7 Reader's guide

The OECD SME and Entrepreneurship Outlook 2023 examines recent SME&E developments and identifies several forthcoming challenges for SME&Es, including uncertain economic conditions, geo-political tensions, rising energy costs, and new pressures across supply-chains.

The standardised country profiles provide a country perspective on the state of SME sector and entrepreneurship, the barriers to trade faced by entrepreneurs, particularly women, the extent of SME integration in global value chains (GVCs), and the accessibility of SMEs to professional networks and digital technologies.

The SME&E Outlook country profiles cover the 38 OECD member countries. They build on the most recent work and data available at the time of drafting. However due to differences in data collection calendars and methodologies, there may be data and time gaps across some indicators and interpretation should be done with caution.

Part 2 of the SME and Entrepreneurship (SME&E) Outlook 2023 is made of standardised country profiles that explore the structural factors of the SME sector, the integration of SMEs into global value chains, and the accessibility of SMEs to networks and digital skills and capital.

The SMEEO country profiles build on work carried out across the OECD and beyond. Measurement and indicators have been selected on the basis of their SME&E policy relevance, international comparability, and the most extensive country coverage. Primary data sources are presented in more details in the Annex A.

A data infrastructure was built and integrated into the OECD corporate data management system to gather, store and harmonise information. The OECD SME&E 'Data Lake' will support future SME- and entrepreneurship-related policy analysis.

Reader's guide

SME sector structure and performance

Recent SME performance has been uneven across firms, sectors and countries (Chapter 1). While most SMEs have little direct exposure to Russia and Ukraine, they have been indirectly affected by the sharp increases in energy and commodity prices, tightening financial conditions and lesser monetary and fiscal support.

The *first section* of the country profiles presents an overview of SMEs across three important dimensions of the economy: employment, turnover, and exports. The relevance and timeliness of these three indicators provide a broad overview of the state of SMEs across countries and time.

- **Employment** refers to employment by micro, SMEs, and large firms expressed as a percent of total employment. Total employment is the total number of persons who worked in or for the

concerned unit during. Sector coverage is the business economy except financial and insurance activities (05-82 except K, according to ISIC Rev. 4). The year of reference is 2020, or latest.

- **Turnover** refers to the total value of invoices corresponding to market sales of goods or services. Turnover of micro, SMEs, and large firms is expressed as a percent of total turnover of the economy. Sector coverage is the business economy except financial and insurance activities (05-82 except K, according to ISIC Rev. 4). The year of reference for turnover is 2020, or latest.

- **Exports** refers to the sales, barter, or gifts or grants, of goods and services from residents to non-residents. Exports by micro, SMEs, and large firms is expressed as a percent of total exports in the country. Sector coverage for the is total economy. The year of reference is 2020, or latest.

An industry breakdown of the Employment and Turnover indicators is also presented for the industries that are particularly vulnerable to disruptions during COVID-19 crisis. These include: manufacturing of motor vehicles and other transport equipment (C/29-30), construction (F/41-43), wholesale/retail trade and repair of motor vehicles (G/45-47), air transport (H/51), accommodation and food service activities (I/55-56), real estate activities (L/68),professional, scientific and technical activities (M/69-75),arts, entertainment and recreation (R/90-93), and other service activities (S/94-96) (OECD, 2020[1]).

Data for employment and exports comes from the OECD Structural and Demographic Business Statistics database (OECD, 2022[2]). Data on exports comes from the Trade by Enterprise Characteristics (TEC) database (OECD, 2022[3]). In cases when data is not available, no information is presented.

Entrepreneurship and business dynamics

The war in Ukraine put a halt to the strong rebound in firm entries witnessed in the course of 2021 up until the first quarter of 2022. Across OECD countries, bankruptcies fell and remained below pre-crisis levels well into 2021 and the beginning of 2022.

The *second section* provides indicators related to business dynamics and entrepreneurship that provide a glimpse of how these were affected by the pandemic and subsequently Russia's war of aggression against Ukraine.

Business dynamics are measured by two indicators: firm entries and bankruptcies while *entrepreneurship* is measured by self-employment.

- **Firm entries** refers to the number of new enterprises created during the reference quarter. Firm entry is presented as quarter-over-quarter growth from the year 2000 (or earliest available) until the second quarter of 2022 (or latest available). Growth is obtained by dividing the value in a quarter by the value the same quarter of the previous year.

- **Bankruptcy** refers to the initiation of insolvency procedures. Note that such procedures do not always end up in the dissolution of the enterprise. Bankruptcy is presented as quarter-over-quarter growth from the year 2000 (or earliest available) until the second quarter of 2022 (or latest available). Growth is obtained by dividing the value in a quarter by the value the same quarter of the previous year. In cases where bankruptcy is not available, business exit data is presented. Business exits refer to the number of dissolutions of companies and equivalent entities.

- **Self-employment** refers to the number of employers, workers who work for themselves, members of producers' co-operatives, and unpaid family workers. It is expressed as a percentage of total employment and available for the year 1990 (or earliest) until the year 2021 (or latest).

Data for firm entries and bankruptcy comes from OECD Timely Indicators of Entrepreneurship database (TIE) (OECD, 2023[4]). Data on self-employment come from Labour Force Statistics (LFS) (OECD, 2020[5]). In cases when data is not available, no information is presented.

SME indebtedness

The COVID-19 crisis and related policy interventions had a significant impact on the dynamics of lending to SMEs (OECD, 2022[6]). In 2022, conditions tighten in financial markets, reflecting greater risk aversion and uncertainty. As a result, a tighter monetary policy stance to counter inflation could impact the conditions for SME borrowing (OECD, 2022[7]). This represents an important challenge for highly leveraged SMEs that took on additional debt to weather the COVID-19 pandemic.

The ***third section*** provides a glimpse on SME indebtedness as a possible obstacle to future SME investment and capacity to scale up and transform.

- The indicator **SME outstanding loans** refers to the bank and financial institution loans to SMEs, amount outstanding (stocks) at the end of period. It is presented as year-over-year growth. It is shown by firm size using the national definition of SME or, if necessary, loan amounts less than EUR 1 million or an equivalent threshold that is deemed appropriate on a case-by-case basis. Data is presented in Year-over-year growth.

The underlying data comes from Financing SMEs and Entrepreneurs 2022 An OECD Scoreboard (OECD, 2022[6]). Data refer to 2021, or latest available. In cases when data is not available, no information is presented.

Women in trade and gender gap

Across OECD countries, international trade is a major driver of economic growth. Amongst the different categories of firms and business owners, women entrepreneurs are less likely to engage in international trade than male entrepreneurs. As a result, women entrepreneurs are less able to seize the opportunities connecting to global networks could bring for increasing competitiveness, and other spillover effects trade could offer (Chapter 3).

The ***fourth section*** provides one indicator that measures the **gender gap in trade**. **The gender gap in trade** shows the extent to which woman-led versus man-led firms export.

The graph presents firms that indicate they engage in trade, as a share of total women-led businesses, men-led businesses or businesses led equally by women and men (%). The share of firms is obtained from the question: Is your business engaged in international trade? Firms labelled that engage in trade are those that report "Yes, as an exporter and importer" or "Yes, as an exporter". The sample included in the analysis are firms in OECD countries that have between 1-249 employees. Only answers from owners and managers of the business are included. Women-led firms are firms where more than 50% of managers and/or owners are women, and men-led firms are firms with more than 50% of managers and owners are men. Businesses equally led by women and men refer to equal number of men and women managing and/or owning the company.

The underlying data comes from the Future of Business Survey (OECD-World Bank-Meta, March 2022[8]), specifically designed to examine these issues. Only the responses from owners and managers of the business (obtained from the question *Which of these best describes your main employment situation?*) are used in the analysis. In cases when data is not available, no information is presented.

SME integration in GVCs, linkages with foreign markets and multinationals

Integration into domestic and global value chains (GVCs) is of particular relevance for SMEs as it can expand market opportunities, including abroad, ease access to strategic resources (such as finance, skills or technology) and enable capacity upgrading, through the exchanges that take place within the value chains (Chapter 4).

The *fifth section* provides 8 indicators across 3 thematic areas that present an overview of integration in GVCs, linkages with foreign markets, and multinationals.

The **first dimension** relates to a country's integration in international trade and are based on trade values for **four indicators:**

- **The first and second indicators** show the share of SMEs in a country's imports and exports as a percentage of all imports and exports, respectively. Country values are compared to the OECD average. SMEs include firms with 1-249 persons employed. Imports of goods and services consist of purchases, barter, or receipts of gifts or grants, of goods and services by residents from non-residents. Exports of goods and services consist of sales, barter, or gifts or grants, of goods and services from residents to non-residents

- **The third and fourth indicators** show the import and export shares of firms trading with more than 20 countries, expressed as a percentage of all imports and exports, respectively. A higher number of trade partners suggest a greater integration in foreign markets and a greater exposure to shocks, including abroad. For example, to calculate the import share of firms that import from 20+ countries, first it is necessary to aggregate all the import value of firms that trade with more than 20 countries. This number is then divided by the total value of imports for the year of reference. Country values are compared to the OECD average.

The data is drawn from the OECD Trade by Enterprise Characteristics database (OECD, 2022[3]). Data refer to 2021 or latest year available. In cases when data is not available, no information is presented.

The **second dimension** relates to a country's vulnerability to trade disruptions due to the participation of domestic SMEs in long GVCs. It presents two indicators: the share of SMEs in export and import trade value of long GVCs.

- The share of SMEs in export (import) trade value of long GVCs is defined as the total exports (imports) by SMEs trading in long GVCs industries divided by the total exports (imports) in long GVCs industries for the year of reference. Long GVCs are defined as the top 10 longest value chains based on the OECD Inter-Country Input-Output (ICIO) model (OECD, 2018[9]) (De Backer and Miroudot, 2013[10]), and using the International Standard Industrial Classification of All Economic Activities Revision 4 (ISIC Rev.4) at two digits: i.e. manufacturing of textiles (13), manufacturing of wearing appeal (14), manufacturing of leather and related products (15), manufacturing of rubber and plastics products (22), manufacturing of basic metals (24), manufacturing of computers, electronics, and optical equipment (26), manufacturing of electrical equipment (27), manufacturing of other machinery and equipment (28), manufacturing of motor vehicles, trailers and semi-trailers (29), and manufacturing of other transport equipment (30). Data are for 2020 (or latest year available). Country values are compared to the OECD average. The data is drawn from the OECD Trade by Enterprise Characteristics database (OECD, 2022[3]). Data refer to 2021, or latest year available. In cases when data is not available, no information is presented.

Finally, the **third dimension** looks at the embeddedness of foreign affiliates in local economy, through the supply chain linkages they have developed in the country.

- The sourcing structure of foreign affiliates refer to the percentage of foreign affiliates' consumption that is sourced domestically, i.e. from domestic multinationals (MNEs) and non-MNEs, across the total economy. Local businesses act as suppliers of MNEs. Country values are compared to the OECD average.

- The output use of foreign affiliates is the percentage of the output of foreign affiliates that is used by domestic MNEs and non-MNEs for intermediary consumption, across the total economy. Local businesses act as users/buyers of MNEs. Country values are compared to the OECD average.

The underlying data comes from OECD TEC database and the OECD Analytical Database on the Activity of Multinational Enterprises (AMNE) (OECD, 2017[11]). The year of reference is 2016. In cases when data is not available, no information is presented.

SME networks for innovation, growth and resilience

Networks are strategic assets for SMEs to access resources, markets, and partners, capture knowledge spillovers, and achieve external economies of scale. Networks enable technological leapfrog, support SME innovation and are a cornerstone for their strategies of resilience (Chapter 4).

The *sixth section* presents three sets of indicators that capture the extent to which SMEs are part of, and make use of, different forms of networks.

The first set of indicators show SME integration in innovation networks through cooperation with higher education institutions and other firms.

Cooperation with higher education institutions refers to firms co-operating on innovation activities with universities or other higher education institutions, as a percentage of innovation active firms. Data are for 2018 and are drawn from the 2021 OECD survey of national Innovation Statistics and Eurostat Community Innovation Survey (OECD, 2021[12]; Eurostat, 2022[13]).

Cooperation with enterprises refers to firms co-operating on innovation activities with other enterprises, as a percentage of innovation active firms. Data are for 2018 and are drawn from the 2021 OECD survey of national Innovation Statistics and Eurostat Community Innovation Survey (OECD, 2021[12]; Eurostat, 2022[13]).

International cooperation with enterprises refers to firms cooperating with enterprises outside of the country of residency of the firm, as a percentage of innovation active firms. Data refer to 2018 and are drawn from the 2021 OECD survey of national Innovation Statistics and Eurostat Community Innovation Survey (OECD, 2021[12]; Eurostat, 2022[13]).

The second set of indicators related to the adoption of platform and network technologies and drawn from the OECD database on ICT Access and Usage by Businesses (OECD, 2023[14]):

Cloud computing services refer to firms purchasing Cloud computing services. Cloud computing services include: e-mail, office software, finance or accounting software, customer relationship management (CRM) software, hosting of databases, storage of files, and computing power to run own software.

Social media use refers to firms using social media, i.e. the enterprise's use of applications based on Internet technology or communication platforms for connecting, creating and exchanging content online, with customers, suppliers, or partners, or within the enterprise. Enterprises using social media are considered those that have a user profile, an account or a user license depending on the requirements and the type of the social media.

Supply chain sharing refer to firms sharing electronically Supply Chain Management (SCM) information with suppliers and customers. Sharing information electronically on SCM implies exchanging information with suppliers and/or customers about the availability, production, development or distribution of goods or services. This information may be exchanged via websites, networks or other means of electronic data transfer, but it excludes manually typed e-mail messages.

Customer relationship management software refer to firms using CRM (Customer Relationship Management) software (%).

The third set of indicators show the participation of SMEs in professional networks:

The membership of SME in formal professional groups refers to the percentage of SMEs that report belonging to the following groups: 1) groups of professional women; 2) groups of people with similar jobs;

3) groups of people leading small businesses; 3) groups of other people in the industry; 4) local chamber of commerce; 5) other professional groups; and 6) no associations to any formal groups. The underlying data comes from the Future of Business Survey (OECD-World Bank-Meta, March 2022[8]), specifically designed to examine these issues. The shares are obtained from the question: "Which of these kinds of professional groups, if any, are you a part of?". The answers are weighted such that the weight of each firm is 1 to account for multiple responses. The sample included in the analysis are firms in OECD countries that have between 1-249 employees. Only the responses obtained from owners and managers of the business (obtained from the question "Which of this best describes your main employment situation?") are included.

All indicators in this section are presented in the form of benchmarking indices and reported on a common scale from 0 to 200 (0 being the lowest OECD value, 100 the median value, and 200 the highest) to make them comparable. The same methodology was used in the SME&E Outlook 2019 (OECD, 2019[15]) and 2021 (OECD, 2021[16]).

Formally, the benchmarking index is constructed as follows. First, let $X_{c,t}$ denote the value for country *c* at time *t*. Second, let $X_{\{min,t\}}$, $X_{\{med,t\}}$ and , $X_{\{max,t\}}$ denote the minimum, median and maximum values at time *t* across OECD countries, respectively. The country index of benchmark $I_{c,t}$ is then calculated using the following conditions:

If $X_{c,t} > X_{\{med,t\}}$ then

$$I_{c,t} = 100 + (X_{c,t} - X_{\{med,t\}})/(, X_{\{max,t\}} - X_{\{med,t\}}) * 100$$

If $X_{c,t} < X_{\{med,t\}}$ then

$$I_{c,t} = 100 - (X_{c,t} - X_{\{med,t\}})/(X_{\{min,t\}} - X_{\{med,t\}}) * 100$$

The benchmark charts highlight the position and dispersion of the top five (High) and bottom five (Low) OECD values. The country's relative position is marked with a dot. However, in cases when data is not available, no information is presented, i.e. the dot marking the country's position in the ranking, does not figure on the graph.

Upskilling, reskilling and finding talent: the role of SME ecosystems

A major obstacle to SME innovation and twin transformation is their more limited access to skills, more limited capacity to attract talent and more limited resources to train and re-train their employees (Chapter 6). Digitalisation transforms the skillset needed to thrive in data-driven economies, but open also opportunities to outsource skills needs.

The ***seventh section*** presents four indicators that capture the different channels through which SME can access digital skills.

- ICT hiring refers to the share of businesses which have employed ICT specialists, within the last 12 months (%). ICT specialists are employees for whom ICT is the main job. For example, to develop, operate or maintain ICT systems or applications.
- Training refers to the share of businesses which provided any type of training to develop ICT related skills of the persons employed, within the last 12 months (%).
- Outsourcing refers to share of firms that purchase cloud computing services in (%). Main cloud computing services include: e-mail, office software, finance or accounting software, customer relationship management (CRM) software, hosting of databases, storage of files, and computing power to run own software.

Data are retrieved from the OECD ICT Access and Usage by Businesses database (OECD, 2023[14]). Small firms are defined having between 10-49 employees, medium-sized between 50 and 249 and large

firms 250 or more. Country values are compared to the OECD average. Data refer to 2021. In cases when data is not available, no information is presented.
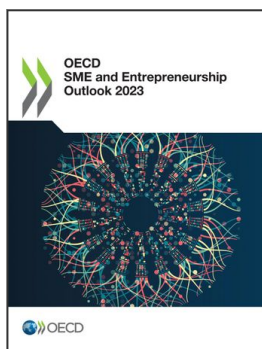
Caveats and caution in interpretation

The SME&E Outlook 2023 country profiles build on the most recent work and data available at the time of drafting. However due to differences in data collection calendars and processes, benchmarking data may not refer to the same year across all indicators or across all countries. The data cut-off date for the country profiles is 15 April 2023. In case when data is not available, no information is presented.

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