

TURKEY

1. Introduction

In Turkey, both the quality of infrastructure and the competitiveness of the *manufacturing* sector in which small and medium-sized enterprises (SMEs) play a key role are improving, even if the share of SMEs in high and medium-high technology manufacturing is minimal. While entrepreneurs in Turkey are eager to search for new opportunities and have little fear of failure, access to finance remains a major issue for the country's SMEs and employers are facing a skills shortage.

SMEs in Turkey have been significantly affected by the COVID-19 pandemic and the policy measures taken to fight it and support the economy. In 2020, SME value added dropped by 7.0% – a significant downturn in the economic performance of Turkish SMEs¹. All sectors except *information and communication*, which grew by 0.8%, decreased in SME value added. The contraction in value added was particularly noticeable in the *wholesale and retail trade* sector, falling by 10.0%, and in the *accommodation and food services* sector, falling by 9.1%. SME value added also declined by 6.3% in the *manufacturing* sector.

In 2019, SMEs generated 52.6% of overall value added in the Turkish 'non-financial business economy', a slightly lower share than the EU average of 53.2%. The contribution of SMEs to total employment was 73.5%, significantly higher than the EU average of 65.0%. However, SME productivity, measured as value added per person employed, amounted to approximately EUR 10 100, only around one quarter of the EU average of EUR 42 600. Turkish SMEs employed an average of 3.6 people, marginally fewer than the EU average of 3.7.

Figure 1: Number of enterprises, persons employed and value added in 2019



	Number of enterprises			Number of persons employed			Value added		
	Turkey		EU-27	Turkey		EU-27	Turkey		EU-27
	Number	Share	Share	Number	Share	Share	€ billion	Share	Share
Micro	2 721 881	92.1%	93.3%	5 170 632	35.7%	29.6%	11.257	8.8%	18.7%
Small	194 375	6.6%	5.7%	2 858 212	19.7%	19.7%	*	*	17%
Medium-sized	32 201	1.1%	0.9%	2 396 289	16.5%	15.8%	*	*	17.3%
SMEs	2 948 457	99.8%	99.8%	10 425 133	71.9%	65.2%	54.819	42.9%	53%
Large	6 799	0.2%	0.2%	4 065 519	28.1%	34.8%	72.985	57.1%	47%
Total	2 955 256	100%	100%	14 490 652	100%	100%	127.804	100%	10%

Source: These data for 2019 are based on data provided by the Turkish Statistical Institute. The data cover the 'non-financial business economy', which includes industry, construction, trade, and services (NACE Rev. 2 sections B to J, L, M and N), but not enterprises in agriculture, forestry and fisheries and the largely non-market service sectors such as education and health. The following size-class definitions are applied: micro firms (0-9 persons employed), small firms (10-49 persons employed), medium-sized firms (50-249 persons employed), and large firms (250+ persons employed), and the size class criteria also take into account financial criteria (net sales revenue and balance sheet total).

* If the number of enterprises in any cell of the data table is less than three, or if one or two of enterprises are dominant even if there are three or more enterprises, the data are not given in accordance with law No 5429.

2. Key strengths

The country's entrepreneurship ecosystem is improving thanks to a wide range of governmental initiatives

Turkey's entrepreneurship ecosystem is improving, with the number of incubation / accelerator centres and the number of funding opportunities increasing.

Between 2010 and 2019: there were increases in the number of:

- startup accelerators – from 6 to 57;
- co-working spaces – from 1 to 44;
- techno-parks in operation – from 27 to 61;
- corporate venture capital funds – from 2 to 26.

By 2020, the number of active, accredited angel networks was 11. Today, the techno-parks are housing more than 5 000 start-ups and scale-ups businesses, employing over 50 000 people in total.

In recent years, the Turkish government has set up a wide variety of programmes and policies to help establish and grow of the country's start-up ecosystem. The most notable state organisations which continuously support start-ups and investors are: i) the Small and Medium Enterprises Development Organization of Turkey (KOSGEB)²; ii) the Scientific and Technological Research

Council of Turkey (TUBITAK)³; iii) Regional Development Agencies and iv) the Ministry of Treasury and Finance (MTF)⁴.

- Via its programme called TUBITAK-BiGG, TUBITAK has been providing grants to support idea-stage start-ups with their innovative and technology-based activities⁵. In 2019, 568 idea-stage start-ups received grants of EUR 31 000 (TRY 200 000) each, while 823 early-stage start-ups and scale-ups received grants totaling EUR 19 million (TRY 123 million)⁶.
- The Ministry of Treasury and Finance launched an angel investor accreditation programme in 2013. This benefited nearly 524 individuals (as of March 2020) who then became eligible for tax incentives linked to start-up investments in Turkey. Today, 300 of them are active⁷.
- In 2015, the Technology Transfer Accelerator (TTA Turkey) Initiative, designed by the European Investment Fund in cooperation with the Ministry of Industry and Technology, the Delegation of the EU to Turkey, and the European Commission's Directorate General Regional Policy, established two funds (ACT Venture Partners, worth EUR 25 million, and DCP, worth EUR 30 million) to provide early-stage investment to deep-tech, intellectual property-based start-ups in Turkey⁸.
- In 2018, TUBITAK and MTF launched a fund-of-funds programme to help establish new venture capital funds. Currently, five fund applications have been shortlisted for matching funding, with the final selection and funding process ongoing⁹.
- Since 2016, KOSGEB has been providing support grants to acceleration programmes abroad to help Turkish start-ups globalise, and to Turkish entrepreneurs looking to participate in accelerator programmes abroad.
- Furthermore, in the last decade, in the context of their R&D grants, TUBITAK and KOSGEB have been providing non-refundable financial grants to cover 75% of the expenditure of eligible R&D projects through specific calls or all-year open calls.
- Technology transfer offices (TTO) at universities serve as a bridge between those universities and the private sector, helping to commercialise research and enable joint projects between academia and private companies. Since 2013, thanks to grants provided by TUBITAK and the regional development agencies, the total number of TTOs has exploded, exceeding 139 in 2019, with nearly 60 established through public grants.
- Entrepreneurship training has become easily accessible through KOSGEB. Successful completion of the training programme is mandatory for entrepreneurs if they want to apply for KOSGEB's entrepreneurship grants.

Both the quality of infrastructure and the competitiveness of the manufacturing sector in which SMEs play a key role are improving

In the 2019 Global Competitiveness Index, prepared by the World Economic Forum, Turkey ranked 49th out of 141 countries in terms of infrastructure¹⁰, ranking particularly high in terms of airport connectivity and electricity access. From 2007 to 2017, the country experienced a year-on-year average growth rate of 3.31% in terms of the quality of its overall infrastructure, which is higher than the Europe and Central Asia Region's median¹¹.

Despite not having a high ranking in the Global Competitiveness Index in terms of institutions, policies and factors that determine the level of productivity – 61st out of 141 countries in 2019¹⁰ – the country is quite competitive in the manufacturing sector. In 2018, Turkey ranked 29th out of 152 countries in terms of 'manufacturing competitive industrial performance' – ranking above the 'World and Emerging Industrial Economies' average – and 14th in the 'Share of World Manufacturing Value Added' Index¹². SMEs play an important role in this scheme, as they account for 42% of the production value in the manufacturing industry¹³. In 2018, the biggest shares in

turnover in manufacturing came from the following sectors: *food and beverages* (11.4%), *textiles* (9.5%), *basic metals* (9.5%), *machinery and equipment* (8.0%) and *motor vehicles, trailers and semi-trailers* (7.7%)¹⁴.

Although further improvements are needed, SMEs have progressed in their competitive capabilities in the last few years. Between 2016 and 2019, the 'Compete' scores for small businesses and medium-sized businesses increased from 46.1 and 59.4 out of 100 to 50.2 and 62.8, respectively. Significant improvements were made in terms of the 'International quality certificate', 'Capacity Utilization' and 'Managerial Experience' pillars of the 'Compete' capability¹⁵.

Entrepreneurs in Turkey are eager to search for new opportunities and have little fear of failure

Entrepreneurs in Turkey are agile and eager to search for new opportunities - new markets, new products and alternative financial sources.

56.84% of Turkish citizens believe they have the required skills and knowledge to start a business, which is higher than the global average of 49.19%¹⁶. As regards fear of failure, in 2018, only 28.10% of 18–64 year-olds in the country agreed that they saw good opportunities but would not start a business for fear it might fail. This fear of failure rate is low compared to the global average (36.23%) and that of several EU counterparts: 37.08% for France, 36.19% for Spain, 35.06% for Germany, 34.7% for the Netherlands, 31.06% for Poland and 51.67% for Italy¹⁷. In 2018, the percentage of 18-64 year-olds who have entrepreneurial intentions and who intend to start a business within 3 years reached 29.7% in Turkey, while, among the EU countries surveyed, France had the closest rate with 18.60%¹⁸.

As a consequence, Turkey's rate for company births and its total entrepreneurial activity rate (which measures opportunity-driven entrepreneurship) are 5.4% and 14.2%, respectively, which are relatively higher than the 2018 EU averages of 1.1% and 6.7%, respectively (the total entrepreneurial activity rate is 12.29% for the Netherlands, 4.97% for Germany, 6.13% for France, 6.39% for Spain, 4.18% for Italy, 10.38% for Slovakia and 5.24% for Poland)¹⁹.

3. Key challenges

Access to finance remains a major issue for SMEs in the country

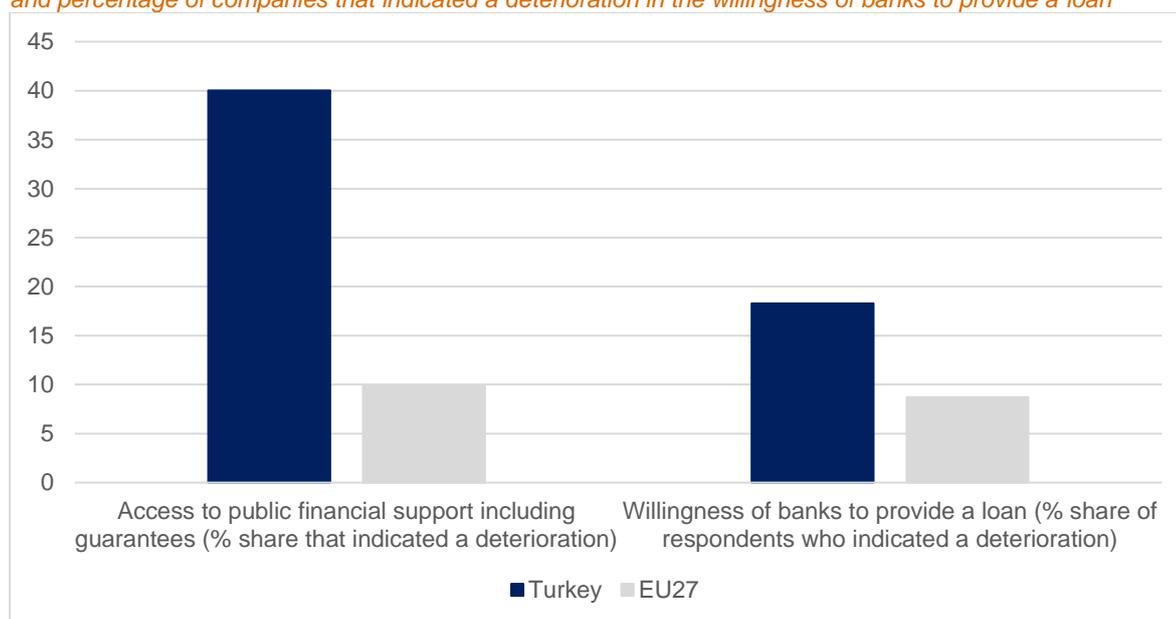
Besides the need to improve the regulatory environment for business²⁰, access to finance constitutes a major hurdle to doing business according to the 2019 Global Competitiveness Index²¹. Despite Turkey slowly improving in the 'Financing of SMEs' dimension, rising from 86th in 2018 (out of 140 countries) to 63rd in 2019 (out of 141 countries), efforts are still needed in this area as this affects almost all businesses including SMEs.

Turkey's scores in both venture capital availability and market capitalization have stagnated in recent years, ranking respectively 88th and 73rd out of 141 countries in 2019, compared to 86th and 73rd in 2018 out of 140 countries²². The share of SME loans in total business loans decreased from 40.14% in 2007 to 32.34% in 2018²³.

While the amount of investment from venture capital funding has steadily increased each year, reaching EUR 160 million (TRY 904 million) in 2018 from EUR 24 million (TRY 47.6 million) in 2010. The total budget is still low compared to other countries, for example: Belgium – EUR 725 million, Denmark – EUR 684 million, United Kingdom – EUR 4.8 billion, France – EUR 5.1 billion, Italy – EUR 324 million, the Netherlands – EUR 868 million, Portugal – EUR 364.5 million and Spain – EUR 1.15 billion²⁴.

Alternative sources of financing are limited, with 90% of the assets remaining in the hands of banks²⁵. Furthermore, the real cost of loans and equity in private markets is very high²⁶.

Figure 2: Percentage of companies that indicated a deterioration in access to public financial support including guarantees and percentage of companies that indicated a deterioration in the willingness of banks to provide a loan



Source: Survey on the Access to Finance of Enterprises (SAFE), 2019²⁷

Employers in Turkey are facing a skills shortage

Turkish employers face difficulties in finding skilled employees (ranking 99th out of 141 countries on the 'Ease of finding skilled employees' dimension in the 2019 Global Competitiveness Report)²⁸.

Indeed, the proportion of people who have a tertiary education and work in a science and technology occupation is only 11.8%, significantly below the EU average of 21.9% in 2019²⁹. The skillsets of graduates and digital skills among the active population are low, with Turkey ranking 103rd and 116th out of 141 countries on these dimensions, respectively, in the 2019 Report³⁰.

Studies show that Turkey has a serious shortage of trained technical staff and intermediate staff³¹. This shortage of skills is a big concern as it directly impacts SMEs. As stressed by the Global Competitiveness Index, a workforce without the appropriate skills is the most problematic factor for doing business²¹.

This skills shortage can be explained by the country's underdeveloped vocational education system³². The quality of the education system, mathematics and science education, management schools, the extent of staff training and the local availability of specialised training services are the worst pillars for Turkey in terms of higher education and training in the Global Competitiveness ranking 2017-2018 (ranking 101, 104, 108, 102, and 93 respectively out of 137 countries)²². The

rate of young people not in employment, education or training increased from 24.4% in 2018 to 26% in 2019, pointing to the need to improve the development of skills programmes for young people in the country³³.

Besides the lack of skilled labour, SMEs also face issues when hiring, as they are not able to find qualified employees ready to accept wages that are often lower than those offered by bigger companies due to their limited financial capacity³⁴.

The employment ratio of ICT workers in total employment was 1% in Turkey while it was 3.9% in the EU in 2019³⁵, therefore preventing the development of high value-added production and/or services. Only 10.1% of small businesses in 2019 and 7.7% in 2020 employed ICT experts. At the same time, 26.3% and 25.9% of medium-sized businesses employed ICT experts in 2019 and 2020, respectively³⁶.

The share of SMEs involved in high and medium-high technology manufacturing is minimal

The share of SMEs involved in high-tech and medium-high tech production – sectors creating high value added – is low compared to EU countries. In 2019, most SMEs in the manufacturing sector were active in low technology (56.9%) and medium-low technology (32%)³⁷.

In 2009, the share of manufacturing SMEs in high-technology and medium-high technology was 0.41% and 9.77%, respectively, comprising 22.19% of the total value added of all SMEs. In 2019, there was a slight improvement as the share of manufacturing SMEs in high technology increased to 0.54%, and the share of manufacturing SMEs in medium-high technology increased to 10.59%, comprising 25.3% of the SMEs total value added. High-tech SMEs produce only 2.16% of the SME total value added³⁸, which is significantly lower than EU counterparts such as: Germany – 16% in 2017; Austria – 8% in 2017; Italy – 8% in 2017; Estonia – 6% in 2017; Czechia – 5% in 2017; Poland – 4% in 2017; Portugal – 4% in 2017; and Slovakia – 4% in 2018³⁹.

In addition, in 2019, the employment share in manufacturing of high- and medium-high tech and knowledge-intensive service sectors was 3.6% in Turkey, against 6.2% in the EU⁴⁰.

Despite low scores in terms of high and medium-high technology manufacturing, the share of SMEs in Turkey's total R&D expenditure increased from 27.4% in 2016 to 31% in 2019⁴¹, the manufacturing sector accounting for the biggest part of the expenditure – 60.84%⁴².

4. Other key SME-related brief insights



IMPACT OF COVID-19 CRISIS ON SMES

According to the survey conducted in December 2020 by KOSGEB⁴³:

- 87.8% of SMEs saw their revenues decrease;
- 86.9% of SMEs highlighted a decrease in demand between January and November 2020 compared to the previous year, while this decrease in demand was over 50% for 34.1% of SMEs;
- 50.6% of SMEs faced problems in receivables;
- 91.5% of SMEs suffered from shortages of cash flow;
- 71.3% of SMEs had to temporarily close and 2.9% went completely out of business of them had to stop their business;
- 17.5% of SMEs were forced to let employees go.

Turkey launched a 21-point stimulus package (Economic Stability Shield) amounting to EUR 13 billion to tackle the effects of the coronavirus pandemic⁴⁴.

The measures under the package, which have been widely-used and effective, are the following:

1. Short Work Allowance measure: income support was provided to workers during the period when they could not work (around EUR 2.2 billion (TRY 20 billion), covering over 3.5 million workers in 480 000 businesses, by 18 November 2020⁴⁵).
2. Three-month deferral of loan payments by companies.
3. Doubling the Credit Guarantee Fund limit from EUR 3.20 billion (TRY 25 billion) to EUR 6.40 billion (TRY 50 billion) to provide funds to SMEs and companies with liquidity needs and collateral deficit. The aim is to encourage the introduction of loan packages for social purposes with favourable and advantageous conditions for SMEs⁴⁶.
4. Deferral of payment of insurance premiums and payment of taxes (value added, income, corporate, accommodation, etc.) for 6 months.
5. Postponement by the government of the principal and interest payments to three public banks (Halkbank, Vakıfbank, Ziraatbank) for 3 months for tradesmen and craftsmen who declare that their businesses have been negatively affected by the pandemic during this period.

In April, the Union of Chambers and Commodity Exchanges of Turkey (TOBB), with private lender Denizbank and the Credit Guarantee Fund (KGF) jointly announced the launch of a new loan package for SMEs. The package will provide TRY 6 billion (EUR 715 million) in loans for SMEs in 2 months, with a maximum loan amount of between TRY 50 000 (EUR 6 600) and TRY 100 000 (EUR 13 200) depending on the province. While the interest rate in the package is 7.5% (less than the average interest rate, which was about 10%), there were no principal and interest payments in 2020⁴⁷.



**GREEN
TRANSITION OF
SMEs**



**SOCIAL
ASPECTS OF
SUSTAINABILITY**

The ratio of electrical energy production from renewable energy and waste increased from 1.9% in 2010 to 12.7% in 2018⁴⁸.

Turkey performs very poorly in terms of 'Workers' rights' and in the 'Ratio of wage and salaried female workers to male workers' indicators, ranking 109th and 112th, respectively, out of 141 countries in 2019⁴⁹.

In 2018, the female/male total early-stage entrepreneurial activity ratio was 42%, against the global average of 69%⁵⁰. 31% of compulsory insured employees were women in 2019⁵¹.

The average daily earning of compulsory insured female employees was 10.2% less than for men (all sectors on average) in 2019⁵².

In 2019, only 23.6% of women earned wages that were equal to or higher than those for men working in similar jobs⁵³.

1% of women work in managerial positions while for men the rate is 1.40%⁵⁴. In 2020, the average informal employment rate was 30.6% (83.5% in agriculture, and 19.3% in non-agriculture)⁵⁵.

Only 14.4% of workers were affiliated to a trade union (figure for January 2021)⁵⁶.



REGULATORY BURDEN

Since February 2018, most of the services (application for grants, entrepreneurship training, etc.) offered by KOSGEB to SMEs and entrepreneurs have been offered via e-government⁵⁷.

Government regulations generate a large burden for SMEs; Turkey ranked 60th out of 141 countries in this area in the 2019 Global Competitiveness report⁵⁸.

In the amendment made to the value added tax code in 2020, paying taxes has become easier in Turkey, as certain capital investments are exempted from value added tax⁵⁹.



DIGITALISATION OF SMES

In 2020, only 3.9% of small businesses and 9.4% of medium-sized businesses were using robot technology⁶⁰, compared to 19.6% for large businesses.

In 2018, the Digital Roadmap 2023 for the Transformation of Manufacturing Industry was prepared⁶¹. Several model factories have been established to help SMEs digitalise through on the job training.

In 2018, the first Capability and Digital Transformation Center-Model Factory was jointly established in Ankara, by the Ankara Chamber of Industry, the Ankara 1st Organized Industrial Zone, United Nations Development Programme, and the Ministry of Industry and Technology⁶².

In Gaziantep, the Model Factory (Competence and Digital Transformation Centre), which was built as part of a protocol signed between the Ministry of Industry and Technology and Gaziantep Chamber of Industry, has been finalised and has begun operations. The Gaziantep Competence and Digital Transformation Centre will help employees increase their knowledge and skills in areas such as lean manufacturing, digital transformation, product development, and energy efficiency⁶³.

A cooperation protocol was signed between TUBITAK and Boğaziçi University to put in place the D3A-Digital Transformation Assessment Tool, which was developed by Boğaziçi University Industry 4.0 Platform, to assess the maturity of SMEs for digital transformation⁶⁴.

¹ The data for 2020 are estimates produced by DIW Econ, based on 2008-2019 data from the Turkish Statistical Institute as well as provisional data for 2019-2020 from the National Accounts Database and the Short-Term Business Statistics database (Eurostat). Due to data constraints, for 2020, only value added data can be estimated (data for employment and number of enterprises are only available up until 2019).

² KOSGEB, available at: <https://en.kosgeb.gov.tr/>

³ TUBITAK, available at: <https://www.tubitak.gov.tr/en>

⁴ Republic of Turkey. Ministry of Treasury and Finance, available at: <https://en.hmb.gov.tr/>

⁵ TUBITAK. *BİGG + Mentor Arayüzü*, available at: <https://www.tubitak.gov.tr/tr/destekler/sanayi/ulusal-destek-programlari/icerik-bigg-mentor-arayuzu>

⁶ See Note **Error! Bookmark not defined..**

⁷ See Note **Error! Bookmark not defined..**

⁸ See Note **Error! Bookmark not defined..**

⁹ See Note **Error! Bookmark not defined..**

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¹¹ The World Bank (2017), *TCdata360, Quality of overall structure*, available at:

https://tcdata360.worldbank.org/indicators/h2cf9f9f8?country=TUR&indicator=536&viz=line_chart&years=2007,2017

¹² UNIDO (2020), *Competitive Industrial Performance Report 2020*. Available at: <https://stat.unido.org/country/TUR.pdf>

¹³ Turkish Statistical Institute, *Production value by size classes and economic activities, 2009-2018*, available at:

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¹⁴ UNIDO (2019), *Turkey*, available at: <https://stat.unido.org/country-profile/economics/TUR>

¹⁵ International Trade Center, *SME Competitiveness Outlook 2016* and *SME Competitiveness Outlook 2019*, available at:

<https://www.intracen.org/SMEOutlook/SMECO2016/> and <https://www.intracen.org/smeco2019/>

¹⁶ Global Entrepreneurship Monitor (2018), *Entrepreneurial Behaviour and Attitudes*, available at:

<https://www.gemconsortium.org/economy-profiles/turkey-2>

¹⁷ Global Entrepreneurship Monitor, *Entrepreneurial Behaviour and Attitudes*, available at:

<https://www.gemconsortium.org/data/key-aps>

¹⁸ See Note 17.

¹⁹ European Commission (2020), *European Innovation Scoreboard 2020*, available at:

https://ec.europa.eu/growth/industry/policy/innovation/scoreboards_en

²⁰ Economic Reform Programme of Turkey (2021-2023) Commission assessment, Commission staff working document

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²¹ See Note 10.

²² See Note 10.

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²³ OECD (2020), *Financing SMEs and Entrepreneurs 2020*, available at: https://www.oecd-ilibrary.org/industry-and-services/financing-smes-and-entrepreneurs_23065265

²⁴ See Note 23.

²⁵ Roger Kelly and Ali Sokmen (2019), *Turkey Diagnostic*, EBRD, available at:

<https://www.ebrd.com/publications/country-diagnostics>

²⁶ OECD, *OECD Economic Surveys: Turkey 2018*, available at: <https://doi.org/10.1787/19990480>

²⁷ *Survey on the Access to Finance of Enterprises (SAFE) 2019*, available at: http://ec.europa.eu/growth/access-to-finance/data-surveys/index_en.htm

²⁸ World Economic Forum (2019), *The Global Competitiveness Report 2019*, available at:

http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf

²⁹ Eurostat Statistics Explained, available at: [https://ec.europa.eu/eurostat/statistics-](https://ec.europa.eu/eurostat/statistics-explained/index.php/R_%26_D_personnel)

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³⁰ See Note 10.

³¹ Nurettin Can, Ufuk Doğuç. (December 2015). mar

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³² See Note 31.

³³ European Training Foundation (2020), *Turkey Education, training and employment developments 2020*, available at:

<https://www.etf.europa.eu/sites/default/files/document/Country%20Fiche%202020%20Turkey%20Education%20Trainin%20and%20Employment%20Developments.pdf>

³⁴ Sinem YILDIRIMALP - Emel İSLAMOĞLU - Bora YENİHAN, *Qualified Labour Force Requirement of Small and Medium Sized Enterprises in Turkey: A Review in the Context of Employer, Journal of Social Policy Conferences; Issue: 66-67 - 2014/1-2, 15-42*, available at: <https://dergipark.org.tr/tr/download/article-file/383704>

³⁵ Eurostat Statistics Explained, available at: [https://ec.europa.eu/eurostat/statistics-](https://ec.europa.eu/eurostat/statistics-explained/index.php/ICT_specialists_in_employment)

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³⁶ Turkish Statistical Institute. Available at: https://turkstatweb.tuik.gov.tr/PreTablo.do?alt_id=1048

³⁷ Turkish Statistical Institute. Calculated from: *Basic indicators in manufacturing industry by size class and technology level, 2009-2019*, available at: https://turkstatweb.tuik.gov.tr/PreTablo.do?alt_id=1033

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- ³⁸ See Note 36.
- ³⁹ Bach Working Group European Committee of Central Balance Sheet Data Offices (November 2019), *Get Insights Into 2019 Database*, available at: <https://www.bach.banque-france.fr/?lang=en>
- ⁴⁰ Eurostat (2019), *Employment in high- and medium-high technology manufacturing sectors and knowledge-intensive service sectors*, available at: <https://ec.europa.eu/eurostat/databrowser/view/tsc00011/default/table?lang=en>
- ⁴¹ Turkish Statistical Institute, *Financial and non-financial corporations gross domestic expenditure on R&D by size class, 2009-2019*, available at: https://tuikweb.tuik.gov.tr/PreTablo.do?alt_id=1033
- ⁴² TUBITAK, available at: <https://www.tubitak.gov.tr/tr/kurumsal/politikalar/icerik-bty-istatistikleri>
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- ⁴⁴ Turkish Treasury and Finance Ministry, *COVID-19 Economic Stability Shield Package*, available at: <http://www.isim.org.tr/content/upload/attached-files/covid-19-ekonomik-istikra-20200414170956.PDF>
- ⁴⁵ TRT HABBER (2020), *3,5 milyondan fazla kişi Kısa Çalışma Ödeneğinden yararlandı*, available at: <https://www.trthaber.com/haber/ekonomi/35-milyondan-fazla-kisi-kisa-calisma-odeneginden-yararlandi-531992.html>
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- ⁴⁷ See Note 44.
- ⁴⁸ Turkish Statistical Institute, *Electricity generation and shares by energy resources*, available at: https://tuikweb.tuik.gov.tr/PreTablo.do?alt_id=1029
- ⁴⁹ See Note 10.
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- ⁵² See Note 51.
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