CeMPA Working Paper Series

CeMPA WP 06/22

A Basic Income for France: Ideas for a debate

Matteo Richiardi

March 2022

CeMPA
Centre for Microsimulation and Policy Analysis

1. Introduction

In this note we explore the distributional effects of selected options for a Universal Basic Income (UBI) scheme in France. The main idea of UBI is to replace conditional benefits targeted at specific sub-groups of the population and possibly subject to means testing, with unconditional benefits. This has been advocated for from different perspectives (Standing, 2017; Van Parijs, 2017; Lowrey, 2018; Torry, 2018, 2021): from an ideological support for a "citizen's income" that does not discriminate between individual characteristics, to administrative simplicity, and efficiency considerations. The latter point to a reduction in work disincentives - the UBI being equivalent to a negative lump tax, independent from labour supply decisions - and to psychological motivations - the elimination of welfare stigma and take-up concerns.

On the downside, UBI schemes sometimes struggle to achieve the same level of redistribution of targeted measures, for their inherent feature of not targeting those in need. Luke Martinelli (2019) has described this situation as the UBI trilemma, "a three-way trade-off in policy design between affordability, adequacy, and securing the full advantages of BI as a radical simplification of existing welfare policy."

Most schemes that have been implemented so far (Samuel, 2020) solve this trilemma by striking a compromise between retaining some sort of conditionality, and increasing the progressivity of the tax system, in this way departing less radically from existing (conditional) guaranteed minimum income schemes (ESPN, 2015; Coady et al., 2021). As our results confirm, the latter in particular turns out to be crucial: when UBI is (mostly) financed by the removal of existing benefits, its effects are more likely to be regressive; while on the contrary UBI is (mostly) financed by an increase in taxes, its effects become progressive.

The French tax-benefit system has a guaranteed minimum income, although means tested, in the form of the Solidarity Labour Income scheme ("Revenu de solidarité active", RSA), a low-earnings top-up. The RSA was tested in 34 counties from May 2007 and then generalised to the entire country from 1 June 2009, replacing some pre-existing benefits (Bouvard, 2021).

As in most other Western countries however, the removal of the conditionality elements in minimum income schemes is obtaining an increasing traction in the French policy debate, especially within parties from the left of the political spectrum (Maruhi and Katekondji, 2020). The Socialist Party introduced a UBI in its manifesto for the 2017 presidential elections, although the proposed scheme maintained significant elements of conditionality (Madec and Timbeau, 2017).[1] Since 2018, some departments have started experimenting with (partial) basic income schemes.

The purpose of this note is to discuss the distributional effects of some a priori identified UBI schemes, as an illustration of the different trade-offs involved, and to foster the debate around UBI in France. All these schemes share the feature of retaining some limited form of conditionality - in particular discriminating access to the scheme and generosity of the benefit by age. The first three schemes consider a different UBI for adults of working age, children, and pensioners. In particular, children get 45% of the standard UBI for adults, while pensioners get a top up to the standard UBI of their existing state pension, but they are allowed to retain their full state pension if that is above the UBI. All these schemes are characterised by the elimination of child benefits, unemployment benefits, and other working age benefits, and differ

[1] Benoît Hamon, its candidate, ended up winning only 6.4% of the popular vote.

with respect to the increase in tax rates envisaged. On one extreme, we assume no increases in the marginal tax rates: in this case the UBI is funded only by a reduction in other expenditures. We then allow funding to include an increase in revenues, whereas all the marginal tax rates are increased respectively by 5 and 10 percentage points, and the no-tax area is halved (from around EUR 10,000 to EUR 5,000).

We find that the option funded only by the elimination of selected targeted benefits is regressive on average, and that only by funding the UBI with a significant increase in general taxation, we are able to obtain a reduction in poverty rates.

Finally, we also consider a more limited basic income scheme targeted to young adults between the age of 20 and the age of 24 (included) only, funded by an increase in all marginal tax rates of 3 percentage points (with no changes to the personal tax allowance). No benefits are eliminated in this case. Results point to drastic improvements for the targeted group and their families, while the costs remain manageable as they are shared by the whole population of taxpayers.

The remaining of this note is structured as follows. Section 2 describes the methodology used in this study, in the context of a theoretical understanding of the mechanisms through which UBI affects individual incomes; Section 3 discusses the assumptions behind the UBI options considered; Section 4 describes such options in details; Section 5 presents our results; and Section 6 summarises and concludes.

2. Theory and methods

To analyse the distributional effects of the different UBI schemes considered, and following a consolidated tradition (e.g., Levy et al., 2012; Francese and Prady, 2018; Martinelli and O'Neill, 2019), we use the tax-benefit microsimulation model EUROMOD (Sutherland and Figari, 2013). EUROMOD is a static tax-benefit calculator for all EU Member States, originally developed by the University of Essex and now maintained and updated by the European Commission.

EUROMOD implements the tax-benefit rules on a representative sample of the population, derived from cross-sectional EU-SILC data.[2] Only deterministic effects due to the changes in the fiscal rules are considered, while the characteristics and behaviour of the population remain fixed. This mimics the direct, overnight budgetary and distributional effects of policy changes, abstracting from indirect effects. The latter are behavioural changes that are triggered by the policy changes, as individuals realise that the fiscal incentives have changed and revise their choices and strategies. Behavioural effects are a priori important when the policy changes are significant, as individuals are more likely to perceive a step change in the institutional and economic environment in which they operate: this is exactly the case of UBI.

Indeed, a large discussion has taken place in the literature on the magnitude of such behavioural effects (Widerquist, 2018). While behavioural changes could extend to family composition (for instance if the UBI affected the decision to leave the parental home, form a new family, and have children), most of the literature has focused on labour supply effects,

[2] EU-SILC is used as input data for all the EU-27 countries. Models for other countries exist based on the EUROMOD architecture and powered by the EUROMOD software, which make use of different datasets. See www.microsimulation.ac.uk/euromod/model.

both at the extensive margin (the decision whether to participate in the labour force or not) and at the intensive margin (the number of hours of work offered).

These labour supply effects arise because individuals face a trade-off between working and earning more on the one hand, and enjoying more leisure time on the other hand, with the cost of leisure being measured by the foregone earnings from work (the opportunity cost of not working). The size and direction of changes in labour supply induced by a change in the economic/fiscal environment depend on whether the income or substitution effects prevail. Income effects refer to the fact that when individuals are richer, they can afford "buying" more leisure time, that is working less (and symmetrically when they are poorer). The income effect, for those that are net beneficiaries, is unambiguously negative for UBI.[3] Substitution effects arise because when work becomes more lucrative, the cost of leisure goes up, so people will "buy" less of it (and symmetrically when work becomes less lucrative). Taxes make work less lucrative, as parts of earnings are taxed away. Conditional benefits also make work less lucrative, as the more individuals work, the more benefits are withdrawn from them.

When analysing the introduction of a UBI scheme, the latter mechanism is not at play, as basic income is unconditional. Substitution effects therefore depend on how the UBI scheme is funded. To the extent that UBI is financed though the elimination of existing benefits, with a corresponding reduction in work disincentives, substitution effects are positive, pointing to an increase in labour supply at the given wage rate. To the extent however that the scheme is funded by an increase in taxes, substitution effects are negative. The overall effect is therefore an empirical matter and cannot be predicted a priori. A recent systematic review of the effects of UBI on labour supply (de Paz-Báñez et al., 2020) found evidence that UBI has if anything a positive albeit limited effect on labour supply overall. This would provide a further source of funding, by increasing government revenues through additional taxes and social contributions.

Further rounds of adjustments can be triggered by changes in the wage structure, that is the wage that individuals can obtain given their characteristics. Aside from smaller effects on aggregate demand due to changes in the income distribution, we can assume that the demand for labour is not affected by the introduction of a UBI scheme. Therefore, changes in the wage rate only arise because of changes in the supply of labour (the supply curve is shifted either inwards or outwards, hence crossing the demand curve at a different equilibrium). However, the labour market is not perfectly competitive, and it is possible that firms could exploit the introduction of a basic income and reduce the wage rate they offer to workers, hence modifying labour demand as well. Another important effect that UBI might have relates to the quality of the matches between the supply and demand of labour, with the unconditional income allowing workers to be more selective and accept only better jobs.

While consideration of all these behavioural effects would significantly increase the scope of the study, their analysis involves a step change in the modelling assumptions required, and the associated level of uncertainty. In this study therefore we focus on arithmetic effects only, to provide a simple, quantitative basis for a more informed policy discussion.

[3] Although proponents of UBI stress that the increase in income might make poorer workers more employable, for instance by allowing them to buy a vehicle.

3. Assumptions

In our analysis we make three important choices. First, we restrict ourselves to budget neutral UBI schemes. This means that we select the amount of the basic income, in each scheme, such that the overall budget balance (taxes plus social contributions minus pensions and benefits) remains unchanged. This assumption is important because it "ties our hand" with respect to the objectives that can be achieved with the scheme. Without it, any objective can be achieved by appropriately sizing up expenditures. Budget neutrality can be read as "extra expenses = extra revenues", and is an assumption that is likely to be put forward in any serious debate on UBI. In the context of this study, we are enforcing budget neutrality under the further assumption, discussed in the previous section, of no behavioural changes. However, we know that this further assumption becomes less accurate the bigger the changes from the current system, both in terms of policy design ("quality") and in terms of their size ("quantity"). This means that our budget neutrality constraint will be more precisely estimated when the two terms in the equation "extra expenses = extra revenues" are smaller. Because we believe that the (unaccounted for) behavioural changes are likely to lead to an increase in labour supply and hence in revenues (see the previous section), this means that we are likely to underestimate the size and hence the effects of the UBI schemes that can be implemented with bigger tax increases.

The second choice is to make the UBI taxable and part of means testing (except for Scenario 4 described below, see Section 4.2). This implies that those who are best placed to do so contribute the most to its cost, and increases the level of progressivity that can be achieved for any given size of the scheme. As suggested by De Henau et al. (2021), who also make this assumption, for administrative convenience the basic income could be paid net of the basic rate tax, with additional taxes recouped through PAYE or individual tax returns. Our third choice is to keep pensions untouched (differently for instance from child benefits, which are eliminated). Under Scenarios 1-3 below (see Section 4.1) we consider pensioners receive a top-up to their pension. However, pensioners contribute to paying for the reform as pensions are taxable.[4]

We evaluate our UBI schemes with respect to a 2019 policy baseline. This is intended to test the properties of the schemes in a "normal" year, unaffected by the emergency Covid-19 policies of 2020-21.

4. UBI options considered

As already stated, the UBI schemes considered here do not replace altogether the existing social security system, but rather augment it by maintaining some existing means-tested benefits and their means-testing (although the existence of basic income reduces reliance on them), and by keeping existing non-means-tested benefits (in particular pensions) at unchanged levels. This 'partial UBI' approach follows a long tradition in the literature - see for instance Reed and Lansley (2016) and Torry (2021) for the UK, as a practical way of reducing poverty, avoiding unemployment traps, and controlling costs - the well-known 'iron triangle' of social policy (Blundell, 2001).

[4] Moreover, they may lose out from the inclusion of basic income in the means testing of some other benefits they might be entitled to. See Section 4.

We consider two different sets of UBI schemes. In the first, everyone receives a basic income, while in the second only young adults receive it, as a form of social investment to facilitate their successful transition to adulthood. We refer to the first as “Basic income for all”, and to the latter as “Basic income for young adults”.

4.1 Basic income for all

We assume a UBI differentiated by age, whereas children receive 45% of the standard basic income available for adults, and pensioners receive a top up to their state pension to the level of the standard UBI. The 45% proportion is what a lone parent and teenager (the most expensive sort of child) require over a single adult according to the minimum income standards identified for the UK by Hirsch et al. (2020).

The level of the standard basic income - and consequently the child and pensioner basic income - is determined by the budget neutrality condition, and therefore depends on how the schemes are funded, to which we now turn.

On the expenditures side, we abolish child benefits, unemployment benefits and some other working age benefits. With respect to child benefits, the following benefits are eliminated:

- **Family allowance** (“Allocations Familiales”, AF): The main child benefit in France, granted to households with 2+ dependent children. The amount varies with the number of children and their age. Since July 2015 it envisages an income threshold.
- **Mean-tested young children allowance** (“Prestation d’accueil du jeune enfant”, PAJE): a means-tested benefit for families with children younger than three years old.
- **Family complement** (“Complément familial”): a means-tested allowance targeted at families with three or more dependent children, aged three years old or more.
- **Mean-tested education related family benefit** (“Allocation de rentrée scolaire”, ARS): an annual lumpsum allowance for school children, paid for each dependent child between the age of 6 and the age of 18, with an income threshold.
- **Family support allowance** (“Allocation de soutien Familial”, ASF): a non-means-tested benefit, paid to children younger than 20 years old who are not raised by both parents.
- **Birth grant** (“Prime de naissance”, PN): a means-tested benefit for each childbirth.

The following benefits for the working age population are also eliminated:

- **Unemployment insurance** (“Allocation de retour à l’emploi”, ARE): the standard unemployment benefit conditional on minimum contributions over a recent period.
- **Unemployment assistance** (“Allocation de solidarité spécifique” ASS): a means tested benefit for people who have exhausted unemployment insurance, have been employed for at least five over the last 10 years, are younger than 60 and actively looking for a job.
- **The Active Solidarity Income** (“Revenu de solidarité active”, RSA): a guaranteed minimum income and low-earnings top-up. It was tested in 34 counties from May 2007 and then generalised to the entire country from 1 June 2009. The RSA replaces the minimum income (RMI), the single parent allowance (API) (in this case the RSA is increased), and some lump-sum aids like the grant of temporary return to work.

- **Activity allowance** (“Prime d’activité”): in place since 1 January 2016, this benefit, subject to an income threshold, replaces the RSA activity allowance and the PPE tax credit.
- **Back-to-work allowance** (“Prime de retour à l’emploi”): a back-to-work financial aid allocated to the beneficiaries of RSA who find a job.

As the basic income enters means testing, it also impacts the following benefits:

- **Solidarity allowance for the elderly** (“Allocation de solidarité aux personnes âgées”, ASPA), targeted at poorer pensioners.
- **Disability benefit** (“Allocation aux adultes handicapés”, AAH), targeted at disabled persons.

The UBI is also funded through an increase in revenues, in terms of the abolishment of certain tax allowances, an increase in the marginal tax rates, and a decrease in the personal income tax allowance. In particular, the following tax allowances are abolished:

- **Deductions for certain categories of income** (“abattement”) such as category C1 (earned income and unemployment). The deduction amounts to 10% with ceilings. In category C3 (capital income), property income (rent) can also be deducted by 30% if the annual property income is lower that EUR 15,000. There are more complicated deductions for property income above EUR 15,000 annually which are not simulated in EUROMOD (and therefore are not abolished). To be noted, deductions for state and occupational pensions are not abolished.
- **Deduction for private retirement savings** (“épargne retraite”) per person which is equal to 10% of earned income from the previous years (less the deduction for professional expenses), within some limits.

As for what concerns personal income tax, we envisage three scenarios. In Scenario 1 we keep the existing tax schedule: the UBI is funded exclusively by a reduction in other expenditures. In Scenarios 2 and 3 we increase all marginal tax rates by 5 percentage points (p.p.) and 10 p.p. respectively, while also reducing the personal income tax allowance to EUR 5,000 (See Table 1). The additional rates envisaged for exceptional contributions on high income earners (“Contribution exceptionnelle sur les hauts revenus”), as well as all the tax bands, remain unchanged.[5]

4.2 Basic income for young adults

In a fourth, partial UBI scenario, we restrict the payment of a basic income to young adults aged 20-24 only. The scheme targets the age group just above the definition of a child according to the French tax-benefit system (an individual younger than 20 years old, with an income less than 55% of the monthly full-time income at the minimum wage). In this scenario, the basic income is entirely additional, is not taxable and does not enter means testing. This scenario is funded exclusively with an increase in all tax rates of 3 p.p., with no changes in the personal income tax allowance. No other benefits are eliminated or reduced.

[5] Since 2013 individuals with income above EUR 250,000 and couples with income above EUR 500,000, with additional thresholds at EUR 500,000 and 1,000,000 pay an additional rate of 3 or 4 percentage points (see Bouvard, 2021).

Table 1: Scenarios for the personal income tax schedule

Income bracket (EUR, 2019)	Marginal tax rates (2019)	Scenario 1	Scenario 2	Scenario 3	Scenario 4
0 – 5,000	0%	0%	0%	0%	0%
5,001 – 10,064	0%	0%	5%	10%	0%
10,065 – 27,794	14%	14%	19%	24%	17%
27,795 – 74,517	30%	30%	35%	40%	33%
74,518 – 157,806	41%	41%	46%	51%	44%
157,807 –	45%	45%	49%	55%	48%

5. Results

As we have already discussed, results for the four scenarios are presented with respect to a baseline with 2019 policies. Accordingly, all monetary values are expressed in 2019 prices. Budget neutrality determines the amount of the different payments envisaged.[6] This brings the level of the monthly Standard BI to EUR 198 (Scenario 1), EUR 388 (Scenario 2) and EUR 516 (Scenario 3) respectively. The amount of the child basic income is 45% of the standard basic income, while pensioners, as we have explained, receive a top up of their state pension to the level of the standard basic income. Scenario 4, where the basic income is given to young adults only, envisages a monthly payment of EUR 337 (Table 2).

Table 2: Basic income payments

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	(monthly EUR)			
Standard BI	198	388	516	n.a.
Child BI	89	174.6	232	n.a.
Young adults BI	n.a.	n.a.	n.a.	337

5.1 Funding

Table 3 describes how the different UBI schemes envisaged are funded, with reference to the baseline (2019 policies). Taxes are increased in all scenarios, because even when the tax rates remain unchanged (Scenario 1), the UBI is taxable. The increase in taxes ranges from

[6] Budget neutrality holds only approximately, as for computational reasons a margin of variation is allowed (the difference in budget balance is however always smaller than 0.05% of total revenues).

EUR 13 billion (Scenario 4) to EUR 25 billion (Scenario 1), EUR 114 billion (Scenario 2) and EUR 174 billion (Scenario 3).

Social insurance contributions and pensions on the other hand remain unchanged. The reduction in benefits amount to EUR 70 billion (Scenario 1), EUR 73 billion (Scenario 2) and EUR 76 billion (Scenario 3), while it is 0 for Scenario 4. To be noted, the reduction in non-means tested benefits is the same across Scenarios 1-3 (EUR 45 billion). Differences in savings on means-tested benefits in Scenarios 1-3 arise because, as we explained, the basic income enters the means testing. These differences are however small, and the main differences in funding come from taxes. The cost of the UBI scheme that can be funded is equal to EUR 95 billion in Scenario 1, EUR 187 billion in Scenario 2, and EUR 250 billion in Scenario 3. The cheaper scheme of Scenario 3 costs EUR 13 billion.

As a measure of how the different schemes are tilted in favour of increased taxation rather than decreased targeted benefits, the ratio between reduction in spending and increase in revenues is 2.74 for Scenario 1, 0.65 for Scenario 2, and 0.44 for Scenario 3, while it is 0 for Scenario 4. This means that the UBI is financed primarily through a reduction in benefits in Scenario 1, with an increased role of taxation in Scenarios 2 and 3. Only taxation plays a role in Scenario 4.

Table 3: Funding of the schemes

	Scenario 1	***Scenario 2***	***Scenario 3***	***Scenario 4***
	Difference to baseline (2019 policies) (EUR)			
+ Personal income tax (IRPP)	26,845,830,242	114,731,995,884	174,665,670,921	13,002,002,679
+ Generalised social contributions (CSG)	-1,185,426,040	-891,851,077	-698,012,040	0
+ Contributions for debt repayment (CRDS)	-257,036,734	-260,360,183	-263,171,634	0
+ Exceptional contributions on high income earners	1,771,558	3,258,770	4,652,627	0
Total taxes	**25,405,122,853**	**113,583,083,825**	**173,709,154,430**	**13,002,010,080**
Total employees, self-empl. and other SIC	**0**	**0**	**0**	**0**
Total employers SIC	**0**	**0**	**0**	**0**
Total credited SIC	**0**	**0**	**0**	**0**
Total SIC	**0**	**0**	**0**	**0**
Total pensions	**0**	**0**	**0**	**0**
+ Means-tested benefit for young children (PAJE)	-3,520,933,467	-3,520,933,467	-3,520,933,467	0
+ Means-tested Survivor Minimum Pension (Allocation veuvage AV)	0	0	0	0
+ Unemployment assistance Benefit (Allocation de solidarité spécifique ASS)	-1,292,348,157	-1,292,348,157	-1,292,348,157	0
+ Means-tested benefit for large families (CF)	-1,883,610,339	-1,883,610,339	-1,883,610,339	0
+ Means-tested educational grant (ARS)	-1,549,476,234	-1,549,476,234	-1,549,476,234	0
+ Means-tested birth grant (PN)	-508,230,680	-508,230,680	-508,230,680	0
+ Means-tested allowance for the elderly (ASPA)	-324,606,842	-1,227,502,686	-1,918,653,359	0
+ Income tested disability benefit (AAH)	-212,777,293	-873,223,222	-1,319,057,778	0
+ Means-tested guaranteed minimum income (RMI/RSA)	-3,611,425,069	-3,611,425,069	-3,611,425,069	0
+ Income tested housing allowance for those renting (AL)	-1,935,694,110	-4,231,619,203	-5,731,205,092	0
+ Other means-tested allowances for families with children	0	0	0	0
+ Other means-tested benefits	0	0	0	0
+ Other means-tested housing benefits	0	0	0	0
+ Scholarships	0	0	0	0
+ Activity allowance	-9,945,495,392	-9,945,495,392	-9,945,495,392	0
Total means tested benefits	**-24,784,568,088**	**-28,643,832,653**	**-31,280,393,271**	**0**
+ Contributory sickness benefit	0	0	0	0
+ Contributory unemployment benefit (ARE)	-33,445,289,550	-33,445,289,550	-33,445,289,550	0
+ Universal child benefit (AF)	-10,347,151,939	-10,347,151,939	-10,347,151,939	0
+ Supplement for free choice of activity (CLCA)	-674,887,002	-674,887,002	-674,887,002	0
+ Family support allowance (ASF)	-283,622,131	-283,622,131	-283,622,131	0
Total non-means tested benefits	**-44,750,950,361**	**-44,750,950,361**	**-44,750,950,361**	**0**
Total benefits	**-69,535,518,449**	**-73,394,783,014**	**-76,031,343,632**	**0**
Basic income	**95,073,652,574**	**187,287,392,996**	**250,043,421,276**	**13,013,893,359**

5.2 Distributional analysis

5.2.1 Average tax burden

As we have described, Scenarios 1-3 differ substantially with respect to how the UBI is funded, and the role of taxes in particular. While the increases in taxes are specified in terms of the marginal tax rates, it is interesting to see their effects on the average tax burden. This is shown in Table 4, with a disaggregation by deciles of disposable household income.

In the baseline, the average tax burden ranges from around 10% in the poorer decile, to around 30% in the richest decile. With respect to this baseline, Scenario 1 entails an increase up to 1.7 p.p., Scenario 2 up to 6.2 p.p., and Scenario 3 up to 9.2 p.p. The increase is limited in poorer deciles, in particular thanks to the personal income tax allowance, and goes down again for the richest decile, due to the diminished role of labour income for this group.

Scenario 4 on the other hand entails a decrease in the average tax burden up to the third decile, which might appear counterintuitive as tax rates increased. This is because the burden is computed in percentage of disposable household income, which goes up for individuals 21-24, and these younger individuals are concentrated in poorer deciles.[7]

Table 4: Average tax burdens by deciles of disposable household income

	***B*aseline**	***Scenario 1***	***Scenario 2***	***Scenario 3***	***Scenario 4***
			Difference to baseline		
Decile 1	10.4%	0.6pp	1.1pp	2.6pp	-0.5pp
Decile 2	11.4%	0.5pp	3.5pp	5.8pp	-0.1pp
Decile 3	14.5%	0.3pp	5.6pp	8.1pp	-0.1pp
Decile 4	17.4%	0.8pp	6.2pp	8.7pp	0.2pp
Decile 5	18.2%	0.9pp	6.2pp	8.9pp	0.5pp
Decile 6	19.5%	1.1pp	6.4pp	9.1pp	0.7pp
Decile 7	21.1%	1.1pp	6.1pp	9.1pp	0.7pp
Decile 8	22.6%	1.4pp	6.2pp	9.2pp	0.8pp
Decile 9	24.6%	1.7pp	6.2pp	9.2pp	1.0pp
Decile 10	30.3%	1.7pp	5.2pp	7.9pp	1.2pp
All	**22.4%**	**1.3pp**	**5.5pp**	**8.0pp**	**0.7pp**

5.2.2 Disposable household income

Table 5 shows the impact of the different scenarios on disposable household income. Scenario 1 is characterised by large losses at the bottom of the income distribution, and large gains for the upper middle class, while the richest decile loses out. Scenario 2 and Scenario 3 on the other hand, where a larger UBI is funded by a significant increase in taxation, see stronger gains at the bottom of the distribution. The partial UBI scheme of Scenario 4 sees large gains

[7] Using market income rather than disposable income as the denominator would result in a division by 0 in many cases.

at the bottom of the income distribution, which turn into losses at the top. The pattern is similar when income is equivalised (results not shown).

Table 5: Disposable household income by decile

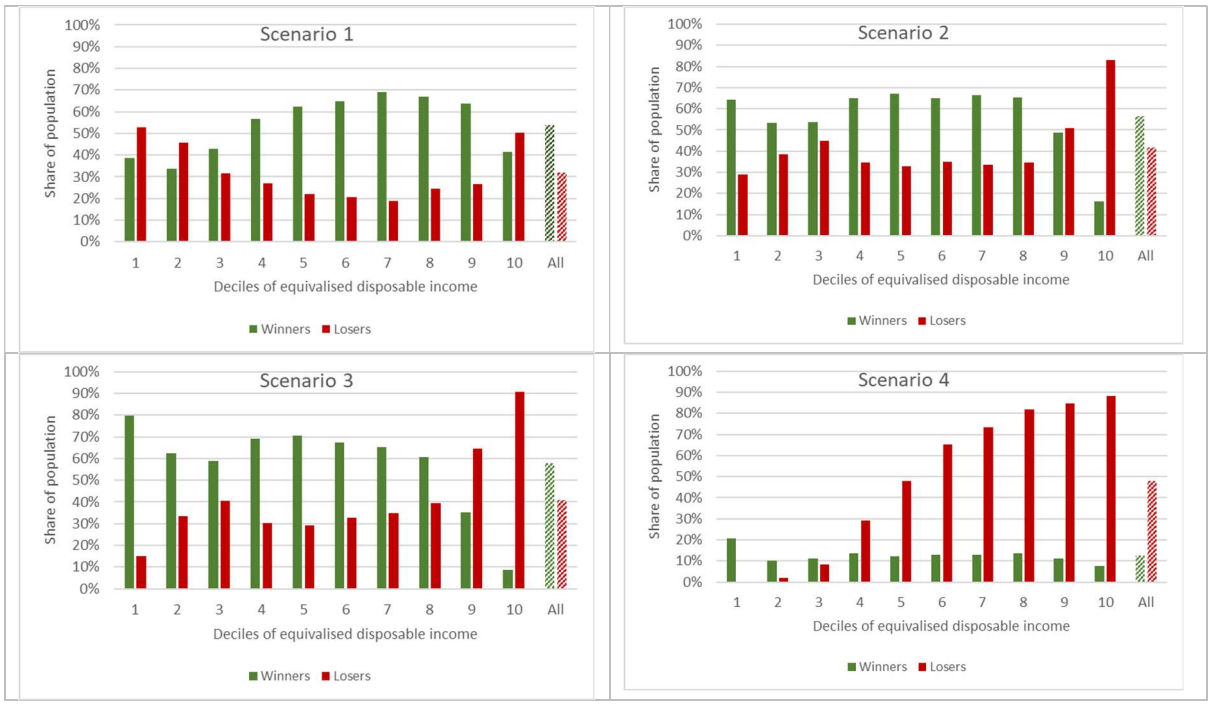
	Baseline	***Scenario 1***	***Scenario 2***	***Scenario 3***	***Scenario 4***
	(EUR)		Difference to baseline (EUR)		
Decile 1	15,573	-791	1,693	3,108	824
Decile 2	21,196	-731	585	1,359	344
Decile 3	23,857	-109	265	758	373
Decile 4	27,942	168	526	1,070	296
Decile 5	32,245	586	700	1,038	162
Decile 6	37,465	759	557	705	47
Decile 7	42,032	917	615	509	-28
Decile 8	49,154	633	198	-152	-184
Decile 9	56,057	270	-811	-1,707	-496
Decile 10	100,758	-1,501	-4,364	-6,975	-1,477
All	40,014	5	11	10	0

5.2.2 Winners and losers

Figure 1 shows the distribution of winners and losers by income deciles. Winners and losers are defined looking at changes in equivalised disposable income greater then 5%. Scenario 1 entails a large fraction of the population losing out as a consequence of the introduction of the UBI, not only in the richest decile, but also in the poorest deciles: around half of the population loses out in the first two deciles, a proportion going down to about one third in the third decile, one fourth in the fourth decile, and one fifth in deciles five to seven.

The proportion of losers in the lower deciles goes down - and the proportion of winners goes up - in Scenarios 2 and 3, where a larger UBI is funded by larger tax increases. Still, 15% of individuals in the poorer decile in Scenario 3 lose out as a consequence of the reform. Scenario 4 entails almost no losers in the poorest decile, with over 20% of winners. The fraction of winners remains stable at around 10% in the other deciles, mapping the distribution of the targeted population and households, but the proportion of losers quickly increases as the basic income for the young is funded by tax increases for all.

Figure 1: Winners and losers



Note: Winners and losers defined by a change in equivalised disposable household income greater than 5%.

Table 6 reports the overall share of winners and losers by sex and age group. The distribution by sex is approximately balanced. The benefits of the reform in Scenario 4 obviously accrue mostly to the targeted age group, although there are some spill overs when looking at equivalised disposable income. State pension age is 62 in France, and over 90% of individuals above that age receive a pension. Although Scenarios 1-3 do not entail cuts in pensions, and tax deductions for pensions are untouched, pensioners still lose from the reform, as pensions are taxable.

Table 6: Share of winners and losers by sex and age group

	Winners				Losers			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Sex:								
females	52.1%	54.8%	56.3%	12.5%	31.7%	42.7%	42.1%	47.4%
males	56.0%	58.3%	59.3%	12.8%	32.2%	40.5%	39.9%	48.9%
Age:								
1-19	58.8%	70.6%	75.0%	8.8%	41.2%	29.4%	25.0%	37.9%
20-24	71.3%	81.3%	84.1%	99.3%	28.7%	18.7%	15.9%	0.7%
25-61	68.8%	68.7%	69.0%	10.9%	31.1%	31.2%	31.0%	52.2%
62+	18.1%	15.2%	15.1%	1.4%	25.5%	77.6%	80.3%	60.0%

Note: Winners and losers defined by a change in equivalised disposable household income greater than 5%.

5.3 Poverty and inequality

Poverty, defined with respect to a poverty line of 60% of median equivalised income in the baseline (EUR 13,758.62) increases in Scenario 1 by 2.8 percentage points, decreases slightly in Scenario 2 (-0.8 p.p.) and more significantly in Scenario 3 (-2.8 p.p.). The overall effect in Scenario 4 is a reduction in the risk of poverty of 1.1 percentage point, quite a significant result given that only a sub-group of the population is targeted.

Table 7 shows the baseline rates and the effects of the four scenarios for different population sub-groups. The big losers in Scenario 1 are families with children, as child benefits are eliminated. Families with children however show the biggest reduction in poverty rates in Scenario 3, as they have more UBI recipients. A group that suffers in all scenarios, in terms of poverty rates, is single individuals above 25 and below pension age, as they either benefit from one single UBI (Scenario 1-3) or no UBI at all (Scenario 4), while losing access to benefits and having to pay more taxes.

Interestingly, although pensioners on average lose from the reform, (see Section 5.2), except in the most extreme tax rise scenario (Scenario 3) their poverty rate either goes down (Scenario 1) or remains practically unchanged (Scenario 2). This is because poorer pensioners pay little taxes, although the reduction in the personal income tax allowance ultimately leads, when combined with a significant tax rise, to an increase in the poverty rate.

Table 7: At-risk-of-poverty rates for different population sub-groups.

	Baseline	***Scenario 1***	***Scenario 2***	***Scenario 3***	***Scenario 4***
			Difference to baseline		
One adult <65, no children	16.2%	5.6pp	4.1pp	2.5pp	-1.9pp
One adult ≥65, no children	10.8%	-1.1pp	-0.2pp	2.0pp	0.0pp
One adult with children	25.3%	15.2pp	1.8pp	-4.6pp	-1.2pp
Two adults, <65, no children	8.3%	0.6pp	-1.9pp	-3.3pp	-1.6pp
Two adults, at least one ≥65, no children	6.1%	-0.2pp	-1.4pp	-1.8pp	-0.1pp
Two adults with one child	7.0%	2.5pp	-1.1pp	-1.6pp	-0.7pp
Two adults with two children	8.4%	1.7pp	-0.9pp	-3.3pp	-0.1pp
Two adults with three or more children	22.1%	14.0pp	-0.1pp	-7.4pp	0.1pp
Three or more adults, no children	6.7%	-0.4pp	-3.3pp	-4.6pp	-2.6pp
Three or more adults with children	18.4%	-0.6pp	-5.1pp	-8.7pp	-5.0pp
All	11.3%	2.8pp	-0.8pp	-2.8pp	-1.1pp

Note: Poverty line defined as 60% of median equivalised disposable income in the baseline (EUR 13,758.62 yearly).

Table 8 shows the contribution of original income taxes, pensions and benefits in the overall poverty rates. The increase in taxes in Scenarios 1-3 would cause a big increase in poverty rates per se, partially or more than completely offset by the changes brought about on the revenue side.

Table 8: At-risk-of-poverty rates by income sources

	Baseline	**Scenario 1**	**Scenario 2**	**Scenario 3**	**Scenario 4**
			Difference to baseline		
A = original income	36.4%	0.0pp	0.0pp	0.0pp	0.0pp
B = A - taxes and social insurance contributions	45.4%	0.1pp	4.8pp	8.6pp	0.1pp
C = B + pensions	23.5%	-0.1pp	4.6pp	8.8pp	0.1pp
D = C + other benefits	11.3%	2.8pp	-0.8pp	-2.8pp	-1.1pp

Note: Poverty line defined as 60% of median equivalised disposable income in the baseline (EUR 13,758.62 yearly).

Finally, Table 9 shows a similar decomposition to Table 8, but on the Gini index. Inequality (as measured by the Gini index) goes slightly up (less than 1 Gini point) in Scenario 1, slightly down in Scenario 2 (around 1 Gini point), and goes down more significantly in Scenario 3 (2.5 Gini points), while remains practically unchanged in Scenario 4.

Table 9: Gini index by income sources

	Baseline	**Scenario 1**	**Scenario 2**	**Scenario 3**	**Scenario 4**
	Gini index		Difference to baseline		
A = original income	0.5060	0.0000	0.0000	0.0000	0.0000
B = A - taxes and social insurance contributions	0.5076	-0.0058	0.0045	0.0111	-0.0012
C = B + pensions	0.3493	-0.0070	-0.0020	0.0018	-0.0028
D = C + other benefits	0.2815	0.0076	-0.0120	-0.0257	-0.0068

6. Conclusions

In this note we have investigated some options for the introduction of a UBI in France, analysed though the lenses of a static tax-benefit microsimulation model. These options differ with respect to the size of the UBI, how it is financed (whether mainly through a reduction in other benefits, or an increase in taxation), and the targeted population.

Overall, we can learn two lessons. First, for the UBI to be effective in protecting the most vulnerable, it needs to be large and funded mainly through an increase in taxation. This is because the UBI benefits everyone and not only those in need, but it is those in need that lose access to the benefits that are eliminated. Redistribution, which is hindered on the expenditures side, needs therefore to be strengthened on the revenues side.

A second lesson is that partial UBI schemes can be attractive, although they retract one of the main tenets of UBI itself, universality. As the benefits are more targeted, smaller schemes become effective in sustaining the incomes of the beneficiaries, while the smaller costs are spread out to a much larger population and therefore remain contained.

References

Blundell, R. (2001). Welfare-to-work: Which policies work and why? Keynes lecture in Economics: 2001. University College London and Institute for Fiscal Studies, https://www.ifs.org.uk/conferences/keynes2001.pdf (accessed 12 March 2022).

Bouvard, L. (2021). EUROMOD Country Report: France (FR) 2018-2021. JRC Sevilla.

Coady, D., Jahan, S., Matsumoto, R., and Shang, B. (2021). Guaranteed minimum income schemes in Europe: Landscape and design, IMF Working Paper WP21/179.

De Henau, J., Himmelweit, S. and Reis, S. (2021). Modelling Universal Basic Income using UKMOD, CeMPA Working Paper CeMPA3/21, University of Essex.

de Paz-Báñez, M. A., Asensio-Coto, M. J., Sánchez-López, C. and Aceytuno, M. (2020). Is there empirical evidence on how the implementation of a Universal Basic Income (UBI) affects labour supply? A systematic review, *Sustainability*, 12(22): 9459.

European Social Policy Network (ESPN). (2015). Minimum income schemes in Europe. A study of national policies. European Commission, Brussels.

Francese, M. and Prady, D. (2018). Universal Basic Income: Debate and impact assessment, IMF Working Paper WP/18/273.

Hirsch, D. et al. (2020). A minimum income standard for the United Kingdom in 2020. Joseph Rowntree Foundation.

Levy, H., Matsaganis, M. and Sutherland, H. (2012). The distributive and cross country effects of a Child Basic Income for the European Union, Research Note 2/2012, Social Situation Observatory. European Commission, Brussels.

Lowrey, A. (2018). *Give People Money. The simple idea to solve inequality and revolutionise our lives*. WH Allen.

Madec, P. and Timbeau, X. (2017). Universal Basic Income: An ambition to be financed, *ofce le blog*, 5 April 2017.

Martinelli, L. (2019). A basic income trilemma: Affordability, adequacy, and the advantages of radically simplified welfare. *Journal of Social Policy*, 49(3): 461-482.

Martinelli, L. and O'Neill, K. (2019). A comparison of the fiscal and distributional effects of alternative basic income implementation modes across the EU28, EUROMOD Working Paper EM14/19, University of Essex.

Maruhi, R. and Katekondji, L. (2021). Basic income in France: Bringing UBI back to the centre of political debate. Report available on the Unconditional Basic Income Europe website, https://www.ubie.org/basic-income-in-france-a-comprehensive-overview-of-the-debate-around-basic-income-the-future-of-the-movement-and-its-political-allies (accessed 10 March 2022).

Samuel, S. (2020). Everywhere basic income has been tried, in one map, *Vox*.

Standing, G. (2017). *Basic income: And how we can make it happen*. Pelican Books.

Sutherland, H. and Figari, F. (2013). EUROMOD: The European Union tax-benefit microsimulation model. *International Journal of Microsimulation*, 6(1): 4-26.

Torry, M. (2018). *Why we need a citizen's basic income*. Policy Press.

Torry, M. (2021). *Basic income: A history*. Edward Elgar.

Torry, M. (2021). Three income maintenance options for 2021. EUROMOD WP1/21, University of Essex.

Van Parijs, P. (2017). *Basic income: A radical proposal for a free society and a sane economy*. Harvard University Press.

Widerquist, K. (2018). *A critical analysis of basic income experiments for researchers, policymakers, and citizens*. Palgrave.

Connect with us

Email us
ipr@bath.ac.uk

Find us online
www.bath.ac.uk/ipr

Read our blog
blogs.bath.ac.uk/iprblog

Follow us on Twitter
@UniofBathIPR

Join our mailing list
https://bit.ly/3wTkWQa

Connect with us on LinkedIn
linkedin.com/school/bath-ac-uk-ipr

UNIVERSITY OF BATH

IPR Institute for Policy Research