ISCTE IUL
REPOSITÓRIO
INSTITUTO UNIVERSITÁRIO DE LISBOA

# Repositório ISCTE-IUL

Deposited in *Repositório ISCTE-IUL*:
2026-07-20

Deposited version:
Accepted Version

Peer-review status of attached file:
Peer-reviewed

Citation for published item:
Pereirinha, J. A., Pereira, E., Branco, F., Costa, D. & Amaro, M. I. (2020). Adequate income in Portugal: Acomparison of two estimation methods. In Christopher Deeming (Ed.), Minimum income standards and reference budgets: International and comparative policy perspectives. (pp. 271-288). Bristol: Bristol University Press, Policy Press.

Further information on publisher's website:
10.2307/j.ctv125jsbv

Publisher's copyright statement:
This is the peer reviewed version of the following article: Pereirinha, J. A., Pereira, E., Branco, F., Costa, D. & Amaro, M. I. (2020). Adequate income in Portugal: Acomparison of two estimation methods. In Christopher Deeming (Ed.), Minimum income standards and reference budgets: International and comparative policy perspectives. (pp. 271-288). Bristol: Bristol University Press, Policy Press., which has been published in final form at https://dx.doi.org/10.2307/j.ctv125jsbv. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0
The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Serviços de Informação e Documentação, Instituto Universitário de Lisboa (ISCTE-IUL)
Av. das Forças Armadas, Edifício II, 1649-026 Lisboa Portugal
Phone: +(351) 217 903 024 | e-mail: administrador.repositorio@iscte-iul.pt
https://repositorio.iscte-iul.pt

# Adequate Income in Portugal: a comparison of two estimation methods

José A. Pereirinha , Elvira Pereira, Francisco Branco, Dália Costa, Inês Amaro

## 1. Introduction

Income adequacy, considered as the sufficiency of disposable income to assure human dignity in a given society, is an old political issue. As stated in the Universal Declaration of Human Rights (1948), "everyone has the right to a standard of living *adequate* for the health and well-being of himself and of his family" (our italics). In a market economy, where the satisfaction of material needs is very much dependent on consumption of goods and services obtained through the market, adequacy of living standard implies adequacy of disposable income to buy them. *Adequate* income as income required for *human dignity* is also in the European Pillar of Social Rights (2017) and is a matter of policy concern at the EU level (Deeming, 2017).

A normative income threshold, as an amount that provides people with an adequate level of resources to lead a decent and dignifying standard of living, is then necessary as a monetary reference for guaranteeing citizenship rights, to identify social needs for designing social policies and to evaluate the adequacy of social policies. This was the motivation for a research to estimate such income threshold for Portugal (*raP income*). The lack of normative content of the EUROSTAT poverty threshold and the lack of an updated version of a normative income threshold in Portugal led to new research designed to construct reference budgets and to estimate adequate incomes (Pereirinha *et al*., 2019 *forthcoming*). The aims was to estimate an empirically based and socially accepted standard of adequate income for different family types, well adapted to the Portuguese reality, based upon a consensual budget development approach with a sound scientific support that could contribute to inform debates on poverty in Portugal, as well as public policy decisions relating to social benefits, social minimums, minimum wage, fiscal measures and other spheres of governance. This research, that follows the MIS approach (Bradshaw *et al*., 2008), will be referred to as *raP income* here ("rendimento adequado em Portugal").

The lack, at the EU level, of a common methodology that may support a normative income threshold, is also a matter of concern, what led the European Commission to propose the construction of reference budgets for all EU countries in order to "facilitate the Commission's task of monitoring the adequacy of income support in Europe" (Goedemé et al., 2014). The ImPRovE method (Goedemé *et al*., 2015) was used in a still undergoing project intending "to support the development of cross-nationally comparable reference budgets in all EU Member States" (*op cit*.) and, in its first stage, "to develop comparable food baskets for all 28 Member States" (*op cit*.). Portugal, with the same team as that of the *raP* project, participated in this early stage. The adequate income (so far focused only on the food budget is estimated), originating from the work on EU Reference Budgets, will be referred to as *RB income*.

Both methods to estimate adequate income (MIS and ImPRovE) are based on a budget standards approach to estimate it, and both recognize that such normative income threshold should be supported by "*what people think*" about what is needed in a given society, and informed with the "*knowledge of experts*" in those relevant domains where

scientific expertise can be used to assess adequacy for human wellbeing. Nevertheless, these methods make a different combination, giving different relative relevance to the two referred normative sources for the threshold calculation.

This chapter explores the use of both approaches to estimate adequate income in Portugal, compares and analyse the different assumptions behind them, and conclude about their goodness to the purpose of measuring poverty and assessment of benefit adequacy.

## 2. Historical and national context

The construction of reference budgets, defined as "patterns of expenditure for different types of households to live at a designated level of well-being" (Warnaar & Luten, 2009:2), has a long history in Europe, and Portugal is one of the countries with the oldest experiences in this field, dating back to the early 1950s as the first reference budgets, although with limited scope of use in social policy, were established at firm level and addressed to the wage fixing in two Portuguese big firms (CRGE in 1951 and 1960 and CUF in 1960) (Pereirinha & Branco, 2013). Later in 1965 (and updated in 1969) the Portuguese government was responsible for the early official reference budget and an income level that was used as a reference for the creation of the national minimum wage in 1974. Since then, a long period lasted without any empirical research intending to construct new reference budgets until 2014/2015, when a team of researchers (authors of this paper), produced estimates using two different research methods, inspired either in MIS (UK) (see Chapter X) or in ImPRovE (see Chapter Y), two methodologies for developing reference budgets in the Europe.

When the early reference budgets were constructed in Portugal, the reference concept in use was that of "*living wage*", advocated as a requirement for adequacy of living conditions of workers by the International Labour Organisation (ILO), as a guiding principle for fixing minimum wages. This principle has its early origins in the 1919 Paris Peace Conference: in the 1919 Treaty of Versailles it was established "the payment to the employed of a wage *adequate* to maintain a reasonable standard of life as this is understood in their time and country" (art. 427, third, that became the article 41 of the ILO Constitution) (our underline) (Reynaud, 2017: 3). This principle of a "*living wage*" for fixing minimum wages was further discussed and amended in the successive ILO Conferences, adopted in the Declaration of Philadelphia (1944) and later extended to other income sources beyond wages (mainly social security transfers) in the 1960s, in the "Resolution concerning Minimum Living Standards and their Adjustment to the Level of Economic Growth" (ILO, 1965). This resolution called for "(...) the establishment of dynamic levels of social security measures; and we suggest that both levels [*wages and social security*] should be periodically adjusted to the economic growth of the country and to increases of the cost of living" (report of the Conference Plenary that approved such resolution, p. 519, quoted in Reynaud, 2017:21).

Moreover, a report of experts of ILO in 1967, regarding the criteria for minimum wage fixing, did not make use of the concept of "*living wage*" but, instead, of that of "*workers´ needs*", and lists several topics which are relevant for its policy implementation, namely: "the difficulty (...) in specifying these needs precisely", "how much income a wage earner requires depends also on the size of his family", "a distinction is implied between a

´subsistence´ standard which covers the barest needs of workers (....) and, on the other hand, a somewhat higher standard which should take greater account of social needs, and which could be seen as a future target for the whole population (...)" and that "(...) human needs have to be interpreted relatively, i.e., in relation with the economic level of the country concerned (...)" (quoted in Reynaud, 2017:23).

It is in this context that the first national reference budget was constructed in 1965, and its updating was made in 1969 for Portugal (MCPS, 1969; Ribeiro, 1971), aiming at the creation of national minimum wage in 1974 (Pereirinha & Branco, 2013). The above quoted issues well summarize the political complexity and the technical difficulties to develop a reference budget that may correspond to a well-accepted concept of "*workers´ needs*". There was, by that time, a great influence by the experience of the creation of SMIG in France, and the influence of some French sociologists, like Laloire (1967), who advocated the concept of "*vital minimum*" as corresponding to the "*minimum human needs*" which, according to this author, "includes, firstly, the physical needs, that is all that is required to keep us alive and to assure capacity for working. The notion of minimum human needs does not restrict to physical needs; it also includes social needs associated to common uses in the community. These social needs are linked to the notion of human dignity: it is commonly agreed that no one should be compelled to live, for scarcity of resources, in conditions that become rather distinct to others of the same social group and, for this reason, cannot participate in the normal customs and traditions in his/her community" (Laloire, 1967: 379, our translation).

It is still this reference budget, although currently updated, that is the support of the present value of either the national minimum wage or some social minima (Pereirinha & Branco, 2013). But its annual updating lacks any scientific support, keeping real minimum wages below its 1974 level (Pereira *et al*., 2017). The need to have an updated normative income threshold to be used as reference led us to estimate the amount of adequate income for different family arrangements, supported in the development of reference budgets using a method that combines the consensual approach (Veit-Wilson, 1987; Walker, 1987) with the knowledge of experts, based on MIS (UK) method for gathering data and analysis (Bradshaw *et al*., 2008). Under this approach, adequate income is the amount that enables an individual to reach a minimum acceptable standard of living in a given society (in the Portuguese research project defined as what is needed to live with human dignity), according to the opinion of ordinary people (what people think) and the knowledge of experts. The concept of human dignity, its translation into goods and services and the cost of the respective consumption basket is a construction very much supported in *focus groups* with ordinary people, aiming a negotiated consensus on what is needed.

Recently, the European Commission has proposed the construction of "reference budgets", defined as baskets of goods and services that are considered necessary to reach an acceptable standard of living for an individual household within a given country, region or city. This decision follows the adoption of the Social Investment Package, in February 2013, intending its use on assessment the adequacy of the income support, in particular minimum income schemes, in the EU. Moreover, it corresponds to the implementation of the European Pillar of Social Rights (launched in 2015), namely in the Principle 14, minimum income ("Everyone lacking sufficient resources has the right to

*adequate* minimum income benefits ensuring a *life in dignity* at all stages of life, and effective access to enabling goods and services. For those who can work, minimum income benefits should be combined with incentives to (re)integrate into the labour market") and the Principle 15, Old Age Income and Pensions ("Workers and the self-employed in retirement have the right to a pension commensurate to their contributions and ensuring an *adequate income*. Women and men shall have equal opportunities to acquire pension rights. Everyone in old age has the right to resources that ensure *living in dignity*" (our underline). The creation of a Reference Budgets´ Network and the need to create a consensus on a common theoretical framework and a common methodology for cross-nationally comparable reference budgets in all EU Member States originated the estimation of another reference budget for Portugal (at the present stage only for the food budget), that will be further referred as *RB income*, which is based on the ImPRovE method of construction of Reference Budgets (Storms et al., 2013). According to this approach, adequate income is the amount that is required to adequately participate in society, that is, the amount that enables people to adequately take the various social roles a person should be able to take as a member of a particular society, what is very much supported by scientific literature and experts´ knowledge.

## 3. A comparison of theory and methods

When comparing MIS/*raP* and ImPRovE/*RB* approaches to reference budgets, a major difference is found on their theoretical frameworks. The other issue is the role played by the focus group method of research and what is expected from them, namely the role of consensus in the participation in focus groups.

There is a long history of research on the construction of reference budgets, which has been prominent in Britain, which reflects the tradition of research on poverty and its empirical emphasis in this country (Deeming, 2010b). One then may say that the MIS approach follows a history of methods used in Britain to estimate minimum/adequate income which, being initiated with Rowntree in 1901 and in 1941 (and latter in 1951) (mainly based on experts´ knowledge), and followed by budgets by Bradshaw, either "low cost but acceptable" or the "modest but adequate" (Bradshaw, 1993) (mainly based on social survey results) and CBS (Consensual Budget Standard) budgets by a research team at the Centre for Research on Social Policy (University of Loughborough) (mainly based on *focus group* interviews results: a potential want becomes a social need if there is consensus among discussants in focus groups) (Deeming, 2005; 2015). Instead of supporting the development of the budgets on consumption patterns or expert opinion, it does it through the participation of common people in *focus groups* aiming at getting consensus about what is the acceptable minimum in the society: the Consensual Budget Standard (CBS). This originated the MIS (Minimum Income Standard).

Both MIS/*raP* and ImPRovE/*RB* methods intend to construct reference budgets that originate minimum acceptable, or adequate, living standards in the society. But while the MIS/*raP* approach is rather pragmatic, not supported by any explicit theory of human needs, ImPRovE/*RB* approach is framed by some well-known theories of human needs. Such difference is linked to the issue of legitimacy for decision on what is an acceptable, or adequate, living standard in the society. MIS/*raP* approach is a "bottom-up" approach that supports this adequacy on the concept of human dignity as consensually defined by ordinary people in the context of focus groups ("*what people think*") (Bradshaw *et al*.,

2008). Contrary to MIS, the ImPRovE/*RB* method is a sort of "top-down" approach to the construction of reference budgets, supported in scientific literature, either in literature on human needs or in the experts´ knowledge ("*what science says*") (Goedemé, T. *et al*, 2015). Its rather normative character is supported in the theory of human needs of Doyal and Gough (1991). This method, aiming at to support EU comparable reference budgets, is under the fundamental assumption that "as human needs are generalizable, it is perfectly possible to construct minimum standards for needs-satisfaction across Europe" (Deeming, 2015).

The MIS/*raP* project, which fieldwork ran in Portugal in the period from July 2012 to February 2014, is based on MIS approach (with some adaptations) comprising several stages, each one informing the development of the subsequent stage (Bradshaw et al., 2008). The method comprises the three ingredients cited above (focus group, experts´ knowledge and survey data), but under a sort of "bottom-up" approach, using focus-groups analysis as its methodological core. The participation of the Portuguese team in the EU pilot project ImPRovE/*RB* involved only the construction of the food budget. This was made for the capital city (Lisbon), for the period of March 2015, and a healthy food basket was constructed for five family types (see **Table 2**).. The design of the healthy food basket for these family types took into account, on the one hand, the recommendations of the Portuguese Food Guide (Portuguese Food Wheel) and, on another hand, the information available on the Portuguese dietary habits (a survey study made for the city of Oporto). Regarding updated recommendations for energy requirements and nutrient intakes, it was decided to use the recommendations proposed by World Health Organization (WHO), Food and Agriculture Organization (FAO) and Food and Nutrition Board, Institute of Medicine.

There are some similarities but also great differences between both methods (MIS/*raP* and ImPRovE/*RB*), so a comparison must go beyond any strict comparison of results. The crucial issues to be compared are the methodological ones. Let us discuss the most relevant.

In both methods focus groups are used to discuss with ordinary people the needs and those goods required to meet them, focusing the discussion on family types (the same as those members of the corresponding focus groups), using the *vignette* technique on hypothetical cases for each family type. In both methods are assumed similar assumptions, namely regarding a good health status of the members of such family type. But, contrary to MIS/*raP* method, in the ImPRovE/*RB* method only food budgets were calculated and for four family types (**Table 2**).

A great difference between the two methods is the role played by the focus groups. In the ImPRovE/*RB* method, the focus groups worked mainly as advisory groups. But a distinction has to be made between two components of the food budget: the healthy food budget and the other functions of food. Regarding the first one, the groups just spoke about what had been decided by the nutritionist. But on the second one (other functions of food), the groups gave their opinion on what should be included and the research team, afterwards, used mainly the results of MIS/*raP* project to decide on the specific list of goods and services to include. Moreover, in the case of ImPRovE/*RB* budget, part of the food basket regarding food related satisfiers/items needed to fulfill other functions of food besides staying in a good health was done considering the results of the three focus

groups, the available data for Portugal of EU-SILC ad-hoc module of 2009 on Material Deprivation and MIS/*raP* research project´s results. Actually, the main guide to develop this part was MIS/*raP* research project´s results because, in the 3 focus group organized in the ImPRovE/*RB* project, participants only gave examples of what should be included as minimum and gave their opinions on quantities and frequencies. In fact, on the one hand, participants didn't have to reach a consensus and, on the other hand, there was no time in the focus group for discussing and developing a concrete list of goods and services (with a global vision of the food budget and considering that the same commodities can fulfill different functions). In all cases, contradictions were not found between the opinions and arguments presented in these focus groups and the results of MIS/*raP* focus groups.

Regarding the healthy food budget, the MIS/*raP* project devoted a greater role to FGs. In the MIS/*raP* project, the nutritionist has developed the shopping list (goods and amounts) on the basis of the menus proposed by FGs, having made some suggestions for amendments aiming for compliance with the guidelines for a healthy diet/nutritional recommendations, which were then presented to the groups that, in general, approved the amendments made.

As said above on comparing methods, a relevant issue is that of the role of the negotiated consensus as a core ingredient in the MIS/*raP* approach, and not in the ImPRovE/*RB* method in the focus groups with ordinary people. Although not being representative of the population (in the statistical sense), this method has been widely recognized with "great potential for establishing a consensual standard of social adequacy for society" (Deeming, 2015) if the recruitment of participants is well designed, with a diversified socio-economic composition and facilitated by a good moderator with a well designed guide for discussion. In the ImPRovE/*RB* this method is used mainly for confirmation of expert opinions and collection of ordinary people opinions giving little room for individual reasoning, group discussion and construction of a negotiated consensus, also because of the time constraints imposed by the method (little time for the sessions of FG). Therefore in this approach the focus groups consist on letting participants accept (or not) what is proposed by the facilitator as supported by literature and the expert´s judgements and not to make a solid construction of a budget from the bottom as in MIS/*raP* approach.

The role of the focus group and the role of the negotiated consensus in the process of construction of the reference budget is a more critical issue when we are dealing with other items of expenditure beyond the food basket, since the role of experts is of higher relevance in this item of consumption. Moreover, the existence of international and national recommendations in this area leaves less room for the criticism to this difference between both methods. But similar recommendations do not exist regarding the other items, which account for approximately 70-75% of total expenditure. This was not yet the scope of this cross-country comparison project of construction of national reference budgets in the EU.

An important difference between the two methods is in the process of pricing the goods included in the food baskets. In the MIS/*raP* project, the prices are those found in the places indicated by purchasing groups, using specific prices included in the menu (lowest price meeting quality criteria). In the ImPRovE/*RB* project, the final food budget is based on observed prices in one supermarket and considering only white-label goods. In

addition, for fruit, vegetables, meat, fish, charcuterie, cheese and vegetables the price is the weighted average of all product varieties for these food categories available in the shop, following the step-wise procedure of the proposed pricing procedure. Such difference may explain some differences found on the computed food budgets in both methods.

## 4. Research findings

We now turn to a comparison of results between ImPRovE/*RB* and MIS/*raP* approaches for the healthy food basket component of the budgets. In order to make these values comparable we have deducted the cost of water and alcoholic beverages from ImPRovE/RB healthy food basket and considered only the all meals cooked at home basket of MIS/raP budget. Furthermore the only family types that we can compare are the ones without children.[1]

**Table 2**

Food Budget considering the healthy food basket (only) and that all meals are cooked at home

€/month

| | woman | man | couple | single woman + 2 children (boy 10y-old, girl 14y-old) | single man + 2 children (boy 10y-old, girl 14y-old) | couple + 2 children (boy 10y-old, girl 14y-old) |
|---|---|---|---|---|---|---|
| ImPRovE/RB | **152,8** | **156,5** | **309,4** | **419,3** | **423,0** | **575,7** |
| MIS/raP | **137,6** | **145,0** | **282,6** | **n.c.** | **n.c.** | **n.c.** |
| ImPRovE/RB using raP pricing | **128,4** | | | | | |
| MIS/raP using ImPRovE/RB pricing | **157,9** | | | | | |

Both in the case of a single adult woman and an adult man, the cost of the food basket is close but higher using ImPRovE/*RB* approach (**Table 2**).

Besides this difference in cost, it is important to understand what are the main differences between these food baskets and budgets, considering both its composition (quantities of different groups of food) and the implicit prices. We have conducted this analysis for the case of the woman.

In terms of the composition of the food basket considering the main food categories considered, the main differences in gross quantities in MIS/*raP* relative to ImPRovE/*RB* are: in vegetables (63%), in dairy (83%), in meat, fish and eggs (188%) and in fat (220%). In the case of bread, grains, legumes and potatoes and fruit, the quantities are (almost)

the same (99% and 100%). Our understanding is that part of the differences found can be explained by the different approaches in development of the food basket. In the case of ImPRovE/*RB*, the nutritionist departed from the guidelines of the Portuguese Food Wheel to develop the weekly complete menu and decide the composition of the basket.[2] In the case of MIS/*raP* the nutritionist developed the complete weekly menu based on what the focus group decided in terms of meals and their composition in an illustrative menu and then proposed some adjustments to guarantee compliance with the minimum and/or maximum thresholds of a healthy food consumption basket. It is important to notice that according to the data from Food Surveys carried out in Portugal, the net quantities for vegetables included in Improve/*RB* are in fact quite above the Portuguese consumption habits and the net quantities for meat included in ImPRovE/*RB* are quite below the Portuguese consumption habits. In both cases MIS/*raP* seems to be more in line with Portuguese food habits thus more adequate in terms of its acceptability. The MIS/*raP* food basket also includes more variety of spices and condiments, and more variety of goods to be used in breakfast and snacks (e.g. jam, marmalade, chocolate powder). It also interesting to note that the high quantities of vegetables and the lack of variation in breakfast composition were two of the issues raised in the ImPRovE/*RB* focus groups.

The other important difference in the cost of budgets is related with the pricing procedure (as presented before). Although the idea in ImPRovE/*RB* of using a weighted average of prices for food categories which contain a large variety of products, namely fresh food and non-pre-packaged products, is well intended to allow for sufficient variation and room for autonomy (Pereirinha et al., 2015), it also may introduce important biases when implemented in a standardized way. In the Portuguese case for instance the price per kilo of fruit in Improve/RB is more than the double of the implicit average price per kilo of fruit in MIS/*raP* (2,4 times higher), which may be seen as an excessive price for allowing variation. This is also the case, but in a much lesser degree, for legumes (1,57 times higher) and vegetables (1,65 times higher) On the other hand, the weighted average prices for fresh and frozen fish and meat (fatter) in ImPRovE/*RB* are lower than the respective implicit prices per kilo in MIS/*raP*.

To estimate the impact of the different pricing procedures we have calculated the cost of MIS/*raP* food basket using Improve/RB prices per kilo and the cost of Improve/RB food basket using MIS/raP implicit prices per kilo, results are shown in **Table 2** above.[3]

Besides the different approaches to develop the basket and the different pricing procedures used, some differences may be explained by the fact that a different location was used as reference (Vila Franca de Xira *vs* Lisbon), there was a different timing in pricing (2014 *vs* 2015) and the shop chosen to observe the prices for part of the food was also different (in the case of MIS/*raP* some goods were priced at the local market rather than in an hypermarket). Nevertheless, according to our analysis, the main differences are explained by the methodological approach to the food basket development and the pricing procedure.

## 5. Impacts and influences on policy and practice

The results of MIS/*raP* research project can be used as a monetary reference to assess the adequacy of minimum incomes in Portugal, to support a poverty threshold for poverty analysis, and to assess the reliability of the consumption scales (by comparing the MIS/*raP* equivalence scales to those of OECD or policy scales used in some social transfers or taxation policy). These are the summary of results that are presented below, and complements some analysis on minimum social standards presented before (Pereira, et al., 2016), now focused on a comparison with an estimated monetary value of adequate income.

Such comparison will be made with MIS/*raP* income since this is the approach that originated a full budget for Portugal. Although ImPRovE/RB approach only originated a food budget, the results presented in Table 2 led us to admit that, assuming a similar ratio food expenditures/total expenses as that in MIS/*raP*, the ImPRovE/*RB* budget would be of a larger amount.

**Table 3** compares the amount of the adequate income (updated to 2017, using CPI data) with the minimum incomes in 2017, and minimum wages (here it is assumed that in a family composed of adults all of them earn the minimum wage and, additionally, receive all the benefit allowances according to the Portuguese law).

**Table 3 Adequate Income and Minimum Incomes in Portugal (€/month) in 2017 (working age people)**

| | raP | minimum wage + social benefits | % raP | unemployment allowance | % raP (*) | Guaranteed Minimum Income | % raP (*) |
|---|---|---|---|---|---|---|---|
| working age adults (18-64) living alone | 783 | 578 | 74% | 433 | 63% | 200 | 29% |
| working age adults (18-64), couple with no children | 1299 | 1157 | 89% | 848 | 77% | 331 | 30% |
| working age adults (18-64), couple with one child (12 years old) | 1796 | 1206 | 67% | 1001 | 60% | 543 | 33% |
| working age adults (18-64), couple with two children (2 years old + 12 years old) | 2271 | 1372 | 60% | 1176 | 55% | 835 | 39% |
| working age adults (18-64), couple with one adult child (daughter 26 years old) | 1816 | 1735 | 96% | 1273 | 78% | 524 | 32% |
| working age adults (18-64), single parent with one child (12 years old) | 1374 | 653 | 48% | 573 | 43% | 389 | 29% |

(*) Were excluded from adequate income those items that are associated to an employment status

The value of the adequate income was adjusted to consider those expenditures agreed by the focus groups that fit the statute of working, and excluding them in case of not working (being then lower in case of unemployment). A worker living alone and earning the minimum wage in Portugal is 26% below the income that assures human dignity. In case of unemployment and receiving the minimum value of unemployment allowance, his/her situation declines to 37%. And in case of receiving the social insertion income (ex guaranteed minimum income), his/her situation declines further to 71%. The economic conditions only approach the minimum required for dignity in the case of a couple with an adult child if all them three earn the minimum wage: in this case the household is only 4% below their adequate income.

**Table 4** compares adequate income for the elderly pensioners (65 years old and above) with minimum incomes guaranteed by two different policy measures for these family types (contributory old age pension and non-contributory solidarity supplement for the elderly), where again it was assumed that in the case of a couple both receive the same income source with the same amount. Their incomes are below the adequate income to live with human dignity, being closer (only 7% below) in the case of a couple where both receive the minimum value of old pension (in case of full record of contribution to Social Security).

**Table 4 Adequate Income and Minimum Incomes in Portugal (€/month) in 2017 (elderly people)**

| | raP | Old Age Pensions (minimum, 30 years recorded contributions) | % raP | Solidarity Supplement for Elderly | % raP |
|---|---|---|---|---|---|
| Old age (pensioner) alone | 634 | 481 | 76% | 469 | 74% |
| Couple Old Age (pensioners) | 1007 | 941 | 93% | 823 | 82% |

The calculated adequate income is quite above the EUROSTAT poverty threshold (60% median adult equivalent income), which was, for Portugal in 2014, 422 € (and the value of the adequate income estimated for that year for a single working-age person was 762, that is, 1.80 times the EU poverty threshold).

Another important result is the estimated equivalent scales (**Table 5**). The usual procedure to estimate poverty incidence in the EU consists on using the modified OECE equivalence scale, which weights the first adult as 1, the other adults as 0.5, and the children as 0.3. In Portugal, however, the original OECD equivalence scale is used to calculate the amount of the means-tested benefits, where these weights are, respectively, 0.7 and 0.5.

The adequate income for a person aged 65 and over is 81% of the equivalent adequate income of an working-age person. For the households headed by working-age persons, and assuming that the head (i.e., the first adult) has a weight equal to 1, the second adult weights 0.66 (close to original OECD equivalence scale, much higher than the modified OECD equivalence scale), and the third adult with a similar weight to the second one. Great difference comes when we take families with children. The estimated cost of the 1st child is 63% the cost of the first adult, and rather similar (about 95%) to the cost of the 2nd adult, much higher than the OECD equivalence scales: in the original OECD equivalence scale the cost of a child was 71% the cost of the 2nd adult, and this percentage reduces to 60% in the modified OECD equivalence scale.

**Table 5 Calculated Consensual Equivalence Scales (MIS/*raP* approach)**

| | | 1st adult | 2nd adult | 3rd adult (child) | 1st child (< 18 years old) | 2nd child (< 18 years old) |
|---|---|---|---|---|---|---|
| **elderly people (65 and over)** | living alone | 0.81 | | | | |
| | couple | 0.81 | 0.48 | | | |
| **working age adults (18-64), with no children** | living alone | 1 | | | | |
| | couple | 1 | 0.66 | | | |
| **working age adults (18-64), with children** | single parent with 1 child (12 years old) | 1 | | | 0.75 | |
| | couple with 1 child 12 years old | 1 | 0.66 | | 0.63 | |
| | couple with 1 child 2 years old | 1 | 0.66 | | 0.70 | |
| | couple with 2 children (12 and 2 years old) | 1 | 0.66 | | 0.63 | 0.61 |
| | couple with 1 adult child (26 years old) | 1 | 0.66 | 0.65 | | |
| **OECD Equivalence Scale** | | 1 | 0.70 | 0.70 | 0.50 | 0.50 |
| **OECD Equivalence Scale (mod.)** | | 1 | 0.50 | 0.50 | 0.30 | 0.30 |

The major conclusion that emerges from such results is the underestimation of poverty incidence if we will accept the minimum income as an indicator of poverty threshold (EUROSTAT poverty threshold is about 55% of our estimated adequate income). And the analyses of poverty in Portugal are rather biased, since the use of the modified OECD equivalence scales underestimates the cost of children, so it underestimates children poverty.

## 6. Conclusions

Our simultaneous participation in both research projects looked rather fruitful for further progressing reference budget research, since it permitted to compare and experiment different approaches in a such challenging process that has to be widely accepted at national and European level. In the case of the MIS/*raP* project (following the MIS-UK approach), a complete budget was developed and in the case of ImPRovE approach, only a food related budget was developed in Portugal.

The construction of widely accepted cross-country comparable reference budgets is crucial to originate EU poverty thresholds that overcomes some limitations from the use of the EUROSTAT poverty threshold to measure poverty among these States, and providing normative content. Such normative content should be transparent from the use of the method that underlies their calculation. But an emphasis on cross-country comparability may originate some simplification, or a theoretical orientation that may cause some lost of its national-normative content. This happens with the use of the ImPRovE method aiming at such EU-comparable orientation. A deeper "national" research on human needs, as it is provided by the MIS/*raP* project for Portugal, will provide a more sounded support for a critical assessment of such EU thresholds when applied to Portugal. This paper was a contribution to illustrate the advantage of this double-sided approach to the calculation of reference budgets. It is questionable that "what science says" provide grounded legitimacy for wide generalization in the EU about what is an adequate living standard without further discussion in focus groups. Moreover, it may lack some local (national) specificity that should account for cross-country comparison. A further cross-country analysis of the early focus groups discussion on

social participation and needs and on the "social functions of food" may be a good starting point with this aim.

## Notes

1 This is because nutritional and food requiriments varies with age and sex and in MIS/raP family types with two children, the children are a two yeares old girl and a twelve yeares old boy, while in Improve/RB the children are a 10 years old boy and 14 years old girl.

2 There is also an important difference in terms of how gross versus net quantities needed for a healthy diet are calculated. In the case of MIS/*raP* the gross quantities take into consideration the edible part of each specific ingredient used, including how it is used/prepared/cooked in the specific meals of the menu (yield after cooking). For instance, in the case of olive oil, sunflower oil or spreadable fat there may be a big difference between what is used in cooking and what is ingested/consumed. In the case of Improve/RB, for the grouped goods (see pricing procedure) it is used the mean value of the different edible food portions, considering a range of different specific goods that are included in the group. This procedure of edible part calculation along with the weighted pricing procedure may introduce a bias in the cost of the budget (by underestimating or overestimating it).

3 For some goods this was not possible because they were only included in one of the food baskets, in these cases we have maintained the original price.

## References


Beveridge, W. (1942), Social Insurance and Allied Services. London: HMSO.

Bradshaw, J. (1993), Budget Standards for the United Kingdom. York: Avebury.

Bradshaw, J. (1994), "The conceptualization and measurement of need: a social policy perspective". In Popay, J. & Williams, G. (eds), *Researching the People´s Health*. London: Routledge, pp. 45-57.

Bradshaw, J., Middleton, S., Davis, A., Oldfield, N., Smith, N., Cusworth, L., Williams, J. (2008), *A minimum income standard for Britain: what people think*. Joseph Rowntree Foundation.

Davis, A., Hirsch, D. and Padley, M. (2018) The Minimum Income Standard as a benchmark of a 'participatory social minimum', *Journal of Poverty and Social Justice*, vol 26, no 1, 19–34

Deeming, C. (2005), Minimum Income Standards: How Might Budget Standards be set for the UK? *Journal of Social Policy*, Vol. 34, No. 4, pp. 619-636.

Deeming, C. (2010a), Determining minimum standards of living and household budgets: methodological issues. *Journal of Sociology*, vol ?, No. ? pp. ?

Deeming, C. (2010b), The Historical Development of Family Budget Standards in Britain, from the 17th Century to the Present. *Social Policy & Administration*, vol 44, No. 7, pp. 765-788.

Deeming, C, 2017, Defining Minimum Income (and Living) Standards in Europe: Methodological issues and policy debates, *Social Policy and Society* 16, 1, 33–48

Doyal, L., Gough, I. (1991), *A theory of human need*. Macmillan.

Goedemé, T., Storms, B., Penne, T., van der Bosch, K. (2014), *Pilot project for the development of a common methodology on reference budgets in Europe. Proposal for a method for comparable reference budgets in Europe*. European Commission: Employment, Social Affairs & Inclusion.

Goedemé, T., Storms, B., Penne, T., van der Bosch, K. (eds) (2015), *Pilot project for the*

*development of a common methodology on reference budgets in Europe. The development of a methodology for comparable reference budgets in Europe - Final report of the pilot project*. European Commission: Employment, Social Affairs & Inclusion.

Laloire. M. (1967), Que é o Minimo Vital? *Análise Social*, pp. 373-383.

Max-Neef, M.A. (1991), Human Scale Development: Conception, Application and Further Reflections. New York: The Apex Press.

MCPS (1969), *A Fixação do Salário Mínimo Legal Interprofissional e do Mecanismo da Sua Actualização*. Relatório incumbido ao Ministério dentro do trabalho e revisão do III Plano de Fomento, por decisão do Conselho de Ministros para os Assuntos Económicos de 11 de Novembro de 1969.

Nussbaum, M. (2011), *Creating capabilities: the Human Development Approach*. Cambridge University Press.

Pereira, E., Branco, F., Amaro, I. e Pereirinha, J. (2017). Minimum Social Standards in Portugal: Changes and Adequacy from the pre to the post austerity period. In *Actas del VI Congreso de REPS* (pp. 1821-1847). Sevilla: Universidad Pablo de Olavide

Pereirinha, J. (coord) (2015), Pilot project for the development of a common methodology on reference budgets in Europe: the Portuguese food basket. European Commission: Employment, Social Affairs & Inclusion.

Pereirinha, J., Branco, F. (2013), Uma abordagem histórica dos padrões de rendimento mínimo em Portugal. *Ler História*, Nº 64, pp. 55-84.

Reynaud, E. (2017), *The International Labour Organization and the Living Wage: A Historical Perspective*. ILO Conditions of Work and Employment Series, No. 90

Ribeiro, M.E. (1971), *Fixação e Actualização do Salário Mínimo e Problemas Conexos*. Gabinete de Estudos e Planeamento do Ministério das Corporações e Previdência Social, Serie Estudos nº 2.

Storms, B., Goedemé, T., Van der Bosch, K., Devuyst, K., (2013), *Towards a common framework for developing cross-nationally comparable reference budgets in Europe*. ImPRovE Methodological Paper No. 13/02, March 2013. Antwerp.

Storms, B., Goedemé, T., van der Bosch, K., Penne, T., Schuerman, N., Stockman, S. (2014), Pilot project for the development of a common methodology on reference budgets in Europe. European Commission: Employment, Social Affairs & Inclusion.

Veit-Wilson, J. H. (1987), Consensual Approach to Poverty Lines and Social Security. *Journal of Social Policy*, 16 (2), pp. 183-211.

Walker, R. (1987), Consensual Approaches to the Definition of Poverty: Towards an alternative Methodology. *Journal of Social Policy*, Vol. 16, No. 2, pp. 213-226.

Warnaar, M., Luten, A. (2009), *Handbook of Reference Budgets*. EC.