

ENTREPRENEURSHIP INDICATORS

Experience of TurkStat

Workshop on “Business Demography and Entrepreneurship Statistics” by SESRIC

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Online

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Entrepreneurship and Business Demography Bulletin

- Business Demography is a study where the basic methodology and approaches are determined by EUROSTAT and OECD and with respect to this feature it is internationally comparable through the countries. Business Demography indicators are the main parts of entrepreneurship concept.
- The study basically aims at measuring the dynamics of birth, death and survival of active enterprises. ‘Entrepreneurship and Business Demography Bulletin’ is believed to reveal the demographic structure of enterprises and to contribute to policies towards the problems related to entrepreneurship.
- The indicators in this bulletin are presented for all active enterprises for a reference year which constitutes the Business Demography coverage.

<https://data.tuik.gov.tr/Bulten/Index?p=Entrepreneurship-and-Business-Demography-2022-49391>

Coverage

- The economically active enterprises in a business registers frame for a reference year constitutes the Business Demography coverage.
- Economically active means that the enterprise has turnover or employee in the reference year.
- Investment could be another indicator in the future for determining if the unit is active even though it has not turnover or employee (SBS department working on this variable)
- Units in liquidation are also in the population of active enterprises if they have any turnover or employee

Coverage

- Geographical Scope: Whole Turkey
- Economic Activity Scope: All NACE activities except
 - ❖ *public adm.and defense; compulsory soc. sec. (Section O)*
 - ❖ *Activities of Households (Section T)*
 - ❖ *International Organizations (Section U)*
 - ❖ *Renting privately without turnover (Nace Rev.2 code 6820)*
 - ❖ *“Activities of membership organisations” under sector S (coded under 94)*
- Institutional Sector Coverage:
 - ❖ *S.11 (Non-financial corporations)*
 - ❖ *S.12 (financial corporations)*
 - ❖ *S.14 (Households)*

Methodology

- Demographic indicators (birth, death, etc.) of enterprises derived from Business Registers are calculated according to the Business Demography Manual by Eurostat and OECD.
- SBR is a register system of TurkStat where the businesses contributing to Gross Domestic Product and legally registered by an administrative authority are covered with their identity, location, stratification and demographic variables according to the norms and standards defined by European Commission Regulations and manuals.
- Business Demography: Demographic life of enterprises are analysed in this concept. It is a subset of business registers frame in terms of coverage.

Methodology

- Enterprise: The enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit.
- Being Active: Turnover or average number of employee is greater than zero for a reference period.

Methodology

- Enterprise Birth: Referring to an enterprise active in year t , while it is not active during the year $t-1$ and $t-2$.
- Enterprise Death: Referring to an enterprise active in year t , while it is not active during the year $t+1$ and $t+2$.
- Enterprise Survival: Referring to the enterprises born in year t and having survived to $t+n$.
- High Growth Enterprise: Enterprises with average annualised growth greater than 10% per annum, over a three year period should be considered as high-growth enterprises. Growth can be measured by the number of employees or by turnover. An employment threshold of 10 is applied at the starting year.
- Gazelles: High growth enterprises up to 5 years old

Methodology

- Foundation year: Calculated from date of commencement of the economic activity assigned by Revenue Administration records. The year of commencement of a reactivated enterprise is determined as the oldest registration time of the legal units under the related enterprise.
- Number of persons employed: This value is obtained by adding the annual average number of owners, partners and unpaid family workers and apprentices active in the enterprise to the annual average number of employees.
- Turnover: Total of the sales of goods and services invoiced by the observation unit during the reference period.

Methodology

- Region: The province where the headquarter of enterprise operates is taken into account.
- Headquarter of Enterprise: It is the reporting/administrative unit that can provide information about the enterprise and its local units. In the Business Registers, the headquarter of enterprises is the unit defined as the headquarter in the Revenue Administration registry tables.
- Classifications: Economic activity classification is NACE Rev.2.
- The Technology Levels are as follows:
 - ❖ *High Technology* : 21+ 26+ 30.3
 - ❖ *Medium-High Technology* : 20+ 25.4+ 27+28+29+30-30.1-30.3+32.5
 - ❖ *Medium-Low Technology*:18.2+19+22+23+24+25-25.4+30.1+33
 - ❖ *Low Technology* :10+11+12+13+14+15+16+17+18-18.2+31+32-32.5

Birth Population

- Defining population of active enterprises in year t (population N_t)
- Defining population of active enterprises in t-1, t-2 (N_{t-1} , N_{t-2})
- If active only in N_t and not in N_{t-1} , N_{t-2}
- Correction of errors
 - ✓ *Manual verifications, national methods for the units which changed their legal status*

Death Population

- Defining population of active enterprises in year t (population N_t)
- Defining population of active enterprises in $t+1$, $t+2$ (N_{t+1} , N_{t+2})
- If active only in N_t and not in N_{t+1} , N_{t+2}
- Correction of errors
 - ❖ *Manual verifications, national methods for the units which changed their legal status*

Survival Population

- Defining population of active enterprises between the year t and $t+n$ (population N_t)
 - n is the number of years for survival
- If active in all consecutive years, continuity of enterprises
- Correction of errors
 - ❖ *Manual verifications, national methods for the units which changed their legal status*

Calculations

- Number of Enterprises: Number of active enterprises within the scope of Business Demography concept.
- Birth Rate: Corresponds to the number of births of enterprises as a percentage of the population of enterprises.
- Employment Creation by Births: Measured as the employment share of enterprise births. It is calculated as the number of persons employed in the reference period t in enterprises born in t divided by the number of persons employed in t in the population of enterprises.

Calculations

- Death Rate: Corresponds to the number of deaths of enterprises as a percentage of the population of enterprises.
- Employment Destruction by Deaths: Measured as the employment share of enterprise deaths. It is calculated as the number of persons employed in the reference period t in exiting enterprises divided by the number of persons employed in t in the population of enterprises.

Calculations

- **Survival Rate:** The 1-year survival rate for reference year t is calculated as the number of 1-year survival of enterprises newly born in t as a percentage of all enterprises born for the first time in year t.
- **Employment Share of Surviving Enterprises:** Employment share of n-year-surviving enterprises is measured as the employment share at birth of surviving enterprises in the year of birth t is divided by the total number of persons employed by enterprises born in year t.
- **Year of Commencement:** Calculated from date of commencement of the economic activity assigned by Revenue Administration records.

Calculations

- Distribution of birth and employment creations by sectors: Distribution of birth and employment creations by NACE Rev.2 sectors.
- Share of birth and employment creations within sector: Share of birth and employment creations within NACE Rev.2 sectors.
- Distribution of deaths and employment destructions by sectors: Distribution of deaths and employment destructions by NACE Rev.2 sectors.
- Share of death and employment destructions within the sector: Share of death and employment destructions within NACE Rev.2 sectors.

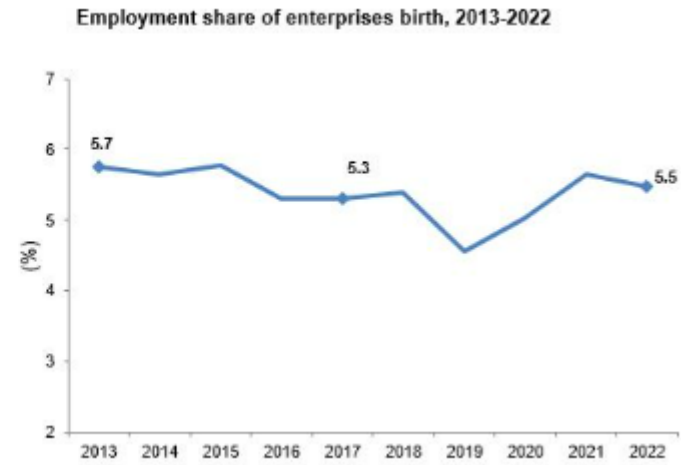
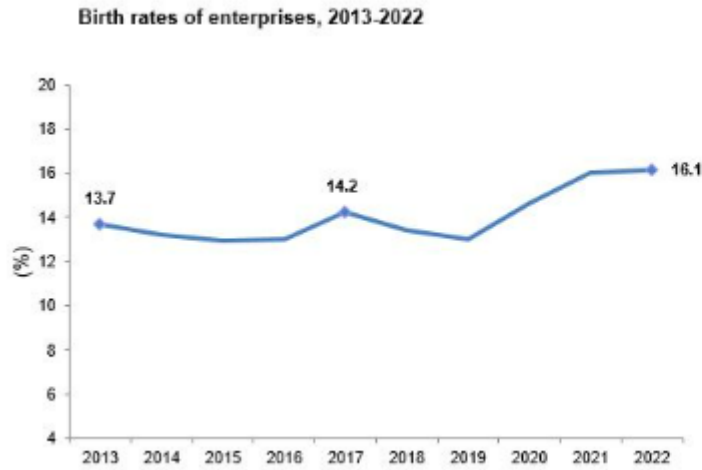
Matching Steps

- No matching steps is applied because it makes very little difference on the indicators.
- However, if administrative data quality enhances in time, demographic events is planned to be defined in the database and eliminated from the related business demography populations for the indicators of higher quality.

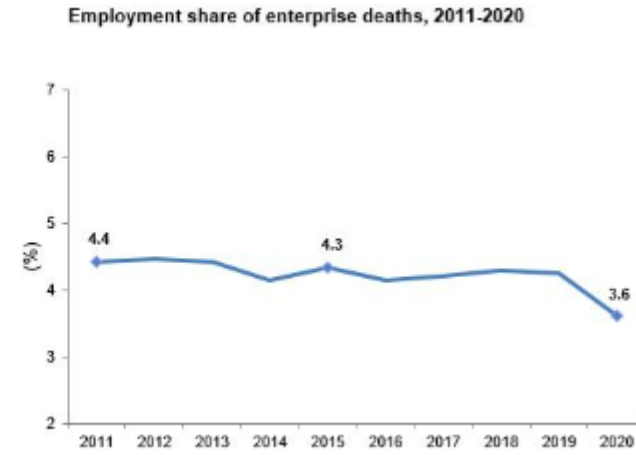
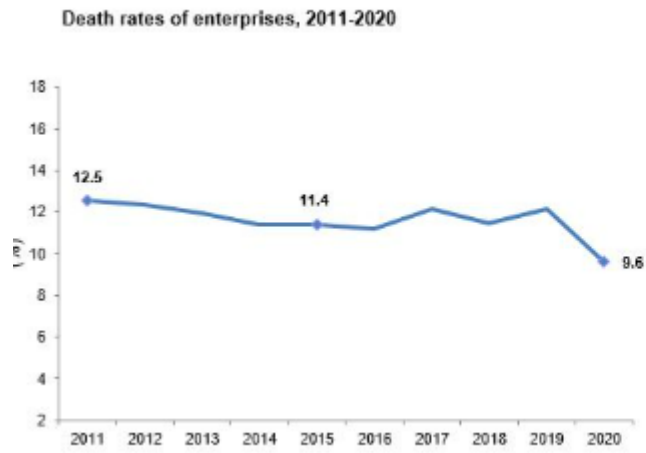
Tables Published

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Some Indicators



Some Indicators



Some Indicators

Survival indicators of enterprises, 2017-2021

	Year of birth					(%)
	2017	2018	2019	2020	2021	
1 year survival	80.2	81.3	80.6	84.1	75.3	
2 year survival	64.1	64.0	66.9	68.2		
3 year survival	53.0	55.3	58.2			
4 year survival	46.0	49.2				
5 year survival	41.4					

Harmonized Data Collection

- CSV files filled and delivered to Eurostat
- Files containing annual demographic statistics
 - ❖ *broken down by NACE activity and legal form*
 - ❖ *broken down by NACE activity and employee size class*
 - ❖ *not yet region*
- Confidentiality rules are applied (primary and secondary)

https://ec.europa.eu/eurostat/databrowser/view/bd_9ac_l_form_r2/default/table?lang=en&category=bsd.bd.bd_h

THANK YOU