OECD Economics Department Working Papers No. 1464

Basic income or a single tapering rule? Incentives, inclusiveness and affordability compared for the case of Finland

Jon Pareliussen,
Hyunjeong Hwang,
Heikki Viitamäki

https://dx.doi.org/10.1787/d8c0fbc4-en

OECD

Unclassified **ECO/WKP(2018)12**

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development **04-Apr-2018**

English - Or. English

ECONOMICS DEPARTMENT

ECO/WKP(2018)12
Unclassified

BASIC INCOME OR A SINGLE TAPERING RULE? INCENTIVES, INCLUSIVENESS AND AFFORDABILITY COMPARED FOR THE CASE OF FINLAND

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By Jon Kristian Pareliussen, Hyunjeong Hwang and Heikki Viitamäki

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ABSTRACT/RÉSUMÉ

Basic income or a single tapering rule? Incentives, inclusiveness and affordability compared for the case of Finland.

The combination of different working-age benefits, childcare costs and income taxation creates complexity, reduces work incentives and holds back employment. This paper compares Finland's benefit system with two benefit reform scenarios: a uniform benefit for all ("basic income") and a universal tapering rule ("universal credit"). The scenarios are modelled in the OECD TaxBen model and the TUJA microsimulation model. We find that replacing current benefits with a basic income would improve incentives for many, but with a drastic redistribution of income and likely increasing poverty as a result. Merging working-age benefits with similar aims and coordinating their tapering against earnings would on the other hand consistently improve work incentives and transparency, while preserving or improving social protection.

Keywords: welfare reform, basic income, universal credit, Finland, work incentives, inequality

JEL classification codes: D31, H53, H55, J38

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Revenu de base ou règle unique de retrait des prestations? Comparaison des incitations, de l'inclusivité et de la charge financière dans le cas de la Finlande.

La combinaison des différentes prestations reçues par les personnes en âge de travailler, des coûts de garde d'enfants et de l'impôt sur le revenu crée de la complexité, réduit les incitations à travailler et restreint l'emploi. Cet article compare le système de prestations sociales finlandais avec deux scénarios de réforme: une prestation uniforme pour tous («revenu de base») et une règle de réduction universelle («crédit universel»). Les scénarios sont modélisés dans le modèle TaxBen de l'OCDE et le modèle de microsimulation TUJA. Nous trouvons que le remplacement des prestations actuelles par un revenu de base améliorerait les incitations pour beaucoup, mais avec une redistribution drastique des revenus et, par conséquent, probablement une pauvreté accrue. La fusion des prestations reçues par les personnes en âge de travailler ayant des objectifs similaires et la coordination de leur réduction en fonction des revenus augmenteraient systématiquement les incitations à travailler et la transparence, tout en préservant ou améliorant la protection sociale.

Mots-clés: réforme des prestations sociales, revenu de base, crédit universel, Finlande, incitations à travailler, inégalité

JEL classification codes: D31, H53, H55, J38.

TABLE OF CONTENTS

BASIC INCOME OR A SINGLE TAPERING RULE? INCENTIVES, INCLUSIVENESS AND AFFORDABILITY COMPARED FOR THE CASE OF FINLAND 5

Introduction 5
Benefit reform scenarios 7
Strengths and weaknesses of the current system 8
Universal basic income: a uniform benefit for all 11
Universal credit: a uniform tapering rule for all existing benefits 13
Comparing the scenarios 16
Incentives 16
Inclusiveness and affordability 18
Possible steps to simplify the system and improve work incentives in the present context 21
Summary and conclusions 22

BIBLIOGRAPHY 23

Annex 1. Common measures of work incentives 24
Annex 2. Additional figures 25
Annex 3. Additional tables 29

Tables

Summary of benefit reform scenarios 7
Main working age benefits and income taxation 8
Details behind Finland's score in Figure 1 and alternative assumptions 11
Comparative average effective tax rates, income-related unemployment insurance 17
Comparative average effective tax rates, social assistance and housing benefit 18
Some key characteristics of benefit reform scenarios 29
Comparative average effective tax rates, income-related unemployment insurance 29
Comparative participation tax rates not eligible for unemployment insurance 30

Figures

Work does not always pay 6
Net income and work incentives in the current system 9
Existing cash support is targeted to the poor in Finland 12
Net income and work incentives in the basic income scenario 13
Net income and work incentives in the universal credit scenario 15
A basic income would increase relative poverty 19
A basic income scenario would alter the income distribution 19
Net income in the different scenarios 20
Improving incentives for second earners 22
Net income and work incentives in the current benefit system 24
Decomposition of net income eligible for unemployment insurance 25
Decomposition of net income not eligible for unemployment insurance 27
Decomposition of net income not eligible for unemployment insurance (continued) 28

BASIC INCOME OR A SINGLE TAPERING RULE? INCENTIVES, INCLUSIVENESS AND AFFORDABILITY COMPARED FOR THE CASE OF FINLAND

By

Jon Kristian Pareliussen, Hyunjeong Hwang and Heikki Viitamäki[1]

Introduction

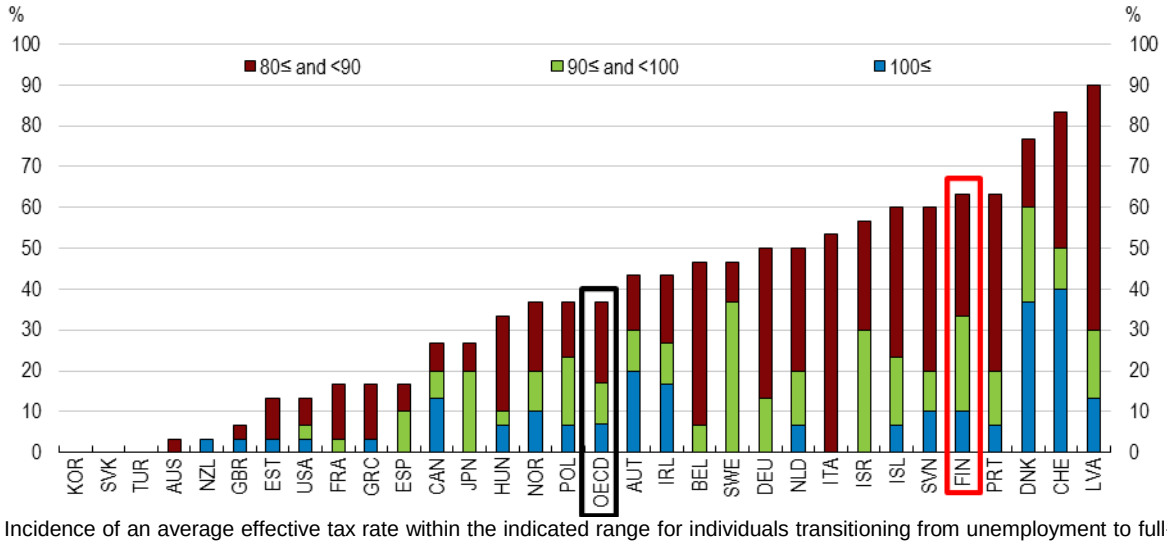
A well-functioning benefit system should encourage work, offer strong social protection and be affordable to the taxpayer. In principle, these goals may form a policy trilemma: high benefit levels can only be combined with strong work incentives if benefits are withdrawn (tapered) slowly against income from work, and generosity combined with slow tapering has a significant fiscal cost. In practice, however, many welfare systems are replete with inefficiencies and benefit reform may therefore not necessarily face such trade-offs. Indeed, working-age benefits in most OECD countries are patchworks of different schemes introduced and reformed over time to cater to different needs, and often administered by different agencies and at different levels of government. Complex interactions between different benefits and income taxation create incentive- and inactivity traps, often compounded by schemes targeting specific demographic groups, such as older workers and families with children. "Bureaucratic traps", where complex benefit rules combined with administrative practices create a real or perceived risk of losing eligibility or delayed benefit payments, can further reduce the attractiveness of work for risk-adverse, often cash-strapped, individuals. In this situation, significant gains can be achieved by improving and simplifying benefit design, removing inactivity-, incentive- and bureaucratic traps (OECD, 2018).

The income from working, net of taxes and benefit loss, is not the only factor affecting individual decisions to take up work or increase work efforts. Work-related expenses, spouse income, the number and age of children, regional housing price differences and individual preferences will for example play important roles. For these reasons and because of the need for balancing incentives with inequality and affordability, it is impossible to determine a general optimal incentive level. However, marginal effective tax rates and/or average effective tax rates (Annex 1) exceeding 100% mean that individuals will lose money from taking up work or working more and are clearly too high. Such disincentives exist nonetheless for some specific individual circumstances in some OECD countries, and average effective tax rates above 80%, which also constitute quite weak incentives, are quite common (Figure 1).

[1] Pareliussen and Hwang work in the OECD Economics Department, Viitamäki in the VATT Institute for Economic Research. The authors would like to thank Jukka Mattila, Ilari Keso, Kaisa Kotakorpi, Hanna Pesola, James Browne, Herwig Immervoll, Mathilde Pak, Christophe André, Vincent Koen and Asa Johansson for valuable comments and suggestions at various stages of the preparation of this paper, and Sisse Nielsen and Mercedes Burgos for secretarial assistance.

Figure 1. Work does not always pay

Incidence of unemployment traps[1]



1. Incidence of an average effective tax rate within the indicated range for individuals transitioning from unemployment to full-time work in the initial phase of unemployment. A value of 100 means that all modelled individuals face inactivity traps. Zero means that none do. Unemployment insurance and means-tested top-ups are included. Average effective tax rates are modelled for six household types: single; single parent; couple, inactive spouse, no children; couple, inactive spouse, two children; couple, working spouse, no children, and; couple, working spouse, two children, and for five income levels: 33%, 50%, 67%, 100% and 150% of national average wage. Households with children are assumed to have two children aged four and six.

Source: Calculations based on the OECD TaxBen model.

A further challenge comes from digitalisation, automation and globalisation, which have led to profound changes in working life over the past few decades, and will continue to do so going forward. Adapting the social safety net to the future of work and treating freelancers and self-employed as far as possible on an equal footing with regular workers is a major challenge to social protection systems across the OECD, but not an insurmountable one (OECD, 2016a; 2017a). Technology also offers solutions. Linking benefit payments to real-time income registries, as planned in Finland from 2020, holds the potential to improve transparency and provide seamless transitions between work and benefits.

To contribute to an informed debate about how social benefit system design can contribute to reduce complexity, improve work incentives and help meet the challenges from a changing world of work, two benefit reform scenarios are developed for the case of Finland: a universal benefit for all ("basic income"), and a universal tapering rule for all existing benefits ("universal credit"). The scenarios are compared on how they change work incentives compared to the existing system (Table 1), whether they are affordable, and how they would affect the distribution of income.

In the case of Finland, a universal basic income at a level that does not imply crippling income taxation, fails to protect vulnerable individuals as well as the current system. A basic income can simplify the benefit system and improve work incentives for some. However, even when retaining some means-tested top-ups, a basic income will imply that the current targeting of benefits changes drastically, resulting in a major redistribution of income. The basic income scenario also increases poverty substantially. The scale of income redistribution and poverty increase clearly depends on the concrete assumptions in the basic income scenario. However, a basic income defined as a uniform benefit to replace many of the current targeted benefits will not achieve the redistribution of the current system or a universal credit, where benefits are targeted to those who need them most. Other, more targeted lump-sum benefit structures can potentially perform better. A basic income would also perform better in a setting where the social safety net is less complete and inclusive than in Finland.

Table 1. Summary of benefit reform scenarios

Current system			Basic income scenario	Universal credit scenario
Benefit / fee	*Programme description*			
Family benefit	Child and lone parent (lump-sum)	Lone parent child maintenance allowance	Family benefit (lump-sum)	Family benefit (lump-sum)
		Lone parent supplement to child benefit	Basic income	
		Child benefit		
	Childcare benefit	Homecare allowance		Universal credit
		Homecare supplement		
		Municipal homecare supplement		
Unemployment benefit	Labour market subsidy			
	Basic unemployment insurance			
	Income-related unemployment insurance			
Social assistance	Basic and household related amount			
	Housing supplement		Social assistance	
Housing benefit	Housing allowance		Housing benefit	
Childcare fee	Income related		Childcare fee	
	Floor and ceiling			Childcare fee (lump-sum)

In contrast, a universal credit-type reform, adapted to Finnish circumstances, can alleviate complexity, strengthen work incentives consistently across household types, raise social protection and reduce poverty within the current fiscal envelope. This reform scenario is only a relatively small departure from the current system compared to the basic income scenario. A practical implementation of such reform would nonetheless be more technically demanding than a basic income.

This paper is structured as follows: The second section explains key features of the current benefit system and outlines the two benefit scenarios. The third section compares how the two scenarios affect incentives, inclusiveness and affordability. The fourth section discusses priorities and concrete actions to gradually move the Finnish benefit system in the direction of greater simplicity and better work incentives. The fifth section summarises and concludes.

Benefit reform scenarios

The OECD TaxBen model embodies the rules governing the main working-age benefits of most OECD countries from 2001 to 2015. This model is used below to describe the main features, strengths and weaknesses of the existing tax-benefit system and two possible directions of reform: a uniform benefit for all (universal basic income); and a uniform tapering rule for all existing benefits (universal credit).

Strengths and weaknesses of the current system

In Finland, unemployment benefits, housing benefits, and social assistance fulfil related purposes and operate along the same dimensions, but have their particular sets of rules that are only partially harmonised. Different benefits have different eligibility criteria and formulas to calculate the initial benefit amount, as this reflects different needs and rights. Unemployment insurance depends on work history, job search and participation in activation schemes. The means-tested housing benefit depends on housing costs, subject to a ceiling determined by household size and local housing costs. Social assistance is a last-resort benefit aiming to raise living standards of all individuals to a minimum level, also accounting for family size and housing expenses. A homecare allowance is available for those who choose to forego public childcare and take care of their own children. Many municipalities also provide top-ups to the homecare allowance (Table 2; OECD, 2016b).

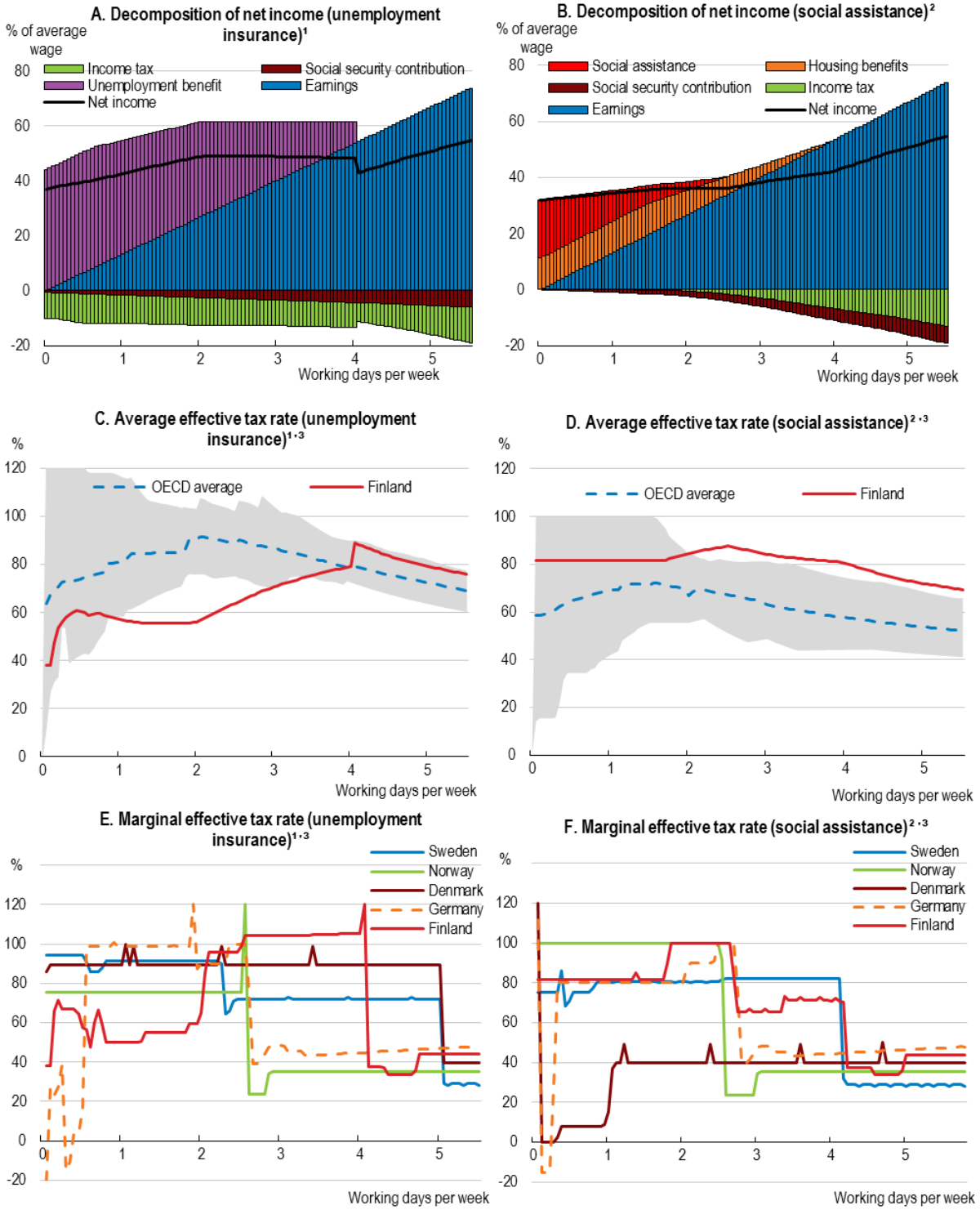
Table 2. Main working age benefits and income taxation[1]

Benefit	Eligibility criteria	Initial amount	Income/wealth definition for tapering	Taxable
Labour market subsidy (*Työmarkkinatuki*)	Registered as unemployed and available for work or activation policies[2]	A personal "basic amount" and supplements for children	Gross individual earnings plus capital income and parents' income if living together	Yes
Basic unemployment insurance (*Peruspäiväraha*)	As in the labour market subsidy, plus 26 weeks of work for the past 28 months[2]	As in the labour market subsidy	Gross individual earnings	Yes
Income-related unemployment insurance (*Ansiosidonnainen työttömyyspäiväraha*)	As in basic unemployment insurance, plus membership in unemployment fund[2]	As in basic unemployment insurance plus a percentage of pre-unemployment income	Gross individual earnings	Yes
Housing allowance (*Yleinen asumistuki*)	Low income	Housing costs, family size and composition, geographical area	Gross household income including taxable benefits	No
Social assistance (*Toimeentulotuki*)	Low income	Housing costs, family size and composition, geographical area, childcare costs	Net household income after taxes and benefits, wealth	No
Homecare allowance (*Kotihoidontuki*)	Does not use public childcare and has children aged 1-3	Number of children and their age; municipal supplement follows local rules	Gross household income (only applies for means-tested supplement)	Yes
Tax/fee	**Criteria**	**Structure**	**Income definition**	
Childcare fee (*Päivähoitomaksu*)	Number of children aged 1-6 in public childcare	Flat rate with floor and ceiling	Gross household income	
Income taxation and social security contributions		Progressive tax schedule	Gross individual income	

1. The reference date for all information is 1 July 2015.
2. Working hours may not exceed 80% of full-time work in the case of part-time unemployment benefits.
Source: OECD (2016b).

Income definitions and tapering rules differ across benefit types. Unemployment insurance benefits are taxable and tapered on gross individual earnings. Social assistance and housing benefits provide top-ups to net income, and are hence not taxable. Income taxation in Finland consists of a flat-rate social security contribution, a flat-rate municipal income tax with a basic allowance and an allowance based on earned income, a progressive central government income tax, an earned income tax credit and a child tax credit in addition to various other deductions covering special circumstances. As in the other Nordics, the income tax is applied to individual income. Individual income taxation generally favours two-earner couples compared to taxation of household income, since second earners then benefit from tax allowances, tax credits and lower marginal taxes in progressive tax schedules. However, the childcare fee for one to six year-old children attending public childcare is equivalent to an additional income tax with a floor and a ceiling but is calculated on the basis of household income, contrary to regular income taxation (OECD, 2016b).

Figure 2. Net income and work incentives in the current system



1. A single person entitled to unemployment insurance going into work, with hourly earnings pre- and post-unemployment of 67% of the national average wage in the initial phase of unemployment. Means-tested benefits are allowed as top-ups to unemployment insurance.
2. A single person not entitled to unemployment insurance going into work with hourly earnings of 67% of the national average wage.
3. Extreme positive rates have been capped at 120%. Extreme negative rates have been capped at -20%. The shaded area denotes the range between the 25th and the 75th percentile in the OECD area.

Source: Calculations based on the OECD TaxBen model.

The main disincentives for those entitled to unemployment insurance originate in unemployment insurance tapering (Figure 2, Panel A), even though housing benefits may also matter, notably for those who do not qualify for the income-related unemployment insurance. Work incentives for those eligible to keep their benefit while working part-time are quite strong in Finland up to a certain point, with among the lowest average effective tax rates in the OECD. This is due to earned income tax credits, a EUR 300 monthly earnings disregard and relatively slow tapering of unemployment benefits (at a rate of 50% of earnings). However, working more than approximately 40% of full-time is strongly discouraged, first by marginal effective tax rates of above 100%, stemming from a rule capping the sum of earnings and benefits at the level of pre-unemployment earnings. Thereafter, an individual working more than 80% of full time loses eligibility to unemployment benefits, resulting in a cliff-edge loss of benefits discouraging full-time work (Panels C and E).

Individuals eligible for means-tested social assistance will also usually receive the means-tested housing benefit (Figure 2, Panel B). Social assistance is tapered at a rate of 80% of net income up to a threshold, after which it is tapered euro for euro. The housing benefit has a taper rate of 32% of gross household income, but since it is part of the income definition for social assistance, marginal effective tax rates for the two benefits combined never exceed 100% (Panel F). One-earner households (singles and couples, with or without children) with moderate earnings prospects face average effective tax rates between 70% and 90% in most situations – high compared to the OECD average but not unique (Panel D). However, second earners with children are eligible to receive the homecare allowance, and will also pay the childcare fee when entering work, resulting in an average effective tax rate well above 100% when working less than approximately 40% of full-time (see Figure 9 as well as Figure A2.2., Panel P in Annex 2).

Simulated work incentives for individuals in model households will depend on the assumptions fed into the benefit model. The current system is here described on the basis of standard assumptions used in the OECD TaxBen model to calculate standard indicators of work incentives, and based on the actual rules and rates in 2015. Two things are worth noting in this respect. The standard assumption that incentives are measured at the beginning of the unemployment spell increases the benefit amount for the unemployment insurance from the normal level to an increased level which used to be generally available for the first 90 days of unemployment, but which is now only available (for a maximum of 200 days) if the individual participates in activation policies. Second, the maximum childcare fee for the second sibling in public childcare has been lowered from 90% of the fee for the first child to 50% as of 2018. However, looking more closely at the data underlying Figure 1, it is clear that even though these two factors (notably the increased allowance) affect work incentives, they do not change the overall picture of weak work incentives for individuals with low earnings (Table 3).

Table 3. Details behind Finland's score in Figure 1 and alternative assumptions

Household type	Earnings[1]	AETR[2]	AETR alternative[3]
Single	0.33	87	87
Lone parent	0.33	86	83
Couple, inactive spouse, no children	0.33	87	87
Couple, inactive spouse, 2 children	0.33	87	87
Couple, working spouse, no children	0.33	75	71
Couple, working spouse, 2 children	0.33	122	112
Single	0.5	85	82
Lone parent	0.5	93	90
Couple, inactive spouse, no children	0.5	92	92
Couple, inactive spouse, 2 children	0.5	92	92
Couple, working spouse, no children	0.5	74	69
Couple, working spouse, 2 children	0.5	110	99
Single	0.67	79	76
Lone parent	0.67	98	95
Couple, inactive spouse, no children	0.67	87	87
Couple, inactive spouse, 2 children	0.67	94	94
Couple, working spouse, no children	0.67	75	69
Couple, working spouse, 2 children	0.67	102	92
Single	1	76	70
Lone parent	1	96	91
Couple, inactive spouse, no children	1	79	76
Couple, inactive spouse, 2 children	1	85	84
Couple, working spouse, no children	1	76	70
Couple, working spouse, 2 children	1	94	85
Single	1.5	74	67
Lone parent	1.5	86	80
Couple, inactive spouse, no children	1.5	74	69
Couple, inactive spouse, 2 children	1.5	76	73
Couple, working spouse, no children	1.5	74	67
Couple, working spouse, 2 children	1.5	85	77

1. In % of national average wage. Pre-unemployment earnings equal post-unemployment earnings.
2. Average effective tax rate.
3. Average effective tax rate in alternative scenario in which the increased unemployment benefit is suppressed, and the maximum childcare fee for the second child is reduced to 50% of the maximum for the first child in line with reforms enacted since 2015.

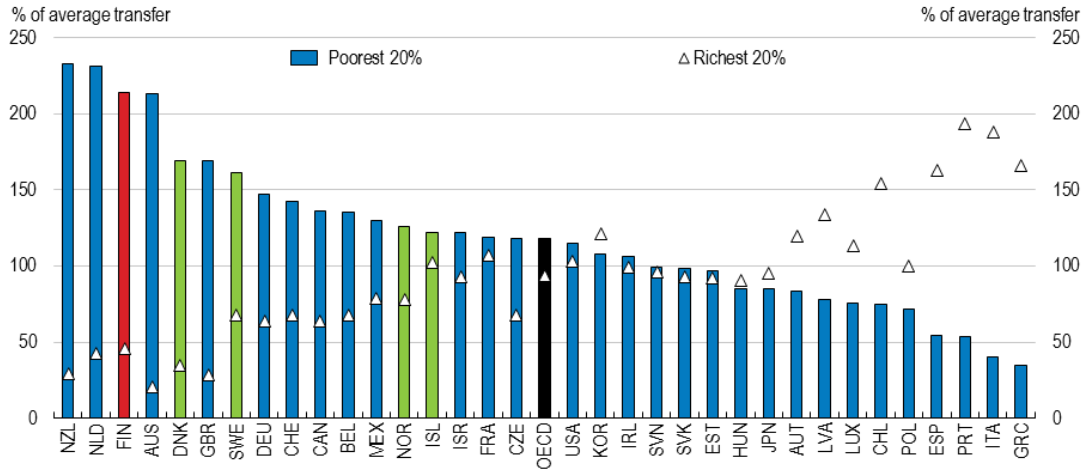
Source: Calculations based on the OECD TaxBen model.

Universal basic income: a uniform benefit for all

A basic income is a uniform benefit to all, regardless of earnings or individual circumstances. The concept of a basic income is not new, and most OECD countries already include unconditional transfers to certain groups in the form of, for example, child benefits and basic old-age pensions. However, the idea of such a benefit for the whole population has gained renewed attention lately as a possible response to challenges facing traditional social protection systems, such as the rise of atypical forms of employment and risk of job losses due to automation, as well as imbalances between work, family and leisure. Incomplete coverage of insurance transfers leading to insufficient security for the poor in existing cash support is a further argument, although one with relatively little relevance for Finland, a country with low inequality and benefits effectively sheltering the poor (Figure 3).

Figure 3. Existing cash support is targeted towards the poor in Finland[1]

2013 or latest year available



1. Public social cash transfers received by working-age individuals in low and high-income groups (equivalised disposable incomes). Age group 18-65, 18-62 in France.

Source: OECD (2017b).

Furthermore, basic income has been put forward as a major simplification of existing benefit systems, and could improve work incentives, since a basic income is not tapered against earnings. However, if existing spending on all working-age benefits was distributed to the same age group as a basic income with an equal amount to all, the benefit level would only constitute 13% of the median income, or 26% of the relative poverty threshold. Financing a basic income at a meaningful level thus requires additional tax revenue, and heavier taxation of income will, at least partially, neutralise enhanced work incentives (OECD, 2017b).

In Finland, a lively academic and political debate about the subject eventually led to the implementation of a two-year basic income trial, which started in January 2017. The experiment covers 2 000 recipients of unemployment assistance, and converts the EUR 560 a month (before tax) unemployment assistance into an unconditional benefit in the sense that tapering and mandatory activation and job search requirements are abolished for the individuals concerned. Income taxation and other benefits are kept unchanged, so that no participant loses out compared to the current system, contrary to what would happen if the scheme was implemented nationally and financed through taxation (Kela 2016; OECD, 2017b).

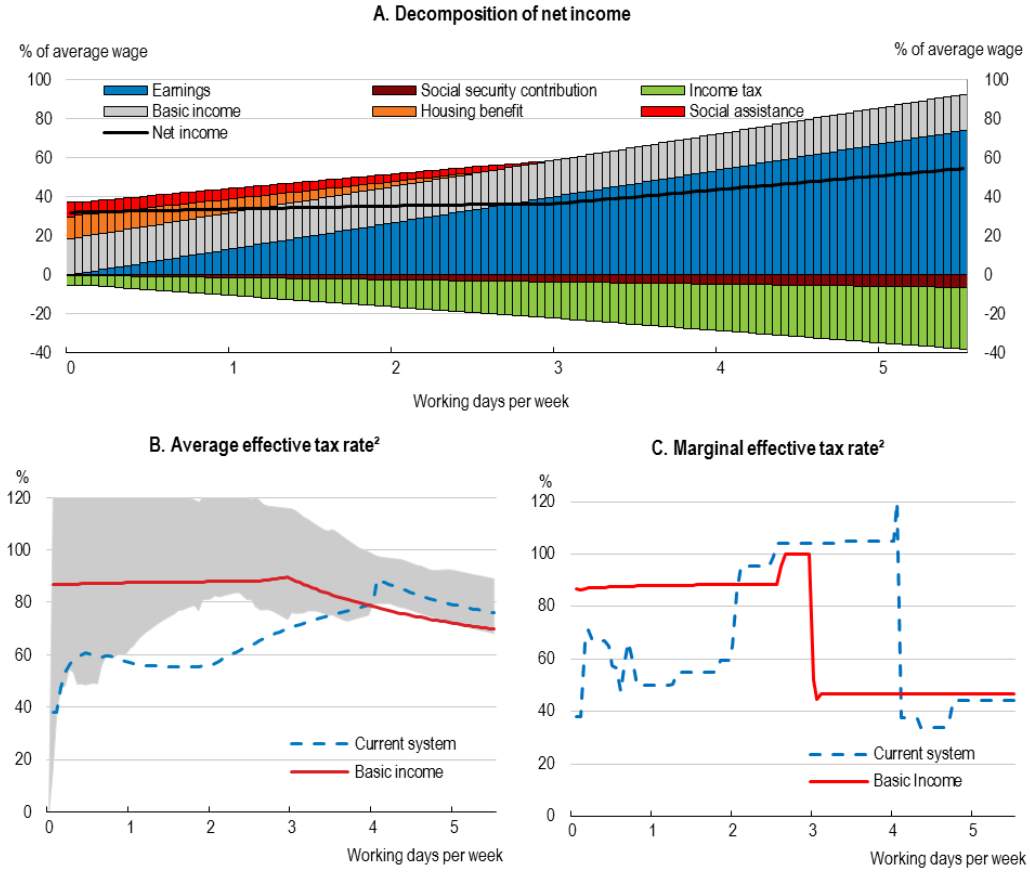
The basic income scenario presented here follows closely the scenario outlined by Browne and Immervoll in OECD (2017b) and Browne and Immervoll (2017). The basic income applies to working-age individuals and is set at EUR 573 (486) per month before (after) tax. This level corresponds to social assistance for adults, with basic income for children derived from social assistance child supplements (EUR 237 before tax). The new benefit replaces unemployment, social assistance (except the housing element) and early retirement benefits, but disability benefits and cash support for housing are retained (see Table 1, 2 and Table A3.1 in Annex 3). Setting the basic income at a level that would fully remove the need for needs-tested housing related top-ups would imply crippling income taxation. A basic income of EUR 1500 per month would for example require a flat-rate income tax of 79% (replacing current income taxation), but would not fully remove the need for housing benefits (Kela, 2016).

All tax credits and allowances are removed to fund the reform. There is little rationale for a tax-free earnings allowance when everyone receives a minimum level of income. Furthermore, the zero bracket in the government income tax is abolished and all other brackets are shifted proportionally, which implies raising taxes significantly. The basic income is taxable, introducing some progressivity reflecting the income taxation schedule.

The scenario diverges from the scenario presented in OECD (2017b) in that it is calculated on the basis of 2015 tax- and benefit rules, whereas OECD (2017b) is based on 2014 rules. The biggest change from 2014 to 2015 is a major simplification of the general housing allowance, where for example the age, surface or heating system of a building stopped having an effect on the benefit amount. Furthermore, the maintenance allowance to single parents is kept outside of the basic income, while it was suppressed and replaced by the basic income in OECD (2017b).

The basic income in this scenario undeniably reduces complexity in entitlement rules, which could be further streamlined by merging housing benefits and the housing element of social assistance (Figure 4, Panel A). The cliff-edge loss of income associated with the loss of unemployment benefits when working more than 80% is also eliminated, enhancing incentives to work full-time for the unemployed. However, incentives to take on part-time jobs would be fairly weak, as the combination of heavier taxation on low incomes and tapering of housing benefits would imply high marginal effective tax rates on low earnings (Panel C), and average effective tax rates of around 90% or above for individuals with moderate earnings potential working up to around 60% of full-time (Panel B). Second earners dependent on public childcare would, as in the current system, lose out compared to inactivity if working less than approximately 40% of full-time (See Figure A2.2, Panel R in Annex 2).

Figure 4. Net income and work incentives in the basic income scenario[1]



1. A single person going into work, with hourly earnings of 67% of the national average wage.
2. Extreme positive rates have been capped at 120%. The shaded area denotes the range between the 25th and the 75th percentile in the OECD area.

Source: Calculations based on the OECD TaxBen model.

Universal credit: a uniform tapering rule for all existing benefits

A very different approach to reducing complexity and disincentives lies in harmonising tapering rules for the different working-age benefits already in place. In practice, such an approach is equivalent to merging the benefits in question into one single benefit, and it requires centralisation of benefit administration and harmonisation of the tax treatment of benefits. If well-executed and linked to a functioning real-time income registry, such a benefit holds the potential to provide seamless

transition from unemployment to work and adjustment to varying work hours. The most prominent example of this type of benefit system is found in the United Kingdom, where the process of rolling out a universal credit nationally is ongoing.

The universal credit benefit design has here been adapted to Finnish circumstances. The scenario merges unemployment related benefits, the housing allowance, social assistance and some child benefits into one single benefit with one single tapering rule. In order to isolate the effect of harmonising tapering, the calculation of the "initial amount", the benefit amount received by an individual out of work, follows exactly the same rules as in the current system:

- Unemployment insurance is calculated first, but removing the current income test and adjusting the benefit level for different tax treatment.
- Thereafter, housing benefits are calculated, but removing own earnings from the income test. In other words, one individual without earnings will receive housing benefits calculated as a function of the spouse's income and own unemployment insurance entitlement.
- Social assistance is calculated in the same way as the housing benefit by removing own income, but now adding also the housing benefit and subtracting income tax for the income test.
- The benefits are then added together to the universal credit initial amount, the benefit amount the individual receives when he or she has no other income.

The initial amount is by definition the same as the individual would receive in the current system. Some relatively minor differences occur nonetheless in the scenario, because of the difficulty to adjust accurately for the change of unemployment benefits from being taxable to being non-taxable.

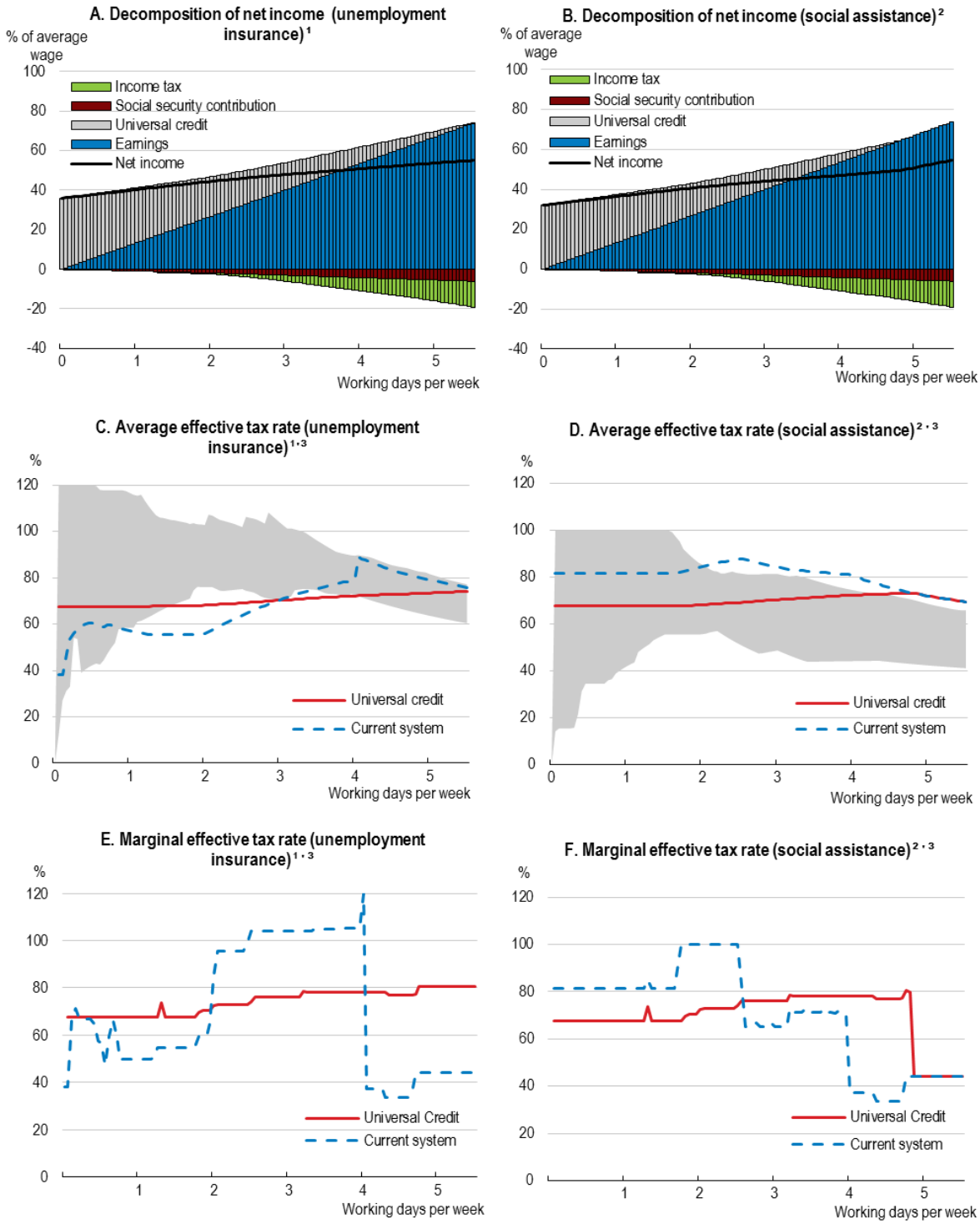
The universal credit is non-taxable and tapered with a rate of 65% on after-tax income. In other words, the net gain from working will be 35 cents of each euro earned after tax. Tapering on after-tax income secures by design that the marginal effective tax rate never exceeds 100%, and smooths out marginal incentives for different earnings levels.[2] Choosing a lower taper rate and/or a higher disregard would improve work incentives, but increase the cost of the benefit. The universal credit in the United Kingdom provides earnings disregards, varying by family type, with the explicit aim to improve work incentives for part-time workers. The choice not to introduce an earnings disregard in the scenario presented here results in comparatively weaker incentives to take on part-time work, but increases affordability.

The homecare allowance is abolished. Furthermore, the current childcare fee, which is structured as an income tax, is removed. It is replaced by a lump-sum fee equal to the maximum payable fee in the current system, but the fee is offset for low-income earners by adding a new childcare supplement to the universal credit (see Table 1 and Table A3.1 in Annex 3). Since this benefit is tapered in a coordinated manner with the other benefits included in the universal credit, these changes remove the current incentive traps for parents of children aged one to six entirely.

Despite preserving the relatively complex rules governing eligibility and calculation of the initial amount from the current system, the universal credit scenario would increase transparency and predictability dramatically from the point of view of the benefit recipient. Once the eligibility and initial amount are confirmed by the public employment service, the pay-off from working or increasing work time is quite transparent (Figure 5, Panels A and B). More importantly, the pay-off will always be positive (Panels C and D).

[2] In practice, annual taxation is a hurdle to monthly tapering on post-tax income, although this hurdle could be overcome either by moving to monthly income taxation, or by approximating monthly post-tax income as a basis for benefit calculation.

Figure 5. Net income and work incentives in the universal credit scenario



1. A single person entitled to unemployment insurance going into work, with hourly earnings pre- and post-unemployment of 67% of the national average wage. Means-tested benefits are allowed as top-ups to unemployment insurance.
2. A single person not entitled to unemployment insurance going into work with hourly earnings of 67% of the national average wage.
3. Extreme positive rates have been capped at 120%. The shaded area denotes the range between the 25th and the 75th percentile in the OECD area.

Source: Calculations based on the OECD TaxBen model.

However, avoiding peaks in the marginal effective tax rate results in benefits being completely tapered off at higher earnings levels than before and comes at the cost of inferior incentives to take on part-time jobs (up to around 40%-50% of full-time) compared to unemployment insurance recipients in the current system. Nonetheless, a longer interval of relatively high marginal effective tax rates is likely preferable to the "cliff-edge" benefit loss associated with unemployment insurance in the current system (Panels E and F). Individuals on social assistance have lower or equal average effective tax rates in the universal credit than in the current system, since the initial benefit level is the same, while the taper rate is lower.

It should be noted that in order to mimic the targeting of the current system as closely as possible and allow for unemployment insurance tapering on individual income, the Finnish version of universal credit outlined here would in practice consist of two parts tapered in sequence: one "household part" and one "individual part". The household part would replace the means-tested housing-and social assistance benefits, and it would be tapered on family income. The individual part would consist of unemployment insurance and childcare benefits. This part would be tapered on individual income after the household part was fully exhausted.

Comparing the scenarios

This section compares incentives in the current system and the two scenarios by studying effects on model households. Fiscal effects of the two scenarios are calculated, and fiscally neutral scenarios constructed and used to gauge distributional effects within the TUJA microsimulation framework. TUJA consists of a tax-benefit calculator linked to microdata, maintained and used by the VATT Institute for Economic Research and the Finnish government. The algorithms used in the tax-benefit model resemble as closely as possible the relevant entitlement rules as applied by relevant agencies and institutions. The microdata originate from Statistics Finland's Income Distribution Survey with a sample size of approximately 10 000 households (Bargain *et al.*, 2010).

A key element of many basic income proposals is that the benefit is given out with no strings attached. Proponents of a basic income often argue that when individuals are released from the straightjacket of job search conditionality and mandatory activation policy this frees them to undertake activities creating value for society, for example by becoming entrepreneurs. Opponents of a basic income often claim the opposite: that conditionality spurs individuals to engage in gainful activities. A large body of research shows that such conditionality can offset negative effects of a high benefit level, a proxy for weak work incentives (see for example Blanchard et al. and 2013, Martin, 2014). In other words, conditionality leads to better outcomes in general, but to the extent a basic income or another benefit reform improves work incentives considerably, the case for conditionality may be less imperative.

Whether or not benefit conditionality increases or reduces benefit dependency is not explicitly analysed in this paper, but it is worth noting that conditionality does not relate to a specific benefit design. A basic income benefit design could in principle be conditional on some mandatory activities, like job search (for those who do not already have one). Likewise, the current benefit design could remain in place even if activation requirements were abolished, and a universal credit reform could be implemented without conditionality. Reform proposals should hence be evaluated based on their impact on incentives, inclusiveness and affordability, not on secondary assumptions about the conditionality regime.

Incentives

Full-time work is still the norm in Finland, and the most useful measure of work incentives for people on unemployment insurance, presumably relatively close to the labour market, may therefore be the average effective tax rate for full-time workers. However, many skills are job-specific, earnings potential deteriorates quickly following involuntary unemployment, shrinking regional job markets offer few attractive jobs, and the incidence of non-standard types of work also increases after displacement. A significant share of the unemployed may therefore not recoup the same salary level as before their

unemployment spell (OECD, 2013). Deteriorating earnings potential can add to disincentives, because the benefit amount in the current unemployment insurance is calculated on the basis of previous earnings, while tapering is partially based on work hours.

In the current system an unemployed person with moderate pre-unemployment earnings and the possibility to go back to full-time work with 80% of previous earnings would face relatively high average effective tax rates when taking up employment, regardless of his or her family situation (Table 4). This is mainly because unemployment benefit is cut off for those going back to working more than 80% of full-time. Even though this cut-off applies to all three versions of the unemployment benefit, it is more likely to be binding for recipients of income-related unemployment insurance than for those receiving more modest amounts in the basic unemployment insurance or the labour market subsidy, a benefit available to those who are not eligible for the other two versions, for example after long-term unemployment. Even with the same salary as in the old job, monetary incentives for an individual entitled to the earnings-related insurance would in many cases be weak, with 75 to 102% of earnings being taxed away, depending on family situation. Work incentives are stronger under both the basic income and the universal credit. They would vary considerably with family type in the basic income, while they by design would be fairly uniform with the universal credit, never exceeding 73.4%. Improved incentives under the basic income are partly a result of a considerably lower initial benefit level than in both the current system and the universal credit, since unemployment insurance is abolished.

Individuals not entitled to earnings-based unemployment insurance can typically be expected to have relatively low earnings prospects and weak labour market attachments. Comparing the average effective tax rate for individuals with modest earnings prospects entitled to social assistance entering work shows that incentives in the basic income scenario are inferior or equivalent to the current system for half-time workers. This is due to the higher marginal tax rates necessary to fund the benefit, combined with the tapering of housing-related benefits. The universal credit on the other hand, displays equivalent or better incentives for all household types. For full-time workers, different work incentives between the basic income and the current system reflect that a basic income is more generous towards couples, while the combination of higher income taxation and tapering of the housing benefit reduces incentives for single-adult households. Average effective tax rates in the universal credit scenario never exceed 73.4%, a considerable improvement compared to the current system (Table 5).

Table 4. Comparative average effective tax rates, income-related unemployment insurance

Previous earnings 67% of national average wage[1]

	Going back to work full time with 100% of previous earnings			**Going back to work full time with 80% of previous earnings**		
Household type	Current system	Basic income	Universal credit	Current system	Basic income	Universal credit
Single	79.1	72.0	73.4	89.4	78.3	72.2
Single parent	97.7	86.2	73.4	99.5	91.4	72.2
Single earner in childless couple	86.5	68.2	73.4	90.3	73.6	72.2
Single earner in couple with children	88.3	74.4	73.4	93.8	81.3	72.2
Second earner in childless couple	74.6	43.9	64.8	83.7	43.2	71.5
Second earner in couple with children	102.0	66.1	73.4	118.0	71.0	72.2

1. A person entitled to unemployment insurance. Means-tested benefits are allowed as top-ups to unemployment insurance. Households with children are assumed to have two children aged two and five. The person is going into work in the initial phase of unemployment but following any waiting period. This implies that individuals in the current system and the universal credit scenario are entitled to an increased income-related allowance, resulting in somewhat higher average effective tax rates than without this allowance. Additional tables available in Annex 3.

Source: Calculations based on the OECD TaxBen model.

Table 5. Comparative average effective tax rates, social assistance and housing benefit

Hourly wage equal to 67% of the national average wage

	Half time			Full time		
Household type	Current system	Basic income	Universal credit	Current system	Basic income	Universal credit
Single	87.6	87.9	69.1	72.0	72.0	72.0
Single parent	67.6	92.5	69.1	77.1	86.2	73.4
Single earner in childless couple	87.6	87.9	69.1	86.5	68.2	73.4
Single earner in couple with children[1]	87.6	87.9	69.1	80.6	74.4	73.4
Second earner in childless couple	11.6	41.9	11.6	24.0	43.9	24.0
Second earner in couple with children[1]	89.4	86.3	56.0	66.6	66.1	46.3

1. Households with children are assumed to have two children aged two and five. Additional tables available in Annex 3.
Source: Calculations based on the OECD TaxBen model.

Inclusiveness and affordability

To evaluate fiscal and distributional effects, scenarios are developed in the TUJA microsimulation framework, as close as possible to those outlined above. The scenarios are limited to individuals aged below 65 years (the statutory pension age). For the basic income scenario, disability benefits and pensions are reduced by an amount equal to the basic income. In addition to the benefits mentioned above, parental leave benefits and student grants are abolished.

The universal credit scenario is constructed as outlined above, with the following adjustments: part-time unemployment benefits are adjusted to their hypothetical levels if the individual was not working, and taxes paid on unemployment benefits are removed. Means-tested and municipal supplements to the homecare allowance are removed, but the basic (lump-sum per child) allowance is kept in place, to reflect that a restructuring of the allowance would likely be partly compensated by other transfers, for example an increase in parental leave payments to low-income parents, but not tied to the use of public childcare. Contrary to the scenario developed in the OECD TaxBen model, this scenario is modelled with tapering of the universal credit on family income, as calculating the individual part of the unemployment insurance in not possible with annual microdata.

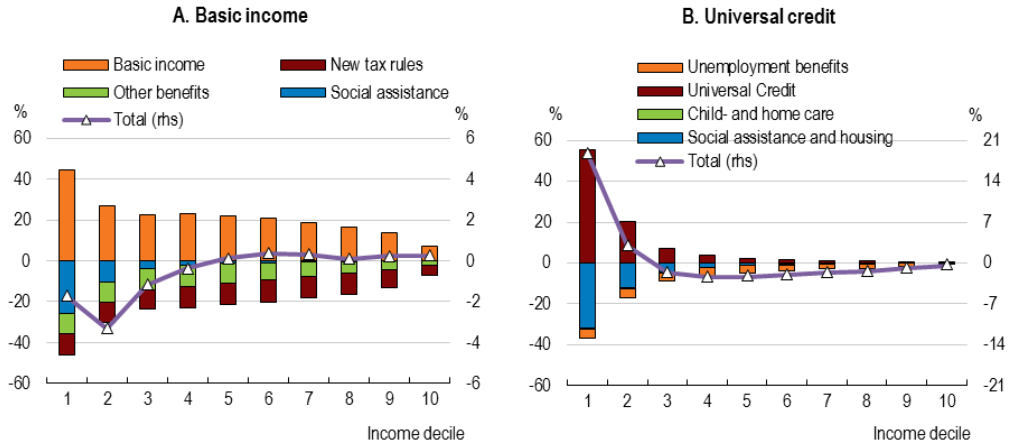
Consistent with OECD (2017b) the adjustment of the government income tax in the basic income scenario turns out to be more heavy-handed than necessary to achieve fiscal neutrality. The static effects of the basic income scenario would strengthen the budget balance by EUR 4.6bn, or 2% of GDP. The cost of the basic income (17bn) is more than offset by increased taxation (13.1bn), and reduced net expenditure, notably on social assistance (2.5bn), unemployment benefits (2.1bn), early pensions (1.2bn) and the child benefit (1bn). In the universal credit scenario, the budget balance strengthens by EUR 0.8bn. However, the fiscal savings are likely to a large extent driven by tapering on family income and therefore overstated compared to a scenario with individual rights to an unemployment insurance element, as outlined above.

Fiscally neutral scenarios are constructed to isolate the redistribution effects of potential reforms. The marginal income tax is reduced by 4 percentage points in the basic income scenario, which makes the scenario close to fiscally neutral. Such a reform would change the income distribution significantly, with losses in the bottom four income deciles and small gains in the top six. Incomes in the lowest deciles are reduced most strongly by abolishing social assistance and unemployment benefits, but abolishing early pensions, student grants and income tax allowances- and credits also affect low incomes disproportionally. The basic income offsets these income losses to an extent, but not completely. The modified income tax schedule, along with abolishing child benefits, sickness benefits and parental leave reduces middle incomes disproportionally (Figure 6, Panel A).

A fiscally neutral universal credit scenario is constructed by lowering the universal credit taper rate to 38%. The average income in the two lowest deciles increases, likely as a result of higher benefit take-up and slower tapering of social assistance. Falling incomes in the middle of the distribution are mainly related to the loss of unemployment benefits, and hence driven by the inability to model an unemployment insurance supplement tapered on individual income in line with the scenario outlined above (Figure 6, Panel B).

Figure 6. A basic income would reduce incomes in the bottom of the distribution

Changing disposable incomes under benefit reform scenarios[1]



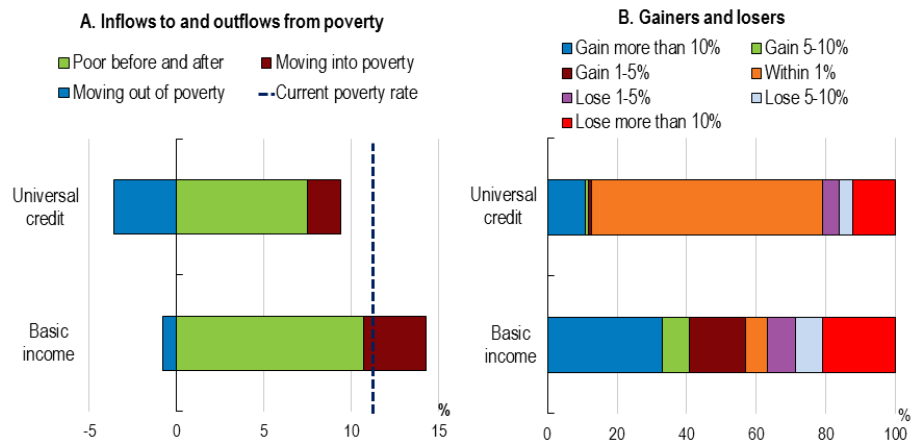
1. Percentage change compared to pre-reform disposable income within each income decile.

Source: Calculations based on the TUJA microsimulation framework.

Overall, in the fiscally neutral basic income scenario the Gini coefficient increases by approximately 0.4 percentage points. The poverty rate rises from 11.5% to 14.3%, and of the 150 000 persons falling below the poverty line, 30 000 are children, and 50 000 early pensioners. Furthermore, the structure of the benefit system changes substantially, affecting most individual incomes. Only around 6% of the population will see their incomes unchanged, a third of the population will see income gains of over 10%, and a fifth will lose more than 10%. Many of the people who would be poor after a basic income reform would not be those who are poor today: 3.6% of the working-age population would fall into poverty as a consequence of this reform, while 0.8% would move out of poverty (Figure 7).

Figure 7. A basic income scenario would alter the income distribution

Share of individuals in working-age households



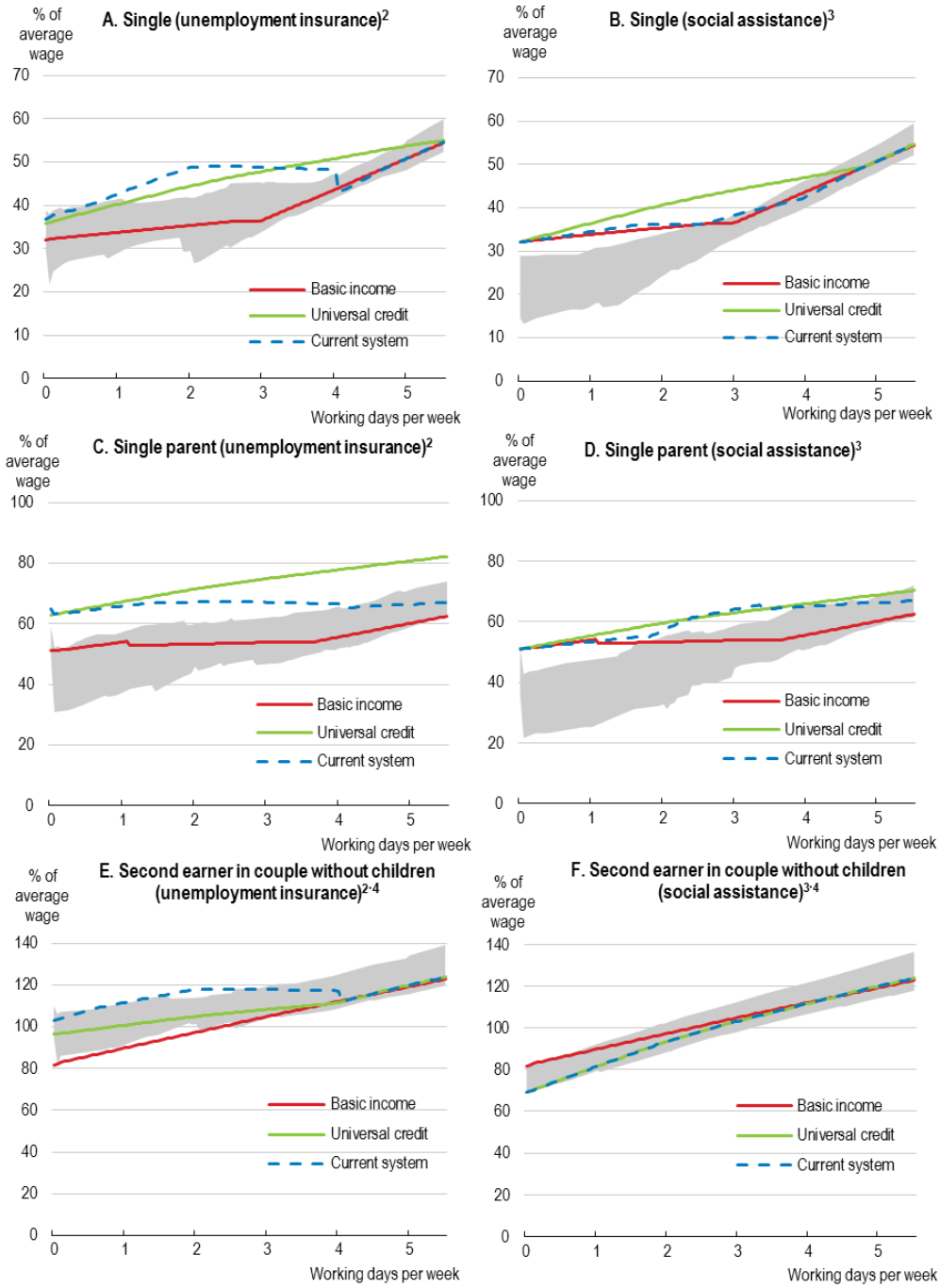
Source: Simulations with the TUJA model.

In contrast, in the universal credit scenario, the Gini coefficient falls by 0.9 percentage points, and 90 000 people exit poverty, thereby reducing the poverty rate by 1.7 percentage points to 9.4%. 1.9% of the population would also move into poverty under the universal credit scenario, but this seems again to be mainly driven by tapering of unemployment insurance on family income. However, some households close to the poverty threshold might also fall below the poverty line as a result of the removal of supplements to the homecare allowance (Figure 7).

The basic income scenario profoundly changes the structure of the benefit system and hence most individual incomes. This redistribution arises because the universal individual benefit in this scenario is more generous towards couples than singles than the current targeted system, the income-based unemployment insurance is abolished, benefit take-up increases and taxation changes. Only around 6% of the population will see their incomes unchanged, a third of the population will see

income gains of more than 10%, and a fifth will lose more than 10%. The Universal credit scenario represents a much smaller departure from the current system, and therefore affects the income distribution much less. The recorded income losses of over 10% are again almost fully (99.2%) related to the unemployment benefit, and thus to the inability to individualise unemployment insurance tapering in the TUJA model. Large gains for some individuals are partly a result of increased benefit take-up in both scenarios, since individuals are assumed to take up the benefits they are entitled to in both scenarios (Figure 8).

Figure 8. Net income in the different scenarios[1]



1. The shaded area denotes the range between the 25th and the 75th percentile in the OECD area.
2. A person entitled to unemployment insurance going into work, with hourly earnings pre- and post-unemployment of 67% of the national average wage. Means-tested benefits are allowed as top-ups to unemployment insurance.
3. A person not entitled to unemployment insurance going into work with hourly earnings of 67% of the national average wage.
4. The primary earner earns the national average wage.

Source: Calculations based on the OECD TaxBen model.

Possible steps to simplify the system and improve work incentives in the present context

A universal credit-type reform, adapted to Finnish circumstances, can alleviate complexity, strengthen work incentives consistently across household types, raise social protection and reduce poverty within the current fiscal envelope. However, the practical implementation of such a reform would be more technically demanding than a basic income. The scale of income redistribution and poverty increase in the basic income scenario clearly depends on the concrete assumptions made. However, a basic income defined as a relatively uniform benefit to replace many of the current targeted benefits will not achieve the redistribution of the current system or a universal credit, where benefits are targeted to those who need them most. Other, more targeted lump-sum benefit structures can potentially perform better. A basic income would also perform better in a setting where the social safety net is less complete and inclusive than in Finland.

The universal credit scenario is a relatively small departure from the current system compared to a basic income, but would still be very far-reaching compared to most working-age benefit reforms enacted in the OECD over the past decade. Reform to improve work incentives need not even be as far-reaching as the universal credit scenario outlined above, but this scenario illustrates important steps on the way to a more unified benefit system. First steps to coordinate benefits would be to harmonise income definitions and tax treatment and unify benefit administration. In order to merge benefits, these are indeed necessary steps.

Two specific incentive issues arise within the unemployment insurance. First, the sum of benefit- and earned income is capped at 100% of previous earnings. Second, unemployment insurance benefits are fully withdrawn when working more than 80% of full time, resulting in a “cliff-edge” loss of income. The cliff-edge loss of benefits can strongly disincentivise re-employment in full-time jobs, and could be abolished. Reducing the benefit level over time after re-employment is an alternative way to avoid making unemployment insurance into a general low-wage subsidy. Somewhat higher tapering on low incomes combined with a lower initial benefit level would ensure that the cap on combined income from work and unemployment insurance is binding in fewer cases, but would entail a trade-off with somewhat weaker protection and weaker work incentives from taking up part-time jobs.

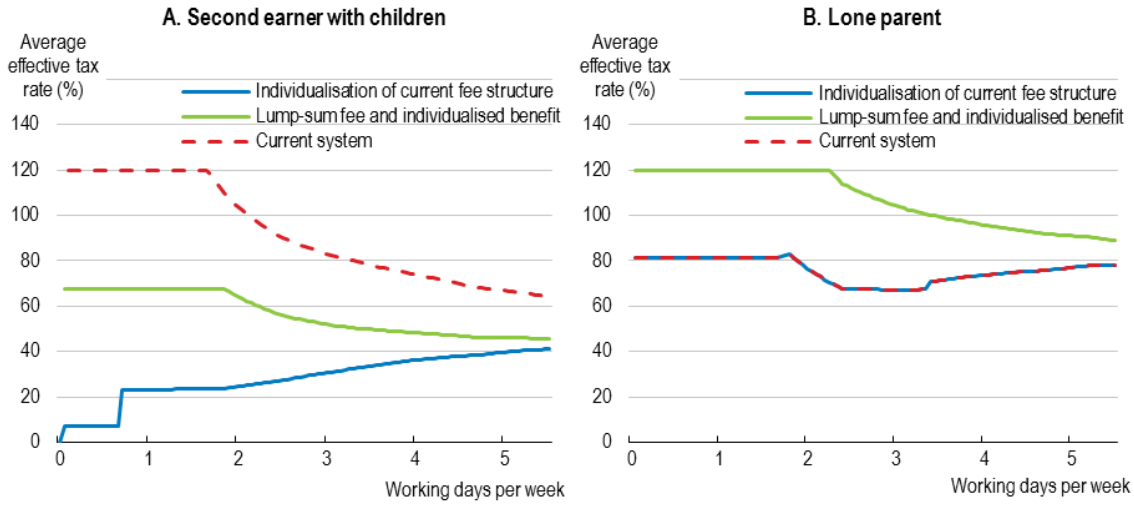
Social assistance is tapered at a rate of first 80%, then 100% of net income. Lowering the tapering rate would improve incentives somewhat, but would lead to interactions with the tapering of the housing benefit, which is part of the social assistance income definition. Marginal effective tax rates would therefore remain high unless the two benefits are merged or tapered in sequence. Merging the two benefits into one should be possible, as social assistance already contains a housing element, and both benefits are means-tested on family income and administered by The Social Insurance Institution of Finland (Kela). However, their income definitions would need to be fully harmonised and legal issues concerning the role of social assistance as a last-resort benefit would need to be resolved.

A combined restructuring of the homecare allowance and the childcare fee could transform work incentives for parents of children aged 1-6 years completely and likely reduce the average duration of leave following childbirth. The homecare allowance is equivalent to a direct subsidy to stay out of the workforce for parents, notably second earners (OECD, 2016c). To remove disincentives, the direct link to participation in childcare needs to be broken. It is possible to partially compensate losers, for example by increasing the basic parental leave amount available upon childbirth regardless of previous earnings.

Individual income taxation in Finland strongly incentivises work for second earners. However, the childcare fee is designed as an additional income tax calculated on family income. Gains to second earners entering work can hence be strongly reduced by the fee, and may even be negative in some circumstances. Calculating the childcare fee on the basis of the lowest-earning spouses’ income is a possible solution which, combined with a restructuring of the homecare allowance, would profoundly transform work incentives for second-earner parents. Alternatively, the current structure could be replaced by a lump-sum

fee combined with an offsetting, individualised childcare benefit, as in the universal credit scenario (Figure 9, Panel A). In the latter case, tapering would need to be coordinated with other benefits to avoid creating new disincentives for single parents (Panel B).

Figure 9. Improving incentives for second earners[1]



1. The homecare allowance is abolished in both scenarios. The "lump-sum fee and individualised benefit" scenario replaces the childcare fee structure by a lump-sum fee combined with a childcare benefit tapered off by 65% of after-tax income. Tapering is not coordinated with tapering of other benefits. In couples, the benefit is individualised and tapered against the income of the spouse with the lowest earnings. The "Individualisation of current fee structure" keeps the current childcare fee structure, but the income test to set the level of the childcare fee is applied to the spouse with the lowest earnings. The modelled individual is not entitled to unemployment insurance, and he or she is going into work with hourly earnings of 67% of the national average wage.

Source: Calculations based on the OECD TaxBen model.

Summary and conclusions

In this paper the current Finnish tax- benefit system is compared with two reform scenarios: a uniform benefit for all ("basic income") and a universal tapering rule ("universal credit"). Both scenarios can be implemented without increasing net fiscal expenditure, although the basic income requires significant increases to income taxation. Both resolve some serious incentive issues in the current system.

However, a revenue-neutral basic income scenario would imply significant redistribution of income, as the basic income is higher for couples and lower for singles compared to the current system with benefits targeted to specific circumstances, and incomes are reduced for those who receive unemployment insurance today. Overall, the basic income scenario increases the Gini coefficient by approximately 0.4 percentage point and increases the poverty rate from 11.5% to 14.3%.

In contrast, the universal credit scenario alleviates complexity and strengthens work incentives consistently for a variety of individual circumstances while preserving or even improving inclusiveness, illustrating that improving and simplifying benefit design may go a long way to removing inactivity-, incentive- and bureaucratic traps. Also, the universal credit reform does not rely on additional funding.

The results of this paper are scenario- and context-specific, in the sense that both different assumptions and a different country context would alter the results. Nonetheless, some lessons learned are more general in nature. Notably, a basic income with one uniform benefit for all is too simple to meet the diverse needs and circumstances that are currently met by the Finnish welfare system, where benefits are targeted to those who need them most. This finding is likely relevant also for other countries with well-developed and targeted social safety nets. For such countries, moving towards coordinated tapering of existing benefits might be a solution worth exploring to improve the performance of welfare benefits. However, a basic income might be more favourable in countries where benefits are less targeted and coverage is less complete. Its simplicity would also be an advantage in countries with weaker administrative capacity than a country like Finland.

BIBLIOGRAPHY

Bargain, O., H. Immervoll and H. Viitamäki (2010), "No claim, no pain: measuring the non-take-up of social assistance using register data", *IZA Discussion Papers*, No. 5355.

Blanchard, O., F. Jaumotte and P. Loungani (2013), "Labor market policies and IMF advice in advanced economies during the Great Recession", *IMF Staff Discussion Note*, 2013/2.

Browne, J. and H. Immervoll (2017), "Mechanics of replacing benefit systems with a basic income: comparative results from a microsimulation approach", *Journal of Economic Inequality, Vol. 15, No.4*.

Causa, O. and M. Hermannsen (2017), "The effectiveness of tax and transfer systems in reducing income inequality across OECD countries", *OECD Economics Department Working Papers*, forthcoming, OECD Publishing, Paris.

Kela (2016), "From idea to experiment, report on universal basic income experiment in Finland", *Kela Working Papers*, No. 106, Helsinki.

Martin, J. (2014), "Activation and active labour market policies in OECD countries: stylized facts and evidence on their effectiveness", *IZA Policy Paper*, No. 84.

OECD (2013), *OECD Employment Outlook 2013*, OECD Publishing, Paris. http://dx.doi.org/10.1787/empl_outlook-2013-en.

OCDE (2016a), "New forms of work in the digital economy", *OECD Digital Economy Papers*, No. 260, OECD Publishing, Paris. DOI : http://dx.doi.org/10.1787/5jlwnklt820x-en.

OECD (2016b), *Finland 2015*, Country chapter for the OECD series Benefits and Wages, www.oecd.org/els/social/workincentives, accessed 7 September 2017.

OECD (2016c), *OECD Economic Surveys: Finland 2016*, OECD Publishing, Paris. http://dx.doi.org/10.1787/eco_surveys-fin-2016-en

OECD (2017a), *OECD Employment Outlook 2017*, OECD Publishing, Paris. http://dx.doi.org/10.1787/empl_outlook-2017-en.

OECD (2017b), "Basic income as a policy option: Can it add up?", *Policy Brief on the Future of Work*, OECD Publishing, Paris.

OECD (2018), *OECD Economic Surveys: Finland 2018*, forthcoming, OECD Publishing, Paris.

Annex 1. Common measures of work incentives

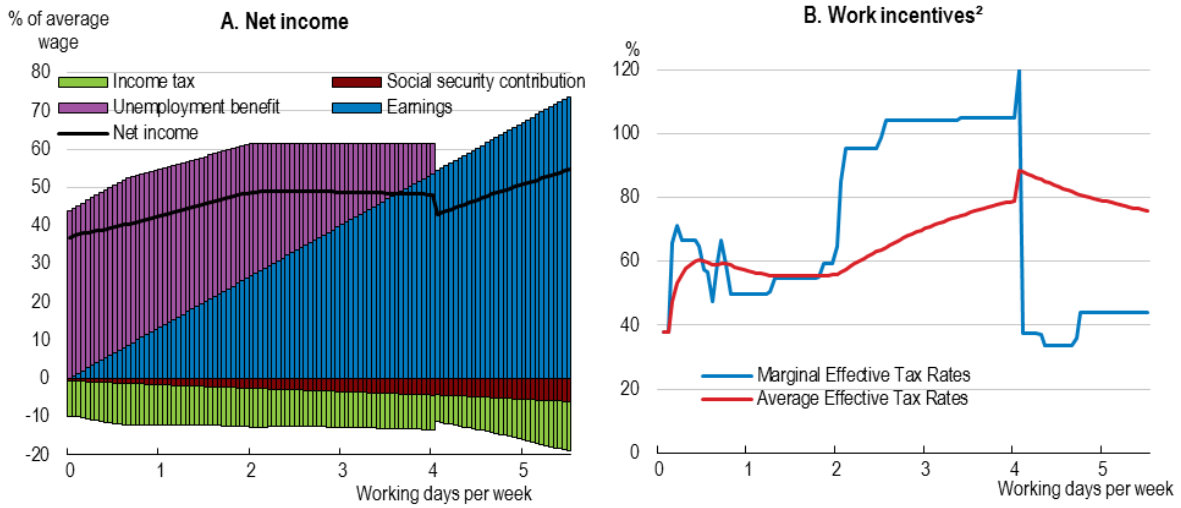
Net income, the income an individual is left with after paying taxes and receiving transfers, is a natural place to start when evaluating the effect of taxes and benefits. The level and composition of net income are interesting in themselves, but the slope of the net income curve as a function of work income (or work hours) also gives considerable information about the strength and causes of incentives to take up work and marginally increase work.

The average effective tax rate (AETR) measures how much of the additional earnings from moving into work will be lost to taxes, charges and benefit withdrawal (tapering). For example, an AETR of 60% at three workdays a week means that if an individual goes from zero to three workdays a week, her net income will increase by 40% of her work income, while 60 cents in a euro will be taxed or taken away by the tapering of benefits. A high AETR is often referred to as an "unemployment trap" for people entitled to unemployment insurance, or an "inactivity trap" as a general term often applied to means-tested last-resort benefits.

The marginal effective tax rate (METR) is a common measure of incentives to progress in work. It measures the marginal increase in net income resulting from a marginal increase in work income. For example, a METR of 80% at three workdays a week means that if an individual increases the amount of hours marginally above three days, she will keep 20% of the additional pay, or 20 cents for each additional euro earned. A high METR is often referred to as an "incentive trap".

The interpretation of these measures is illustrated in Figure A1.1, showing the situation of a person entitled to unemployment insurance, living in a couple with an inactive spouse in Finland. This person will be entitled to both unemployment insurance and housing benefit before going into work. Unemployment benefits rise approximately in line with earnings until they reach a threshold at about 2.5 workdays a week. From this point on unemployment insurance is reduced by an equal amount to additional earnings until it is entirely withdrawn at four workdays a week. The interval in which increased earnings are fully offset by reduced benefits is reflected in a steep rise of the AETR and a METR of approximately 100%. The "cliff-edge" loss of benefits at four days of work is reflected in a sudden jump in the AETR, as well as a pronounced spike in the METR. In sum, these figures show good work incentives up to 2.5 workdays a week, followed by poor incentives up to four workdays, and strong disincentives to work full-time. These incentive issues are clearly caused by the design of the unemployment insurance.

Figure A1.1. Net income and work incentives in the current benefit system[1]



1. A single person entitled to unemployment insurance going into work in the initial phase of unemployment but following any waiting period, with hourly earnings pre- and post-unemployment of 67% of the national average wage. Means-tested benefits are allowed as top-ups to unemployment insurance.
2. Extreme positive rates have been capped at 120%.

Source: Calculations based on the OECD TaxBen model.

Annex 2. Additional figures

Figure A2.1. Decomposition of net income eligible for unemployment insurance[1]

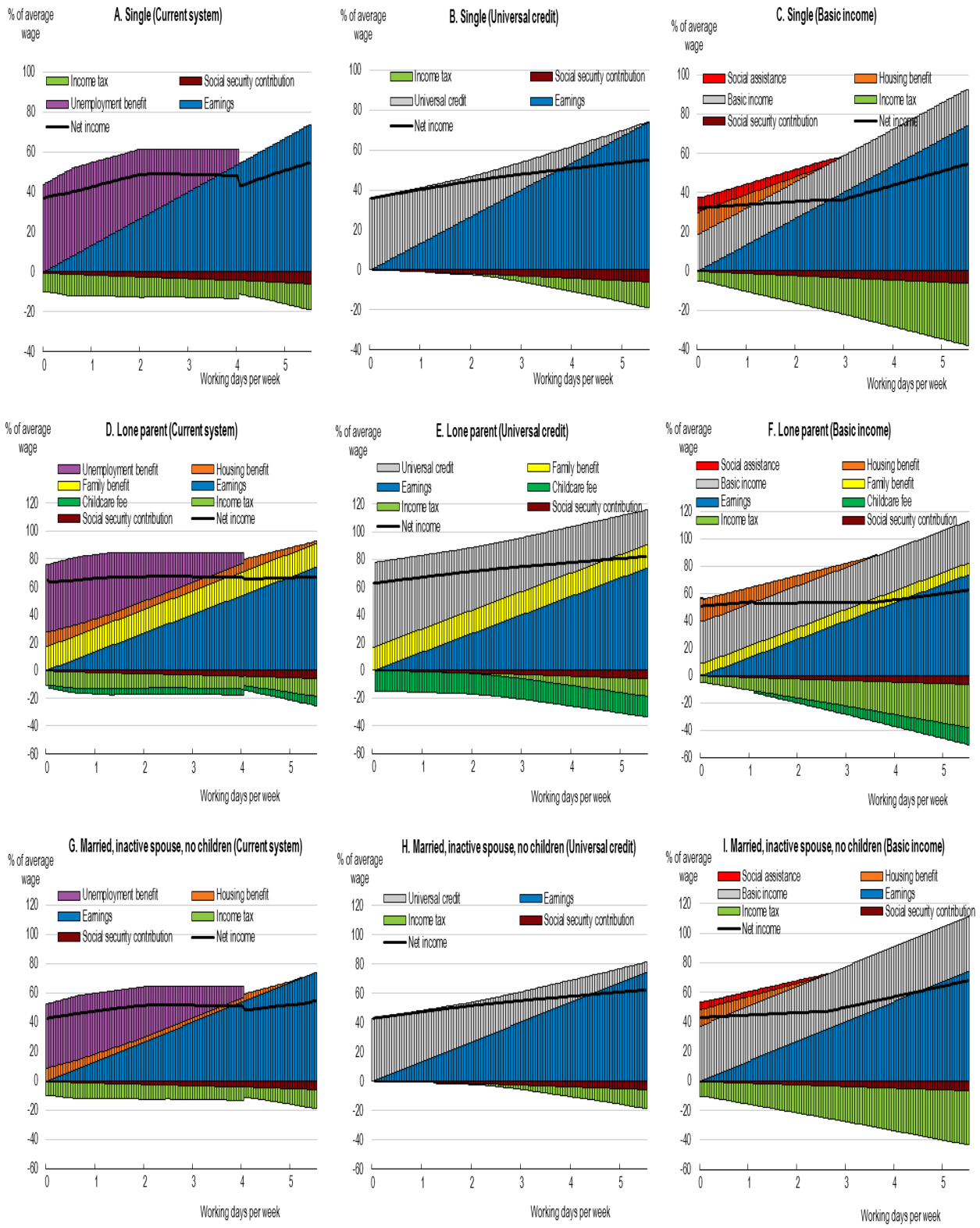
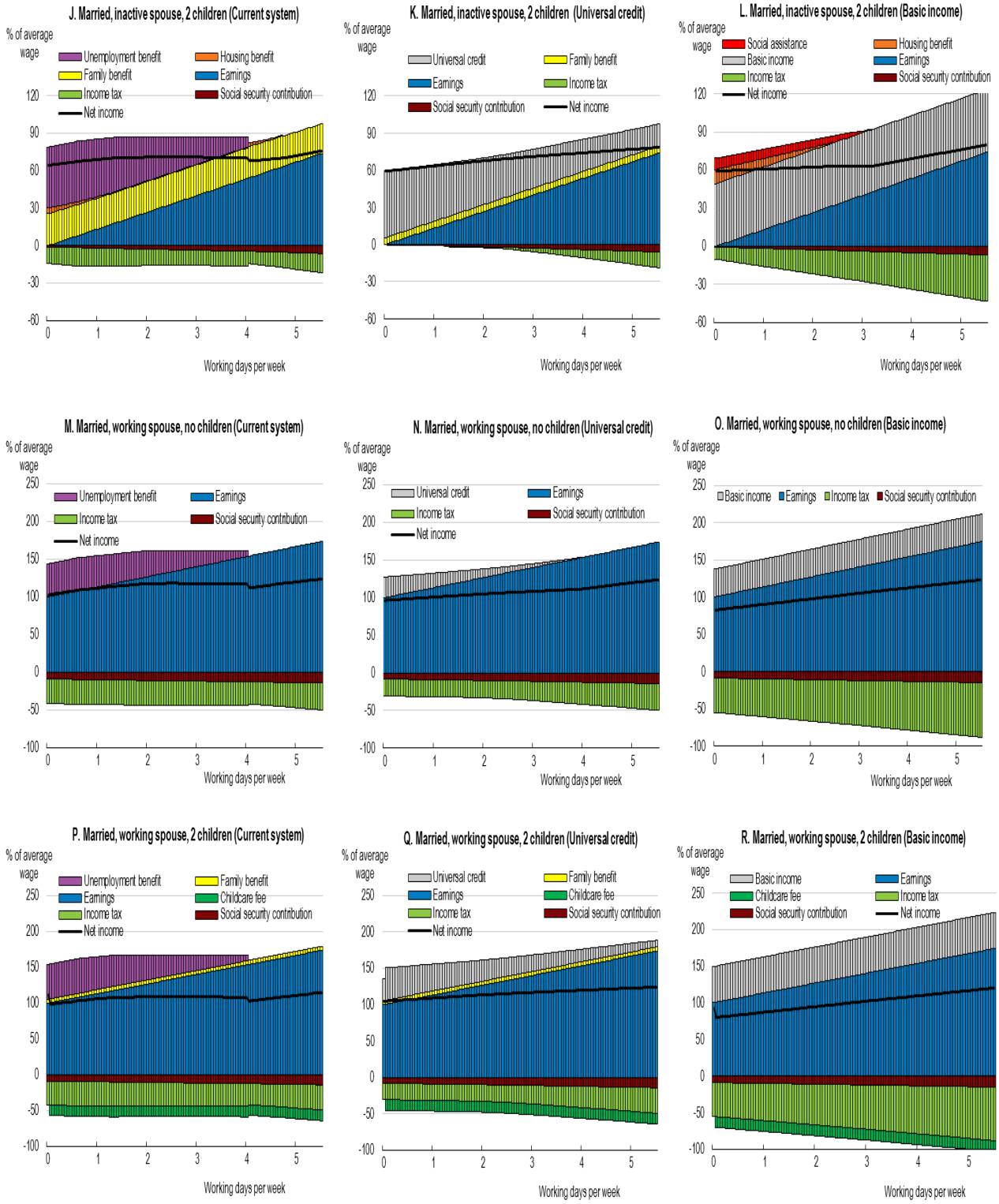


Figure A2.1. Decomposition of net income eligible for unemployment insurance (continued)[1]



1. For a person going into work with hourly earnings of 67% of the national average wage. Unemployment insurance is calculated on the basis of previous earnings of 67%.

Source: Calculations based on the OECD TaxBen model.

Figure A2.2. Decomposition of net income not eligible for unemployment insurance[1]

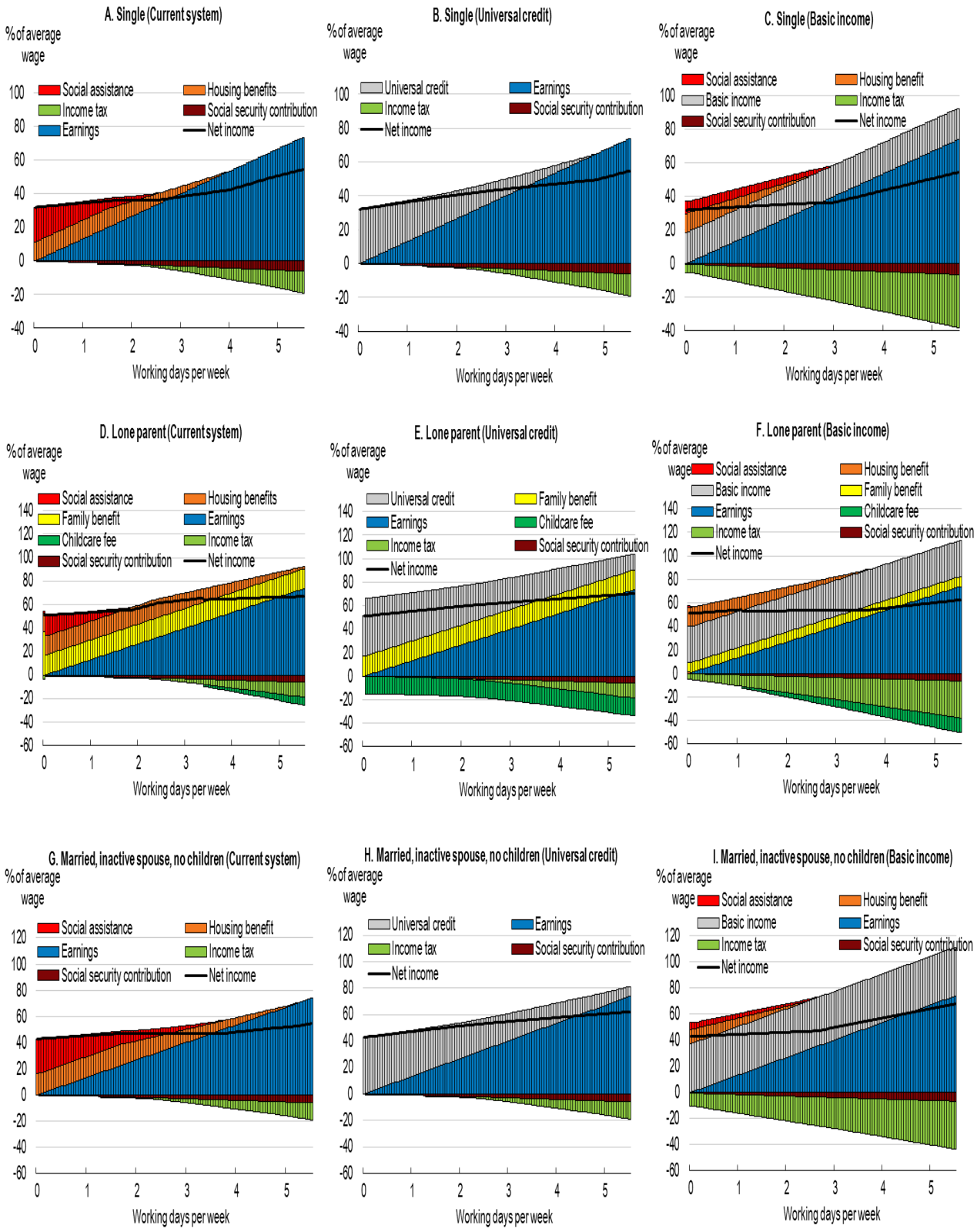
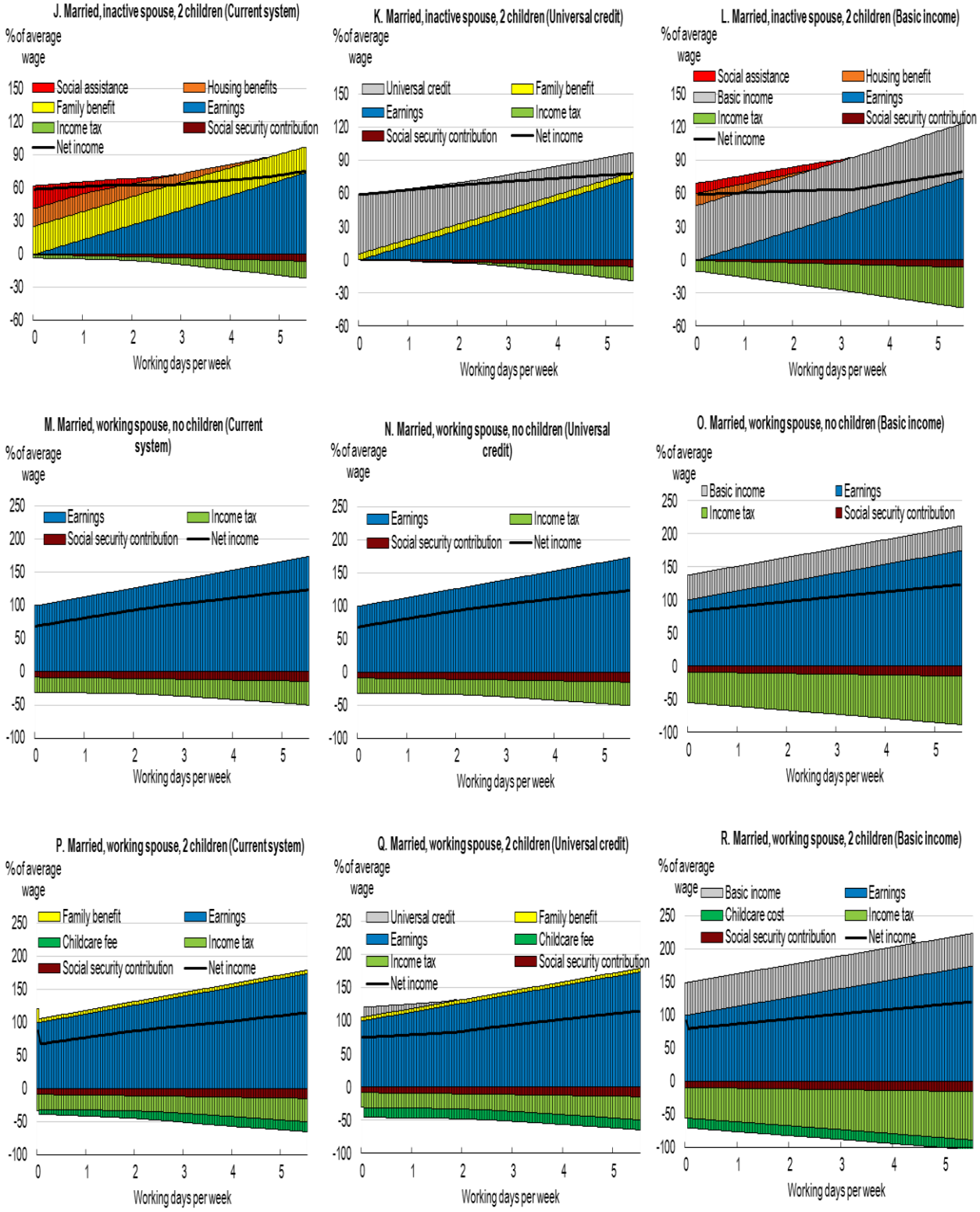


Figure A2.2. Decomposition of net income not eligible for unemployment insurance (continued)[1]



1. For a person going into work with hourly earnings of 67% of the national average wage.

Source: Calculations based on the OECD TaxBen model.

Annex 3. Additional tables

Table A3.1. Some key characteristics of benefit reform scenarios

Scenarios	Benefit	Eligibility criteria	Initial amount	Income/wealth definition for tapering	Taxable
Basic income scenario[1]	Basic income	None	A lump-sum benefit for each individual	Not tapered	Yes
	Social assistance	Low income	Housing costs, family size and composition, geographical area	Net household income after tax and benefits, wealth	No
	Housing benefit	Low income	Housing costs, family size and composition, geographical area	Gross household income including taxable benefits (e.g. basic income)	No
Universal credit scenario[2]	Universal Credit	Low income, unemployed or having children in public childcare	Housing costs, family size and composition, geographical area, childcare costs and pre-unemployment income	After-tax household or individual income, depending on work history	No

1. The childcare fee structure is kept unchanged, tax credits, tax allowances and the zero bracket of central government income tax are abolished.
2. The childcare fee is restructured, while income taxation remains unchanged.

Table A3.2. Comparative average effective tax rates, income-related unemployment insurance[1]

A. Previous earnings 100% of national average wage

	Going back to work full time with 100% of previous earnings			Going back to work full time with 80% of previous earnings		
Household type	Current system	Basic income	Universal credit	Current system	Basic income	Universal credit
Single	76.1	63.7	73.2	83.8	67.9	74.6
Single parent	95.6	76.8	75.7	103.4	82.9	74.4
Single earner in childless couple	79.3	61.1	75.8	87.9	64.7	74.6
Single earner in couple with children	81.1	65.3	75.8	88.5	69.9	74.5
Second earner in childless couple	76.1	44.8	67.9	83.8	44.4	73.5
Second earner in couple with children	93.9	59.7	75.8	106.0	63.0	74.5

B. Previous earnings 150% of national average wage

	Going back to work full time with 100% of previous earnings			Going back to work full time with 80% of previous earnings		
Household type	Current system	Basic income	Universal credit	Current system	Basic income	Universal credit
Single	73.5	59.7	69.5	79.7	61.0	74.7
Single parent	85.6	68.4	77.9	94.6	71.9	76.8
Single earner in childless couple	73.5	58.0	73.3	79.7	58.9	76.8
Single earner in couple with children	76.7	60.7	77.3	83.7	62.3	76.8
Second earner in childless couple	73.5	47.1	68.2	79.7	45.3	73.1
Second earner in couple with children	85.5	57.0	77.9	94.6	57.7	76.8

1. A person entitled to unemployment insurance. Means-tested benefits are allowed as top-ups to unemployment insurance. Households with children are assumed to have two children aged two and five. The person is going into work in the initial phase of unemployment but following any waiting period.

Source: Calculations based on the OECD TaxBen model.

Table A3.3. Comparative participation tax rates not eligible for unemployment insurance[1]

A. Going into work earning 100% of the average wage

	Half time			Full time		
Household type	Current system	Basic income	Universal credit	Current system	Basic income	Universal credit
Single	81.6	80.6	71.8	63.0	63.7	63.0
Single parent	72.6	93.3	71.8	76.4	76.8	75.7
Single earner in childless couple	91.6	75.5	71.8	73.7	61.1	73.7
Single earner in couple with children	84.9	83.8	71.8	70.6	65.3	75.8
Second earner in childless couple	19.3	43.0	19.3	30.9	44.8	30.9
Second earner in couple with children	75.7	72.7	49.1	59.3	59.7	45.6

B. Going into work earning 150% of the average wage

	Half time			Full time		
Household type	Current system	Basic income	Universal credit	Current system	Basic income	Universal credit
Single	69.0	69.3	69.0	58.3	59.7	58.3
Single parent	78.5	84.0	74.0	69.6	68.4	69.6
Single earner in childless couple	83.3	65.9	74.2	65.4	58.0	65.4
Single earner in couple with children	77.1	71.5	74.1	63.9	60.7	72.5
Second earner in childless couple	26.2	44.2	26.2	36.9	47.1	36.9
Second earner in couple with children	63.9	64.1	45.7	55.9	57.0	46.8

1. Households with children are assumed to have two children aged two and five.

Source: Calculations based on the OECD TaxBen model