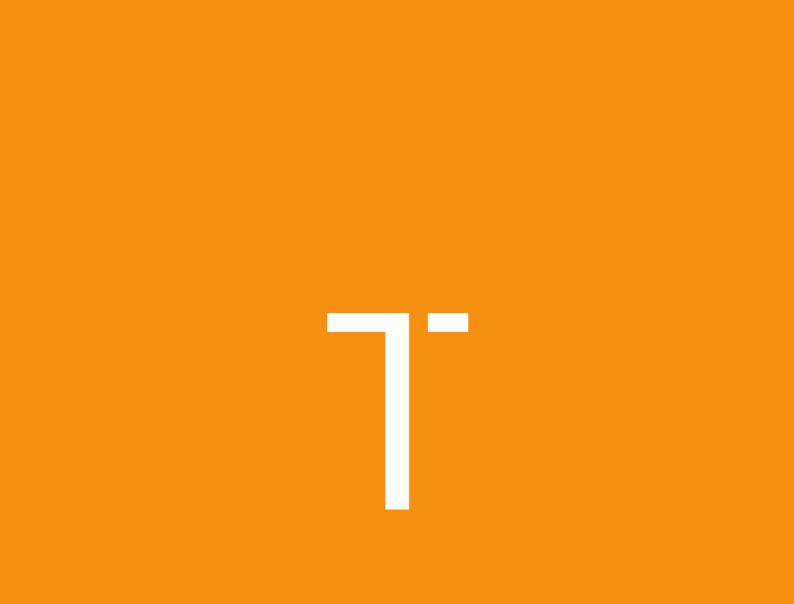


Working papers 106 | 2016

From idea to experiment

Report on universal basic income experiment in Finland



This working paper is an abridged version by Olli Kangas of the original report published in Finnish: Ideasta kokeiluun. Esiselvitys perustulokokeilun toteuttamisvaihtoehdoista, 2016. Published in English with permission. Translated by The English Centre.
© Authors and Research at Kela
www.kela.fi/research
ISSN 2323-9239
Helsinki 2016

CONTENTS

For	eword	t		4	
1	Reco	ommen	dations of the working group	5	
2	Bacl	kground		7	
3	Sup	ort for	basic income in Finland	9	
4	Ехре	erimenta	al design and the sample	11	
5	Basi	c incom	e models and microsimulations	16	
	5.1	Descri	ption of the calculation models	17	
	5.2	Full ba	sic income	19	
		5.2.1	What is meant by full basic income?	19	
		5.2.2	Full basic income in microsimulation	19	
		5.2.3	Full basic income: summary	24	
	5.3	Partial	basic income	24	
		5.3.1	What is meant by partial basic income?	24	
			Wage earner living alone – current model and basic income model with 550		
			and 750 euros	26	
		5.3.3	Single parent: current model and basic income of 550 and 750 euros	31	
		5.3.4	Two-adult households	34	
		5.3.5	Assessing partial basic income	36	
	5.4	Negati	ve income tax	37	
		5.4.1	Negative income tax in microsimulations	38	
		5.4.2	Assessing negative income tax	40	
	5.5	Budge	tary and income distribution effects of partial basic income and negative		
		incom	e tax	40	
	5.6	Other	basic income models	41	
		5.6.1	Participation income/participatory social security	42	
		5.6.2	Alternative models - Universal Credit/active welfare	44	
		5.6.3	Basic account - a liberalistic approach	46	
		5.6.4	Changes in housing allowance: "housing grant"	47	
6	Plati	orm for	the basic income experiment	49	
	6.1	Using	Kela as the payment platform	50	
	6.2	Basic	income experiment and Finnish Tax Administration	52	
7	Asse	sment	of the models and recommendations	53	
8	Post	script:	What happened and why	58	
	8.1	Conte	nt of the Government's Bill	58	
	8.2	Reacti	ons on the Bill: "a foolish and outrageously expensive travesty"?	59	
	8.3 Why were the recommendations of the preliminary report not adopted as such?				

FOREWORD

The aim of this working paper "From Idea to Experiment" is to summarise the preliminary report on the universal basic income (BI) experiment planned in Finland. The core working group preparing the report consisted of Olli Kangas along with Pertti Honkanen, Kari Hämäläinen, Markus Kanerva, Ohto Kanninen, Jani-Petri Laamanen, Ville-Veikko Pulkka, Tapio Räsänen, Miska Simanainen, Anna-Kaisa Tuovinen and Jouko Verho. The purpose of the preliminary report (delivered 30th March 2016 to the Government) was to propose models and designs for the Finnish BI experiment for the years 2017 and 2018. We began by specifying the concept and content of BI. We collected information on BI in other countries, on debates surrounding BI and on the popular support for BI in Finland, and evaluated different models by utilising microsimulations. Extensive experiments such as the Finnish one involve constitutional and other legal evaluations. BI is not only interesting from the Finnish perspective but it also sets a precedent at the EU level. Therefore, there were sections on the relationship between EU and Finnish legislation. In addition to the very report, we produced a number of separate reports on different specific themes.

In retrospect, we can only conclude that the assignment was much more extensive, difficult and complicated than we could have imagined at the start. Answering one question opened a large number of new questions, as implementing a seemingly very simple social policy device into complex institutional settings is a very demanding task. And as can be seen in the bill on BI legislation (25th August 2016) much of our recommendations could not be met (the press release attached in the end of this working paper).

There has been extensive public interest in the 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. In accordance with our assignment, we drafted plans for a basic income experiment. The original idea was that after the preliminary report we shall begin to prepare the final report (due to the 15th November 2016) and elaborate on the model for the experiment. However, since the experiment is scheduled to start by the beginning of 2017, we had to be ready with the model and the experimental setting already before September 2016. Needless to say, all this affected the accuracy of the planning of the model as well as the level of ambition we had. At the moment, it seems that the Government will start with a basic income of 560 euros (net per month). Unfortunately, many of the ideas we proposed in the preliminary report will never materialize. The English version is somewhat shorter than the Finnish one: sections on legal constraints¹ and lengthy sections concerning municipal and labor market actors are not translated. However, we hope that this shortened version makes it possible for a non-Finnish speaking reader to get an idea of what our working group had in mind when sketching the initial experimental setting.

Helsinki, September 2016

Authors

¹ Legal aspects of the experiment are discussed in Kalliomaa-Puha L, Tuovinen A-K, Kangas O. The basic income experiment in Finland. Journal of Social Security Law 2016; 23 (2): 75–88.

1 RECOMMENDATIONS OF THE WORKING GROUP

The basic income experiment is one of the key projects formulated in the programme of Prime Minister Juha Sipilä's Government. According to plans, 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 policy measures designed to reform the Finnish social security system to better correspond with the changes in working life, to make social security more participatory and diminish work-disincentives, reduce bureaucracy and simplify the overly complex benefit system.

Partial basic income as a basis

The preliminary report discusses the suitability of full basic income, partial basic income, negative income tax and other possible 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 costs so that various 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 a more intensive regional sampling to examine externalities².

According to the report, universal basic income would partly solve bureaucratic traps, whereas the effects on other incentive problems would be modest. Eliminating incentive problems would require reforms in many different sectors of social and tax policy. It would be easy to make incentives better by reducing the minimum level of social security. This would, however, increase poverty and worsen livelihood-related problems. In the basic income experiment one possibility would be to implement basic income into the existing tax system. Then, the effective marginal tax rates and participation tax rates would be substantially lower than in the current social policy system. However, the model would not be cost-neutral.

Target group

The entire adult population of Finland (excl. pensioners) is used as a basis for the sample. As the budget allocated for the experiment is limited, the treatment and control groups should be carefully selected so that the effects of basic income can be reliably established. For the rea-

² For the time being, it seems to be so that the funds available do not allow the regional / local level experiment (footnote added in July 2016).

sons mentioned above, age and income must be used as selection criteria and only low-income earners aged between 25 and 63³ should be used. Incentive effects are the strongest in this group of people. There have been different views on including students and other young people in the experiment. Should politicians so decide, the inclusion of younger age groups and a model tailored to their needs might be considered during further plans. A weighted sample of particularly interesting groups could also be applied.

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

A net partial basic income of 550 euros should be used as a basis but parallel to that level, the levels of 600, and 700 euros should also be tested if such a research setting passes the constitutionality test.

Suitability of different models for the experiment

An updated 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. Given the economic, legal, administrative and time table related constraints, the working group's view was that partial basic income would provide the most practical basis for examining the different effects of basic income. As basic income and negative income tax have the same effect from the individual's perspective, experimenting with partial basic income would also produce useful information about the feasibility of negative income tax.

The experiment could be carried out using Kela's (the Social Insurance Institution of Finland) payment platform even if there was no income register. If the benefits provided by Kela could be used in the experiment, the sample size could be substantially increased, which would make the results more reliable and would allow the inclusion of special groups.

³ The governmental Bill stipulates that the target population in the first phase is 2,000 randomly selected persons in the age bracket 25 to 58 years. The treatment group as well as the control group are drawn from the registers of the Social Insurance Institution of Finland (Kela) that also pays out the basic income to the clients.

2 BACKGROUND

In the fall of 2015 the Prime Minister's Office called for tenders on a basic income experiment. After an evaluation of the scientific quality and competence of participating research groups, the planning of the experiment 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 the 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 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 Tuori 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 concerning municipal taxation and services.

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 (euros per month),
- propose how to integrate earnings-related benefits and different types of basic social security benefits into basic income,
- determine the taxation of the different models,
- evaluate the strengths and weaknesses of the different basic income models, considering constitutional aspects and EU law,
- produce a 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 autumn 2016. The follow-up study can be used as a basis for the experiment.

The consortium was also asked to examine the effect of different basic income models on poverty and income inequality. Administrative and ICT efforts required for implementing different models and, consequently, the suitability of the models for experiments were also reviewed.

Depending on the model used, basic income has a number of direct and indirect effects. Basic income has effects on work (dis)incentives: the labour market behaviour of individuals and households, employment and types of employment relationships, 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 these systems. The purpose of the preliminary report is to assess effects of the basic income models in an ex ante setting. In the second stage of the review (deadline 15th 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 imported 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. Furthermore, 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 in some African countries) in the 1960s, 1970s and 1980s was totally different from the Finnish basic income testing environment of the late 2010s. Despite of the above, the experiments carried out in other countries can provide some guidance for Finnish decision-makers.

Discussing basic income at a general level is not a useful basis for the experiment because even small differences between basic income models may lead to very different outcomes. The work is based on the well-established definition of basic income. In a broad sense, it is 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 solid stream of income that will be paid even if all other flows of income from private or public sources were stopped. On the other hand, in an ideal situation basic income allows individuals to acquire additional income without any fear of losing achieved social security benefits (unemployment compensation, social assistance, housing allowance etc.), or being hit by waiting periods before getting access to benefits or payment delays due to 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 comprehensive and unconditional basic income boils down to this aspect: basic income as an irreversible and absolute right. Supporters of basic income view it as an alternative to contemporary models of welfare state, be it the Bismarckian or Beveridgean. At the same time, there are lots of opponents of basic income in both of those two camps and also outside them.

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

- 1. A full basic income model in which everybody would receive the same sum, irrespective of their income or situation,
- 2. a basic income model, which would be in addition to certain basic social security benefits and earnings-related benefits,
- 3. a 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 impacts of different basic income models on work incentives, poverty and income inequality can be examined by utilising microsimulations based on extensive register data. The microsimulations show that it is difficult to find one single model that would cure all the problems simultaneously if the aim is to ensure a balanced budget. The level of basic income, the level and form of taxation (progressive or flat rate tax) and social insurance based benefits also have a substantial effect on the effective marginal tax rates and the participation tax rates used as indicators in incentive calculations.

Legal constraints to the basic income experiment and the issues concerning the experimental design are more extensively discussed in a separate publication (see footnote 1, p. 4). In the section on microsimulations we first examine the effects of the models on a 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. We will start with the broad concept of basic income as defined by the international Basic Income Earth Network (BIEN). Basic income is "an income unconditionally granted to all on an individual basis, without means test or work requirement".

3 SUPPORT FOR BASIC INCOME IN FINLAND

In principle, there seems to be a good possibility for providing basic income in Finland, as there is ample popular support for the idea of basic income. In order to study the level of support we have conducted a number of opinion surveys. The first survey was carried out in 2002. In that survey questions were at a very general level and they yielded very positive attitudes on different forms of basic income. The same questions were used in a 2015 survey when the planning of the basic income experiment started.

Those surveys indicate that there, indeed, is support for basic income among Finns. Furthermore, the support seems to have remained stable throughout the early 2000s. In the survey conducted in September 2015, 69 per cent of all the respondents were in favour of basic income. We also asked what would possibly be the proper level of the would-be basic income. The median of responses was 1,000 euros which is 1.4 times higher than the minimum pension. There are some differences between political parties. The strongest support is found among those who vote for the Swedish People's Party (SPP), the Green League and the Left Al-

liance. The two latter are as a party in favour of basic income, whereas the SPP's attitude is unclear. Interestingly enough, also voters for the Social Democrats are positive although the party itself is sceptical towards basic income. The most critical attitudes are among the National Coalition Party and Christian Democrats. It must be kept in mind that the majority of them are also in affirmative. The Christian Democrats are additionally very positive towards a negative income tax system.

There are not major differences between socioeconomic groups in their attitudes and support for the idea of basic income. Students and 'others', i.e. those non-pensioners that are outside labour markets are the most supporting groups, whereas the self-employed and farmers in 2002 have somewhat more skeptical attitudes on basic income.

The Table 1 and Figure 1 (p. 11) indicate that there is strong support for basic income in Finland. However, a subsequent survey (conducted in December 2015) showed that the respondents – high-income earners in particular – become much more critical when they were told the tax rates needed to finance basic income. The support went down to 35 per cent for a basic income of €500 a month with a flat rate tax of 40 per cent collected from income exceeding the level of basic income. An €800 basic income level and a tax rate of 55 per cent were supported only by 29 per cent of Finns. Thus, there is a strong general support for the idea basic income but it does not have bearing for the specific basic income models. Also taxes needed to finance the system diminish its support. Thus, the political problem may be that in principle people are in affirmative but in practice they are not willing to pay the financial costs.

Table 1. Support (%) for basic income and negative income tax in Finland in 2002^a and 2015 (the per cent share of those respondents who said that the idea is very good or good) according to political affiliation.

Political affiliation	Basic ir	ncome	Negative income tax	
	2002	2015	2002	2015
The Green League	71	75	83	80
Christian Democrats	63	56	95	81
The Finns Party	-	69	-	77
Swedish People's Party	64	83	68	83
The Left Alliance	82	86	85	84
Centre Party	62	62	80	73
The National Coalition Party	48	54	63	56
Social Democrats	59	69	81	76

^aIn the 2002 survey, data for The Finns Party are not available because of too few respondents.

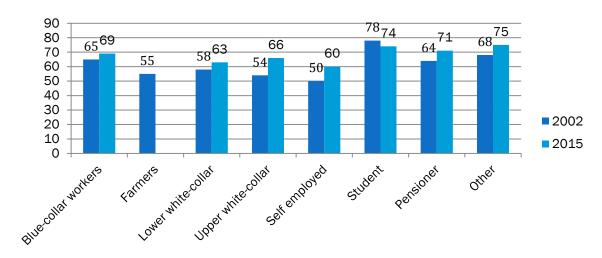


Figure 1. Support (%) for basic income in Finland 2002 and 2015 according to the socio-economic status of the respondent. (obs: in the 2015 survey farmers and blue-collar workers are merged together).

4 EXPERIMENTAL DESIGN AND THE SAMPLE

The objective of the basic income experiment is to estimate the causal effect of a basic income scheme on outcomes. The challenge is to ensure that the experiment provides a valid counterfactual, i.e. what would have happened to those receiving basic income if they had not received it. This requires that the control group corresponds to the treatment group in all but one respect; persons allocated to the control group do not receive basic income. The most reliable evaluation method to carry out this is random assignment. With large enough groups it will ensure that the only systematic difference between the groups is that one group is given basic income and the other was not. Any consequences that follow from basic income can then be easily determined by comparing the outcomes of the two groups.

Random assignment has been rarely utilized in Finnish experiments. Instead, the most commonly used experimental method has been local experiments. In regional experiments central or local government ensures obligatory participation within regional boundaries. One advantage of this is that it eliminates selection bias arising from voluntary participation. In voluntary experiments the results may be biased since often only those who calculate to benefit from participation join the experiment, whereas those who think that they may lose if they participate may refrain. Furthermore, results based on voluntary participation cannot be generalized to the population level.

Regional experiments have their pros and cons. The main positive aspect is the previous experience of this type of experiment in Finnish administration. These experiments passed the constitutional test. Also institutional effects on encounters between clients and various street-level bureaucracies could be studied (e.g., social and employment offices). Local experiments also provide the possibility to explore spill over effects on labour markets including interactions and networking effects between individuals provided that the whole target population is

not assigned to the experiment. However, this requires that the assignment process produces similar treatment and control groups, as discussed above.

A regional experiment would also have severe drawbacks. First, regions are very heterogenous and the number of administrative regions in Finland is limited. Some of regional differences can be controlled for in the experiment but there will inevitably be differences that are very difficult to observe. This implies that it is not possible to find control regions or municipalities that would be identical with the experiment region. An experiment in one region does not represent other regions, not to speak of the whole country. Furthermore, a multi-year experiment carried out in a single region is prone to many risks. An unanticipated shock (e.g., a closure of a dominant industry) affecting the municipality in question would ruin the whole experiment.

We propose two-stage sampling to utilise the strengths of alternative experimental settings:

- 1. Primary sampling should be in the form of low-intensity nation-wide random sampling. This would cover the whole country, excluding regions that are reserved for secondary regional sampling (see 2).
- 2. If the resources allocated for the experiment allow, the nation-wide experiment will be supplemented by local experiments. The local experiments would be based on high-intensity sampling, i.e., a substantial share of the target population in one or more municipality is included in the treatment group.

The main advantages of simple random sampling are clarity and reliability. When applied on a nationwide basis or in an otherwise sufficiently large region, this option will automatically produce the required geographic and demographic coverage. The role of the supplementary regional experiments is to allow the analysis of spill over effects.

Carrying out the basic income experiment as a randomised field experiment will produce an ideal research design. Correctly implemented randomisation will remove any selection bias in terms of non-observable factors. Basic income is provided to a randomly chosen subset of the target population, and the rest continue receiving benefits as before. Depending on the design, the experiment can include one or several treatment and control groups. Furthermore, interesting subpopulations can be emphasised e.g. by using oversampling.

Participation in the experiment should preferably be obligatory. This would mean that randomisation is also simple because the target population can be determined based on register data. In addition, obligatory participation removes any bias arising from voluntary selection in the experiment. This ensures that the comparison between test and control groups produces unbiased estimates and the results can be generalised to the whole target population.

Even though a single treatment group with one level of basic income would already produce information about the employment effects of the model in question, it would be difficult to use the results as a basis for improving the model. The dynamics of a basic income model can only be properly understood if more than one treatment group with different levels of basic in-

come and tax rates is included in the experiment. This has also been the design in basic income experiments carried out in the United States.

Table 2 shows an example of a basic income experiment which randomises persons into five separate treatment groups. The levels of basic income given in the Table are only examples and the corresponding flat tax rates are denoted with a and b. The actual levels and rates will be defined using microsimulations and cost-benefit analyses. In model A0, basic social security benefits are replaced with basic income and the current tax system remains unchanged. Considering learning about the mechanisms of basic income, it is essential that the experiment includes large variation between basic income levels and tax rates so that the income and substitution effects of labour supply can be identified. For this reason, in models A1 and B1, the tax rate is lowered by five percentage points, whereas in models A2 and B2 the tax rates are close to those applied in the current system. The tax rates in A2 and B2 will be based on net income and calculated using a microsimulation model and power calculations.

Table 2. Examples of basic income models.

Model	Basic income, EUR	Tax rate
AO	500	Current
A1	500	a-5
A2	500	а
B1	700	b-5
B2	700	b

Based on power calculations, it may be necessary to reduce the number of treatment groups from what is suggested above. These power calculations will be done separately for each treatment group.

Figure 2 (p. 14) gives an illustration how sample size is related to the minimum detectable effect of the experiment. The Figure shows that a group of 10,000 individuals would ensure the observation of a statistically significant outcome if the basic income model changed the employment rate of the target group by two percentage points. On the other hand, if the basic income model fails to increase the employment rate by at least one percentage point, the evaluation is unlikely to give any significant results even with a very large sample size. Alternatively, if the sample size is less than 10,000 members, the experiment should result in substantial changes in the employment rate to provide a detectable effect.

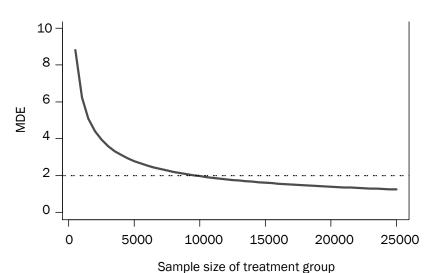


Figure 2. Example of the minimum detectable effect by sample size.

Target population

The experiment should cover the whole Finnish population, if possible. There are, however, some limitations. First, under the Constitution of Finland, the experiment can neither improve nor weaken the economic situation of the treatment group in an unreasonable manner. Second, the budget allocated for the experiment is limited. It would not be effective to include such groups in the experiment that are likely to be unaffected by small changes in their benefits or net income. Such groups would require a substantial change in their income levels, which might be considered unreasonable in legal terms. This would also be costly and reduce the number of treated individuals.

The selection of the target population is closely connected to the budget. The main question is whether savings in benefit expenditures due to basic income can be included in the budget.⁴ If this is not possible, a basic income of, say, 500 euros can be paid to only 1,700 persons for two years. If it is possible to use savings in social benefits in the experiment, the size of the treatment group would increase to approximately 8,000 persons.

In the evaluation of employment effects, it is natural to focus on groups whose employment rates the basic income model is expected to improve significantly. For this reason, old-age pension recipients fall outside the scope of the experiment. Changing pension levels through basic income and tax rates would also be legally problematic as this would affect earned benefits that are protected by property rights under the Constitution. For the same constitutional reason, recipients of earnings-related unemployment allowance are a problematic group if the basic income model weakens the level of earnings-related unemployment security.

Middle and high-income earners that are strongly attached to labour markets are typically found to be unreactive to small changes in taxation. In addition, they do not receive the benefits that a partial basic income model might replace. Generating observable employment ef-

⁴ According to the Government's decision this can be done (footnote added in July 2016).

fects for this group would probably require a basic income model that would be too expensive for the budget allocated for the experiment. For these reasons, we propose that the experiment focuses on low-income households.

Inclusion of students in the basic income experiment cannot be justified based on employment effects. For students, the main outcome should be finishing their studies. If the aim is to include students in the basic income scheme, they should have their own multi-year experiment that examines opportunities and the progress of studies.

Youth who are neither studying, working nor in training, are an equally problematic group as students. The Finnish government has tried to improve the situation of this group through various activation measures, such as the youth guarantee. At the same time it has deemed it necessary to cut the benefits paid to young people. The cuts have been implemented by limiting the eligibility for labour market subsidy and by reducing the level of social assistance for those aged 18 and over who are still living with their parents. Because of the lower benefit levels, young people would be a significantly more expensive target group than adults, which would lead to the risk that the treatment group in the experiment would not be large enough. If the basic income experiment proves a success among older age groups, the next natural step could be a basic income experiment targeted to younger age groups including students.

If the basic income experiment is carried out as described above, one potential target population would consist of low-income individuals aged between 25 and 63 years. 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 using preliminary tax data.

We conducted preliminary analysis on the target population with the Statistics Finland's individual level income distribution data. When we limit the target population to individuals with earnings below the annual median income (23,301 euros), the number of those between 25 and 63 years 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 a household, children or other family members. Inclusion of these two groups in the basic income experiment should be considered carefully.

Figure 3 (p. 16) shows an example how the 845,000 individuals can be classified into different groups. Based on the figure, the long-term unemployed, individuals relying on social assistance, people on disability pension or chronically ill (labour market outsiders) account for 43 per cent of the target population. A total of 11 per cent are in fixed-term or part-time employment. About ten per cent 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.

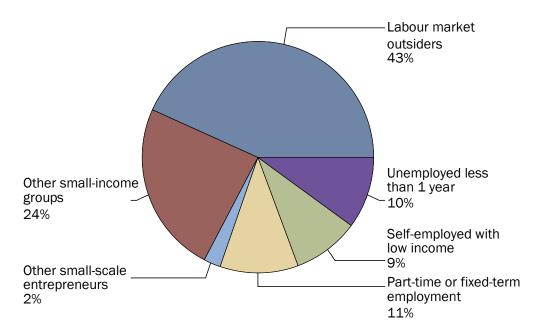


Figure 3. Classifying low-income individuals and households⁵.

5 BASIC INCOME MODELS AND MICROSIMULATIONS

Calculations of different basic income options presented in the subsequent sections are made using microsimulations. As a rule, we use two different approaches: data-based and example calculations. The simulation calculations have been made using the modified SISU (housed at and maintained by the Statistics Finland) and JUTTA (housed at and maintained by the Social Insurance Institution, Kela) microsimulation models, which are the main microsimulation models used in Finland.

Data simulations 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 transfers 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 tax rate. The purpose of the flat tax rate calculations is to provide a somewhat realistic picture of the tax rates that are needed to finance basic income. It does not mean that only the flat tax models or the flat rates presented here should be used in the basic income experiment. We have also simulated combinations of flat tax rates and the current tax system, modified the existing tax system, applied a simple progressive tax scale and a scheme in which basic income is in the form of negative income tax.

^{5 &}quot;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; the "labour market outsiders" group consists of individuals who have the socio-economic status of the long-term unemployed or who are mainly disabled/chronically ill or who have received social assistance for more than six months.

In addition to the data-based simulations we also present example calculations of the composition of income in different types of households, in the existing system of transfers and in different basic income options. In most of the examples, we use a 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 impact of the increase in earned income on net income (transfers, taxes and work income) would be very small or even non-existent. In the example calculations, the focus is on unemployed individuals and part-time workers living in rental flats. In those cases the existing social security system is often seen as inadequate.

The data-simulations are based on the 2013 register and survey data, and the 2013 legislation. 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 only a few changes in economic and population structures or income levels between 2013 and 2016. Our simulations 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 level 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. In sum, whereas data simulations are based on the 2013 legislation, our example calculations use the current legislation.

5.1 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 the basic income levels of 450, 550, 650 and 750 euros a month. In the text, the results are mainly presented for the basic income level 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 detail. This is because full basic income is connected to strong institutional-political challenges and strong economic constraints. The model would be fairly expensive and it is not realistic to assume that 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 process of microsimulation calculations is as follows:

- Basic income is paid to all individuals aged 18 and over but not to pensioners (old-age pensions, disability pensions)
- Basic income is reduced from taxable social insurance based social benefits (earningsrelated unemployment allowance, basic unemployment allowance, labour market subsidy, sickness allowance, parental allowance, child home care allowance); adjusted unemployment allowance will be retained

- Study grants will be replaced by basic income but students' housing supplements will be simulated
- A simple flat-tax model: earned income and capital income are taxed in the same manner with 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

In the example calculations we examine how the total disposable income (consisting of social transfers, earnings and taxes) of individuals or households change when earned income increases. In the basic situation, the individual does not have any earned income. We simulate gradual increases in earned income to see how income-tested social transfers diminish and how taxation increases and what the (dis)incentive effect of their interaction is. We calculate the effects of increasing earned income on unemployment benefits, housing allowance and social assistance. 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. Needless to say, the calculations are only schematic and we are not able to analyse all the variations in the income formation process and in all household combinations and life phases.

Housing allowance and social assistance are also calculated on the basis of the 2016 legislation, and it is directly derived from housing allowance formulas. The housing allowance calculations are based on the assumption that the individual resides or the household is located in a municipality belonging to municipal category 3 (Table 3, p. 19). This category comprises the townships of Tampere, Turku, Oulu, Kuopio, Rovaniemi and most other large or middle-sized towns (except for the greater Helsinki area). A total of 49 per cent of all housing allowance recipients live in municipalities belonging to 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 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 housing allowance and social assistance in the calculations would increase if the households were located in the greater Helsinki area (where 14% of housing allowance recipients live) or if the rents and other housing costs were higher. Similar changes would also take place in other municipal categories (Table 4, p. 19).

Table 3. Number and percentages of housing allowance recipients^a 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%

^a "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.

Persons in the household	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

5.2 Full basic income

5.2.1 What is meant by full basic income?

Full basic income can be understood to mean a model that would replace a large proportion of 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.

5.2.2 Full basic income in microsimulation

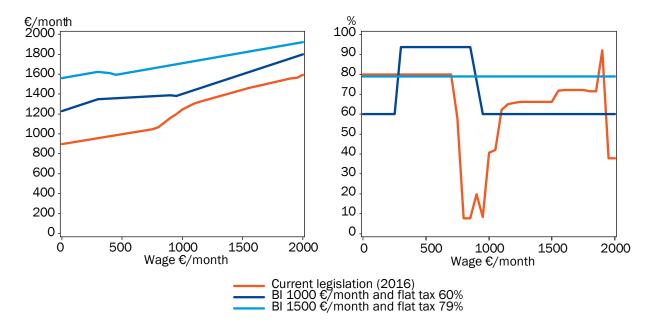
Figure 4 (p. 20) shows the results of microsimulations with full basic income and under the current social security system. The basis for these calculations is a wage earner living alone (who is eligible for housing allowance or social assistance but not for other social insurance based benefits) and whose work income can vary from 0 to 2,000 euros/month. 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 seen in the graphs below. Figure 4 provides a stylised summary of the income composition process, which has been decomposed in detail in Figure 5 (p. 21).

The panels in Figure 4 can be interpreted as follows. The left-hand panel depicts lines for disposable income (euros a month, shown on the vertical axis) when work income increases from 0 to 2,000 euros/month (shown in the horizontal axis). In the right-hand panel, effective marginal tax rates (the vertical axis) are displayed according to income from work (the horizontal axis). All subsequent graphs can be interpreted in the same way.

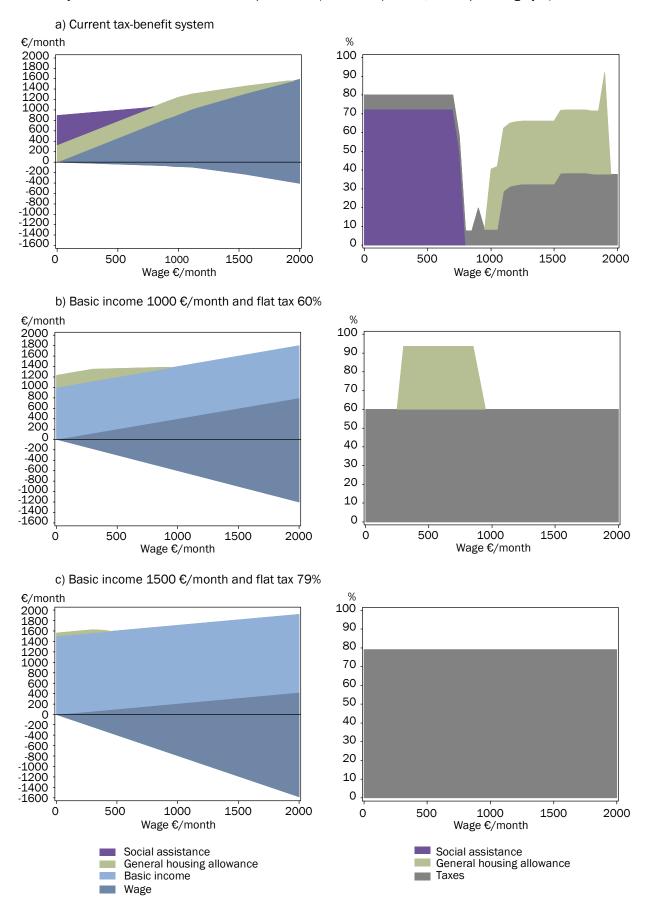
Not surprisingly, 'full' basic income improves income in all income groups but effective marginal tax rates remain high and in many cases they are higher than in the current system (Figure 4).

Figure 4. Disposable income and effective marginal tax rate of employed person living alone in the current tax-benefit system and full BI models with simple flat tax (rent 411 €/month, municipal category 3).



The left-hand panels in Figure 5 (p. 21) show decompositions of the effects of income transfers and taxes on net income when income from work gradually increases. As shown in the upper left-hand panel, which illustrates the current situation, increase in income will neutralise social assistance when work income exceeds 800 euros a month. Housing allowance starts to diminish when monthly income exceeds about 1,000 euros. Despite the elimination of income-tested transfers and increases in taxes, there is a continuous increase in disposable income. Thus, in this sense, the current model provides incentives for work. The upper right-hand panel shows that the effective marginal tax rate resulting from the 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 termination of social assistance, the marginal tax rate is fairly low (10%–20%) in the monthly income categories of 800 and 1,050 euros. But as a result of the reduction in housing allowance, marginal tax rates will reach about 70 per cent in the income bracket of 1,200–1,800 euros a month. In groups with higher incomes than 1,800 euros a month, the level of the effective marginal tax only depends on the level of income tax.

Figure 5. Composition of income and effective marginal tax rate of employed person living alone in the current tax-benefit system and full BI models with simple flat tax (rent 411 €/month, municipal category 3).



As the middle panels show, the recipient would be eligible for a certain amount of housing allowance even if the basic income level was 1,000 euros/month. It should be noted, however, that a substantial proportion of 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, p. 23). As a result of housing allowance, the marginal tax rate would be about 90 per cent in the low-income categories (income 450–900 euros a month).

With a basic income level of 1,500 euros, housing allowance would cause a sharp increase in the marginal tax rate within the income bracket 450–500 euros. Of course, it can be claimed that in this case, the individual concerned would no longer be eligible for any housing allowance because of the high amount of income coming from the basic income scheme.

Above we have discussed effective marginal tax rates. The second, complementary approach to examining the incentive effects of different models is to examine tax rates in situations where an individual becomes employed or starts working longer hours for example by 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. 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 than the current system if income increases 1,000 euros to 2,000 euros a month.

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

Change in wages	Current legislation	Basic income 1,000 euros/month	Basic income 1,500 euros/month
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%

Using microsimulations, it is possible to assess the macro-level costs and income distribution effects of different social policy decisions. We also carried out such data-based simulations for different basic income levels. Table 6 sums up some of the most important budgetary effects of the two 'full' basic income models.

As can be seen, full basic income would replace a large proportion of the existing transfers. Introducing a basic income of 1,000 euros would reduce unemployment spending from about 4 billion to 800 million euros, while a basic income of 1,500 euros would decrease unemployment expenditure to 273 million euros. Spending on social assistance would fall from about 600 million euros to 48 and 36 million, respectively. There would also be similar reductions in most of the other social transfers. However, even if the basic income is set at a fairly high level, it would not fully replace social insurance. The main reason is that insurance-

based, income-related benefits are much higher than the level of basic income which covers most of the existing 'basic' daily allowances payable to those who do not qualify for incomerelated benefits.

High levels of basic income would naturally have significant effects on income distribution. There would be a substantial narrowing of income inequality. The Gini coefficient would fall from the current 26.4 to 21.7 if the basic income level is 1,000 euros and to 17.9 if the basic income level is 1,500 euros. The proportion of low-income households (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 pensioners' incomes fall in relation to the income of the rest of the population, which slightly increases the relative poverty rates among pensioners.

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

	Current legislation	Basic income 1,000 euros/month	Basic income 1,500 euros/month
Flat tax rate, %		60	79
Basic income expenditure		35,016	52,524
Disposable income	113,251	113,168	112,948
Unemployment expenditure	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 allowance	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

5.2.3 Full basic income: summary

Full basic income would, at least at the highest levels, allow the inclusion of housing allowance (which is of the main sources of disincentives) into basic income. If basic income is primarily financed by a flat tax collected on income earned in addition to basic income, the tax rates will be high. Because a model based on full basic income would, at least at its highest levels, provide a secure livelihood without other income, questions on various behavioural effects become interesting.

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. However, when set at 1,000 euros, basic income would only slightly differ from the present combined level of social assistance/labour market subsidy and housing allowance. Possible work-disincentives, conflicts with earnings-related unemployment security, political controversies, high costs, regional differences in housing costs and possibly the lack of legitimacy might be the weaknesses of the model. Furthermore, the level could be too high for some groups and too low for the others – as is the case with all income transfers.

5.3 Partial basic income

5.3.1 What is meant by partial basic income?

The difference between partial basic income and full basic income is that in the former model, the level of benefit is substantially lower and the aim is not to replace other current transfers to the same extent as in full basic income. The degree of replacement naturally depends on the level of the basic income paid. In our models, a large proportion of social 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 microsimulations presented below show cost-neutral flat tax rates for partial basic income options of different levels. The results of these tax calculations are summarised in Table 7 (p. 25). The Table illustrates how limiting the sample to the adult population on the one hand, and to the population aged between 24 and 64 on the other (for the reasons stated above in section 4), 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. 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 models.

Leaving the population aged between 18 and 24 outside basic income would reduce the costneutral tax rate by about one (at a basic income of 550 euros) to two percentage points (at a basic income of 750 euros).

Table 7. Basic income expenditure, cost-neutral flat rate tax (%) and changes in disposable income according to the level of the basic income and according to different target populations^a.

	Adults (excl. pen	sioners)	Individuals aged 24 and over (excl. pensioners)		
Basic income (euros/month)	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	

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

As is the case with the full basic income presented above, partial basic income would reduce the need for other transfers as shown in Table 8. 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.

Table 8. Impact of different basic income levels on other social expenditure items (million euro)a.

		Basic income (euros/month)			
	Current legislation	450	550	650	750
Unemployment expenditure	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
Other taxes	32,638	5,981	5,981	5,981	5,980

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

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 expenditures 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.

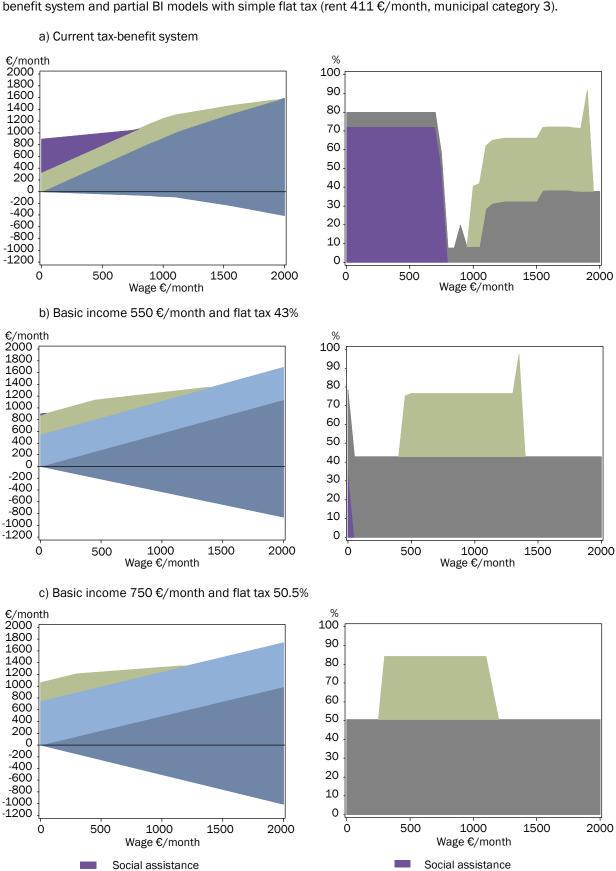
5.3.2 Wage earner living alone – current model and basic income model with 550 and 750 euros

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 (p. 23) so that we can have a comparable picture of effective marginal tax rates and the factors influencing them. Under the current system, the effect of social assistance extends to a work income of about 800 euros. With a basic income of 550 euros, the effect of social assistance is restricted to a very low income area and with a basic income of 750 euros, social assistance paid to single-person households is no longer included. There are few differences between the effective marginal tax rates compared with the current system. Also in these example calculations basic income schemes be they 550 or 750 euros demand relatively high flat tax rates (43.0 and 50.5 per cent, respectively).

If the calculations were based on the current tax system or a progressive taxation mimicking the present one, the positive incentive effects of partial basic income would be much more substantial. In addition to the marginal tax rates, we should also examine the participation tax rates, i.e., 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 an example). Table 9 (p. 30) shows that under the current legislation, the participation tax rate in part-time work is slightly over 80 per cent. If earned 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 decreasing housing allowance.

The examples presented above are based on individuals not getting any other social benefits. The situation changes when we examine the situation of an individual who is getting basic unemployment allowance (or labour market subsidy) and how the increase in hours worked or employment affects increases in net income (Figure 7, p. 28). In this case, too, we will use an individual living alone as an 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 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 income increases from 0 to 500 euros, the participation tax rate is lower (36.9%) under the current model than under the basic income models (50.2 and 63.9%). When an individual moves from a situation with no income or from part-time work (with an income of 1,000 euros) to full-time employment (with an 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%).

Figure 6. Composition of income and effective marginal tax rate of employed person living alone in the current taxbenefit system and partial BI models with simple flat tax (rent 411 €/month, municipal category 3).



General housing allowance

Basic income

Wage

General housing allowance

Taxes

Figure 7. Composition of income and effective marginal tax rate of unemployed person living alone in the current tax-benefit system and partial BI models with simple flat tax (adjusted basic unemployment allowance, rent 411 €/month, municipal category 3).

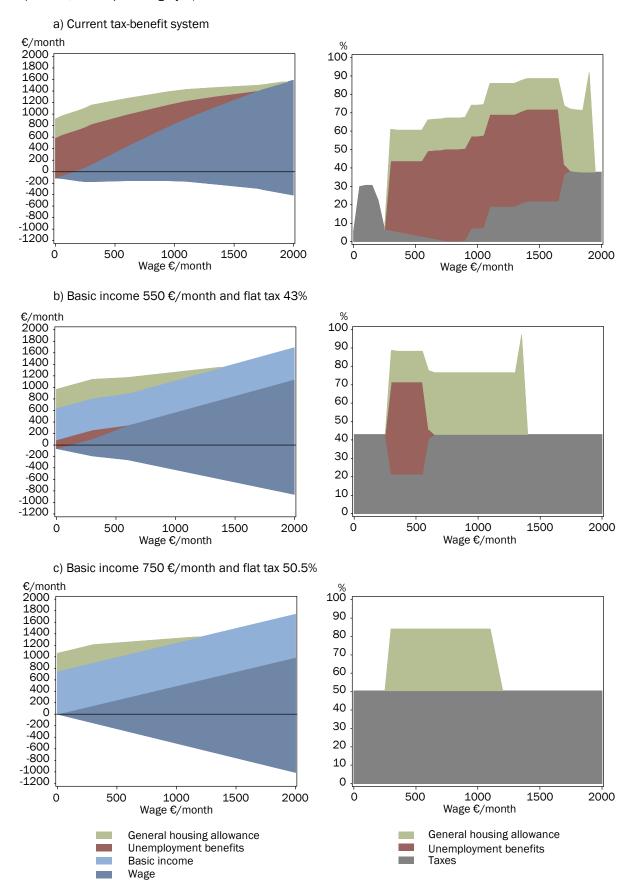
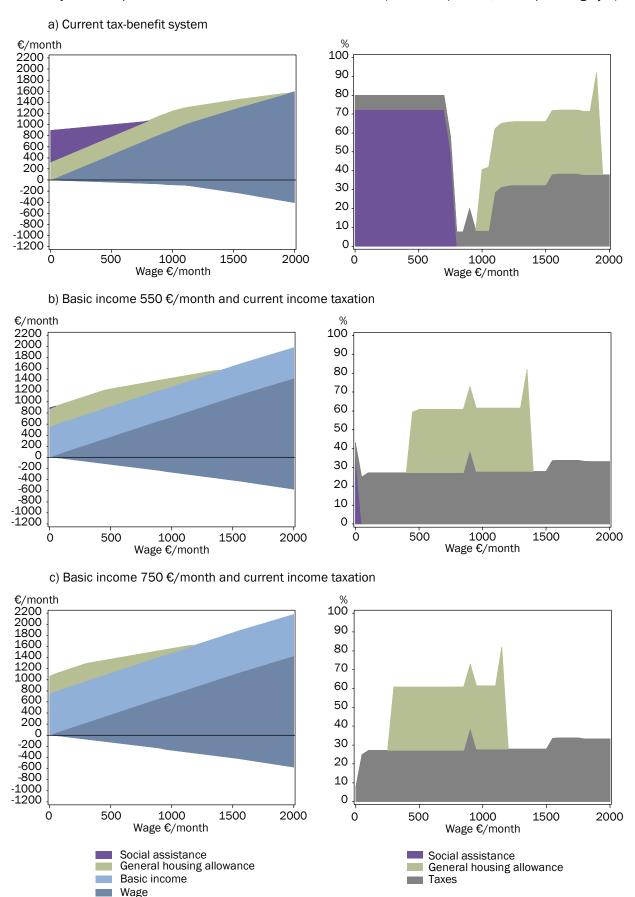


Figure 8. Composition of income and effective marginal tax rate of employed person living alone in the current taxbenefit system and partial BI models with current income taxation (rent 411 €/month, municipal category 3).



As shown above, basic income models have high flat tax rates if they are solely financed by a flat rate tax. This would raise both the effective marginal tax rates and participation tax rates and basic income would not result in 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 in basic income models than under the current system. The situation changes substantially if basic income is incorporated into a progressive taxation framework resembling the current tax model (see Figure 7 vs. Figure 8, p. 28–29, see also Table 9) However, this model is not any more cost neutral.

Comparing Figure 7 with Figure 8 and studying Table 9 demonstrates the central role taxation plays in creating work disincentives. As a rule, all examinations of basic income models in the current taxation framework will produce lower marginal and participation tax rates than the current system. Changing basic income (that here is treated as tax-free 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). 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^a.

		Basic income (BI) 550 euros/month and tax model		Basic income euros/month ar	, ,
Change in wages	Current legislation	Flat tax	Current, tax-free Bl	Flat tax	Current, tax-free Bl
No social insurance ba	sed benefits but eli	gibility for housing a	llowance and soc	ial 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 unempl	oyment allowance a	and eligibility for hou	sing allowance a	nd 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

^a"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.

5.3.3 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 basic income: No consideration needs to be given to the supplements paid to families with children under the Finnish social security system. When different family types 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. If the children are in the day care age, the problem is made worse by earnings-related day care fees. 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.

In regard to basic income and single parents, consideration should be given to the different types of supplements paid for children, and to 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 (p. 33), the starting point is a single parent with two children who lives in a municipality in municipal category 3 and who is eligible for adjusted basic allowance.

The situation of the single parent shows that both under the current model or, in this case, the 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. But nevertheless, effective marginal tax-rates are close to 100 per cent.

The marginal and participation tax rates of an unemployed single parent in a situation where the individual concerned is eligible for earnings-related unemployment allowance are examined in Table 10 (p. 32). As can be seen, in many cases effective marginal tax rates are very high up to a work income of 2,500 euros and sometimes they hover around 100 per cent. This is particularly the case if the effects of day care fees are included in the incentive calculations. This applies both 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 the assumed rents are higher than the rents used as the basis for housing allowance. The rents exceeding the upper limit for housing allowance can be compensated by social assistance.

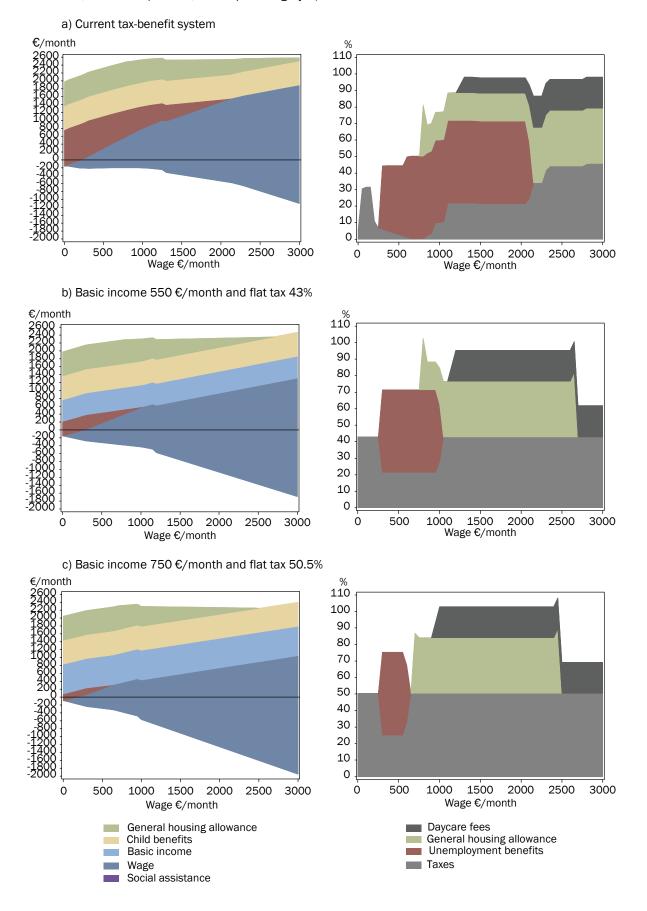
The effective marginal tax rate is highest with a basic income of 750 euros and a flat tax rate of 50.6 per cent. The same applies to participation tax rates. When monthly income increases from 0 to 2,000 euros, the tax rates under the current model are lower than under the simulated basic income models. 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.

Table 10. Participation tax rate of a single parent who is unemployed/becoming employed (adjusted basic allowance, eligibility for housing allowance and social assistance, day care fees considered), work income of 0–2,000 euros/month, current transfer system and basic income of 550 and 750 euros (basic income with flat tax rate and the current tax system.

			550 euros/month x model		50 euros/month x model
Change in wages	Current legislation	Flat tax Current (cost-neutral)		Flat tax (cost-neutral)	Current (not cost-neutral)
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

Table 10 illustrates the situation where the individual concerned moves from receiving basic daily allowance to employment. For basic income, the situation looks significantly better if the financing is based on the current tax system (or something similar it), instead of relying on a budget-neutral flat rate tax. 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 possibly would be carried out and where no changes to the tax system are made.

Figure 9. Composition of income and effective marginal tax rate of unemployed single parent in the current tax-benefit system and partial BI models with simple flat tax (two children in daycare, adjusted basic unemployment allowance, rent 761 €/month, municipal category 3).

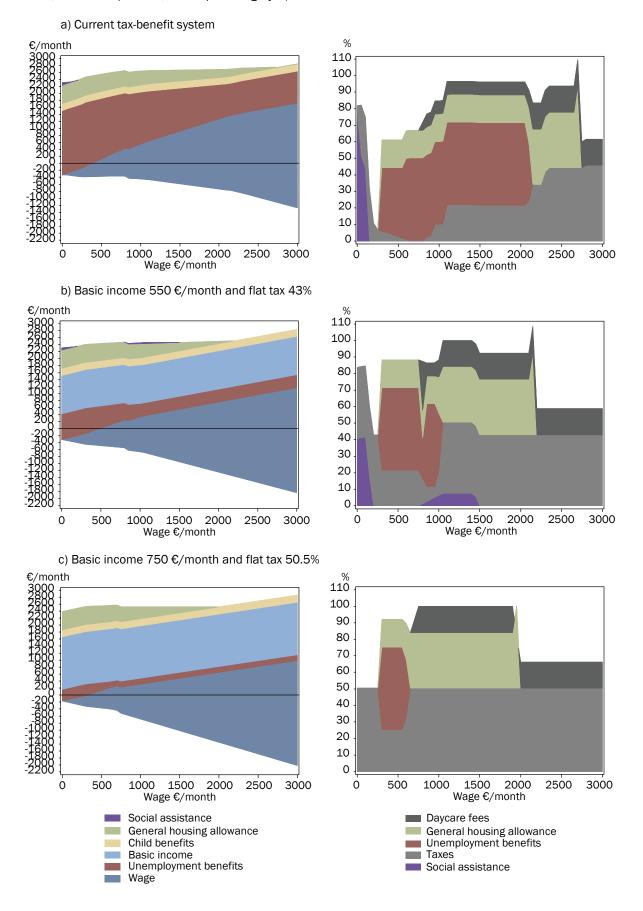


5.3.4 Two-adult households

In the following section we take a brief look at the situation of a household with two adults and two children in the day care age 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 gets employment, while the other one continues to rely on labour market subsidy.

Effective marginal tax rates are very high in all options shown in Figure 10 (p. 35). Under the current model, there is little increase in disposable income even if gross income increases 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: basic income participation tax rates in the lower income levels are higher than under the current system. When 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 basic income models yield slightly lower participation tax rates than the current system. 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 with monthly earnings of 1,200 euros.

Figure 10. Composition of income and effective marginal tax rate of unemployed couple in the current tax-benefit system and partial BI models with simple flat tax (two children in daycare, adjusted basic unemployment allowance, rent 901 €/month, municipal category 3).



5.3.5 Assessing partial basic income

As shown by the examples above, replacing the housing allowance system with basic income is particularly difficult because there are substantial regional differences in housing costs. 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 housing allowance could be examined in more detail, the housing grant should only be introduced to a certain proportion of 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 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.

Replacing child home care allowance (a specific Finnish cash for care system) 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. As in most basic income models, if the basic income level would be higher than the current child home care allowance this could persuade more women to stay home.

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. Merging together the existing basic social security (Kela) 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. Basic income or the combination and harmonisation of 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 benefits, 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 bring more administrative cost-effectiveness even though the effects (measured in euros and the number of employees) would not be as substantial as is often claimed in public debate.

5.4 Negative income tax

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. The underpinning philosophy of basic income and negative tax is different as well as the way of paying out the benefit, but the two models 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. 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 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 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.

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 the 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.

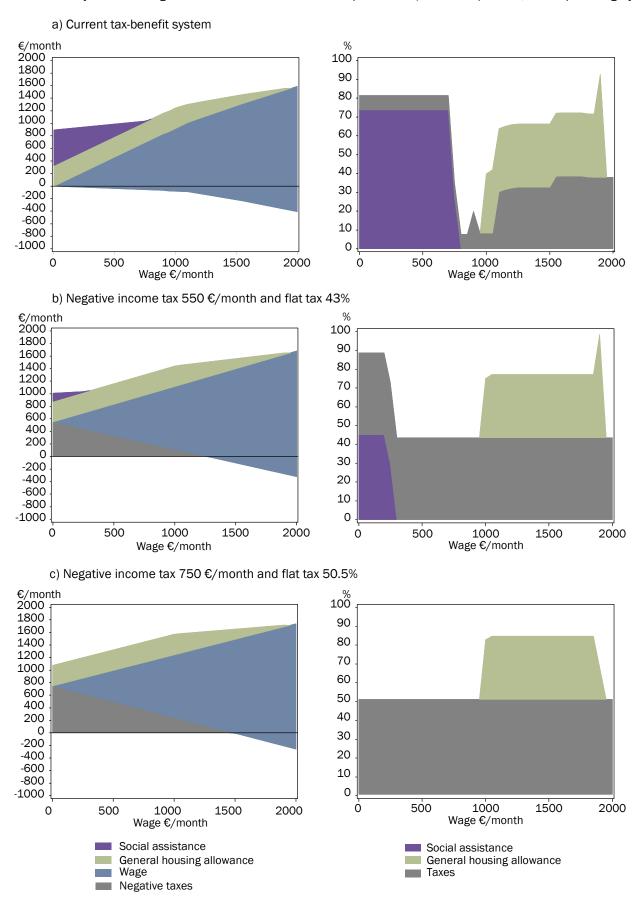
Even though the general security model would retain some of the means-tested components of the current social security system and the option of sanctions, the Social Democratic Youth is of the view that the general security model would address the same problems as the basic income models. In the organisation's opinion, it would combine the best parts of the current social security system, 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.

5.4.1 Negative income tax in microsimulations

The effects of negative income tax were simulated at the 550 and 750 euro levels. The composition of the effective marginal tax rates of the two negative tax levels are compared with the current social security system (Figure 11, p. 39). The comparison is based on a wage earner living alone and 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 the basis for housing allowance. Furthermore, the rent equals to the maximum rent that is taken into account when calculating housing allowance. Thus, the calculations are subject to the same limitations and reservations that apply to the modelling 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 only a few differences in the profiles of effective marginal tax rates between a 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. Consequently, marginal tax rates remain lower in low-income (0 to 900 euros) groups. 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 employed person living alone in the current tax-benefit system and negative income tax models with simple flat tax (rent 411 €/month, municipal category 3).



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 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 income increases from 1,000 to 2,000 euros. In the featured basic income models, the group in question has lower tax rates.

Table 11. Participation tax rates of a 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%

5.4.2 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 by the participants themselves. 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 in Finland.

To work properly, negative income tax, and models based on the same idea, demand a real time income register that contains periodic data on salaries, wages and other income (in other words, the periods in which income is earned). The lack of periodic data would make the payment of real-time negative income tax more difficult, arbitrary and prone to mistakes.

Like other basic income models, 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.

5.5 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. With models with basic incomes of 550, 650 and 750 euros, the expenditure would be about 19, 23 and 26 billion euros, respectively. The flat

tax rates covering this expenditure would be 39.5, 43.5, 48.0 and 52.5 per cent, respectively. Data simulations give possibilities to assess the effects of basic income on different current transfer items. In the examined models, the amount corresponding to the applied 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 (see Table 8, p. 25).

The most important and politically perhaps the most controversial issue is how the distribution of income will change who the winners and the losers are. 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 diminish poverty and income inequality. On the one hand, a higher tax-free basic income would increase the purchasing power of low-income earners, while on the other hand, a higher marginal tax rate would reduce the disposable income of the highest income groups. At the basic incomes of 550 and 750 euros, the Gini coefficient measuring income equality would decline from the current value of 26.4 to 26.1 and 24.2, respectively (at the population level). A negative income tax of 500 euros would reduce the Gini index more than the basic income of 500 euros (Gini = 25.7). At the basic income level 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 models.

It goes without saying that there are winners and losers in the basic income system. For example, with basic income level of 550 euros, students, housewives, and low-income wage earners would be the winners. 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 a flat tax rate in all cases. Surprisingly enough, the unemployed would be the biggest losers. For them, basic income would only partially replace existing income and the taxation on the remaining unemployment security benefits (such as various supplements and earnings-related components) would be higher than under the current system.

5.6 Other basic income models

The Prime Minister's Office also urged us to examine other options for experimenting with 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 an obligatory work component so that obligations are imposed on certain groups (for example a training obligation for young people) as conditions for receiving the benefit. Alternatively, 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 and in some other countries. For example, in 2014 Denmark introduced the 'nyttejob' (useful work)

scheme, which is obligatory for recipients of social assistance and unemployment security benefits⁶.

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 of such schemes. There are initiatives to merge a number of basic security schemes into one single scheme inspired by the British universal credit system. Britain is in the process of overhauling its social security system by combining six previously separate social security and tax deduction schemes. The aim is to have a unified system that is more incentive-based and easier to understand, and in which 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.

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 housing allowance scheme.

Some of the models discussed later cannot be considered as forms of basic income. Some them are very difficult to evaluate by microsimulations, 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 – providing that they are needed.

5.6.1 Participation income/participatory social security

In addition to unconditional models there have also been a number of proposals for basic income that would include conditionality and obligations. Debates have revolved around participation income even though the obligation to do community work has also occasionally been included in the concept of basic income. The main principle in these proposals is individuals could gain the right to basic income by being active. According to Anthony Atkinson, 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. The central issue (and problem) in participation income is which types of activity would be interpreted as participation. This means that the introduction of participation income would require a political debate about the conditions of participation.

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 participa-

⁶ See: http://www.boernogunge.dk/internet/boernogunge.nsf/0/126DAF939F007F70C1257DDD003C9558?opendocument.

tory 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 problematic situations. 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 make employment-promoting decisions.

Participation income is often understood as a combination of unconditional minimum income and a participation supplement paid on top of it. Participation supplements linked with the 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 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 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 unemployment benefits. An arrangement such as participation income would eliminate this problem and it would also make it easier for the unemployed 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 use. In fact, in the debate of technological transition, basic income is often presented as participation income that also provides the 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.

The extensive administrative apparatus required for delivering and administrating participation income is one of its weaknesses. 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 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.

Without doubt, participation income would require administration, services tailored to each individual's needs and resources for managing the scheme. There is also the question how the genuinely voluntary nature of the model could be ensured while running the risk that participation income could replace paid work and 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.

In sum, the major weaknesses of participation income are 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 e.g., for occupational safety and health. Because of administrative problems, the participation income model would not be the most feasible option for a field experiment. Besides, by being partially conditional, it would not allow research on unconditional 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 compared to the current system.

5.6.2 Alternative models - Universal Credit/active welfare

There has been some interest in Finland in the Universal Credit scheme, which is being introduced in Britain. Christian Democrats have used 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 how social transfers are 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 for examining other options for eliminating disincentives of the current social security system.

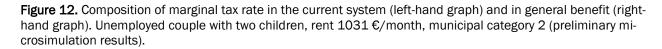
The Universal Credit scheme has been developed so that working would always increase the net income of households, while social transfers would gradually decrease. In fact, the level of the benefit would depend on the income of the household, not on individual income. The publicly expressed aim of the 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

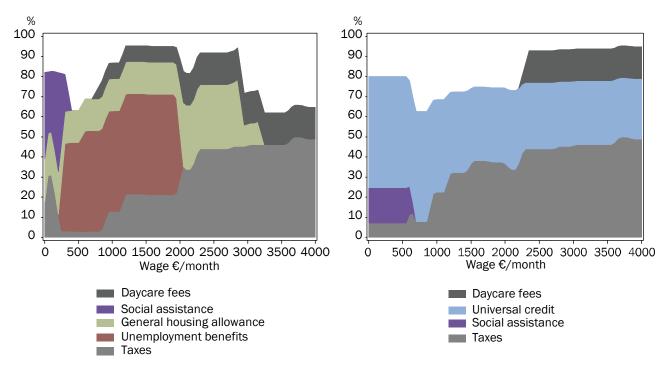
cent of Britain's employment offices (364,000 beneficiaries on 22 February 2016) and the results reported by the British government seem positive. The view is that the beneficiaries find work more quickly and earn more than before. In January 2016, a total of 32 per cent of the beneficiaries were in employment.

Under the active welfare model proposed by Finnish Christian Democrats, most of the basic Kela-administered benefits would be combined into one single 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, the combination of benefits and the introduction of an electronic system would eliminate some of the bureaucratic traps of the current social security system. The model is based on the idea that as income increases, benefits are 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.

The new form of benefit would consist of a basic component and a housing component, which would depend on family structure. The basic component would consist of a basic component paid to adults (729 euros + possible single parent supplement), the number of additional adults (343 euros), a child component (117 euros for one child and 109 euros for each additional child) and a 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 of net work income. In the modelling below, housing costs are based on the average situation in municipality category 2 and the criteria for 2016 social assistance legislation are used in the microsimulation models. The basic levels have been adjusted so that the general benefit would not significantly change the disposable income of households. In other worlds, the solution would be cost-neutral from the perspective of households.

The benefit would replace general housing allowance, social assistance and as many other taxable benefits as possible. In the early part of the modelling, the focus is on replacing basic unemployment allowance, labour market subsidy, general housing allowance and social assistance with the general benefit. In the simulations, those eligible for the general benefit would also remain eligible for social assistance so that it can be calculated how large a proportion of the beneficiaries would receive the 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 for by increasing the single parent coefficient in the basic component. Tax rates would remain unchanged and the general benefit would be tax-free.





As shown in the panels in Figure 12, effective marginal tax rate under the current model is high, which was already shown above in the examination of the different basic income models. In the general benefit system, 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 the general benefit must pay higher day care fees, the effective marginal tax rate would also be higher. The modelling of universal credit like systems should continue and the model should be made more precise.

5.6.3 Basic account - a liberalistic approach

Different types of account models have been proposed in Finland and other countries. In 2013 the Finnish Libertarian think tank Libera presented its own social security model based on personal accounts. 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. 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 an account. However, no more than 50,000 euros could be transferred to the account each year.

All working age individuals with the capacity to work 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 billion euros. Other social security benefits would be retained but the idea is that there would be less need for them than now. The basic account system 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 the individuals themselves would become responsible for meanstesting it would nevertheless be possible to control the spending of the money kept in the account. Supporters of the basic account system favour this scheme over basic income because the basic account system 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 time unit. 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 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 were doing a varying amount of short-time work each month. This would be a problematic model for Kela to administer. If there was an up-to-date income register that is updated each month, Kela could automatize 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 is possible.

5.6.4 Changes in housing allowance: "housing grant" 7

Housing allowance is one source for work disincentives, and a "Housing grant" is one way to try to solve the problem. The housing grant means a monthly transfer paid to households or individuals for covering housing costs. The 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 (e.g. municipality) and it increases as the size of the family increases. In this respect it resembles the Universal Credit scheme used in Britain.

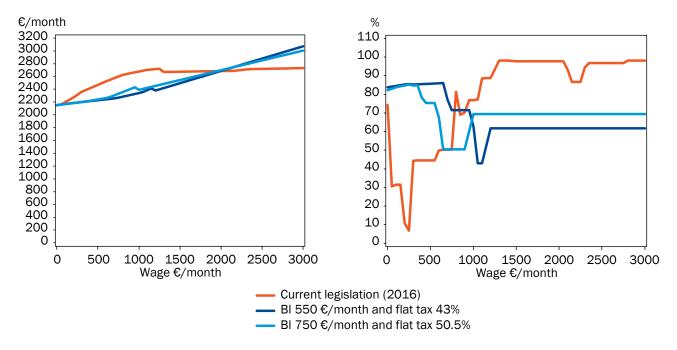
⁷ This section is based on Jouko Verho's memorandum discussing housing benefits provided as part of the basic income experiment. The calculations are based on the ideas of the winning proposal in the basic income hackathon organised by Sitra and the think tank Demos.

The housing grant could be of the same size as the housing allowance paid to a household at the start of the experiment. The housing grant would remain unchanged irrespective of the housing costs incurred by the household or changes in them during the experiment. In that case the housing grant would in practice be a part of 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 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 the examination of the interesting housing-related incentive and behavioural effects, the housing grant should only be introduced for some of the treatment groups so that the effects of the housing grant on housing decisions can be separated from other effects of basic income.

One homogenous and uniform basic income system would fit badly in a context with a huge variation in housing costs within the country. The problem could be solved by a housing allowance system that takes into consideration regional variation in costs of housing. However, here we have the incentive problems discussed above. The second option could be the "housing grant", i.e. a model where basic income includes living cost supplements that would specifically take into account regional differences in housing costs. The supplement could be formed as follows: each adult should receive 400 euros in housing allowance in municipality category 1 and 2, 300 euros in municipality category 3, and 200 euros in municipality category 4. Figure 13 (p. 49) 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 unemployment benefit with two day care-aged children in the most expensive municipality category. The rent is set at 110 per cent of the rent used as the 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 housing costs.

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

Figure 13. Disposable income after taxes and daycare fees and effective marginal tax rate of employed single parent in the current tax-benefit system and partial BI models with simple flat tax (two children in daycare, adjusted basic unemployment allowance, rent 1030.70 €/month, municipal category 1, child benefits included).



It would be relatively easy to include the housing grant in the experiment as its level can be determined in accordance to 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 would be the same amount for all people living in an area. It would also be 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 would not be too much variation based on housing costs in the housing grants 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 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.

6 PLATFORM FOR THE 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 developed 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 basic social assistance to Kela which happens in the beginning of 2017).

6.1 Using Kela as the payment platform

The ability of Kela to serve as the payment platform is examined on the basis of four different options⁸. In the first option (A), 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, basic income would be paid on a monthly basis to the thousands of individuals in the treatment groups. 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), basic income would be paid to the treatment 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 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 treatment group so that the official processing basic income grants a specific amount to the client without calculations and decisions. Basic income would be paid as regular payments until the end of the experiment or until the official responsible 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 create a new separate benefit-processing system by copying the basic solutions from existing payment schemes set up for guarantee pension payments.

Of the four options above, 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,

⁸ 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.

option A could be tested on a specific group and relatively small treatment groups. Option A 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. 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. 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 basic income would appear in connection with 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. Using 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, 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 between 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 system, the size of the sampling group and the experiment timetable are known. The problem is that nearly all of the 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.

6.2 Basic income experiment and Finnish Tax Administration9

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 a new system (Gentax) which will be in place in 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. A flat rate tax would cover the 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 separated from normal taxation calculations and tax prepayment basic calculations. In the flat tax model basic income would be taxexempt 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 basic income would be based on a specific flat tax rate. The flat tax could be the same for everybody or graded 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 calculations as taxable benefit. If the intention is to make basic income completely tax-exempt there should be a separate basic income deduction in the calculations. The deduction would decrease as net earned income and net capital income increase. All other deductions would be as before. Tax withholding could be carried out on basic income if the client 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.

⁹ This section is based on a memorandum prepared by the Finnish Tax Administration.

7 ASSESMENT OF THE MODELS AND RECOMMENDATIONS

The different basic income models have their own strengths and weaknesses. Below (see Table 12, p. 55) 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 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 them if basic income guaranteed similar earnings. High basic income could also cause political and 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. Because of these institutional and political constraints it would probably be impossible to even try a model with full basic income. Trade unions and political actors close to them would strongly oppose such a scheme.

Negative income tax has its own attractions. However, from the perspective of testing, the model has its problems. 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 the 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 from the Finnish Tax Administration.

The advantage of **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 unconditional basic income. Even though there has been a great deal of debate on participation income in connection with basic income, experiments with basic income and participation income would respond to different information requirements. Thus, there would be two experiments. However, the experiments should 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 immedi-

ately. Like the negative income tax, the general benefit system 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 participation income, the conditional nature of the Universal Credit model makes it impossible to examine the effects of unconditional 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** system would be such a big reform in the current system 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 the basic account system 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 their income 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 on partial basic income. The advantage of the model is that it would provide continuity for persons with an uncertain flow of income. It would also be possible to introduce the model gradually by adding benefits provided by Kela as part of basic social security. This approach would also provide a basis for experimenting with 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 generalize.

Even though partial basic income would offer a solution for a large number of bureaucratic traps, gaps and delays, it would not alone 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 good to remember that a basic income scheme also involves administration even if it means less bureaucracy. In sum, our conclusion is that partial basic income combined with the designs described above would provide the best basis for examining the employment and other effects of basic income in a reliable experimental design.

 Table 12. Summary of different models discussed in the report.

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

	Full basic income (1,000+ euros)	Partial basic income (<800 euros)	Negative income tax	Participation income	Universal Credit
Poverty and income gaps, participation	 (+) 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. 	 (+) If higher than the current basic social security benefits they would reduce poverty and narrow income gaps. (+) Would take different life situations into account better 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). 	(+/-) Effects on poverty levels and income distribution would depend on the level of guaranteed income and the tax system.	(+) Might provide a stronger sense of participation if the participation was voluntary and would provide individuals with a better livelihood. (+) Would provide an incentive for more participation. (+) Would make current activation measures more self-motivated. (+) Would benefit civil society organisations. (+) Would allow voluntary work without the fear of losing unemployment security.	(+/-) The effects would depend on the level of benefits and the effectiveness of the sanctions.
Feasibility	(-) Replacing the current earnings- related unemployment security would probably not be economically realistic.	 (+) 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 the conditionality of earnings-related unemployment security. 	(-) Could not be implemented at the moment and would require an income register.	(+) Could be implemented within the current system at the local level.	(+/-) Would require the combination of current basic social security benefits, which might be politically difficult.
Support base	(+) 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). (-) High tax rates could reduce support. (-) Would provi§de a challenge to the earnings-related pension system and unemployment funds: institutional and legitimacy problem.	(-) There is marked decrease in support for basic income when flat tax rates are combined with models of partial basic income.	(-) Might divide individuals more clearly to beneficiaries and payers.	(-) Would also require a political debate on participation criteria.	(-) There is usually little support for means-tested benefits.

	Full basic income (1,000+ euros)	Partial basic income (<800 euros)	Negative income tax	Participation income	Universal Credit
Feasibility for testing	(-) Would make the experiment less credible scientifically as the sample size would, for reasons of cost, remain smaller than for lower basic income levels.		(-) Would require a national income register for real-time income monitoring and monthly payments of guaranteed income based on personal income reporting would weaken the scientific credibility of the experiment.	 (+) Could be tested in small scale and at the local level. (-) Reliability and extrapolation of the results is difficult. (-) Would not allow testing of the effects of unconditional basic income. Because of its conditional nature, would be better suited as a model for a research group developing participatory social security. (-) Constructing a payment platform for the experiment would be difficult. (-) Organisation would require additional resources. Who would be responsible for the organisation? 	(-) Would require an income register; testing would not be currently possible. (-) Because of conditionality, would not allow the testing of the effects of unconditional basic income.

8 POST SCRIPT: WHAT HAPPENED AND WHY¹⁰

8.1 Content of the Government's Bill

On 25th August 2016 the Finnish Ministry of Social Affairs and Health sent out for comments a legislative bill on the basic income experiment. In a nutshell the Ministry suggests in the legislative proposal as follows:

- 1. The aim of the bill is to carry out the basic income experiment included in Prime Minister Juha Sipilä's Government Programme. The basic income experiment is one of the activities aiming to reform social security so that it corresponds better to the changes of working life, to overhaul social security to encourage participation and employment, to reduce bureaucracy, and to simplify the complicated benefits system in a sustainable way regarding public finances.
- 2. The basic income experiment will be carried out in 2017–2018. The Social Insurance Institution of Finland (Kela) would be responsible for carrying out the experiment. The primary goal of the basic income experiment is related to promoting employment. The experiment including a follow-up research aims to find out whether basic income promotes employment.
- 3. Persons between 25 and 58 years of age living in Finland who in November 2016 receive basic daily allowance or labour market support under the Unemployment Security Act are the target group of the experiment. From the target group, a test group of 2,000 persons will be selected by random sampling. When assessing the effects of basic income, the test group would be compared with a control group comprised of such persons from the target group who do not receive basic income. The test group would not include persons receiving old-age pension or students, for example, because improving their employment situation is not the objective of the basic income experiment.
- 4. It would be mandatory to participate in the experiment, which would ensure that the results will not be biased. According to the bill, the net level of basic income would be €560 per month. Since the experiment would be mandatory, the level of the lowest basic income to be tested should correspond to the level of labour market subsidy and basic unemployment daily allowance. Basic income would be tax free for the receivers.
- 5. Basic income would be paid by Kela. An experiment means that, at this point, basic income will not be paid to the whole population.
- 6. The government proposal is included in the budget proposal for 2017. The intention is that the acts would enter into force on 1st January 2017.

8.2 Reactions on the Bill: "a foolish and outrageously expensive travesty"?

As could be expected, initial reactions to the bill were highly critical. As is the case with most matters of public interest, the more details about them are revealed, the more criticism they tend to attract. The public response may be favourable as long as the discussion remains on a theoretical level, but when the focus turns to more concrete issues, the comments become more critical. We may perhaps safely assume that everyone is in favour of equality, but opinions diverge when it comes time to find practical ways to promote it. Similarly, there is a strong general support for the idea of basic income but it does not have bearing for the specific basic income models. Also taxes needed to finance the system will diminish the support of the model. Thus, the political and practical problem is that in principle people are in affirmative but in practice they are not willing to pay the financial costs.

As expected, this is precisely what happened with the basic income experiment. Some thought that the amount that would be paid out as a basic income was outrageously large, while others found it shamefully meagre. Some considered the target population to be completely unsuitable and argued that it should include students and other young persons, those who are partially fit for work, freelance workers, micro-entrepreneurs, non-regular workers, and low-income individuals.

Criticism from the opponents and proponents of a basic income

While some of the criticism was expected, some came from unexpected quarters, namely those who wholeheartedly support the idea of a basic income in general. Economists pointed out that the model selected was not cost neutral. Some even denounced it as "outrageously expensive". However, there were economists who had good words for the experiment, saying that the experiment design can provide valuable information about incentive effects. The criticism expressed by Social Democrats was expected given their earlier comments on the basic income. Some of them rejected the experiment out of hand. "Sample too skewed and small, research pointless. How can anyone who calls himself a scientist go along with this travesty?" Criticism also came from the ranks of the Green Party and the Left Alliance, both parties that support the idea of a basic income. They found fault with the decision to focus on the unemployed, with the fact that the basic income would be exempt from tax, and with the high cost of the system. Some argued that the experiment should have been built around voluntary rather than mandatory participation. Voices from the Left Alliance took up the same line of criticism, calling for the inclusion of various specific population groups in the experiment. According to the Christian Democrats, the model is unsustainable and should be replaced by something that mimics the British Universal Credit system. The Centre Party's youth organization said that the proposal left young people behind. Some Centre representatives admitted the problems but argued that the experimental design suggested is a good starting point and possibly can be complemented by a larger experiment.

There are many reasons for this criticism. Much of it is well founded while some stems from misunderstandings, whether accidental or intentional. Some of it is simply politics: Whatever

the government does, the opposition will criticise. After all, the logic of opposition politics seems to be that the government never does anything well or to completion. Compared to the optimal experiment design outlined in the preliminary report, the current proposal is very limited in scope and for many a terrible disappointment. This, too, is behind some of the criticism being heard. Finally, some of the comments combine all of these elements.

In the following, we will attempt to explain why the criticised model and experiment design were chosen, and why the model diverges from the designs outlined in the preliminary report.

8.3 Why were the recommendations of the preliminary report not adopted as such?

The budget for the experiment was €20 million, which had to cover the administrative cost of the experiment. This means that the factual amount available for benefit purposes is less than €20 million.

In the finale end the Finnish Tax Administration was not able to participate in the drafting of the law. Therefore, it was impossible to make any changes in the tax provisions, which means that the model had to be based on the existing tax system. The preliminary report of the research team describes a number of cost-neutral tax models, but implementing them might have cost as much several million euros. Also, it would have been impossible, both in terms of the technical implementation and the legislative work required, to produce them by 1 January 2017.

It was decided not to test several different levels of basic income. Under the constitution, all individuals are to be treated equally unless there are justified reasons for not doing so. The prospect of producing valuable information to support decision-making can be considered to be such a justified reason. An experiment of this kind is without precedent in Finnish history. Therefore, the decision was taken to start off with one level of basic income that would correspond to the current level of basic economic security enjoyed by the target group. Participation was made mandatory in order to prevent selection bias and to get reliable results from the experiment. It would be possible to carry out the experiment on the basis of voluntary participation, but such a design includes so many potential sources of error that we decided against it. A voluntary experiment is only the second-best experiment!

The reason for the decision to carry out the experiment among 2,000 unemployed persons is that, as current recipients of welfare benefits from Kela, they offer a cost-effective alternative. The adopted research model is such that it allows us to base the research around unemployment benefits being paid out by Kela. Also, it is less complicated to draft the law with a specific group of people in mind. With a more heterogeneous treatment group, it would have been more laborious and time-consuming to make sure that the research model would fit a variety of different work, family and social policy situations. Inserting a simple model into a complex institutional environment is a difficult task. In this regard, the time constraints placed on the legislative process limited the choice of the target population and research model. Groups

other than those collecting unemployment benefit from Kela had to be excluded for reasons having to do with costs, taxation and various "long-tail" considerations of social policy.

Taking into account the administrative realities of unemployment benefit provision, the 2,000 (possibly increased later to 3,000) unemployed individuals are the maximum population size that can be accommodated within the specified timeframe. With a significantly larger sample, it would be necessary to devise a more complex payments system, which would have taken longer. What we said about the legislative process applies here as well. Introducing a new element into the payments system requires all of the other system elements to be adjusted, which requires a substantial effort in terms of systems development. However, Kela's systems development resources are already reserved for the pressing task of creating a payments system in time for the handover of social assistance payments from the municipalities to Kela, which will take place on 1 January 2017.

Finally, the choice of unemployment benefit recipients was supported by the possibility to make the sampling speedy and efficient. This is because the up-to-date recipient registries maintained by Kela make it easy to draw a sample of unemployment benefit recipients. If the target population consisted of low-income individuals, as envisaged in the preliminary report, the sampling would have had to be made on the basis of tax data, which, at worst, can be two years old. Thus, the sample would have been based on data that was no longer current. A treatment group drawn from some other source than Kela's beneficiary registry would have been too expensive given the limited budget for the experiment.

As for the notion that the target group would consist of students and other young people, those in non-regular or freelance employment, or individuals who are partially fit for work, we must bear in mind the limits imposed by the experiment budget of \in 20 million minus administrative costs. One participant who is a freelancer/non-regular worker/self-employed carries a cost of about \in 14,000 for the experiment budget. Hence, if the entire budget of \in 20 million (not taking into account the administrative costs) were spent on the above mentioned groups, the sample would only comprise about 1,400 individuals. Taking into account the administrative costs, we would be left with a sample of not much more than 1,000 persons, which would have to be subdivided into smaller groups of a few hundred individuals. Any information obtained from such a small sample would not be reliable. A sample population of 1,000 students carries a cost of \in 10 million. Then, if the sample were divided between several municipalities, the sample would be fragmented even further.

The model outlined in the draft bill has been criticised for being too generous and not cost neutral. The model is generous because the basic income has been defined as tax-exempt income. No one is proposing that this tax-exempt model would be adopted as such. The tax-exempt model was defended with the argument that because it was necessary (as described above) to adopt such a small sample size, the treatment effect would have to be significant for us to determine reliably whether the treatment has any effect. According to power analyses, using the model set out in the draft bill and a sample of 2,000 individuals, we can identify this effect. The model allows us to detect whether financial incentives affect people's behaviour. If

this generous model has no effect, what will? The model can also be used to study how "bureaucracy traps" affect behaviour.

Our hope is that the experiment scheduled to start on 1st January 2017 will be a pilot study followed later by a larger experiment, which would include many other groups and which would allow us to test cost-neutral models, either on the basis of the flat-tax models described in the preliminary report or with modified progressive tax models. There are some positive signs in that direction. But of course, that would require a larger budget, the participation of the tax administration in drafting revised tax laws, and resources for Kela to construct a payments system suitable for use in a relatively large treatment group.