

# European Innovation Scoreboard **2024** Country Profile **Malta**

Innovation

#### European Innovation Scoreboard 2024 - Country profile Malta

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#### Moderate Innovator 🔵

Summary innovation index (relative to EU in 2017): 96.8 Rank: 21

Change vs 2023: ▼ -1.9 Change vs 2017: ▲ 7

Indicator	Performance relative to the EU in 2024		Performance change 2017-2024	Performance change 2023-2024
SUMMARY INNOVATION INDEX	88.0		7.0	-1.9
Human resources	87.3		13.6	16.4
New doctorate graduates	21.4		0.0	0.0
Population with tertiary education	117.3		20.3	22.7
Population involved in lifelong learning	131.3		27.5	35.7
Attractive research systems	144.6		23.1	-3.3
International scientific co-publications	123.9		76.8	-6.9
Scientific publications among the top 10% most cited	80.7		11.3	-3.3
Foreign doctorate students as a % of all doctorate students	264.4		0.0	0.0
Digitalisation	137.3		33.6	15.3
Broadband penetration	134.3		60.9	24.1
Individuals with above basic overall digital skills	141.5		6.7	6.7
Finance and support	14.9		-13.8	0.0
R&D expenditure in the public sector	18.0		-19.7	0.0
Venture capital expenditures	22.9		-0.3	0.8
Direct and indirect government support of business	1.6		-20.6	-0.8
R&D Firm investments	45.0		10.4	-9.1
R&D expenditure in the business sector	29.2		6.8	3.0
Non-R&D innovation expenditures	72.9		9.5	-27.3
Innovation expenditures per person employed	36.0		15.3	-3.2
Use of information technologies	115.5		8.9	-2.7
	134.5		21.6	4.4
Enterprises providing ICT training	97.1		-3.2	-9.6
Employed ICT specialists				
Innovators	51.8		5.6	-23.1
SMEs introducing product innovations	45.5		-2.7	-15.9
SMEs introducing business process innovations	56.9		13.5	-29.7
Linkages	92.0		44.2	-28.7
Innovative SMEs collaborating with others	41.5		30.4	-23.4
Public-private co-publications	135.3		77.5	-10.5
Job-to-job mobility of HRST	116.6		41.2	-41.2
Intellectual assets	132.6		-11.7	3.8
PCT patent applications	74.8		22.5	11.7
Trademark applications	206.4		0.0	0.0
Design applications	143.1		-64.9	-3.3
Employment impacts	108.6		-3.8	-14.7
Employment in knowledge-intensive activities	160.7		9.6	1.2
Employment in innovative enterprises	64.8		-15.9	-28.8
Sales impacts	65.4		-7.7	-5.5
Exports of medium and high technology products	100.6		-12.3	7.2
Knowledge-intensive services exports	41.2		-22.2	-7.2
Sales of new-to-market and new-to-firm innovations	47.1		19.5	-23.8
Environmental sustainability	106.1		16.9	9.6
Resource productivity	126.9		47.9	28.9
Air emissions by fine particulates	125.0		7.3	-0.2
Environment-related technologies	60.8		5.5	8.2

Malta is a Moderate Innovator with performance at 88% of the EU average in 2024. Performance is above the average of the Moderate Innovators (84.8%). Performance is increasing less than the EU (+10%).

#### **Relative strengths**

- Foreign doctorate students as a % of all doctorate students
- Trademark applications
- Employment in knowledgeintensive activities

#### **Relative weaknesses**

- Direct and indirect government support of business R&D
- R&D expenditure in the public sector
- New doctorate graduates

#### Strong increases since 2017

- Public-private co-publications International scientific co-
- publications
- Broadband penetration

#### Strong decreases since 2017

- Design applications
- Knowledge-intensive services exports
- Direct and indirect government support of business R&D

#### Strong increases since 2023

- Population involved in lifelong learning
- Resource productivity
- Broadband penetration

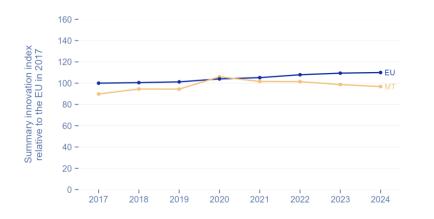
#### Strong decreases since 2023

- Job-to-job mobility of HRST SMEs introducing business
- process innovations • Employment in innovative
- enterprises

Footnote: The first data column shows scores relative to the EU in 2024, with colour codes indicating performance levels. The subsequent columns show performance changes over time, with scores relative to the EU in 2017, coloured in purple for positive change and red for negative change. As reference years differ between the first column (2024) and the last two columns (2017), scores cannot be directly compared or subtracted across these columns.

Emerging Innovators Moderate Innovators Strong Innovators Innovation Leaders

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# Summary innovation index

The line chart shows the evolution of the innovation performance of Malta over time, relative to the performance of the EU in 2017.

**Footnote:** All performance scores (SII and dimensions below) are relative to that of the EU in 2017.

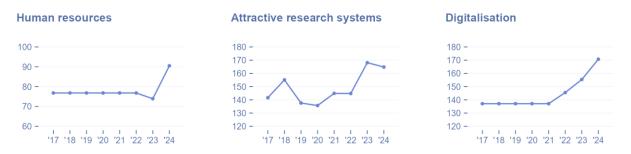
# Framework conditions

Although a small country, Malta is home to a number of higher education institutions and performs well in terms of access to tertiary education (117.3% of the EU average) with continuous improvement since 2017 (+20.3%-points). The share of the population involved in lifelong learning is also well above the EU average (131.3% of EU average) and has been improving (+27.5%-points) since 2017.

Malta is attractive to foreign students and has the second-highest share of foreign doctorate students, scoring 264.4% of the EU average in 2024. Collaboration with other countries is also strong in terms of joint research, with a high and quickly increasing number of international scientific co-publications (+76.8%-points since 2017). This needs to be considered given the country's small population, geographic location, and language resources.

Malta faces a challenge due to the shortage of highly skilled workers in its population, especially in terms of new doctorate graduates in STEM which is only 21.4% of the EU average in 2024, among the lowest performance across EU countries (on a per capita basis).

Despite the lack of STEM professionals, Malta is among the top-performing countries in terms of digitalisation. The country benefits from remarkable broadband penetration (134.3% of the EU average in 2024) and individuals with above basic digital skills (141.5% of the EU average in 2024).



#### Investments

Malta's investments in innovation are poor compared to most EU countries. R&D expenditures are among the lowest in the EU, both in the public sector (18.0% of the EU average in 2024) and in the business sector (29.2% of the EU average in 2024). Direct and indirect government support to business R&D (e.g. tax incentives favouring enterprises undertaking innovation activities) is the lowest in the EU, currently at 1.6% of the EU average. According to the European Semester report, the low public R&D investment does not mirror Malta's economic growth (European Commission, 2024).

While innovation investments from the government and public sector have been decreasing in the last years, an upward trend is observed in the private sector (+10.4%-points in firm investments since 2017), in particular in innovation expenditures per person (+15.3%-points), although they remain at only 36.0% of the EU average. Venture capital is also particularly low, and represents 22.9% of the EU average.

Malta performs higher than the EU average in terms of the use of information technologies (115.5% of the EU average in 2024). The share of enterprises providing ICT training has gradually increased (+21.6%-points), and represents 134.5% of the EU average. However, since 2017 there is a slight downward trend in the employment of ICT Specialists by Maltese enterprises (-3.2%-points).



### **Innovation activities**

Malta demonstrates a mixed performance in innovation activities. It performs well in the generation of intellectual assets, with trademark applications (206.4%) being over double than the EU average in 2024. Although PCT patent applications are below the EU average (74.8% in 2024), they have been rapidly increasing in recent years (+22.5%-points). Since 2017, the number of public-private co-publications (+77.5%-points) show increasing collaboration trends through joint research between public and private sectors. The growing job-to-job mobility of staff in Science & Technology (+41.2%-points) indicates the presence of job opportunities in the Maltese innovation system.

However, innovation in SMEs is limited, with a low share of SMEs introducing product or business process innovations (respectively 45.5% and 56.9% of the EU average), and high volatility in the observed trends. Collaboration between innovative SMEs is also below half of the EU average, and subject to volatility despite general positive improvement (+30.4%-points between 2017 and 2024).



# Impacts

In Malta, there are conflicting trends in the impact of innovation activities on the economy. While employment in knowledge-intensive sectors is at 160.7% of the EU 2024 average, making them one of the highest rates in the EU, the growth of employment in innovative businesses has been decreasing since 2017 (-15.9%-points) and is significantly lower than the EU average (64.8% of EU average). Additionally, the sales of innovations (new-to-market and new-to-firm) are among the lowest in the EU at 47.1% of the EU 2024 average, along with knowledge-intensive services exports (41.2% of the EU average).

In the national research and innovation strategic plan 2023 - 2027, the Maltese Council for Science and Technology points out the limitations associated to its local market faced by Malta's small economy. This implies that Maltese enterprises and start-ups need to increasingly target European and international markets through exports to grow. Malta's exports are more oriented towards manufactured products (e.g. semiconductors) than services (CRV, 2023) which is reflected in the indicators, with exports of medium and high technology products close to the EU average (100.6% of it in 2024), while knowledge-intensive services are among the lowest in the EU (41.2% of the EU average in 2024).

As for environmental sustainability, Malta outperforms the EU in resource productivity (126.9% of the EU 2024 average) and in air emissions by fine particulates (125.0% of the EU 2024 average) but is considerably lagging in the production of patents based on environment-related technologies (60.8% of the EU 2024 average).



# Structural differences

# Performance and structure of the economy

Malta's GDP per capita is 104.0% of the EU average. Despite the COVID-19 crisis that strongly affected several of Malta's key economic sectors (tourism, wholesale and retail) (Government of Malta, 2023), the economy is growing rapidly, by 6.9% on average annually, which is the highest GDP growth rate in the EU.

The economy of Malta is relatively more oriented toward services (45.1% of employment), in particular knowledgeintensive services (34.1% of employment in services). Compared to the EU average, Malta has a relatively small share of employment in manufacturing (10.1% of employment) and high and medium high-tech manufacturing (27.0% of employment in manufacturing).

SMEs are the pillars of the Maltese economy. They represent 99.8% of enterprises in Malta (JRC & GROW, 2024), and account for a higher overall turnover than large enterprises, which is unique in the EU. SMEs are represented and supported by the Malta Chamber of SMEs, which has over 7 000 members from over 90 different sectors. Malta also attracts businesses from abroad thanks to its advantageous corporate tax system, English as an official language, and even dedicated start-up programme for non-EU residents (Start in Malta, 2024; Vertex Alliance, 2024), resulting in the share of foreign-controlled enterprises reaching 20.8% of value added (one of the highest shares in the EU).

#### **Business and entrepreneurship**

Malta boasts the third highest rate of enterprise births among EU countries (1.9% of active enterprises), encouraged by the multiple incubators and accelerators providing startups with mentorship, funding, and office space.

Despite the overall low investment in R&D from the private sector (see investment section), Malta's number of enterprises per population that are top R&D spenders is more than double the EU average. This indicates the concentration of R&D spending in a few key firms.

Malta attracts massive FDI thanks to its relatively open FDI policy, managed since 2020 by the National Office for Foreign Direct Investment Screening (UN Trade, 2020). FDI net inflows averaged 27.6% of GDP in recent years, which is the second highest FDI net inflow in the EU.

#### **Innovation profiles**

Malta's share of enterprises introducing product innovations, with or without market novelty, is among the lowest in the EU. Nevertheless, the share of enterprises introducing business process innovations is similar to the EU average, highly driven by large enterprises. While Malta counts relatively more non-innovative enterprises with the potential to innovate, it also struggles with a significant share of non-innovative enterprises that do not have the disposition to innovate.

# Governance and policy framework

Malta is a single-chamber parliamentary republic, with the prime minister as head of government. With a rule of law and a corruption perception slightly below the EU average, Malta has room for improvement to ensure a proper governance encouraging the creation of a secure business environment. In this perspective, Malta has recently adopted a series of measures to improve fairness in taxation and to fight money laundering and financial crime (Council of Europe, 2023).

Government procurement plays a limited role in supporting innovation, as innovation procurement in Malta is among the lowest in the EU. However, procurement of advanced technology products is above the EU average, showing the will of authorities in Malta to integrate advanced technology into public sector activities.

# Climate change

The efforts towards a circular economy, coordinated by CEMalta, have contributed to achieve a circular material use rate significantly higher than the EU average (14.8%). On top of that, Malta is the best-performing country in terms of the intensity of greenhouse gas emissions from energy consumption. However, Malta's score on the Eco-Innovation Index is among the lowest in the EU, driven downwards by the low investment in green technologies and research.

# Demography

Malta has a population of 526,374 inhabitants and an average annual population growth of 2.5%, one of the highest in the EU. Covering just over 316 km<sup>2</sup>, it is the most densely populated EU Member State, with a population density of 1,649.8 inhabitants/km<sup>2</sup>.

# **Structural indicators**

The table below presents some structural differences between Malta and the EU.

	МТ	EU
Performance and structure of the economy		
GDP per capita	104	100
Average annual GDP growth (2021-2023 average)	6.9	1.9
Employment share Manufacturing	10.1	15.8
Employment share High and Medium high-tech	27	37.9
Employment share Services	45.1	39.8
Employment share Knowledge-intensive services	34.1	28.6
Turnover share SMEs	21	12.6
Turnover share large enterprises	16	49.6
Foreign-controlled enterprises – share of value added	20.8	13.3
Business and entrepreneurship		
Enterprise births	1.9	0.8
FDI net inflows	27.6	1.9
Top R&D spending enterprises	19.3	8.4
Buyer sophistication	3.5	3.6
Innovation profiles		
In-house product innovators with market novelties	8.1	11.7
In-house product innovators without market novelties	8.1	13.7
In-house business process innovators	17.9	17.6
Innovators that do not develop innovations themselves	5.1	6.1
Innovation active non-innovators	2	4.2
Non-innovators with potential to innovate	20.9	17.8
Non-innovators without disposition to innovate	38	30.6
Governance and policy frameworks		
Corruption Perceptions Index	52	64
Government procurement of advanced technology products	3.7	3.4

	МТ	EU
Rule of law	0.8	1
Innovation procurement as a share of total public procurement	2.7	9.2
Climate change		
Circular material use rate	14.8	11.5
Greenhouse gas emissions intensity of energy consumption	61.7	82.8
Eco-Innovation Index	79.8	121.5
Demography		
Population size (in millions)	0.5	447
Average annual population growth (2021-2023 average)	2.5	0.3
Population density	1649.8	109

# References

The country's relative strengths and weaknesses for each indicator, compared to other EU Member States and neighbouring countries, can be found in <u>Annex B</u>.

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This report provides the Country profile from the 2024 European Innovation Scoreboard for Malta

Studies and reports