

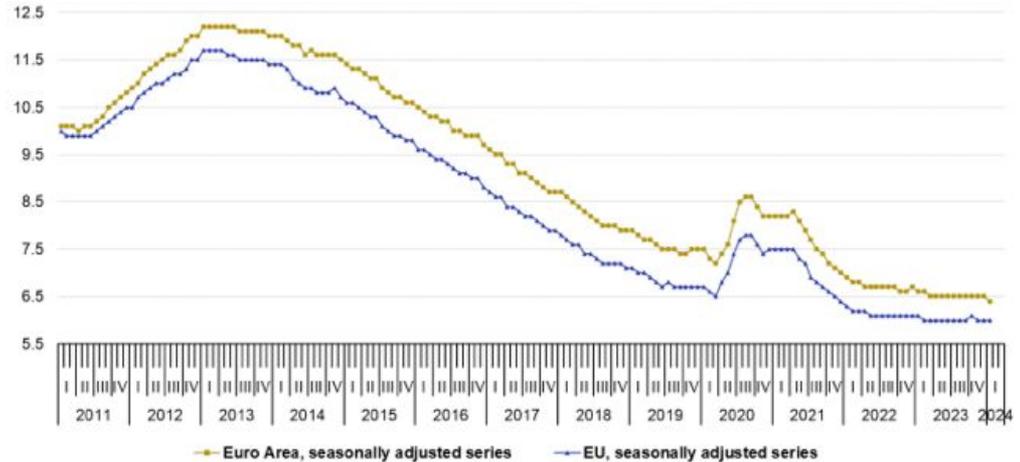
# Unemployment

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# Recap - Main Terms

- Labor force
- Unemployment rate
- Employment rate
- Participation rate

Unemployment rates, EU and EA, seasonally adjusted, January 2011 - January 2024



# Unemployment statistics - Eurostat version

An **unemployed** person is defined by Eurostat, according to the guidelines of the International Labour Organization, as:

- someone aged 15 to 74;
- not employed during the reference week according to the definition of employment;
- currently available for work, i.e. available for paid employment or self-employment before the end of the 2 weeks following the reference week;
- actively seeking work, i.e. had either carried out activities in the four-week period ending with the reference week to seek paid employment or self-employment or found a job to start within a period of at most 3 months from the end of the reference week.

Source of data: **EU-LFS**

The EU-LFS is a large household sample survey providing quarterly results on labour participation of people aged 15 and over and on people outside the labour force. The survey covers persons aged 15 years and over who live in private households. Those doing military or community service and those living in institutional or collective households are not included.

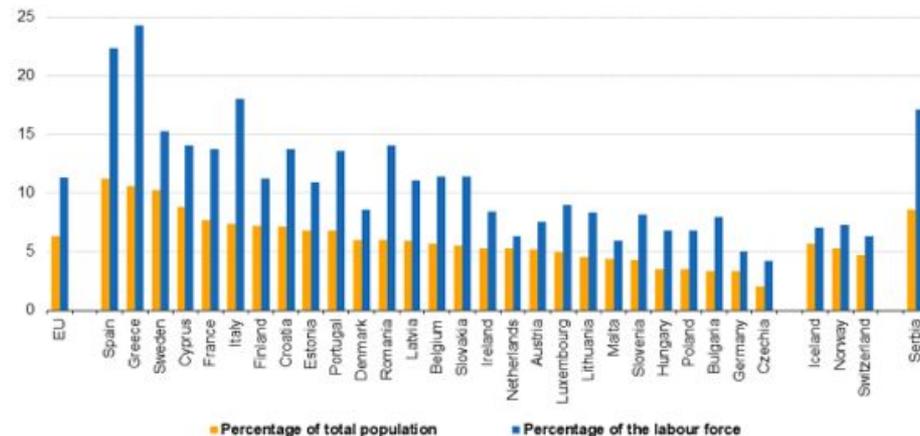
# Complementary unemployment measures

Measure and Description	Rate
U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force (includes only very long-term unemployed)	1.3%
U-2 Job losers and persons who have completed temporary jobs, as a percent of the civilian labor force (excludes job leavers)	1.9
U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate)	4.0
U-4 Total unemployed, plus discouraged workers, as a percent of the civilian labor force plus discouraged workers	4.3
U-5 Total unemployed plus all marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers	4.9
U-6 Total unemployed, plus all marginally attached workers, plus total employed part-time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers	8.1

*Note:* The Bureau of Labor Statistics defines terms as follows.

- *Marginally attached workers* are persons who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the recent past.
- *Discouraged workers* are marginally attached workers who have given a job-market-related reason for not currently looking for a job.
- *Persons employed part-time for economic reasons* are those who want and are available for full-time work but have had to settle for a part-time schedule.

**Youth unemployment, 2022**  
(age group 15-29)



Source: Eurostat (dataset code une\_rt\_a)

eurostat

Figure 7: Youth unemployment, 2022

Source: Eurostat (une\_rt\_a)

# Phillips curve

- One of the best known (empirical) relationships in economics
- Implies Stable trade-off between inflation and the output gap.
- Policymakers' preferences: low unemployment and inflation
- Tradeoff between inflation and unemployment, called the Phillips curve
- Using monetary or fiscal policy to expand aggregate demand -> Higher output means lower unemployment -> higher wages and higher inflation
- Components:
  - Expected inflation
  - Deviation from output or unemployment gap
  - Supply shock

$$\underbrace{\pi_t = \kappa x_t}_{\text{Keynesian Phillips Curve}} + \underbrace{\hat{\mu}_t + \beta E_t \pi_{t+1}}_{\text{New Keynesian Phillips Curve}}$$

# Phillips curve part 2

- Original form by Philips (1959)
- Strongly non-linear
- Describes unemployment and wage inflation

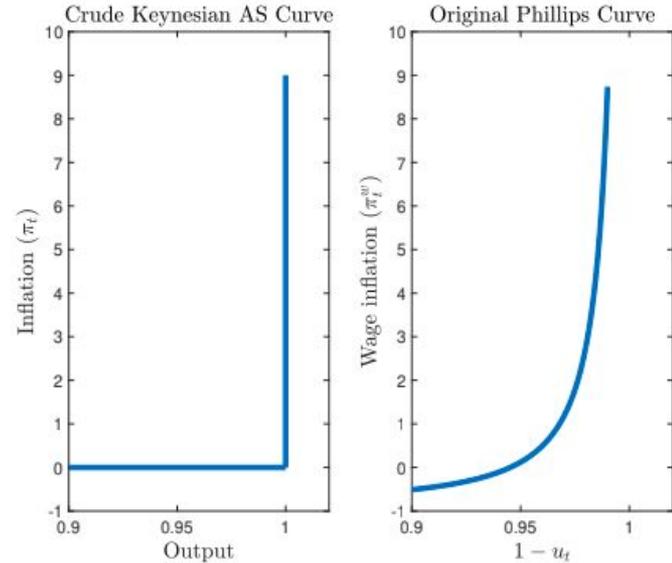
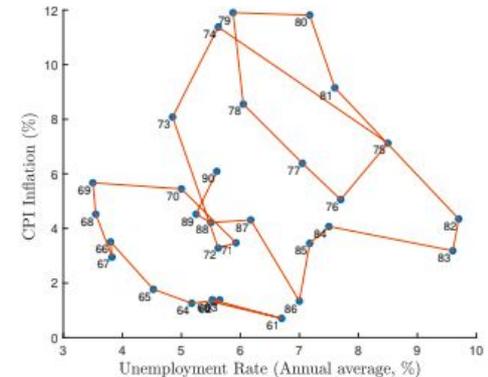


Figure 1: The crude Keynesian Phillips curve versus the original Phillips curve proposed and estimated by Phillips in 1958

“very few unemployed we should expect employers to bid up wages quite rapidly, each firm and each industry being continually tempted to offer a little above the prevailing wage.”

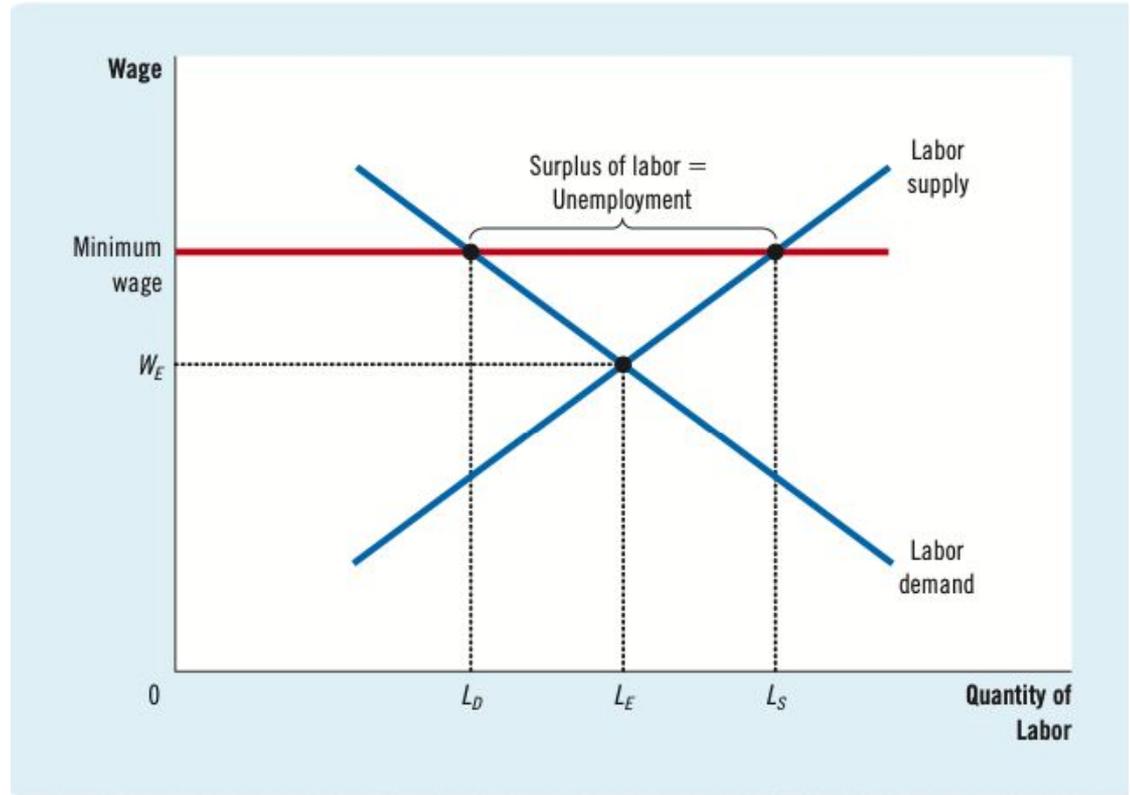
# NAIRU?

- Breakdown of the Phillips curve as a stable relationship in 1970s
- Huge impact on macroeconomic - “Natural Rate of Unemployment” proposed (Friedman, 1968)
- Idea: distinction between the short run, when variations of unemployment could affect inflation, and the long run, when, by construction, unemployment could not vary.
- Efforts to reduce unemployment below its natural rate equilibrium would appear successful in the short run, but would soon generate accelerating inflation, whose intolerability would force a retreat to the natural rate



# Minimum Wage - classical theory

- Minimum wage laws can cause unemployment by creating a surplus of labor when the wage is set above the level that balances supply and demand.
- Minimum wage laws primarily affect low-skilled and low-experience workers
- If wages are kept above the equilibrium level for any reason, the result is unemployment.
- Unions and efficiency wages can also keep wages above the equilibrium level, leading to unemployment for a larger portion of the labor force.



## Minimal Wages - recent evidence

<https://cepr.org/voxeu/columns/reallocation-effects-minimum-wage>

<https://cepr.org/voxeu/columns/optimal-minimum-wages>

# Article 1 - Questions

1. What were the main concerns of economists and media outlets prior to the introduction of the minimum wage in Germany in 2015, and how did these concerns compare to the actual outcomes of the policy?
2. How did the minimum wage in Germany affect the wages and employment prospects of low-wage workers, and what were the spillover effects on wage bins slightly above the minimum wage?
3. How did the minimum wage in Germany lead to a reallocation of workers and improve the quality of establishments operating in the economy?
4. According to the analysis, how did the minimum wage in Germany impact wage inequality and the overall welfare of low-wage workers?

# Article 2 - Questions

1. What are the main findings of the simulations conducted by Ahlfeldt et al. (2022) regarding the effects of ambitious federal minimum wages on employment, equity, and welfare?
2. What are the trade-offs involved in setting minimum wages, as illustrated by the results of the simulations, and what are the implications for policymakers?
3. How do regional minimum wages compare to federal minimum wages in terms of their potential effects on employment, welfare, and the trade-off between negative employment effects and positive welfare effects?

# References

- <https://pubs.aeaweb.org/doi/pdf/10.1257%2Fjep.11.1.93>
- Hazell, Jonathon, Juan Herreno, Emi Nakamura and Jon Steinsson. 2022. The Slope of the Phillips Curve: Evidence from U.S. States. The Quarterly Journal of Economics 137(3): 1299-1344.