BUSINESS DEMOGRAPHY

"Training Course on Entrepreneurship Statistics"

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CONTENT

• Why is Business Demography data needed?

• Data Source, Aim, Legal Base

• Definitions
  ❖ Business Demography
  ❖ Enterprise, Demographic Events
  ❖ Local Unit, Demographic Events
WHY IS BD DATA NEEDED?

• Coherent and comparable data across the members of the European Statistical System

• Promoting entrepreneurship is instrument for improving competitiveness thus generating economic growth and job opportunities

• Formation of new enterprises and the growth of SMEs are essential for job creation
WHY IS BD DATA NEEDED?

Ultimate objective

- Dynamic knowledge based economy, sustainable growth, more and better jobs

- Economic growth and productivity
  - Support for entrepreneurship and entrepreneurial dynamism
RELATION TO BUSINESS REGISTERS

- Births & Deaths
- Survival
- High Growth & Gazelles
- Entry & Exit
- Etc.

- Analyzed under Business Demography
- Data source is Business Registers
AIM

• Coherent and comparable data across the members of the European Statistical System

• Promoting entrepreneurship
  - Improving competitiveness
  - Generating economic growth and job opportunities
  - Dynamic knowledge based economy
  - Sustainable growth, more and better jobs, economic growth and productivity

• Observation of enterprise births, deaths, survivals over time
  - Impact of these “demographic events” on employment
AIM

Data answering questions like:

- How many enterprises are born every year compared with the total population of active enterprises?

- How many of these enterprises survive for 1...5 years?

- How many people are employed in these newly born enterprises?

- Etc.
LEGAL BASE

• Eurostat’s Structural Business Statistics data transmission, Annex IX
  ❖ Structure of the datafile to be delivered
  ❖ Legal forms, nace activity groups, size classes

  ❖ the definitions of characteristics
  ❖ the technical format for the transmission of data

  ❖ Practical definitions
  ❖ Operational rules for calculating the indicators
DEFINITIONS

What is Business Demography?

It covers events,

- like births and other creations of units, deaths and other cessations of units, and their ratio to the business population

- follow-up of units in time dimension, thus gaining information on their survival or discontinuity.

- development in time dimension according to certain characteristics like size, thus gaining information on the growth of units, or a cohort of units, by type of activity

*Definition in Eurostat-OECD Manual on Business Demography*
DEMOGRAPHIC EVENTS

- Birth
- Death
- Survival
- Reactivation
- Change of Ownership
- Merge
- Takeover
- Breakup
- Splitup
DEMOGRAPHIC EVENTS

Criteria for identification of demographic events

• Continuity of production factors

• In practice: controlling legal unit, economic activity, location
DEMEOGRAPHIC EVENTS – WHAT UNITS?

Enterprise

- Birth, death, survival
- Reactivation
- Change of ownership
- Merger, take-over, split-off, break-up...
- Transfer to another enterprise group

- Enterprise in Turkish Business Demography experience
DEMOPROGRAPHIC EVENTS – WHAT UNITS?

• Local unit
  - Birth, death
  - Transfer to another enterprise

• Enterprise group (not considered here)
  - Birth, death
  - Merger, take-over, split-off, break-up...
  - Restructuring within a group
  - Complex restructuring with > 1 group
ENTERPRISE

Definition of enterprise*

• the smallest combination of legal units

• an organisational unit producing goods or services

• benefiting from a certain degree of autonomy in decision-making, especially for the allocation of its current resources

• Carrying out one or more activities at one or more locations.

• An enterprise may be a sole legal unit

*Council Regulation on Statistical Units 696/93
• Births do not include entries into the population due to: mergers, break-ups, split-off or restructuring of a set of enterprises.

• It does not include entries into a sub-population resulting only from a change of activity
ENTERPRISE BIRTH

- Creation of new combination of production factors, i.e. new enterprise starts ‘from scratch’

- Unit must be active (employment or turnover)

- Change in BR: creation of ID number

- Exclusions:
  - Mergers, break-ups, split-offs, restructuring of enterprise group
  - Change of activity or legal form
  - Reactivation of dormant units within 2 years
ENTERPRISE BIRTH

- Subset of active new enterprises registered in the BR

  all enterprises

  ≥ active enterprises

  ≥ active and new enterprises

  ≥ enterprise births
ENTERPRISE DEATH

- Deaths do not include exits from the population due to mergers, take-overs, breakups and restructuring of a set of enterprises.

- It does not include exits from a sub-population resulting only from a change of activity.
ENTERPRISE DEATH

• Dissolution of production factors, enterprise really closes down.

• No more activity (employment and turnover) for two years. A reactivation within 2 years is not a death and birth.

• Change in BR: “deletion” of ID number

• Exclusions
  ❖ mergers, break-ups, take-overs, restructuring of enterprise group
  ❖ change of activity, change of legal form
ENTERPRISE DEATH

• Subset of active enterprises registered in the BR

all enterprises

≥ active enterprises

≥ active in reference year and dormant at the two consecutive years

≥ enterprise death
ENTERPRISE SURVIVAL

- An enterprise born in year t and if it is still active in terms of turnover and/or employment in any part of year t+1, it is considered to have survived to t+1.

- An enterprise is also considered to have survived if the linked legal unit(s) have ceased to be active, but their activity has been taken over by a new legal unit set up specifically to take over the factors of production of that enterprise (survival by take-over).
Enterprise events without birth/death

Change of ownership – One to one takeover
Enterprise events without birth/death

- Restructuring within an enterprise
  - creation or deletion of a legal unit
  - change of enterprise group
Enterprise events without birth/death

• Merger - New enterprise is not a birth
  ❖ Cessation of units but no dissolution of production factors
  ❖ Two or more enterprises integrate, all of them lose their initial identity
  ❖ No death, prod. factors continue, more than one entç involved in event
  ❖ One new ID number, two or more “deleted”
Enterprise events without birth/death

- Takeover - Cessation of units, but no dissolution of production factors
  - No death
  - One of the enterprises keeps its identity (and ID number) and integrates the other(s), whose ID number is “deleted”.
Enterprise events without birth/death

- Break-up - creation of units, but not of production factors
  - Break-up (counterpart to merger)
  - One enterprise disappears (ID number “deleted”)
  - Two or more enterprises emerge from it (new ID numbers)
  - No births, no death
Enterprise events without birth/death

- Split-off (counterpart to take-over)
  - creation of units, but not of production factors
  - Split-off (counterpart to take-over)
  - One enterprise continues to exist (keeps ID number)
  - One or more enterprises emerge from it (new ID numbers)
  - No birth
Enterprise – more complex events

• **Joint venture**: Two or more enterprises commit resources to a new one on a temporary basis. (new ID number)

• **Restructuring within an enterprise group**: Creation / cessation of enterprises within a group

• **Complex restructuring**: Enterprises or parts of them move between enterprise groups
## SUMMARY

<table>
<thead>
<tr>
<th>Event</th>
<th>Real, observable world</th>
<th>Business register</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of enterprises before the event</td>
<td>Number of enterprises after the event</td>
</tr>
<tr>
<td>Birth</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Death</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Change of ownership</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Merger</td>
<td>n</td>
<td>1</td>
</tr>
<tr>
<td>Take-over</td>
<td>n</td>
<td>1</td>
</tr>
<tr>
<td>Break-up</td>
<td>1</td>
<td>n</td>
</tr>
<tr>
<td>Split-off</td>
<td>1</td>
<td>n</td>
</tr>
<tr>
<td>Creation of a joint venture</td>
<td>n</td>
<td>n+1</td>
</tr>
<tr>
<td>Cessation of a joint venture</td>
<td>n</td>
<td>n-1</td>
</tr>
<tr>
<td>Restructuring within an enterprise</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Restructuring within an eg</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Change of group</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Complex restructuring</td>
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<td>n</td>
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</table>
## ENTERPRISE-CONTINUITY RULES

<table>
<thead>
<tr>
<th>Change of controlling legal unit</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
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</thead>
<tbody>
<tr>
<td>Change of principal activity</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Change of main location</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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</tr>
<tr>
<td><strong>Continuity of Enterprise?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No, but*</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

* exceptional case: an unincorporated business simultaneously moves to a new location and changes its legal form to become incorporated => continuation.
ENTERPRISE - REACTIVATION

Special case in terms of continuity

If reactivated within 24 months: enterprise continues

If reactivated after 24 months: death followed by a birth
LOCAL UNIT

Definition of local unit:

• The local unit is an enterprise or part thereof
  ❖ A factory, office, mine or depot

• Situated in a geographically identified place.

• Economic activity is carried out for one and the same enterprise

*Council Regulation on Statistical Units 696/93
LOCAL UNIT BIRTH&DEATH

Birth
Creation of a combination of production factors at a certain geographical location.

Death
Dissolution of the combination of production factors at a location.
# LOCAL UNIT-CONTINUITY RULES

<table>
<thead>
<tr>
<th>Change of enterprise link</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>No</th>
<th>Yes</th>
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</thead>
<tbody>
<tr>
<td>Change of principal activity</td>
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<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Change of employment &gt; 50%</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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</tr>
<tr>
<td>Continuity of local unit?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

=> Local unit continues if no or 1 factor changes; it dies if 2 or 3 factors change.
Continuity of local unit that moves

Move over a short distance
  If one or more of the three factors change as well, the unit loses its identity

Move over a long distance
  The local unit loses its identity

What is a short distance?
  Within a region
  National conditions
LOCAL UNIT REACTIVATION

Special case in terms of continuity

If reactivated within 24 months: local unit continues

If reactivated after 24 months: death followed by a birth

=> Same rule as for enterprise reactivation
SERIES (Annex IX):

9A: data collection broken down by NACE activity and *legal form*

9B: data collection broken down by NACE activity and *employee size class*

9C: estimated death data broken down by NACE activity and *legal form*

9D: estimated death data broken down by NACE activity and *employee size class*
Thank you