ALGORITHM TO IDENTIFY BUSINESS ANGELS USING A FIRM SURVEY AND A LARGE SCALE FIRM DATA BASE FOR GERMANY

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DATA BASE

❖ IAB/ZEW Start-up Panel (until 2016: KfW/ZEW Start-up Panel): Firm survey of young firms (up to seven years old)
  – Telephone-interviews of 5,000-6,000 firms in each year
  – Focus on Hightech-Start-ups

❖ Mannheim Enterprise Panel (MUP) (in co-operation with the credit-rating agency Creditreform): Firm data of Germany’s firm population
  – 3,000,000 active firms
  – 5,500,000 closed firms
  – Longitudinal data of owner structure since 1999
IDENTIFICATION OF PRIVATE INVESTORS IN THE MUP

Identification of investors of young corporate firms (up to ten years old) in the large scale firm data base MUP

- Equity investments of persons who are not involved in the management
- Equity share ≤ 25% (minority stakeholders)
- Excluding persons who are directly related to the firm’s owners (spouses, children, parents)
- Further family members and friends cannot be excluded (these persons cannot be considered as professional investors)

➢ result: a broad group of investors, which includes passive occasionally investors, professional passive investors and Business Angels
70% of the investments are realized in the year of foundation.
Survey 2013 of the Mannheim Start-up Panel

Identification due to investments:

- *Investments in the start-up by a private investor (loans or equity capital) (but not Venture Capital Companies)*
  - Identification of investors

- Identification due to the type of investment:
  *Active investors, who are equity shareholders, and hence sharing in losses and in profits*
  - Identification of Business Angels
START-UPS RECEIVING INVESTMENTS FROM PRIVATE INVESTORS AND VC-COMPANIES: SHARE OF POPULATION SIZE

Foundation years 2009-2012

Source: KfW/ZEW Start-up Panel 2013, values weighted by population weights
ESTIMATION OF THE NUMBERS OF BUSINESS ANGELS

Estimation procedure for the foundation cohorts 2009-2012:

- Estimation of the number of start-ups financed by Business Angels:
  KfW/ZEW Start-up Panel (see above)

- Estimation of the number of investments:
  KfW/ZEW Start-up Panel

- Analysis of the owner structure of interviewed firms with Business Angel investments:
  Mannheim Enterprise Panel

- Identification of further equity investments of the identified Business Angels within the foundation cohort of 2009-2012: → 2,5 pro BA:
  Mannheim Enterprise Panel

- Assumptions regarding BA investments which are not visible in the MUP:
  - Lower Margin: identified BAs also engage in form of invisible investments
  - Upper Margin: identified BAs only engage in form of visible investments

  own calculations
RESULTANT NUMBER OF BUSINESS ANGELS

Results weighted by population weights:
In 2013, were engaged in the firms of the foundation cohorts 2009-2012:

- Business Angels (equity capital): between 6,300 and 9,100
- (Equity-)Investors altogether (acc. to MUP, see above): 14,000
OUTLOOK

What comes next?

- upcoming 2019 Start-up Panel contains questionblock on Business Angels
- investigate recent dynamics in the German Business Angel market
- ... impact of policy measures (INVEST)