazione totale	Tasso di attività	Tasso di occupazione	Tasso di disoccupazione
MESSINA	Barcellona Pozzo di Gotto	0	A	A	A1	11	348,1	67.213	3	19,3	4,3	23,6	33,9	57,4	66,3	41,0	33,6	18,1
	Brolo	0	C	CB	CB3	4	73,7	14.637	2	4,6	0,9	5,5	6,9	12,4	14,1	44,5	37,2	16,3
	Capo d'Orlando	0	A	A	A1	13	328,0	44.238	2	13,6	2,0	15,6	21,6	37,2	42,1	41,9	36,5	12,8
	Caronia	0	A	A	A1	2	294,9	7.393	1	2,1	0,5	2,6	3,5	6,1	6,8	42,5	34,4	19,0
	Francavilla di Sicilia	0	A	A	A1	6	283,4	10.320	2	3,0	0,6	3,6	5,1	8,7	9,8	41,2	34,2	17,1
	Lipari	0	B	BB	BB2	4	116,0	14.289	2	5,1	1,0	6,0	7,5	13,5	15,3	44,7	37,5	16,0
	Messina	0	B	BA	BA3	6	302,1	266.184	4	74,0	23,8	97,9	125,3	223,2	255,9	43,8	33,2	24,3
	Milazzo	0	D	D	D4	14	251,8	79.608	3	21,6	6,1	27,7	40,1	67,8	77,6	40,8	31,9	21,9
	Mistretta	0	A	A	A1	2	156,2	6.370	1	1,8	0,4	2,1	3,1	5,2	5,9	40,7	33,8	16,9
	Patti	0	A	A	A1	7	238,0	30.065	2	9,1	1,9	11,0	14,4	25,5	28,9	43,3	35,8	17,3
	Sant'Agata di Militello	0	A	A	A1	6	178,4	28.286	2	8,5	1,4	9,9	14,3	24,3	27,5	41,0	35,1	14,4
	Santa Teresa di Riva	0	A	A	A1	15	247,3	34.254	2	10,3	1,9	12,2	17,1	29,3	33,3	41,7	35,3	15,3
	Santo Stefano di Camastra	0	D	D	D3	5	122,3	10.801	2	2,8	0,5	3,4	5,8	9,1	10,3	36,9	31,0	15,9
	Taormina	0	B	BB	BB1	10	118,5	35.415	2	10,9	2,2	13,2	17,6	30,7	35,1	42,8	35,5	17,0
AGRIGENTO	Agrigento	0	B	BA	BA4	12	657,7	151.831	4	40,1	14,8	54,9	75,4	130,2	150,7	42,1	30,8	26,9
	Bivona	0	A	A	A1	5	317,1	18.892	2	4,4	1,1	5,5	10,2	15,6	17,5	35,0	28,1	19,5
	Cammarata	0	A	A	A1	3	319,0	22.801	2	5,7	2,2	7,9	11,2	19,1	22,0	41,1	29,6	28,0
	Campobello di Licata	0	A	A	A1	2	130,8	22.515	2	5,7	1,5	7,2	11,0	18,2	21,2	39,7	31,4	21,0
	Canicattì	0	B	BA	BA4	4	202,0	52.085	3	13,6	3,8	17,4	26,9	44,3	52,0	39,3	30,6	22,0
	Licata	0	B	BB	BB2	2	256,7	61.704	3	15,0	5,2	20,2	30,3	50,6	59,2	40,0	29,6	25,9
	Menfi	0	A	A	A1	4	310,1	28.340	2	6,8	1,7	8,5	15,4	23,9	27,4	35,6	28,4	20,3
	Naro	0	A	A	A1	2	223,8	10.250	2	2,5	0,6	3,1	5,4	8,4	9,6	36,4	29,7	18,4
	Ribera	0	A	A	A1	6	300,9	31.371	2	8,1	2,2	10,3	15,9	26,2	30,1	39,3	30,9	21,4
	Sciacca	0	B	BB	BB2	2	315,8	44.818	2	12,0	3,0	15,0	23,0	38,0	43,8	39,5	31,6	20,1

			Specializzazioni produttive prevalenti			Dati di base 2011 (Censimento)				Valori assoluti (migliaia) Media anno 2018						Tassi		
PROVINCE	Denominazione	Distretto	CLASSE	SOTTO-CLASSE	GRUPPO	Numero di Comuni 2011	Superficie (kmq) 2011	Popolazione residente 2011	Classe dimensione	Occupati	In cerca di occupazione	Forze di lavoro	Non forze di lavoro in età15 anni e più	Popolazione di 15 anni o più	Popolazione totale	Tasso di attività	Tasso di occupazione	Tasso di disoccupazione
CALTANISSETTA	Caltanissetta	0	B	BA	BA2	8	686,5	112.289	4	32,7	8,0	40,6	54,4	95,0	109,7	42,8	34,4	19,6
	Gela	0	D	D	D4	2	375,9	103.666	4	24,2	7,7	31,9	53,4	85,3	101,0	37,4	28,4	24,1
	Mazzarino	0	A	A	A1	2	302,2	15.097	2	3,7	1,3	5,0	7,6	12,6	14,4	39,9	29,7	25,6
	Mussomeli	0	A	A	A1	6	295,3	20.454	2	5,5	1,4	6,8	10,2	17,0	19,2	40,0	32,0	20,0
	Riesi	0	A	A	A1	2	365,5	16.690	2	4,2	1,1	5,3	8,4	13,7	15,9	38,5	30,5	21,0
ENNA	Enna	0	B	BA	BA4	4	512,2	45.855	2	13,1	3,0	16,2	22,5	38,6	43,9	41,8	34,0	18,7
	Leonforte	0	A	A	A1	6	604,0	43.093	2	10,6	4,1	14,8	20,7	35,5	41,1	41,6	30,0	28,0
	Nicosia	0	A	A	A1	2	277,6	15.077	2	4,1	1,0	5,1	7,4	12,5	14,3	41,0	32,9	19,7
	Piazza Armerina	0	A	A	A1	4	687,1	48.277	2	11,8	3,4	15,3	24,9	40,2	46,1	38,0	29,5	22,4
	Troina	0	A	A	A1	4	389,7	18.824	2	5,0	1,6	6,6	8,8	15,5	17,7	42,9	32,3	24,7
CATANIA	Adrano	0	B	BA	BA4	4	354,0	72.182	3	17,1	6,3	23,4	36,9	60,3	72,3	38,9	28,4	26,9
	Bronte	0	A	A	A1	5	560,4	30.942	2	8,2	1,5	9,7	16,0	25,7	30,1	37,7	31,8	15,6
	Caltagirone	0	B	BA	BA4	3	424,5	46.832	2	12,2	2,9	15,1	24,9	40,0	46,1	37,7	30,4	19,4
	Catania	0	B	BA	BA2	22	653,4	675.979	5	191,5	47,8	239,3	361,3	600,5	706,1	39,8	31,9	20,0
	Giarre	0	A	A	A1	10	315,8	95.572	3	27,0	5,4	32,4	50,5	82,8	95,6	39,1	32,6	16,5
	Granmichele	0	A	A	A1	4	305,0	26.496	2	7,5	1,6	9,0	13,7	22,8	26,4	39,6	32,8	17,2
	Palagonia	0	B	BB	BB2	5	737,1	40.555	2	8,8	1,5	10,3	23,5	33,8	40,1	30,5	26,0	14,7
	Paternò	0	B	BA	BA4	2	184,2	51.561	3	13,5	2,7	16,2	27,3	43,5	51,7	37,3	31,1	16,6
	Randazzo	0	A	A	A1	3	257,1	12.667	2	3,4	1,0	4,3	6,3	10,7	12,1	40,7	31,5	22,6
	Scordia	0	A	A	A1	2	86,8	24.975	2	5,6	1,1	6,7	14,2	20,8	24,1	32,1	26,9	16,2
RAGUSA	Comiso	0	A	A	A1	2	192,8	37.427	2	11,0	3,4	14,4	18,2	32,6	37,8	44,2	33,8	23,6
	Ispica	0	A	A	A1	2	129,1	34.100	2	10,4	2,3	12,6	17,8	30,4	35,6	41,5	34,1	17,9
	Ragusa	0	B	BA	BA4	6	1.017,0	165.492	4	53,0	11,6	64,6	82,5	147,1	170,9	43,9	36,0	17,9
	Vittoria	0	B	BB	BB2	2	284,9	70.678	3	21,9	5,3	27,2	36,0	63,2	75,1	43,0	34,6	19,4

TABELLA 02. - *TABLE 02.*

			Specializzazioni produttive prevalenti			Dati di base 2011 (Censimento)				Valori assoluti (migliaia) Media anno 2018						Tassi		
PROVINCE	Denominazione	Distretto	CLASSE	SOTTO-CLASSE	GRUPPO	Numero di Comuni 2011	Superficie (kmq) 2011	Popolazione residente 2011	Classe dimensione	Occupati	In cerca di occupazione	Forze di lavoro	Non forze di lavoro in età15 anni e più	Popolazione di 15 anni o più	Popolazione totale	Tasso di attività	Tasso di occupazione	Tasso di disoccupazione
SIRACUSA	Augusta	0	D	D	D4	6	442,3	73.688	3	20,9	5,7	26,6	36,6	63,2	72,7	42,1	33,1	21,4
	Lentini	0	B	BA	BA4	3	449,9	55.326	3	12,1	2,2	14,3	32,2	46,5	53,5	30,8	26,1	15,2
	Noto	0	A	A	A1	5	828,9	57.537	3	16,7	4,1	20,8	27,9	48,7	56,6	42,8	34,2	19,9
	Pachino	0	B	BB	BB2	2	66,1	25.840	2	7,1	2,3	9,4	12,8	22,2	26,0	42,3	32,1	24,1
	Siracusa	0	B	BA	BA4	5	336,9	187.501	4	54,0	16,9	70,9	92,6	163,5	189,8	43,3	33,0	23,8
	SICILIA					**390**	**25.832,4**	**4.999.854,0**		**1.362,7**	**372,3**	**1.735,0**	**2.564,4**	**4.299,3**	**4.998,0**	**39,7**	**31,7**	**20,0**
	ITALIA					**8.092**	**302.073,0**	**59.394.207,0**		**23.214,9**	**2.755,5**	**25.970,4**	**26.056,8**	**52.027,2**	**60.092,0**	**49,9**	**44,6**	**10,6**

Fonte: ns. elaborazione su dati Istat

Legenda Tabella **02.**
Legend Table ***02.***

Distretti industriali	
CLASSE	**Descrizione CLASSE**
1	SLL con presenza di piccola e media impresa manifatturiera (distretto)
0	SLL non distretto

Dimensione dei SLL	
Classe dimensione	**Descrizione della classe dimensionale del SLL**
1	Fino a 10.000 ab.
2	10.001-50.000 ab.
3	50.001-100.000 ab.
4	100.001-500.000 ab.
5	Oltre 500.000 ab.

Legenda Tabella **02.**
Legend Table ***02.***

Descrizione delle classi, sotto-classi e gruppi di specializzazione					
CLASSE	**Descrizione CLASSE**	**SOTTO-CLASSE**	**Descrizione SOTTO-CLASSE**	**GRUPPO**	**Descrizione GRUPPO**
A	SISTEMI SENZA SPECIALIZZAZIONE	**A**	Sistemi senza specializzazione	**A1**	Sistemi locali non specializzati
B	SISTEMI NON MANIFATTURIERI	**BA**	Sistemi urbani	**BA1**	Sistemi locali urbani ad alta specializzazione
B	SISTEMI NON MANIFATTURIERI	**BA**	Sistemi urbani	**BA2**	Sistemi locali urbani pluri-specializzati
B	SISTEMI NON MANIFATTURIERI	**BA**	Sistemi urbani	**BA3**	Sistemi locali urbani prevalentemente portuali
B	SISTEMI NON MANIFATTURIERI	**BA**	Sistemi urbani	**BA4**	Sistemi locali urbani non specializzati
B	SISTEMI NON MANIFATTURIERI	**BB**	Altri sistemi non manifatturieri	**BB1**	Sistemi locali turistici
B	SISTEMI NON MANIFATTURIERI	**BB**	Altri sistemi non manifatturieri	**BB2**	Sistemi locali a vocazione agricola
C	SISTEMI DEL MADE IN ITALY	**CA**	Sistemi del tessile, delle pelli e dell'abbigliamento	**CA1**	Sistemi locali del tessile e dell'abbigliamento
C	SISTEMI DEL MADE IN ITALY	**CA**	Sistemi del tessile, delle pelli e dell'abbigliamento	**CA2**	Sistemi locali delle pelli e del cuoio
C	SISTEMI DEL MADE IN ITALY	**CB**	Altri sistemi del made in Italy	**CB**1	Sistemi locali della fabbricazione di macchine
C	SISTEMI DEL MADE IN ITALY	**CB**	Altri sistemi del made in Italy	**CB2**	Sistemi locali del legno e dei mobili
C	SISTEMI DEL MADE IN ITALY	**CB**	Altri sistemi del made in Italy	**CB3**	Sistemi locali dell'agro-alimentare
C	SISTEMI DEL MADE IN ITALY	**CB**	Altri sistemi del made in Italy	**CB4**	Sistemi locali dei gioielli, degli occhiali e degli strumenti musicali
D	SISTEMI DELLA MANIFATTURA PESANTE	**D**	Sistemi della manifattura pesante	**D1**	Sistemi locali dei mezzi di trasporto
D	SISTEMI DELLA MANIFATTURA PESANTE	**D**	Sistemi della manifattura pesante	**D2**	Sistemi locali della produzione e lavorazione dei metalli
D	SISTEMI DELLA MANIFATTURA PESANTE	**D**	Sistemi della manifattura pesante	**D3**	Sistemi locali dei materiali da costruzione
D	SISTEMI DELLA MANIFATTURA PESANTE	**D**	Sistemi della manifattura pesante	**D4**	Sistemi locali della petrolchimica e della farmaceutica

03.

Giovani che risultano fuori dal circuito lavorativo o formativo (NEET), valori percentuali – Unione Europea

Percentage of Youth Not in employment, education or training (NEET) - EU

Classe di età	15-29 anni											
Periodo	2013			2014			2015			2016		
Sesso	maschi	femmine	totale	maschi	femmine	totale	maschi	femmine	totale	maschi	femmine	totale
Unione europea (28 paesi)	**14,1**	**17,7**	**15,9**	**13,5**	**17,1**	**15,3**	**13,0**	**16,7**	**14,8**	**12,2**	**16,3**	**14,2**
Austria	7,1	9,4	8,3	8,4	10,3	9,3	8,2	9,2	8,7	8,4	9,4	8,9
Belgio	14,1	15,7	14,9	13,9	14,2	14,1	13,9	15,0	14,4	12,0	14,0	13,0
Ceca, Repubblica	8,2	17,7	12,8	7,0	17,4	12,1	6,6	17,2	11,8	5,6	16,8	11,1
Danimarca	7,0	8,1	7,5	6,8	7,8	7,3	7,3	8,2	7,7	7,2	7,7	7,4
Estonia	11,1	17,5	14,3	11,2	16,4	13,8	7,9	17,3	12,5	8,6	19,2	13,8
Finlandia	10,4	11,4	10,9	11,8	11,7	11,8	11,6	13,1	12,4	11,2	12,3	11,7
Francia	12,3	15,3	13,8	12,4	14,6	13,5	13,5	15,9	14,7	13,1	15,6	14,4
Germania	6,8	10,7	8,7	6,7	10,8	8,7	6,6	10,5	8,5	7,0	10,8	8,8
Grecia	27,0	30,8	28,9	24,8	28,5	26,7	22,2	26,1	24,1	19,8	24,8	22,2
Irlanda	18,4	18,7	18,6	17,1	19,0	18,1	16,2	17,5	16,8	14,5	16,0	15,2
Italia	**24,4**	**27,7**	**26,0**	**24,8**	**27,7**	**26,2**	**24,2**	**27,1**	**25,7**	**22,4**	**26,3**	**24,3**
Lussemburgo	6,7	7,8	7,2	7,4	5,6	6,5	6,5	8,7	7,6	5,4	8,3	6,8
Paesi Bassi	6,7	7,6	7,1	6,4	8,1	7,2	5,8	7,6	6,7	5,7	6,9	6,3
Polonia	13,4	19,1	16,2	13,1	18,1	15,5	12,6	16,7	14,6	10,7	17,1	13,8
Portogallo	16,2	17,2	16,7	14,0	15,3	14,6	12,1	14,4	13,2	12,4	13,2	12,8
Regno Unito	11,9	17,6	14,7	10,5	16,4	13,4	9,8	15,5	12,7	9,8	14,9	12,3

Classe di età	15-29 anni											
Periodo	2013			2014			2015			2016		
Sesso	maschi	femmine	totale	maschi	femmine	totale	maschi	femmine	totale	maschi	femmine	totale
Romania	16,3	23,1	19,6	16,5	23,5	19,9	16,1	26,1	20,9	15,2	25,5	20,2
Slovacchia	16,2	21,9	19,0	14,9	21,7	18,2	13,2	21,4	17,2	11,1	20,9	15,9
Slovenia	11,7	14,1	12,9	11,2	14,8	13,0	11,7	13,0	12,3	10,6	11,3	10,9
Spagna	22,8	22,1	22,5	20,5	20,9	20,7	19,2	19,7	19,4	17,4	18,7	18,1
Svezia	7,5	8,3	7,9	7,5	8,1	7,8	7,2	7,6	7,4	6,8	7,3	7,1
Ungheria	14,9	22,7	18,8	12,2	20,8	16,4	11,1	19,2	15,1	9,6	18,8	14,1
Croazia	*	*	*	22,4	21,2	21,8	20,8	19,5	20,1	19,5	19,4	19,5
Bulgaria	23,8	27,8	25,7	21,3	26,8	24,0	19,8	24,7	22,2	19,1	25,8	22,4
Cipro	20,7	20,1	20,4	20,5	18,5	19,5	17,7	19,2	18,5	16,2	19,3	17,9
Lettonia	13,9	17,3	15,6	12,6	17,9	15,2	12,2	15,4	13,8	12,9	13,6	13,3
Lituania	13,2	14,3	13,7	11,5	14,3	12,9	10,7	13,0	11,8	10,8	10,7	10,7
Malta	**9,3**	**13,4**	**11,3**	**9,6**	**15,6**	**12,5**	**9,0**	**13,9**	**11,4**	**6,3**	**11,5**	**8,8**

Fonte: ns. elaborazione su dati Istat

*: il fenomeno esiste, ma i dati non si conoscono per qualsiasi ragione

TABELLA 03. - *TABLE 03.*

04.

Giovani che risultano fuori dal circuito lavorativo o formativo (NEET), valori percentuali - Italia

Percentage of Youth Not in employment, education or training (NEET) - Italy

Classe di età	15-29 anni											
Periodo	2014			2015			2016			2017		
Sesso	maschi	femmine	totale	maschi	femmine	totale	maschi	femmine	totale	maschi	femmine	totale
Italia	24,8	27,7	26,2	24,2	27,1	25,7	22,4	26,3	24,3	22,4	26,0	24,1
Centro-nord	17,8	22,2	19,9	17,3	21,6	19,4	15,3	20,7	17,9	15,4	19,9	17,6
Nord-ovest	18,2	20,6	19,3	17,5	20,9	19,2	14,9	20,8	17,8	14,9	20,1	17,4
Nord-est	14,1	22,2	18,1	13,8	21,2	17,5	11,6	19,6	15,5	12,6	18,7	15,6
Centro	20,9	24,2	22,5	20,2	22,9	21,5	19,2	21,6	20,4	18,7	20,7	19,7
Mezzogiorno	35,5	36,1	35,8	34,9	35,6	35,3	33,5	34,9	34,2	33,3	35,5	34,4
Sicilia	40,3	40,2	40,3	39,7	38,9	39,3	37,5	38,7	38,1	36,5	38,7	37,6

Fonte: ns. elaborazione su dati Istat

05.
Occupati per titolo, anno 2018
2018 data on Human Resources by highest level of education attained

Titolo di studio	licenza di scuola elementare, nessun titolo di studio			licenza di scuola media			diploma			laurea e post-laurea			totale		
Sesso	**maschi**	**femmine**	**totale**	**maschi**	**femmine**	**totale**	**maschi**	**femmine**	**totale**	**maschi**	**femmine**	**totale**	**maschi**	**femmine**	**totale**
Italia	496	216	712	4.321	2.133	6.454	6.181	4.498	10.679	2.449	2.921	5.369	13.447	9.768	23.215
Sicilia	54	18	71	325	103	428	362	227	589	132	142	274	873	490	1.363
Sicilia/Italia	10,83%	8,18%	10,02%	7,52%	4,83%	6,63%	5,86%	5,05%	5,52%	5,40%	4,86%	5,10%	6,49%	5,01%	5,87%
popolazione Italia/popolazione Sicilia															**8,32%**

Fonte: ns. elaborazione su dati Istat

06.
Occupati (migliaia) per settore attività
Human Resources (thousands) per sector of economic activities

Periodo	Italia			Sicilia		
	2016	2017	2018	2016	2017	2018
Attività Economica						
Totale attività economiche	24.848,6	25.138,1	25.358,8	1.536,1	1.529,7	1.516,8
agricoltura, silvicoltura e pesca	937,4	920,9	926,6	122,9	122,0	128,0
produzioni vegetali e animali, caccia e servizi connessi, silvicultura	909,0	892,3	-	115,5	114,4	-
pesca e acquicoltura	28,4	28,6	-	7,4	7,6	-
attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di trattamento dei rifiuti e risanamento, costruzioni	5.739,5	5.752,1	5.804,4	220,2	214,9	222,1
attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di trattamento dei rifiuti e risanamento	4.189,3	4.216,1	4.272,8	128,6	126,8	132,3
industria estrattiva	22,6	22,5	-	2,0	2,1	-
industria manifatturiera	3.866,8	3.891,1	-	100,8	98,9	-
industrie alimentari, delle bevande e del tabacco	462,6	469,7	-	30,1	30,3	-
industrie tessili, confezione di articoli di abbigliamento e di articoli in pelle e simili	497,8	499,0	-	4,4	4,1	-
industria del legno, della carta, editoria	276,3	275,3	-	8,4	7,9	-
fabbricazione di coke e prodotti derivanti dalla raffinazione del petrolio, fabbricazione di prodotti chimici e farmaceutici	188,4	191,9	-	7,6	7,8	-
fabbricazione di articoli in gomma e materie plastiche e altri prodotti della lavorazione di minerali non metalliferi	348,9	347,0	-	11,6	10,8	-
attività metallurgiche e fabbricazione di prodotti in metallo, esclusi macchinari e attrezzature	657,2	662,7	-	12,0	11,9	-
fabbricazione di computer e prodotti di elettronica e ottica, fabbricazione di apparecchiature elettriche, fabbricazione di macchinari e apparecchiature n.c.a	733,9	739,5	-	9,1	9,2	-
fabbricazione di mezzi di trasporto	260,5	264,7	-	3,2	2,3	-
fabbricazione di mobili, altre industrie manifatturiere, riparazione e installazione di macchine e apparecchiature	441,2	441,3	-	14,4	14,6	-
fornitura di energia elettrica, gas, vapore e aria condizionata	83,5	82,8		4,7	4,7	-
fornitura di acqua, reti fognarie, attività di trattamento dei rifiuti e risanamento	216,4	219,7	-	21,1	21,1	-
costruzioni	1.550,2	1.536,0	1.531,6	91,6	88,1	89,8
servizi	18.171,7	18.465,1	18.627,8	1.193,0	1.192,8	1.166,7
commercio all'ingrosso e al dettaglio, riparazione di autoveicoli e motocicli, trasporti e magazzinaggio, servizi di alloggio e di ristorazione, servizi di informazione e comunicazione	6.969,3	7.161,4	7.209,1	416,7	422,3	409,4
commercio all'ingrosso e al dettaglio, riparazione di autoveicoli e motocicli, trasporto e magazzinaggio, servizi di alloggio e di ristorazione	6.366,3	6.550,8	-	398,1	403,2	-
commercio all'ingrosso e al dettaglio, riparazione di autoveicoli e motocicli	3.692,5	3.734,2	-	255,9	253,8	-
trasporti e magazzinaggio	1.158,3	1.185,3	-	59,6	60,6	-
servizi di alloggio e di ristorazione	1.515,5	1.631,3	-	82,6	88,8	-

Periodo	Italia			Sicilia		
	2016	2017	2018	2016	2017	2018
Attività Economica						
servizi di informazione e comunicazione	603,0	610,6	-	18,6	19,1	-
attività finanziarie e assicurative, attività immobiliari, attività professionali, scientifiche e tecniche, amministrazione e servizi di supporto	3.818,7	3.894,4	3.980,4	185,7	186,5	180,5
attività finanziarie e assicurative	659,6	648,5	-	31,2	31,3	-
attività immobiliari	181,8	181,1	-	6,1	6,3	-
attività professionali, scientifiche e tecniche, amministrazione e servizi di supporto	2.977,3	3.064,8	-	148,4	148,9	-
attività professionali, scientifiche e tecniche	1.657,0	1.659,3	-	78,8	78,1	-
attività amministrative e di servizi di supporto	1.320,3	1.405,5	-	69,6	70,8	-
amministrazione pubblica e difesa, assicurazione sociale obbligatoria, istruzione, sanità e assistenza sociale, attività artistiche, di intrattenimento e divertimento, riparazione di beni per la casa e altri servizi	7.383,7	7.409,3	7.438,3	590,6	584,0	576,8
amministrazione pubblica e difesa, assicurazione sociale obbligatoria, istruzione, sanità e assistenza sociale	4.745,1	4.749,5	-	406,6	404,2	-
amministrazione pubblica e difesa, assicurazione sociale obbligatoria	1.279,6	1.247,7	-	129,1	126,9	-
istruzione	1.544,9	1.559,1	-	135,9	133,7	-
sanità e assistenza sociale	1.920,6	1.942,7	-	141,6	143,6	-
attività artistiche, di intrattenimento e divertimento, riparazione di beni per la casa e altri servizi	2.638,6	2.659,8	-	184,0	179,8	-
attività artistiche, di intrattenimento e divertimento	327,2	343,2	-	22,3	22,9	-
altre attività di servizi	739,1	738,2	-	48,8	47,8	-
attività di famiglie e convivenze come datori di lavoro per personale domestico, produzione di beni e servizi indifferenziati per uso proprio da parte di famiglie e convivenze	1.572,3	1.578,4	-	112,9	109,1	-

Fonte: ns. elaborazione su dati Istat

07.
Persone in cerca di occupazione (migliaia)
People in search of occupation (thousands)

Classe di età	15 anni e più					
Periodo	Sicilia		Italia		Sicilia/Italia	
	2017	2018	2017	2018	2017	2018
Titolo di studio						
licenza di scuola elementare, nessun titolo di studio	27	30	164	157	16,30%	18,98%
licenza di scuola media	157	157	1.161	1.069	13,51%	14,67%
diploma	152	147	1.252	1.210	12,17%	12,13%
laurea e post-laurea	38	39	352	340	10,82%	11,43%
totale	374	372	2.929	2.775	12,77%	13,41%

Fonte: ns. elaborazione su dati Istat

08.
Tasso di disoccupazione per sesso (Sicilia - 2018)
Unemployment rate per gender (Sicily - 2018)

Classe di età	15-74 anni		
Sesso	maschi	femmine	totale
Titolo di studio			
licenza di scuola elementare, nessun titolo di studio	26,4	38,0	29,7
licenza di scuola media	23,5	35,7	26,9
diploma	18,7	21,9	19,9
laurea e post-laurea	9,3	15,2	12,5
totale	19,8	24,3	21,5

Fonte: ns. elaborazione su dati Istat

09.
Tasso di disoccupazione per provincia (Sicilia, 2018)
Unemployment rate – provincial level (Sicily, 2018)

Classe di età	15 anni e più		
Anno	**2016**	**2017**	**2018**
Agrigento	24,3	23,0	27,6
Caltanissetta	21,1	17,7	17,6
Catania	18,5	18,8	18,9
Enna	19,8	24,7	21,6
Messina	22,4	24,8	25,5
Palermo	25,1	21,3	19,8
Ragusa	19,4	18,8	18,7
Siracusa	24,0	22,0	22,2
Trapani	21,2	24,4	23,6

Fonte: ns. elaborazione su dati Istat

10.
Tasso di occupazione per provincia (Sicilia, 2018)
Employment rate – provincial level (Sicily, 2018)

Classe di età	15-64 anni		
Anno	**2016**	**2017**	**2018**
Agrigento	39,1	39,7	38,8
Caltanissetta	40,3	38,5	39,2
Catania	39,6	40,1	39,9
Enna	41,1	41,4	40,0
Messina	42,1	42,5	41,5
Palermo	37,4	38,5	39,4
Ragusa	47,5	49,1	48,1
Siracusa	41,9	42,2	45,5
Trapani	39,8	39,6	38,4

Fonte: ns. elaborazione su dati Istat

11.
Tasso di occupazione per sesso e classe di età (Sicilia/Italia, 2018)
Employment rate per gender and age class (Sicily/Italy, 2018)

Classe di età	15-74 anni					
Sesso	Sicilia			Italia		
	maschi	femmine	totale	maschi	femmine	totale
Titolo di studio						
licenza di scuola elementare, nessun titolo di studio	39,3	10,0	22,9	47,6	17,2	31,1
licenza di scuola media	45,0	15,6	30,9	57,5	32,5	45,8
diploma	57,8	36,5	47,2	73,4	55,0	64,3
laurea e post-laurea	73,9	61,1	66,6	83,5	75,3	78,7
totale	52,5	29,1	407,0	67,6	49,5	58,5

Fonte: ns. elaborazione su dati Istat

12.
Tasso di inattività per provincia (Sicilia, 2018)
Inactive population rate – provincial data (Sicily, 2018)

Classe di età	15-64 anni		
Anni	2016	2017	2018
Agrigento	48,1	48,1	46,0
Caltanissetta	48,8	53,0	52,3
Catania	51,2	50,4	50,6
Enna	48,7	44,9	48,8
Messina	45,6	43,2	44,2
Palermo	49,8	50,8	50,7
Ragusa	41,0	39,2	40,4
Siracusa	44,7	45,7	41,3
Trapani	49,2	47,4	49,5

Fonte: ns. elaborazione su dati Istat

13.
Popolazione per condizione professionale (migliaia) (Sicilia/Italia, 2018)
Population by labour status (thousands) (Sicily/Italy, 2018)

Classe di età	15 anni e più					
Condizione professionale europea	Sicilia		Italia		Sicilia/Italia	
	2017	2018	2017	2018	2017	2018
forze lavoro	1.741	1.735	26.442	26.486	6,58%	6,55%
occupati	1.367	1.363	23.513	23.711	5,81%	5,75%
disoccupati	374	372	2.929	2.775	12,77%	13,41%
totale inattivi	2.574	2.564	26.500	26.436	9,71%	9,70%
totale	4.315	4.299	52.942	52.921	8,15%	8,12%

Fonte: ns. elaborazione su dati Istat

14.
Serie Storica - Incidenza della disoccupazione femminile di lunga durata
Time Series – Long-term female unemployment rate

Quota di persone in cerca di occupazione da oltre 12 mesi sul totale delle persone in cerca di occupazione (percentuale)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	62,7	64,2	68,0	70,3	76,8	72,1	72,7	69,6	70,3
Italia	49,8	52,5	54,8	57,1	62,8	58,8	58,6	57,8	59,6
- Nord	40,8	45,8	47,2	48,6	55,9	51,9	50,9	50,5	50,3
- Nord-ovest	44,8	47,2	51,7	51,1	58,3	55,1	53,4	53,0	53,8
- Nord-est	35,1	43,5	39,9	45,1	52,4	47,2	47,0	46,5	45,1
- Centro	48,9	50,3	49,3	53,1	60,0	54,0	51,9	52,5	56,0
- Centro-Nord	43,6	47,3	47,9	50,2	57,4	52,6	51,3	51,2	52,4
- Mezzogiorno	58,7	59,5	64,1	66,5	69,8	67,0	67,7	65,8	68,0
- Sud	58,9	59,1	62,9	66,1	68,8	67,4	67,5	66,1	68,7
- Isole	58,3	60,3	66,5	67,6	72,1	66,2	68,0	65,1	66,5

Fonte: ns. elaborazione su dati Istat

15.
Serie Storica - Incidenza della disoccupazione maschile di lunga durata
Time Series – Long-term male unemployment rate

Quota di persone in cerca di occupazione da oltre 12 mesi sul totale delle persone in cerca di occupazione (percentuale)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	54,1	54,3	58,4	63,7	68,4	66,2	64,1	68,2	70,4
Italia	47,2	51,6	51,9	56,9	60,3	59,1	58,1	59,7	58,6
- Nord	40,3	44,3	42,3	50,1	53,1	53,2	50,5	50,4	46,8
- Nord-ovest	42,6	46,2	46,8	52,2	56,4	55,9	51,6	52,0	49,8
- Nord-est	36,5	40,8	34,8	46,4	47,2	48,1	48,4	47,8	41,8
- Centro	46,4	48,2	47,8	52,2	56,7	52,1	53,7	54,7	54,1
- Centro-Nord	42,4	45,7	44,2	50,8	54,4	52,8	51,7	52,1	49,7
- Mezzogiorno	52,0	57,3	59,2	62,7	66,1	65,2	64,0	65,9	66,1
- Sud	52,4	58,8	59,9	63,4	66,3	65,7	64,8	66,2	65,8
- Isole	51,2	54,4	57,9	61,3	65,7	64,1	62,4	65,3	66,8

Fonte: ns. elaborazione su dati Istat

16.
Serie Storica - Tasso di disoccupazione di lunga durata
Time Series -Long time unemployment rate

Quota di persone in cerca di occupazione da oltre 12 mesi sulle forze di lavoro (percentuale)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	8,4	8,3	11,4	13,9	15,9	14,7	14,9	14,8	15,1
Italia	4,1	4,3	5,7	6,9	7,8	7,0	6,8	6,6	6,3
- Nord	2,4	2,6	3,3	4,1	4,7	4,2	3,8	3,5	3,2
- Nord-ovest	2,7	2,9	3,9	4,6	5,3	4,8	4,3	3,9	3,6
- Nord-est	1,9	2,1	2,4	3,5	3,8	3,5	3,2	2,9	2,6
- Centro	3,6	3,7	4,6	5,6	6,6	5,6	5,5	5,3	5,2
- Centro-Nord	2,7	2,9	3,7	4,6	5,3	4,7	4,3	4,1	3,8
- Mezzogiorno	7,3	7,9	10,5	12,6	14,0	12,8	12,9	12,7	12,3
- Sud	7,0	7,8	10,3	12,6	13,8	12,6	12,6	12,5	11,9
- Isole	7,8	8,0	10,8	12,7	14,5	13,2	13,4	13,2	13,2

Fonte: ns. elaborazione su dati Istat

17.
Serie Storica - Tasso di disoccupazione femminile di lunga durata
Time Series – Long-term female unemployment rate

Quota di persone in cerca di occupazione da oltre 12 mesi sul totale delle forze lavoro (percentuale)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	10,7	10,9	13,9	16,1	18,6	16,3	17,4	16,3	17,1
Italia	4,8	5,0	6,5	7,5	8,7	7,5	7,5	7,2	7,0
- Nord	2,8	3,1	4,0	4,6	5,4	4,7	4,4	4,2	3,9
- Nord-ovest	3,2	3,4	4,7	4,9	5,8	5,1	4,9	4,6	4,4
- Nord-est	2,4	2,7	3,0	4,2	4,9	4,1	3,8	3,6	3,3
- Centro	4,3	4,4	5,4	6,4	7,5	6,1	5,9	5,8	5,9
- Centro-Nord	3,3	3,5	4,4	5,1	6,0	5,1	4,9	4,7	4,5
- Mezzogiorno	9,2	9,6	12,4	14,2	16,2	14,3	14,9	14,3	14,2
- Sud	9,1	9,4	12,2	14,2	16,2	14,4	14,9	14,5	14,2
- Isole	9,5	9,8	12,6	14,2	16,3	14,1	15,0	14,0	14,2

Fonte: ns. elaborazione su dati Istat

18.
Serie Storica - Tasso di disoccupazione maschile di lunga durata
Time Series - Long-term male unemployment rate

Quota di persone in cerca di occupazione da oltre 12 mesi sul totale delle forze lavoro (percentuale)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	7,2	6,9	10,1	12,7	14,4	13,7	13,5	13,9	13,9
Italia	3,5	3,9	5,1	6,5	7,2	6,7	6,3	6,2	5,7
- Nord	2,0	2,2	2,7	3,8	4,1	3,9	3,3	3,0	2,6
- Nord-ovest	2,3	2,6	3,3	4,4	4,9	4,5	3,8	3,3	3,0
- Nord-est	1,6	1,7	2,0	3,0	3,0	2,9	2,8	2,5	2,1
- Centro	3,0	3,2	3,9	5,0	5,9	5,3	5,2	5,0	4,6
- Centro-Nord	2,3	2,5	3,1	4,1	4,7	4,3	3,9	3,6	3,2
- Mezzogiorno	6,2	6,9	9,4	11,7	12,6	11,9	11,6	11,8	11,1
- Sud	5,9	6,9	9,2	11,6	12,3	11,6	11,2	11,4	10,5
- Isole	6,8	6,9	9,6	11,9	13,4	12,6	12,4	12,7	12,5

Fonte: ns. elaborazione su dati Istat

19.
Serie Storica – Tasso giovani NEET (totale)
Time Series – Total youth NEET rate

Giovani tra i 15 e i 29 anni non occupati né inseriti in un percorso di istruzione/formazione in percentuale sulla popolazione nella corrispondente classe di età (media annua)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	33,2	35,4	37,4	39,5	40,3	39,3	38,1	37,6	38,6
Italia	22,0	22,5	23,8	26,0	26,2	25,7	24,3	24,1	23,4
- Nord	15,5	15,2	16,3	18,9	18,8	18,4	16,9	16,7	15,6
- Nord-ovest	16,0	15,4	16,7	19,7	19,3	19,2	17,8	17,4	16,3
- Nord-est	14,8	14,8	15,9	17,8	18,1	17,5	15,5	15,6	14,8
- Centro	16,9	18,6	19,7	21,5	22,5	21,5	20,4	19,7	19,6
- Centro-Nord	15,9	16,2	17,4	19,7	19,9	19,4	17,9	17,6	16,8
- Mezzogiorno	30,7	31,7	33,1	35,3	35,8	35,3	34,2	34,4	33,8
- Sud	30,3	30,8	32,1	34,2	34,3	34,2	33,2	33,7	32,6
- Isole	31,5	33,7	35,4	37,9	39,0	37,7	36,5	35,8	36,3

Fonte: ns. elaborazione su dati Istat

20.
Serie Storica - Tasso giovani NEET (maschi)
Time Series – Male youth NEET rate

Giovani tra i 15 e i 29 anni non occupati né inseriti in un percorso di istruzione/formazione in percentuale sulla popolazione nella corrispondente classe di età (media annua)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	30,75	31,40	35,43	38,59	40,32	39,68	37,47	36,52	36,90
Italia	19,31	20,04	21,75	24,45	24,82	24,25	22,45	22,37	21,45
- Nord	12,38	12,19	13,94	16,74	16,44	15,95	13,53	13,94	12,95
- Nord-ovest	13,26	12,60	15,00	18,71	18,15	17,51	14,92	14,90	14,11
- Nord-est	11,18	11,63	12,47	14,02	14,07	13,81	11,62	12,62	11,36
- Centro	14,06	16,37	17,56	19,40	20,87	20,19	19,24	18,74	18,45
- Centro-Nord	12,90	13,48	15,06	17,56	17,81	17,26	15,28	15,41	14,62
- Mezzogiorno	28,52	29,56	31,59	34,77	35,46	34,94	33,53	33,31	32,40
- Sud	28,01	29,01	30,45	33,59	33,69	33,50	32,27	32,43	30,89
- Isole	29,62	30,74	34,07	37,34	39,30	38,03	36,26	35,25	35,70

Fonte: ns. elaborazione su dati Istat

21.
Serie Storica - Tasso giovani NEET (femmine)
Time Series – Female youth NEET rate

Giovani tra i 15 e i 29 anni non occupati né inseriti in un percorso di istruzione/formazione in percentuale sulla popolazione nella corrispondente classe di età (media annua)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	35,75	39,54	39,41	40,47	40,24	38,87	38,68	38,74	40,37
Italia	24,68	25,10	25,84	27,55	27,69	27,14	26,28	25,96	25,38
- Nord	18,61	18,24	18,83	21,14	21,26	21,03	20,33	19,52	18,49
- Nord-ovest	18,73	18,38	18,46	20,72	20,59	20,87	20,85	20,11	18,59
- Nord-est	18,45	18,04	19,32	21,72	22,16	21,24	19,62	18,72	18,36
- Centro	19,73	20,95	22,00	23,76	24,15	22,92	21,62	20,70	20,84
- Centro-Nord	18,96	19,07	19,80	21,95	22,15	21,61	20,72	19,88	19,20
- Mezzogiorno	32,94	33,89	34,76	35,93	36,12	35,64	34,90	35,52	35,24
- Sud	32,75	32,59	33,85	34,78	34,97	34,86	34,08	35,12	34,49
- Isole	33,35	36,70	36,72	38,44	38,63	37,33	36,68	36,39	36,88

Fonte: ns. elaborazione su dati Istat

22.
Serie Storica - Incidenza della disoccupazione di lunga durata
Time Series – Long-term unemployment rate

Quota di persone in cerca di occupazione da oltre 12 mesi sul totale delle persone in cerca di occupazione (percentuale)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	57,6	58,5	62,3	66,3	71,7	68,5	67,5	68,7	70,3
Italia	48,5	52,0	53,3	57,0	61,5	58,9	58,4	58,8	59,1
- Nord	40,6	45,0	44,8	49,4	54,5	52,5	50,7	50,4	48,6
- Nord-ovest	43,7	46,7	49,3	51,7	57,3	55,5	52,5	52,5	51,8
- Nord-est	35,7	42,2	37,4	45,7	50,0	47,6	47,7	47,1	43,6
- Centro	47,7	49,3	48,5	52,6	58,4	53,0	52,9	53,6	55,0
- Centro-Nord	43,0	46,5	46,1	50,5	55,9	52,7	51,5	51,6	51,1
- Mezzogiorno	54,8	58,2	61,2	64,2	67,7	65,9	65,5	65,8	66,9
- Sud	55,2	58,9	61,2	64,5	67,4	66,4	66,0	66,2	67,1
- Isole	54,2	56,9	61,4	63,8	68,3	64,9	64,7	65,2	66,7

Fonte: ns. elaborazione su dati Istat

23.
Serie Storica - Addetti delle nuove imprese
Time Series – New enterprise officers

Addetti delle imprese nate nell'ultimo triennio in percentuale su addetti totali

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	4,2	1,9	3,7	3,8	3,9	3,9	3,8	3,8
Italia	2,7	2,7	2,3	2,3	2,3	2,3	2,3	2,3
- Nord	2,2	2,2	1,8	1,8	1,8	1,8	1,8	1,7
- Nord-ovest	2,2	3,8	1,9	1,8	1,8	1,8	1,9	1,8
- Nord-est	2,1	3,8	1,7	1,7	1,7	1,7	1,7	1,6
- Centro	2,9	3,8	2,5	2,5	2,5	2,6	2,5	2,5
- Centro-Nord	2,4	2,2	2,0	2,0	2,0	2,0	2,0	2,0
- Mezzogiorno	4,1	3,8	3,6	3,6	3,7	3,7	3,6	3,6
- Sud	4,1	3,8	3,6	3,7	3,7	3,7	3,6	3,6
- Isole	4,1	3,8	3,5	3,6	3,7	3,7	3,7	3,7

Fonte: ns. elaborazione su dati Istat

24.
Serie Storica - Produttività del settore della pesca
Time Series – Fishery sector productivity

Valore aggiunto della pesca, piscicoltura e servizi connessi per ULA dello stesso settore
(migliaia di euro concatenati - anno di riferimento 2010)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	38,62	40,70	36,72	36,68	29,44	29,51	32,27	32,19
Italia	43,10	45,22	41,40	37,50	34,99	37,27	39,17	37,92
- Nord	38,79	39,00	35,56	31,90	34,62	39,70	42,64	40,91
- Nord-ovest	74,98	68,17	75,94	67,43	79,49	74,31	98,41	84,31
- Nord-est	33,88	34,40	30,10	26,90	28,86	34,05	35,49	34,64
- Centro	42,67	45,00	41,02	38,15	35,83	35,56	36,19	37,56
- Centro-Nord	40,18	41,09	37,49	33,94	35,01	38,20	40,25	39,65
- Mezzogiorno	45,33	48,49	44,41	40,32	34,95	36,56	38,35	36,67
- Sud	56,70	59,58	54,81	45,48	41,97	43,13	45,24	43,15
- Isole	37,03	40,22	37,06	36,02	29,84	31,59	33,42	32,59

Fonte: ns. elaborazione su dati Istat

25.
Serie Storica - Valore aggiunto del settore della pesca (prezzi correnti)
Time Series – Economic salience of the fishery sector (current prices)

Valore aggiunto della pesca, della piscicoltura e servizi connessi sul valore aggiunto totale, a prezzi correnti (percentuale)

Area geografica	Anni						
	2010	2011	2012	2013	2014	2015	2016
Sicilia	0,38	0,35	0,29	0,25	0,24	0,27	0,28
Italia	0,10	0,09	0,08	0,06	0,06	0,07	0,07
- Nord	0,04	0,04	0,04	0,03	0,03	0,03	0,03
- Nord-ovest	0,02	0,02	0,02	0,01	0,01	0,01	0,01
- Nord-est	0,08	0,07	0,07	0,06	0,06	0,06	0,05
- Centro	0,07	0,06	0,05	0,05	0,04	0,05	0,05
- Centro-Nord	0,05	0,05	0,04	0,04	0,03	0,04	0,03
- Mezzogiorno	0,25	0,23	0,19	0,16	0,16	0,18	0,18
- Sud	0,19	0,18	0,15	0,13	0,13	0,14	0,13
- Isole	0,36	0,35	0,28	0,24	0,23	0,26	0,27

Fonte: ns. elaborazione su dati Istat

26.
Serie Storica - Andamento dell'occupazione del settore della pesca
Time Series – Employment in the fishery sector

Variazione rispetto all'anno precedente delle unità di lavoro del settore della pesca,della piscicoltura e dei servizi connessi (percentuale)

Area geografica	Anni						
	2010	2011	2012	2013	2014	2015	2016
Sicilia	-6,3	1,3	-11,8	6,0	1,4	2,8	2,7
Italia	-6,7	-2,3	-0,7	-6,1	-0,4	2,9	-1,0
- Nord	-4,3	-4,5	6,0	-11,2	-1,3	1,3	0,0
- Nord-ovest	9,1	-16,7	10,0	-18,2	22,2	-18,2	11,1
- Nord-est	-6,2	-2,6	5,4	-10,3	-4,3	4,5	-1,4
- Centro	-7,8	-2,1	-6,5	-9,3	2,6	2,5	-7,3
- Centro-Nord	-5,6	-3,7	1,5	-10,6	0,0	1,7	-2,5
- Mezzogiorno	-7,6	-1,2	-2,4	-2,4	-0,6	3,8	0,0
- Sud	-6,4	-4,1	7,1	-9,3	1,5	1,4	-4,3
- Isole	-8,4	1,0	-9,1	3,3	-2,2	5,5	3,1

Fonte: ns. elaborazione su dati Istat

27.
Serie Storica - PIL Nazionale e per macro area
Time Series – Current GDP for macro

Prodotto interno lordo ai prezzi di mercato (milioni di euro)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	88.851,50	88.480,60	87.720,40	86.345,00	84.561,60	86.206,40	86.500,00	87.605,90
Italia	1.604.514,50	1.637.462,70	1.613.264,90	1.604.599,10	1.621.827,20	1.652.085,30	1.689.747,70	1.724.954,40
- Nord	878.223,90	901.527,40	887.113,00	888.264,10	903.730,60	922.024,10	946.233,00	969.570,30
- Nord-ovest	522.763,10	534.179,80	524.169,90	522.854,50	531.864,00	542.424,10	556.359,90	570.422,40
- Nord-est	355.460,80	367.347,60	362.943,10	365.409,60	371.866,60	379.600,00	389.873,10	399.147,90
- Centro	351.652,40	358.091,20	350.993,60	347.713,60	351.310,80	355.105,90	365.248,30	370.269,00
- Centro-Nord	1.229.876,30	1.259.618,60	1.238.106,60	1.235.977,70	1.255.041,40	1.277.130,00	1.311.481,30	1.339.839,30
- Mezzogiorno	373.282,50	376.355,20	373.625,70	366.904,70	365.380,60	373.745,20	377.078,70	383.928,10
- Sud	251.431,50	254.651,10	252.748,80	248.417,40	248.646,90	254.164,60	257.560,00	262.811,60
- Isole	121.851,00	121.704,10	120.876,90	118.487,30	116.733,70	119.580,60	119.518,70	121.116,50

Fonte: ns. elaborazione su dati Istat

28.
Serie Storica - Valore aggiunto Pesca, piscicoltura e servizi connessi (prezzi correnti)
Time Series – Fishery, pisciculture and satellite activities' added-value (current prices)

Valore aggiunto ai prezzi base della branca Pesca, piscicoltura e servizi connessi (milioni di euro a prezzi correnti)

Area geografica	Anni						
	2010	2011	2012	2013	2014	2015	2016
Sicilia	305,222	282,698	230,993	192,111	184,4	210	221,9
Italia	1383,86	1321,51	1106,650	935,295	913,8	1031,4	1009,7
- Nord	343,244	325,659	282,286	250,811	246	278,8	252,3
- Nord-ovest	81,7989	79,4455	70,3742	61,8741	61,1	68,70	63,4
- Nord-est	261,445	246,213	211,911	188,937	184,9	210,1	188,9
- Centro	211,502	203,007	166,834	141,269	137,4	155,5	158,2
- Centro-Nord	554,746	528,666	449,120	392,081	383,4	434,3	410,5
- Mezzogiorno	829,117	792,840	657,530	543,215	530,4	597,1	599,2
- Sud	434,943	414,354	349,713	287,967	283,5	317,5	309,2
- Isole	394,174	378,486	307,817	255,248	246,9	279,6	290,0

Fonte: ns. elaborazione su dati Istat

29.
Serie Storica - ULA Pesca, piscicoltura e servizi connessi
Time Series – ALU (annual labour unit) Fishery, pisciculture and satellite activities'

Unità di lavoro del settore della pesca, piscicoltura e servizi connessi (media annua in migliaia di unità)

Area geografica	Anni						
	2010	2011	2012	2013	2014	2015	2016
Sicilia	7,5	7,6	6,7	7,1	7,2	7,4	7,6
Italia	30,6	29,9	29,7	27,9	27,8	28,6	28,3
- Nord	8,8	8,4	8,9	7,9	7,8	7,9	7,9
- Nord-ovest	1,2	1	1,1	0,9	1,1	0,9	1
- Nord-est	7,6	7,4	7,8	7	6,7	7	6,9
- Centro	4,7	4,6	4,3	3,9	4	4,1	3,8
- Centro-Nord	13,5	13	13,2	11,8	11,8	12	11,7
- Mezzogiorno	17,1	16,9	16,5	16,1	16	16,6	16,6
- Sud	7,3	7	7,5	6,8	6,9	7	6,7
- Isole	9,8	9,9	9	9,3	9,1	9,6	9,9

Fonte: ns. elaborazione su dati Istat

30.

Serie Storica - Esportazioni di Prodotti dell'agricoltura, caccia, silvicoltura, pesca e piscicoltura

Time Series – Export of agricultural, hunting, forestry, fishery, and pisciculture products

Codice ATECO 2007 A - (euro)

Area geografica	Anni							
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	2017
Sicilia	479.303.905	498.632.181	429.930.270	461.829.972	498.216.913	531.317.428	574.465.130	599.506.631
Italia	5.613.802.408	5.800.215.885	5.822.179.297	5.982.036.600	5.935.736.911	6.620.046.792	6.851.880.748	7.115.105.681
- Nord	3.359.587.362	3.465.412.281	3.499.656.684	3.529.607.535	3.521.664.618	3.839.821.400	4.006.387.829	4.119.620.020
- Nord-ovest	1.045.073.334	1.034.047.951	1.004.900.136	1.046.819.779	1.080.068.467	1.141.179.158	1.201.201.875	1.241.935.550
- Nord-est	2.314.514.028	2.431.364.330	2.494.756.548	2.482.787.756	2.441.596.151	2.698.642.242	2.805.185.954	2.877.684.470
- Centro	622.232.059	625.854.119	709.715.797	741.214.477	732.701.960	820.324.837	865.515.487	894.352.490
- Centro-Nord	3.981.819.421	4.091.266.400	4.209.372.481	4.270.822.012	4.254.366.578	4.660.146.237	4.871.903.316	5.013.972.510
- Mezzogiorno	1.630.589.565	1.704.610.687	1.606.893.239	1.709.866.889	1.680.902.596	1.952.774.855	1.976.332.408	2.098.278.370
- Sud	1.148.413.879	1.201.424.591	1.172.606.548	1.241.715.892	1.174.738.722	1.411.091.010	1.390.157.313	1.485.795.143
- Isole	482.175.686	503.186.096	434.286.691	468.150.997	506.163.874	541.683.845	586.175.095	612.483.227

Fonte: ns. elaborazione su dati Istat

31.
Valore aggiunto a prezzi correnti Sicilia
Value-added on current prices in Sicily

(milioni di euro)	2016	2017	2018
totale attività economiche	77.836,6	79.273,9	79.825,6
agricoltura, silvicoltura e pesca	3.061,2	3.258,9	3.077,8
produzioni vegetali e animali, caccia e servizi connessi, silvicultura	2.838,8	3.075,7	-
pesca e acquicoltura	222,4	183,2	-
attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di trattamento dei rifiuti e risanamento, costruzioni	10.189,2	10.140,8	10.540,0
attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di trattamento dei rifiuti e risanamento	6.912,5	6.983,9	7.273,7
industria estrattiva	115,1	123,5	-
industria manifatturiera	4.565,2	4.573,4	-
industrie alimentari, delle bevande e del tabacco	1.089,9	1.087,2	-
industrie tessili, confezione di articoli di abbigliamento e di articoli in pelle e simili	130,9	120,1	-
industria del legno, della carta, editoria	281,8	250,3	-
fabbricazione di coke e prodotti derivanti dalla raffinazione del petrolio, fabbricazione di prodotti chimici e farmaceutici	874,7	923,7	-
fabbricazione di articoli in gomma e materie plastiche e altri prodotti della lavorazione di minerali non metalliferi	485,4	464,3	-
attività metallurgiche e fabbricazione di prodotti in metallo, esclusi macchinari e attrezzature	422,8	413,3	-
fabbricazione di computer e prodotti di elettronica e ottica, fabbricazione di apparecchiature elettriche, fabbricazione di macchinari e apparecchiature n.c.a	562,9	608,1	-
fabbricazione di mezzi di trasporto	155,1	133,6	-
fabbricazione di mobili, altre industrie manifatturiere, riparazione e installazione di macchine e apparecchiature	561,7	572,7	-
fornitura di energia elettrica, gas, vapore e aria condizionata	1.208,1	1.213,2	-
fornitura di acqua, reti fognarie, attività di trattamento dei rifiuti e risanamento	1.024,2	1.073,7	-
costruzioni	3.276,7	3.156,9	3.266,3
servizi	64.586,2	65.874,2	66.207,7
commercio all'ingrosso e al dettaglio, riparazione di autoveicoli e motocicli, trasporti e magazzinaggio, servizi di alloggio e di ristorazione, servizi di informazione e comunicazione	18.237,9	19.103,6	18.934,5
commercio all'ingrosso e al dettaglio, riparazione di autoveicoli e motocicli, trasporto e magazzinaggio, servizi di alloggio e di ristorazione	16.764,7	17.468,2	-
commercio all'ingrosso e al dettaglio, riparazione di autoveicoli e motocicli	9.480,7	9.873,6	-
trasporti e magazzinaggio	4.327,0	4.487,3	-
servizi di alloggio e di ristorazione	2.957,0	3.107,3	-
servizi di informazione e comunicazione	1.473,2	1.635,4	-
attività finanziarie e assicurative, attività immobiliari, attività professionali, scientifiche e tecniche, amministrazione e servizi di supporto	20.956,3	21.300,1	21.224,1
attività finanziarie e assicurative	2.831,6	2.764,4	-
attività immobiliari	12.640,5	12.839,6	-
attività professionali, scientifiche e tecniche, amministrazione e servizi di supporto	5.484,1	5.696,1	-

(milioni di euro)	2016	2017	2018
attività professionali, scientifiche e tecniche	3.682,3	3.807,6	-
attività amministrative e di servizi di supporto	1.801,9	1.888,5	-
amministrazione pubblica e difesa, assicurazione sociale obbligatoria, istruzione, sanità e assistenza sociale, attività artistiche, di intrattenimento e divertimento, riparazione di beni per la casa e altri servizi	25.392,0	25.470,5	26.049,2
amministrazione pubblica e difesa, assicurazione sociale obbligatoria, istruzione, sanità e assistenza sociale	21.586,1	21.783,6	-
amministrazione pubblica e difesa, assicurazione sociale obbligatoria	9.431,4	9.466,7	-
istruzione	5.572,6	5.615,2	-
sanità e assistenza sociale	6.582,1	6.701,6	-
attività artistiche, di intrattenimento e divertimento, riparazione di beni per la casa e altri servizi	3.805,9	3.686,9	-
attività artistiche, di intrattenimento e divertimento	1.033,1	1.025,7	-
altre attività di servizi	1.742,0	1.691,5	-
attività di famiglie e convivenze come datori di lavoro per personale domestico, produzione di beni e servizi indifferenziati per uso proprio da parte di famiglie e convivenze	1.030,8	969,6	-

Fonte: ns. elaborazione su dati Istat

32.
Serie Storica - Valore aggiunto agricoltura, silvicoltura e pesca (prezzi correnti)
Time Series – Value-added of agriculture, forestry, and fishery (current prices)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	2909,9	2939,8	3176,8	3294	2963	3255,9	3051,5	3122,3	3056,21
Italia	28416,4	30879,9	31698	33614,1	31476,6	33364,5	31802,8	32954,2	33069,90
- Nord	12354,0	13736,7	14147,7	14862,8	14228,5	14440,9	14275,9	14720,8	15050,20
- Nord-ovest	5244,7	5830,4	5992,7	6103,7	6055,4	6051,3	5902,7	6188,2	6075,16
- Nord-est	7109,3	7906,3	8155,0	8759,1	8173,1	8389,6	8373,2	8532,6	8975,07
- Centro	4685,9	4952,1	5063,5	5343,5	4979,5	5379,1	5108,0	5080,0	5239,03
- Centro-Nord	17039,9	18688,8	19211,2	20206,3	19208,0	19820,0	19383,9	19800,8	20289,30
- Mezzogiorno	11376,5	12191,1	12486,8	13407,8	12268,6	13544,5	12418,9	13153,4	12780,60
- Sud	7089,2	7928,2	8014,5	8685,0	7815,8	8740,8	7904,4	8615,6	8301,79
- Isole	4287,3	4262,9	4472,3	4722,8	4452,8	4803,7	4514,5	4537,8	4478,86

Fonte: ns. elaborazione su dati Istat

33.
Serie Storica - Emissioni di gas a effetto serra in agricoltura
Time Series – Greenhouse gas emissions in agriculture

Tep CO_2/1000

Area geografica	Anni	
	2010	2015
Sicilia	1325,4	1360,7
Italia	33741,2	29953,4
- Nord	20882,5	19551,0
- Nord-ovest	12100,4	11547,8
- Nord-est	8782,2	8003,2
- Centro	3760,1	2968,9
- Centro-Nord	24642,6	22519,9
- Mezzogiorno	9098,6	7433,5
- Sud	5264,6	4241,2
- Isole	3834,0	3192,3

Fonte: ns. elaborazione su dati Istat

34.
Serie Storica - Emissioni di gas serra
Time Series – Greenhouse gas emissions

Tonnellate di CO_2 equivalente per abitante

Area geografica	Anni				
	1995	2000	2005	2010	2015
Sicilia	8,8	9,3	9,3	8,3	7,0
Italia	9,5	9,9	10,2	8,7	7,3
- Nord	10,6	10,8	11,2	9,3	7,9
- Nord-ovest	10,3	10,2	10,9	9,1	7,6
- Nord-est	11,0	11,8	11,7	9,5	8,3
- Centro	8,9	9,5	9,3	7,9	6,4
- Centro-Nord	10,1	10,4	10,7	8,9	7,4
- Mezzogiorno	8,1	8,6	9,1	8,2	7,0
- Sud	7,2	7,5	8,1	7,4	6,4
- Isole	10,1	11,0	11,1	9,7	8,0

Fonte: ns. elaborazione su dati Istat

35.
Serie Storica - Produzione di energia elettrica lorda degli impianti da fonti rinnovabili (GWh)
Time Series – Renewable source plants gross production of electric power (GWh)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	2.593,9	3.248,3	4.748,7	5.127,9	5.221,5	4.912,6	5.184,8	5.139,1	5.388,5
Italia	76.964,4	82.961,4	92.222,3	112.008,4	120.679,6	108.904,1	108.021,8	103.897,6	114.414,5
- Nord	45.146,8	47.662,0	50.132,1	60.360,0	69.005,9	58.427,7	56.012,5	51.864,8	61.008,1
- Nord-ovest	24.354,4	25.764,9	27.320,9	32.211,3	35.852,0	32.381,1	30.040,0	28.365,3	32.621,2
- Nord-est	20.792,4	21.897,1	22.811,2	28.148,7	33.153,9	26.046,6	25.972,5	23.499,5	28.386,9
- Centro	11.988,0	12.548,0	13.207,5	16.744,2	16.942,7	16.167,0	16.224,4	15.702,0	16.736,0
- Centro-Nord	57.134,8	60.210,0	63.339,6	77.104,2	85.948,6	74.594,7	72.236,9	67.566,8	77.744,1
- Mezzogiorno	19.829,6	22.751,4	28.882,7	34.904,2	34.731,0	34.309,3	35.785,0	36.330,8	36.670,4
- Sud	15.150,4	17.018,2	21.054,8	25.833,4	25.849,8	26.011,0	27.077,6	27.691,8	27.843,9
- Isole	4.679,2	5.733,2	7.827,9	9.070,8	8.881,2	8.298,4	8.707,4	8.639,0	8.826,5

Fonte: ns. elaborazione su dati Istat

36.
Serie Storica - Produzione lorda di energia elettrica attraverso impianti idrici (GWh)
Time Series – Waterwork gross production of electric power (GWh)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	143,6	98,1	171,7	174,7	146,4	250,5	142,4	330,9	126,1
Italia	51.116,7	45.822,7	41.874,7	52.773,4	58.545,5	45.537,3	42.431,8	38.024,8	48.786,2
- Nord	39.522,8	37.264,6	35.440,1	41.460,1	48.384,5	36.799,3	34.637,7	31.016,2	39.146,3
- Nord-ovest	21.502,5	20.558,4	20.032,8	22.880,5	25.774,9	21.824,1	19.523,3	18.697,3	22.106,4
- Nord-est	18.020,3	16.706,2	15.407,3	18.579,6	22.609,6	14.975,1	15.114,4	12.318,9	17.039,9
- Centro	5.254,0	3.546,2	2.709,1	5.318,8	4.805,2	3.609,1	3.855,2	2.926,6	4.460,8
- Centro-Nord	44.776,8	40.810,8	38.149,2	46.778,9	53.189,7	40.408,4	38.492,8	33.942,8	43.607,1
- Mezzogiorno	6.339,9	5.011,9	3.725,5	5.994,5	5.355,8	5.128,9	3.938,9	4.082,0	5.179,1
- Sud	5.791,0	4.460,9	3.316,4	5.337,2	4.848,8	4.687,7	3.637,4	3.422,4	4.633,7
- Isole	548,9	551,0	409,1	657,3	507,0	441,2	301,5	659,6	545,4

Fonte: ns. elaborazione su dati Istat

37.
Serie Storica - Produzione lorda di energia elettrica da cogenerazione (GWh)
Time Series – Cogeneration gross production of electric power (GWh)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	10.237,8	10.222,7	10.286,2	9.738,5	9.158,5	8.205,2	9.047,4	8.162,6
Italia	111.467,8	101.508,7	100.838,9	91.292,8	85.150,7	95.874,5	105.126,9	110.128,1
- Nord	54.579,0	49.413,1	51.812,4	50.463,3	45.935,1	53.583,3	58.489,2	63.497,5
- Nord-ovest	28.919,1	28.588,4	29.480,6	28.825,5	26.532,2	29.621,0	31.152,2	34.094,3
- Nord-est	25.659,9	20.824,7	22.331,9	21.637,8	19.402,9	23.962,3	27.337,0	29.403,2
- Centro	14.975,6	13.763,2	13.771,7	9.031,6	8.716,2	9.652,8	10.565,5	11.156,4
- Centro-Nord	69.554,5	63.176,3	65.584,1	59.494,9	54.651,3	63.236,1	69.054,8	74.653,9
- Mezzogiorno	41.913,3	38.332,4	35.254,8	31.797,9	30.499,4	32.638,4	36.072,1	35.474,2
- Sud	25.979,6	22.978,6	19.940,8	16.983,3	16.240,9	19.078,3	21.739,7	22.442,5
- Isole	15.933,7	15.353,8	15.314,0	14.814,7	14.258,5	13.560,1	14.332,4	13.031,7

Fonte: ns. elaborazione su dati Istat

38.
Serie Storica - Produzione lorda di energia elettrica da bioenergie (GWh)
Time Series – Bioenergy gross production of electric power (GWh)

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	150,2	109,8	69,6	189,8	259,3	264,8	239,9	258,6	262,8
Italia	9.439,9	10.832,3	12.486,7	17.090,1	18.732,9	19.395,7	19.508,6	19.378,2	19.152,4
- Nord	4.797,3	5.898,1	7.339,5	10.469,5	11.822,8	12.269,0	12.242,2	12.171,0	12.398,3
- Nord-ovest	2.471,8	3.257,9	3.990,8	5.543,5	6.118,4	6.370,0	6.367,7	6.345,1	6.274,2
- Nord-est	2.325,5	2.640,2	3.348,7	4.926,0	5.704,4	5.898,9	5.874,5	5.825,9	6.124,1
- Centro	874,1	1.074,8	1.046,8	1.417,3	1.718,3	1.699,0	1.608,8	1.537,1	1.541,9
- Centro-Nord	5.671,4	6.972,9	8.386,3	11.886,8	13.541,1	13.967,9	13.851,0	13.708,1	13.940,2
- Mezzogiorno	3.768,5	3.859,4	4.100,4	5.203,3	5.191,8	5.427,8	5.657,6	5.670,1	5.212,2
- Sud	3.048,7	3.109,6	3.366,3	4.244,2	4.243,0	4.420,5	4.851,1	4.826,6	4.509,5
- Isole	719,8	749,8	734,1	959,1	948,8	1.007,3	806,5	843,5	702,7

Fonte: ns. elaborazione su dati Istat

39.
Serie Storica - Consumi di energia elettrica coperti da fonti rinnovabili (incluso idroelettrica)
Time Series – renewable energy consumption (including hydroelectric power)

Produzione lorda di energia elettrica da fonti rinnovabili (incluso idro)
in percentuale sui consumi interni lordi di energia elettrica misurati in GWh

Area geografica	Anni								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	11,0	13,8	20,8	23,6	24,8	23,7	26,2	25,1	27,2
Italia	22,2	23,8	26,9	33,7	37,3	33,1	33,1	31,1	34,3
- Nord	24,1	25,3	27,1	33,2	38,8	32,1	30,7	27,7	32,3
- Nord-ovest	22,5	23,8	25,6	30,8	35,2	31,4	29,1	26,8	30,7
- Nord-est	26,4	27,4	29,2	36,3	43,5	33,1	32,8	29,0	34,5
- Centro	19,3	20,0	21,3	28,0	29,2	27,3	27,9	26,6	28,6
- Centro-Nord	22,9	24,0	25,7	31,9	36,4	30,9	30,0	27,5	31,5
- Mezzogiorno	20,4	23,3	30,2	38,7	39,7	38,9	41,5	41,5	42,4
- Sud	25,1	27,9	34,8	44,5	45,7	45,0	47,5	48,2	49,3
- Isole	12,7	15,7	22,3	28,2	28,7	27,3	29,8	28,6	29,5

Fonte: ns. elaborazione su dati Istat

40.
Serie Storica - Raccolta differenziata dei rifiuti urbani
Time Series – Recycling urban waste

Rifiuti urbani oggetto di raccolta differenziata sul totale dei rifiuti urbani (percentuale)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	9,4	11,2	13,2	13,3	12,5	12,8	15,4	21,7
Italia	35,3	37,7	40,0	42,3	45,2	47,5	52,5	55,5
- Nord	49,1	51,1	52,7	54,4	56,7	58,6	64,2	66,2
- Nord-ovest	46,3	47,7	49,6	51,0	53,1	55,2	62,3	64,5
- Nord-est	52,7	55,3	56,7	58,8	61,2	62,9	66,6	68,3
- Centro	27,1	30,2	33,1	36,4	40,8	43,8	48,6	51,8
- Centro-Nord	41,8	44,2	46,3	48,5	51,5	53,8	59,3	61,6
- Mezzogiorno	21,2	23,9	26,5	28,8	31,3	33,6	37,6	41,9
- Sud	22,9	26,1	29,0	32,2	35,8	38,9	43,3	47,0
- Isole	17,9	19,7	21,6	22,1	22,1	23,0	26,0	31,6

Fonte: ns. elaborazione su dati Istat

41.
Serie Storica - Quantità di frazione umida trattata in impianti di compostaggio per la produzione di compost di qualità
Time Series – Quantity of food waste treated in compost plants for the production of quality compost

Frazione umida trattata in impianti di compostaggio sulla frazione di umido nel rifiuto urbano totale (percentuale)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	6,1	9,2	13,5	12,4	13,3	9,9	17,6	16,1
Italia	38,3	36,7	42,3	42,5	47,8	50,2	53,6	56,4
- Nord	63,9	57,9	65,5	63,4	74,4	76,1	79,2	84,9
- Nord-ovest	59,4	52,3	57,0	52,3	61,0	69,0	73,1	79,4
- Nord-est	68,9	65,1	76,3	77,3	91,1	83,6	85,5	90,6
- Centro	27,0	26,7	28,9	32,4	31,7	37,9	38,1	34,5
- Centro-Nord	51,3	47,6	53,4	53,2	60,5	64,3	66,6	69,6
- Mezzogiorno	14,3	14,6	19,8	20,6	21,3	24,2	29,1	31,3
- Sud	11,5	11,2	16,0	16,8	17,3	24,9	28,7	32,7
- Isole	19,2	21,3	27,5	28,2	29,3	23,0	29,9	29,0

Fonte: ns. elaborazione su dati Istat

42.
Serie Storica - Rifiuti urbani raccolti per abitante (kg)
Time Series – Collected urban waste per inhabitant ratio (kg)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	521,9	515,7	485,2	471,5	459,8	462,3	465,3	456,0
Italia	547,9	528,6	503,8	491,0	487,8	486,2	496,7	488,7
- Nord	546,3	527,9	502,8	492,9	495,9	493,9	510,0	503,1
- Nord-ovest	527,5	509,8	483,9	472,7	475,1	472,7	482,1	475,3
- Nord-est	572,2	552,8	528,7	520,8	524,9	523,3	548,7	541,5
- Centro	634,1	605,8	579,3	558,2	547,1	542,7	548,0	537,7
- Centro-Nord	572,5	551,2	525,6	512,5	511,4	508,7	521,6	513,6
- Mezzogiorno	501,8	486,1	462,4	450,0	442,9	443,1	449,3	440,9
- Sud	494,4	475,6	454,5	443,0	437,6	437,4	444,3	435,7
- Isole	517,1	508,0	479,1	464,6	453,9	455,2	459,8	451,6

Fonte: ns. elaborazione su dati Istat

43.
Serie Storica - Rifiuti urbani smaltiti in discarica per abitante (kg)
Time series – Urban waste disposal in landfill per inhabitant ratio (kg)

Area geografica	Anni							
	2010	2011	2012	2013	2014	2015	2016	2017
Sicilia	487,7	467,9	404,6	440,8	387,7	383,0	371,6	332,6
Italia	253,4	222,4	196,9	181,2	153,5	128,7	122,6	114,4
- Nord	135,6	119,2	109,7	100,9	94,0	69,6	60,7	62,0
- Nord-ovest	136,4	126,4	110,8	99,4	83,6	57,7	55,2	57,6
- Nord-est	134,6	109,3	108,3	102,9	108,3	86,0	68,2	68,0
- Centro	390,9	361,1	325,7	247,0	177,5	152,8	147,6	127,1
- Centro-Nord	211,9	191,5	174,3	144,8	119,3	94,8	87,0	81,7
- Mezzogiorno	331,4	280,5	239,4	250,3	218,7	193,5	190,6	177,2
- Sud	290,4	220,9	187,7	193,3	166,5	134,0	131,4	123,9
- Isole	417,6	405,8	348,3	370,2	328,2	318,2	314,7	289,1

Fonte: ns. elaborazione su dati Istat

44.
Serie Storica - Emissioni totali di CO_2
Time Series – Total CO_2 emisisons

Area geografica	Anni				
	1995	2000	2005	2010	2015
Sicilia	43.863.695,17	46.257.712,44	46.172.557,49	41.381.605,40	35.412.331,84
Italia	537.413.944,77	562.360.928,00	589.606.535,35	515.623.633,76	440.623.287,85
- Nord	267.975.183,00	276.264.537,37	294.599.235,71	251.411.308,46	218.266.116,68
- Nord-ovest	153.387.975,63	152.066.090,83	166.326.972,59	143.314.403,67	121.978.850,97
- Nord-est	114.587.207,36	124.198.446,54	128.272.263,12	108.096.904,79	96.287.265,71
- Centro	97.518.229,43	103.562.929,39	104.153.468,12	91.403.823,32	77.258.045,09
- Centro-Nord	365.493.412,43	379.827.466,76	398.752.703,83	342.815.131,78	295.524.161,77
- Mezzogiorno	167.326.987,80	177.101.215,30	186.363.354,65	168.249.838,92	145.099.126,08
- Sud	100.379.097,96	104.067.178,68	112.800.794,50	104.051.828,41	91.068.623,43
- Isole	66.947.889,84	73.034.036,62	73.562.560,15	64.198.010,50	54.030.502,66

Fonte: ns. elaborazione su dati Istat

45.
Serie Storica - Aziende agrituristiche in Sicilia per tipologia
Time Series – Agritourism enterprises in Sicily per type

Un'azienda agricola può essere autorizzata all'esercizio di una o più tipologie di attività agrituristiche

Tipologie agrituristiche	2010	2011	2012	2013	2014	2015	2016	2017	Var.% 2010/2017	Var.% 2016/2017
Alloggio										
- Aziende	16.504	16.759	16.906	17.102	17.793	18.295	18.632	19.115	15,8%	2,6%
- Posti letto	206.145	210.747	217.946	224.933	232.580	238.323	245.473	253.328	22,9%	3,2%
- Piazzole di sosta	8.759	9.113	8.363	8.100	9.263	10.660	11.367	11.746	34,1%	3,3%
Ristorazione										
- Aziende	9.914	10.033	10.144	10.514	11.061	11.207	11.329	11.407	15,1%	0,7%
- Posti a sedere	385.470	385.075	397.175	406.957	423.777	432.884	444.117	441.771	14,6%	-0,5%
Degustazione										
- Aziende	3.836	3.876	3.449	3.588	3.837	4.285	4.654	4.849	26,4%	4,2%
Altre attività										
- Aziende	11.421	11.785	11.982	12.096	12.307	12.416	12.446	12.986	13,7%	4,3%
di cui con:										
- Equitazione	1.638	1.662	1.489	1.230	1.222	1.269	1.357	1.496	-8,7%	10,2%
- Escursionismo	3.190	3.233	3.324	3.124	3.143	3.242	3.442	3.482	9,2%	1,2%
- Osservazioni naturalistiche	784	891	932	972	1.037	1.110	1.317	1.240	58,2%	-5,8%
- Trekking	1.950	1.949	1.821	1.717	1.767	1.838	1.939	1.932	-0,9%	-0,4%
- Mountain bike	2.800	2.794	2.785	2.851	2.656	2.666	2.585	2.595	-7,3%	0,4%
- Fattorie didattiche	752	1.122	1.251	1.176	1.289	1.402	1.497	1.547	105,7%	3,3%
- Corsi	1.967	1.878	2.009	1.770	1.887	1.952	1.917	1.855	-5,7%	-3,2%
- Sport	4.152	4.141	5.058	5.088	5.013	4.846	4.752	5.000	20,4%	5,2%
- Varie	6.312	6.737	4.917	6.033	6.391	6.443	6.704	7.411	17,4%	10,5%
Agriturismo										
- Aziende in complesso	**19.973**	**20.413**	**20.474**	**20.897**	**21.744**	**22.238**	**22.661**	**23.406**	**17,2%**	**3,3%**

Fonte: ns. elaborazione su dati ISPRA/Istat

46.
Aziende agrituristiche per tipologia (Italia/Sicilia)
Agritourism enterprises per type (Italy/Sicily)

Un'azienda agricola può essere autorizzata all'esercizio di una o più tipologie di attività agrituristiche

Tipologia Agriturismo	Alloggio		Ristorazione		Degustazione		Altre attività		Totale	
	2017	Variazione % 2016-2017	2017	Variazione % 2016-2017	2017	Variazione % 2016-2017	2017	Variazione % 2016-2017	2017	Variazione % 2016-2017
Sicilia	800	15,3%	530	-1,3%	365	4,0%	813	17,0%	858	13,0%
Italia	19.115	2,6%	11407	0,7%	4.849	4,2%	12.986	4,3%	23.406	3,3%
Sicilia/Italia	**4,19%**		**4,65%**		**7,53%**		**6,26%**		**3,67%**	

Fonte: ns. elaborazione su dati ISPRA/Istat

47.
Aziende agrituristiche per tipo di altre attività (Italia/Sicilia, 2017)
Agritourism enterprises per type of activity 'other' (Italy/Sicily, 2017)

Un'azienda agricola può essere autorizzata all'esercizio di una o più tipologie di attività agrituristiche

Tipologia Altra attività	Equitazione	Escursioni	Osservazioni naturalistiche	Trekking	Mountain Bike	Fattorie didattiche	Corsi vari	Attività sportive	Attività varie	Totale
Sicilia	261	512	146	83	61	85	122	650	411	813
Italia	1.496	3.482	1.240	1.932	2.595	1.547	1.855	5.000	7.411	12.986
Sicilia/Italia	17,45%	14,70%	11,77%	4,30%	2,35%	5,49%	6,58%	13,00%	5,55%	6,26%

Fonte: ns. elaborazione su dati ISPRA/Istat

48.

Capacità degli esercizi ricettivi, per tipologia di esercizio (Italia/Sicilia, 2017-2018)

Capacity of Tourist accommodation establishments per type of activity (Italy/Sicily, 2017-2018)

Anno	Esercizi alberghieri		Esercizi complementari										Bed and Breakfast		Totale esercizi ricettivi	
			Campeggi e villaggi turistici		Alloggi in affitto		Alloggi agroturistici		Altri esercizi		TOTALE (escluso B&B)					
	n.	n. letti	n.	n. letti	n.	n. letti	n.	n. letti	n.	n. letti	n.	n. letti	n.	n. letti	n.	n. letti
Sicilia 2017	1.302	123.515	86	26.980	1.544	20.280	307	6.444	235	6.118	2.172	59.822	3.276	19.923	6.750	203.260
Italia 2017	32.988	2.239.446	2.643	1.353.895	104.661	755.631	18.771	256.533	11.638	254.469	137.713	2.620.528	34.202	177.824	204.903	5.037.798
Sicilia/Italia 2017	3,95%	5,52%	3,25%	1,99%	1,48%	2,68%	1,64%	2,51%	2,02%	2,40%	1,58%	2,28%	9,58%	11,20%	3,29%	4,03%
Sicilia 2018	1.319	123.927	84	26.547	1.697	21.351	312	6.550	234	6.067	2.327	60.515	3.509	21.448	7.155	205.890
Italia 2018	32.896	2.260.190	2.611	1.342.488	109.906	767.185	20.267	269.837	15.115	282.477	147.899	2.661.987	35.198	184.869	215.993	5.107.046
Sicilia/Italia 2018	4,01%	5,48%	3,22%	1,98%	1,54%	2,78%	1,54%	2,43%	1,55%	2,15%	1,57%	2,27%	9,97%	11,60%	3,31%	4,03%

Fonte: ns. elaborazione su dati ISPRA/Istat

49.
Serie storica - Indice di utilizzazione netta degli esercizi alberghieri (Italia/Sicilia)
Time Series - Net hotel occupancy rate (Italy/Sicily)

Anno	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sicilia	27,9	29,8	28,3	28	29	32,7	39,5	39,3	39,6
ITALIA	**38,2**	**40,2**	**40,9**	**40,5**	**40,6**	**42,5**	**43,7**	**46,1**	**48,3**

Fonte: ns. elaborazione su dati ISPRA/Istat

51.
Serie Storica - Distribuzione regionale delle spiagge italiane con etichetta "bandiera blu"
Time Series – Regional collocation of Italian beaches labeled 'bandiera blu' (clean sea award)

Regioni	2014	2015	2016	2017	2018	2019
Piemonte	1	2	2	2	3	3
Lombardia	1	1	1	1	1	1
Trentino-Alto Adige	5	5	5	10	10	10
Veneto	7	8	8	8	8	8
Friuli-Venezia Giulia	2	2	2	2	2	2
Liguria	20	23	25	27	27	30
Emilia-Romagna	9	9	7	6	7	7
Toscana	18	18	19	19	19	19
Marche	17	17	17	17	16	15
Lazio	7	8	8	8	8	9
Abruzzo	10	8	6	8	9	10
Molise	3	3	3	2	1	1
Campania	13	14	14	15	18	18
Puglia	10	11	11	11	14	13
Basilicata	1	1	2	2	4	5
Calabria	4	4	5	7	9	11
Sicilia	**6**	**5**	**6**	**7**	**6**	**7**
Sardegna	6	8	11	11	13	14
ITALIA	**269**	**280**	**293**	**342**	**368**	**385**

Fonte: ns. elaborazione su dati ISPRA/Bandierablu.org

50.
Numero di posti barca per tipologia di struttura e classi di lunghezza e percentuale di distribuzione per km di costa (Italia/Sicilia, 2017)
The *Capacity of boats per type of structure and length class, and coastal distribution per km - percentage points (Italy/Sicily, 2017)*

Tipologia	Tipologia di struttura			Classi di lunghezza			Posti barca totali	Lunghezza costa	Posti barca totali per km di costa
	Porto turistico	Approdo turistico	Punto di ormeggio	fino a 10,00 m o non specificati	da 10,01 a 24,00 m	oltre 24,00 m			
	n.							km	n./km
Sicilia	4.404	4.808	5.955	10.536	4.325	306	15.167	1.603	9,5
Totale	64.188	44.955	49.405	104.974	49.574	4.000	158.548	8.274	19,2
Sicilia/Totale	**6,86%**	**10,70%**	**12,05%**	**10,04%**	**8,72%**	**7,65%**	**9,57%**	**19,37%**	

Fonte: ns. elaborazione su dati ISPRA/Istat

SOCIOECONOMIC STATISTICAL ANNEX MALTA - TABLES

APPENDICE STATISTICA SOCIO ECONOMICA MALTA - Tabelle

01.
PIL e principali componenti (uscite, spese ed entrate)
GDP and main components (output, expenditure and income)

Item	Gross domestic product at market prices									
Unit	Chain linked volumes, index 2010=100									
GEO/TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
European Union	100.0	101.8	101.1	101.0	102.6	105.0	107.2	110.1	112.5	-
Belgium	100.0	101.7	102.4	102.9	104.5	106.7	108.3	110.4	112.0	113.5
Bulgaria	100.0	102.4	102.7	103.0	105.0	109.2	113.4	117.3	120.9	-
Czechia	100.0	101.8	101.0	100.5	103.2	108.7	111.3	116.2	119.5	-
Denmark	100.0	101.3	101.6	102.5	104.2	106.6	110.1	112.3	115.0	117.6
Germany	100.0	103.9	104.4	104.8	107.1	109.0	111.4	114.2	115.9	116.6
Estonia	100.0	107.4	110.8	112.3	115.6	117.8	120.9	127.8	133.9	139.7
Ireland	100.0	100.3	100.6	101.9	110.7	138.5	143.6	155.3	168.0	-
Greece	100.0	90.9	84.2	81.5	82.1	81.7	81.6	82.8	84.4	-
Spain	100.0	99.2	96.3	94.9	96.2	99.9	102.9	105.9	108.4	110.5
France	100.0	102.2	102.5	103.1	104.1	105.2	106.4	108.8	110.7	112.1
Croatia	100.0	99.7	97.5	96.9	96.8	99.2	102.6	105.9	108.7	-
Italy	100.0	**100.7**	**97.7**	**95.9**	**95.9**	**96.6**	**97.9**	**99.5**	**100.3**	**100.6**
Cyprus	100.0	100.4	96.9	90.6	88.9	91.9	98.1	102.4	106.5	-
Latvia	100.0	106.3	110.7	113.3	115.4	119.2	121.3	125.9	131.3	134.2
Lithuania	100.0	106.0	110.1	114.0	118.0	120.4	123.5	128.7	133.4	138.6
Luxembourg	100.0	102.5	102.2	105.9	110.5	115.2	120.5	122.7	126.5	-
Hungary	100.0	101.8	100.3	102.3	106.6	110.7	113.1	118.0	124.0	130.1
Malta	100.0	**101.4**	**104.2**	**109.2**	**118.8**	**131.7**	**139.4**	**148.4**	**159.3**	**166.3**
Netherlands	100.0	101.6	100.5	100.4	101.8	103.8	106.1	109.2	112.0	114.0
Austria	100.0	102.9	103.6	103.6	104.3	105.4	107.6	110.3	112.9	114.7
Poland	100.0	105.0	106.7	108.2	111.8	116.1	119.6	125.5	132.0	137.4
Portugal	100.0	98.3	94.3	93.4	94.2	95.9	97.8	101.2	103.7	-
Romania	100.0	102.0	104.1	107.8	111.5	115.8	121.3	130.0	135.7	-
Slovenia	100.0	100.9	98.2	97.2	99.9	102.1	105.3	110.4	114.9	117.7
Slovakia	100.0	102.9	104.8	105.5	108.4	113.7	116.1	119.6	124.4	-
Finland	100.0	102.5	101.1	100.2	99.8	100.4	103.1	106.3	108.2	-
Sweden	100.0	103.1	102.4	103.5	106.4	111.1	113.7	116.5	119.1	120.5

Source of data: Eurostat

02.
Principali aggregati del PIL pro capite
Main GDP aggregates per capita

Unit	Percentage of EU27 total per capita based on million purchasing power standards								
Item	**Gross domestic product at market prices**								
GEO/TIME	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
European Union	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Belgium	121.1	119.0	121.3	121.2	121.2	120.9	120.3	119.1	118.5
Bulgaria	44.4	45.5	46.6	46.0	47.4	48.0	49.5	50.3	51.5
Czechia	83.8	83.7	83.3	84.6	87.1	88.2	88.5	90.2	91.5
Denmark	130.8	129.1	128.5	129.7	129.2	128.4	127.8	128.7	128.4
Germany	120.6	123.7	124.4	124.8	126.8	124.8	124.4	123.5	122.4
Estonia	66.2	71.9	75.0	76.6	78.5	77.1	77.7	80.0	83.1
Ireland	131.7	130.4	132.7	133.0	137.9	180.9	177.5	184.2	191.6
Greece	85.6	76.0	72.5	72.4	72.4	70.4	68.5	67.8	68.2
Spain	96.4	92.7	91.0	90.0	90.5	91.4	91.9	92.3	91.6
France	109.2	108.9	108.1	109.7	108.3	106.9	105.7	104.6	104.1
Croatia	60.1	60.3	60.6	60.4	59.6	60.2	61.6	62.4	63.6
Italy	**105.9**	**105.2**	**103.3**	**100.1**	**97.7**	**96.6**	**98.5**	**97.7**	**96.5**
Cyprus	101.6	96.8	91.3	84.3	81.1	83.0	86.4	87.5	88.8
Latvia	53.5	57.6	61.1	63.0	64.3	65.0	65.0	66.7	69.9
Lithuania	60.9	66.3	70.7	74.0	76.0	75.4	76.2	79.0	81.4
Luxembourg	260.0	266.9	262.5	264.3	272.3	271.6	270.8	262.0	260.9
Hungary	65.6	66.5	66.4	68.0	69.1	69.8	68.3	69.2	71.7
Malta	**84.6**	**83.1**	**84.4**	**86.2**	**90.0**	**94.7**	**96.5**	**98.6**	**98.3**
Netherlands	137.0	135.5	135.6	136.6	132.8	131.6	129.0	129.3	129.9
Austria	127.8	129.3	133.3	133.0	131.7	130.7	130.2	128.0	128.0
Poland	63.2	65.6	67.5	67.8	68.3	69.4	68.9	70.2	71.4
Portugal	82.9	77.8	75.8	77.5	77.5	77.6	78.0	77.7	77.0
Romania	51.6	52.1	54.3	54.9	55.6	56.6	60.0	63.1	65.6
Slovenia	84.6	84.1	83.3	83.2	83.3	82.8	83.4	85.7	87.5
Slovakia	75.9	75.7	77.3	77.6	78.2	78.3	77.5	76.5	77.8
Finland	118.4	118.9	117.3	115.1	112.6	111.2	110.6	110.9	111.6
Sweden	128.2	129.4	130.0	128.0	126.9	128.2	124.2	123.0	122.8

Source of data: Eurostat

03.
PIL pro capite
GDP per capita

Unit	Chain linked volumes (2010), euro per capita									
GEO/TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
European Union	24900	25320	25080	25030	25390	25930	26410	27090	27620	-
Belgium	33330	33460	33490	33490	33870	34360	34700	35250	35600	35900
Bulgaria	5050	5300	5350	5400	5530	5790	6050	6310	6550	-
Czechia	14900	15200	15060	14980	15370	16160	16520	17200	17620	17980
Denmark	43840	44240	44170	44410	44890	45630	46720	47360	48260	49140
Germany	31940	33200	33280	33330	33930	34220	34700	35420	35860	35970
Estonia	11150	12010	12430	12640	13060	13330	13650	14440	15090	15670
Ireland	36790	36760	36690	37010	39890	49470	50710	54240	57960	-
Greece	20320	18500	17240	16800	17040	17080	17110	17410	17780	-
Spain	23040	22770	22080	21840	22210	23080	23760	24410	24880	25150
France	30690	31210	31160	31170	31320	31540	31770	32370	32830	33360
Croatia	10500	10500	10300	10280	10310	10630	11100	11560	11990	-
Italy	**26930**	**27020**	**26090**	**25480**	**25420**	**25640**	**26020**	**26490**	**26740**	**26860**
Cyprus	23400	22900	21780	20400	20240	21040	22360	23120	23770	24250
Latvia	8500	9200	9700	10030	10310	10740	11030	11560	12140	12490
Lithuania	9030	9790	10300	10780	11250	11590	12040	12750	13320	13880
Luxembourg	79160	79310	77240	78030	79490	81300	82880	82550	83470	-
Hungary	9900	10110	10010	10230	10690	11130	11410	11930	12560	13180
Malta	**15920**	**16070**	**16370**	**16920**	**18030**	**19520**	**20190**	**20910**	**21670**	**21890**
Netherlands	38470	38880	38340	38180	38580	39170	39810	40730	41540	41990
Austria	35390	36300	36390	36180	36130	36140	36430	37090	37810	38240
Poland	9390	9860	10020	10170	10510	10920	11260	11820	12430	12950
Portugal	16990	16720	16110	16050	16260	16620	17010	17650	18110	-
Romania	6190	6350	6510	6760	7020	7320	7720	8320	8740	-
Slovenia	17750	17870	17360	17160	17620	17990	18540	19430	20170	20490
Slovakia	12540	12980	13200	13270	13620	14270	14550	14970	15560	-
Finland	35080	35810	35140	34660	34390	34460	35300	36310	36890	-
Sweden	39920	40820	40270	40360	41060	42430	42910	43350	43810	43900

04.
Popolazione al 1° Gennaio 2010-2019
Population on 01 January 2010-2019

GEO\TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
European Union	440.7	439.9	440.6	441.3	442.9	443.7	444.8	445.5	446.1	446.8
Belgium	10.8	11	11.1	11.1	11.2	11.2	11.3	11.4	11.4	11.5
Bulgaria	7.4	7.4	7.3	7.3	7.2	7.2	7.2	7.1	7.1	7.0
Czechia	10.5	10.5	10.5	10.5	10.5	10.5	10.6	10.6	10.6	10.6
Denmark	5.5	5.6	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8
Germany	80.1	80.2	80.3	80.5	80.8	81.2	82.2	82.5	82.8	83.0
Estonia	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Ireland	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.8	4.8	4.9
Greece	11.1	11.1	11.1	11.0	10.9	10.9	10.8	10.8	10.7	10.7
Spain	46.5	46.7	46.8	46.7	46.5	46.5	46.4	46.5	46.7	46.9
France	64.7	65.0	65.3	65.6	66.2	66.5	66.6	66.8	66.9	67.0
Croatia	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.1	4.1
Italy	**59.2**	**59.4**	**59.4**	**59.7**	**60.8**	**60.8**	**60.7**	**60.6**	**60.5**	**60.4**
Cyprus	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Latvia	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9
Lithuania	3.1	3.1	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.8
Luxembourg	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
Hungary	10.0	10.0	9.9	9.9	9.9	9.9	9.8	9.8	9.8	9.8
Malta	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**
Netherlands	16.6	16.7	16.7	16.8	16.8	16.9	17.0	17.0	17.2	17.3
Austria	8.4	8.4	8.4	8.5	8.5	8.6	8.7	8.8	8.8	8.9
Poland	38.0	38.0	38.1	38.1	38.0	38.0	38.0	38.0	38.0	38.0
Portugal	10.6	10.6	10.5	10.5	10.4	10.4	10.3	10.3	10.3	10.3
Romania	20.3	20.2	20.1	20.0	19.9	19.8	19.8	19.6	19.6	19.4
Slovenia	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Slovakia	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.5
Finland	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.5	5.5	5.5
Sweden	9.4	9.4	9.5	9.6	9.6	9.7	9.8	10.0	10.0	10.0

Source of data: Eurostat

05.
Contributi all'Indice dei Prezzi al Dettaglio (CPI)
Contributions to Retail Price Index

% annual averages	2015	2016	2017	2018	2019
Food and non-alcoholic beverages	2.6	3.5	1.0	3.6	2.2
Beverages (alcoholic) and tobacco	6.2	3.4	-0.2	1.1	0.3
Clothing and footwear	0.9	-2.8	-1.4	1.8	-2.4
Housing	0.6	1.1	1.5	2.1	1.4
Water, electricity, gas and fuels	2.1	3.8	3.7	0.7	-0.9
Furniture, household equipment & maintenance costs	2.2	1.4	2.3	0.4	1.9
Transport	-2.1	-0.3	1.1	1.7	1.5
Communications	-2.5	-1.7	0.5	-0.9	0.0
Recreation and culture	1.2	-3.9	2.3	-0.9	1.9
Education	5.4	5.5	0.5	-4.4	2.4
Restaurants and hotels	1.8	2.1	1.1	0.8	1.7
Miscellaneous goods and services	1.8	0.5	1.8	1.8	1.9
All	**1.2**	**1.0**	**1.3**	**1.2**	**1.3**

Source of data: NSO various publications

06.
Indice Armonizzato del Prezzo al Consumo (IPCA)
Harmonized Index Consumer Price (HICP)

(2015 = 100)	all items - annual average indices									
GEO\TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
European Union	93.0	95.7	98.2	99.5	99.9	100.0	100.2	101.7	103.6	105.0
Belgium	92.1	95.2	97.7	98.9	99.4	100.0	101.8	104.0	106.4	107.8
Bulgaria	96.7	99.9	102.3	102.7	101.1	100.0	98.7	99.9	102.5	105.0
Czechia	92.6	94.6	98.0	99.3	99.8	100.0	100.7	103.1	105.1	107.8
Denmark	94.1	96.6	98.9	99.4	99.8	100.0	100.0	101.1	101.8	102.5
Germany	92.7	95.0	97.0	98.6	99.3	100.0	100.4	102.1	104.0	105.5
Estonia	88.0	92.4	96.3	99.5	99.9	100.0	100.8	104.5	108.1	110.5
Ireland	96.2	97.4	99.2	99.7	100.0	100.0	99.8	100.1	100.8	101.7
Greece	99.3	102.4	103.4	102.5	101.1	100.0	100.0	101.2	101.9	102.5
Spain	94.1	96.9	99.3	100.8	100.6	100.0	99.7	101.7	103.5	104.3
France	94.1	96.2	98.3	99.3	99.9	100.0	100.3	101.5	103.6	105.0
Croatia	92.6	94.6	97.8	100.0	100.3	100.0	99.4	100.7	102.2	103.0
Italy	**92.6**	**95.3**	**98.4**	**99.7**	**99.9**	**100.0**	**99.9**	**101.3**	**102.5**	**103.2**
Cyprus	95.1	98.4	101.5	101.8	101.6	100.0	98.8	99.5	100.2	100.8
Latvia	93.0	96.9	99.1	99.1	99.8	100.0	100.1	103.0	105.6	108.5
Lithuania	92.4	96.2	99.3	100.4	100.7	100.0	100.7	104.4	107.1	109.5
Luxembourg	91.4	94.9	97.6	99.3	99.9	100.0	100.0	102.2	104.2	105.9
Hungary	89.5	93.0	98.2	99.9	99.9	100.0	100.5	102.8	105.8	109.5
Malta	**91.8**	**94.1**	**97.1**	**98.1**	**98.8**	**100.0**	**100.9**	**102.2**	**104.0**	**105.5**
Netherlands	92.1	94.3	97.0	99.5	99.8	100.0	100.1	101.4	103.0	105.8
Austria	90.1	93.4	95.8	97.8	99.2	100.0	101.0	103.2	105.4	107.0
Poland	92.7	96.3	99.8	100.6	100.7	100.0	99.8	101.4	102.6	104.8
Portugal	93.2	96.5	99.2	99.7	99.5	100.0	100.6	102.2	103.4	103.7
Romania	87.7	92.8	96.0	99.0	100.4	100.0	98.9	100.0	104.1	108.2
Slovenia	93.9	95.8	98.5	100.4	100.8	100.0	99.9	101.4	103.4	105.1
Slovakia	91.7	95.4	99.0	100.5	100.4	100.0	99.5	100.9	103.5	106.3
Finland	90.8	93.9	96.8	99.0	100.2	100.0	100.4	101.2	102.4	103.6
Sweden	96.4	97.8	98.7	99.1	99.3	100.0	101.1	103.0	105.1	106.9

Source of Data: Eurostat

07.
Tasso totale di disoccupazione
Total unemployment rate

	Percentage of active population											
GEO\TIME	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
EU (27 countries)	7.3	9.2	9.9	9.9	10.9	11.4	10.9	10.1	9.1	8.2	7.3	6.8
Belgium	7.0	7.9	8.3	7.2	7.6	8.4	8.5	8.5	7.8	7.1	6.0	5.4
Bulgaria	5.6	6.8	10.3	11.3	12.3	13.0	11.4	9.2	7.6	6.2	5.2	4.1
Czechia	4.4	6.7	7.3	6.7	7.0	7.0	6.1	5.1	4.0	2.9	2.2	2.0
Denmark	3.7	6.4	7.7	7.8	7.8	7.4	6.9	6.3	6.0	5.8	5.1	5.0
Germany	7.4	7.6	7.0	5.8	5.4	5.2	5.0	4.6	4.1	3.8	3.4	3.2
Estonia	5.5	13.5	16.7	12.3	10.0	8.6	7.4	6.2	6.8	5.8	5.4	-
Ireland	6.8	12.6	14.6	15.4	15.5	13.8	11.9	10.0	8.4	6.7	5.8	5.0
Greece	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9	23.6	21.5	19.3	-
Spain	11.3	17.9	19.9	21.4	24.8	26.1	24.5	22.1	19.6	17.2	15.3	14.1
France	7.4	9.1	9.3	9.2	9.8	10.3	10.3	10.4	10.1	9.4	9.1	8.5
Croatia	8.6	9.3	11.8	13.7	15.8	17.4	17.2	16.1	13.4	11.0	8.4	6.8
Italy	**6.7**	**7.7**	**8.4**	**8.4**	**10.7**	**12.1**	**12.7**	**11.9**	**11.7**	**11.2**	**10.6**	**-**
Cyprus	3.7	5.4	6.3	7.9	11.9	15.9	16.1	15.0	13.0	11.1	8.4	7.5
Latvia	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9	9.6	8.7	7.4	6.4
Lithuania	5.8	13.8	17.8	15.4	13.4	11.8	10.7	9.1	7.9	7.1	6.2	6.3
Luxembourg	4.9	5.1	4.6	4.8	5.1	5.9	6.0	6.5	6.3	5.6	5.5	5.5
Hungary	7.8	10.0	11.2	11.0	11.0	10.2	7.7	6.8	5.1	4.2	3.7	-
Malta	**6.0**	**6.9**	**6.8**	**6.4**	**6.2**	**6.1**	**5.7**	**5.4**	**4.7**	**4.0**	**3.7**	**3.5**
Netherlands	3.7	4.4	5.0	5.0	5.8	7.3	7.4	6.9	6.0	4.9	3.8	3.4
Austria	4.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7	6.0	5.5	4.9	4.5
Poland	7.1	8.1	9.7	9.7	10.1	10.3	9.0	7.5	6.2	4.9	3.9	3.4
Portugal	8.8	10.7	12.0	12.9	15.8	16.4	14.1	12.6	11.2	9.0	7.0	6.6
Romania	5.6	6.5	7.0	7.2	6.8	7.1	6.8	6.8	5.9	4.9	4.2	3.9
Slovenia	4.4	5.9	7.3	8.2	8.9	10.1	9.7	9.0	8.0	6.6	5.1	4.6
Slovakia	9.6	12.1	14.5	13.7	14.0	14.2	13.2	11.5	9.7	8.1	6.5	5.8
Finland	6.4	8.2	8.4	7.8	7.7	8.2	8.7	9.4	8.8	8.6	7.4	6.7
Sweden	6.2	8.3	8.6	7.8	8.0	8.0	7.9	7.4	6.9	6.7	6.3	6.8

Source of Data: Eurostat

08.
Tasso d'occupazione per sesso
Employment rate by sex

age group 20-64										
GEO/TIME	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**TARGET**
European Union	67.8	67.9	67.6	67.5	68.2	69.1	70.1	71.3	72.4	75.0
Belgium	67.6	67.3	67.2	67.2	67.3	67.2	67.7	68.5	69.7	73.2
Bulgaria	64.7	62.9	63.0	63.5	65.1	67.1	67.7	71.3	72.4	76.0
Czechia	70.4	70.9	71.5	72.5	73.5	74.8	76.7	78.5	79.9	75.0
Denmark	74.9	74.8	74.3	74.3	74.7	75.4	76.0	76.6	77.5	80.0
Germany	75.0	76.5	76.9	77.3	77.7	78.0	78.6	79.2	79.9	77.0
Estonia	66.8	70.6	72.2	73.3	74.3	76.5	76.6	78.7	79.5	76.0
Ireland	65.5	64.6	64.5	66.5	68.1	69.9	71.4	73.0	74.1	69.0
Greece	63.8	59.6	55.0	52.9	53.3	54.9	56.2	57.8	59.5	70.0
Spain	62.8	62.0	59.6	58.6	59.9	62.0	63.9	65.5	67.0	74.0
France	68.9	68.8	68.9	69.0	69.2	69.5	70.0	70.6	71.3	75.0
Croatia	62.1	59.8	58.1	57.2	59.2	60.6	61.4	63.6	65.2	62.9
Italy	**61.0**	**61.0**	**60.9**	**59.7**	**59.9**	**60.5**	**61.6**	**62.3**	**63.0**	**67.0**
Cyprus	75.0	73.4	70.2	67.2	67.6	67.9	68.7	70.8	73.9	75.0
Latvia	64.3	66.3	68.1	69.7	70.7	72.5	73.2	74.8	76.8	73.0
Lithuania	64.3	66.9	68.5	69.9	71.8	73.3	75.2	76.0	77.8	72.8
Luxembourg	70.7	70.1	71.4	71.1	72.1	70.9	70.7	71.5	72.1	73.0
Hungary	59.9	60.4	61.6	63.0	66.7	68.9	71.5	73.3	74.4	75.0
Malta	**60.1**	**61.6**	**63.9**	**66.2**	**67.9**	**69.0**	**71.1**	**73.0**	**75.5**	**70.0**
Netherlands	76.2	76.4	76.6	75.9	75.4	76.4	77.1	78.0	79.2	80.0
Austria	73.9	74.2	74.4	74.6	74.2	74.3	74.8	75.4	76.2	77.0
Poland	64.3	64.5	64.7	64.9	66.5	67.8	69.3	70.9	72.2	71.0
Portugal	70.3	68.8	66.3	65.4	67.6	69.1	70.6	73.4	75.4	75.0
Romania	64.8	63.8	64.8	64.7	65.7	66.0	66.3	68.8	69.9	70.0
Slovenia	70.3	68.4	68.3	67.2	67.7	69.1	70.1	73.4	75.4	75.0
Slovakia	64.6	65.0	65.1	65.0	65.9	67.7	69.8	71.1	72.4	72.0
Finland	73.0	73.8	74.0	73.3	73.1	72.9	73.4	74.2	76.3	78.0
Sweden	78.1	79.4	79.4	79.8	80.0	80.5	81.2	81.8	82.4	80.0

Source of Data: Eurostat

09.
Spesa per i consumi finali delle famiglie e delle organizzazioni no profit
Final consumption expenditure of households and non-profit institutions serving households

Percentage of gross domestic product (GDP) - At current prices											
GEO\TIME	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union	54.9	55.9	55.6	55.4	55.6	55.3	54.7	54.0	53.8	53.6	53.4
Belgium	50.7	51.4	51.4	51.5	51.9	52.5	51.8	51.3	51.4	51.4	51.6
Bulgaria	65.6	63.0	63.6	62.2	65.3	62.2	62.5	61.9	60.4	60.1	59.7
Czechia	47.4	48.6	49.0	49.1	49.2	49.4	48.1	46.8	47.0	47.4	47.4
Denmark	47.4	48.5	47.6	47.9	48.0	47.7	47.2	47.1	46.7	46.5	46.7
Germany	54.2	56.4	55.1	54.4	54.9	54.6	53.4	52.9	52.6	52.3	52.1
Estonia	53.1	52.9	52.1	50.1	50.7	51.3	50.5	51.3	51.7	50.3	49.7
Ireland	48.7	47.7	47.6	46.4	45.5	45.0	43.0	33.0	33.8	32.2	31.0
Greece	67.4	68.1	69.4	69.9	69.9	70.8	70.2	69.4	69.2	68.7	68.0
Spain	57.5	56.9	58.1	58.5	59.5	59.0	59.4	58.5	58.2	58.4	58.3
France	54.5	55.4	55.4	55.0	54.7	54.6	54.3	54.0	54.3	54.0	53.9
Croatia	60.7	59.8	60.1	61.2	62.2	62.3	60.5	59.1	58.3	58.1	58.2
Italy	**59.4**	**60.4**	**60.7**	**61.1**	**61.3**	**60.9**	**60.6**	**60.8**	**60.1**	**60.3**	**60.3**
Cyprus	66.8	63.7	65.8	65.8	66.9	67.0	69.0	67.9	66.0	65.5	65.2
Latvia	58.0	60.4	63.1	61.4	60.8	61.9	61.3	60.2	60.2	59.8	58.9
Lithuania	65.0	68.1	64.0	62.4	62.2	62.4	62.0	62.6	63.0	62.1	61.8
Luxembourg	32.9	34.2	32.2	31.3	32.2	31.7	30.9	30.1	29.7	29.8	29.8
Hungary	53.6	53.6	52.5	52.8	53.8	52.3	50.2	48.9	49.8	49.5	48.7
Malta	**58.8**	**61.0**	**57.8**	**58.7**	**57.2**	**55.4**	**51.2**	**48.1**	**46.2**	**44.2**	**43.6**
Netherlands	45.6	45.7	45.4	45.6	45.5	45.5	45.3	45.0	44.6	44.3	44.1
Austria	51.8	53.5	53.5	53.4	53.5	53.7	53.4	52.7	52.3	52.2	51.8
Poland	61.8	61.6	61.6	61.5	61.5	60.9	60.0	58.4	58.5	58.3	58.1
Portugal	66.2	64.8	65.9	65.9	66.5	65.4	66.1	65.6	65.4	64.6	64.8
Romania	63.9	63.1	63.8	63.4	63.6	61.1	61.5	61.8	62.5	63.0	63.5
Slovenia	51.1	55.0	56.2	56.5	57.5	56.1	55.0	54.0	53.9	52.7	52.3
Slovakia	55.8	59.7	57.2	55.7	56.1	55.5	55.1	54.0	55.1	55.9	55.9
Finland	49.3	52.1	52.6	53.2	54.0	54.2	54.5	54.5	54.3	53.2	52.8
Sweden	45.1	47.5	46.8	46.5	46.8	47.0	46.6	45.7	45.3	45.0	44.7

Source of Data: Eurostat

10.
Spesa per i consumi finali della pubblica amministrazione
Final consumption expenditure of general government

Percentage of gross domestic product (GDP) - At current prices											
GEO\TIME	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
European Union	20.3	21.9	21.6	21.2	21.2	21.3	21.2	20.8	20.8	20.6	20.5
Belgium	22.7	24.2	23.7	24.0	24.3	24.3	24.2	23.6	23.2	23.1	23.1
Bulgaria	17.2	16.7	16.6	15.9	15.9	17.2	16.9	16.1	15.6	15.6	16.5
Czechia	19.4	21.0	20.8	20.2	19.8	20.2	19.7	19.2	19.3	19.2	19.9
Denmark	25.1	27.9	27.4	26.6	26.5	26.0	25.8	25.5	24.9	24.6	24.3
Germany	18.3	20.0	19.6	19.1	19.3	19.6	19.6	19.6	19.8	19.9	19.9
Estonia	18.7	21.1	20.1	18.7	18.5	19.0	19.1	20.0	20.4	19.9	19.6
Ireland	18.8	20.1	18.8	18.3	17.7	16.9	16.0	12.3	12.3	12.0	11.9
Greece	20.7	23.3	22.2	21.8	21.7	20.4	20.3	20.3	20.1	19.8	19.1
Spain	18.8	20.6	20.6	20.7	20.0	19.9	19.6	19.5	19.1	18.6	18.6
France	22.6	24.1	24.0	23.7	24.0	24.1	24.1	23.8	23.7	23.7	23.4
Croatia	18.7	20.5	20.5	20.7	20.6	20.3	20.8	20.1	19.6	19.5	19.4
Italy	**19.6**	**20.7**	**20.6**	**19.8**	**19.8**	**19.8**	**19.5**	**19.1**	**19.0**	**18.8**	**19.0**
Cyprus	17.1	18.8	18.5	19.1	18.8	18.5	16.8	16.4	15.3	15.0	14.9
Latvia	19.7	19.1	18.4	18.2	17.4	17.6	17.5	18.1	18.1	18.1	17.8
Lithuania	18.7	21.2	19.9	18.4	17.5	16.7	16.6	17.2	17.0	16.3	16.5
Luxembourg	15.7	17.5	17.0	16.7	17.4	17.3	16.7	16.5	15.9	16.4	16.7
Hungary	21.4	22.1	21.6	20.7	20.1	19.8	20.1	19.8	20.1	20.3	19.7
Malta	**19.7**	**19.8**	**19.5**	**19.7**	**20.2**	**19.3**	**18.9**	**17.5**	**16.1**	**15.3**	**16.2**
Netherlands	23.5	26.0	26.2	25.8	26.0	25.8	25.7	25.0	24.7	24.3	24.2
Austria	19.3	20.7	20.5	19.9	19.9	19.9	19.8	19.8	19.7	19.5	19.3
Poland	18.6	18.7	19.1	18.1	17.9	18.1	18.2	18.0	17.9	17.7	17.8
Portugal	19.8	21.3	20.6	19.7	18.3	18.8	18.4	17.9	17.6	17.2	17.0
Romania	15.9	16.1	15.5	14.3	14.5	14.1	14.2	13.7	15.1	15.7	16.8
Slovenia	18.2	20.2	20.4	20.6	20.4	19.6	18.9	18.8	19.1	18.4	18.3
Slovakia	17.5	20.0	19.2	18.3	17.7	18.0	18.4	18.6	18.9	18.9	18.6
Finland	21.6	24.1	23.7	23.4	24.1	24.5	24.5	24.4	23.7	22.8	22.7
Sweden	24.7	26.1	25.1	25.0	25.8	26.3	26.2	25.8	26.4	26.1	26.0

Source of Data: Eurostat

11.
Formazione del capitale fisso lordo (investimenti)
Gross fixed capital formation (investments)

Percentage of gross domestic product (GDP) - At current prices											
GEO\TIME	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
European Union	23.2	21.3	20.8	20.8	20.4	19.8	19.8	20.2	20.4	20.7	21.0
Belgium	24.1	22.8	22.1	23.0	23.0	22.2	22.8	23.0	23.2	23.1	23.8
Bulgaria	33.0	27.8	22.3	21.0	21.2	21.3	21.1	20.9	18.5	18.4	18.8
Czechia	29.0	27.1	26.9	26.5	25.9	25.1	25.1	26.5	24.9	24.8	25.6
Denmark	22.9	20.2	18.1	18.2	18.8	19.1	19.2	19.9	21.0	21.2	22.0
Germany	20.3	19.3	19.5	20.4	20.3	19.9	20.0	20.0	20.3	20.5	21.2
Estonia	31.1	22.6	21.1	26.2	28.5	27.7	25.6	24.3	23.3	24.8	23.9
Ireland	24.8	21.1	17.5	16.6	19.6	18.6	20.6	24.1	35.6	31.4	23.4
Greece	23.8	20.8	17.6	15.3	12.6	12.2	11.5	11.6	12.1	12.9	11.1
Spain	27.8	23.1	21.8	20.0	18.5	17.4	17.8	18.0	18.0	18.7	19.4
France	23.6	22.1	22.1	22.4	22.5	22.0	21.8	21.5	21.8	22.5	22.9
Croatia	28.2	25.2	21.2	20.2	19.6	19.7	19.3	19.5	20.1	20.0	20.0
Italy	**21.3**	**20.1**	**20.0**	**19.7**	**18.3**	**17.2**	**16.7**	**16.9**	**17.2**	**17.4**	**17.7**
Cyprus	27.2	23.4	22.5	19.0	15.5	14.1	12.9	12.6	17.8	21.1	19.1
Latvia	32.0	22.4	19.2	22.0	25.3	23.1	22.6	22.0	19.5	20.7	22.5
Lithuania	26.0	17.9	16.9	18.5	17.4	18.5	18.9	19.6	19.9	20.0	20.5
Luxembourg	20.3	18.4	17.6	19.2	20.2	19.5	20.0	18.2	18.1	18.8	16.8
Hungary	23.4	22.7	20.2	19.7	19.2	20.8	22.1	22.3	19.7	22.2	25.2
Malta	**19.6**	**18.2**	**21.4**	**17.9**	**18.1**	**17.4**	**17.2**	**24.8**	**23.6**	**20.5**	**18.9**
Netherlands	22.1	21.3	19.7	20.1	18.8	18.4	17.6	22.1	20.0	20.1	20.3
Austria	23.3	22.4	21.6	22.5	22.6	23.0	22.7	22.7	23.1	23.5	23.9
Poland	23.1	21.4	20.3	20.7	19.8	18.8	19.7	20.1	18.0	17.5	18.2
Portugal	22.9	21.2	20.6	18.4	15.8	14.8	15.0	15.5	15.5	16.8	17.6
Romania	37.3	26.0	26.1	27.2	27.4	24.8	24.3	24.8	22.9	22.4	21.0
Slovenia	29.4	24.1	21.1	19.9	19.0	19.6	19.1	18.7	17.4	18.3	19.2
Slovakia	24.8	20.8	21.1	23.3	20.3	20.4	20.4	23.7	21.0	21.3	21.2
Finland	24.5	23.0	22.3	22.6	23.1	22.0	21.5	21.2	22.7	23.2	23.6
Sweden	24.8	22.7	22.7	23.2	23.0	22.7	23.5	23.8	24.2	25.2	25.9

Source of Data: Eurostat

12.
Conto corrente della bilancia dei pagamenti
Current Account Balance

Percentage of gross domestic product (GDP)											
GEO\TIME	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Belgium	-1.0	1.7	1.6	-1.9	-0.1	1.0	0.8	1.4	0.6	1.2	-1.0
Bulgaria	-22.0	-8.3	-1.7	0.3	-0.9	1.3	1.2	0.1	3.2	3.5	5.4
Czechia	-1.9	-2.3	-3.6	-2.1	-1.6	-0.5	0.2	0.2	1.6	1.7	0.3
Denmark	2.9	3.5	6.6	6.6	6.3	7.8	8.9	8.2	7.8	7.8	7.0
Germany	5.7	5.8	5.7	6.2	7.1	6.6	7.2	8.6	8.5	8.1	7.4
Estonia	-8.6	2.5	1.8	1.3	-1.9	0.3	0.7	1.8	1.7	2.7	2.0
Ireland	-6.2	-4.7	-1.2	-1.6	-3.4	1.6	1.1	4.4	-4.2	0.5	10.6
Greece	-15.1	-12.3	-10.0	-8.6	-3.5	-1.4	-0.7	-0.8	-1.7	-1.9	-2.8
Spain	-8.9	-4.1	-3.7	-2.7	0.1	2.0	1.7	2.0	3.2	2.7	1.9
France	-0.7	-0.6	-0.6	-0.9	-1.0	-0.5	-1.0	-0.4	-0.5	-0.7	-0.6
Croatia	-10.7	-6.7	-2.3	-1.8	-1.9	-1.1	0.2	3.2	2.0	3.3	1.9
Italy	**-2.8**	**-1.9**	**-3.3**	**-2.8**	**-0.2**	**1.1**	**1.9**	**1.4**	**2.6**	**2.7**	**2.6**
Cyprus	-14.7	-6.7	-10.7	-2.3	-3.9	-1.5	-4.1	-0.4	-4.2	-5.1	-4.4
Latvia	-12.3	7.7	1.8	-3.2	-3.6	-2.7	-2.3	-0.9	1.4	1.0	-0.7
Lithuania	-13.2	2.1	0.2	-3.7	-1.6	1.7	3.5	-2.4	-1.1	0.5	0.3
Luxembourg	7.6	7.2	6.7	6.0	5.6	5.4	5.2	5.1	4.9	4.9	4.8
Hungary	-7.1	-0.7	0.3	0.6	1.6	3.5	1.2	2.3	4.6	2.3	-0.5
Malta	**-2.4**	**-8.5**	**-6.3**	**-2.0**	**-0.4**	**0.1**	**5.8**	**2.8**	**3.8**	**10.5**	**10.4**
Netherlands	5.0	5.4	7.0	8.6	10.2	9.8	8.5	6.3	8.1	10.8	10.9
Austria	4.5	2.6	2.9	1.6	1.5	1.9	2.5	1.7	2.7	1.6	2.3
Poland	-6.7	-4.0	-5.4	-5.2	-3.7	-1.3	-2.1	-0.6	-0.5	0.1	-1.0
Portugal	-12.1	-10.4	-10.1	-6.0	-1.6	1.6	0.2	0.2	1.1	1.2	0.4
Romania	-11.4	-4.7	-5.1	-5.0	-4.8	-0.8	-0.2	-0.6	-1.4	-2.8	-4.4
Slovenia	-5.3	-1.1	-0.7	-0.8	1.3	3.3	5.1	3.8	4.8	6.1	5.7
Slovakia	-6.4	-3.4	-4.7	-4.9	0.9	1.9	1.1	-2.1	-2.7	-1.9	-2.6
Finland	2.5	2.0	1.5	-1.4	-2.1	-1.8	-1.3	-0.9	-2.0	-0.8	-1.4
Sweden	7.8	6.0	5.9	5.5	5.5	5.2	4.5	4.1	3.5	3.1	1.9

Source of Data: Eurostat

13.
Commercio di beni per periodo dei principali gruppi merceologici
Trade in goods by period by major commodity groups

€ millions					
GROUPS/TIME	**2015**	**2016**	**2017**	**2018**	**2019**
Imports	6114.7	6451.8	6125.4	6278.9	7318.1
Food	245.6	571.9	625.1	628.7	594.0
Beverages and tobacco	42.3	98.0	95.9	112.3	129.7
Crude materials	15.9	26.4	26.2	27.4	35.9
Mineral fuels	1357.5	1600.3	1775.0	1947.0	1867.7
Chemicals	363.6	466.4	521.5	603.0	674.0
Semi manufacture goods	122.9	376.0	361.3	413.1	434.3
Machinery and transport equipment	969.2	2852.8	2236.2	2005.0	3006.5
Miscellaneous manufactured articles	411.5	439.0	469.7	527.7	562.0
Miscellaneous transactions	0.7	21.1	14.6	14.8	14.0
Exports	3529.3	3927.6	3707.7	3440.4	3611.4
Food	246.5	257.1	283.4	345.3	277.3
Beverages and tobacco	42.3	41.1	38.6	44.6	46.9
Crude materials	15.9	12.6	13.4	13.3	10.0
Mineral fuels	1357.5	1162.6	1469.1	1048.6	1004.7
Chemicals	363.6	965.0	383.1	387.0	522.2
Semi manufacture goods	122.9	120.9	150.7	153.7	134.4
Machinery and transport equipment	969.2	961.7	987.8	956.8	1024.5
Miscellanous manufactured articles	411.5	405.8	380.7	488.8	588.8
Miscellaneous transactions	0.7	0.7	0.8	2.5	2.6

Source of Data: NSO

14.
Ripartizione geografica delle Partite Correnti
The Current Account Geographical Breakdown

	2019		
€ millions	**Credit**	**Debit**	**Net**
Current account – world	21,213	20,058	1,154
EU	13,847	13,893	-46
Extra	7,366	6,165	1,201
Goods – world	2,465	3,601	-1,136
EU	1,061	2,140	-1.079
Extra	1,403	1,460	-57
Services - world	11,514	8,195	3,319
EU	8,188	5,779	2,409
Extra	3,326	2,416	910
Primary income - world	7,079	7,982	-912
EU	4,521	5,826	-1,305
Extra	2,549	2,156	393
Secondary income- world	164	280	-116
EU	77	147	-71
Extra	87	133	-46

Source of Data: NSO

15.
Bilancia dei Pagamenti
Balance of Payments

€ millions					
TIME	2014	2015	2016	2017	2018
Current account	275	867	712	1178	1378
Goods and services	635	608	1200	2415	2637
Goods	-1118	-1485	-1911	1500	-1461
Services	1753	2092	3110	3915	4096
Transport	-122	98	203	324	445
Travel	846	909	938	1114	1129
Other services	1030	1085	1970	2477	2522
Primary income	-557	35	-719	1110	-1134
Compensation of employees	-1	-1128	-21	42	-51
Secondary income	196	224	231	127	-125
Capital account	140	157	44	60	70
Financial account	454	912	1346	1284	650
Direct investment	-6819	-8383	-8300	-9423	-9647
Portfolio investment	13002	4766	4756	6722	2969
Financial derivatives	-883	-818	-6	-107	180
Other investment	-4859	5420	4807	3945	6979
Reserve assets	12	-73	88	146	168
Net errors and omissions	40	-111	590	46	-797

Source of Data: NSO

16.
Posizione Estera Netta degli Investimenti (NIIP)
Net International Investment Position

Percentage of gross domestic product (GDP)									
GEO\TIME	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Belgium	56.3	51.4	40.8	43.2	44.8	45.2	54.5	56.7	41.3
Bulgaria	-92.4	-82.8	-77.7	-73.5	-72.2	-61.8	-47.9	-43.3	-35.2
Czechia	-46	-45.2	-45.9	-41.4	-36.6	-32.9	-26.9	-25	-23.5
Denmark	12.8	27.8	36.1	37.2	43.3	33.4	52.6	55.4	64.4
Germany	25.8	23.3	28.7	34.7	40.8	46.6	51.4	55.2	62
Estonia	-69.4	-54	-50.7	-49.7	-46.7	-39.9	-39.2	-32.5	-27.7
Ireland	-113.5	-139.3	-137.8	-133.4	-164.7	-198.4	-171.7	-167.2	-165
Greece	-99	-88.8	-115.9	-130.4	-131.9	-135.4	-137.6	-140.7	-143.3
Spain	-91	-93.8	-88.9	-92.8	-95.9	-88.9	-85.5	-85.5	-80.4
France	-9.3	-8.7	-12.8	-16.6	-15.6	-12.9	-13	-16.6	-16.4
Croatia	-95.4	-93.1	-91.6	-89.5	-86.8	-78.4	-72.4	-65.6	-57.9
Italy	**-20.1**	**-18.2**	**-23**	**-23.3**	**-21**	**-19.3**	**-11.9**	**-7.7**	**-4.7**
Cyprus	-122.2	-141.9	-141.1	-162.5	-163.8	-154.5	-134.2	-126.5	-121.3
Latvia	-83	-74.7	-67.5	-66.7	-67.1	-64.1	-59	-56.2	-49
Lithuania	-60	-53.6	-54.3	-50.6	-46.8	-43.6	-42.9	-37.9	-31
Luxembourg	-20.4	28.9	58.4	58.9	59.3	50	54.6	51.8	59.8
Hungary	-106.7	-104.2	-92.2	-82.2	-80.4	-67.9	-59.6	-54.9	-52
Malta	**12.1**	**6.3**	**19.6**	**26.9**	**43**	**37.3**	**35.3**	**63.7**	**62.8**
Netherlands	11	20.1	26.7	30.7	48	48.9	61.4	59.4	70.7
Austria	-5.2	-1.9	-3.2	1.3	3.4	2.2	4.1	2.8	3.7
Poland	-65.1	-62.4	-65.3	-68.9	-69.1	-62.1	-61.6	-61.2	-55.8
Portugal	-107.2	-104.1	-119.3	-120.2	-123.8	-118.9	-110.3	-109.9	-105.6
Romania	-64.1	-66.1	-67.6	-63.2	-57.1	-54.7	-49.1	-47.4	-43.7
Slovenia	-43.1	-39.8	-44	-39.3	-38.4	-31.2	-28.9	-24.2	-18.9
Slovakia	-61.5	-63.9	-60.6	-62.2	-63.5	-63.9	-66.8	-68.3	-68.1
Finland	15.5	13.9	10.6	3	-3.1	4.8	5.2	0.1	-6
Sweden	-5.5	-8.3	-15.5	-15.9	-2.3	-5.2	-1.9	1.4	8.1

Source of Data: Eurostat

17.
Produzione Industriale
Industrial Production

Annual average % changes	Shares	2014	2015	2016	2017	2018
Industrial production	100.0	-5.7	6.0	-4.3	4.0	-1.6
Manufacturing	83.3	-6.5	6.5	-5.4	3.8	-1.9
of which:						
Computer, electronic and optical products	18.4	-22.8	0.5	-11.3	1.4	-14.0
Basic pharmaceutical products	10.4	-30.5	35.3	-18.0	-2.8	-14.4
Food products	8.1	7.4	9.3	-11.9	-1.1	-7.7
Printing and reproduction of recorded media	5.9	2.4	-2.7	-13.6	-2.0	35.9
Rubber and plastic products	4.4	-1.3	4.4	7.6	7.4	-11.1
Beverages	3.9	8.7	6.0	2.6	4.6	-3.1
Energy	16.3	-1.6	3.6	0.6	4.6	1.3
Mining and quarrying	0.4	-22.0	-2.7	13.2	-8.4	13.8

Source of Data: NSO

18.
Contributo del Valore Aggiunto Lordo settoriale al PIL nominale
Contribution of Sectoral Gross Value Added to Nominal GDP

% points	2014	2015	2016	2017	2018
Agriculture and fishing	1.1	1.1	1.2	0.8	0.9
Mining and quarrying; utilities	1.4	1.4	1.7	1.6	1.6
Manufacturing	8.7	7.5	7.0	7.2	7.2
Construction	3.5	3.4	3.1	3.4	3.2
Services	73.2	75.1	77.8	78.6	77.6
of which:					
Wholesale and retail trade; repair of motor vehicles, transportation, accommodation and related activities	19.3	20.2	19.6	19.4	18.4
Information and communication	5.5	5.8	5.9	5.9	5.7
Financial and insurance activities	6.1	5.7	6.4	6.7	6.2
Real estate activities	4.5	4.6	4.6	4.1	4.3
Professional, scientific, administrative activities	10.1	11.2	11.7	13.1	13.2
Public administration and defence; education, health and related activities	16.0	15.1	15.0	14.8	14.8
Arts, entertainment; household repair and related activities	11.7	12.5	14.6	14.6	15.0
Gross value added	9.8	12.6	12.9	12.9	13.2
Net taxation on products	12.2	11.5	11.5	11.6	12.0
Total	100.0	100.0	100.0	100.0	100.0
Nominal GDP growth	**11.2**	**13.5**	**7.2**	**9.4**	**8.9**

Source of Data: NSO

19.
Turismo: flussi turistici
Tourism: tourist flows

	2016	2017	2018	2019
Total inbound tourists (000s)	**1965.9**	**2273.8**	**2598.7**	**2753.2**
UK	560.0	560.9	640.6	649.6
Italy	315.2	363.7	390.6	393.0
Germany	156.8	193.0	227.0	211.5
France	144.8	176.4	213.3	239.1
Other	267.1	334.0	1127.3	1260.0
Cruise passengers (000s)	615.2	670.1	632.7	765.7
Income from inbound tourism (€m)	1709.0	1946.9	2101.8	2220.6
UK	485.1	473.1	517.3	514.4
Italy	193.1	225.7	233.1	236.4
Germany	137.9	168.7	191.8	175.6
France	126.1	154.4	172.2	192.3
Other	278.2	334.8	987.3	1101.9
Total per capita expenditure (€)	**869**	**856**	**809.0**	**807.0**
Outbound tourists (000s)	496.8	572.5	667.0	706.8
UK	96.2	105.8	118.7	126.4
Italy	165.6	181.1	212.2	214.2
Germany	32.3	38.4	42.1	23.7
France	17.0	21.5	28.5	28.1
Others	185.7	225.7	265.5	314.4
Outlay from outbound tourism (€m)	461.4	516.5	563.2	606.2
UK	88.9	91.5	100.7	104.0
Italy	109.7	119.4	132.9	137.9
Germany	31.8	36.1	36.4	33.3
France	15.9	19.7	23.9	23.2
Others	215.1	249.8	269.3	307.8

Source of Data: NSO

20.
Debito lordo dell'amministrazione pubblica
General government gross debt

Percentage of gross domestic product (GDP)											
European Union	**64.9**	**75.7**	**80.5**	**81.8**	**84.7**	**86.4**	**86.5**	**84.7**	**83.9**	**81.6**	**79.7**
Belgium	93.2	100.2	100.3	103.5	104.8	105.5	107.0	105.2	104.9	101.8	100.0
Bulgaria	13.0	13.7	15.4	15.2	16.7	17.1	27.1	26.0	29.3	25.3	22.3
Czechia	28.3	33.6	37.4	39.8	44.5	44.9	42.2	40.0	36.8	34.7	32.6
Denmark	33.3	40.2	42.6	46.1	44.9	44.0	44.3	39.8	37.2	35.5	34.2
Germany	65.5	73.0	82.4	79.8	81.1	78.7	75.7	72.1	69.2	65.3	61.9
Estonia	4.5	7.2	6.6	6.1	9.8	10.2	10.6	10.0	10.2	9.3	8.4
Ireland	42.4	61.5	86.0	111.1	119.9	119.9	104.4	76.7	73.9	67.8	63.6
Greece	109.4	126.7	146.2	172.1	159.6	177.4	178.9	175.9	178.5	176.2	181.2
Spain	39.7	53.3	60.5	69.9	86.3	95.8	100.7	99.3	99.2	98.6	97.6
France	68.8	83.0	85.3	87.8	90.6	93.4	94.9	95.6	98.0	98.4	98.4
Croatia	39.3	48.7	57.8	64.4	70.1	81.2	84.7	84.4	81.0	78.0	74.8
Italy	**106.1**	**116.6**	**119.2**	**119.7**	**126.5**	**132.4**	**135.4**	**135.3**	**134.8**	**134.1**	**134.8**
Cyprus	45.6	54.3	56.4	65.9	80.3	104.0	109.2	107.5	103.4	93.9	100.6
Latvia	18.1	36.2	47.3	43.1	41.6	39.4	40.9	36.7	40.2	38.6	36.4
Lithuania	14.6	28.0	36.3	37.2	39.8	38.7	40.6	42.7	39.9	39.3	34.1
Luxembourg	14.9	15.7	19.8	18.7	22.0	23.7	22.7	22.0	20.1	22.3	21.0
Hungary	71.8	78.2	80.6	80.8	78.5	77.3	76.8	76.1	75.5	72.9	70.2
Malta	**62.6**	**67.6**	**67.5**	**70.2**	**67.7**	**68.4**	**63.4**	**57.8**	**55.5**	**50.3**	**45.8**
Netherlands	54.7	56.8	59.2	61.7	66.2	67.7	67.8	64.6	61.9	56.9	52.4
Austria	68.7	79.9	82.7	82.4	81.9	81.3	84.0	84.9	82.9	78.3	74.0
Poland	46.3	49.4	53.1	54.1	53.7	55.7	50.4	51.3	54.2	50.6	48.9
Portugal	75.6	87.8	100.2	114.4	129.0	131.4	132.9	131.2	131.5	126.0	122.2
Romania	12.3	21.8	29.6	34.0	37.0	37.6	39.2	37.8	37.3	35.1	35.0
Slovenia	21.8	34.5	38.3	46.5	53.6	70.0	80.3	82.6	78.7	74.1	70.4
Slovakia	28.6	36.4	41.0	43.5	51.8	54.7	53.5	51.9	52.0	51.3	49.4
Finland	32.6	41.5	46.9	48.3	53.6	56.2	59.8	63.0	62.6	60.9	59.0
Sweden	37.7	40.9	38.2	37.3	37.7	40.5	45.2	43.9	42.3	40.7	38.8

Source of Data: Eurostat

21.
Avanzo/disavanzo dell'amministrazione pubblica
General government deficit/surplus

Percentage of gross domestic product (GDP)											
GEO\TIME	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union	-2.0	-6.0	-6.0	-4.1	-3.6	-2.9	-2.4	-1.9	-1.3	-0.8	-0.4
Belgium	-1.1	-5.4	-4.1	-4.3	-4.3	-3.1	-3.1	-2.4	-2.4	-0.7	-0.7
Bulgaria	1.6	-4.0	-3.1	-2.0	-0.3	-0.4	-5.4	-1.7	0.1	1.1	1.8
Czechia	-2.0	-5.5	-4.2	-2.7	-3.9	-1.2	-2.1	-0.6	0.7	1.6	1.1
Denmark	3.2	-2.8	-2.7	-2.1	-3.5	-1.2	1.1	-1.2	0.2	1.7	0.8
Germany	-0.1	-3.2	-4.4	-0.9	0.0	0.0	0.6	0.9	1.2	1.2	1.9
Estonia	-2.6	-2.2	0.2	1.1	-0.3	0.2	0.7	0.1	-0.5	-0.8	-0.6
Ireland	-7.0	-13.8	-32.1	-12.8	-8.1	-6.2	-3.6	-1.9	-0.7	-0.3	0.1
Greece	-10.2	-15.1	-11.2	-10.3	-8.9	-13.2	-3.6	-5.6	0.5	0.7	1.0
Spain	-4.6	-11.3	-9.5	-9.7	-10.7	-7.0	-5.9	-5.2	-4.3	-3.0	-2.5
France	-3.3	-7.2	-6.9	-5.2	-5.0	-4.1	-3.9	-3.6	-3.5	-2.8	-2.5
Croatia	-2.8	-6.0	-6.5	-7.9	-5.4	-5.3	-5.3	-3.3	-1.1	0.8	0.3
Italy	**-2.6**	**-5.1**	**-4.2**	**-3.6**	**-2.9**	**-2.9**	**-3.0**	**-2.6**	**-2.4**	**-2.4**	**-2.2**
Cyprus	0.9	-5.4	-4.7	-5.7	-5.6	-5.8	-8.7	-1.0	0.1	1.7	-4.4
Latvia	-4.2	-9.5	-8.6	-4.2	-1.2	-1.2	-1.4	-1.4	0.1	-0.5	-0.7
Lithuania	-3.1	-9.1	-6.9	-9.0	-3.1	-2.6	-0.6	-0.3	0.2	0.5	0.6
Luxembourg	3.3	-0.7	-0.7	0.5	0.3	1.0	1.3	1.4	1.8	1.4	2.7
Hungary	-3.7	-4.7	-4.4	-5.2	-2.3	-2.5	-2.8	-2.0	-1.8	-2.4	-2.3
Malta	**-4.2**	**-3.2**	**-2.4**	**-2.4**	**-3.5**	**-2.4**	**-1.7**	**-1.0**	**0.9**	**3.4**	**1.9**
Netherlands	0.2	-5.1	-5.2	-4.4	-3.9	-2.9	-2.2	-2.0	0.0	1.3	1.5
Austria	-1.5	-5.3	-4.4	-2.6	-2.2	-2.0	-2.7	-1.0	-1.5	-0.7	0.2
Poland	-3.6	-7.3	-7.4	-4.9	-3.7	-4.2	-3.6	-2.6	-2.4	-1.5	-0.2
Portugal	-3.7	-9.9	-11.4	-7.7	-6.2	-5.1	-7.4	-4.4	-1.9	-3.0	-0.4
Romania	-5.4	-9.1	-6.9	-5.4	-3.7	-2.1	-1.2	-0.6	-2.6	-2.6	-3.0
Slovenia	-1.4	-5.8	-5.6	-6.6	-4.0	-14.6	-5.5	-2.8	-1.9	0.0	0.8
Slovakia	-2.5	-8.1	-7.5	-4.5	-4.4	-2.9	-3.1	-2.7	-2.5	-1.0	-1.1
Finland	4.2	-2.5	-2.5	-1.0	-2.2	-2.5	-3.0	-2.4	-1.7	-0.7	-0.8
Sweden	1.9	-0.7	0.0	-0.2	-1.0	-1.4	-1.5	0.0	1.0	1.4	0.8

Source of Data: Eurostat

22.
Tasso di cambio effettivo reale – partner commerciali dell'Euro Zone
Real effective exchange rate - Euro Area trading partners

2010 = 100	Index									
GEO\TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Belgium	100	100.74	100.9	100.63	100.59	101	102.5	103.3	103.8	103.64
Bulgaria	100	100.61	100.5	99.59	97.62	96.38	94.84	94.5	95.34	96.44
Czechia	100	102.21	101	97.61	91.92	92.72	93.86	97.06	99.79	100.89
Denmark	100	99.92	99.87	98.69	98.55	98.41	98.29	97.89	96.65	95.87
Germany	100	99.67	99.15	99.28	99.63	100.2	100.2	100.4	100.6	100.59
Estonia	100	102.03	103.6	105.35	105.22	105.1	105.6	107.7	109.4	110.2
Ireland	100	98.51	97.91	96.93	96.73	96.41	95.85	94.57	93.51	93.04
Greece	100	100.34	98.8	96.54	94.75	93.52	93.33	92.98	92.11	91.44
Spain	100	100.34	100.3	100.43	99.75	98.8	98.11	98.64	98.61	98.11
France	100	99.53	99.2	98.64	98.79	98.58	98.59	98.13	98.47	98.46
Croatia	100	97.44	97.06	97.1	96.09	95.87	96	96.63	97.01	96.49
Italy	**100**	**100.27**	**101.2**	**100.95**	**100.66**	**100.5**	**100.1**	**99.81**	**99.18**	**98.42**
Cyprus	100	100.66	101.6	100.95	100.54	98.93	97.45	96.63	95.76	95.07
Latvia	100	101.52	102.4	100.18	100.16	100.2	99.9	100.9	101.5	102.7
Lithuania	100	101.19	101.7	101.39	101.09	100.1	100.5	102.5	103.1	103.86
Luxembourg	100	101.05	101.5	101.69	101.87	101.6	101.3	101.8	102	102.24
Hungary	100	99.69	99.38	96.97	92.74	92.12	91.79	93.15	91.24	91.25
Malta	**100**	**99.77**	**100.6**	**100.11**	**100.45**	**101.4**	**102**	**101.7**	**101.7**	**101.9**
Netherlands	100	99.78	100.2	101.34	101.1	101	100.7	100.4	100.1	101.59
Austria	100	100.87	101	101.56	102.52	103	103.7	104.4	104.7	104.84
Poland	100	98.01	97.68	96.71	96.56	95.62	91.2	93.47	92.76	92.68
Portugal	100	100.81	101.1	100.08	99.56	99.97	100.4	100.4	99.71	98.79
Romania	100	102.35	98.11	100.72	101.05	100.3	97.94	95.85	96.17	96.74
Slovenia	100	99.34	99.58	99.97	99.78	98.67	98.21	98.16	98.27	98.6
Slovakia	100	101.34	102.6	102.5	101.8	101.1	100.3	100	100.7	102.14
Finland	100	100.6	101.2	101.92	102.64	102.2	102.2	101.4	100.7	100.44
Sweden	100	104.18	106.4	105.88	100.24	97.99	97.53	96.21	90.51	88.04

Source of Data: ***Eurostat***

23.
Indici del volume di scambio per paese dichiarante
Trade volume indices, by reporting country

2015 = 100	Volume Ratio (Export/Import)								
GEO\TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union	89.9	94.9	102.5	105.1	103.0	100.0	98.4	98.8	97.2
Belgium	97.2	97.1	97.9	99.7	99.5	100.0	98.2	99.3	98.8
Bulgaria	96.8	104.9	98.4	104.7	101.4	100.0	104.4	106.3	102.4
Czechia	94.9	97.1	101.6	102.5	102.3	100.0	100.7	100.4	98.2
Denmark	105.4	106.1	104.2	101.4	101.3	100.0	100.1	99.5	97.1
Germany	98.5	99.8	103.8	102.4	100.9	100.0	98.0	98.2	96.9
Estonia	101.8	104.8	99.9	98.8	99.1	100.0	98.1	98.5	100.3
Ireland	112.5	111.1	108.9	104.0	97.1	100.0	99.4	93.9	101.6
Greece	72.0	84.5	98.0	101.2	97.6	100.0	99.8	100.6	102.5
Spain	82.5	89.7	97.7	106.9	103.7	100.0	101.9	100.8	100.3
France	94.9	94.7	97.1	98.5	99.5	100.0	99.8	99.6	101.0
Croatia	93.6	95.9	97.2	94.5	98.3	100.0	100.7	103.8	100.2
Italy	**87.3**	**91.9**	**100.4**	**103.0**	**103.2**	**100.0**	**99.3**	**101.3**	**100.0**
Cyprus	32.8	42.1	49.4	67.4	85.1	100.0	82.5	78.4	99.7
Latvia	96.7	96.0	100.5	98.4	99.3	100.0	100.5	99.3	96.5
Lithuania	102.0	102.2	107.5	108.2	106.5	100.0	100.0	102.1	101.1
Luxembourg	97.6	95.4	94.2	94.7	100.3	100.0	100.8	97.4	98.0
Hungary	104.9	105.7	105.3	101.8	99.5	100.0	100.0	96.8	94.6
Malta	**176.3**	**166.2**	**173.0**	**152.4**	**109.5**	**100.0**	**114.1**	**105.0**	**99.1**
Netherlands	102.9	103.0	103.0	104.7	103.4	100.0	101.8	102.2	101.3
Austria	95.2	94.7	96.4	98.2	100.7	100.0	98.1	98.9	100.1
Poland	87.4	89.4	94.4	99.3	98.8	100.0	100.5	100.0	98.6
Portugal	84.3	95.5	106.4	106.6	102.4	100.0	97.6	95.7	93.3
Romania	92.6	94.8	95.2	104.2	105.1	100.0	98.1	97.9	96.4
Slovenia	92.1	94.0	97.0	97.1	100.1	100.0	100.2	100.3	99.3
Slovakia	95.0	96.9	102.6	103.3	101.9	100.0	99.0	96.4	94.8
Finland	103.4	99.3	103.8	102.8	102.6	100.0	96.3	99.0	100.3
Sweden	102.6	104.2	104.2	104.0	100.9	100.0	98.2	100.3	98.8

Source of Data: **Eurostat**