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A UNIVERSAL BASIC INCOME FOR IRELAND: LESSONS FROM THE INTERNATIONAL LITERATURE

PAUL REDMOND, SEAMUS MCGUINNESS, KLAVS CIPRIKIS







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Paul Redmond

Seamus McGuinness

Klavs Ciprikis

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THE AUTHORS

Paul Redmond is a Senior Research Officer at the Economic and Social Research Institute (ESRI) and an Adjunct Associate Professor at Trinity College Dublin. Seamus McGuinness is a Research Professor at the ESRI and an Adjunct Professor at Trinity College Dublin. Klavs Ciprikis is a Postdoctoral Research Fellow at the ESRI.

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This report has been accepted for publication by the Institute, which does not itself take institutional policy positions. All ESRI Research Series reports are peer reviewed prior to publication. The author(s) are solely responsible for the content and the views expressed.

TABLE OF CONTENTS

ABBREVIATIO	NSiii
EXECUTIVE SU	JMMARYv
SECTION 1	Introduction
SECTION 2	UBI policy in Ireland: 30 years of policy discussion and proposals7
SECTION 3	The potential effects of a UBI on labour supply15
SECTION 4	The potential impact of a UBI on health outcomes
SECTION 5	Case studies of UBI pilots
5.1	Basic Income for the Arts Pilot Scheme 22
5.2	Germany
5.3	Stockton, California (US)
5.4	Ontario (Canada)
5.5	Finland
5.6	Barcelona (Spain) 27
5.7	Other experiments
5.8	Minimum-income schemes in the EU and OECD
SECTION 6	The estimated cost of a UBI for ireland
6.1	A universal, non-means-tested UBI equal to 60% of median income
6.2	A universal, non-means-tested UBI equal to 50% of median income
6.3	A universal, non-means-tested UBI equal to current social welfare rate (€208
	per week)
6.4	A UBI costing a total of ${\ensuremath{\in}} 10$ billion per year (gross)
SECTION 7	General guidelines for implementing a UBI pilot study
SECTION 8	Summary
SECTION 9	Conclusion
REFERENCES	
APPENDIX A	
APPENDIX B	

LIST OF TABLES

Table 3.1	Ireland and EU employment rates (%), 2009–2019	16
Table 8.1	Options for implementing a UBI pilot	43
Table B.1	Expenditure on social welfare by programme, 2019	56
Table B.2	Largest schemes by expenditure, 2019	56

ABBREVIATIONS

BIA	Basic income for the arts
CSO	Central Statistics Office
EEA	European Economic Area
GDP	Gross domestic product
GMI	Guaranteed minimum income
OBIP	Ontario Basic Income Pilot
QAA	Qualified Adult Allowance
UBI	Universal basic income
UKMOD	Tax benefit microsimulation model (UK)

EXECUTIVE SUMMARY

- A universal basic income (UBI) is defined as a universal, unconditional cash payment that is made regularly, is sufficient to live on, is not means tested, carries no work requirements and is paid on an individual basis. This study examines the international evidence on universal basic incomes and identifies key issues for consideration in the design of any UBI pilot for Ireland.
- Despite the mainstream interest in UBI as a potential policy tool, relatively little is known about the associated consequences of such policies. Even the definition of a UBI appears to be poorly understood and is often misused in the public discourse.
- Several pilot studies have been recently implemented across different countries. However, some pilot studies depart from the accepted definition of UBI. For example, some are not universal, in that they only target a specific subgroup of the population and/or have eligibility restrictions based on earnings. Others provide a relatively low level of payment, which may fall short of what an individual could reasonably be expected to live on.
- There are a number of potentially positive impacts associated with a UBI. A universal, unconditional payment could eliminate the stigma associated with welfare receipt. If replacing existing welfare payments, a UBI would also involve lower transaction costs, both on the recipient (in terms of the application procedure) and on Government (in terms of administering the payment). Universal, unconditional payments would also avoid situations where people choose not to work in order to retain means-tested benefits. UBI could give individuals the freedom to turn down or leave insecure, exploitative or low-paid work in pursuit of better or improved work opportunities. In addition, it would mean that persons in informal and often unpaid work, such as childcare and eldercare, which is mostly done by women, receive some compensation for their labour. Empirical results from several pilot studies have found evidence of positive health impacts following the implementation of a UBI.
- In terms of potential disadvantages, a UBI, by definition, may not target those that are
 most in need, as a large percentage of recipients will be high-earning individuals.
 Furthermore, the cost of a UBI is likely to be very expensive, even if other existing
 benefits (such as unemployment benefits) are no longer required. The net impacts of
 a UBI on labour supply are unclear, with both positive and negative influences on
 labour market participation potentially arising as a consequence of a UBI.
- In this study, we undertake some basic calculations relating to four possible UBI approaches, all of which would involve an unconditional payment to every individual aged over 18 in Ireland. The four approaches are: (a) a 'baseline UBI' of a non-meanstested, universal payment equivalent to 60 per cent of median equivalised disposable income (€14,387 in 2019, equivalent to €1,200 per month); (b) a payment equivalent to a lower cut-off of 50 per cent of median annual equivalised income (€11,989 in 2019, equivalent to €1,000 per month); (c) a payment equivalent to the current social welfare rate of €208 per week (€10,816 per year, or €901 per month); (d) we take a benchmark of €10 billion (gross) and calculate how much could be paid, in terms of a UBI, for this amount.

- A UBI set at 60 per cent of median income in 2019 equates to a monthly payment of €1,200 per person and would have a gross cost of just under €50 billion per annum if paid to every individual in Ireland aged 18 and over. This compares to total expenditure on all social welfare programmes in 2019 of €20.9 billion. A UBI equivalent to 50 per cent of 2019 median equivalised annual income amounts to a monthly payment of €1,000 per person. The gross cost of such a UBI would amount to €41 billion. The gross cost of a UBI set at the current social welfare rate of €208 per week would amount to €37 billion per annum. A UBI for a total gross cost of €10 billion per year would equate to a monthly payment of €243 per month, per person.
- There is an inherent trade-off associated with the design of a UBI. A true UBI, i.e., one that involves a universal, unconditional payment set at a high enough rate to ensure a minimum standard of living, may be prohibitively expensive. Accordingly, many pilots throughout the world depart from this definition by implementing a lower rate of payment and/or targeting specific subgroups of the population, such as low-income households. Such pilots are more closely aligned to a guaranteed minimum income (GMI). Unlike the unconditional payment associated with a UBI, a GMI typically involves some sort of means test or eligibility requirement that targets the payment towards low-income households.
- There are important elements of a UBI for which policymakers exercise considerable discretion. Key questions include:
 - a) Who gets the UBI? Is it to be universal, as a true UBI should be, or is it targeted towards specific groups based on income, in which case it would resemble a GMI, instead of a true UBI?
 - b) What will be the monetary value of the UBI?
 - c) To what extent will the UBI replace existing welfare payments?

The answer to these questions will have major implications both for the cost of, and impacts arising from, any UBI policy.

- A related question concerns how a UBI could be financed. The international evidence suggests that the level of income tax required to finance a UBI may not be politically acceptable. Previous work for Ireland, carried out in the 1990s, indicated that a tax rate of 50 or 60 per cent may be required to finance a UBI consisting of a payment rate equivalent to the prevailing social welfare rates at the time. More recent policy proposals by the Green Party suggest alternative funding mechanisms, including a tax on pensions, a speculative transactions tax, a site-value tax and increased stamp duty. The Green Party also propose that individuals would have a tax-free allowance up to the value of their UBI, with any income above that being taxed at the higher rate of tax (40 per cent). Tax credits would also be abolished.
- Funding a UBI through changes to the tax and benefit system may lead to some individuals being financially worse off. This would be problematic for a pilot study as it may not be feasible from an ethical, administrative (and possibly legal) perspective for some pilot participants to be made worse off. In that regard, there may be two complimentary solutions to further investigate the feasibility and desirability of a UBI.

- Implement a relatively small-scale pilot study, similar to the Basic Income for the Arts (BIA) Pilot Scheme, in which participants receive an unconditional basic income payment for a specified period of time. Such a pilot, while involving payment of a basic income, would not fully incorporate any tax or benefit changes. However, as it would be implemented on a small subset of the population, it could be funded in much the same way as the BIA Pilot Scheme. It would provide key insights into the behavioural responses and outcomes relating to a UBI.
- 2. Implement a microsimulation analysis. This would take account of the funding mechanism required to fund any full-scale rollout of the UBI, including changes to the tax and benefit system, while providing insights into how this would impact the income distribution.
- The two approaches outlined above are complimentary: the pilot would capture behavioural responses and outcomes that microsimulation cannot fully capture, while the microsimulation could capture the impact of changes to the tax and welfare system.
- Irrespective of the ultimate policy design, we outline a number of general guidelines and practical considerations for the successful implementation of any UBI pilot study.

SECTION 1

Introduction

This study examines the international evidence on universal basic income (UBI) and identifies key issues for consideration in the design of any UBI pilot for Ireland. The idea of providing a UBI has received a lot of attention in recent years among academics, policymakers and the media, and has been described as 'the idea *du jour* in the battle over reinvigorating the welfare state' (Neuwinger, 2021; De Wispelaere and Stirton, 2004; Hoynes and Rothstein, 2019).¹ There are 'diverse rationales' put forward in support of a UBI (Gentilini et al., 2020), including:

- greater coverage and reduced administrative burden on the welfare system;
- increased fairness in social contracts;
- redressing power imbalances between employers and employees;
- improved gender equity;
- reduced financial precarity;
- addressing unemployment traps;
- rewarding unpaid work; and
- as a mitigating policy for potential job losses due to automation.

A UBI is defined as a universal, unconditional cash payment that is made regularly, is sufficient to live on, is not means tested, carries no work requirements and is paid on an individual basis (Van Parijs, 1992; Martinelli, 2017; Hoynes and Rothstein, 2019; Neuwinger, 2021). A true UBI would provide a relatively large, completely unconditional payment to every adult, or citizen, in the country. The cost of such a policy is likely to be very expensive, even if other existing benefits (such as unemployment benefits) are no longer required. Hoynes and Rothstein (2019), for the US, calculate that the cost of a UBI of \$12,000 to every US resident over 18 years of age would be \$3 trillion per year, which amounts to 75 per cent of all current federal expenditures. They estimate that implementing such a policy would require a doubling of all federal tax revenues.

Despite the mainstream interest in UBI as a potential policy tool, little is known about the associated consequences of such policies. Even the definition of a UBI appears to be poorly understood and often misused in the public discourse. Several pilot studies, which are examined in detail in Section 3, have been recently implemented across different countries, and they may provide some of the muchneeded empirical evidence on the consequences and outcomes of UBI policies.

¹ Sloman (2018), referencing Thomas Paine (1797) and Thomas Spence (1803), notes that the idea of a universal basic income dates back 'at least as far as the age of enlightenment'.

However, even though the stated aim of some pilot studies is to trial UBI, they typically depart in some way from the canonical definition of UBI (Neuwinger, 2021). For example, some are not universal, in that they target only a specific subgroup of the population. Others only provide a very low level of income, which an individual could not be reasonably expected to live on. The recent basic income experiment in Finland has received criticism on these grounds, as it targeted only unemployed individuals and provided a relatively low level of income (De Wispelaere et al., 2018). Such departures from the traditional definition of a UBI may reduce the cost of implementing such a policy. However, it may not be appropriate to label such policies as a UBI, as certain pilot schemes may be more closely related to a guaranteed minimum income (GMI) (Gentilini et al., 2019).²

When designing a basic income type policy, there are a wide range of possible permutations relating to issues such as universality (versus targeted payments), as well as the magnitude of the UBI payment. The universality component of UBI, which entails a payment to all individuals or citizens of a country, is perhaps the most contentious aspect of the policy. This may explain why existing pilots often depart from the universality component. As mentioned, the Finnish pilot targeted only unemployed individuals, and Finland is not alone in this regard. Recent pilots in Canada (Ontario) and Spain (Barcelona) only selected individuals on low incomes, while one in Stockton, California, targeted individuals living in poor neighbourhoods; these examples can therefore be seen as a type of GMI pilot, as opposed to a UBI pilot. One basic income pilot, implemented in Germany in August 2020, *was* universal and unconditional, as recipients could qualify regardless of their income level.³

The pros and cons regarding the universality factor are set out by Gentilini et al. (2019). Compared to means-tested welfare payments, a universal payment may eliminate the stigma associated with welfare receipt. If replacing existing welfare payments, a UBI would also involve less transaction costs, both on the recipient (in terms of the application procedure) and on Government (in terms of administering the payment). Universal payments would also avoid situations where people choose not to work in order to retain means-tested benefits. However, in practical terms, a universal payment by its very nature may prove to be prohibitively expensive. Gentilini et al. (2019) note that financing a UBI sufficiently high to have a meaningful impact on poverty would require tax rates 'that are politically prohibitive in most countries'. Earlier work for Ireland (Honohan, 1987; Callan et al., 1994) indicated that a tax rate of at least 60 per cent may be required to finance

² While UBI is unconditional and not means tested, a guaranteed minimum income (GMI) is a means-tested payment aimed at preventing households from falling into poverty (Coady et al., 2021).

³ See *Pilotprojekt Grundeinkommen – Basic Income Pilot Project*, https://www.pilotprojektgrundeinkommen.de/english.

a UBI at a relatively low rate, equivalent to the prevailing social welfare rate at that time.

A UBI may be poorly targeted, as a large percentage of recipients will be highearning individuals. Pareliussen et al. (2018) used microsimulation to evaluate the impacts of implementing a fiscally-neutral UBI in Finland. While that payment is quite modest, being roughly similar to the rate of jobseeker's benefit in Finland, it requires substantial income tax increases along with a removal of certain benefits. The micro-simulated UBI leads to an increase in income inequality.⁴ Thus, the authors conclude:

A basic income with one uniform benefit for all is too simple to meet the diverse needs and circumstances that are currently met by the Finnish welfare system, where benefits are targeted to those who need them most. This finding is likely relevant also for other countries with well-developed and targeted social safety nets.

When thinking about the magnitude of a potential UBI payment, it is important to take account of the specific purpose of the UBI. The motivating factors put forward in favour of a UBI typically relate to poverty reduction or the protection of workers from job losses. For example, proponents of UBI often cite the threat to jobs from automation as the primary reason for implementing a UBI. This is precisely the motivation behind the Y-Combinator (Silicon Valley) Basic Income pilot scheme (Bowman et al., 2017). Y-Combinator president, Sam Altman, stated the following in relation to basic income:

I'm fairly confident that at some point in the future, as technology continues to eliminate traditional jobs and massive new wealth gets created, we're going to see some version of this at a national scale. So it would be good to answer some of the theoretical questions now.⁵

If the primary goal of a UBI is to insulate workers against job loss due to automation, or other related factors, then the UBI would need to be set at a level to maintain a minimum standard of living. Similarly, if the primary goal of UBI is poverty reduction, then a UBI would need to be set at some predefined poverty threshold. Again, within existing pilot studies, there is considerable heterogeneity regarding the size of the payment, ranging from approximately €500 per month in Finland and Stockton (California), to €1,200 per month in Germany.

Callan et al. (1994) used microsimulation of the tax and welfare system to analyse the potential impact of the introduction of UBI in Ireland. The analysis considered the implementation of an unconditional UBI equivalent to the lowest welfare

⁴ The UBI leads to an increase in the Gini coefficient of 0.4 per centage points.

⁵ See https://ycombinator.wpengine.com/basic-income/.

payments in 1987 (of £35 per week). The findings indicated that a tax rate of approximately 60 per cent would be required to finance this UBI.⁶ It was estimated that the introduction of a UBI would generate a substantial redistribution of income, with a net impact benefitting those at the bottom and middle of the equivalised income distribution, with net losses incurred by those in the top third of the income distribution. The analysis also revealed positive work-incentive effects due to lower replacement rates. However, while we may observe positive impacts in net terms, it is still possible that many low-income households could be made worse off. Microsimulation analysis by Callan et al. (1999) showed that a basic income equivalent to the social welfare rate at that time, funded by income taxation, could lead to one in four people in the bottom 30 per cent of the income distribution being worse off, an outcome requiring a social solidarity fund to top up the income of certain groups.

De Henau et al. (2021) use microsimulation (the UKMOD model) to explore the financing and distributional effects of a UBI introduction in the UK. The authors note that this has limitations as it is restricted to modelling income taxes and national insurance contributions. The authors also point out that the study examines basic income that *augments* but does not *replace* means-tested benefits, which would still be required to avoid significant losses for those at the bottom of the income distribution. Two main options are explored: 1) a relatively low basic income amounting to £4,200 per annum (net) for an adult, funded by abolition of personal allowances and an increase in tax rates of three percentage points; and 2) a higher basic income based on minimum-income standards, equal to £16,674 per annum (net) for an adult, funded by an increase in all tax rates by 47.6 percentage points. While, on average, the main beneficiaries from both schemes tend to be among the lowest deciles, a significant number of people, including those on low incomes and lone mothers, would lose out financially following the introduction of the two variations of such a scheme.

In this report, we take guidance from the international literature and the existing pilots that are in operation to outline four possible options. The first, which we refer to as the 'baseline UBI', is the option that most closely resembles a true, or canonical, UBI. It involves a non-means-tested, universal payment to every adult in the State that is equivalent to the at-risk-of-poverty threshold, which amounts to 60 per cent of median equivalised disposable income (€14,387 in 2019, equivalent to €1,200 per month). The second example chooses a lower cut-off of 50 per cent of median annual equivalised income (€11,989 in 2019, equivalent to €1,000 per month). The third option consists of a payment equivalent to the current social

⁶ An alternative basic family income was also considered. Instead of paying the same amount to all adults, this scheme could involve a lower payment to couples (similar to the welfare system at that time). The tax rate required to finance this would be slightly lower, at 57 per cent. While the payment was assessed based on family status, the payment would still be paid to each adult separately.

Introduction 5

welfare rate of ≤ 208 per week ($\leq 10,816$ per year, or ≤ 901 per month). In the fourth instance, we investigate the type of UBI that could be implemented for a predefined fixed amount, by taking a benchmark of ≤ 10 billion (gross) and calculating how much could be paid, in terms of a UBI, for this amount.

Section 2 of this paper provides a detailed outline of the policy discussion relating to UBI in Ireland over recent decades, followed by a discussion of the potential outcomes of a UBI policy, which reviews some of the international evidence. Section 3 discusses the potential impacts of a UBI on labour supply, while the potential impacts on health outcomes is discussed in Section 4. Section 5 reviews UBI-type pilots that have been implemented internationally. Some of these pilots depart from the UBI criteria and may be more closely aligned with guaranteed minimum income (GMI). Where relevant, this distinction is clarified. Section 6 outlines specific examples of potential UBI rates in Ireland. Sections 7 and 8 outline the general guidelines and practical policy considerations required to implement a successful UBI pilot study. Section 9 concludes.

SECTION 2

UBI policy in Ireland: 30 years of policy discussions and proposals

Discussions around the feasibility and potential implications of a universal basic income (UBI) in Ireland have taken place intermittently over several decades. The issue was most recently examined as part of the Irish Government's Partnership 2000 for inclusion, employment and competitiveness. As part of this process, a steering group was established in 1998 to investigate the potential for a basic income in Ireland. Several research papers on basic income policies were commissioned (see, Callan et al., 1999; Clark, 1999), following which the Irish Government published a green paper on UBI to summarise the main issues and to encourage informed debate in this area (Government of Ireland, 2002).⁷ The type of basic income considered by the steering group consisted of a universal payment that would replace existing social welfare payments, with the rate of basic income equal to the prevailing social welfare rates. The parameters of the basic income design also involved replacing the existing taxation system; instead of two rax rates (20 per cent and 42 per cent at the time of publication of the green paper), the UBI would involve one flat tax rate of approximately 50 per cent on all income. Existing tax allowances and credits would be abolished. As the microsimulation research indicated that a large number of individuals, including many people in the lowest income deciles, would be made worse off following the introduction of this type of UBI, it was concluded a social solidarity fund would be needed to top up the incomes of certain groups.

The body of work produced during that period regarding the type of basic income under consideration was highly informative. However, that was 25 years ago, and the debate around UBI has evolved since then, with a number of basic income pilot studies being implemented in various countries across the world. The current debate on UBI should encompass the recent evidence and developments in this area. The parameters of most of the recent pilot studies, which are discussed in Section 5, do not resemble those that featured in the basic income policy discussion in Ireland more than two decades ago.

One aspect of the basic income parameters analysed by Callan et al. (1999) that is at odds with other pilot programmes since implemented, as well as findings from the body of literature over the last two decades, is the fact that the basic income payment to people of retirement age far exceeds the payment made to those of working age. The basic benefit rates outlined in Table 4.1 of Callan et al. (1999) indicate that those aged over 80 would receive a basic income payment that is 35

⁷ The idea of a basic income in Ireland can be traced back further to Dowling (1977), a report commissioned by the National Economic and Social Council for integrating tax and social welfare, in which vasic income was one of the options discussed.

per cent higher than the rate for those of working age, while those aged 65-79 years would receive a payment approximately 30 per cent higher than those of working age. This is due to the fact that the basic income payments were based on the prevailing social welfare rates at the time.⁸ However, given that the proposed advantages of a basic income, outlined by the Irish Government, were to remove poverty and employment traps, reward types of work such as household work and child-rearing and promote equity and fairness across society, it is unlikely that proposals that confer a far higher UBI rate on older individuals would be widely accepted in today's policy environment. For example, it is typically working-age women who take on the greatest share of unpaid household work and child-rearing duties (Russell et al., 2019), and the incidence of poverty and deprivation is particularly prevalent among single-parent households containing women of working age (Roantree et al., 2021).⁹ On the issue of promoting a fair and cohesive society, it is not clear that this would be achieved through a single tax rate of 50 per cent, potentially resulting in a relatively low-paid worker paying the same nominal tax rate as somebody in the top percentile of the earnings distribution.

It is important also to reconcile the stated goals of any basic income policy with the likely outcomes of the type of policy under consideration. The Government highlighted the potential benefits of simplicity and poverty reduction associated with a basic income (Government of Ireland, 2002). However, microsimulation analysis by Callan et al. (1999) indicated that the proposed basic income policy could lead to one in four people in the bottom 30 per cent of the income distribution being worse off. A social solidarity fund, which in itself could be quite complex and administratively burdensome, would be needed to compensate such groups. Therefore, from the outset we see that the potential benefits of this type of basic income policy in terms of poverty reduction and administrative simplicity are not obvious.

Despite social welfare rates having been embedded into the parameters of the previous basic income discussions in Ireland, it is important to point out that it is generally not assumed, either nationally or internationally, that basic income rates are equal to prevailing social welfare rates. For example, a basic income pilot scheme for creative arts workers in Ireland will run from 2022 to 2025, with a payment rate of €325 per week.¹⁰ This exceeds the prevailing social welfare rate of €208 per week.¹¹ Recent proposals by the Green Party (2019) suggest that a UBI equivalent to the prevailing social welfare rates would be too low, and a rate equal to the current at-risk-of-poverty rate should be used instead. A recent pilot in

⁸ See Appendix A for further details on the construction of UBI rates in Callan et al. (1999).

⁹ NESC (2020) propose an alternative policy in the form of a participation income. This would supplement existing contingency-based welfare payments for people making societal contributions such as voluntary work or unpaid care.

¹⁰ See https://www.gov.ie/en/publication/29337-basic-income-for-the-arts-pilot-scheme-guidelines-for-applicants/#aims-of-the-scheme.

^{11 €208} per week is the maximum weekly payment for schemes relating to, for example, disability and unemployment.

Germany involved a UBI equal to 75 per cent of the minimum monthly wage. The same rate of UBI in Ireland in 2022 would equate to approximately \leq 1,200 per month.¹² This also happens to equal the at-risk-of-poverty threshold that we examine later in this paper.

It is not automatically assumed that basic income replaces all existing social welfare payments. In Stockton, California, the payment was designed to supplement, rather than replace, social welfare payments.¹³ Following a detailed feasibility study to explore the possibility of implementing a basic income pilot in Scotland (Citizens' Basic Income Feasibility Study Steering Group, 2020), it was noted that some vulnerable individuals could be made financially worse off. For this reason, it was suggested that, while some social welfare payments could be replaced, others would need to be retained – in particular, those relating to disability, work capability, housing and childcare support.

Another important aspect of the basic income policy debate that receives relatively little attention is the question of eligibility as it relates to citizenship or residency. As noted by Gentilini et al. (2019), it is important to establish whether eligibility is based on citizenship (thereby potentially excluding noncitizens) or by residency. When it is mentioned in official policy documentation, the discussion is often unclear. The Government's green paper on basic income (Government of Ireland, 2002) makes several references to the fact that a basic income would be paid to 'citizens'. However, it is unclear whether the suggestion is that basic income would be paid only to those with Irish citizenship. For example, if only Irish citizens received basic income payments, this could give rise to differences between Irish and non-Irish citizens along important dimensions such as, for example, reservation wages and incentives to work. The consequences for the labour market are hard to predict, and it is not clear that either microsimulation or a pilot study could provide answers. However, it seems more likely that the green paper is actually referring to residents, and not strictly those with Irish citizenship. Given the importance of the issue, this point should be clarified in all future documentation.

The questions of eligibility based on residency and the potential impacts on migration are raised by Boyle and McCarthy (2000). The assumption is that entitlement is not based on Irish citizenship, but rather is aligned with the general rules relating to social welfare entitlement. However, even this is not straightforward. As noted by Boyle and McCarthy (2000), entitlement could vary depending on whether basic income was viewed in a similar way to unemployment benefits, rather than family benefits. For example, if linked to family benefits, a

¹² Based on a person working 38 hours per week at €10.50 per hour.

¹³ In Stockton, California, poor neighbourhoods were targeted for the pilot, with recipients receiving €500 per month.

person from another European Economic Area (EEA) country who is working in Ireland, but whose family is in another EEA country, may be able to claim UBI for their family members not residing in Ireland. Boyle and McCarthy note that, 'This would open up the possibility of migrants seeking to work or reside in Ireland while benefits would be payable in respect of a family still residing in the migrants' home country'. Boyle and McCarthy also suggest that while the impact on net migration in the short term would be limited, the entry of poorer countries into the EU could lead to more significant immigration in the longer term. It should be noted that Boyle and McCarthy's comments pre-date the enlargement of the EU that took place from 2004 to 2013, during which time countries with relatively low levels of GDP per capita (e.g., Bulgaria and Romania) joined the EU.

More recently, the Green Party have proposed a UBI policy for Ireland (Green Party, 2019). It would involve a basic income payment equivalent to the 'at-risk-ofpoverty threshold', which amounts to 60 per cent of median income, and would replace existing social welfare payments. It is also proposed that, 'As a general rule of thumb, basic income rates will be adjusted in line with the CSO [Central Statistics Office] consumer price index and rather than be adjusted annually be done every 5 years'. The Green Party suggest the scheme would cost €6.5 billion, and propose that it would be funded by the following taxes: (a) a tax on pension funds of at least 0.6 per cent, to yield €1 billion; (b) a five per cent site-value tax, to raise €5 billion; (c) a 0.15 per cent speculative transaction tax (on betting, share trades, currency trades, etc.) to raise €1 billion; and a four per cent increase in stamp duty for property trades which do not relate to the principal private residence, to raise €400 million. As part of the funding mechanism, Green Party (2019) also propose that the lower rate of tax (20 per cent) is replaced by the higher tax rate of 40 per cent. Specifically, individuals will have a tax-free allowance up to the value of their UBI, and any income above that will be taxed at 40 per cent.

The funding proposal for a UBI outlined by the Green Party is a welcome addition to the policy debate. However, as mentioned earlier, the international policy debate relating to UBI often contains inconsistencies and a lack of consensus on some of the basic concepts. It is important to highlight these inconsistencies to foster a more precise and well-informed policy discussion going forward. Accordingly, while the Green Party UBI proposal is a valuable addition to the policy discussion on UBI in Ireland, there are several aspects of Green Party (2019) that could benefit from further clarification in future policy documents. Firstly, they indicate that their basic income proposal will aim to provide recipients with 'a basic living wage'. However, a living wage is a separate policy issue, and it is important that policy documents do not conflate UBI with a living wage.¹⁴

¹⁴ For more information on living wage, see https://www.livingwage.ie/.

When it comes to the actual rates of payment, Green Party (2019) suggest using a payment equivalent to the at-risk-of-poverty threshold. This would amount to a UBI payment of approximately €215 per week.¹⁵ However, while the at-risk-of-poverty threshold (€215 per week) is proposed as a payment rate, the actual costing appears to be based on paying a UBI equal to the (then) prevailing rate of social welfare (€203 per week).¹⁶ The proposed rate of payment of UBI is one of the most important parameters to consider when designing such a policy, and therefore it is important to ensure clarity and consistency in this area in any future proposals.

When designing a UBI, another important parameter to consider is eligibility. By its nature, a true UBI is unconditional with respect to income. However, there may be conditionality with respect to residency or citizenship. Many policy documents do not address this issue, so its inclusion is a positive feature of the Green Party (2019) proposal. It is stated that it would be available to all individuals resident in Ireland. However, the costing section (see Section 3 of the proposal) notes that, 'Eligible recipients include all those who are legally resident in the state for more than 2 years'. A more detailed discussion, and justification, relating to eligibility criteria based on residency is required. For example, the justification for the two-year timeframe is not clear. It may relate to a common misunderstanding that habitual residency applications contain a 'two-year rule', when in fact it does not.¹⁷ Nonetheless, having a system of UBI available to some individuals but not to others, based on this two-year time frame, could generate discrepancies in the labour market that could have consequences that are hard to predict. For example, consider two individuals with the same characteristics, working the same job, with the only difference being that the resident who has been in Ireland for more than two years receives an additional €200 per week on top of her wages, while the other person that has not yet been in Ireland for two years does not receive this payment.18

The benefits of poverty reduction, fairness and administrative simplification are not always obvious when it comes to UBI proposals. As mentioned earlier, certain types of UBI could lead to some low-income individuals being worse off (Callan et al., 1999). Similarly, the Green Party proposal notes that some people would be made worse off and would therefore need some type of supplementary welfare top up. While some low earners benefit more, in terms of take-home pay, the

¹⁵ The at-risk-of-poverty rate in Green Party (2019) relates to 2014 (€10,926 per year). This is inflated to €11,188 in 2015, using an assumed inflation rate of 2.4 per cent.

¹⁶ See Appendix 2 in Green Party (2019). Note that the €203 is based on previous rates of social welfare. This has subsequently increased to €208 per week.

¹⁷ See https://www.flac.ie/publications/guide-habitual-residence-condition/.

¹⁸ This has implications for a large number of households. Latest population and migration estimates from the CSO indicate that, for the first four months of 2021, 35,000 non-Irish nationals arrived to live in Ireland. See https://www.cso.ie/en/csolatestnews/pressreleases/2021pressreleases/pressstatementpopulationandmigrationesti matesapril2021/#:~:text=These%20inflows%20resulted%20in%20the,12.9%25%20of%20the%20total%20population.

Green Party proposal shows that, following the introduction of the proposed UBI along with the abolition of tax credits and the replacement of the 20 per cent tax rate with the 40 per cent rate, a person earning \notin 40,000 would receive the same yearly net increase in their disposable income (\notin 150) as a person earning, for example, \notin 275,000. Given that the average yearly earnings in Ireland in 2019 was \notin 40,000, it is not clear that the proposed policy could be perceived as equitable and fair.¹⁹ This underscores the difficulties in designing, and funding, such a policy in a fair and equitable way.

Finally, in motivating UBI as a poverty-reducing policy, Green Party (2019) suggests that 'universal benefits have been proven to be the most effective means by which to lower rates of poverty and ensure that all members of the community enjoy a decent quality of life'. However, much of the existing literature does not support such a strong assertion. Microsimulation has shown that previously proposed universal benefits for Ireland can have detrimental consequences for some low earners. Pareliussen et al. (2018) show that a similar type of UBI for Finland could lead to an increase in income inequality and conclude that the existing targeted benefit system does a better job. Hanna and Olken (2018) provide comprehensive discussion and analysis of the role of UBI versus targeted transfers at reducing poverty in developing countries. They conclude that existing welfare targeting policies in developing countries deliver substantial improvements in welfare when compared to universal payments, as transfers are more effectively targeted at the poorest people.

Microsimulation analysis may be useful for providing information on the potential consequences of a proposed UBI and its associated funding mechanism. However, going beyond an analysis of straightforward income tax changes, to explore other taxes such as carbon and property taxes, is challenging. A microsimulation analysis was recently conducted in Scotland, with the aim of providing information for a potential UBI pilot study (Citizens' Basic Income Feasibility Study Steering Group, 2020). The report makes the following important conclusion regarding the feasibility of microsimulation and the inherent limitations in the insights that microsimulation can provide in this context. The 'novel forms of taxation' that are referred to below relate to carbon taxes and land value taxes.

The number of permutations of additional forms of taxation, including new taxes such as carbon taxes, tourist taxes or land value taxes, is very large, such that trying to explore a full range of permutations of different forms of taxation would make the modelling (and any potential tax structure) very complicated and the results difficult to convey. Evidence of the impact of other forms of taxation on the key parameters in the model such as labour supply responses is very

¹⁹ See https://www.cso.ie/en/releasesandpublications/er/elca/earningsandlabourcostsannualdata2019/.

limited, in particular the more novel forms of taxation mentioned above.

In Ireland, microsimulation has recently been used to study carbon taxes (using the SWITCH tax-benefit model). However, as noted by O'Malley et al. (2020), this type of analysis typically does not capture the long-run behavioural responses associated with such changes. Nonetheless, such analysis could prove useful in developing our understanding of the potential consequences of various funding mechanisms associated with a UBI.

SECTION 3

The potential effects of a UBI on labour supply

According to economic theory, when considering the labour supply decision, individuals face a trade-off between income and leisure. By allocating more time to work, individuals can increase their income while reducing leisure. Conversely, an individual may decide to work less in order to pursue more leisure. The theory of labour supply suggests that additional unearned income, such as UBI, can negatively affect a person's labour market participation, as they choose to increase their consumption of leisure while reducing their time at work – this is referred to as the 'income effect'. A strand of literature seeks to empirically test the income effect. A novel strategy is to use lottery wins as a source of exogenous increases in non-labour income. This is the approach taken by Imbens et al. (2001) for the US and Cesarini et al. (2016) for Sweden. Both find evidence of a modest reduction in labour supply in response to additional unearned income. While it is not clear whether these results would apply to other forms of unearned income (such as UBI), it is important to note that these studies included lottery wins of varying magnitudes, which in many cases were quite small, and may therefore generalise to other types of payments.²⁰

Although reducing time in paid work due to unearned basic income can be perceived as a negative outcome, proponents of UBI suggest that labour supply adjustments may be beneficial in some cases. For example, UBI enables individuals to turn down or leave insecure, exploitative or low-paid work in pursuit of better or improved work opportunities (Hoynes and Rothstein, 2019). It also means that persons in informal and often unpaid work, such as domestic housework, childcare and eldercare, which is mostly done by women, can receive some compensation for their labour. However, this could also incentivise women to reduce their participation in paid work compared to men (Gentilini et al., 2019). This may be a particularly important factor for Ireland, where the gap in the employment rate between men and women has been growing in recent years.²¹ In 2019, the employment rate for men was 74.6 per cent compared to 63.7 per cent for women, giving a difference of 10.9 percentage points. This was greater than the average gap in employment rates for men and women in the EU of 10.2 percentage points, as shown in Table 3.1 below. While for the EU as a whole, the gender gap in employment rates has been declining, in Ireland it has been increasing over the last decade. If a UBI was to disproportionately impact the labour supply of women, it could potentially further exacerbate this gap.

²⁰ As noted by Cesarini et al. (2016), less than nine per cent of their sample of lottery winners won more than 10,000 SEK (US\$1,400).

²¹ See https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2019/work/.

	Ireland		EU			
Year	Men	Women	Difference	Men	Women	Difference
2009	68.6	59.3	9.3	70.6	58.3	12.3
2010	65.3	57.4	7.9	70.1	58.2	11.9
2011	64.0	56.8	7.2	70.0	58.4	11.6
2012	63.4	56.3	7.1	69.6	58.6	11.0
2013	65.8	57.1	8.7	69.4	58.8	10.6
2014	67.7	57.5	10.2	70.1	59.6	10.5
2015	70.2	59.0	11.2	70.8	60.4	10.4
2016	71.6	61.2	10.4	71.8	61.4	10.4
2017	72.6	62.3	10.3	72.9	62.4	10.5
2018	73.8	63.4	10.4	73.8	63.3	10.5
2019	74.6	63.7	10.9	74.4	64.2	10.2

TABLE 3.1 IRELAND AND EU EMPLOYMENT RATES (%), 2009–2019

Source: CSO, Women and Men in Ireland, 2019. CSO, QNHS, CSO LFS, Eurostat LFS.

It is possible that a UBI could lead to an increase in labour supply for certain individuals. For those in receipt of means-tested benefits, the withdrawal of these benefits upon finding work could discourage the take-up of employment. With an unconditional UBI, there is no payment withdrawal and therefore these types of disincentive effects do not exist (Martinelli, 2017). To further understand these effects, it is useful to consider the potential impact of a UBI on replacement rates, defined as the amount of in-work income that is replaced by the social welfare system when an individual becomes unemployed. Higher replacement rates, which imply that most of a person's in-work income is replaced by the social welfare system, are associated with employment-related disincentive effects (Boyle, 2018). To illustrate this point, let us take a hypothetical example. Suppose a person's outof-work income is equal to the rate of Jobseeker's Allowance, €203 per week.²² If that person was working, let us assume they would earn €400 per week (net). Their replacement rate would be 51 per cent (203/400). Now let us assume instead that the Jobseeker's Allowance is replaced by a UBI. For simplicity, we assume the UBI is the same rate as the Jobseeker's Allowance, at €203. In this instance, the replacement rate is lower, at 34 per cent (203/603), which is due to the fact that the unconditional UBI is retained even when the individual finds employment. The lower replacement rate is consistent with a greater incentive to find employment, compared to the higher replacement rate associated with Jobseeker's Allowance.

Using a microsimulation model of the tax and welfare system, Callan et al. (1994) analysed the potential impact of a UBI on replacement rates in Ireland. They found that in 1987, approximately 10 per cent of the unemployed faced a replacement rate of over 80 per cent. The introduction of a UBI equivalent to the lowest welfare

²² Jobseeker's Allowance increased from €203 per week to €208 per week in 2022.

payment at that time (of £35 per week), financed by a uniform 61.6 per cent income tax rate, reduced the proportion of unemployed individuals with replacement rates above 80 per cent from one in ten to just one in 100. For employees, the percentage with replacement rates above 80 per cent was halved, to approximately 2.1 per cent. Callan et al. (1994) argue that lower replacement rates represent the 'strongest positive dynamic for employment creation which would arise from a basic income scheme'.

In terms of the empirical evidence on labour supply, De Paz-Báñez et al. (2020) carried out a systematic review of the available evidence on the relationship between UBI and labour supply. They found no evidence of a significant reduction in labour supply associated with UBI policies; however, there was some heterogeneity across groups, with labour supply reductions observed among children, the elderly, the sick, those with disabilities, women with young children and young people in education. Similarly, Gentilini et al. (2019), reviewing empirical evidence for basic income pilots in North America and Iran, concluded that, overall, unconditional basic income did not appear to generate significant disincentives to paid work.

While reviews such as De Paz-Báñez et al. (2020) and Gentilini et al. (2019) are informative, it is useful to also mention individual studies that focus on a specific basic income policy. One notable recent study is Jones and Marinescu's (2018) examination of the impact of the Alaskan Permanent Fund Dividend, which amounts to a yearly payment of \$2,072 per resident.²³ They found no evidence of a negative impact on employment (the extensive margin). One suggestion put forward to explain this result is that any negative income effect is offset by consumption increases that stimulate labour demand. There is some evidence of a reduction in the intensive margin (hours worked). However, Jones and Marinescu (2018) could not rule out the possibility that this is due to more part-time workers entering employment. Kangas et al. (2020), in a review of the impact of the Finnish pilot, in which participating unemployment benefit recipients could retain their unemployment benefit even if they found employment, found no negative employment effects associated with the pilot.²⁴ In the Spanish experiment, labour market participation decreased for persons who received the payment only but increased for those who received the payment and participated in education and training programmes (Riutort et al., 2021).

The introduction of a UBI could also impact undeclared work. Means-tested benefits may create incentives to engage in undeclared work to avoid a reduction or withdrawal of benefits. Due to its unconditionality, a UBI could remove such

²³ The Dividend started at \$331 in 1984, increasing to \$2,072 by 2015.

²⁴ See https://www.kela.fi/web/en/news-archive/-/asset_publisher/IN08GY2nIrZo/content/results-of-the-basicincome-experiment-small-employment-effects-better-perceived-economic-security-and-mental-wellbeing.

incentives, and this is sometimes mentioned in the policy debate as an additional potential benefit of introducing UBI (Zimmermann et al., 2020). However, given the limited adoption of UBI policies, coupled with the difficulty in measuring undeclared work, there is little empirical evidence on this topic. Gamel et al. (2006) present findings from a basic income questionnaire targeted at 'poorly qualified young adults who had recently become employed'. Respondents currently in employment were asked what they would do first if they were to receive a basic income today. Just under 2 per cent said they would 'stop doing undeclared work'. In terms of other responses, a majority (55.4 per cent) said they would change nothing; 16.9 per cent said they would work less; 0.4 per cent said the would stop working; 1.8 per cent said they would change jobs; 11.2 per cent said they would obtain training or education; and 12.5 per cent said they would practice an interesting activity.

SECTION 4

The potential impact of a UBI on health outcomes

Recent discussions around universal basic income (UBI) policies reference the potential for UBI to positively impact health outcomes (Haagh and Rohregger, 2019), and evidence is emerging from basic income experiments around the world to support this. In terms of direct health effects, Forget (2011) used administrative health data to examine the health outcomes associated with a Canadian guaranteed income field experiment, which ran from 1974 to 1979.²⁵ The results show an 8.5 per cent reduction in hospitalisation rates. Guaranteed income recipients also had less contact with doctors, especially for mental health reasons. During a more recent Canadian guaranteed minimum-income (GMI) pilot, which took place in Ontario from 2017 to 2019, 88 per cent of recipients reported improvements in their mental health and reduced levels of stress (Standing, 2019; Ferdosi and McDowell, 2020).²⁶ The Alaska Permanent Fund Dividend has been shown to reduce the incidence of low birth weight, especially among less-educated mothers (Chung et al., 2016; Ruckert et al., 2018). There is also evidence of positive health and wellbeing effects from pilots in Finland, where jobseekers got to keep their unemployment benefit if they found work (Kangas et al., 2020), as well as pilots in Barcelona (Riutort et al., 2021) and California (West et al., 2021).²⁷

There have been pilots in developing countries that have also shown positive impacts on health outcomes. In one pilot implemented in rural areas of Madhya Pradesh in India from 2012 to 2013, the majority of beneficiaries reported an improvement in their health, which they attributed to the unconditional cash transfer (SEWA, 2015).²⁸ Baird et al. (2013) found a reduction in psychological distress following an unconditional cash transfer experiment in Malawi. Therefore, a growing body of evidence highlights that UBI policies can have positive impacts on health and wellbeing, including a person's mental health.

²⁵ This was the MININCOME experiment in Manitoba. It was targeted at low-income families with the minimum income rate based on 60 per cent of Statistics Canada Low Income Cut-off (LICO). Each dollar received from other sources reduced the benefit by 50 cents.

²⁶ The pilot involved payments of approximately C\$17,000 to single people and C\$24,000 to couples, with amounts reduced by 50 cents for every extra dollar of income received.

²⁷ These basic income experiments are discussed in more detail in Section 4 below.

²⁸ The pilot was implemented by SEWA Bharat, the All India Federation of Self-Employed Women's Association, with the support of UNICEF.

SECTION 5

Case studies of UBI pilots

This section provides a detailed overview of universal basic income (UBI) pilots that are taking place, or have recently taken place, internationally. It examines their aims and objectives, provides an overview of the scope of each study, presents empirical findings (if any) associated with each and extracts relevant recommendations and lessons for an Irish UBI pilot. Beginning with a discussion of the Basic Income for the Arts (BIA) Pilot Scheme in Ireland, which is due to commence in 2022, it goes on to provide an overview of pilot studies in Finland, Canada (Ontario), Spain (Barcelona), the US (Stockton, California) and Germany. This section also reviews, in less detail, other pilots and schemes that, while informative, are perhaps less relevant to a proposed UBI pilot in Ireland. These include schemes in the Netherlands, Alaska, North Carolina and Brazil.

As previously discussed, a UBI involves a universal, unconditional payment. Some of the pilot studies discussed in this section consist of payments that specifically target certain groups on low incomes, or at risk of poverty. For example, the pilot study in Canada (Ontario) targeted people on low incomes (under \$34,000 per year for a single person). These types of targeted payments resemble a guaranteed minimum income (GMI) instead of a true UBI. While both types of payments are related, a GMI is different to a UBI, as a GMI typically involves a means-tested payment, or some eligibility restrictions, that targets low-income groups with the aim of reducing poverty. If a GMI removed all eligibility or means-testing criteria, then it would become a UBI.

Some of the pilot studies require further clarification, as the GMI / UBI distinction is more ambiguous. The UBI pilot in Stockton, California, is an example of this. To qualify, a person must live in a neighbourhood with a median income below \$46,033, which is the city's median household income. However, participants receiving basic income could be earning more than the city's median income, provided they were living in the designated neighbourhood. Therefore, while this pilot targets poor neighbourhoods, it does not specifically target poor people living in those neighbourhoods. As such, one can view this type of pilot as a true UBI pilot that was implemented in a poor neighbourhood. Of course, focusing only on poor neighbourhoods, irrespective of whether there is an earnings eligibility criteria for residents in that neighbourhood, means that the results may not be generalisable to other areas. It is clear, therefore, that many of the basic income type pilot schemes are related to more general minimum-income schemes that currently operate in most advanced economies. While a detailed discussion of such schemes is beyond the remit of the current paper, this section concludes with a general discussion of minimum-income schemes in operation internationally (Section 5.8).

5.1 BASIC INCOME FOR THE ARTS PILOT SCHEME

5.1.1 Aims and objectives

The Basic Income for the Arts (BIA) Pilot Scheme in Ireland will run from 2022 to 2025 and is open to eligible artists and creative arts sector workers.²⁹ The objective of the scheme is to address earnings instability associated with arts sector workers, who often engage in intermittent, periodic and project-based work. The pilot scheme will examine whether the provision of a basic income impacts the creative practice of such workers, by providing income security and reducing income precarity. While this is not a UBI, it is clearly of relevance as it is an ongoing basic income type pilot that is currently being implemented by the Government of Ireland. The administration and implementation of this pilot could provide useful guidance for the rollout of a UBI pilot.

5.1.2 Scope of the study

Funding for the BIA Pilot Scheme allows for approximately 2,000 participants. Relevant arts sector workers were invited to apply for inclusion in the scheme through an online portal. Applications closed at 1 p.m. on 12 May 2022. As the number of applicants exceeded 2,000 not all applicants can be selected for inclusion in the pilot scheme. The selection process is non-competitive, meaning that all applicants who satisfy the eligibility criteria will be included in an anonymised random sampling process, through which 2,000 participants will be selected from the pool of all eligible applicants. The rate of payment is €325 per week and participants will receive this for a period of three years, from 2022 to 2025. The BIA income is taxable and is treated as income from self-employment for the purpose of means tests for Department of Social Protection welfare schemes.

Participants in the BIA scheme are required to comply with data collection requirements to allow for ongoing evaluation of the scheme. Payment of BIA is conditional on the provision of such information. Information will be collected across several dimensions including: time spent on creative activities; other income earned; demographic data; and wellbeing indicators. To facilitate the evaluation of the programme, a control group of 1,000 individuals will be created, consisting of eligible applicants who were not selected to receive the payment. Control group participants will be paid two weeks basic income for each year of the pilot scheme to compensate them for participating in the same data collection as the BIA participants.

²⁹ For specific details on the types of workers that are eligible, see https://www.gov.ie/en/publication/29337-basic-income-for-the-arts-pilot-scheme-guidelines-for-applicants/#aimsof-the-scheme.

5.2 GERMANY

5.2.1 Aims and objectives

The aim of the German basic income pilot project is to scientifically test the impact of UBI on health, labour market participation, the digital revolution, cohesion, politics and consumption (Mein Grundeinkommen e.V., 2021). The objective is to estimate and understand the societal and labour market outcomes of UBI and to provide models for realistic financing of UBI.

5.2.2 Scope of the study

The basic income pilot began in August 2020 and will continue for three years.³⁰ During the pilot, three consecutive studies will be conducted. In the first study a random sample of 122 people will receive an unconditional income of \leq 1,200 per month, which is equivalent to approximately 75 per cent of the minimum monthly wage in Germany,³¹ for the duration of the pilot, with another 1,380 people serving as the comparison group. Due to the unconditional nature of the payment, many recipients are on relatively high incomes. Approximately half of the basic-income recipients have net household incomes between \leq 1,200 and \leq 2,600 per month, which means that for the first time the impact of basic income can be examined across most of society (Bohmeyer, 2021).

5.2.3 Analysis

During the life of the UBI pilot, all participants will complete seven online questionnaires and some will be invited to in-depth interviews about their basic income experience. The pilot will be successful if it creates positive individual and collective societal effects, is financially feasible and does not have a negative effect on paid employment (Mein Grundeinkommen e.V., 2020). This is one of the longest UBI pilots ever to be conducted anywhere in the world, and it will apply a variety of scientific methods to examine the impact of basic income from a variety of perspectives (Bohmeyer, 2021).

5.3 STOCKTON, CALIFORNIA (US)

5.3.1 Aims and objectives

The aim of the Stockton UBI pilot was to address inequality, income volatility and poverty in the city. Objectives of the pilot included scientific analysis of the impact of guaranteed income on income volatility, financial wellbeing, physical

³⁰ See https://www.diw.de/en/diw_01.c.796681.en/projects/basic_income_pilot_project.html.

³¹ See https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=File:Minimum_wages,_July_2011_and_July_2021_(EUR_per_month_and_%25).png.

functioning, psychological distress, and individual agency (Martin-West et al., 2019). This pilot could be viewed as a basic income pilot studied that was trialled in low-income neighbourhoods. Therefore, the results may not generalise to all other areas.

5.3.2 Scope of the study

The Stockton UBI pilot ran from February 2019 to February 2021. A random sample of 125 participants was selected to receive a basic income from eligible households. To be eligible for the basic income, individuals had to be at least 18 years old and live in a neighbourhood in Stockton with a median income below \$46,033, which is the city's median household income. However, participants receiving the basic income payment could be earning more or less than the city's median income, provided they were living in a designated neighbourhood. Another 200 individuals from the same neighbourhoods were randomly selected as the control group. Each basic-income recipient received an unconditional payment of \$500 per month, irrespective of other social supports or income. Basic income served as a supplement, rather than replacement, of existing social safety mechanisms (SEED, 2019).

5.3.3 Preliminary findings

Although the pilot formally finished in February 2021 only preliminary findings from the first year of the pilot are available. The key findings indicate that basic income reduced income volatility, enabled persons to find full-time employment, improved physical functioning and mental health, and created new opportunities for self-development (West et al., 2021). Basic income also had a statistically significant effect on physical and mental health as both improved for basic-income recipients, with no statistical effect evident for the control group (West et al., 2021). Alleviation of financial strain meant that more people receiving basic income increased goal setting and risk taking, enabling them to take on training and educational opportunities, and search for better jobs, neither of which they were able to do previously.

5.4 ONTARIO (CANADA)

5.4.1 Aims and objectives

The aim of the Ontario Basic Income Pilot (OBIP) is to examine how basic income may help people living on low incomes to meet their basic needs. The objective of the OBIP was to study the impact of basic income on food security, mental health, housing stability, education and training, and employment and labour market participation. While it is referred to as a basic income pilot, it resembles a GMI scheme, as it specifically targets those on low incomes.

5.4.2 Scope of the study

The OBIP began in April 2017 and was scheduled to run for three years but was cancelled by the new government in April 2018 (Ferdosi and McDowell, 2020). The pilot ran in three communities, namely Hamilton, Brantford and Brant County, and 6,000 people were enrolled in the pilot (4,000 received basic income and 2,000 participated as the control group), with demographics representative of Ontario's population.³² Participants were 18 to 64 years old, living in selected regions for more than 12 months and living on a low income, which was under \$34,000 per year for a single person or under \$48,000 per year for a couple. The pilot guaranteed a basic income of 75 per cent of the low-income measure, equivalent to 37.5 per cent of median income in Ontario, which was \$16,989 per year for a single person and \$24,027 per year for a couple (Mendelson, 2019). Persons with disabilities would receive an additional \$6,000 per year over and above the basic income. For persons receiving both basic income and other income, a reduction rate applied, which would see their basic income decrease by \$0.50 for every dollar earned from work or other income sources. This meant that a basic-income recipient would need to have \$33,978 income before the basic income was fully eliminated (Mendelson, 2019).

5.4.3 Findings and analysis

Although the OBIP was prematurely cancelled, some key findings emerged. Most recipients of the basic income reported improvements in food security, housing stability, financial status, social relationships, physical and mental health and less frequent hospital visits (Ferdosi and McDowell, 2020). OBIP recipients were able to improve their lives by purchasing additional necessities, eating healthier diets, paying off debts, spending more time with friends and family as well as going back to school (McDowell and Ferdosi, 2021). In terms of labour market outcomes, the majority of basic-income recipients who worked before the pilot continued to work after receiving basic income and many more reported moving to better paying and more secure jobs (Ferdosi and McDowell, 2020).

5.5 FINLAND

5.5.1 Aims and objectives

The aim of the Finnish basic income experiment was to 'reform the Finnish social security system to better correspond with the changes in working life, to make social security more participatory and diminish work disincentives, reduce bureaucracy and simplify the overly complex benefit system' (Hiilamo and Kangas, 2017). The main objectives of the basic income experiment were to gain an

³² See https://www.ontario.ca/page/ontario-basic-income-pilot#section-1.

understanding of how receiving basic income would affect employment status, income and wellbeing.³³ This pilot departs from other pilot studies, in that it does not involve a true UBI payment, as it focuses on a very specific group of people – those who are unemployed. As such, any evidence from this pilot study is unlikely to capture the full effects of a true UBI.

5.5.2 Scope of the study

The Finish basic income experiment was carried out from January 2017 to December 2018. A random sample of 7,000 people between 25 and 58 years old were selected from a nationwide group of 173,000 people who were receiving basic unemployment benefits. The sample was separated into a 'treatment group' of 2,000 people who received basic income only and a 'control group' of 5,000 people who continued to receive basic unemployment benefits only. Participation in the experiment was mandatory. People in the treatment group received a basic monthly income of ξ 560, which was unconditional, tax exempt and not affected by income from work. The net benefit of basic income was similar to the net benefit of basic unemployment benefits (Kangas, 2019). Initially, both groups were identical in terms of sociodemographic characteristics, and any changes in economic status and unemployment at the end of the experiment may be due to the provision of basic income.

5.5.3 Findings and analysis

Persons receiving basic income experienced greater life satisfaction and fewer mental health problems than the control group, and felt better about their economic security.³⁴ In general, no significant employment effect was observed in the first year of the experiment; however, for families with children employment rates improved during both years of the experiment.³⁵ Participants were interviewed and surveyed during and after the basic income experiment. The treatment group reported that their trust in other people and social institutions improved compared to the control group, and that they had higher confidence in future possibilities.³⁶

33 See

- 35 Ibid.
- 36 See

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162219/STM_2020_15_rap.pdf?sequence=1&isAllowed=y. 34 See https://www.kela.fi/web/en/news-archive/-/asset_publisher/IN08GY2nIrZo/content/results-of-the-basic-income-

experiment-small-employment-effects-better-perceived-economic-security-and-mental-wellbeing.

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162219/STM_2020_15_rap.pdf?sequence=1&isAllowed=y.

5.6 BARCELONA (SPAIN)

5.6.1 Aims and objectives

The aim of Barcelona's B-MINCOME pilot was to improve incomes and civic engagement, and to mitigate poverty and social exclusion (Colini, 2019). Its objective was to test the effectiveness of a guaranteed minimum income (GMI) in deprived and disadvantaged communities in Barcelona. Therefore, it was not a true UBI experiment.

5.6.2 Scope of the study

The B-MINCOME experiment ran from November 2017 to October 2019. A random sample of 1,000 low-income households were selected from potential candidates from ten of Barcelona's most deprived areas. An additional 383 households participated passively as the control group. Household members had to be registered in Barcelona, at least one household member had to be between 25 and 60 years old, and participants had to avail of municipal social services at the time of the experiment (Riutort et al., 2021). Each household in the treatment group was entitled to GMI between €100 and €1,676 per month. The amount of GMI depended on household maintenance costs and other sources of income. Some of the B-Mincome participants were also required to participate in active policies, such as training and employment, social entrepreneurship programme and community participation.

5.6.3 Findings and analysis

The findings of Barcelona's experiment showed that basic income alleviated the feeling of financial uncertainty and stress, which also contributed to significant improvements in individual wellbeing and life satisfaction when compared to the control group (Riutort et al., 2021). However, B-Mincome's active policies did not increase willingness for entrepreneurship activities or the need to find quality work. In fact, the project as a whole reduced labour market participation, though those who participated in training and employment programmes and received GMI saw a positive impact on work placements. In terms of financial stability, some households acquired economic independence and were able to plan for the future, while other households did not manage to get out of financial hardship.

5.7 OTHER EXPERIMENTS

5.7.1 The Netherlands

A GMI experiment ran from 2018 to 2020 in the city of Utrecht. The aim of the experiment was to restructure social assistance payments to find the best way to guide people on guaranteed basic income towards employment and social

participation (Verlaat et al., 2020). A total of 752 participants were divided into four groups: the control group; those receiving the payment but with no obligation to find and accept work; those receiving the payment and extra help and guidance in finding employment; and those receiving the payment while also keeping a large proportion of income from work (Verlaat et al., 2020). Key findings indicate that in all programmes, labour market participation improved, as did recipients' health and wellbeing and sense of autonomy.

5.7.2 Alaska (US)

In 1982, the Alaska Permanent Fund Dividend was introduced to redistribute profits from the oil industry to all citizens of Alaska in a form of UBI. Dividend payments are affected by company performance, which means that cash transfers are not consistent over time. The payment started at \$331 in 1984, but had increased to \$2,072 by 2015 (Marinescu, 2019). Jones and Marinescu (2018) found no effect of the dividend payment on employment but observed an increase in part-time work.

5.7.3 North Carolina (US)

Since 1997, the Eastern Band of Cherokee Indians in North Carolina, the US, have used dividend transfers to redistribute profits from a casino on tribal land to every tribal member without condition (Marinescu, 2019). The basic income guarantee in 2016 was \$12,000 per adult (CSJ, 2018). There are approximately 14,000 tribal members entitled to basic income. Over the years, guaranteed basic-income recipients were more likely to be lifted out of poverty than those without basic income, less likely to develop psychological problems, such as depression and anxiety, and children were more likely to stay in school longer (CSJ, 2018). Marinescu (2019) also found that basic-income recipients work the same number of hours as those who do not receive guaranteed income. The level of basic income is linked to business performance and profits, which may not provide a stable and reliable basic income for recipients.

5.7.4 Brazil

In Marica, Brazil, approximately one-quarter, or 42,000, of that city's citizens are enrolled in a GMI programme, which has been operating since 2015 (JFI, 2020). Initially, each recipient received the equivalent of US\$58 in *mumbuca*, Marica's digital currency, per month. This is approximately 30 per cent of Brazil's minimum monthly income. Since the onset of the COVID-19 crisis, the payment temporarily increased to US\$130 in *mumbuca* currency. Those who have lived in Marica for at least three years and are part of a household earning less than three times Brazil's minimum monthly income are entitled to the payment. The main objective of the programme is to alleviate poverty, address economic inequality and improve job security. Although more people receiving the payment are lifted out of poverty, there is little research estimating the long-term effects of Marica's programme.

5.8 MINIMUM-INCOME SCHEMES IN THE EU AND OECD

Immervoll (2009) provides a useful, and comprehensive, overview of general minimum-income schemes in member countries of the Organisation for Economic Co-operation and Development (OECD). In developing a typology of minimum-income benefits, Immervoll (2009) describes them as, 'cash or in-kind transfers that aim at preventing extreme hardship and employ a low-income criterion as the central entitlement condition'. Examples include payments such as unemployment benefits that are not related to social insurance contributions and means-tested lone parent/family benefits. It is important that such benefits are accompanied by activation measures to allow individuals re-enter employment, where possible. However, Immervoll (2009) notes that the most immediate priority of minimum-income benefits is to prevent individuals from going without minimum safety nets at a time when they are most needed.

Within the EU, the right to an adequate minimum income is stated explicitly in Principle 14 of the European Pillar of Social Rights:

Everyone lacking sufficient resources has the right to adequate minimum-income benefits ensuring a life in dignity at all stages of life, and effective access to enabling goods and services. For those who can work, minimum-income benefits should be combined with incentives to (re)integrate into the labour market.

Konle-Seidl (2021) assesses the adequacy of minimum-income support in the EU, where adequacy is based on the at-risk-of-poverty rate. Konle-Seidl (2021) notes that while levels of minimum income vary considerably across the EU, Ireland is the only country where benefit levels for a single member household are close to the poverty threshold. In other countries, minimum-income supports often fall far below the poverty threshold. This is especially true in Bulgaria, Hungary, Italy, Romania and Slovakia.³⁷ Therefore, even in the absence of a UBI, Ireland appears to perform better than other EU countries at providing a minimum income for those that need it most.

³⁷ Note, the calculations in Konle-Seidl (2021) are based on 2019 data.

SECTION 6

The estimated cost of a UBI for Ireland

This section examines four possible universal basic income (UBI) policies in Ireland. The 'baseline UBI', the option that most closely resembles a true UBI, involves a non-means-tested, universal payment to every adult in the State that is equivalent to the 2019 at-risk-of-poverty threshold, which amounts to 60 per cent of median equivalised disposable household income (€1,200 per month). The second example applies a lower UBI, equivalent to 50 per cent of median equivalised disposable household income (€1,000 per month). In the third example, we examine a UBI equivalent to the current social welfare rate of €208 per week. Finally, in the fourth example, we examine the type of UBI that could be paid for a given fixed gross amount, equivalent to €10 billion per year.

6.1 A UNIVERSAL, NON-MEANS-TESTED UBI EQUAL TO 60 PER CENT OF MEDIAN INCOME

According to the 2016 Census of Population, there were 3,424,935 individuals aged over 18 years of age in Ireland.³⁸ A true UBI, as defined above, would involve a sufficiently large payment to each individual to allow them to live on. While we discuss different thresholds and payments in greater detail below, a reasonable estimate of the minimum income required to ensure a person is not in poverty is the 'at risk of poverty' threshold. This is defined as 60 per cent of median annual equivalised income, which amounted to €14,387 in 2019.³⁹ This indicates that a single person would need to earn in excess of this amount to exceed the poverty threshold, which is equivalent to a monthly payment of €1,200 per person. A UBI set at this level would have a gross cost of just under €50 billion per annum.⁴⁰ To put this in context, total expenditure on all social welfare programmes in 2019 was €20.9 billion (DEASP, 2019).

While we base the rate of UBI on the at risk of poverty threshold, it is important to note that this would not represent a viable basis for calculating a UBI on a continuous basis. The at-risk-of-poverty threshold is 60 per cent of median income. Therefore, implementing a UBI would increase the at-risk-of-poverty threshold by altering the income distribution. As such, the at-risk-of-poverty threshold could not be used to re-calculate the UBI going forward, as it would lead to a scenario where the UBI is constantly increasing in response to increases in the at-risk-of-poverty threshold, which itself was caused by a higher UBI. Nonetheless,

³⁸ See https://www.cso.ie/en/releasesandpublications/ep/p-cp3oy/cp3/agr/.

³⁹ See https://www.cso.ie/en/releasesandpublications/ep/p-

silc/survey on income and living conditions silc 2019/poverty and deprivation/.

⁴⁰ Multiplying 3,424,935 by €14,387 gives €49,274,539,842.

the 2019 threshold provides a useful starting point for thinking about a UBI rate that would enable individuals to achieve an acceptable standard of living.

6.2 A UNIVERSAL, NON-MEANS-TESTED UBI EQUAL TO 50 PER CENT OF MEDIAN INCOME

A UBI equivalent to 50 per cent of 2019 median equivalised annual income amounts to a monthly payment of $\leq 1,000$ per person, or $\leq 12,000$ per year. The gross cost of such a UBI would amount to ≤ 41 billion.⁴¹ This is approximately double the total social welfare expenditure in 2019.

6.3 A UNIVERSAL, NON-MEANS-TESTED UBI EQUAL TO CURRENT SOCIAL WELFARE RATE (€208 PER WEEK)

A UBI set at the current social welfare payment rate of ≤ 208 per week amounts to a yearly payment of $\leq 10,816$. The gross cost of such a UBI paid to 3,424,935 individuals would amount to ≤ 37 billion. However, a UBI payment equal to the prevailing social welfare rate has received the following recent criticism by Green Party (2019) as being too low:

As the aim of a UBI is to lift the greatest proportion of the populace out of poverty it is assumed that current levels of welfare payments are not sufficient to do so or do not represent a fair redistribution of national income to achieve lower levels of poverty within the state. The Green Party believes that the UBI should be benchmarked to the most recent data on poverty rates and minimum disposable incomes with an ongoing review process that resets rates on a five year basis.

6.4 A UBI COSTING A TOTAL OF €10 BILLION PER YEAR (GROSS)

The costs associated with implementing a UBI similar to those outlined above (Sections 6.1–6.3) are high in gross terms. A more feasible approach may be to initially designate an appropriate and realistic cost that could be allocated to a UBI, and then calculate what could be achieved given this outlay. For example, what could be achieved for a total gross cost of \leq 10 billion per year? Assuming again a population consisting of 3,424,935 individuals aged over 18 years of age, this would amount to \leq 2,920 per year, or \leq 243 per month, per person.

These examples underline the inherent trade-off facing all proposed UBI policies. While a key feature of a true UBI is that it provides an adequate level of income to achieve an acceptable standard of living, the practical costs of implementing such a policy may be large. We stress that we are providing basic calculations of gross

⁴¹ Multiplying €12,000 by 3,424,935 gives €41,099,220,000.

cost. Any UBI policy would likely involve significant changes to the tax and benefit system. Earlier work has indicated that financing a UBI through income tax could require a high tax rate, in the order of 50 or 60 per cent (see Callan et al., 1994; Callan et al., 2000; Honohan, 1987). More recently, Green Party (2019) suggests alternative financing through a tax on pension funds, a site-value tax, a speculative transaction tax, an increase in stamp duty for property trades that do not relate to the principal private residence, and the replacement of the 20 per cent tax rate with the higher (40 per cent) rate. A more detailed analysis of the impacts of such funding mechanisms could be explored through microsimulation analysis.

One of the core advantages of a UBI is that it could potentially replace some, or all, existing social welfare payments. Having one unconditional payment could greatly reduce administrative costs associated with means tests, while also removing any stigma of benefit receipt among recipients. Ultimately, the decision as to which of the existing benefits that could be replaced is a task for policymakers. To inform this decision, we show the payment amounts associated with specific social welfare payments in appendix Tables B.1 and B.2. For example, in 2019, spending on Jobseeker's Allowance and Jobseeker's Benefit was €1.6 billion and €350 million respectively. When weighing up the cost of a UBI, it is important to factor in the savings on any benefits that it may replace.

SECTION 7

General guidelines for implementing a UBI pilot study

In addition to the insights gleaned from the specific pilot studies outlined above, we can look to the existing literature for general guidelines and suggestions for implementing a successful universal basic income (UBI) pilot study. Neuwinger (2021) highlights several important and practical considerations for the successful implementation of any such pilot scheme. Firstly, it is necessary to have an appropriate treatment and control group to evaluate the impacts of the pilot study. The sample size should be sufficiently large to allow for an evaluation to take place to investigate impacts. Capturing the relevant information from both groups is of critical importance. The type of information to be captured needs to be carefully considered, as this will be the data used for any evaluation in the future. The types of variables that are captured in other studies include, for example: employment status; health and wellbeing measures; financial health measures; educational status/attainment; crime; and perceptions and opinions of social institutions and government departments. Construction of the treatment and control groups, along with the type of information captured, could be informed by the existing BIA pilot study.

Neuwinger (2021) also recommends that the pilot should not be overly complex. Administrative complexity has been a feature of previous pilots (such as B-MINCOME, Barcelona), and this may hinder attempts to analyse them effectively and draw clear conclusions. Research partnerships are also highlighted as an important component for a successful UBI pilot. For example, VATT Institute for Economic Research was involved in the Finnish UBI pilot, the University of Barcelona was involved in evaluating the B-MINCOME guaranteed minimum income (GMI) pilot scheme in Spain, while the German Institute for Economic Research (DIW Berlin), the University of Cologne and the Max Planck Institute are all involved in the German basic income experiment that is currently underway. It is also important to ensure there are no legal impediments to the implementation of a pilot. In Spain, it is illegal for municipalities to implement income policies other than to existing social services users.

There is some debate in the UBI literature on how to select a treatment group and a control group. One method is to select a sample of households or individuals that are drawn from across the country (or town /city /county) to participate in the UBI pilot (the treatment group). These are then compared to another sample of households or individuals, also drawn from the country-wide population that do not get the UBI (the control group). For example, in Ireland, this could mean that participants (both the treatment and control groups) consist of a subset of the population drawn from across a range of counties. In this type of pilot study, recipients are scattered across locations. Econometric techniques can then be used to evaluate the causal effect of the UBI on various outcomes. The collection of detailed sociodemographic characteristics would be used to control for systematic differences in the treatment and control group. For example, it would be important to collect information on characteristics including education, family size/structure, employment (current and past), income, age, gender, caring responsibilities, occupation (current and past) and housing tenure.

Instead of having treatment and control individuals scattered across locations, some suggest the use of a 'saturation site' for a UBI pilot (Mendelson, 2019; Forget, 2011). This would involve selecting a specific region (such as a town or village) within which everyone is eligible for the programme. The rationale for such an approach is that a UBI may have substantial community-wide effects that can only be adequately captured with the use of a saturation site – for example, reductions in crime and healthcare service use (Calnitsky and Gonalons-Pons, 2021; Mendelson, 2019; Forget, 2011). With this 'saturation site' approach, a control group could then be chosen from a similar site (such as a town) for the purposes of evaluation. There are, however, drawbacks and difficulties with such an approach. Firstly, implementing a pilot UBI study is expensive, and the chosen saturation site would need to have a sufficiently small population for it to be feasible. Secondly, if the saturation site was very different to most other locations in the country, then any results relating to the UBI outcomes may not be generalisable to the country as a whole.

The recent B-MINCOME pilot study in Barcelona provides some useful information regarding the practicalities of data collection and the selection of a treatment and control group.⁴² It should be noted, however, that the B-MINCOME was a GMI pilot, as opposed to a UBI. It focused on the ten poorest areas of the city, and there were eligibility criteria for participation, including prior engagement with social services. As part of the data collection process, three survey waves were administered. The first survey (the baseline) was administered before the policy commenced (November 2017), with two follow-up surveys (October 2018 and July 2019) carried out to capture data following the commencement of the pilot. The B-MINCOME was designed to allow for a counterfactual evaluation and, as such, consisted of a treatment group (the recipients) and a control group (those who did not receive the payment). Both treatment and control groups were surveyed in all waves. As the B-MINCOME project was targeted towards users of social services, Barcelona City Council identified 4,305 active users of social services, all of whom were contacted by letter about the proposed pilot. Following 400 information sessions about the pilot, 2,525 households applied. Ultimately, 1,527 were found to be eligible and a lottery was used to assign individuals to either the treatment

⁴² See https://www.uia-initiative.eu/en/operational-challenges/barcelona-bmincome.

or control group. The baseline survey was carried out using a computer-assisted telephone survey. In cases where language difficulties arose, some families were contacted in person; families that could not be reached by phone were contacted directly by social services. The initial response rate for the baseline survey was 87 per cent, falling to 79 and 76 per cent for the second and third survey waves respectively.

It is important that potentially low response rates are factored into the decision regarding the overall sample size, as a low sample size may have serious consequences for policy evaluation. The Finnish experiment, which targeted unemployed individuals, was designed with a treatment group sample size of 2,000 participants. That number drew criticism for being too small to allow for robust statistical inferences (Kangas, 2019), and the actual number fell far below this due to low response rates; the survey response rate for the treatment group was just 31 per cent, and for the control group it was even lower, at 20.3 per cent. Ensuring an adequately large sample size, along with robust measures for ensuring a high response rate, is of critical importance for the successful evaluation of any pilot study.

An alternative method for selecting a treatment and control group can be found in the current German basic income pilot project. Individuals interested in participating were invited to apply for inclusion. While this UBI pilot was completely unconditional (i.e., did not depend on income or any other factor), applicants completed a questionnaire to capture socio-economic and demographic characteristics. The study aimed to get one million applicants, with the aim of selecting just 1,500 participants (120 in the treatment group and 1,380 in the control group). The large pool of applicants was deemed necessary because 'data quality is improved substantially if the base population from which participants are selected is as large and diverse as possible'.⁴³ A drawback of the German pilot is the very small sample size. The ability to accurately analyse the outcomes of a basic income pilot would require a larger sample size. Note that the current Basic Income for the Arts (BIA) Pilot Scheme that is operating in Ireland (discussed in Section 5.1) involves a treatment group of 2,000 individuals. This type of sample size is more appropriate for the effective evaluation of a basic income scheme.

A UBI pilot has to run long enough to allow for the identification of behavioural changes, which can take time to manifest. Standing (2019) suggests a pilot should be operational for at least one year, but optimally for two years. The Finnish experiment ran for two years, as did the pilot studies in Barcelona and Stockton (California). The Ontario pilot, which began in 2017, was scheduled to run for three

⁴³ See 'DIW Berlin: Basic Income Pilot Project', https://www.diw.de/en/diw_01.c.796681.en/projects/basic_income_pilot_project.html.

years before being cancelled by a newly elected government, while the German UBI pilot that began in 2020 will run for three years. The BIA pilot in Ireland is scheduled to run for three years, which seems like an adequate timeframe to capture the full impacts of any pilot study.

SECTION 8

Summary – Options for a universal basic income pilot

Section 7 identified general guidance on the requirements of any universal basic income (UBI) pilot study and, regarding elements that can involve considerable discretion, the various approaches open to policymakers were outlined. Drawing on that and the information presented in Sections 1-6, this section outlines options for implementing a UBI pilot in Ireland. Table 8.1 summarises the main criteria to be considered, along with the potential strengths and limitations associated with each option.

There are a number of important considerations regarding sample design and selection of participants. Firstly, the geographical location needs to be decided. Broadly speaking, there are two main choices – a saturation site versus country-wide sampling. The advantage of a saturation site is that it may capture community-specific spillover effects associated with a UBI. However, the difficulty with targeting a very specific area (such as a town) is that the results of the pilot may not generalise beyond that location in the presence of area-specific factors that impact the results.

Having selected the geographical location, the sample of participants for the pilot must be selected. Careful consideration must be given to align the pilot sample with the ultimate UBI goal. For example, if the ultimate aim is to test the impacts of 'true UBI', then a representative sample would be drawn from the full population of citizens. However, some existing pilots target specific groups. For example, the Live Register could be used to identify participants. This may have administrative advantages, as individuals and their characteristics are readily identifiable from existing databases. It may also provide important insights into the effect of a UBI on people who are unemployed. However, this approach to sampling will give very specific results that may not generalise to the full population. For example, while Live Register participants can be used to select a pilot sample, it is not a workable approach for a full-scale UBI pilot, as it would exclude those not on the Live Register.

It is possible to target recipients based on need, through an income or means assessment. However, this approach moves away from a UBI pilot towards a guaranteed minimum-income (GMI) pilot, which may be fundamentally different from the intended scope of the study.

Additional practicalities need to be considered when selecting pilot participants. Participants may be chosen using existing administrative data sources, which would help ensure a representative sample. A question then arises as to whether participation should be mandatory or voluntary. Enforcing mandatory participation could help with the recruitment and retention of participants, but may face resistance and resentment, which may be particularly problematic for data collection, though some countries, such as Finland, did impose mandatory participation when selecting a sample of unemployed individuals for their pilot study. Another option that has been utilised in other jurisdictions, such as Germany, and more recently for the BIA pilot in Ireland, is to have an applicationbased system. The difficulty here is that the applicants may be systematically different from non-applicants, making it difficult to generalise the results. However, this approach ensures that those in the pilot sample are inherently interested in the UBI pilot, which could be beneficial for data collection and attrition.

It is important that the paid amount in the pilot aligns with the ultimate policy goal. For example, if a pilot study consists of a relatively high payment, but the ultimate UBI policy aim was for a much lower amount, then the pilot results would have limited real-world value in terms of predicting the outcomes of the final UBI policy. Of course, practical considerations relate also to cost – the higher the UBI, the more costly the pilot. However, as a pilot is based on only a sample of the population concerned, such costs should not be prohibitively large. Related to this is the sample size, which is one of the most important aspects of the pilot design. Failure to secure an adequately large sample size could have a significantly detrimental impact on the level of statistical analysis enabled by the study. It is imperative to secure a large enough sample size to allow for robust analysis to be conducted. Consideration needs to be given to attrition, as it is inevitable some people will drop out of the pilot study with the passing of time.

The duration of the pilot needs to be agreed. This is something that varies across pilots reviewed here, but it is imperative that enough time is given to allow for behavioural effects to manifest. Based on existing pilots, a minimum two-year timeframe seems appropriate. The length of the pilot may also have implications for the frequency with which data are collected. Frequency of data collection should be higher for shorter pilots (e.g. every three months) and could be lower for longer pilots (e.g. every six months). On this point, it is worth noting that the existing Labour Force Survey administered by the CSO is conducted on a quarterly basis.

The means of collecting data also needs to be considered. This could take the form of telephone interviews or online questionnaires. Further detailed guidance could be sought from the CSO regarding the pros and cons of each method. Qualitative interviews of pilot participants may also be useful. This has been done in the case of the Finnish basic income experiment (Blomberg et al., 2021).

Standing (2021) highlights the importance of 'a legally binding commitment that the pilot will be conducted in a way stated at the outset to completion', which includes the stated duration of the pilot. Standing (2021) is highly critical of the Ontario pilot, because while it was initially stated that the pilot would run for three years, it was subsequently cancelled after just one year due to a change in government. Standing (2011) goes as far as to state the procedural rule was 'abused'. Many disadvantaged and low-income households that were included in the pilot made plans based on the reasonable expectation of the pilot continuing for three years, putting them at a disadvantage when it ended prematurely. Therefore, if a pilot is planned to take place for three years, it is important that mechanisms are in place to ensure that this is what happens. This would likely require cross-party agreement in Government, as it is possible that changes to Government could take place over a pilot's duration. It is reasonable, however, to make it clear to participants that the income may discontinue after the proposed pilot duration. This is already made clear in the BIA documentation:

Applicants should be aware that the Basic Income for the Arts is a pilot research programme, therefore participants will be required to engage in ongoing data collection as part of the pilot. As this is a research pilot there is no guarantee that funding will continue after the pilot.

An additional ethical consideration when implementing a pilot study is that it may not be acceptable for pilot participants to be made worse off. As we have discussed earlier, for example in relation to Callan et al. (1999), funding a UBI through changes to the tax and benefit system may lead some people being worse off. In that regard, there may be two complimentary approaches, as follows.

- Implement a relatively small-scale pilot study, similar to the BIA Pilot Scheme, in which participants receive an unconditional basic income payment for a specified period of time. The pilot, while paying a basic income, would not fully incorporate any tax or benefit changes required to fund a full-scale rollout of basic income. However, as it would be implemented on small subset of the population, it could be funded in much the same way as the BIA pilot. This would provide key insights into the behavioural responses and outcomes relating to a UBI.
- 2. Implement a microsimulation analysis. This would take account of the funding mechanism required to fund any full-scale rollout of the UBI, including changes to the tax and welfare system, providing important insights into how this would impact the income distribution.

The two approaches outlined above are complimentary; the pilot would capture behavioural responses and outcomes associated with receipt of UBI that microsimulation cannot fully capture, while the microsimulation could study the

impact of a UBI that is funded by changes to the tax and welfare system. The latter could not be incorporated into a pilot, due to administrative and ethical (and possibly legal) difficulties associated with changing the tax and benefit status of a subset of the population, and thereby making some people worse off.

TABLE 8.1 OPTIONS FOR IMPLEMENTING A UBI PILOT

Criteria	Pros	Cons
Treatment and control group selection		
1. Saturation site	Captures community-wide spillover effects (e.g., crime).	May not generalise to the full population.
2. Country-wide sampling	The general population is considered.	May not capture community-wide spillover effects.
The pilot sample		
a) All citizens or residents	Resembles a 'true' UBI. It is important to clarify eligibility criteria up-front: is it restricted to Irish citizenship, or residency?	Administratively difficult in identifying and selecting participants (to ensure the sample are representative).
b) Unemployed only	Easy to select recipients from Live Register data.	Applies only to a very specific group. May not generalise to other groups (employed individuals).
c) Income/earnings criteria	Would capture the effects of a targeted payment towards those that need it (if this was, ultimately, the intended policy).	Not a true UBI. Resembles a GMI pilot instead. May not generalise to the full population in the event of the actual payment being expanded to other groups.
Selecting pilot participants		
1. Administrative data sources	Administratively feasible to select based on characteristics.	Not all individuals appear in one single data source (e.g., Live Register).
2. Application based	Reduces administrative burden of recruiting individuals.	Not random.
3. Mandatory participation	Easier to gather pilot participants.	Possibly legal issues. May be negatively received by the public.
4. Voluntary participation	Ensures that the individuals that participate are motivated. May boost follow-on data collection.	Possibly non-random (selection issues).
5. Large sample size	Critical to have a large sample size to allow for robust, interpretable results.	The higher the sample size, the greater the administrative and financial costs.
Amount of UBI		
 60% of median income (Approximately €1,200 per month) 	Resembles a 'true UBI'.	High cost.
 50% of median income (Approximately €1,000 per month) 	Resembles a 'true UBI'.	High cost.
 Equivalent to current social welfare rate (€208 per week) 	Resembles a 'true UBI'.	Has received criticism as being too low.

TABLE 8.1 (CONTD.) OPTIONS FOR IMPLEMENTING A UBI PILOT

Cri	teria	Pros	Cons
4.	Total UBI funding: €10 billion per year – amounts to €243 per month	Lower cost.	May not resemble a 'true UBI' due to the low level of payment. Lower than other comparable pilots considered internationally.
5.	Additional consideration: Should UBI replace existing benefits?	Administrative advantages.	Potentially disproportionately negative impacts for some groups.
Da	ta collection		
1.	Telephone interview	Interviewer can engage the participant and probe for further information if needed.	Costly to administer.
2.	Online	Relatively inexpensive to administer.	May lead to greater non-response.
Pil	ot duration		
1.	One year	Financially and administratively least costly.	Not enough time to derive meaningful conclusions about the effectiveness of UBI.
2.	Two years	Appropriate timeframe to investigate the impact of UBI in society and economy.	Greater attrition as time is increased. Financially and administratively costly
3.	More than two years	Enough time for the full behavioural responses to manifest.	Greater attrition as time is increased. Financially and administratively costly.
Da	ta collection timeframe		
1.	Every quarter	High frequency data can provide more detailed insights into behavioural changes.	Administratively burdensome.
2.	Every six months	Relatively high frequency.	Administratively burdensome.
3.	Every year	Low financial and administrative costs associated with data collection.	Infrequent data collection.

Note: GMI=Guaranteed minimum income.

SECTION 9

Conclusion

This paper reviews international evidence on universal basic income (UBI), with the aim of informing the rollout of a UBI pilot scheme in Ireland. The rationale for a UBI is multifaceted and varies from country to country; however, central arguments in its favour include: poverty reduction; the removal of stigmatisation associated with welfare receipt; administrative ease; the removal of work disincentives associated with means-tested benefits; and improvements in health and wellbeing. While the definition of a UBI is relatively straightforward, the implementation of international pilots generally depart from it in some way, which seems to reflect the high cost of implementing a truly universal, unconditional payment at a level sufficient to meet living requirements. Having reviewed the literature, we find that there is substantial heterogeneity in the design of pilot studies, with most departing from the canonical definition of a UBI. Pilot studies often attach conditionality based on earnings or income and therefore resemble a type of guaranteed minimum income (GMI), as opposed to a true UBI.

We outline some basic calculations for four possible UBI approaches: (a) a 'baseline UBI' of a non-means-tested, universal payment equivalent to 60 per cent of median equivalised disposable income (€14,387 in 2019, equivalent to €1,200 per month); (b) a payment equivalent to a lower cut-off of 50 per cent of median annual equivalised income (€11,989 in 2019, equivalent to €1,000 per month); (c) a payment equivalent to the current social welfare rate of €208 per week (€10,816 per year, or €901 per month); and (d) taking a benchmark of €10 billion (gross), we calculate how much could be paid, in terms of a UBI, for this amount. Assuming it is paid to every individual aged over 18 in Ireland, a UBI set at 60 per cent of median income in 2019 equates to a monthly payment of €1,200 per person and would have a gross cost of just under €50 billion per annum. To put this in context, total expenditure on all social welfare programmes in 2019 was €20.9 billion. A UBI equivalent to 50 per cent of 2019 median equivalised annual income amounts to a monthly payment of €1,000 per person. The gross cost of such a UBI would amount to €41 billion. The gross cost of a UBI equal to the current social welfare rate of €208 per week would be €37 billion. A UBI for a total gross cost of €10 billion per year would equate to a monthly payment €243 per month, per person.

Elements of UBI policy design involve considerable discretion in the types of features that are chosen by policymakers. Key questions include: (a) Who gets the payment? (Is it universal or targeted?); (b) How much will the UBI be?; and (c) To what extent will the UBI replace existing welfare payments? The answers to these questions will have major implications both for the cost of and impacts arising from any UBI policy.

Financing is a key issue for a UBI. Previous work for Ireland, carried out in the 1990s, indicated that a tax rate of 50 or 60 per cent may be required to finance a UBI, with a payment rate equivalent to the prevailing social welfare rates at that time. This is in line with the international evidence, indicating that a meaningful rate of UBI would require a tax rate that is not likely to be politically feasible. More recent policy proposals by the Green Party suggest alternative funding mechanisms, including a tax on pensions, a speculative transactions tax, a site-value tax, and increased stamp duty. This would be accompanied by changes to the rates of taxation; while individuals will have a tax-free allowance up to the value of their UBI, any income above that will be taxed at the higher rate (40 per cent).

A pilot study, similar to the recent BIA pilot study, accompanied by microsimulation analysis, presents a useful avenue for future research into the possible impacts of a UBI in Ireland. There are benefits and limitations to a pilot study and to microsimulation, but taken together these two approaches may be complimentary. For example, a pilot study can provide valuable information on behavioural responses and individual outcomes (e.g., financial, health, labour supply) that microsimulation cannot fully capture. On the other hand, microsimulation can provide valuable information on the consequences of the various funding mechanisms, through changes to the tax and benefit system, that may not be possible to implement in a pilot study.

Based on the existing evidence, this study establishes a number of general guidelines to be followed when implementing a UBI pilot study, irrespective of the specific features of the UBI. Firstly, control and treatment groups should be clearly defined and the study sample size should be sufficiently large to allow for a reliable analysis of the impacts of the pilot. There are a number of options for control and treatment group selection relating to, for example, geographical location, whether pilot participants should recruited via an application-based system or selected using administrative datasets, and whether such participation should be mandatory or voluntary.

Outcome variables should be clearly defined and in line with the policy objectives of the UBI. These should include measures related to employment, financial status, health and wellbeing, and education and training attainment/participation. Related to this, the pilot should also collect relevant background and demographic information on pilot participants. The econometric strategy for identifying causal impacts should be determined in advance of the pilot. Insofar as it is possible, the pilot should avoid being too administratively complex. Appropriate baseline measures should be taken prior to the role out of any UBI, and the study period should be sufficiently long to ensure that outcomes can be captured. Data should be collected periodically, with the frequency of data collection decided in advance (e.g., quarterly, every six months or every year). Low response rates can be very damaging for the effectiveness of any study and considerable planning is required regarding the appropriate initial sample size and survey/data collection methodology to ensure that minimum data requirements are met. Any potential legal and ethical issues need to be addressed well in advance of the implementation date. Finally, there is strong international evidence highlighting the importance of research partnerships in effectively delivering and analysing a UBI pilot.

REFERENCES

- Baird, S., J. De Hoop and B. Özler (2013). 'Income shocks and adolescent mental health', *Journal of Human Resources*, Vol. 48, No. 2, pp. 370-403.
- Bohmeyer, M. (2021). So became the participants selected, Pilotprojekt Grundeinkommen, https://www.pilotprojekt-grundeinkommen.de/journal/so-wurden-dieteilnehmerinnen-ausgewaehlt.
- Boyle, C. (2018). *Spending review 2018: Analysis of replacement rates,* IGEES and The Department of Public Expenditure and Reform.
- Boyle, G. and T. McCarthy (2000). *The impact of basic income on migration and the informal economy*, Report for the Working Group on Basic Income.
- Bowman, D., S. Mallett and D. Cooney-O'Donoghue (2017). 'Basic income: trade-offs and bottom lines', Research Policy Centre Working Paper.
- Blomberg, H., C. Kroll and L. Tarkiainen (2021). 'Life on basic income-Interview accounts by basic income experiment participants on the effects of the experiment', in O. Kangas (ed.), *Experimenting with unconditional basic income*, Edward Elgar Publishing.
- Callan, T., C. O'Donoghue and C. O'Neill (1994). *Analysis of basic income schemes for Ireland*, ESRI Policy Research Series Number 21, Economic and Social Research Institute, Dublin.
- Callan, T., B. Nolan, J. Walsh, J. McBride and R. Nestor (1999). *Basic income in Ireland: A study for the Working Group on Basic Income*, Economic and Social Research Institute, Dublin.
- Calnitsky, D. and P. Gonalons-Pons (2021). 'The impact of an experimental guaranteed income on crime and violence', *Social Problems*, Vol. 68, No. 3, pp. 778-798.
- Cesarini, D., E. Lindqvist, R. Östling and B. Wallace (2016). 'Wealth, health, and child development: Evidence from administrative data on Swedish lottery players', *The Quarterly Journal of Economics*, Vol. 131, No. 2, pp. 687-738.
- Chung, W., H. Ha and B. Kim (2016). 'Money transfer and birth weight: Evidence from the Alaska permanent fund dividend', *Economic Inquiry*, Vol. 54, No. 1, pp. 576-590.
- Citizens' Basic Income Feasibility Study Steering Group (2020). Assessing the feasibility of citizens' basic income pilots in Scotland: Final report, https://www.basicincome.scot/__data/assets/pdf_file/0024/175371/Draft-Final-CBI-Feasibility_Main-Report-June-2020.pdf.
- Clark, C. (1999). Report for the Working Group on Basic Income, St. John's University.
- Coady, D., S. Jahan, R. Matsumoto and B. Shang (2021). *Guaranteed minimum income* schemes in Europe: Landscape and design, IMF Working Paper WP/21/179, International Monetary Fund.

- Colini, L. (2019). The B-MINCOME project. Journal N° 5, https://www.uiainitiative.eu/sites/default/files/2020-03/Barcelona_BMINCOME_Journal_5.pdf [accessed 31 August 2021].
- CSJ (2018). Universal basic income: An effective policy for poverty reduction? The Centre for Social Justice, Westminster, https://www.centreforsocialjustice.org.uk/wp-content/uploads/2018/08/CSJ_UBI_August-2018.pdf.
- DEASP (2019). *Statistical information on social welfare services, Annual report 2019,* Department of Employment Affairs and Social Protection, Dublin.
- De Henau, J, S. Himmelweit and S. Reis (2021). *Modelling universal basic income using UKMOD*, CeMPA Working Paper 03/21.
- de Paz-Báñez, M.A., M.J. Asensio-Coto, C. Sánchez-López and M.T. Aceytuno (2020). 'Is there empirical evidence on how the implementation of a universal basic income (UBI) affects labour supply? A systematic review', *Sustainability*, Vol. 12, No. 22, pp. 1-36.
- De Wispelaere, J. and L. Stirton (2004). 'The many faces of universal basic income', *The Political Quarterly*, Vol. 75, No. 3, pp. 266-274.
- Dowling, B. (1977). Integrated approaches to personal income taxes and transfers, National Economic and Social Council, Dublin.
- Ferdosi, M. and T. McDowell (2020). 'More than welfare: The experiences of employed and unemployed Ontario basic income recipients', *Basic Income Studies*, Vol. 15, No. 2.
- Forget, E.L. (2011). 'The town with no poverty: The health effects of a Canadian guaranteed annual income field experiment', *Canadian Public Policy*, Vol. 37, No. 3, pp. 283-305.
- Gamel, C., D. Balsan and J. Vero (2006). 'The impact of basic income on the propensity to work: Theoretical issues and micro-econometric results', *The Journal of Socio-Economics*, Vol. 35, No. 3, pp. 476-497.
- Gentilini, U., M. Grosh, J. Rigolini and R. Yemtsov (eds.) (2019). *Exploring universal basic income: A guide to navigating concepts, evidence, and practices,* World Bank Publications.
- Government of Ireland (2002). Basic income: A green paper, https://basicincome.ie/wpcontent/uploads/2021/01/GreenPaperOnBasicIncome1.pdf.
- Green Party (2019). Universal basic income policy, https://www.greenparty.ie/policies/universal-basic-income.
- Haagh, L. and B. Rohregger (2019). Universal basic income policies and their potential for addressing health inequities: Transformative approaches to a healthy, prosperous life for all, World Health Organization, Regional Office for Europe.
- Hanna, R. and B.A. Olken (2018). 'Universal basic incomes versus targeted transfers: Antipoverty programs in developing countries', *Journal of Economic Perspectives*, Vol. 32, No. 4, pp. 201-226.

- Hiilamo, H. and O. Kangas (2017). 'Universal basic income: Does the carrot work better than the stick?', *Meeting of the Minds*, 25 January.
- Hoynes, H. and J. Rothstein (2019). 'Universal basic income in the United States and advanced countries', *Annual Review of Economics*, Vol. 11, pp. 929-958.
- Honohan, P. (1987). 'A radical reform of social welfare and income evaluated', *Administration*, Vol. 35 No. 1, pp. 69-87
- Imbens, G.W., D.B. Rubin and B.I. Sacerdote (2001). 'Estimating the effect of unearned income on labor earnings, savings, and consumption: Evidence from a survey of lottery players', *American Economic Review*, Vol. 91, No. 4, pp. 778-794.
- Immervoll, H. (2009). *Minimum-income benefits in OECD countries: Policy design, effectiveness and challenges*, OECD Social, Employment and Migration Working Papers, No. 100.
- JFI (2020). 'Maricá basic income fact sheet', Jain Family Institute and Fluminense Federal University, https://static1.squarespace.com/static/5f03b142d0412e25521412d8/t/5f2c1882 56203f7f04feb6dc/1596725379404/Marica+Basic+Income+Fact+Sheet.pdf.
- Jones, D. and I. Marinescu (2018). *The labor market impacts of universal and permanent cash transfers: Evidence from the Alaska Permanent Fund*, No. w24312, National Bureau of Economic Research.
- Kangas, O., M. Jauhiainen and J. Simanainen (2020). *Evaluation of the Finnish basic income experiment*, The Ministry of Social Affairs and Health, Finland.
- Kangas, O. (2019). First results from the Finnish basic income experiment, European Social Policy Network Flash Report 2019/17.
- Konle-Seidl, R.A. (2021). *Strengthening minimum income protection in the EU*, European Parliament Briefing Paper.
- Marinescu, I. (2019). *Summary: Universal basic income*, Wharton PPI B-School for Public Policy Seminar Summaries, University of Pennsylvania, https://repository.upenn.edu/cgi/viewcontent.cgi?article=1010&context=pennw hartonppi_bschool.
- Martin-West, S., A.C. Baker, S. Balakrishnan, K. Rao and G. You (2019). *Pre-analysis plan Stockton economic empowerment demonstration*, Jain Family Institute, New York, https://www.jainfamilyinstitute.org/assets/seed-pre-analysis-plan-july-2019.pdf.
- Martinelli, L. (2017). *IPR policy brief: Assessing the case for a universal basic income in the UK*, IPR Policy Brief, Institute for Policy Research, University of Bath, http://www.bath.ac.uk/publications/assessing-the-case-for-auniversal-basicincome-in-the-uk/.
- McDowell, T. and M. Ferdosi, M. (2021). 'The impacts of the Ontario Basic Income Pilot: A comparative analysis of the findings from the Hamilton region', *Basic Income Studies*, Vol. 16, No. 2.

Mendelson, M. (2019). Lessons from Ontario's Basic Income Project, Maytree.

- Mein Grundeinkommen e.V. (2020). *Basic Income Pilot Project*, The German Institute for Economic Research (DIW Berlin) and Mein Grundeinkommen e.V., https://images.meinbge.de/image/upload/v1/pilot/projektmappe/Basic_Income _Pilot_Project_Magazine.pdf.
- Mein Grundeinkommen e.V., (2021). What is the Basic Income Pilot Project?, Pilotprojekt Grundeinkommen, https://www.pilotprojekt-grundeinkommen.de/english.
- NESC (2020). The future of the Irish social welfare system: Participation and protection, National Economic and Social Council, Dublin.
- Neuwinger, M. (2021). 'The revolution will not be randomized: Universal basic income, randomized controlled trials, and "evidence-based" social policy', *Global Social Policy*, Vol. 22, No. 1.
- O'Malley, S., B. Roantree and J. Curtis (2020). *Carbon taxes, poverty and compensation options*, ESRI Survey and Statistical Report Series Number 98, Economic and Social Research Institute, Dublin.
- Pareliussen, J., H. Hwang and H. Viitamäki (2018). 'Basic income or a single tapering rule? Incentives, inclusiveness and affordability compared for the case of Finland', OECD Economics Department Working Papers, No. 1464, OECD Publishing, Paris, https://doi.org/10.1787/d8c0fbc4-en.
- Paine, T. (1797). Agrarian justice, reprinted in M. Foot and I. Kramnick (eds.) (1987). *Thomas Paine reader*, Harmondsworth, Penguin, pp. 474-489.
- Riutort, S., A. Julia, B. Lain and L. Torrens (2021). *Resultados finales del proyecto piloto B-MINCOME (2017-2019)*, Barcelona City Council, Barcelona.
- Roantree, B., B. Maitre, A. McTague, I. Privalko (2021). *Poverty, income inequality and living standards in Ireland*, Economic and Social Research Institute, Dublin.
- Ruckert, A., C. Huynh and R. Labonté (2018). 'Reducing health inequities: Is universal basic income the way forward?', *Journal of Public Health*, Vol. 40, No. 1, pp. 3-7.
- Russell, H., R. Grotti, F. McGinnity and I. Privalko (2019). *Caring and unpaid work in Ireland*, ESRI Research Series. Economic and Social Research Institute, Dublin.
- Sloman, P. (2018). 'Universal basic income in British politics, 1918–2018: From a "vagabond's wage" to a global debate', *Journal of Social Policy*, Vol. 47, No. 3, pp. 625-642.
- SEED (2019). Our vision for SEED: A discussion paper, Stockton Economic Empowerment Demonstration, https://static1.squarespace.com/static/6039d612b17d055cac14070f/t/605029ab

52a6b53e3dd38cf8/1615866284641/10+-+SEED+Discussion+Paper.pdf.

- SEWA (2015). Madhya pradesh unconditional cash transfer project: Executive summary, Sewa Bharat, https://sewabharat.org/wp-content/uploads/2015/07/Executivesummary.pdf.
- Spence, T. (1803). The Constitution of Spensonia, reprinted in H. Dickinson (ed.) (1982). The political works of Thomas Spence, Avero (Eighteenth-Century) Publications, Newcastle-upon-Tyne, pp. 104-118.

- Standing, G. (2019). *Piloting basic income as common dividends*, Progressive Economy Forum, London.
- Van Parijs, P. (1992). Arguing for basic income, Vol. 995, Verso, London.
- Verlaat, T., M. de Kruijk, S. Rosenkranz, L. Groot and M. Sanders (2020). Weten wat werkt: Samen werken aan een betere bijstand, Utrecht University, Utrecht, https://www.uu.nl/sites/default/files/uu-use-eindrapport-wetenwatwerktsummary-en.pdf.
- West, S., A.C Baker, S. Samra and E. Coltrera (2021). *Preliminary analysis: SEED's first year*, Stockton Economic Empowerment Demonstration, https://static1.squarespace.com/static/6039d612b17d055cac14070f/t/603ef119 4c474b329f33c329/1614737690661/SEED_Preliminary+Analysis-SEEDs+First+Year_Final+Report_Individual+Pages+-2.pdf.
- Zimmermann, K., U. Boljka, T. Rakar and M.F. Hrast (2020). 'The social legitimacy of the universal basic income from a social justice perspective: A comparative analysis of Germany and Slovenia, *Journal of International and Comparative Social Policy*, Vol. 36, No. 3, pp. 301-331.

APPENDIX A

How UBI rates in Callan et al. (1999) are constructed

The basic income payment rates in Callan et al. (1999) are harmonised with social welfare rates. It is stated that this method was 'agreed in clarifications of the project specification'. In 1998, the maximum rate for most social welfare schemes (excluding the state pension) was £70.50, and this forms the basis for basic income payments for those aged 21-64. For older people, the basic income rates are based on the contributory state pension, which was £83. For those over 80 years of age, there was an additional £5 payment, meaning those in that age group got £88.

Taking these 1998 rates as the reference parameters, a basic income is then calculated for 2001. Callan et al. (1999) note that basic income rates for 2001 are:

determined by applying the resources available for increases above indexation to the implementation of commitments under Partnership 2000 (raising some QAA [Qualified Adult Allowance] rates and the personal rates for short-term UA [Unemployment Assistance] and SWA [Supplementary Welfare Allowance]), and to the creation of a uniform, higher rate of payment for those aged over 66 (with corresponding increases in QAA rates for relevant schemes).

This results in a payment of \pm 74.80 for those aged 21-64, \pm 83 for those aged 65, and a payment of \pm 101.3 for those over 80.

APPENDIX B

Expenditure on social welfare

TABLE B.1 EXPENDITURE ON SOCIAL WELFARE BY PROGRAMME, 2019

Scheme	€million	%
Pensions	8,214.99	39.3%
Illness, disability and caring	4,448.64	21.3%
Working age income supports	3,262.26	15.6%
Children	2,654.79	12.6%
Supplementary payments	798.62	3.8%
Working age employment supports	757.46	3.7%
Administration	772.82	3.7%
Total	20,909.58	100.0%

Source: Annual SWS statistical information report, https://www.gov.ie/en/publication/02f594-annual-sws-statisticalinformation-report/.

TABLE B.2 LARGEST SCHEMES BY EXPENDITURE, 2019

(€million)
5,603.13
2,102.57
1,705.97
1,629.03
1,558.92
1,042.83
862.56
728.11
607.22
533.07
397.2
353.39
348.01
267.2
219.54

Source: Annual SWS statistical information report, https://www.gov.ie/en/publication/02f594-annual-sws-statisticalinformation-report/. Whitaker Square, Sir John Rogerson's Quay, Dublin 2 Telephone **+353 1 863 2000** Email **admin@esri.ie** Web **www.esri.ie** Twitter **@ESRIDublin**

