Beispiele wirtschaftswissenschaftlicher Forschung unter Verwendung der Ressourcen der SuUB Bremen

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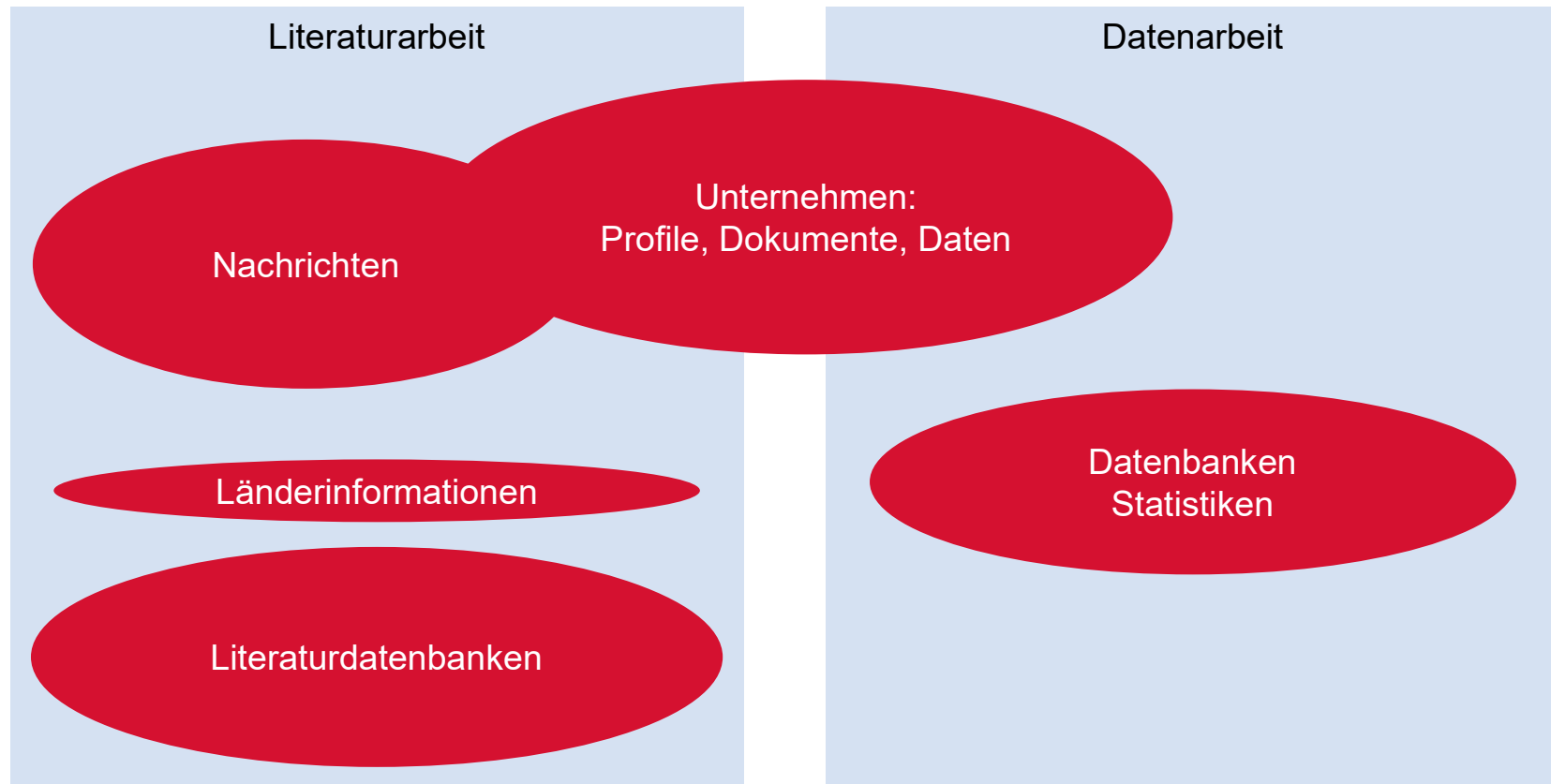
Agenda

- ## Relevanz von Ressourcen im Forschungsprozess

  - Systematik

- ## Ressourcen

  - Literaturarbeit
  - Datenarbeit

- ## Anwendungsbeispiele

  - Datensatzaufbau: "Development of a Dataset of Multinational Enterprises and AI Patents (2011-2019)"
  - Auswertung Datensatz: "Does AI make or break technological pathdependency of multinational enterprises?"
  - Auswertung Textkorpus: "Using Topic Modelling in Innovation Studies"

- ## F&A

Relevanz von Ressourcen im Forschungsprozess

- **Unabdinglich für empirische Arbeiten**
  - Genaue Kenntnis der methodischen Literatur
  - Zugang zu "den besten" Daten -> Qualität und Relevanz der Forschung
  - Codes für Programme und Methoden als entscheidende Ressource
- **Relevanz für theoretische Arbeiten**
  - Genaue Kenntnis der Literatur

Relevanz von Ressourcen im Forschungsprozess

Systematik

Ressourcen für die Literaturarbeit

- Nachrichten und Unternehmensprofile
  - weltweite Nachrichten
  - Quellen von Fachzeitschrift bis Tageszeitung
  - Unterschiedliche Qualität der Unternehmensdaten
  - u.a.: Factiva, NexisUni, Wiso-Net
- Literaturdatenbanken
  - Aktuelle wissenschaftliche Literatur: u.a. Web of Science
  - Historische Quellen: Making of the Modern World, China: Trade, Politics & Culture
- Länderinformationen
  - EIU-Country Reports Archive
- Gesetzestexte
  - aktuelle Gesetzen und Kommentare
  - u.a.: Beck Online, Stotax

Ressourcen für die Datenarbeit

- Unternehmensdatenbanken
  - Geprüfte Daten
  - Unterschiedlich aktuell
  - Verschiedene Module (Finanzmarktdaten, Patente)
  - u.a. ORBIS, Compustat, Refinitiv Workspace/Eikon
- Sonstige
  - u.a. Statista, WIIW FDI Database, EHI Handelsdaten
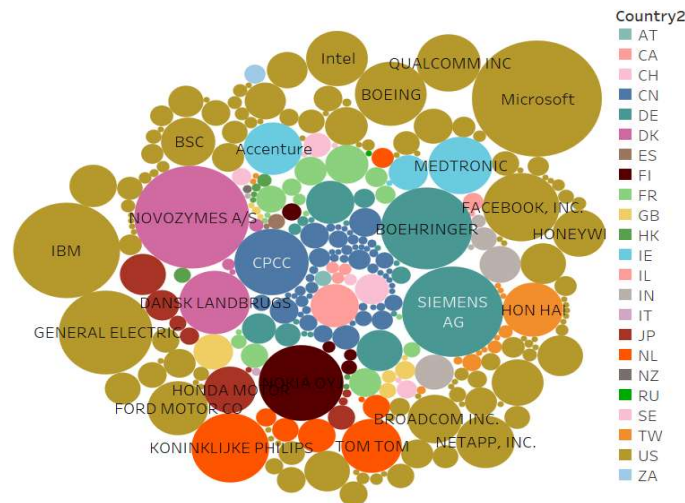
Datensatzaufbau

Felix Lüders and Matheus E. Leusin: "Development of a Dataset of Multinational Enterprises and AI Patents (2011-2019)"

- Goal: panel data of MNEs including subsidiaries and AI patents
  - Requires consolidated data
  - Requires database covering certain period
- Orbis + Orbis modules
  - Orbis: current ownership structure
  - Zephyr: M&A-Deals
  - IP: Patents
- Contribution
  - Panel data depicts dynamic ownership structure
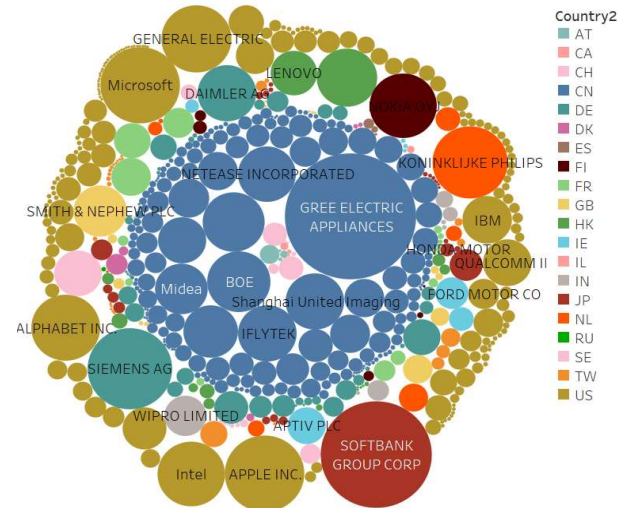 - Code + data used by research groups

Datensatzaufbau

- Final dataset
  - MNEs: subsidiaries, global ultimate owners
  - Characteristics: level of firm, industry, multi-nationality, country
  - Patents: owner, applicant, priority date, description
- Patent applications 2011 and 2019

Auswertung Datensatz

Matheus E. Leusin and Björn Jindra: "Does AI make or break technological pathdependency of multinational enterprises?"

- Question: How does AI affect the knowledge-relatedness of MNEs inventions?
- Data
  - Panel data structure: separate time from treatment effect
  - Link between patents and companies required
- Method:
  1. Matching: number of patents per year, age of company, NACE code, size class
  2. DiD: estimate treatment effect of AI adoption
- Findings
  - AI techniques have positive and significant effect on knowledge-relatedness
  - AI adoption likely to reinforce existing specialisation advantages, path-dependency and incremental innovation

Auswertung Textkorpus

Jessica Birkholz, Jutta Günther and Mariia Shkolnykova: "Using Topic Modelling in Innovation Studies"

- Questions:
  - (1) What innovation-related topics appeared in the news agenda during the first phase of the COVID-19 pandemic and how did these topics evolve over time?
  - (2) What actors were prominently present in the reporting about innovation activities during the first months of the pandemic?
- Data requirement
  - Timely: traditional sources not applicable
  - Factiva
  - Text base: 143 articles, 91 "before" and 52 "during"
- Method: topic modelling
  - Increasingly used in economic analyses

Auswertung Textkorpus

- Results:
  - Political decision-makers + actors from research and education: all topics
  - Large companies: new ideas, digitization, future orientation
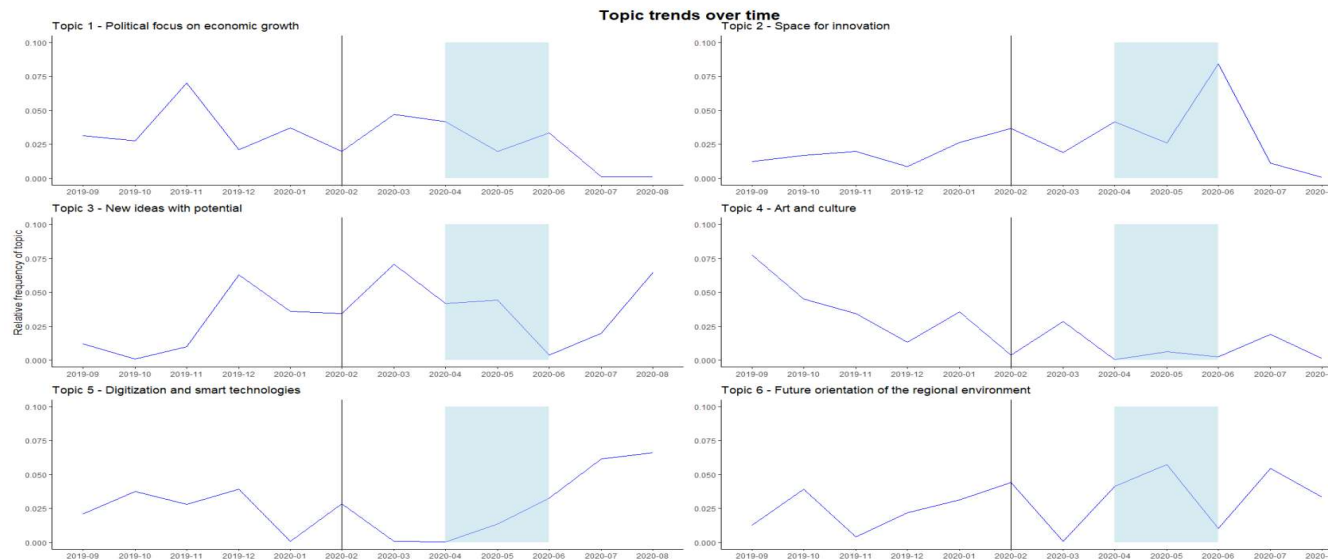 - SMEs: digitization

Figure 6: Topic trends over time

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Thank you for your attention!

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