

KOSGEB Enterprise Assessment Report Metadata Document

The Enterprise Assessment Report is a document created by processing the data obtained from the administrative records of various institutions and organizations.

As the administrative records are obtained directly from the source institutions and organizations, KOSGEB is not responsible for the accuracy and currentness of the data.

Legal Basis

The Enterprise Assessment Report has been developed on the basis of the item g¹ of the article 227 and the item t² of the article 234 of the Presidential Decree No. 4, "About The Organization of the Affiliated, Relevant, and Related Institutions of the Ministries" published in the Official Gazette dated 15.07.2018 and numbered 30479.

Objective

Today, data management is no longer just considered a technical issue. The data is now accepted as an important asset of the institutions and is the main input of the analyses in many services that are offered to the target audience. In line with the vision of using the data collected by the public administration in favour of the citizens, KOSGEB started this study for the SMEs, the economic unit that is deprived of information most.

The objective of the Enterprise Assessment Report is to supply SMEs with information to help them express themselves and make informed business decisions. Thanks to this report the enterprises will be able to see their positions in their sectors regarding finance, technology, export, efficiency, and human resources.

Also, by establishing feedback and coordination mechanisms with our data sources, we anticipate to draw attention to the importance of a common data standard in the public institutions and organizations by raising awareness through mutual interaction.

Definitions and Abbreviations

RA	Revenue Administration
MOT	Ministry of Trade
MOIT	Ministry of Industry and Technology
TURK PATENT	Turkish Patent and Trademark Office
SSI	Social Security Institution
GTIP	GTIP - Customs Tariff Statistical Code (Turkish Harmonized

¹ g) To ensure the strengthening and development of enterprises in terms of knowledge and skills in investment, production, management, and planning.

² t) To obtain information and data about businesses and entrepreneurs from public institutions and organizations, and natural and legal persons, to use during the design process of the support policies for SMEs and entrepreneurs, and to ensure that the services are provided in a fast, high quality, simplified, and low cost manner.

NACE	Nomenclature of Economic Activities
NUTS	Nomenclature of Territorial Units for Statistics

Classifications

Industry

In the Enterprise Assessment Report, norms and standards of Eurostat (Statistical Office of the European Union) are used. Sectoral calculations use NACE Rev.2 6-digit classification. Main field of activity of an SME decided using Revenue Administration's latest records of the previous year.

Technology intensity level classification of the manufacturing industry is the aggregation developed by Eurostat. It is based on NACE Rev.2. and groups companies as high-technology, medium high-technology, medium low-technology, and low-technology.

Region

Nomenclature of Territorial Units for Statistics Level-1 classification made by TURKSTAT is used for the sectoral averages.

Code	Region Name	Provinces
TR1	Istanbul	İstanbul
TR2	West Marmara	Balıkesir, Çanakkale, Edirne, Kırklareli, Tekirdağ
TR3	Aegean	Afyonkarahisar, Aydın, Denizli, İzmir, Kütahya, Manisa, Muğla, Uşak
TR4	East Marmara	Bilecik, Bolu, Bursa, Düzce, Eskişehir, Kocaeli, Sakarya, Yalova
TR5	West Anatolia	Ankara, Karaman, Konya
TR6	Mediterranean	Adana, Antalya, Burdur, Hatay, Isparta, Kahramanmaraş, Mersin, Osmaniye
TR7	Central Anatolia	Aksaray, Kayseri, Kırıkkale, Kırşehir, Nevşehir, Niğde, Sivas, Yozgat
TR8	West Black Sea	Amasya, Bartın, Çankırı, Çorum, Karabük, Kastamonu, Samsun, Sinop, Tokat, Zonguldak
TR9	East Black Sea	Artvin, Giresun, Gümüşhane, Ordu, Rize, Trabzon
TR10	North-East Anatolia	Ağrı, Ardahan, Bayburt, Erzincan, Erzurum, Iğdır, Kars
TR11	Mid-East Anatolia	Bingöl, Bitlis, Elazığ, Hakkâri, Malatya, Muş, Tunceli, Van
TR12	South-East Anatolia	Adıyaman, Batman, Diyarbakır, Gaziantep, Kilis, Mardin, Siirt, Şanlıurfa, Şırnak

Target Group and Geographical Boundary

Target audience of the report is businesses owned by natural or legal persons that use balance sheet or account summary for tax accounting and operate within the borders of Turkey.

Data Sources

In the study, the administrative records kept by the institutions and organizations are used as data source. The enterprise will see its status without any interpretation on its records.

In order to make the data received from institutions and organizations usable data cleaning and merging process has been carried out by KOSGEB.

The main data sources used for the report are the online services established according to data sharing protocols signed with several institutions and organizations:

Ministry of Industry and Technology	Annual operating statements
Ministry of Trade	Customs declarations
Revenue Administration	Centre and tax office information, date of birth, tax accounting method, sector, balance sheets, income tables, account summaries
Social Security Institution	Total number of social security premium days of employees
Patent and Trademark Office	Trademarks, patents, and utility models

Calculation Rules

The report consists of seven sections:

1. Company Identity Information
2. General Rankings
3. Human Resources
4. R&D, Innovation, and Branding
5. Productivity
6. Exportation
7. Finance

Administrative records received according to data sharing protocols were used in each title. The results are reflected without any comment or interpretation.

Empty data cells are not included in the analyses.

Due to the large number of SMEs and the heterogeneity of the administrative records, the report will be created for businesses that use balance sheets or account summaries for tax accounting, and in the General Ranking and Finance sections the content of the report differs by the tax accounting method.

The data of the enterprise are shown in the graphs together with the sector and statistical region averages for each title. The outliers removed from the data when calculating averages using the interquartile range rule.

In the Finance section; vertical analysis, ratio analysis and trend percentages analysis have been performed over the balance sheet and income table data. For the businesses which don't have got balance sheets but use account summaries, rate analyses were used instead.

In the trend analyses under the subsection Growth - Regression Indicators, no graphs will be drawn if there exists zero or negative values for any year.

If the number of enterprises in an average calculation is 6 or fewer, to protect anonymity of the enterprises the average will not be shown in the graph.

In the General Rankings section, if the number of enterprises in a ranking calculation is 6 or fewer, to protect anonymity of the enterprises the corresponding graph won't be created.

Time based analyses in the report were made using five years of data, including the last approved financial year of the enterprise.

In order to draw a five-year graphs under the Effective Use of Assets subsection, six-year data were used for calculations.

In the Company Identity Information section, Technology intensity level aggregation of the manufacturing industry developed by Eurostat is used. According to this aggregation manufacturing industry companies are classified as high-technology, medium high-technology, medium low-technology, or low-technology, and non-manufacturing companies are shown as "other".

In the Human Resources section Number of Employees per Annum According to the Annual Operating Statement title, if an enterprise has multiple branches, number of employees of each brach are added together.

In the productivity section, capacity utilisation ratio is based on industry registry certificate. If an enterprise has got more than one workplace, weighted sum of utilisation ratios by turnovers of each workplaces shown in annual operating statement has been calculated.

The sector averages in the Export section includes only the exporting enterprises.

The rankings in the General Rankings section includes the enterprises which have got data for related variable.

The variable names and calculation rules for the report are given in the attached document.

Constraints and Assumptions

1. For the sector averages NACE Rev.2 six-digit classification was used to be able to make more elaborative comparisons. The NACE code on the first place in the enterprise's declared list of activities received from RA records was assumed as the main sector of the enterprise.
2. Since the report contains multi-year analyses, latest records of the previous year were used to determine the enterprises' main sectors.
3. In the Finance section, trend analyses have been done for three, four or five years depending on available data.
4. If the business used both balance sheet and account summary in same year, the report uses the balance sheet data.
5. If the business had had got more than one balance sheets and account summaries for the same year, sums of corresponding items were used for analyses.

6. In the Company Identity Information section, company name, tax identification number, province, statistical region, workplaces, start date, tax accounting method, and sector fields are obtained from the RA.

Publication Period

The reports will be renewed yearly if the enterprise requests via e-Government web site.

Note: Please send an e-mail to idr@kosgeb.gov.tr for your comments and suggestions.

Annex

Variables and Calculation Rules

Deciding Rankings

While determining the ranks in Sections 2 and 6, the same rank is given to the enterprises with the same value, and the next rank was calculated according to the number of the enterprises with higher value. For example, if there were two enterprises which have got the highest value for a variable, the ranks of the first four enterprises would be 1, 1, 3, and 4.

Chapters 3: Human Resources

Total Number of Social Security Premium Days per Annum = 4A Social Security Premium Days

Chapters 5: Productivity

Labour Productivity = Net Sales / 4A Social Security Premium Days

Investment Productivity = Net Sales / Tangible Fixed Assets

Chapters 6: Exportation

The Percentage of the Export Sales in the Total Sales = Export Sales / Total Sales

Chapters 7: Finance

Formulas for Bookkeepers According to the Balance Sheet Procedure:

A. Debt Payment Rates

Net Working Capital = Current Assets - and Short-Term Liabilities

Current Ratio = Current Assets / (Short-Term Liabilities)

1,5 The rate is sufficient in developing countries.

Quick (Acid-Test) Ratio = (Current Assets - Inventory) / Short-Term Liabilities

The rate 1 is sufficient

Cash Ratio = (Current Assets - Inventory - Trade Receivables) / Short-Term Liabilities

The Rate below 0.20 is sufficient

B. Effective Use of Assets

Average Collection Period = 365 / (Net Sales / Average Trade Receivables)

Average Trade Receivables =
[Trade Receivables for the Last Approved Financial Year (2018) +
Trade Receivables For The Previous Approved Financial Year (2017)] / 2

Inventory Turnover Period = 365 / (Net Sales / Average Inventory)

Average Inventory =
[Inventory for the Last Approved Financial Year (2018) +
Inventory for the Previous Approved Financial Year (2017)] / 2

Cash Conversion Cycle = Average Collection Period + Inventory Turnover Period

Accounts Payable Turnover Period = $365 / (\text{Cost of Sales} / \text{Average Trade Payable})$

$$\frac{\text{Average Trade Payable for the Last Approved Financial Year (2018)} + \text{Trade Payable for the Previous Approved Financial Year (2017)}}{2} =$$

Working Capital Turnover Period = Cash Conversion Cycle - Accounts Payable Turnover Period

C. Sources of Asset Financing

Leverage Ratio = $(\text{Short-Term Liabilities} + \text{Long-Term Liabilities}) / \text{Total Assets}$

D. Asset – Resource Structure

The Share of Current Assets in Total Assets = $\text{Current Assets} / \text{Total Assets}$

The Share of the Fixed Assets in Total Assets = $\text{Fixed Assets} / \text{Total Assets}$

The Share of Short-Term Liabilities in Total Liabilities = $\text{Short-Term Liabilities} / \text{Total Liabilities}$

The Share of Long-Term Liabilities in Total Liabilities = $\text{Long-Term Liabilities} / \text{Total Liabilities}$

The Share of Shareholders' Equity in Total Liabilities = $\text{Shareholders' Equity} / \text{Total Liabilities}$

E. Profitability Indicators

Profitability of Sales = $\text{Net Period Profit or Loss} / \text{Net Sales}$

Profitability of Activities = $\text{Operating Profit or Loss} / \text{Net Sales}$

Profitability of Shareholders' Equity = $\text{Net Period Profit or Loss} / \text{Equity}$

F. Growth - Regression Indicators

For the following titles, base year's amount is assigned a value of 100 unit, and annual changes are calculated relative to that base year.

Trade Receivables – Net Sales

Trade Receivables – Trade Payables

Current Assets – Short-Term Liabilities

Short-Term Liabilities – Long-Term Liabilities

Inventory – Net Sales

Net Sales – Cost of Sales

Net Sales – Financial Expenses

Formulas For The Businesses that Use Account Summary:

Incomes = Sales for The Period + Other incomes + Wares at the End of the Period

Expenses = Wares at the Beginning of the Period + Wares within the Period + Expenses

Profit & Losses = Incomes-Expenses

Profit = $\text{Incomes-Expenses} > 0$

Losses = $\text{Incomes -Expenses} < 0$

Net Sales = Sales for the period + Other income

Financial Size = Wares at the End of the Period

Expenses			of		Sales			=
Wares	at	the	Beginning	of	the	Period		+
Wares		within	the		Period			+
Wares at the End of the Period								