

Unemployment insurance: a comparative analysis for Europe

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Reasons to intervene in the labour market

- Among the reasons for government intervention there are:
 - 1) Market Failures (Externalities, Public goods etc...).
 - 2) Redistribution.
 - 3) Merit goods.

Labour policies and the Labour Markets

- Several public interventions can affect the labour markets. Main forms of policies:
- Some are related to unemployment issues:
 - Passive policies: Support to unemployed in the form of **Unemployment Insurance/Benefits**
 - Active policies: Support to unemployed helping them in finding a job
 - Protection of the rights of employed workers in the form of **Employment Protection**

Labour policies and the Labour Markets

- Others policies are related to the wage earned by workers
 - Minimum wages
 - Wage bargaining (partly a labour policy, partly a form of market regulation and partly a form of market power)

Active and passive labour policies

- Active policies help unemployed individuals in finding a job.
- Passive policies help unemployed individuals giving them some form of income.
- We focus now on passive policies.

Money to unemployed workers

- Consider now a policy consisting in giving money to unemployed workers.
- What are the reasons for such a policy?

Money to unemployed workers

- Giving money to unemployment can be motivated for redistributive reasons but also because of market failures.
- In this latter case the reasons for market failure comes from problems of asymmetric information and moral hazard.

Asymmetric information, moral hazard and unemployed workers

- A government can give money to unemployed workers to help him facing an unexpected period of time when he cannot find a job.
- But, alternatively, the worker could have obtained a private insurance to cover him in case of unemployed.
- That is, the worker could go to a private insurance company, pay them an amount each month and in exchange get back a larger amount of money if he lose a job.
- If this is the case, the market can take care of the problem of unemployment and public intervention is not needed

Asymmetric information, moral hazard and unemployed workers

- However a private insurance against unemployment can hardly exist because of:
- **Asymmetric Information:** the insurance company does not know exactly the quality of workers and does not know the probability that he loses the job (while workers know this information).
- **Moral Hazard:** once the worker has a private insurance against unemployment his behaviour will change. He will put effort in the job (increasing the probability of being fired) and, in particular, once he becomes unemployed he will put less effort in finding a job (given that he is paid to be out of work!).

Asymmetric information, moral hazard and unemployed workers

- Given **Asymmetric Information** and **Moral Hazard** the private sector cannot provide an insurance against unemployment and therefore the public sector should intervene to create a public insurance against unemployment or some other transfer of money to people out of work.

Social Insurance, Unemployment Insurance and Social Assistance

- **Social insurance:** it is an *insurance* that workers pay to some public institutions and that covers them in case of some events (usually illness, accidents, old age, unemployment and so on).
- **Unemployment insurance:** it is an *insurance* that workers pay to some public institutions and that covers them in case of unemployment.
- **Social assistance:** it is an amount of money that the governments transfer to individuals. It is not an insurance and these individuals did not pay anything to receive it.

Social Insurance, Unemployment Insurance and Social Assistance

- Here we focus on unemployment insurance (and not much on social insurance in general).
- We will cover several aspects of unemployment benefits: practical, theoretical, empirical and comparative.
- Real UI systems imply the payment of contribution while working and the reception of benefits when the job is lost.

Theoretical effects of unemployment benefits - I

- Using previous job search model we know that:

- Beveridge Curve
$$v = \left(\frac{\gamma}{K}\right)^{\frac{1}{1-\beta}} \frac{(1-u)^{\frac{1}{1-\beta}}}{u}$$

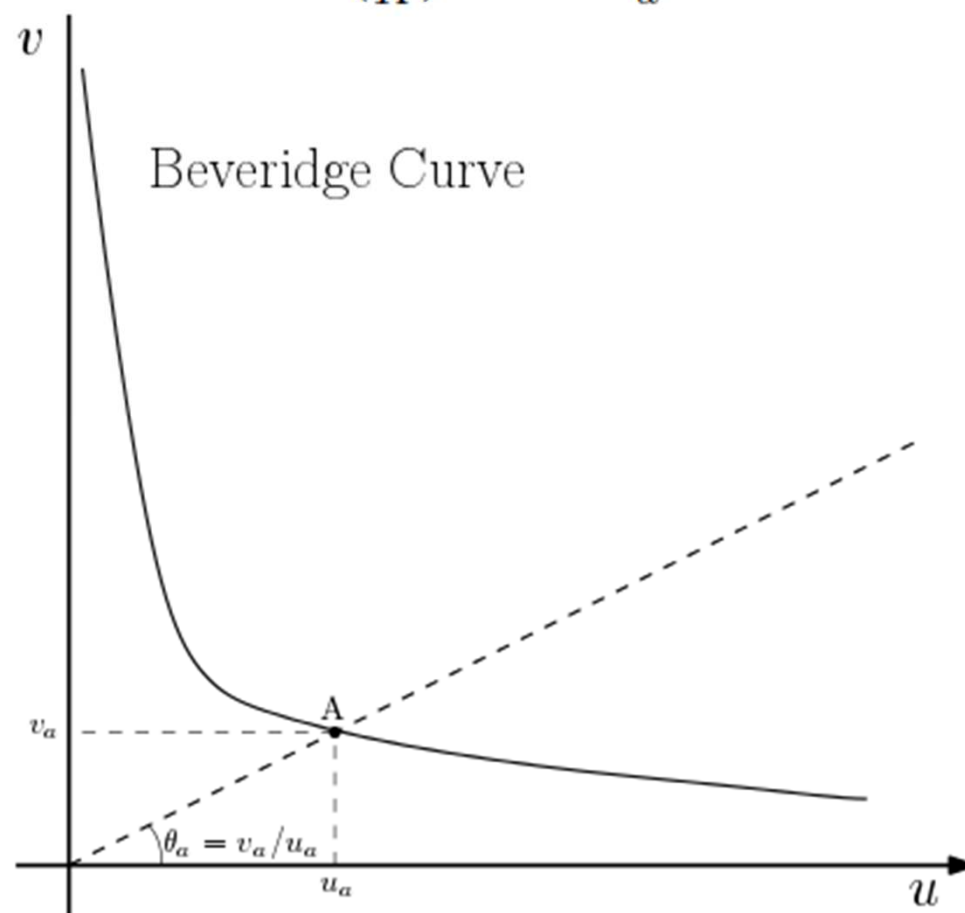


Figure 1: Beveridge Curve

Theoretical effects of unemployment benefits - II

- Free entry condition is $\frac{A - b - C}{C} = \frac{2r + 2\gamma}{K} \theta^\beta + \theta$

Where b is the amount benefits paid

- If b increases
the LHS decreases
and the right hand side has
to decrease as well.
Then θ decreases.

UNEMPLOYMENT RISES.

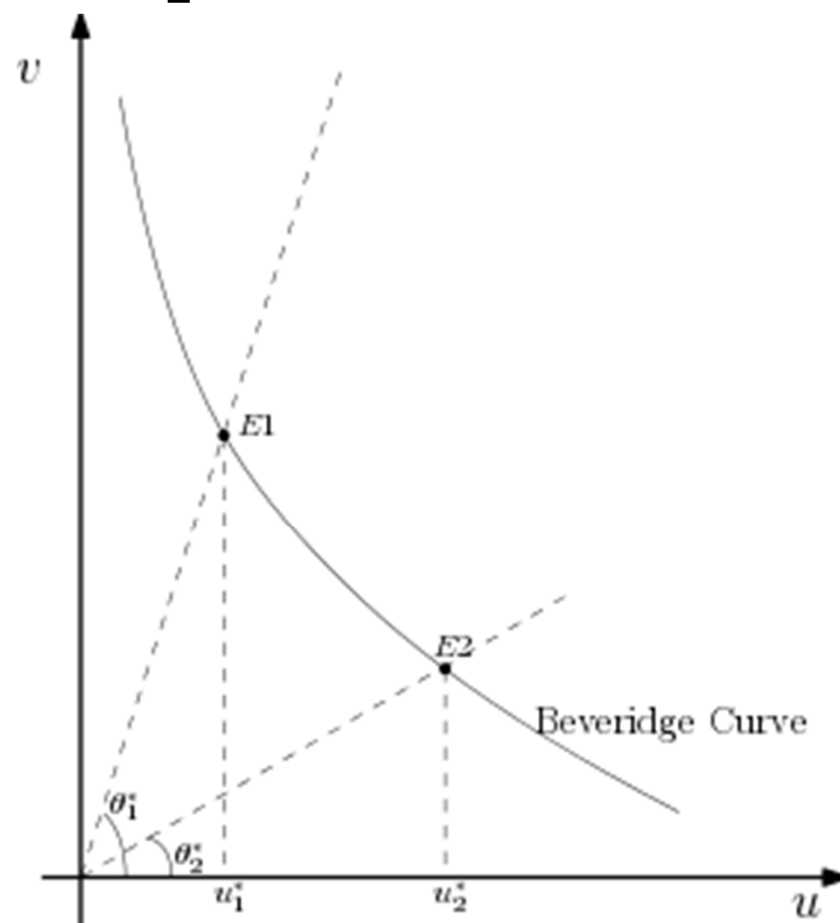


Figure 1: Changes in θ and changes in equilibrium unemployment

Theoretical effects of unemployment benefits - III

- In a job search context with random wages, the reservation wage is: $w_r = b + \frac{\lambda}{r} \int_{w_r}^{+\infty} [1 - F(w)] dw$
- Job finding probability is $H = \lambda [1 - F(w_r)]$
- And average duration is $1/H$
- Increasing b also increases reservation wages, it reduces job finding probabilities and **increases average unemployment duration**

Theoretical effects of unemployment benefits - IV

- In a job search context with random wages and endogenous search effort, the optimal search effort is given by

$$w_r = b - g(s) + \frac{s\lambda}{r + \gamma} \int_{w_r}^{+\infty} [1 - F(w)] dw$$

- The optimal effort is determined in such way that:

$$g'(s) = \frac{\lambda}{r + \gamma} \int_{w_r}^{+\infty} [1 - F(w)] dw$$

- If b increases, the reservation wage increases and search effort decreases.

$$H = s\lambda[1 - F(w_r)]$$

- Job finding probability is
- And thus an increase in b produces now an even larger fall in job finding probability and an even larger

Increase in average unemployment duration

Other theoretical effects of unemployment benefits

- The presence of benefits increases the inflow toward unemployment:
 - Wages are larger, jobs becomes less profitable from firm point of view
 - Unemployment is less scary: workers quit more.
 - Unemployment is more attractive than staying of the labour force.
- Re-entitlement effect: having a job entitle on receiving benefits in the future and people search harder.

Unemployment insurance systems

- Unemployment insurance systems consist in a mechanism that pays amounts of money (benefits) to certain individuals when they are unemployed.
- UI systems are usually made up of an infrastructure that is the same in all systems.

UI building blocks

- **Eligibility requirements:**
- In order to be eligible to receive benefits workers must satisfy some eligibility requirements.
- Often they are in the forms of previous months/years of employment and of contribution to some welfare funds.
- This, in general, prevent new entrants in the labour market to be eligible for benefits.
- If the system did not require any previous contribution it is not exactly structured as "insurance" but rather as "assistance"

UI building blocks

- **Requirement during benefits reception**
- Workers on benefits are often asked to maintain some behaviour during this period. Failure to maintain such compulsory behaviour should imply the suspension or termination of the benefits.
- Typical examples can be the requirement of active search (unemployed must prove to be actively searching for a job), of attending training courses and the obligation of not refusing job offers.

UI building blocks

- **Employment services during reception**
- Workers on benefits are usually offer some employment services during this period. In particular they are generally offered:
 - Counseling through several interviews with job counselor that advise them how to better search for a job.
 - Direct offers of jobs that appear to be suitable for the worker.
 - Training course to enhance the skills and the employability.
 - A personal plan which describe in details the course of action to follow in order to improve employability.
 - All this activities are in general carried out by public employment centre (even if private alternatives are sometimes offered).

UI building blocks

- **Amount paid as benefits**
- The actually amount paid is usually computed as a percentage of last wage (or an average of wages during the last few years). A ceiling to the benefits is usually also added.
- In general benefits are taxed at the normal rate and in some cases (but not always) contains pension contribution.

UI building blocks

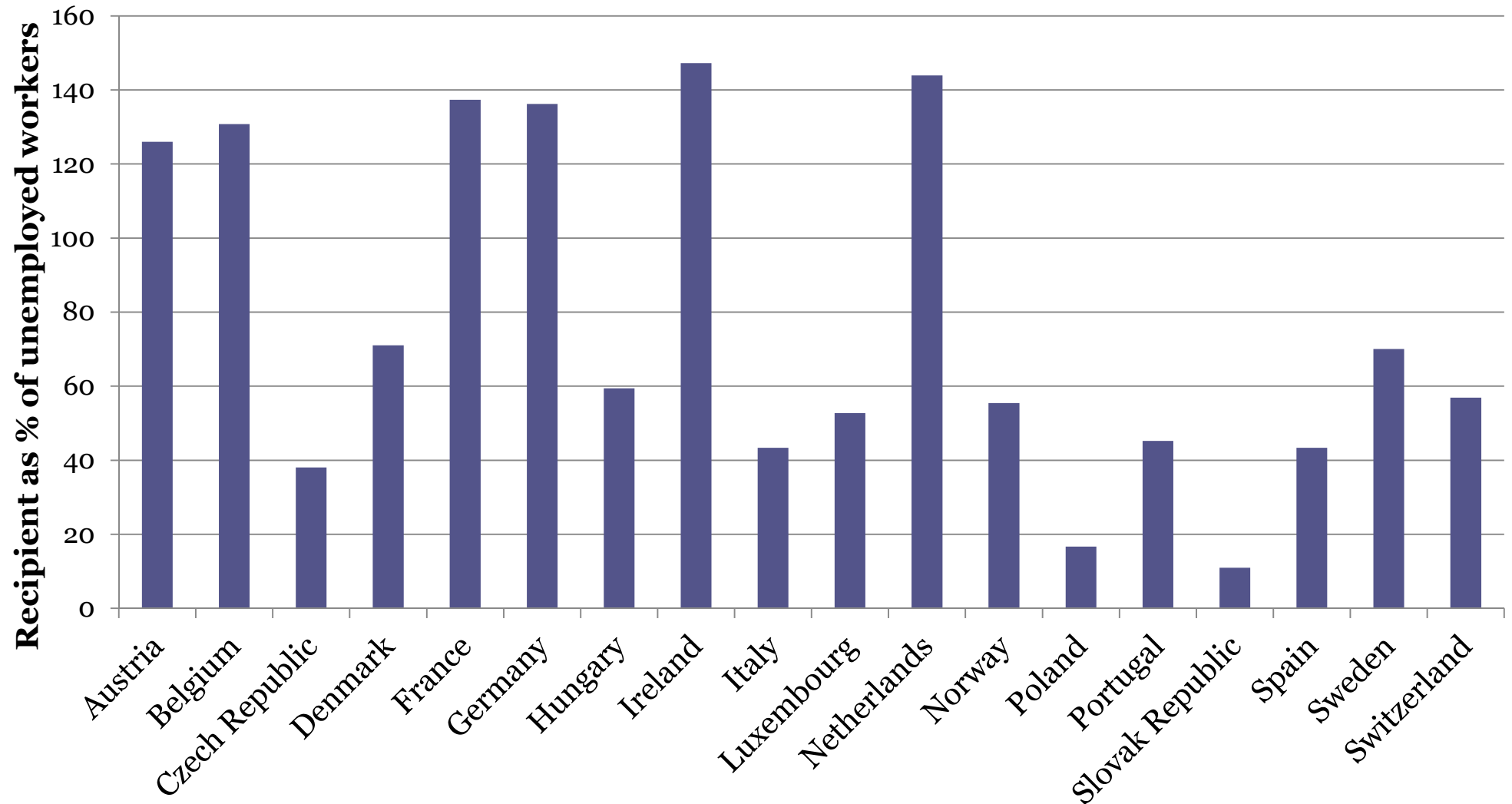
- **Maximum duration**
- Benefits usually have a maximum duration in months/years after which benefits expires and workers stop receiving them.
- In some case duration also affect the amount received: benefits amounts decrease through duration.
- Maximum duration usually depend on workers age (older get longer benefits) and on how long the worker contributed before becoming unemployed.

A comparison of European UI system

- We compare systems on two dimensions:
- The generosity of the system (amounts and duration)
- Active Employment Services and Search Requirements (how the unemployed is helped in finding a job and how stringent are the search requirements).
- In addition it is worthwhile to explore the diffusion of unemployment benefits.

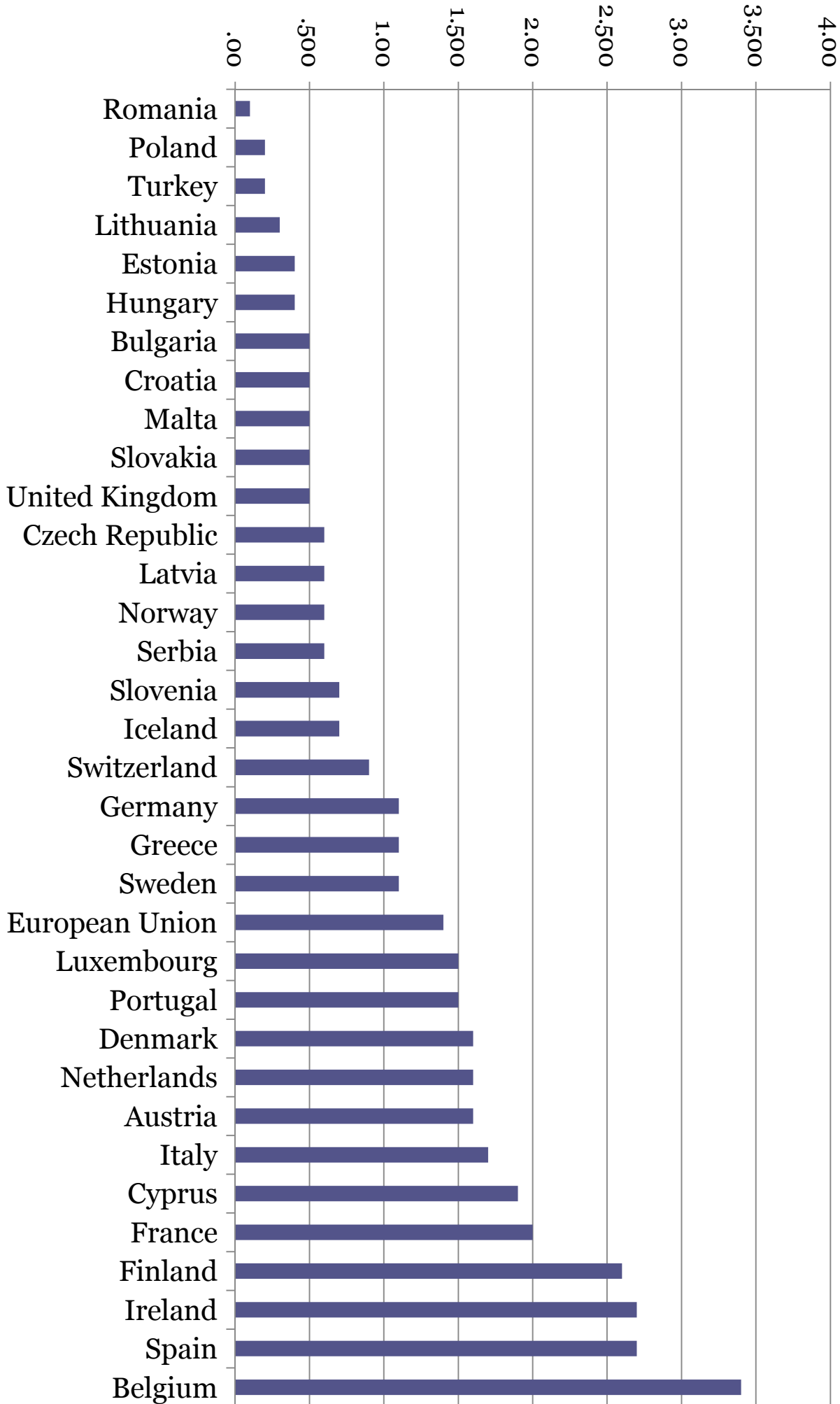
Income support for unemployment in Europe

Unemployed workers receiving income support (%)



Expenditure for unemployment compensation

Expenditure for unemployment compensation as % of GDP



Assessing generosity of UI schemes

- Generosity is determined by the amount paid as benefits and by their maximum duration.
- OECD provides a ranking of the UI scheme of different countries in terms of generosity.

OECD Ranking on generosity - immediate

Replacement rates with respect of last wage at initial stages of unemployment (2013)

Israel	95	Denmark	77
Portugal	95	Japan	75
Luxembourg	92	Estonia	74
Switzerland	90	Belgium	74
Czech Republic	89	Chile	73
Germany	88	Turkey	73
Finland	86	Hungary	72
Slovak Republic	84	United States	69
Slovenia	83	Ireland	68
France	82	Sweden	68
Spain	82	Korea	66
Norway	81	Greece	61
Canada	81	Poland	60
Austria	80	United Kingdom	56
Italy	80	New Zealand	56
Netherlands	78	Australia	56
Iceland	77		

OECD Ranking on generosity - long term

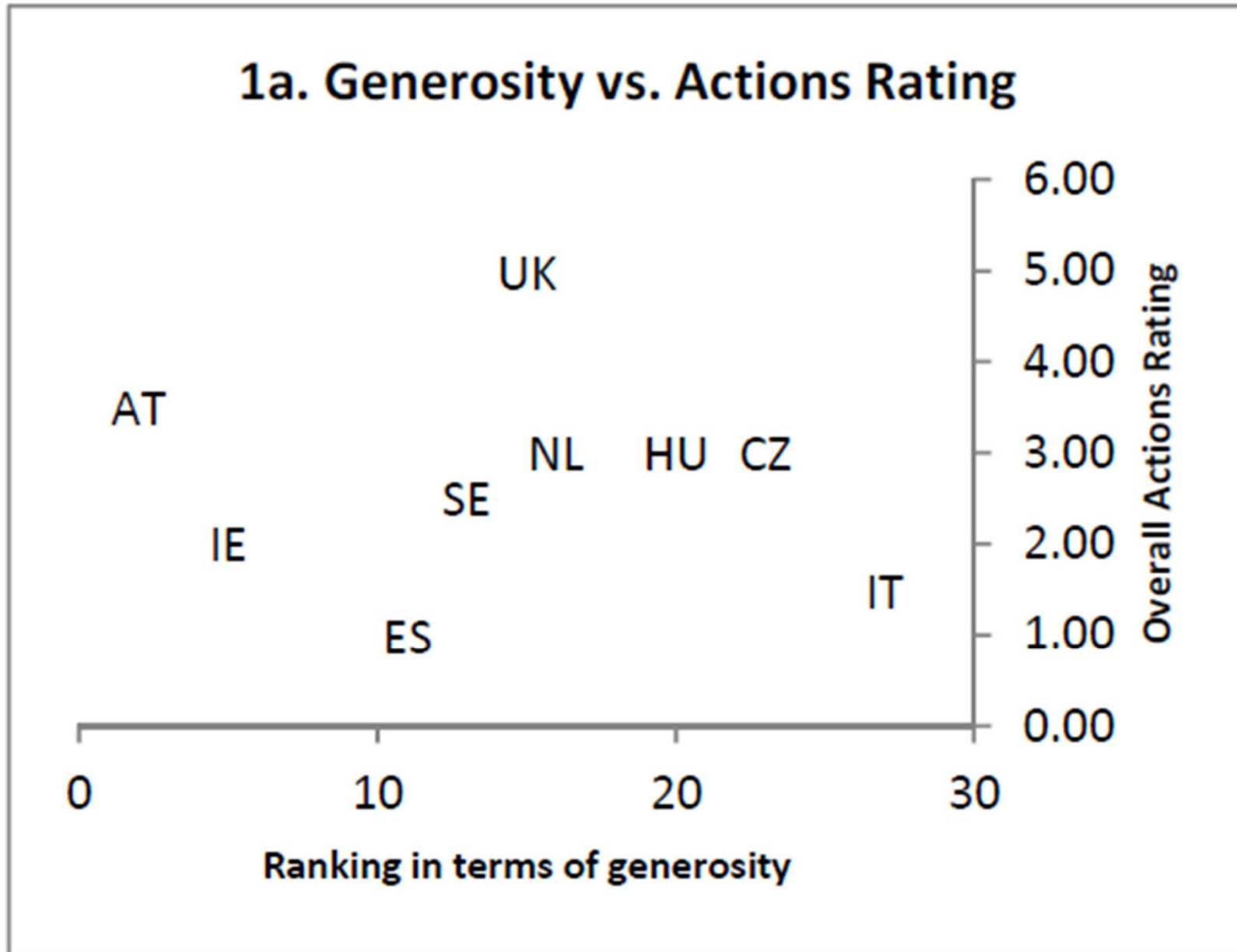
Replacement rates with respect of last wage over five years (2013)

Belgium	64	Luxembourg	24
Austria	58	Slovenia	21
Ireland	58	Switzerland	17
Australia	47	Chile	16
New Zealand	47	Slovak Republic	16
Finland	47	Poland	15
France	46	Greece	15
Germany	41	Estonia	15
Sweden	39	Japan	14
Portugal	36	Israel	12
Iceland	36	United States	11
Denmark	35	Hungary	11
Spain	33	Italy	9
Norway	32	Korea	9
United Kingdom	32	Turkey	9
Netherlands	30	Czech Republic	7
Canada	25		

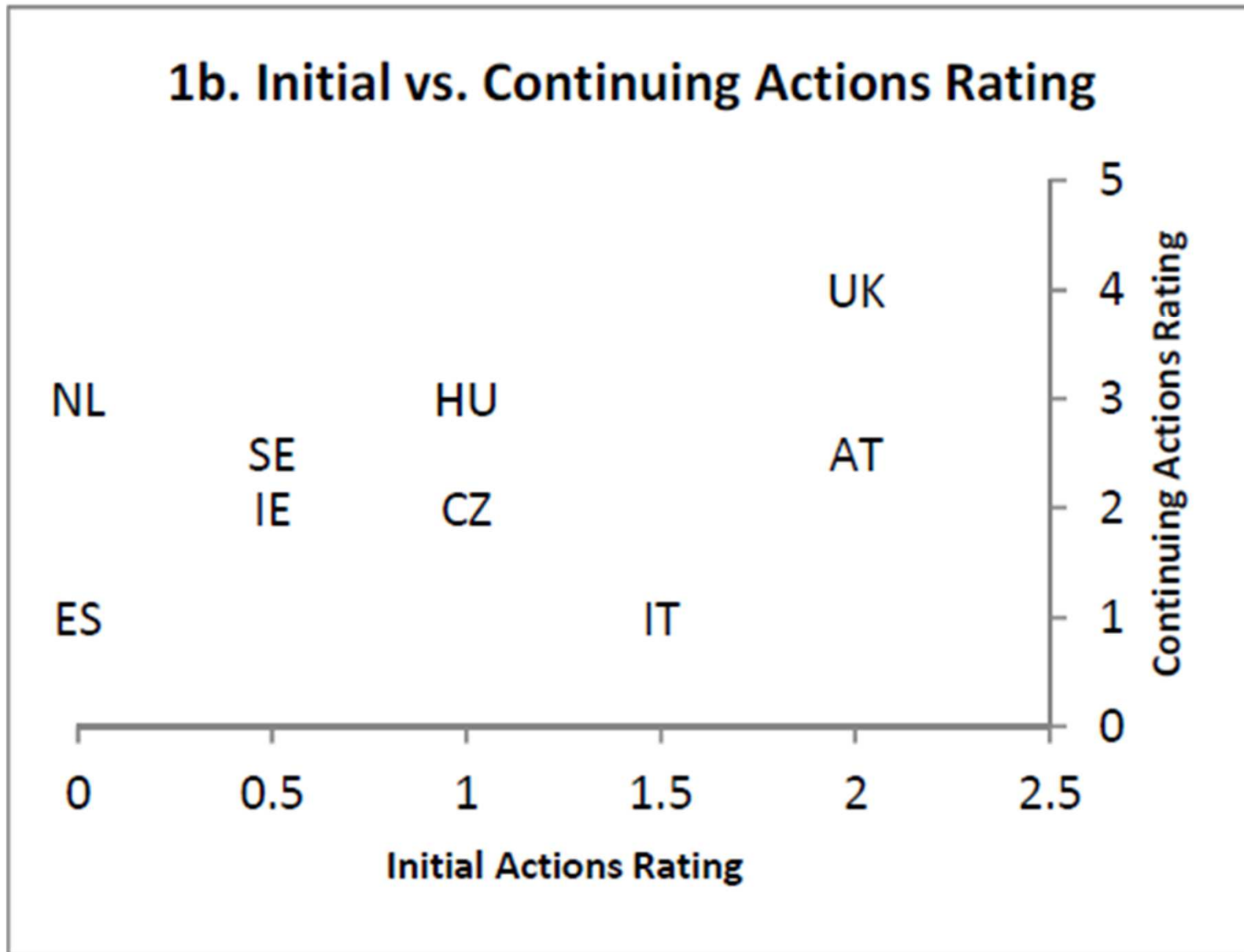
Measuring Active Employment Services and Search Requirements

- We evaluate several aspects:
 - 1) Placement efforts at initial registration
 - 2) If and when an individual action plan is devised
 - 3) Frequency of search of reports on search activity
 - 4) Whether a proof of search is revised
 - 5) Whether counseling is given also at later stages of unemployment spells.
- Point 1 and 2 makes up the "initial" activity of the system.
- Point 2,3,4 and 5 makes up the "continuing" effect of the system.
- We will give a score of 0, 0.5 or 1 to each of these aspects to each system and obtain a score for the "initial", "continuing" and "overall" activity.

Generosity and activity



Initial and continuity activity



Empirical evidence on unemployment benefits

- Mild (and mixed) evidence that receiving income support increases unemployment duration.
- This effect can be counterweighted by properly designed UI systems: in few cases receiving benefits within a UI system decreases unemployment duration.
- Spikes in re-employment toward the end of unemployment benefit spell.

Further Readings on Unemployment Insurance

- Moffitt, R., 2014, Unemployment benefits and unemployment. *IZA World of Labor*
- Tatsiramos, K. and van Ours, J. C., 2014, Labor Market Effects of Unemployment Insurance Design. *Journal of Economic Surveys*.