Basic Income Network Scotland: Review of Citizens' Basic Income Feasibility Study

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Introduction

Interest in universal basic income has mushroomed in recent years in response to increasing employment insecurity and in-work poverty, with pilots and trials conducted or planned in several locations, and support from a growing number of politicians. The Scottish Government recently funded a two-year feasibility study to examine the options for piloting a basic income in Scotland. The Citizens' Basic Income Feasibility Study Steering Group completed their work in June 2020, and submitted reports on possible basic income pilots in Scotland and how these might be evaluated, along with complementary studies modelling the possible economic impacts of a basic income on Scotland and potential interactions between a CBI pilot and the current social security arrangements. The Steering Group recommended that a Scottish pilot should go ahead, although this is not currently possible under the terms of the devolution settlement.

Basic Income Network Scotland strongly welcomed this collection of studies as very significant contributions to the development and progression of Basic Income here and abroad. We highly commend their robust and rigorous work and recognise how much these colleagues and their respective institutions have progressed and supported the many debates and analyses across this country, the rest of the UK and indeed globally since publication.

This BINS paper offers a commentary on elements of these publications recording some thoughts and challenges to us all in how a basic income scheme might be introduced, assessed and impact on the economy and society. We hope this is appreciated in the spirit in which it is written as progressing the analytical framework and understanding of this potential instrument for significant change. We wish to thank the three contributors to this paper: Dr Marcia Gibson, Professor Mike Danson and Annie Miller. We welcome all feedback, comments and criticisms.

Approach

This paper offers a review of the following publications from The Citizens' Basic Income Feasibility Study Steering Group, published June 2020. All publications are available at Basic Income Scotland.

Assessing the Feasibility of Citizens' Basic Income Pilots in Scotland:

- *Final Report* [168 pp]
- *Executive Summary* [13 pp]
- *Appendices* [60 pp]

These reports were complemented by the work of a Research Group from the Fraser of Allander Institute (University of Strathclyde), IPPR Scotland, and Manchester Metropolitan University (May 2020):

- *Modelling the Economic Impact of a Citizen's Basic Income in Scotland* [156 pp]
- *Modelling the Economic Impact of a Citizen's Basic Income in Scotland – a guide to the report released today* [9 pp]

This commentary is presented in three parts: *1. A critique of the evaluation and research design* is offered by Dr Marcia Gibson; *2. The Economic Analysis of the Introduction of CBI across Scotland* is examined by Professor Mike Danson; and *3. An assessment of the fiscal assumptions and means-tested welfare alternatives* by Annie Miller.

1. A critique of the evaluation and research design

Proposed study design

The final report of the Feasibility Group lays out the Group's recommended model for evaluating a Scottish basic income pilot. The report describes the proposed study design as a randomised controlled trial (RCT), and later recommends a cluster RCT (cRCT). However, the actual design described is not an RCT. Many people are familiar with the concept of RCTs from medical research. When researchers need to test whether a new drug or treatment is effective, the strongest research design available is an RCT. In an RCT, a sample of patients is selected, and they are then allocated randomly to one of (usually) two groups. The 'treatment group' receives the new medication, and the 'control group' does not. In medical trials, they will often receive a placebo treatment which has no active ingredients. Typically, neither researchers nor participants know who has received which treatment until the end of the trial. If outcomes for the treatment group are better than those for the control group, the treatment is judged to be effective.

It is often the case that characteristics of the study participants, such as age or gender, can have an effect on the outcome of the treatment. If the groups are selected by the researchers, or volunteer to participate, there is a risk that there will be more respondents with certain characteristics in one group than in the other. This could bias the effects of the treatment, and mean the study is not an accurate measure of the treatment's effects. Random allocation of participants means that every member of the sample has an equal chance of being in either of the groups. The result is that if the sample is large enough, the members of each group will have similar characteristics, and the risk of *selection bias* is reduced.

RCTs are also used by social researchers to test whether policies or programmes (often called interventions) are effective. It is usually much more complex to conduct an RCT of a social intervention, and they are relatively rare in the UK. However, many people argue that they are the most reliable method of assessing an intervention's effects. Sometimes researchers want to find out whether an intervention is effective at the level of larger communities. In this case, it is possible to randomise schools, or small towns, or any type of unit which is appropriate to measure the effects of the intervention. This requires a large number of units to ensure that after randomisation, the two groups have similar

characteristics. This is known as a cluster RCT (cRCT). Due to the large number of sites involved, they are very expensive to run.

One of the most interesting, and potentially most important, effects a basic income might have is changes at the level of community or society, which could arise as result of people changing their behaviour. These could occur in almost every area of life, but a few examples can help to illustrate the point. In Alaska, every citizen receives around $2000 per year in dividends from the state's oil revenues. Evidence suggests that mothers of young children reduce the numbers of hours they work and spend more time at home. There has been a large reduction in infant obesity, possibly due to the effect on maternal employment. In turn, this is projected to generate very large savings on health service costs. A study of unconditional payments in Canada found that young people stayed in school for up to a year longer when their families received payments, and this was partly because teenagers were influenced by their friends' decisions to stay in school. A normal RCT design can capture effects on individuals, but not these types of spillover or indirect effects at community or higher levels. This means that in attempting to evaluate basic income, there is a tension or trade-off between measuring individual effects and capturing effects on the whole community. A cRCT of basic income in India was able to achieve this at the level of villages because India is a vast country and there are hundreds of thousands of villages. Unfortunately, because Scotland is a small country, there aren't enough towns or villages to randomise effectively.

In order to capture such community-level effects, the Feasibility Group have proposed a pilot with two study sites. In one site, adults aged between 25 and pension age would receive weekly payments of £73.10 , and in the other the payments would be £213.59 per week (other age groups, including children, would receive payments of different values). The sites would be selected by identifying a number of communities with similar levels of characteristics such as unemployment and poverty, and randomly sampling[1] the two study sites from this list of communities. However, as discussed, to fulfil the criteria for an RCT, individual sample members would have to be selected and then randomised to either treatment or a control group who receive no treatment. For a cRCT, a large number of

[1] Random sampling and random allocation are not the same thing. Random sampling involves selecting members of a population randomly for inclusion in a research study. Random allocation involves selecting a sample and then randomly allocating them to one of two or more groups.

towns/villages/settlements would have to be selected and then randomised in the same way. The proposed pilot design does neither of these things; there will only be two sites, and they will not have been randomly allocated to treatment or control. The individuals in the sample sites will receive basic income payments due to where they reside, not due to random allocation. Although in a cRCT, it is necessary to have a large sample of communities, the discussion of sample sizes refers only to individuals, not to sites.

In this proposal, all residents of both sites selected would receive payments of differing values, and the comparison sample would be drawn randomly from the wider population outwith the intervention sites. The design proposed is, in effect, what is termed a controlled before and after study. Although the sites would be chosen on a number of variables to be representative of Scottish communities, there are so many factors that could influence the effects of a BI that in practical terms it is not possible to identify and match all of them. As explained above, this could mean that the effects were influenced by characteristics of the community, meaning it is difficult to tell whether the same effects would occur in a different community. Further, when the sample of communities is very small, it is not possible to tell whether any effects occurred because of the basic income or because of some other change that happened, such as a large new employer opening in the community. Despite these limitations, controlled before and after studies can generate useful evidence, and may well be the only practicable approach to gathering data on community-level effects in the Scottish context.

Proposed basic income models

Many definitions of, and proposals for, basic income peg the value of payments at a fairly low level. It is intended that they should cover basic subsistence and no more, in part due to issues around affordability and political acceptability. The proposed pilot has one arm with payments close in value to current income replacement benefits, similar to the majority of proposals. Another arm is proposed with payments based on the Joseph Rowntree Foundation's Minimum Income Standard (MIS) at the time of the analysis: £11,107 per annum or £213.59 per week for a single person excluding rent and childcare[2]. The rationale for this is that higher payments would have stronger effects on poverty. An accompanying

[2] From the work by Abigail Davis, Donald Hirsch, Matt Padley, Claire Shepherd (2018) 'A Minimum Income Standard for the UK 2008-2018: continuity and change', York: Joseph Rowntree Foundation.

analysis of the fiscal implications of the proposed basic income models, conducted by the Fraser of Allander Institute, shows that this would require very large tax increases, with the lowest tax band increasing to 59% and the highest to 89%. The Income Tax Personal Allowance would also be abolished. It is difficult to envisage a situation in which this would be acceptable politically or to the wider public. Given that such an intervention is very unlikely to be implemented, it is hard to see what the purpose of evaluating it would be. The evaluation itself would be extremely costly, and engaging people in a three-year long pilot of a highly implausible but life-altering intervention raises some ethical issues. The report acknowledges that transitioning back to their normal income could be very challenging for people on low incomes and proposes some transitional supports, but it seems likely that the process of transitioning to and from this higher income could still be very disruptive for the sample members. In addition, the FAI analysis finds that were the MIS rate rolled out the very high tax rates would reduce work incentives, particularly for higher earners. Since these very high tax rates would not apply in the intervention sample, it would not be a good test of the real-world effects of implementing higher payments at scale.

Rationale for study and for outcomes measured

Although the report provides a summary of existing evidence from a systematic scoping review of studies similar to basic income, there are several references to a lack of evidence from studies of universal, permanent interventions, or for impacts on long-term service use and wider economic outcomes. However, the scoping review does include studies of long-term, universal, and quasi-universal interventions, such as the Alaska Permanent Fund, the Eastern Cherokee tribal dividend payments, and a site in one study where there was universal eligibility for people on low incomes. These provide some evidence on wider outcomes such as how long young people remain in education, hospital admissions, wages, consumption, and crime.

These studies are of interventions which differ from basic income in several ways, but they are the only available evidence on the impact of unconditional cash transfers in high income countries. They were conducted in political, economic, and geographical contexts which differ from present day Scotland in important ways. However, this does not mean that the evidence is irrelevant in a Scottish setting. It is always difficult to judge how 'transferable' the evidence from a different context or intervention is, but when similar impacts are found

in a range of different contexts, confidence in transferability is actually increased. One key way in which existing studies differ from a full basic income is that payments are not funded by general taxation, but this is equally true of the proposed pilot, as it would not be possible to alter the tax regime only for the study sites.

The report suggests that the lack of evidence for effects on long-term service use and wider economic impacts provides a rationale for piloting BI in Scotland, but later states that it would not be possible to identify impacts on such outcomes within the three-year time frame of the pilot. However, evidence from the existing studies suggests that effects on these outcomes can become apparent quite rapidly. In Alaska, effects on crime, consumption, and demand for labour occur immediately after payments are received. Impacts on hospital admissions and educational participation were seen in one study within two years. Administrative data on such outcomes are likely to be available. Further, as the authors of the FAI economic modelling study note, effects on such outcomes could lead to cost savings and productivity increases which may offset the substantial costs of a BI to some extent (although the balance of costs and benefits would likely play out differently under the income tax increases required to fund a BI). In the context of piloting such a radical intervention, it seems particularly important to attempt to measure such effects.

2. The Economic Analysis of the Introduction of CBI across Scotland

Complexity and time

A key feature of the proposed pilots will be their impacts on the economic position of individuals, their families, communities and the economy as a whole. This is an essential element of the feasibility study and of the pilots and experiments going forward, but it means struggling with a highly complex set of issues. Ahead of any pilots being established, modelling and forecasting have been applied to suggest how people might react to having a basic income, how their behaviours in the labour market and in spending might change, what that might mean for shops, landlords and other companies, with informed complementary commentaries on whether children might stay on in school and training for longer and some move to part-time work from either full-time or no employment, etc etc. The possible changes in people's work, spending, training, caring and voluntary habits are endless and how we try and estimate these is challenging. Then aggregating these possible effects into their impacts on the wider economy, on local and national taxes, and on public sector budgets presents a whole extra layer of complexity.

Economists use a series of techniques based on past experiences and evidence to undertake estimates of both the microeconomic (individual citizens and businesses) and the macroeconomic (aggregate workers, businesses, taxes and expenditure) effects. The feasibility study addressed what both these levels of impacts might be by engaging with researchers at the Fraser of Allander Institute at the University of Strathclyde, Manchester Metropolitan University and IPPR Scotland. Their work focused on the economic effects of introducing a Citizen's Basic Income where there is good previous evidence and expectations of likely and possible behaviours and actions. What that sort of research is less able to quantify are the longer term implications of these potential changes for health (physical and mental), attitudes to staying in school, of starting up a business or returning to education, of rates of crime and domestic abuse, and so on. Therefore, as with much academic and economic research, the analysis can only take us so far in identifying and proposing what the full society-wide impacts of a pilot or full basic income might be; however, the pilots will be needed to offer robust evidence to answer some of these issues but only a full launch across the nation will be able to reveal actual impacts.

Table 1: Citizens Basic Income Values in 2019/20

Age Band	Low level CBI	High level CBI
0-15	84.54	120.48
16-19	84.54	213.59
20-24	57.90	213.59
25 up to State Pension Age	73.10	213.59
State Pension Age and over	163.00	195.90

Within those limitations, the researchers have undertaken some scenario building to suggest what the possible outputs and impacts of a full CBI across Scotland might be by applying their established models to the proposed basic income levels proposed in the feasibility study[3].

Their research is conducted in three stages and the assumptions, inner workings of the models and sensitivity analyses are all as important to scrutinise as the results themselves. The modelling shows the expected improvements for individuals across Scotland if these levels of BI were introduced (**Table 2**). The overall impacts are estimated to be fairly substantial with obvious benefits to the poorest in society, especially those at the bottom of the income distribution (e.g. bottom quintile = bottom 20%) with significant reductions in poverty and inequality (**Table 4**). The Universal Credit (UC) comparator is designed to meet the same reductions in poverty but with changes in UC that would only apply to those on this social security benefit, with all the current conditionality requirements still in place.

[3] Their report on the analysis, assumptions and limitations is long and comprehensive but written and presented very accessibly. Available from University of Strathclyde and Basic Income Scotland

Table 2: Change in weekly unit income

(single adult or lone parent with dependent children)

Option	**1**	**2**	**3**
	Low level CBI	**High level CBI**	**Universal Credit comparator**
	Average change in weekly unit income		
All people	**£13 pw**	**£7 pw**	**£6 pw**
People in bottom quintile	£71 pw	£269 pw	£31 pw
People in 2nd quintile	£56 pw	£199 pw	£31 pw
People in middle quintile	£36 pw	£99 pw	£7 pw
People in 4th quintile	£3 pw	-£47 pw	-£2 pw
People in top quintile	-£102 pw	-£499 pw	-£40 pw

The reductions in poverty are significant as demonstrated in **Table 3**, and would take Scotland down to the sorts of levels that our neighbours of Nordic and other social democratic countries:

Table 3: Effects on Poverty

Option	1		2	3
	Low level CBI	**Illustration of low level CBI after modelling macroeconomic effects**	**High level CBI**	**Universal Credit comparator**
Change in poverty (Base = 1,140,000)	-280,000	-280,000	-910,000	-170,000
Change in child poverty (Base = 270,000	-90,000	-80,000	-250,000	-100,000
Change in poverty rate (Base = 21.6%)	-5.4 pp	-3.3 pp	-17.3 pp	-3.2 pp
Change in child poverty rate (Base = 28.0%)	-9 pp	-6 pp	-25 pp	-10 pp
Gross cost per person lifted out of poverty	139,000	n/a	87,000	15,000
Gross cost per child lifted out of poverty	-293,000	n/a	235,000	10,000

In this Stage 1 analysis, to meet the assumed condition that any change must be fiscally neutral (i.e. that the overall government budget is not changed), it is assumed that changes in income tax will be used to finance the introduction of a basic income. This is not the only means by which the costs of a BI could be covered and others have modelled a number of other approaches (for example by Annie Miller for Scotland and Malcolm Torry for the UK[4]). The feasibility study economic researchers use a microsimulation model to estimate the likely gross fiscal cost of introducing a 'high' and 'low' basic income as being between £26.7bn and £57.8bn and then calculate the changes in income tax required to finance such levels of CBI for the whole of Scotland (**Table 4**). After adjusting other elements in the social security and tax systems, these suggest very high amounts would be required to be raised through income taxation, of between £7.2bn and £38.3bn, per annum. They estimate this would necessitate increasing tax rates by 8 up to 49 percentage points. These are not forecasts but the outcomes of the models give the assumptions imposed in the evaluation exercise.

Table 4: Costs and new income tax rates required to achieve fiscal neutrality

Option	**1**	**2**	**3**
	Low level CBI	**High level CBI**	**Universal Credit comparator**
Gross cost	**-26.7 bn**	**- 57.8 bn**	**-1.0 bn**
Savings from benefit reductions	4.0 bn	4.0 bn	0.0 bn
Savings from state pension reduction	6.3 bn	6.6 bn	0.0 bn
Savings from personal allowance abolition	9.1 bn	9.0 bn	0.0 bn
Savings from tax rate rises	7.2 bn	38.3 bn	0.9 bn
Net cost	**-0.2 bn**	**0.1 bn**	**0.0 bn**
Income tax rate rises needed to achieve fiscal neutrality	+ 8 points on every band	+49 pts on band 3 +44 pts on band 4 +39 pts on 1,2,5	+6 pts on top two bands
New Scottish income tax schedule	7:28:29:49:54	58:59:70:85:85	19:20:21:47:52

[4] Meghnad Desai and Ana Helena Palermo have used various approaches to see how a BI could be paid for and like many have started by looking at a flat rate income tax in 'Some effects of basic income on economic Variables'

The research considers how individuals, households and firms might respond to such a major change in fiscal policy by using an economic model of the Scottish economy generating a number of different scenarios (**Table 5**). In Stage 3, the results from these macroeconomic long-run economic simulations (changes in employment and wages, etc.) are used to identify potential effects on the distribution of household incomes and measures of poverty (**Table 2**).

In building these scenarios, such factors as migration, skill levels and consumption patterns are varied to allow a fuller consideration of what the potential impacts could be with a national Basic Income (as in **Table 5**). Importantly none of these is a forecast but rather a set of scenarios is presented which illustrates what sorts of changes in the main economic indicators might be generated, and how different assumptions and factors interact and lead to different possible outcomes. Indeed, sufficient tables are presented in the report that there is an opportunity for readers to undertake some illustrations of what sort of BI scheme they might to be piloted. The summary tables offered in the Executive Summary likewise offer the authors' preferences.

Table 5: Long run impact of low level CBI

	No migration	Migration scenario
GDP (£m)	**-4.4%**	**-15.2%**
Real take home wage	**-11.5%**	**-7.7%**
Employment	**-5.0%**	**-16.4%**
Income tax	**87.3%**	**125.1%**
Transfers to households from Government	**117.4%**	**117.4%**
Consumption of lowest quintile	**28.7%**	**23.7%**

Summary

If a significant, permanent and unconditional CBI (meeting the criteria of the feasibility study and so comparable with the BINS and BIEN definitions) was introduced significant positive impacts on inequality and poverty would and could be realised. The assumptions adopted in the modelling in this report insist on funding this intervention just through income tax, inevitably meaning a very high increase in marginal tax rates. The constraints on income and other tax powers devolved to Scotland mean that more radical fiscal approaches have not been modelled but Land Value Tax, wealth taxes, variations on the tax rates on dividend and savings incomes and on VAT would all be possibilities to modify the anticipated increases on taxes on earned income. As Desai and Palermo as well as others cited in Malcolm Torry's book (see footnote) have suggested, 'money creation [proposed by proponents of MMT (Modern Monetary Theory)], and different forms of taxation, such as consumption taxes, Value Added Tax (VAT), income taxes, capital taxes, resource taxes, robot taxes, and taxation on financial transactions' could all be applied individually or in combination.

The final table (**Table 6**) shows that after the sort of campaign and advocacy necessary to convince the population of the value of accepting the 'social wage' (embracing the combined benefits of a CBI, a wellbeing economy and society, health and welfare provision as well as the take home wage), a much richer, happier and healthier and more sustainable Scotland could be delivered. So there is a need to convince better off workers and taxpayers to accept reductions in their take home pay (and for the wealthiest of their incomes) as the price of significant reductions of poverty and inequality. The population's altruistic attitudes and behaviours revealed during the pandemic suggest it is not far to reject the neoclassical and neoliberal underpinnings the micro- and macro-economic models adopted in the report.

Also, given the limitations of the theories and evidence underpinning the models and so scenarios, the economic analyses have not been able to examine even the economic impacts on health and wellbeing, crime rates, productivity, and many more elements of society so that the real social and economic benefits to Scotland's people are undoubtedly underestimated.

Table 6: Long run impacts of an income tax-financed, low level CBI with social wage and migration (% change compared with no CBI)

GDP (£m)	**0.10**
GDP per capita	**0.20**
Consumption	**0.00**
Investment	**0.46**
Total exports	**0.00**
Total imports	**-0.01**
Nominal gross wage	**0.00**
Inflation	**0.00**
Unemployment rate	**0.00**
Employment	**-0.14**
Population	**-0.09**
Total household tax	**36.82**
Income tax	**73.62**
Real Scottish Government consumption	**0.00**
Lowest quintile consumption	**30.76**
Second quintile consumption	**15.22**
Third quintile consumption	**3.65**
Fourth quintile consumption	**-6.32**
Highest quintile consumption	**-12.48**

3. An assessment of the fiscal assumptions and means-tested welfare alternatives

Why the choice of tax regimes in the economic modelling led to unnecessarily high and misleading income tax rates

While the scope of the Feasibility Study as a whole is impressive and provides much useful guidance for future studies, inevitably the devil is in the detail.

No basic income (BI) scheme is complete without its recommended sources of finance also being specified. It would have aided the subsequent micro- and macro-simulations if the Steering Group have provided more guidance to the Fraser of Allander Institute (FAI) group. Its remit was to look at the distributional and fiscal impacts on both micro- and macro-economies, of implementing two versions of a citizen's basic income (CBI) in Scotland, using fiscally neutral modelling (which was taken to imply the use of taxes on income).

The UK has two parallel systems of taxes on incomes – income tax and National Insurance Contributions (NICs). Both have structural allowances (the Personal Income Tax Allowance (PITA) and the Primary Threshold (PT)) and tax reliefs, that together provide a system of 'tax welfare' for taxpayers often in proportion to their incomes. Both structural allowances and tax reliefs are instruments controlled by powers reserved to Westminster. In 2018-19, the tax welfare in these two systems alone was forecast to cost the UK Treasury £253bn in terms of revenue foregone, and would reduce the potential income tax base of total gross income by nearly one sixth, increasing the rates of tax on income for those who could not avoid paying them. Scotland's one twelfth share would have cost £21 bn.

The FAI modellers abolished the PITA, saving £107/12 bn = £9 bn for Scotland, and reducing all of the income thresholds by £12,500 (FAI report, p.19, footnote 23). This raises the following questions:

- Was the remit given to FAI intended to limit the sources of finance to the income tax system alone, or was it assumed that NICs would also be considered? Certainly, the report does not point out that NIC rates have to be added to the proposed new income tax rates.
- Why not also abolish the PT in the NIC system, saving a further £26.4/12bn = £2.2 bn?

- Why not also close all the tax loopholes in both systems, saving a further £119.35/12bn = £9.9 bn, and thus helping to reduce Scotland's income inequality, which is part of the objective of a BI scheme? It would also have reduced the negative unearned income effect on labour supply for higher income people. Even though the current generation of micro-simulation Tax and Benefit Models (TBMs) do not permit the closing of individual tax loopholes, surely it must be fairly simple for it to calculate the taxation of gross incomes, omitting all of the loopholes?

The extra savings of £12.1bn could have covered the £7bn required for the low-BI scheme and left enough over for a small combined PITA + PT, without having to change the current rates of income tax so drastically. It would also have had a higher breakeven point, which would have made it more politically feasible.

It should have been obvious that the high-BI scheme, if financed solely by taxes on income, would lead to high rates. The BI for a working age adult of £213.59 was already equal to 50% of average gross income per head in Scotland in 2019, even before the cost of retained benefits has been added. In fact, if only two BI schemes could be included in the study, a BI scheme based on the 'After Housing Costs have been deducted' (AHC) version of OECD's poverty benchmark would have been far more useful (this would suggest £162 for working age adults: see **Appendix 1**). At a later time, when a BI scheme is being implemented gradually, the high-BI scheme could be introduced, supplemented by taxes from other sources, such as a Land Value Tax, a consumption tax, or a financial transaction tax, or after a Sovereign Wealth Fund had been built up, for instance.

Further, although a strongly progressive scheme is often recommended for typical schedules of taxes on income, there are advantages in financing BI schemes using a flat tax, (although a small PITA+PT is allowable so that casual earnings would not require a tax return to be submitted, and a higher rate on higher incomes may be necessary to create a breakeven point). A mainly flat tax can bring about a more inclusive society and avoids the excessively high rates of taxes on income that otherwise occur and again this can make it more politically feasible. Not only can a relatively high tax for low-income people be acceptable when accompanied by an increase in income, but often it represents a decrease compared with the high marginal deduction rates on benefits.

In fact, the low-BIs, together with a small joint PITA+PT of £3,120 could have been financed by a joint income-and-NICs flat tax of 31%, ending with a higher rate on higher incomes in order to create a breakeven point. The corresponding flat tax rate for the high-BI scheme would have been 59%. and an intermediate BI scheme, based on levels midway between the low and high-level schemes, would have been 45%.

In other words, the excessively high income tax rates were avoidable and misleading.

Since a BI is based on the individual, it would be interesting to see a similar analysis of distributional and fiscal effects on individuals, whether singletons or part of a larger household. Would the seven million or so working age adults, listed as 'economically inactive' according to the ONS, be better off with a BI?

Given the sophisticated analysis of the effects of BI on labour supply, it was disappointing that the new rates of taxes on income that were assumed for the analysis were so unnecessarily high.

It would have been good to have had, for the different income quintiles:

(i) The unearned 'income effect' on labour supply of the combination of:

- the *gain* of a BI;
- the *loss* of previous benefits;
- a *reduction* in the value of the PITA and/or PT;
- and the *loss* of tax reliefs.

This is the income effect which would lead to a new disposable income, but based on the same gross income as previously.

(ii) The 'price effect' on labour supply, of changes to net wage rates resulting from changes in the rates of taxes on incomes (required to finance the BI scheme), can be further divided into a substitution and an income effect.

The price effect leads to another new disposable income, based on a changed gross income.

The people with the greatest elasticities of supply are those who are deprived of leisure and those who are deprived of income. Both unearned income and price effects will be relatively large in both these groups.

The economic theory of labour supply, based on backward-bending labour supply curves, predicts that, for *high-waged workers*, the income effect of an increase in earned income will be negative; that is, a positive increase in unearned income would have a negative effect on hours worked, and vice versa. However, the price effect from an increase in rates of taxes on incomes will be positive, leading to an increase in hours worked, but the movements would be relatively small because of their low elasticities of supply.

For *low-waged earners*, the effects are more complex, due to the phenomenon of the reservation wage (RW), below which it is not worth the individual working for pay. The RW is a complex function of both unearned income and net wage rates. Contrary to expectations, when the UK introduced a National Minimum Wage in 1998, employment increased. Claimants, both those on out-of-work benefits and those on in-work benefits, who will face a decrease from the high marginal deduction rates on means-tested benefits to a lower rate of taxes on income, are likely to find that their new net wage rate will be greater than their RW. The price effect for even a small decrease in rates of taxes on income, and thus an increase in the net wage rate, will lead to a relatively large increase in hours worked.

Of course, the real question is whether there would be a downturn in the economy as a result of the introduction of a BI scheme, either as a one-off downward shift, or a slight reduction in the growth rate, or even worse, a negative growth rate. It would rarely be advisable to introduce such an ambitious scheme as the high-BI, all at once, (unless there were special reasons, such as in a recession caused by a pandemic, perhaps). If a BI scheme were to be introduced gradually, starting with the low BI, it would give plenty of warning of negative effects, but would also give high-earners the opportunity to adjust to any losses slowly, and thus with less grief. The FAI team concentrated on the likelihood of high-waged workers making large lifestyle changes, such as relocating, to compensate for the large increases in income tax that were predicted. By the same token, the new Scotland would attract other high-waged earners inwardly. Although Sweden has some very high rates of taxation on income, it remains a favourite destination for international workers from all over the world.

We would welcome a new generation of super microsimulation Tax-Benefit-Models (TBMs) which would allow the user to control individual tax loopholes. Similarly, a new generation

of super microsimulation TBMs incorporating the dynamic labour supply effects, would also be welcome, or better still, a model that does both.

The means-tested Universal Credit comparator policy presented as a cheaper way of reducing poverty is not the long-term solution.

While the Universal Credit comparator policy could provide an immediate improvement in the UK's wholly inadequate Social Security system, and be a welcome first step towards a BI scheme, the whole point of a BI system is that it leads to five transformative, beneficial, broad outcomes simultaneously. The MTB system leads to the opposite outcomes. While poverty might be the highest priority of the five broad outcomes, the other potential outcomes should not be neglected

Poverty is not just about material deprivation, but it also includes the external and internalised stigma, the persistent financial insecurity and feelings of exclusion and rejection by their peers, which those in poverty claim is even more painful than trying to survive on below-subsistence benefits. Means-tested benefits (MTBs) could reduce the material deprivation, but do not address the other damaging aspects of poverty.

Table 7: Comparison of BIs with MTBs or MIGs

SIMULTANEOUS OUTCOMES:	BIs	MTBs or GMIs or MIGs
Emancipation	BI is not intrusive into people's circumstances	Means-testing is intrusive into people's circumstances.
Wellbeing	BI ideally is delivered *ex ante*, before the recipient could suffer from an inadequate income. BI could not only prevent material deprivation, but it also prevents stigmatisation, humiliation and exclusion.	Means-testing usually takes place *ex post*, after the applicant has already suffered from an inadequate income. Means-testing could prevent material deprivation, but it fails to address other aspects of poverty – stigmatisation, humiliation, insecurity
A just, united and inclusive society	BI is neither divisive, nor exclusive.	Means-testing is divisive, dividing the population into those whose low means makes them eligible for MTBs and those who are not. Means-testing can lead to exclusion.
A more efficient, flexible and productive labour market	BI does not introduce an inherent disincentive from taking up work-for-pay. BI is independent of its source of finance, and so does not necessarily affect its progressive or regressive nature.	Means-testing inevitably increases the effective tax rate on the income of recipients, reducing their net wage rates, thus introducing an inherent disincentive to their taking up work-for-pay. Means-testing leads to regressive effective tax systems, where low-income people face higher effective tax rates on their incomes compared with those on higher incomes. MIGS will be even less effective with the anticipated changes in the labour market – more unemployment and incomes varying from week to week.
Simpler, more efficient administration system	BI simplifies the administration of the social protection system, making it more efficient and cheaper than means-tested systems.	Means-testing is both inefficient and costly. Means-testing is even more complicated and inefficient for people with a portfolio of part-time, insecure jobs, and an income varying from week to week.

MTBs, including Guaranteed Minimum Incomes (GMIs) and Minimum Income Guarantees (MIGs), which are MTBs with 100% withdrawal rates, represent a method of tinkering at the edges of the present inadequate UK Social Security system, and is reactive, rather than preventative. It requires low-income and other vulnerable groups to submit themselves to a humiliating means-testing process. Some claim that means-testing protects poorer people, but, in fact, it is a method of segregating them, making it easier to identify, stigmatise and reject them.

The fact that MTBs are based on the cohabiting couple, and not the individual, requiring joint applications for benefits, can trap the poorer partner, usually the woman, into the humiliating role of financial dependent. It can also shield couples from scrutiny for economic and other abuse. MTBs in the UK are also subject to harsh conditionality and savage sanctions, leading to chronic stress and anxiety. It would be naïve to assume that the MTBs would be retained while changing the assessment and delivery unit, and making them not to be conditional on work or availability for work.

Beveridge's National Insurance (NI) system was designed to solve problems relevant to an economy dependent on labour at the turn of the twentieth century and was implemented decades later. Current politicians are busy avoiding the problems inherent in the Social Assistance (SA) system, designed during the second world war, for those in need who were not eligible for NI benefits. It incorporated some gross structural flaws from the start, making the system unjust for the poorest and most vulnerable members of society, but they were accepted at the time because the SA system was an improvement on what was available before. Over time, the levels of benefits in both NI and SA systems have been eroded and are now well below the OECD official poverty benchmark, leading increasing numbers into debt or destitution. The Covid-19 pandemic has exposed the holes in the 'safety net'.

A BI system is far more appropriate for the new age of automation and artificial intelligence, which has already encroached on many medium-wage jobs, and made many unskilled workers rely on low-waged, part-time insecure jobs in the gig economy. This process will continue to cast swathes of workers into financial insecurity into a future in which demand for unskilled labour is likely to be lower than before and there will be less emphasis on working for pay, in an economy that is far less dependent on workers.

Conclusions

The scope of the study is comprehensive and impressive, with much to recommend. But:

- There are only two schemes, a low-BI and a high-BI one. An intermediate level scheme, preferably based on the OECD AHC poverty benchmark would have been far more useful, and cheaper.
- The particular choice of revenue neutral income tax systems was ill-advised, leading to avoidably high tax rates.
- Labour supply analysis, based on unnecessarily high wage rates, has led to misleadingly negative predictions of the effects on the economy.
- Automation and artificial intelligence will have a much greater impact on the economy than a BI system, which, in fact, is the antidote to it.
- BI may be more expensive than the current Social Security system, but the latter is full of harmful structural flaws
- Nevertheless, this feasibility study is not just about a BI pilot experiment. It is also the study of the feasibility of implementing a BI system in either a fully-fiscally-devolved Scotland or across the UK as a whole, and should be studied carefully by all serious BI advocates.

Further reading:

Gibson, M., Hearty, W. and Craig, P. (2018). *Universal Basic Income: A scoping review of evidence on impacts and study characteristics*.

Gibson, M., Hearty, W., & Craig, P. (2020). The public health effects of interventions similar to basic income: a scoping review. *The Lancet Public Health*, *5*(3), e165-e176.

Miller, A. (2020) *Essentials of Basic Income*, £4.99; ISBN: 978-1-913025-58-8, new edition, Luath Press, Edinburgh.

Miller, A. (2020) *A Basic Income Pocketbook*, £9.99; ISBN: 978-1-912147-62-5, updated with figures for fiscal year 2020-21.

M. Torry (ed.) (2019) The Palgrave International Handbook of Basic Income. Exploring the Basic Income Guarantee, Palgrave MacMillan.

Reports and publications

The Basic Income Scotland resources page offers a full set of their reports and analyses.

Useful Links

- Basic Income Network Scotland
- BIEN (Basic Income Earth Network)
- RSA (Basic Income)
- Poverty and Inequality Commission
- Fairer Scotland
- Fairer Fife
- North Ayrshire – Fair for All
- Improvement Service

Appendix

Appendix 1: Intermediate BI Level for Scottish Feasibility Study, 2019-20

The problem is to do with what information would have been available in 2018 when the BI levels would have to have been set in time for the fiscal year 2019-20.

The OECD/EU poverty benchmark is defined as '60% of median equivalised net income for a couple'. There is a figure for 'Before Housing Costs have been taken into account (BHC)', and a different one for 'After Housing Costs have been taken into account (AHC)'. The second is more relevant for a BI in Scotland, retaining a separate Housing Benefit system.

The weighting for AHC is 0.58 for the first adult in the household.

These core figures are published by the DWP in their annual *Households Below Average Income*, published around March each year, but the data for 2016-17 is already a year old by March 2018 – too late for fiscal year 2018-19, but could be used for 2019-20 – now two years out of date.

This is why I prefer to use 40% of average gross incomes in Scotland instead, for the AHC equivalent.

Table showing the amounts of an intermediate level BI for a working age adult and a child

UK	**£ pw**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Median AHC		£425	£437	£447	£476
		2019-20	**2020-21**	**2021-22**	**2022-23**
OECD/EU Pov benchmark = 0.6 x 0.58		£148	£152	£156	£166
OECD/EU Pov benchmark for child = 0.6 x 0.2		£51	£52.50	£54	£57
SCOTLAND		**2017**	**2018**	**2019**	
Average gross income		£404.09	£404.04	£426.98	
		2019-20	**2020-21**	**2021-22**	
MILLER AHC Pov benchmark = 0.4 (rounded up) for adults aged 16-64		£162.00	£162.00	£171.00	

MILLER Pov benchmark for child = 0.2	£81.00	£81.00	£85.50

The highlighted column indicates what was available in 2018 as information on which to base the decision re BI levels for 2019-20.

Note. The SFS low BI level for single person was UC = £73.10 pw.

The SFS high BI level for a single person was MIS = £213.59 pw.

A BI scheme based on my own poverty benchmark for working-age adults and children as above for 2019-20, with a BI = £173.75 pw for adults of 65 and above, and a reduced joint Personal Allowance + Primary Threshold of £3,120, having closed all tax loopholes, could have been funded by an otherwise flat tax of 47% (Miller, *A BI Pocketbook*, 2020; p. 145).