



# THE OECD TAX-BENEFIT MODEL (TaxBEN)

PURPOSE, SCOPE AND USES



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<http://oe.cd/TaxBEN>



# The OECD tax-benefit model (TaxBEN)

## What is it?

- Essentially a **calculator** of tax liabilities and benefit entitlements for a broad set of hypothetical families.
- Users are **free to change** many characteristics of the selected families
- The model incorporates detailed **tax and benefit rules** for more than 40 countries and 22 years.
- Uses a **unified and consistent methodological framework** to calculate taxes and benefits.
  - ✓ Unique tool for **cross-country comparisons** and policy evaluations
  - ✓ **‘Official’ results**: ministries provide information, validate and ‘sign off’
  - ✓ Long history of use by IOs; **acceptance in policy community**
  - ✓ **Long time series**: back to at least 2001 for most countries
  - ✓ **Comparability, consistency** across countries and over time
  - ✓ **Versatile and flexible and “light”**; e.g., no need for survey/admin data
  - ✓ **Publicly available**: [indicators](#), [policy descriptions](#), [web calculator](#)
  - ✓ **Friendly support** 😊



# TaxBEN: A trusted source of evidence in the policy and research communities

## OECD

Employment Outlook, Economic surveys, Policy briefs and reviews, Accession reviews.

## Academic research

Journal articles and book chapters

## European Commission

European Semester and CSRs, EC tax-benefit database; EU Pillar of Social rights, flagship publications.

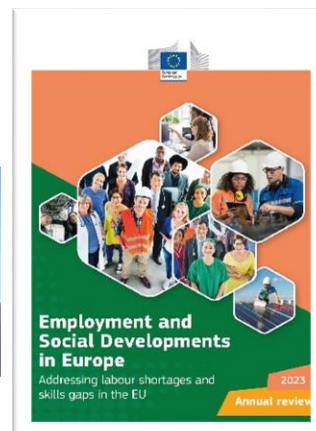
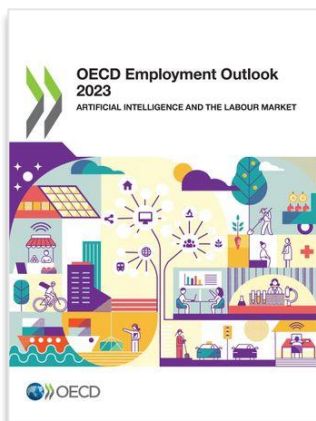
## National administrations and statistical institutes

Reports and databases

**Other IOs:** ILO, IMF, UN and WB → Working papers, reports and publications

## Media

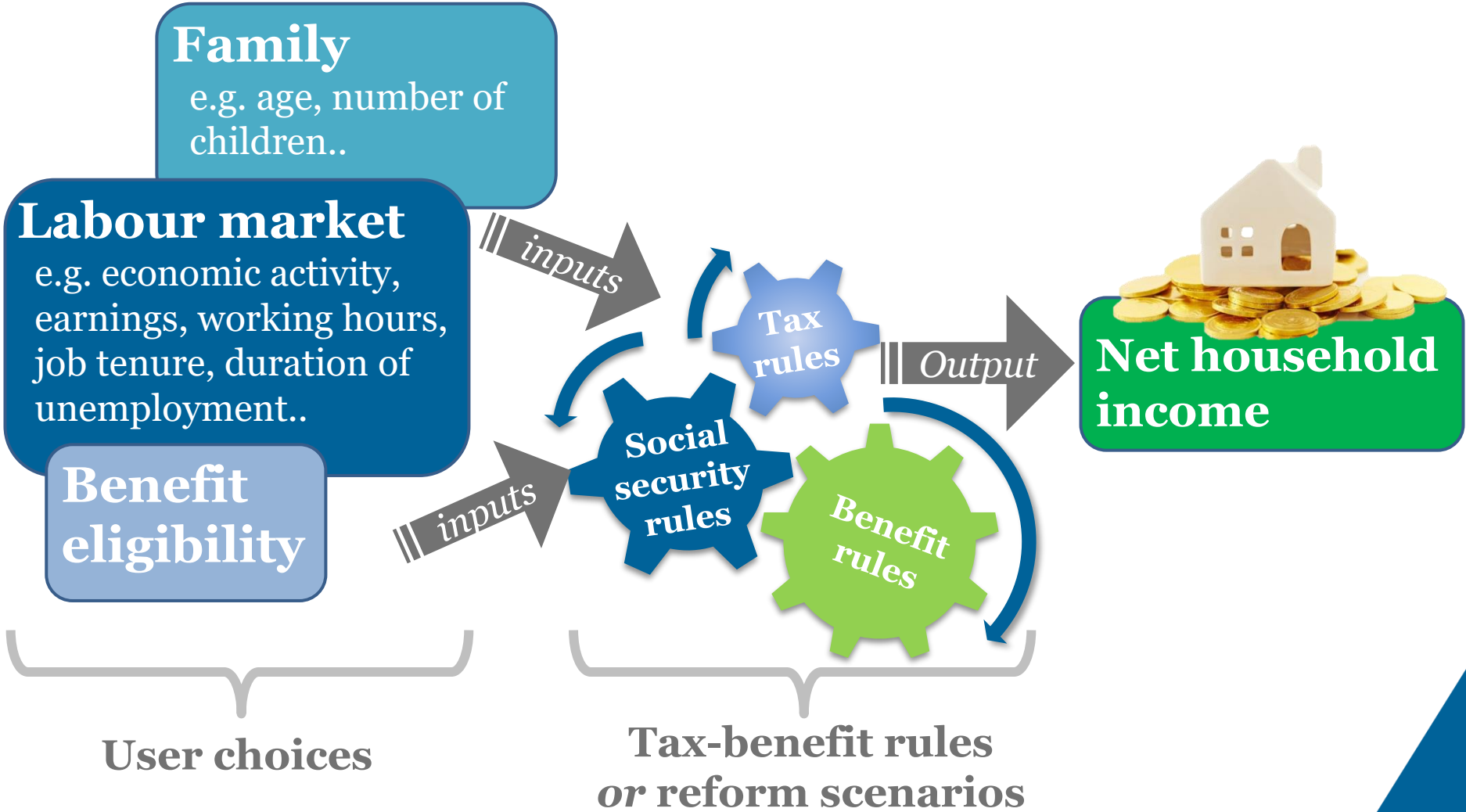
Newspaper, magazines, interviews





# How does TaxBEN work?

TaxBEN calculates taxes and benefits for hypothetical families *given a set of characteristics specified by the user*





# TaxBEN: highly customised results

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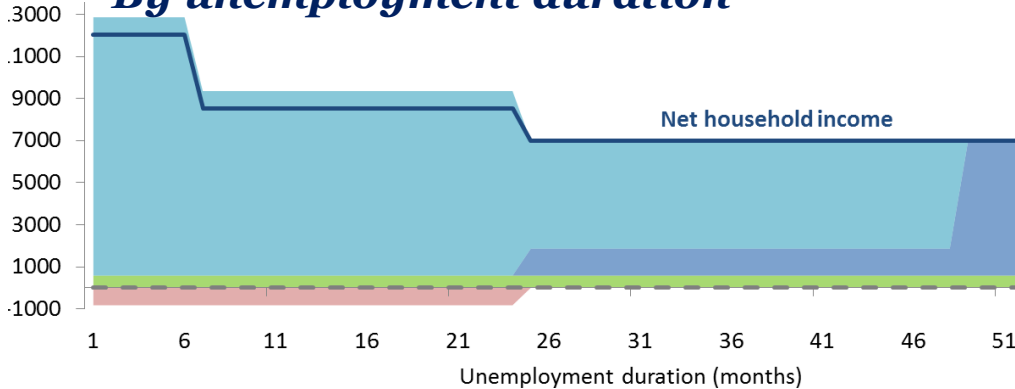
- Users are **free to change** many characteristics of the selected families, e.g.:
  - **Age and number of adults and children** (default: adults are 40 years old while children are aged 4, 6, 8 and 10 - depending on their number)
  - Social security **contribution record** (default: 22 years)
  - **Housing costs** (default: 20% of the average wage, when applicable)
    - Housing costs include both the rent and any housing-related expenditure
  - **Unemployment duration** (default: 2 months)
    - Unemployment duration is calculated at the end of any waiting period (when applicable)
  - **Hours of work** (default: 40 hours/week)
  - **Earnings levels** (default: Average Wage)
  - **Benefit eligibility / take up**



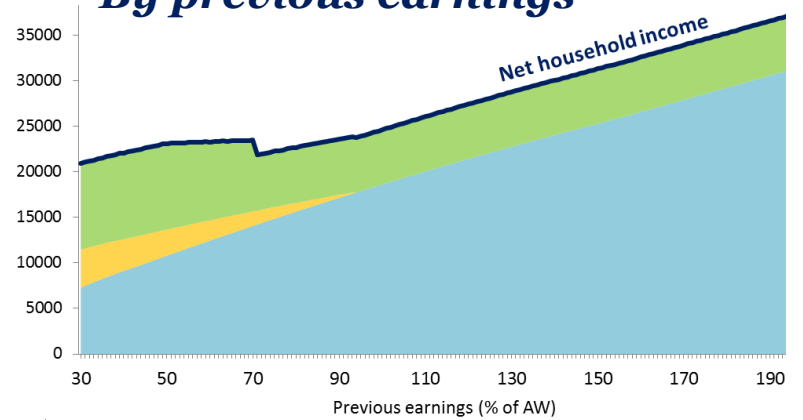
# Typical TaxBEN output

→ Net household incomes by selected scenarios

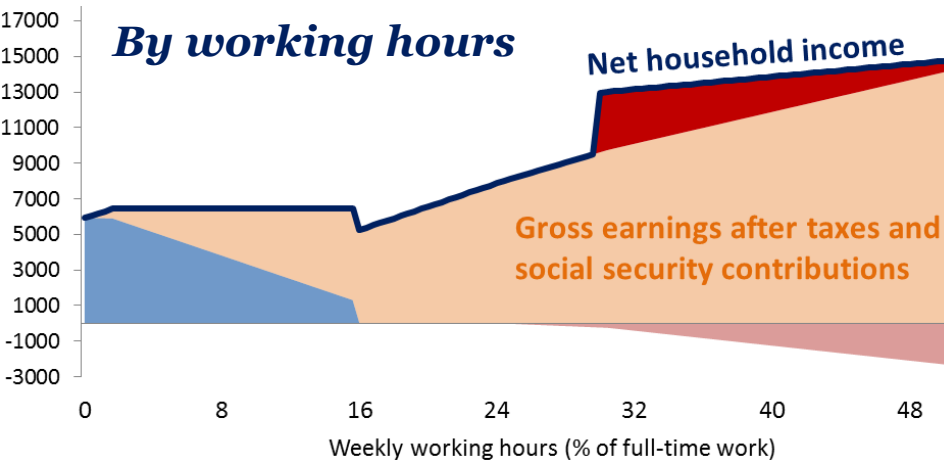
**By unemployment duration**



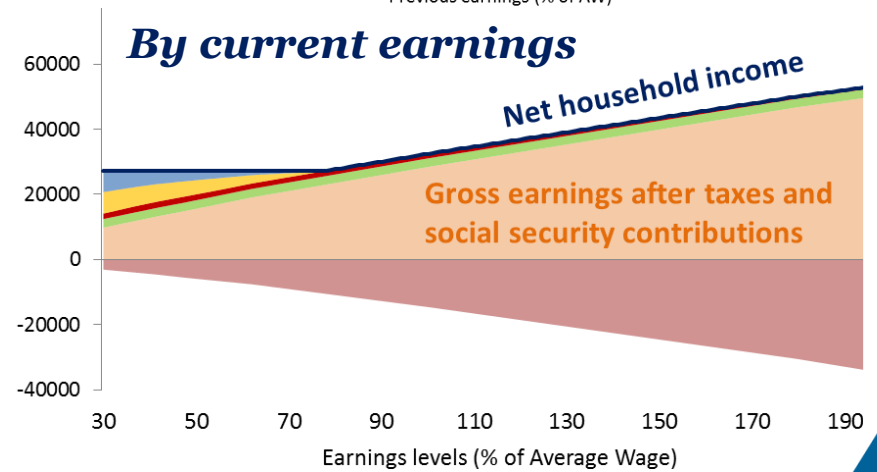
**By previous earnings**



**By working hours**



**By current earnings**



Gross earnings-IT-SSC  
Housing benefits (HB)  
Taxes

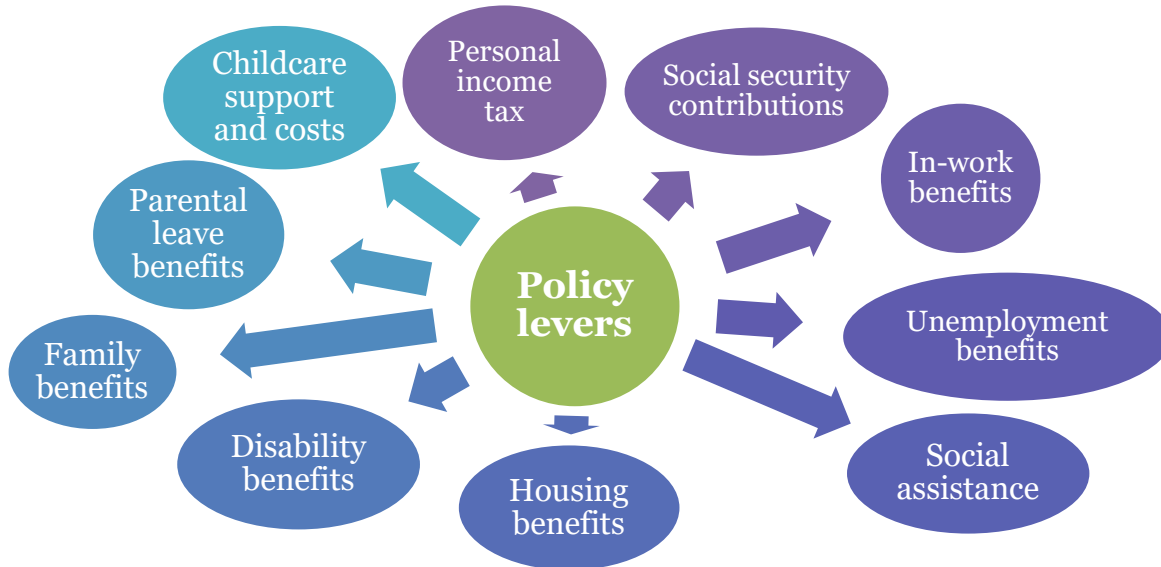
Family benefits (FB)  
Social assistance (SA)  
Net income

In-work benefits (IW)  
Unemployment benefits (UB)  
Gross earnings



# TaxBEN: Policy scope

- **Broad set of social and fiscal policy levers**



→ *Interactions between policy levers*

- **Note: some policies are not simulated**
  - ⚠ Taxes on wealth and property
  - ⚠ Indirect taxes
  - ⚠ Early-retirement / old-age benefits
  - ⚠ Sickness benefits
  - ⚠ In-kind transfers (e.g. free school meals or subsidised transport)
- **Others are simulated only for selected countries and years**
  - Net childcare costs
  - Parental leave benefits
  - Disability benefits



## TaxBEN: Purpose

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- **Results are useful to address questions like:**
  - Do cash transfers prevent income poverty?
  - Do childcare costs make employment financially unviable?
  - How generous are benefits for jobseekers?
  - What type of benefits do people receive when they are out of work? For how long?
  - What is the *net* income gain from an increase of the statutory minimum wage?
  - Do tax and benefit rules create incentives for the partners of a couple to share work more equally?
  - How has benefit generosity developed over the last years?







# Detailed descriptions of policy rules



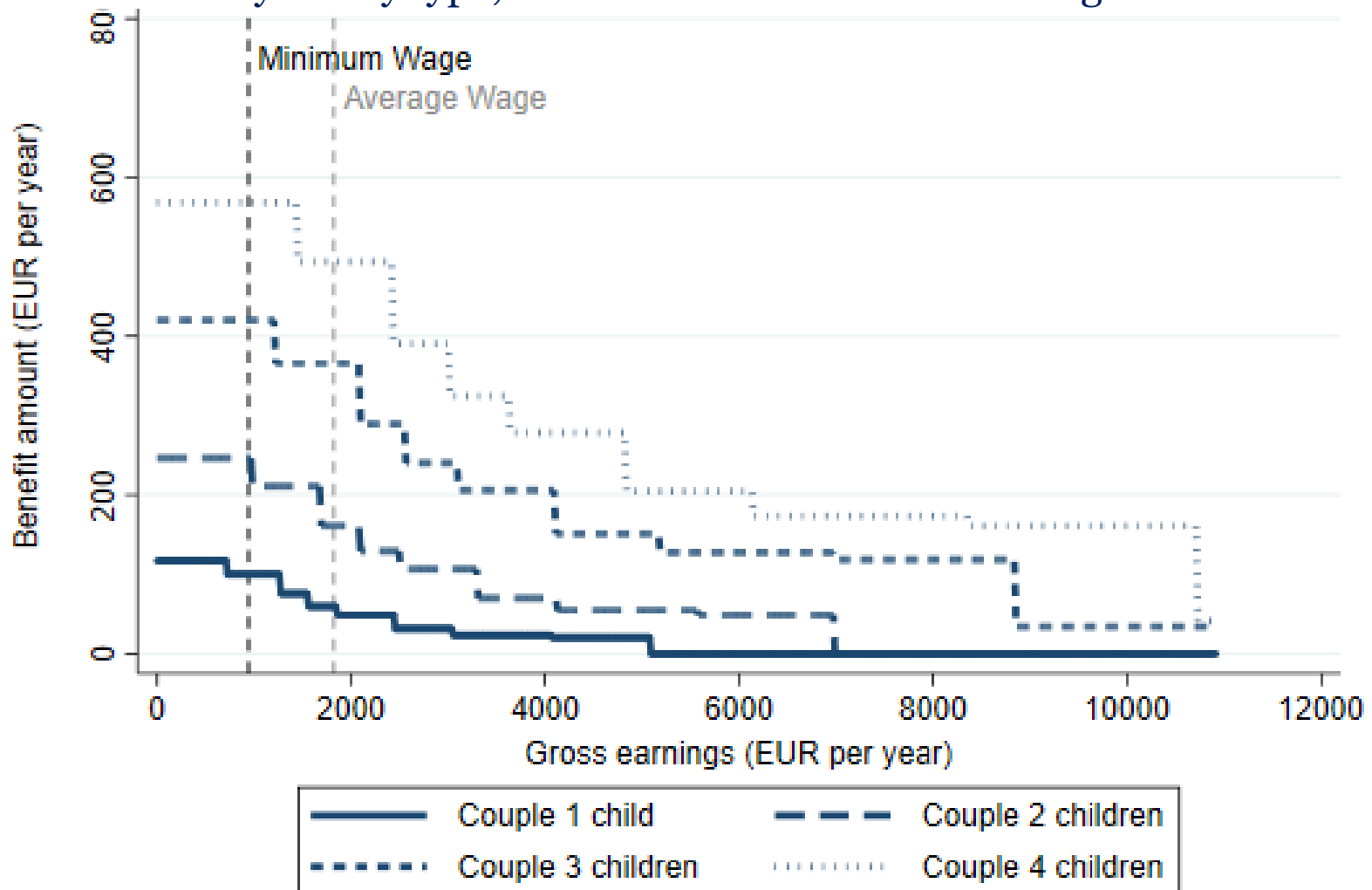
- Information provided and validated by national governments and national statistical institutes
- Annual updates
- Clear and comprehensive description of policy rules and interactions
- Explicit links with the TaxBEN model, including selected calculations
- [Available online](#) for all available countries and years



# Using TaxBEN

→ Analysing selected policy mechanisms for a particular country

## Family benefit amounts in Slovenia by family type, number of children and earnings levels

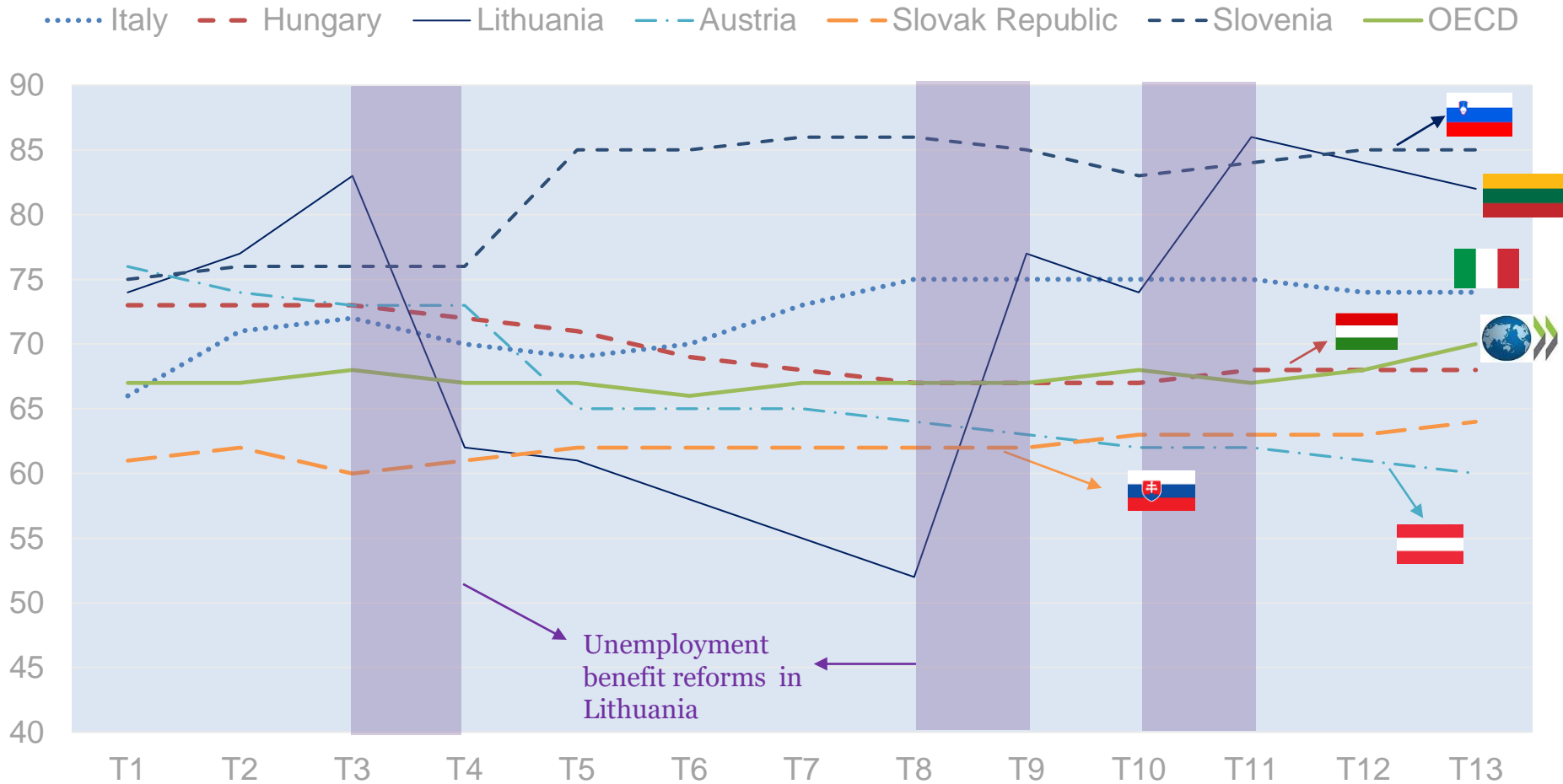




# Using TaxBEN

→ Monitoring reforms and policy benchmarking

## Net replacement rates in unemployment over time Single person without children



Unemployment benefit reforms in Lithuania

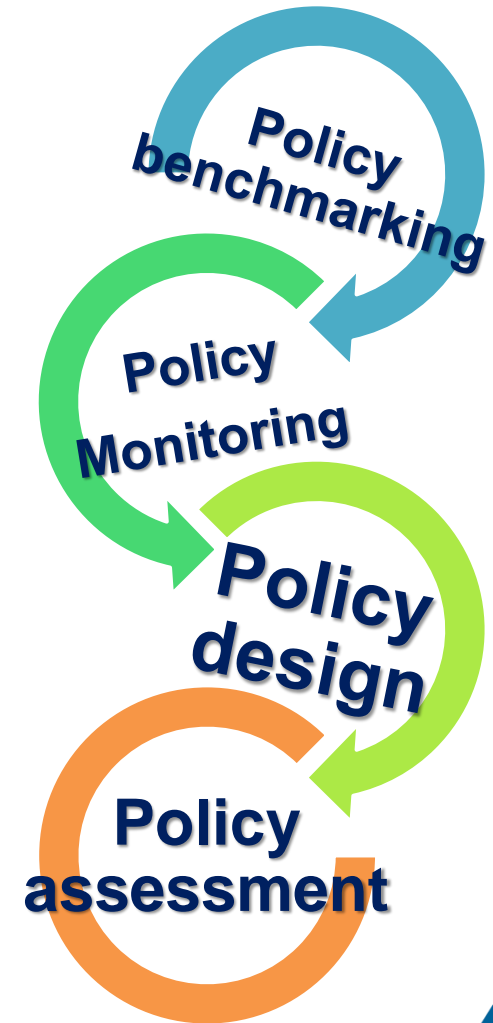
Source: OECD Tax and Benefit Model - <http://oe.cd/TaxBEN>



# Using TaxBEN

→ Assessing tax and benefit reforms

- TaxBEN has been used extensively for **policy benchmarking** and **monitoring** purposes.
- TaxBEN is particularly useful also for **designing** and **assessing reforms** at the country level.
- Policy assessments can refer to **past**, **recent** or **future reforms** (i.e. proposals that are debated or announced but not yet implemented)





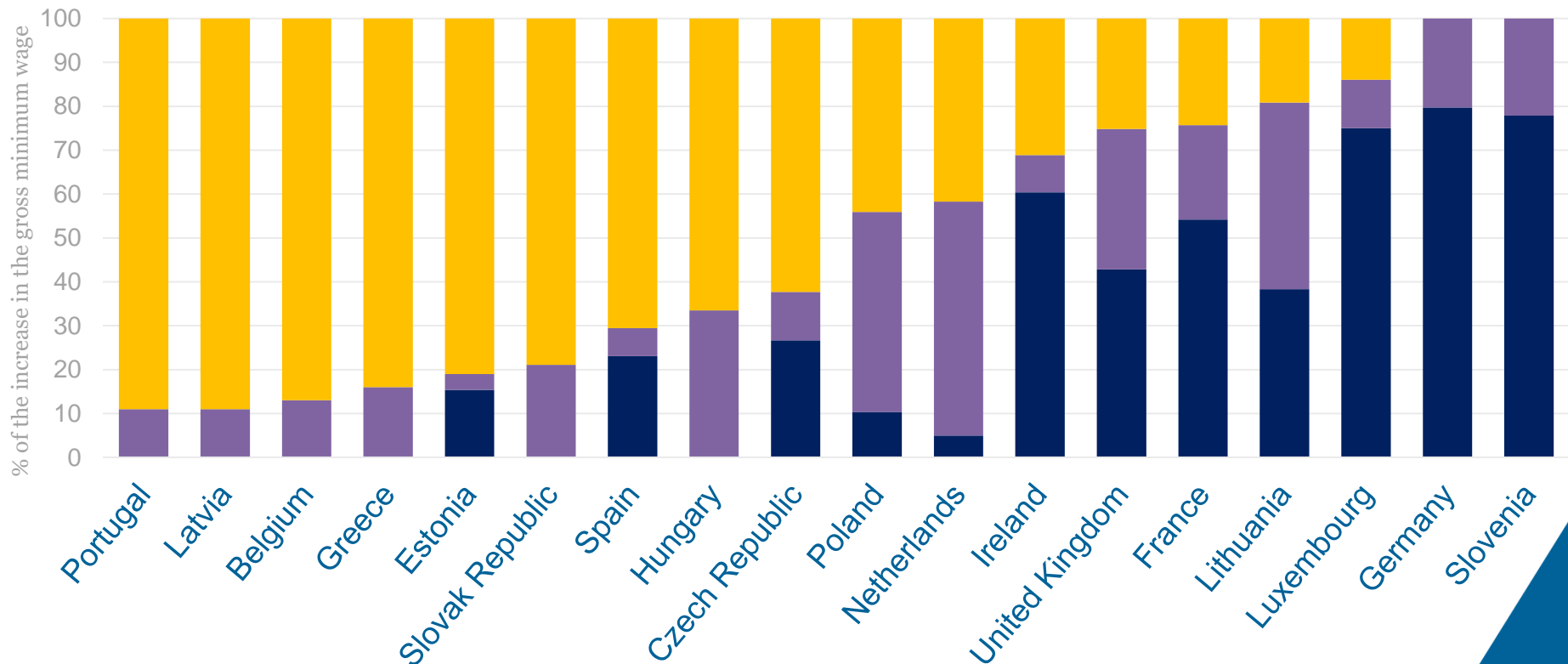
# Assessing tax-benefit policies. Illustration #1/3

## Increase of the statutory minimum wage

**What is the net income gain from 10% increase of the statutory minimum wage?**

One-earner couple with one child

■ Net Gain ■ Increase in employee income tax and social security contributions ■ Reduction in Benefit Entitlements





# Assessing tax-benefit policies. Illustration #2/3

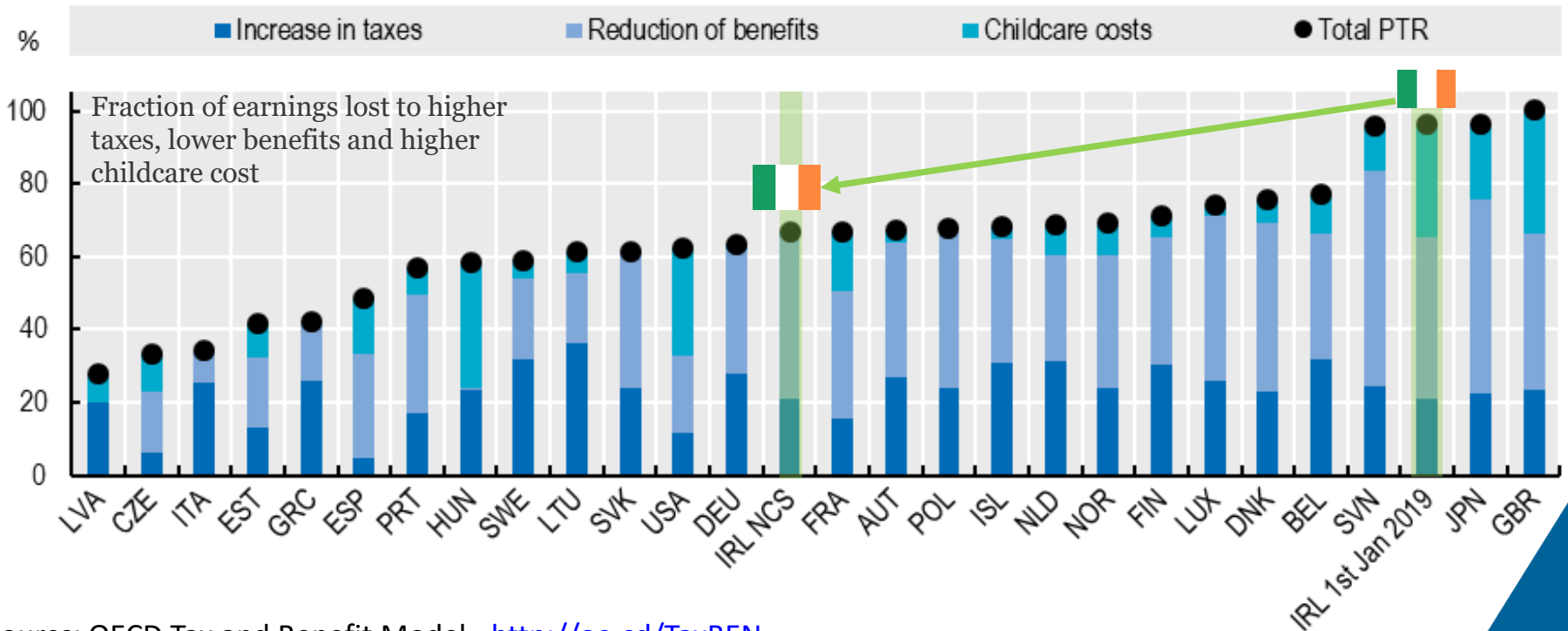
## Childcare reform in Ireland

From the Community Childcare Subvention scheme (CCS) to the NCS

The NCS introduced considerable subsidies to childcare costs for low-income families

### Effective tax rate to take up employment

Single parent taking up full-time work at the average wage, two children aged 2 and 3.





# Assessing tax-benefit policies. Illustration #3/3

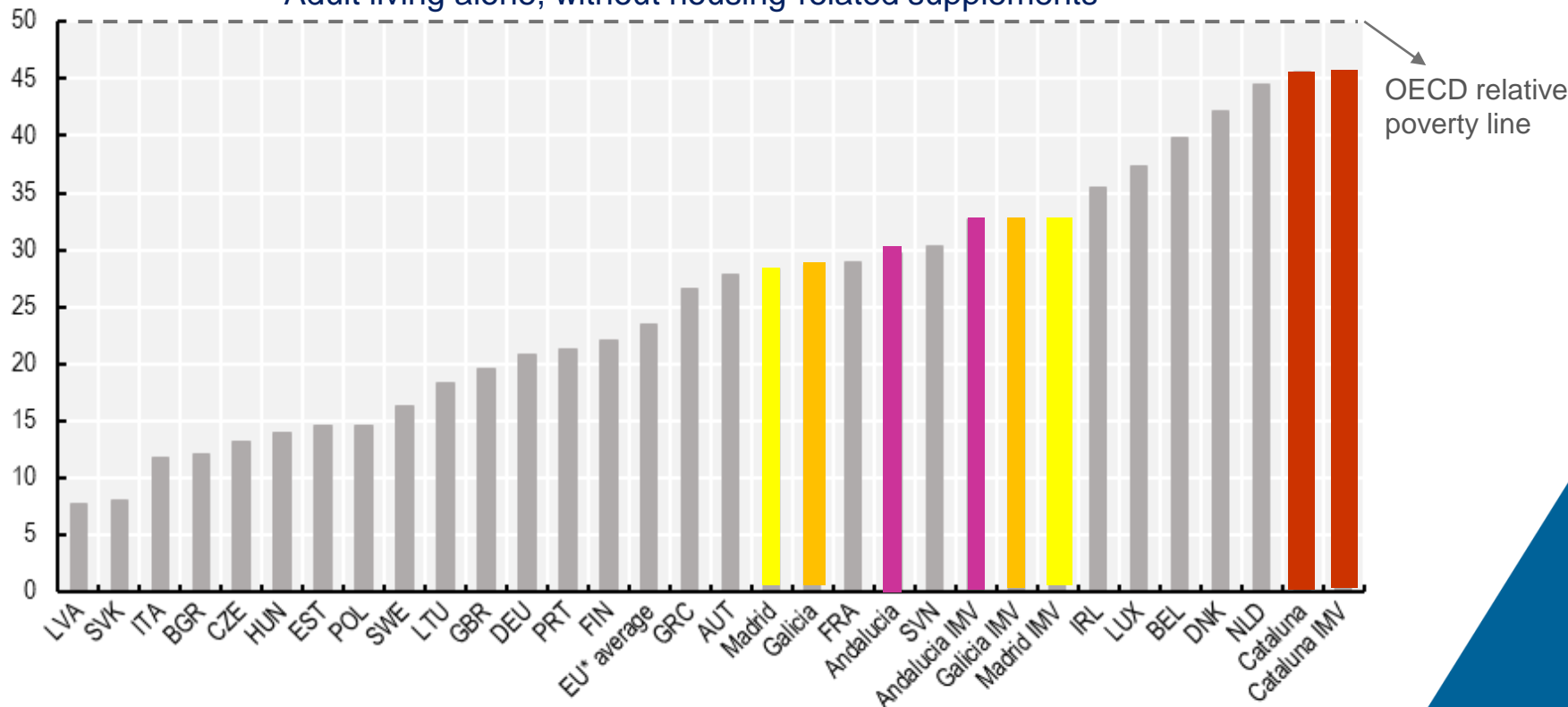
## GMI reform in Spain (*Ingreso Mínimo Vital*)

New GMI scheme that complements the existing regional schemes

Entitlements increase from about 28 to 30% of the national minimum household income to 33%. For Catalonia entitlements were already 46% (EU best) before the reform.

### Net income of GMI benefit recipients, in % of median household income

Adult living alone, without housing-related supplements





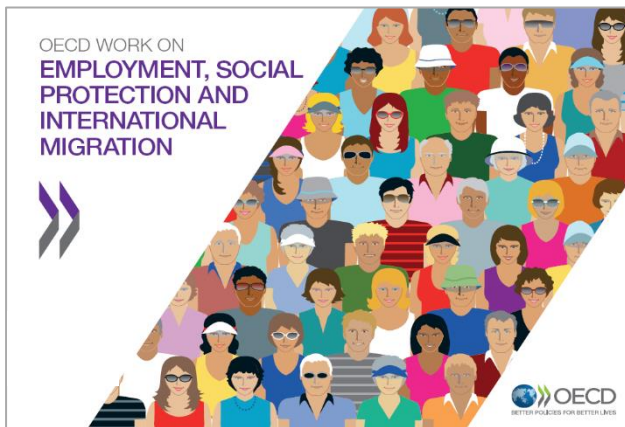
# Thank you!

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Web resources: [oe.cd/TaxBEN](http://oe.cd/TaxBEN)

