



Facultad de Ciencias Económicas y Empresariales

TRABAJO FIN DE GRADO EN ECONOMÍA

Cost and benefits of the Universal Basic Income implementation in Navarra

Eduardo Sainz Goñi

DIRECTOR

Pedro Pascual Arzoz

CODIRECTORA

Idoya Zabaleta Arregui

Pamplona-Iruña

12 de junio de 2015

Abstract

The Basic Income has been defined as a relatively small income that the public Administration unconditionally provides to all its members as a citizenship right. Its principal objective consists on guaranteeing the entire population with an income enough to satisfy living basic needs, but it could have other positive effects such as a more equally income redistribution or tax fraud fighting, as well as some drawbacks, like the labor supply disincentives. In this essay we present the argument in favor and against this policy and ultimately define how it could be financed according to the actual tax and social benefits' system in Navarra. The research also approaches the main economic implications of the proposal, both in terms of static income redistribution and discusses other relevant dynamic uncertainties.

Key words: Universal Basic Income, Social Benefits, Income Tax Reform in Navarra, Effective Average Tax Rate, Poverty Trap.

JEL classification: I3, H53.

| Table of shorthands | |
|---------------------|---|
| MIB | Minimum Income Benefit |
| RIS | Renta de Inclusión Social |
| RAI | Renta Activa de Inserción |
| RBU | Universal Basic Income |
| ECV | Encuesta de Condiciones de Vida |
| CC.AA | Comunidades Autónomas |
| INE | Instituto Nacional de Estadística |
| IPREM | Indicador Público de Renta de Efectos Múltiples |
| SMI | Salario Mínimo Interprofesional |
| EATR | Effective Average Tax Rate |
| SEPE | Servicio Público de Empleo Estatal |
| SEEPROS | Sistema Europeo de Estadísticas Integradas de Protección Social |
| EPA | Encuesta de Población Activa |
| RGI | Renta de Garantía de Ingresos |
| INR | Negative Income Subsidy |
| CL | Payable Tax |
| BL | Taxable Income |

Table of contents:

| | |
|--|-----------|
| 1. INTRODUCTION..... | 5 |
| 1.1. Public administration transfer limits | 7 |
| 1.2. Navarra and the situation of its principal MIB: the RIS..... | 8 |
| 1.3. The effectiveness of the social expenditure in Navarra | 9 |
| | |
| 2. CHANGING PROPOSALS: THE UNIVERSAL BASIC INCOME AND ITS ALTERNATIVES..... | 12 |
| 2.1. Critics and disadvantages of the RBU: The labor supply disincentive..... | 14 |
| 2.2. Alternative policies to the RBU: the Negative Income Tax (INR)..... | 15 |
| | |
| 3. THE RBU CONSIDERATIONS AND COST SAVINGS: FIRST STEPS OF FINANCING | 17 |
| 3.1. The youth population and the RBU | 17 |
| 3.2. Previous public benefits after the RBU | 18 |
| 3.3. Foreigners and the RBU..... | 18 |
| 3.4. Prisoners and the RBU | 19 |
| | |
| 4. THE RBU COST OF FINANCING | 19 |
| 4.1. Sources of financing | 21 |
| 4.2. Final RBU financing: the Income Tax reform..... | 26 |
| | |
| 5. ESTIMATING THE EFFECTS OF THE RBU IMPLEMENTATION..... | 31 |
| 5.1. Further considerations of the results | 33 |
| | |
| 6. CONCLUSIONS | 35 |
| | |
| 7. REFERENCES | 37 |

1. INTRODUCTION

The deep economic recession, a high-rise unemployment rate and the budget cutting policies implemented in our country have led to a raising poverty and inequality level, as well as the number of people consider to be “vulnerable”. There is also an increasing consensus about the emergency to revert the situation of those individuals that have suffered the most the social precariousness and unequal opportunities for inclusion, in every Autonomous Community (CC.AA).

According to official data, from the first semester of 2008 to the first semester of 2015 –a period that could be considered as heavily beaten by the crisis- the number of employed people in Navarra has diminished from 316.128 to less than 260 thousand. The employment rate, (that we consider to be more reliable than the unemployment rate) has established below the fifty percent of employment for the first time since the EPA methodology first began.

Furthermore, 2014 “Survey of Living Conditions” (ECV) of Navarra, collects some results that probe the lasting social emergency in our region: the relative poverty rate (measured as a 60% of the income per consumption unit median¹) has reached a 22’3% in absolute values. Regarding ages, the highest poverty rate corresponds to the minors below 16 years old whilst they are women who suffer relative poverty the most compared to men.

The Gini coefficient measures how far is the real income distribution compared to a perfectly equal distribution. Regarding inequality, the Lorenz curve shows the accumulated percentages of income received compared to the total percentage of recipients, from the poorest to the wealthiest households. Gini index measures the surface between the Lorenz curve and the hypothetical absolute equity line, expressed as a percentage of the total surface under this line. So, a 0 Gini index represents a perfectly equal distribution, whilst a 100 index shows complete inequality. According to ECV (2014), Gini coefficient in Navarra was 30’42 points, slightly below the Spanish absolute level (35 points) but still higher than the UE-27 average.

¹ The median is the value that appears when ordering the number of individuals from the lowest to the highest income and it shows half of them over that value and under it. Therefore its value depends on how total income is distributed. In Navarra the median income stands for 10.201 € (ECV, 2014)

Once we have been witnesses of the current level of inequality and poverty risk, we need to try to develop new policies that would ensure the dignified living of the whole population. In this context the Universal Basic Income (RBU) that we will later on define with details, plays a significant role for fighting poverty and inequality. According to recent research in this matter, Arcarons et al. (2014), defend the pertinence of what they call a “citizenship’s Basic Income”, in other words, they propose the implementation of a public income, whether universal or guaranteed, for every citizen, no matter its level of income nor social position. Even more, these authors estimate this policy to have viability from an economic perspective (without distorting too much the current income structure). Beyond anything else, the RBU can be understood as a tool for social redistribution.

Although this policy seems to have a current context, there are many authors who have debated for years about this issue. In his book “Public Economics in Action” (1995), A.B, Atkinson wrote: *“In essence, the scheme considered here consists of the payment of a basic income to everyone in the population (with possibly differing amounts according to age). This Basic Income would, in the pure form replace all social security benefits”.*

In this essay we will translate this definition of unconditioned citizenship’s basic income into the acronym RBU, but keeping in mind that the term ‘Universal’ has some constraints when dealing with certain groups of population. Also, the matter of pertinence in its purest significance will not be deeply discussed. We will try to focus only in the pros and cons of the policy as well as making a simulation of the effect of its implementation (together with a tax reform) in Navarra –given that there does not exist any research for this specific region-.

Along the first paragraph, we briefly describe the effectiveness of the social expenditure in Navarra and its constraints. In paragraph 2, we define some proposals like the RBU and other well known alternatives, as well as laying the foundation stone to construct the Universal Basic Income implementation. Then, in the third paragraph we analyze the special characteristics of this policy, according to its financing and conditionality. Finally, the last paragraphs will try to accomplish the difficult challenge of introducing a tax reform in order to finance the extra cost of the RBU, and ultimately shows the major changes results that it would imply in our society.

1.1. Public administration transfer limits

Despite the severe economic situation, the described inequality has not been accompanied by a decisive intervention from the Public Administrations, in the sense of orienting policies to guarantee a minimum and sufficient income to fulfill basic living conditions. It is true that there have been some poverty defuse in the oldest ranges of the population, thanks to a well defined pension politic and completed with the introduction of dependent's protection measures (LISMI benefits). However, many other policies have resulted to be insufficient. This is the case of the transfers to recipients of non-contributory benefits, unemployment benefits or basic insertion incomes.

In contrast with other countries, it's clearly observed that there is a systematic absence in supplying with an efficient minimum income. The combination of the access restrictions and low benefit's monetary amounts has made these Income Guarantees to focus only in very narrow collectives, despite the widespread severe context that we described.

According to CIPARAIS (Laparra et al., 2015)², there are several significant factors that point out the extreme polarization of our region:

- 6 over 10 workers are currently long-term unemployed; increasing sevenfold from 3.600 people in 2008 to 27.000, nowadays.
- The number of households with one of its members unemployed has moved from 7.9% in 2007 to 26.1% in 2014 which means a 3,3 times multiplying compared to a 2,7 in Spanish average.
- In November 2009 the unemployment protection covered a 78.7% of unemployed workers. In 2014, this percentage stands for a 55.2%.
- During the last year, among total people under relative poverty line (income below 10.201 €), a 37.8% was employed; this demonstrates the weak tool that working labor complies as the well-recognized major tool for fighting poverty.
- The research also points out a severe economic deterioration of the lowest income levels, whose earnings reduced more than a twenty percent during this severity period of crisis (2007-2014).

²“Segundo Informe sobre Desigualdad, Pobreza y Exdusión Social en Navarra” (2015)

At State level, the EMIN (Malgesini, 2014)³ concludes that an 80% of the interviewed population who receives Minimum Income Benefits considers that these transfers do not allow having a dignified level of live. Furthermore, they confirm that not everyone who needs this basic income has an access to it. One of the mentioned barriers is that the process requires a large amount of documentation that cannot be managed by the Administration in a reasonable period of time; in some cases the mentioned delay lasts for more than one year.

Since they were created, the constant increase in Minimum Income Benefits' (MIBs) financial resources is hiding a loss on its extension and intensity related to the number of families in needy conditions and the mean amount received by them. The excessive bureaucracy surrounding them implies a risk of access to obtain these benefits, rejecting many potential recipients out of the MIBs system and creating a gap in between this needy people and the Basic Social Service. As a matter of fact, according to the EMIN there is a 67% of homeless potential recipient that are not covered by the MIBs.

Regarding constraints, the next barrier for the MIBs access pointed out by the interviewed recipients, has to be with the excessive prerequisites and procedures of the system. Ultimately, according to interviewers, the main reasons attributed to the uncovering of the MIBs are; "lack of rights consciousness" (67% of respondents), "unknown procedure mechanisms" (61%) and "household exclusion instability" (61%).

1.2. Navarra and the situation of its principal MIB: the RIS

The RIS benefit has been transformed over many years to end up positioned as the main MIB in our region. The RIS has the official objective of covering the essential needs of the familiar unit in social exclusion situations and to promote their introduction into the social life consisting on a maximum income of an 85% of SMI (Minimum Wage). Moreover, the perceiver would have to comply with the following prerequisites:

- To be in an age between 25 and 65 years old.
- Legally reside in the Spanish territory.
- To accredit an effective and continued residence in Navarra during the two years before the benefit request.

³ "European Report on Minimum Income Systems" (2014)

- Having a lower than the RIS benefit income during the last semester.
- To previously apply for any other Public benefit and Social Insurance pension that could correspond to him.

Given these compulsory conditions in order to be a RIS recipient, we cannot forget the long period of administrative persecution started after being elected and before receiving a MIB that ultimately lasts only for six months and renewable if the perceiver is considered to maintain it.

However, there must be some considerations to take into account for understanding the functioning of this public transfer.

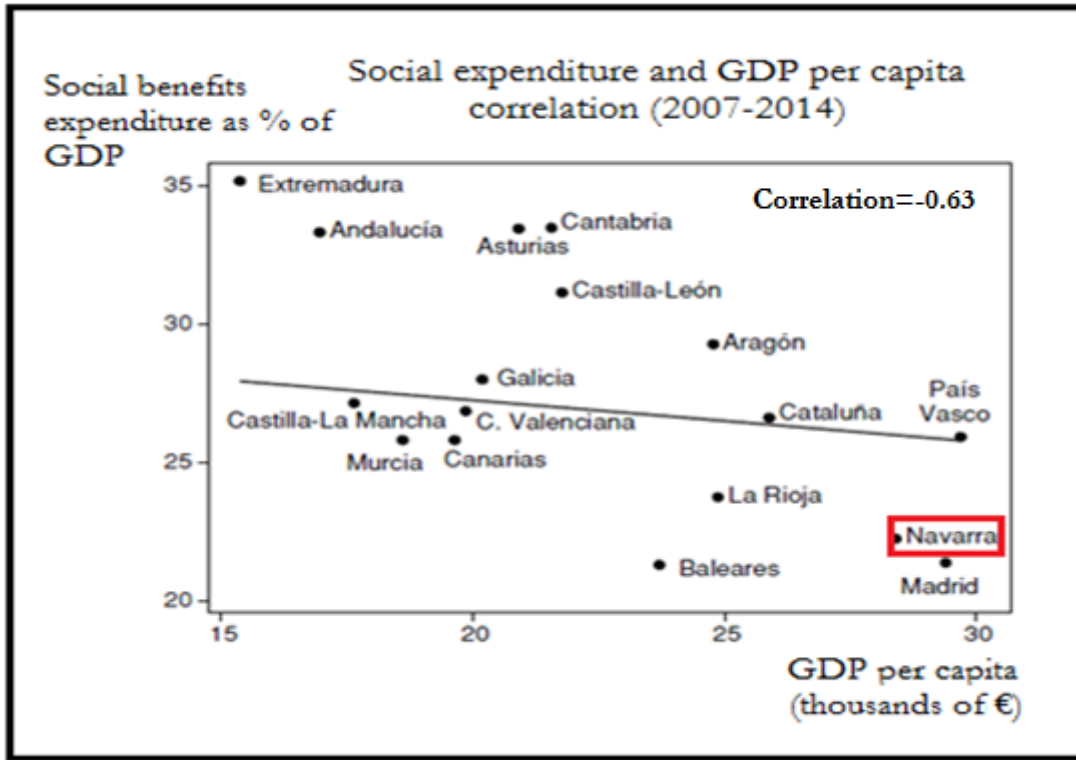
Firstly, the conditionality of the RIS, places the recipient in a poverty trap of labor disincentive; any other job whose compensation was slightly above the RIS benefit would be directly rejected as a matter of rational economic calculation. In that sense, some considerations, as the one made in the income guarantee benefit (RGI) administered in the Basque Country, allows the recipient to extend the benefit by progressively reducing it when finding a job and thus, does not eliminate the whole benefit at once. The RGI follows an implicit idea of non-disincentive job acceptance whereas Navarra's RIS focuses on chasing the recipient to avoid any fraud.

1.3. The effectiveness of the social expenditure in Navarra

Garcia and Raymond (2014)⁴ analyze the relationship between the economic cycles and inequality in Spanish regions comparing different indexes before and after public redistribution mechanisms. In particular, differences are very significant when using the Gini index. Navarra is a good example of how the income per capita is not always correlated with high income redistribution and, in fact, our Administration is one of the least income redistributors through public benefits. Although this observation requires a closer approach analysis, it certainly gives a clear advice to promote powerful income redistribution policies.

⁴ "Distribución de la renta y ciclo económico: España 2003-2011" (2014)

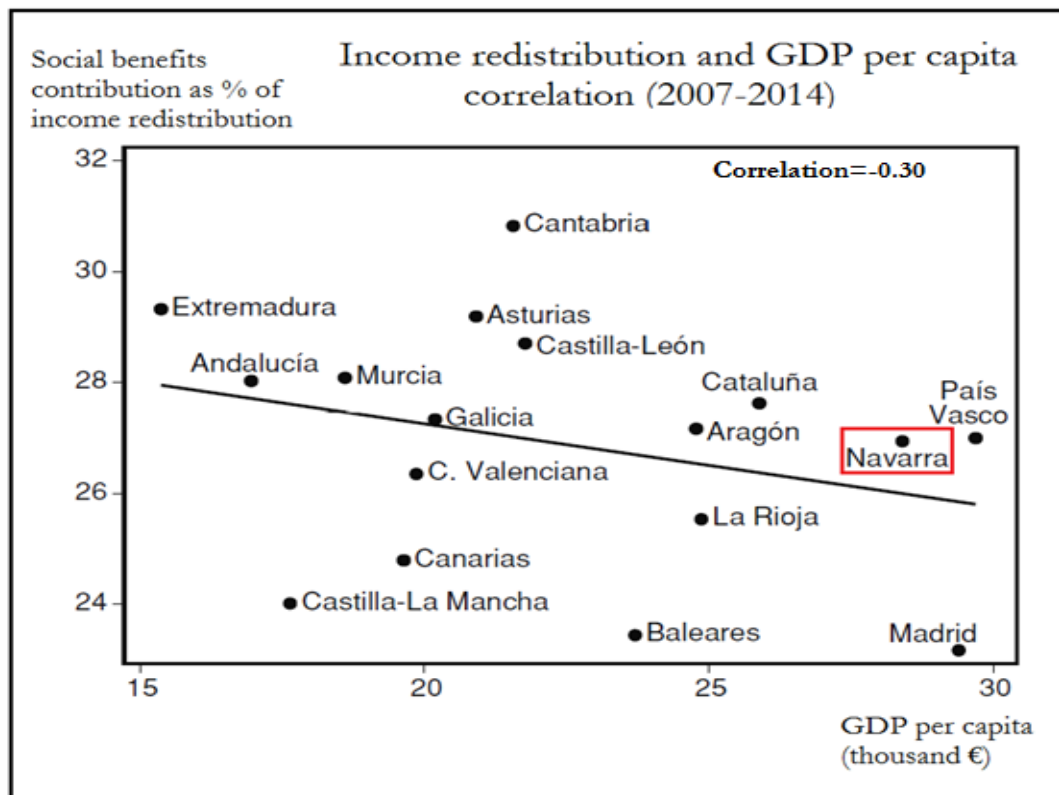
Graph 1. Social expenditure and GDP per capita correlation in Spanish regions



Source: SEEPROS and EUROSTAT (Garcia and Raymond, 2014)

Graph 1 shows the correlation between the public redistribution benefits and welfare and the GDP per capita in Spanish regions. Contrary to expectations, there is no clear evidence that GDP per capita and public benefit expenditure to be correlated and, what is more, there even seems to be an inverse relationship between both variables; being the lower per capita income regions the ones that spend the more in social benefits.

Graph 2. Income redistribution and GDP per capita correlation in Spanish regions



Source: SEEPROS and EUROSTAT (Garcia and Raymond, 2014)

Graph 2 seems more intuitive to understand the weak correlation there exists in most of Spanish regions and especially in Navarra. The research’s methodology in order to measure social benefits contribution and their redistribution consists on analyzing panels of tax contributors and social benefits recipients in an ex-ante and ex-post individual’s income restructuring. Regarding the graph, there is again a counter intuitive fact; although GDP per capita in Navarra is one of the highest, it is also one of the regions that redistributes the less compared to the others.

Despite the emergency situation suffered during the last years of severity, there does not seem to be a real compromise for reversing it. In fact, recent legislative changes in most basic MIBs, such as the ones accomplished in 2014 for restraining the RIS accessibility, go in the way to maintain or even discourage any further attempt for income redistribution. Once we know with details the current need to foster social expenditure and income redistribution, it is now time to supply with new effective enhancing policies.

2. CHANGING PROPOSALS: THE UNIVERSAL BASIC INCOME AND ITS ALTERNATIVES

Monetary social transfers are divided in two main groups; those that are related with the progressive quotation of the individual during his job life (these are called contributory pensions) and the rest of them are non-quoted benefits for recipients that have not accumulated enough quotes to perceive a Social Security pension or have already spent them. This second case, the group of non-contributory pensions, is defined by different authors (Arriba y Ayala, 2013)⁵ as a tangle of economic devices composed by some the following benefits: the Law of Social Integration of the Disabled people (LISMI), the unemployment assistance benefit, social inclusion income, etc. This income maintenance system shows a fragmented and uncoordinated distribution that ultimately creates an absence of homogeneous criteria for the recipients. Given these limitations, it is not surprising that the poverty rate in Navarra has been growing up over the European mean during the last years (ECV, 2014).

The complexity and inefficient Social Security system explains why many potential recipients are considered to be outside of the social net's rights, whilst there seem to be many other "bounty hunters" that take advantage of administrative gaps in order to accumulate unnecessary aids; the so called "Mateo Effect".

Public administrative costs are too high with respect to the total budget managed in the social protection system, not only for the institutions but also for the benefit's recipient who is submitted in heavy checking controls, creating an important vulnerability delay from the moment when the aid is claimed to the final acceptance and the ultimate payment.

The fact that most of these benefits are conditioned to the unemployment, or cannot be compatible with being employed, is a major disincentive for obtaining a formal job and advocates the worker to move from the real and fiscally organized labor to the "black economy" and the tax fraud. This effect is known as the "poverty trap"; the recipient knows that he will lose his benefit if he finds a job so there may be case that the worker would even reduce his usual spending in order to reach the administration prerequisite.

Another issue regarding most of the actual benefits entails the recognition by the recipient to be in a critical situation of marginalization and stigmatization inside the rest of the

⁵"El sistema de garantía de ingresos: tendencias y factores de cambio" (2013)

society, originating severe psychological damages. Due to this fear, some people may avoid to request for the benefit and automatically exclude themselves from any aid.

The first proposal to solve these inefficiencies may be to implement a Universal Basic Income, hereinafter referred as RBU (from its Spanish acronym, *Renta Básica Universal*). The RBU is referred to be one of the most effective policies against poverty and its consequences, as many authors defend and argue in different essays (Arcarons and Raventos, 2014)⁶. It is known to be an unconditioned and universal monetary public transfer guaranteed for any citizen without any counterpart nor compromise, and independent of other labor or familiar sources and circumstances.

Our RBU proposal would substitute or integrate any other previous public benefit, wherever lower or equal to the proposed RBU, including tax benefits from personal income-tax statements and explicit monetary transfers, so it doesn't sum with the rest of existing benefits. This universal basic income would not be subject to any upcoming income-tax, whilst the rest of future income revenues will be taxed. No need to say that the RBU should not affect other implicit Welfare State benefits, such as public health and education. The RBU itself would only affect the rest of public benefits in a way to eliminate them and not to modify the existing universal rights.

Compared to the rest of conditioned benefits drawbacks that have been already described, the RBU has important advantages:

- The administrative costs related to the public resources used for managing and inspecting the correct transfer process would be drastically reduced, entailing savings both for public institutions and for recipients.
- Any kind of stigmatization described for conditioned benefits' recipients would automatically disappear as the universality of this basic income makes the whole citizenship to be a recipient.
- The RBU is an automatic and direct benefit, so any previous improper delay on receptions disappears; there is anticipation on avoiding the risk of exclusion rather than an afterwards-solving.
- There is no incompatibility with additional income, implying the disappearance of the "poverty trap" and any other type of tax fraud as well as promoting following acceptances for job offers.

⁶ "Un modelo de financiación de la Renta Básica técnicamente factible y políticamente no inerte" (2014)

- Ultimately, the RBU implies a mattress that softens the pro cyclical economic drawbacks, diminishing its effects and helping to maintain a basic consumption level when a recessive spiral arises.

2.1. Critics and disadvantages of the RBU: The labor supply disincentive

The first usual critics refer to the possible disincentive effect on the employment and the labor research effort. This essay will not focus on every detail regarding public benefits disincentive on labor supply, however there is a large literature concerning two different perspectives; the ones who understand social benefits as the origin of labor supply disincentive, and the opposite position.

The first argument in favor of the non-disincentive defenders is precisely that the RBU eliminates, beyond anything, the incentives to work in the black economy. In fact, recipients know that possible new income does not make them lose their right for the RBU, so there is a direct persuasion out of the informal labor; any worker earning a benefit that was close to its previous constraint (no incentive to work any further than that line) would automatically see this restriction to disappear.

There is not even a unique contrasting of any actual public benefit that concludes that the disincentive effect occurs straightforward. Probably the most significant experiment analyzing this effect is the one carried out by Marx and Peeters (2008)⁷, in which they observe the behavior of a group of Belgium inhabitants benefiting from a lively and unconditioned one thousand euro basic income. According to the research, only a small proportion of the sample changed its habitudes and its working behavior after the prize was given. Those that changed their conditions admitted to have changed them only reducing a bit their working attitude but not leaving their job forever. Most of the interviewers recognized that the income proportioned them an extra security as well as widening their options to plan the future situation.

The next critic comes from the argument that and unconditioned basic income would create a “pull factor”; foreign (both from different Spanish regions and outside countries) people seeking an unconditioned income, would tend to immigrate to Navarra. In that

⁷ “An Unconditional Basic Income and Labor Supply Results from a Survey of Lottery Winners” (2008)

sense, the RBU should consequently establish a minimum residence for recipients before getting the right⁸. However, it must be also said that the “pull factor” can be somehow contrasted if we analyze the following fact; in the Basque Country, the absolute annual increase on immigration fell down right after the introduction of two very generous public benefits, the Income Guaranteed Benefit (RGI) and the Auxiliary Housing Benefit (PCV) and it continues to be the region with the lowest rate of foreign inhabitants (INE, 2008-2014).

Of course this attraction effect would have to be taken into account, because if it occurred there would be a serious negative result on the policy viability. So it will be necessary to define clearly when the benefit right arises. In that sense, the RBU transfer must be low enough to guarantee a minimum migration control and working disincentive, but also relatively high to comply with the objective of being a basic subsistence guarantee.

2.2. Alternative policies to the RBU: the Negative Income Subsidy (INR)

As defined by the economist Martínez Alvarez (2002)⁹, “the INR imposes the State the obligation to subsidize any citizen that is under a specific income level”.

The idea behind this policy is similar to the RBU’s; to provide the whole population with a guaranteed basic income. In this case, the INR implies to subsidize with a 60% the difference between the individuals’ taxable income (BL) and its exempt minimum¹⁰.

Bringing the proposal into a straightforward summary and considering the term of family unit (parents and children summed together) as the final recipient, we can define the following formula for our INR proposal:

$$S = \frac{(1+0.2n)*0.6*(12.000-Y)}{12} \quad [1]$$

⁸ This first constraint eliminates the Universality of the RBU to replace it with a conditioned permanence or residence. However, we will maintain this term as a matter of consolidating the ultimate essence of the proposal.

⁹ “Impuesto Negativo sobre la Renta: Una solución novedosa y eficiente a la pobreza” (2002)

¹⁰ We established a 60% subsidy and the 12.000€ exempt minimum as mere references (Actually, the minimum exempt on income in Navarra is 11.250 euro).

Where “S” is the final monthly after-taxed subsidy received by the unit family, “n” represents the number of children covered by the family unit¹¹ and “Y” stands for the taxable income (BL) declared in the preceding year. Table 1 shows different examples of how much each family unit will benefit (in terms of euro) from the INR subsidy, depending on its final taxable income.

Table 1. INR implementation

| Family unit composition | Taxable liquid income (Y) | Annual subsidy | Monthly subsidy |
|---------------------------------|---------------------------|----------------|-----------------|
| Childless low income | 9.000,00 | 1.800,00 | 150,00 |
| Low income with 2 children | 9.000,00 | 2.520,00 | 210,00 |
| Childless very low income | 4.000,00 | 4.800,00 | 400,00 |
| Very low income with 2 children | 4.000,00 | 6.720,00 | 560,00 |
| Childless and no income | 0,00 | 7.200,00 | 600,00 |
| No income and 2 children | 0,00 | 10.080,00 | 840,00 |

Source: Own elaboration

If we consider a total 15.000 recipients in each of the three income levels described in Table 1, the final cost of this policy could be computed the following way:

- 15.000 low income individuals: $15.000 \times 1.800 = 27$ million €.
- 15.000 very low income individuals: $15.000 \times 4.800 = 72$ million €.
- 15.000 no-income people: $15.000 \times 7.200 = 108$ million €.
- 5.000 dependent children in each income bracket:
 $0.2 \times (5.000) \times (1.800 + 4.800 + 7.200) / 3 = 4.6$ million €.

Final cost would amount a total 211.6 million € from which the administration would have to determine whether to maintain previous social benefits to these recipients or not.

Although the INR would seem to be much easier to apply and financed compared to the RBU, the major problem of introducing it would come from the fact that it doesn't fight against “black economy”. Any low income recipient would rather choose to work in an informal job without declaring its income in order to receive a larger State subsidy. There would be also a high benefit for those that do not have any labor or saving income but, instead, are owners of a substantial patrimony or heritage from which to benefit and enjoy

¹¹ Giving a 20% weight to children is an index used by the OECD as an equivalent scale to estimate family income level.

good living conditions. Thus, an apparently redistributing measure can ultimately turn into a subsidy transferred to the least needing individuals, reinforcing again the Mateo Effect.

Therefore, the mechanisms to administer this shortcoming can only come from the demand and supervision of the declared income by the public institutions implying an ultimate rising in administrative costs.

3. THE RBU CONSIDERATIONS AND COST SAVINGS: FIRST STEPS OF FINANCING

The major problem arising when dealing with the RBU has to be its cost of financing. It seems intuitive that providing the whole population with an unconditioned basic income would be economically untenable, but, let us try to firstly define the concrete characteristics of the RBU and to estimate the cost of this policy.

In this paragraph we are going to describe the numerous peculiarities of the RBU financing. The first clashes arise when the critics consider the cost to be equal to providing every single inhabitant with the same RBU amount. This is a common mistake because although the whole citizenship is considered to be potentially recipient there would be certain groups with different weights.

3.1. The youth population and the RBU

The RBU pretends to guarantee a basic and elemental income to the whole citizenship and of course young people are not always exempted to basic needs. The fact that these minors are commonly integrated in family units under their parent's custody implies taking into account obvious "economies of scale" when sharing common expenses. Therefore, as described in the INR paragraph, we will consider their benefit to be a 20% of the normal RBU (OECD scale). In that sense, increasing the coefficient to a 30% (Sanzo y Pinilla,

2004)¹² of the basic income would promote the appearance of new single-parent families, which is considered to be one of the most harmed groups during periods of economic severity.

There should also be a criterion in order to distinguish between minors and adults. According to the income tax deductions, the maximum age to benefit from descendent tax reliefs is 25 years old. However, in this proposal we will fix as a requisite to receive the entire basic income to be older than 18 years old and emancipated; the principles of the RBU imply to cover the basic needs of the whole society but, in the case of the people that already live under a parental charge, they do not necessarily change their living conditions when becoming adults. Offering a basic income to an adult that lives in a family unit housing coverage would imply a perverse non emancipating incentive.

3.2. Previous public benefits after the RBU

The RBU implies to substitute any previous benefit and substitute them with the proposed basic income whenever they are lower than the new transfer. In cases where current benefits are higher (contributory pensions), these pensions will be maintained as a complement of the part that exceeds the RBU. For this group of population the RBU has no particular effect, but they will receive it as a way to guarantee universality.

This last statement implies that, as a general rule, the non-contributory benefits are will be considered to be under the proposed basic income and thus, all of these social benefits would be ultimately swallowed by the RBU¹³.

3.3. Foreigners and the RBU

As said before, we cannot obviate the risk of a “pull factor” if foreigners are attracted by the security net that the RBU offers. Nonetheless, it does not seem acceptable to exclude all foreigners (whether national or outsiders) out of the RBU right. As in many other

¹² “La renta básica: por una reforma del sistema fiscal y de protección social”. (Sanzo y Pinilla, 2004)

¹³ There may be the case of some non contributory benefits to be higher than the RBU, for instance the RIS can sometimes reach a 100% of the SMI in extreme cases, however the mean of these social benefits never stands above the 426€ ceiling.

guaranteed income policies there should be a prerequisite of minimum residency in our territory, excluding informal and temporal-stance foreigners (both national and outsiders) out of the current RBU right¹⁴. The requisite of minimum residency together with a low enough quantity would avoid massive migratory movement into Navarra.

3.4. Prisoners and the RBU

The population in intern prison residency would be excluded from receiving the RBU, as this group already receives a subsistence guarantee from the public State. During their reclusion period they would be outside of the potential RBU recipients. Introducing this measure may produce an indirect reduction on the incidence of convictions as there is a double penalty in being imprisoned; stop receiving your RBU and condemn your family to reduce its disposable income.

4. THE RBU COST OF FINANCING

As said before, when computing the final cost of the RBU, it is not the entire population who receives the basic income but, instead, we have to find out the equivalent number of recipients by applying different reduction coefficients to different groups of the population.

In this sense, we will begin with dividing the population in eight different segments (adults, minors, non-emancipated adults, contributory benefits preceptors, unemployment contributory benefit, recluses, non permanent foreign residents and, finally those residents of Navarra that are currently living abroad) and collect the number of people in each of them.¹⁵

The weighting coefficient depends also on the group of researched population; adults are weighted with a 100% (entire RBU) and minors are weighted with a 0.2 (20% of the RBU).

¹⁴ Excluding the temporal workers guarantees a minimum period of regular taxation and formal working.

¹⁵ The data is obtained from different sources of information; Instituto Nacional de Estadística (INE), Instituto de Estadística Navarro (IEN), Consejo de la Juventud, Instituto de Mayores y Servicios Sociales (IMSERSO), Ministerio de Empleo y Seguridad Social, Departamento de Inmigración, Padrón de Españoles Residentes en el Extranjero (PERE), etc

However, in order to calculate the cost we also need to consider the exempted groups by giving them a coefficient of reduction so as to discount these subgroups out of the wide minor-adult groups. In that sense, non-emancipated adults will be weighted with a -0.8 coefficient (80% saving on RBU cost) and contributory benefit's recipients, unemployment benefit recipients, recluses, non permanent foreign residents and Navarre resident population abroad account with a -1 weight (full savings on their potential basic income perception).

Table 2. Equivalent population in RBU terms

| Equivalent population in RBU terms | Population | Coefficient | Adjusted population |
|---|------------------------|-------------|---------------------|
| Total | 644.477 | | |
| Adults | 519.687 | 1 | 519.687,00 |
| Minors | 124.790 | 0,2 | 24.958,00 |
| Non emancipated adults | 73.750 | -0,8 | -59.000,00 |
| Contributory benefits recipients | 125.390 | -1 | -125.390,00 |
| Unemployment benefit recipients | 19.463 | -1 | -19.463,00 |
| Recluses | 313 | -1 | -313 |
| Non permanent foreign residents | 24.274 | -1 | -24.274,00 |
| Navarre resident population abroad | 25.862 | -1 | -25.862,00 |
| | | | |
| Equivalent population | 45,05% of total | | 290.343,00 |

Source: SEEPROS, INE, Instituto Estadístico de Navarra, CJE and IMSERSO. Own elaboration

The final equivalent population stands for 290.343 people which are equal to a 45.05% of the total population in Navarra. This will be the amount we would have to multiply by the annual RBU amount in order to compute the total cost of financing the policy for Navarra's Budget.

The initial saving objective is to compensate the new RBU with as many of the current benefits as possible, in order to find a sustainable approach. However, if the final RBU benefit results to be insignificant, we would have to conclude that implementing the policy is useless; there is no sense in applying a basic income that is far away from subsistence living conditions. Therefore, it will be necessary to find out an amount that equilibrates the viability of financing with an accepted minimum transfer. As a matter of fact we have

already analyzed the possible fears when dealing with a too high unconditioned benefit and the risk from the “pull factor” and the labor supply disincentive too.

In Table 3 we have gathered some reference amounts regarding actual benefits and other official indicators such as the minimum wage, the IPREM, the income-tax personal minimum or the dependent spouse minimum, in order to find out an optimal ceiling for the RBU.

Table 3. Reference amounts of social benefits in Navarra

| Reference amounts of social benefits in Navarra | Annual | Monthly |
|---|-------------------|-----------------|
| Minimum wage | 9.080,40 € | 756,70 € |
| IPREM | 6.390,13 € | 532,51 € |
| Individual Income tax minimum | 3.700,00 € | 308,33 € |
| Non-contributory unemployment benefit | 5.112,00 € | 426,00 € |
| RIS average | 769,68 € | 64,14 € |
| Maximum dependent spouse benefit | 4.735,20 € | 394,60 € |
| Maximum non-contributory pension | 4.402,80 € | 366,90 € |
| Basic Income (Raventós y Arcarons, 2014) | 7.740,00 € | 645,00 € |
| Proposed RBU (individual) | 5.112,00 € | 426,00 € |
| Proposed RBU (two adults) | 10.224,00 € | 852,00 € |
| Proposed RBU (2 adults and 2 children) | 12.268,80 € | 1.022,40 € |

Source: SEEPROS, INE, Instituto Estadístico de Navarra, CJE and IMSERSO. Own elaboration

We have finally assumed the RBU to be equal to the standard non-contributory unemployment benefit or, what is to say, equal to 426 € per month (an 80% of the IPREM). One of the first criterion to define this amount as the optimal ceiling that every individual would receive is because it is an intermediate amount in between the lowest social benefit (RIS) and the maximum reference (645€). We have also included additional reference quantities with different household compositions, where the standard two adults and two minors’ family would have a monthly 1.022’4 euro benefit and a 12.268 annual transfer payment.

Next step would be to multiply the equivalent population in Table 2 with the RBU amount in Table 3. Considering the described groups and their coefficients, the direct estimation of the total absolute cost would come from this formula:

$$CRBU = 426 * (A + 0.2M - 0.8NEA - CBR - UBR - R - NPFR - NRPA) \quad [2]$$

Given that the population in brackets sums up to 290.343 individuals, the total amount that comes out of the formula gives an absolute initial cost of financing of almost one thousand five hundred million euro. This does not mean, of course, that the final cost for the General Budget would be this amount. Thereupon, we need to find out where would be the savings coming from.

4.1. Sources of financing

The RBU introduction implies to integrate any other existing public social benefit. It is this simplification method what makes this basic income so useful in order to guarantee that no needy individual will get entangled in the bureaucracy that accompanies this entire Social Service network. Simplifying the public benefits' system has been a desire for many researchers in this field¹⁶.

Consistently, the first source of automatic financing is represented by all those social benefits whose quantities stand under the proposed basic income and that would disappear after implementing the RBU. Together with these benefit's savings, we have also estimated a reduction in some other expenditure items that are not collected in the Government's General Budget but are hand in hand with our proposal:

- Reduction in administrative costs as a consequence of integrating every social benefit in a unique RBU.
- Upcoming earnings from the resurge "black economy" back to the audited economy. Although we cannot estimate the entire income to be recovered, this item should be also considered as a way of financing.
- Income Tax deductions and reductions would be fully removed as they would no longer comply with their objective of guaranteeing an unconditioned exempted minimum¹⁷.

Once again there must be said that these last amounts will be only calculated with estimations and are gathered in order to be managed in an ultimate reform simulation. In case this policy would ever see the light, a very detailed analysis must be carried out before any later implementation.

¹⁶ "Bases para la activación del sistema de garantía de ingresos en España". (2014)

¹⁷ Data concerning this item is obtained from the "Departamento de Hacienda de Navarra" (2014).

Table 4. Total and real cost of financing the RBU

| Public social benefits (Navarra) | Subgroups | Beneficiaries | Monthly mean | Annual mean | Euros per year |
|--------------------------------------|-----------------------------------|---------------|--------------|-----------------------|-----------------|
| Contributory benefits | Contributory pensions | 125390 | 974 € | 11.682 € | 1.464.866.167 € |
| Non contributory benefits | Retirement (Social Security) | 1689 | 353 € | 4.237 € | 7.156.428 € |
| | Disability (Social Security) | 942 | 403 € | 4.834 € | 4.553.251 € |
| | LISMI benefits | 126 | 160 € | 1.923 € | 242.335 € |
| Unemployment benefits | Contributory | 19463 | 860 € | 10.318 € | 200.811.449 € |
| | Non contributory (80%*IPREM) | 11192 | 426 € | 5.112 € | 57.213.504 € |
| | Active Insertion Income (Timely) | 1511 | 688 € | 8.254 € | 12.471.915 € |
| In-charged children | Causant | 12055 | | | 141.125.956 € |
| | Beneficiary | 7495 | | | 133.779.454 € |
| Maternal aid (Timely) | Maternal and paternal aid | 5028 | | | 32.435.300 € |
| Regional benefits | RIS | 10227 | 306 € | 3.667 € | 37.500.000 € |
| | Familiar subsistence aid | | | | 36.216.108 € |
| Local benefits | Basic social services | | | | 12.500.000 € |
| Dependency care aid | | | | | 31.890.000 € |
| Income tax deductions and reductions | | | | | 404.727.000 € |
| Administrative cost saving | | | | | 50.000.000 € |
| Income from "black economy" | 50% of an estimated 528,3 million | | | | 264.150.000 € |
| | | | | TOTAL SAVINGS | 2.627.488.868 € |
| | | | | REAL SAVINGS | 1.225.961.252 € |
| | | | | RBU TOTAL COST | 1.484.233.416 € |
| | | | | RBU REAL COST | 258.272.164 € |

Source:

SEEPROS, INE, Instituto Estadístico de Navarra, CJE and IMSERSO. Own elaboration

Table 4 represents a summary of all public social benefits collected in groups and subgroups. Alongside these groups there is a column for the number of beneficiaries of this transfer, a monthly and annual mean of each policy and, finally, the total cost of each benefit for the Public Administration. However, not every single benefit has to be considered as a saving; contributory benefits -both for pensions and unemployment- cannot entail any aid in our financing since the minimum amount for recipients of these transfers is always higher than the proposed RBU.

As said before, it is not only public benefits what matters when computing the cost of financing the RBU. There are also three other items that we consider to reduce the total amount to finance:

- The income tax deductions and reductions: Given that the RBU fulfills basic necessities in every single social group, there would be no need to maintain income tax reductions and deductions. It is important to consider the assumptions that these two tax reliefs have been introduced with the idea of creating a support to finance basic living expenses. Some other reliefs do not even have this priority and only seek to compensate transfers that the taxpayer makes with an intention to facilitate an activity with official public interests. This last case is specially discussed in Navarra, where we have some questionable income tax reliefs such as the reductions based on contributions to political parties or the deductions for investing on primary residence.

The second criterion we consider for eliminating these reliefs comes from the fact that they are clearly regressive. In the case of income reductions it is evident that if we reduce the taxable income before applying any tax rate, the effect could not ever be redistributive and so tax reductions benefit the most to those taxpayers that are charged with the highest nominal tax rates¹⁸.

- Secondly, we have considered an additional saving in the administrative cost of the actual Public Administration system. Maintaining a system of conditioned social benefits requires a high degree of public control in order to determine where the

¹⁸ There may be other arguments defending that reductions are exempted before applying the corresponding tax rate because basic necessities are equal for the whole population, but this reasoning certainly goes against the tax principle of the “Ability to pay” which tells that taxation must go in accordance with the income or wealth of the taxpayer.

right begins or ends. Introducing a RBU and thus eliminating the rest of social benefits below it, would imply a saving on current administrative spending. We have estimated this saving to be equal to fifty million euro, which is a criterion that has been used when analyzing the introduction of the RBU in Guipúzcoa, a region whose Public Administration size has similar characteristics to Navarra's (Arcarons et al, 2014)¹⁹.

- Finally, the third source of saving comes from the income emerged from “black economy” activities. We have already defined the problems of conditioned benefits and their implication in the poverty trap. It is evident to consider this advantage of the RBU compared to the rest of described benefits; if an individual is not constraint to earn an income below the one required by the social benefit, it would have no incentive to hide additional earnings coming from non-taxed activities. The RBU straightly provides a planning security for future revenues and expenses and, thus, the contributor will not feel compelled to tax evasion or frauds.

Considering the total labor black economy of Navarra to be close to 530 million € (Mauleón y Sarda, 2014)²⁰, a good estimation of total earnings coming from this item can be computed as a 50% of the entire non-taxed economy. It would be naïve to expect a hundred percent of the black economy to disappear since not all these activities are related with the poverty trap but also with other issues such as undeclared assets, irregular transfers, intra community VAT frauds, etc.

Given the described cost savings we can determine a total real savings of more than one thousand two hundred million euro with which to finance our proposal. Not to say that there exist too many uncontrolled situations that can modify our previous results and so we should be aware that this is only an estimated approach.

Further considerations of increasing savings and costs can come out from other items. For instance, according to the fiscal multipliers there should be an indirect effect on the total income of a region after higher or lower public spending. Given that the RBU has never

¹⁹ “Una propuesta de financiación de Renta Básica en Gipuzkoa” (2014)

²⁰ “El Plan de Lucha contra el Fraude Fiscal contempla medidas de concienciación ciudadana. Economía Sumergida en Navarra” (2014)

been implemented, it is complicated to assess the effect that it would have in essential variables but it would not be hard to assess how significant earnings coming from taxed consumption would appear if the whole citizenship is provided with a RBU²¹.

However, not every single effect can be considered to be beneficial for the economy. As we said before, there may be a disincentive effect on labor whose implications can be beneficial from workers' point of view but unprofitable for contracting companies. It is evident that the RBU gives the worker a great power of decision against the company; precarious or underpaid work would no longer be necessary to satisfy basic necessities and can be substituted by more rewarding jobs. The direct effect of this freedom for workers can be understood as a direct strike for the firms that seek to maximize profit by minimizing their employee's wages. Although this shouldn't be a problem for society, it can become a detriment in that firm's taxation and ultimately decrease the income from Corporate Taxing.

Giving the workers the power to decide does not only imply a negative effect for the economy, in his stead, it could be understood as a freedom for taking the control of their own labor force. We assume that providing the society with a basic income will produce a disappearing of most precarious jobs that could be substituted with workings that actually produce a welfare society (but cannot be currently developed because of its unproductive characteristics). In this sense, the RBU would not only involve a basic subsistence support for needy groups but also a change in the current productive model where we live in.

4.2. Final RBU financing: the Income Tax reform

First thing to say is that the RBU is not completely sustainable without reforming the actual fiscal system. As we explained in previous Tables, the RBU has an approximate absolute cost of almost one thousand and five hundred million euro, whilst the total real savings from current social benefits, eliminating reductions and deductions, emerging half of the actual black economy, etc. stand for a slightly lower amount (more than one thousand and two hundred million euro). Given the actual imbalance of cost and savings, there could be an RBU amount that made the financing completely sustainable. If we would implement a

²¹ Wagner Law

RBU with a monthly amount of 350 €, problems of funding would be solved and the direct implementation of this proposal would be a fact. However, we said that the benefit transfer must be high enough to guarantee basic sustainability and therefore, we should not forget what was our first proposal; a monthly RBU of 426€.

The extra needy financing would therefore imply a consistent tax reform. Although we default the exact data for this last year (2015), we will use from now on the amounts extracted from 2014 Income Tax Statements (Departamento de Hacienda, 2014). In that sense, Table 5 gathers the number on income tax statements declared in Navarra, the taxable income and the net payable tax divided in different brackets according to their taxable income level.

As we can see, the total number of statements summed up to 332.093 people. Given that the income tax statement is usually integrated by all members of the family units, we can deduct from this estimation that there is a large share of our population that is not contained in the Income Tax system; either by a problem of delay or, what is more likely to be the case, for not reaching enough income to be compelled to declare. Thus, we will only consider the reform to affect to the actual taxpayers.

Regarding the Table it is worth to be shown that a 25% of low income individuals represents only for a 0,5% of the total taxable income, whilst the highest income bracket is integrated by a 4% of the total taxpayers and summed up more than a 20% of the total taxable income.

Table 5. Income Tax distribution in Navarra

| Income brackets (€) | Number of statements | | Taxable income (million €) | | Net payable tax (m€) | |
|---------------------|----------------------|-------------|----------------------------|-------------|----------------------|-------------|
| | | | | | | |
| <3000 | 75.156 | 22,63% | 32,71 € | 0,52% | 0,46 € | 0,04% |
| 3000,01-6000 | 30.491 | 9,18% | 133,51 € | 2,14% | 1,28 € | 0,11% |
| 6000,01-12000 | 49.275 | 14,84% | 442,87 € | 7,09% | 32,04 € | 2,77% |
| 12000,01-18000 | 47.876 | 14,42% | 713,89 € | 11,43% | 88,54 € | 7,65% |
| 18000,01-24000 | 36.525 | 11,00% | 763,24 € | 12,21% | 114,74 € | 9,92% |
| 24000,01-30000 | 28.602 | 8,61% | 768,21 € | 12,29% | 130,99 € | 11,32% |
| 30000,01-45000 | 36.511 | 10,99% | 1.324,01 € | 21,19% | 248,57 € | 21,48% |
| 45000,01-60000 | 14.270 | 4,30% | 733,86 € | 11,74% | 158,52 € | 13,70% |
| >60000 | 13.387 | 4,03% | 1.336,17 € | 21,38% | 381,92 € | 33,01% |
| Total | 332.093 | 100% | 6.248,47 € | 100% | 1.157,06 € | 100% |

Source: Own elaboration (Departamento de Hacienda de Navarra)

The nominal tax rates of each of those nine brackets were the following; 13%, 22%, 25%, 28%, 36%, 40%, 42%, 43% and 44%. However, it is not the nominal rate what matters when dealing with taxation. What really tells the real cost for taxpayers is the effective average tax rate (EATR).

This EATR is far below the marginal rate in Income Tax for each of the income brackets and should be considered as the main point in order to establish a new reform in the personal income taxation (*IRPF*). Operating with the effective average tax rate should be the key point to face the restructuring of the fiscal system and so we will modify it in order to obtain the additional revenue that we need to finance our RBU proposal.

The initially proposed RBU has been proved to be unsustainable with only considering total savings. Thus, it would be necessary to establish certain surcharges in the actual Income Tax rates in order to make it sustainable. As we said, the best way to guarantee that the system increases its progressiveness would be to sum any additional surcharge straightly over the effective average tax rate (instead of modifying the actual nominal taxation).

A first attempt to find a surcharge sufficient enough to achieve the goal of earning the extra public revenue to finance the RBU could consist on an equal addition of a 6% in the EATR of every level of income and, although this reform might be efficient in the sense of covering the extra revenue, it would not be consistent with our proposal since it raises the EATR of the lowest income levels similar to the highest levels and breaks with the principle of progressiveness.

If our attempt was to make the Income Tax system more progressive and redistributive we cannot surcharge the same rate to the highest and lowest incomes. Also because it would go in counter of one of the main taxation principles; the “Ability to pay”, this concept means that “the burden of taxation should be distributed according to the earnings or wealth of the taxpayer”. Thus, it would be incoherent to finance a basic income and provide everyone with basic subsistence if we are obtaining the lacking revenues precisely from the lowest income brackets.

The infeasibility of this first proposed surcharge means that we need to find out method that enables us to achieve our objectives. If progressivity is our goal, then the direct response to the system reform should come from progressively surcharge each one of the income brackets. This second proposal seems more appropriate for our objective since it would increase the total revenues from Income Tax without damaging the lowest levels of income.

According to this last proposal and we suggest an addition to each bracket with a progressive one percent increase in the EATR, starting from a 0% surcharge to the lowest income level to reach an 8% increase for the highest. So next step would be to calculate the net payable tax obtained after the reform is made.

Given that the lack of revenues is almost equal to 260 million €, we can define a new variable (CL2) that stands after the total increase on net payable taxes after the reform. In order to fix a general formula for estimating the extra need for financing, we should define a parameter that will proceed both as a value and a sub-index. This i variable represents both the taxable income bracket and its corresponding surcharge. Given the last observations the formula might end up as follows:

$$\boxed{\sum CL2 = \sum BL_i * (EATR_i^1 + \left(\frac{i-1}{100}\right))} \quad [3]$$

Where CL2 is equal to the total ex-post net payable tax, BL stands for the corresponding taxable income level; $EATR^1$ is the effective average tax rate and $\frac{i-1}{100}$ equals the surcharge for each level of income (being i the corresponding bracket).

As we can see in Table 6, there would be a substantial change in the highest levels of income whilst the lowest remained unchanged. The Table expresses in annual terms how this proposal affects each income bracket and how the mean of the EATR has increased from 18% to a 24%, approaching us to more progressive Income Tax systems²².

²² EATR in different countries: Finland=23'29%, Denmark=37'41%, Sweden=22'01%. (OCDE, 2014)

The new net payable tax stands for almost one thousand and five hundred million euro, which is slightly more than the total financing need for the RBU²³.

With this Income Tax reform, the Administration would get more than enough resources to afford the RBU implementation making the proposal to be sustainable. In fact, the difference between the net payable tax before and after the reform is more than 300 million €, whilst we estimated to require about 260 million € extra revenues (difference between total savings and costs).

Table 6. Income Tax surcharge effect

| Income Brackets | Taxable Income (BL) | Net Payable Tax (CL1) (m€) | Effective Average Tax Rate (1) | Surcharge (%) | Effective Average Tax Rate (2) | Net Payable Tax (CL2) (m€) |
|-----------------|---------------------|----------------------------|--------------------------------|---------------|--------------------------------|----------------------------|
| <3000 | 32,71 € | 0,46 € | 1,41% | 0% | 1,41% | 0,46 € |
| 3000,01-6000 | 133,51 € | 1,28 € | 0,96% | 1% | 1,96% | 2,62 € |
| 6000,01-12000 | 442,87 € | 32,04 € | 7,23% | 2% | 9,23% | 40,90 € |
| 12000,01-18000 | 713,89 € | 88,54 € | 12,40% | 3% | 15,40% | 109,96 € |
| 18000,01-24000 | 763,24 € | 114,74 € | 15,03% | 4% | 19,03% | 145,27 € |
| 24000,01-30000 | 768,21 € | 130,99 € | 17,05% | 5% | 22,05% | 169,40 € |
| 30000,01-45000 | 1.324,01 € | 248,57 € | 18,77% | 6% | 24,77% | 328,01 € |
| 45000,01-60000 | 733,86 € | 158,52 € | 21,60% | 7% | 28,60% | 209,89 € |
| >60000 | 1.336,17 € | 381,92 € | 28,58% | 8% | 36,58% | 488,81 € |
| Total | 6.248,47 € | 1.157,06 € | 18,41% | | 23,93% | 1.495,31 € |
| | | | (CL/BL) (1) | | (CL/BL) (2) | |

Source: Own elaboration

Although it may seem straightforward to finance the RBU in the first year, we should notice that there is an extra simplification that we have considered in order to estimate the cost and savings; to eliminate reductions and deductions. According to our analysis the tax reform would be meaningful in the first year, however, in the second year we would need to re-estimate the effective average tax rate and reformulate a new surcharge for each income bracket in order to achieve a new sustainable financing. The cooperation between technicians and politicians is therefore essential in order to evaluate the implications in each scenario and to optimize the decision taking.

²³ The Administration could dedicate this extra tax revenue to maintain certain minimum social basic aids for the people that are not included in the RBU (i.e. non-permanent residents)

5. ESTIMATING THE EFFECTS OF THE RBU IMPLEMENTATION

Once we have given the steps to make a sustainable tax reform, let us estimate how the RBU would affect the distribution of income after being implemented. Table 7 below gives an approximation of the total/mean losses and gains on income for every taxed bracket after the tax reform is implemented.

Before entering in details, we have to consider the final redistribution as a “zero-sum game” in which total gains on each income bracket has to be balanced with a loss in another bracket. We are therefore considering that the total revenue that emerged from the tax reform would be used to finance the RBU, considering again any result as a mere estimation of the possible effects.

Table 7. Gain/Loss effect of the tax reform (Annual terms)

| Income brackets | Number of statements | Income loss (CL1-CL2) | Mean loss | Gain from RBU | Mean gain from RBU | Mean net result (Gain-Loss) |
|-----------------|----------------------|-----------------------|------------|---------------|--------------------|-----------------------------|
| <3000 | 75.156 | - € | - € | 138.714.497 € | 1.846 € | 1.846 € |
| 3000,01-6000 | 30.491 | 1.335.100 € | 43,79 € | 56.276.861 € | 1.846 € | 1.802 € |
| 6000,01-12000 | 49.275 | 8.857.400 € | 179,75 € | 90.946.256 € | 1.846 € | 1.666 € |
| 12000,01-18000 | 47.876 | 21.416.700 € | 447,34 € | 88.364.140 € | 1.846 € | 1.398 € |
| 18000,01-24000 | 36.525 | 30.529.600 € | 835,85 € | 67.413.740 € | 1.846 € | 1.010 € |
| 24000,01-30000 | 28.602 | 38.410.500 € | 1.342,93 € | 52.790.357 € | 1.846 € | 503 € |
| 30000,01-45000 | 36.511 | 79.440.600 € | 2.175,80 € | 67.387.900 € | 1.846 € | -330 € |
| 45000,01-60000 | 14.270 | 51.370.200 € | 3.599,87 € | 26.337.962 € | 1.846 € | -1.754 € |
| >60000 | 13.387 | 106.893.600 € | 7.984,88 € | 24.708.220 € | 1.846 € | -6.139 € |
| Total | 332.093 | 338.253.700 € | | 612.939.932 € | | - € |

Source: Own elaboration.

In annual terms, the income loss represents the difference between the net payable tax before and after the reform. Of course there would be a mean initial loss for every bracket (except the first one) as we have surcharged the effective average rate in each of them.

The gain from RBU has nonetheless some particular explanations. Unlike the calculations of the income loss, regarding gains it is not the whole society who pays for the extra financing of the RBU but it is everyone (outside and inside the Income Tax system) who receives it. Therefore, in order to compute mean gains, we cannot straightly multiply every income statement by its corresponding RBU, but instead there should be a coefficient of reduction to compensate the ones who are included in this fiscal system and those that are not. According to this, the annual mean gain from RBU for each statement (considering every taxpayer to receive the same amount of benefit) would be 1.846 euro; of course not every individual would receive this amount but it is useful to consider it in order to find the net results.

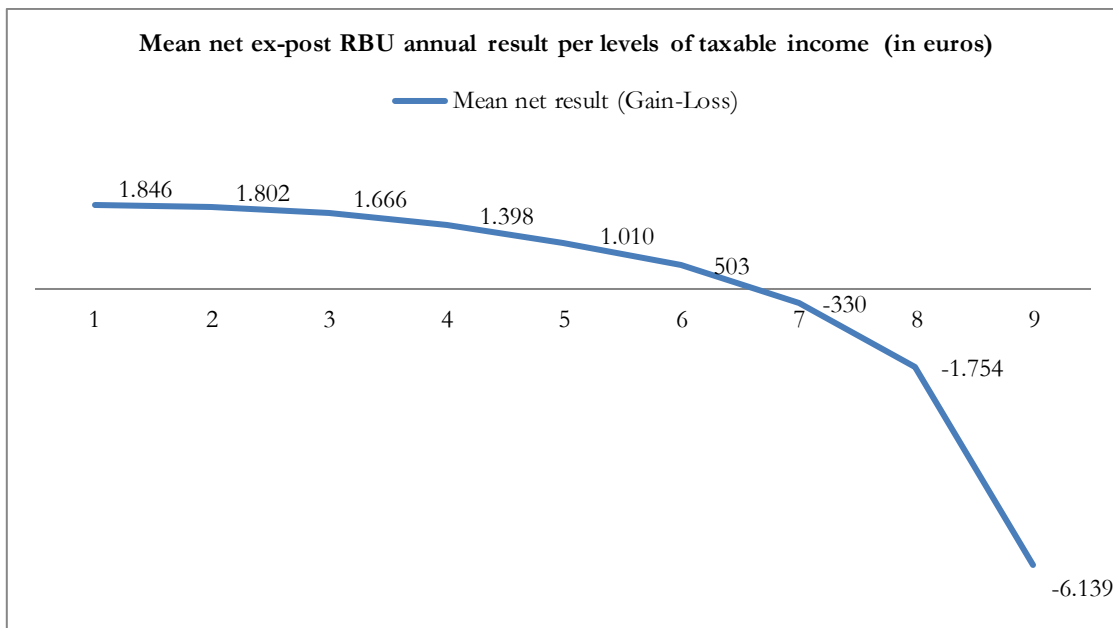
Finally, the last step would be to calculate how the net results are distributed. As we see in Table 7, we will consider the mean net result of each statement so as to estimate the individual gains or loss of the different representative income levels.

According to Graph 4, there would be no individual loss until we reach the last levels of taxable income. In fact they are only the highest levels of income the ones that are clearly harmed by the RBU proposal, whilst the 7th bracket ends up losing a redundant annual amount of 330 €.

As said before, the total sum of the net results has to end up in a zero-summation, meaning that there is a total redistribution from the upper to the lower income levels.

Graph 4 shows accurately how the redistribution affects each level of taxable income, starting from the lowest (1st) and finishing with the highest (9th). There is clearly a net positive result in every level until we reach the seventh bracket and, after that, the result becomes negative for the following income levels.

Graph 4. Results of the tax reform on income brackets



Source: Own elaboration.

Although the results have been carried out by a methodological process of estimations and presumptions, the final effect shown in Graph 4 gives us a brief idea of how the income would restructure after the RBU is implemented, ending up in a more redistributing tax system and ultimately in a Welfare increase.

5.1. Further considerations of the results

1. Regarding the tax reform, Navarra has an advantage compared to the rest of Spanish regions; we enjoy a separate tax institution (*Hacienda Foral*) that allows our region to modify the Law separately from the State's *Ministerio de Hacienda*, provided that we respect the covenant of the *Convenio Económico* and the LORAFNA (*Ley Organica de Amejoramiento del Fuero, 13/1982*). This principle enables our Regional Administration to adapt the tax system by surcharging or diminishing some pre-established income tax rates. To negotiate the actual tax constraints would be crucial in order to apply any surcharge in the final tax system.

2. The results (Graph 4) show clearly how the RBU would damage the highest levels of income. It is evident that any reform aiming to obtain progressive revenues from the tax system has to put the interest of the lowest and medium levels of income before the uppers. The problem in making the highest income levels to hold most of the taxation weight of our system has to be with, what is called, the Laffer Curve. According to this theory; “an excessive increase on the income tax rates would disincentive the people to work more and earn better wages if the next bracket of income compelled them to pay relatively higher taxes”. Likewise, increasing taxes on capital gains would incentive the individuals with big patrimonies to move away from their original region to others where taxes are lower.

3. As well as possible harmful results for the Public Administration there would be a noticeable benefit on indirect taxes according to the systematic transmission from social benefit’s transfers to final expenditure in Consumption. Therefore, there would be non-estimated additional earnings (VAT revenues and other indirect tax collection) to include in further RBU implementation.

6. CONCLUSIONS

So far, and defaulting a more precisely calculus that ought to be obtained with complex fiscal simulators and micro-data, we have exposed a clear and simplified version of how the RBU would work. Together with this, we have to give some extra considerations in order to understand the proposal without prejudices.

First, this is an illustrative proposal with the aim of enhancing a remarkable demand; ‘to guarantee the material existence of the entire society’. The difficulties arising when dealing with this proposal do not always come from economic criteria but also from moral objections.

Also, the RBU seems even more helpful in a situation like the one created by the current social crisis. In that sense, we believe that the RBU could succeed during periods of economic stability but it is crucial in periods of severity. Beyond any economic prejudice, the proposal would have a direct impact in the labor system: it would recompose the social interest of the most vulnerable groups of the society and give them a greater bargaining power against labor demand. Furthermore, earning a regular public income would permit the recipients to plan, save, and ultimately give them an access to some elemental rights like housing (it is nowadays particularly harsh to rent without any family income, employment nor savings). The RBU also implies a major stabilization in the basic consumption to sustain the demand in periods of crisis (especially for vulnerable groups), avoiding a bigger gap in social and economic inequality. An increasing consumption capacity in the lowest income levels of society would straightly stimulate the aggregate demand and could re-launch the economy.

Of course, our last proposal could imply severe drawbacks in certain levels of income (specially the uppers) and thus, create cases of iniquity. Needless to say that the tax reform that we proposed has some very redistributive effects and could be misleading if the taxpayers that would hold the required extra public revenue to finance the RBU consider their ex-post situation to be extremely imbalanced. All in all, the RBU implementations should ultimately depend on the ‘tax awareness’ of the population and their consideration about the fairness of the tax system; if the RBU proposal goes in the way to increase the Welfare State, there may be a increasing positive consensus of fiscal well-functioning and people would accept to pay an extra ‘fair’ tax.

Finally, a public policy like the RBU would imply a radical change in the actual economic functioning. One of the main characteristics of the developed countries' economies is the enormous bargaining power of the big corporations over the employees; when the prospect to be fired increases during economic severity periods, there is an extra bargaining power for the employer. In these cases, the RBU represents a powerful tool to equilibrate this worker-company relationship. Any labor demand must be good enough to compensate a better off for an individual that already receives public income and, at the same time, a guaranteed public benefit can have the perverse effect of reducing labor supply. In that sense, the proposed RBU goes in the way to find a better equilibrium between labor demand and supply.

When proposing alternative policies there should always be priorities and in this case, the priority of the RBU should be clear; to guarantee the basic material conditions for the whole population.

7. REFERENCES:

- ARCARONS, J., RAVENTOS, D., and TORRENS, L. (2014): *Una propuesta de financiación de Renta Básica en Gipuzkoa*. Gipuzkoa: XIII Simposio sobre la Renta Básica.
- ARCARONS, J. and RAVENTOS, D. (2014): *Un modelo de financiación de la Renta Básica técnicamente factible y políticamente no inerte*. Barcelona: Sin Permiso
- ARCARONS, J., BOSO, A., NOGUERA, J., RAVENTOS, D. (2005): *La Renda Bàsica de Ciutadania. Una proposta viable per a Catalunya*. Barcelona: Mediterrànea-Fundació Jaume Bofill.
- ARRIBA, A. and AYALA, L. (2013): “El sistema de garantía de ingresos: tendencias y factores de cambio”. *Presupuesto y Gasto Público*, 71-2/2013
- ATKINSON, A. B. (1995): “The Basic Income/ Flat Tax Proposal” *Public Economics in Action* p.1-23
- GARCÍA, G. and RAYMOND, J. (2014): “Distribución de la renta y ciclo económico: España 2003-2011” *Madrid: Investigaciones Regionales*, 30 pp.53-77
- GIMENO, J. (2014): *Aproximación a una Renta Básica Sostenible*. UNED: XIV Jornadas de Economía Crítica.
- LAPARRA, M. (2015): *Segundo Informe sobre Desigualdad, Pobreza y Exclusión Social en Navarra*. Universidad Pública de Navarra: Cátedra CIPARAIS
- MALGASINI, G. (2014): *European Report on Minimum Income Systems*. Spain: European Anti-Poverty Network (EAPN)
- MARTINEZ, J. (2002): “Impuesto Negativo sobre la Renta: Una solución novedosa y eficiente a la pobreza”. *Madrid: Estudios de Economía Aplicada*, pp.451-470
- MARX, A. and PEETERS, H. (2008): “An Unconditional Basic Income and Labor Supply Results from a Survey of Lottery Winners”. *The Journal of Socio-Economics*, pp.1636-1659
- MAULEON, I. and SARDA, J. (2014): *El Plan de Lucha contra el Fraude Fiscal contempla medidas de concienciación ciudadana*. *Economía Sumergida en Navarra*. Gobierno de Navarra: Ley de Medidas contra el Fraude Fiscal.

- PINILLA, R. (2004): “Más allá del bienestar. La renta básica de ciudadanía como innovación social basada en la evidencia” Barcelona: Icaria.
- SANZO, L. (2013): *La política de garantía de ingresos en Euskadi*. País Vasco: Zerbitzuan
- SANZO, L. and PINILLA, R. (2004): “La renta básica: por una reforma del sistema fiscal y de protección social” Madrid: Fundación Alternativas.
- STIGLITZ, J. (2012): “The Price of Inequality: How Today's Divided Society Endangers Our Future” Madrid: Taurus.
- VANDERBORGHT, Y. y VAN PARIJS, P. (2005): *La renta básica: una medida eficaz para luchar contra la pobreza*. Barcelona: Paidós.
- ZALAKAIN, J. (2014): *Bases para la activación del sistema de garantía de ingresos en España*. SIIS Centro de Documentación y Estudios Fundación Eguía Careaga