

UBI

A PATH TO FREEDOM

Report about
a possible experiment on

Unconditional Basic
Income in

Portugal

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The Economic Value of an Unconditional Basic Income: its Costs and the Benefits

A Case Study for Portugal

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This proposal is the sole responsibility of its two authors

Executive Summary

This report aims to clarify some of the main concepts of an Unconditional Basic Income (UBI) and introduce potential financing models for its implementation. A brief introduction to the concept of UBI is presented, as well as a survey of the main experiments conducted so far and their results. An outline of the main arguments in favour and against the measure is developed and a summarized discussion on the UBI debate in Europe is provided.

The report then introduces and discusses the existing financing models for a UBI, before concluding on recommendations for a broader study to understand the net cost of implementing such policy, which includes proposals for a financing model. The last section focuses on the Portuguese context, by discussing Portugal's current welfare state and some of its challenges, while also considering how the UBI debate has evolved in the country. It includes a claim for a local or national experiment that could help understand more about the first and second order effects of implementing a UBI in Portugal.

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Index

Introduction	Pág. 1
Chapter 1	
- 1. Uncondicional Basic Income as a Proposal.	Pág. 3
- 2. Experimenting with a UBI.	Pág. 4
- 3. The European Debate on UBI.	Pág. 5
Chapter 2	
- 2. Financing a UBI	Pág. 8
2.1 Key Concepts on the Costs and Benefits of UBI	Pág. 8
. Gross and Net Cost	Pág. 8
. Defining the Grant Level	Pág. 9
. Funding Sources	Pág. 10
. Scope	Pág. 12
. With or Without Taxation?	Pág. 13
2.2 Financing Models	Pág. 14
. Estimating the Cost of UBI in Vacuum	Pág. 14
. The Revenue Neutral Proposals	Pág. 15
. UBI as Unaffordable (and Undesirable)	Pág. 16
. A Proposal for an Affordable UBI	Pág. 18
Chapter 3	
- 3. A Case Study for Portugal	Pág. 23
. The Portuguese Welfare State	Pág. 24
. The Portuguese Debate on UBI	Pág. 24
. Scenarios for Financing a UBI in Portugal	Pág. 25
. Final Coments	Pág. 31
Chapter 4	
Conclusion and Further Research/References	Pág. 33
Foot notes/Quotations/References	Pág. 38

1. Introduction

The idea of Unconditional Basic Income (UBI) has received widespread attention in recent decades as a possible policy solution to some of the most pressing challenges faced in contemporary societies. Despite not being a new idea, it remains a radical proposal, that has yet failed to congregate widespread political support. While most of arguments in favour of a UBI are unrelated to the instrumental question of how to finance it, there is a standard objection to the policy that claims the impossibility of funding it in a sustainable manner. However, the financial question is a contextual objection, highly dependent on the economic structure of a given country (region or even city) where UBI might be implemented, but also its benefit systems, the number of people who are eligible and the tax system. As a World Bank report on the feasibility of UBI pointed out: 'Decisions about a UBI should come in conjunction with decisions about its financing, as alternative financing options can have quite different macroeconomic, fiscal, and distributional effects that could reinforce or offset those of the UBI. Those effects would reflect a range of economic, demographic, social, and institutional factors that will likely prove highly country specific'¹.

Hence, questions of feasibility are likely to be manageable, in the sense of understanding different scenarios and how they interact within the economy, tax system and benefit systems. As such, the present report will explore the economic costs and value of an idea such as UBI, focusing on a country-specific case, namely Portugal. To do so, this report will explore existing literature, benchmarking other reports focused on the same topic.

The report starts off by reviewing existing literature on the benefits and downsides of UBI and discussing the insights from UBI and guaranteed income experiments. These will allow for a complete benchmark on the potential economic value of this policy.

Secondly, it will focus on the financial question, by first introducing some of the key concepts involved in any estimate of the cost of a UBI. These include the distinctions between gross and net cost, but also discussions on some of the different decisions involving such a study e.g., 'what should be the grant level?'; 'What is the scope of a UBI policy?'; 'Should a UBI be taxed and what can be possible funding sources for a UBI?'

After looking at some of the key concepts related with financing a UBI, the report looks at recent studies that present an estimate of how much a UBI could cost and offer financing models that either incorporate such a policy in tax and benefit systems or discuss possible revenue sources. Four different categories of studies were included: those who look at a UBI in a vacuum and offer a 'ballpark' estimate of its cost; those who try to propose a 'revenue neutral' UBI proposal; those who consider UBI to be unaffordable and/or undesirable, especially considering other policies and finally, those who consider UBI to be an affordable and desirable policy. Table 2 offers a summarized picture of all these financing models.

The last section of this report will zoom in the case of Portugal. Given Portugal's current endemic poverty (including working poverty) it will be argued that it presents a context where a UBI could be a different solution to help tackle the high prevalence of poverty, alongside other problems such as the precarious nature of working arrangements². A brief contextualization of Portugal's welfare state, including some of the current poverty levels will be presented, before discussing how the UBI debate has evolved in the country. In the final section, a summary of the existing studies on the cost of UBI will be considered. These include three main studies, and one exploratory summary of funding sources, that highlight both the complexity, but also opportunities to fund such a policy in the country.

Table 3 offers a summarized picture of these cost estimates and financing models. The section will close with our recommendations for a future broader study on the cost and funding sources for a UBI in Portugal. This scenario analysis will provide rough estimates, given that a comprehensive estimate of the economic net value of a UBI requires an extensive survey of data and microsimulation study which was not possible to conduct in the context of this report, since it requires extensive collaboration between an interdisciplinary team of specialists on the topic³.

However, the survey of existing studies will highlight existing cost estimates (mostly gross cost, but also some attempts at understanding the net cost of such a policy), existing revenue streams within the Portuguese economy to cover the tentative cost estimates, but also discuss the potential impacts on poverty that such a policy could have. While most Portuguese studies do not address this question, looking at cost estimates for Portugal in tandem with more in-depth enquires that have been conducted for other contexts, allows us to ponder how such results can be translated to the Portuguese context.

The report will close with recommendations for a future study, but also a broad call to action for more studies to be conducted, not only into how much a UBI could cost, and what could be a viable financing model, but also on the benefits and value of introducing it. It will also follow claims by other researchers for the need to introduce a UBI experiment in the country, in order to know more about its potential first and second order impacts e.g., labour market, productivity, health, education in Portugal.

Unconditional Basic Income as a Proposal

An Unconditional Basic Income (hereinafter UBI) is an income of sufficient amount to guarantee decent living conditions, paid unconditionally in cash to all citizens and legal residents of a political community, without considering the financial situation of the recipients⁴. A UBI is characterized by being universal (for everyone in a given political community), individual (contrary to other benefits which are given to households), unconditional, meaning obligations-free, and ideally it should be of a sufficiently high amount to guarantee a dignified existence and civic participation. Most proposals feature monthly payments, although there are cases in which the distribution might be annual or even on a weekly basis. The radical nature of a UBI resides in its unconditional nature: being obligations-free, it grants everyone the same amount, regardless of whether they meet some requirement such as having earnings below the poverty rate or being unemployed. As such, both unemployed and employed people would receive, as well as those with higher and lower earnings.

The idea is not new, having been theorized since the eighteenth century, namely with Thomas Paine in his book *Agrarian Justice* (1797), in the form of a land dividend. Therefore, it is rooted in an idea of granting everyone an amount based on people's shared ownership of a given resource, such as land. Since then, the idea evolved, particularly in the twentieth century with economists from both the left and right political spectrum proposing some form of dividend (James Meade, for example⁵) or a negative-income tax, like Milton Freedman⁶.

Before moving on, it is worth discussing what are the differences between UBI, and other similar models, such as the negative-income tax (hereinafter NIT) or Guaranteed Income. NIT is a form of a negative tax, that has a net cost, and outcome very similar to a UBI (if paired with progressive taxes to fund it) but has different principles in its definition. Philip Harvey defined a NIT as “a system of refundable tax credits that guarantees eligible tax filers a certain minimum income”⁷. A NIT works the following way: “tax filers with no income from other sources receive the full NIT benefit in cash, thereby providing them a basic income guarantee (BIG). Persons with taxable income receive a cash benefit only to the extent their NIT credit exceeds their tax liabilities. Thus, as a person's income rises, the size of the cash NIT benefit they receive declines”⁸. Hence, to those below a certain income threshold (breakeven point) the NIT functions as an unconditional income: what can be called a Guaranteed Income (Harvey called it a BIG). Above that threshold, people will be net contributors to the policy and will therefore not receive any income, but rather pay for it. Hence, NIT shares some similarities with UBI – it is unconditional cash, individual and the grant provided can be enough to a dignified existence (depending on the target value for the guaranteed income). However, it misses the 'universal' criteria, by defining a threshold upon which people will become net contributors, instead of recipients of unconditional cash. The same is true for the Guaranteed Income model. It is defended as an individual and unconditional cash transfer, but it is targeted: only people below a certain income threshold receive it. It is often also a lower amount, that is below the poverty line, although it does not have to be the case.

Since a lot of the models of a UBI rely on funding mechanisms that aim to be redistributive in nature – those with more income or capital act as net contributors to pay the UBI transfers – a UBI in outcome can be similar to a NIT⁹. Nonetheless, it is worth considering the differences in these models, especially because they might impact the political economy of implementing a UBI.

Experimenting With a UBI

The twentieth century saw the first surge in UBI experiments, particularly in North America. Between 1969 and 1980, several large-scale trials of a negative-income tax were implemented in cities across the United States of America (USA), followed by a similar trial in Canada around the same time. The American experiment of “guaranteed income” was designed to test the effects on employment, education, and the family, as well as the conditions of capital accumulation. While testing a negative-income tax, and not a UBI, these experiments provided important empirical data about the outcomes of implementing an unconditional cash grant. Stress and anxiety decreased, as well as reduced rates of hospitalization, particularly salient in the Canadian experiment¹⁰. There were also increases in educational take-up, namely in the USA, with many young adults choosing to remain more time studying, instead of quitting school earlier to enter into the job market¹¹. There was however a significant, albeit limited, decline in the work effort of the beneficiaries, which was generally distributed unevenly among different members of the household, being higher for spouses than for the 'main breadwinner of the house'¹². Despite debates on the validity of these results¹³, the small reduction in work effort was enough to discredit the idea at the time.

However, since the beginning of the twentieth-first century we are witnessing surges on basic income experiments across the globe, with concomitant effects in the political support for the idea. The year 2008 saw the implementation of what was the first world-wide UBI pilot in a community in Otjivero, Namibia. The pilot triggered a demand for testing out a UBI in the development context, initiating experiments in India, between 2008 and 2013. These pilots proved very successful, with positive results across different areas. They showed improvements in nutrition, in access to sanitation, health care, education, nutrition, and school attendance¹⁴. They gave participants more financial security and increased economic independence. They also promoted community empowerment, accountability, and bonding¹⁵.

Since these pilots, many other guaranteed income experiments have taken place in different contexts. Contrary to the large-scale negative income trials in the sixties and seventies, and to the pilots running in Namibia and India, the recent surge in experiments are better framed as guaranteed income experiments, as opposed to basic income ones. Each experiment fails to meet a given characteristic of what a UBI is - either because it fails to account to universality, or because the amount granted is quite small¹⁶. However, given that these experiments tested the impacts of an unconditional cash grant, it is worth considering their results as proxies of the potential impacts of implementing a UBI.

These experiments include the much-debated experiment in Finland, between 2017 and 2019, where 1.000 individuals between 25 and 58 years old looking for work and receiving an unemployment benefit received instead an unconditional grant of 560 euros – with no obligations. The experiment was run until the end, despite some regulatory changes in social assistance benefits, which tampered with its validity. Nonetheless, it showed positive impacts in anxiety, stress and increase happiness¹⁷.

The experiment did not find any difference in labour activation amongst the control and treatment group, except in some groups (where the unconditional grant was more successful): this meant that an unconditional basic grant did not prove more successful than conditional benefits in encouraging a quicker entrance in the job market. This was deemed a failure for UBI, with widespread international media coverage discussing how the experiment proved UBI to be a failure¹⁸. It is however arguable this was the case, given that the goal of UBI as a policy is not necessarily to serve as an activation policy, although it can contribute, by reducing the poverty trap (as the Finnish basic income experiment seemed to show, since vulnerable populations involved in the experiment seemed to start work quicker, and take up more work when granted an unconditional grant, as opposed to existing benefits).

Since the Finnish basic income experiment, other small-scale experiments have taken place in Europe, with different goals, and some straying off the label of UBI or basic income. These include the experiments in several cities in The Netherlands in 2017, which also focused on comparing unconditional grants with existing conditional benefits; The B-MINCOME experiment in Barcelona between 2017-2018 which focused on testing the impact of an unconditional grant in the social inclusion and poverty rates of vulnerable populations in the city. More recently, Germany has also started a basic income pilot, through a nation-wide lottery, which aims to explore the potential impacts of granting a basic income. Besides the experiments in Europe, since 2017 GiveDirectly, a non-profit organization has been implementing large-scale basic income trials in Kenya, namely one of the longest-running pilots which is scheduled to last 12 years. Ontario in Canada also started a basic income pilot in 2017, which was cut short after only 1 year, in the aftermath of local elections. Finally, in 2019 one of the youngest Mayors in the history of the USA, Michael D. Tubbs launched the first mayor-led guaranteed income—The Stockton Economic Empowerment Demonstration (SEED)—where 125 randomly selected residents received 500 US dollars per month for 24 months with no strings attached. The results showed increased economic security and independence, improvements in nutrition and education of those who participated¹⁹. This led to a large-scale movement with dozens of other mayors pledging and moving forward to implement guaranteed income experiments in their constituencies²⁰.

The European Debate on UBI

The debate on UBI as a viable policy option is most often a moral debate. At its core, debating UBI means debating different perspectives on what a society ought to ensure to its citizens. UBI advocates argue how UBI should be considered as a right. All members of a political community should be granted as a right the means to a dignified existence without being asked anything in return, namely without enforcing any requirement for participating in the labour market or performing any productive task. Arguments in favour of UBI as a right cover a broad span of topic. UBI is seen as a mechanism to de-commodify work, and hence promote a new relationship with work, mitigating the effects of work contracts that are often conducted in extreme duress (e.g., 'work or starve'). Some say reducing work effort is needed not only for better quality of life, but also as a necessity given current technological developments. There are also arguments on how UBI is a better mechanism for social assistance and to complement existing welfare states.

These arguments include claim of the need for a more comprehensive safety net (e.g., for precariat workers²¹, for example) but also a less stigmatizing one²², where resources are directed towards education and training, instead of regulating and enforcing benefit requirements, for example. Many of these claims are also followed by discussions on how UBI can be a better mechanism to fight poverty (discussing UBI in the Global South²³ is usually also included in this debate) and potentially also as a mechanism to contribute to reduce inequality. Finally, many of these arguments are met by a tandem favourable argument claiming that UBI might provide a more effective but also efficient safety net than some of the minimum income schemes currently implemented. While the previous discussion did not aim to exhaust all possible arguments in favour of UBI, it allows a quick overview on the main arguments that tend to be used by advocates when claiming the need to test or implement a UBI.

On the other side of the debate spectrum, opponents to the idea of UBI also exhibit compelling objections to the idea, which are once again rooted in different takes on what we owe to each other as citizens of a political community. One of such objections focuses on the universal nature of UBI, and claims that instead of giving it to everyone, we should have targeted benefits. Some opponents of UBI do not necessarily object to the unconditional idea, but rather to the non-targeting nature of UBI. Targeting is considered fairer, namely because it focuses resources where 'they are most needed'. Such claimants believe instead of a UBI we should have minimum income schemes (guaranteed ones, or not) with means-tested mechanisms where an income floor or prove of impairment or illness should be the criteria to eligibility. This argument is both rooted on a moral consideration (e.g. only those in 'need' should receive benefits) but is often times also a financial argument. Opponents of UBI who claim this objection often state that this is the only sound financial guaranteed scheme that states can sustainably afford. A second strong objection is the reciprocity one. Their proponents claim that no able body person in a given political community should be granted a benefit without contributing in a productive way to the so-called social surplus. In its standard form, the reciprocity objection underlies current mechanisms for labour activation or common conditional requirements for eligibility of benefits (e.g., providing proofs of training or job search). However, what is deemed as 'contribution' can range from participating in the labour market full time, to care work or volunteer activities. The reciprocity objection is one of the strongest claims against UBI, by sustaining long-held beliefs on the need for members of a political community to contribute according to their ability. They also echo fears of 'free riding', that tend to be common when discussing benefits. Namely, the idea that benefits create dependency and reduce work incentives, which might create a situation where some withdraw from contributing, while others are forced to work harder to compensate the increase burden.

Finally, the third objection is based on paternalistic considerations. Paternalistic arguments against UBI range from discussing the centrality of work, and the benefits of working and negative aspects of promoting any behaviour that encourages more leisure time. To arguments in favour of basic services, as opposed to cash grants, such as UBI, on the claims that people cannot necessarily be fully trusted with their autonomy when it comes to managing their expenses (especially people in extreme poverty).

The fact of the matter is that individuals often seek occupations that will provide fulfilment of core personal values, meaning and purpose and opportunities to help others, occupations with fundamental social and economic value, such as care and homework, voluntary work in all kinds of associations, political involvement, etc. The problem is that very rarely these occupations are paid. So, a UBI would contribute to rectify this unfairness. We should also consider David Graeber's work on "bullshit jobs" and how we are forced to accept them to guarantee our survival, despite our convictions, wills or the benefits we could reap from them²⁴, thus rendering it even more difficult to dedicate our work time to more meaningful occupations which have vital social and economic value²⁵.

Finally, some have argued that although the moral objections to UBI are, in principle, strong and difficult to overcome, there might be instrumental reasons why we should relax them. These include concerns with how care givers are considerate, or the rampant levels of inequality and persistent pockets of poverty or evidence of stigmatization from current social assistance mechanisms, and challenges in promoting social inclusion²⁶.

While most often the debate on UBI has moral undertones, with different political groups expressing their support or objecting to the policy on the grounds of its impact in labour market, social norms, and society, it is common to hear about the so-called 'financial question'. Hence, while political parties and individuals tend to be conflicted about implementing a UBI based on the reciprocity question, or on paternalistic grounds, it is common to hear that regardless of such debates, UBI is not affordable, hence not realistic. Politicians and some economists argue that UBI is too costly and hence not politically or economically feasible to be implemented, and therefore not worth debating about. Hence, it is imperative to discuss the 'affordability question', and the idea of whether UBI is too costly or not to be implemented. In what follows we will discuss some of the key concepts that should guide our discussion on the affordability and cost of a UBI, before turning to the Portuguese case.

2. Financing a UBI

2.1. Key Concepts on the Costs and Benefits of UBI

Before discussing whether a UBI is affordable, and zooming in the Portuguese case, it is necessary to introduce and explain the key concepts that form the basis of any analysis of the costs and benefits of its implementation. Choosing some perspective based on such concepts (i.e., using gross or net cost) can change our estimates and hence our answer to the affordability question. It is therefore important to understand each of these concepts before moving on.

Gross and Net Cost

One of the main controversial concepts when discussing a UBI is the variable that should guide our analysis of the 'true' cost of implementing it. Karl Widerquist has argued that using gross instead of net cost when discussing UBI leads to an overestimate and misunderstanding of the impact, but most importantly, of the true cost of implementing a UBI. The philosopher and economist defines net cost as “the redistributive burden – the net cost, the real cost – of UBI: the amount of money the UBI transfers from one group of people to another plus the associated transaction cost”²⁷. Hence, in another piece, Karl Widerquist and George Arndt argue that UBI's cost should be defined as follows:

“The net cost of UBI is the amount of money the UBI transfers from one group of people (the “net contributors”) to another group of people (the “net beneficiaries”), plus the associated transaction cost. The net cost of UBI is, therefore, roughly equivalent to its net benefit. The net cost of UBI is a far more difficult calculation because, although everyone receives UBI, almost everyone also pays at least some of the taxes needed to “finance” it; almost everyone will be affected by savings generated by cuts in other programs that can be replaced by UBI; and some people will be affected by the loss of those programs' benefits”²⁸.

*On the other hand, Widerquist argues that most estimates of a UBI use its gross cost as “the amount given to each individual times the size of the population”²⁹. He further argues that using the latter instead of the former leads to an inflated estimate of the cost of UBI, since it does not consider the “amount of taking money from and giving it back to **the same people at the same time in the same form**”³⁰.*

Such a distinction is however controversial when it comes to discussing the cost of UBI. Philip Harvey, for example, has argued that while the distinction exists (for UBI but also for other policies) it does not make sense to discuss the net cost as the 'right' estimate for the cost of implementing a UBI. In his view, while UBI can have the same net cost (redistributive effect) than that of a negative income tax (NIT) – where only those below a certain income threshold receive an unconditional amount, while others above such a threshold pay a certain amount – it does not follow that UBI and NIT costs are the same. Hence, he believes using net cost for a UBI is imprecise, partly because of how people would perceive the UBI they receive, and the taxes they pay (and that help fund it):

“All government benefits can be regarded as providing cash or in-kind tax refunds. Some taxpayers receive benefits that are worth more than the taxes they pay. Others receive benefits that are worth less than the taxes they pay. A UBI would be no different. Even the fact that a UBI would be paid in cash does not distinguish it from other benefit programs. Many recipients of both means tested and contributory cash transfers pay taxes that help support the programs from which they receive benefits”³¹. He further claims that insisting on using net cost when it comes to discussing the affordability of a UBI requires advocates to explain “why people would view the UBI payments they would receive from government and the taxes they would pay to fund the program any differently than the benefits they receive and the taxes they pay to support other transfer programs or, for that matter, other noncash benefits”³².

At this point, it is worth considering an example to illuminate the distinction between gross and net cost. Gross cost can be called the 'upfront cost' of implementing a UBI, while net cost can be defined as redistributive or real cost of the policy.

Let's picture a room with 15 people who want to set up a UBI for the room of 2EUR per person. The upfront cost of the policy would be 30EUR. The ten richest people in the room are asked to contribute 3EUR each towards funding it. After they each put in 3EUR, raising the total 30EUR needed, every person in the room gets their 2EUR universal basic income. **But because the ten richest people in the room contributed 3EUR, and then got 2EUR back as the UBI, their real, net contribution is in fact 1EUR each. So, the real cost of the UBI is 10EUR.** Estimates that just multiply the size of the UBI by the population of a country do the equivalent of claiming that the cost of UBI in the room above is a whopping 30EUR. But the real cost in this scenario – the money redistributed from the wealthy – is only 10EUR.

Hence, while using the gross cost might be relevant in certain cases, the net cost seems to provide a better estimate for discussing how to finance a UBI, especially if the spirit of the proposed model is to be redistributive – to impact favorably in a more significant way those who are worst off, by appealing to the better off who contribute to such an effort. Such is the spirit of most western Europe welfare states, where education, health or public transit are all public benefits, but some contribute more to fund their value (through taxes) while others enjoy them at a lower cost, or for free.

Defining the Grant Level

Another key concern to consider is what should be the amount granted through an unconditional transfer?

As discussed in the first section, a UBI is set to be defined as a cash grant that allows for a 'dignified existence and civic participation'. Hence, oftentimes it is argued this should amount to an individual transfer closer to the 'living wage' or even above it. While these are the most ambitious proposals, namely argued by Philippe Van Parijs, as the UBI model that could be the most emancipatory and provide the biggest impacts in terms of poverty alleviation but also changes in work patterns³³,

proposals for a UBI are most often discussing whether it should be a value closer to the poverty line of a given context. For Portugal, for example, it would be a UBI of close to 554EUR per month³⁴.

It might also be discussed whether a UBI should be initially set at the poverty line, and then rolled out and increased to close to the living wage, or increase its incrementality, by starting with an amount lower than the poverty line (two thirds of the poverty line, for example) and roll it out to the poverty line level some months or years after being implemented, and continue rolling it out until it reaches a higher amount. Depending on the goal of the UBI implemented, such models can incorporate different amounts, and incorporate an incremental mindset in its implementation.

Discussing the amount also implies discussing whether everyone would receive the same amount. While a UBI is in principle universal, it does not follow that everyone needs to receive the same. Some proposals discriminate the amount by age: children and teenagers would receive less, while everyone else would receive the same amount. Karl Widerquist, for example, proposes a model where everyone below 18 years-old receives half of the UBI distributed to adults³⁵. Some models, on the other hand, argue that the amount should be the same, regardless of age, below 18 parents should be the one determining what to do with most of the money granted for their children. Depending on existing welfare programs – such as pensions, or disability subsidies – a UBI might be a top-up of existing programs, or might be increased to those who are older, or who have some impairment or disability, to the extent that such provisions are non-existent, or deemed insufficient.

Discussing the amount, and how it will be set up according to criteria such as age, possibility to work and existing safety nets is imperative to any discussion on the cost and affordability of a UBI.

Funding Sources

To discuss if a UBI is affordable, it is not enough to determine who gets how much, nor how those decisions amount to a certain net or gross cost. Affordability also requires discussing where the money will come from. In other words, it implies discussing which funding sources might exist and be optimal to fund a proposal such as a UBI.

It is undeniable that UBI is a costly policy option, even if one considers the net cost as its most reliable estimate. As with other welfare programs and transfers (i.e., pensions, or healthcare systems) a UBI promises to provide significant results, especially long term, which amount to high investments in individuals and society, such as mitigating or eradicating poverty, improvements in education or health. But doing so also comes with significant costs in a short term. Hence, it is important to understand which funding sources might be worth exploring in a given context and acknowledge that a mix of sources might be the best way to go when it comes to understanding how to finance a UBI. In a 2020 report by the World Bank this point was acknowledged by its authors, arguing that decisions about financing are important to the extent that they might yield “different macroeconomic, fiscal, and distributional effects that could reinforce or offset those of the UBI. Those effects would reflect a range of economic, demographic, social, and institutional factors that are likely to be highly country specific”³⁶.

When deciding funding sources, one needs to first account to whether a UBI would be 'budget neutral', like the one that has been proposed by Boadway et al for Canada³⁷, or if it will require 'revenue mobilization strategies', as it is often the case in most models suggested. The first implies designing a UBI that substitutes certain transfers (or programs) in such a way that it is 'cost free': it is in essence a substitution. Instead of programs x, y and z that costs 20EUR, we will have a UBI costing the same 20EUR

In the same World Bank report, Ter-Minassian presents what could be some of the main funding sources of a UBI, in case one designs a policy that requires revenue mobilization strategies. The sources are also rated according to criteria such as their 'revenue potential', their 'sensitivity to cycle' or their 'political acceptability' (see table 1 below).

Table 1³⁸

Revenue source	Revenue potential	Growth friendliness	Sensitivity to cycle	Redistributive potential	Administrative costs	Compliance costs	Visibility	Political acceptability
Personal income taxes	V	L	M/H	H	H	M/H	H	M/L
Corporate income taxes	M	L	H	L	M/H	H	M	M
General consumption taxes	H	M	M	L	M	M	L	M
Excise taxes	M/L	M	M/L	L	L	L	L	M
Property taxes	M/L	H	L	M/H	H	M	H	L
Social security contributions	M	L	M/H	L	L	L	M	M/L
"Green" taxes	L	M/H	L	L/M	H	M	H	M/L
User fees	M	M/H	L	L	M	L/M	H	M
Royalties	M/H	L	H	L	M	M	M	H

NOTE: H = high; M = medium; L = low; V = varying.

Some of these sources could be further discriminated into particular policy options: property taxes could be either a land tax, or maybe an inheritance tax targeting land and property. General consumption taxes, namely VAT could be used, but one could also think about increases taxes on luxury goods. Corporate taxes could be implemented, but there are also proposals for taxes on financial transactions, or even robot taxes. Royalties or a dividend from natural resources are also often discussed as funding sources for a UBI, not only because of the history of the policy – with Thomas Paine, and his proposal for a land dividend – but also because of the existing Alaska Dividend Fund that distributes an annual dividend based on the receipts from its oil companies.

Two final notes. One of the possible funding sources for a UBI is taxes related with the ecological transition. For instance, through so-called Pigouvian taxes. These taxes work by “internalizing the damages transactions impose to third parties, such that transactions with a surplus lower than the damage they create tend not to take place (thereby increasing efficiency and decreasing damages), while transactions with a surplus higher than the damage create become associated with some form of compensation for third parties (thereby increasing fairness)”³⁹.

Taxes on environmental pollution might also be a way forward, targeting individuals and organizations whose environmental impact in certain areas is not up to the standards deemed required for a sustainable ecological transition. While there are concerns that such taxes can become regressive (for instance, consider the heated debates around fuel taxes) it is worth pointing out recent studies find compelling evidence showcasing how more wealth correlates with higher greenhouse gas emissions. Hence, billionaires and millionaires contribute significantly more to climate change, with an “annual emissions a million times higher than a person in the poorest 90% of the world's population”.⁴⁰

A final source of revenue that could be mobilized, despite the challenges it might impose on regulatory bodies, is pondering the possibility to use revenue that is currently not being captured due to corruption and tax evasion. In a Report by the Greens/EFA on the costs of corruption in the European Union (EU), estimated a loss of GDP as a result of corruption in the EU to be about 904 billion euros per year⁴¹. In Portugal, the report estimates a whopping 18.2 billion euros 'lost' to corruption per year, which amounts to 7.9% of the country's GDP at the time of the report⁴². If we consider tax evasion, recent data points out that in Portugal tax evasion is worth 1 billion euros per year, mostly attributed to companies, namely multinational groups⁴³. More robust measures targeting tax evasion, highlighting the importance of paying taxes, their redistributive nature, while also tightening policies targeting corruption, could significantly increase available revenues, which could in turn be directed towards paying an unconditional basic income. If we add the values that come from parallel economy, that in Portugal amounts to an astounding 27% of the GDP (2015), meaning 49 billion euros⁴⁴, it's clear that not only through taxation the funding of such policy might be executed.

Scope

Finally, discussing the cost and affordability of a UBI also depends on the scope of the policy. Besides determining who gets what, one needs to decide what are the 'boundaries' of the policy. Most proposals accept nation states as the appropriate measure of a 'political community'. Hence, when discussing a UBI in Portugal, we should discuss it as a policy to be implemented in the entire country. However, some proposals – and experiments – challenge this assumption.

Noteworthy are recent experiments, who are now focusing on smaller administrative regions – like Catalunya in Spain, or cities, like Barcelona in the same country (with the B-MINCOME experiment) or the Mayors for a Guaranteed Income initiatives in the USA, who are focusing on promoting guaranteed income experiments, and even discussing possible implementation of such a policy at city levels, given that Mayors are the ones behind the push for experimentation. There is also the famous Maricá policy in Brazil, where a guaranteed income funded through a local currency, and implemented by the city's then former Mayor, has led to one of the most promising programs, that has been extensively rolled out, and might potentially become a universal and unconditional cash grant (hence, a UBI).⁴⁵

While some are proposing experiments and a UBI at a city or regional level, Van Parijs has also famously argued for a UBI at a bigger administrative level than a nation-wide UBI⁴⁶. In order to promote the social pillar of the EU, and contribute to the socio-economic convergence within the Union, namely on poverty levels, an EU stipend – the Euro-dividend – should be implemented. This would be a universal and unconditional cash grant, distributed to 'every legal resident of the European Union, or at least of the subset of member states that either have adopted the Euro or are committed to doing so soon'⁴⁷. Van Parijs' proposal is of a Euro-dividend averaging 200EUR per month, funded through a 'harmonized VAT-base at a rate of about 20%, which amounts to nearly 10% of the EU's GDP'⁴⁸. Recent developments at the European Parliament have focused on arguing for a new set of sources for EU revenues. Enabling the EU to increase its own resources⁴⁹, can also contribute to the possibility of a Euro-dividend financed through such mechanisms (besides the VAT), also possibly allowing a discussion for a UBI set at a higher level than the one proposed by Van Parijs. And although the European Commission "follows with interest" the subject, it replied to the Green/EFA member of the European Parliament, Francisco Guerreiro, that for the moment it "does not plan concrete initiatives on the issue".⁵⁰

Arguing for a city, regional, national, or supra-national wide UBI is a matter of policy option. There might be instrumental reasons for choosing one over the other i.e., Euro-dividend would most likely be easier to implement for Portugal, from a financial standpoint, than a nation-wide UBI⁵¹. A city wide UBI might be more political feasible than a nation- or supranational-wide UBI. Nonetheless, choosing the scope is also important when discussing the cost of a UBI, and its affordability.

With or Without taxation?

One way to avoid the huge cost of implementing a UBI (universal guaranteed income) is through taxation, by defining a 'marginal tax rate' (or claw-back rate) and deciding whether such a rate will apply to every unit of earned income from everyone receiving a UBI, or only to some cases. Taxing such economic and social policy, besides the savings that might potentially come from replacing some public transfers, is what determines that a UBI might have a net cost (redistributive cost) lower from its gross cost. Moreover, taxing the UBI can be a determinate feature of the model, or it might a result of incorporating the policy within tax systems (if they are progressive) in case the UBI is not deemed tax exempt.

Hence, taxing or not a UBI is as instrumental measure, that might reduce its net cost. However, it might also be a matter of justice. By taxing (or incorporating a UBI within tax systems) one might reinforce the redistributive component of the policy, while keeping intact its universal roll out, which yields potential benefits not only in administrative savings, but also in reducing the stigmatizing consequences from targeting benefits.

2.2. Financing Models

In what follows, we will discuss some of the most well-known financing models for a UBI. It aims to offer a snapshot of the most relevant existing studies, their assumptions, conclusions, and challenges. It will both showcase models that argue that a UBI could be affordable and non-affordable. It will also include proposals that require revenue mobilization strategies, and others who either don't discuss funding sources, or propose a revenue neutral UBI.

Estimating the Cost of UBI in Vacuum

Model 1: a ballpark estimate for the USA:

Karl Widerquist proposed what he called an estimate of the cost of a 'UBI in vacuum'. With this he means a model where the cost of UBI does not consider its interaction with welfare programs or tax systems. Hence, it does not consider savings or not from replacing or keeping existing welfare programs, nor how it might interact with income or consumption taxes. Instead, it looks at a possible estimate of how much a UBI could cost. Moreover, it focuses the estimate in the net cost, or 'redistributive cost', arguing that the 'gross cost' is a less interesting estimate. He further argues that we won't be able to have a 'realistic understanding of how much a UBI costs without making an assessment of the extent to which its benefits and burdens cancel each other out'.⁵²

Besides using the net cost in his estimate, Widerquist also considers three additional variables: the marginal tax rate defined as 'the tax rate faced by net beneficiaries on a one-unit increase in market income'. Such a rate can be called a claw back of the money received. Contrary to some proposals, Widerquist proposes a marginal tax rate of 50% of market income. This rate is assumed as the same for both net beneficiaries of UBI and the net contributors, where the first receive UBI, whereas the latter will pay for it, although Widerquist also agrees that above the break-even point, net-contributors will most likely already pay taxes that fund their 'UBI', and therefore won't need to be subjected to the 50% marginal tax rate. Secondly, Widerquist defines the grant level – how much will the UBI be set before the marginal tax rate – at the poverty threshold. Since he uses the USA as a context, the value for the grant value was defined as 12.000USD for an individual 6.000USD for a child below 18 years old. Finally, Widerquist also assumes an administrative cost from implementing UBI of around 0,7% of total budget.

Widerquist ballpark estimate concludes that a UBI set at 2015 poverty line in the US, and attributing half of that value to children, with a marginal tax rate of 50% would cost **539 billion USD** (15,7% of the gross cost of the program). Such a difference between net and gross cost is attributed to the fact that in his model “less than half of citizens are net beneficiaries. (...) [but also] net beneficiaries pay most of the cost of their own UBIs in taxes on their own income”.⁵³

Widerquist argues that his model would 'drop the official poverty rate [in the US] from 13,5% to 0%, lifting 43.1 million people (including 14.5 million children) out of poverty.'⁵⁴ **It would do so at an increased cost of 25% of current transfer payments in the US, of 14% of total federal spending, and only 2,95% of GDP.**

The Revenue Neutral Proposals

Model 2: optimizing the system in Canada

Robin Boadway, Katherine Cuff and Kourtney Koebel proposed a three step UBI for Canada, that would be able to harmonize both the federal and provincial components in the country. Moreover, they took it as a principle that the model should be 'revenue neutral': meaning it substitutes some existing programs, which allows the redirection of funds towards a UBI.

They first defined which welfare programs should be kept intact. These include “public programs such as employment creation, housing, education, and healthcare. Instead, they focused on reforming existing government transfer programs, namely tax credits and “leaving intact in-kind benefits, social services and regulations (e.g., minimum wage)” but also “Social insurance programs such as employment insurance (EI), workers' compensation and Canada and Quebec Pension Plans (CPP/QPP)”⁵⁵. Hence, the proposal works only with existing tax transfers, and keeps intact important federal programs, but also the contributory pensions.

Besides the funding aspect of the policy, Boadway et al. also focus on designing a program that could help mitigate poverty and contribute to improve the financial situation of the people in the lowest income levels. Hence, it works as a strongly redistributive policy, designed to help those who are worst off.

To achieve their goal, and ensure revenue-neutrality, Boadway et al. focused on the 'unconditional' or 'guaranteed' nature of the policy and sacrificed its universal component. Hence, they proposed a twostep BIG – Basic Income Guarantee, that is income-tested (only people below a certain income receive it), and replaces existing tax credits, by harmonizing them into one (first step). The second step would be to encourage each province to also replace their provincial tax credits (transfers) by a BIG, that could be suitable to the living standards of their Province, and work as a top-up to the federal BIG.

The grant level of the BIG, nation-wide, would be 20.000 USD per adult, adjusted for family size, with a marginal tax rate of 30% based on family net income. The nation-wide grant level was established by defining a federal BIG of 14.322 USD (by replacing existing tax credits), and an average provincial one of 5.678USD.

Finally, they simulate the impact of implementing the BIG nation-wide, as a massive redistribution between those in the top income deciles, and the ones in the bottom. **While the earnings of those in the top half of the net family income fall roughly 10% 'those in the bottom two deciles gain by 167% and 74%, respectively'. They also look at the impact in inequality, through the Gini coefficient, estimating a decrease of almost '17% and the poverty rate falling by 73% to only 3.2%'.⁵⁶**

UBI as Unaffordable (and Undesirable)

Model 3: UBI at the crossroads. Either not enough or too costly to be realistic

The Organization for Economic Co-operation and Development (OECD) modeled the possibilities of implementing a UBI in some of its member countries. It defined as a model a UBI paid to everyone above 18 or younger than 65. This policy would not affect the incomes of people above normal retirement age, nor any public service such as education or health provision. It would, however, replace most cash transfers and tax-free allowances, including social insurance, while retaining 'some benefits intended to compensate costs related to special needs such as disability and cash housing support'.⁵⁷

Based on these principles, they define two goals:

One model would be based on a 'budget neutral' proviso. As such, the UBI needs to cost the same of replacing existing cash transfers, according to the principles defined above. They estimate that for most countries in OECD such a UBI would be below the poverty line (in Portugal, for example, it would be between 20-30% of the poverty line (2013 data)⁵⁸. Hence, such a UBI would be far from eradicating poverty, and might potentially leave those in the lowest income deciles, in a worse position than with existing social benefits.

Hence, they move into the second model, one that established that a UBI which can help mitigate poverty and contribute to improve the situation of the worst of needs additional revenues to be financed. To do so, they propose taxing BI alongside other incomes – include a marginal tax rate (a claw back rate) that reinforces the redistributive effect of the policy, hence reducing its net cost, but also reducing or eradicating tax-free allowances since “the rationale for allowing individuals to keep a portion of their income tax-free becomes less convincing when everyone receives a minimum level of income”⁵⁹. They further argue that this might be a positive measure for work incentives while also ensuring lower marginal tax rates for low-income earners – hence increasing the redistributive effect of UBI.

Considering this second model, they define what might be the possibility of setting the GI at a 'guaranteed minimum income' (which varies per country and would be based on the cash transfers' replacements defined above). In some countries such as Finland or Italy a basic income set at this minimum level could be implemented with limited or no increase in taxation (it would be budget neutral), while in others, to be budget neutral it would be a very low basic income (for example, in the United Kingdom (UK)). Moreover, when considering 'winners and losers', they estimate that while the middle class will see their earnings potentially increase, some low-income earners, namely unemployed or retirees could see decreases in their income, especially in contexts 'where the benefits that a BI would replace are largely based on social insurance'.⁶⁰

The policy brief ends disclaiming what they consider to be drawbacks from a UBI, noteworthy among them the impact on work incentives, but also taking up more activities that might be socially relevant, but which the report deems as 'risky for individuals', such as volunteering or caring⁶¹. They also conclude that while a more generous UBI could not have the drawbacks from a very minimum basic income – namely in terms of its impacts in low-income earners – it would require a very strong effort to finance it, namely through increased taxation.

Their final proposals include the trade-offs and potential contexts where a UBI might be desirable at a modest level: if one intends to implement a reform that 'more equally shares the benefits of globalization or technological progress'⁶², or if in a given context lower income groups receive relatively smaller shares of overall benefit expenditures. They also propose a move towards activation, but with 'mild eligibility criteria' to reduce the number of recipients or reducing the time-span of the disbursement where 'BI payments were capped, e.g., at a certain number of years during anyone's lifetime'⁶³. Finally, they propose a further alternative, where BI is implemented in stages, by populational groups, e.g., BI could be rolled out to successive future cohorts of young adults⁶⁴.

Model 4: Job Guarantee is Superior to an UBI or NIT

In a 2006 paper, Philip Harvey discussed the cost of both the UBI proposal, and the NIT one⁶⁵. He starts off by arguing that the only estimate that we should be considering when discussing a UBI is the gross cost, while its 'redistributive cost', which might be similar to the gross cost of a NIT proposal, is not an accurate estimate of how much revenue would need to be mobilized to implement a UBI (see 'Gross and Net Cost' sub-section of this report). Hence, he moves on arguing that given that a UBI can only be discussed by using its gross cost, such a proposal is not realistically affordable, and as such we should focus on discussing estimates for a NIT, instead.

He then models the cost and redistributive impact of a NIT, having in mind a proposal by Charles Clark⁶⁶ for a UBI and NIT system in the US. Such a model presupposes two levels of benefits: 'All persons 18 years of age or older would receive a UBI equal to the official poverty threshold for a single person living alone. All persons under the age of 18 would receive a uniform UBI set below the individual poverty threshold, but high enough to guarantee that their family income – when combined with the UBI benefits received by their adult caretakers – will at least equal the poverty threshold for a family of requisite size'⁶⁷. Hence, the grant level would be the following: **3.500 USD for people under 18 years of age; 9.359 USD for persons between 19-64 of age, 8.628 USD for those 65 years of age and above.** Since Harvey opted for a NIT model, it also encompassed a break-even point (from net receiver to net contributor) which given the flat tax (marginal tax on UBI, and taxes to fund all other programs) that would make 'a person between the ages of 18 and 64 would have to have earned less than 20.706 USD before they receive a NIT benefit check from the government'⁶⁸.

Harvey estimates that the cost of its NIT proposal, modeling Clark's one, would be 1.09 trillion USD. He further claims this would be the same net (redistributive cost) of implementing a UBI, instead of a NIT, but reinforces his point that such a measure is inaccurate to estimate the cost of a UBI. Finally, he also mentions how such a cost does not consider any savings that could come from substituting/replacing cash transfers deemed redundant when a UBI is implemented⁶⁹.

He finishes by arguing that such a proposal – NIT as the more affordable one or UBI – would be extremely costly to implement, further claiming that such cost could become even higher and unsustainable if one take into account work incentives, which Harvey believes would be negative e.g., net recipients would reduce a lot of their work intensity, if a NIT or UBI would be implemented⁷⁰. Hence, he closes by arguing that we should consider the 'opportunity cost' of

implementing such costly measures, and instead look for other proposals whose outcome might be similar or better, with relative lower costs, such as the job guarantee strategy⁷¹.

A Proposal for an Affordable UBI

Model 5: a proposal for Canada

The organization UBI Works used the Parliamentary Budget Office (PBO) estimate of what could be a sustainable UBI to be implemented in Canada. While it does consider some part of the benefits system in place in the country, it does not consider the tax system, nor the harmonization will all the benefits (at the federal and provincial levels) in the country. As such, we include it in the 'UBI in vacuum' estimates. The model defines 18.300 USD for individuals (~1.500 USD/month) and 25.900 USD for couples (~2.150 USD/month). This sets the grant level at 75% of the Low-Income Measure (LIM, a common measure of Canada's poverty line), and incorporates a marginal tax rate, given that 'This basic income would be reduced by \$0.50 per dollar of employment income but does not impact pensions, payments to seniors, or children'⁷².

Hence, it would be a UBI closer to the poverty line, with a marginal tax rate on net beneficiaries (as Widerquist's ballpark estimate). The total net cost of the proposal would not only include the reduction from the marginal tax rate (the claw back rate) but also replacing \$30 billion of federal and provincial tax credits that exist in the country. The net cost of the proposal, given these **estimates would be 51 billion USD.**

The PBO and UBI Works organization estimate that this UBI would cost **'5% of what all levels of government spent in 2020'** and would **'lift 1.6 million families out of poverty, making life more affordable for 7.4 million Canadians including millions of people who work'**. The organization proposes funding UBI not only by replacing the existing tax credits, through the claw back rate (where net beneficiaries also contribute some percentage to pay the UBI, depending on their earned income) and finally also by 'removing tax advantages enjoyed by some industries, companies and individuals which are driving wealth and income inequality'. These include 'contributions from the financial sector' which include financial transactions but also financial activities taxes, 'fewer tax breaks for large companies' which include applying a corporate tax, or implementing a cap on business deductions, among others, and finally, 'fewer subsidies for the wealthiest', which include eliminating 50% of capital gains exemption, among other measures⁷³.

Model 6: In praise of a redistributive UBI

Karl Widerquist and George Arndt have proposed a UBI model for the UK, based on a microsimulation study that attempt to incorporate features of its tax-benefit system.

They focused on the estimate of the 'net cost', or what they call 'the real cost' of a UBI proposal and define the grant level at the poverty threshold for the UK.

This would amount to a **UBI for adults of 7.706 GBP per person per year, which equals the poverty line for two adults living together (15.413 GBP), but below the poverty line for one individual living alone (10.327 GBP)**. They define a '50% marginal tax rate for the income tax of net beneficiaries, integrated into the UK tax-and-benefit system'⁷⁴ and identify several cash grant programs that could be replaced, adding a 'no harm clause' where no one in the bottom 20% of the income distribution would be harmed by the loss of programs replaced by the UBI. As an illustration, given the marginal tax rate defined in their study, for the average UK family, the income at which someone will not be a net beneficiary of a UBI will be 32.906 GBD, which given the UK income distribution would mean that 'around 70% of households would, to different degrees, become net beneficiaries of the UBI scheme, assuming a uniform distribution of household sizes across the income spectrum'⁷⁵. In terms of programs which could be replaced, Widerquist and Arndt assume that all conditional cash transfers should be replaced, except housing benefits, and all contributory programs, except healthcare contributions. They therefore choose to retain the exceptions mentioned, but also benefits targeting 'special needs arising from special circumstances', such as disablement allowance, war pensions or industrial injuries allowances, among others⁷⁶.

Such a model allows estimating a poverty-level UBI for the United Kingdom of 67 billion GBD per year (net cost) which amounts to 3.4% of Gross Domestic Product (GDP). Moreover, this net cost would represent an increase of '39% to the cost of the UK's existing benefits system (not including the spending on the National Health Service), and an 8.7% increase in the UK's total government spending'⁷⁷. **In terms of impact, this model estimates a decrease of 16% to 4% in the percentage of UK families with incomes below the current official poverty line. They further predict that income poverty among children and the elderly would disappear⁷⁸.**

Model 7: A UBI as a toolkit for economic policy

If one looks at Spain, we will find a plurality of financing models for a UBI. Through the works of several economists and political scientists, but also the political efforts that have resulted in a pilot in Barcelona – B-MINCOME – and a scheduled basic income pilot for the same city, we can get a glimpse of how much a UBI could cost, but also what should be included in such an estimate.

A 2020 article by Jordi Arcarons, Daniel Raventós and Lluís Torrens⁷⁹ provides a summary of one of the most discussed UBI models for Spain. They first lay out the main assumptions for the model, summarized below.

- The amount granted should be **enough to cover basic amenities**, or how they frame it "to cover the material conditions for people's existence"⁸⁰. This would be closer to the **poverty line of 8.815 euros per year**.
- The amount is also **differentiated by age and household type**. The authors follow the OECD household modified-scale, which measures the relative income needs of households of different sizes and composition⁸¹. Where the first adult of the household is defined as 1, any additional adult counts for 0,5, and children (below 14) are considered as 0,3. Hence, in a household of 4, with 3 adults (above eighteen) and a child below 14, the UBI is set at 2,3 (1+0,5*2 + 0,3).

Hence, this household would receive 20.275 euros, divided by its four elements, which means dividing the amount per adults (7.603 euros annually per person), with the third adult (which in the model is set to be the son/daughter of the former two) receiving 5.069 euros.

- UBI replaces all **existing transfers whose value is below** the one set for basic income.
- UBI will not be considered for the income tax.
- A UBI should be financed mainly through a **reform in Spain's income tax (IRPF)**, but it might also include other revenue sources, **such as wealth or land taxes.**
 - The authors discuss their proposal for reform, which includes **simplifying the existing scheme, by introducing a demanding flat tax for all income of around 46,83%**, while also including a **proviso for compensating the lowest income households.** Any household in the lowest 20% income percentile (the ones with lower income) will not be left in a worst-off situation than before the income tax reform. Hence, the reform must ensure that the **20% poorest do not see their net income decrease due to the introduction of a flat tax.** Such a compensation scheme would mostly impact poorest households, namely pensioners.
 - Moreover, the authors also propose a **flat wealth tax of 2% to be applied to wealth located in the 90-100 percentile**, which in Spain is worth almost a trillion euros. Such a tax could raise a figure of over 19 billion euros, an amount the authors stress is much “higher than the additional cost of compensation (15.107 million euros)” set to prevent the poorest household of suffering with the new income tax reform⁸².
- Not a single euro should be divested from the revenues already collected through the income tax, and which are meant to cover existing expenses with the welfare state, namely the ones **concerning education and health.**

The authors also discuss the impacts on both poverty and inequality, and the redistributive effect of their UBI model. With the proposed reform on income tax, they argue it is feasible to finance this policy for everyone, in an amount very close to the poverty threshold. Moreover, it would benefit **70% of the population (they would be 'net beneficiaries') with a transferring cost from the rich, who would in effect be net contributors, of around 3,5% of Spain's GDP in the reference period.** This would be a direct result of the redistributive impact of the policy and its interaction with the tax reform: the authors argue that this model would have a 14,78% redistributive effect, compared to 3,8% of the status quo. **Poverty would be significantly reduced, with only 0,54% of households of households at risk of poverty and 0,15% experiencing severe poverty** – a whopping decrease from the numbers reported for the study's time period - 19,28% and 8,46%, respectively. Finally, the impact on inequality would also be notable, with an estimated **15 point reduction in the GINI coefficient**, from 0,3836 to 0,2359, effectively reducing the inequality level in the country.

Table 2: Summary of Financing Models

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	UBI in vacuum	Revenue neutral	UBI is unaffordable		Affordable UBI		
	Model 1: ballpark estimate	Model 2: Optimize the system	Model 3: UBI is unaffordable or unrealistic	Model 4: Job Guarantee is better	Model 2: proposal for CA	Model 6: a redistributive UBI	Model 7: UBI as a toolkit for economic policy
Country	USA	Canada	Several (within OECD)	USA	Canada	United Kingdom	Spain
Grant level	12.000 USD for an individual 6.000USD for children (annually)	20.000 USD per adult, adjusted for family size	GMI – Below Poverty line Or Set at the Poverty Line	500 USD for people under 18 years of age; 9.359 USD for persons between 19-64 of age, 8.628 USD for those 65 years of age and above	18.300USD for individuals (~1.500 USD/month) and 25.900 USD for couples (~2.150 USD/month).	UBI for adults of 7,706 GBP per person per year, which equals the poverty line for two adults living together (15,413 GBP), but below the poverty line for one individual living alone (£10,327)	8.815 euros per year. Follow the OECD household modified-scale, where first adult counts 1x, additional adults count 0,5, and children below 14 count 0,3.
Universal	Yes – but redistributive	No	Yes – not sustainable Propose: .Mild eligibility criteria .Payments Cap during lifetime .Implemented by population groups	NO: NIT model	Yes – but redistributive	Yes – but redistributive	Yes – UBI is not considered for income tax
Unconditional	Yes	Yes	Maybe	Yes	Yes	Yes	Yes
Marginal Tax Rate	50% market income	30% based on family net income	N/A	25,6%	50% per dollar of employment income (pensions, payments to children or seniors are exempt)	50% income tax of net beneficiaries integrated into UK's tax and benefit system	No
Cost	539 billion USD (net cost)	Revenue Neutral	Depends in context	1.09 trillion USD (NIT)	51 billion USD (net cost)	67 billion GBD per year (net cost)	273.760,05 million euros (gross cost)
Funding sources	N/A	Replacing existing Tax Credits (federal an provincial level)	Mostly income tax	N/A	.Reduce tax credits .Contributions from the financial sector .Fewer tax breaks for large companies .Fewer subsidies for the wealthiest.	.Marginal tax and income tax .Substituting predefined cash transfers	Reform of the income tax – flat tax for all income, and a compensation proviso for the 20% poorest households

	UBI in vacuum	Revenue neutral	UBI is unaffordable		Affordable UBI		
	Model 1: ballpark estimate	Model 2: Optimize the system	Model 3: UBI is unaffordable or unrealistic	Model 4: Job Guarantee is better	Model 2: proposal for CA	Model 6: a redistributive UBI	Model 7: UBI as a toolkit for economic policy
							Wealth tax of 2%
Impact on Poverty	Poverty Rate Reduction from 13,5% to 0%. Lifts 43,1 million people (including 14,5 million children) out of poverty	Poverty rate falling by 73% to only 3,2%	Might increase earning of middle class or lower income groups with little take up of benefits. Might reduce benefits of those who have extensive coverage e.g., people with disability, unemployed	N/A	Lift 1.6 million families out of poverty	Decrease of 16% to 4% in the percentage of UK families with incomes below the current official poverty line. Income poverty among children and the elderly would disappear	0,54% of households at risk of poverty and 0,15% experiencing severe poverty (reduction from 19,28% and 8,46%, respectively)
Impact on Inequality	N/A	Decrease of almost 17% in Gini Coefficient. Earnings of those in the top half of the net family income fall roughly 10%. Earnings of those in the bottom two deciles gain by 167% and 74%, respectively	N/A	N/A	Make life more affordable for 7.4 million Canadians including millions of people who work	70% of households would, to different degrees, become net beneficiaries of the UBI scheme, assuming a uniform distribution of household sizes across the income spectrum	14,78% redistributive effect, compared to 3,8% of the status quo. 15point reduction in the GINI coefficient, from 0,3836 to 0,2359.

3. A Case Study for Portugal

Both the objections and the arguments in favor of UBI presented above have been mentioned in the public debate on implementing such policy in the Portuguese context. The country has seen a surge in the debate, since the first European Citizens Initiative on Unconditional Basic Income in 2013, and the recent one in 2020⁸³, with a growing movement led by Associação RBI Portugal, a non-profit focusing on advocacy for UBI in the country. But whereas the debate in civic society has been growing, mentioning of UBI in the political debate has been almost nonexistent, with some notable exceptions, such as the BIEN – Basic Income Earth Network Congress in Lisbon, in 2017.

This has notably changed in the last few years. In 2019, Francisco Guerreiro was elected to the European Parliament to the Greens/EFA with a program that specifically endorsed the idea of Unconditional Basic Income. Moreover, in the recent parliamentary elections (January 2022), it was also clear how UBI was becoming one of the topics to be discussed by candidates. Despite only three political parties have endorsed the idea of a UBI, and only two have included it in their political program, the series of debates on television that marked the campaign included more than one time the topic of UBI, with both journalists and political representatives using the platform to discuss the topic, either by mentioning their desirability (namely the two parties PAN and LIVRE, which participated in the television debates and endorsed a UBI) but also to express some objections to the idea. This was followed by a number of political commentators and journalists publishing several articles and op-eds on the topic, further contributing to public debate on UBI. These have come in the aftermath of a year where the movement on UBI also increased with the introduction of a 12-series documentary on the topic⁸⁴, that premiered in November 2021. The documentary developed by the MEP Francisco Guerreiro and sponsored by Greens/EFA, titled UBI: A path to freedom⁸⁵, has been shown in several cities in Portugal, and has also been used across Europe by the groups that have worked to discuss the topic.

The evidence on the media and political parties' increased interest on UBI is further reinforced if one looks at the most recent polls on UBI. In 2021, YouGov conducted an independent survey on six European countries - France, Germany, Italy, Poland, Portugal and Spain. People expressed strong support for a UBI and would like their governments to set up a pilot project. But in no other place was this so striking as in Portugal: while only 52% of respondents from France were in favor of a UBI, this number rose to 83% in Portugal⁸⁶. A similar study conducted by Marktest on behalf of the MEP Francisco Guerreiro, where 1450 people were interviewed, also found significant results: 76% of the respondents are in favor of a UBI, with most of them arguing that it would be beneficial to first promote a UBI pilot that fostered the national debate and allowed a deeper knowledge on its potential impacts.

The use of Portugal as a case study to discuss the implementation of such policy is justified by the growing curiosity and interest of both civic society and political representatives. The results of the above-mentioned polls, and the growing media coverage of the topic show that it is imperative to further discuss the topic of UBI in the country.

But Portugal is also a good case study, given the pressing challenges faced by both the Portuguese society and economy. A topic we will now turn to.

The Portuguese Welfare State

Portugal belongs to the group of most unequal countries in the context of the EU (27), with a Gini coefficient of 31.9% in 2019, compared with the average of 30.2% of EU (27). In Portugal, 20% of those who have more income, receive 5 times the income of the bottom 20% of the population. When it comes to poverty, Portugal has also suffered from a persistent intensity of poverty that has not fell much below the 20% (after social transfers). In 2020, 16,2% of the population received an income below the poverty line (6.653 euros, or 554 euros per month) after social transfers. The last couple of years have seen this indicator improve (since the 2011 financial crisis) but have also highlighted the role of social assistance mechanisms given that this rate would increase to 42,4% if we exclude social transfers (including pensions). To this we should also take into account how unequal the distribution of wealth is in Portugal⁸⁷.

The role of the welfare state, and particularly of its social transfers to avoid a spike in extreme poverty in the country, highlights the vulnerable situation of many households in the country, including those where there is no reduced work intensity (working poverty has also been considered as one of the most pressing challenges, with one in five workers experiencing poverty in 2018)⁸⁸. As such, it justifies considering how current mechanisms might be insufficient to cope with existing challenges such as growing instances of precarious jobs, working poverty (e.g. working poverty is not covered by the minimum income scheme in the country – the Rendimento Social de Inserção (RSI) or inherent limits of the existing minimum scheme as the RSI, namely inadequate coverage due to administrative failures or instances of stigmatization (the last available data highlighted that RSI might exclude at least 30% of the population who would be eligible to receive it). Moreover, upcoming challenges in extending coverage to new contract workers, or coping with changes in technological development in the country might increasingly justify looking for new solutions that might complement existing mechanisms of social assistance. As such, Portugal might be a well-positioned country to be used as case study for the implementation of a UBI⁸⁹.

The Portuguese Debate on UBI

The debate in Portugal on UBI has now been taking place for over a decade. However, concretely little has been done in the last legislatures on the topic, except for MEP Francisco Guerreiro who has substantively contribute to the debate at the national level as in the European Parliament, as a Portuguese representative. In the political debates in January 2022 which took place just before the legislative elections in Portugal, all the leaders of the main political parties took a public stance on UBI, but the exchanges which took place where ill-informed and nothing substantial came out from them⁹⁰.

Scenarios for Financing a UBI in Portugal

Model a) First attempt to estimate the cost of a UBI in Portugal

Pedro Teixeira presents one of the first estimates of how much a UBI could cost in the Portuguese context⁹¹. It assumes that certain public services, such as education or health could not e.g., given the Portuguese Constitutional, and should not be scaled back by introducing a UBI in the country. It assumes that the only estimate that we should be using is the gross cost of the policy (much like Philip Harvey) and considers the substitution of certain redundant subsidies and benefits which a UBI could replace without harming the worst off negatively. These include all the contributory transfers whose amount is lower than the proposed UBI e.g., Rendimento Social de Inserção (Minimum Income Scheme) or Abono da Família (sort of family allowance).

His model looks at two proposals: a UBI close to the poverty line, at around 420 EUR/month⁹² per person, and a second modest proposal of 200 EUR/month per person, including children. It assumes that a UBI should be tax free, and therefore does not propose any marginal tax rate. That being said, the article assumes that the funding for a UBI should come from the savings generated through the replacement of some transfers, as mentioned above, but also the potential restructuring of the IRS – income tax structure. Teixeira estimates that the savings from social transfers replaced by a 200 EUR/month UBI would cover 30% of the budget required to fund such policy, whereas for a higher UBI of around 450 EUR/month, such savings would amount to 35% of the budget⁹³. Given the savings from replacing transfers for both UBI models (of 200 and 450 EUR per person), Teixeira estimates that a UBI of 200 EUR/month per person would cost 16.2 billion EUR, while a UBI of 450 EUR/month per person would amount to 37.3 billion EUR.

Given such costs, Teixeira estimates how much should the IRS be restructured in order to fund the existing gaps for both models. His findings conclude that both models would require a significant increase in the tax burden of those with the highest income, but also potentially the middle class. For the modest UBI, this would create a potentially regressive situation, where those who benefit the most would be the poorest, but also the richest, whereas the middle class would pay the significant burden of the policy. For a more significant UBI, Teixeira believes the distributional impact of the UBI could offset some of the impact of the increase tax burden, but it would still require an increase in taxes that might be hard to justify⁹⁴.

Hence, Teixeira concludes that while a UBI might still be justifiable, namely as a right, its funding is challenging, especially given Portugal's income distribution. Therefore, he argues that the funding structure for a UBI should consider not only the potential savings from redundancies created by implementing an unconditional and universal cash grant, some restructuring of the income tax but contemplating different funding sources. He proposes some, including implementing wealth and inheritance taxes, taxes on financial transactions or consumptions or even policies targeting tax evasion⁹⁵. He also argues that to reduce the financial burden we might need to consider a UBI with a lower grant level for certain segments of the population, namely those below 18 years of age.

Model b) A modest UBI for Portugal, or a Euro-dividend

A second model proposed by Mariana Castro looks at three possible scenarios for a small, modest and more comprehensive UBI⁹⁶. In many ways, Castro's proposal echoes Teixeira's by also looking at the potential savings that might result from implementing a UBI. Hence, she considers savings estimated by the replacement or top-up of certain transfers whose value is above the grant level for a UBI. These include both contributory and non-contributory pensions such as the unemployment transfers, family allowances, old age pensions or the minimum income scheme in the country e.g., Rendimento Social de Inserção. Finally, it also assumes that a UBI should not be taxed, along the same lines as Teixeira.

Castro defines three models for a UBI, only jeopardizing the 'universality' criteria, by excluding children from the recipients group. Scenario one will grant everyone above 18 years of age a 100 EUR/month UBI; scenario two will be similar to Teixeira – a 200 EUR/month UBI; while the third scenario will be the most comprehensive scenario of 450 EUR/month⁹⁷. **Castro assumes the gross cost estimate, and starts by estimating that scenario one (100 EUR/month) would cost 10.8 billion EUR, where 62% of the total cost would be secured through the savings from the replacement or top-up of social transfers.**

To cover the remaining portion of the cost of a small UBI, Castro proposes three measures: increase the income tax through a progressive lens, ensuring the worst-off are not jeopardized; secondly, create an additional tax rate on the wealthy, by creating a new sub-tax within the last income rank; finally she proposes increasing the consumption tax of certain products e.g., VAT, excluding products which are considered tax free, e.g., medical appointments, but also primary goods. Hence, she argues for an increase in the VAT of luxury goods and other similar products and services.

For scenario one, Castro believes a UBI could be funded by making some social transfers redundant when implementing a UBI. However, for the more ambitious scenarios two and three (200 EUR/month and 450 EUR/month, respectively) Castro estimates that not only would require savings from replacing social transfers, but also the all the above measures, namely the restructuring of income tax, of VAT and the introduction of a wealth tax. Even so, Castro estimates significant funding gaps: 47% for scenario two and 58% for scenario three, even considering more additional taxes, given that scenario three would cost e.g., gross cost, roughly 55.8 billion EUR, or 30% of GDP (2016 data).

Given the significant funding gaps for the modest and comprehensive UBI scenarios Castro proposes additional taxes or policies that could be implemented. These could include a 'tourism dividend', reformulating the land tax, or implementing a wealth tax, or even considering environmental taxes or a 'robot tax'. Hence, she concludes that while possible, scenario two, and especially scenario three are considerably more challenging to implement, and hence a gradual implementation, starting with a small UBI might be desirable, since it would not require any radical change in the tax system.

But before closing, Castro also ponders the possibility of a Euro dividend, or a UBI at a European level, as proposed by Van Parijs⁹⁸. Given the challenges of funding a UBI in Portugal, Castro ponders whether a European level UBI would be less challenging, financially, even if it could be less politically feasible. It is also worth well mentioning that a recent poll on UBI in Portugal to reveals that 45% of the persons interviewed were in favor of a mixed funding where the UE would fund half of the amount and Portugal the other half. But 42% of the interviewed were in favor of a total funding by the EU. Finally, only 6.5% were in favor of a funding solely by the Portuguese Government⁹⁹.

Model c) UBI and climate policies

João Vasco Gama proposed an innovative way to fund a small UBI in the Portuguese context¹⁰⁰. Gama first looks at a comprehensive UBI first of 540 EUR/month to be paid to all adults – with an increase of 15% in the marginal tax rate for the tax break between 48k EUR and 75k EUR and an increase in the marginal tax of 20% for the tax break above 75k EUR¹⁰¹. Given the large funding gap required to fund the comprehensive UBI, Gama contemplates four main funding sources: the marginal tax rates, implementing a demanding land tax and wealth taxes e.g., inheritance taxes and finally use Pigouvian taxes whose revenue could amount to 61,2% of the required cost of funding a UBI set at a level closer to the poverty line.

However, given the comprehensive funding requirement, and his size, which is estimated as being close to 30% of the GDP e.g., gross cost, Gama argues that a more incremental proposal might be better. He proposes a 'gradual implementation' where a UBI would be funded through Pigouvian taxes, namely carbon taxes, or taxes related to 'air pollutants, water pollution, lead exposure and natural resources management', which would amount to a small UBI of 104.1 EUR/month¹⁰².

While Gama agrees this would be a very small UBI, and one that is not resistant to crisis, since it is funded on consumption-sort of taxes, his study estimated that even this small UBI would impact individuals by 'increasing the disposable income of 62% of Portuguese households' where 'the richest Portuguese households would face an 8.4% decrease in their income'¹⁰³. He further claims that gradual implementation could contribute to a more stable political mobilization, given that people could become supporters of the policy once it has been implemented for some time, but might also promote learnings on the second-order effects of UBI but also on how to secure other funding sources that could be essential for implementing a more comprehensive UBI.

His conclusion ponders whether a Euro dividend would be a better policy option, not only because it would maximize the environmental impact, but also because it could reduce some of the challenges of implementing Pigouvian taxes at a country level e.g., price increase in imported goods or intermediate goods. It would also increase the tax base which could impact the sustainability of its funding. Argues also for the need to promote experiments, namely in Portugal, to better understand the impacts and how they might help us find a way to finance a UBI in this southern country.

Exploratory considerations: how to secure funding in Portugal

A recent paper by Richard Pereira also attempts to discuss what are the possibilities to secure funding to implement a UBI in Portugal¹⁰⁴. While the article does not discuss the actual cost, gross or net, of a UBI proposal, it proposes some guidance for existing studies.

It starts by quoting existing research on Canada, but also Switzerland and Australia, that demonstrate that a UBI can be an affordable policy and moves on to argue on the same lines as Karl Widerquist that any estimate of the cost of a UBI should focus on its net cost (redistributive effect).

It then focuses on discussing what could be the funding sources of a UBI, which are dependent on political choices, but also on the requirements for funding. His proposal also claims that most public services should remain intact e.g., education or health, although some could be replacing, when redundancies in cash transfers and benefits are identified. His funding sources include implementing land taxes or increase luxury taxes; focus on financial transactions e.g., 'tobin' taxes, looking at the possibility of sovereign funds, namely through lithium revenues or consider a tourism dividend, along the lines of what is being discussed in Hawaii¹⁰⁵. It rejects increasing VAT across the board (except in luxury goods) because of its regressive nature. It also rejects restructuring the income tax, due to its political economy.

Table 3: Summary of Cost Estimates for Portugal

	Model a) First attempt to estimate cost of a UBI in PT		Model b) Proposals for UBI			Model c) environmentally inspired UBI	
	'Poverty Line'	Modest Proposal	Small UBI	Modest UBI	Comprehensive UBI	Comprehensive UBI	Environmentally driven UBI
Grant level	420 EUR/month	200 EUR/month	100 EUR/month			540 EUR/month	104,1 EUR/month
Universal	Yes	Yes	No – children excluded	No – children excluded	No children excluded	No children excluded	No – children excluded
Unconditional	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Marginal Tax Rate	Tax Free	Tax Free	Tax Free	Tax Free	Tax Free	Increase of 15% in the marginal tax rate for the tax break between 48k EUR and 75k EUR and an increase in the marginal tax of 20% for the tax break above 75k EUR	N/A
Cost	37.3 billion EUR (includes savings from other transfers)	16,2 billion EUR (includes savings from other transfers)	11,8 billion EUR (gross cost) – for entire population. 10,8 billion EUR (gross cost) – excluding children 62% funded through savings	25,8 billion EUR (gross cost) – for entire population 47% remaining cost to be secured	55,8 billion EUR (gross cost) – for entire population 58% remaining cost to be secured	30% GDP (gross cost) 61,2% could be funded through Pigouvian taxes. The remaining could be funded through marginal tax rates, implementing a demanding land tax and wealth taxes e.g.,	Funded through Pigouvian taxes, namely carbon taxes, or taxes related to air pollutants, water pollution, lead exposure and natural resources management

	Model a) First attempt to estimate cost of a UBI in PT	Model b) Proposals for UBI			Model c) environmentally inspired UBI		
	'Poverty Line'	Modest Proposal	Small UBI	Modest UBI	Comprehensive UBI	Comprehensive UBI	Environmentally driven UBI
			from other social transfers			inheritance taxes	
Impact on Poverty	The worst off would benefit	Smoother redistribution, with the worst off improving their situation	N/A	N/A	N/A	N/A	Increasing the disposable income of 62% of Portuguese households
Impact on Inequality	Negatively impacting the middle-income class	Decrease but no data	N/A	N/A	N/A	N/A	Increasing the disposable income of 62% of Portuguese households where the richest Portuguese households would face an 8.4% decrease in their income

Final Comments

Existing studies on how to finance a UBI show the challenges of not only estimating its cost, but also defining where to collect the money to pay for it. While it seems that granting everyone an unconditional amount periodically should be translated into an easier cost estimate e.g., gross cost, most often, understanding how much can a UBI cost includes considering its interaction with the tax-benefit system, which savings, if any, can be created, and how progressive taxation could be used to soften the blow of financing such a costly policy, but also perhaps more importantly, to highlight the redistributive nature that a UBI can have.

Given the models presented for Portugal, we believe certain considerations are worth considering for a future study, that aims at replicating some complex models that have been conducted elsewhere, namely some we have introduced in the present report for both Canada, the UK or the USA. In what follows, we will close with some of these considerations:

1. We agree that any UBI proposal in Portugal should consider that public provision of services e.g., health, education, housing should be kept intact when a UBI is implemented, not only as a Constitutional imperative, but also as a matter of social justice. Hence, UBI is considered as a radical mechanism to make the welfare state more comprehensive and just.

2. While a NIT can provide the same outcome that a UBI, and its gross cost is smaller, we believe a UBI should be prioritized as an end goal. A UBI in principle will be less stigmatizing and would contribute to reduce instances where social transfers further deepen misrecognition among citizens.

3. The proposal should discuss the possibility of a UBI set at a value close to the poverty line – between 500 and 570 EUR/month for adults. While this is a demanding UBI, we strongly believe it will be the one with the most transformative possibilities. Hence, any estimate of how much a UBI can cost, both gross and net estimates, should consider this level. We also believe it should be given to everyone, and we leave it open for public and political debate whether the amount should be differentiated based on age. **We encourage future studies to ponder this possibility and consider including models where a UBI is set at the same level for everyone, across age, and differentiated models.** We also believe that any study should account for the necessity and benefits of a **gradual implementation.** As such, we encourage that studies also include cost estimates for more a more modest UBI, whose impact could nonetheless be significant e.g., 200 EUR/month UBI for adults.

4. While a gross cost estimate is important, we agree with both Widerquist and Pereira that the real cost of UBI will be its redistributive effect, or net cost. Hence, we encourage further studies in Portugal that aim at understanding the net cost of introducing a UBI, by not only estimating savings from redundancies in existing cash transfers, but also how it might be integrated into the tax system. **We further believe that it is worth considering a marginal tax rate e.g., claw-back rate when introducing a UBI,** that should be smaller for those with lower income, and increase for those with higher earned income. Having a claw-back rate, alongside a smaller value given to children will reduce the net cost of implementing a UBI in the country.

5. When researching how a UBI will interact with the tax-benefit system, we argue for a 'no harm principle': While certain transfers might be deemed redundant e.g., family allowances, or survival pensions, or minimum income schemes, we believe others should be protected, and hence a UBI can either be added to such pensions, or a UBI can receive a top-up based on the value set for each one of them. These include transfers related with disability, but also pensions.

6. We agree that using VAT as a proposal for funding a UBI might be regressive, and hence we would discourage it, except in luxury goods, whose taxation could increase. We also acknowledge Teixeira's study that both highlight the difficulties of funding a UBI through the income tax, without jeopardizing the middle class. Nonetheless, we still believe it is worth considering the progressivity of the income tax, to collect revenue for a UBI e.g., using Castro's proposal for re-introducing a solidarity tax (taxa de solidariedade) for those in the top of the income distribution. **However, we would argue for the need to diversify revenue sources, a claim defended by the authors that elaborated the existing financing models in Portugal.** We think it is worth considering **wealth taxes**, given that wealth inequality seems to be increasingly more relevant than income, but also **environmental taxes** e.g., like Gama's proposal. Targeting the biggest pollutants seems to be a way forward that might be both effective at mobilizing revenues, but most importantly, contributing to a fair ecological transition. It is also worth exploring ideas related with social dividends e.g., from tourism activity, or exploitation of natural resources. A review of the land tax, with progressivity in mind could also be considered. Finally, given the astounding numbers pertaining to the informal economy, and the costs of corruption in both the EU and Portugal, tackling corruption and tax evasion seems to be a priority for fairness, but also for revenue mobilization. Doing so could significantly improve available resources for investing in the welfare state and could contribute to the share of sources that could be used to finance a UBI.

7. Finally, we believe a **nation-wide implementation of a UBI is the most feasible e.g., as opposed to an EU-wide implementation**, but also the one with the highest potential for impact e.g., instead of a city-wide implementation. However, we agree that a EU dividend would solve many of the instrumental issues when it comes to funding a UBI in Portugal, and could also be important for increasing social justice and solidarity at the EU level, and hence we are not opposed. **Perhaps, one can imagine that a Euro-dividend could coexist alongside a modest national UBI, which could amount to the desired higher UBI, set at the poverty-rate level, or even higher.**

8. **We also believe that experimenting with UBI locally might be beneficial**, not only because it would be easier e.g., to get funding and approval, and to study its impacts, but also because it might allow for more social innovation, where an experiment might include other ideas such as local currencies or community-led banks. **A pilot project should thus be a priority, to be considered by the Portuguese Parliament, funded either through EU innovation funds, the National Budget or both.**

4. Conclusion and further research

We believe this report highlights the challenges but also possibilities for funding a UBI. While this is an ambitious policy, whose cost can be significantly high, it is also one whose benefits in poverty alleviation, work emancipation and potential for impacts on health and education are great. In a way, its cost might small when compared to the benefits it might generate.

While we believe the discussion on UBI is first and foremost a moral one, we also acknowledge the need to understand how it could be introduced in a given context, and which funding sources could be mobilized to pay for it. In this report we aimed to highlight which decisions are involved when estimating the cost of a UBI and offer a screenshot of existing financing models in the world, but also for the Portuguese case.

We close by claiming that more research is needed if we wish to understand the cost and affordability of a UBI in Portugal. Such a study should look at the net cost of a UBI, by looking in detail to its interaction with the tax-benefit system, in a similar vein to what Widerquist and Arndt have done for the UK¹⁰⁶. Only after such an estimate is conducted, can we start to discuss what funding sources are available, and look at possible scenarios for either a gradual or a full-fledge UBI implementation.

Finally, we also believe more research is needed to not only understand the funding sources and the administrative costs of implementing a UBI, but also and perhaps more importantly, to know more about the second-order effects that a UBI can have in a given context. These include impacts on education and health, impacts on the incentives to take on work, or to engage in other activities and potentially impacts on consumption, namely on sustainable consumption. These results are better attained through experimentation, and hence we argue that we should look to try to implement a UBI experiment in Portugal. Doing so would not only provide rich data for further studies on the cost of a UBI but would also create a nation-wide discussion on whether such a policy should be implemented, furthering the debate around a radical but promising proposal for the near future.

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Foot notes/Quotations

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