

Kirjoita tekstiä napsauttamalla tätä.

# **FROM IDEA TO EXPERIMENT - REPORT ON UNIVERSAL BASIC INCOME EXPERIMENT IN FINLAND**

Kirjoita tekstiä napsauttamalla tätä.



**Kirjoittaja**

Kirjoittajan nimi, titteli, oppiarvo  
Työpaikka/taustataho  
etunimi.sukunimi@tyopaikka.fi

© Kirjoittaja ja Kela

[www.kela.fi/tutkimus](http://www.kela.fi/tutkimus)

ISSN 2323-9239

Helsinki 2015

# SISÄLTÖ

Foreword	5
1. Summary and recommendations	7
2. Background	10
3. LEGAL CONSTRAINTS	14
3.1. Basic income models against the background of EU legislation	18
4. EXPERIMENTAL DESIGN AND SAMPLE POPULATION	21
4.1. What should be assessed in the experiment?	21
4.1.1. Basis for reliable assessment	22
4.1.2. Randomisation helps in the construction of a credible control group	23
4.2. Regional experiments	24
4.2.1. Regional experiments involving the entire target population	24
4.2.2. Experiments involving only part of the regional target population	25
4.3. Proposal for experimental design	26
4.3.1. Randomising participants	26
4.3.2. Obligatory nature of participation	27
4.3.3. Sampling unit	28
4.3.4. Target group	28
5. Sampling design – two-stage sampling	30
5.1. Groups taking part in the experiment	31
5.1.1. Power calculations	33
5.2. Target population	34
5.2.1. Role of the budget allocated for the experiment	35
5.2.2. Employment effects against the background of earlier research	35
5.2.3. Target population	36
5.2.4. Small-income households as target population	38
6. BASIC INCOME MODELS AND MICROSIMULATIONS	42
6.1. Description of the calculation models	43
6.2. Full basic income	46
6.2.1. What is meant by full basic income?	46
6.2.2. Full basic income in microsimulation	47
6.2.3. Full basic income: summary	52
6.3. Partial basic income	53
6.3.1. What is meant by partial basic income?	53
6.3.2. Wage earner living alone - current model and basic income of 550 and 750 euros . 55	
6.3.3. Single parent: current model and basic income of 550 and 750 euros	62
6.3.4. Two-adult households	66
6.3.5. Assessing partial basic income	68
6.4. Negative income tax	69
6.4.1. Negative income tax in microsimulations	71
6.4.2. Assessing negative income tax	73
6.5. Budgetary and income distribution effects of partial basic income and negative income tax	74
6.6. Other basic income models	75

6.6.1. Participation income/participatory social security.....	76
6.6.2. Alternative models – Universal Credit/active welfare .....	78
6.6.3. Options – basic account .....	81
6.6.4. Changes in housing allowance: “housing grant” .....	82
7. PLATFORM FOR BASIC INCOME EXPERIMENT .....	85
7.1. Using Kela as the payment platform.....	85
7.2. Basic income experiment and Finnish Tax Administration .....	87
8. ASSESSMENT OF THE MODELS AND RECOMMENDATIONS.....	89

## FOREWORD

This report “From Idea to Experiment” is a preliminary report on the universal basic income experiment planned in Finland and its purpose is to provide an overview of the information available on basic income, make preliminary analyses and propose experimental models and designs. The structure of the publication reflects a process that has lasted for five months. We began by specifying the concept and content of basic income. We collected information on experiments conducted and planned in other countries, debate on basic income in Finland and the support base for basic income in Finland. Extensive experiments such as the one with basic income involve constitutional considerations, which have been extensively reviewed with constitutional experts. Basic income as an entirely new form of benefit is still an unknown concept in the EU legislation. The central question is how basic income fits into the EU legislation and other international legislation. Basic income is not only interesting from the Finnish perspective but it also sets a precedent at EU level.

The “empirical” data presented in the publication consists of a microsimulation. Microsimulation can be used for changing legislation and the effects of the changed legislation can be illustrated by using cases as examples, while on the other hand effects on the national economy can be assessed by applying the new model to income distribution data. The calculations present examples of the composition of income in different types of household in the existing system of current transfers and in the basic income options. The calculations detail “easy” cases (people living alone who account for a majority of Finnish households) and “difficult” cases where incentive problems accumulate generating high effective marginal tax rates and high participation tax rates. In “difficult” cases the increase in earned income is not reflected in higher net income. In the calculations provided as examples, the main attention is on unemployed people and part-time workers living in rental flats in whose case the current social security system is often seen as inadequate.

The proposal first presents a model with full basic income, followed by partial basic income, negative income tax and other basic income options. For reasons of presentation and space, our focus is on two levels of basic income: basic income of 550 euros and 750 euros. The lower level has been selected as a basis for the calculations because 550 euros roughly corresponds to the monthly net level of many of the basic social security benefits provided by Kela. At the same time, the higher level has been selected for comparison so that the incentive effects of different levels of basic income compared with the existing system of current transfers could be illustrated. We have also made preliminary calculations using basic income between 450 and 1,500 euros (in a model based on full basic income). In principle, modellings and sensitivity analyses could be made at any level of basic income. However, the current level of basic social security sets legal constraints, while on the other hand, the cost of the model provides practical obstacles concerning the model to be tested. A summary is presented in the last section.

---

In retrospect, one can only conclude that the assignment was much more extensive, difficult and complicated than we could have imagined at the start of the work. Answering one question opened a large number of new questions. We found answers to some of the questions, while other questions remained unanswered. This means that there is a need for further studies. We were surprised to note that there has been extensive public interest in the basic income experiment, in both Finland and elsewhere. In some cases the interest and the enthusiasm have led to the false conclusion that Finland has already introduced a system of universal basic income. As its name suggests ("From Idea to Experiment"), this report is a preliminary report on a basic income experiment. It should be made clear that, in accordance with our assignment, we have drafted plans for a basic income experiment, not a basic income scheme. This is an important difference, which seems to have been frequently overlooked in the domestic and international debate.

Our aim has been to collect information on earlier basic income experiments, analyse basic income models, evaluate their advantages and disadvantages, produce calculations and assessments and make comparisons between different models and current systems. Our objective has been to produce comparable information about the functioning of the different models for decision-making. We are presenting a number of different options of basic income models and experimental designs. The Government will reach its own conclusions of how to proceed.

Helsinki 29 March 2016

The authors

# 1. SUMMARY AND RECOMMENDATIONS

The report presents information available on basic income models, experiments carried out with them and results of the experiments. Effects of the different basic income models are also assessed in the report. Based on the preliminary report, the Government will decide on how to proceed with the experiment, take measures to draft the necessary legislation and select the models to be experimented and the experimental design. The research working group will examine the Government's policy decisions and present more specific proposals in its final report, which is due on 15 November 2016.

The basic income experiment is one of the key projects formulated in the programme of Prime Minister Juha Sipilä's Government. The project was launched with a preliminary study lasting through 2016 in which the feasibility of basic income will be assessed. According to current planning, the basic income experiment will be carried out in 2017-2018, followed by an assessment of its results in 2019. The basic income experiment is one of the measures in which the aim is to reform the Finnish social security system in accordance with changes in working life, to make social security more participatory and incentive-based, to reduce bureaucracy and simplify the complex benefit system in a manner that would be sustainable from the perspective of general government finances.

## **Partial basic income as a basis**

The preliminary report discusses the suitability of full basic income, partial basic income, negative income tax and other models for the experiment. Full basic income could replace a large part of the existing social insurance based social security. This means that the benefit should be quite high. However, such a model would be fairly expensive. Partial basic income would harmonise most of the existing basic social security benefits, while most of the earnings-related benefits would remain unchanged. The partial basic income model is simulated on different levels of benefit and housing cost so that its incentive effects can be determined.

## **Nationwide and regional sampling**

Under the budget available for the experiment, a total of about 1,500 individuals can take part in the experiment. If, in addition to the funding allocated for the experiment, existing social benefits could also be used, the sample size could be increased by several thousand participants. The working group proposes a two-stage sampling approach: a randomised nationwide sampling and (for examining externalities) a more intensive regional sampling. A weighted sample could be produced of the groups that are interesting from the perspective of the experiment. The experimental design also involves constitutional and other legal considerations, which are examined in detail in the report.

Basic income would solve some problems, while other problems would require more comprehensive reforms

According to the report, universal basic income would solve problems arising from gaps and bureaucracy but would not alone solve all incentive-related problems. Eliminating incentive-related problems would require reforms in many different sectors of social and tax policy. Single parents living in the greater Helsinki area and paying high rents are particularly problematic from the perspective of social policy as their incentive problems can only be solved satisfactorily by introducing comprehensive social security reforms. It would be easy to make incentive indicators look better by reducing the minimum level of social security. This would, however, increase poverty and worsen livelihood-related problems. In the basic income experiment is on the basis of the existing tax system, the effective marginal tax rates and participation tax rates of the basic income models would be lower than under the current social policy system. However, the model would not be cost-neutral in terms of funding.

### **Target group**

The entire adult population of Finland (excl. pensioners) is used as a basis for selecting the sample. As the budget allocated for the experiment is limited the test groups should be carefully selected so that the employment effects of basic income can be determined. It may be that for the reasons mentioned above, the age and income must be used as selection criteria and only low-income earners aged between 25 and 63 should be used. It is conceivable that the incentive effects connected with accepting work are strongest in this group of people. There have been different views of including students and other young people in the experiment. Should politicians so decide, inclusion of the younger age groups and a model tailored to their needs might be considered during further planning. A weighted sample of particularly interesting special groups could also be produced.

In an ideal test situation, test groups would be using different basic income models in which case it would be possible to study basic income impact mechanisms in a comprehensive manner. Even though a test group would produce information about the employment effects of the basic income model in question, it would be difficult to use the results as a basis for improvements in the model. The operating mechanisms of basic income can only be properly understood if the experiment involves more than one test group with different levels of basic income. This has also been the experimental design in basic income experiments carried out in the United States and other countries.

### **Suitability of different models for the experiment**

It is noted in the report, that a workable income register would be required for an experiment involving negative income tax. Experiments conducted in the United States have shown that tests based on self-reported data do not produce reliable results. At the same time, basic income strongly based on conditional reciprocity would involve control problems: How would the required level of participation be defined, who would supervise the process and who would check that the requirement is met. Such an experiment could only be carried out in small scale. In the working group's view, partial basic income would provide the most reliable basis for examining the different effects of basic income.



Incorporating many of the basic social security benefits into partial basic income would ensure that the experiment will produce valuable results. A net partial basic income of 550 euros should be used as a basis but parallel to that other levels should also be tested in so far as this is possible within the limits of the Constitution. As the basic income and the negative income tax have the same effect from the perspective of individuals, experimenting partial basic income would also produce useful information about the feasibility of negative income tax. The experiment could also be carried out on Kela's payment platform even if there was no income register. If the benefits provided by Kela could be used in the experiment, the sample size can be substantially increased, which would make the results more reliable and would allow the inclusion of special groups.

## 2. BACKGROUND

The basic income experiment is one of the key projects formulated in the programme of Prime Minister Juha Sipilä's Government. The basic income experiment is one of the measures in which the aim is to reform the Finnish social security system in accordance with changes in working life, to make social security more participatory and incentive-based, to reduce bureaucracy and simplify the complex benefit system, which often creates disincentives as well as income and bureaucratic traps. The main question is how to make social security more incentive-based. A review of the information requirements, feasible models, grounds for the experiment and legal and other limitations was requested for use as a basis for the legislation required for the experiment and its implementation.

The Prime Minister's Office invited proposals for the experiment as a competitive tendering process funded out of the Government's analysis, assessment and research plan. After evaluation, the preliminary review was entrusted to a consortium consisting of the Finnish Social Insurance Institution (Kela), VATT Institute for Economic Research, the Universities of Helsinki, Tampere, Turku and Eastern Finland, the National Fund for Research and Development (Sitra), the think tank Tänk, and the Federation of Finnish Enterprises. The Association of Finnish Local and Regional Authorities also contributed to the review. The consortium heard views of Finnish and foreign experts who have developed microsimulation models suited for the assessment of basic income models, conducted assessments of the effects of taxation solutions, employment support measures and other policy measures, assessed the functioning and effects of minimum income schemes and analysed the debate on basic income models in Finland and elsewhere. Academy Professor Kaarlo Tuoria provided comments on the constitutional implications of different experimental designs and levels of basic social security. On matters of tax law, the working group consulted Heikki Niskakangas, Professor Emeritus at Aalto University. The Association of Finnish Local and Regional Authorities was consulted in matters concerning municipal taxation.

The purpose of the preliminary review has been to collect the information available on different basic income models, use this information for outlining the information requirements and produce a small number of options for comparison from the perspective of feasibility. The task of the consortium conducting the assignment was: "to produce a model for implementing a basic income experiment so that the experiment can form a basis for sufficiently reliable assessments on the incentive and other effects of basic income in different population groups and an estimate of the total costs." Accordingly, the preliminary review was expected to

- produce a detailed description of the basic income models suitable for the experiment and determine the level of basic income for these models (in euros),
- propose how to integrate earnings-related benefits and different types of basic social security benefits into basic income,
- determine the taxation characteristics of the different models,
- determine the strengths and weaknesses of the different basic income models, considering constitutional aspects and the EU law,

- produce a well-thought-out proposal for a basic income model the feasibility of which should be examined in more detail in the follow-up study to be launched in 2016, in view of a possible experiment.

When assigning the task to the consortium, the Government also emphasised that the aim is to make social security more participatory and incentive-based by means of basic income. The consortium was also asked to examine the effect of different basic income models on poverty and income gaps. The models presented in the report are also examined from this perspective. The administrative and ICT effort required by different models and, consequently, the suitability of the models for experiments is reviewed at the end of the report.

Depending on the model used, basic income has a number of direct and indirect effects. Basic income has an effect on the provision and reception of work (incentive aspect), labour market behaviour of individuals and households, employment and types of employment relationship, income levels and the use of social security benefits. It also has an effect on service systems (especially employment and social services) and the daily work of the street-level bureaucrats working in the systems. The purpose of the preliminary report is to assess the different effects of the basic income models in an ex ante setting. In the second stage of the review (deadline 15 November 2016), the focus will be on one or a small number of feasible models, which will be developed on the basis of the explorative studies of the preliminary report.

There are no basic income models that could be directly copied to Finland. The experiments carried out in other countries have taken place in environments that are totally different in terms of social policy and institutional structures and it is clear that these factors have an effect on to what extent the results can be transferred from one institutional environment to another. Despite this, the experiments carried out in other countries can provide some guidance for Finnish decision-makers. However, it should be remembered that, in terms of the level of social security, labour market participation of women and men, social institutions and taxation, the situation in the United States (not to mention Iran, Brazil, India or certain African countries) in the 1960s, 1970s and 1980s was totally different from the Finnish basic income testing environment of the late 2010s.

The report is based on an observation that discussing basic income at general level is not a useful basis for the experiment (de Wispelaere 2016) because even the slightest differences between basic income models may lead to very different end results. The work is based on the well-established definition under which basic income is, in a broad sense, guaranteed income provided by the state to all citizens or permanent residents of the country. Basic income is guaranteed income in two relevant ways. On the one hand, it is, as a rule, non-withdrawable, which means that it serves as the lowest level of income flow under which nobody should fall. Basic income provides individuals with a core income that will be paid even if all other flows of income from the private or public sector were stopped. On the other hand, in an ideal situation, the core level provided by the basic income allows individuals to acquire additional income without any fear of problems that would arise from additional income or short-time jobs, such as a loss of social security status (unemployment

benefits, etc.), waiting periods or payment delays arising from the processing of benefit applications.

Furthermore, full basic income is an independent benefit, which means that it is secure and that every citizen is eligible for it irrespective of background considerations that traditionally make benefit payments conditional. The politically most contested element of the comprehensive and unconditional basic income boils down to this aspect: basic income as irreversible and absolute right. Supporters of basic income view basic income as an alternative to contemporary models of welfare state, be it the model conceived by Bismarck or Beveridge. At the same time, there are opponents of basic income in both camps and outside them.

There are substantial differences between basic income models in terms of how they would be implemented. These concern the perceived effects on individuals and groups (such as women, young people and students), the social values and human concept used as a basis for basic income and the political thinking and ideologies behind them. Different basic income models have an effect on the support for basic income and its political feasibility.

The Government proposed four different basic income models as a basis for the assignment:

1. Full basic income model in which everybody would receive the same sum, irrespective of their income or situation,
2. basic income model, which would be in addition to certain basic social security benefits and earnings-related benefits,
3. negative tax income model, and
4. other basic income models.

The weaknesses and strengths of the models are assessed in this report on the basis of the objectives set in the assignment. The basic income models described above are distinguished by such factors as their relationship with other areas of social security (target group, level, supplementary benefits, means of funding (income taxation reform and other funding sources); objectives (in connection with labour markets, social policy and society at large) and their effects. The level of basic income is essential for determining the expected effects of basic income. The level of basic income and any remaining social insurance based supplementary benefits also have a substantial effect on the level of the effective marginal tax rates and the participation tax rates used as indicators in incentive calculations.

The differences of the models in relation to general government, work incentives, poverty and income gaps can be examined in microsimulations based on extensive register data. However, no improvements can be achieved in all these areas simultaneously if the aim is to ensure balanced budget. Funding of the basic income is a central issue.

Before any detailed analysis of the models, we will take a look at the basic income debate in Finland and elsewhere and the support base of basic income. This is connected with the review of the information requirements referred to in the assignment. We will first examine the effects of the

---

models at general level (how the strengths and weaknesses of the models can be assessed from the perspective of work incentives and participation). Issues concerning the level and taxation of basic income are also discussed. The legal constraints to the basic income experiment and the issues concerning the experimental design are discussed in separate sections. All these issues are also discussed in more detail in separate reports.

We will start with the broad concept of basic income. The report is based on the assumption that the aim of the experiment is to test the effects of definition-based basic income. Thus, as described above, basic income is understood, in accordance with the definition produced by the international Basic Income Earth Network (BIEN), as “an income unconditionally granted to all on an individual basis, without means test or work requirement”. Basic income is often limited to the adult population. We then move on to assessing models that those in favour of basic income might not call basic income or that would not find any supporters among this group.

### 3. LEGAL CONSTRAINTS

According to the Constitutional Law Committee of the Finnish Parliament, the main conditions for experimental legislation are as follows: The experiment must be based on the law, the objective must be acceptable (especially from the perspective of basic rights), the legislation must be precise, the areas selected for the experiment must be suited for the purpose, the experiment must be of limited duration and the inequality arising from the experiment must be within reasonable limits. As already stated above, the experiment will be specifically assessed in a democratic decision-making process (as a legislative project subject to normal legislative procedure in Parliament). This approach is based on a principle that the experiment must have democratic legitimacy and that it should be free of any arbitrary practices. This means that the provisions of the act on the basic income experiment must be precise and that the requirement for precision applies to the following elements of the experiment: a) competent authority in the implementation of the basic income experiment; b) main content of the powers granted to the competent authority; c) procedural provisions in the implementation of the basic income experiment; and d) period of validity of the experiment. The acts on experiments are always of specific duration and they are only in effect for the short period required for the experiment. This means that, as regards the basic income experiment, it must also be assessed whether an experiment of two years will produce scientifically reliable results. Against this background, the testing period should not be too short. However, the Constitutional Law Committee has occasionally criticised experimental projects that it has considered too long. In such projects, the experiment has lasted for five or even eight years.

The rationale of the Government proposal for an act on basic income experiment must detail the grounds for deviating from the principle of non-discrimination. In accordance with the statement practice of the Constitutional Law Committee, an experiment carried out with the aim of assessing reforms required for societal improvements may constitute an acceptable justification for deviating from the principle of non-discrimination, especially when the aim is to ensure other basic rights. The basic income experiment is especially closely connected with ensuring better implementation of the basic rights laid down in section 18 (right to work) and section 19 (right to social security) of the Constitution of Finland. Even though under section 6(2) of the Constitution of Finland, no one shall, without an acceptable reason, be treated differently from other individuals, deviations from the non-discrimination principle are allowed if there are justified grounds for doing so. Here the focus is on whether the discrimination can be justified on grounds that are acceptable from the perspective of the system of basic rights. Discrimination based on qualities that individuals cannot influence (such as ethnic origin, skin colour or gender) is not normally acceptable. Even though using such discrimination criteria in the basic income experiment is not acceptable, an individual's age might be acceptable on rational grounds. Place of residence has been an acceptable discrimination criterion in earlier experiments and, as a rule, this could also be deemed to be the case in the basic income experiment.

The acceptability of a discrimination criterion is largely based on its rationality but it must also be in accordance with the proportionality principle (only reasonable discrimination is acceptable). The experiment must also be in the correct proportion to its objectives. In accordance with this proportionality requirement, the basic income experiment must, on objective grounds, be necessary and essential and it is also required that the information on the effects of the envisaged reform produced by the experiment cannot be obtained by other means. This means that the acceptability of the experiment must be assessed against the background of the following questions: 1) What is the information objective?; 2) Why is this information needed?; 3) What are the means used for obtaining this information (experimental design)?; 4) Can the desired information be obtained with the experimental design in question?; 5) Are there any other ways of obtaining the information? The information requirement must be acceptable in normative terms and the experimental design must be acceptable from the perspective of meeting the information requirement.

The experimental design must be such that the information obtained with it is valid and relevant from the perspective of the information requirements behind the experiment. Experimental designs of which it is known in advance that they will not produce reliable information about the effects of the reform are not acceptable from the perspective of deviating from the non-discrimination principle. Thus, there is actually no justification for deviating from the non-discrimination principle in the name of the experiment. This means that the basic income experiment must be carefully planned. It requires adequate research and economic resources and enough time. Consideration must be given to the groups of individuals selected for the experiment. Discrimination based on qualities that individuals cannot influence (such as ethnic origin, skin colour, gender) is not normally acceptable. Discrimination based on qualities that individuals cannot influence (such as ethnic origin, skin colour, gender) is not normally acceptable. The experimental design to be selected will naturally determine what can be studied in the experiment and what results it can achieve.

There is a limit to the deviations from the non-discrimination principle in the name of the experiment. Consideration must be given to the requirement of inviolability, which lies in the core of the basic rights. This means that a certain minimum level must be ensured in all circumstances. In non-discrimination this means that individuals may not be put into different legal positions on unreasonable grounds. The requirement of observing human rights should also have a similar guiding effect. As regards basic and human rights in the social sphere, the inviolability requirement referred to above means that each right has a core content that provides the absolute minimum in all situations. This means that the basic income experiment cannot be on the basis of extremely low levels of basic income. The existing minimum basic social security can be considered as a minimum even though that too has been deemed to be inadequate in some respects (see for example THL 1/2015, ECSR Conclusions Finland 2013) and this should be taken into account when the euro amounts of the basic income are set.

If it is deemed justified to carry out the basic income experiment as a regional experiment, provisions on the region (or regions) should be primarily laid down by an act. If this is not possible, the secondary option should be to have an act laying down adequately precise criteria for selecting the regions (and/or individuals participating in the experiment). This means that the political considera-

tion in the matter would take place in Parliament and the actors implementing the experiment would not have any margin for consideration as it would be the case of “technical” application of the provisions. The variables defining the region in which the experiment takes place and/or the participating individuals must be based on explicit considerations. This means that the legislative proposal must state why these variables are used for defining the regions and/or individuals selected for the experiment. It is important from the perspective of non-discrimination and the objectives of the experiment (the information objectives that can be used as a basis for decision-making) that a representative sample is used.

The question whether participation in the basic income experiment should be on a voluntary or obligatory basis is not straightforward. On the one hand, free will, which is essential to individual sovereignty, is a fundamental element in the experiment. It would require conscious consent of the individual and the consent must be genuine, voluntary, explicit and in written form. The legal framework of the manner in which the consent is used should be clear from the act on the experiment. On the other hand, the legal position of an individual must be explicitly defined by law. The fact that the results of the experiment can be extrapolated also derives from such statutory “obligatory participation”: Voluntary participation creates a selection bias, which has an effect on the results of the experiment and their extrapolation potential. This is also connected with the legal protection requirements connected with the basic income experiment, especially from an individual’s perspective. It is probably quite important for the individuals taking part in the experiment that they can cancel their participation (withdraw from the experiment before its completion). Cancellation should be possible without giving any reasons and without any harmful consequences for the individual concerned. The option should also be available to participants in a consent-based experiment.

Another requirement is that the examination and assessment of the results of the experiment is appropriately organised. The basic income experiment is primarily centred on individuals and their labour market behaviour. The basic income experiment is research in humanities, which means that it falls under the ethical principles laid out by the Finnish Advisory Board on Research Integrity (TENK 2009), which are ultimately based on legal obligations. The ethical principles guiding research in the humanities can be divided into the following three categories: 1) respecting the autonomy of research subjects; 2) avoidance of harm; and 3) privacy and data protection. The first category mainly concerns whether participation in the experiment is voluntary and if this is not the case, on what grounds are deviations from this consent principle allowed. The second category concerns the principle of avoiding harm. In the basic income experiment, this means that there must be an ex-ante assessment on the risks associated with the experiment and on how any risks can be avoided or at least minimised. One example is the risk, or at least the concern, that the basic income (experiment) might lead to more social exclusion among young people and that it would cause people in need of special social welfare assistance to fall in a trap (Perkiö 2016, 9). In order to avoid this, there should be special cooperation arrangements between the parties implementing the basic income experiment and municipal social services during the experiment, while data transfer powers necessary for the task should also be established. The last mentioned point is also connected with general data protection issues, which must be taken into account as important factors guiding the research on the basic income experiment.



Each EU Member State has the right to decide on its social security system and on what grounds it provides social security for its citizens and foreigners residing or staying in its territory. (Article 153(4) of TFEU<sup>1</sup>). However, the EU law also has an effect on national legislation. Finland has approved the legal order of the European Union as part of its own legal order when implementing the treaty of accession. This means that in addition to the Treaty on the European Union and other EU provisions, Finland must also take into account other sources of the Union law (legal principles, international treaties concluded by the European Union and the case law of the Court of Justice of the European Union).

Under Title II, Chapter 9, Article 70 of the regulation 883/2004, special non-contributory cash benefits mean benefits that are intended to provide supplementary, substitute or ancillary cover against the risks covered by the branches of social security referred to in Article 3(1). Article 3 of the regulation, which is referred to in Article 70, contains provisions on the matters covered by the regulation and it lists the branches of social security that fall under the scope

of the regulation (see chapter 3.2.1 above). Special non-contributory cash benefits must also guarantee the individuals concerned a minimum subsistence income having regard to the economic and social situation in the Member State concerned.

Under Article 70 of the regulation, the financing of the special non-contributory cash benefits must also exclusively derive from compulsory taxation intended to cover general public expenditure and the conditions for providing and for calculating the benefits may not be dependent on any contribution in respect of the beneficiary. Furthermore, it is stated in the article that the benefits provided to supplement a contributory benefit shall not be considered to be contributory benefits for this reason alone and that such special non-contributory cash benefits must be listed in Annex X to the regulation. However, under the case law of the Court of Justice of the European Union, the fact that rules have not been mentioned in the declaration made by a Member State is not of itself proof that it could not be the case of special non-contributory cash benefits (C-20/96 Snares, paragraphs 34 and 35). Labour market subsidy and pensioners' housing allowance are the two Finnish benefits currently listed in Annex X.

If on the basis of the conditions referred to above, it is concluded that it is a question of a special non-contributory cash benefit, Article 7 of the regulation 883/2004 on the waiving of residence rules<sup>2</sup> is not applied to the benefit and it is not necessary to export the benefits. This means that the benefits are only granted in the Member State of residence under its national legislation and the benefits are not paid to a foreign country if the beneficiary moves to another country (Article 7(4)). However, in that case too it should be taken into account that the concept of residence cannot be solely in accordance with the provisions on residence applied in each Member State and that the

<sup>1</sup> Consolidated version of the Treaty on the Functioning of the European Union, Official Journal of the European Union, C 326, 26 October 2012: 47–200.

<sup>2</sup> "Unless otherwise provided for by this Regulation, cash benefits payable under the legislation of one or more Member States or under this Regulation shall not be subject to any reduction, amendment, suspension, withdrawal or confiscation on account of the fact that the beneficiary or the members of his/her family reside in a Member State other than that in which the institution responsible for providing benefits is situated." (Article 7 of the regulation 883/2004).

definitions of residence contained in the regulations 883/2004 and 987/2009 may in certain situations deviate from the residence provisions laid down in Finland's national legislation.

The criteria for assessing whether the benefit is a special non-contributory cash benefit:

- Does the benefit provide supplementary, substitute or ancillary cover in connection with the branches of social security mentioned in Article 3 of the regulation No 883/2004?
- Is the benefit intended to provide the individual in question with minimum subsistence income?
- Is consideration given to the economic and social situation of the Member State concerned?
- Does the financing exclusively derive from compulsory taxation intended to cover general public expenditure?
- Are the benefits dependent on any contribution in respect of the beneficiary?

### **3.1. Basic income models against the background of EU legislation**

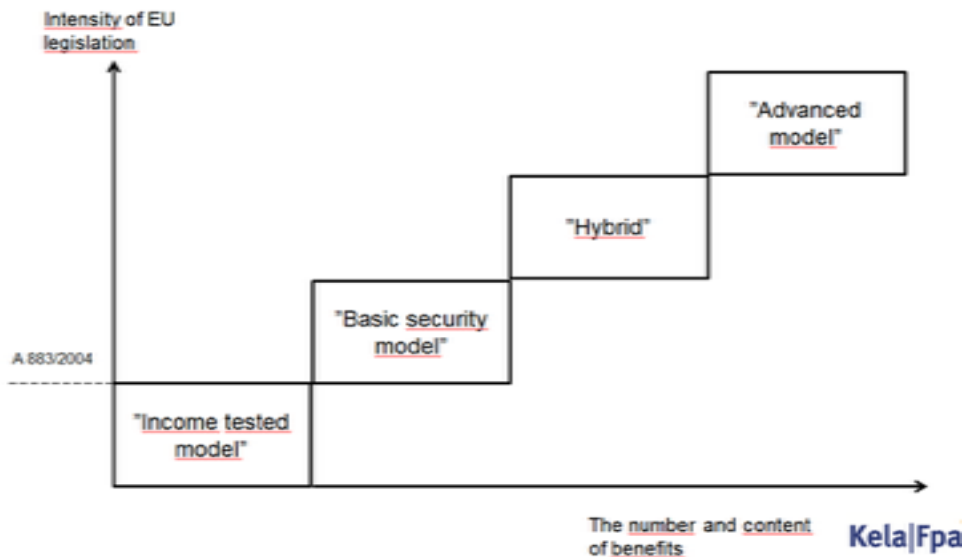
Based on what is described above, it is possible to draw conclusions on how basic income would be positioned in the EU legislation (including social security coordination). However, it should be pointed out that what is described below is of preliminary nature and therefore it does not give a comprehensive picture of the matter. This can only be assessed in more detail when the basic income model to be experimented has been defined.

The “social welfare model” could combine such benefits as the basic amount of social assistance and general housing allowance. In their current form, these benefits are social welfare benefits under EU legislation and they are not matters covered by the regulation 883/2004 (Article 3 of regulation 883/2004). Thus, a basic income model built on this basis would probably not be exportable (the benefit would only be paid to individuals residing in Finland). It should be noted, however, that even if the regulation 883/2004 was not applicable, the benefit could be payable as a social benefit under other EU provisions (see regulation 492/2011). It should also be noted that when benefits are classified as social welfare benefits, the essential factor is how the benefit in question is positioned in the EU legislation as a whole.

The “minimum security model” could combine the basic amount of social assistance, housing allowance and the labour market subsidy. From the perspective of the EU legislation it can be noted that social assistance and housing allowance do not fall within the scope of the social security coordination regulation (883/2004). At the same time, even though labour market subsidy falls under the scope of the regulation, it is considered to be a special non-contributory cash benefit (Article 70), to which the benefit export provision is not applied. In other words, the benefit in question is only paid in the Member State of residence on the basis of residence. From this perspective, this basic income model would not be exportable. Moreover, under the case law of the Court of Justice of the Eu-

ropean Union, a general social benefit guaranteeing a minimum subsistence income does not fall within the scope of the social security coordination regulation (see for example paragraph 15 of C-249/83 Hoeckx). The first two models can be deemed to be of such type.

Figure 1. Hypothetical presentation of the relationship between the intensity of different basic income models and the EU legislation.



The “unemployment security model” could combine the basic amount of social assistance, labour market subsidy and the basic unemployment allowance. From the perspective of the EU legislation, this would be a “hybrid model” because social assistance is considered to be a social welfare benefit and as stated above, it does not fall within the scope of the regulation. At the same time, labour market subsidy is a special non-contributory cash benefit (=non exportable), whereas the basic unemployment allowance falls under the scope of the regulation 883/2004 and it is exportable in certain situations. Such a basic income model might be considered to be within the scope of the regulation in its entirety as, from the perspective of the social benefits covered by the regulation (Article 3), it would definitely be an unemployment security benefit and intended to compensate the risk in question. Thus, such a model would probably also be exportable.

The “basic security model” could combine a large number of social insurance based benefits and possibly also other benefits. If the purpose of this basic income model is to replace many of the benefits compensating social risks that are listed in Article 3 of the regulation 883/2004, it can also be assumed that a basic income model built on this basis could be considered to fall within the scope of the social security coordination regulation and that it might be exportable. Practical implementation of such a model would also involve challenges as it would be unclear how it could be coordinated with the social security benefits of other Member States.

It is clear that the EU legislation would have an effect on the basic income models examined in this report and in none of the models could the eligibility for basic income be limited to Finnish citizens without violating against the principles of non-discrimination laid down in the EU legislation. These principles laid down in the primary legislation have been shaped by the case law of the Court

of Justice of the European Union and they have also been incorporated in the European Union Charter of Fundamental Rights, which has the same legal status as other treaties (Talus and Penttinen 2015, 5).

From the perspective of assessing different basic income models, the most important pieces of secondary EU legislation are the regulations 883/2004 and 987/2009 on the coordination of social security systems and implementation of the coordination, regulation 492/2011 on the freedom of movement for workers and the directive 2004/38/EC on the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States. Limiting the basic income to individuals residing in Finland might be possible if the basic income was defined as a special non-contributory cash benefit, as laid down in Article 70 of the coordination regulation 883/2004. However, this definition would depend on which of our existing social benefits would be included in the basic income, which model would be used for funding basic income and whether the purpose of basic income would be to guarantee minimum subsistence income for the beneficiary. If it is not possible to define basic income as a special non-contributory cash benefit, as laid down in Article 70, it is conceivable that it would be included in one of the branches of social security falling within the scope of the regulation 883/2004. In that case, basic income would be an exportable benefit. If, on the other hand, basic income is considered to be a social welfare benefit, it would not fall within the scope of application of the regulation 883/2004 and would not be an exportable benefit. It should be noted that even if the conclusion was that basic income falls outside the scope of the regulation 883/2004, the regulation on the free movement of workers (492/2011) might still be applicable. Furthermore, if the individual applying for basic income is considered to be a worker, as referred to in the regulation 492/2011 or his or her family member, these individuals would be eligible for basic income irrespective of their nationality if other conditions are met.

Ultimately, the applicability or non-applicability of the above EU provisions to basic income will depend on the decisions on basic income issued by the Court of Justice of the European Union. Even though it is impossible to predict what the court will decide, when looking back on its judicial practice over the years the conclusion is that the EU Court of Justice has long been an engine for European integration. However, in recent years, it has also issued more cautious decisions in matters concerning social security.<sup>3</sup>

---

<sup>3</sup> See for example Brey (C-140/12), Dano (C-333/13) and Alimanovic (C-67/14).

## 4. EXPERIMENTAL DESIGN AND SAMPLE POPULATION<sup>4</sup>

### 4.1. What should be assessed in the experiment?

The indicators used for assessing the success of the experiment should already be determined when the experiment is in the planning stage. It would be an attractive idea to examine the experiment on a comprehensive basis and select as many indicators as possible. However, a comprehensive approach also has its disadvantages. When a large number of factors is measured, it also becomes easier to find statistically significant effects. An assessment survey based on seven response variables that are independent of each would report at least one statistically significant effect with the probability of 30 per cent even if the experiment itself would not have any effect on a single response variable. If the number of independent response variables is increased to ten, the probability of reporting at least one statistically significant finding already rises to 40 per cent.

The main problem in the use of a large number of response variables is the possibility of finding randomly appearing significant findings from the statistical data (data mining). In the worst case, the focus in the assessment survey would be exclusively on randomly appearing significant effects. In the less serious cases, the study would highlight significant findings and leave the interpretation of the results to the readers. An increasing number of social scientists worried about the trend are calling for transparent research (see for example, Miguel et al. 2014 and Coffman and Niederle 2015). They propose that transparency should be promoted through openness of research material, publication of preliminary research design plans and preregistration of the plans. In their strictest form, the preliminary plans present the primary measurable factor against which the effectiveness of the experiment is measured. The preliminary plan may also list secondary research objects but these would not have any effect on the primary conclusions on the effectiveness of the experiment.

Based on the assignment concerning the basic income experiment, the most natural primary response variable would be employment as information on it can be obtained from administrative registers in a cost-effective manner. Consideration should also be given to including registration as an unemployed job seeker in the list of primary response variables. This would provide a natural starting point for assessing the replacement of conditional labour market subsidy with unconditional basic income of the same amount, which may have an effect on the willingness of the target population to subject itself to the activation measures of the labour administration. Secondary factors measured by means of different registers could involve such matters as earnings, income poverty or studying. Many of the response variables also pose additional challenges to the assessment of the

---

<sup>4</sup> This chapter is based on the work of the working group preparing the experimental design and the basic income model. The following persons took part in the work: Kari Hämäläinen, Pertti Honkanen, Markus Kanerva, Olli Kangas, Ohto Kanninen, Jani-Petri Laamanen, Ville-Veikko Pulkka, Miska Simanainen and Jouko Verho. The following persons took part in the preparation of the experimental design: Kari Hämäläinen, Olli Kangas, Ohto Kanninen, Jani-Petri Laamanen and Jouko Verho. The text was written by Kari Hämäläinen and Jouko Verho, while Miska Simanainen produced the tables. This chapter was written by Kari Hämäläinen and Jouko Verho. Matti Sarvimäki, seminar participants from the Research Institute of the Finnish Economy, Labour Institute for Economic Research and VATT Institute for Economic Research and participants of the annual meeting of the Finnish Economic Association in Pori all supplied valuable comments on the experimental design. We would like to thank them for their contribution.

effectiveness of the experiment (see Duflo et al. 2007). Therefore, the need for them should be carefully considered.

The information supplementing register data would require meetings with basic income recipients and members of the control group, which would substantially increase the costs arising from the experiment. However, the information obtained through the meetings would open up new research trends through such factors as stress levels and detailed health indicators. However, the disadvantage would be that when the basic income scheme enters into force at national level, such tests would probably not be incorporated into the scheme. Regular meetings during the experiment could, however, have an effect on people's behaviour and this manner they could also influence the assessment results. Separate measurements as part of the basic income experiment should only be considered if they can be funded from the experiment budget without risking the impact assessment of the primary study object. In that case too they should only cover a specific proportion of the participants.

#### **4.1.1. Basis for reliable assessment**

The main purpose of the basic income experiment is to determine the employment effects of basic income in a credible and explicit manner. The experiment has already attracted substantial international interest during the planning stage. The implementation of the basic income experiment and its results will inevitably be assessed much more extensively and in greater detail than has been the case with any of the earlier nationwide experiments. The conclusions of the assessment report must, above all, provide a credible answer to one question: How much (in terms of percentage points) does basic income increase/reduce employment rates and is the effect statistically significant? Using this information as a basis, it is a fairly straightforward task to assess the increase/decrease in the number of employed individuals in Finland after the nationwide introduction of the basic income model tested in the experiment.

Even though it is easy to define the primary objective of the assessment it is difficult to verify in a reliable manner the targeted causal connection between the basic income experiment and employment. Employment prospects are affected by a large number of factors that do not depend on basic income. The challenge is to ensure that the experiment will help to establish what would have happened to the people receiving basic income if they had not received any basic income. At individual level, this is an impossible task. It is impossible for an individual to receive and not to receive basic income at the same time. However, using a sufficiently large group receiving basic income and by establishing a control group for comparative purposes it is possible to determine the average effect of basic income on the test group. If the budget allocated for the experiment allows the payment of basic income to a large group of people, the average effects can be determined in different types of groups.

It is clear that the effect of basic income cannot be reliably assessed by using any type of control group. The research design must be constructed so that on average the control group corresponds to the group receiving basic income in all but one respect: It does not receive basic income. This is the

only way to ensure that all other explanations for differences in employment rates between the groups can be excluded.

#### **4.1.2. Randomisation helps in the construction of a credible control group**

Establishing a control group corresponding to the test group is not a straightforward task. Selecting the participants to the experiment is the critical point in the experimental design. Under no circumstances should the participants include individuals or the experiment be carried out in regions that are all of a specific type. Situations where participation is influenced by factors not observable to researchers are particularly problematic. Examples of factors at individual level that are difficult to observe include attitudes, one's own health, the health of a family member or the capacity of the individual concerned. If the factors in question are connected with an indicator used in the assessment of the experiment's success, the comparison between the test and control groups will not produce the desired causal connection. It is impossible to correct non-observable differences between the groups in retrospect, which means that it is also impossible to eliminate them from the impact assessment of the basic income experiment.

Depending on the nature of the selection process, the assessment result of the experiment either overestimates or underestimates the actual effect of the experiment. One example of this is the employment experiment targeting unemployed job seekers in which priority is given to work-oriented, healthy, motivated and highly capable individuals. The selected test group has better employment prospects than other unemployed job seekers in all situations. When comparisons are made between a test group and a control group that both display similar observable factors, any employment experiment will produce positive employment effects, irrespective of whether the experiment promoted employment or not. In the worst case, an employment experiment considered to be useful on the basis of the selected test group may lower the employment rate at national level. However, after the experiment has been made into a nationwide project, this negative effect can no longer be verified because there is no longer any universal control group for the target group. The situation would be the opposite if individuals who have weak employment prospects as a result of such non-observable factors as weaker control over their lives are selected to the employment experiment. In such cases, studies would consider all experiments as failures, even if they had improved employment rates.

The selection problem can be eliminated during the experiment planning stage. This requires the use of an external rule in the selection of experiment participants, which helps to ensure that a control group corresponding to the participants in all respects (including non-observable factors) can be formed. Randomising the experiment target population into test and control groups has been found to be the best way of establishing two groups that, on average, correspond to each other. As the name suggests, the research method divides all factors influencing employment into different groups in a random manner. In this case a sufficiently large sample size will ensure that on average the groups correspond to each other in all possible respects. The only systematic difference between the groups is that one group was provided with an opportunity to take part in the experiment and the other was not. In that situation, the effect of the experiment can be easily determined by comparing the employment rates of the two groups with each other.

We propose in the preliminary review that the effects of the basic income are determined using a randomisation-based research design. Randomisation is an extensively used assessment method and the assessment results that it has produced are widely accepted as being the most reliable. For example, in Forss et al. (2016), a large number of societal experiments based on randomised experimental designs are reviewed. In Finland, randomisation is widely used in small-scale field tests. In extensive experiments, the central and local governments have, however, primarily relied on regional experiments. To provide background for the proposal, we decided to take a closer look at the problem points of regional experiments from the perspective of the reliability and extrapolation of their results.

## **4.2. Regional experiments**

### **4.2.1. Regional experiments involving the entire target population**

In Finland, the most common method of limiting participation in an experiment is to conduct it on a regional basis. In regional experiments involving the entire target population, central or local government ensures participation by imposing sanctions in the form of regional boundaries. This eliminates the above-mentioned selection bias arising from the voluntary participation. Regional experiments involving the entire target population have included the full employment experiment covering the municipality of Paltamo (Kokko et al. 2013), and the Kainuu administrative experiment, which covered the region of Kainuu (Hämäläinen and Moisio 2015).

Forcing a single region to take part in the experiment would produce a control group that corresponds to the test group if Finland consisted of a large number of identical regions. However, every region is different in its own ways. Some of the regional differences can be taken into account in the analyses. However, there will inevitably be differences that are difficult to observe and they may be connected with history, attitudes, administrative efficiency and other similar factors. Thus, there are no control regions that would be fully identical with a test region. It is not quite clear whether it is even possible to establish such a region as a weighted average of the regions outside the experiment. An experiment conducted in one region does not produce credible or universally acceptable assessment results as there is a substantial risk that the regional differences interfere with the effect of the experiment itself.

Furthermore, a multi-year experiment carried out in a single regional is prone to risks. An unanticipated change affecting the municipality in question would easily ruin the whole experiment. The only thing that is needed is the exit of a regionally important employer from the region. The risks are not limited to decisions made by private companies. The extensive administrative reforms planned for the public sector (such as the social welfare and health care reform or the upper secondary education reform), would have differing effects at regional level.

The last reservation concerning an experiment taking place in a single region pertains to the extrapolation of the results. This is a particularly difficult problem in a basic income experiment in which



the budget does not allow a large area to be selected for the experiment. It is impossible to extrapolate results produced in a small rural municipality to large urban regions.

Some of the problems can be minimised by increasing the size of the test regions provided that this is permitted by the budget allocated for the purpose. This would make it easier to extrapolate the results and would also eliminate some of the risks arising from unexpected region-specific risks. In principle, eliminating differences between regions would be possible by increasing the number of test regions. However, the total number of regions in Finland would set limits to this. As regards individuals, test and control groups can, on average, be harmonised by randomising as many as hundreds of thousands of individuals in the target populations into different groups. However, there are only a few hundred municipalities and less than twenty regions in Finland. Not even in the best case will the test and control groups correspond to each other in terms of all regional differences, fully or on average. This would be impossible even if attempts are made to increase the number of observations in the basic income experiment by searching individuals corresponding to the target population of the test municipalities from the municipalities outside the experiment. The groups are located in different labour market areas, which is inevitably reflected in differences in labour market opportunities between the test and control groups.

#### **4.2.2. Experiments involving only part of the regional target population**

Regional experiments do not always involve the whole target population of the region. Recent examples of this include the project “Participative Integration in Finland” and the project in which labour market measures were experimented at municipal level. Such experiments only differ from nationwide experiments in terms of their size. From the perspective of establishing a credible control group, it is insignificant whether part of the target population is selected from within Finland or from within a region. Directing the experiment at part of the target population in a limited area does not facilitate the assessment in any way. In practice, formation of test and control groups corresponding to each other is impossible if regional actors select to the experiment the individuals that in their view are best-suited for the purpose or if only individuals willing to take part are selected. On the other hand, a regional experiment only creates one additional problem in terms of the extrapolation of the results. However, this is probably a smaller problem than an assessment result that is basically wrong in terms of the effects of regional experiments.

In regional experiments involving only part of the target population the selection bias can be avoided in the same manner as in nationwide experiments: Central or local government must play a role in the selection of the target population. The most important consideration is to ensure that the parties carrying out the experiment or those willing to take part are unable to manipulate the selected criterion. In a basic income experiment, one solution might be to limit the experiment to individuals born after a certain date. A birth date is a good example of a predetermined factor that nobody can influence when hearing about the experiment. If in addition to this, individuals born immediately before and after a specific date are, on average, similar in terms of their attitudes and other characteristics, the design allows the establishment of test and control groups corresponding to each other.

This means that the central and local government should set a predetermined participation criterion that the parties carrying out the experiment or the people wishing to join the experiment cannot influence. Using the criterion, it is possible to eliminate the selection bias and determine the full effect of the experiment. Such factors as the birth date cannot be used as a selection criteria without limitations. First of all the assessment result only applies to individuals of certain age in the vicinity of the selection criterion. Secondly, the assessment of the experiment is only possible with statistical modelling, which requires a large number of observations on both sides of the selection criterion. This in turn will be reflected in the costs of the experiment.

If the aim of the experiment is to extrapolate the results to the whole target population of the region, selection of the participants should be on the basis of randomisation. If the aim is to extrapolate the results at national level, the experiment should be carried out on a nationwide basis. In regional experiments, the focus should be on networking effects and balance effects in the labour market. Based on these principles, the working group has constructed the following proposal for a basic income experiment.

### **4.3. Proposal for experimental design**

The most important aim in the research design is to have a situation where the employment effects of the basic income experiment can be assessed so that the results are reliable and can be extrapolated. The reliability of the assessment results can only be ensured by preventing selection between the test group and the control group. At the same time, the results can only be extrapolated if the groups taking part in the experiment do not differ from the rest of the population in terms of non-observable factors. It must also be ensured that all interesting demographic and socio-economic population groups are sufficiently well represented in the test group.

#### **4.3.1. Randomising participants**

Carrying out the basic income experiment as a randomised field experiment will produce an ideal research design because as a result of a correctly implemented randomisation, there will not be any selection in terms of non-observable factors.

In randomisation, individuals are selected to the test group and the control group by drawing lots among the population assigned to the experiment. Depending on the design, there can be one or more test groups and control groups and in them the emphasis can be on interesting population groups. For example, priority can be given to unemployed job seekers over those in employment as long as the weighing is on the basis of factors that can be determined on the basis of the data before the draw. Thus, two individuals in the target population with similar backgrounds must have equal probability of being selected to the test group.<sup>5</sup>

---

<sup>5</sup> Alternatively, it is also possible to carry out the sampling on the basis of a deterministic method similar to randomisation. For example, a systematic and thorough sampling based on birthdates will in practice produce the same result as random sampling.

### 4.3.2. Obligatory nature of participation

If the participation in the experiment is obligatory, randomisation is also simple. The drawing of the lots can be carried out among a target population determined on the basis of register data and there cannot be any selection on the basis of non-observable factors. In that case, the comparison between test and control groups produces unbiased assessment results, which can be extrapolated to cover the whole target population in a straightforward manner.

However, if it is not possible to make participation obligatory (on legal or other grounds), the basic income experiment can also be carried out on the basis of consent. Giving the consent is not on a random basis but depends on the willingness of the individuals concerned to take part in the experiment. This willingness to participate is a non-observable factor, which means that, according to the definition, giving of consent will be followed by the selection of the test group.

In order to ensure that an experiment based on voluntary participation produces reliable assessment results, a group picked at random from the target population must first be asked for its consent. The drawing of the lots in which the test and control groups are established will only be made after the individuals concerned have given their consent and only the individuals that have given their consent will take part in the draw. This will mean additional work stages in the formation of the test groups. It is particularly important to ensure that the number of individuals giving their consent is sufficiently large so that the sample is of adequate size. Receiving consent is probably easier if the individuals concerned are offered a basic income model that is more advantageous in taxation terms (and more expensive in terms of the experiment).

The most important problem in voluntary participation is the generalisation of the assessment results. The findings will only produce a reliable assessment of the effects of basic income on the individuals that have given their consent. However, from the perspective of a basic income model, it should be possible to extrapolate the results to individuals that did not want to take part in the experiment. The demographic and socio-economic differences between those that have given their consent and other individuals can be observed fairly easily by weighing the findings again if the group of individuals giving consent is sufficiently large. At the same time, however, it is practically impossible to eliminate the selection arising from non-observable differences.

The second problem arising from voluntary participation concerns the arrangement of the experiment. This problem has to be addressed if the voluntary nature of the experiment also means that participants may leave the experiment before its completion. This will result in loss during the research monitoring process. The loss will at least partially depend on non-observable factors, which means that it will cause additional test group selection and result bias.

For this reason we recommend obligatory participation if it is possible in legal terms (see above for constitution considerations).

### 4.3.3. Sampling unit

In random sampling the sampling units will be selected by drawing lots. We propose that the sampling should take place before the experiment and involve households determined on the basis of register data. Individual randomisation would be a natural alternative to this. The fact that the basic income model will change work incentives at household level would be a factor in favour of sampling among households. This means that including all members of a household in the experiment would bring us closer to a situation where the basic income model is already in use. Furthermore, from the perspective of decision-making in families it would be clearer if both spouses have unified tax models.

However, after randomisation, the individuals selected to the experiment by drawing lots must be monitored at individual level. Households are not permanent units and from the perspective of the administration of the experiment it would be simpler if the tax model of the individuals concerned is not changed on the basis of how households are formed and dissolved during the experiment. Furthermore, making the inclusion in the experiment conditional on a membership in a household would create selection.

### 4.3.4. Target group

From the perspective of introducing the system of basic income, the experiment should cover the Finnish population as comprehensively as possible. However, in practice, the target population should be much more limited because there are population groups that cannot be provided with a basic income model influencing their behaviour or there are other experiment-related limitations that justify their exclusion. The general principles concerning the definition of the target population are reviewed below.

The basic income model studied in the basic income experiment has two main limitations. First of all, under the Constitution of Finland, the model to be tested may not unreasonably strengthen or weaken the economic position of the test group. Secondly, the budget allocated for the experiment is limited and must be used in a cost-effective manner. This means that population groups that are not affected by small changes in the tax model should be left outside the experiment. In their case, an adequate change in taxation could, in legal terms, be interpreted as unreasonable and substantial changes would also make the experiment expensive.

Thus, the experiment should primarily be directed at population groups that can be expected to react to relatively small changes in the tax model. As the main aim of the experiment is to strengthen work incentives, there are grounds to focus on how changes in taxation impact employment. In the taxation literature published in the field of economics, this population group is called the extensive margin of the labour supply (Blundell and Macurdy 1999).

Individuals with high income are widely considered to be outside the extensive margin of the labour supply. Individuals with high income have a high incentive to remain in the labour force because

leaving working life would in their case result in substantial income losses. In tax research, the degree of flexibility in the supply of high-income workforce is estimated to be fairly small (Matikka et al. 2016), which means that it is probably impossible to change the taxation model as part of the experiment so that behavioural changes could be observed. At least this would require a substantial sample size.

Workforce is defined as the working-age population that is either unemployed or employed at the time of the review. From the perspective of the aims of the experiment, unemployment should in this context be broadly interpreted so that the individuals that in principle would be prepared to accept a job even if they have not recently sought work or have officially registered as job seekers should also be considered as unemployed.

For these reasons, the focus in the chapter below is on an experimental design in which the target population incorporates the individuals that at the start of the experiment are in working age and whose income is below the median income. Specifications of the target population are discussed **in more detail in chapter 11.5.**

## 5. SAMPLING DESIGN – TWO-STAGE SAMPLING

The sampling design of the experiment must allow reliable assessment of the experiment so that the design resembles the reform to be studied as closely as possible (the situation in which basic income is already in use in Finland).

The experiment of a basic income model involves a research challenge because it has been suggested that the effects of basic income are not limited to incentives of the individuals as it would also change the labour market balance. In that case, ensuring the full overall effect of the basic income reform would require the inclusion of an entire economic region in the experiment which in turn would require that all individuals belonging to the target population in the economic region should belong to the test group. However, forming sufficiently large economic regions in Finland for the experiment would be problematic as statistical inference would require a large number of such regions. A large proportion of the Finnish population is, however, concentrated in the largest urban areas, which in practice means that for them it is not possible to create a reliable sampling design in which even twenty regions could be included in the test and control groups.

The alternative is to limit the experiment to individual effects. A design based on simple random sampling would be well-suited for studying individual effects. In that case the individuals belonging to the target population would only have low probability of being selected to the test group. For example, when the target population consists of one million low-income individuals, a sampling of one per cent will produce a test group of 10,000 individuals. In that case the experiment would have a very low regional intensity, which means that there would be practically no spillover effects or externalities to other individuals or economic actors.

Clarity and reliability of the design are the advantages of simple random sampling. When applied on a nationwide basis or in an otherwise sufficiently large region, this option will automatically produce the required geographic and demographic coverage. There are substantial gaps in economic development between Finnish regions, which means that it is important to include regions that are economically strong and those that are economically weak. However, depending on the prioritisation of the target groups, there might be grounds for applying weighted sampling so that all interesting groups are adequately well represented.

However, in order to ensure that externalities can also be studied in the basic income experiment, we propose that a two-stage sampling be applied and two different types of sampling are combined as follows:

1. The primary sampling should be in the form of low-intensity simple random sampling. This would cover the whole country, excluding regions that are reserved for secondary regional sampling.

2. If the resources allocated for the experiment allow a sufficiently large sample to be used, simple sampling will be supplemented with a regional experiment. The regional experiment will be on the basis of high-intensity sampling.

The regional experiment will primarily be carried out in two or more regions separated from the primary sampling in a clustered manner (cluster sampling). The cluster sampling will involve two-stage randomisation. The target regions will be determined first and the regions in which the experiment will be carried out will be selected from among them by drawing lots. After this a large proportion of the target populations in the regions will be assigned to test groups. Similar experimental designs based on cluster sampling have been used for studying externalities in such areas as the labour policy (see for example, Crepon et al. 2015).

The high-intensity sampling should be made with at least two levels of intensity. If the target population has an inclusion probability of 30 per cent and 70 per cent, the generation of externalities can be assessed by comparing the test groups of these regional groups. If the inclusion probability is very high or if the test group includes the entire target population of the region, it excludes the possibility of using the populations of the same regions as control groups. The control groups of the same region may be valuable for purposes such as observing regional labour market shocks. It should be noted, however, that in high-intensity sampling, using the population of the same region as control groups is basically problematic if externalities occur (control group contamination).

The optimal regional units and regional boundaries in cluster sampling must be based on a comprehensive empirical analysis in which it is ensured that the regions are sufficiently representative, both economically and demographically. As stated above, an ideal regional unit would be extremely large. In practice, the size of the regional unit is largely determined by the budget allocated for the experiment because in high-intensity sampling, a large region means an extremely large sample. From an administrative perspective, a municipality would be well-suited as a regional unit because in high-intensity sampling, the experiment would have significant effects on local government finances.

From the perspective of assessing the basic income experiment, the relationship between nationwide sampling and cluster sampling should be made more specific at a later stage. Depending on to what extent cluster sampling will be used, it must be decided whether it will be examined in the power calculations as a separate experiment. In that case, it would be possible to select the externalities as one primary response in the experiment. However, the requirement for this is that the manner in which the externalities are measured can be explicitly defined. Alternatively, cluster sampling can be used on a different basis. A regional experiment may be interesting from an administrative perspective or it can be used in the carrying out of interview surveys.

## **5.1. Groups taking part in the experiment**

A large number of test and control groups will be established for the basic income experiment. The test groups will differ from each other on the basis of their regions, demographic composition and

the basic income models offered to them. Each of the groups, which are different in terms of regions and demographic composition, will be divided into test and control groups by means of randomisation. The test groups that differ in accordance with the tested models can, however, use the same control groups.

Regional test groups differ from each other in accordance with sampling methods and the regional units of the cluster sampling. The simple random sampling group can be treated as a single test group but the regional units of the cluster sampling must be treated as separate groups. As regards the demographic groups, the groups of particular interest should be defined. These groups form separate test groups for which separate power calculations will be produced.

A situation where the test groups of the basic income experiment have differing basic income models would allow the studying of the basic income impact mechanisms. Even though a single test group would already produce information about the employment effects of the basic income model in question, it would be difficult to use the results as a basis for improving the model. The operating mechanisms of the basic income can only be properly understood if more than one test group with different levels of basic income and tax rates take part in the experiment. This has also been the experimental design in basic income experiments carried out in the United States and other countries (Forss et al. 2016).

It would be important to separate the income and substitution elasticities of labour supply from the basic income impact mechanisms. Substitution elasticity means the effect that arises directly from changes in disposable income. If the basic income model leads to lower taxes and higher income, substitution elasticity will in most cases result in a slight increase in employment rates. Income elasticity is a situation where higher disposable income may prompt employees to work less because they also want more leisure time. Studying these effects, which probably go to opposite directions, would be important so that an optimal basic income model can be built and these effects cannot be identified without making comparisons between different basic income models.

Table 1 shows the different models that are randomised to five test groups. The basic income levels given in the table are only examples and the corresponding tax rates are marked with parameters a and b. The final figures must be defined on the basis of microsimulations. In model A0, basic social security benefits would be replaced with basic income but the current tax system would remain unchanged. From the perspective of assessing impact mechanisms, it is essential that there is clear variation between basic income levels and that there are sufficient changes in tax rates so that the income and substitution effects can be determined. For this reason, in models A1 and B1, the flat-rate tax would be lowered by five percentage points, whereas in models A2 and B2 the tax rates would be close to those applied in the current system. The rates in A2 and B2 would be based on net income and calculated by means of microsimulation.



**Table 1:** Examples of basic income models

Model	Basic income, EUR	Tax rate
A0	500	current
A1	500	a-5
A2	500	a
B1	700	b-5
B2	700	b

The budget allocated for the experiment is limited and tax reductions will generate costs. For this reason, only the tax rates of low-income individuals should be changed and for the proportion exceeding the median income, taxation could remain unchanged. If changes are introduced they should ensure cost neutrality. Ultimately, the tested models should be selected so that the samples in the test groups are sufficiently large because otherwise it is not possible to observe the differences between the models. Based on power calculations, it may become necessary to reduce the number of the tested models from what is presented above.

A control group is allocated to each regionally and demographically defined test group. The allocation is by drawing lots. If the monitoring of the experiment is based on register data, the control group may in principle be quite large or equal in size to the target population remaining outside the test group. The smallest control groups usually have the same number of members as the corresponding test groups. If increasing the size of the control group will generate costs (mailing, etc.), its optimum size should be defined on the basis of budget and sample size calculations.

### 5.1.1. Power calculations

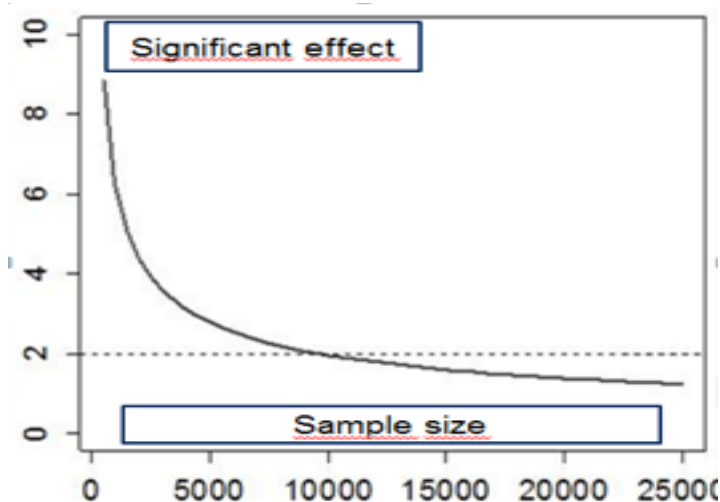
The sample sizes of the test groups are defined on the basis of power calculations. The power calculations show how large a sample size is required so that the effect of the basic income experiment can be observed during the assessment. The response variables prepared in advance and the power calculations made for them help to ensure that the statistical testing of the assessment is explicit and reliable.

The power calculations are made separately for each test group. Based on what is described above, a regional experiment and a more extensive experiment based on simple random sampling might require their own power calculations. At basic level, the power calculations only apply to the average effect on the target population. One purpose of the experiment might be to assess the effect of basic income on specific target groups in which case the power calculations would not be made for the entire target population but separately for each target group.

More than one response variable for which the power calculations are made may also be defined for the experiment. As the aim of the experiment is to improve the employment situation, the employment rate should be selected as the primary response in the power calculation. Even though other responses can also be examined, the success of the experiment should only be assessed on the basis of the primary variables for which power calculations have been made. Other responses are secondary and they can be used as a basis for more detailed analysis but not for assessing the success of the experiment.

Figure 2 gives an example of the size of a test group of the basic income experiment and the smallest observable employment effect<sup>6</sup>. The figure shows that a test group of 10,000 members would ensure the observation of a statistically significant outcome in the experiment if the basic income model changed the employment rate by two percentage points. On the basis of this, the conclusion is that if the basic income model fails to bring significant changes in employment rates (by at least one percentage point), the assessment is unlikely to produce significant results even if a large sample size were to be used. On the other hand, if the sample size is small (less than 10,000 members), the experiment should result in substantial changes in employment rates (by several percentage points). Otherwise the chances of observing significant effects in the assessment would be small.

**Figure 2.** Example of the smallest observable effect and sample size.



## 5.2. Target population

The target population of the basic income experiment means the group of individuals at which the sampling in the experiment is directed. Specifying the target population must be based on the background details of the individuals that are available to the researchers before the start of the experi-

<sup>6</sup> The parameters used in the calculation are as follows (see Duflo et al. 2007). In type I error (significance level) is 5% and in type II it is 20%. The assumption is that the employment rate among the low-income target population is 55%. According to a conservative estimate, the test group and control group are of the same size. If the number of control subjects can be increased at no extra cost, it will lower the smallest observable effect by several tenths of a percentage point.

ment. In practice the target population can be specified on the basis of such factors as the latest tax information and the information contained in Kela's benefit register.

The manner in which the target population is specified has a crucial effect on the costs of the experiment in two ways. Firstly, if the focus in the experiment is on population groups for whom basic income will mean substantially higher benefits the sample size will remain significantly smaller than if the benefit levels of the target population remain unchanged. Secondly, some of the population can only be expected to generate small employment effects. They should be represented by substantially larger samples than the population groups that can be expected to react more easily.

For these reasons, it is essential that the target population of the experiment is specified in a cost-effective manner and consideration is given to the objectives of the experiment, budget effects generated by the target population and expected employment effects. The factors impacting the budget allocated for the experiment and existing research information on employment elasticities are reviewed in more detail below. After this, we will discuss additional demographic specifications concerning the target population.

### **5.2.1. Role of the budget allocated for the experiment**

The selection of the target population is closely connected with the budget of 20 million euros allocated for the experiment. The main question is whether benefit expenditure saved as a result of the payment of basic income can be included in the budget. If this is not possible, only 1,700 individuals can be paid a basic income of 500 euros for only two years. If the basic income of 500 euros replaced benefits of 250 euros paid to the individuals concerned, the test group could have twice as many members. The test group would increase to more than 8,000 and the net costs would amount to 100 euros per test group member. If the basic income replaced a corresponding sum of benefits paid to the individuals concerned, the only restriction to the size of the test group would be the number of benefit recipients.

From the perspective of the test participants who are in employment, the essential question is whether the higher taxes collected under the basic income model can be considered in the budget allocated for the experiment. If under a basic income model, the net income of the middle-income earners remain more or less unchanged and the budget is defined on the basis of net costs, middle-income earners could be included in the target population at low cost. If the budget is not defined on the basis of net costs, the individuals in employment will become the most expensive group in the experiment. In that case the experiment should probably be limited to individuals in whose case the basic income would replace existing benefits.

### **5.2.2. Employment effects against the background of earlier research**

After it has been decided how the budget allocated for the experiment is defined it must be determined in whose case the experimental design allows the employment effects to be observed. The study commissioned by the Economic Policy Council (Matikka et al. 2016) provides an overview of recent research information on how monetary incentives (such as changes in taxation and social security) impact the willingness to participate in working life. Available research results suggest that tax rates do not have much effect on working hours. As regards the work participation decisions, the effects have been somewhat greater even though the average participation elasticity has been fairly modest (below 0.3). This means that when an individual is employed, the increase of ten per cent in disposable income will increase the number of people in employment by almost three per cent.

The low elasticity estimates of labour supply pose a real challenge to the assessment of the employment effects of the basic income experiment. The test group should probably have dozens if not hundreds of thousands of individuals in permanent employment relationships so that the experimental design would show how the basic income experiment has changed their behaviour. Even though it is easier to observe the effects affecting those outside employment constructing the experimental design would nevertheless involve problems. Let us assume a situation where the basic income experiment increases the disposable income after employment from 1,000 to 1,100 euros. Based on earlier research findings (participation elasticity of 0.3) we can expect the employment rate of about 50 per cent at the time of the preliminary power calculation to increase by almost 1.5 percentage points. Unequivocal separation of an effect of this magnitude from random variation would, on the basis of the preliminary power calculation, require a test group of more than 20,000.

If the effect of the basic income on employment decisions is mainly through monetary incentives, the experiment would require a large test group, a more than ten per cent increase in disposable income after employment or a focus on groups with significant employment potential. Alternatively, it might be considered that the basic income experiment will mainly boost employment by dismantling bureaucratic traps. We are not aware of any research results on participation elasticities concerning the elimination of bureaucratic traps and thus it is impossible to anticipate their effects.

### **5.2.3. Target population**

Based on what is said above, the selection of the target population is limited by the basic income model to be selected and its parameters, the benefits now paid to different groups and assumptions of how the basic income reform affects employment decisions in different groups. It is not yet known during the preparation of the preliminary review which basic income model will be proposed for testing on the basis of the review. The savings in Kela's benefits paid to relevant groups that are expected to be generated during the two-year experiment are not yet known either. In fact, the definite selection of the target population can only take place after the completion of the preliminary review. In this report, we will focus on the groups on whom the basic income model to be proposed after the preliminary review should or should not be tested in the experiment itself.

In the assessment of employment effects, it is natural to focus on groups whose employment situation the basic income model is intended to improve. For this reason alone, old-age pension recipients fall outside the scope of the experiment. Changing pension levels through basic income levels and tax rates would also be problematic from the perspective of the protection of property under the Constitution as it would involve changes in earned benefits. For the same constitutional reason, recipients of earnings-related unemployment allowance are a problematic group from the perspective of the experiment if the basic income model to be tested weakens the level of earnings-related unemployment security.

It is also natural that middle-income and high-income employees that are well-established in the labour market are not included in the basic income experiment target population. Based on existing research information, they rarely react to small changes in tax rates that might be possible within the framework of the experiment. Furthermore, they do not receive benefits that a partial basic income model might replace. Generating observable employment effects for this group would probably require a basic income model that is so expensive or a sample that is so large that it could not be funded from the budget allocated for the experiment. For this reason, there are good grounds for focusing on low-income households.

Furthermore, including students in the basic income experiment cannot be justified from the perspective of employment effects. For them, completion of the studies should be the main aim. Even though the effect of basic income on the time required for completing the studies is an interesting matter, it is uncertain whether this effect can be observed during the two-year period planned for the experiment.

The second student-related reservation is derived from the budget allocated for the experiment. Let us examine a basic income of 500 euros. In that case, the net cost of one student in the experiment would be the basic income minus study grant. With a study grant of about 250 euros, the sum budgeted for the experiment would be enough for a maximum of 3,300 students if all other population groups were left outside the experiment. The test group consisting of students could be increased by replacing both the student financial aid and the students' housing supplement with basic income. It should be noted, however, that for university students the basic income experiment would then largely become an experiment in which the elimination of income limits for student financial aid is tested. If the aim is to include students in the basic income scheme, they should have their own multi-year experiment the aims of which would be primarily connected with study opportunities and study progress.

From the perspective of the budget allocated for the experiment, young people who are not studying or working are even more problematic than students. Efforts have been made to improve the situation of this group through activation measures directed at young people (such as the youth guarantee). At the same time it has been deemed necessary to cut the benefits paid to young people. The cuts have been implemented by limiting the eligibility of young people for labour market subsidy and by paying young people aged 18 and over living at home lowered basic amount of social assistance. Because of the lower benefit levels, young people would be a significantly more expensive

target group than adults, in which case the risk would be that the sample size in an experiment directed at young people would not be large enough.

When specifying the basic income model to be selected on the basis of the preliminary review, serious consideration should therefore be given to whether young people should be included in the basic income experiment or whether the test group containing members from slightly older age groups should be enlarged. If the basic income experiment proves a success among older age groups the next step could be a basic income experiment among younger age groups and this experiment could also involve students.

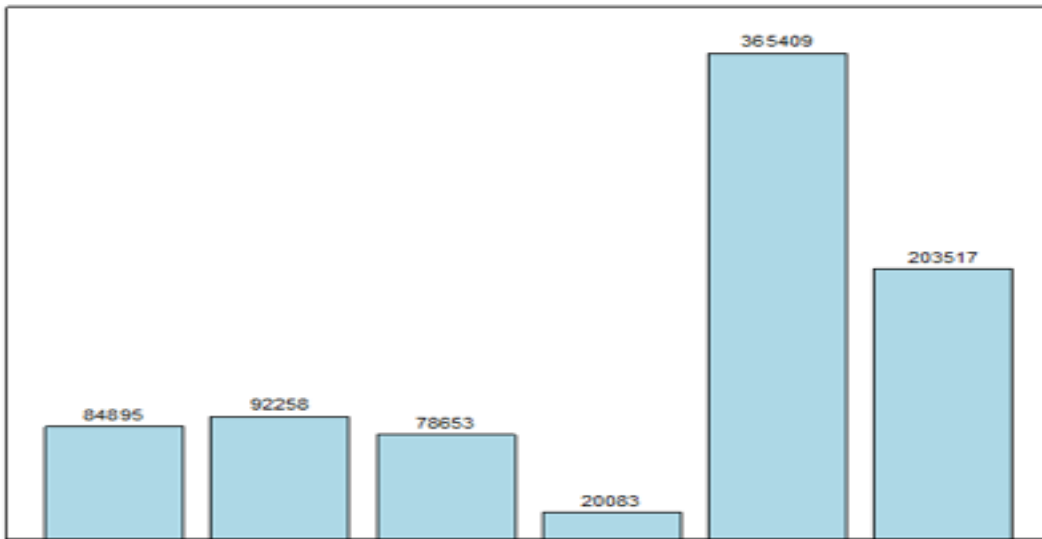
#### 5.2.4. Small-income households as target population

If the basic income experiment is directed in the manner described above, the target population would consist of low-income individuals aged between 25 and 63 or low-income households. The size of the target population depends on how low income is defined and on whether the concept of low income is examined at individual or household level. The concept of low income should be defined in a broad manner in accordance with the part of the income distribution to which the high effective marginal tax rates of the current benefit system apply. It should also be noted that the sampling in the experiment must be based on the latest available register data, which means that the concept of low income must be defined on the basis of preliminary tax data and disposable household income can only be considered at very rough level.

Preliminary studies on the target population have been made on the basis of the income distribution service data of Statistics Finland. When the target population is limited to individuals with earnings below the median income (23,301 euros), the number of individuals aged between 25 and 63 who are not studying is 845,000. A total of 159,000 of them are on a disability pension or chronically ill, while 70,000 are caring for household, children or other family members. Including these two groups in the basic income experiment should still be considered.

Figure 3 shows one classification of how the 845,000 individuals described above are divided into groups relevant to the basic income experiment. Based on the figure, long-term unemployed, individuals relying on social assistance, people on disability pension or chronically ill (outer sphere of the labour market) account for 43 per cent of the target population. A total of 11 per cent of the target population are in fixed-term or part-time employment relationship. About ten per cent of the target population have been out of work for less than one year, while another ten per cent are self-employed people with low income. The number of other self-employed people is fairly small. A quarter of the target population is outside all these groups. Most of the individuals in this category are low-income earners in permanent employment and people caring for their children or other family members at home. The structure of the groups is detailed in the **table appended to this report**.

**Figure 3.** Classifying low-income individuals and households



Explanations to the bars, from the left to the right: 1. Unemployed less than 1 year; 2. part-time or fixed-term employment; 3. self employed; 4. other small-scale entrepreneurs; 5. labour market outsiders; 6. other small-income groups.

NB: (i) “Self-employed with low income” are individuals who have the socio-economic status of self-employed entrepreneurs/individuals engaged in liberal professions or who have used a freelance tax card or have, according to tax information, received grants; (ii) The category “outer sphere of the labour market” consists of individuals who have the socio-economic status of long-term unemployed or who are mainly disabled/chronically ill or who have received social assistance for more than six months.

**Table 2.** Structure of the target population, individuals aged between 25 and 63 with earnings below median income (23,301 euros/year).

	<b>T a r g e t p o p u l a - t i o n , t o t a l</b>	<b>U n e m - p l o y e d f o r l e s s t h a n o n e y e a r</b>	<b>I n f i x e d - t e r m o r p a r t - t i m e e m p l o y - m e n t</b>	<b>S e l f - e m p l o y e d w i t h l o w i n c o m e</b>	<b>O t h e r s m a l l e n t r e p r e - n e u r s</b>	<b>O u t e r s p h e r e o f t h e l a b o u r m a r k e t</b>	<b>O t h e r l o w - i n - c o m e i n - d i v i d u a l s o r h o u s e - h o l d s</b>
Gender							
male	421,893	34,494	41,249	40,869	13,511	209,838	81,932
female	514,233	57,523	78,830	42,623	6,572	171,849	156,837
Age (in years)							
25-34	287,867	36,066	66,392	22,921	2,304	71,052	89,133
35-44	173,202	14,356	19,163	20,469	3,090	64,993	51,130
45-54	198,248	22,558	13,776	20,284	7,070	91,825	42,733
55-64	276,810	19,037	20,747	19,819	7,619	153,815	55,773
Education							
basic education	207,327	15,128	12,132	11,579	4,608	121,905	41,975
Upper secondary level or short-cycle tertiary level	573,290	60,615	75,219	49,746	13,174	228,406	146,130
bachelor or equivalent education	97,141	9,647	23,737	10,691	1,132	17,292	34,641
master or equivalent level	58,369	6,628	8,990	11,475	1,169	14,083	16,024
Household structure							
One adult	254,178	14,940	29,364	11,133	2,833	166,282	29,626
One adult & children	28,331	6,108	4,313	1,953	123	8,991	6,843
Two adults	315,093	35,036	45,009	36,914	8,605	117,830	71,698
Two adults & children	238,998	25,387	31,008	24,411	5,831	53,625	98,736
other	99,526	10,547	10,384	9,081	2,691	34,958	31,865
Status in December							
in full-time employment	147,706	35,094	17,123	7,243	81	11,817	76,349
in part-time employ- ment	85,771	8,888	65,084	2,705	376	8,718	.
full-time entrepreneur	121,724	3,799	281	61,075	18,541	814	37,213
part-time entrepreneur	14,005	2,049	4,616	6,145	853	343	.
unemployed	198,567	26,167	.	.	.	171,461	939
student	91,311	7,123	27,820	4,839	.	16,277	35,252



retired (excl. disabled)	35,796	4,229	1,121	74	.	4,452	25,919
on disability pension	158,680	.	.	.	.	158,680	.
military service or similar	237	.	.	.	.	.	237
caring for household or family members	69,965	2,923	3,754	733	.	5,244	57,310
other activity	12,366	1,747	279	678	232	3,880	5,550
Type of employment relationship in main workplace							
not working	427,868	20,955	105	1,628	.	305,488	99,692
permanent employment relationship	351,991	29,813	55,303	75,455	20,083	32,431	138,907
fixed-term or temporary	155,862	41,250	64,435	6,409	.	43,767	.
don't know	405	.	236	.	.	.	170
Decile, individual weight							
first quintile	397,260	30,739	41,392	26,588	5,155	219,744	73,642
second quintile	203,207	25,624	31,181	17,943	2,648	70,451	55,361
third quintile	156,926	18,181	21,964	16,143	4,652	48,762	47,224
fourth quintile	105,643	10,437	15,392	11,281	4,601	28,789	35,143
fifth quintile	73,091	7,037	10,149	11,538	3,027	13,941	27,399
Individual's income, euros							
0-4,999	117,562	3,676	9,084	25,430	4,981	29,834	44,557
5,000-9,999	227,404	10,952	18,546	14,002	2,911	140,461	40,532
10,000-14,999	219,221	13,894	27,673	17,300	4,612	111,714	44,028
15,000-19,999	211,287	35,445	35,707	16,798	4,687	68,338	50,311
20,000–	160,653	28,051	29,068	9,963	2,891	31,339	59,341
Total	936,127	92,018	120,078	83,492	20,083	381,686	238,769

## 6. BASIC INCOME MODELS AND MICROSIMULATIONS<sup>7</sup>

Below are calculations of different basic income options made using the microsimulation model. The calculations are grouped into example calculations and data-based simulation calculations. The simulation calculations have been made using the modified SISU and JUTTA microsimulation models.

The data-based calculations are based on the 2013 income distribution service data, which provides a sample of about 27,000 individuals and 11,000 households taken from the population permanently residing in Finland. The purpose of the calculations is to determine how different levels of basic income could be financed, considering the savings resulting from the partial replacement of the existing social security and changes in the income tax system. In most calculations, the current income taxation of basic income recipients would be replaced with a simple flat-rate tax but other options are also discussed. The purpose of the flat-rate tax calculations is to provide a realistic picture of the tax rates that are needed to finance basic income. It does not mean that only the flat-rate tax models or the flat rates presented here should be used in the basic income experiment. We also simulate a combination of flat rates and the current tax system, application of the existing tax system in its current or slightly modified form, application of a simple progressive tax scale and a scheme in which basic income is in the form of negative income tax.

In addition to the simulation calculations we also present example calculations of the composition of income in different types of household, in the existing system of current transfers and in different basic income options. In most of the examples, we are using the flat tax rate corresponding to the basic income level that has been derived from data-based simulation. In the example calculations, particular consideration is given to situations where incentive problems accumulate, resulting in high effective marginal tax rates and participation tax rates. In other words, the focus is on cases in which the effect of the increase in earned income on net income would be minor or even non-existent. In the example calculations, the focus is on unemployed individuals and part-time workers living in rental flats in whose case the existing social security system is often seen as inadequate.

The data-based simulations are based on 2013 register and survey data and the legislation in effect in 2013. We assume that this will also provide a sufficiently comprehensive picture of the current options for financing basic income even though there have been legislative changes since 2013. However, there have been few changes in economic and population structures or income levels between 2013 and 2016. The results of the data-based simulation also include the population groups for whom no basic income is calculated and that are taxed in accordance with the normal tax legislation. The most important of such groups are pensioners. In addition to basic income recipients, households may also have pensioners for whom no basic income is calculated in the model. Income earners under the age of 18 have only a minor effect on the results.

---

<sup>7</sup> This section is based on the microsimulation calculations by Pertti Honkanen and Miska Simanainen, which are appended to this report.

The simulation calculations are of static nature, which means that any behavioural effects of the changes are not assessed or considered. Existing income is redistributed by adjusting the basic income to existing social security and by changing income taxation. The example calculations have been made on the basis of the legislation in effect in 2016. This means that a number of fairly recent legislative changes have an effect on the results. These include the introduction of a protected component of 300 euros in the calculation of the adjusted unemployment allowance and general housing allowance, the latest changes in income taxation, cuts in child benefits and the child deduction. The existing legislation in such areas as housing allowance and social assistance is applied without any adjustments in the example calculations describing the basic income option and consideration has been given to basic income as a new type of income.

This section gives a short overview of some of the figures and tables that were presented in more detail in the **Finnish appendix** submitted to the Government. In the subsequent sections, which discuss the partial basic income and other models, only some of the more important observations are presented as examples. It is not possible to review all the material compiled in the **appendix tables**.

## 6.1. Description of the calculation models

As a rule, the data simulations and example calculations are presented in the following model frameworks. Data-based simulations are produced for basic income levels of 450, 550, 650 and 750 euros. In the text, the results are mainly presented for basic income of 550 euros or for 550 and 750 euros. Only brief references are made to higher basic income levels and they are not modelled in any detail. This is because full basic income is connected with strong institutional-political challenges (as described above) and strong economic constraints. The model would be fairly expensive and it is not realistic to assume that the social insurance based and earnings-related benefits could be abandoned. In order to illustrate different options, simulations have been made with different tax models (cost-neutral flat tax, progressive tax scale, combining basic income with the existing tax system as a tax-exempt or taxable benefit) and at different rental levels and housing allowance schemes. The examples are as follows:

The examples are as follows:

### **Current legislation (in data simulations legislation in effect in 2013 and in example calculations legislation in effect in 2016)**

#### **Base model for basic income (full and partial basic income)**

- The basic income is paid to all individuals aged 18 and over but not to pensioners (old-age pensions, disability pensions)
- The basic income is reduced from taxable social insurance based social benefits (earnings-related unemployment allowance, basic unemployment allowance, labour market subsidy,

sickness allowance, parental allowance, child home care allowance); adjusted unemployment allowance will be retained

- Study grant will be replaced with basic income but students' housing supplement will be simulated
- A simple flat-tax model: earned income and capital income are taxed in the same manner, there would be no tax-exempt dividends, basic income is taxable earned income but a tax deduction corresponding to basic income will be directed at earned income
- Basic income is considered as income reducing housing allowance and social assistance

### **Negative income tax and**

**other basic income models. In this section we provide a brief modelling of the Universal Credit scheme introduced in Britain.**

In the example calculations (**which are presented in more detail in the appendix “Microsimulation results of the basic income project”**) we examine how the total disposable income of individuals or households change when the earned income of an individual or household increases. In the basic situation, the individual does not have any earned income. If the individual is in that case eligible for unemployment security, the assumption is that the earned income is adjusted with the unemployment security using the adjusted allowance formula. This is done on the basis of the formula by ignoring the provisions of the Unemployment Security Act under which the use of adjusted allowance is limited to part-time work, shortened working hours or full-time work lasting for no more than two weeks. The working hours should not exceed 80 per cent of the working hours of the normal full-time work but this restriction is not considered in the calculations. In this case, the adjusted unemployment allowance is, however, only derived from the original unemployment allowance and monthly pay. The income taxes are calculated by applying the 2016 legislation and using the average municipal tax rate. No consideration is given to the church tax. Housing allowance and social assistance are also calculated on the basis of the 2016 legislation, which means that they partially depend on the protected component of the work income: gross earnings of 300 euros in housing allowance and net earnings of 150 euros in social assistance. In basic income models, the basic income is part of gross income, which is considered in the calculation of housing allowance and part of net income which has an effect on the size of any social assistance. The housing allowance is directly derived from housing allowance formulas. The Housing Allowance Act contains provisions on adjusting housing allowance on the basis of changes in income but these provisions are not considered in the calculations. Under section 27 of the Housing Allowance Act (338/2014), the housing allowance must be adjusted if the continuous monthly income of a household has increased by at least 400 euros or decreased by at least 200 euros.

The housing allowance calculations are based on an assumption that the individual resides or the household is located in a municipality belonging to municipal category 3. This category comprises Tampere, Turku, Oulu, Kuopio, Rovaniemi and most other large or middle-sized cities (except for the greater Helsinki area). A total of 49 per cent of all housing allowance recipients live in the municipalities belonging to the municipal category 3. The maximum housing costs considered in the housing allowance (depending on family size and municipal category) are considered as rent. For an individual living alone in a municipality belonging to the municipal category 3, the amount is 411 euros/month. This is also the case when social assistance is calculated (other housing costs are not considered). The proportion of the housing allowance and social assistance in the calculations would increase if it is assumed that the households are located in the greater Helsinki area (where 14% of housing allowance recipients live) or that the rents and other housing costs are higher. Similar changes would also take place in other municipal categories (Table 4).

**Table 3.** Number and percentages of housing allowance recipients in different municipal categories in 2013.

Municipal category	Population	Percentage	Households	Percentage	Housing allowance recipients	Percentage
1	587,000	10.90%	320,000	12.20%	32,000	13.50%
2	490,000	9.10%	226,000	8.60%	20,000	8.30%
3	2,064,000	38.40%	1,039,000	39.60%	118,000	49.30%
4	2,230,000	41.50%	1,039,000	39.60%	69,000	29.00%
Total	5,371,000	100.00%	2,624,000	100.00%	239,000	100.00%

“Housing allowance recipients” means households receiving general housing allowance. Calculations are based on income distribution service data.

**Table 4.** Household size and rents used as a basis for general housing allowance, in different municipal categories.

Household size	Municipal category 1 (euros/month)	Municipal category 2 (euros/month)	Municipal category 3 (euros/month)	Municipal category 4 (euros/month)
1	508	492	411	362
2	735	706	600	527
3	937	890	761	675
4	1,095	1,038	901	804

## 6.2. Full basic income

### 6.2.1. What is meant by full basic income?

Full basic income can be understood to mean a model that would replace a large proportion of the other social insurance based benefits. In practice this would mean that the level of basic income would be higher than the current basic social security. In Finland, such models have been proposed, particularly in the 1980s when high basic income was seen as a response to technological unemployment caused by automation. In both Finland and elsewhere, full basic income has been seen as an instrument that would help to reduce the supply of labour and in this way allow more equal distribution of work and wealth and provide people with participatory opportunities outside paid work. The debate on basic income as a response to technological unemployment has resurfaced during the past few years as assessments on the employment effects of digital technologies have been produced (see for example Frey & Osborne 2013; Brynjolfsson & McAfee 2014; Pajarinen & Rouvinen 2014).

There has been discussion on full basic income in many countries. In the models developed between 2006 and 2010 by Dieter Althaus, a German politician representing the Christian Democratic Union, the income exceeding the basic income would be taxed at a flat rate of 50 per cent but only up to 1,600 euros. After that the basic income would drop from 600 euros to 300 euros but the tax rate would also be halved (to 25 per cent). In the models proposed by Althaus, children would also be eligible for a basic income of 300 euros. The model would replace other social security benefits. In the basic income model proposed by the Left Party of Germany (Die Linke) in 2009, the basic income would be 1,000 euros (500 euros for children). It would be financed by imposing a flat tax of 35 per cent on income exceeding the basic income and the scheme would also require higher taxes on the financial sector, energy and luxury products. The existing housing allowance, special allowances and most of the components of earnings-related social insurance system would be retained. Switzerland will hold a referendum on a basic income of 2,500 Swiss francs (about 2,300 euros) in June 2016.

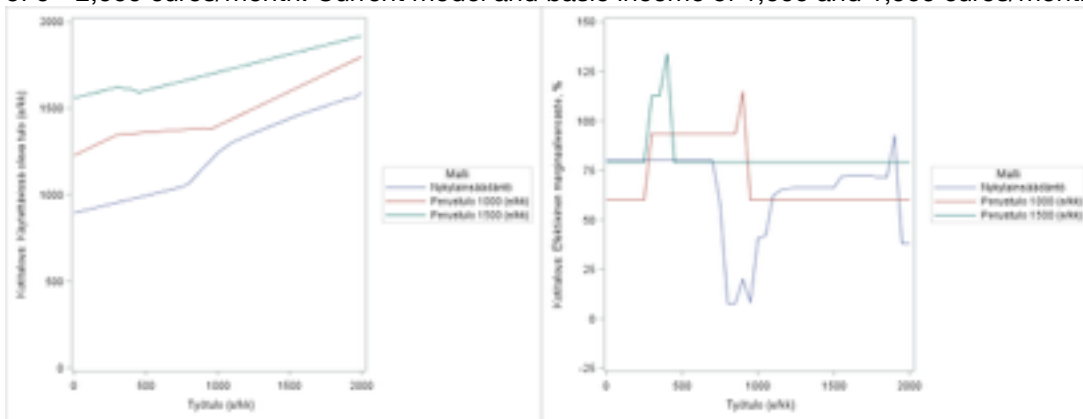
It seems that full basic income has support among the Finnish public. In a survey conducted by Kela in autumn 2015, 69 per cent of the respondents were in favour of a basic income of 1,000 euros. However, a subsequent survey showed that people, especially those in higher income categories, become much more critical when they were asked questions about the tax rates that might result from the introduction of basic income (see section 4 above).

### 6.2.2. Full basic income in microsimulation

Figure 4 below shows the results of microsimulation with full basic income and under the current model on the basis of disposable work income and effective marginal tax rates for a wage earner living alone (who is eligible for housing allowance or social assistance but not for other social insurance based benefits), with work income of 0 - 2,000 euros/month. In other words, this is an “easy case”. The figure gives a number of examples to illustrate the effects of the current model and basic income of 1,000 and 1,500 euros. The basic income calculations have been made on the basis of a cost-neutral flat-tax model, which leads to fairly high tax rates, as is shown in the figures below **and the Appendix Tables 26 and 27.**

The graphs on the left in Figure 4 illustrate the composition of income under the current social security model (which is hereafter also referred to as the “current model”) and with basic income of 1,000 and 1,500 euros. The figure provides a summary of the income composition process, which has been decomposed in Figure 5 below. The figure shows that basic income will provide a higher disposable income at all levels of gross income. The graph on the right shows that the effective marginal tax rate is quite high in both full basic income models. This graph, too, is a visualised summary of the figures in which the effects of the different factors are decomposed. The summaries are also given in the appendices to this report.

**Figure 4.** Disposable income and effective marginal tax rate of a wage earner living alone, with work income of 0 - 2,000 euros/month. Current model and basic income of 1,000 and 1,500 euros/month.



Explanations: vertical axis 'käytettävissä oleva tulo' = disposable income; horizontal axis 'Nykylainsäädäntö' = present legislation; 'Perustulo 1000 (e/kk)' = Basic income €1000 a month; 'Perustulo 1500 (e/kk)' = Basic income €1500 a month.

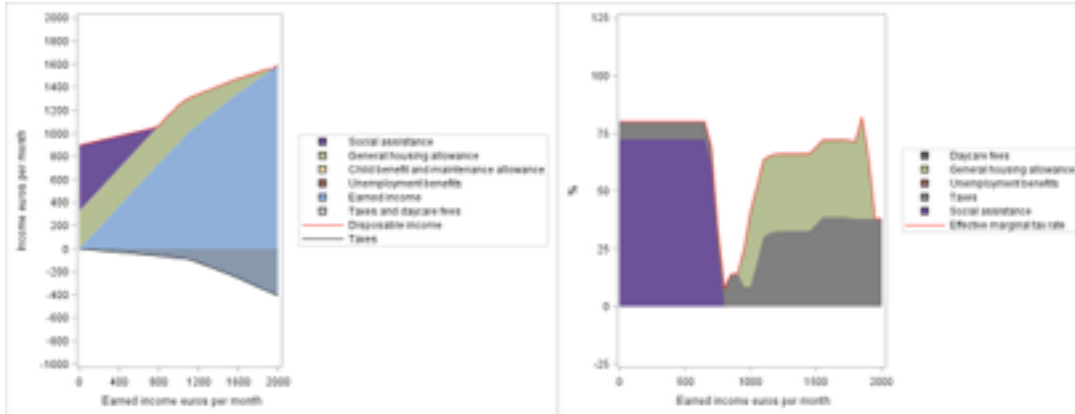
The graphs can be interpreted as follows: The increase in work income from 0 to 2,000 euros/month is shown on the horizontal axis. In the graph on the left, the vertical axis illustrates the decomposition of the increase in income (in euros): how work income will reduce social benefits and the taxes will rise. In the graph on the right, the vertical axis shows how different factors impact the effective marginal tax rate. All subsequent graphs can be interpreted in the same manner.

As shown in the graph on the left, which illustrates the current situation, the increase in income will neutralise some of the social assistance and the housing allowance also starts to fall from a monthly income of about 1,000 euros. However, there is a continuous increase in disposable income. Thus, in this sense, the current model provides incentives for work. The graph on the right shows that the effective marginal tax rate resulting from a reduction in social assistance and taxation is 80 per cent (in other words, the recipient can keep 20 cents of each euro earned) up to a work income of about 700 euros. After the end of social assistance, the marginal tax rate is fairly low (10 - 20%) in the monthly income categories of 800 and 1,050 euros. As a result of the reduction in housing allowance, marginal tax rates will reach about 70 per cent at higher income levels up to a level when the recipient is no longer eligible for housing allowance (at work income of almost 2,000 euros).

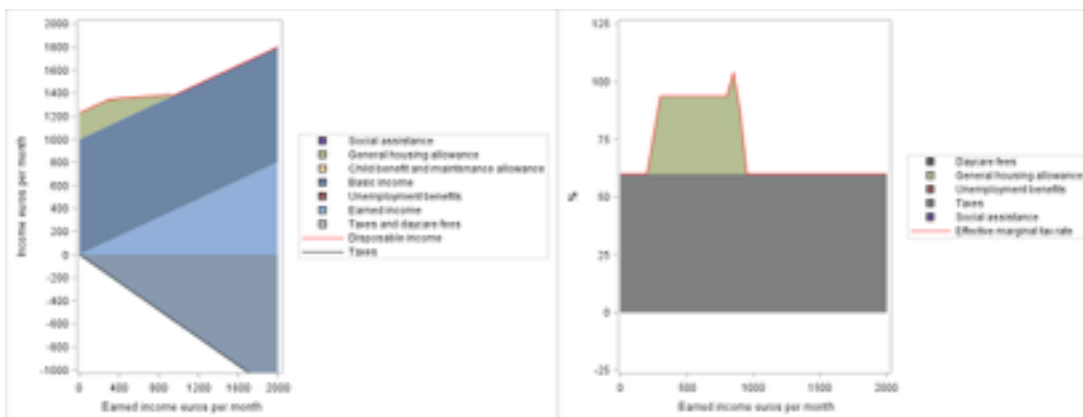


**Figure 5.** Composition of income and effective marginal tax rate for employed person living alone (salary 0-2000 € per month). Current legislation, basic income 1000 and 1500 € per month with flat tax rate (simple model).

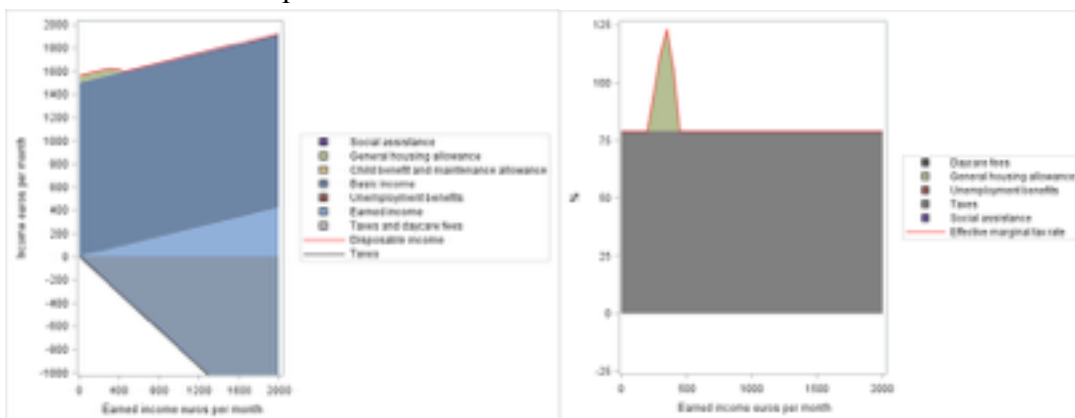
### Current legislation.



### Basic income 1000 € per month.



### Basic income 1500 € per month.



The recipient would be eligible for a certain amount of housing allowance even if the basic income was 1,000 euros/month. It should be noted, however, that a substantial proportion of the housing allowance would be replaced with basic income: Housing allowance expenditure would fall from

603 million euros to 263 million or 92 million euros. (Table 6). As a result of the housing allowance, marginal tax rate would be nearly 100 per cent in the low-income categories. In a basic income of 1,500 euros, which is a fairly high amount, the housing allowance would cause a sharp increase in the marginal tax rate. Of course, it can be claimed that in this case, the individual concerned would no longer be eligible for any housing allowance. In this case, consideration should be given to differences in living costs between different municipalities. Should the principle of uniformity be abandoned in this case even though the supporters of basic income have viewed it as a central principle of basic income? The calculations are based on the assumption that schemes such as child benefits and disability allowances would remain unchanged.

Above we have discussed effective marginal tax rates. The second, complimentary approach to examining the incentive effects of different models is to examine the tax rates in situations where an individual becomes employed or starts working longer hours by for example changing from part-time to full-time work. These participation tax rates (Table 5) show how much taxes increase and current transfers are reduced when an individual is employed at a specific pay. If an individual's income increases from 0 to 500 euros/month, their participation tax rate under the current model would be 36.9 per cent. The tax rate would be substantially higher in both basic income models. The basic income models fare better if the income increases from 0 or from 1,000 euros to 2,000 euros.

**Table 5.** Participation tax rates of an unemployed individual living alone. Current model and basic income of 1,000 and 1,500 euros/month.

<b>Change in wages</b>	<b>Current legislation</b>	<b>Basic income 1,000 euros/month</b>	<b>Basic income 1,500 euros/month</b>
0 > 500 euros	36.9%	73.4%	91.1%
0 > 1,000 euros	51.7%	82.9%	85.1%
0 > 2,000 euros	66.3%	71.4%	82.0%
1,000 > 2,000 euros	80.9%	60.0%	79.0%

All current transfers come at a price and changing one current transfer scheme will have an effect on many other schemes through links and ties of different types. Using microsimulations, it is possible to assess the cost and income distribution effects of different social policy decisions. Table 6 sums up some of the most important budgetary effects of the full basic income model.

Full basic income would replace a large proportion of the other current transfers. Introducing basic income of 1,000 euros would reduce the funding allocated for unemployment security from about 4 billion to 800 million euros, while a basic income of 1,500 euros would cause the funding to fall to 273 million euros. Spending on social assistance would fall from about 600 million euros to almost 50 or almost 40 million. There would also be similar reductions in most of the other social insurance based benefits. However, even if the basic income is set at a fairly high level, it would not fully replace other social insurance based benefits.

High levels of basic income would naturally have significant effects on income distribution. There would be a substantial narrowing of income gaps. The Gini coefficient would fall from the current 26.4 to 21.7 if the basic income is 1,000 euros and to 17.9 if the basic income is 1,500 euros. Proportion of low-income households of the total population (at a poverty threshold of 60%) would fall from 14.1 per cent to 9.5 or 4.8 per cent. Poverty among children would fall from 13.2 per cent to 9.4 or 3.4 per cent. Surprisingly enough, poverty among the elderly would increase (10.1% -> 11.6% and 13.2%). This is because as the income of the rest of the population increases the pensioners' income would fall behind the income of the rest of the population, which would cause a slight rise in poverty among pensioners.

**Table 6.** Budgetary effects of full basic income (1,000 and 1,500 euros/month) in a basic income model based on simple flat tax.

	<b>Current legislation</b>	<b>Basic income 1,000 euros/month</b>	<b>Basic income 1,500 euros/month</b>
Flat tax rate, %		60.0	79.0
Basic income expenditure		35,016	52,524
Disposable income	113,251	113,168	112,948
Unemployment security	3,928	801	273
Sickness allowance	1,402	574	308
Child home care allowance	419	72	72
Pensions paid by Kela	2,202	2,202	2,202
Student financial aid	531	7	7
Students' housing supplement	268	268	268
Pensioners' housing allowance	472	465	460
General housing allowance	603	263	92
Social assistance	586	48	36
Child benefits and child maintenance allowance	1,665	1,665	1,665
Disability benefits	345	345	345
Current transfers, total	12,419	6,709	5,728

### 6.2.3. Full basic income: summary

Full basic income would, at least at the highest levels, allow the inclusion of the housing allowance (which is a source of disincentives) into the basic income. However, as seen above, even recipients of a basic income of 1,500 euros would still receive a small amount of housing allowance. If the basic income is primarily funded by means of a flat tax on earned income, the taxation on earned income will be high even if the participation tax rate and the effective marginal tax rate were reduced. Because a model based on full basic income would, at least at its highest levels, provide a secure livelihood without other income, there could be a reduction in the supply of labour.

Replacing earnings-related unemployment allowance with full basic income would mean a very high level of basic income. The median wage in the Finnish private sector in 2014 was 3,135 euros and the earnings-related unemployment allowance based on this amount (without supplements) is 1,732.25 euros/month. It should be noted, however, that earnings-related unemployment allowances are subject to withholding tax of at least 25 per cent in accordance with the pay used as a basis for

the allowance. It would, however, be difficult to raise the basic income to the level of the highest earnings-related allowances.

From the legal perspective, the citizens' social rights would be best guaranteed by a model based on full basic income. At its highest levels, it would also bring the basic social security benefits paid to individuals living alone close to the minimum reference budget defined by the Consumer Society Research Centre. Thus, it would lift people from economically problematic circumstances, as shown by the inequality and poverty indicators presented above.

More well-being and less poverty were the two advantages of full basic income mentioned by the employment actors interviewed for this report. When set at 1,000 euros, it would only slightly differ from the combined level of social assistance/labour market subsidy and housing allowance. Experts listed possible disincentives, conflicts with earnings-related unemployment security, high cost and regional differences in housing costs as weaknesses of the model. Furthermore, the level could be too high for some groups and too low for the others.

## **6.3. Partial basic income**

### **6.3.1. What is meant by partial basic income?**

In the Finnish debate, basic income is usually referred to what is called partial basic income, in which basic income would replace some of the social insurance based benefits, whereas benefits which would substantially increase the cost of basic income when incorporated into it would be retained.

The most advanced models of partial basic income in Finland have been put forward by the Green Party (2007/2014) and the Left Alliance (2011). Social assistance, housing allowance and earnings-related benefits would be retained in both models. Register-based microsimulations have been made on these models and they allow an assessment of the costs and incentive and income distribution effects arising from them. As is common in partial basic income models, taxation would eliminate the economic advantages gained by middle-income and high-income earners through basic income. The income distribution effects depend on the level of the basic income and the progression applied in income taxation.

The difference between partial basic income and full basic income is that in the former model, the level of basic income is substantially lower and the aim is not to replace other current transfers to the same extent as in full basic income. The level of replacement naturally depends on the level of the basic income paid. A large proportion of the social insurance based benefits (such as earnings-related benefits and housing allowance) would be outside partial basic income and they would "float" on top of the basic income. The microsimulation modellings presented below show cost-neutral flat tax rates for partial basic income options of different levels. The options have been cal-

culated by increasing the flat tax rates in stages of 0.5 percentage points until the disposable income of the entire population is a maximum of 100 million euros higher than in simulations based on the current legislation. The results of these tax calculations are summarised in the table below (Table 7). The table also illustrates how limiting the sample to the adult population on the one hand and the population aged between 24 and 64 on the other (for the reasons stated above), excluding pensioners, impacts the flat tax rates. It is clear that the funding could also be provided by applying the existing tax system or by other means, as has been discussed in the sections above. Later in the report, we will present comparisons of how the flat tax versus the current taxation would impact participation tax rates. Before examining the income formation process and tax rates through examples, we will take a short look at the cost effects of different basic income options.

**Table 7.** Basic income expenditure, cost-neutral tax rate and changes in disposable income under a basic income model based on simple flat tax, in accordance with basic income level.

Basic income (euros/month)	Adults (excl. pensioners)		Individuals aged 24 and over (excl. pensioners)	
	Basic income expenditure (million euros/year)	Tax rate (%)	Basic income expenditure (million euros/year)	Tax rate (%)
450	15,757	40.0	13,317	39.0
550	19,259	43.0	16,276	42.0
650	22,760	46.5	19,236	45.0
750	26,262	50.5	22,195	48.5

Income distribution service data 2013 of Statistics Finland, legislation in effect in 2013.

Leaving the population aged between 18 and 24 outside the basic income scheme would reduce the cost-neutral tax rate by about one percentage point (at a basic income of 550 euros) and about two percentage points (at a basic income of 750 euros). This is the conclusion if the students aged under 25 would remain under the scope of the existing student financial aid scheme and the older students within the scope of basic income would only receive the housing supplement.

As is the case with the full basic income presented above, partial basic income would also impact the rest of the current transfer system. The budgetary effects have been calculated using a modified SISU microsimulation model and the 2013 income distribution service data (as was done with the full basic income model).

**Table 8.** Most important current transfer and tax items under a basic income model based on simple flat tax at different levels of basic income (in basic income paid to adults).

	Current legislation	Basic income (euros/month)			
		450	550	650	750
Unemployment security	3,928	1,740	1,546	1,357	1,184
Health insurance	1,402	989	898	815	741
General housing allowance	603	547	513	482	407
Social assistance	586	373	238	147	92
Flat tax	0	37,459	40,123	43,243	46,870
Additional financing requirement		12,018	15,066	18,169	21,294
Flat tax		37,459	40,123	43,243	46,870
Other taxes	32,638	5,981	5,981	5,981	5,980

Income distribution service data 2013 of Statistics Finland, legislation in effect in 2013.

While a full basic income of 1,500 euros would reduce unemployment expenditure to about one tenth of the current situation, the replacement effects of partial basic income would be much more moderate, as shown in Table 8. More detailed analyses of the effects of basic income of 550 and 750 euros are shown below and in the appendices.

### 6.3.2. Wage earner living alone - current model and basic income of 550 and 750 euros

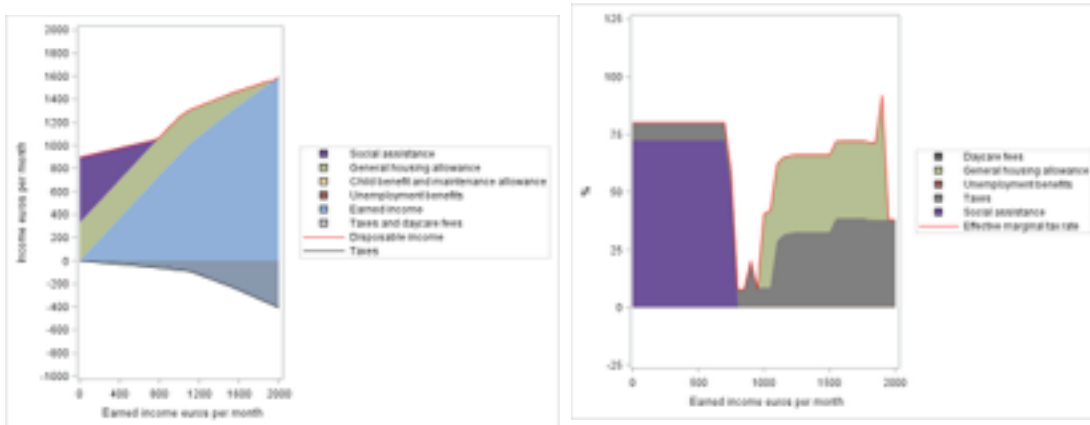
Incentive effects can be calculated for separate examples and as averages from the actual data using microsimulation models. In each case, the outcome depends on the assumed household structure, such as the number of children, place of residence and housing costs. In the sections below, we will examine the effects of partial basic income on the basis of examples. Only a small number of cases are considered in the text section (wage earner living alone, single parent and unemployed couple). More detailed calculations of a larger group of examples are presented **in the appendix**.

The incentive effects of the current model were already examined in the discussion on full basic income above. However, the current model is described again in Figure 6 so that we can have a comparable picture of effective marginal tax rates and the factors influencing them. Under the current model, the effect of social assistance extends to a work income of about 800 euros. In basic income of 550 euros, the effect of social assistance is restricted to a very low income area and under a basic income of 705 euros, social assistance paid to single-member households is no longer included. There are few differences between the effective marginal tax rates compared with the current

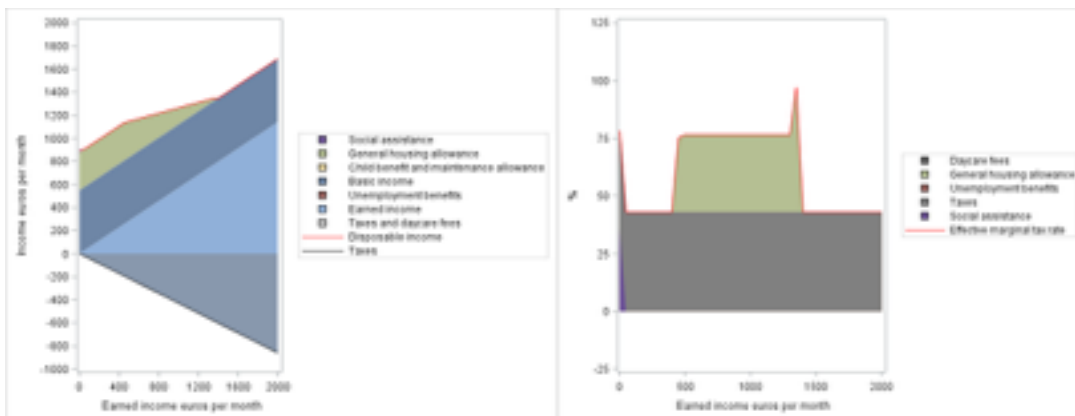
model, which in these example calculations too is the result of the fairly high flat tax rates in connection with basic income (43.0 and 50.5 per cent).

**Figure 6.** Composition of income and effective marginal tax rate for employed person living alone (salary 0-2000 € per month). Current legislation, basic income 550 and 750 € per month with flat tax rate (simple model).

### Current legislation.

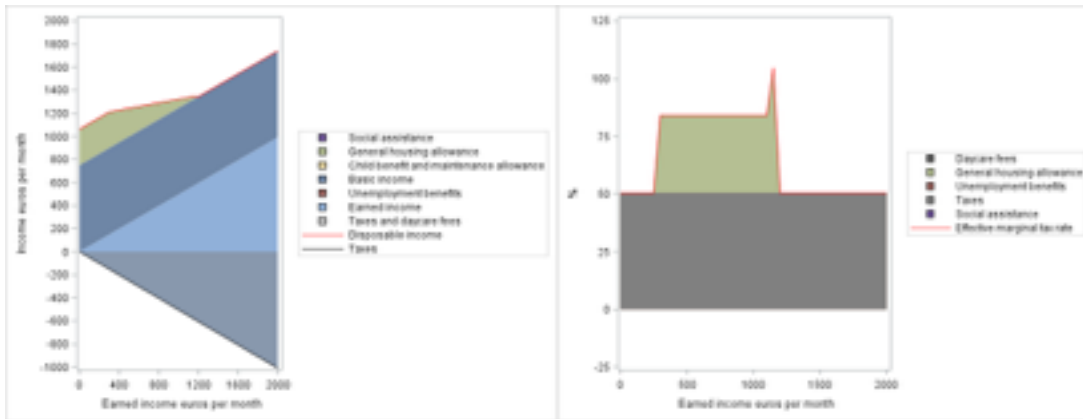


### Basic income 550 € per month.



### Basic income 750 € per month.





If the calculations were on the basis of the current tax system or a progressive taxation based on it, the incentive effects of the basic income would be much more substantial. In addition to the marginal tax rates, we should also examine the participation tax rates, or at what levels of taxation people become employed in part-time or low-paid jobs (earned income of 500 and 1,000 euros as examples) or full-time jobs (earned income of 2,000 euros as example) (Table 9). The table shows that under the current legislation, the participation tax rate in part-time work is slightly over 80 per cent. If the income increases from 0 to 1,000 euros or from 0 or 1,000 to 2,000 euros, the participation tax rate is about 65 per cent. At the lower basic income level of 550 euros, the tax rate will be lower than under the current model in all these cases. However, a basic income of 750 euros will produce a tax rate that is higher than under the current model when the increase is from zero to earnings of 1,000 euros. This is the combined effect of a fairly high flat tax and housing allowance.

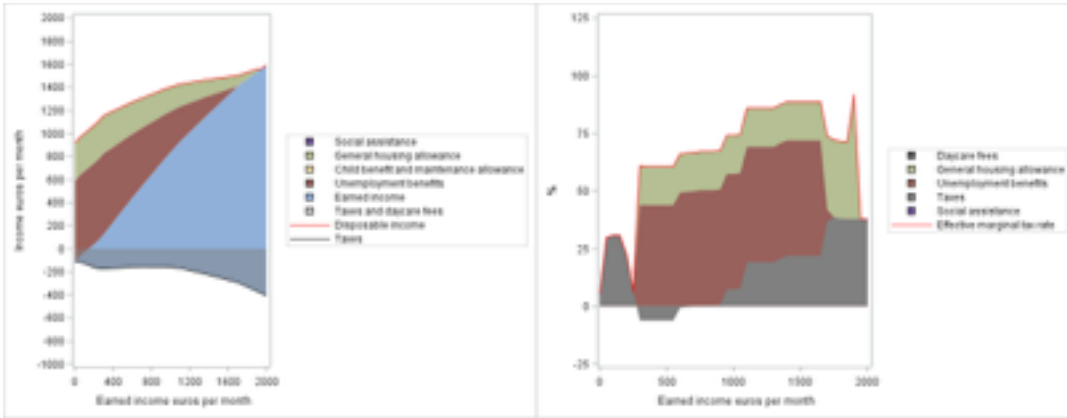
The example presented above is not based on any social insurance based benefits. The situation changes slightly when we examine the increase in hours worked or employment on the basis of adjusted basic unemployment allowance. In this case, too, we will use an individual living alone as the example. Both under the current model and with both basic income models discussed above, there is a steady rise in income but effective marginal tax rates are high. Under the current model, the marginal tax rate is between 80 and 90 per cent when the earned income is between 600 and 1,750 euros. The basic income models would produce similar tax levels. The difference is that under the current model, the tax is lower when the income is very low. The same is shown in Table 9: When the income increases from 0 to 500 euros, the participation tax rate is lower (34.5%) under the current model than under basic income models (50.2 and 63.9%). When an individual moves from a situation with no income or from part-time work (with income of 1,000 euros) to full-time employment (with income of 2,000 euros), the marginal tax rates of the basic income models are lower than under the current model (69.3% versus 60.8% and 66.2% and 82.2% versus 58.0% and 58.3%).

As shown above, basic income models have high flat tax rates if the basic income is solely financed by means of a flat tax. This will raise both the effective marginal tax rates and participation tax rates and the basic income would not mean any marked improvement on the current model. In fact, the high flat tax rate is the reason why in some cases the effective marginal tax rates and participation tax rates are higher than under the current model. The situation changes substantially if the basic

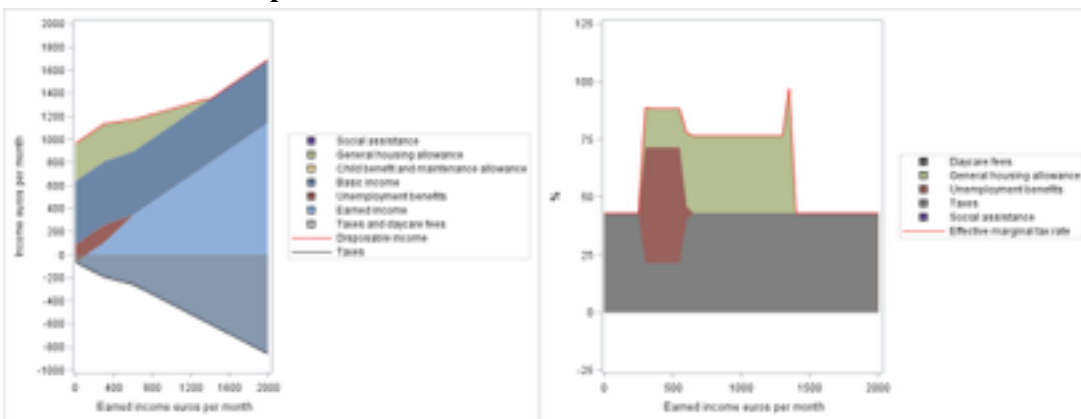
income is incorporated into a progressive taxation framework resembling the current tax model. In fact, the situation seems to be that in the experiment the current tax model would be applied to the basic income and the earned income coming on top of it. For this reason the tax rates applied in this situation should also be examined (Figure 7). The basic income is examined as tax-exempt income. Other income would be taxed in accordance with the current system but the basic deduction in municipal taxation, as well as earned income and work income deductions (in state and municipal taxation) would not be considered. In the second case, basic income would also be taxed in accordance with the current tax system (Table 9, **Appendix Tables 32 - 33 and Appendix Figures 79 - 90**).

**Figure 7.** Composition of income and effective marginal tax rate for unemployed person living alone (adjusted basic unemployment allowance). Current legislation, basic income 550 and 750 € per month with flat tax rate (simple model).

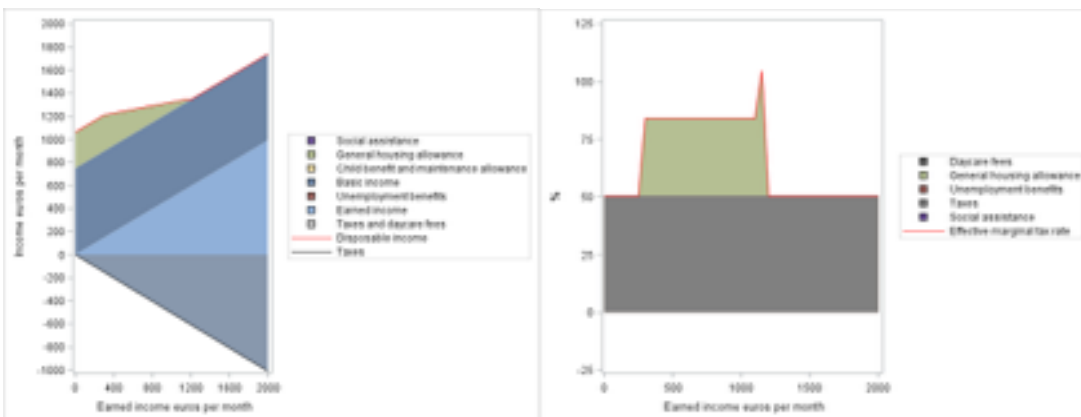
**Current legislation.**



**Basic income 550 € per month.**

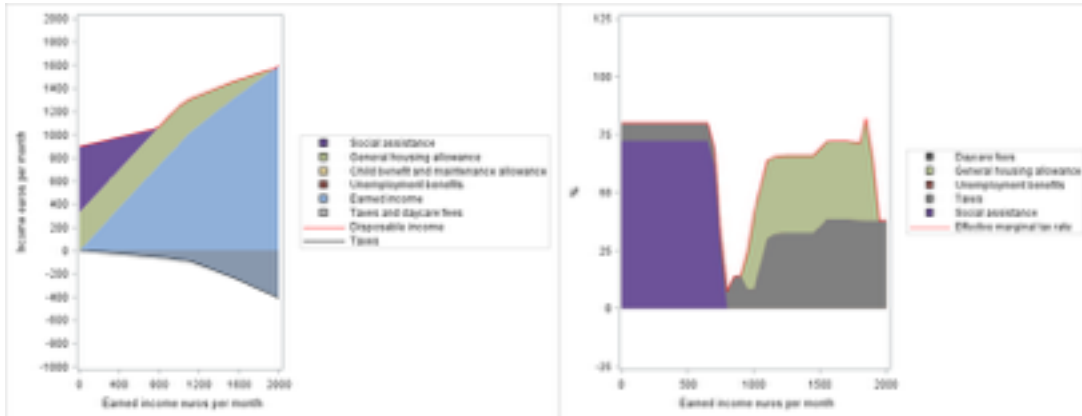


**Basic income 750 € per month.**

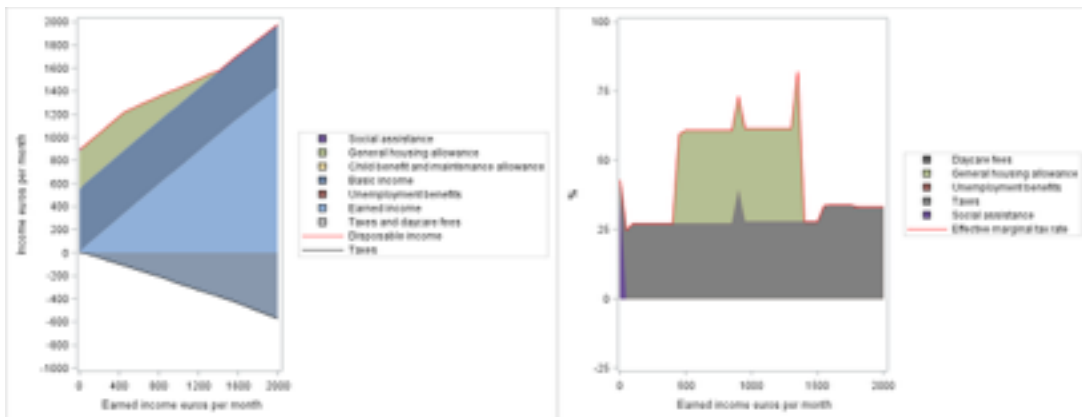


**Figure 8.** Composition of income and effective marginal tax rate for employed person living alone (salary 0-2000 € per month). Current legislation, basic income 550 and 750 € per month with current income taxation.

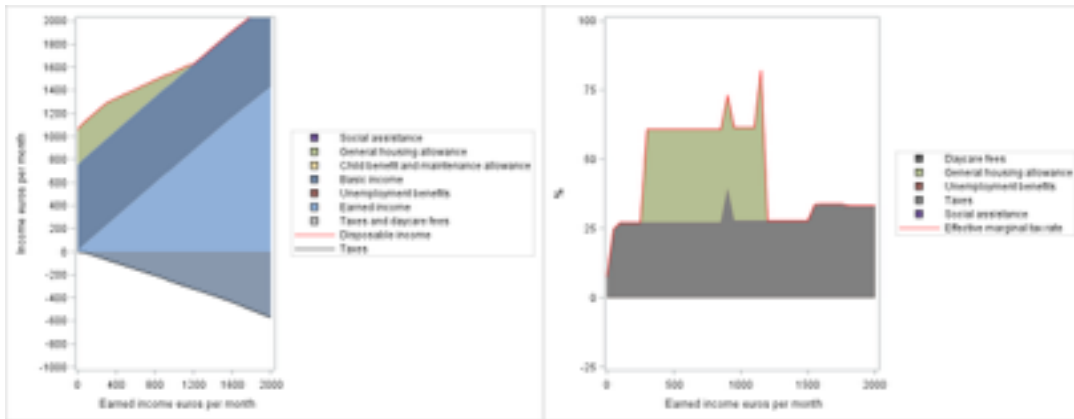
### Current legislation.



### Basic income 550 € per month.



### Basic income 750 € per month.



Comparing Figure 8 with the descriptions of a corresponding case under the current model or basic income models based of flat tax rates shows the central role of taxation in the matter. As a rule, all examinations of basis income models in the current taxation framework will produce lower marginal and participation tax rates than the current system. Changing basic income into taxable income would naturally mean higher tax rates but the participation tax rates would nevertheless remain lower than under the current model (Table 9). Other cases are described in **appendix tables and figures**. When incorporated into the current tax system, a tax-exempt basic income of 550 euros would generate a budget deficit of about 11 billion euros. The budget deficit resulting from taxable basic income would be about nine billion euros.

**Table 9.** Participation tax rates of a wage earner living alone, current model and basic income of 550 and 750 euros/month.

Change in wages	Current legislation	Basic income 550 euros/month and tax model		Basic income 750 euros/month and tax model	
		Flat tax	Current, tax-exempt	Flat tax	Current, tax-exempt
No social insurance based benefits but eligibility for housing allowance and social assistance					
0 > 500 euros	80.0	50.2	31.8	63.9	38.5
0 > 1,000 euros	65.1	63.6	47.0	74.0	50.3
0 > 2,000 euros	65.2	60.8	45.9	66.2	44.2
1,000 > 2,000 euros	65.3	58.0	44.9	58.3	38.2
Adjusted basic allowance and eligibility for housing allowance and social assistance					
0 > 500 euros	36.9	50.2	47.5	63.9	38.5
0 > 1,000 euros	51.7	63.6	57.2	74.0	50.3
0 > 2,000 euros	66.3	60.8	51.1	66.2	44.2
1,000 > 2,000 euros	80.9	58.0	44.9	58.3	38.2

“Current” is calculated using the SISU model on the basis of the 2016 legislation and “flax tax” is calculated using the JUTTA model on the basis of the 2016 legislation.

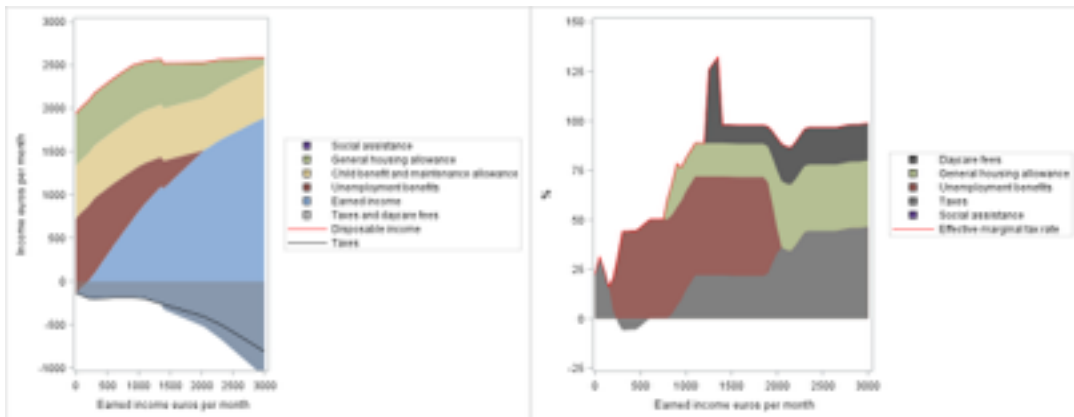
### **6.3.3. Single parent: current model and basic income of 550 and 750 euros**

Above we have examined individuals living alone who account for a majority of all Finnish households. Individuals living alone are “easy” cases from the perspective of modelling the basic income: No consideration needs to be given to the supplements paid to families with children under the Finnish social security system. When different types of family and incentive factors are examined, a common conclusion is that single parents are worst affected by disincentives. They are greatly dependent on means-tested benefits and these benefits also vary in accordance with the number of children. Unemployment allowances have child supplements. Housing allowance and housing costs increase as the number of children increases. Social assistance also depends on the number of children and single parents are eligible for higher basic amounts of social assistance. Even though the number of children has little effect on taxation, the child deduction, introduced on a temporary basis in 2015, will increase marginal tax rates in certain income brackets. As a result, paid work is less attractive to single parents than to people living alone that are otherwise in the same position or it only becomes attractive at higher pay levels. If the children are in daycare age, the problem is made worse by earnings-related daycare fees (Kotamäki and Kärkkäinen 2015; Viitamäki 2015). There is, however, one factor in the income composition of families with children that does not involve any incentive problems: child benefits. They do not depend on work income or other income. The same applies to child maintenance allowance paid to single parents. If child benefits were made earnings-related (means-tested), as is occasionally suggested, this advantage would be lost. Taxation of child benefits would, at least partially, have the same effect. It might also lead to a situation where all families with children would have to pay higher marginal tax rates on work income, which in turn might make work less attractive.

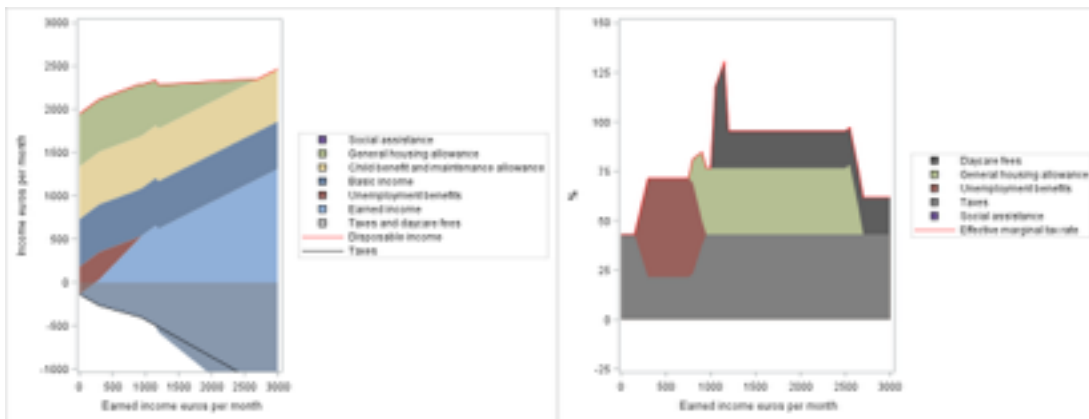
As regards single parents, consideration should be given to the different types of supplements paid for children and any single parent supplements. In this section the focus is on the situation of single parents under the current model and under the two basic income models used as examples. In Figure 9, the starting point is a single parent with two children who lives in the municipal category 3 and who is eligible for adjusted basic allowance.

**Figure 9.** Composition of income and effective marginal tax rate for unemployed single parent (adjusted basic unemployment allowance, two children in daycare). Current legislation, basic income 550 and 750 € per month with flat tax rate (simple model).

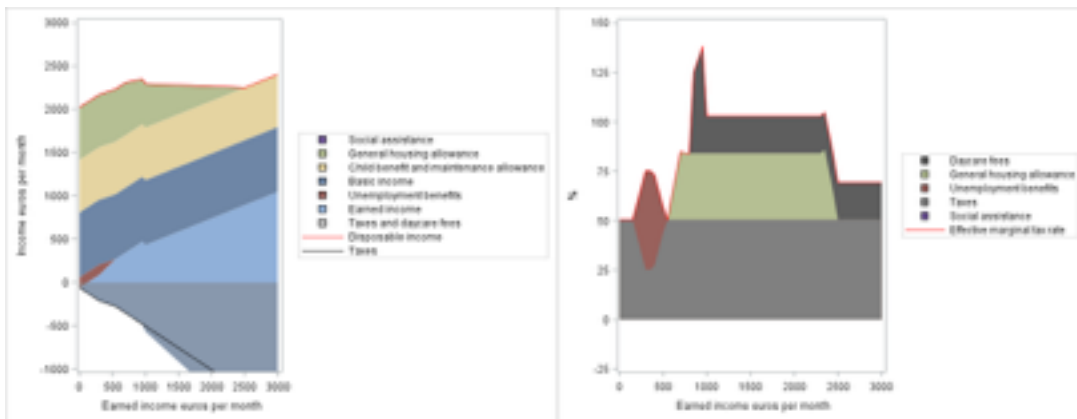
### Current legislation.



### Basic income 550 € per month.



### Basic income 750 € per month.



---

The situation of the single parent shows that both under the current model or, in this case, hypothetical basic income models, there are many reasons why effective marginal tax rates remain fairly high. Admittedly, the basic income option is more logical as it involves a smaller number of sudden changes in tax rates.



**Table 10.** Composition of participation tax rate of a single parent who is unemployed/becoming employed (adjusted basic allowance, eligibility for housing allowance and social assistance, daycare fees considered), work income of 0 - 2,000 euros/month, current model and basic income of 550 and 750 euros (basic income with flat tax and current tax model in which basic income is tax-exempt).

Change in wages	Current legislation	Basic income 550 euros/month and tax model		Basic income 750 euros/month and tax model	
		Flat tax	Current	Flat tax	Current
0 > 500 euros	29.3	54.4	28.8	60.4	27.7
0 > 1,000 euros	42.0	64.7	43.7	72.8	36.6
0 > 2,000 euros	70.3	81.2	64.6	87.8	59.9
0 > 3,000	78.4	82.7	71.2	87.3	65.8
1,000 > 2,000	98.7	97.8	85.6	102.9	83.1
2,000 > 3,000	94.6	85.6	84.5	86.4	77.8

The marginal and participation tax rates of an unemployed single parent in a situation where the individual concerned is eligible for earnings-related (adjusted) unemployment allowance are examined in **Appendix Figures 27-33**. In that case, all effective marginal tax rates are very high up to work income of 2,500 euros and they are in the region of 100 per cent. This is particularly the case if the effects of the daycare fees are considered. This applies to the current social security system and basic income. The effective tax rates of single parents (and other cases discussed in this report) are increased still further if it is assumed that the rents are higher than the rents used as a basis for housing allowance, which may be compensated with social assistance (see for example Honkanen & Kangas 2016).

The effective marginal tax rate is highest in the basic income of 750 euros and a flat tax rate of 50.6 per cent. The same applies to participation tax rates. The participation tax rates of individuals that have moved from earnings-related unemployment security to employment are examined in **Appendix Table 23**. When the monthly income increases from 0 to 2,000 euros, the tax rates under the current model are lower than under the simulated basic income models. At the same time, the increase in income from 1,000 euros upwards leads to a situation where the participation tax rates under the basic income models are lower than under the current model.

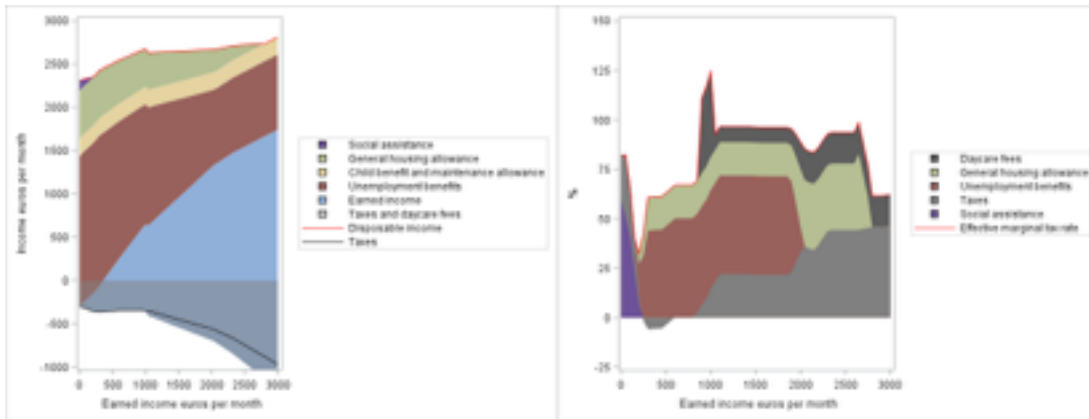
From the perspective of the basic income, the situation looks significantly better if the financing is based on the current tax system, instead of relying on budget-neutral flat tax, so that the basic income is tax-exempt or taxable. Table 10 and **Appendix Tables 33 and 34** illustrate the situation when the individual concerned is moving from receiving basic daily allowance to employment. It should be noted, however, that the situation is artificial in the sense that the design is not budget neutral. Nevertheless, it gives some idea of the incentive structures in a situation where the experiment would be carried out.

#### **6.3.4. Two-adult households**

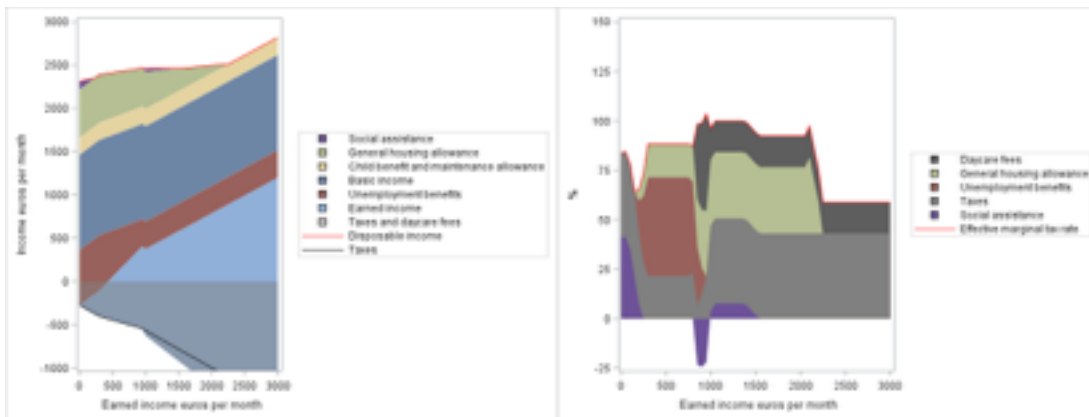
In the following section we take a brief look at the situation of a household of two adults and two daycare-aged children under the current model and under the hypothetical basic income models. We will first examine a household where both adults are unemployed, receive labour market subsidy and one of the adults is becoming employed, while the other one will continue to rely on labour market subsidy. After that we will examine a household where one of the spouses is working on a low salary (1,200 euros/month) and the spouse receiving labour market subsidy is becoming employed. In both cases, consideration has been given to the effects of the daycare fees on effective marginal tax rates and participation tax rates.

**Figure 10.** Composition of income and effective marginal tax rate for two unemployed adults (adjusted labour market subsidy, two children in daycare). Current legislation, basic income 550 and 750 € per month with flat tax rate (simple model).

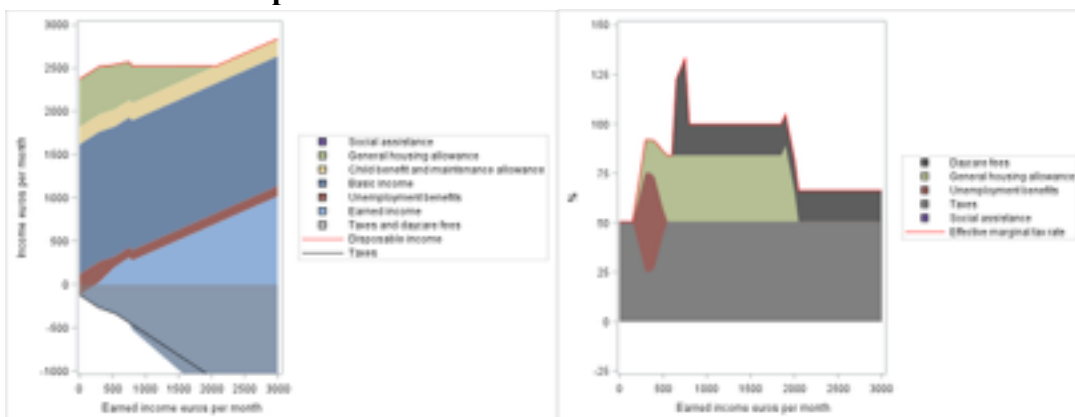
### Current legislation.



### Basic income 550 € per month.



### Basic income 750 € per month.



Effective marginal tax rates are very high in all options shown in Figure 10. Under the current model, there is little increase in disposable income even if the gross income increased from about 1,000

euros to about 2,500 euros. In both basic income models the corresponding bracket is between about 500 euros and about 2,000 euros. Basic income would not be an automatic solution in this respect. The same conclusion can be made from **Appendix Table 24**, according to which basic income participation tax rates in the lower income levels are higher than under the current model. When the income increases from 1,000 euros to 2,000 euros there are no essential differences between the models. However, in the income bracket 2,000 - 3,000 euros, the participation tax rates of the basic income models are slightly lower than under the current model. The situation remains essentially the same when we look at a household where one of the spouses receives labour market subsidy and the other one is in employment, earning a monthly salary of 1,200 euros.

### 6.3.5. Assessing partial basic income

As shown by the examples above and the examples described in the appendices, replacing the housing allowance system with basic income is particularly difficult because there are substantial regional differences in housing costs and the housing costs are often high, especially in the greater Helsinki area. It would thus seem that an overhaul of the housing allowance scheme is inevitable if the purpose of partial basic income is to eliminate a large number of disincentives.

It would be possible to alleviate the incentive problems associated with housing allowance in the basic income experiment by introducing a fixed housing grant tied to the housing costs of the place of residence and which would increase as the size of the family increases. In that case, the housing grant would be considered to be part of basic income. However, in order to ensure that the incentives of the housing allowance could be examined in more detail, the housing grant should only be introduced for a certain proportion of the households. The model resembles the housing component included in the general security model presented by the Social Democratic Youth. In this scheme the benefit would be defined in relation to the average rent/square meter payable in the municipality, while the household size would define the size of the dwelling eligible for the allowance. Up-to-date information would always be collected from the income register.

Similar improvements to the housing allowance model are also proposed by the British-based Royal Society of Arts (RSA) in its basic income report (Painter & Thoung 2015, 33–35). According to the report, basic rental income would not be income-related and it would be paid to all people living in rental flats. The level of the basic rental income would be market-based, which can be interpreted to mean that it would be based on average rents charged per square metre. As the basic rental income would increase costs, RSA proposes that the individuals that have benefited most from the housing stock should also pay taxes on the additional income. In fact, RSA proposes that funding could be augmented by introducing a tax on land (land value tax).

Other options presented by RSA in its report include transferring of the housing budgets to local level, which is believed to increase the supply of lower-cost housing and ensure the right level of allowances at suburb-level.

Replacing child home care allowance with basic income also raises the question of gender equality. Already the current child home care allowance scheme is considered to have a negative effect on women's labour market position (see for example Sipilä 2012, 202 - 204). As in most basic income models, the basic income would be higher than the current child home care allowance this could persuade more women to stay home. As some of the other forms of benefit would also be retained under partial basic income, it would not lead to the elimination of all bureaucratic traps. As regards the payment of earnings-related unemployment security, it should be examined how the payment traffic between unemployment funds and Kela would function. As stated before, partial basic income would replace the basic allowance paid as part of the earnings-related unemployment security.

Partial basic income can be criticised for not substantially changing the current system: The incentive problems arising from housing allowance would remain, the level might be too low, especially for single parents and there would still be a great deal of bureaucracy even if the benefits were harmonised. The combination of the basic social security benefits would have the advantage of reducing the delays arising from moving from one benefit to another and it would also mean fewer gaps and uncertainties connected with the coordination between work and social security. Likewise, different benefit schemes require different payment platforms, administrative systems and benefit processors. The basic income or the combination and harmonisation of the basic social security benefits would have an effect on all of them. For example, Kela spends a total of about 370 person-years on the housing allowance that it administers (of this, general housing allowance accounts for about 260 person-years and the pensioners' housing allowance for about 110 person-years), about 120 person-years on student financial aid, about 310 person-years on labour market subsidy and basic unemployment allowance and about 200 person-years on sickness allowance. The combination and harmonisation of the schemes would also bring more administrative cost-effectiveness even though the improvements (measured in euros and the number of employees) would not be as substantial as is often claimed in the public debate.

## 6.4. Negative income tax

The negative income tax, which was first proposed by American economists in the 1960s, is a social security and tax scheme based on an income compensation by means of taxation when an individual's income remains below the agreed minimum level. Osmo Soininvaara has been the most visible proponent of negative income tax in Finland (1994) but in its assessment of a basic income experiment (Forss & Kanninen 2014), the think tank Tänk also proposed that the negative income tax should be used as the basic income model in a field experiment. Negative income tax was also mentioned as an option in the work reform programme of the Centre Party in 1998.

In terms of its definition, negative income tax is not identical with basic income but it can have similar end results. Both models aim to guarantee minimum income and provide more incentives for work. Thus, an experiment with partial basic income would also provide information about the incentive effects of negative income tax. The fact that negative income tax would divide people more clearly into those who benefit from the model and those who finance it has been seen as the most

important difference between the two (see for example Kopra 2007, 17) At the same time, a similar division is also part of the current social security system.

The latest proposal concerning the coordination of social security and earned income by means of a negative income tax model has been presented by the Social Democratic Youth. Its general security model is based on the national income register which is under preparation by the Ministry of Finance and the Finnish Tax Administration for introduction in 2019. (The initiative of the Social Democratic Youth could also be presented under the heading “Other basic income models”). The national income register would allow real-time monitoring of the income and in this way a more flexible coordination of earned income and social security. The general security model proposed by the Social Democratic Youth would have three tiers: Guaranteed income would cover 80 per cent (520 euros/month) of the minimum reference budget defined by the Consumer Society Research Centre, general income 100 per cent (675 euros/month) and active income 125 per cent (812.5 euros/month).

The general security model would combine the basic amount of social assistance, minimum social security benefits, student income, child home care allowance, housing subsidies and the tax deductions for low-income households. On top of the general security, households would also be eligible for earnings-related parental, sickness and unemployment allowances and the earnings-related component of adult education.

The guaranteed income would be paid on a means-tested basis using data obtained from the income register if the income was less than 80 per cent of the minimum reference budget of the Consumer Society Research Centre. The general income would be social insurance based. In other words, it would be paid on the basis of unemployment, birth of a child, illness, studying, disability and child home care and the payment would be automatic or on the basis of notification. However, the recipients of general income would be obliged to actively seek work. In order to be eligible for active income, an individual should take part in services promoting employment. However, an active approach would have a wider meaning than now. Social workers would still be able to decide on the discretionary components of social assistance. The income would be reduced by 60 per cent compared with the growth in net work income.

When an individual has been a general security recipient for three months their service requirements would be examined and an employment plan would be prepared for them. Refusing the services without an acceptable reason would lead to a stricter obligation to accept work. After the individual concerned has become employed, general security payments would continue for an additional month and they could also be used as pay subsidy or start-up grants. Students, parents staying at home, individuals affected by illnesses and disabled would fall within the scope of general income. Entrepreneurs, grant recipients and other recipients of irregular income would also be eligible for general security.

Even though the general security model would retain some of the means-tested components of the current social security and the option of sanctions, the Social Democratic Youth is of the view that the general security model would address the same problems as the basic income models. In the or-

ganisation's opinion, it would combine the best parts of the current social security, basic income models and the Universal Credit model introduced in Britain. The Social Democratic Youth would finance the model by adopting a single-rate VAT, by reducing the number of tax deductions and by simplifying taxation through higher real estate taxes and capital taxation.

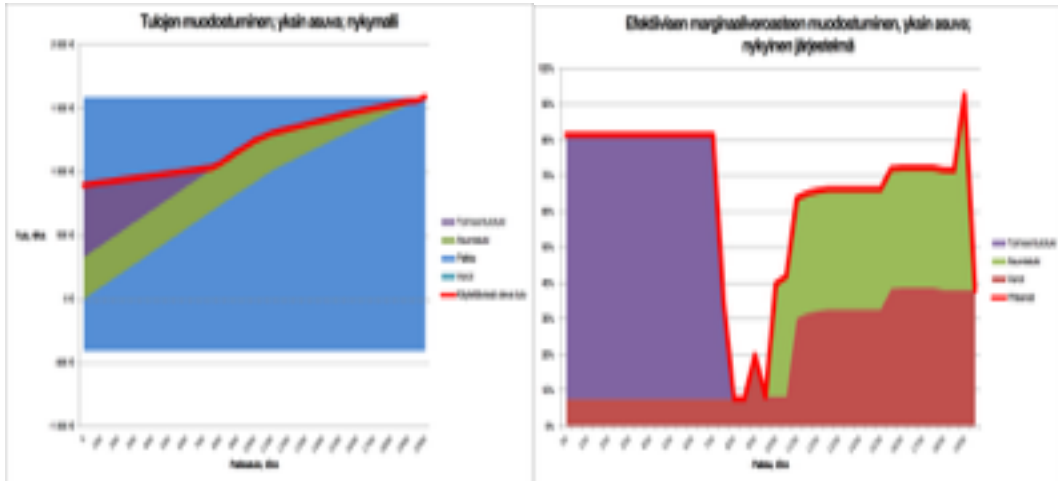
#### **6.4.1. Negative income tax in microsimulations**

The effects of negative income tax were simulated at 550 and 750 euros. The composition of the effective marginal taxation of a negative income tax of 550 euros is compared with the current social security system in Figure 11. The comparison is from the perspective of a wage earner living alone who does not receive any social insurance based benefits but is eligible for housing allowance or social assistance and whose earned income increases from 0 to 2,000 euros/month. This calculation, too, is based on municipal category 3 and the calculated rent is in accordance with the rents used as a basis for housing allowance. Thus, the calculations are subject to the same limitations and reservations that apply to the modellings of partial and full basic income presented above. A comparison with the current model and partial basic income options gives some idea of possible differences and similarities between the models.

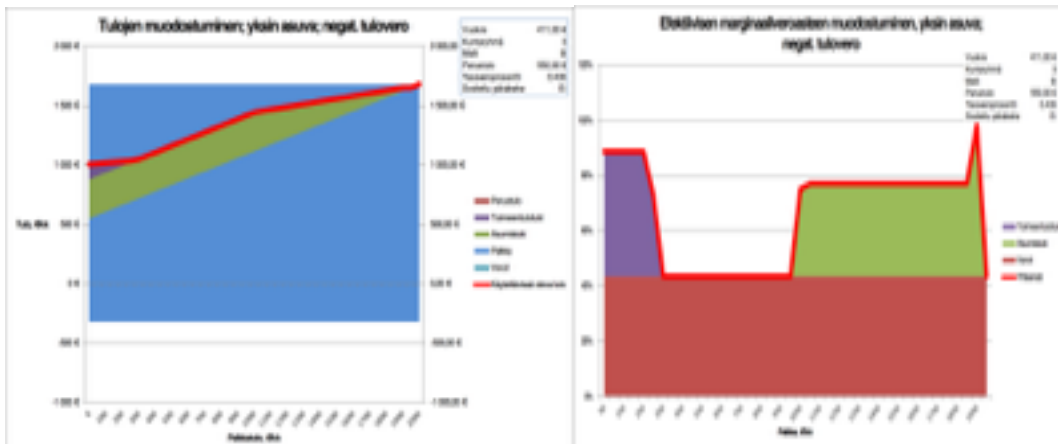
There are few differences in the profiles of the effective marginal tax rates between the negative income tax of 550 euros and the current social policy and tax system. However, social assistance plays a more important role in the current system. Social assistance is also paid under the negative income tax model, but it is limited to a narrower income bracket. On a higher level of negative income tax (in this figure, at 750 euros), the client no longer has any need for social assistance and the need mainly applies to supplementary and preventive social assistance.

**Figure 11.** Composition of income and effective marginal tax rate of a wage earner living alone, current model and negative income tax of 550 euros, work income of 0 - 2,000 euros/month, rent €411 a month.

### Current model

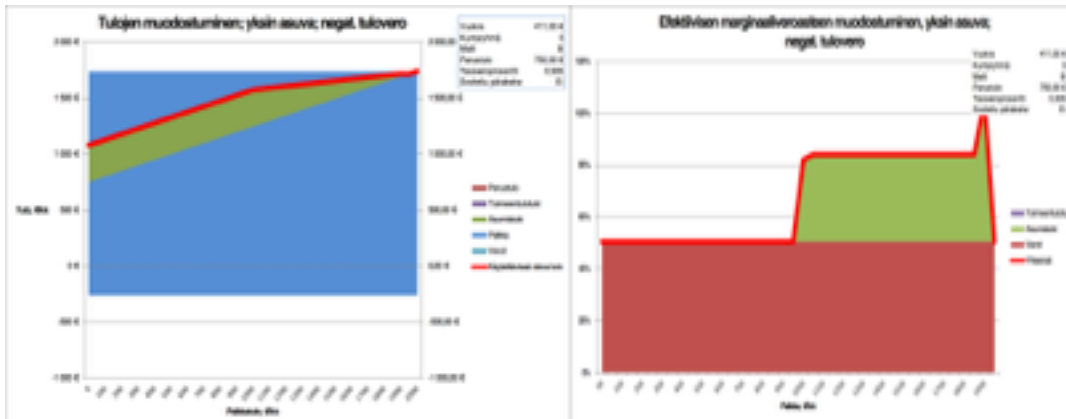


### Negative income tax 550 euros/month



### Negative income tax 750 euros/month





Headings: 'Tulot' = income; 'Tulojen muodostuminen; yksin asuva; negat. tulovero' = negative income tax; 'Perustulo' = Basic income; 'Toimeentulotuki' = Social assistance; 'Asumistuki' = Housing allowance; 'Palkka' = work income; 'Verot' = Taxes paid; 'Tasaveroprosentti' = Flat rate tax (%); 'Käytettävissä oleva tulo' = Disposable income; 'Yhteensä' = Total.

Examination of participation tax rates (Table 11) shows that the results are affected by the level of income and the income group in which the accepted job is located. As the income increases from 0 to 500 euros, all variations of negative income tax and basic income produce tax rates that are lower than under the current model. Negative income tax produces the highest tax rates when the income increases from 1,000 to 2,000 euros. In the basic income model, the group in question has lower tax rates.

**Table 11.** Participation tax rates of wage earner living alone (no social insurance based benefits), current model, negative income tax and basic income of 550 and 750 euros/month.

Change in income	Current legislation	Negative income tax 550 euros/month	Negative income tax 750 euros/month	Basic income 550 euros/month	Basic income 750 euros/month
0 > 500 euros	82.4%	69.0%	50.5%	50.2%	63.9%
0 > 1,000 euros	68.0%	56.3%	50.5%	63.6%	74.0%
0 > 2,000 euros	65.5%	66.3%	66.9%	60.8%	66.2%
1,000 > 2,000 euros	63.1%	76.4%	83.4%	58.0%	58.2%

#### 6.4.2. Assessing negative income tax

Between 1968 and 1980 a total of four negative income tax field experiments were carried out in the United States and one in Canada and in all of them the results were reported personally by the participants. If the experiment required personal income reporting, the field experiment with negative income tax would be much more difficult to carry out in a scientifically credible manner than a basic income experiment. In the United States, the suspicion was that work income was underreported, which would naturally lead to biased results. A negative income model would require an up-to-date income register, which does not currently exist.

When interviewed about the model, employment actors gave sharply differing views about the model. A model based on an income register was, however, viewed as safe, fair and incentive-based

in addition to which it was also considered to reduce bureaucracy. The model was also considered to be the best way to influence one's one income through work. The fact that the model could also be complex and difficult to understand, that the income register might not function properly and in real time and that the model could even generate new traps were seen as problems. It was also considered essential that the income register is in real time and contains the periodic data on salaries, wages and other income (in other words, the periods in which the income is earned). Lack of periodic data would make the payment of real-time negative income tax more difficult.

Like other basic income models, the negative income tax aims to reduce the number of disincentives by facilitating the coordination of different types of income. For this reason basic income experiments can at least give rough estimates of the feasibility of negative income tax.

## 6.5. Budgetary and income distribution effects of partial basic income and negative income tax

It is clear that basic income expenditure depends on the size of the basic income paid to each individual. Paying a basic income of 450 euros to all adults (excl. pensioners) would mean annual expenditure of about 16 billion euros. If a model with basic income of 550, 650 and 750 euros were to be adopted, the expenditure would be about 19, 23 and 26 billion euros, respectively (**Appendix Table 1**). The flat tax rates covering this expenditure would be 39.5, 43.5, 48.0 and 52.5 per cent, respectively. Based on data-based simulations it is possible to assess the effects of the basic income on different current transfer items. In the examined models, the amount corresponding to the basic income is deducted from the social insurance based benefits received by the individual, which means that the total sums of these benefits are also reduced. For example under a basic income model of 550 euros, the unemployment allowances paid by the state would decrease from 3.9 billion to 1.5 billion euros and the allowances paid under the Sickness Insurance Act from 1.4 billion to 0.9 billion euros. Under a basic income of 550 euros, social assistance expenditure would decrease from about 590 million to about 240 million euros and under a basic income of 750 euros, to about 90 million euros. Disability benefits, child benefits, child maintenance allowance, students' housing supplement and the pension benefits paid by Kela would remain unchanged as there are no changes directed at them in the calculations. The total sum paid as child home care allowance would decline from 420 million to 70 million euros and practically the only study grants left would be those paid to recipients under the age of 18.

The most important and politically perhaps the most controversial issue is how the distribution of income will change, who are the winners and who are the losers. According to the microsimulation a basic income of 550 euros would not have any significant effects on income distribution. Higher levels of basic income naturally help to even out income differences. On the one hand, a higher tax-exempt basic income would increase purchasing power among low-income earners, while on the other hand, a higher marginal tax rate would reduce disposable income among the highest-income groups. At basic income of 550 and 750 euros, the Gini coefficient measuring income equality (see

above) would decline from the current value of 26.4 to 26.1 and 24.2, respectively (at population level). A negative income tax of 500 euros would reduce the Gini index more than a basic income of 500 euros (Gini = 25.7). At basic income of 550 euros, there would be a slight increase in child poverty (from 13.2% to 14.0%), but it would decrease to 12.8 per cent at a negative income tax of the same level. A basic income of 750 euros would also reduce child poverty (11.7%). These levels of basic income would also lead to an increase in poverty among the elderly. This was also the case with the full basic income modelling and for the same reason.

It goes without saying that there are winners and losers in the basic income system. For example, in a basic income of 550 euros, students and wage earners would be the winners. This estimate is based on the percentages of the different groups. The fact that students would be the winners under this model is not surprising: Basic income would increase their disposable income because it is higher than the study grant. At the same time, for wage earners, basic income would be a new type of income, which is not totally eliminated by flat tax in all cases. Surprisingly enough, the unemployed would be the biggest losers. For them, basic income would partially replace existing income and the taxation on the remaining unemployment security benefits (such as various supplements) would be higher than under the current system.

## 6.6. Other basic income models

The Prime Minister's Office also urged the working group to examine other options for experimenting basic income. We have already described options in which different elements of basic income and negative income tax are combined with participatory/conditional social security (as in the general security model proposed by the Social Democratic Youth). Basic income can also include a obligatory component so that obligations are imposed on certain groups (for example training obligation for young people) as conditions for the benefit. Alternatively, the basic income could be universal and unconditional but an individual could augment it by taking part in certain activities considered to be important from the perspective of society at large. Such forms of participatory social security have been discussed in Finland (Ministry of Social Affairs and Health 2015) and in other countries. For example, in 2014 Denmark introduced the nyttejob (useful work) scheme, which is obligatory for recipients of social assistance and unemployment security benefits<sup>8</sup>.

There has also been debate in Finland on other ways of reforming the existing social security and on making it more incentive-based and better suited to changes in society. The basic account model proposed by the Libera think tank is one such scheme. Schemes based on the same idea have been introduced in a number of countries. Britain is in the process of overhauling its social security system by combining six previously separate social security or tax deduction schemes. The aim is to have a unified system that is more incentive-based and easier to understand and in which the basic social security benefits would decrease by the same percentage as work income increases. The purpose is to prevent illogical changes in effective marginal tax rates.

---

<sup>8</sup> <http://www.boernogunge.dk/internet/boernogunge.nsf/0/126DAF939F007F70C1257DDD003C9558?opendocument>

As is shown by the calculations and figures above, housing allowance substantially increases effective marginal tax rates. Even though the housing allowance scheme has been streamlined it still contains disincentives. Overhauling the housing allowance scheme is technically challenging and politically extremely difficult because there are many potential losers. Changes that might be incorporated in the housing allowance scheme as part of the basic income experiment are tentatively discussed below. The aim is to obtain information about the potential incentive effects of the allowance scheme.

Some of these models are such that they cannot be considered as pure forms of basic income. Some of them are very difficult to subject to microsimulation calculations, some of them can be assessed with the simulations carried out in connection with other models and for some of them new calculations have been made. All options can be supplemented and assessed in more detail in follow-up studies. Below is a brief preliminary description for follow-up analyses.

### **6.6.1. Participation income/participatory social security**

In addition to the unconditional models there have also been a number of proposals for basic income that would include a participation obligation. This debate has centred around the participation income even though the obligation to do community work has also occasionally been included in the concept of citizen's salary (Andersson 1989, 1993, 1998). The main principle in these proposals is that individuals could gain the right to basic income by being active.

According to Anthony Atkinson, Professor at London School of Economics and the best-known developer of participation income, people in employment, job seekers, disabled and individuals involved in the work of care and non-governmental organisations would be eligible for participation income. In fact, the central issue in participation income is which types of activity would be interpreted as participation. This means that the introduction of the participation income would require a political debate about the conditions for the participation.

The debate on participatory social security can be considered to have similarities with the participation income thinking. In its final report, the working group examining participatory social security (Ministry of Social Affairs and Health 2015, 47-50) specifically proposed that individuals should be rewarded for an active approach instead of facing incentives based on top-down sanctions. In the view of the working group, the social security should also in the future be based on ensuring livelihood of individuals, which in itself would allow people to be active and possess functional capacity. Ensuring adequate resources for employment and business services, promoting self-motivation and low threshold services were also deemed important. The current system of preventive social assistance was also interpreted as participatory social security.

If the existing activation measures were developed so that unemployed individuals could be able to determine more freely which services best support their employment and participatory opportunities, the inclusive (participatory) character of social security might increase. If the measures defined

in cooperation with the client in this manner could make the recipient eligible for additional income, social security could be considered to increase the level of participation if it could lift individuals out of the problematic situation. In its general security model, the Social Democratic Youth proposed that the concept of active approach should be broadened and such activities as self-motivated studies should be permitted in all circumstances. In other words, the view of the Social Democratic Youth is that there should be more trust in peoples' capacity to take employment-promoting decisions.

Participation income is often understood as a combination of unconditional minimum income and participation supplement paid on top of it. Participation supplement linked with active approach could strengthen the sense of participation and decrease the risk of exclusion. However, at the same time it could also reduce participation in the open labour market as people could argue that they can also take part in the activities benefiting society at large outside the labour market.

The self-motivated nature of the services connected with the current social security system could of course be strengthened by simply making the participation voluntary in all situations. Even though this could lead to a lower level of participation, the individuals to be activated would probably be more motivated and there would be more resources available for helping them.

In the current system, voluntary work can be interpreted as work, which may even lead to the loss of the unemployment security. An arrangement such as the participation income would eliminate this problem and it would also make it easier for unemployed individuals to become established in society. In fact, third-sector employment actors interviewed for this report were particularly favourably disposed towards participation income. Their view was that, in addition to clarifying the status of voluntary work, it would also provide rewards for useful work, provide incentives for participation, benefit society and associations, provide meaningful occupation, improve the operating prerequisites of the association sector and provide people with more choices in their lives.

The threat of technological unemployment resulting from technological advances has reignited the debate on whether there should be a wider concept of work. In fact, in the debate of technological transition, basic income is often presented as participation income that also provides a basis for participation in production taking place outside paid work. If technological unemployment increases, it might be necessary to provide more support for work carried out in civil society.

According to Jurgen de Wispelaere (2016, 65-67), the extensive administrative structures required by participation income are its weakness. In fact, when the feasibility of the model selected for the experiment is assessed, consideration should also be given to the administrative resources required by the model. Especially the development of new forms of participation for field experiments would be challenging and for this reason, only existing activating labour market policy measures could probably be accepted as participation. At the same time, it has also been proposed (see for example Keskitalo 2013, 60-61) that already the appropriate implementation of existing activation measures would require more personnel resources. In the Dutch city of Utrecht, the main purpose of basic income is to provide an alternative to conditional activation because the view is that maintaining

work obligation by administrative means requires excessive resources and is expensive and inefficient in relation to the objectives set. For this reason, there are plans in the Netherlands to provide social assistance clients with an unconditional “trust grant” on a trial basis. The aim is to avoid difficult questions such as for what should the recipients be paid, what is the required level of participation, how much should be paid for different types of participation and who would oversee the process.

The employment actors interviewed for this report also pointed out that participation income would require administration, services tailored to each individual’s needs and resources for the parties managing the scheme. The interviewees also raised the question how the genuinely voluntary nature of the model could be ensured and they voiced the concern that participation income could replace paid work and that it might eliminate incentives to move to the open labour market. Services guiding individuals to work and training were also seen as an important component of the system.

Employment actors were of the view that at practical level, a weakness of the participation income is that it would be difficult to define how much socially important work should individuals do in return for a monetary compensation, how long the benefit would be paid and who would be responsible for such matters as occupational safety and health. Some of the interviewees were of the opinion that the expense allowance currently paid to participants in activating labour market measures (nine euros/day) would be enough as participation income.

Because of administrative problems, the participation income model would not be the most feasible option. Besides, by being partially conditional, it would not allow research on definition-based basic income. In order to ensure meaningful research on participation income in relation to the current system, it should also include unconditional elements. In practice, this would mean the option of refusing to take part in participatory measures without the risk of sanctions. This is the case in some of the Dutch experiments. Otherwise, there would be no essential differences to the current system.

### **6.6.2. Alternative models – Universal Credit/active welfare<sup>9</sup>**

There has been some interest in Finland in the Universal Credit scheme, which is being introduced in Britain. Christian Democrats have used the Universal Credit as a basis for their active welfare model, in which the aim is to eliminate disincentives by combining elements of basic social security and by changing the manner in which the level of social security is reduced as income increases. However, in the Universal Credit scheme, benefits are strongly means-tested and involve sanctions, which would make it impossible to test the incentive effects of definition-based basic income. The model would nevertheless provide one approach to examining other options for eliminating disincentives of the current social security.

The Universal Credit scheme has been developed so that working would always increase the net income of households, while the general benefits would gradually decrease. In fact, the level of the

---

<sup>9</sup> This section is based on microsimulations carried out by Tapio Räsänen.

benefit would depend on the income of the household, not of individuals. The publicly expressed aim of the scheme is to reduce poverty by providing more economic incentives for work and to make the beneficiaries and their families more independent. The benefit has been introduced gradually, starting in April 2013. The benefit is already available in 90 per cent of Britain's employment offices (364,000 beneficiaries on 22 February 2016) and the results reported by the British government seem positive. The view is that the beneficiaries find work more quickly and earn more than before. In January 2016, a total of 32 per cent of the beneficiaries were in employment.

The scheme combines six previous unemployment security and tax deduction benefits. The new benefit also incorporates housing allowances and child-related benefits. Guardians and individuals with disabilities are, however, eligible for supplements. The application process is fully digitalised. Beneficiaries that do not have any access to telecommunications must complete the electronic application in a local employment office (Jobcentre Plus) or in a library. After completing the electronic application, the beneficiary must take part in an interview in a Jobcentre Plus. In connection with the interview, the beneficiaries must also sign a commitment detailing their rights and obligations. The commitment also lays out sanctions that may remain in effect for up to three years.

The construction of the IT system for the scheme has been an expensive project and the final costs will probably be much higher than planned. Furthermore, the scheme has not functioned smoothly, which has resulted in delays in the payment of benefits. In addition to the problems affecting the IT system, the administrative costs of Universal Credit have also been increased by the need to keep old schemes operational during a period of transition. In fact, particular consideration must also be given to the functioning of the IT system in the basic income experiment.

Administration of the Universal Credit scheme falls under the purview of the British Department for Work and Pensions (DWB). The benefits are paid directly to beneficiaries' bank accounts but alternative payment methods are also available if the beneficiary does not have any bank account. The payment decisions are made by the employment offices.

Under the active welfare model, most of the social security benefits would be combined into a single-level general benefit, in addition to which higher means-tested benefits could also be paid to such groups as families with children. In the view of the Christian Democrats, combination of benefits and the introduction of an electronic system would eliminate some of the bureaucratic traps of the current social security. The model is based on an idea that as income increases, the benefits would be cut through the tax system (in the same way as in basic income) but marginal tax and participation tax rates would be lower. The aim is to ensure that low-income earners would have low tax rates.

Below are some of preliminary SISU-based microsimulations of a new benefit based on the Universal Credit model which combines a number of existing basic social security benefits. The new form of benefit would consist of a basic component and a housing component, which would depend on the family structure. The basic component would consist of a basic component paid to adults (729 euros + possible single parent supplement), the proportion of additional adults (343 euros), child

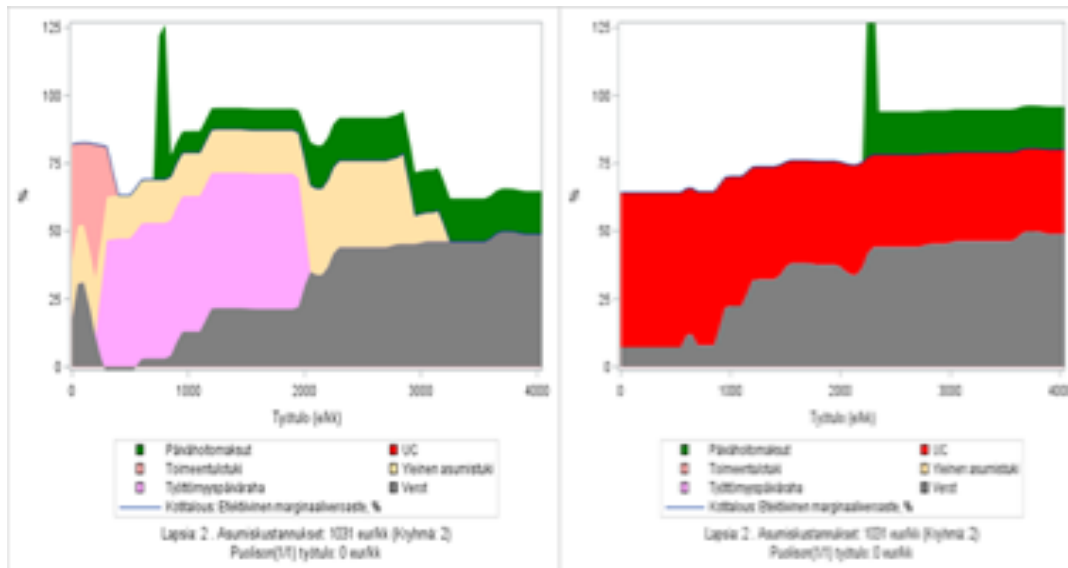
component (117 euros for one child and 109 euros for each additional child) and the housing component, which would be based on the rents used as a basis for general housing allowance without the basic deductible. The reduction rate is set at 62 per cent, which means that the general benefit would decrease by 62 cents for each euro in net work income. In the modelling below, housing costs are based on housing costs in municipality category 2 and the criteria for social assistance under the 2016 legislation used in the SISU model. The basic levels have been adjusted so that the general benefit would not significantly change the disposable income of basic households. In other words, the solution would be cost-neutral from the perspective of households.

The benefit would replace general housing allowance, social assistance and a maximum number of taxable benefits. In the early part of the modelling, the focus is on replacing the basic unemployment allowance, labour market subsidy, general housing allowance and social assistance with the general benefit. In the simulations, those eligible for general benefit would also remain eligible for social assistance so that it can be calculated how large a proportion of the beneficiaries would receive general benefit instead of social assistance. Some of the benefits are kept at their current levels in the modelling. Child benefits and child maintenance allowance are the benefits and current transfers that will be retained. Child benefits could also be eliminated and incorporated into the child component, in which case child benefits, too, would decrease by a common reduction rate. Child maintenance allowance could be changed into a benefit reducing the general benefit on a gross basis and the change could be compensated by increasing the single parent coefficient in the basic component. Tax rates would remain unchanged and the general benefit would be tax-exempt.

We start the definition of the basic level of the general benefit with the modelling of households with unemployed members. **The examination is based on the evaluation report on the sufficiency of basic social security in 2011–2015 (The table “Composition of income in households with unemployed members in four different types of family and four different levels of housing costs in 2015” on page 49).** Housing costs are based on housing costs in municipality category 2 used in the report and the criteria for social assistance under the 2016 legislation used in the SISU model. The basic levels have been adjusted so that the general benefit would not significantly change the disposable income of basic households. In other words, the solution would be cost-neutral from the perspective of households.



**Figure 12.** Composition of marginal tax rate in the current system (left-hand graph) and in general benefit (right-hand graph). Unemployed couple with two children, municipality grouping 2 and monthly housings costs of 1,031 euros (preliminary microsimulation results).



Headings: 'Työtulo' = Work income = 'Päivähoitomaksut' = Child care fees; UC = Universal Credit; Toimeentulotuki' = Social assistance; 'Yleinen asumistuki' = General housing allowance; 'Työttömyyspäiväraha' = Unemployment compensation; Efektiivinen marginaaliveroaste' = Effective marginal tax rate (%). 'Puolison työtulo 0 eur/kk' = spouse's work income= €0 a month

As show by the graphs, effective marginal tax rate under the current model is high, which was already shown above in the examination of the current model. In general benefit, the reduction in income is at more moderate levels and within the reduction percentage of 62 defined above up to a monthly income of about 1,000 euros. After that income limit, higher tax rates will push effective tax rate upwards. If the recipients of general benefit must pay higher daycare fees, the effective marginal tax rate would also be higher. The modellings should continue and made more precise. The above is only a brief description of the idea.

### 6.6.3. Options – basic account

Different types of account model have been proposed in Finland and other countries. (e.g. Lassila and Valkonen 1999). The Libertarian think tank Libera presented its own social security model based on personal accounts in 2013. Under the model, the state would provide an initial payment of 20,000 euros to an account linked with social security and if the balance falls below that level the account holder could only withdraw a certain amount each month. Otherwise the money kept in the account would be freely available. Only when the balance falls below the 20,000 euros or shrinks rapidly, could restrictions be imposed. When the balance drops below the initial level, the system would behave in the same manner as the basic income. In other words, the account holder would have access to a specific sum (in Libera's model 400 euros). In practice, the model would provide unconditional basic income.

The sum accumulated in the account would be freely available for investments, insurance, purchasing of services or employing other people in accordance with the principles governing the granting of the household deduction. Tax on work compensation paid from a basic account to an entrepreneur's basic account would only be paid once and the payment would take place when the entrepreneur withdraws the sum from their account. This would, however, only apply to self-employed persons. The income tax would only be paid when the money is withdrawn from the account. A total of ten per cent of the gross income (including employer's contributions) would be transferred to the account and it would also be possible to pay voluntary contributions to the account. However, no more than 50,000 euros could be transferred to the account each year.

All individuals in working age and with working capacity would get a basic account. At the moment, there are almost 2.3 million such people in Finland. At the moment, providing the working-age population with the initial payment would cost about 46,000,000,000 euros. Other social security benefits would be retained but the idea is that there would be less need for them than now. Basic account is founded on the idea that it would encourage people to save money and make decisions that boost employment. According to Libera, even though under the basic account scheme individuals themselves would become responsible for means-testing it would nevertheless be possible to control the spending of the money kept in the account. Supporters of basic account favour this scheme over basic income because basic account would not require tax increases, it would allow tax-exempt savings and job-creation, encourage capital formation and boost employment.

Thus, basic account would be a personal social security account from which the account holder could withdraw a limited amount of money each month. It could be characterised as a social security bank card with a withdrawal limit per unit of time. The logic is to act more in accordance with banking principles. If Kela were to be used as the payment platform, the problem would be that Kela pays the benefits as a lump sum or continuously on the basis of an application on which a decision has been made. If Kela made a decision to pay a specific sum to an account each month, the account holders would have to contact Kela on a monthly basis if they are doing a varying amount of short-time work each month. This would be a problematic model for Kela. If there was an up-to-date income register that is updated each month, Kela could automatise the payment process. Payments not relying on an income register would be difficult and work-intensive for all those concerned. A scheme resembling basic account is already in use in Singapore, which means that implementing it could at least be possible.

#### **6.6.4. Changes in housing allowance: "housing grant"<sup>10</sup>**

In this context, housing grant means a monthly current transfer paid to households or individuals for covering housing costs. Housing grant is a fixed sum, which means that it is not based on any actual housing costs. The housing grant depends on the housing costs of the area of residence (such as

---

<sup>10</sup> This section is based on Jouko Verho's memorandum discussing housing benefits provided as part of the basic income experiment. The calculations are based on the ideas of the winning proposal in the basic income hackathon organised by Sitra and the think tank Demos.

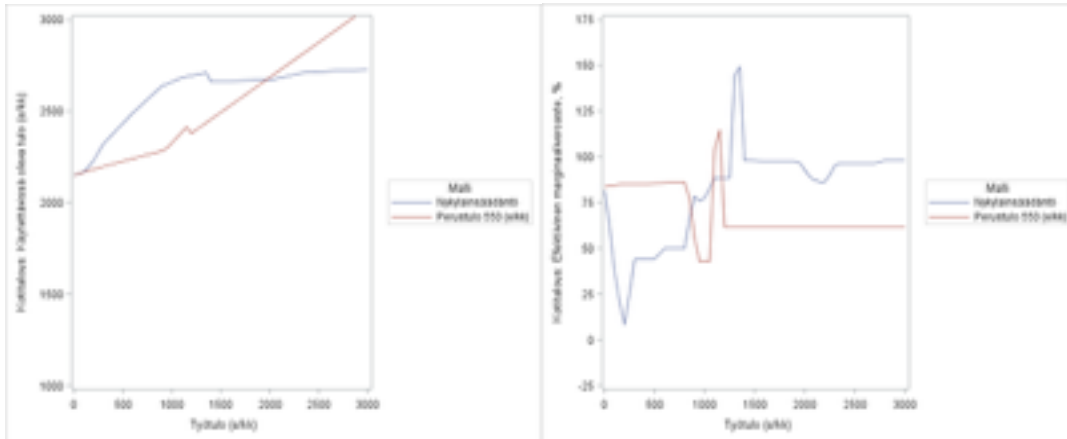
municipality) and it increases as the size of the family increases. In this respect it resembles the Universal Credit scheme used in Britain.

The housing grant could be of the same size as the housing allowance paid to a household at the start of the experiment. Housing grant would remain unchanged irrespective of the housing costs incurred by the household or changes in them during the experiment. In that case housing grant would in practice be part of the basic income that depends on the size of the household and an experiment with the housing grant would allow the examination of different housing choices. Some of the households would probably like to shift consumption from housing to other areas. This would mean moving to a smaller dwelling or to a less expensive area. In order to allow examination of the interesting housing-related incentive and behavioural effects, the housing grant should only be introduced for some of the test groups so that the effects of the housing grant on housing decisions can be separated from other effects of the basic income.

It was proposed in the basic income workshop arranged by Sitra and the think tank Demos that basic income should include living cost supplements that would specifically take into account the regional differences in housing costs. Under the winning proposal, each adult should receive 400 euros in the housing allowance municipality category 1 and 2, 300 euros in the municipality category 3, and 200 euros in the municipality category 4. Figure 13 presents the effective marginal tax rate calculations for a basic income model in which general housing allowance has been replaced with a fixed housing cost supplement and an increase in child benefits (100 euros/month for each child). The case examined here is a “difficult” one: a single parent living on basic daily allowance with two daycare-aged children in the most expensive municipality category. The rent is set at 110 per cent of the rent used as a basis for housing allowance paid to such households (1030.70 euros/month). The figure shows the effective marginal tax rates under the current model and with a basic income of 550 euros augmented with a housing grant taking into account regional cost differences.

According to microsimulations, the current social policy model would produce lower effective marginal tax rates and participation tax rates (see **Appendix Table 42**) if people find employment at low income levels. At the same time, however, if the income increases from 1,000 euros upwards, the hypothetical model applied here would produce significantly lower tax rates.

**Figure 13.** Single parent, unemployed/becoming employed (adjusted basic unemployment allowance), two daycare-aged children. Municipal category 1, rent 110 per cent of the rent used as a basis for housing allowance (1030.70 euros/month). Disposable income, effective marginal tax rates under the current model and with basic income of 550 euros to which housing grant and child benefit supplement have been added.



Explanations: 'Käytettävissä oleva tulo (e/kk)' = Disposable income; 'Työtulo' = Work income; 'Malli' = Model; 'Nykytilanne' = Current legislation; 'Perustulo 550 (e/kk)' Basic income €550 a month.

It would be relatively easy to include the housing grant in the experiment as its level can be determined in accordance with a housing allowance decision made before the experiment. In practice, however, the introduction of the housing grant would have extremely difficult behavioural effects. In that case the housing grant could no longer be determined in accordance with actual housing costs as it should be of the same amount for all people living in an area. It should also be of the same amount for all households of a certain size. This means that housing grant recipients would have an incentive to move their registered residence to areas that are as expensive as possible. This in turn would mean that there should not be too much variation based on housing costs in the housing grant between different areas if the intention is to avoid a system for supervising registered residence and actual residence. Such a system would be against the principle of the basic income. The second problem is connected with changes in households. The housing grant per individual should be substantially higher for individuals living alone than for larger households so that it could serve as a benefit related to housing costs. However, it would be practically impossible to check whether couples actually live together, which means that everybody would have an incentive to register as individuals living alone.

## 7. PLATFORM FOR BASIC INCOME EXPERIMENT

In addition to the planning of basic income models and simulating their effects, there are two additional important issues in the experiment: How the payment of basic income is arranged and how basic income is coordinated with the existing current transfer system. As was already discussed in the above section on legal issues, solving issues concerning social benefits and the payment of the benefits is the responsibility of public authorities and it is difficult to transfer it to other parties. For this reason, the payment of basic income must be incorporated into the existing social policy and tax system. Most of the individuals falling under the scope of the basic income experiment may already receive basic social security benefits or other benefits administered by Kela. Thus, it would be natural if Kela took part in the basic income experiment and develops a payment system for coordinating basic income and other areas of social security. However, Kela would not be able to manage the entire scheme on its own. The expertise of the Finnish Tax Administration and the tax system it manages are also needed. All this sets constraints on the basic income experiment. Both Kela and the Finnish Tax Administration are in the process of overhauling their information systems and a large number of experts are engaged in the social security reforms under way (including the transfer of the basic social assistance to Kela).

### 7.1. Using Kela as the payment platform

The ability of Kela to serve as the payment platform is examined on the basis of four different options<sup>11</sup>. In the first option (A), the basic income would be paid using Kela's "Toimistojen maksut" (Office payments) one-off payment system. The system provides a platform for paying Kela's invoices and other payments and it is not specifically built for paying benefits. In this option, the basic income would be paid on a monthly basis to the N individuals in the sample. Any effects on other Kela benefits paid to the individuals in question would be dealt with manually. After the conclusion of the experiment, a decision would be made to return the benefits to their previous levels if the individuals concerned are still eligible for them.

In the second option (B), the basic income would be paid to a sample group as a batch run. In this option, the incorporation of basic income into benefits paid by Kela as part of basic social security would also be managed manually. If the basic income prevents the payment of other benefits, their payments would be automatically interrupted. Compared with option A this arrangement has the advantage of ensuring automatic basic income payments.

In the third option (model C), basic income would be paid to the sample group so that the official processing it grants a specific amount of basic income without calculations and decisions. The basic income would be paid as regular payments until the end of the experiment or until the official re-

---

<sup>11</sup> This section is based on the assessments jointly prepared by Esko Karjala, Director of Operational Development at Kela, and ICT experts on Kela's chances to develop a payment system for basic income.

sponsible for the processing discontinues the payments and the benefits are returned to their pre-experiment state if the individuals concerned are still eligible for them.

The fourth option (model D) would be based on the YHTE system, which would create a new separate benefit-processing system by copying the basic solutions from existing payment schemes set up for the guarantee pension.

Of the four options above, the option A would be the most burdensome to Kela's benefit processors but it would require less information system work than the other options. Furthermore, option A could be tested on a specific group and a relatively small sample group. The option would be prone to errors because of the large amount of manual work required. The number of errors could be controlled by means of ex-post checks. Incorporation of changes into the information system could only properly start after the social assistance scheme is fully operational (around March 2017). If this model is selected, it might be possible to start the experiment as early as 2018. The basic income payments would not appear in the individual's benefit details, which would make client service more difficult.

Option B would involve significantly less benefit processing than option A and, because of automatic basic income payments, the risk of errors would also be lower. The basic income payments would not appear in the individual's benefit details, which would make client service more difficult. Incorporation of changes into the information system could only properly start after the social assistance scheme is fully operational (around March 2017). The basic income experiment could be launched at the start of 2018 at the earliest.

Option C would be the best model from the perspective of benefit processing and client service: There would be less manual benefit processing than in the other options and the basic income would appear in connection with the benefit details. Incorporation of changes into the information system could only properly start after the social assistance scheme is fully operational (around March 2017). The basic income experiment could be launched in autumn 2018 at the earliest. This option would require more extensive changes in Kela's benefit processing software than option B. This option would involve more testing than option A or B. In this option, the sample group could be substantially larger than in the other options as the processing system would have the highest degree of automation.

From the perspective of benefit processing and client service, options C and D are equal. Incorporation of the information system changes could start in full as soon as the specifications are available. The effects on the progress of Kela's extensive benefit architecture project (Arkki project) are smaller than in model C because option D is fully based on the existing YHTE architecture. The information systems should, however, be extensively tested. The systems would not be operational before the end of 2018. Options C and D would allow the largest sample size.

To sum up the findings, Kela does not have any payment systems that would allow the experiment to be launched immediately. After the drafting of the Government proposal, each of the above options would require between six and nine months for information system specification and be-

tween six and twelve months for implementation, testing and introduction. The actual amount of work required can only be estimated when the content of the basic income, size of the sampling group and the experiment timetable are known. The problem is that nearly all Kela resources that would be needed for building the payment system are tied to the preparation of the transfer of social assistance to Kela. Only after the social assistance scheme is working smoothly can resources be released to the construction of the payment platform for the basic income experiment.

## **7.2. Basic income experiment and Finnish Tax Administration<sup>12</sup>**

There are extensive interfaces between the basic income experiment and the Finnish Tax Administration. The Finnish Tax Administration is in the process of overhauling its systems, which would slow down the construction of the new tax systems required for the basic income experiment and make the construction process more difficult. The situation is similar to that in Kela. According to the Finnish Tax Administration, the planned timetable for implementing the basic income model is too strict, which means that basic income could not be introduced using the existing systems in 2017. Testing of the basic income model would endanger the progress of the Finnish Tax Administration's off-the-shelf software project and could have unpredictable effects on the taxation of the clients in the target group. According to the Finnish Tax Administration, the basic income experiment should only take place when Finland's individual taxation system has been transferred into the Getax system (during 2019). Under the existing system, updates would have to be made in more than ten different systems.

According to the Finnish Tax Administration, there are two tax-related basic income options. The calculations of the models are based on the following assumptions. The basic income experiment would only cover earned income. The clients would receive basic income and normal income as before. Capital income and deductions from capital income would be taxed as before and they would not have any effect on this model. The flat tax would cover state tax, municipal tax, church tax, health care fees and allowances, public broadcasting tax and the possible regional tax. The experiment would only involve tax residents. The client would have to remain a participant in the experiment for the whole duration of the tax year and both spouses should take part. The client should be treated separately from the taxation calculations and the tax prepayment basic calculations. In the flat tax model the basic income would be tax-exempt and would not be taken into account in the calculations. Income acquisition costs would not be deductible. Tax withholding, tax prepayments and the final taxation on the income earned in addition to the basic income would be based on a specific flat tax rate. The flat tax could be the same to everybody or phased on the basis of the amount of additional income. According to the calculations of the Finnish Tax Administration, incorporation of a flat-tax model into the current systems would cost about three million euros. When incorporated into Gentax, its average effect would be about 800,000 euros.

In the second model, basic income would be considered in the calculations as taxable benefit. If the intention is to make basic income completely tax-exempt there should be a separate basic income

---

<sup>12</sup> This section is based on a memorandum prepared by the Finnish Tax Administration.

deduction in the calculations. The deduction would decrease as net earned income and net capital income increase. All other deductions would be as before. A tax withholding could be carried out on the basic income if the client also has a revised tax card for basic income. According to the calculations of the Finnish Tax Administration, the introduction of the model would cost an average of about 500,000 euros. This latter model, which would be integrated into the current tax system, would be easier to implement.



## 8. ASSESSMENT OF THE MODELS AND RECOMMENDATIONS

Different basic income models have their own strengths and weaknesses. Below is a short summary of the different models and their suitability for the basic income experiment.

According to the supporters of the **full basic income model**, this option would simplify the entire current transfer system. Basic income would replace most of the other current transfers. As stated above, a full basic income model involves several problems. The model is expensive, which may make it difficult to justify this option in terms of social policy. Thus, there are probably no grounds for testing it.

Introducing a model based on full basic income could create challenges for the legitimacy of the earnings-related pension system, if the basic income was higher than the lowest earnings-related pensions. Individuals paying earnings-related or self-employed persons' pension contributions might feel that there is no reason for paying any contributions if basic income guaranteed similar earnings. High basic income could also cause political-ideological conflicts in the discussions on the status of the unemployment fund system. Low-income earners would have fewer incentives to join unemployment funds and, consequently, trade unions. Already because of these institutional-political constraints it would probably be impossible to even try a model with full basic income.

**Negative income tax** has its own attractions. However, from the perspective of testing, the model has its problems. As stated in the survey conducted by the think tank Tänk (Forss & Kanninen 2014, 41-42), negative income taxation could only be applied at the level of monthly income if it was accompanied by real-time income monitoring. In fact, both the proposals of Tänk and Social Democratic Youth are based on the national income register, which will not be introduced before 2019. In technical terms, negative income tax would be too difficult to implement as part of a basic income experiment without an income register or it would at least require a substantial input of the Finnish Tax Administration.

The advantage of the **participation income** is that it does not provide any money for "idleness". For this reason, it would be easy to justify, both politically and from the perspective of (work) ethics. The model has its own bureaucratic and definition problems. For this reason, it would be administratively challenging to examine participation income as part of the basic income experiment and it would not produce information about the functioning of the definition-based basic income. For this reason, the best option would be to allow the research group of participatory social security to continue the development of participation income. In fact, the main task of the research group led by Professor Heikki Hiilamo is to develop a participation income model suitable to Finnish conditions. Even though there has been a great deal of debate on the participation income in connection with the basic income, the experiments with basic income and participation income

would respond to different information requirements. However, the projects should probably be coordinated in one way or another.

A **general benefit based on the Universal Credit** model would be applied through an electronic system in which all factors affecting the means-tested components of the benefit would have to be disclosed. Changes in conditions would have to be entered into the system immediately. Like the negative income tax, the general benefit would be based on the national income register and for this reason it would be too early to test it as part of the basic income experiment. Like the participation income, the conditional nature of the Universal Credit model makes it impossible to examine the effects of the definitions-based basic income. However, it should be examined whether Finland could follow Britain's example and combine different basic social security benefits and introduce a more logical rate by which earnings would cause a reduction in social benefits.

The **basic account** would revolutionise the current system to such an extent that it would probably be impossible to test it comprehensively as part of the basic income experiment. At the same time, however, different variations of basic account could be tested in a two-year experiment. The experiment might, for example, include third-year university students with the same number of courses behind them and who would be promised a monthly basic income of 500 euros for 24 months. Students graduating within one year of the start of the experiment could keep the basic income they have received over a period of 12 months as a reward for speedy completion of their studies. In the same manner, the experiment could also be extended to cover other groups receiving basic income (basic account). If they did not have any other income, they would be able to withdraw a specific sum as basic income from the account. On the other hand, if they received work income they could report the income to the income register. Individuals in employment would be able to save the sums in the basic account and they would be able to withdraw the sum in the account at the end of the experiment. However, the experiment would be administratively problematic.

The Finnish basic income debate has been largely centred around partial basic income. The advantage of the model is that it would provide continuity for an uncertain flow of income. It would also be possible to introduce the model gradually by combining benefits provided by Kela as part of basic social security. This approach would also provide a basis for experimenting partial basic income. The benefits paid by Kela could be made into a "basic income" as part of the experiment, which would allow a substantially larger sample size. The budget allocated for the experiment would be enough for a sample of about 1,500 individuals. By including Kela's benefits, the number could be increased by several thousands, which would make the results more reliable and easier to extrapolate.

Even though partial basic income would offer a solution for a large number of bureaucratic traps, gaps and delays, it would not eliminate all disincentives. It is also clear that partial basic income would not eliminate all administrative work around social security. At the same time, it is inevitable that a basic income scheme (too) also involves administration even if it meant less bureaucracy. For example, the employment actors were of the view that partial basic income (at 550 euros) would be more realistic and provide more incentives to work and services than a model based on full basic

---

income and that it would also reduce bureaucracy and mean less waste of resources. It would also take better account of different levels of housing costs, if the housing allowance scheme remained unchanged.

Partial basic income combined with the designs described in section 11 above would provide the best basis for examining the employment and other effects of basic income in a reliable experimental design.

	<b>Full basic income (1,000+ euros)</b>	<b>Partial basic income (&lt;800 euros)</b>	<b>Negative income tax</b>	<b>Participation income</b>	<b>Universal Credit</b>
<b>Economic incentives for work (effective marginal tax rate &amp; participation tax rate)</b>	<p>(+) There would be more incentives if the basic income and, consequently, taxation would remain at reasonable levels.</p> <p>(+) Social security would be simpler (replacement of social insurance based benefits); housing allowance, which is problematic from the perspective of incentives, could be replaced.</p> <p>(-) Financing the model through income taxation would require high tax rates. There would be fewer incentives for work.</p>	<p>(+) There would be more incentives for activation measures than in full basic income if the activation supplements were retained.</p> <p>(+) A model based on current taxation model would provide substantially more incentives.</p> <p>(-) A cost-neutral model would not automatically lead to more work incentives.</p> <p>(-) Lowering of effective marginal tax rates and participation tax rates would require less cost-neutrality, weaker basic social security and/or housing allowance reform.</p>	<p>(+/-) Depending on the tax system and the level of guaranteed income, incentives could become stronger or weaker.</p> <p>(+) Would involve more careful income discretion than basic income.</p> <p>(+) Directing the money at low-income individuals would be easy to justify politically.</p>	<p>(+) Would provide citizens with incentives for more participation.</p> <p>(-) Might remove the incentive to move to open labour market.</p>	<p>(+) Basic social security would have only one reduction rate, which in turn would mean more predictability.</p>
<b>Bureaucracy and administration</b>	<p>(+) Would be the simplest model in terms of administration.</p> <p>(+) Would provide an effective tool for eliminating bureaucratic traps as the need for other social security benefits is reduced.</p> <p>Would eliminate gaps and delays.</p> <p>Would release resources of the authorities to other work.</p> <p>Would facilitate coordination of paid work and entrepreneurship.</p>	<p>(+) Would reduce bureaucracy.</p> <p>Would eliminate some of the gaps and delays, would release resources of the authorities to other work and would facilitate coordination of paid work and entrepreneurship.</p> <p>(-) There would still be bureaucracy.</p>	<p>(+) Would eliminate some of the bureaucratic traps.</p> <p>(-) How would other current transfers react to negative income tax?</p> <p>(-) Defining periodic income details</p>	<p>(-) Would create more bureaucracy.</p> <p>(-) Who would define which activities provide eligibility for participation income?</p>	<p>(+) Combining benefits would reduce bureaucracy.</p> <p>(-/+ ) Strongly conditional</p> <p>(-) Means-testing and sanctions would require extensive cooperation between the authorities.</p>

Poverty and income gaps, participation	<p>(+) Would be an effective tool for reducing poverty and the best option for narrowing income gaps. Would reduce the need for discretionary social assistance. (+) Would benefit civil society organisations. (+) Would allow voluntary work without fear of losing unemployment security. (-) Might be too high for some individuals and too low for others; would not take into account regional differences in housing costs.</p>	<p>(+) If higher than the current basic social security benefits they would reduce poverty and narrow income gaps. (+) Would take better account of different life situations than full basic income. (+) Would benefit civil society organisations. (+) Would allow voluntary work without fear of losing unemployment security. (-) Would weaken the livelihood of individuals eligible for social security supplements (such as single parents).</p>	<p>(+/-) Effects on poverty levels and income distribution would depend on the level of the guaranteed income and the tax system.</p>	<p>(+) Might provide a stronger sense of participation if the participation was voluntary and would provide individuals with better livelihood. (+) Would provide an incentive for a more participation. (+) Would make current activation measures more self-motivated. (+) Would benefit civil society organisations. (+) Would allow voluntary work without fear of losing unemployment security.</p>	<p>(+/-) The effects would depend on the level of benefits and the effectiveness of the sanctions.</p>
Feasibility	<p>(-) Replacing the current earnings-related unemployment security would probably not be economically realistic.</p>	<p>(+) Would be economically more realistic than full basic income. (+) Would be close to the current level of basic social security (about 550 euros). (-) Would leave open the issue of conditionality of earnings-related unemployment security.</p>	<p>(-) Could not be implemented at the moment and would require an income register.</p>	<p>(+) Could be implemented within the current system at local level.</p>	<p>(+/-) Would require the combination of current basic social security benefits, which might be politically difficult.</p>

Support base	<p>(+) The principle of basic income enjoys broad support (in September 2015, 69 per cent of those questioned were in favour of a basic income of 1,000 euros).</p> <p>(-) High tax rates could reduce support.</p> <p>(-) Would provide a challenge to the earnings-related pension system and unemployment funds: institutional and legitimacy problem.</p>	<p>(-) There is marked decrease in support for basic income when flat tax rates are combined with models of partial basic income.</p>	<p>(-) Might divide individuals to beneficiaries and payers more easily.</p>	<p>(-) Would also require a political debate on participation criteria.</p>	<p>(-) There is usually little support for means-tested benefits.</p>
Feasibility for testing	<p>(-) Would make the experiment less credible scientifically as the sample size would, for reasons of cost, remain smaller than for lower basic income levels.</p>		<p>(-) Would require a national income register for real-time income monitoring and monthly payments of guaranteed income. Personal income reporting would weaken scientific credibility of the experiment.</p>	<p>(+) Could be tested in small scale and at local level.</p> <p>(-) Reliability and extrapolation of the results.</p> <p>(-) Would not allow testing of the effects of definition-based basic income. Because of its conditional nature, would be better suited as a model for the research group developing participatory social security.</p> <p>(-) Constructing a payment platform for the experiment would be difficult.</p> <p>(-) Organisation would require additional resources. Who would be responsible for the organisation?</p>	<p>(-) Would require an income register; testing would not be currently possible.</p> <p>(-) Because of conditionality, would not allow testing of the effects of definition-based basic income.</p>



