Integrating trade register data in the Statistical Business Register – recent developments in Germany

Meeting of the Group of Experts on Business Registers
26 – 29 September 2022

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Sources for maintaining the German Business Register

Current sources

Main sources:

» monthly data from the Federal Employment Agency
» monthly data from the financial administration

Additional sources:

» Chamber of Crafts
» Deutsche Bundesbank
» commercial data provider (enterprise groups)
» information from surveys
» ...
Sources for maintaining the German Business Register

In development

- Federal directory of physicians / federal directory of dentists
  - Legal framework: change to Volume V of the Social Insurance Code (SGB V) in 2021
  - Project in initial conception stage
- Webscraping to identify and link firm websites
  - Regional office of Hesse has developed a webscraping tool to be integrated with the BR
  - Project in initial conception stage
- Data from the trade register
  - Legal framework: Statistics Register Act (StatRegG)
  - Project due to be implemented by 2023
Integrating data from the trade register

Background

4 statistical offices of the Länder (federal states) already process this data.

In 2019 a working group began work on a concept to be implemented across all regional offices.

The challenge: developing a harmonized process for use of the data which allows for heterogenous (personnel) resources across offices.

Solution: differentiate between compulsory (minimum) processing of annual index data and optional (on-top) processing of monthly notifications.
Data from the trade register

Index data

Index data for all firms in German trade register, register of cooperatives and register of partnerships

Variables: Firm name, address, legal form, status (current/closed), register number, register section, registration court

<table>
<thead>
<tr>
<th>Register</th>
<th>Current registrations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Register, Section A</td>
<td>466,339</td>
</tr>
<tr>
<td>Trade Register, Section B</td>
<td>1,464,443</td>
</tr>
<tr>
<td>Register of cooperatives</td>
<td>9,110</td>
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Data from the trade register

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» unique identifier of particular registration (≈ unique firm identifier)

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Data from the trade register

Notifications

Short texts notifying of new firm registrations, firm closures, changes in firm information etc.


16.02.2022, Registration court Leipzig HRB 34483  
(translated from German)

Dataset contains notification text, date of notification plus identifier (register number, register section, registration court)
Data from the trade register

Coding of notifications

Notification texts are searched for certain key words that indicate a certain relevant event


16.02.2022, Registration court Leipzig HRB 34483 (translated from German)

→ here: „change of business address“
## Data from the trade register

### Relevant events (excerpt)

<table>
<thead>
<tr>
<th>Event (translated from German)</th>
<th>Notifications *</th>
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<tbody>
<tr>
<td>Registration ended</td>
<td>85,173</td>
</tr>
<tr>
<td>Change of business address</td>
<td>46,457</td>
</tr>
<tr>
<td>Change in registered office</td>
<td>58,381</td>
</tr>
<tr>
<td>Change to firm</td>
<td>32,829</td>
</tr>
<tr>
<td>Change to corporate purpose</td>
<td>29,127</td>
</tr>
<tr>
<td>Merger</td>
<td>16,969</td>
</tr>
<tr>
<td>Notification of deletion</td>
<td>8,498</td>
</tr>
</tbody>
</table>

* All notifications in time period February – December 2021
Use of trade register for maintaining the BR

Benefits

Reliable source for maintaining core information (name, address, legal form) of legal units

Once linkage established, core information can be updated automatically

Facilitates maintenance of register number, register section, registration court

» Basis for legal entity identifier number (LEID) in EuroGroups Register

» Widely used and publicly available identifier

» Allows for linkages between Statistical Business Register and other data sources
Use of trade register for maintaining the BR

Benefits

Processing monthly notifications allows for timely identification of changes to legal units (closures, mergers, change of address, change of name, etc.)

» Increased accuracy and quality of information in the Statistical Business Register

» Reduction in non-response rates for surveys
Use of trade register for maintaining the BR

Challenges

Relevant events must be extracted from unstructured text

» 146 registration courts, no standardised reporting of notifications
  » „change of address“ / „new address“ / „address formerly X, now Y“ / „Firm Z has moved“
  » All possible variants must be added to the programming

» Notification often contains information on multiple events (e.g. change of address plus change of name)
  » All events must be correctly extracted and coded
  » Multiple parallel events must be prioritised
Use of trade register for maintaining the BR

Challenges

Register number, register section, registration court is a unique identifier of current registration in trade register, not of legal unit

» Not a unique identifier for past registrations
  » Registration courts re-issue numbers from closed registrations to new firms
» At times incompatible with rules for discontinuity of legal units in the Statistical Business Register
Use of trade register for maintaining the BR

Challenges

Example 1:
Firm X is registered in Wiesbaden (→ Wiesbaden HRB 12345) then moves to Frankfurt and is required to register there (→ Frankfurt am Main HRB 98765)

» From point of view of the index data this is a new registration in the trade register

» From point of view of the BR, this is the same legal unit
Use of trade register for maintaining the BR

Challenges

Example 1:
Firm X is registered in Wiesbaden (→ Wiesbaden HRB 12345) then moves to Frankfurt and is required to register there (→ Frankfurt am Main HRB 98765)

» From point of view of the index data this is a new registration in the trade register
» From point of view of the BR, this is the same legal unit

Possible solution:
These cases could be identified using information about previous / subsequent registration

» This information is only available in notifications
   » The information must first be extracted to identify link between two registrations
Use of trade register for maintaining the BR

Challenges

Example 2:
Registration court in Wiesbaden reuses the number for a newly registered firm Firm Y in the following year
Firm X in t1: Wiesbaden HRB 12345
Firm Y in t2: Wiesbaden HRB 12345
» Trade register information for Firm Y incorrectly linked to Firm X in the SB in t2
Use of trade register for maintaining the BR

Challenges

Example 2:
Registration court in Wiesbaden reuses the number for a newly registered firm Firm Y in the following year
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Firm Y in t2: Wiesbaden HRB 12345

Trade register information for Firm Y incorrectly linked to Firm X in the SB in t2

Solution:
This case must be marked for manual processing instead of automatic updating

Using information in index data (variable 'current' or 'closed')
Plausibility tests based on differences in firm name and address
Use of trade register for maintaining the BR

Future developments

Establishing linkage between trade register data and the Statistical Business Register means other channels for maintenance can be exploited in the future

» Notifications of (changes in) firm activities
  » Facilitates NACE (re-)classifications

» Facilitating linkages between legal units and their websites
  » Telemedia law requires German firms to include their trade register registration on their website
  » Opens possibility for maintaining the Statistical Business Unit through information gained from web scraping
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