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**The use of hypothetical household data
for policy learning – EUROMOD HHoT
baseline indicators**

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Abstract

Tax-benefit microsimulation models are typically used to assess the impact of policy changes on the income distribution based on micro data representative of the population. Such analysis assesses the effects of tax-benefit policies by considering their interaction effects and the population structure, which are both important elements for an overall assessment of complex realities. However, it can be helpful to abstract from this complexity and to explain the effects of tax-benefit policies using concrete examples. Using hypothetical households visualises how single policies are linked with each other while leaving the additional complexity of the population structure aside. This paper uses the Hypothetical Household Tool (HHoT) to generate hypothetical household data that can be used in EUROMOD, the tax and benefit microsimulation model of the European Union, to analyse current tax and benefit policies as well as the effects of policy changes in a comparative manner. The paper provides a brief introduction of the use of hypothetical data in general and presents concrete examples of its application. The main part proposes a set of basic indicators that can be used to learn about European tax-benefit systems in a comparative perspective.

JEL: D04, H24, H31, I38, J38

Keywords: hypothetical households, European Union, microsimulation, social policy

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* The Hypothetical Household Tool (HHoT) has been jointly developed at the University of Essex and the University of Antwerp as an application of the EUROMOD software. The development of the application was supported by the InGRID (Inclusive Growth Research Infrastructure Diffusion) project funded by the European Commission's 7th Framework Programme under the 'Capacities' heading and involved 17 European partners. The authors are grateful to Tim Goedemé, Tine Hufkens, Chrysa Leventi, Kostas Manios, Natascha Van Mechelen, Olga Rastrigina, Holly Sutherland and Gerlinde Verbist for their work in developing HHoT and their comments to the report. We are furthermore grateful to our colleagues at ISER who provided valuable comments. The results presented here are based on EUROMOD version H1.0+. EUROMOD is maintained, developed, and managed by the Institute for Social and Economic Research (ISER) at the University of Essex, in collaboration with national teams from the EU member states. We are indebted to the many people who have contributed to the development of EUROMOD. The process of extending and updating EUROMOD is financially supported by the European Union Programme for Employment and Social Innovation 'Easi' (2014-2020). The results and their interpretation are the authors' responsibility.

1. Introduction: the use of hypothetical household data

Tax-benefit microsimulation models are typically used to assess the impact of policy changes on the income distribution based on micro data representative of the population. Such analysis assesses the effects of tax-benefit policies by considering their interaction effects and the population structure, which are both important elements for an overall assessment of complex realities.

Tax-benefit microsimulation models are also an important tool for ex-ante evaluation of reform proposals. In this context, it is often necessary to complement distributional effects with concrete examples using hypothetical data. Hypothetical data abstracts from the complexity of the population structure and uses well-defined model families to illustrate the pure policy effect (Burlacu, O'Donoghue, and Sologon 2014). As such, they are not a substitute for distributional analysis – i.e. of the actual income distribution – but a valuable complement for various purposes and user groups (see an overview in *ibid.*). Thus, microsimulation results based on hypothetical data capture the complexity of social welfare systems in showing how single policies are linked with each other while leaving the additional complexity of the population structure aside.

This is especially useful for the evaluation of policies targeted at certain household types. One can even change specific characteristics of the household stepwise while holding other characteristics constant and analyse the effects of these adjustments. The illustrative character of using hypothetical household data serves as a useful tool for policy analysts but can also help to communicate the effects of policy changes. By using concrete model families, the scientific community can contribute to a better understanding of policy design by translating complex legislation into accessible examples for a broader, non-scientific audience.

Finally, hypothetical data can also be used for model validation purposes and to understand the assumptions of different models. Newly implemented policies and reform ideas can be easily checked by producing results for households treated by these policies. Concrete examples help to better understand differences in assumptions and to cross validate results (Hufkens et al. 2016).

In this paper, we emphasise the illustrative and comparative uses of hypothetical household data for comparative policy learning. We present the Hypothetical Household Tool (HHoT), a novel application (Goedemé et al. 2018) developed at the University of Essex jointly with the University of Antwerp supported by the InGRID (Inclusive Growth Research Infrastructure Diffusion) project funded by the European Commission's 7th Framework Programme under the 'Capacities' heading. HHoT is a flexible tool that allows users to generate their own hypothetical household data. This data can be used in EUROMOD, the tax and benefit microsimulation model of the European Union, to analyse current tax and benefit policies as well as the effects of policy changes in a comparative manner.

Comparative indicators, like the ones presented in this paper, can provide a better understanding of how different policy designs affect the income situation of a specified household. This in turn can stimulate a first discussion about policy reforms. However, especially

in this context one needs to be aware of country differences in family, labour market and earnings structure. Hypothetical household results can show the mechanics of the system but do not take the representativeness of the model household into account (Immervoll, Marianna, and Ercole 2004). Population structure and labour market characteristics may lead to a successful policy design in one country but may have very different or even reverse overall effects in another. Nevertheless, analysis based on hypothetical household data contributes to a better understanding of tax-benefit policies and their comparative differences.

The aim of this paper is to offer a reference point (baseline results) to users of HHoT. We show how hypothetical household data can be used for both scientific research and policy analysis by presenting examples of analysis and by providing basic indicators describing the effects of tax-benefit-systems of the European Union.

The remainder is structured as follows: after a brief introduction to HHoT and EUROMOD, we further elaborate on the policy learning potential of hypothetical household data using concrete examples. The third section provides an overview of basic indicators in a comparative perspective, a proposal for how policy learning can be useful at the European level. The detailed methodological specifications and single country profiles are provided in the Annex.

2. HHoT: the EUROMOD hypothetical household tool

EUROMOD (EM) is the tax-benefit microsimulation model for the European Union that enables researchers and policy analysts to calculate, in a comparable manner, the effects of taxes and benefits on household incomes and work incentives for the population of each country and for the EU as a whole (Sutherland and Figari 2013). EUROMOD uses its own software, developed for its multi-country purpose, offering a high degree of flexibility.

EUROMOD is available for all EU countries and covers the policy years 2007 to 2017 except for Croatia where it is available from 2011 onwards. As such, it provides a very rich collection of tax-benefit rules which are updated every year and can be analysed using microdata or the user-generated model families.

The same criteria apply to HHoT. The hypothetical household tool is a EUROMOD application for generating hypothetical household data based on user-specified characteristics (Goedemé et al. 2018). Hufkens et al. (2016) provide an introduction to HHoT and a first validation of the application. Like the EUROMOD software and content, HHoT is also freely accessible together with the household specifications¹ and reference table used in this report.

Standard EUROMOD distributional analysis makes use of the European Union Statistics on Income and Living Conditions (EU-SILC) microdata for most countries². HHoT, which is embedded in the EUROMOD interface as an extra application, allows users to generate an alternative dataset with hypothetical households that can be used to calculate the same tax and

¹ <https://www.euromod.ac.uk/content/hhot-manual-and-households>

² The Family Resource Survey is used for the UK.

benefit elements but based on model families. These hypothetical data can include more information than available in EU-SILC and thus, allows for simulations of benefits and taxes that cannot be simulated in the standard EUROMOD due to the lack of information necessary to simulate certain policy elements correctly. Even though, the latest release of HHoT does not make use of this feature, the flexibility of the EUROMOD software allows user to create hypothetical data and to expand the models based on their research needs. The most sophisticated application of this feature is to replace microdata in cases where access to data is restricted or timely data and data for a specific population group is not available. Already now, HHoT allows for an analysis of subpopulation groups usually not very well represented in surveys such as top earners or multi-generational households.

HHoT is comparable to other hypothetical data tools like the tax-benefit model of the OECD³ or the SPIN⁴ and CSB-MIPI (Mechelen et al. 2011) databases. What is common to all these tools is that they provide comparative information on the institutional design of social policies and their impact on the income situation of various model families. They differ, however, in their country scope, the provided data points (time-series) as well as in their coverage of policy types. Most importantly, they also differ in their usability for specific research questions (see Table 1). The main disadvantage of these databases is that they only provide ready-made indicators for pre-defined households and actual policy systems. Using an application like HHoT on the other hand provides high user flexibility in defining the model families and together with EUROMOD, the possibility to simulate the effects of policy changes. Furthermore, different from other models, HHoT results can also be used to complement distributional analysis within the same consistent modelling framework.

Table 1: Comparative hypothetical household tools and their characteristics

	Type	Cross-country	Latest policy year	Flexible definition households	Policy changes	Detailed output	Complement distributional analysis
SPIN	Database	X	2013*	-	-	-	-
CSB-MIPI	Database	X	2012	-	-	-	-
OECD model	Model	X	2014	(X)**	(X)**	X	-
HHoT/EM	Model	X	2017	X	X	X	X

Note: own specification. * latest policy year depends on the selected set of indicators. ** The flexibility of the model is somehow restrictive as modelling policy changes beyond changes in current policy parameters is relatively complex. The same is true for complex household compositions.

3. Examples of policy learning using hypothetical household data

As mentioned in the introduction of this paper, hypothetical household data serve various purposes for different types of user (see Table 2 for a summary). In this paper we focus on the illustrative and cross-national dimension by showing how such data can be used for policy learning in Europe.

³ www.oecd.org/els/social/workincentives

⁴ <http://www.sofi.su.se/spin>

Learning from each other is an important element of policy reforms and causal mechanism of what is known as policy diffusion (Dobbin, Simmons, and Garrett 2007) and policy transfer (Dolowitz and Marsh 2000) in the public policy literature. Countries systematically respond to other countries' reforms by copying their policies or by reacting to the pressure resulting from policy changes in another country (Obinger, Schmitt, and Starke 2013). The intergovernmental exchange and collaboration within EU Member States (e.g. Open Method of Coordination) has strengthened and institutionalised this long history of policy learning. Many tax-benefit systems in Europe show similar characteristics and are comparable in their design and emphasise on specific target groups. Thus, policy learning can be used to reduce the uncertainty of consequences of policy changes and to build on best practise examples from other countries.

Table 2: Applications and user groups of hypothetical household tools

	Communication	Illustration	Cross-national comparison	Validation of simulations	Creating own data
Wider public	X	X	X	-	-
Policy analyst	X	X	X	X	X
Researcher	X	X	X	X	X

However, policy learning also needs to take the country-specific context (e.g. population characteristics) into account. That is why, providing indicators based on hypothetical household data can help to gain a better understanding of policy design and outcomes for specific model families and serves as a starting point for further (distributional) analysis. Urban et al. (2017) use this approach to learn about the support for children in different countries by varying the number of children and the earnings level of the parents. This analysis provides the basis for a policy swap exercise where the authors introduce family benefits of other Alps-Adriatic countries (Slovenia, Hungary, Italy, and Austria) to Croatia. The model family results furthermore provide a better understanding of how changes in the income distribution after implementing these complex policy reforms can be interpreted.

Hypothetical household data can also be used to learn about the evolution of social welfare systems within a country over time rather than policy learning across countries. One example is Navicke and Lazutka's (2016) research on work incentives in Lithuania. Their analysis is based on distributional data complemented by model families to show changes in the inactivity, unemployment, and low wage trap for specific households. Their work focuses on the periods 2005 to 2009 – which is characterised by rapid economic growth – and 2009 to 2013 – which is characterised by economic decline and fiscal consolidation. Their results illustrate the trade-off between adequacy of social support and work incentives and the pro-cyclical dynamics of cash benefits during economic growth and decline in Lithuania.

Another non-comparative example is based on Atkinson's (2015) proposals for reducing income inequality which include far reaching changes to current tax- and benefit systems using the United Kingdom as a case study. An analysis (Atkinson et al. 2017) follows up on these reform ideas and calculates their first-order effects on inequality and poverty. Due to the complexity of policy changes, model families are used to assess how the reform scenarios affect specific households. The authors focus on a two-adult household with children and vary the employment and income situation of the adults. Model families were not only used to better communicate and illustrate the results but also to validate how the proposals need to be implemented to have

the envisaged direct effects for the target group. This is an example of how model families can be used to understand complex interrelated mechanisms of the tax-benefit system by abstracting from additional population effects.

Hypothetical household data are furthermore used to assess the implicit equivalence scale of tax-benefit systems. Disposable household income is usually adjusted by an equivalence scale accounting for the composition of the household. A commonly used equivalence scale is the modified OECD scale attributing a weight of 1 to the first adult in the household, a weight of 0.5 to every other person above the age of 14 and a weight of 0.3 to every child aged 0-14. However, this standardised scale might not always capture the implicit judgements underlying the tax and benefit system. This is especially the case when taking different income levels into account. While higher income households seem to be well represented by the OECD scale, each additional household member increases the implicit scale by a weight of about 0.5 in low income households (Van de Ven, Nicolas, and Azpitarte 2017). A cross-country comparison shows that the implicit equivalence scale for high income households increases substantially with each additional household member in some countries while there is very little variation in others. Thus, research of this kind can be helpful to assess (a) the consistency of tax and benefit implicit scales compared to scales which are usually applied and (b) the generosity of welfare systems across countries for different family types. Research can also go beyond implicit equivalence scales by testing equivalence scales that are based on very different assumptions such as for example subjective equivalence scales based on an subjective assessment of the income a household needs to make ends meet (Kundera et al. 2016).

These examples showcase the variety of applications of hypothetical household data. Although all of them are based on relatively simple household characteristics, HHoT can also allow for more complicated household structures such as multi-generational households or far-to-reach target groups.

4. A proposal for policy learning in the European Union using HHoT baseline indicators

In this section we propose a collection of baseline indicators produced with EUROMOD-HHoT. The selection of indicators gives an overview of differences in tax-benefit systems across the European Union. More detailed country profiles are presented in the Annex. All results are based on the latest public release of EUROMOD H1.0+ using the country specific tax and benefit policies as of June 2017. We use EUROMOD software version 2.1.0 and HHoT software version v1.1.0.

To guarantee comparability across countries, all results are presented as a percentage of the country-specific 2017 average gross earnings. The earnings have been calculated using EU-SILC 2015 data and updated to 2017 using country-specific uprating factors (e.g. the increase in gross earnings retrieved from administrative data). A detailed description of the methodology as well as a table with the absolute values of the underlying average gross earnings can be found in Annex I.

The specification of the hypothetical households is based on specific assumptions (see Table 4 in the Annex). All adults are aged 40; the children are aged 4 (pre-school) and 6 (in primary education). Adults in employment are assumed to work full-time for 40 hours per week and to have 10 years of work experience. Similar characteristics are assumed for unemployed or inactive adults for their previous job. The (previous) earnings of the first and the second adult in the household are assumed to be equal to 100% of the average monthly gross earnings, unless otherwise specified. All households are assumed to live in rented accommodation with housing costs of 20% of the country-specific average monthly gross earnings. Finally, we assume that benefits are fully taken up by eligible units and that all model households report their actual income to tax authorities. Only simulated benefits are included in the analysis (see Table 5 in the Annex for more details).

Progressivity of tax and benefit systems

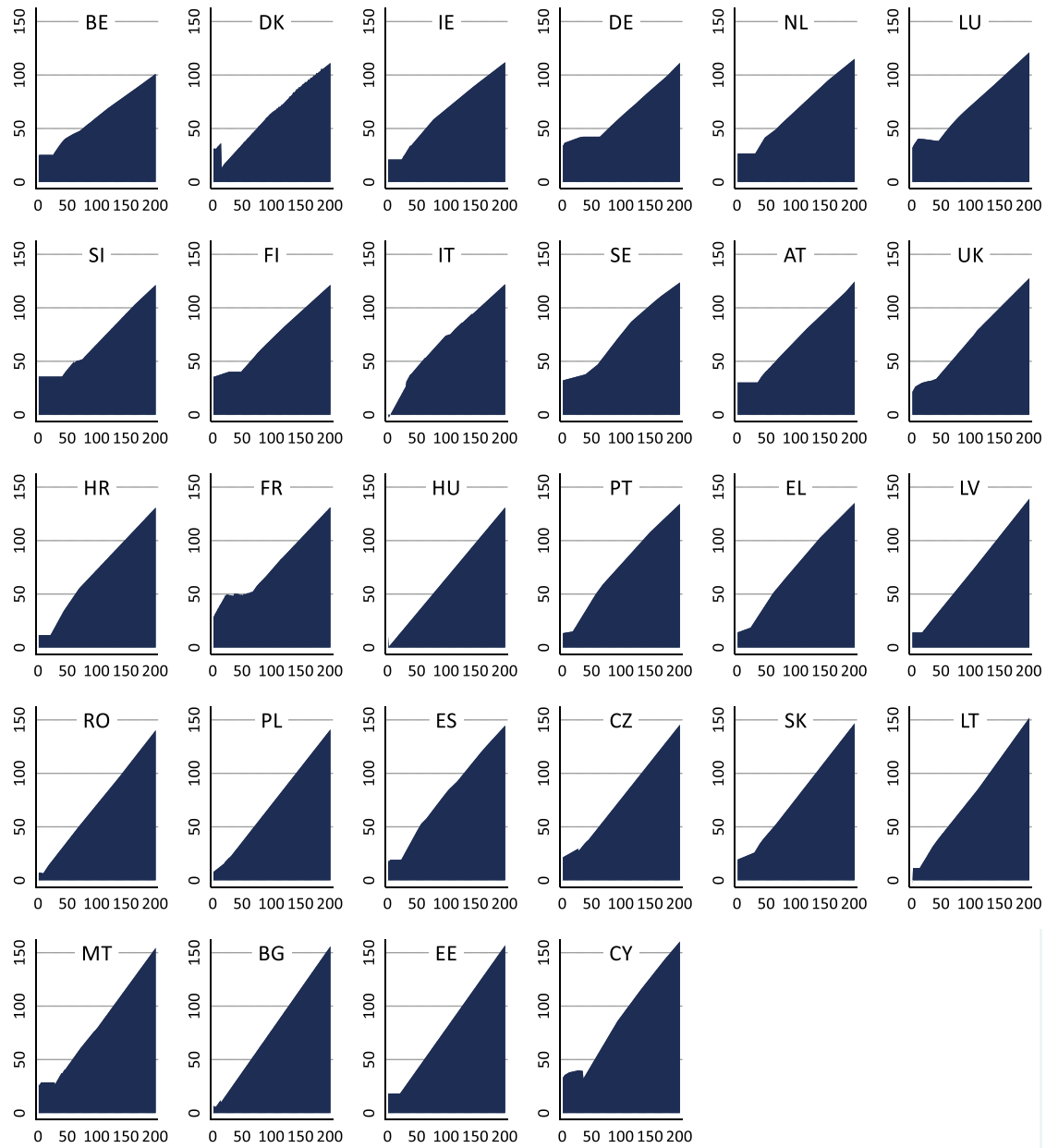
First, we focus on the progressivity of tax and benefit systems on single person households by level of earnings. Figure 1 shows the shape of disposable income starting with a person with 0% of average monthly gross earnings (inactive person), going up to a person with 200% of average monthly gross earnings on the x-axis and the level of disposable income (in % of average monthly gross earnings) including social transfers after taxes and social insurance contributions on the y-axis. All presented social insurance contributions in this paper refer to employees' social insurance contributions rather than employers' social insurance contributions.

Countries at the top of the graph are those with relatively high tax and social insurance contributions paid by higher earners (200% of average monthly gross earnings) while the bottom of the graph shows countries with relatively low contribution levels of high earners. High earners contribute a very high share of their gross earnings in Belgium, Denmark, and Ireland, while this is less the case in Bulgaria, Estonia and Cyprus.

A decomposition of this graph for each country (see the budget constraint charts in the Annex) shows that this is due to comparably low taxes and social insurance contributions in Cyprus, low worker social insurance contributions in Estonia and the flat tax system in Bulgaria. Deductions for a single person with 200% of the average monthly gross earnings amount to about 20% of the earnings in these countries while the same person would have to contribute up to half of the gross earnings in Belgium, Denmark, and Ireland.

Also, the shape of the disposable income by gross earnings gives an indication of the progressivity of the tax and benefit system. See for example the curvy line in Sweden as compared to the very straight line in Hungary. Like Bulgaria, Hungary has a flat-tax system with a similar share of contributions across earning levels while the curve flattens for higher earnings (i.e. higher contributions) in Sweden.

Figure 1: Net disposable income by level of gross earnings (0-200% of average gross earnings), 2017 policy system



Note: The x-axis shows the level of earnings in percentage of average earnings starting from 0 and going up to 200%. The y-axis shows the disposable income in percentage of average earnings after taking into account social transfers as well as taxes and social insurance contributions (assuming full benefit take-up and full tax compliance). Countries are ranked in ascending order by the level of net disposable income at 200% of average earnings. Policy system 2017 refers to the status quo on 30th of June 2017. See Annex for more detailed graphs.

The shape of the disposable income on the very left gives insights on the income support for low earners, the availability of minimum income benefits and extent of support. It shows that countries like Germany, Luxembourg, Denmark, Finland, France, Slovenia, and Sweden provide a relatively high level of support through means-tested benefits for people with no or very low earnings. In these countries, minimum income benefits are available as a top-up to low earnings and gradually decreased at a certain level of earnings (which is also highlighted in the budget

constraint charts in the Annex). The exception among the mentioned countries is Denmark, where relatively high support is available for people with up to 15% of the average monthly gross earnings and only very little support for people above this threshold. Different from other countries, social assistance benefit is not defined as a top-up to low household income but is in principle only available to families with no other income sources with the exception of earnings of DK 26.25 per hour for up to 160 hours per month. Thus, only model families with very low income are actually eligible to the social assistance benefit.

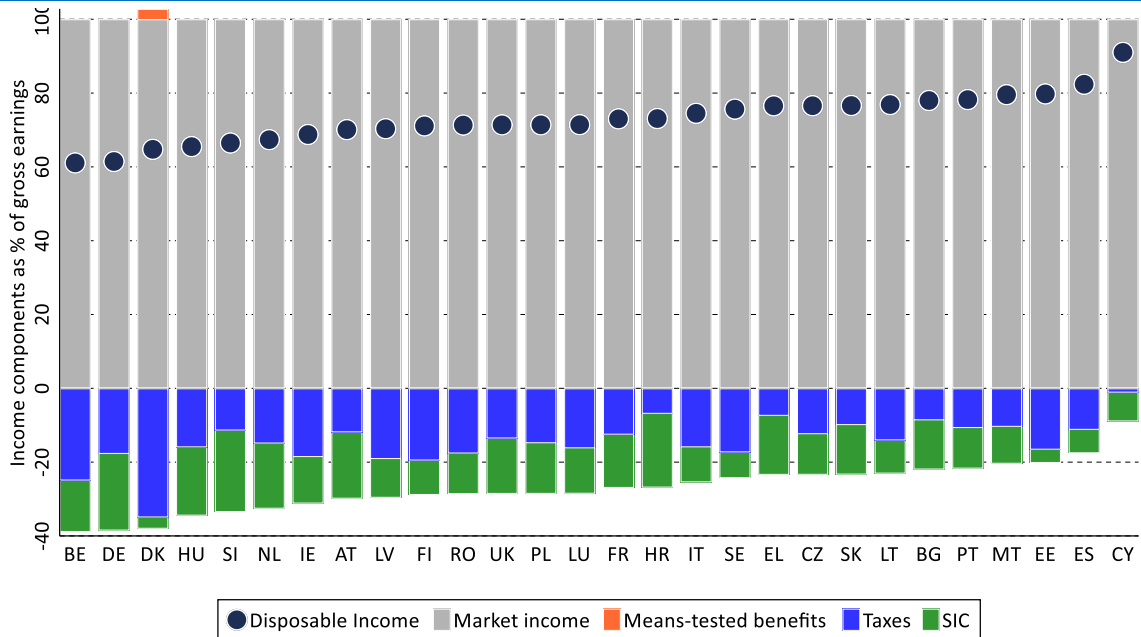
In Cyprus, the drop in disposable income of earners with more than 35% of average earnings can be explained by assumptions in the EM model rather than the actual situation. The Guaranteed Minimum Income (GMI) benefit in Cyprus consists of two parts, a top-up benefit for households with less than €480 household income in 2017 and a housing allowance, which is a supplement to the top-up benefit in case GMI recipients pay rent or they own a house and cannot afford to repay their mortgage loans. The applied asset test for the housing allowance in the EUROMOD baseline is simplified due to the lack of information in the usually used micro-data. Thus, everyone eligible for the top-up benefit also receives the housing allowance in the hypothetical scenario. While the top-up benefit gradually decreases with higher earnings, the housing allowance remains the same for all beneficiaries which leads to the drop in disposable income once the model family reaches earnings above the means-test.

Other countries provide no or very little support. See for example Bulgaria, Poland, Hungary and Croatia. In some countries, social assistance is only provided on the regional level which is not always simulated in the country models (see for example Italy).

In a second step, we look at the differences in disposable income and level of tax and social insurance contribution at different earning levels in more detail. Figure 2 shows the disposable income and the contribution of different tax-benefit components for average earners. Among the 28 EU countries considered, household disposable income of average earners ranges from 60% to 90% of gross earnings. Income taxes and social insurance contributions (SIC) as % of gross earnings are highest in Belgium, followed by Germany and Denmark and lowest in Cyprus, Spain, and Malta. In most countries direct taxes and SIC of average earners vary between 25-35% of their earnings which leaves them with an income of 65-75% of their gross earnings.

Countries also differ in the emphasis they put on direct taxes vs. SIC. While deductions are mostly based on taxes in Denmark, the social insurance system plays a fairly important role in Croatia, Slovenia, Austria, Germany and Cyprus (where income tax plays a very small role). In addition, Denmark is the only country where average earners are eligible for means-tested benefits (housing benefit and green check).

Figure 2: Gross vs. net income of average earners, 2017 policy system

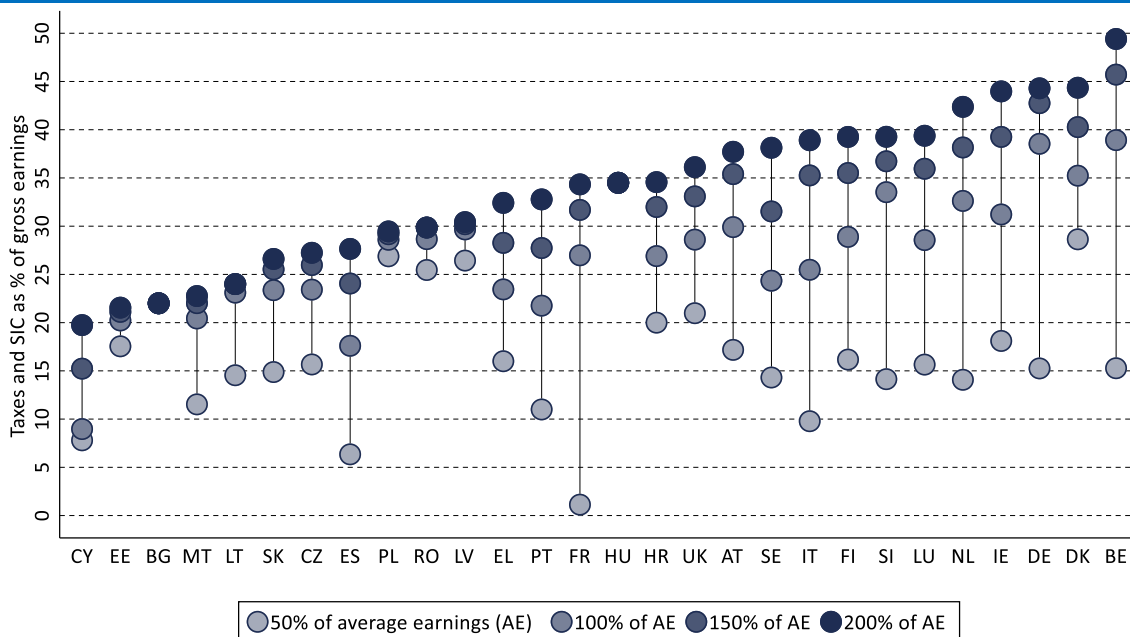


Note: countries are ranked by the level of disposable income. Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full tax-compliance and full benefit take-up.

Figure 3 shows taxes and SIC as percentage of gross earnings for individuals earning 50%, 100%, 150% and 200% of average monthly gross earnings. In the already mentioned “flat tax” countries, Hungary and Bulgaria, the percentage of taxes and SIC remains the same across earnings levels. Deduction rates are very similar across earnings levels in Estonia, Poland, Romania, and Latvia. To some extent this is also the case in Malta, Lithuania, Slovakia, and Czech Republic except for significantly lower rates for those earning 50% of average earnings. Similar to Hungary and Bulgaria, the income tax in most of these countries (the Baltics, Romania, Slovakia and the Czech Republic) consists of only one tax bracket, though the latter two temporarily introduced an additional tax bracket in mid-2012.

Deduction levels are especially low for low earners in France and Spain. Cyprus stands out with a comparably low, yet progressive, deduction rate across income levels. Other countries with higher but progressive overall tax and SIC deductions are Spain, Greece, Portugal, France, Croatia, and the UK. The same is true for Italy, Slovenia, Finland, Luxembourg, the Netherlands, Ireland, Denmark, and Belgium, where high earners pay more than 40% of their gross earnings in taxes and SIC. In Germany and Austria the relative tax and SIC burden of those earning 150% and 200% of average earnings is almost the same.

Figure 3: Taxes and SIC at different levels of gross earnings, 2017 policy system



Note: countries are ranked by the level of taxes and SIC of high income earners (200% of average earnings). Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full tax-compliance.

Work incentives

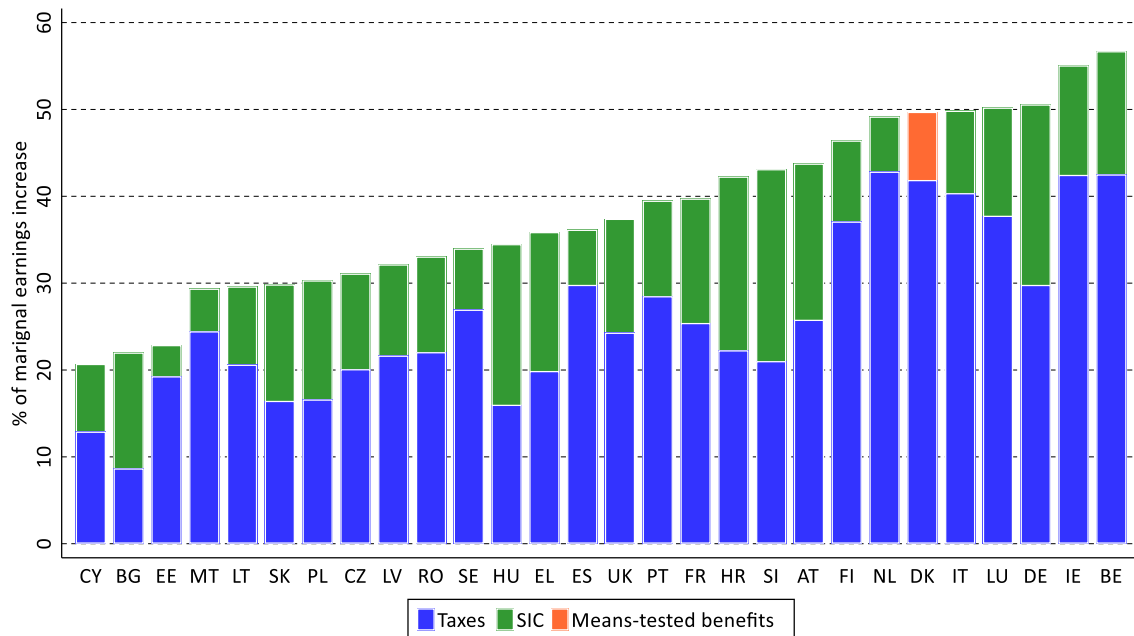
Another area where hypothetical data can be of use is the analysis of work incentives. Marginal effective tax rates (METRs) measure the incentive to work/earn more, expressed as the share of an earnings increase that is taxed away due to higher social insurance contributions, higher taxes, or the loss of benefit entitlement. We assume a 3% earnings increase in our calculations using the methodological approach suggested by Jara and Tumino (2013). METRs take values between 0 (individuals keep all the earnings increase = high incentive) and 100 (individuals lose all the earnings increase = high disincentive). The advantage of calculating the METRs in EUROMOD is that they can be complemented by population-level distributional analysis together with a profile of sub-population groups affected more by disincentives (Jara, Gasior, and Makovec 2017).

Figure 4 shows average METRs for earners with 80 to 120% of average earnings (the country profiles in the Annex include the same information for different earning levels). The reason for averaging instead of using the example of an average earner is based on the sensitivity of METRs which can differ a lot between an average earner and someone earning slightly above or below average earnings. Thus, using the average METR of a certain earnings range produces results that are more in line with the actual situation.

Across countries, net earnings increases are lower than gross increases due to higher taxes and social insurance contributions. The incentive to earn more is very high in Cyprus, Bulgaria and Estonia, where only about 20% of the earnings increase is lost due to higher taxes and social insurance contributions. Belgium and Ireland are the countries with the highest work disincentives for earnings between 80 and 120% of average earnings. Denmark is the only EU

country where average earners are still eligible for means-tested benefits (housing benefit and green check) which are reduced when their earnings increase.

Figure 4: Decomposition of average METRs at earnings levels from 80 to 120% of average earnings by income component, 2017 policy system



Note: countries are ranked by the percentage of marginal earnings increase taxed away. Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full tax-compliance and full benefit take-up.

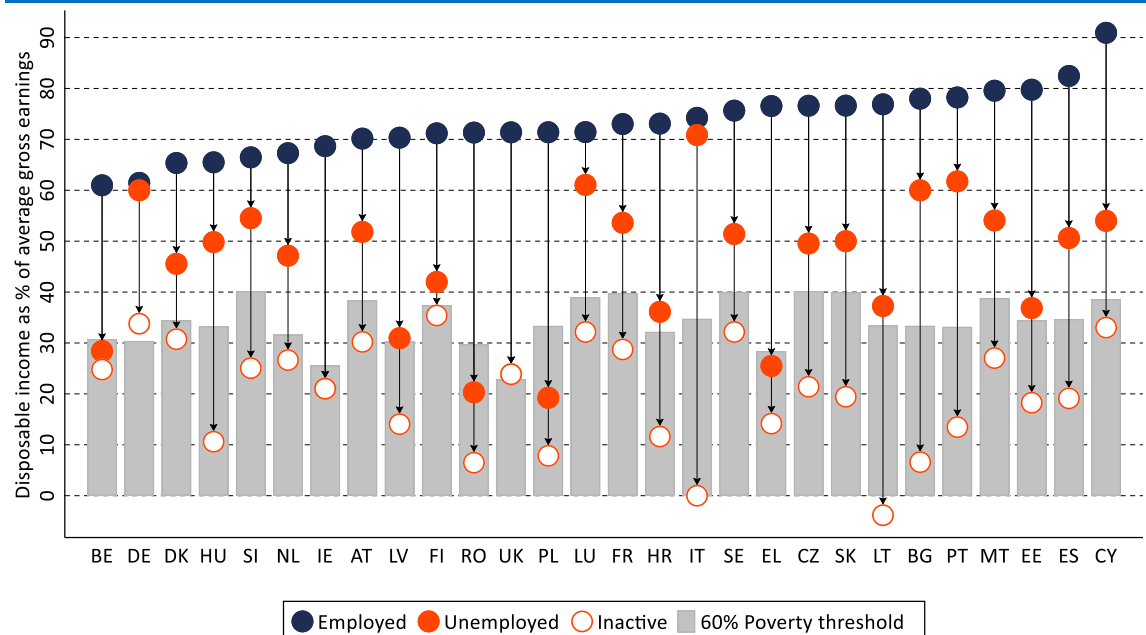
Replacement incomes of unemployed and inactive persons

While the previous section elaborated on work incentives on the intensive margin (to work more), this section is linked to work incentives on the extensive margin (to work at all). We show how the income of an employed average earner compares to her income once unemployed or inactive. Welfare states need to strike a balance between adequacy of social support and maintaining work incentives, meaning that support needs to be sufficient for those in need of a social safety net while at the same time being in employment still needs to pay off.

The starting point is Figure 2, where the disposable income of average earner as a percentage of her average gross earnings was presented. In Figure 5, we compare this level to the replacement income the same person would get if unemployed or inactive. We assume a work history of 10 years to make sure that the unemployed person fulfils the eligibility condition for the unemployment insurance benefit. The inactive person is not eligible for unemployment benefits and receives social assistance benefits (if available in the country). Also taxes and social insurance contributions that have to be paid by benefit recipients in some countries are accounted for. The results are compared to the level of the 60% poverty threshold. It indicates to what extent the provided support level is high enough to sustain a living standard above the poverty line when out of work. Please note that results in this Figure 2 refer to the average income in the period receiving unemployment benefit rather than the average monthly value of

the year. This is to show the actual replacement income in countries where entitlement to unemployment benefits is less than 12 months⁵.

Figure 5: The disposable income of unemployed and inactive compared to employed people and the level of the 60% at-risk-of poverty threshold, 2017 policy system



Note: The calculation of the poverty threshold is based on the simulated disposable income using EUROMOD. Countries are ranked by the disposable income of the employed person. Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full tax-compliance and full benefit take-up. The employed and unemployed individuals are assumed to have a work history of 10 years in full-time employment with previous earnings of 100% of average earnings. Values refer to monthly values rather than monthly averages.

Figure 5 shows that the replacement income for the unemployed is quite different among EU Member States. Germany, Luxembourg, Italy⁶, Bulgaria and Portugal provide relatively high benefits for unemployed. However, while unemployed are entitled to the benefit for at least 12 months in most of these countries, it is only 9 months in Bulgaria (and support very low for those no longer eligible). Unemployed persons have almost the same disposable income as employed average earners in Germany. This is not only due to the high replacement rate of the unemployment benefit but also due to the high contributions paid by the employed person. Other countries like Romania and Poland provide very low levels of support clearly below the poverty line. Especially in Poland, this can lead to a quite precarious situation as unemployment benefit is only paid for 6 months and financial support is very low for those no longer eligible for the benefit. Unemployment benefit is relatively high in Hungary but only paid for 3 months.

⁵ Benefit entitlement is 6 months in IE, MT, LT, CY, SK, SI, PL; 3 months in NL, HU; 11 months in CZ; 9 months in BG

⁶ In Italy this is partly due to the current implementation of unemployment benefit which does not take all eligibility criteria into account.

Similar to Poland, Romania, Bulgaria and Croatia, the replacement income drops to 10% of average gross earnings.

In general, the income situation is relatively precarious for the inactive across countries. In most countries, income support for those no longer eligible for any kind of unemployment benefit is relatively low and below the poverty threshold. No support for the inactive model family is available in Lithuania. Even though Lithuania provides a social assistance benefit to those with no or low income, one eligibility criteria is to be registered with the “state territorial labour exchange”. However, the inactive person in our scenario is not available for the labour market and thus, does not fulfil the conditions for receiving social assistance benefit. On top of that, inactive in Lithuania are still liable for paying mandatory health contributions which leads to a negative disposable income. There is no national social assistance scheme in Italy. The (limited) schemes at the local level are not part of the simulations in EUROMOD. The level of support is the same for unemployed and inactive people with previous average earnings in the UK and Ireland (and almost the same in Belgium).

Support for families with children

An important element of most tax and benefit systems is the support for families with children. It is usually provided through a mix of direct family benefits, income replacement for child care or tax reliefs for employed parents. The focus of this section is on the tax elements and direct cash benefits of tax-benefit systems.

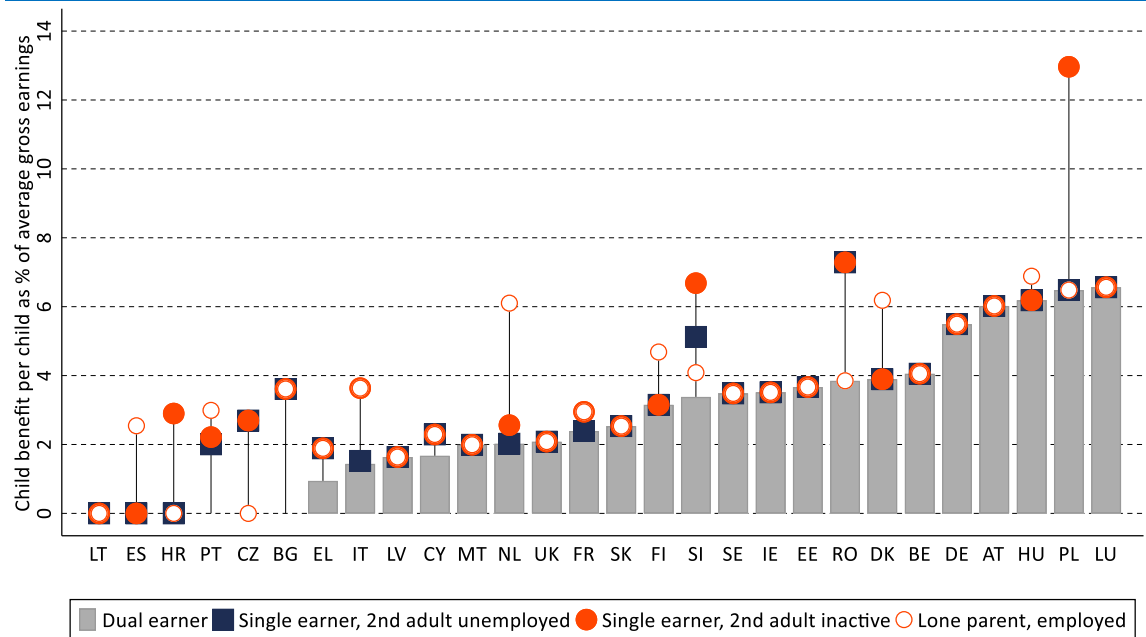
Figure 6 gives an overview of simulated child benefits differentiating lone parents and couple parents as well as the activity status of the second adult in the couple-parent household. The graph shows to what extent child support depends on the household composition and the income level of the parents.

Many countries provide the same support regardless of the activity status/income of the parent(s). This is the case in Latvia, Malta, the United Kingdom, Slovakia, Sweden, Ireland, Estonia, Belgium, Germany, Austria and Luxembourg. Most of them provide universal child benefits (no means test applies). In addition, some of these countries also provide a (smaller) means-tested benefit for large families or lone parents. However, the presented model families do not fulfil the requirements for these benefits⁷.

Lithuania stands out with no family benefit for the specified model families. Across household types, earnings are too high to fulfil the income test of the child benefit. The situation is similar for selected households in Spain, Croatia, Bulgaria, Portugal and the Czech Republic.

⁷ Two children do not classify as a large family or the overall household income is too high.

Figure 6: Family benefits per child by household types in % of average gross earnings, 2017 policy system

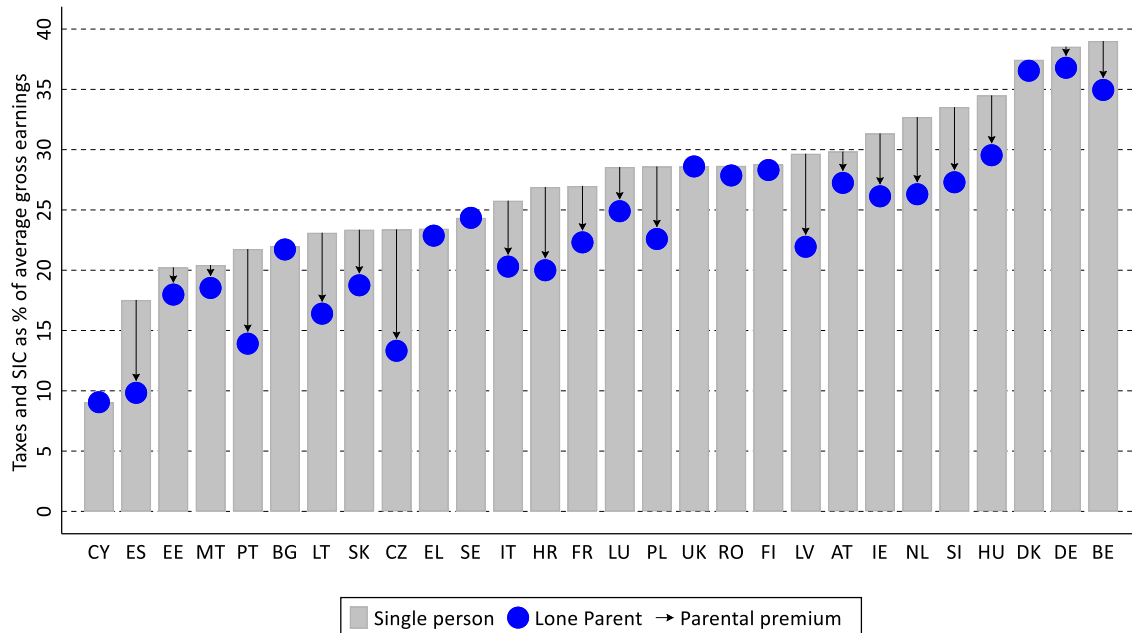


Note: Countries are ranked by the benefit level of “Dual earner”. The children are assumed to be 4 and 6 years old. Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full benefit take-up. The employed and unemployed individuals are assumed to have a work history of 10 years in full-time employment with previous earnings of 100% of average earnings. All employed parents are assumed to earn average earnings.

On top of cash benefits, many tax systems provide a tax premium for parents. Figure 7 compares the share of direct taxes and social insurance contributions of lone parents to that of a single person household without children. The difference between the income deductions is the tax premium for a single person living with children (the only characteristic that differentiates the two households from each other).

The graph shows that lone parents with average earnings pay substantially less taxes and SIC than single person households in many countries. This is especially the case in Spain, Latvia, Croatia, Portugal (all -8%) and Czech Republic (-10%). Other countries provide only very small or no tax relief. This is for example the case for Denmark and Germany, two countries with very high overall share of deductions, as well as Cyprus, Estonia, Malta, Bulgaria, Greece, Sweden, the United Kingdom, Romania and Finland.

Figure 7: Taxes and SIC of a lone parent compared to a single person without children , 2017 policy system

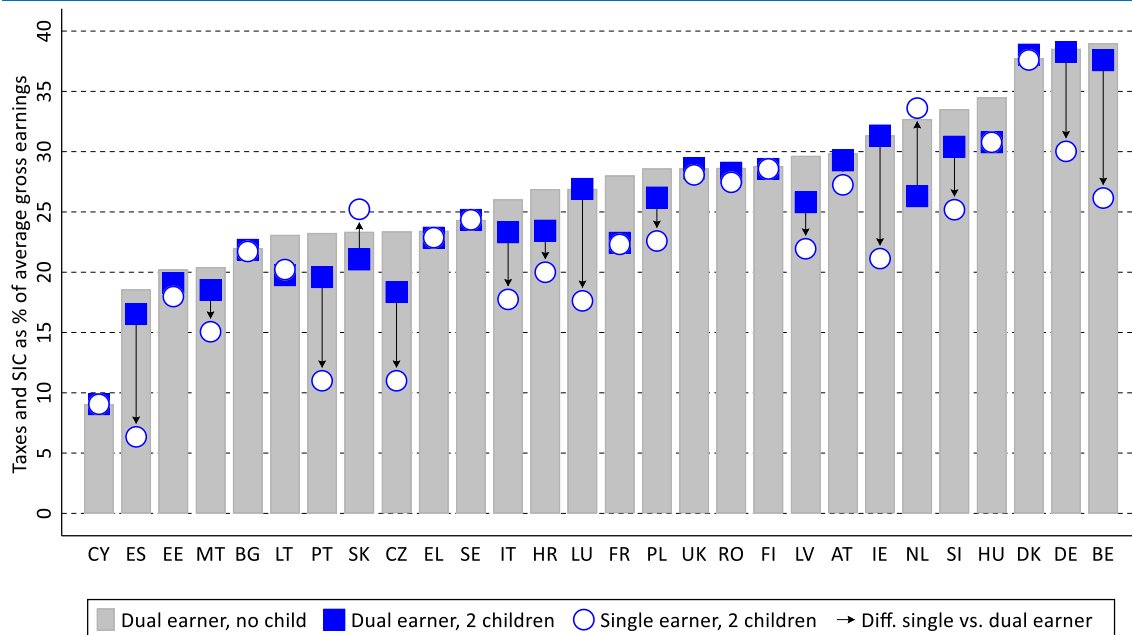


Note: Countries are ranked by the level of taxes and SIC of single persons. The lone parent is assumed to have to children aged 4 and 6. Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full tax compliance. The single person and the lone parent are assumed to be average earners.

The premiums presented above refer to the situation of lone parents specifically. However, tax instruments may be different for couples with children. While many welfare states provide extra tax reliefs for lone parents, others provide tax elements that distinguish between single earner (only one parent in employment) and dual earner parents (both parents in employment). The second adult in the single earner household is defined as inactive to create a hypothetical situation where one parent stays at home to care for the children.

Figure 8 presents the differences in taxes and SIC paid by dual and single earner households with children compared to dual earner households without children. It shows that countries are quite heterogeneous. Cyprus, Estonia, Bulgaria, Greece, Sweden, the United Kingdom, Romania, Finland and Denmark provide no or only minor tax premiums to average-earning couples with children (like lone parents). Other countries provide tax reliefs for one group of parents but not the other. Single earner families are clearly advantaged by the tax system in Spain, Portugal, Czech Republic, Italy, Luxembourg, Ireland, Slovenia, Germany and Belgium. Dual earner families receive tax allowances/credits in some countries but often to a lesser extent.

Figure 8: The tax and contribution level of single earner compared to a dual earner household, 2017 policy system



Note: Countries are ranked by the level of taxes and SIC of dual earner households without children. Policy system 2017 refers to the status quo on 30th of June 2017. Results are based on the assumption of full tax compliance. The households with children are assumed to have two children aged 4 and 6. All employed parents are assumed to be average earners. The second adult in the single earner household is assumed to be inactive with a work history of 10 years in full-time employment.

The Netherlands and Slovakia stand out because of their higher deductions for single earner households. In the Netherlands this can be explained by the health insurance which also needs to be paid by the parent who stays at home. In Slovakia, the single earner pays lower income taxes than dual earner parents. However, the parent who stays at home is liable to credited health insurance contributions which overall leads to a higher level of deductions.

5. Conclusion and future outlook

The paper provides insights into the design of tax and benefit policies across the European Union. It makes a case for the usefulness of hypothetical households in visualising how single policies are linked to each other while leaving the additional complexity of the population structure aside. The indicators compare countries by the progressivity of their tax and benefit systems, the extent they provide incentives to work and to work more and the extent they support families with children.

It is a proposal of a basic set of indicators that can be used to learn from each other. One can easily think of further expansion, including more in-depth analysis on specific policy elements and other model family types (e.g. pensioners). The paper offers a starting point for such analysis and a reference point for further uses of the Hypothetical Household Tool (HHoT). A potential direction for research is the focus on changes over time for specific family types and an analysis of the path dependency of social policy.

All results presented in section 4 make use of HHoT and the current tax and benefit system simulated in EUROMOD. However, the flexibility of both actually allows for an ex-ante evaluation of policy reforms and their impact on the income situation of the specified households. Two examples of rather complex policy reform proposals are described in the paper (Atkinson's proposal and the implementation of other countries family benefits in Croatia) and there is potential for further analysis.

Another characteristic of the use of hypothetical household data is to bypass the lack of information in available micro data or lack of access to suitable microdata. This of course requires careful thinking and assumptions about the specification of households. HHoT can include additional information (e.g. on work history) not part of EU-SILC data which are used for distributional analysis in most countries. However, these variables are not yet taken into account in the models themselves. The University of Essex together with the University of Antwerp is working on expanding the country models by providing enhanced simulations of various benefits including unemployment benefits, housing and heating benefits and parental leave benefits when using hypothetical data.

Further plans include the visualisation of results. Apart from academics, policy analysts, journalists and the wider public have an interest in understanding implications of tax-benefit systems and their changes. Visualisation tools can provide easy access to HHoT based results for these user groups and facilitates the communication of results to the very same.

The use of hypothetical household data clearly offers opportunities to a simplified presentation of complex realities and an expansion of research questions where no microdata are available. Nevertheless, a discussion of the results needs to emphasize the abstraction from population structure especially (but not only) in cross-country analysis. Although this is important to highlight, it is at the same time the beauty of hypothetical data: to make complex tax and benefit systems accessible.

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Annex I: Methodological details

Calculation of monthly average earnings used for the baseline indicators

HHoT provides a reference table with country-specific average earnings for 2009-2017 derived from European Union Statistics on Income and Living Conditions (EU-SILC). The values refer to average monthly earnings of full-time employees (including both manual and non-manual worker).

The calculation of the average earnings is based on gross employee cash or near cash incomes (py010g) of full-time workers aged 16 or older. It includes wages and salaries, remuneration for time not worked (e.g. holiday payments), enhanced rates of pay for overtime, fees paid to directors of incorporated enterprises, piece rate payments, payments for fostering children, commissions, tips and supplementary payments (e.g. thirteenth month payment). It excludes fringe benefits, reimbursements, severance and termination pay, lump sum payments at the normal retirement date and union strike payments. The gross employee cash or near cash income is divided by the number of months worked per year in order to calculate the monthly average earnings of full-time employees. Observations with months in part-time employment have been excluded from the calculation. Also regional, gender and age differences are not taken into account.

All results refer to weighted country averages and are calculated in EURs using the currency specific exchange rate as of June 30 of the respective year (which are also applied in the EM models). Table 3 shows the 2017 values in EUR and national currency (where applicable) which have been used for the hypothetical households presented in this paper.

EU-SILC data 2010-2015⁸ were used to calculate average monthly earnings for 2009-2014. At the time of writing this paper, EU-SILC data were only available up to 2015, referring to the income situation in 2014. Thus, income data needed to be updated until 2017 using country-specific updating factors (e.g. the increase in gross earnings retrieved from administrative data) which are also used in the EM country models.

⁸ Except for Germany and the United Kingdom for which the latest available EU-SILC data was 2014 (2013 income year).

Table 3: Country specific 2017 average monthly earnings used for the baseline indicators

Country	In EUR	In national currency
AT	3140.24	-
BE	3500.56	-
BG	601.72	1176.84
CY	1891.30	-
CZ	1024.31	27332.60
DE	3495.43	-
DK	4091.22	30425.57
EE	1363.38	-
EL	1412.15	-
ES	1965.41	-
FI	3167.61	-
FR	2730.09	-
HR	928.85	6913.83
HU	695.74	215012.62
IE	3984.27	-
IT	2251.91	-
LT	893.97	-
LU	4753.80	-
LV	1043.15	-
MT	1881.91	-
NL	3617.86	-
PL	912.65	3891.83
PT	1363.98	-
RO	479.33	2176.91
SE	3350.66	32152.29
SI	1539.31	-
SK	928.29	-
UK	4080.11	3526.11

Source: Own calculation based on EU-SILC 2015 (2014 for UK and DE) data and EM uprating factors and exchange rates.

Table 4: Specification of the hypothetical households

	HH member	Age	Economic status	Hours worked per week	Current/previous earnings	Work history	Current education status	Housing costs
Single person*	Adult1	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Adult1	40	Unemployed	0 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Adult1	40	Inactive	0 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
Lone Parent	Adult1	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Child1	4	Pupil/Student	0 hours	-	-	Pre-school	
	Child2	6	Pupil/Student	0 hours	-	-	Primary	
Two adults	Adult1	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Adult2	40	Inactive	0 hours	100% average earnings	120 months (10 years)	Not in education	
	Child1	4	Pupil/Student	0 hours	-	-	Pre-school	
	Child2	6	Pupil/Student	0 hours	-	-	Primary	
	Adult1	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Adult2	40	Unemployed	0 hours	100% average earnings	120 months (10 years)	Not in education	
	Child1	4	Pupil/Student	0 hours	-	-	Pre-school	
	Child2	6	Pupil/Student	0 hours	-	-	Primary	
	Adult1	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Adult2	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	
	Child1	4	Pupil/Student	0 hours	-	-	Pre-school	
	Child2	6	Pupil/Student	0 hours	-	-	Primary	
	Adult1	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	20% average earnings
	Adult2	40	Employee	40 hours	100% average earnings	120 months (10 years)	Not in education	

Note: * Current earnings range from 0%-200% for the budget constraint charts, while all other characteristics remain unchanged.

Households are assumed to have no other market incomes; also wealth is not taken into account. Additional assumptions apply in selected countries: families are assumed to live in Ile de France in France, in Brussels in Belgium, in Centralny in Poland, in London in the United Kingdom, in Madrid in Spain, in Vienna in Austria and in Lazio in Italy; employees in Austria, Italy and Luxembourg are assumed to be white collar worker; the size of the rented apartment is 70.8 m² in Estonia, 90 m² in Greece and 65 m² in Poland. Greek employees are assumed to contribute to the "old" pension social insurance scheme and employees in Estonia to the mandatory public pension scheme. Proportion of compulsory private pension contribution is 0.053 in the United Kingdom and 0.086 in Ireland.

Table 5: Overview of benefits simulated in EUROMOD by country and benefit type

	Unemployment Benefits	Social assistance and housing benefits	Family and education benefits
AT	Unemployment benefit, unemployment assistance benefit, family supplement	Minimum income benefit	Main child benefit, child tax credit, family bonus, childcare benefit + supplement
BE	Unemployment benefit	Income support, income support for elderly	Child benefit, birth allowance, BE HOME
BG	Unemployment benefit	Guaranteed minimum income, heating benefit	Non-contributory benefit for raising a child under the age of 1, means-tested child benefit, child benefit for education, non-means tested child benefit for twins, non-means tested child benefit for mothers in tertiary education, birth grant, contributory maternity benefit, contributory maternity benefit for pregnancy and childbirth
CY	Unemployment benefit	Guaranteed minimum income	Child benefit (basic and supplementary amount), birth grant, student grant
CZ	Unemployment benefit	Social assistance benefit, housing benefit	Birth grant, parental allowance, income tax bonus, child allowance
DE	Unemployment benefit I, II and social benefits	General social assistance, old-age social assistance, housing benefits	Child benefits, additional child benefits, maternity leave, parental leave, education benefits
DK	Unemployment benefit	Social assistance benefit, housing benefit, housing grant, green check	child benefit for student parents, main child benefit, supplement, child family grant
EE	Unemployment benefit, unemployment assistance benefit	Subsistence benefit	childbirth allowance, child allowance, large family parent allowance, childcare allowance
EL	Unemployment benefit	Guaranteed minimum income, unemployment assistance for older worker, pensioner's social solidarity benefit, social pension	Child benefit, large family benefit
ES	Unemployment benefit, temporary unemployment protection program, unemployment assistance and income guarantee benefit, unemployment insurance for self-employed	Minimum income benefit	Non-contributory child benefit (no disability), non-contributory child benefit (with disability), regional universal large family benefit, regional universal child benefit for birth/adoption, regional universal child benefit, means-tested birth/adoption benefit, universal multiple birth/adoption benefit, regional means-tested large family benefit, regional means-tested child benefit

			for birth/adoption, regional means-tested child benefit, working mother refundable tax credit, working lone parent tax credit, working large families tax credit
FI	Earnings related unemployment allowance, basic unemployment allowance, labour market subsidy	Pensioner housing allowance, general housing allowance, student housing supplement, local authority income support	Child benefit, study grant, child home care allowance
FR	Means-tested unemployment benefit, contributory unemployment benefit	Guaranteed minimum income, means-tested housing assistance for tenants, activity allowance	Supplement for free choice of activity (CLCA), birth grant, family support allowance, means-tested educational allowance, means-tested benefit for large families, means-tested benefit for young children, universal, main child benefit (AF)
HR	Unemployment benefit	Subsistence benefit, compensation for electricity costs	Child benefit, maternity leave benefit, one-time grant for new born children, maternity and parental allowance, parental leave
HU	Unemployment benefit, job-seeker allowance	Social assistance benefit	Child raising support, child care allowance, regular child protection benefit, family allowance, maternity grant
IE	Jobseekers' benefit, jobseekers' allowance	Supplementary welfare allowance	Child benefit, maternity benefit, family income supplement, one parent family payment
IT	Unemployment benefit, wage supplementation scheme	-	Family Allowance for 1 parent and children, Family Allowance for 2 parents and children, family Allowance for couple and 0 child, new born bonus, scholarships and grants
LT	Unemployment benefit	Social benefit	Family Allowance for 1 parent and, family Allowance for 2 parents and children, child benefit, family Allowance for couple and 0 child, new born bonus
LU	Unemployment benefit	Social assistance, heating allowance, rent allowance	maternity allowance, education allowance, new school year allowance, child benefit
LV	Unemployment benefit	Guaranteed minimum income, housing benefit	family state benefit, childcare benefit, childbirth benefit, paternity benefit, maternity benefit, parental benefit

MT	Unemployment benefit, unemployment assistance, special unemployment benefit	Cost of living bonus and additional bonus, social assistance, supplementary assistance	Means-tested child allowance, non-means tested child allowance, social assistance for single parents, in work benefit
NL	Unemployment benefit	Social assistance benefit, housing benefit	Child benefit, family benefit
PL	Unemployment benefit	Permanent social assistance benefit, temporary social assistance benefit, housing benefit	supplement for education of disabled child, supplement for starting school year, basic child benefit, supplement for child birth, supplement for lone parent, supplement for large families, universal child allowance, parental allowance, child-care allowance
PT	Unemployment benefit, unemployment assistance	Social insertion income, solidarity supplement for older persons	Child benefit
RO	Unemployment benefit, contributory unemployment benefit	Guaranteed minimum income, heating benefit	Means-tested educational allowance, Child raising allowance-not in work, child raising support for working mother, means-tested family benefits, universal child benefit
SE	Unemployment benefit	Social assistance benefit, housing allowance, housing allowance for pensioners	Child benefit
SI	Unemployment benefit	Social assistance benefit, income support, housing benefit	Child benefit, parental payment, parental allowance, credited employee/employer contributions for parents working part time, credited employee/employer contributions for parents of four or more children who exit labour market
SK	Unemployment benefit	Material needs benefit	Child birth grant & additional birth grant, child benefit, parental allowance ,tax refunds
UK	Income based unemployment benefit, contributory unemployment benefit	Income support, working tax credit, housing benefit, council tax benefit	Child benefit, child Tax Credit

Note: the table gives an overview of all simulated benefits in EUROMOD while not all of them are actually relevant for the hypothetical households used in this paper.

Table 6: Country-specific modifications of the baseline

Country	Modification
AT	None
BE	Switch on bun_be
BG	None
CY	Switch on bunct_cy
CZ	None
DE	None
DK	None
EE	None
EL	None
ES	Switch on bsarg_es
FI	None
FR	None
HR	None
HU	None
IE	The Irish model uses the predicted hourly wage to simulated the unemployment benefit (bunct_ie) which is not necessary for hypothetical households, thus the constant \$ImputedWage needs to be set to 0 instead of 1.
IT	Switch on bunct02_it
LT	None
LU	None
LV	None
MT	None
NL	None
PL	None
PT	None
RO	None
SE	Switch on bun_se
SI	Switch on bunct_si
SK	None
UK	None

Annex II: Country Profiles

Reading guide for the country profiles

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)

The budget constraint chart shows the level of means-tested benefits received and the level of taxes and SIC paid by a single person household based on the level of gross earnings.

The disposable income line shows the overall disposable household income after deducting taxes and SIC from the gross earnings and taking received benefits into account.

METR by level of average gross earnings and income components

The graph shows how much of a 3% increase in gross earnings is “taxed” away due to lower benefit entitlement or higher SIC and taxes. The higher the marginal effective tax rate (METR) the lower the incentive to work/earn more.

The overall level is decomposed into higher taxes, higher SIC and the loss of means-tested (M.t.) benefits due to the earnings increases.

METR are provided for different levels of gross earnings (25, 50, 75, 100, 125, 150, 175 and 200% of average gross earnings).

Household net income by income components and economic status (% of average gross earnings)

The table presents the disposable household income of single person households, decomposed by type of income as well as taxes and SIC.

Each column represents a single person household with a different economic status:

- EMPL is employed
- UNEMP is unemployed
- INAC is inactive and not in education.

Household net income by income components and family type (% of average gross earnings)

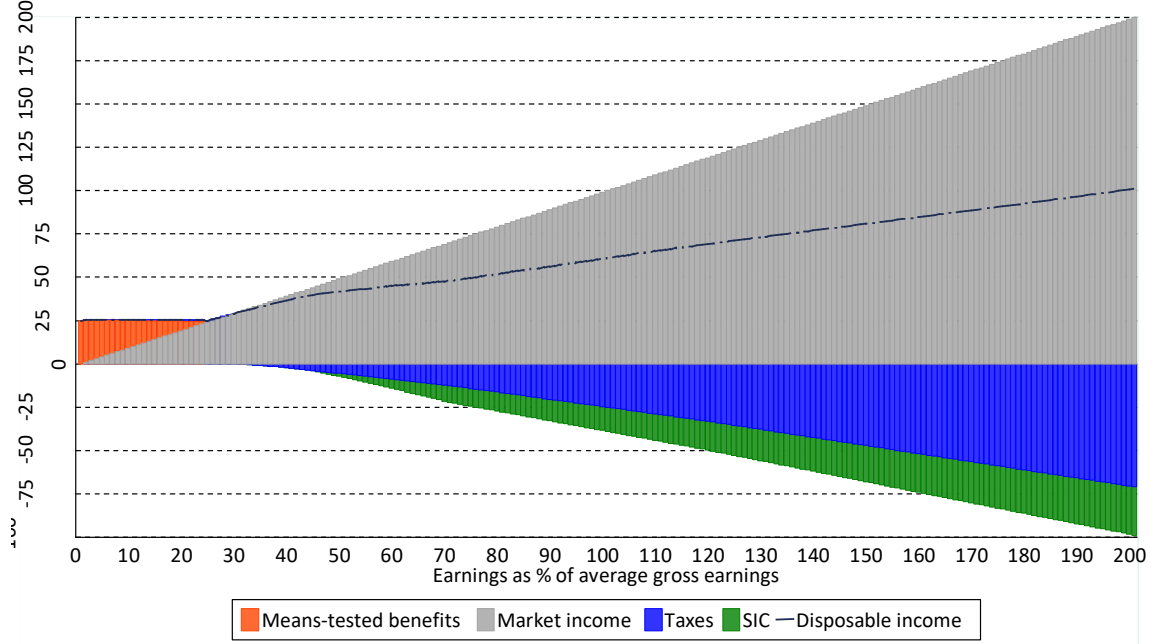
The table presents the disposable household income of different family types, decomposed by type of income as well as taxes and SIC.

- Each column represents a different family type:
- Single person: one employed person without children
- Lone parent: employed single parent with 2 children
- Single earner (INAC): couple, one adult in employment, the second adult inactive, not in education with 2 children
- Single earner (UNEMP): couple, one adult in employment, the second adult unemployed, with 2 children
- Dual Earner, 2: couple, both adults in employment, with 2 children
- Dual Earner, 4: couple, both adults in employment, with 4 children

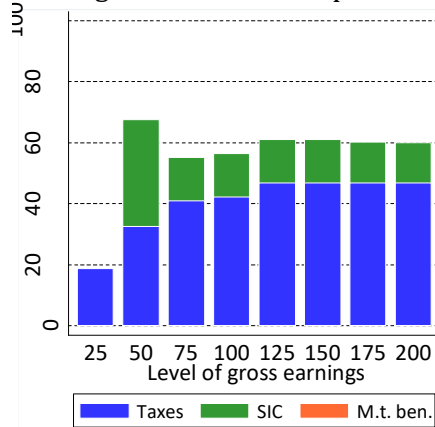
The last row shows the equivalised disposable household income. The total household income is divided by the modified OECD scale to take differences in household composition into account. The scale attributes a weight of 1 to the head of the household, a weight of 0.5 to every person above the age of 14 and a weight of 0.3 to every child aged 0-14.

Belgium

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

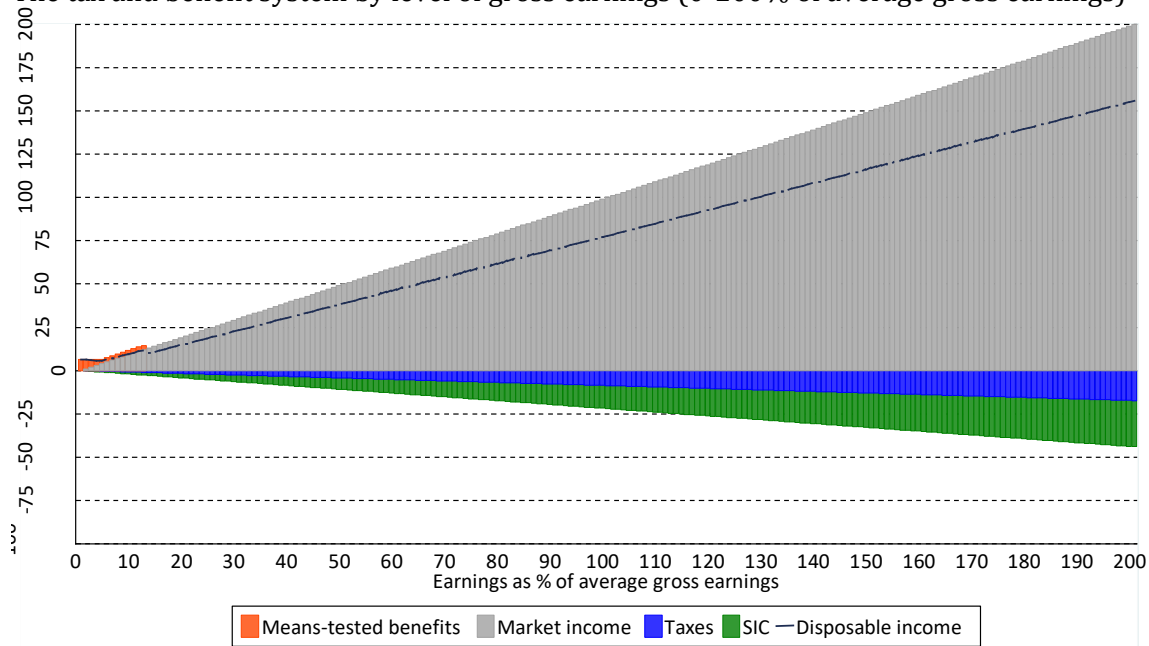
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	28.4	0.0
Social Assist./Housing	0.0	0.0	24.8
- Taxes	-25.1	0.0	0.0
- SIC	-13.9	0.0	0.0
Disp. HH income	61.0	28.4	24.8

Household net income by income components and family type (% of average gross earnings)

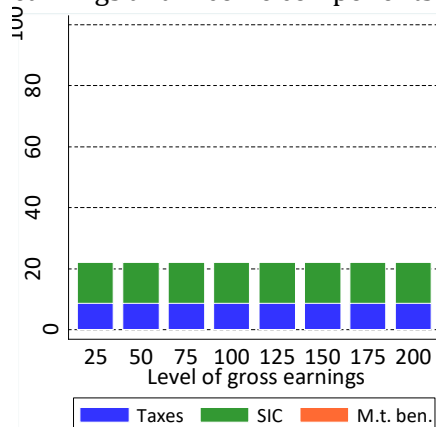
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	26.8	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	8.1	8.1	8.1	8.1	0.0
- Taxes	-25.1	-21.0	-12.2	-20.2	-47.3	-50.1
- SIC	-13.9	-13.9	-13.9	-14.3	-27.9	-27.9
Disp. HH income	61.0	73.2	82.0	100.4	132.9	122.0
Equ. disp. HH income	61.0	45.7	39.0	47.8	63.3	81.3

Bulgaria

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

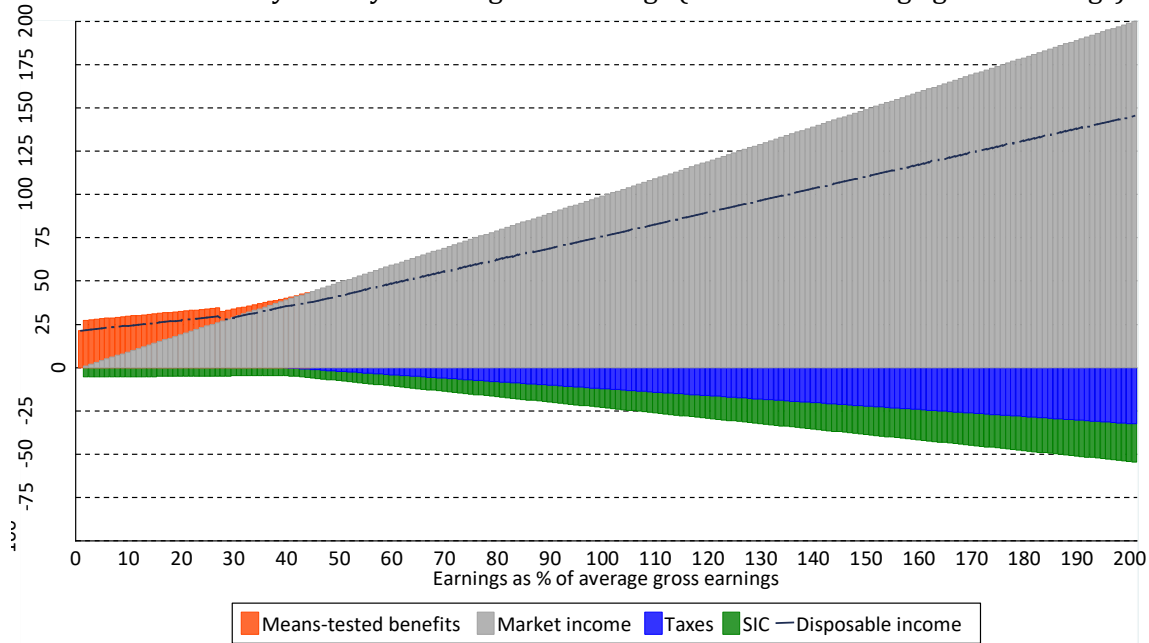
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	45.0	0.0
Social Assist./Housing	0.0	0.0	6.6
- Taxes	-8.7	0.0	0.0
- SIC	-13.3	0.0	0.0
Disp. HH income	78.0	45.0	6.6

Household net income by income components and family type (% of average gross earnings)

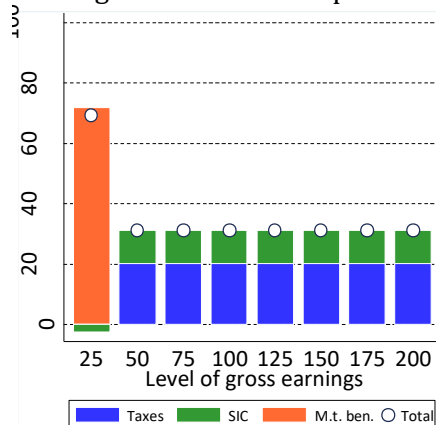
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	45.0	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	7.2	7.2	0.0	0.0	0.0
- Taxes	-8.7	-8.4	-8.4	-8.4	-17.0	-17.3
- SIC	-13.3	-13.3	-13.3	-13.3	-26.7	-26.7
Disp. HH income	78.0	85.5	85.5	123.3	156.3	156.0
Equ. disp. HH income	78.0	53.4	40.7	58.7	74.4	104.0

Czech Republic

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

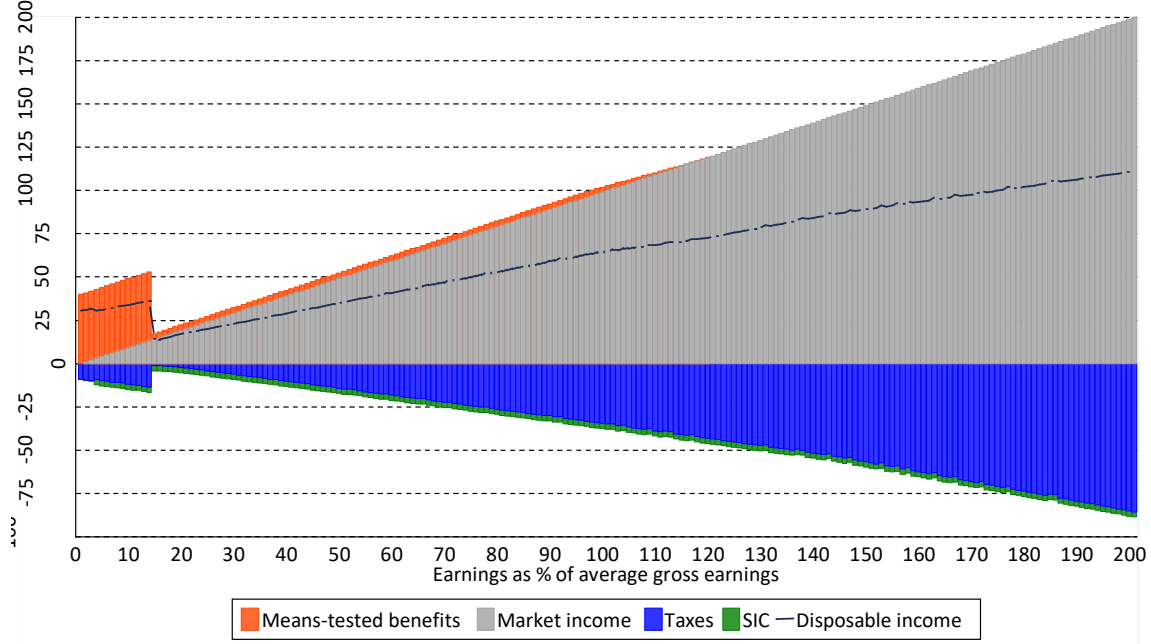
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	45.4	0.0
Social Assist./Housing	0.0	0.0	21.4
- Taxes	-12.4	0.0	0.0
- SIC	-11.0	0.0	0.0
Disp. HH income	76.6	45.4	21.4

Household net income by income components and family type (% of average gross earnings)

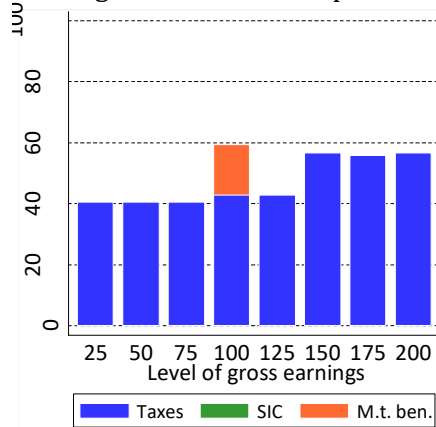
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	45.4	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	0.0	5.4	5.4	0.0	0.0
- Taxes	-12.4	-2.3	0.0	0.0	-14.7	-24.8
- SIC	-11.0	-11.0	-11.0	-11.0	-22.0	-22.0
Disp. HH income	76.6	86.7	94.4	139.8	163.3	153.2
Equ. disp. HH income	76.6	54.2	44.9	66.6	77.8	102.2

Denmark

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

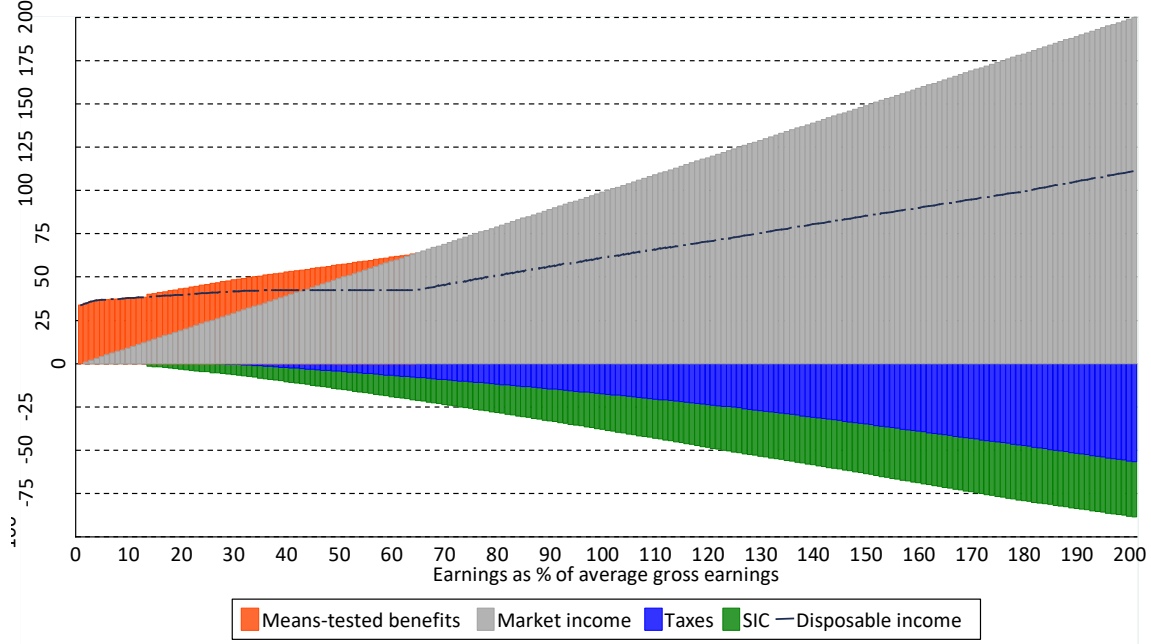
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	60.5	0.0
Social Assist./Housing	2.8	3.3	39.9
- Taxes	-34.4	-18.2	-9.2
- SIC	-3.1	0.0	0.0
Disp. HH income	65.4	45.6	30.7

Household net income by income components and family type (% of average gross earnings)

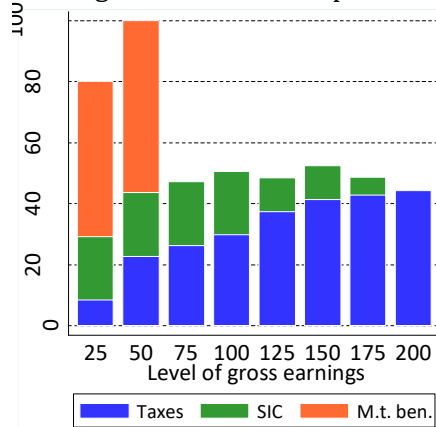
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	60.5	0.0	0.0
Social Ass./Housing	2.8	4.8	14.2	0.6	0.6	0.5
Family/Education	0.0	12.4	7.8	7.8	7.8	0.0
- Taxes	-34.4	-33.5	-34.5	-53.2	-70.0	-69.4
- SIC	-3.1	-3.1	-3.1	-3.1	-6.1	-6.1
Disp. HH income	65.4	80.6	84.4	112.6	132.3	125.0
Equ. disp. HH income	65.4	50.4	40.2	53.6	63.0	83.3

Germany

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

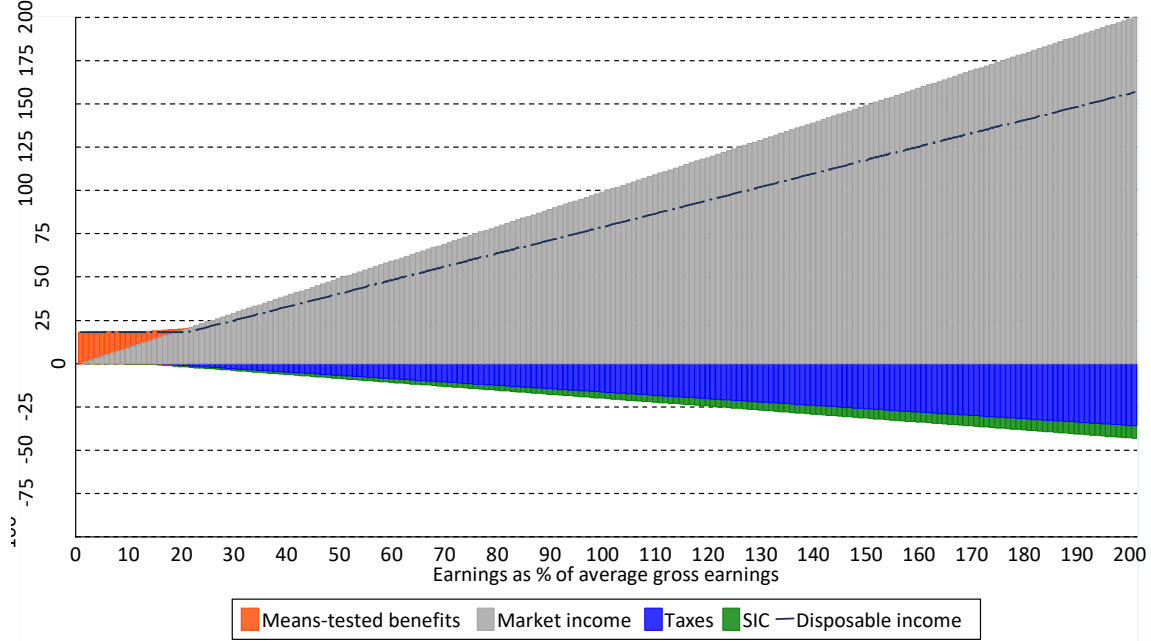
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	60.0	33.8
Social Assist./Housing	0.0	0.0	0.0
- Taxes	-17.8	0.0	0.0
- SIC	-20.8	0.0	0.0
Disp. HH income	61.5	60.0	33.8

Household net income by income components and family type (% of average gross earnings)

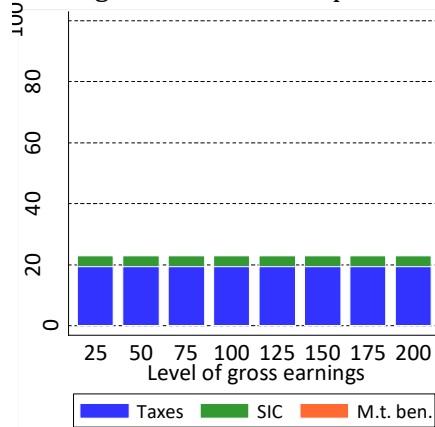
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	67.0	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	11.0	11.0	11.0	11.0	0.0
- Taxes	-17.8	-16.3	-9.5	-16.6	-35.5	-35.5
- SIC	-20.8	-20.5	-20.5	-20.5	-41.0	-41.5
Disp. HH income	61.5	74.2	81.0	140.9	134.4	122.9
Equ. disp. HH income	61.5	46.4	38.6	67.1	64.0	81.9

Estonia

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

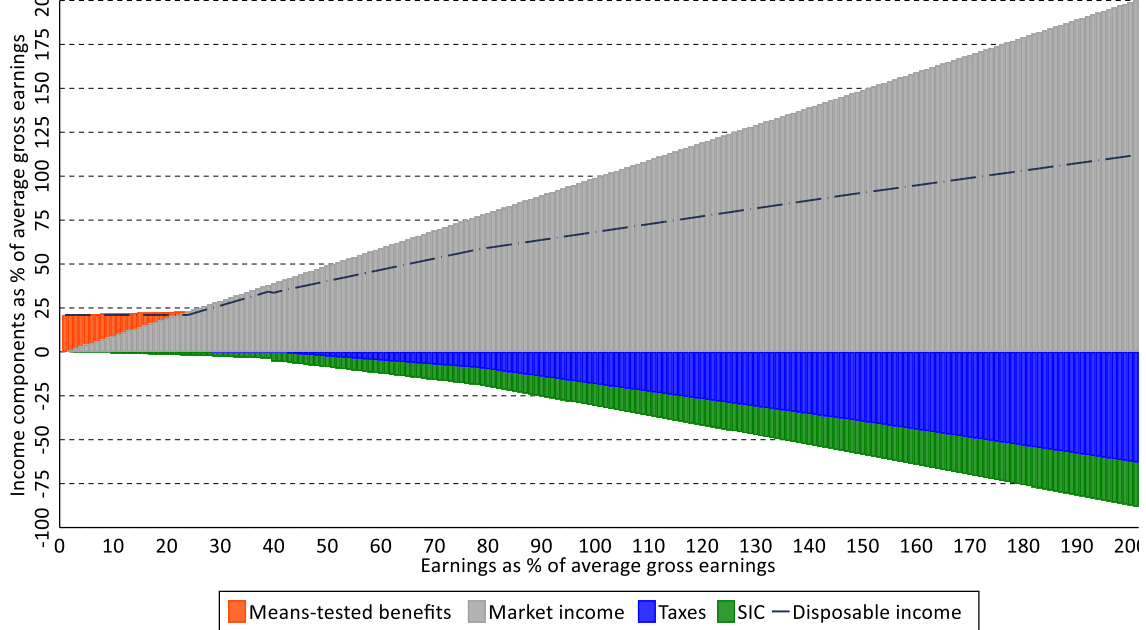
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	42.8	0.0
Social Assist./Housing	0.0	0.0	18.3
- Taxes	-16.6	-5.9	0.0
- SIC	-3.6	0.0	0.0
Disp. HH income	79.8	36.9	18.3

Household net income by income components and family type (% of average gross earnings)

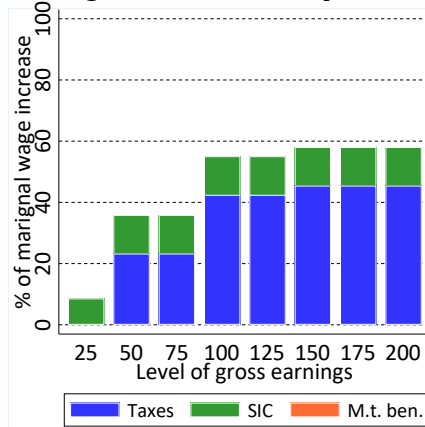
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	42.8	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	7.3	7.3	7.3	7.3	0.0
- Taxes	-16.6	-14.4	-14.4	-20.3	-31.0	-33.3
- SIC	-3.6	-3.6	-3.6	-3.6	-7.2	-7.2
Disp. HH income	79.8	89.4	89.4	126.2	169.1	159.5
Equ. disp. HH income	79.8	55.8	42.5	60.1	80.5	106.3

Ireland

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

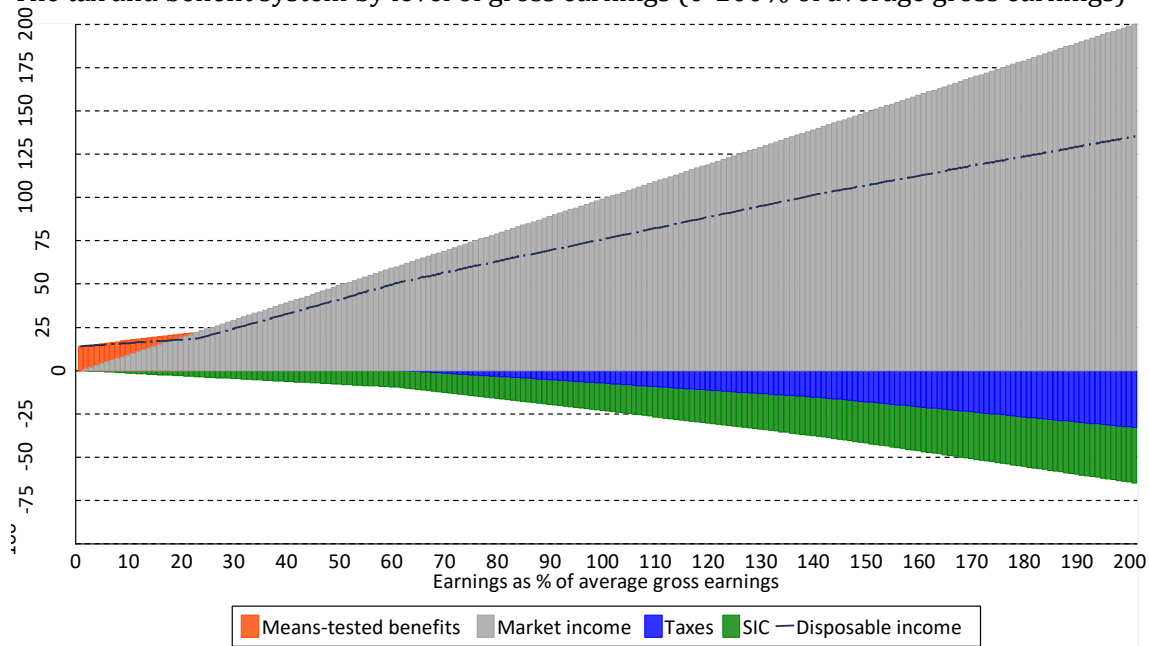
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	4.7	0.0
Social Assist./Housing	0.0	16.3	21.0
- Taxes	-18.7	0.0	0.0
- SIC	-12.6	0.0	0.0
Disp. HH income	68.7	21.0	21.0

Household net income by income components and family type (% of average gross earnings)

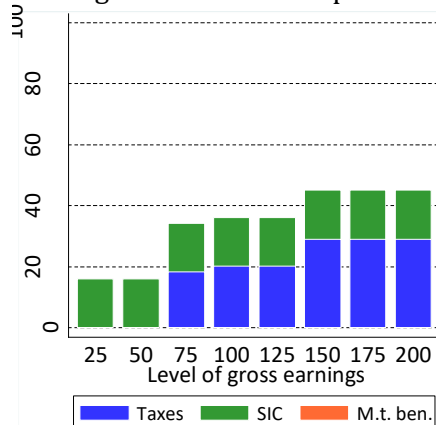
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	4.7	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	7.0	7.0	7.0	7.0	0
- Taxes	-18.7	-13.5	-8.5	-10.5	-37.5	-37.5
- SIC	-12.6	-12.6	-12.6	-12.6	-25.2	-25.2
Disp. HH income	68.7	80.9	85.9	88.7	144.3	137.3
Equ. disp. HH income	68.7	50.6	40.9	42.2	68.7	91.5

Greece

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	25.5	0.0
Social Assist./Housing	0.0	0.0	14.2
- Taxes	-7.4	0.0	0.0
- SIC	-16.0	0.0	0.0
Disp. HH income	76.6	25.5	14.2

Household net income by income components and family type (% of average gross earnings)

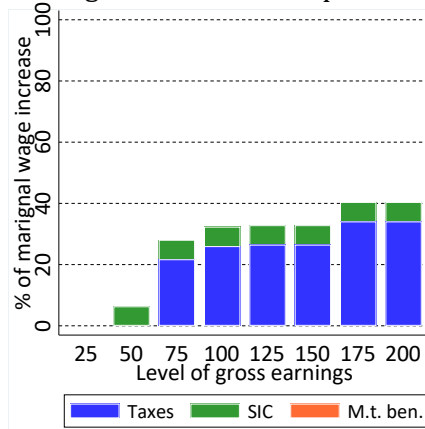
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	30.6	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	3.8	3.8	3.8	1.9	0.0
- Taxes	-7.4	-6.9	-6.9	-6.9	-13.7	-14.9
- SIC	-16.0	-16.0	-16.0	-16.0	-32.0	-32.0
Disp. HH income	76.6	80.9	80.9	111.5	156.2	153.1
Equ. disp. HH income	76.6	50.6	38.5	53.1	74.4	102.1

Spain

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

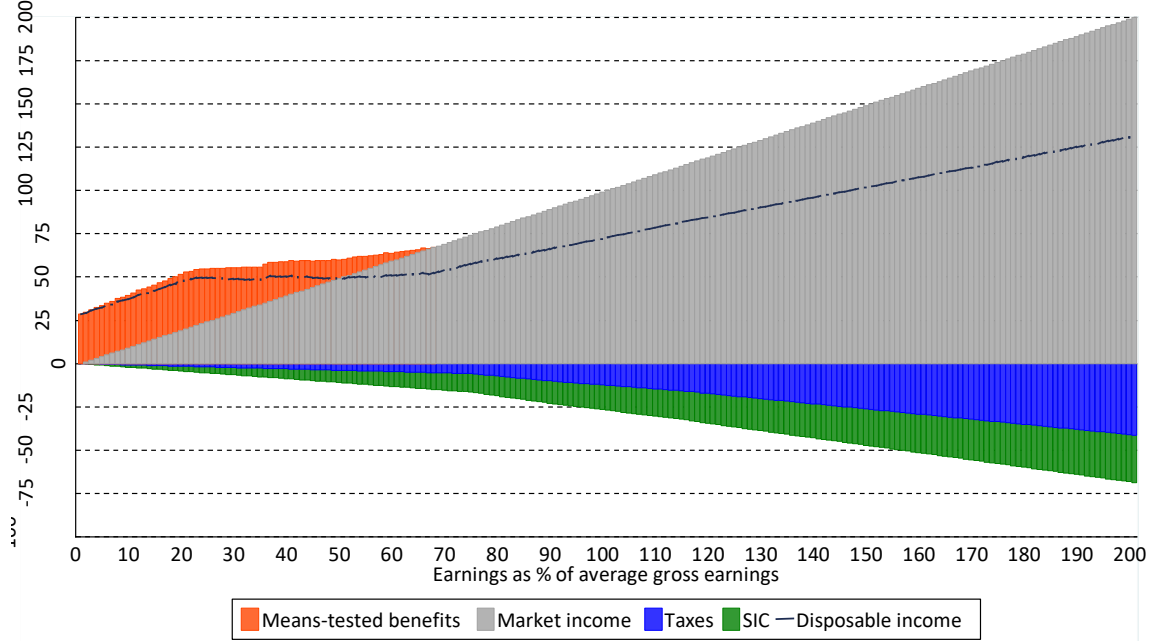
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	55.3	0.0
Social Assist./Housing	0.0	0.0	19.1
- Taxes	-11.2	0.0	0.0
- SIC	-6.3	-4.7	0.0
Disp. HH income	82.5	50.6	19.1

Household net income by income components and family type (% of average gross earnings)

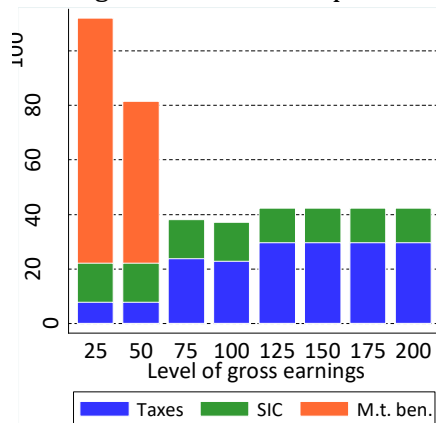
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	55.3	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	5.1	0.0	0.0	0.0	0.0
- Taxes	-11.2	-3.5	0.0	-8.3	-20.4	-24.5
- SIC	-6.3	-6.3	-6.3	-11.1	-12.7	-12.7
Disp. HH income	82.5	95.3	93.6	136.0	166.9	162.8
Equ. disp. HH income	82.5	59.5	44.6	64.8	79.5	108.6

France

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

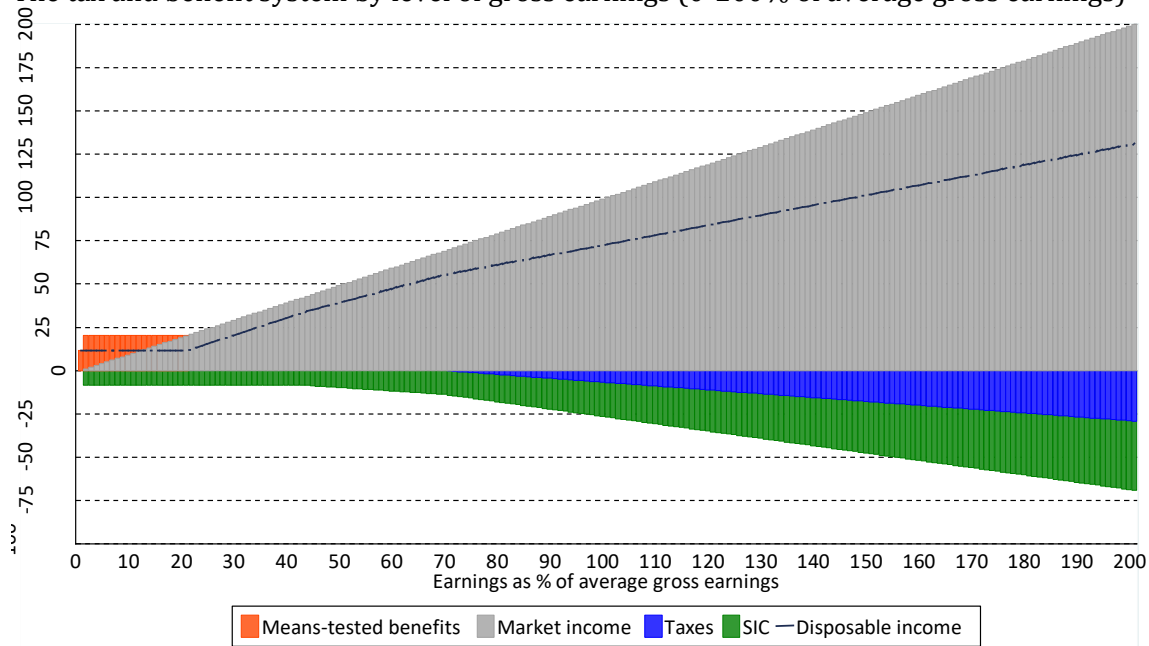
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	57.4	0.0
Social Assist./Housing	0.0	0.0	28.8
- Taxes	-12.6	-3.8	-0.1
- SIC	-14.4	0.0	0.0
Disp. HH income	73.0	53.6	28.7

Household net income by income components and family type (% of average gross earnings)

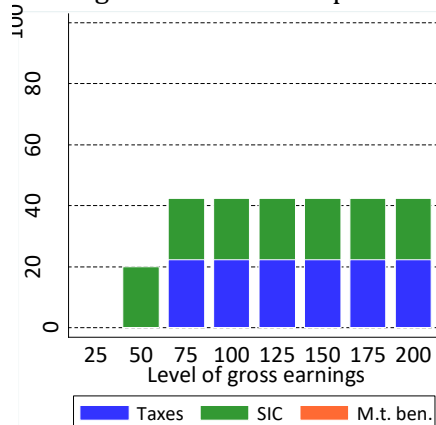
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	57.4	0.0	0.0
Social Ass./Housing	0.0	1.3	9.8	0.0	0.0	0.0
Family/Education	0.0	5.9	5.9	4.8	4.8	0.0
- Taxes	-12.6	-7.9	-7.9	-15.2	-16.0	-27.2
- SIC	-14.4	-14.4	-14.4	-14.4	-28.9	-28.9
Disp. HH income	73.0	84.9	93.4	132.6	159.9	144.0
Equ. disp. HH income	73.0	53.1	44.5	63.1	76.1	96.0

Croatia

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

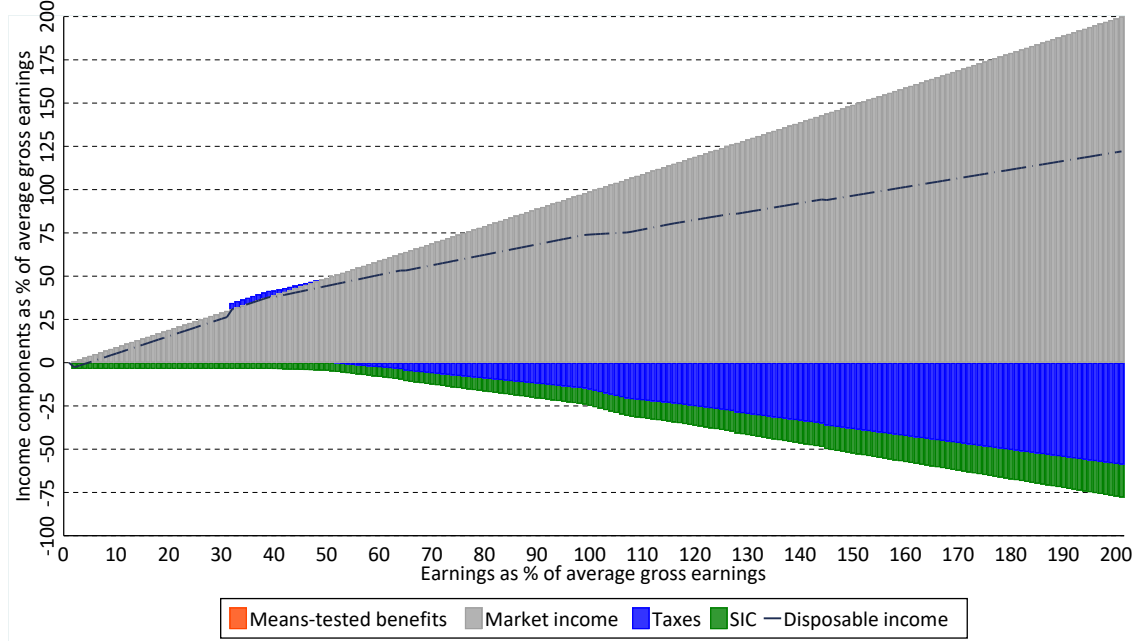
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	36.1	0.0
Social Assist./Housing	0.0	0.0	11.6
- Taxes	-6.9	0.0	0.0
- SIC	-20.0	0.0	0.0
Disp. HH income	73.1	36.1	11.6

Household net income by income components and family type (% of average gross earnings)

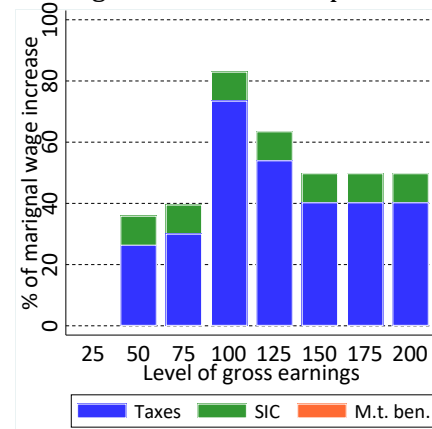
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	36.1	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	0.0	5.8	0.0	0.0	0.0
- Taxes	-6.9	0.0	0.0	0.0	-6.9	-13.8
- SIC	-20.0	-20.0	-20.0	-20.0	-40.0	-40.0
Disp. HH income	73.1	80.0	85.8	116.1	153.1	146.2
Equ. disp. HH income	73.1	50.0	40.9	55.3	72.9	97.5

Italy

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

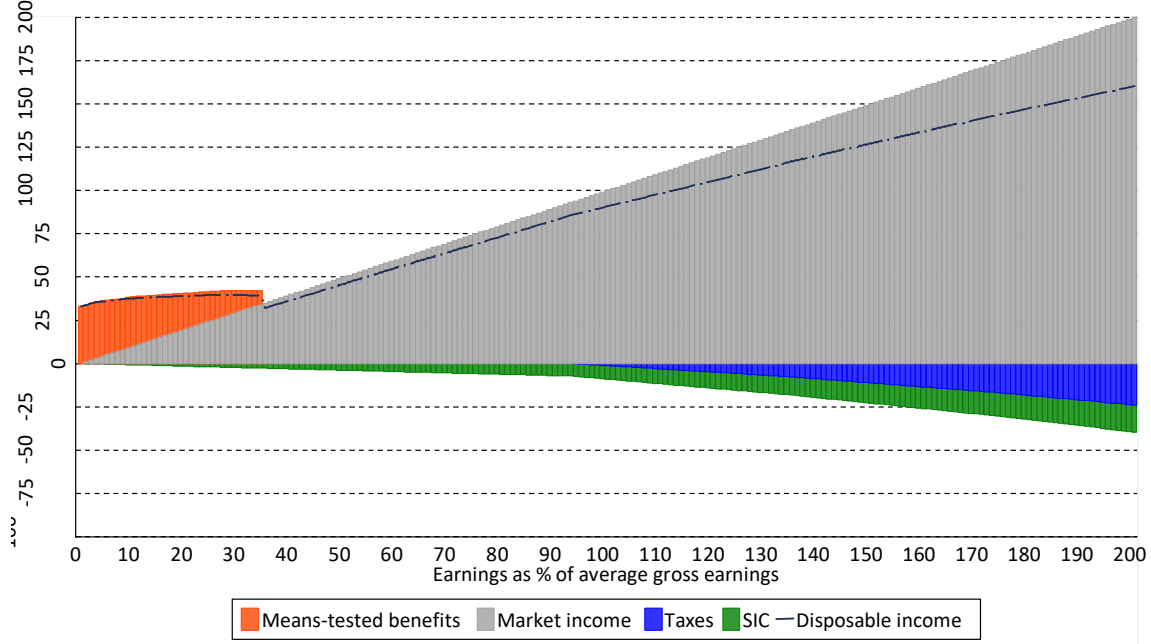
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	84.2	0.0
Social Assist./Housing	0.0	0.0	0.0
- Taxes	-16.3	-13.4	0.0
- SIC	-9.5	0.0	0.0
Disp. HH income	74.2	70.8	0.0

Household net income by income components and family type (% of average gross earnings)

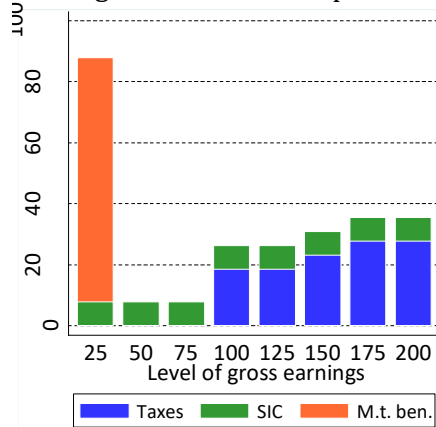
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	84.2	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	7.3	7.3	3.0	2.9	0.0
- Taxes	-16.3	-10.8	-8.3	-22.2	-27.6	-33.1
- SIC	-9.5	-9.5	-9.5	-9.5	-19.0	-19.0
Disp. HH income	74.2	87.0	89.5	155.6	156.3	147.9
Equ. disp. HH income	74.2	54.4	42.6	74.1	74.4	98.6

Cyprus

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

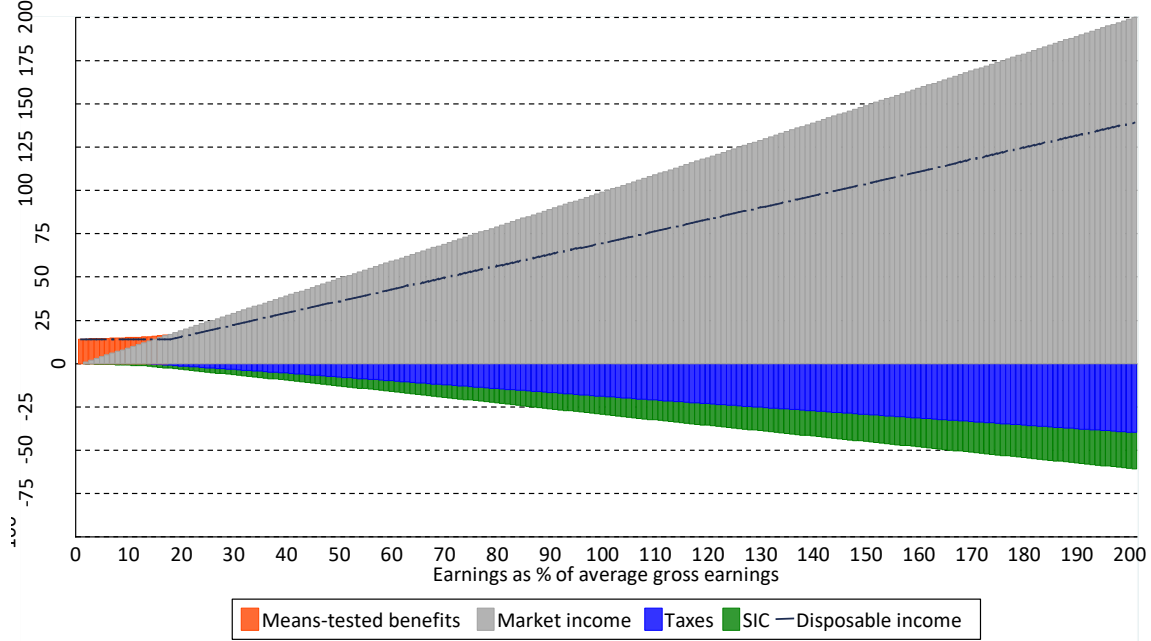
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	27.0	0.0
Social Assist./Housing	0.0	0.0	33.0
- Taxes	-1.3	0.0	0.0
- SIC	-7.8	0.0	0.0
Disp. HH income	90.9	27.0	33.0

Household net income by income components and family type (% of average gross earnings)

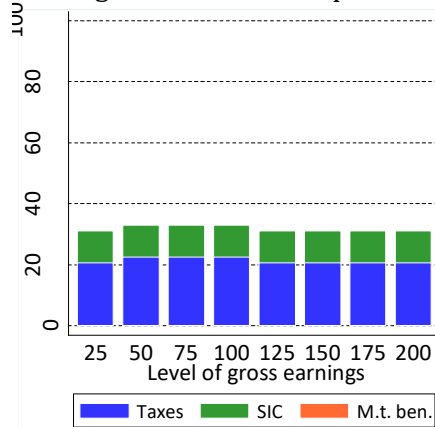
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	29.4	0.0	0.0
Social Ass./Housing	0.0	19.0	0.0	0.0	0.0	0.0
Family/Education	0.0	4.6	4.6	4.6	3.3	0.0
- Taxes	-1.3	-1.3	-1.3	-1.3	-2.5	-2.5
- SIC	-7.8	-7.8	-7.8	-7.8	-15.6	-15.6
Disp. HH income	90.9	114.6	95.5	124.9	185.2	181.9
Equ. disp. HH income	90.9	71.6	45.5	59.5	88.2	121.3

Latvia

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

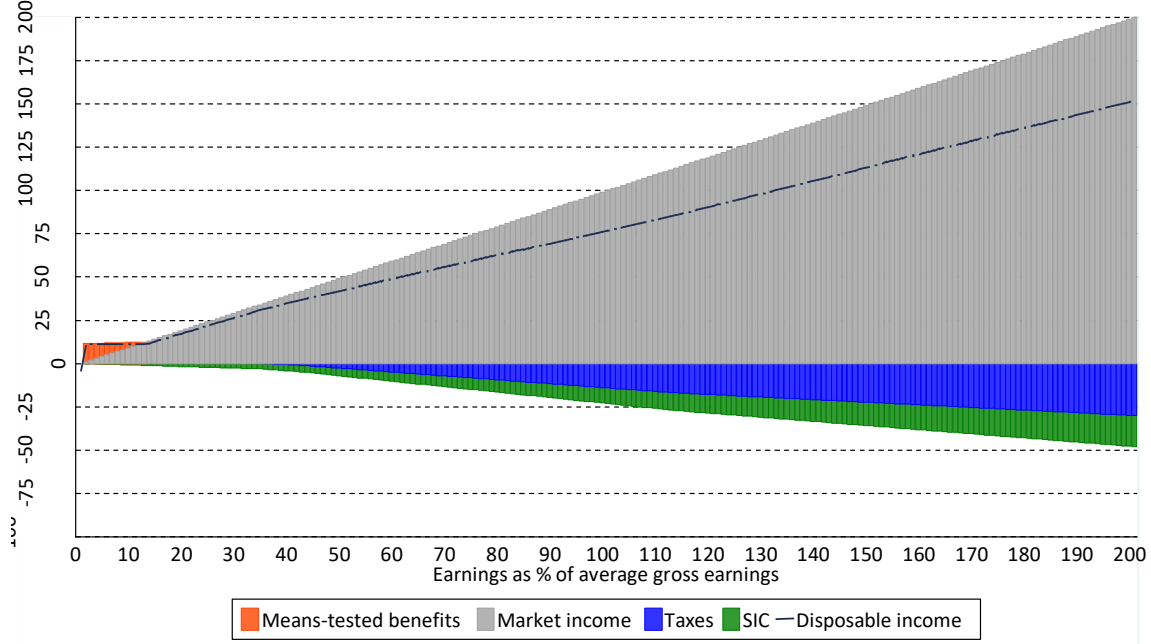
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	30.9	0.0
Social Assist./Housing	0.0	0.0	14.1
- Taxes	-19.2	0.0	0.0
- SIC	-10.5	0.0	0.0
Disp. HH income	70.3	30.9	14.1

Household net income by income components and family type (% of average gross earnings)

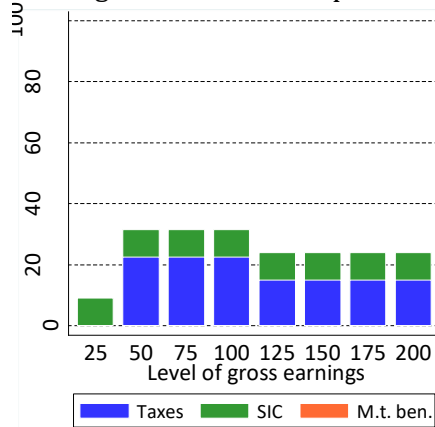
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	30.9	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	3.3	3.3	3.3	3.3	0
- Taxes	-19.2	-11.4	-11.4	-11.4	-30.6	-38.3
- SIC	-10.5	-10.5	-10.5	-10.5	-21.0	-21.0
Disp. HH income	70.3	81.3	81.3	112.3	151.7	140.7
Equ. disp. HH income	70.3	50.8	38.7	53.5	72.2	93.8

Lithuania

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

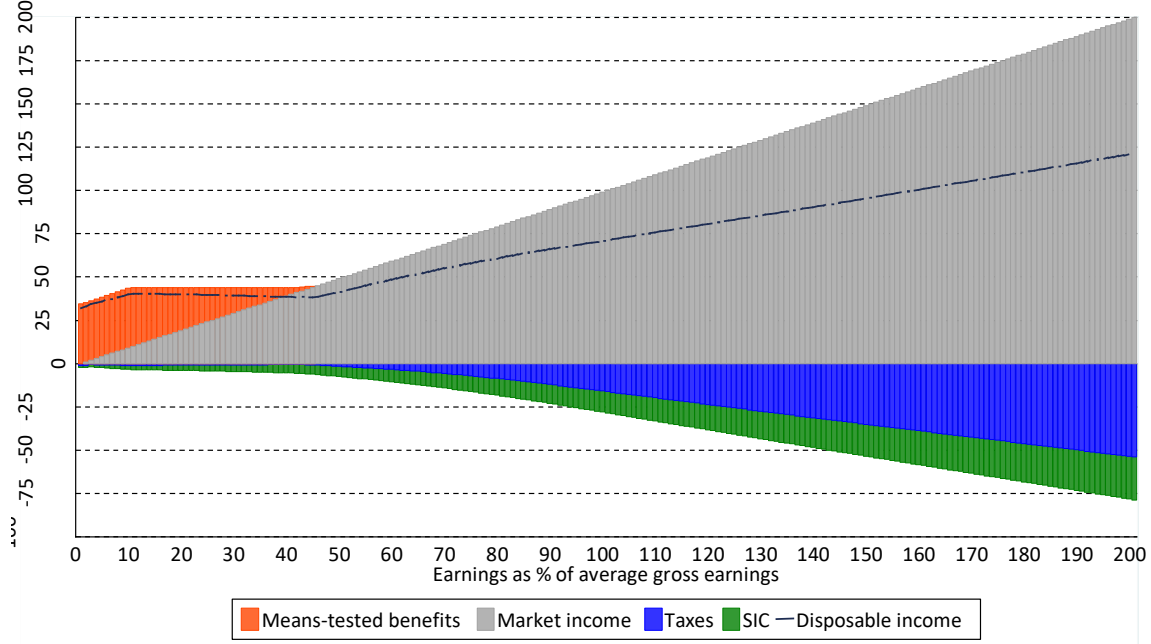
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	18.6	0.0
Social Assist./Housing	0.0	0.0	0.0
- Taxes	-14.1	0.0	0.0
- SIC	-9.0	0.0	-3.8
Disp. HH income	76.9	18.6	-3.8

Household net income by income components and family type (% of average gross earnings)

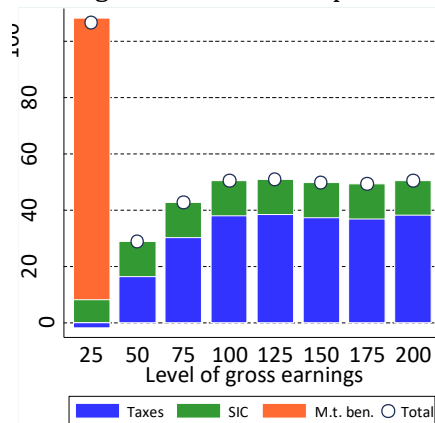
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	18.6	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	0.0	0.0	0.0	0.0	0.0
- Taxes	-14.1	-7.4	-7.4	-7.4	-21.5	-28.2
- SIC	-9.0	-9.0	-12.8	-9.0	-18.0	-18.0
Disp. HH income	76.9	83.6	79.8	102.2	160.5	153.8
Equ. disp. HH income	76.9	52.3	38.0	48.7	76.4	102.5

Luxembourg

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

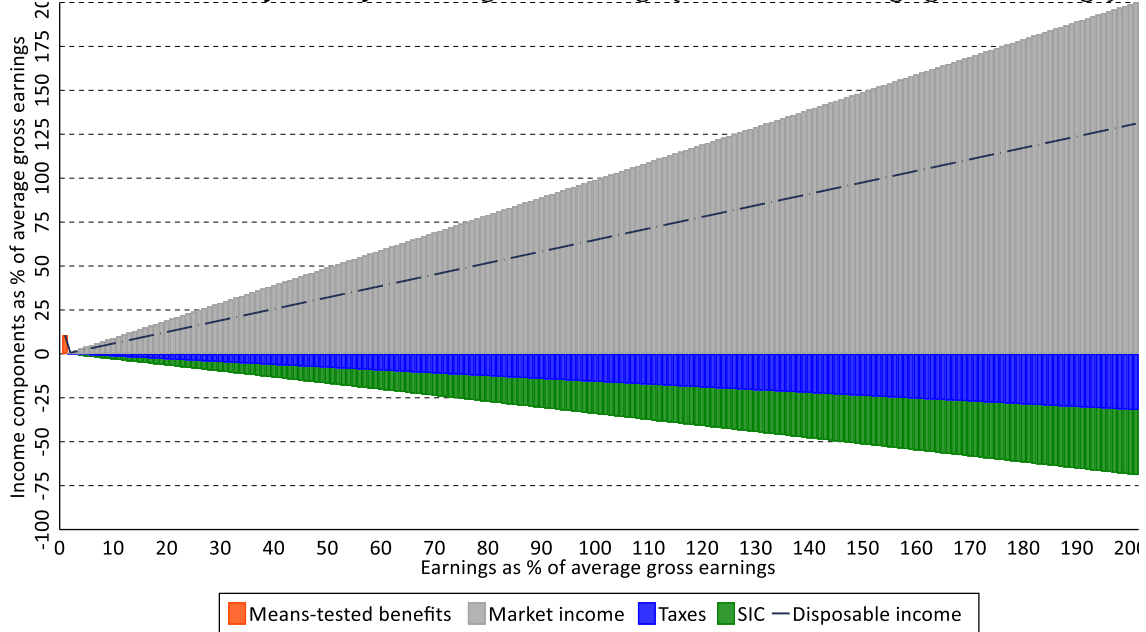
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	80.0	0.0
Social Assist./Housing	0.0	0.0	34.4
- Taxes	-16.3	-9.3	-1.0
- SIC	-12.3	-9.6	-1.2
Disp. HH income	71.4	61.1	32.2

Household net income by income components and family type (% of average gross earnings)

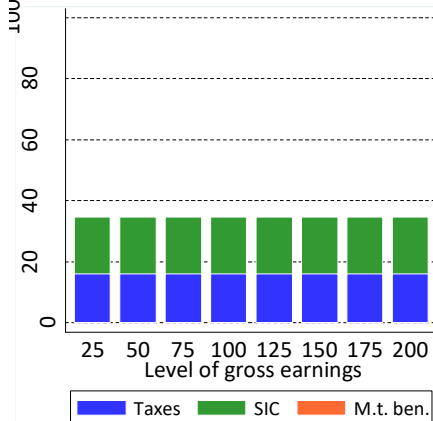
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	100.0
Unemployment	0.0	0.0	0.0	85.0	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	13.1	13.1	13.1	13.1	0.0
- Taxes	-16.3	-12.6	-5.3	-24.3	-29.2	-29.2
- SIC	-12.3	-12.3	-12.3	-22.5	-24.6	-24.6
Disp. HH income	71.4	88.2	95.5	151.3	159.3	146.2
Equ. disp. HH income	71.4	55.1	45.5	72.0	75.9	97.4

Hungary

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

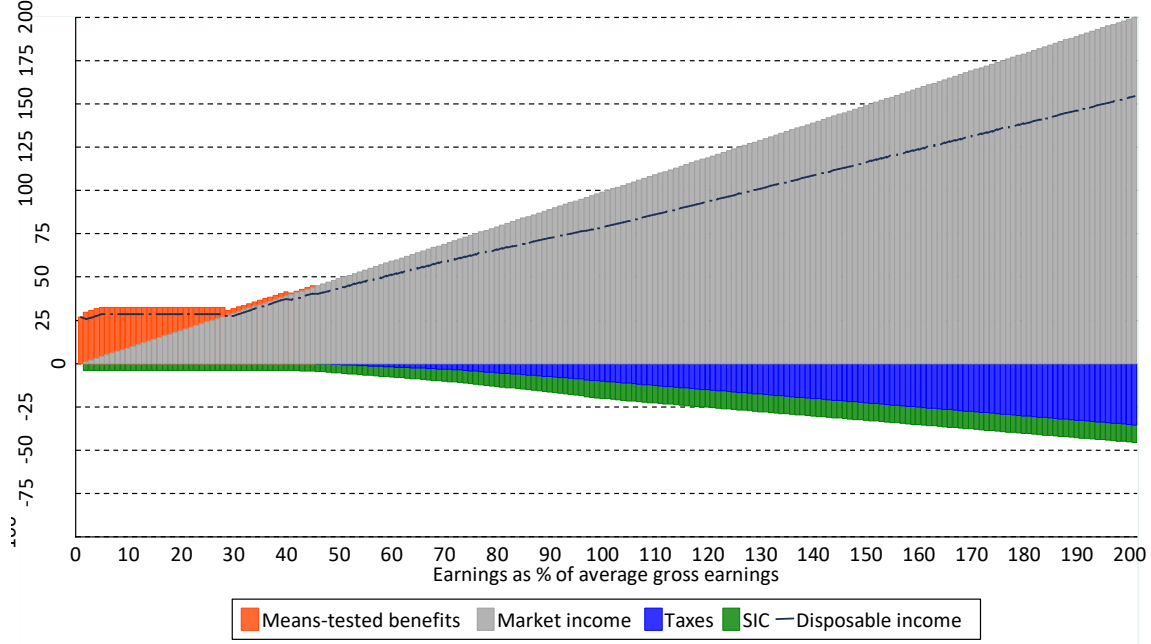
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	14.8	0.0
Social Assist./Housing	0.0	0.0	10.6
- Taxes	-16.0	-2.4	0.0
- SIC	-18.5	0.0	0.0
Disp. HH income	65.5	12.5	10.6

Household net income by income components and family type (% of average gross earnings)

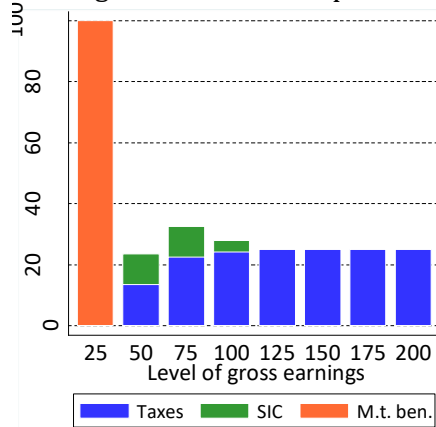
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	14.8	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	13.8	12.4	12.4	12.4	0.0
- Taxes	-16.0	-11.0	-12.3	-12.3	-24.6	-32.0
- SIC	-18.5	-18.5	-18.5	-18.5	-37.0	-37.0
Disp. HH income	65.5	84.2	81.6	96.4	150.8	131.0
Equ. disp. HH income	65.5	52.6	38.9	45.9	71.8	87.3

Malta

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

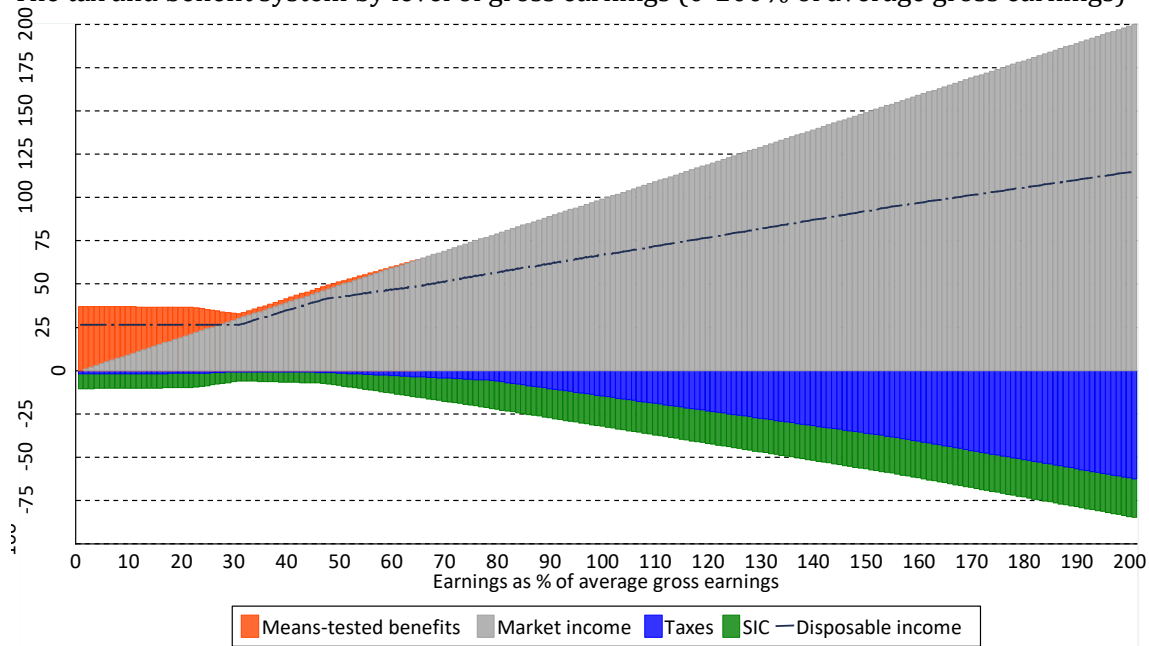
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	21.3	0.0
Social Assist./Housing	0.0	5.7	27.0
- Taxes	-10.4	0.0	0.0
- SIC	-10.0	0.0	0.0
Disp. HH income	79.6	27.0	27.0

Household net income by income components and family type (% of average gross earnings)

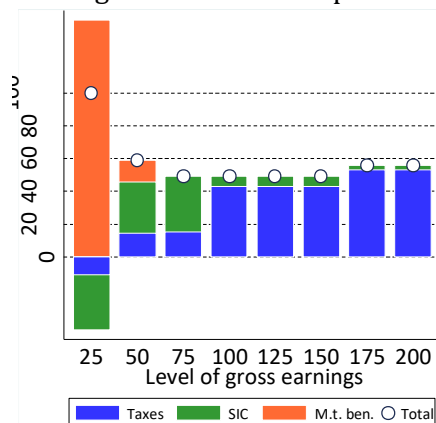
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	5.6	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	4.0	4.0	4.0	4.0	0.0
- Taxes	-10.4	-8.5	-5.1	-5.1	-17.1	-20.9
- SIC	-10.0	-10.0	-10.0	-10.0	-20.0	-20.0
Disp. HH income	79.6	85.5	88.9	94.5	166.9	159.1
Equ. disp. HH income	79.6	53.4	42.3	45.0	79.5	106.1

The Netherlands

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

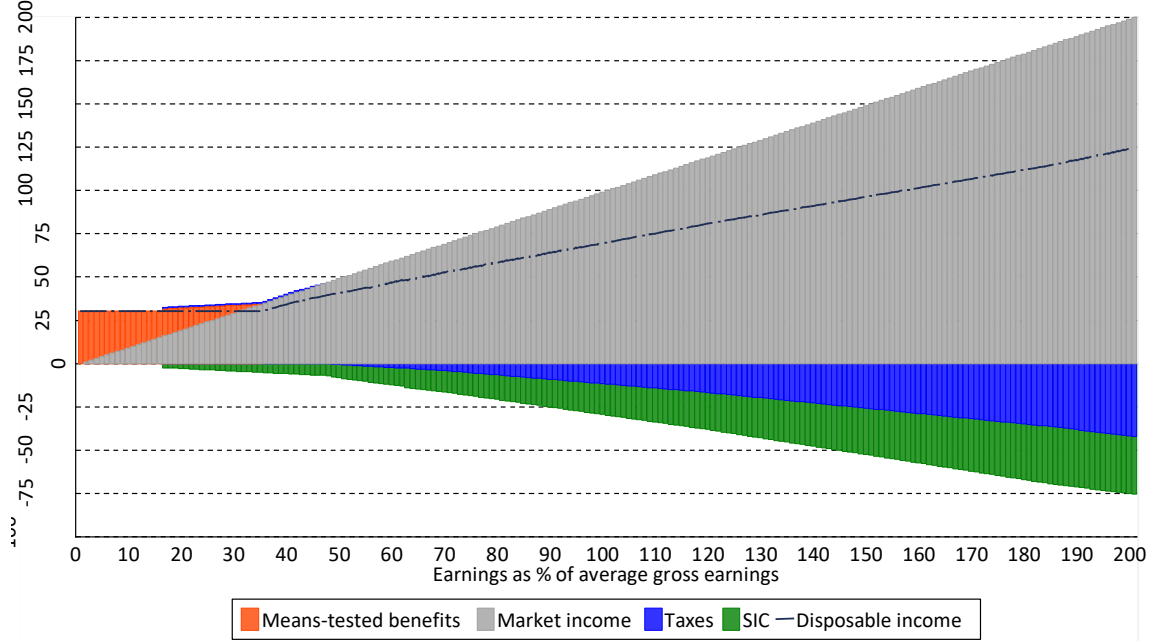
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	59.2	0.0
Social Assist./Housing	0.0	0.0	34.6
- Taxes	-15.1	-4.7	-1.8
- SIC	-17.6	-15.9	-8.6
Disp. HH income	67.3	39.3	26.6

Household net income by income components and family type (% of average gross earnings)

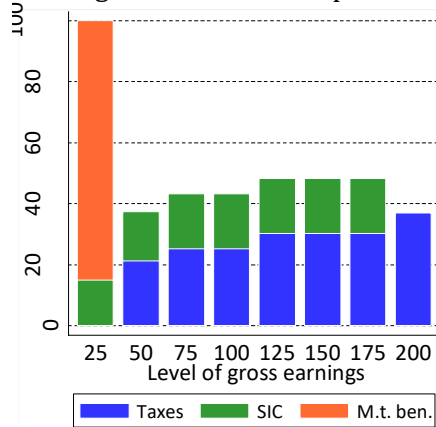
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	59.2	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	12.2	5.1	4.0	4.0	0.0
- Taxes	-15.1	-13.5	-14.6	-19.8	-27.1	-30.2
- SIC	-17.6	-12.8	-19.0	-33.5	-25.5	-35.2
Disp. HH income	67.3	85.9	71.5	109.9	151.4	134.6
Equ. disp. HH income	67.3	53.7	34.1	52.3	72.1	89.7

Austria

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

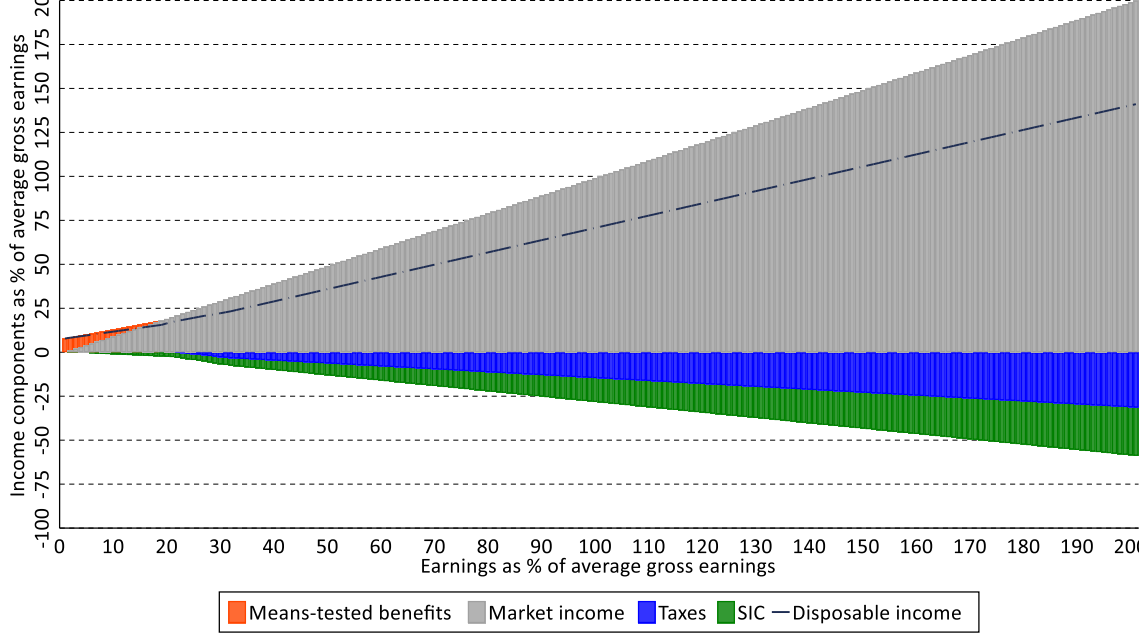
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	51.8	0.0
Social Assist./Housing	0.0	0.0	30.2
- Taxes	-11.9	0.0	0.0
- SIC	-18.0	0.0	0.0
Disp. HH income	70.2	51.8	30.2

Household net income by income components and family type (% of average gross earnings)

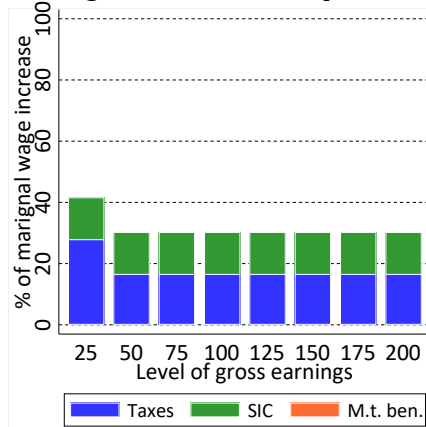
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	53.7	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	12.0	12.0	12.0	12.0	0.0
- Taxes	-11.9	-9.3	-9.3	-9.1	-22.6	-23.7
- SIC	-18.0	-18.0	-18.0	-18.0	-36.0	-36.0
Disp. HH income	70.2	84.8	84.8	138.7	153.5	140.3
Equ. disp. HH income	70.2	53.0	40.4	66.0	73.1	93.5

Poland

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

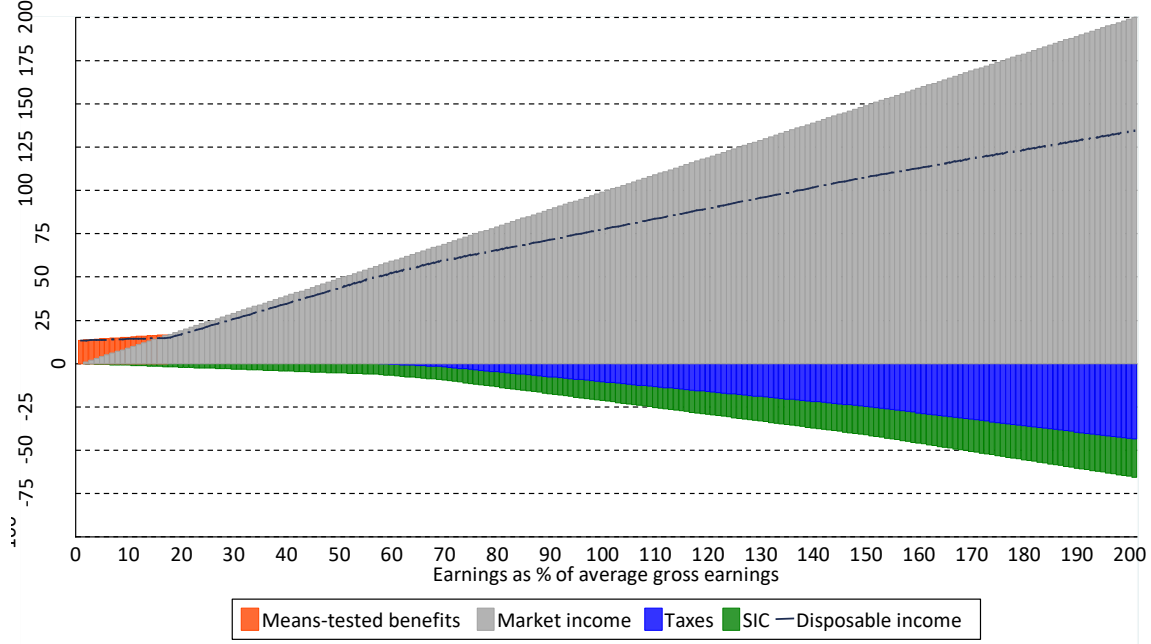
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	9.6	0.0
Social Assist./Housing	0.0	3.0	7.8
- Taxes	-14.9	0.0	0.0
- SIC	-13.7	0.0	0.0
Disp. HH income	71.4	12.6	7.8

Household net income by income components and family type (% of average gross earnings)

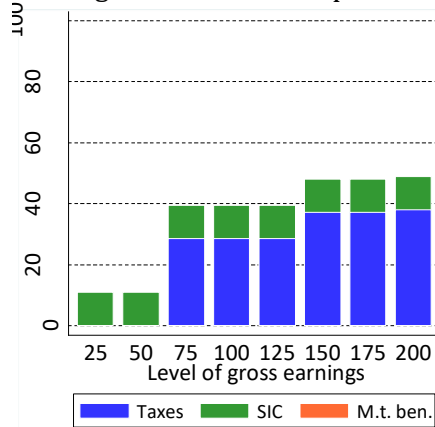
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	9.6	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	13.0	25.9	13.0	13.0	0.0
- Taxes	-14.9	-8.9	-8.9	-10.6	-25.0	-29.8
- SIC	-13.7	-13.7	-13.7	-13.7	-27.4	-27.4
Disp. HH income	71.4	90.4	103.3	98.3	160.6	142.8
Equ. disp. HH income	71.4	56.5	49.2	46.8	76.5	95.2

Portugal

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

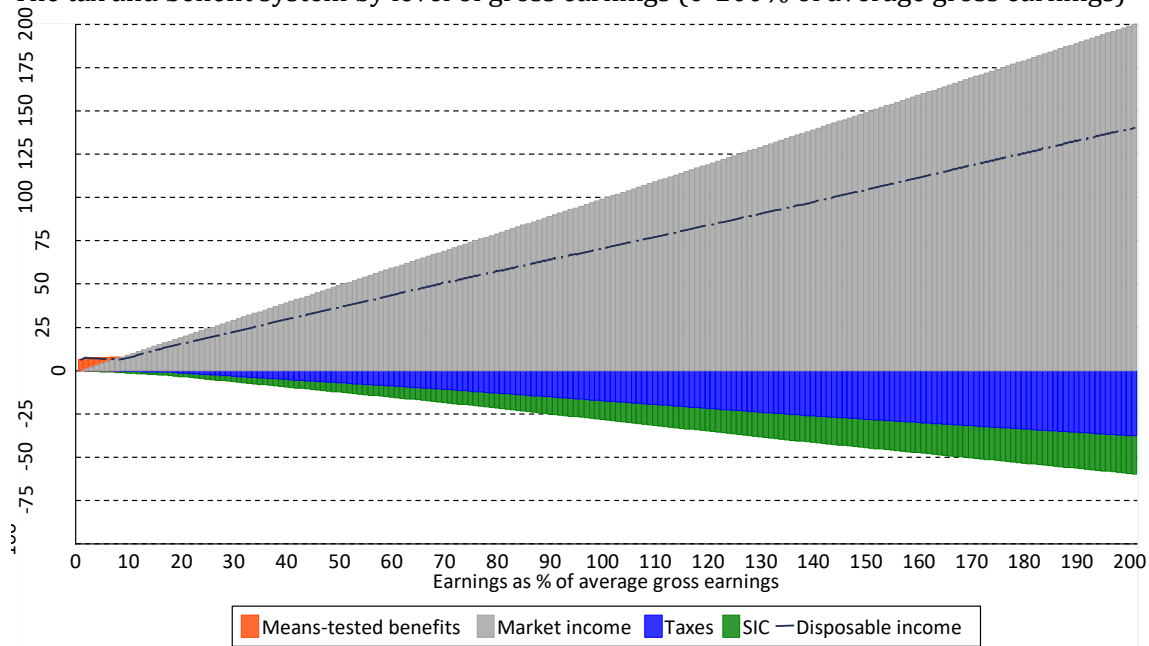
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	61.8	0.0
Social Assist./Housing	0.0	0.0	13.5
- Taxes	-10.8	0.0	0.0
- SIC	-11.0	0.0	0.0
Disp. HH income	78.2	61.8	13.5

Household net income by income components and family type (% of average gross earnings)

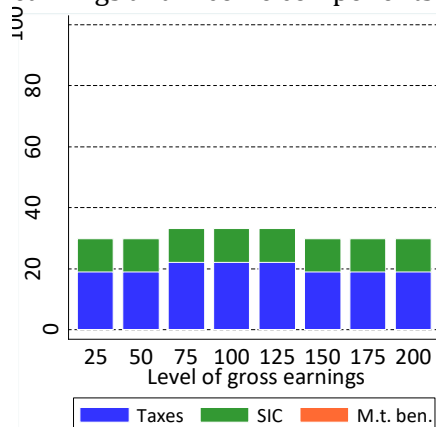
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	61.8	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	6.0	4.4	4.0	0.0	0.0
- Taxes	-10.8	-2.9	0.0	0.0	-17.2	-24.5
- SIC	-11.0	-11.0	-11.0	-11.0	-22.0	-22.0
Disp. HH income	78.2	92.1	93.4	154.8	160.8	153.5
Equ. disp. HH income	78.2	57.5	44.5	73.7	76.6	102.3

Romania

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

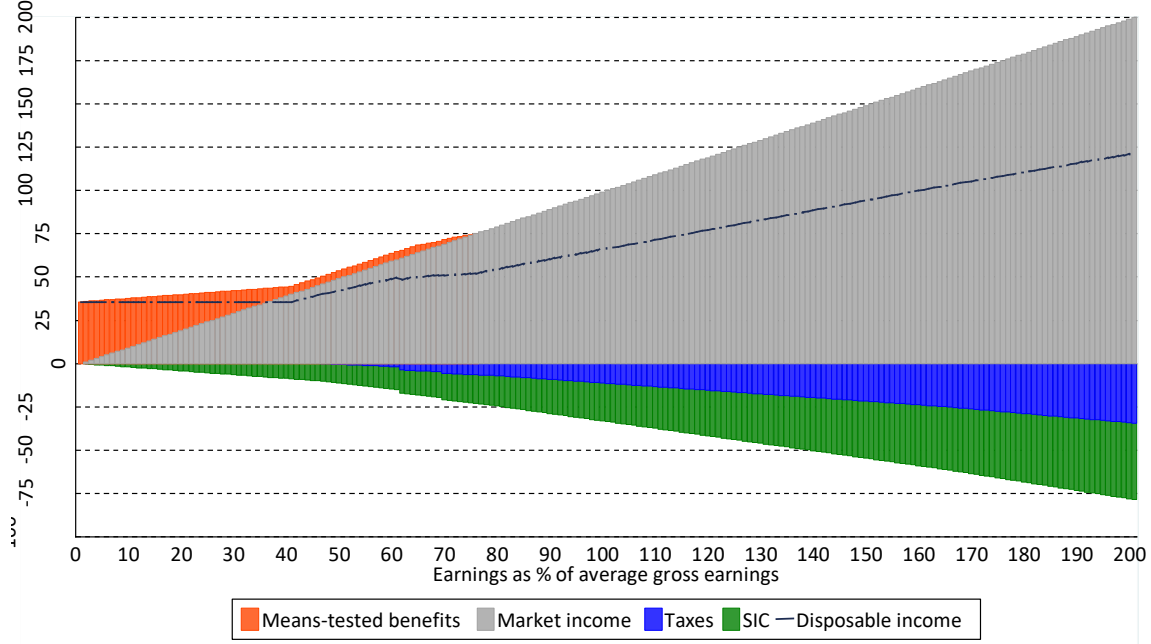
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	24.2	0.0
Social Assist./Housing	0.0	0.0	6.5
- Taxes	-17.7	-3.9	0.0
- SIC	-11.0	0.0	0.0
Disp. HH income	71.3	20.3	6.5

Household net income by income components and family type (% of average gross earnings)

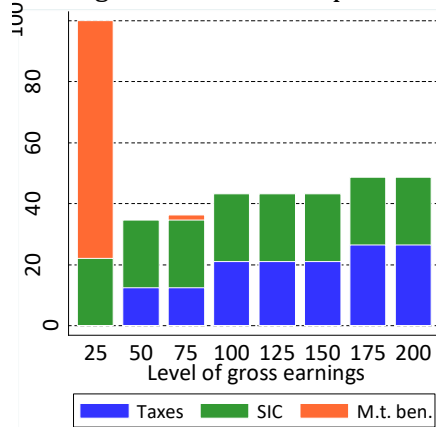
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	24.2	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	7.7	14.6	14.6	7.7	0.0
- Taxes	-17.7	-16.9	-16.5	-20.7	-34.5	-35.3
- SIC	-11.0	-11.0	-11.0	-11.0	-22.0	-22.0
Disp. HH income	71.3	79.8	87.1	107.0	151.2	142.7
Equ. disp. HH income	71.3	49.9	41.5	51.0	72.0	95.1

Slovenia

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

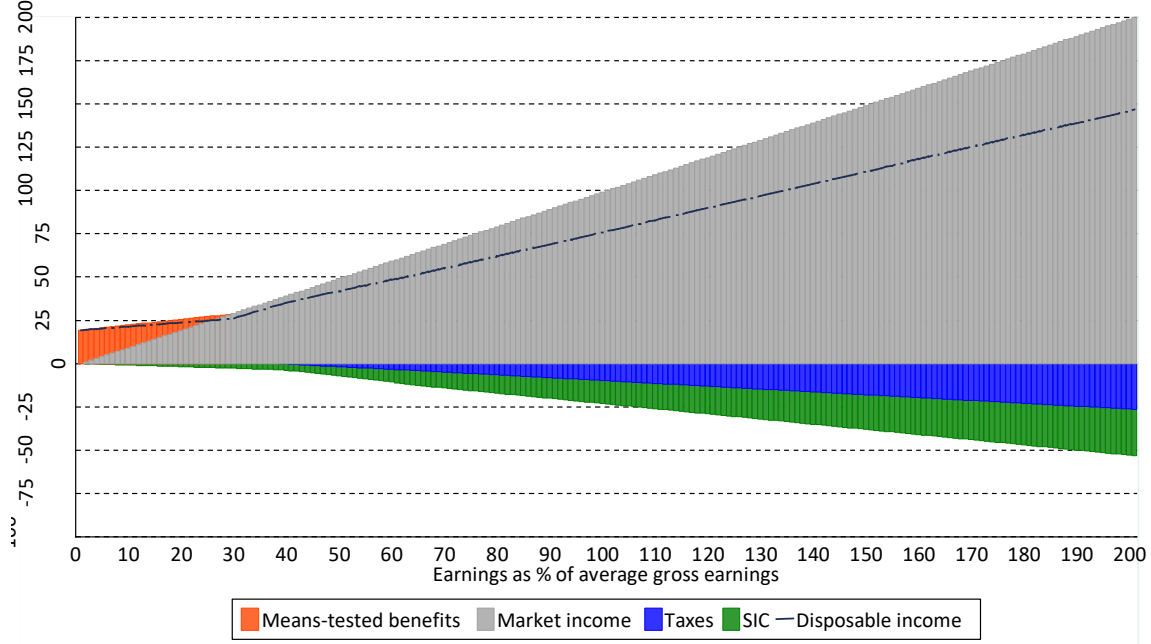
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	29.0	0.0
Social Assist./Housing	0.0	4.6	25.1
- Taxes	-11.4	0.0	0.0
- SIC	-22.1	-6.3	0.0
Disp. HH income	66.5	27.3	25.1

Household net income by income components and family type (% of average gross earnings)

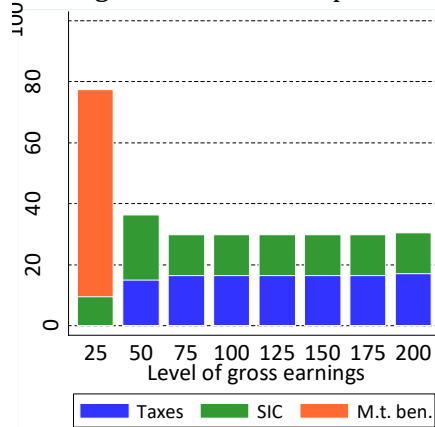
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	29.0	0.0	0.0
Social Ass./Housing	0.0	7.9	9.4	6.8	0.0	0.0
Family/Education	0.0	8.2	13.4	10.2	6.8	0.0
- Taxes	-11.4	-5.2	-3.1	-5.2	-16.6	-22.9
- SIC	-22.1	-22.1	-22.1	-28.4	-44.2	-44.2
Disp. HH income	66.5	88.8	97.5	112.5	145.9	132.9
Equ. disp. HH income	66.5	55.5	46.4	53.6	69.5	88.6

Slovakia

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

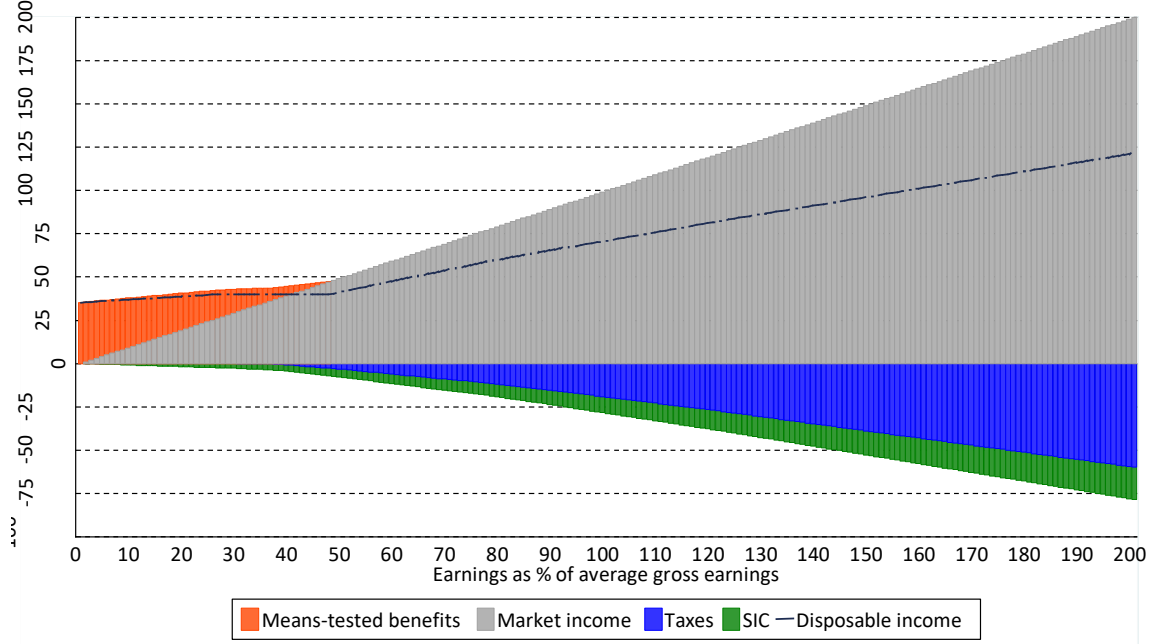
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	25.0	0.0
Social Assist./Housing	0.0	0.0	19.4
- Taxes	-10.0	0.0	0.0
- SIC	-13.4	0.0	0.0
Disp. HH income	76.6	25.0	19.4

Household net income by income components and family type (% of average gross earnings)

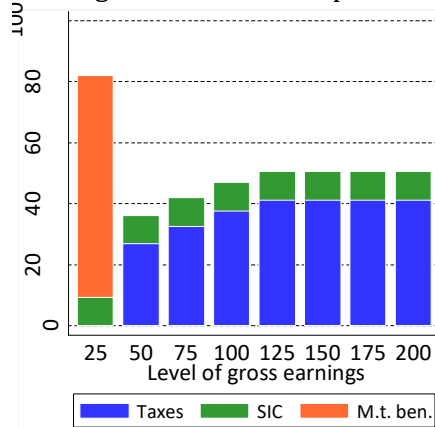
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	25.0	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	5.1	5.1	5.1	5.1	0.0
- Taxes	-10.0	-5.4	-11.8	-3.6	-15.3	-19.9
- SIC	-13.4	-13.4	-13.4	-13.4	-26.8	-26.8
Disp. HH income	76.6	86.3	79.8	113.1	162.9	153.3
Equ. disp. HH income	76.6	53.9	38.0	53.8	77.6	102.2

Finland

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

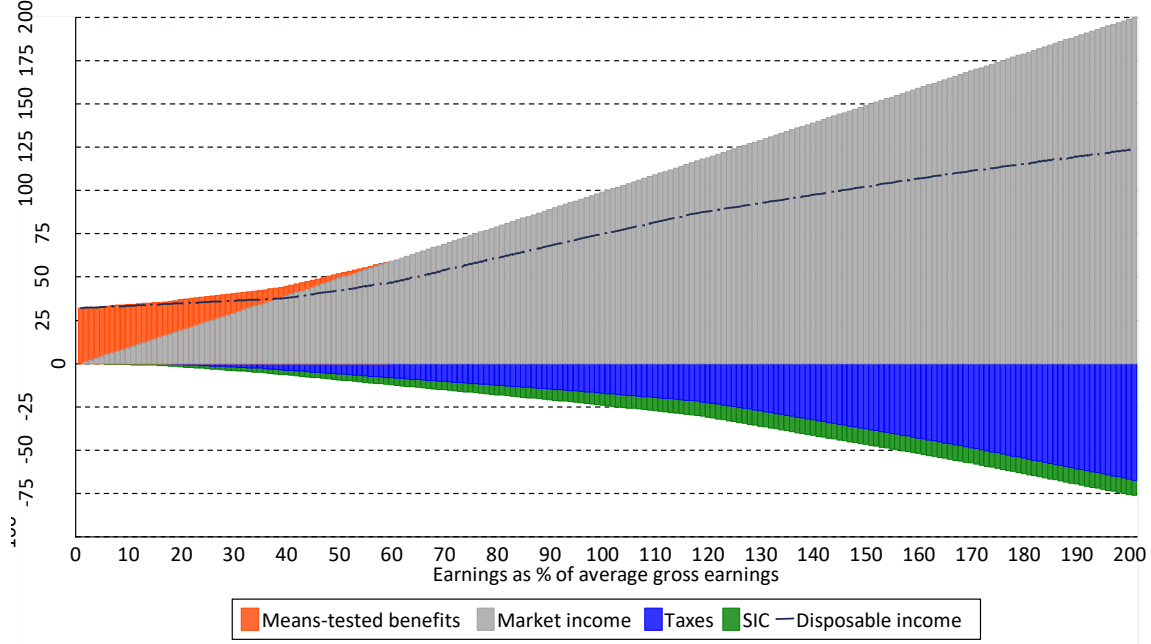
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	54.7	0.0
Social Assist./Housing	0.0	0.0	35.4
- Taxes	-19.5	-12.7	0.0
- SIC	-9.3	0.0	0.0
Disp. HH income	71.2	42.0	35.4

Household net income by income components and family type (% of average gross earnings)

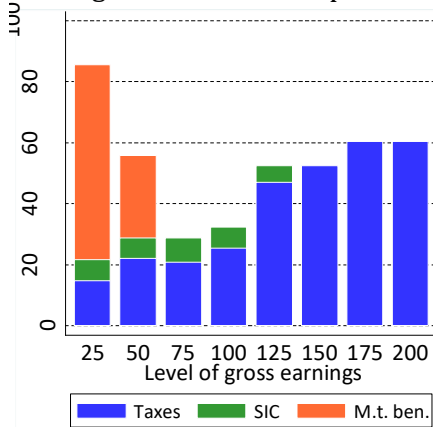
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	4
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	60.0	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	9.4	6.3	6.3	6.3	0.0
- Taxes	-19.5	-19.0	-19.2	-33.2	-38.5	-38.2
- SIC	-9.3	-9.3	-9.3	-9.3	-18.7	-18.7
Disp. HH income	71.2	81.1	77.7	123.8	149.2	142.4
Equ. disp. HH income	71.2	50.7	37.0	58.9	71.0	94.9

Sweden

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

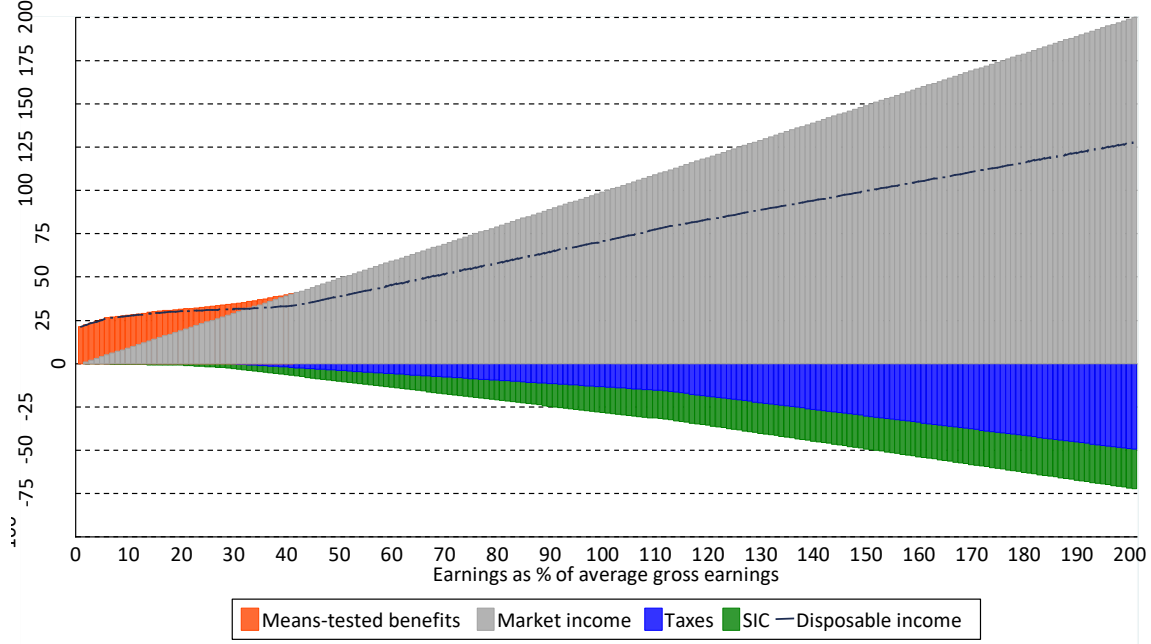
	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	73.5	0.0
Social Assist./Housing	0.0	0.0	32.2
- Taxes	-17.4	-17.0	0.0
- SIC	-7.0	-5.2	0.0
Disp. HH income	75.7	51.4	32.2

Household net income by income components and family type (% of average gross earnings)

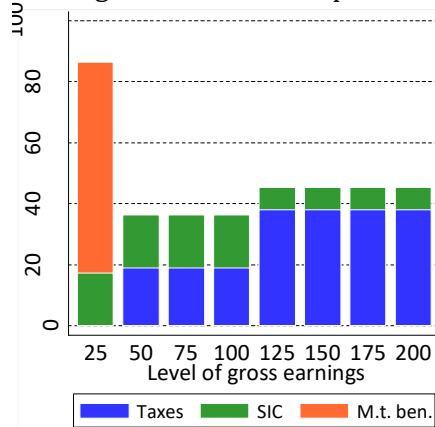
	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	4
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	74.4	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	7.0	7.0	7.0	7.0	11.5
- Taxes	-17.4	-17.4	-17.4	-34.6	-34.7	-34.7
- SIC	-7.0	-7.0	-7.0	-12.2	-14.0	-14.0
Disp. HH income	75.7	82.6	82.6	134.6	158.3	162.8
Equ. disp. HH income	75.7	51.6	39.3	64.1	75.4	60.3

United Kingdom

The tax and benefit system by level of gross earnings (0-200% of average gross earnings)



METR by level of average gross earnings and income components



Household net income by income components and economic status (% of average gross earnings)

	EMPL	UNEMP	INAC
Earnings	100.0	0.0	0.0
Unemployment	0.0	8.9	0.0
Social Assist./Housing	0.0	15.0	23.9
- Taxes	-13.6	0.0	0.0
- SIC	-15.0	0.0	0.0
Disp. HH income	71.4	23.9	23.9

Household net income by income components and family type (% of average gross earnings)

	Single person	Lone parent	Single earner (INAC)	Single earner (UNEMP)	Dual Earner	Dual Earner
Adults						
No. of children	0	2	2	2	2	0
Earnings	100.0	100.0	100.0	100.0	200.0	200.0
Unemployment	0.0	0.0	0.0	8.9	0.0	0.0
Social Ass./Housing	0.0	0.0	0.0	0.0	0.0	0.0
Family/Education	0.0	4.2	4.2	4.2	4.2	0.0
- Taxes	-13.6	-13.6	-13.1	-13.1	-27.2	-27.2
- SIC	-15.0	-15.0	-15.0	-15.0	-30.0	-30.0
Disp. HH income	71.4	75.6	76.1	84.9	146.9	142.8
Equ. disp. HH income	71.4	47.2	36.2	40.5	70.0	95.2