INTERMEDIATE MACROECONOMICS

MATCHING MODEL OF UNEMPLOYMENT

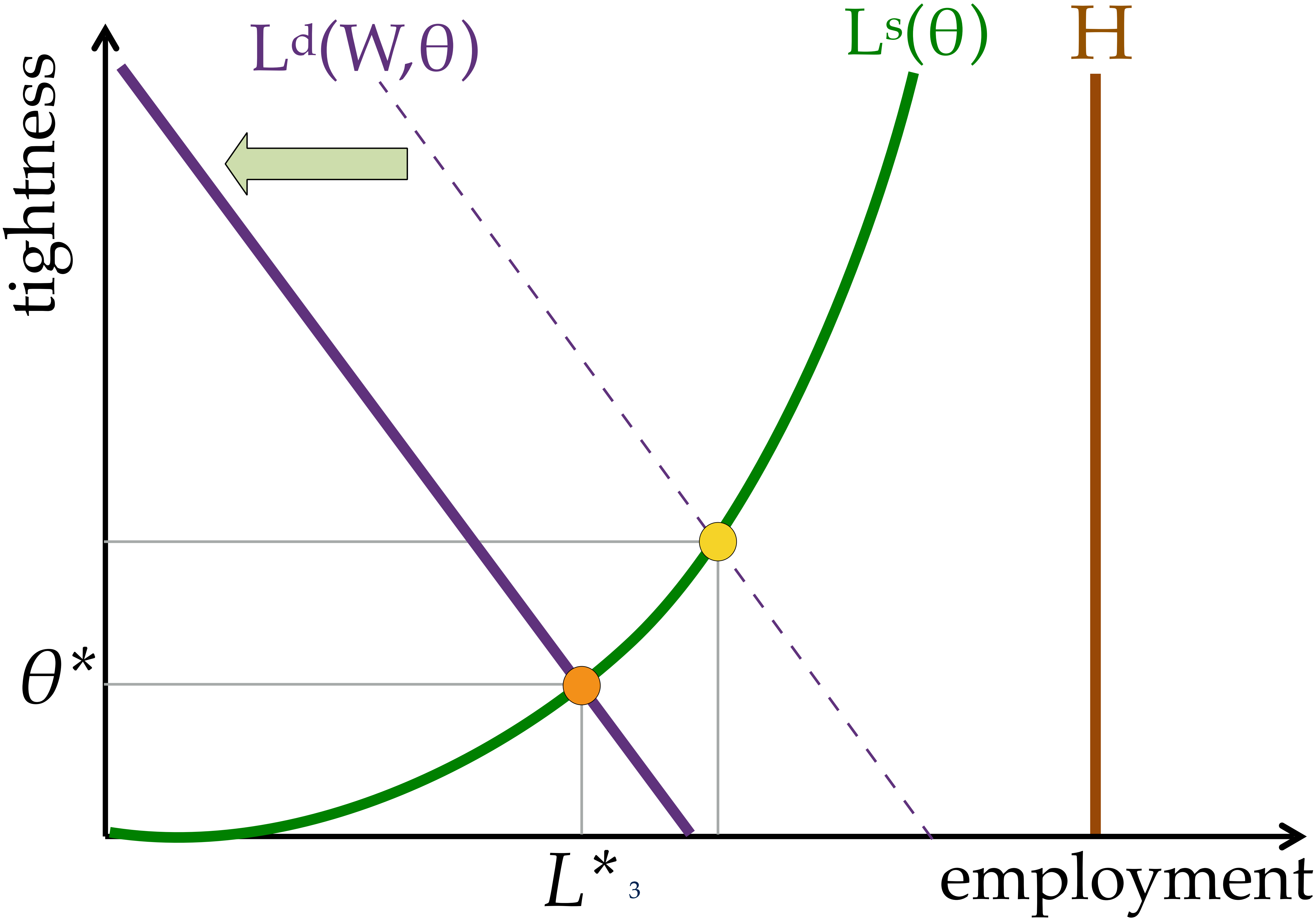
19. LABOR-MARKET POLICIES

Pascal Michaillat
pascalmichaillat.org/c4/

THE MINIMUM WAGE

- assume that all workers are paid at the minimum wage
- an increase in the minimum wage is an increase in the wage W
- this reduces the labor demand
  - because $L^d(\theta,W)$ is decreasing in W
- but it does not affect the labor supply
  - because $L^s(\theta)$ is independent of W

INCREASE IN MINIMUM WAGE



INCREASE IN MINIMUM WAGE

- a higher minimum wage leads to
  - lower labor market tightness
  - higher unemployment rate
  - lower employment
- so the policy seems costly for those who remain jobless
- but we neglect efficiency-wage effects: higher minimum wage —> higher productivity —> higher labor demand
- we also neglect aggregate-demand effects: higher minimum wage —> higher disposable income —> higher spending —> higher sales for firms —> higher labor demand

UNEMPLOYMENT INSURANCE (UI)

- eligible workers:
  - have worked and earned sufficiently (depends on state)
  - are unemployed through no fault of their own
- unemployment benefits replace 50% of past wage
  - if wage is \$2000, UI benefits are $0.5 \times \$2000 = \$1000$ per month
  - monthly UI benefits are capped (depends on state)

UI DURATION

- in normal times, workers receive UI benefits for 26 weeks
- and UI duration is automatically increased in recessions:
  - state unemployment > 6.5%: duration goes up to 39 weeks
  - state unemployment > 8%: duration goes up to 46 weeks
  - in 2009, stimulus package (ARRA) extended duration to 99 weeks in states with unemployment > 8.5%

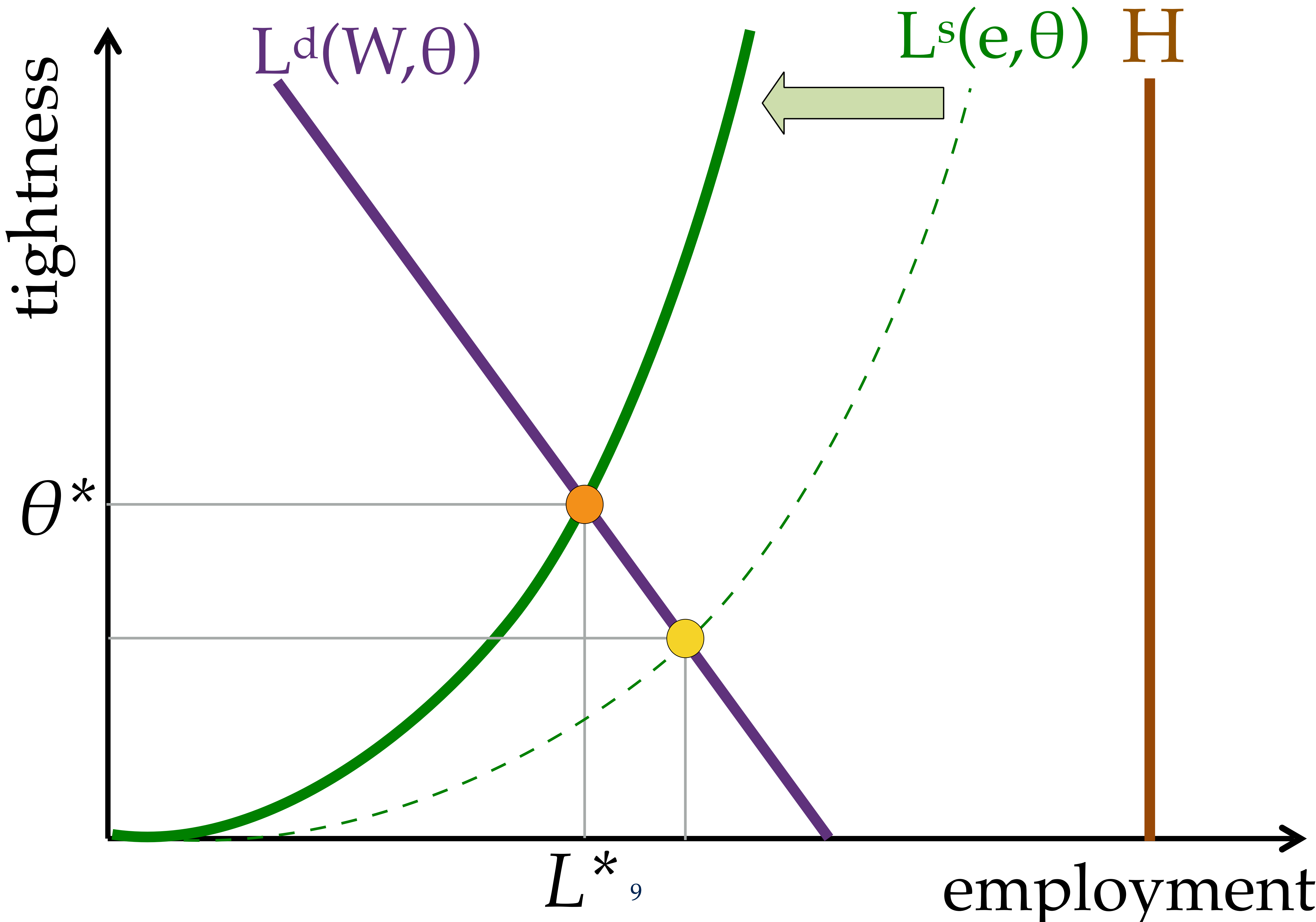
INCREASE IN UI

- when unemployed workers choose job-search effort e, labor supply depends on the parameter e
  - labor supply is increasing in e
  - more effort —> more people find jobs
- the main effect of an increase in UI is to reduce unemployed workers’ job-search effort
  - which reduces labor supply
  - but does not affect labor demand

EMPIRICAL EVIDENCE ON UI

- typical finding: people who receive more generous UI remain unemployed longer, implying that they search less
  - Moffitt (1985): "The results indicate that a 10-percent increase in the UI benefit level increases spells by about half a week and that a 1-week increase in UI potential duration increases spells by about 0.15 weeks."

INCREASE IN UI



INCREASE IN UI

- a more generous UI leads to
  - higher labor market tightness
  - higher unemployment rate
  - lower employment
- despite raising the unemployment rate, more generous UI may be desirable in recessions because it improves the material conditions of unemployed workers

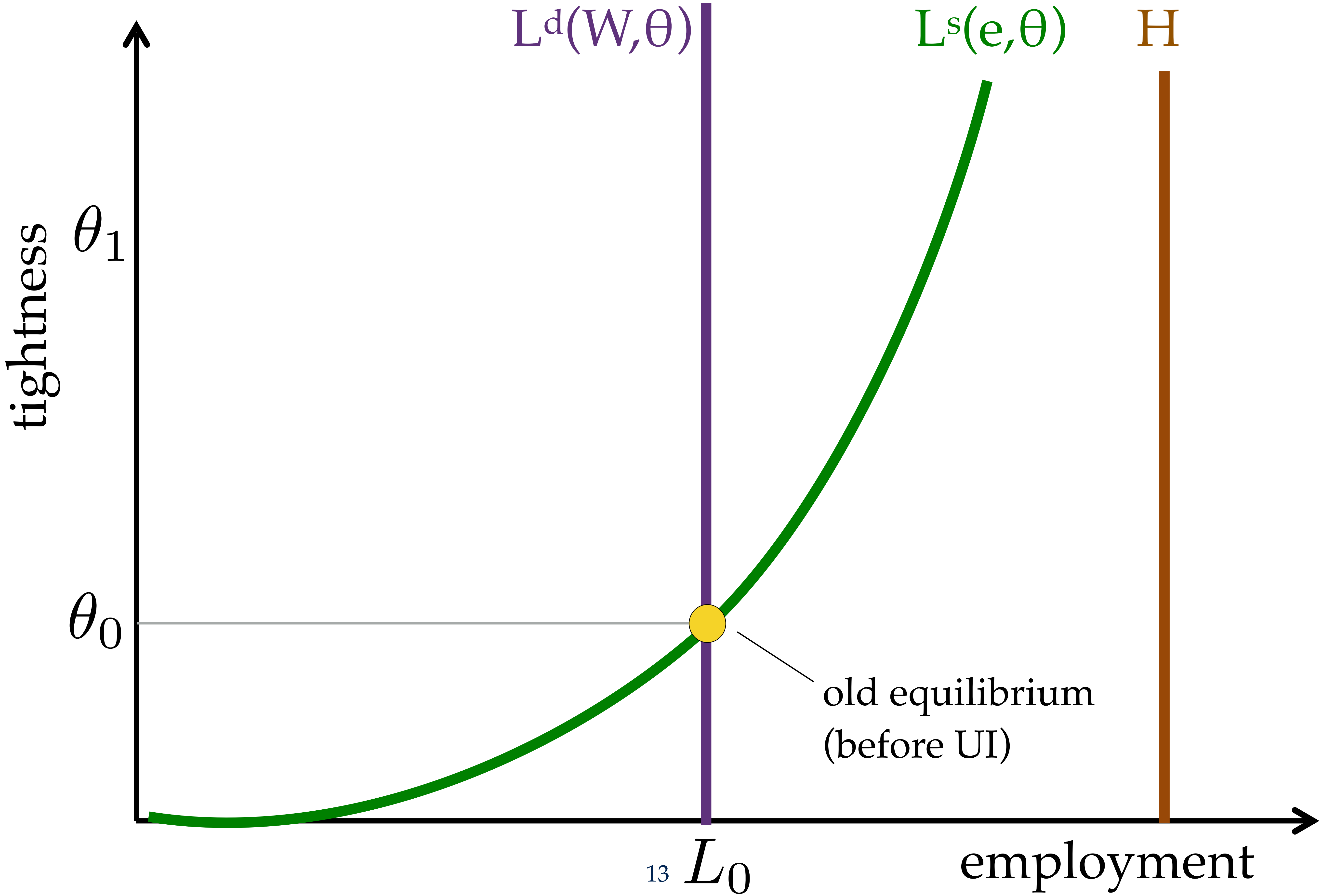
ADDITIONAL EFFECTS OF UI

- we have neglected the effect of UI on wages: higher UI —> higher outside option for workers —> higher wage in bargaining
  - in the data this effect seems weak/zero: the re-employment wage of people who receive more generous UI does not change
  - if UI raised wages, UI would have a negative effect on labor demand (in addition to negative effect on labor supply)
- another possible effect is that higher UI stimulates aggregate demand, which could stimulate the labor demand

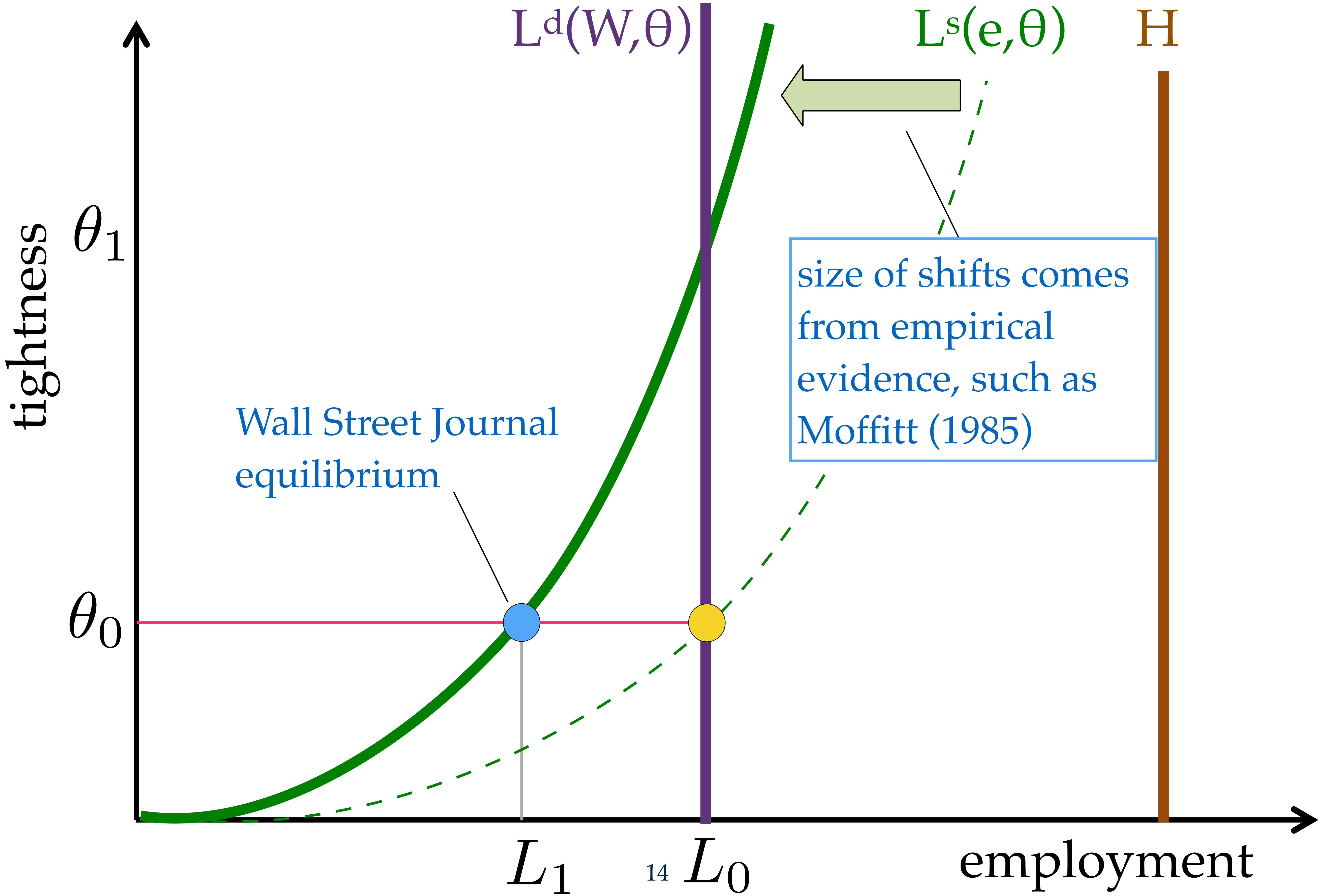
UNDERSTANDING THE OVERALL EFFECT OF UI

- empirical evidence: when jobseekers receive more UI, they search less and stay unemployed longer
  - in labor-market diagram: labor-supply curve shifts inward
- thus people infer that increasing UI strongly reduces employment
  - UI appear very costly in terms of employment
  - see Wall Street Journal op-ed: https://perma.cc/C99J-AF5S
  - implicit assumption: tightness is fixed
- but when labor demand is taken into account, tightness may adjust
  - example: when the number of jobs is fixed
  - in that case, UI is not as costly as previously thought

INCREASE IN UI WITH FIXED NUMBER OF JOBS



INCREASE IN UI WITH FIXED NUMBER OF JOBS



INCREASE IN UI WITH FIXED NUMBER OF JOBS