Proposed Empirical Strategy and Definitions
Work for Week 34

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1 Proposed definitions

Number of hires via announced openings

- Ideally:

$$H_A(i,t) = \begin{cases} H(i,t) & \text{if } H(i,t) < O_A(I_t = 0, I_{t-1} = 1) \\ O_A(I_t = 1, I_{t-1} = 0) & \text{if } H(i,I_t) > O_A(I_t = 1, I_{t-1} = 0) \end{cases} \tag{1}$$

- Maybe more doable:

$$H_A(i,t) = \begin{cases} H(i,t) & \text{if } H(i,t) < O_a(i,t) \\ O_a(i,t) & \text{if } H(i,t) > O_a(i,t) \end{cases} \tag{2}$$

Number of hires via unannounced openings

$$H_U(i,t) = H(i,t) - H_A(i,t) \tag{3}$$

Stock of announced job openings

$$O_a(i,t) := \text{Observed} \tag{4}$$

Stock of unannounced job openings

$$O(i,t) = H_A(i,t) \tag{5}$$

2 Descriptives: Pure

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3 Descriptives: Tabulation

- Hires tabulated on
  1. Time
  2. All given background variables.
- Announced positions tabulated on
  1. Time
  2. All given background variables.
- Stocks of announced and unannounced job openings should be tabulated on *firm* information. Firm information comes from IDFI, which cannot be matched. So we have to somehow transform workplace information (in IDAS) to firm information.
  - Sector based on workplace (BRANCHE03)
  - Firm size (has to be constructed)
  - Growth of firm size.
  - Average hourlt wage in firm.
- Hires should be tabulated on person and job information. However, due to the nature of the data not all hires can be traced out on announced and unannounced openings. Thus, when tabulating on person and job information we will restrict us to the sample of hires where all hires are either done via announced or unannounced openings.
  - Age
  - Sex
  - Wage decile
  - Sector
  - Position

4 Descriptives: Figures

- Histograms:
  1. $H_A(i,t)$ on monthly basis. Aggregate for all years and for each year seperately.
  2. $H_U(i,t)$ on monthly basis. Aggregate for all years and for each year seperately.
- Figures

1. $(t, \sum_i H_A(i,t))$
2. $(t, \sum_i H_U(i,t))$
3. $(t, \sum_i O_A(i,t))$
4. $(t, \sum_i O_U(i,t))$
5. (t, share of hires via announced openings).
6. (t, share of hires via unannounced openings).
7. Actual Beveridge curve $(u, O_a + O_u)$.
8. Perceived Beveridge curve (u, O_a).

5 Analysis

- Estimate matching functions for annonuced and unannounced openings.
- Use calibrated model to rationalise shifts in share of announced openings.