

# The natural-level variable

- **Natural level of employment = full employment level ( $N^*$ )**
  - **Definition:** the level of *equilibrium employment under flexible price/wage (no nominal frictions)*
  - Given real and institutional factors, the equilibrium level of employment where “Labor demand” is equal to “labor supply”
- **Natural level of unemployment rate ( $u^n$ );**
  - **Definition:**  $\%U = (LF - N^* / LF)$
  - Always positive; due to search friction / labor reallocation / market structure
- **Natural level of output = Potential output = Full-employment output ( $Y^n$ )**
  - **Definition:** The level of output corresponding to the natural level of employment ( $N^*$ )

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- The concepts defined so far implicitly assume some ideal conditions
  - Flexible price/wage
  - If there were a wage contracting, the contract would be written in **“real-wage” contracting**, or **the nominal contract with full-indexation**
- None of these are the case in the reality

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- More realistic/practical concept is to assume that workers signed the nominal wage contract with **a given level of price expectation**.
- The natural-level ones should then be defined in the similar way, i.e. expectation-based (expectation-driven) equilibrium.

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- **Natural level of employment = full employment level ( $N^*$ )**
  - **Definition:** the level of “*steady/stationary*” *equilibrium employment*
  - **Steady / Stationary:** *no adjustment further required in the labor market*
  - **Notion:** *Equilibrium employment when  $P_t = P_t^e$  (self-correctly guessed expectation) → If this is not true, workers will realize the problem on their own, causing some self-correcting adjustments in the labor market!*