

What is the Minimum Budget for an Adequate Social Participation in Spain? An Estimate Through the Reference Budgets Approach

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Abstract In Spain, the percentage of population living in poverty or social exclusion has consistently increased since 2007. This trend makes it unlikely to reach the Spanish National Europe 2020 target, which is to reduce in 1.400.000 the people at risk of poverty or exclusion. At the same time, the Spanish Minimum Income Protection Schemes are complex, fragmented and inefficient. In the context of the Europe 2020 Strategy, reference budgets are regarded as a tool to improve poverty measurement and assess income adequacy. This paper describes the development of the Spanish Reference Budgets: priced baskets containing the minimum goods and services necessary for well-described types of families to have an adequate social participation. The study here presented combines various sources of information: national guidelines, expert opinion, scientific literature, survey data on cultural habits and focus group discussions using a cross-country comparable approach. Based on a needs-based perspective, we have estimated a minimum budget threshold that ranges from 427€ to 1569€/month depending on the type of family. Without considering housing and car costs, the healthy food budget is the one that represents a higher share of the total budget in all family types. The weight of the other baskets depends on the household composition, mainly on the presence of children. The aim of our approach is to assess family and children needs, as well as to orient policies designed to guarantee social rights and reduce children poverty and social exclusion.

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1 Introduction

In 2014 nearly one out of three adults (29.2 %) and 35.8 % minors were at risk of poverty or social exclusion in Spain, according to the at-risk-of-poverty and social exclusion indicator (AROPE). The Spanish AROPE is consistently higher than the median AROPE for the overall population and for children under 18 years old in the 28 European Member States which is estimated to be 24.4 and 27.8 %, respectively (Eurostat 2016a). The same source fixes the poverty threshold in Spain for 2014 at 8011€ for a single person household and 16823.1€ for a household with 2 adults and 2 children less than 14 years old (Eurostat 2016b). 22.1 % of the total population and 29.6 % of minors are living under this threshold (Eurostat 2016c).

Poverty in Spain have consistently increased since 2007, which makes unlikely to reach the Spanish National Europe 2020 target of reducing in 1.400.000 the number of people at-risk-of-poverty or exclusion. Although it has been pointed out that Spain is recovering from the recent crisis and experiencing economic growth, further EU policy recommendations are still formulated in order to fight unemployment and the high private and public debt in this country (European Commission 2015). Furthermore, minimum income schemes in Spain are heterogeneous across the territory and are seen as inadequate to guarantee financial support to unemployed people and inefficient for tackling poverty (De la Peña Esteban et al. 2015; Malgesini Rey 2014).

However, the definition of poverty using the income approach entails controversy, because the standard of living is established by choosing an arbitrary point on the income distribution (Borgeraas and Brusdal 2008). A second remark is the limited impact of the relative poverty approach on policy (Bradshaw et al. 1987). The Council of European Communities in 1975 defined individuals or families living in poverty as those not having enough resources to lead the minimum acceptable way of life of the European Member State in which they live (Decancq et al. 2013). Other research questions emerging from this definition would be: which is the minimum acceptable way of life and, which are the resources needed in one particular society to reach this standard of living.

The reference budgets (RBs) approach could help address these questions. RBs are priced baskets of goods and services that represent a given living standard (Bradshaw 1993). The main characteristics of RBs are that: (a) RBs reflect what is considered the minimum acceptable living standard in a given society at a given moment of time, sometimes using the opinion of public oriented reference groups; (b) RBs can be updated annually according to the consumer price index or according to general changes in the minimum acceptable in a given society at a given moment of time; (c) RBs take into account the income in kind and publicly available goods and services, thus they estimate the "real" out-of-pocket money that is necessary for families to reach a given standard of living; and finally, (d) RBs illustrate the variation of needs across households and, particularly, assess children costs (Borgeraas and Dahl 2010; Decancq et al. 2013; Goedemé and Rottiers 2011; Storms et al. 2011). The origins of this method are linked to the study of living conditions and poverty in Britain and USA at the

beginning of the 20th century (Bradshaw 2000; Fisher 2007). Since then, its use has spread in many European and non-European countries, although with some methodological differences (Borgeraas and Dahl 2010; Deeming 2005; Fisher 2007; Saunders 1999; Storms et al. 2014).

In the context of the Europe 2020 Strategy goals, RBs are seen as a potential approach to contextualise poverty indicators and monitor social policy, especially if developed from a cross-nationally comparable method, as well as an educative instrument for financial counselling, health advice or assessment of family and children needs (Goedemé et al. 2015a, b; Penne et al. 2016; Saunders 2000; Vranken 2010). Following on from this, the European Commission has promoted the development of this method to design efficient and adequate income support in the Member States since February 2013 (European Commission 2013b). This promotion actually constitutes a follow-up, improvement and extension of the ImPRovE 7th FP project presented in this paper.

'Poverty Reduction in Europe: Social Policy and Innovation' (ImPRovE Consortium 2012) is an international research project aimed at studying poverty, social policy and social innovation in Europe. Within the ImPRovE project (2012–2016), cross-nationally comparable RBs were developed for six countries: Belgium, Finland, Greece, Hungary, Italy and Spain. This was a first opportunity to develop from a common theoretical and methodological framework cross-nationally comparable RBs in Europe. In this study, RBs were defined as priced baskets of goods and services that represent the minimum necessary resources to participate adequately for well-described hypothetical types of families. In this context, participating adequately means that people would have the essentials to develop their various social roles in a particular society (Goedemé et al. 2015a, b; Storms 2012; Storms et al. 2013).

The paper is structured in three sections. First, we describe the theoretical framework, data and methods used to estimate the resources needed for an adequate social participation at the minimum for different types of families in Spain, as well as the composition of each basket. Second, we present the results obtained regarding the different baskets, the total budget and, specifically, the children costs. Thirdly, we discuss and interpret the figures obtained in relation to the Spanish institutional context and examine how RBs could be used to monitoring social policy in our country. Finally, we give an overview of the limitations and the following steps to be taken.

2 Methodology

The Spanish RBs (SRB) developed within the ImPRovE project illustrate the minimum resources needed for an adequate social participation in our society for a selection of family types.

SRBs were constructed following a standardized approach that departed from a common conceptual framework and method to guarantee cross-national comparability between the countries involved in the project. Thus, cross-nationally variations should only be due to differences in the institutional context, the climate and geographical conditions, the culture and the availability, quality and price of goods and services in each country (Goedemé et al. 2015a; Storms et al. 2013). The common framework used in this project was built upon four aspects:

First, the standardization of the targeted living standard, defined as the minimum financial resources needed to participate adequately in a given society which allows people to fulfil their social roles. We started from Storms et al.'s work (2013) based on Doyal and Gough (1984, 1994), who identified ten intermediate needs that must be covered before people can fully participate in society: (1) healthy food; (2) suitable clothing; (3) personal hygiene; (4) accessible healthcare; (5) adequate housing; (6) security in childhood; (7) meaningful social relations; (8) lifelong learning; (9) rest and relaxation and (10) mobility.

Secondly, the standardization of the target population, according to which RBs were developed for adults at active age (working or non-working) and children. As physical health ('bodily integrity') and autonomy of agency ('practical reason') are conditions that influence life in great measure and can modify the previous needs, adults and children were assumed to be in good health, without disabilities and being well-informed, autonomous persons with competences to manage their everyday life. Specifically, RBs were developed for four specific hypothetical model family types: (1) single man or woman in active age; (2) couple (male and female) in active age; (3) single woman (in active age) with a child (boy, primary school 10 years old) and (4) couple (male and female) in active age, plus 2 children (1 boy, primary school 10 years old and 1 girl, secondary school, 14 years old).

Thirdly, the standardization of the territory for which the budgets were constructed. RBs were elaborated for European cities in an urbanized environment with a wide public transportation network: Antwerp (Belgium), Athens (Greece), Barcelona (Spain), Budapest (Hungry), Helsinki (Finland) and Milan (Italy).

Finally, RBs covered the following intermediate needs, which were translated into eight baskets of goods and services: (1) healthy food; (2) suitable clothing; (3) rest and leisure; (4) personal care and health care; (5) maintaining significant social relations; (6) safety in childhood; (7) mobility and (8) housing. This intermediate needs were associated into functions that allowed translating these needs into concrete list of goods and services, with providers, prices and life spans. The process was recorded into harmonised Excel files. The housing costs were calculated separately by the coordinating team using a statistical method for all the cities involved and the life-long learning and security baskets were excluded from the exercise (Goedemé et al. 2015a).

Altogether this process constitutes the 'common base', supported by international guidelines, scientific evidence and previous research on RBs in Belgium (more details in: Goedemé et al. 2015a). From here, a four-step procedure was used to elaborate the six national RBs in ImPRovE: (1) adapting the 'common base' to the local context, by checking the appropriateness of each concrete good and service to be included in the baskets, (2) assessing the acceptability of the basket through focus group discussions; baskets were adjusted according to the latter; (3) pricing these goods and services; and (4) final check-in by the coordinating team.

In order to determine and adapt the concrete list of goods and services required in our context different sources of information were used depending on availability and suitability: official guidelines or specific regulations at different levels (national (Spain), regional (Catalonia), and local (Barcelona)); expert opinion, scientific literature or survey data available. Table 1 synthesizes the different sources used in each basket.

Once the initial baskets were designed, three focus groups of about 90 min were conducted with the aim of finding arguments about the composition of the baskets in

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Baskets	Official guidelines	Expert opinion	Scientific literature	Survey information	Focus groups
Healthy food			\checkmark		
Suitable clothing	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Rest and leisure		\checkmark	\checkmark	\checkmark	\checkmark
Personal care		\checkmark			\checkmark
Health care		\checkmark		\checkmark	\checkmark
Maintaining significant social relations	\checkmark			\checkmark	\checkmark
Safety in childhood	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Mobility				\checkmark	\checkmark

Table 1 Sources of information to elaborate the Spanish Reference Budget

Source: Own elaboration

order to validate the acceptability and feasibility of the SRB. The first one was developed in December 2013 and served as a test-focus group, while the other two took place in March 2014.

We approached the respondents through public and private social organizations in Barcelona, which helped us to recruit between 6 and 8 adults with children between 8 and 16 years old per group. In total we had 20 participants. The sample was balanced in terms of the working situation and levels of income (11 low income; 9 medium or medium-high). This characteristic is especially important in RBs research, because it enables to focus the discussion on not what is needed at the level of survival, but what is needed for a real participation in society (Vranken 2010).

The aim was not focusing on the individual preferences or particular situation of each participant, but to check if there were items lacking or redundant in the baskets and collect reasons in favour or against their inclusion for an adequate social participation at the minimum. With this objective, participants were asked to emphasize with a reference family composed by 4 members: 2 adults and 2 children: a boy of 10 years old and a girl of 14 years old. As focus groups participants were mixed in terms of socioeconomic characteristics, beginning with a hypothetical situation helped the discussion between participants as remarked in previous research on RBs using this technique (Devuyst et al. 2014).

After the selection of the items included in each of the baskets, the pricing process was the last step to develop, and also followed a common procedure and criteria between partners: (1) selecting the shops according to the agreements made in the common cross-national framework and the proposals emerged in the focus groups and/ or expert opinion; (2) choosing the concrete item, amount and the associated price and (3) calculate the price per month. The pricing for the food basket was conducted in July 2013, while all the other baskets were priced in the first half of 2014.

In order to guarantee comparability in a way that is both reasonable with a minimum budget and also contains a certain degree of freedom of choice for families (Goedemé et al. 2015a), it was necessary to establish a target price for each basket (e.g. the third cheapest shirt of a certain quality in a shop). Items were priced through the different shops' websites by choosing the item with the most suitable characteristics according to

the associated function that should be met. Discounts or sales prices were not considered. When the item included in the basket was an activity or a non-material resource, we used survey data to estimate the minimum budget needed to spend in such activity (e.g. hotel for holidays, leisure activities such as cinema). Finally, for each family type, each item price was multiplied by the monthly amount required and divided by the life span in months so as to obtain the monthly price. The same life span values were taken by the different countries, unless relevant local information indicated otherwise.

The process ended with the revision of the national baskets by the coordinating team, who determined if they were still unjustifiable deviations from the 'common base' and asked, if necessary, to better justify the decisions made when adjusting the budgets to the local context.

Next, the translation of the various intermediate needs into the different baskets of goods and services is detailed.

2.1 Healthy Food

The Healthy Food basket comprises the conversion of the healthy eating intermediate need identified by Doyal and Gough (1984) and includes the goods and services necessary to guarantee an adequate nutrition: food products and also the minimum kitchen equipment necessary to prepare, serve, eating, store and conserve food. Social, psychological and emotional functions of food were taken into account in the baskets safety in childhood, maintaining significant social relations and rest and leisure (Goedemé et al. 2015a; Storms et al. 2013).

In order to compose the country-specific food basket we relied on a nutritionist, who determined the types, amounts and frequencies of the different food products for the different family members (adults and children) based on the current Spanish dietary recommendations for adults (SENC 2004) and PERSEO Program for children and adolescents (Perez-Rodrigo et al. 2013). According to these standards a weekly menu was developed and its feasibility and acceptability was contrasted in focus groups discussions. The dietary recommendations also suggest between 30 and 60 min of physical daily activity. In that case, participants in focus groups agreed that in a minimum budget context this activity could be done freely outdoors and integrated in the daily quotidian life in our context.

The last step was to price the items. The retailer selected was wide-spread across Spain and with prices around 10 % higher than the cheapest retailer in order to consider some degree of freedom for families to buy food. This decision was based on a comparative study between retailers by the Spanish Consumers' Association (OCU 2012). For more detailed information about this basket see Carrillo et al. (2016).

2.2 Suitable Clothing

The Clothing basket includes items that protect against all weather conditions and that allow people to participate from activities foreseen in other baskets in order to play their various socials roles at the same time that can provide a specific identity (Goedemé et al. 2015a). Thus, the basket contains summer, winter and mid-season clothes, including shoes, and some complementary accessories and the necessary elements for maintenance, storage and repair.

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Specific guidelines that establish the adequate number of items of clothing per person were not available in Spain. We live in a context with high levels of clothes consumption (CRIC 2012), where it is difficult to standardize the number of clothes needed at the minimum and where the need for a more responsible and sustainable consumption of clothes has been highlighted (Ajuntament de Barcelona 2008; Sales 2011; SETEM 2005). Additionally, clothing is a very subjective need: besides dirt, physiological or personality questions, the frequency of changing clothes may also have an influence.

In order to complete the theoretical expert part for the clothing basket social workers and socio-educative professionals involved in charity organizations were interviewed. This information was useful to make the necessary adjustments to translate this need into a list of goods and services needed to develop a suitable clothing basket for the reference city (Barcelona).

The second source of information to grasp the cultural habits for the clothing basket was focus-group discussions. First, the discussion served to agree on two main points: (1) the basket should include formal and informal clothes and should be multifunctional to allow people to play their different social roles, (2) the minimum number of clothing items should respond to hygiene criteria, national cultural habits and practical considerations (Goedemé et al. 2015a). When confronted to the list of items included in the basket, the participants ensured that the chosen clothing items and amounts reflected the needs and cultural habits of the population for the different profiles (man, woman and children aged 10 and 14 years old). The list of clothes included coats, pants, dresses and skirts, shirts and t-shirts, sweaters, sports clothes, underwear, socks, accessories and shoes, as well as products for maintenance, storage and reparation.

Finally, although some surveys information about clothing consumption are available (GESOP 2011; SETEM 2005), we also relied on focus groups arguments to establish the shops were the items selected for the basket would be priced. The choice of shops was linked to preferences about quality or quantity of clothing items. Participants agreed that variation is important and they would preferentially look for products that are good value for money. However, they also said that a minimum quality is important to have decent-looking clothes for a longer time. The possibility of including second hand goods was explored, but dismissed because its relative eventuality as a shopping option for clothes in our context.

For the pricing procedure of the clothing basket the third cheapest item of a certain quality in a shop was chosen in order to take into account a certain degree of freedom of choice for families. In addition, we added a 10 % discount on the price of new clothes since people tend to buy clothes during sales periods.

2.3 Rest & Leisure

The Rest and Leisure basket contains the necessary items to have an adequate physical, social and emotional health in order to participate at a minimum in the society (Goedemé et al. 2015a). Due to the lack of national guidelines with regard to rest conditions and leisure activities, the countries agreed on common criteria, regarding the type and number of items included in both baskets.

In order to validate of the Rest basket, we used the expertise of a physiotherapist, in absence of concrete recommendations in our country. Our expert considered that the common criteria were suitable for Spain. Mainly, the basket is composed by adequate beds for the different components of the household (single beds for children older than 2 years old and double beds for adults) and their corresponding accessories. For the pricing we used multinational retailers in order to facilitate cross-country comparability.

In the case of leisure we sustained the adaptation to the local context by means of scientific literature, survey data and important feedback from focus groups. Three main sources of leisure were recognized in the six countries: holidays, domestic leisure and participation in social and cultural activities (Goedemé et al. 2015a). Concerning holidays, more than six out of ten Spanish spent at least one night away from home when travelling for work or private purposes in 2012 (64 %) according to the Flash Eurobarometer Report No.370 (European Commission 2013a:50). This rate is 7 points below the average of the European Union (71 %). The majority of participants in focus groups considered that a 5-day domestic holiday trip away from home in summer is necessary for an acceptable living standard. However, children's summer vacation lasts two and a half months in Spain (from mid June to mid September). In addition, the school calendar includes 2 weeks of holiday in Christmas and approximately ten additional days in Easter term. For these reasons, other opportunities all along the academic year to go on day trips were included in the Safety in Childhood basket. In this basked 5 days accommodation in a Hotel, food on vacation (15 % of the food basket and 1 warm meal in a bistro) and pocket money to spend as one pleases (2ϵ /per person) were included.

In the focus groups discussions, the camping option was seen as an expensive one, also because it requires a car. Another feasible option for the participants was to spend holidays to a friend or family house. In fact, 39.8 % of the domestic tourism trips respond to this type of accommodation option (Instituto de Estudios Turísticos 2012). Although this option is the most common, in order to guarantee cross-country comparability between the budgets, we agreed on taking a vacation less dependent on relatives and friends and that provide more freedom to families. Consequently, taking into account that 17.8 % of Spaniards take the Hotel as an option for domestic tourism trips according to the same source, we included this type of accommodation in the leisure budget. We used the report *The Hotel Price Index. Revisión de los precios hoteleros globales: Enero-Junio 2011* to estimate the price for the stay at the Hotel. According to this analysis Spaniards spent on average 76€ per night/bedroom in Spain (Hoteles.com 2011:26–27). The travel costs for holiday are included in the mobility basket.

Regarding the domestic leisure the items included were mainly electronic devices TV and DVD and their corresponding accessories (support to fix the TV in the wall and cable HDMI) are included. TV and Radio are the most common media equipment; more than nine out of ten Spaniards have both of them. DVD players are nowadays also present in more than eight out of ten households according to the *Encuesta de Hábitos y Prácticas Culturales en España 2010–11* (MECD 2012). In the case of the radio, participants in focus groups agreed that there is no need for this piece of equipment anymore because nowadays radio emissions is accessible through the TV, the mobile phone or trough Internet connection in the computer. Another particularity of the province of Barcelona is the free access to the Municipal Libraries Network. This network allows people to use all the library services (e.g. borrow books, CDs, DVDs, consult magazines, newspapers, etc.). In this category we also included a small budget for snacks during domestic leisure (e.g. chips).

spend freely that allow people to participate in socio-cultural activities along the year. Additionally, for cultural life we assigned a sum of money that allows adults to go out 12 times a year (once a month), which includes attending 6 cultural events. We estimated 7€ per each night out. Regarding the cultural events, focus groups argued that people should have the opportunity to experience a variety of cultural events: "what is most important is to have the opportunity to do different activities; in order to experience this, going to the beach has the same importance as visiting a museum or going to the cinema" (Participant in focus group No. 2, woman, middle class). Based on this preference, we provided budget to go to the cinema (2 times per year) and other cultural activities (2 theatre plays and 2 concerts per year). For these special nights out a babysitter is necessary only for a child between 6 and 10 years old. We included this service only 6 nights/year; the other 6 night's parents could rely on friends or relatives. The next quote argues about this need:

"When you become a mother, you don't give up being a person. If during the weekend children can stay with their grandparents, you can rest at home or go out for a drink. You wouldn't spend 100€ or 20€, but perhaps a couple of Euros for a beer. The aim of this break is to get distracted for a while and to have your own space, or to spend some time with your partner. Not everything should focus on your children, you would end up crazy otherwise...!" (Participant in focus group No. 3, woman, lower class).

2.4 Personal Care

The personal care basket includes the minimum necessary items in order to have an adequate personal hygiene, which is important to prevent disease, as well as to promote psychological and social inclusion. In order to build the country-specific personal care basket, the Belgian list of goods and services was validated by a national health expert, who adapted the list to our local context (Goedemé et al. 2015a). Our expert considered that the same principles were suitable for Spain, given the environmental and cultural characteristics and so were the goods included in the basket.

The basket is composed by the following categories of products: hand hygiene (e.g. nail set), mouth hygiene (e.g. tooth paste, tooth brush, mouth wash), body hygiene (e.g. soap and other cosmetics and intimate hygiene and shave) and hair care (e.g. includes products such as shampoo and hairdresser services), as well as accessories (e.g. towels, toilet paper, and bathroom mat).

Finally, body lotion, hair dryer, hair color for women, tissues, a bathroom mat, a toilet brush a mug for tooth brushes, a shower curtain and a toilet bin were added in response to the arguments in the focus groups as well as for comparability reasons with the rest of the countries. When possible, we used prices from the same stores as in the food basket.

2.5 Health Care

The Spanish RBs within the ImPRovE project were constructed for reference families with the assumption of being in good health. Accordingly, the health care basket is composed by goods and services related to disease prevention, injuries, contraception and non-severe everyday diseases. We also departed from the Belgian health care basket, which was adapted to our particular context and validated by the same health expert that participated in the validation of the Spanish Personal Care basket. The Health Care basket includes several visits to a general practitioner per year for individual counseling as a preventive function, in case of possible injuries or for vaccines or cancer prevention activities; an annual preventive oral examination and the cost of a tooth filling, contraception pills for woman and teenager girls and annual checks and a home medicine chest with medicines for common diseases (fever medication and antibiotics for children).

The Spanish Health System is universal, which means that medical attention is guaranteed, with different categories of coverage depending on the personal conditions. This level of coverage determines the level of benefits that a person receives. In any of the cases, the medical costs of the consultations and related services (such as medical tests or hospitalizations) are funded by the national taxes, so the citizens do not have to pay for them (Generalitat de Catalunya 2012; Spanish Ministry of Health, Social Services and Equality 2011). Additionally, we calculated the cost of a tooth filling in case of dental caries for each adult and for the adolescent girl on a five yearly base. In Spain, odontologists' prices are subject to a free market policy, so the cost of these services have been taken from a study conducted in 2004 by FACUA's watchdog organization (FACUA 2004). Prescribed medicines have a certain rate of co-payment depending on the specific drug and the total income of the individual or head of the household. However, certain collectives are exempts of making any contribution, such as individuals (and their beneficiaries) with a disability degree higher than a 33 %, individuals receiving treatment for a work-related accident or disease, non-working individuals without social perceptions and those receiving non-contributive pensions. Because of this price variability and because the family types selected are healthy, we took the common-base price in the pharmacy without discounts for the medicine chest.

2.6 Maintaining Significant Social Relations

This basket includes the items needed to develop social relationships (with relatives and friends), which is very important for a healthy emotional life and for the development of our identity. In the absence of quality guidelines, we started from common criteria and the Belgian previous research on RBs in order to guarantee comparability (Goedemé et al. 2015a). Therefore, focus groups arguments around this subject were important to check the items included in this basket, as well as information surveys about cultural habits.

The basket is composed by the following categories: a budget for inviting family and friends at home (2 times per month); going out for a meal once a month in a simple restaurant or buying take away food. For example, the following quote justifies this need: "We are talking about this family [reference family], a mother who usually cooks. So, one day of going out, helps psychologically, because she does not have to think

what to buy, what food she has at home or what to cook...Going out on Sunday, for example, makes you feel good and relaxed" (Participant in focus group No. 3, woman, lower-middle class).

Other items included in this basket are: communication technologies (e.g. computer and Internet connection at home, Mobile phone for each adult in the household; printer, ink, paper and pen drive); cultural celebrations (Christmas Day, New Year's Eve; Twelfth Night; Easter Sunday and birthdays of each family member); elements for cheering up the house e.g. candles); cards, envelopes, stamps and other stationery objects, and citizenship obligations (e.g. identity card).

To choose and price the items we relied on the focus groups arguments and also on local consumer surveys when available (e.g. CNMC 2014; Fundación Telefónica 2014). When possible, we used the same retailers as other baskets (e.g. stationary objects the same shop as school material for children in Safety in Childhood basket) or common international retailers agreed in the project with other countries.

2.7 Safety in Childhood

We developed the Safety in Childhood Basket for Spain based on the Belgian proposal (Goedemé et al. 2015a) taking into account Spanish national legislation, scientific literature, survey information and youth national experts. Particularly in this basket, focus groups were also important to verify the adequacy of the items that we had included.

Like in the Belgian context, our guideline is the *International Convention on the Rights of the Child* (CRC) (United Nations General Assembly 1989) that was ratified by Spain in 1990. In the nineties, both Spain as a whole (1996) and Catalonia (1995) incorporated the principles of the *Convention* in their own legislation. Since then, particularly in Catalonia, there have been several legislations (Fernández Barrera 2012).

Our main guideline to decide which items we included in this basket was the latest law in force in Catalonia since 2010: the *Catalan law 14/2010 (27/05/2010) about rights and opportunities for childhood* (Parlament de Catalunya 2011). This law focuses on different aspects of children's wellbeing from an integral and holistic approach centred in the material resources and immaterial (physical, mental, spiritual, moral and social development). Articles No. 37 and No. 41 emphasise that ensuring the necessary life conditions for this integral development is parents or tutors duty. Public authorities should adopt measures to ensure that parents or tutors have the opportunity to provide them with a basic level of material welfare for an adequate integral development.

A local study by Kid's Cluster (2014) reveals that there is a trend to recover "outdoor" family leisure activities as a unique and authentic experience, where all members of the family could get out of the daily routine. Thus, the Safety in Childhood basket includes 4 non-free activities per year in the city of Barcelona: 2 sport activities (cycling and swimming) and 2 family visits to museums, plus a drink consumption (2ε per person). Moreover, Barcelona's climate allows families to do other freely "outdoor" activities along the year (e.g. going to the beach, walking...etc.).

Other items assigned to this basket are: a personal mobile phone for the teenagers with a pre-payment card; a budget for celebrating birthdays for 10 years old boy (including food and other party materials); a budget to participate in cultural and other activities (including membership to a youth association and going to the cinema, theatre and concerts, the same amount than for adults); the inclusion of different kind of toys depending on the age, following expert recommendations (Marín et al. 2008); pocket money (5€ and 10€ per month for a boy of 10 years old and a girl of 14 years old, respectively, plus 5€ extra when going out with friends) and education costs.

Education in Spain and Catalonia is compulsory and free from the age of 6 to 16 (6– 11 years old primary school and 12–16 years old secondary school) as established in the Spanish Constitution (article No. 27.4) (Spain 1978) and the Statute of Autonomy of Catalonia (article No. 21.4) (Parlament de Catalunya 2016). Despite these principles, there are some costs that have to be covered by parents, such as a small fee for enrolment, participatory activities and some materials to develop school work. Hence we include the costs of these elements in a state school: school enrolment, which includes school insurance tax and parent's association; school material (e.g. school bag, notebooks, pencils, etc.); school clothes (e.g. 2 school smocks for primary school children); school books and a budget for school excursions. We did not include in this basket school meals, because less than the 50 % of the children use the school lunch service (Diputació de Barcelona 2011), neither ICT equipments (computer and Internet) for school work that it is included in the Maintaining Significant Social Relations basket. Our national experts regarded as essential to assign a minimum budget to spend at least 1 week in a youth summer camp in order to contribute to the development of the child and also to the parents' family-work conciliation. However, for comparability reasons the latter point was not included.

The pricing was based on surveys on local habits that priced some of these activities (e.g. OCU (2013) survey on Education costs; or Protégeles (2005) (mobile phones for teenagers)). When possible, the same retailers than in the other baskets were chosen (e.g. healthy food, suitable clothing or personal care); otherwise we followed expert's recommendations.

2.8 Mobility

In order to develop social participation and the activities foreseen in the different baskets the family members need to be mobile. In this study the RBs were developed for families living in cities with an extensive public network of public transport. In the case of Barcelona, the public transport metropolitan network covers more than 14.000 km and only one fourth of its population uses private motor transportation on a daily bases (ATM 2013). Although, in this city bicycles are more and more common, they are mostly used among youth and only represent a small part of the movements. These data indicate that public transport is the most used form of mobility in Barcelona. This fact was confirmed during the focus groups, in which the participants agreed that although a car can be useful to do some leisure activities, it is too expensive an unnecessary, since the public transportation network is good enough.

The Integrated Fare System makes it possible to use the different modes of transport (underground, bus, tram, Ferrocarrils de la Generalitat de Catalunya (FGC) and RENFE) in the same journey within the Metropolitan Region extended to the limits of the local rail services, and the neighbor regions of l'Anoia and el Bages, including a time for transfer between transports. There are several tickets and fares that can be purchased depending on the mobility needs. Following the Belgian example, all the necessary movements to fulfill the needs specified in the rest of budgets (e.g. family outing, domestic holiday, trip to hospital, visit to relatives, theatre or cinema visit...) were taken into account for the calculation of the public transport costs. Thus, for every household member above 14 years old we included a '50-30' travel pass which allows for 50 integrated journeys on 30 consecutive days from the first validation on all modes of transport. Children between 4 and 12 years old have a personalized ticket that costs 35ε for all the eight-year period. For travelling to the holiday place (coast/mountain) we included a cost that guarantees a wide range of public transport options and areas to spend the holiday more than 80 km away from the city. Thus, we calculated twice the price of a 6 zone of the Barcelona suburban railway area. Children between 7 and

With the aim to consider the cost-convenience of a private means of transportation, in addition to the cost of public transport and a bike for each family member, the cost of a second-hand car was added in the final version of this basket, which includes the cost of insuring, driving, and maintenance to allow people to have more freedom of movements.

13 years old have a 40 % discount of the adult price (RENFE 2014).

3 Results

3.1 Overview of the Total SRB

Table 2 shows the estimated monthly total budget and the detailed baskets for various family types. The total cost of the monthly reference budget ranges from $427 \in$ (single woman) or $458 \in$ (single man) to $1569 \in$ for a four member family without including housing and car costs.

In the case of single individuals, we observe differences in the total amounts due to gender influence in the estimation of the amounts needed, mainly in the Healthy Food, the Personal and Health Care baskets and less importantly in the Mobility and Maintaining Social Relations baskets. Although the dietary guidelines do not specify recommendations for each gender, the nutritional needs for men are usually higher than for women. Therefore, the lower portion threshold suggested in the dietary guidelines by the SENC (2004) was taken as a reference for women and the upper threshold was applied to men. Differences in the food amounts included for celebrations basket. Concerning Personal and Health Care baskets, the inclusion of specific products for women (body hygiene and hair care, categories of the Personal Care basket) and contraceptives pills (in the Health Care basket) increased the total costs of these baskets for women. The slightly differences in the Mobility basket are due to the type of bike considered depending on gender.

As reflected in Table 3, the Healthy Food basket represents the most important share of the total budget in all family types – 37 to nearly 41 % depending on family type. On the contrary, the Rest and Leisure basket is the one with less weight, especially in bigger families because of the shared costs of some items – for example, booking a shared hotel room for siblings and also because of the possibility of developing free outdoor activities that the Mediterranean climate offers. Concerning the Maintaining Social Relations basket something similar accounts. It is higher relative to the total

Table 2 Monthly total budget (in Euros) of the Spanish Reference Budget per detailed baskets categories for various family types. Barcelona (Spain), 2014	dget (in E	uros) of 1	the Spanisł	ι Reference Bι	udget per det	tailed baskets	categories for	various fami	ly types. Barcel	lona (Spa	in), 2014		
Basket	Single Sing woman man	Single man	Average single	Single woman + boy 10y old	Single man + boy 10y old	Average single+ +boy 10y old	Single woman + girl 14y old	Single man + girl 14y old	Average single+ + girl 14y old	Couple	Couple Couple + boy 10y old	Couple + girl 14y old	Couple + boy 10y + girl 14y old
Healthy food (including water 142.81 and other liquids and kitchen equipment)	142.81	184.11	163.46	273.99	321.31	297.65	284.77	334.75	309.76	311.12	454.62	458.17	587.57
Suitable clothing	47.24	51.54	49.39	104.97	109.26	107.11	98.52	102.81	100.67	92.28	149.67	143.22	201.04
Rest & leisure	52.03	52.54	52.28	65.74	66.34	66.04	84.08	84.71	84.40	68.95	82.51	101.06	107.24
Personal & health care	45.50	28.99	37.25	62.38	45.73	54.06	105.23	70.11	87.67	72.23	89.20	133.42	130.60
Maintaining significant social relations	89.03	89.82	89.42	108.35	109.89	109.12	114.64	116.28	115.46	119.65	142.56	149.14	170.46
Safety in childhood (only families with children)	0.00	0.00	0.00	101.03	101.03	101.03	113.01	113.01	113.01	0.00	104.27	116.44	214.21
Mobility (total public transport + bike)	50.07	50.90	50.49	57.32	58.15	57.74	99.25	100.09	99.67	100.98	108.22	150.16	157.41
Mobility (total public transport + bike + car)	265.06	265.89	265.47	272.30	273.14	272.72	314.24	315.07	314.66	315.96	323.21	365.14	372.39
Total (without car & housing 426.67 costs)	426.67	457.90	442.29	773.77	811.72	792.74	899.50	921.76	910.63	765.21	1131.05	1251.61	1568.53
Total (without housing costs) 641.66		672.89	657.27	988.76	1026.70	1007.73	1114.49	1136.75	1125.62	980.20	1346.03	1466.60	1783.52
Source: Own computations	100												

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Basket	Average single	ingle	Average single + 1 child (boy 10y)	ngle + 1 10y)	Average single +1 child (girl 14y)	ngle +1 14y)	Couple		Couple +1 child (boy 10y old)	child old)	Couple +1 child (girl 14y old)	child d)	Couple + 2 children (boy 10y old + girl 14y old)	2 children Id + girl
	Without car (%)	With car (%)	Without car (%)	With car (%)	Without car (%)	With car (%)	Without car (%)	With car (%)	Without car (%)	With car (%)	Without car (%)	With car (%)	Without car (%)	With car (%)
Healthy food	36.98	24.88	37.55	29.54	34.02	27.52	40.66	31.74	40.19	33.77	36.61	31.24	37.46	32.94
Suitable clothing	11.17	7.52	13.51	10.63	11.05	8.94	12.06	9.42	13.23	11.12	11.44	9.77	12.82	11.27
Rest & leisure	11.81	7.95	8.32	6.54	9.26	7.49	9.00	7.02	7.29	6.13	8.06	6.88	6.82	6.00
Personal & health care	8.43	5.67	6.82	5.36	9.63	7.79	9.44	7.37	7.89	6.63	10.66	9.10	8.33	7.32
Maintaining significant social relations	20.19	13.59	13.73	10.80	12.65	10.23	15.64	12.21	12.60	10.59	11.92	10.17	10.87	9.56
Safety in childhood	0.00	0.00	12.74	10.03	12.41	10.04	0.00	0.00	9.22	7.75	9.30	7.94	13.66	12.01
Mobility	11.42	40.40	7.28	27.06	10.95	27.95	13.20	32.24	9.57	24.01	12.00	24.90	10.04	20.88
Total (without housing costs)	100	100	100	100	100	100	100	100	100	100	100	100	100	100

•	computations
(Cwn
2	Source:

Table 3 Weight of the various baskets relative to the total budget with and without car costs included (%). Barcelona (Spain), 2014

budget for singles and couples (20 % to nearly 16 %, respectively, of the total budget), while it represents a less important cost for bigger families with three or more members (between 13 and 11 % of the total budget).

The relative weight of the other baskets in the total budget depends on the household size and particularly the presence of children. Clothing costs represent a similar proportion of the total budget in all family types, but is bigger in families with primary school children being the 2nd or 3rd main basket in relation to the total budget. This observation can be explained by the major amount of items included for each category of clothes for children understanding that they need more variation than adults because when playing they get dirty easily. The Safety in Childhood basket represents the second most important share of the total budget without housing and car costs when the family is composed by more than one child (couple + two children), followed very closely by the clothing basket in the 3rd position. The fact that not all school costs are covered by the state (for example school material and books) represents an added out-of pocket money for parents to spend on their children's education in our country. The Personal & Health Care baskets represent a very slow proportion in relation to the total budget. The fact that the majority of products for personal hygiene are available in supermarkets at an affordable cost and that a free universal health care system is provided by the state results in a reduction of the out-of pocket payments by citizens.

Regarding mobility costs, public transport in Barcelona is subsidised for children under 13 years old. This policy helps a lot to reduce mobility costs in families with young children. Also the good quality and extended network of public transportation system in Barcelona and its Metropolitan Area was seen in the focus groups discussions as adequate and advantageous for social participation with no need to use a private transportation system, such as a car. However, the possibility to have a car for leisure activities and especially during holidays was seen as a need because it gives to families more freedom, which favours social participation. This is the reason why we tried to estimate separately the additional monthly costs resulting from having a car (around 215ℓ /month). For singles the costs of a car results around 49 % more budget (657ℓ) than a single going without car (442ℓ) (see Table 2) and if added would represent a weight around 40 % of the total budget, more than the food basket. However, as the family size increases the additional weight of a car diminishes representing around 32-27 % of the total budget for a 2 members household; between 24 and 25 % for 3 member household and nearly 21 % for a family composed of 4 members (see Table 3).

Although in this exercise we excluded housing costs, the relative weight of various baskets would be modified if these costs were considered. The estimation of the cost of a modest but adequate dwelling meeting some quality criteria has been calculated using quantile log-linear regression models by the coordinating team with a subsample of densely populated areas in the region in which the reference cities are located through EU-SILC 2012 data. The amounts obtained were uprated to 2014 price levels through the harmonised consumer price indices for housing produced by Eurostat (Goedemé et al. 2015a).

The housing costs for densely populated areas in Catalonia, the region where Barcelona is placed, are presented in Fig. 1. For private tenants, the housing costs represent between 56 % to around 30 % of the total budget without car depending on the household type. This means that housing basket represents the main cost for families, after the Healthy Food basket. The weight of housing costs relative to the total budget diminishes for outright

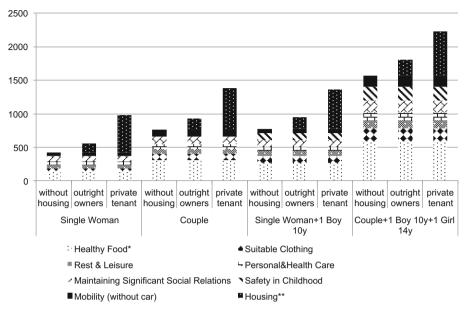


Fig. 1 Monthly total budget (in Euros) with housing costs included by type of tenure per various family types. Barcelona (Spain), 2014. *Source*: Own computations. (*) Healthy food: includes water and other liquids and kitchen equipment. (**) Housing costs: EU-SILC UDB 2012 – version 2 of August 2014, updated to price levels for the first half of 2014, using the harmonised consumer price index for housing, water, electricity, gas and other fuels from Eurostat online database

owners, between 24 and 13 % and also the weight of these costs depends on the composition of the household. It is observed that as the household size grows, the weight of the housing costs relative to the total budget diminishes, both outright owners and private tenants, which indicate the presence of economies of scale (Goedemé et al. 2015a; Penne et al. 2016).

In addition, these data should also be interpreted in a context where home-owner culture predominates, although the renting market has started to be significant in the areas where the prices for buying a house were higher, particularly, in Barcelona and areas nearby (Oficina de Promoció i Gestió de l'Habitatge 2012). However, the renting market is still insufficient, with high prices and a lack of enough social housing, which make access difficult (Bosch 2011).

All in all, we observe that the inclusion of housing costs and private transport not only increase the total budget but also modifies the weights in the total budget. Therefore, the food basket is not standing any more as the larger share of the total budget when these costs are taken into account. Moreover, the composition of the household and the type of tenure influence these weights.

3.2 Children Costs per Baskets and Family Types

The normative approach permits to compare the budgets between household types and estimate the direct additional costs of an adults or children (Saunders 2000; Storms and Van den Bosch 2009). Following on from our estimations, the total budget without car and housing costs obtained for a couple (765 \in) is 73 % more than the average minimum budget for a single person household (442 \in), see Table 2.

Moreover, we could calculate the added costs for households with children. A lone parent household with a 10-year-old boy needs 79 % more budget (793€, average amount lone parent woman or men) than a single adult living alone (442€, average amount between woman and men) without car costs. The additional costs are higher when the child is a 14-year-old girl (911€, average amount lone parent woman or man plus girl 14-year-old), which represents more than twice the amount of a single adult household (442€). Couples with a 10 year-old boy would need 48 % more budget (1131€) than when being a couple alone without children (765€), while having a 14-year-old would represent 64 % more budget (1252€). For a couple with 2 children the added cost for children is higher than two-fold the amount needed for the couple alone (1569€). On the one hand, we observe that children costs have a big impact in the total budget, particularly for single parents, for whom they represent closely the amount of an additional adult. On the other hand, as the size of the family grows and some costs are shared these differences in the added costs are smaller.

In Table 4 we specifically focus on the costs for children in each of the baskets. We estimate separately for each basket the costs of primary and secondary school children depending on the household type. We have calculated these costs using a deductive variant method, described by Oldfield and Bradshaw (2011:134) as follows: "deducting the budget for a single person from the budget for a lone parent with one child and the budget for a childless couple from the budget for a couple plus two children". In our case, we took the average cost (man/woman) for the single person household. In general, we observe that the cost of a child increases with age and how the age-sex combinations influence the results as other research has pointed out (Oldfield and Bradshaw 2011; Saunders 2000; Storms and Van den Bosch 2009). In our RBs the

Basket	Primary school child (one parent) (€)	Primary school child (one parent) (% / total)	Secondary school child (one parent) (€)	Secondary school child (one parent) (% / total)	Primary & secondary school child (couple) (€)	Primary & secondary school child (couple) (% / total)
Healthy food	134.19	38.31	146.30	31.25	276.45	34.42
Suitable clothing	57.72	16.48	51.28	10.95	108.75	13.54
Rest & leisure	13.70	3.91	32.06	6.85	38.18	4.75
Personal & health care	16.81	4.80	50.42	10.77	58.37	7.27
Maintaining significant social relations	19.57	5.59	25.90	5.53	50.81	6.33
Safety in childhood	101.03	28.84	113.01	24.14	214.21	26.67
Mobility without car	7.25	2.07	49.18	10.51	56.43	7.03
Total without housing & without car	350.27	100	468.15	100	803.21	100

 Table 4
 Monthly total budget (in Euros) for children per basket and weight of the various baskets relative to the total children's budget without car and housing costs (%). Barcelona (Spain), 2014

Source: Own computations

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additional costs of a secondary school girl of 14y old in a lone parent household (468 \in) represents between 34 % more budget than a boy of 10 years old living in the same type of household (350 \in). Nevertheless, results on Table 4 show how the weight of the various baskets relative to the total budget for children changes depending on the age of children.

It is clear that the Healthy Food basket is the one that represents a higher proportion of the total budget assigned to children. The second most important basket relative to the total budget for children is Safety in Childhood. As mentioned in the previous section, this is due to some education costs that are not fully covered by the state. These costs represent between 29 and 24 % of the total budget for children depending on the age of children and the family type.

The third more important basket for primary children is the Clothing basket and also for the case of families with 2 children, which represent 16 % and nearly 14 % respectively. The budget is higher in families with primary school children due to the short lifespan of clothes. For secondary school children the Clothing, the Personal and Health Care and the Mobility basket without car would be in the third position representing around 11 %. The cost of these two latest baskets is higher for secondary school children because of the inclusion of contraceptives which are excluded from our Social Security System and the fact that the Public Transportation System in Barcelona allows an especial price only for children between 4 and 13 years old (a card of 35€ during all this age period, 2014). Rest and Leisure and Maintaining Social Relationships are the baskets with less weight relative to the total budget.

In sum, these data show an estimation of the additional costs per child depending on the age and the type of household. We have observed that all costs increase with age, except for the Clothing basket. However, in the construction of the budgets we did not take into account some existing practices within families such as "passing clothes" between siblings or cousins or school material (e.g. books); these exchanges would be very difficult to estimate, but in real life can represent an important source of savings for parents. At the same time, some economies of scale emerge when the family grows. An example is seen in the 4-member family type where the Leisure basket cost is not doubled respect to the single parent with a secondary school child, because siblings could share a hotel bedroom during holidays. Nevertheless, the budgets we have estimated for Spain reveal that, for some specific needs, the added costs of children has an important weight in the monthly budget for families.

4 Discussion and Conclusions

In this article we have presented the RBs for an adequate social participation at the minimum for limited hypothetical family types for Spain. To the best of our knowledge, this is the first attempt to construct RBs from a normative point of view in this country.

Our results slightly differ from the previous research on RBs in Spain by ADICAE in 2009, based mainly on consumption surveys on the actual expenditure of households and using expert advice and focus group discussions (Warnaar and Luten 2009). The preceding study estimated that monthly needs for a single person and a four members household would be, respectively, 534ϵ and 1262ϵ (without rent, heating, water, light and financial basic services) (ADICAE 2009). In 2014, our results estimate a minimum

budget threshold that ranges from 427 to 1569€ for the same family types (without housing basket and car costs). Although the results are quite similar, approaches diverge. Actual expenditure surveys reflect consumption patterns, which are influenced by preferences and social conditions. Conversely, RBs aim to determine individual or household needs from a rights and needs-based perspective.

RBs presented in this paper are illustrative and are conceived as a tool to build consensus in society about the goods and services needed to participate adequately in our society, independently from the availability of personal resources or consumption patterns (Goedemé et al. 2015a; Saunders 2000). Thus, the RBs developed in this research are not meant to be prescriptive of what should people do or have, but to illustrate the threshold below an adequate social participation is not possible, which means to be able to fulfill their social roles in a well-described family type in a particular society (Goedemé et al. 2015a). In that sense, RBs are a tool to guide social policies and, specially, child policies, in planning and orientate what are the needs that require more resources to guarantee the well-being, as well as the equity between citizens. In this section we draw some conclusions from the figures regarding three aspects of the Spanish institutional context: the role of subsidised goods and services; children policies (cash benefits and investment in education); SRB compared to the atrisk-of-poverty indicator and the structure of minimum income schemes in order to fight inequality.

The fact that personal and health care or mobility baskets have a low weight in families with primary children is due to the role of subsidised goods and services provided by the government such as the universal Health Care System and the low cost travel passes for children under 13 years old. These facilities help to reduce the out-ofpocket money that parents should spend on these services for their children. However, the public transport depends on local policy, thus different practices could be found across Spain. Along with the availability of public goods and services, purchasing habits could differ between regions, as well as prices of goods in the private market. The Spanish National Institute of Statistics does not provide access to the basic information needed to calculate the PPP index at the regional level in Spain. A recent study used an alternative method to explore differences in regional price levels through GDP models and data on total expenditure, showing that Catalonia has price levels higher than the national average in 2012 (Costa et al. 2015). Hence, if the purpose of the RBs was to inform social policies at regional or national level, the pricing process should be adapted and reference budgets developed for other territories (urban and rural areas).

The same applies for some cultural activities included in the Safety in Childhood basket that tend to be free or with discounts for children, generally under 16 years old. These types of policies clearly reduce children costs in big cities, while other costs are higher, for instance housing or child care, as noted in a recent study of the extra costs of children in London (Hirsch 2015). However, it is necessary to make the age range a more coherent criterion between services, especially, knowing that in Spain compulsory education is until the age of 16, which is the moment when children acquire the right to work, and people reach adulthood at 18 years old. In that sense, to guarantee the mobility need is clue, because as Ridge (2011) points out the accessibility to public transport is essential for children's social and cultural participation.

In the case of Spain, Public Health Care and Education expenditure reaches to have a significant reduction of inequality and poverty in all regions (Jurado et al. 2016). Nevertheless, other authors have observed that the Spain Welfare System – as other Mediterranean Welfare-System countries – has a low expenditure in policies to support families with children, particularly with cash income benefits and benefits in kind (e.g. child care services). This characteristic has been observed before and after the beginning of the economic crisis, which has consequences in the objectives concerning children's well-being and poverty rates; of note, Spain is already positioned at the queue of European Union countries (Bradshaw 2014; Cantó 2014; Förter and Verbist 2014). In 2011, the contribution in cash income benefits to families with children in Spain was 0.5 % in terms of percentage of the Gross Domestic Product (GDP), clearly below the medium value of other European countries 1.4 % (González-Bueno and Bello 2014:38). In contrast to other neighbor European countries, a universal cash benefit for each child that was born or adopted only was implemented for a short period 2007–2010, although it is a key element to reduce childhood poverty (Cantó 2014).

However, the economic crisis and the subsequent implementation of austerity policies have restricted the provision of subsidized goods and services. In 2013 the investment in child policies was 7.6 % less than in 2007, before the starting of the economic crisis (González Gago 2015:18). The investment in education has been reduced in all the Spanish regions during this period (Assiego and Ubrich 2015). This means that support to students in form of grants to access enrolment and school material (e.g. text books) is reduced due to public budget availability. As the development of RBs have shown education costs represent considerable out-of-pocket money that parents should invest in their children's education. Thus, these austerity policies in this subject not only affect family economy, but also the equity and inclusion in the educative system that is necessary to guarantee equal opportunities to access knowl-edge and develop competencies for all citizens.

The universal coverage of the Spanish Health Care System has also been questioned during this period of austerity. The *Real Decreto-Ley 16/2012* reforms the access of foreigners to health care, increases the financial contributions to the health care services that are considered supplementary and accessory and for some pharmaceutical assistance co-payment proportional to income level is required (Carvalho Fortes et al. 2015). This affects particularly the most vulnerable collectives, such as the non-registered foreigners and elderly people, highly dependent on these services. In our research, RBs have been constructed for family types composed by members that are in good health and well-informed people in active age. Nonetheless, we should also include the impact of these variations in those situations when developing the Health Care basket for other family types.

Finally, it should be highlighted the high extent of poverty in Spain, especially children poverty rates, which are a structural problem in this country and have increased during the recent economic crisis (González-Bueno and Bello 2014). Particularly, a study by Bárcena-Martín et al. (2016) has shown that households with children are the most vulnerable, not only are more affected by the economic crisis in 2008–2012, but also experimented less income growth in the expansive period 2004–2008 compared to households without children.

In this context, the RBs approach could be an additional tool to contextualise the atrisk-of-poverty threshold (Penne et al. 2016). For a comparative purpose, in Fig. 2 the

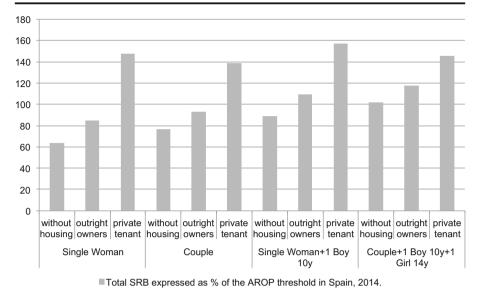


Fig. 2 Total SRB budget (Euros/month) for various family types and tenure status expressed as a percentage of the at-risk-of-poverty threshold in Spain, 2014. *Source*: Own computations. At-risk-of-poverty threshold retrieved from Eurostat on 26/09/2016. EU-SILC 2015. Values refer to 2014

SRB is expressed as a percentage of the Spanish poverty threshold, defined at 60 % of median equivalised income. In 2014 the level of this threshold was 8011€/year for a single person household, which could be adapted to various family types using the modified OCDE equivalence scale (UNICEF Innocenti Research Centre 2012). This figure should be carefully interpreted, as the SRB have been developed for hypothetical family types, having good health and living in urban environment – Barcelona as a reference city – while the at-risk-of-poverty threshold refers to the Spanish population as a whole. The exercise shows that the SRB total budget for private tenants, at the level of the Spanish poverty threshold, for all family types, is not sufficient to participate adequately in society. In the case of the budget for outright owners, at the level of the at-risk-of-poverty threshold, only families with children would have an income insufficient for an adequate social participation at the minimum.

The use of the RBs approach highlights the impact that high housing costs have in the total budget at the level of the at-risk-of-poverty threshold, as well as the fact that the relative costs of a child in a household might be underestimated through the modified OECD equivalence scale, as other research has pointed out (Goedemé et al. 2015a; Oldfield and Bradshaw 2011; Storms and Van den Bosch 2009). For example, although further analysis is necessary, the equivalence scales derived from the RBs developed from a cross-national perspective illustrate that the weight of a primary school child (6–11 years old) without housing cost oscillates around 0.6 - 0.7 depending on the country, while the OECD scale assumes 0.3 for a child at this age. RBs scale decreases when housing costs are added, particularly for private tenants in Spain (Penne et al. 2016).

Thus, the reference budget approach estimates the out-of-pocket money that parents should spend to guarantee that their children have an adequate social participation at the minimum. Furthermore, these RBs could be used as a benchmark to assess the

adequacy of the Minimum Income Protection Schemes (MIPS) as other countries try to do (Van Lancker 2015). Different studies agree that the design of Minimum Income Polices in Spain is very complex, heterogeneous across the territory, inadequate and inefficient to reduce poverty (De la Peña Esteban et al. 2015; Gimeno Ullastres 2015; Malgesini Rey 2014). In Table 5 we compare SRB with the minimum income allowance - "Renda Minima d'Inserció", RMI - in Catalonia (the administrative region for which SRB have been build) for the year 2014. The RMI establishes a minimum of 423.70€/month for singles and an additional amount of 55.29€/month per child until a maximum of 645.30 (month per household, the equivalent to the minimum wage for the same year. We observe that the RMI covers nearly the total amount of SRB for singles and a large part of the SRB for families with children, between 41 and 61 % of the SRB when housing costs are not included. However, the RMI is clearly insufficient for a social participation at the minimum for private tenants and, particularly, for families with children. The RMI underestimates the additional amount that children represent in a household. According to our results (Table 4) an additional amount of 55.29€/month per child would be insufficient even to cover a healthy diet for a primary school child (134€/month). In addition, the RMI does not take into account the age of children, which is an element that influences the variation of the additional costs, as shown in Section 3.2. There is little research in our context that focuses on children costs. The only study that comes to similar results is conducted by FEDAIA, a nonprofit organisation in Catalonia specialised in childhood, who estimates that the cost of raising a child in a residential care centre is 428.12€/month. This entity is advocating for a universal child benefit around the 50 % of this amount, 208.33€/month (Montserrat et al. 2015).

Consequently, we suggest that the use of RBs could help to assess the adequacy of MIPS across Spain because RBs could be developed locally, taking into account the institutional context of each autonomous region. However, we should take into account that any social assistance support should be accompanied by specialised professionals that understand the family and children needs and guide throughout a networked socio-educative process the social inclusion of people experimenting poverty (Longás Mayayo et al. 2016).

Household type	RMI Catalonia 2014 (€/month)	SRB without housing (€/month)	Ratio of RMI to SRB without housing costs (%)	SRB outright owners (€/month)	Ratio of RMI to SRB outright owners (%)	SRB private tenant (€/month)	Ratio of RMI to SRB private tenants (%)
Single woman	423.70	426.67	99.30	564.67	75.03	984.20	43.05
Single woman + 1 boy 10y	478.99	773.77	61.90	947.77	50.54	1362.14	35.16
Couple + 1 boy 10y + 1 girl 14y	645.30	1568.53	41.14	1804.53	35.76	2235.67	14.63

 Table 5
 RMI 2014 for different family types as a proportion of the SRB for Barcelona with and without housing costs, 2014

Source: Own computations. RMI 2014 (Malgesini Rey 2014:23)

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References

- ADICAE (2009). La economía de los consumidores frente a la crisis. Guía para el uso de presupuestos familiares de referencia en la gestión de la economía doméstica. Madrid: ADICAE. http://hipotecaconderechos.org/documentos/folletos/guia_familiar.pdf. Accessed 21 June 2016.
- Ajuntament de Barcelona (2008). Som allò que vestim. Guia per al consum responsable de moda. Barcelona: Ajuntament de Barcelona, Col. Guies d'educació ambiental, (34). http://w110.bcn. cat/MediAmbient/Continguts/Continguts_Transversals/Educacio_Ambiental/Documents/Fitxers/GUIA_ ModaSostenible CAT.pdf. Accessed 19 Oct 2012.
- Assiego, V., & Ubrich, T. (2015). Iluminando el futuro. Invertir en educación es luchar contra la pobreza infantil. Madrid: Save The Children España. https://www.savethechildren. es/sites/default/files/imce/docs/pobreza-equidad-educativa-espana_iluminando-el-futuro.pdf. Accessed 1 June 2016.
- ATM. Àrea de Barcelona. Autoritat del Transport Metropolità (2013). Memòria 2012. http://doc.atm. cat/ca/memoria2012/index.html. Accessed 10 Mar 2014.
- Bárcena-Martín, E., Moro-Egido, A. I., & Pérez-Moreno, S. (2016). How income growth differs with children in Spain: a comparative European perspective. *Child Indicators Research*, 9(2), 357–370. doi:10.1007/s12187-015-9329-z.

- Borgeraas, E., & Brusdal, R. (2008). The costs of children a comparison of standard budget and income approach. *Child Indicators Research*, 1(4), 372–376. doi:10.1007/s12187-008-9017-3.
- Borgeraas, E., & Dahl, E. (2010). Low income and 'poverty lines' in Norway: a comparison of three concepts. International Journal of Social Welfare, 19(1), 73–83. doi:10.1111/j.1468-2397.2008.00622.x.
- Bosch, J. (2011). Les polítiques metropolitanes d'habitatge a Europa: Els casos de Londres, Paris, Brussel · les i Barcelona. Ajut a la recerca en govern local 2010. Barcelona: Centre per a la Innovació Local Direcció d'Estudis i Prospectiva. Diputació de Barcelona. http://www1.diba.cat/llibreria/pdf/50042.pdf. Accessed 6 Oct 2016.
- Bradshaw, J. (1993). Budget standards for the United Kingdom. Alderschot: Avebury.
- Bradshaw, J. (2000). Preface. In B. S. Rowntree (Ed.), Poverty: A study of town life (Centenial edth ed., pp. xix–xxxii). Bristol: The Policy Press.
- Bradshaw, J. (2014). Pobreza y bienestar infantiles. Panorama Social, (20), 23–35. Madrid: Fundación de las Cajas de Ahorros.
- Bradshaw, J. R., Mitchell, D., & Morgan, J. (1987). Evaluating adequacy: the potential of budget standards. *Journal of Social Policy*, 16(2), 165–181. doi:10.1017/S0047279400020365.
- Cantó, O. (2014). El papel de las políticas públicas en la lucha contra la pobreza infantil. Panorama Social, (20), 89–103. Madrid: Fundación de las Cajas de Ahorros.
- Carrillo, E., Cussó-Parcerisas, I., & Riera, J. (2016). Development of the Spanish healthy food reference budget for an adequate social participation at the minimum. *Public Health Nutrition*. doi:10.1017/S1368980016001026.
- Carvalho Fortes, P.A., Ribeiro Parizi Carvalho, R., & Prado Louvison, M.C. (2015). Economic crisis and counterreform of universal health care systems: Spanish case. *Rev Saúde Pública*, 49. doi:10.1590/S0034-8910.2015049005469.
- CNMC. Comisión Nacional de los Mercados y la Competencia (2014). Informe sobre les consumos y gastos de los hogares españoles en los servicios de comunicaciones electrónicas. Segundo semestre 2013. Junio 2014. http://www.cnmc.es. Accessed 27 June 2014.
- Costa, A., García, J., López, X., & Raymond, J. L. (2015). Estimació de les paritats de poder adquisitiu per a les comunitats autônomes espanyoles. Barcelona: Generalitat de Catalunya: Departament d'Economia i Coneixement, Col. Monografies, (17).
- CRIC. Centre de Recerca i Informació en Consum (2012). Consum conscient de roba. Part I. Molta roba i poc sabó, Opcions, (39), 11–21.
- De la Peña Esteban, J. I., Fernández-Sáinz, A., & Peña-Miguel, N. (2015). Estudio sobre la viabilidad de una prestación social básica en España. *Regional and Sectoral Economic Studies*, 15(1), 111–130.
- Decancq, K., Goedemé, T., Van den Bosch, K., & Vanhille, J. (2013). The evolution of poverty in the european union: concepts, measurement and data. ImPRovE Methodological Paper No13/01, 1–42. Antwerp. http://improve-research.eu. Accessed 30 Sept 2015.
- Deeming, C. (2005). Minimum income standards: how might budget standards be set for the UK? Journal of Social Policy, 34(4), 619–636. doi:10.1017/S0047279405009189.
- Devuyst, K., Storms, B., & Penne, T. (2014). Methodologische keuzes bij de ontwikkeling van referentiebudgetten: welke rol voor focusgroepen?. VLAS-Studies, (19), Antwerp: Vlaams Armoedesteunpunt.
- Doyal, L., & Gough, I. (1984). A theory of human needs. Crit Soc Policy; 4(10), 6–38. doi:10.1177/026101838400401002.
- Doyal, L., & Gough, I. (1994). Teoría de las necesidades humanas. Barcelona: Icaria.
- European Commission (2013a). Flash Eurobarometer 370. Attitudes of Europeans towards tourism. Report. http://ec.europa.eu/public_opinion/flash/fl_370_en.pdf. Accessed 23 July 2015.
- European Commission (2013b). Social investment: Commission urges Member States to focus on growth and social cohesion – frequently asked questions. MEMO 13/117, 20th Februrary 2013. Brussels: European Commission. http://europa.eu/rapid/press-release_MEMO-13-117_en.htm. Accessed 30 Sept 2015.
- European Commission (2015). European Semester 2015. Spain: Policy Recommendations. http://ec.europa. eu/europe2020/europe-2020-in-your-country/espana/country-specific-recommendations/index_en.htm. Accessed 30 Sept 2015.
- Eurostat (2016a). People at risk of poverty or social exclusion by age and sex (AROPE). EU-SILC 2014. [ilc_peps01, 29/09/2016]. http://ec.europa.eu/eurostat/data/database. Accessed 3 Oct 2016.
- Eurostat (2016b). At-risk-of-poverty thresholds. EU-SILC 2015. [ilc_li01, 15/09/2016]. http://ec.europa. eu/eurostat/data/database. Accessed 26 Sept2016.
- Eurostat (2016c). At-risk-of-poverty rate by poverty threshold, age and sex. EU-SILC 2015. [ilc_li02, 29/09/ 2016]. http://ec.europa.eu/eurostat/data/database. Accessed 3 Oct 2016.
- FACUA. Federación de Consumidores en Acción (2004). FACUA detecta diferencias de hasta el 433 % en las tarifas de las clínicas dentales de diecisiete ciudades españolas. http://www.facua.org/facuainforma/2004/28 enero2004.htm. Accessed 15 Mar 2014.

- Fernández Barrera, J. (2012). La participació dels infants i adolescents a Catalunya: una realitat o una ficció?. Barcelona: UNICEF Comitè Catalunya. Col·lecció Docs Infância. http://www.unicef.es/cat/actualitatdocumentacio/publicacions/la-participacio-dels-infants-i-adolescents-catalunya. Accessed 28 Aug 2013.
- Fisher, G. M. (2007). An overview of recent work on standard budgets in the United States and other Anglophone countries, 1–29. https://aspe.hhs.gov/sites/default/files/pdf/180341/report.pdf. Accessed 5 Feb 2015.
- Förter, M., & Verbist, G. (2014). Prestaciones familiares, distribución de la renta y pobreza: el impacto de las transferencias para niños pequeños en 23 países europeos. *Panorama Social*, (20), 105–119. Madrid: Fundación de las Cajas de Ahorros.
- Fundación Telefónica (2014). La sociedad de la información en España_siE[13. http://www.fundacion. telefonica.com/es/arte_cultura/publicaciones/sie/sie2013.htm. Accessed 5 Mar 2014.
- Generalitat de Catalunya (2012). Enquesta de salut de Catalunya 2011. Informe dels principals resultats. http://salutweb.gencat.cat/web/.content/home/el_departament/estadistiques_sanitaries/enquestes/02_ enquesta_catalunya_continua/documents/informeesca2011.pdf. Accessed 20 July 2016.
- GESOP. Gabinet d'Estudis Socials i Opinió Pública (2011). El comerç a Barcelona. Informe de l'Òmnibus Municipal. Informe de Resultats Març 2011. http://w3.bcn.cat/fitxers/comerc/491 informeelcomerabarcelona.969.pdf. Accessed 5 Oct 2012.
- Gimeno Ullastres, J. A. (2015). Aproximación a una renta básica sostenible. In L. Ayala Cañón & J. Ruiz-Huerta Carbonell (Eds.), Segundo Informe sobre la Desigualdad en España (pp. 97–102). Madrid: Fundación Alternativas.
- Goedemé, T., & Rottiers, S. (2011). Poverty in the enlarged European Union. A discussion about definitions and reference groups. *Sociology Compass*, 5(1), 77–91. doi:10.1111/j.1751-9020.2010.00350.x.
- Goedemé, T., Storms, B., Stockman, S., Penne, T., & Van den Bosch, K. (2015a). Towards cross-country comparable reference budgets in Europe: first results of a concerted effort. *European Journal of Social Security*, 17(1), 3–30.
- Goedemé, T., Storms, B. & Van den Bosch, K. (2015b). Pilot project: developing a common methodology on reference budgets in Europe. Proposal for a method for comparable reference budgets in Europe. Brussels: European Commission. Directorate-General for Employment, Social Affairs and Inclusion. http://ec. europa.eu/social/main.jsp?catId = 738&langId = en&pubId = 7801. Accessed 20 July 2016.
- González Gago, E. (dir.) (2015). La infancia en los presupuestos. Estimación de la inversión en políticas relacionadas con la infancia en España y su evolución entre 2007 y 2013. Madrid: UNICEF Comité Español. https://www.unicef.es. Accessed 20 July 2016.
- González-Bueno, G., & Bello, A. (2014). La Infancia en España 2014. El valor social de los niños: hacia un Pacto de Estado por la Infancia. Madrid: UNICEF. http://www.unicef.es. Accessed 13 Jan 2015.
- Hirsch, D. (2015). Children in London. The extra cost. London: Child Poverty Action Group (CPAG). http://www.cpag.org.uk/. Accessed 25 July 2016.
- Hoteles.com (2011). The Hotel Price Index. Revision de los precios hoteleros globales. Enero Junio 2011. http://press.hotels.com/en-us/hotel-price-index/. Accessed 20 June 2016.
- ImPRovE Consortium (2012). ImPRovE project: Poverty, Social Policy and Innovation. http://improveresearch.eu/. Accessed 25 July 2016.
- Instituto de Estudios Turísticos (2012). Movimientos Turísticos de los Españoles (FAMILITUR). Número de viajes por tipo de alojamiento, según destino interno y emisor. Datos aboslutos. Año 2012. Datos definitivos. Madrid: Ministerio de Industria, Energia y Turismo. http://estadisticas.tourspain.es/eses/estadisticas/familitur/paginas/default.aspx. Accessed 29 Oct 2013.
- Jurado, A., Perez-Mayo, J., & Pedraja, F. (2016). The impact of public services expenditure on the Spanish income distribution. Social Indicators Research, 127(1), 217–241. doi:10.1007/s11205-015-0957-y.
- KID'S CLUSTER (2014). El darrer estudi de KID'S CLUSTER detalla les principals tendències en educació i lleure familiar. El blog de Kid's Cluster. http://blog.kids-cluster.com/?p = 419. Accessed 30 Mar 2014.
- Longás Mayayo, L., Riera Romaní, J., & Civís Zaragoza, M. (2016). Asesoramiento al programa CaixaProinfancia; Evaluación del cambio, hacia un modelo de acción socioeducativa. *Pedagogía Social Revista Interuniversitaria*, 28, 85–98.
- Malgesini Rey, G. (2014). EMIN. Informe sobre los Sistemas de Rentas Mínimas en España. Análisis y Mapa de Ruta para un Sistema de Rentas Mínimas adecuadas y accesibles en los Estados Miembros de la UE. Brussels: European Commission. Directorate-General for Employment, Social Affairs and Inclusion. http://eapn.es/ARCHIVO/documentos/recursos/1/1410503349_emin_informe_septiembre_2014.pdf. Accessed 25 July 2016.
- Marín, I., Penón, S., & Martínez, M. (2008). El placer de jugar. Aprende y divértate jugando con tus hijos. De 0 a 14 años. Barcelona: Ediciones Ceac.

- MECD. Ministerio de Educación, Cultura y Deporte (2012). Estadística 2012. Anuario de Estadísticas Culturales. Madrid: Secretaría General Técnica Subdirección General de Publicaciones, Información y Documentación. http://www.mecd.gob.es/servicios-al-ciudadano-mecd/estadisticas/cultura/mc/naec/portada.html. Accessed 24 Oct 2013.
- Montserrat, J., Vilà, T., & FEDAIA. (2015). Proposta de prestació econòmica universal per a la criança (PEUC). Informe FEDAIA. Barcelona: FEDAIA. http://www.fedaia.org/sites/fedaia/files/uploads/informe_peuc_ fedaia.pdf. Accessed 6 Oct 2016.
- OCU. Organización de Consumidores y Usuarios (2012). Supermercados. Descubra el más barato de su barrio. Compra Maest, 374.
- OCU. Organización de Consumidores y Usuarios (2013). Las familias gastaran de media 1.874 euros por hijo en el próximo curso escolar. http://www.ocu.org/consumo-familia/nc/noticias/gasto-vuelta-al-cole-2013. Accessed 30 Oct 2013.
- Oficina de Promoció i Gestió de l'Habitatge (Dir.) (2012). Mapa de Serveis i Indicadors d'Habitatge de la Província de Barcelona. Anuari 2010. Observatori local d'Habitatge. Barcelona: Diputació de Barcelona, Col. Estudis, Sèrie Territori, 10.
- Oldfield, N., & Bradshaw, J. (2011). The costs of a child in a low-income household. *Journal of Poverty and Social Justice*, 19(2), 131–143. doi:10.1332/175982711X574003.
- Parlament de Catalunya (2011). Llei 14/2010, de 27 de maig, dels drets i les oportunitats en la infància i l'adolescència. Barcelona: Parlament de Catalunya. Departament d'Edicions. http://www.parlament. cat/activitat/cataleg/TL115.pdf. Accessed 30 Oct 2013.
- Parlament de Catalunya (2016). Estatut d'Autonomia de Catalunya. Edició 2016. Barcelona: Parlament de Catalunya. http://www.parlament.cat/document/cataleg/48089.pdf. Accessed 30 June 2016.
- Penne, T., Cussó Parcerisas, I., Mäkinen, L., Storms, B., & Goedemé, T. (2016). Can Reference Budgets Be Used as a Poverty Line. ImPRovE Working Paper No. 16/05. Antwerp: Herman Deleeck Centre for Social Policy – University of Antwerp. http://improve-research.eu/. Accessed 20 May 2016.
- Perez-Rodrigo, C., Calderón, V., Campos Amado, J., & Aranceta, J. (2013). Perseo project: process evaluation, level of implementation and effectiveness. *Annals of Nutrition & Metabolism*, 63(1), 1115. doi:10.1159/000354245.
- Protégeles (2005). Seguridad infantil y costumbres de los menores en la telefonía móvil. Madrid: Protégeles. http://www.tecnoeduca.net/sites/default/files/archivos/estudio_telefonia_protegeles.pdf. Accessed 30 Mar 2014.
- RENFE (2014). Niños. En AVE, Larga Distancia, Avant y Media Distancia Convencional. http://www.renfe. com/viajeros/tarifas/ninos.html. Accessed 25 June 2014.
- Ridge, T. (2011). The everyday costs of poverty in childhood: a review of qualitative research exploring the lives and experiences of low-income children in the UK. *Children and Society*, 25(1), 73–84. doi:10.1111/j.1099-0860.2010.00345.x.
- Sales, A. (coord.) (2011). Moda: Indústria i drets laborals. Guia per a un consum crític de roba. SETEM-Catalunya.http://www.setem.org/media/pdfs/moda_industria_i_drets_laborals_baixa.pdf. Accessed 21 Oct 2012.
- Saunders, P. (1999). Budget standards and the poverty line. *The Australian Economic Review*, 32(1), 43–61. doi:10.1111/1467-8462.00092.
- Saunders, P. (2000). Budget standards and the costs of children. A guide to calculating the costs of children. Research Report No. 3. Melbourne: Australian Institute of Family Studies. https://aifs.gov. au/publications/guide-calculating-costs-children/budget-standards-and-costs-children. Accessed 10 June 2016.
- SENC. Sociedad Española de Nutrición Comunitaria (2004). Guía de la alimentación saludable. http://www. nutricioncomunitaria.org/es/noticia-documento/19. Accessed 21 July 2016.
- SETEM (2005). Guía para el consumo responsable de ropa. (2a ed.). SETEM-Campaña Ropa Limpia. https://www.ropalimpia.org/adjuntos/noticias/materiales/Guia-Consumo-Ropa.pdf. Accessed 21 Oct 2012.
- Spain (1978). Constitución española. Boletín Oficial del Estado (BOE), n.311, de 29 de diciembre 1978. Texto consolidado. Última modificación: 27 de septiembre de 2011. https://www.boe.es/buscar/pdf/1978/BOE-A-1978-31229-consolidado.pdf. Accessed 29 July 2014.
- Spanish Ministry of Health, Social Services and Equality (2011). Presentación de la Encuesta Nacional de Salud: ENSE 2011–2012. http://www.msc.es/estadEstudios/estadisticas/encuestaNacional/encuestaNac2011 /PresentacionENSE2012.pdf. Accessed 2 June 2012.
- Storms, B. (2012). Referentiebudgetten voor maatschappelijke participatie. PhD Thesis, University of Antwerp.

- Storms, B., & Van den Bosch, K. (2009). What income do families need for social participation at the minimum? A budget standard for Flandes. Antwerp: CSB-UA. http://www.centrumvoorsociaalbeleid. be/index.php?q = node/1756. Accessed 30 Sept 2015.
- Storms, B., Goedemé, T., & Van den Bosch, K. (2011). Reference budgets. Are they an alternative to the current poverty line?. Conference Growth, Social Protection and Inequality. Sigtuna: FISS, 1–37. http://onderzoek.khk.be/domein_SociaalEconomischBeleid/documents/Storms_Goedeme_VandenBosch. pdf. Accessed 5 Feb 2015.
- Storms, B., Goedemé, T., Van den Bosch, K., & Devuyst, K. (2013). Towards a common framework for developing cross-nationally comparable reference budgets in Europe. ImPRovE Methodological Paper No. 13/02. Antwerp: Herman Deleeck Centre for Social Policy – University of Antwerp. http://improveresearch.eu. Accessed 30 Sept 2015.
- Storms, B., Goedemé, T., Van den Bosch, K., Penne, T., Schuerman, N., & Stockman, S. (2014). Pilot project for the development of a common methodology on reference budgets in Europe. Review of current state of play on reference budget practices at national, regional, and local level. Brussels: European Commission. Directorate-General for Employment, Social Affairs & Inclusion. http://ec.europa. eu/social/main.jsp?catId = 1092&intPageId = 2312&langId = en. Accessed 25 July 2016.
- UNICEF Innocenti Research Centre (2012). Measuring Child Poverty: New league tables of child poverty in the world's rich countries. *Innocenti Report Card*, (10). Florence: UNICEF Innocenti Research Centre.
- United Nations General Assembly (1989). Convention on the Rights of the Child, 20 November 1989. http://www.un.org/documents/ga/res/44/a44r025.htm. Accessed 29 July 2016.
- Van Lancker, A. (2015). Toward adequate and accessible Minimum Income Schemes in Europe. Analysis of Minimum Income Schemes and roadmaps in 30 countries participating in the EMIN project – Synthesis report. Brussels: European Commission. Directorate-General for Employment, Social Affairs and Inclusion. http://www.armutskonferenz.at/files/emin_summary-report-2014_en.pdf. Accessed 30 June 2016.
- Vranken, J. (2010). Using Reference Budgets for Drawing up the requirements of a Minimum Income Scheme and Assessing Adequacy. Synthesis Report. Brussels: European Commission. Employment, Social Affairs and Inclusion. http://ec.europa.eu/social/main.jsp?catId = 1024&langId = en&newsId = 1392 &moreDocuments = yes&tableName = news. Accessed 30 June 2016.
- Warnaar, M., & Luten, A. (eds.). (2009). Handbook of Reference Budgets. On the design, construction and application of reerence budgets. Utrecht: Nibud. https://www.nibud.nl/wp-content/uploads/Handbook_ of_Reference_Budgets.pdf. Accessed 30 Sept 2015.