CeMPA Working Paper Series

**CeMPA WP 07/22**

# Two feasible Basic Income schemes for the UK, and a feasible pilot project for Scotland

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April 2022

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CeMPA
Centre for Microsimulation and Policy Analysis

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## Acknowledgements

In relation to UKMOD, the microsimulation programme used to obtain the research results contained in this report: I am most grateful to Holly Sutherland, Matteo Richiardi, Alari Paulus, Cara McGenn, Iva Tasseva, Paola De Agostini, and all those from the Institute for Social and Economic Research and the Centre for Microsimulation and Policy Analysis who have given me considerable assistance with research and working papers during the past fifteen years.

The results presented here are based on UKMOD version A3.0+. UKMOD is maintained, developed and managed by the Centre for Microsimulation and Policy Analysis at the University of Essex. I am indebted to all of the former developers of the UK component of EUROMOD and later UKMOD: Mike Brewer, Kakia Chatsiou, Paola De Agostini, Chrysa Leventi, Sara Reis, Holly Sutherland, and Iva Tasseva.

UKMOD was supported from 2018 to 2021 by a Nuffield Foundation grant (grant WEL/43597 2018-2021). The Nuffield Foundation (www.nuffieldfoundation.org) is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in Education, Welfare, and Justice. It also funds student programmes that provide opportunities for young people to develop skills in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics and the Ada Lovelace Institute.

The UK Family Resources Survey data was made available by the Department for Work and Pensions via the UK Data Archive.

UKMOD delivers static microsimulation results, and does not account for possible behavioural responses nor for general equilibrium effects.

The results obtained during this research project and their interpretation are the author's responsibility. Opinions expressed in this report should not be regarded as opinions of the Nuffield Foundation, the Freiburg Institute for Basic Income Studies, where the author is a member of the microsimulation group, the Institute for Policy Research at the University of Bath, where he is a Visiting Fellow, or the Basic Income Earth Network (BIEN), of which he is treasurer and a trustee.

## 1. Definitions

Research projects require clear definitions consistently applied (Torry, 2021d). Three definitions will be important in relation to this report.

- A ‘Basic Income’ is ‘an equal, regular and unconditional income for every individual of the same age’. This definition conforms to the definition published by the Basic Income Earth Network (BIEN), ‘A Basic Income is a periodic cash payment unconditionally delivered to all on an individual basis, without means-test or work requirement’ (Basic Income Earth Network (BIEN), 2022), and that published by the Citizen’s Basic Income Trust, ‘An unconditional, nonwithdrawable income paid to every individual as a right of citizenship’ (Citizen’s Basic Income Trust, 2022).
- A ‘Basic Income scheme’ is a Basic Income, with levels defined for each age group, the funding method fully specified, and any accompanying changes to existing tax and benefits systems also fully specified.
- A ‘pilot project’: The relevant definition of ‘pilot’ used as an adjective is given by the Oxford English Dictionary as ‘That serves as a prototype or trial prior to a full-scale operation or activity; experimental, initial’. Examples are given: ‘pilot study’, ‘pilot project’. This suggests that we should define ‘a Basic Income pilot project’ as ‘A prototype or trial Basic Income scheme prior to a full-scale Basic Income scheme’. We shall therefore require that the Basic Income scheme that is the subject of the pilot project should have the same characteristics as the national Basic Income scheme for which it is a pilot project; and as a national Basic Income scheme would have to be financially and otherwise feasible if it were to be implemented, the Basic Income scheme tested in the pilot project would have to be financially and otherwise feasible to implement nationwide.

## 2. Introduction

A Basic Income is an equal, regular and unconditional income for every individual of the same age, and an increasingly important element of the global debate about the proposal is the question of financial feasibility: not only in relation to whether it would be possible for a country to afford to pay a Basic Income, but just as importantly in relation to a Basic Income scheme's effects on household disposable incomes. No Basic Income would ever be implemented on its own, so what would be implemented would be a Basic Income scheme: that is, a Basic Income, with frequency of payment, levels of payment for different age groups, and so on, all specified, the funding method specified, and with all accompanying changes to taxation and other benefits also specified in detail. It would be perfectly possible to implement a Basic Income scheme that would tip large numbers of low income households into deeper poverty: hence the complexity of the question of financial feasibility.

The only research method that can evaluate illustrative Basic Income schemes for all of the required aspects of financial feasibility is microsimulation: a computer programme into which are written all of the tax and benefits regulations of a country, and through which is passed real world financial data on a statistically significant sample of the country's population, in order to generate a set of statistics related to the tax and benefits system written into the programme. First of all the current tax and benefits system of a country is microsimulated. Then changes can be made—for instance, a Basic Income can be written into the programme—and current taxes and benefits might be changed. A new set of statistics can then be compared with those related to the current system in order to discover the effects that an illustrative Basic Income scheme would have in the real world: for instance, in relation to poverty and inequality indices, household net disposable income gains and losses, numbers of households on means-tested benefits, and so on. In the UK we are fortunate to have available UKMOD, a UK version of EUROMOD, maintained by the Centre for Microsimulation and Policy Analysis at the University of Essex. We also experience the benefit of a long history of microsimulation research (Torry, 2021b: 144–47), and significant amounts of recent microsimulation research in relation to the Basic Income debate (Lansley and Reed, 2019; Martinelli, 2017a; 2017b; 2017c; Reed and Lansley, 2016; Torry, 2019; 2020a; 2021a; 2021c; 2022).

This author's own research has been conducted in the context of an increasingly onerous set of feasibility criteria for illustrative Basic Income schemes. The most recent additional criterion is the retention of an Income Tax Personal Allowance at a realistic level rather than its reduction to zero. The argument for this change is that to abolish the Income Tax Personal Allowance in its entirety would result in Income Tax being charged on occasional and very part-time earnings, which would be administratively difficult to achieve. The same problem would result from reducing the National Insurance Contributions Primary Earnings Threshold to zero. The problem with retaining a realistic Income Tax Personal Allowance and a realistic National Insurance Contributions Primary Earnings Threshold is that it then becomes more difficult to provide a Basic Income at a realistic level and at the same time meet all of the existing feasibility criteria—reductions in poverty and inequality indices, a reduction in the number of household on means-tested benefits, almost no significant household net disposable income losses for low-income households, and keeping Income Tax rate increases to three percentage points or lower. Research has shown that a Basic Income paid at Minimum Income Standard level would not be feasible (Torry, 2020b), but to pay anything below about £60 per week to every working age adult would be unlikely to offer the beneficial effects that we might expect a totally secure layer of income to provide. This research exercise finds that it is in fact possible to pay a Basic Income of more than £60 per week, retain an Income Tax Personal Allowance of £3,000 per annum and a matching National Insurance Contributions Primary Earnings Threshold, and at the same time meet the normal feasibility criteria.

But having said that there are arguments for retaining a realistic Income Tax Personal Allowance, there is also an argument for turning as much of it as possible, and potentially all

of it, into a Basic Income. An Income Tax Personal Allowance benefits those with earned incomes more than it benefits those with earned incomes below it. The problem is particularly acute when increases in the Income Tax Personal Allowance are advertised as a way to reduce poverty when they are in fact of benefit to the less poor and of no benefit at all to the poorest. Recently the New Economics Foundation has proposed turning the Income Tax Personal Allowance into a Weekly National Allowance: a payment to every individual that would have been a Basic Income if it had not been withdrawn from the highest earners (Pollard et al., 2022; Stirling and Arnold, 2019). Accordingly, the second section of this report evaluates an illustrative Basic Income scheme paid for almost entirely by reducing to zero both the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold. This second illustrative scheme is evaluated in relation to all of the usual feasibility criteria but not of course in relation to the requirement for a continuing Income Tax Personal Allowance.

The Basic Income debate is now global and diverse, and an important aspect of it relates to the desirability or otherwise of holding pilot projects. A significant problem relating to holding a genuine saturation site Basic Income pilot project in the context of a more developed economy is that for an experiment to be a genuine pilot project it would have to be with a Basic Income scheme that could feasibly be rolled out nationwide. In the UK, changing Income Tax and National Insurance Contribution rates for an individual community would be nigh on impossible, as would be changes to any of the regulations relating to existing tax and benefits systems. What is particularly interesting about the second kind of Basic Income scheme evaluated in this report is that most of the very small number of changes that it envisages would be possible to make for a single community. For a single community, everyone could be allocated a ‘BR’, ‘basic rate’, tax code, which would have the effect of reducing the Income Tax Personal Allowance to zero for all of those individuals. If a Basic Income could then be paid to every individual in that community, and if a way could be found to reduce the National Insurance Contributions Primary Earnings Threshold to zero for the community’s population, then because means-tested benefits calculations would automatically change in relation to households’ Basic Incomes and changes to earned incomes brought about by the loss of the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold, that community could experience a Basic Income scheme that could be rolled out nationwide, and so would be taking part in a genuine pilot project. A control community chosen to match as far as possible the social and economic characteristics of the pilot community would then enable a random controlled trial to take place, meaning that we would be able to evaluate some of the effects of an illustrative Basic Income scheme that cannot be predicted on the basis of microsimulation, such as changes to employment market behaviour.

The research reported here therefore responds not only to the more general question as to whether financially feasible Basic Income schemes exist, but also to the important question as to whether it would be possible to hold a genuine pilot project in the context of a more developed economy.

## 3. A Basic Income scheme that would retain a realistic Income Tax Personal Allowance

For the purposes of the research reported below, the following feasibility criteria have been assumed (Torry, 2019: 22–23, 44–45):

- As few changes as possible are to be made to the current tax and benefits system, consistent with the other aims in view. (This criterion is required because of the difficulty of getting multiple complex changes through the UK's policy process at the same time);
- revenue neutrality (Hirsch, 2015), which for the purposes of this research exercise is taken to be a net cost or saving of no more than 0.1 per cent of GDP for the scheme as a whole;
- the avoidance of significant household net disposable income losses, particularly for low income households, and in particular an aim of no more than 2 per cent of low income households experiencing household net disposable income losses of more than 5 per cent;
- Income Tax rates to rise by no more than 3 percentage points, with the possibility of the top rate rising by up to 4 percentage points. (This criterion is required because Income Tax rate increases are as much a psychological issue as a fiscal one) (Hirsch, 2015);
- reductions in inequality and in all poverty indices;
- substantial numbers of households taken off means-tested benefits, or brought within striking distance of coming off them.

The revenue neutrality criterion is essential for at least three reasons:

- Any funding gap would have to be filled from another source of funds: for instance, a carbon tax. Getting one change through the UK's policy process is difficult enough. Attempting to get both a Basic Income and a carbon tax through the process at the same time would be even more problematic. Once a Basic Income, funded from within the current tax and benefits system, had been established, funding an increase in the Basic Incomes by establishing a carbon tax would then be both sensible and possible;
- Tax revenue can normally be employed for any government purpose, so there is no intrinsic reason for a consumption tax, a carbon tax, or almost any other tax, to be used by a government to fund a Basic Income scheme. The one exception is the combination of Income Tax and National Insurance Contributions. The substantial additional tax revenue obtained from significant reductions in the Income Tax Personal Allowance and the Primary Earnings Threshold would have to be returned immediately to households if large household disposable income losses were to be avoided: so tax revenue from this source could only be used to fund the Basic Incomes.
- If there is a funding gap in an illustrative Basic Income scheme, then the additional funds required would have to be obtained from somewhere: a carbon tax or consumption taxes are sometimes suggested. Any additional source of funds would impact household disposable incomes, which would render the results obtained from the microsimulation exercise unreliable and therefore misleading if published.

The currently regressive nature of National Insurance Contributions (NICs) invites an increase from 2 per cent of earned income to 12 per cent of earned income above the Upper Earnings Limit, so collecting NICs at 12 per cent on all earned income above the Primary Earnings Threshold would provide a legitimate and useful funding source.

While some of the funds to pay for the Basic Income scheme would be obtained from increasing the Income Tax rates and the National Insurance Contributions rate for higher earners, most of the funds would be obtained by reducing the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold. Most previous illustrative schemes for the UK have reduced these thresholds to zero. The research reported here takes a more balanced approach, and allows for a layer of tax-free earned income in order to encourage occasional and part-time employment and the establishment of new enterprises, and also to avoid the problem of the tax authorities having to collect Income Tax on small part-time or occasional earned incomes.

The illustrative scheme that has emerged from sequentially altering the parameters of a Basic Income scheme, microsimulating the resulting schemes in relation to the current tax and benefits systems, and evaluating the effects of the schemes against the criteria listed above until a scheme is found that satisfies them, is as follows: The scheme retains a small but meaningful Income Tax Personal Allowance of £3,000 per annum, with a matching Primary Earnings Threshold of £57 per week, and it pays a Working Age Adult Basic Income of £65 per week [1] along with lower amounts for younger adults, a £10 per week addition to Child Benefit, and a small Citizen's Pension alongside the existing Basic State Pension. The basic rate of Income Tax is raised from 20% to 23%, the higher rate from 40% to 43%, and the highest rate from 45% to 49%: increases that would be psychologically and therefore politically feasible. Because the Basic Incomes cannot be high enough to remove all households from means-tested benefits, the Basic Incomes are taken into account in the same way as other income when means-tested benefits are calculated, except that in relation to Housing Benefit and Council Tax Benefit only half of each Basic Income is taken into account in order to reduce the number of low-income household disposable income losses to an acceptable level, and in relation to Universal Credit, Basic Incomes are treated as earned rather than unearned income. National Insurance Contributions are evened out at 12% for all earned income above the Primary Earnings Threshold.

The outcome is an illustrative Basic Income scheme that retains a small but still meaningful Income Tax Personal Allowance, and a small but meaningful National Insurance Contributions Primary Earnings Threshold, and that raises Income Tax rates by feasible amounts while at the same time paying Basic Incomes at levels that would make a significant difference to individuals' and households' financial security. The Basic Income levels and Child Benefit increase translate into completely secure layers of income of £282 per month for an individual living alone, £563 per month for a couple, and £807 per month for a couple with two children.

Detailed results for the microsimulation exercise are as follows:

[1] Calculation: If x is the residual Income Tax Personal Allowance (ITPA), and the National Insurance Contribution (NIC) Primary Earnings Threshold (PET) is designed so that NICs and Income Tax (IT) start to be paid at the same earned income level, then in relation to values of ITPA and NIC PET for 2022–23: (((12570 – x) / 52) x (23 / 100)) + ((242 – (x / 52)) x (12 / 100)) = 65. x = 3251 and x/52 = 62.52. These have to be lowered to an Income Tax Personal Allowance of £3,000 per annum and a National Insurance Contributions Primary Earnings Threshold of £57 per week in order to meet the feasibility criteria.

*Table 1: The illustrative Basic Income scheme*

| **Basic Income levels, tax rates, and net cost of scheme** | |
|---|---|
| Citizen's Pension per week (existing state pensions remain in payment) | £35 |
| Working age adult Basic Income per week (25 to 65 years old) | £65 |
| Young adult Basic Income per week (20 to 24 years old) | £50 |
| Education age Basic Income per week (16 to 19 years old, but not young people still in full-time education, and whose families therefore receive Child Benefit) | £30 |
| (Child Benefit is increased by £10 per week) | [£10] |
| Income Tax, basic rate (on £3,000 – £50,270) | 23% |
| Income Tax, higher rate (on £50,271 – £150,000) | 43% |
| Income Tax, top rate (on £150,000 – ) | 49% |
| Net cost of scheme (£1.1bn per annum equates to 0.05% of UK GDP) | £1.1bn p.a. |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Table 2 shows how many households would suffer disposable income losses of over 10% and over 5%, and how many households in the lowest equivalised disposable income quintile [2] would suffer losses of over 10% and over 5%.

*Table 2: Household disposable income losses*

| **Household disposable income losses over 10% and 5% for all households and for the lowest equivalised disposable income quintile** | |
|---|---|
| Proportion of all households experiencing losses of over 5% at the point of implementation | 9.00% |
| Proportion of all households experiencing losses of over 10% at the point of implementation | 1.97% |
| Proportion of households in the lowest equivalised disposable income quintile experiencing losses of over 5% at the point of implementation | 1.94% |
| Proportion of households in the lowest equivalised disposable income quintile experiencing losses of over 10% at the point of implementation | 1.37% |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Table 3 shows the changes in the numbers of households receiving means-tested benefits, and also the numbers of households brought within striking distance of coming off them.

[2] The OECD equivalisation method is used, which allocates 1 for the first adult in a household, 0.5 for a second person aged 14 or over, and 0.3 for children under 14 years old. The figures are added, and the household disposable income divided by the total to generate the equivalised income. Households are then ordered by their equivalised incomes and the losses experienced by households with the lowest 20% of equivalised disposable incomes are evaluated.

*Table 3: Reductions in numbers claiming means-tested benefits or within striking distance of coming off them, and the reductions in the total costs of the benefits and in the average value of claims*

| **Numbers of households claiming means-tested benefits or within striking distance of coming off them** | **The existing scheme in 2022-23** | **The Basic Income scheme** |
|---|---|---|
| Percentage of households claiming any means-tested benefits | 30.90% | 30.49% |
| Percentage of households claiming more than £100 per month in means-tested benefits | 27.05% | 25.83% |
| Percentage of households claiming more than £200 per month in means-tested benefits | 24.10% | 21.40% |
| **Reductions in total cost and average value of claims for means-tested benefits** | **Reduction in total cost** | **Reduction in average value of claim** |
| All means-tested benefits | 17.73% | 16.63% |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Tables 4 to 7 show reductions in inequality and poverty rates.

*Table 4: Poverty indices for 2022-23 for the illustrative Basic Income scheme (based on incomes before housing costs)*

| **Poverty headcount by population group** | **Poverty rates for current system** | **Poverty rates for Basic Income scheme** | **Difference in poverty rates** | **Percentage reduction** |
|---|---|---|---|---|
| Children | 20.52% | 14.33% | -6.19pp | 30.17% |
| Adults | 13.47% | 9.39% | -4.08pp | 30.29% |
| Adults in work | 6.77% | 4.52% | -2.25pp | 33.23% |
| Elderly | 16.13% | 14.17% | -1.96pp | 12.15% |
| All | 15.45% | 11.30% | -4.14pp | 26.86% |
| Fixed Poverty Line | £338.63 | | | |

Source: UKMOD statistics presenter

*Table 5: Poverty indices for 2022-23 for the illustrative Basic Income scheme (based on incomes after housing costs)*

| **Poverty headcount by population group** | **Poverty rates for current system** | **Poverty rates for Basic Income scheme** | **Difference in poverty rates** | **Percentage reduction** |
|---|---|---|---|---|
| Children | 28.60% | 21.40% | -7.20pp | 25.18% |
| Adults | 18.06% | 13.97% | -4.09pp | 22.63% |
| Adults in work | 10.43% | 7.98% | -2.45pp | 23.49% |
| Elderly | 18.90% | 15.90% | -3.00pp | 15.86% |
| All | 20.44% | 15.89% | -4.55pp | 22.25% |
| Fixed Poverty Line | £295.47 | | | |

Source: UKMOD statistics presenter

*Table 6: Inequality indices for 2022-23 household disposable incomes for the illustrative Basic Income scheme (based on incomes before housing costs)*

| Gini coefficient for current system | Gini coefficient for Basic Income scheme | Difference between the two Gini coefficients | S80/S20 ratio for current system | S80/S20 ratio for Basic Income scheme | Difference between the two S80/S20 ratios |
|---|---|---|---|---|---|
| 0.2940 | 0.2637 | -0.0302 | 4.4855 | 3.7528 | -0.7327 |

Source: UKMOD statistics presenter

*Table 7: Inequality indices for 2022-23 household disposable incomes for the illustrative Basic Income scheme (based on incomes after housing costs)*

| Gini coefficient for current system | Gini coefficient for Basic Income scheme | Difference between the two Gini coefficients | S80/S20 ratio for current system | S80/S20 ratio for Basic Income scheme | Difference between the two S80/S20 ratios |
|---|---|---|---|---|---|
| 0.3331 | 0.2997 | -0.0333 | 5.8928 | 4.7299 | -1.1629 |

Source: UKMOD statistics presenter

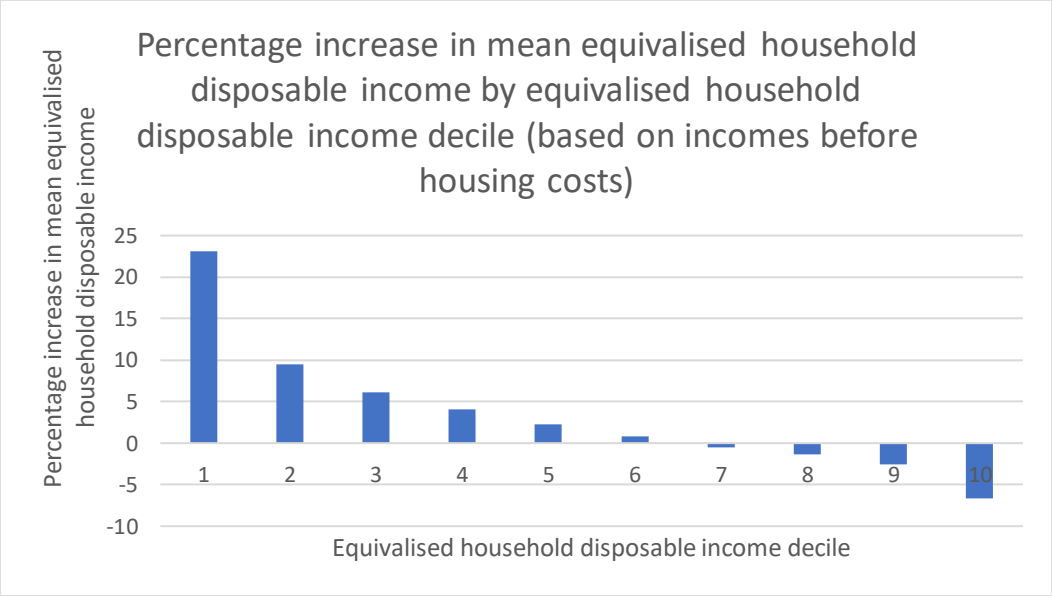
Tables 8 and 9, and figures 1 and 2, show the redistribution patterns that would result from the implementation of the Basic Income scheme, in relation both to incomes before housing costs and incomes after housing costs.

*Table 8: Percentage increase in mean equivalised household disposable income by equivalised household disposable income decile (based on incomes before housing costs)*

| | Current tax and benefits system, £ per week | Basic Income scheme, £ per week | Difference, £ per week | Percentage increase |
|---|---|---|---|---|
| Decile 1 | 211.27 | 260.10 | 48.84 | 23.12% |
| Decile 2 | 334.73 | 366.51 | 31.77 | 9.49% |
| Decile 3 | 403.00 | 427.48 | 24.48 | 6.08% |
| Decile 4 | 465.25 | 484.07 | 18.82 | 4.05% |
| Decile 5 | 529.35 | 541.14 | 11.79 | 2.22% |
| Decile 6 | 599.90 | 604.75 | 4.85 | 0.81% |
| Decile 7 | 682.37 | 678.57 | -3.80 | -0.56% |
| Decile 8 | 789.53 | 778.66 | -10.87 | -1.38% |
| Decile 9 | 943.02 | 919.48 | -23.55 | -2.50% |
| Decile 10 | 1,510.12 | 1,410.07 | -100.05 | -6.63% |

Source: UKMOD statistics presenter

*Figure 1*



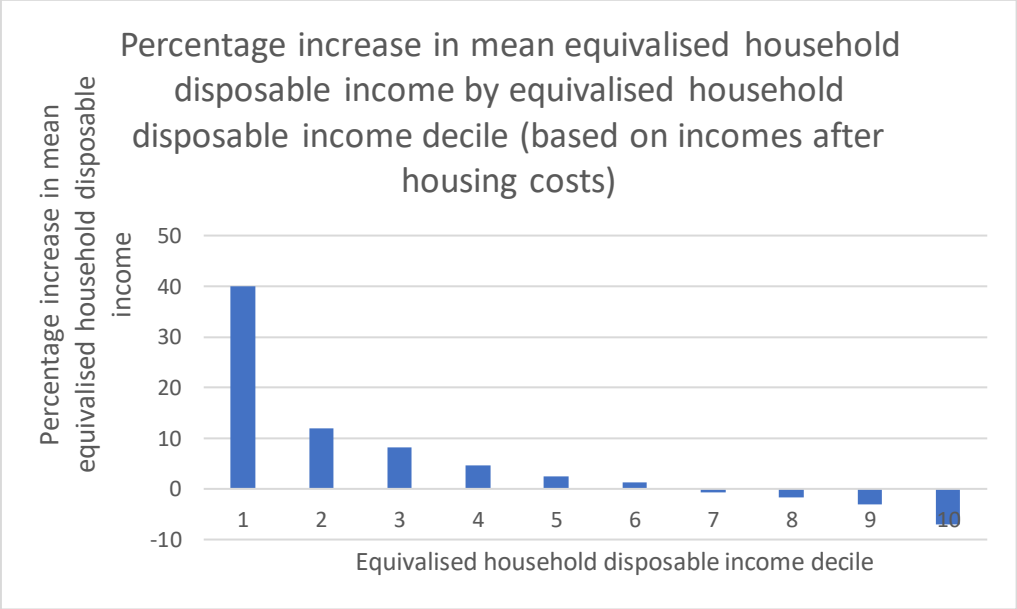

Source: Table created by the author from figures generated by the UKMOD statistics presenter

*Table 9: Percentage increase in mean equivalised household disposable income by equivalised household disposable income decile (based on incomes after housing costs)*

| | **Current tax and benefits system, £ per week** | **Basic Income scheme, £ per week** | **Difference, £ per week** | **Percentage increase** |
|---|---|---|---|---|
| Decile 1 | 121.47 | 170.05 | 48.58 | 40.00 |
| Decile 2 | 258.06 | 288.65 | 30.59 | 11.86 |
| Decile 3 | 324.42 | 351.14 | 26.71 | 8.236 |
| Decile 4 | 387.55 | 405.66 | 18.11 | 4.676 |
| Decile 5 | 455.88 | 466.94 | 11.07 | 2.43 |
| Decile 6 | 527.72 | 534.96 | 7.24 | 1.37 |
| Decile 7 | 613.15 | 609.34 | -3.81 | -0.62 |
| Decile 8 | 719.38 | 707.64 | -11.74 | -1.63 |
| Decile 9 | 872.25 | 845.89 | -26.37 | -3.02 |
| Decile 10 | 1,413.97 | 1,315.88 | -98.09 | -6.94 |

Source: UKMOD statistics presenter

*Figure 2*




Source: Table created by the author from figures generated by the UKMOD statistics presenter

This is the kind of redistributive pattern that we might wish to see generated by a Basic Income scheme. Given that low-income households have a higher propensity to consume than higher income households, the additional income that lower income households would receive on average would increase demand in the economy. The scheme would also benefit the disposable incomes of mid-range income households. Only those with the highest incomes would experience average disposable income losses: but those losses should be well understood in the current circumstances, and would also be manageable.

The Basic Income scheme described here would fulfil all of the feasibility criteria, and so could feasibly be rolled out to the entire UK population. It would also be easy to implement, and so could be rolled out quite quickly if the political will were to exist. Most importantly, the scheme would result in a significant layer of secure and predictable income for every individual and household in the UK.

## 4. A radically simple Basic Income scheme that would reduce to zero the Income Tax Personal Allowance

A second microsimulation research exercise takes its lead from the New Economics Foundation's proposal for a Basic Income funded by reducing to zero the Income Tax Personal Allowance: so the scheme does that, and also reduces to zero the National Insurance Contributions Primary Earnings Threshold. No changes are made to Income Tax or National Insurance Contribution rates, Child Benefit, or existing benefits, although of course Basic Incomes would automatically be taken into account when means-tested benefits were calculated, as would be changed net earned income figures resulting from Income Tax and National Insurance Contributions being collected on all earned income because of the abolition of the Income Tax Personal Allowance and the reduction to zero of the National Insurance Contributions Primary Earnings Threshold. Because in this exercise far fewer parameters of a Basic Income scheme can be altered than for the exercise reported above, feasibility criteria have to be loosened slightly: but the significant result is that a Basic Income scheme that makes such a small number of changes to the current system comes so close to meeting the onerous feasibility criteria imposed on this research project.

The scheme that emerges reduces to zero the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold, and is still able to pay a Working Age Adult Basic Income of £65 per week along with lower amounts for younger adults, and a small Citizen's Pension alongside the existing Basic State Pension. Income Tax rates remain unchanged, and the National Insurance Contribution rate is not raised to 12% above the Upper Earnings Limit. The Basic Incomes are taken into account in the same way as other income when means-tested benefits are calculated, except that in relation to Housing Benefit and Council Tax Benefit only half of each Basic Income is taken into account in order to reduce the number of low-income household disposable income losses to an acceptable level, and in relation to Universal Credit Basic Incomes are treated as earned rather than unearned income.

The outcome is an illustrative Basic Income scheme that reduces to zero the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold, and that does not raise Income Tax rates, while at the same time paying Basic Incomes at levels that would make a significant difference to individuals' and households' financial security. The Basic Income levels translate into completely secure layers of income of £282 per month for an individual living alone, £563 per month for a couple, and £720 per month for a couple with two children.

Detailed results for the microsimulation exercise are as reported in tables 10 to 18.

*Table 10: The illustrative Basic Income scheme*

| **Basic Income levels, tax rates, and net cost of scheme** | |
|---|---|
| Citizen's Pension per week (existing state pensions remain in payment) | £35 |
| Working age adult Basic Income per week (25 to 65 years old) | £65 |
| Young adult Basic Income per week (20 to 24 years old) | £50 |
| Education age Basic Income per week (16 to 19 years old, but not young people still in full-time education, and whose families therefore receive Child Benefit) | £30 |
| Income Tax, basic rate (on £0 – £50,270) | 20% |
| Income Tax, higher rate (on £50,271 – £150,000) | 40% |
| Income Tax, top rate (on £150,000 – ) | 45% |
| Net cost of scheme (£3.67bn per annum equates to 0.17% of UK GDP, and so is above the normal criterion, but by an amount that should not unduly compromise financial feasibility.) | £3.67bn p.a. |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Table 11 shows how many households would suffer disposable income losses of over 10% and over 5%, and how many households in the lowest equivalised disposable income quintile [3] would suffer losses of over 10% and over 5%.

*Table 11: Household disposable income losses*

| **Household disposable income losses over 10% and 5% for all households and for the lowest equivalised disposable income quintile** | |
|---|---|
| Proportion of all households experiencing losses of over 5% at the point of implementation | 8.24% |
| Proportion of all households experiencing losses of over 10% at the point of implementation | 0.93% |
| Proportion of households in the lowest equivalised disposable income quintile experiencing losses of over 5% at the point of implementation | 6.44% |
| Proportion of households in the lowest equivalised disposable income quintile experiencing losses of over 10% at the point of implementation | 1.37% |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Table 12 shows the changes in the numbers of households receiving means-tested benefits, and also the numbers of households brought within striking distance of coming off them.

[3] The OECD equivalisation method is used, which allocates 1 for the first adult in a household, 0.5 for a second person aged 14 or over, and 0.3 for children under 14 years old. The figures are added, and the household disposable income divided by the total to generate the equivalised income. Households are then ordered by their equivalised incomes and the losses experienced by households with the lowest 20% of equivalised disposable incomes are evaluated.

*Table 12: Reductions in numbers claiming means-tested benefits or within striking distance of coming off them, and the reductions in the total costs of the benefits and in the average value of claims*

| **Numbers of households claiming means-tested benefits or within striking distance of coming off them** | **The existing scheme in 2022-23** | **The Basic Income scheme** |
|---|---|---|
| Percentage of households claiming any means-tested benefits | 30.90% | 30.02% |
| Percentage of households claiming more than £100 per month in means-tested benefits | 27.05% | 25.34% |
| Percentage of households claiming more than £200 per month in means-tested benefits | 24.10% | 21.82% |
| **Reductions in total cost and average value of claims for means-tested benefits** | **Reduction in total cost** | **Reduction in average value of claim** |
| All means-tested benefits | 15.38% | 15.70% |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Tables 13 to 16 show reductions in inequality and in poverty rates.

*Table 13: Poverty indices for 2022-23 for the illustrative Basic Income scheme (based on incomes before housing costs)*

| **Poverty headcount by population group** | **Poverty rates for current system** | **Poverty rates for Basic Income scheme** | **Difference in poverty rates** | **Percentage reduction** |
|---|---|---|---|---|
| Children | 20.52% | 17.85% | -2.67pp | 13.01% |
| Adults | 13.47% | 10.81% | -2.67pp | 19.79% |
| Adults in work | 6.77% | 5.68% | -1.09pp | 16.06% |
| Elderly | 16.13% | 15.34% | -0.79pp | 4.92% |
| All | 15.45% | 13.12% | -2.33pp | 15.07% |
| Fixed Poverty Line | £338.63 | | | |

Source: UKMOD statistics presenter

*Table 14: Poverty indices for 2022-23 for the illustrative Basic Income scheme (based on incomes after housing costs)*

| **Poverty headcount by population group** | **Poverty rates for current system** | **Poverty rates for Basic Income scheme** | **Difference in poverty rates** | **Percentage reduction** |
|---|---|---|---|---|
| Children | 28.60% | 26.19% | -2.42pp | 8.45% |
| Adults | 18.06% | 15.81% | -2.25pp | 12.45% |
| Adults in work | 10.43% | 9.67% | -0.77pp | 7.33% |
| Elderly | 18.90% | 16.80% | -2.10pp | 11.12% |
| All | 20.44% | 18.18% | -2.26pp | 11.04% |
| Fixed Poverty Line | £295.47 | | | |

Source: UKMOD statistics presenter

*Table 15: Inequality indices for 2022-23 household disposable incomes for the illustrative Basic Income scheme (based on incomes before housing costs)*

| Gini coefficient for current system | Gini coefficient for Basic Income scheme | Difference between the two Gini coefficients | S80/S20 ratio for current system | S80/S20 ratio for Basic Income scheme | Difference between the two S80/S20 ratios |
|---|---|---|---|---|---|
| 0.2940 | 0.2839 | -0.0100 | 4.4855 | 4.1225 | -0.3630 |

Source: UKMOD statistics presenter

*Table 16: Inequality indices for 2022-23 household disposable incomes for the illustrative Basic Income scheme (based on incomes after housing costs)*

| Gini coefficient for current system | Gini coefficient for Basic Income scheme | Difference between the two Gini coefficients | S80/S20 ratio for current system | S80/S20 ratio for Basic Income scheme | Difference between the two S80/S20 ratios |
|---|---|---|---|---|---|
| 0.3331 | 0.3220 | -0.0111 | 5.8928 | 5.2830 | -0.6098 |

Source: UKMOD statistics presenter

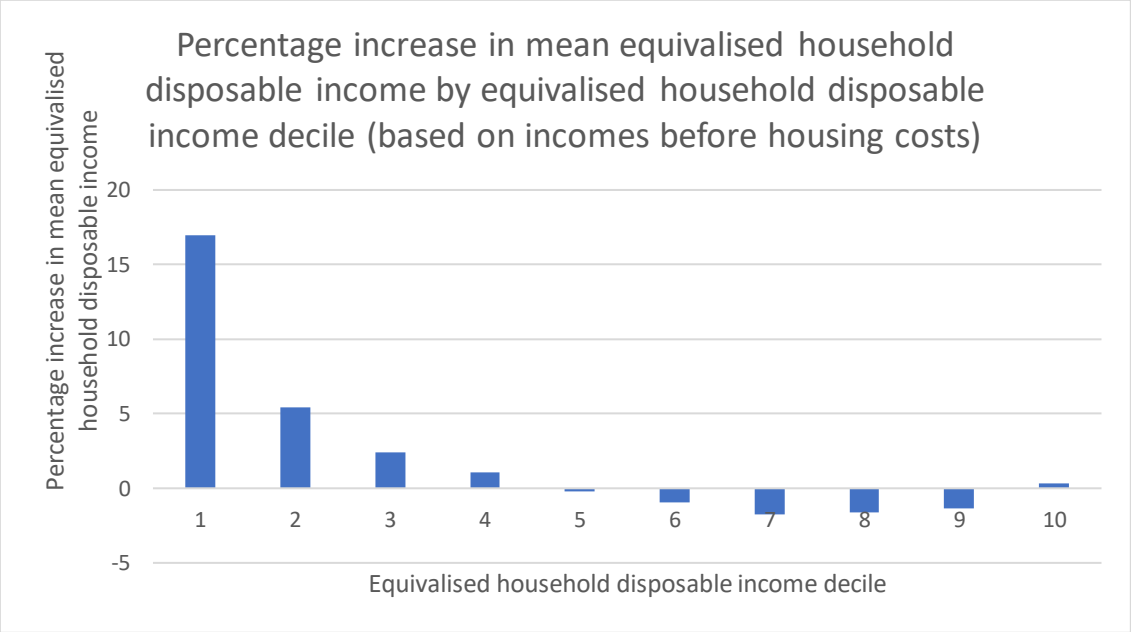
Tables 17 and 18, and figures 3 and 4, show the redistribution patterns that would result from the implementation of the Basic Income scheme, in relation both to incomes before housing costs and incomes after housing costs.

*Table 17: Percentage increase in mean equivalised household disposable income by equivalised household disposable income decile (based on incomes before housing costs)*

| | Current tax and benefits system, £ per week | Basic Income scheme, £ per week | Difference, £ per week | Percentage increase |
|---|---|---|---|---|
| Decile 1 | 211.27 | 247.07 | 35.81 | 16.95% |
| Decile 2 | 334.73 | 352.86 | 18.12 | 5.41% |
| Decile 3 | 403.00 | 412.67 | 9.67 | 2.40% |
| Decile 4 | 465.25 | 470.29 | 5.04 | 1.08% |
| Decile 5 | 529.35 | 528.42 | -0.93 | -0.18% |
| Decile 6 | 599.90 | 594.14 | -5.76 | -0.96% |
| Decile 7 | 682.37 | 670.47 | -11.90 | -1.74% |
| Decile 8 | 789.53 | 776.67 | -12.87 | -1.63% |
| Decile 9 | 943.02 | 930.07 | -12.96 | -1.37% |
| Decile 10 | 1,510.12 | 1,515.35 | 5.23 | 0.35% |

Source: UKMOD statistics presenter

*Figure 3*



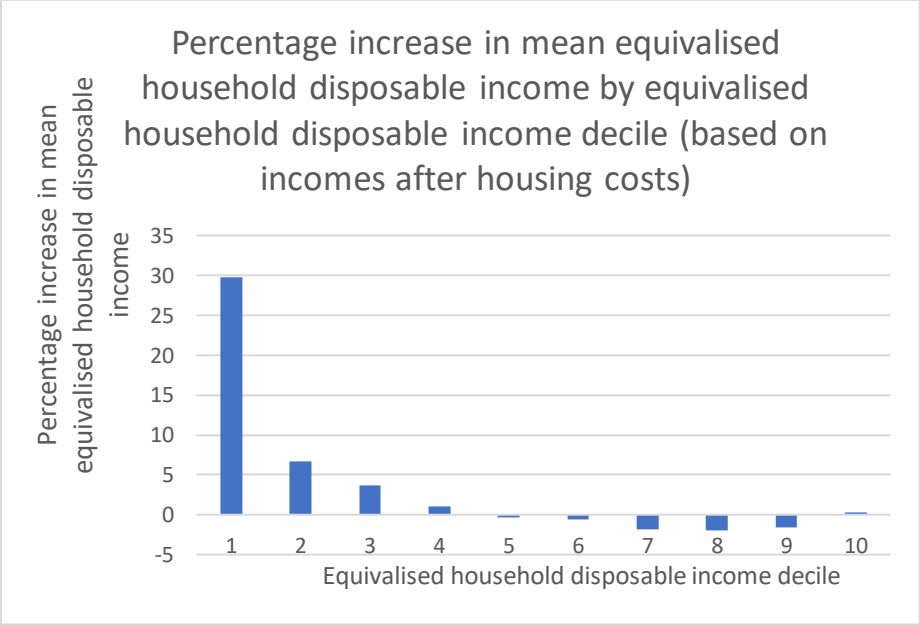

Source: Table created by the author from figures generated by the UKMOD statistics presenter

*Table 18: Percentage increase in mean equivalised household disposable income by equivalised household disposable income decile (based on incomes after housing costs)*

| | **Current tax and benefits system, £ per week** | **Basic Income scheme, £ per week** | **Difference, £ per week** | **Percentage increase** |
|---|---|---|---|---|
| Decile 1 | 121.47 | 157.68 | 36.21 | 29.81% |
| Decile 2 | 258.06 | 275.18 | 17.13 | 6.64% |
| Decile 3 | 324.42 | 336.53 | 12.10 | 3.73% |
| Decile 4 | 387.55 | 391.49 | 3.93 | 1.01% |
| Decile 5 | 455.88 | 454.17 | -1.70 | -0.37% |
| Decile 6 | 527.72 | 524.31 | -3.41 | -0.65% |
| Decile 7 | 613.15 | 601.98 | -11.17 | -1.82% |
| Decile 8 | 719.38 | 705.40 | -13.98 | -1.94% |
| Decile 9 | 872.25 | 858.15 | -14.10 | -1.62% |
| Decile 10 | 1,413.97 | 1,418.43 | 4.46 | 0.32% |

Source: UKMOD statistics presenter

*Figure 4*




Source: Table created by the author from figures generated by the UKMOD statistics presenter

The radically simple nature of the funding mechanism for this Basic Income scheme means that the usual feasibility criteria are not entirely met. The funding gap, at 0.17% of GDP, constitutes more than 0.1% of GDP, and the redistributive pattern is not exactly what we might wish to see at the higher earned incomes end of the spectrum. The reason for the slight increase in mean household disposable income in the tenth decile is that the UK withdraws the Income Tax Personal Allowance at a rate of £1 for every £2 of taxable income over £100,000, so anyone with taxable income over £125,140 per annum receives a Basic Income but has no Income Tax Personal Allowance to lose. A government that implemented this Basic Income scheme might subsequently choose to increase Income Tax and/or National Insurance Contribution rates for higher earners, which would reduce both the funding gap and the disposable income increase for individuals with the highest incomes.

6.44% of households in the lowest equivalised disposable income quintile suffering household net disposable income losses of more than 5% is well above the permitted 2% level, but more than half of those losses are between 5% and 6% of household net disposable income, so the feasibility criterion is not as far from being met as the bald figure of 6.44% might suggest.

We can conclude that what we have here is a radically simple Basic Income scheme that could be implemented very quickly by turning the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold into unconditional weekly or monthly cash payments, with no other changes being required apart from the obvious minor changes to regulations governing the means to be taken into account when means-tested benefits are calculated.

We can conclude that if a Basic Income scheme that meets all of the stated feasibility criteria is required, then the first illustrative Basic Income scheme discovered and evaluated here should be implemented, but that if a Basic Income scheme was needed that would require only the simplest possible changes to the existing tax and benefits system to be made, then the second scheme reported here is the one to implement.

## 5. Pilot projects

The second scheme evaluated here might be useful in another way as well. Conducting a pilot project in a country with a developed economy, and particularly in one with complex tax and benefits systems, is seriously difficult to organise, which is why no such pilot project has happened. Because a pilot project would have to mirror in a single community the characteristics of a Basic Income scheme that could be implemented across the whole country, existing taxes and benefits would have to be changed for that single community in the ways in which they would have to be changed if a nationwide Basic Income scheme were to be implemented. The complexity of doing that is the reason why pilot projects have been held in the context of less developed economies where income taxes and benefits systems tend be simpler or absent, but not in countries such as the UK.

A thorough feasibility study in Scotland came to the following conclusion:

> The majority of social security benefits a CBI [Citizen's Basic Income] would need to interact with are reserved to the UK Government, particularly those in relation to housing, child-care support and other top-up payments. Within current welfare and tax governance arrangements, political will and support across all levels of government (local, Scottish and UK) including the Department for Work and Pensions (DWP) and HM Revenue and Customs (HMRC) would be required to overcome these challenges. Without such support, the feasibility of a pilot, that minimises detriment, would require legislative changes to be made. (Citizens' Basic Income Feasibility Study Steering Group, 2020: 8)

This could also be said of Income Tax and National Insurance Contributions, as although the Scottish Government is able to vary slightly both Income Tax rates and the related thresholds, the Income Tax Personal Allowance remains the UK Government's prerogative.

Given the complex nature of the existing tax and benefits systems in the UK, and the difficulty that the UK Government has had with the implementation of its means-tested 'Universal Credit', it is not surprising that Government ministers have no wish to embark on the complex legislation that would be required to facilitate a Basic Income pilot project.

However, the second illustrative Basic Income scheme reported here offers an opportunity. It would not be too large a task to construct the database required to pay an unconditional income to everyone living in a specified community; nor would it be too difficult to apply to everyone in the community a 'BR'—'basic rate'—tax code that would have the automatic effect of reducing to zero the Income Tax Personal Allowance; and it would not be too difficult to charge National Insurance Contributions on all earned income. Means-tested benefits would automatically adjust with only a few minor changes to the regulations being required. It would be helpful to hold pilot projects in communities not subject to too much cross-border commuting, as companies that employed people from both within and outside the pilot community would have to apply the BR tax code and reduce to zero the National Insurance Contributions Primary Earnings Threshold only for those with postcodes inside the pilot community boundary, but this single administrative complexity would be the only one of any substance and would not be difficult to handle. HMRC would have to make appropriate arrangements for self-employed individuals.

Scotland is the nation in the UK in which there has been most interest in running a Basic Income pilot project during the past twenty years, and its Income Tax system varies slightly from that of the rest of the UK, so we are fortunate that UKMOD allows the researcher to employ only the regulations and data relating to Scotland. What follows is a Scottish version of the second illustrative Basic Income scheme described and evaluated above, as it is this third scheme that would be mirrored in a Scottish pilot project.

## 6. A radically simple illustrative Basic Income scheme for Scotland, and a Scottish pilot project

This illustrative Basic Income scheme has been evaluated on the basis of the tax and benefits regulations that apply to Scotland, and using only Scottish data.

*Table 19: The illustrative Basic Income scheme*

| **Basic Income levels, tax rates, and net cost of scheme** | |
|---|---|
| Citizen's Pension per week (existing state pensions remain in payment) | £35 |
| Working age adult Basic Income per week (25 to 65 years old) | £65 |
| Young adult Basic Income per week (20 to 24 years old) | £50 |
| Education age Basic Income per week (16 to 19 years old, but not young people still in full-time education, and whose families therefore receive Child Benefit) | £30 |
| Income Tax rates: All five of Scotland's Income Tax rates remain unchanged. The Income Tax Personal Allowance is reduced to zero | |
| Net cost of scheme (£0.42bn per annum equates to 0.25% of Scotland's GDP, and so is above the normal criterion, but by an amount that should not unduly compromise financial feasibility.) | £0.42bn p.a. |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Table 20 shows how many households would suffer disposable income losses of over 10% and over 5%, and how many households in the lowest equivalised disposable income quintile [4] would suffer losses of over 10% and over 5%.

*Table 20: Household disposable income losses*

| **Household disposable income losses over 10% and 5% for all households and for the lowest equivalised disposable income quintile**<br>(figures for the lowest equivalised original income quintile are given in brackets) | |
|---|---|
| Proportion of all households experiencing losses of over 5% at the point of implementation | 9.90% |
| Proportion of all households experiencing losses of over 10% at the point of implementation | 0.97% |
| Proportion of households in the lowest equivalised disposable income quintile experiencing losses of over 5% at the point of implementation | 6.16% |
| Proportion of households in the lowest equivalised disposable income quintile experiencing losses of over 10% at the point of implementation | 0.98% |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Table 21 shows the changes in the numbers of households receiving means-tested benefits, and also the numbers of households brought within striking distance of coming off them.

[4] The OECD equivalisation method is used, which allocates 1 for the first adult in a household, 0.5 for a second person aged 14 or over, and 0.3 for children under 14 years old. The figures are added, and the household disposable income divided by the total to generate the equivalised income. Households are then ordered by their equivalised incomes and the losses experienced by households with the lowest 20% of equivalised disposable incomes are evaluated.

*Table 21: Reductions in numbers claiming means-tested benefits or within striking distance of coming off them, and the reductions in the total costs of the benefits and in the average value of claims*

| **Numbers of households claiming means-tested benefits or within striking distance of coming off them** | **The existing scheme in 2022-23** | **The Basic Income scheme** |
|---|---|---|
| Percentage of households claiming any means-tested benefits | 29.54% | 30.57% |
| Percentage of households claiming more than £100 per month in means-tested benefits | 26.36% | 26.50% |
| Percentage of households claiming more than £200 per month in means-tested benefits | 24.20% | 22.45% |
| **Reductions in total cost and average value of claims for means-tested benefits** | **Reduction in total cost** | **Reduction in average value of claim** |
| All means-tested benefits | 14.09% | 17.13% |

Source: author's own calculations from the output files generated by UKMOD version A3.0+.

Tables 22 to 25 show reductions in inequality and in poverty rates.

*Table 22: Poverty indices for 2022-23 for the illustrative Basic Income scheme (based on incomes before housing costs)*

| **Poverty headcount by population group** | **Poverty rates for current system** | **Poverty rates for Basic Income scheme** | **Difference in poverty rates** | **Percentage reduction** |
|---|---|---|---|---|
| Children | 17.03% | 13.18% | -3.85pp | 22.59% |
| Adults | 13.44% | 9.43% | -4.00pp | 29.80% |
| Adults in work | 5.18% | 3.97% | -1.21pp | 23.31% |
| Elderly | 14.17% | 13.88% | -0.29pp | 2.05% |
| All | 14.23% | 10.96% | -3.27pp | 22.97% |
| Fixed Poverty Line | £337.80 | | | |

Source: UKMOD statistics presenter

*Table 23: Poverty indices for 2022-23 for the illustrative Basic Income scheme (based on incomes after housing costs)*

| **Poverty headcount by population group** | **Poverty rates for current system** | **Poverty rates for Basic Income scheme** | **Difference in poverty rates** | **Percentage reduction** |
|---|---|---|---|---|
| Children | 24.32% | 20.36% | -3.96pp | 16.28% |
| Adults | 17.11% | 15.67% | -1.44pp | 8.41% |
| Adults in work | 8.08% | 7.68% | -0.40pp | 4.98% |
| Elderly | 18.32% | 16.21% | -2.11pp | 11.52% |
| All | 18.65% | 16.63% | -2.03pp | 10.86% |
| Fixed Poverty Line | £303.66 | | | |

Source: UKMOD statistics presenter

*Table 24: Inequality indices for 2022-23 household disposable incomes for the illustrative Basic Income scheme (based on incomes before housing costs)*

| Gini coefficient for current system | Gini coefficient for Basic Income scheme | Difference between the two Gini coefficients | S80/S20 ratio for current system | S80/S20 ratio for Basic Income scheme | Difference between the two S80/S20 ratios |
|---|---|---|---|---|---|
| 0.2635 | 0.2537 | -0.0098 | 3.8708 | 3.5825 | -0.2883 |

Source: UKMOD statistics presenter

*Table 25: Inequality indices for 2022-23 household disposable incomes for the illustrative Basic Income scheme (based on incomes after housing costs)*

| Gini coefficient for current system | Gini coefficient for Basic Income scheme | Difference between the two Gini coefficients | S80/S20 ratio for current system | S80/S20 ratio for Basic Income scheme | Difference between the two S80/S20 ratios |
|---|---|---|---|---|---|
| 0.2979 | 0.2871 | -0.0108 | 4.9614 | 4.4110 | -0.5504 |

Source: UKMOD statistics presenter

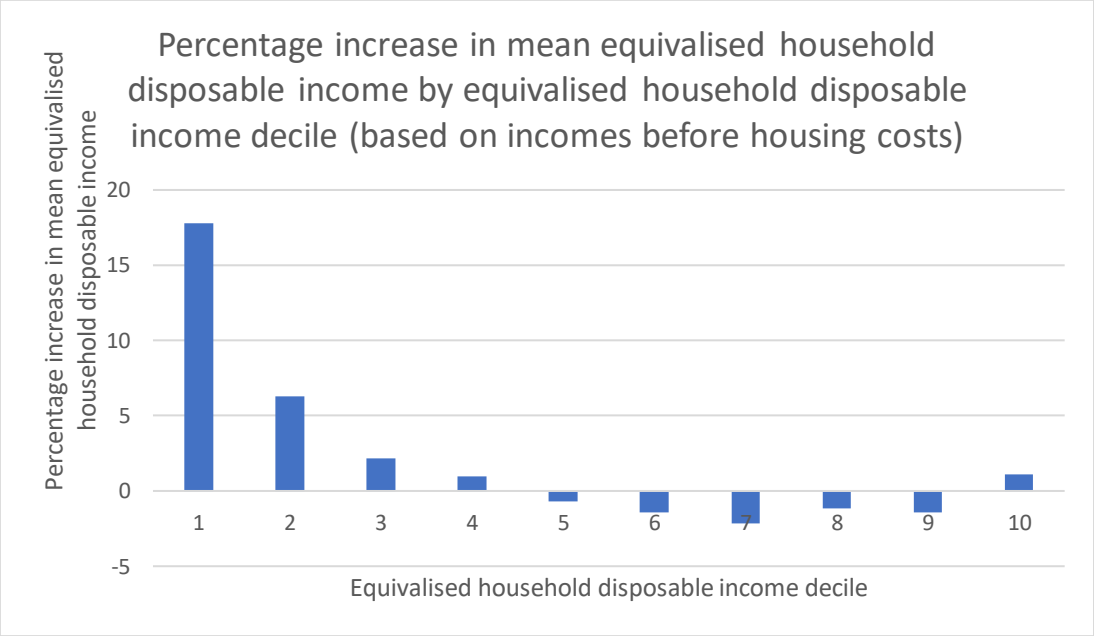
Tables 26 and 27, and figures 5 and 6, show the redistribution patterns that would result from the implementation of the Basic Income scheme, in relation both to incomes before housing costs and incomes after housing costs.

*Table 26: Percentage increase in mean equivalised household disposable income by equivalised household disposable income decile (based on incomes before housing costs)*

| | Current tax and benefits system, £ per week | Basic Income scheme, £ per week | Difference, £ per week | Percentage increase |
|---|---|---|---|---|
| Decile 1 | 214.20 | 252.35 | 38.16 | 17.81% |
| Decile 2 | 344.17 | 365.84 | 21.67 | 6.30% |
| Decile 3 | 410.26 | 419.03 | 8.76 | 2.14% |
| Decile 4 | 468.88 | 473.29 | 4.41 | 0.94% |
| Decile 5 | 528.78 | 525.26 | -3.52 | -0.67% |
| Decile 6 | 604.09 | 595.28 | -8.81 | -1.45% |
| Decile 7 | 680.76 | 666.03 | -14.73 | -2.16% |
| Decile 8 | 764.45 | 755.68 | -8.77 | -1.15% |
| Decile 9 | 888.45 | 875.60 | -12.86 | -1.45% |
| Decile 10 | 1,294.78 | 1,308.63 | 13.85 | 1.07% |

Source: UKMOD statistics presenter

*Figure 5*



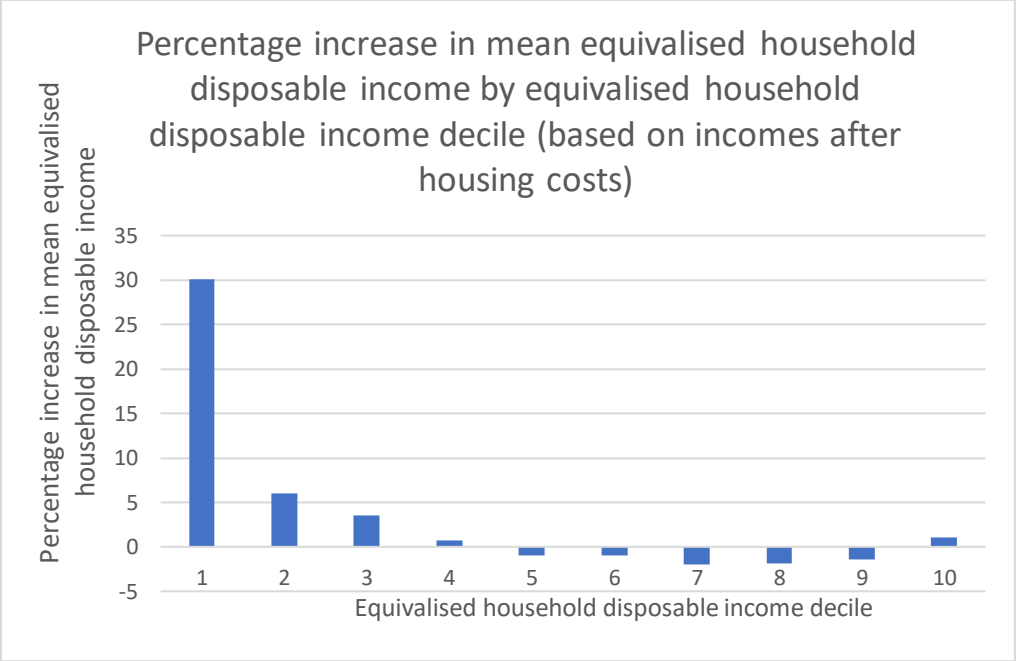

Source: Table created by the author from figures generated by the UKMOD statistics presenter

*Table 27: Percentage increase in mean equivalised household disposable income by equivalised household disposable income decile (based on incomes after housing costs)*

| | **Current tax and benefits system, £ per week** | **Basic Income scheme, £ per week** | **Difference, £ per week** | **Percentage increase** |
|---|---|---|---|---|
| Decile 1 | 136.14 | 177.09 | 40.95 | 30.08% |
| Decile 2 | 276.11 | 292.83 | 16.72 | 6.05% |
| Decile 3 | 344.32 | 356.51 | 12.20 | 3.54% |
| Decile 4 | 404.70 | 407.59 | 2.89 | 0.71% |
| Decile 5 | 471.21 | 466.83 | -4.37 | -0.93% |
| Decile 6 | 544.77 | 539.58 | -5.19 | -0.95% |
| Decile 7 | 629.42 | 616.97 | -12.45 | -1.98% |
| Decile 8 | 709.16 | 695.81 | -13.34 | -1.88% |
| Decile 9 | 836.10 | 824.13 | -11.97 | -1.43% |
| Decile 10 | 1,234.74 | 1,247.77 | 13.03 | 1.06% |

Source: UKMOD statistics presenter

*Figure 6*




Source: Table created by the author from figures generated by the UKMOD statistics presenter

Small differences emerge between these results and those for the similar simple illustrative Basic Income scheme for the UK, but they are still close enough to fulfilling the feasibility criteria that we can legitimately conclude that this scheme could provide a useful basis for a genuine pilot project in a single Scottish community or series of communities.

The net cost for the whole of Scotland's population of 5.5 million would be £0.42bn per annum, so the net cost for a pilot project in Inverness, with a population of 47,000, would be £3.6m per annum, which would not be a high price to pay for the first genuine pilot project in a developed economy such as that of Scotland.

## 7. Conclusions

The current configuration of the UK's tax and benefits system offers to its government some significant choices as to how to implement a Basic Income scheme.

- The first illustrative Basic Income scheme described and evaluated here would fulfil all of a stringent set of financial feasibility criteria;
- The second illustrative Basic Income scheme would be radically simple to implement and would come close to fulfilling the same criteria;
- A pilot project could be based on this second illustrative scheme: an option that could be particularly attract to the Scottish Government if it could gain permission to reduce to zero the Income Tax Personal Allowance and the National Insurance Contributions Primary Earnings Threshold, and to pay a Basic Income to every member of Scotland's population.

What would not be possible would be a pilot project based on the first illustrative scheme discussed in this report. Given the political will, the changes to the current tax and benefits systems required by this scheme could be made nationwide, but it would be difficult to make them for a single community or a series of communities. However, now that we have a viable option for a pilot project that would mirror a feasible nationwide scheme, it no longer needs to concern us that one particular kind of Basic Income scheme would be difficult to test in a pilot project. We only need one feasible option for a pilot project, and we now have that.

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