
Welfare expenditures

(Stiglitz ch. 14 and 15; Gruber ch.13, 14, 17; Rosen ch.9,10,11; recent evolution in the EU <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/3975.pdf>)

- Social programmes
 - Reasons for public intervention
 - Efficiency and equity effects
 - An example: the unemployment benefits
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Social expenditures: Europe vs US/1

- **All rich nations have large welfare states.** Welfare measures represent the largest share of public expenditures in most OECD countries (more than one fifth of GDP).
- **The overall size of welfare expenditures is rather similar across OECD countries,** domains are similar & mostly similarly sized. Redistribution is however much more extensive in Europe.
- The US tend to protect some disadvantaged categories (sick, elderly, large families, although less than Europe), but they have very few transfers to the “poor” per se compared to Europe.
- Relative to European countries, the US:
 - ❑ Spend relatively more in health care
 - ❑ Spend less on cash & early education
 - ❑ Rely on safety nets & contribution related benefits rather than universal benefits
 - ❑ Charity contributions are much larger in the US than In Europe: charity per capita in the US in 2000 is \$691 per capita, against 141 for UK and 57 for Europe as a whole.

Spending on social protection, EU-28, % of GDP, 2016- *Source: Eurostat*

In the EU28 highest social spending on GDP in DK, FI, BE and FR (over 30%).

Social protection expenditure in the EU Member States, 2016 (% GDP)

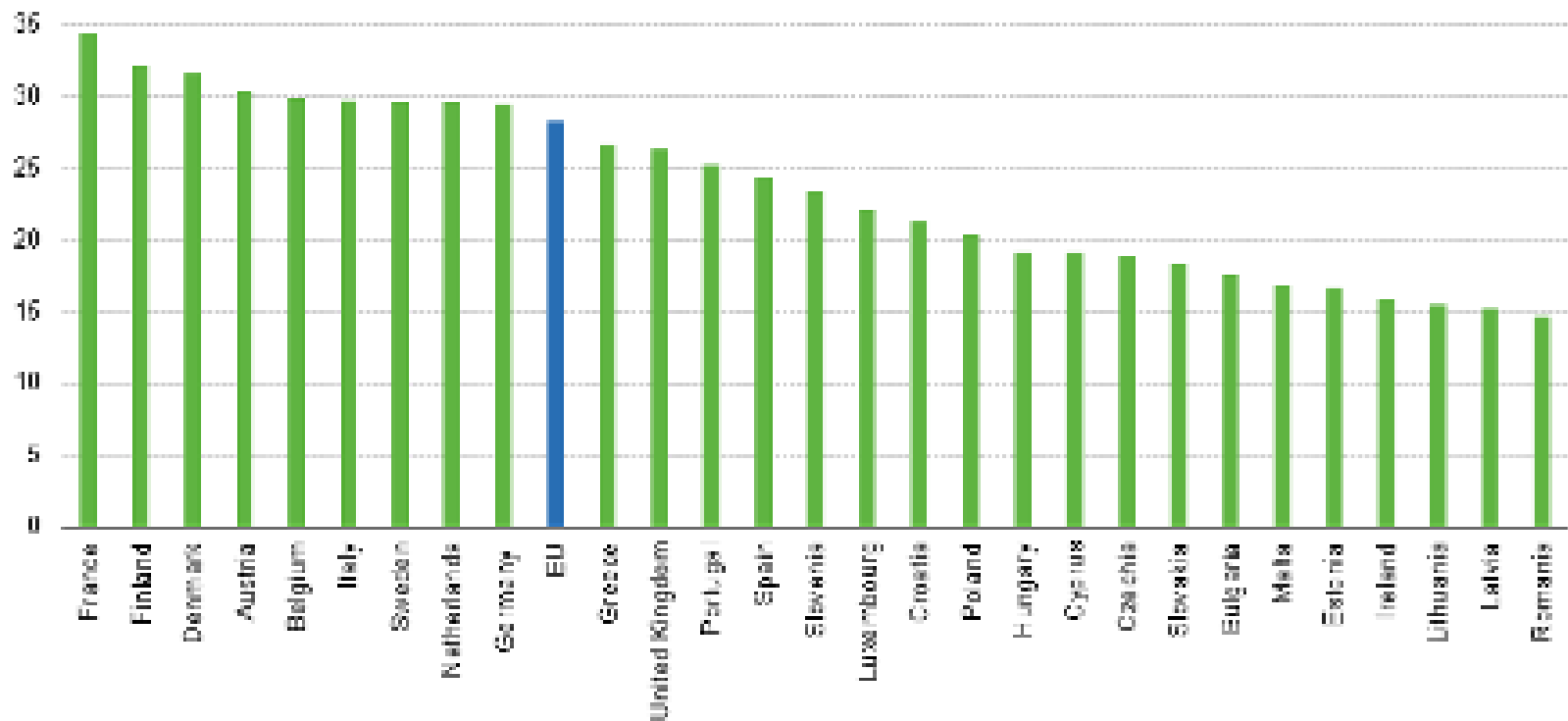
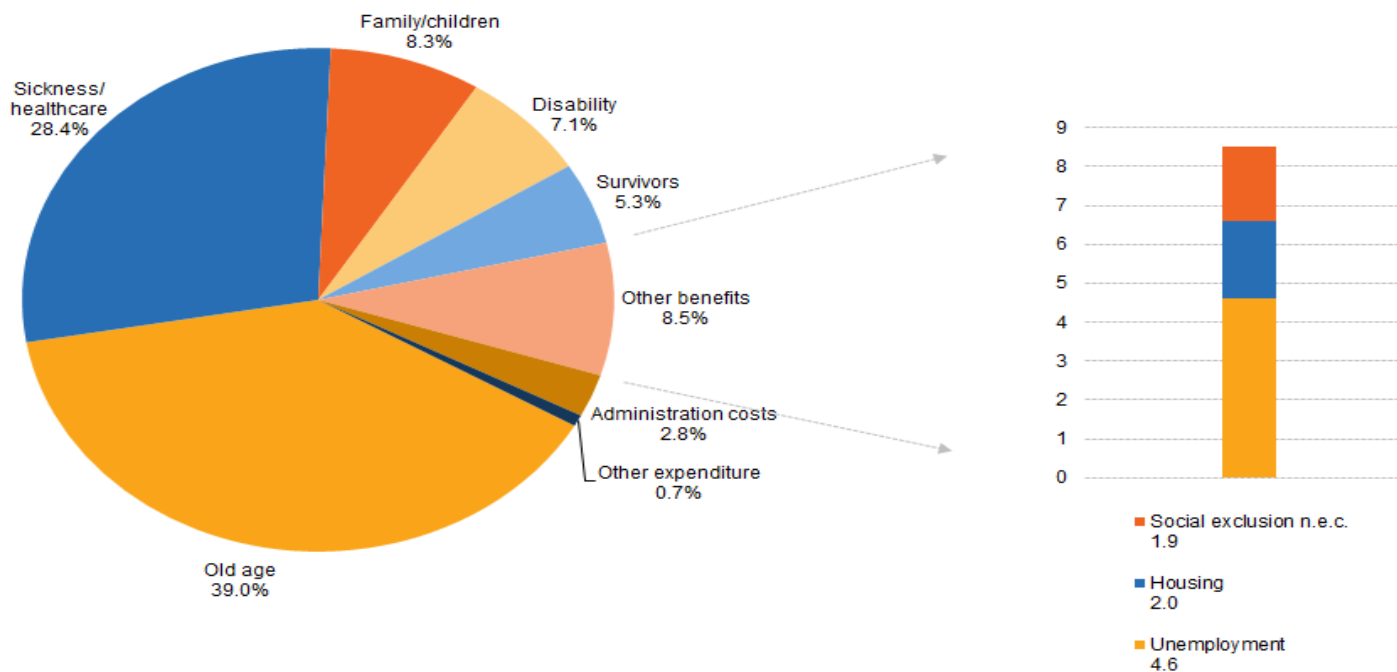


Figure 2: Structure of social protection expenditure, EU-28, % of total expenditure, 2015

Source: Eurostat, *Expenditure: main results*

Pensions and health care are the largest share of social expenditures (67.3%).

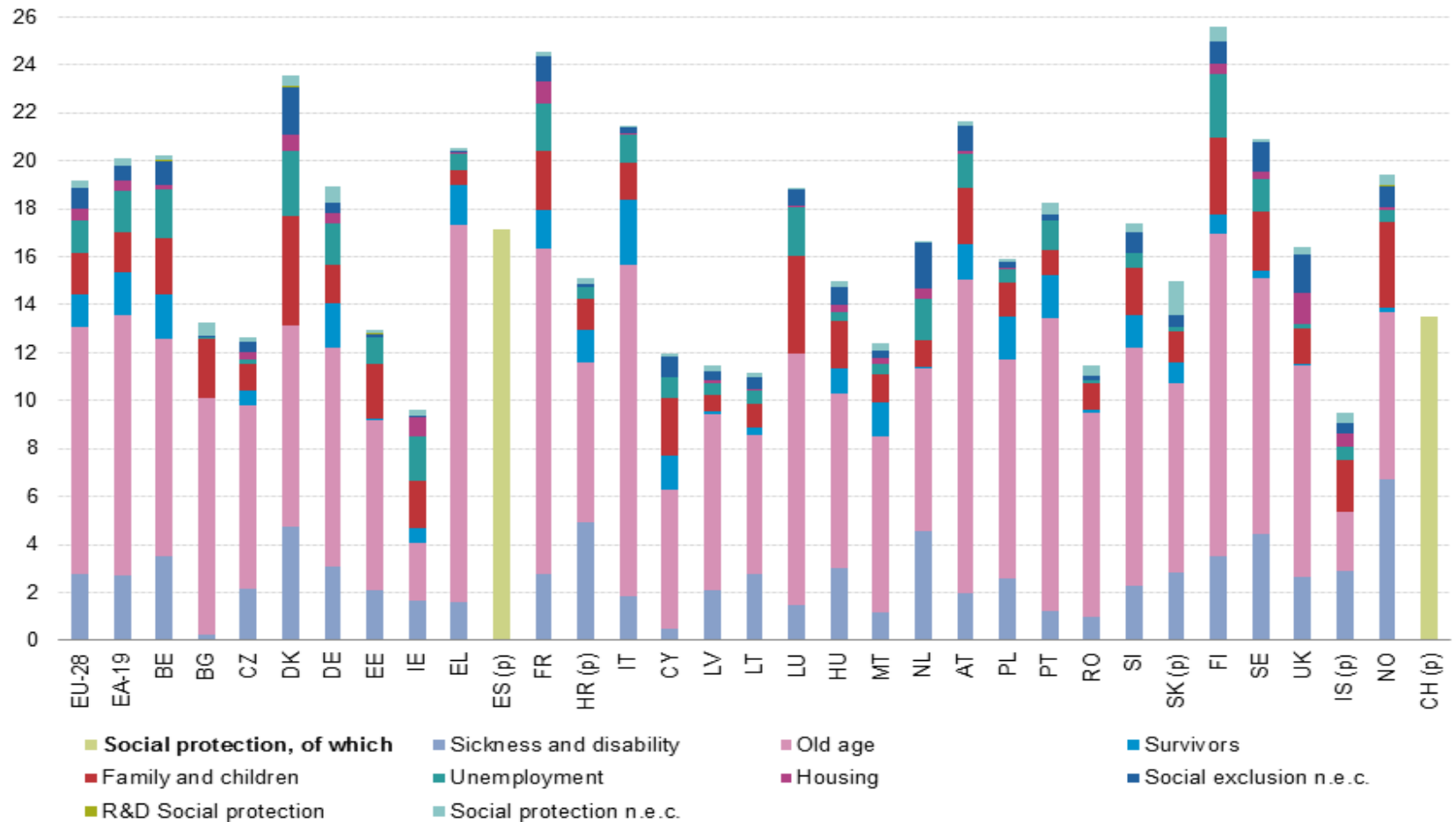
Structure of social protection expenditure, EU-28, 2015
(% of total expenditure)



Note: estimates, including 2014 data for Poland.

Source: Eurostat (online data code: spr_exp_sum)

Total general government expenditure on social protection, 2015 (% of GDP). Source: Eurostat



Assistance policies in Italy

- Low social expenditures, apart from pensions which absorb most of Italian welfare expenditures.
 - Prevalence of cash transfers, only fiscal deductions for children are categorical
 - Low distributive effectiveness, also due to large fiscal evasion which makes it difficult to introduce means tested benefits
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Social assistance

- **Social assistance** has a redistributive role:
 - It provides cash and/or in kind benefits (housing, food health care, etc.) to the poor.
 - It is financed with income taxation.
 - It is usually means tested: only individuals whose financial resources fall below a certain level can receive benefits
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Social insurance

- **Social insurance (or social security)** is a form of forced savings to insure against adverse events, such as unemployment, sickness, old age, invalidity.
 - It has an insurance role and it is usually financed on payroll taxes (social security contributions) by firms and workers.
 - Differently from private insurances, it also redistribute income, because benefits are not related to individual characteristics and payments.
 - Participation is compulsory
 - Eligibility and benefit levels depend in part on past contributions made by the worker (insurance)
 - Benefit payments begin with some identifiable occurrence (unemployment, illness, retirement)
 - The programmes are not means tested (i.e. do not depend on the financial conditions of beneficiaries)

Types of programmes

- **Categorical:** welfare programmes restricted to population groups (categories) with specific characteristics (e.g. single mothers, disabled people, etc.)
 - **Means tested:** welfare programmes restricted to low income people
 - **Cash transfers:** welfare programmes that provide cash benefits to recipients
 - **In-kind:** welfare programmes that delivers goods or services, e.g. medical care, food, housing to recipients
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Social Insurance: Rationale for public intervention

- **Missing markets and adverse selection:** The market fails to provide insurance against many of the most important social risks facing individuals: unemployment, poverty, bad health, old age. Due to **adverse selection** only those with higher social risks will be willing to buy an insurance. Market efficiency would require individuals with higher social risks to pay higher premiums, however they are the least able to pay for it.
- **High transaction costs** (administrative and monitoring costs) which fall as the insured increase (scale economies in transaction costs).
- **Merit good:** people are myopic and underinsure themselves against social risks. The cost of supporting those who fail to provide for themselves is borne by others
- **Externalities:** social conflict, general health and social conditions...

Social insurance: advantages of public intervention

- **Public social security programmes:**
 - have lower costs, due to scale economies,
 - they can always meet their obligations by rising taxes,
 - they can engage in risk sharing across generations,
 - they are not faced by adverse selection since individuals are obliged to “buy” social insurance, unemployment and retirement (merit goods).
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Social insurance: limits of public intervention

- **Disincentive effects:** discourage private savings (*crowding out*) and work effort (*unemployment trap, early retirement*), reducing long run growth. However social stability may support growth.
 - **Moral hazard:** reduced incentive to provide for bad periods and old age.
 - **Increasing costs and risks of fiscal imbalance** with population ageing and increasing administrative costs (as in health care programs) which crowd out other programs (such as programs on children).
 - **Low perceived rate of returns** relative to private insurance, especially in the case of retirement funds.
 - **Redistribution** among those making similar contributions, not based on assessment of need. How to measure poverty and need?
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Social assistance (welfare) programs

Safety net programmes to contrast poverty: housing programmes, health programmes, family and children support, income support during inactivity, disability and invalidity

- These programmes are usually **means tested** and targeted to individuals and/or families below the poverty line

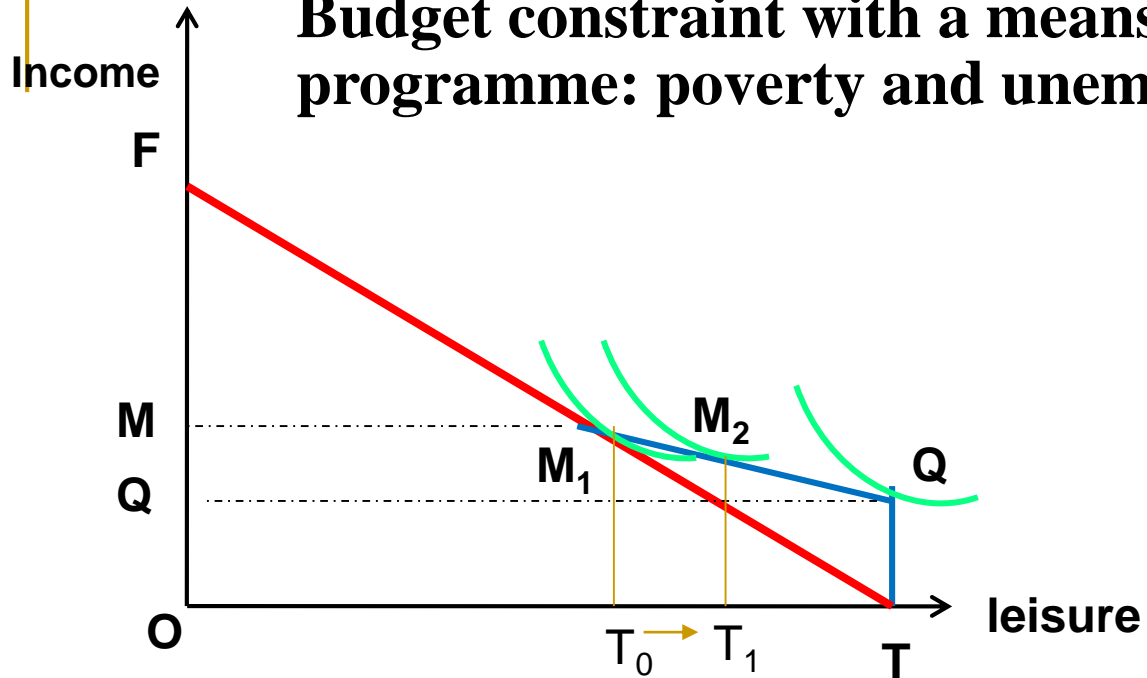
Rationales:

- Positive externalities, especially in the case of programmes aimed at children
 - Equity reasons
 - *problem*: how to define poverty and eligibility?
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Possible negative effects of social assistance/1

- **Poverty trap and welfare dependency :**
 - Net of taxes benefits are higher than net wages for low wage individuals and include also in kind benefits (such as housing, free meals in schools, etc.).
 - Since welfare benefits are reduced as income rises, low wage families may be induced to reduce labour supply or to work in the underground economy in order to be eligible to welfare benefits.
 - When there is a threshold, and benefits go to zero when income exceed a certain level, the disincentive effect is particularly relevant near the utoff level
- **Moral hazard:** individuals and families are induced to declare a lower income than the real one.

Budget constraint with a means tested assistance programme: poverty and unemployment traps

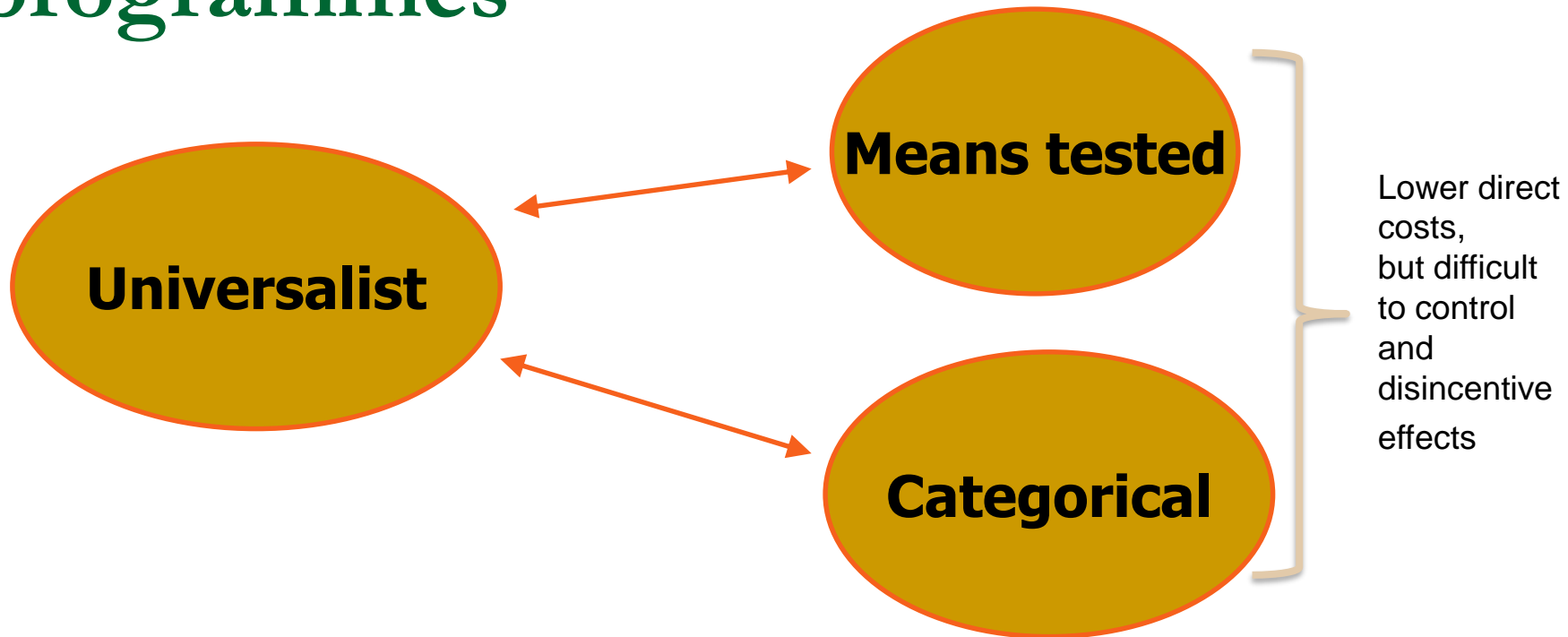


Full subsidy OQ only up to a labour income below Q ,
 Partial subsidy (or negative income tax) between Q and M . No subsidy above M .
The budget constraints becomes TQM_1F

Disincentive effects: the choice is either Q (no work) or the budget constraint QM_1F :

- **Unemployment trap:** Q (no work) is preferred to work
- **Poverty trap:** the subsidy reduces the labour supply relative to the situation without the subsidy for some individuals (M_2 is preferred to M_1), especially if they get low wages in the labour market.

Three main types of assistance programmes



Social assistance: Means tested programmes

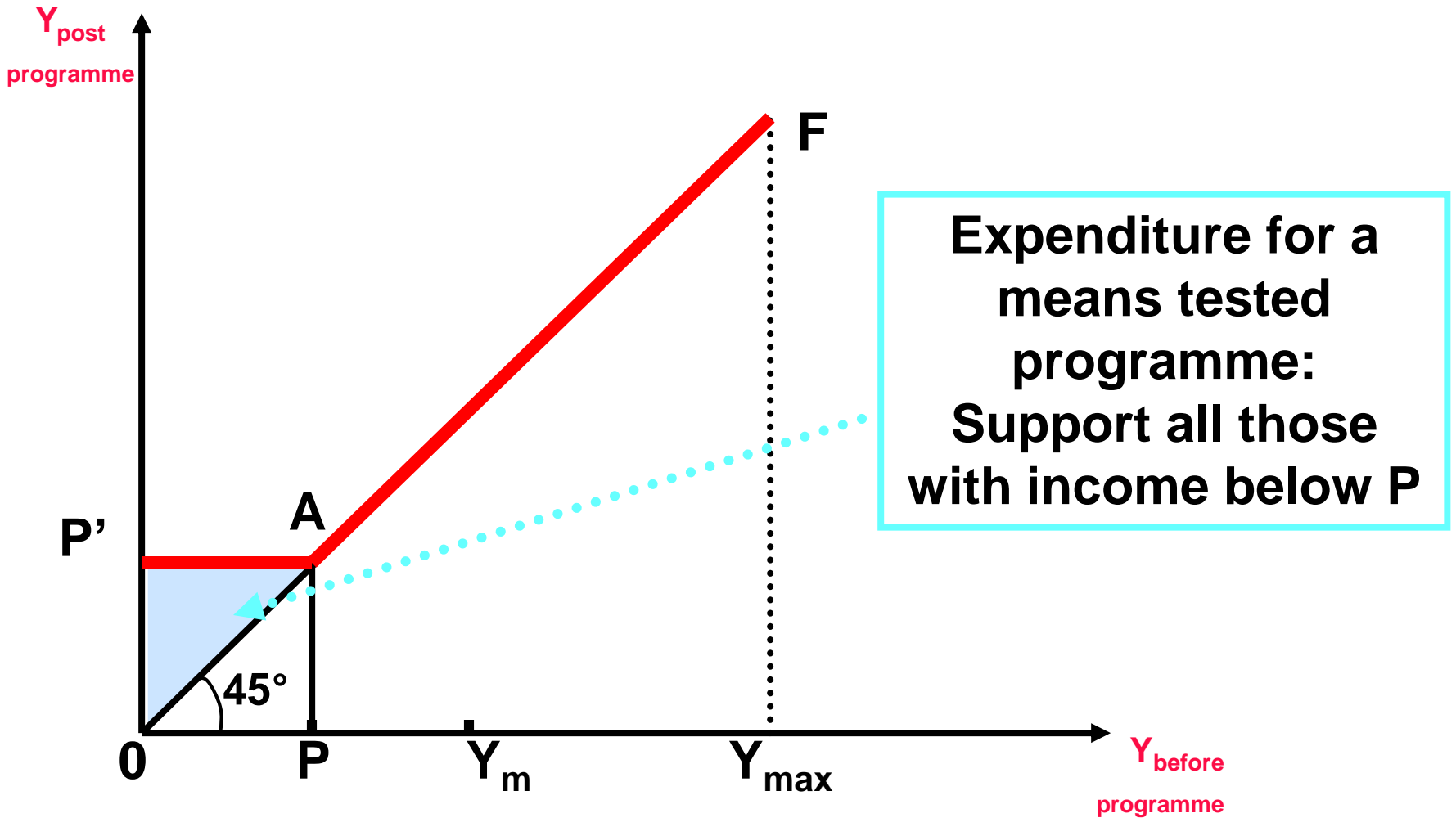
■ *Advantages relative to universal programmes:*

- ❑ Better target efficiency: it is possible to target the program on those (usually families) who most need support
- ❑ Lower expenditure

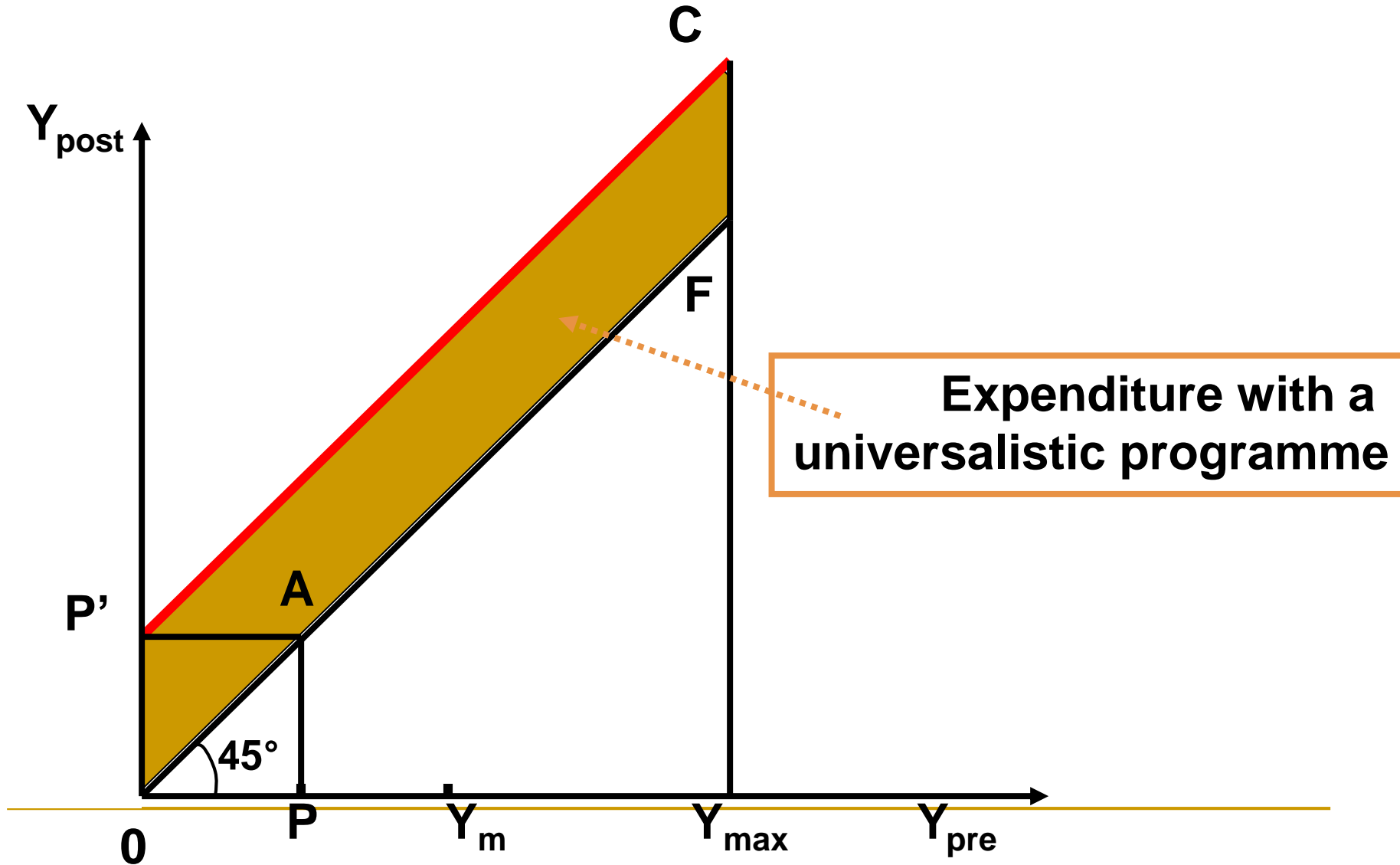
■ *Disadvantages:*

- ❑ High administrative costs to assess eligibility and avoid moral hazard
 - ❑ Asymmetric information problems (helping those who don't need help, not helping the real needy): it is important the definition of adequate indicators
 - ❑ Social stigma which may prevent take up
 - ❑ Poverty trap: welfare dependence and disincentive to exit from a poverty condition, especially for benefits based on thresholds (the benefit is lost when income exceed a given level). Example: the Medicaid programme in the US.
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Means tested programs cost less...



... than universal programs



Categorical programmes

■ Pros

- Better targeting: on categories of need instead than on income (at individual level): e.g. lone mothers, the disabled, long term unemployed etc.
- Less disincentive effects than means tested programmes
- Easier to detect eligibility

■ Cons

- Unfair to treat different poors differently
 - Distortionary effects in meeting eligibility standards (ex: aid to lone mothers may discourage marriages).
 - High administrative costs (although lower than means testing because easier to detect eligibility)
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In kind programmes

■ Pros

- Increase targeting efficiency (reaching the intended beneficiaries and reducing “impostors”)
- They provide access to basic rights (shelter, food, health care, education), specific egalitarianism view

■ Cons

- Administrative costs
 - In some cases they are not efficient:
 - ✓ the gvt could reach the same results with cash benefits at lower costs for the taxpayer
 - ✓ they distort individuals’ consumption patterns (induce to consume more of the good/service provided, than would otherwise as in the case of food stamps)
 - Eligibility standards may produce unintended results (discourage work for example),
 - Paternalistic measures.
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In kind vs cash transfers

Food stamps

Sam has a monthly income of 300 Euro, the price of food is 2 euro per KG and the unit price of the other goods is 1 euro.

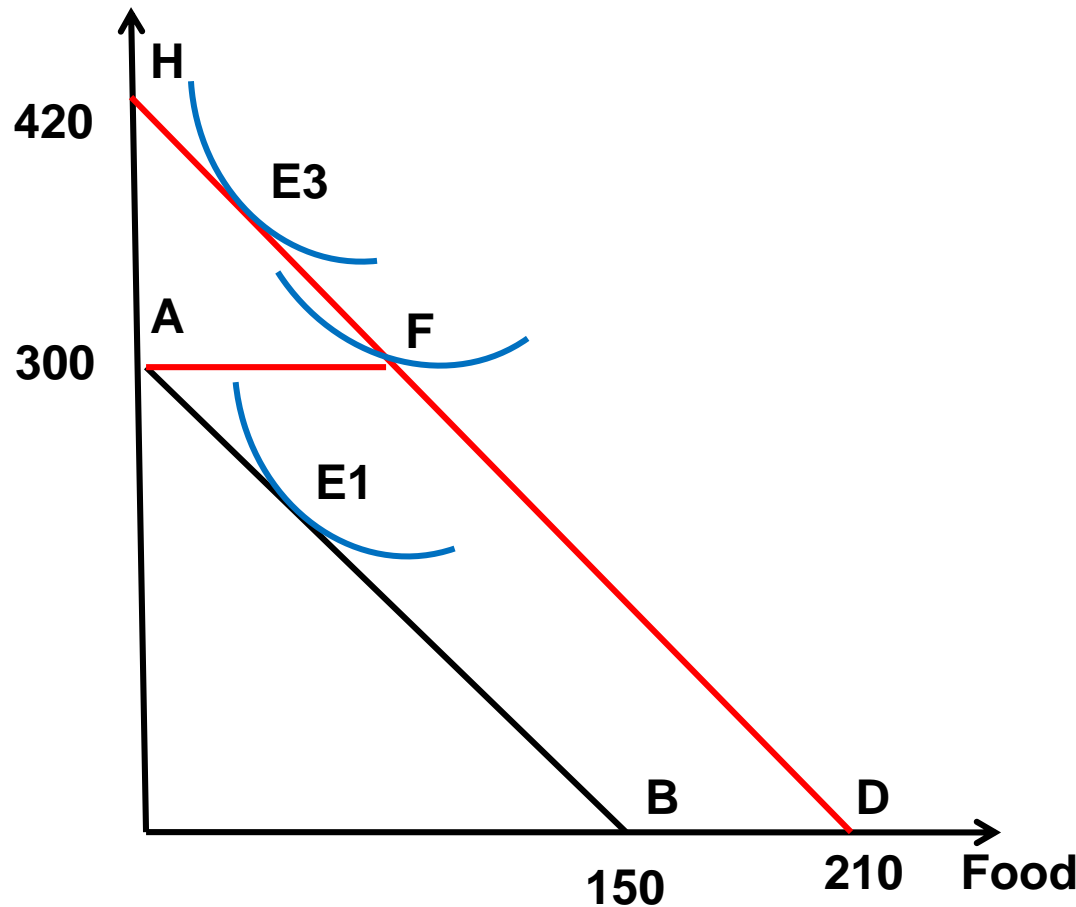
His initial budget constraint is **AB**, given his preferences his choice is point **E1**.

The gvt introduces an **in kind transfer** of 60 Kg more of food, Sam's budget constraint becomes **AFD** and Sam's best choice is now the corner point **F**. If instead the gvt gives Sam a **cash transfer** of the same cost as the in kind transfer ($60\text{kg} \times 2 \text{ euro} = 120 \text{ euro}$), Sam's new budget constraint is **HD** and he will reach a higher indifference curve and choose **E3**.

Note that these results depend on Sam's preferences.

For individuals with other preferences there could be no differences in the effects of in kind vs cash transfers.

Other goods



Social assistance: how to design benefit systems/1

- Three broad goals in designing benefit systems:
 - a) **Support living standards** of low income families with children
 - b) **Encourage work** and economic self sufficiency
 - c) **Keep costs low** for the tax payers
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Social assistance: how to design benefit systems/2

Measures to reduce welfare dependency

a) tag support to the really needy:

- Categorical vs means-tested
- In kind vs cash transfers

b) Improve outside opportunities: higher net wages (through lower taxation), child support, enforcement, etc.

c) Introduce work availability among eligibility conditions (*workfare*).

d) Introduce In Work Benefits: individuals do not lose the benefits if they work .

The optimal system depends on the behavioral response of individuals (indirect effects)

An example: unemployment benefits / 1

For additional info: OECD: https://www.oecd-ilibrary.org/sites/empl_outlook-2018-9-en/index.html?itemId=/content/component/empl_outlook-2018-9-en%20;

Esser et al. (2013), [Unemployment Benefits in EU Member States - European Commission](#)

- Unemployment benefits offer income to workers experiencing unemployment spells. It should protect *jobseekers* .
- The first UB system was introduced in the UK in 1911.
- Complex design to discourage opportunistic behavior: i.e. people not accepting a new job as long as the UB is available

UBs often operate in connection with other non-employment benefits (other income transfers to non-employed individuals in working age) such as:

- ❑ Social assistance of the last resort
 - ❑ Early retirement
 - ❑ Invalidity pensions
 - ❑ Sickness and housing benefits.
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Unemployment Insurance and Assistance

UB systems usually include two components:

Unemployment Insurance (UI):

- ❑ Benefit depends on payments during past work experience
- ❑ Offers provisions proportional to past earnings
- ❑ The length of the entitlement period is dependent on the length of the contribution period.
- ❑ Some “experience-rating” (e.g., in the US) with employers paying more if they use it

Unemployment Assistance (UA):

- ❑ Accessible independently of payments during the past working experience
- ❑ Flat subsidy: provisions independent of past earnings
- ❑ Entitlement not conditional on the length of the contribution period.

Table 1: Type of unemployment assistance in 27 EU Member States, 2010.

	Unemployment assistance		Social assistance
	<i>Means-tested</i>	<i>Flat-rate</i>	
Austria	X		
Belgium			X
Bulgaria			X
Cyprus			X
Czech Republic	X		
Denmark			X
Estonia		X	
Finland	X		
France	X		
Germany	X		
Greece		X	
Hungary		X	
Ireland	X		
Italy			
Latvia			X
Lithuania			X
Luxembourg			X
Malta	X		
Netherlands		X	
Norway			X
Poland			X
Portugal	X		
Romania			X
Slovakia			X
Slovenia			X
Spain	X		
Sweden		X	
Switzerland			X
UK	X		

Source: MISSOC/European Commission.

Unemployment benefits: indicators of generosity

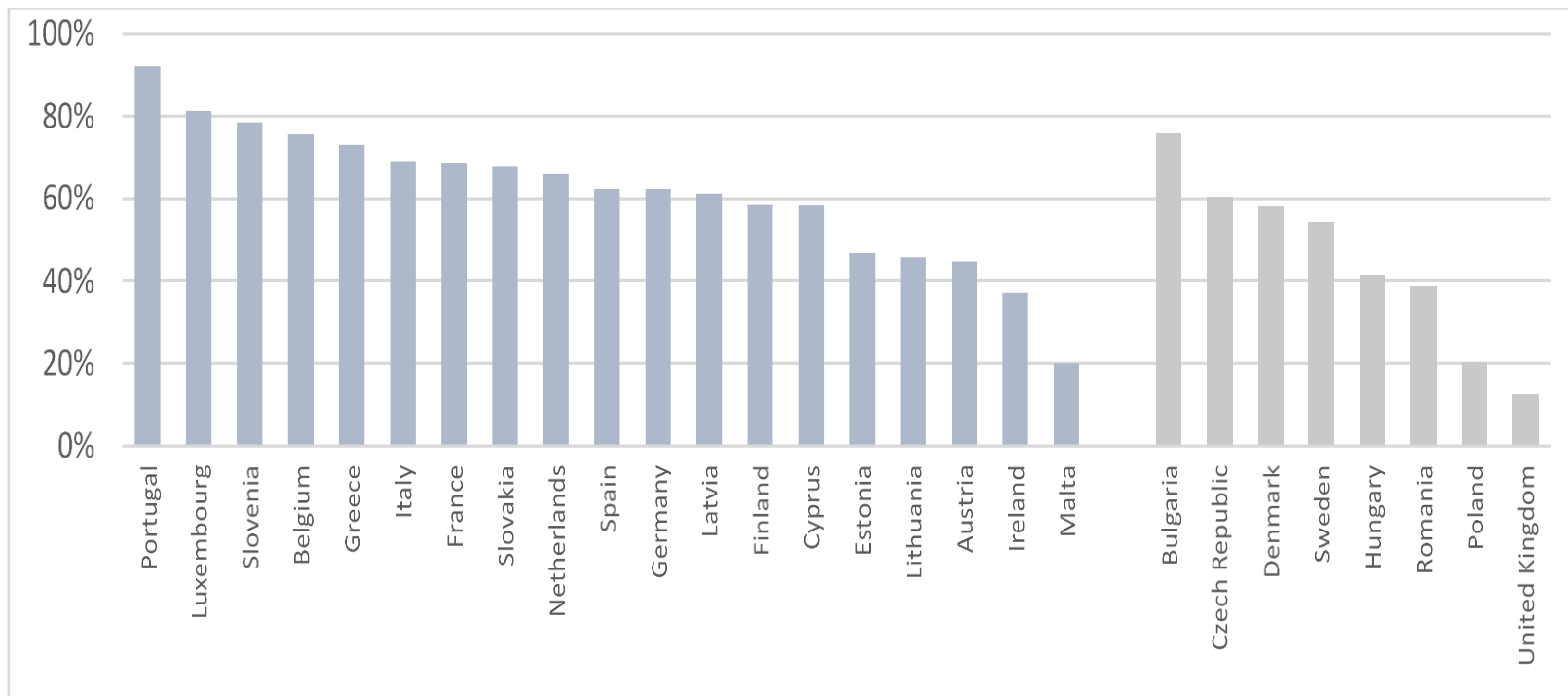
- Relevant features to assess the generosity of UBs:
 - **replacement rate**: *level* of the UB relative to the previous (future) wage. Replacement rate can be computed *net* or *gross* of taxes, at different unemployment durations, for different household characteristics
 - maximum **duration** of benefits
 - **eligibility** conditions (conditions for access) and **coverage** (fraction of unemployed receiving the benefit): categorical vs. means-tested
 - **entitlement** (rules for provision including sanctions after assessment of search intensity)

Evolution of UBs

- Increasing generosity up to the 1980s, especially in Europe. Levelling off or small decline in the 1990s
 - Net replacement rate on average 2/3 higher than gross rates
 - Increasing sanctions for refusal of jobs or participation to active labour market policies (ALMP)
 - Relatively low coverage notably in Southern Europe
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Net replacement rates for a single person in the EU27 (2010). Source: Esser et al. (2013) Report

Figure 1: Net replacement rates for a single person in the EU27,



Source: Social Policy Indicators (SPIN) Database.

Net Replacement Rates for four family types at two earnings levels.

After tax and including family and housing benefits for *long-term* benefit recipients (1999-2000)

	APW - level				66.7% of APW – level			
	Single	Married couple	Couple 2 children	Lone parent 2 children	Single	Married couple	Couple 2 children	Lone parent 2 children
Canada	24	41	62	60	35	57	81	80
France ¹	30	28	42	43	43	41	59	60
Germany ¹	54	52	65	63	63	61	71	71
Greece ¹	8	8	10	11	8	8	11	12
Ireland ²	31	43	56	56	41	59	66	64
Italy ³	0	4	18	14	0	5	21	17
Luxembourg	50	67	75	59	70	92	93	82
Norway	66	67	74	83	65	67	82	90
Sweden ⁴	54	71	85	59	79	102	110	70
United Kingdom	46	57	80	71	66	80	88	81
United States	7	12	46	38	10	17	59	48

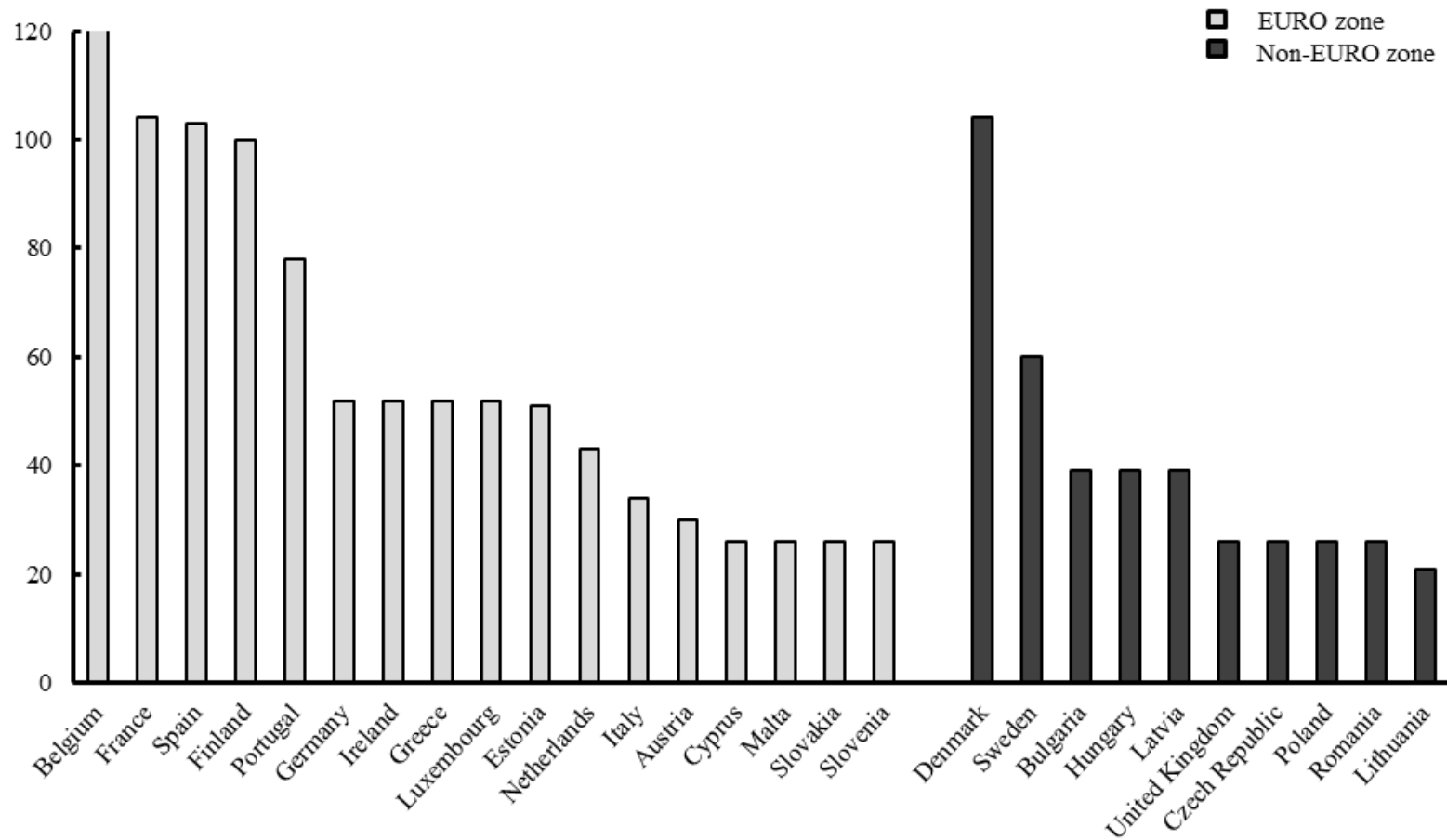
Note:

1. NNRs are based on SA except in France, Germany, Greece, where NNRs are based on unemployment assistance.
2. Housing benefits are not included due to very small number of recipients.
3. Social assistance (*Reddito minimo di inserimento*) is not included in Net Replacement Rates due to its experimental character (on trial in 39 municipalities). NRR are based on family benefits.
4. People in work are not entitled to social assistance.

Source: OECD tax-benefit models

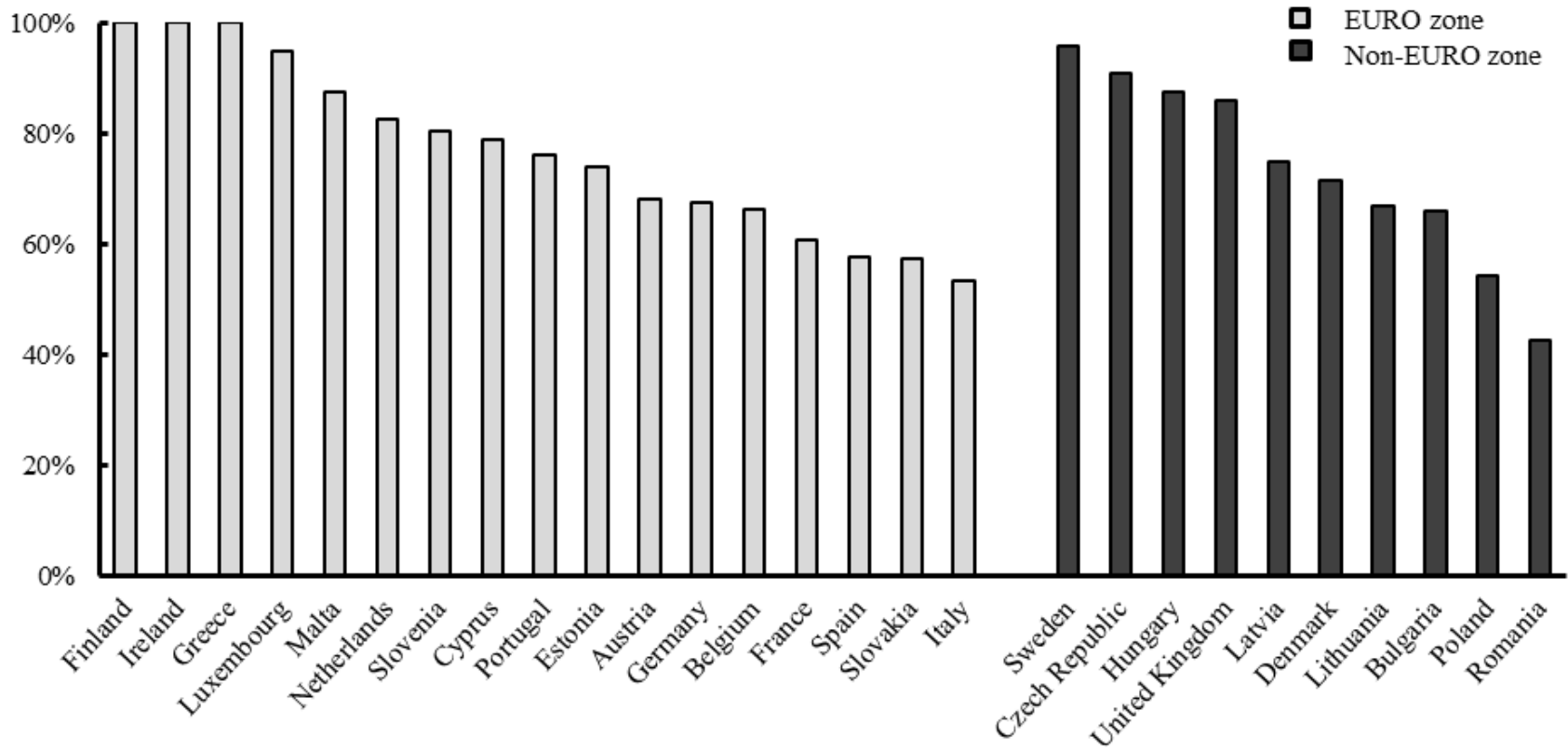
Duration of unemployment insurance benefits in 27 EU

Member States, 2010- Source: Esser et al. (2013) Report based on Social Policy Indicator Database (SPIN).



Unemployment insurance coverage rates in 27 EU Member States, 2010.

Source: Esser et al. (2013) Report based on Social Policy Indicator Database (SPIN).



Rationale for public intervention

- **Market failure:** moral hazard and adverse selection
 - **Asymmetric information.**
 - **Risk pooling problem:** risks are correlated (e.g., during recession a lot of people become unemployed in the same period)
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Trade-offs in the provision of UB

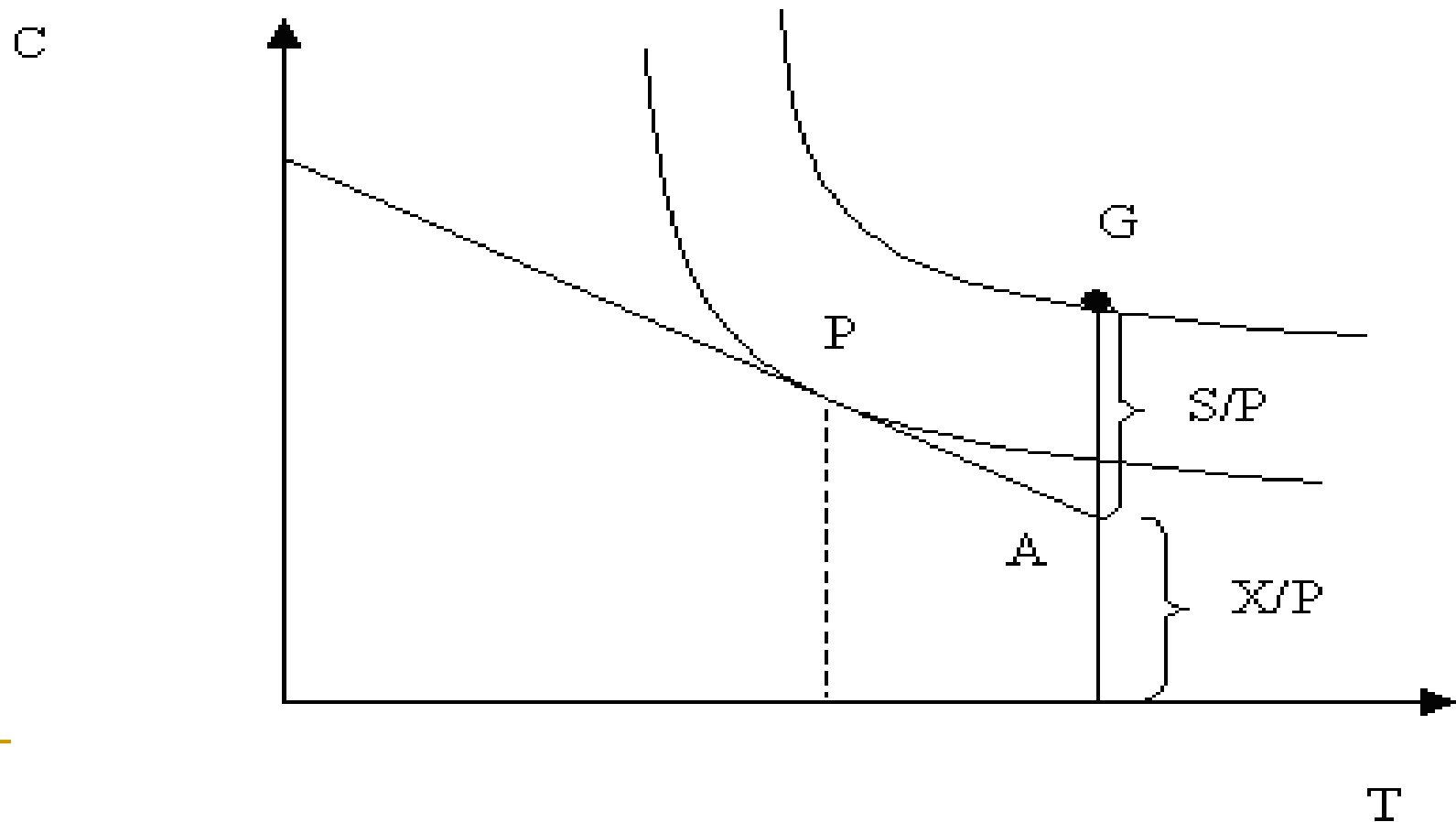
CONs

- **Reduced incentives to work** (welfare dependence)
- **Fiscal costs**

PROs

- **Improved risk sharing** (with risk-averse workers).
Increase in welfare
 - **Spillovers:** workers encouraged to take risky, jobs
 - **Subsidy to job search,**
matching efficiency
-

Work decision under unemployment benefits:
welfare dependency and lower labour supply especially for those receiving low net wages in the labour market



Expected effects in Labor Markets

- Main expected effects:
 - **Job search effect** (on the reservation wage)
 - **Wage effect** (on the bargaining outcome)
 - **Entitlement effect** (increase in participation of those not receiving Ubs)
 - **Moral hazard by employers** (greater use of layoffs)
 - Also **tax effect** related to funding of Ubs
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Job search and wage effects

Job search effect

- UB increase the reservation wage of those receiving it: jobseekers become more choosy and only accept job offers involving a higher net wage than the UB
- Longer duration of unemployment among UB recipients.

Wage effect

- Higher outside option of workers at the bargaining table (pure bargaining effect)
 - Higher wage is required to deter shirking (efficiency wage effect). The penalty associated with unemployment is reduced in presence of UBs
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Entitlement effect

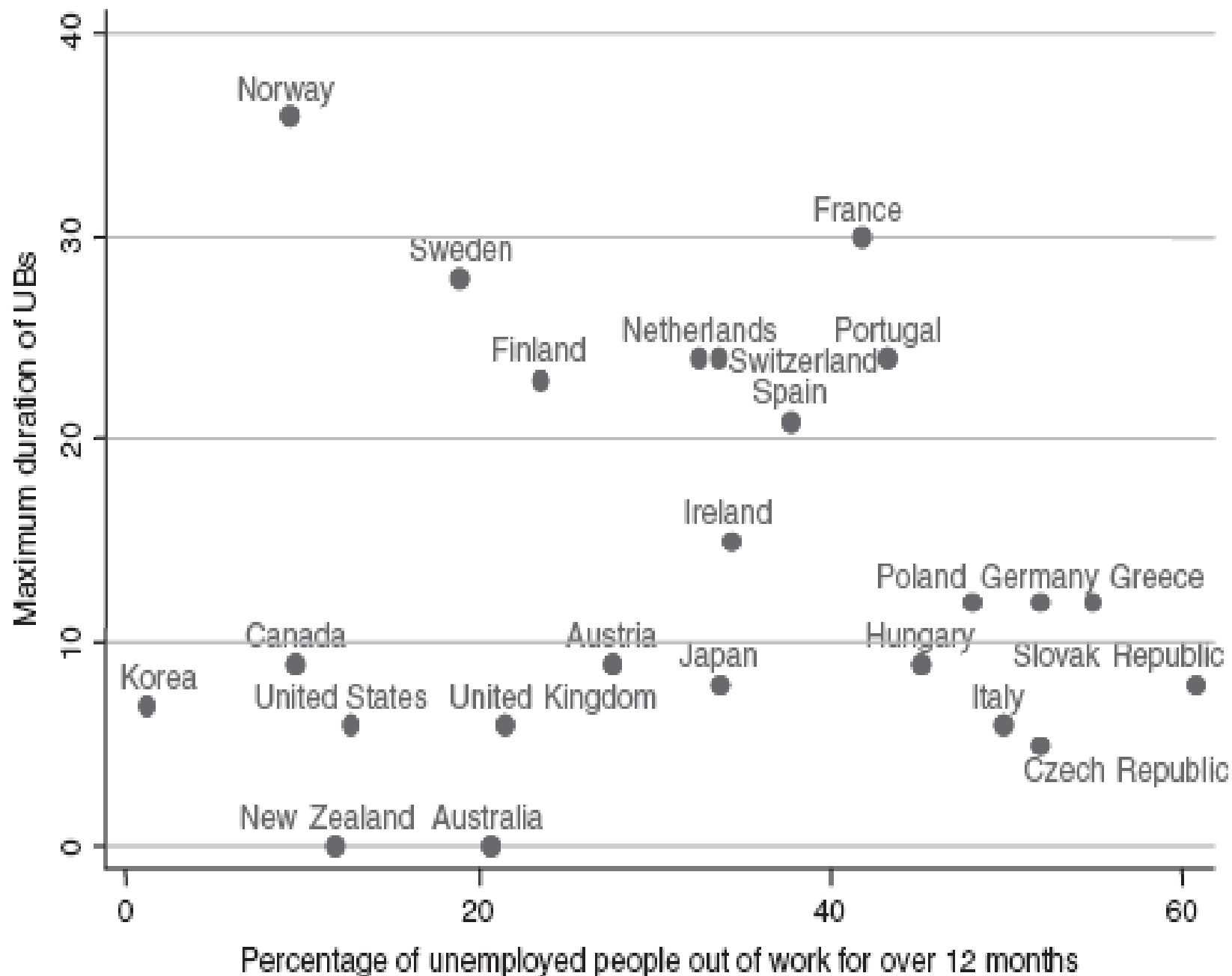
- **UBs increase the value of employment, and this induces:**
 - **Higher participation** in the labor market
 - **Lower reservation wage** of jobseekers not receiving Ubs and higher job finding rates of unemployed not eligible to UBs.
 - **Incentives to accept also risky jobs** (precarious or with temporary spells) for the outsiders
 - May **improve mobility** in economies experiencing structural change if in the declining sector there is wage compression
-

Moral hazard from employers

- With unemployment benefits supporting workers during unemployment, employers may have an incentive to use layoffs excessively
 - Firms exploit the availability of UB compensation to adjust the workforce do the business cycle
 - The layoff rate may increase as soon as workers become eligible to UB.
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Empirical evidence

- **Increase in reported reservation wages**
 - **Longer duration of benefits correlated with longer duration of unemployment.** Unemployment outflows increase in proximity of the maximum duration of benefits
 - Presence of **spillovers** between recipients and non-recipients of UB: also labor supply enhancing effects (as predicted by entitlement effect)
 - Evidence of **UB eligibility affecting the layoff rate** of workers as soon as they reach eligibility (e.g. US, Italy).
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Why do UBs exist, if they have negative effects?

- Properly designed UBs **improve the allocation of human capital** and thus, foster economic growth.
 - However, UBs **should not be too generous** in order not to discourage job search altogether and generate stagnant unemployment pools.
 - The most relevant issues do not concern whether or not a country should have a UB system, but **how the system should be designed** along its several dimensions. Difficult to reform once in place.
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Optimal design of UBs

- Public provider faces the moral-hazard problems on both workers' and employers' side.
- In order to reduce disincentives to seek jobs:
 - **Low replacement rates**, declining with unemployment duration.
 - **Administrative pressure** on recipients to search for and accept jobs.
 - Offer of **slots in ALMPs** as a way to elicit effort
 - **Introduce financial incentives to the take-up of jobs:** in work benefits and premia in terms of residual benefit claims.
- To reduce employers' excessive use of layoffs, introduce **experience rating systems**, with employers contributing to the UB system according to their use of UBs