## Family budgets and standards of living among the working classes in Spain (1900-1930)

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The impoverishment of the working classes caused by industrialization and the social conflicts that this process engendered prompted the creation and administration of a huge number of surveys on family budgets in Europe, in Australia, and in the United States. Spain, however, was not among the countries where these studies were carried out – not even in the initial stages, when the surveys were performed on the initiative of private individuals, such as the ones conducted by King among English families from different social sectors as early as 16881; by Davies in poor peasant families in England in 1794-5; by Eden in rural and urban families in Great Britain in 1797; by Ducpétiaux on working-class families in Belgium (1855); by Booth in workers in London (1891), or the best-known of all, though actually designed with other purposes in mind, the surveys by Le Play in European workers between 1833 and 1853<sup>2</sup>. Nor do we find in Spain anything resembling the official surveys administered by public bodies in the nineteenth century onwards, spurred on by the intensification of labour conflict (Stigler 1954)<sup>3</sup>. The establishment of a minimum wage law was proposed by Eden in 1797 and was the aspiration that underpinned the calculation of many budgets from that time onwards. Hence, the insights into living standards provided by the microdata recorded in these surveys formed the basis for the estimation of standard budgets<sup>4</sup> of a prescriptive nature. This practice had theoretical implications, and had to contend with methodological problems, such as the choice of the family as the unit of analysis, the definition of subsistence consumption, and the characterization of a minimal level of well-being and the structure and composition of expenditure required to achieve it. Since the earliest days, these issues have been the subject of a debate that continues to the present day<sup>5</sup>. Challenged by reports of rising poverty and the urgent need to develop a minimum wage policy, governments called for the application of scientific criteria to the preparation of family budgets<sup>6</sup>. This demand was shared by employers because workers' associations urged the bosses to pay at least subsistence wages<sup>7</sup>. But despite the efforts to apply scientific criteria, both in the administration of surveys and in the processing of the data these budgets were underpinned by cultural assumptions regarding what a decent life is and about the means to achieve it, and regarding models of organization of work, family, and gender. Similarly, the

<sup>1</sup> On these early surveys, see Deeming (2010)

<sup>2</sup> We should also mention Rowntree's work on York (1901), regarded as the first standard budget produced with modern statistical criteria.

<sup>3</sup> The United States Bureau of Statistics conducted more than a hundred studies on the living standards of workers between 1870 and 1900. The support of Congress was fundamental in the continuity and proliferation of these studies throughout the twentieth century. In the following years, numerous studies were conducted to determine wages in the public sector in different cities (Monroe, Brady, Constantine, 1941). The Works Progress Administration collected information on family consumption during the Great Depression in 53 cities, comparing the minimum budget that could be established in times of crisis with the standard budget (albeit not wholly satisfactory), for a married couple with two children aged 8 and 13.

<sup>4</sup> On the definition of a standard budget see Vecchi (2011).

<sup>5</sup> References of special interest on the development of family budgets and the debates in different countries can be seen in Brady 1948, Stigler, 1954; Houthakker, 1957; Bradshaw, 1993; Fisher, 2007; Johnson, Rogers, Tan 2001; Deeming, 2010; Vecch,i 2017; Olivanti, 2018.

<sup>6</sup> The application of scientific criteria to the determination of workers' diets began in the mid-nineteenth century with the work by Neild, 1842; Smith 1863; Simon 1864; Atwater 1895; see Deeming 2010. The diets developed by Cerdà in 1857 and by Úbeda Correal half a century later, follow in this tradition. These studies reflect the limited nutritional knowledge of the period.

<sup>7</sup> In the United States, this debate was already underway in 1909 with the commissioning by Congress of the first budgets to reflect the living standards of workers in the cotton-growing towns of Massachusetts (Johnson, Rogers, Tan, 2001).

analysis of the data collected in family budget surveys was inevitably affected by what was known at the time about health, nutrition and the energy expenditure caused by work, pregnancy, and motherhood. With time, budget surveys carried out by individuals were gradually replaced by more regular official initiatives and the processes of survey collection became more standardized. Surveys might also be carried out by private firms; in Spain, for instance, the mining company Rio Tinto Ltd canvassed its workers to compile data that would help it to establish a wage sufficient to cover the needs of their families, and to ensure the supply of labour (Martinez Soto, Trescastro, Perceval 2023).

In some cases the original surveys have been preserved, even some of the ones that were not published. In others, what remains are standard budgets, which are the source habitually used by historians<sup>8</sup>. In Spain, for instance, the family budgets in by Ildefons Cerdà's *Monografía estadística de la clase obrera de Barcelona en 1856* [Statistical Monograph of the Working Class of Barcelona in 1856] were based on information obtained by representatives of workers' associations, not on surveys of families. José Úbeda Correal created four "budget models" adapted to the average wage of a "good worker" in Madrid in 1902, which was taken to be the sole family income. This is a theoretical model that attempts to establish the best combinations of expenditure for working-class families to enable them to cover their needs, i.e., housing, clothing, food and so on. Like the one created by Cerdà, these budgets were based on specific models of work, family, gender and socialization.

Public projects such as the Spanish Agricultural Surveys of 1842 and 1849 did not directly interview families. Nor did the ones carry out at the end of the nineteenth century at the request of the Commission for Social Reforms (1888, 1902, 1904), whose results, on a multitude of topics, were essentially qualitative, although they also published some standard budgets for specific locations. The sources used for the standard budgets carried out by municipal statistical institutions in cities such as Barcelona, Madrid and Bilbao are not always known and have not been preserved. The same is true of the studies carried out in the 1930s by the *Institut d'Investigacions Econòmiques* (the Institute of Economic Research) of Barcelona<sup>9</sup> and the Spanish National Statistics Institute (INE) in the 1940s. Of course, throughout the nineteenth century, "standard family budgets" were published in monographs, newspapers and elsewhere, but the sources and procedures used are generally unknown and the reliability of the data cannot be taken for granted (Sallarés y Pla, 1888).

Nevertheless, despite their limitations, throughout the eighteenth and nineteenth centuries family budgets were regarded the best tool for analysing the population's living standards. Today, national and international bodies continue the systematic implementation of family budget surveys such as the ones carried out in Spain since 1958 by the INE.

Given the limitations of real wages as an indicator of living standards, modern-day social and economic historians have revived family budgets as a source for their analyses<sup>10</sup>, and consumption has once again become the focus of household budget methodology. When data on consumption are unavailable, and particularly in the context of early modern economic history, the Allen welfare ratio methodology, based on an abstract and homogeneous consumption and income model, has been considered particularly useful for making international comparisons of real wages (Allen, 2001, 2009, 2013, 2015). The model has been used to create wage series for unskilled urban workers from the Middle Ages to the nineteenth century in different countries (Allen, 2001, 2009, 2015; Allen, Bassino, Moll, and Van Zanden, 2011). It measures whether a male head of household, especially a construction worker, could support himself, his wife, and two children on his wage. Of the many consumption baskets that Allen developed, the literature on economic history has made extensive use of the "barebone basket", indicative of the minimum resources necessary for the survival of an urban working-class family (Allen, 2009). In Spain, as part of the Great Divergence debate, recent research has used this method to compare the real wages of textile and construction workers in the

<sup>8</sup> Some were carried out by social scientists such as Engel, following Le Play and Ducpétiaux.

<sup>9</sup> The surveys carried out by the institute in various locations in Catalonia have not been found; Bosch Aymerich 1955a, 1955b, 1955c, 1955d.

<sup>10</sup> Williamson 1995; Van Zanden, 1999; Lindert, and Williamson, 2011. And from another perspective, Humphries 2013; Horrell, Humphries, Weisdorf 2021.

early modern era with those living in cities in north-western Europe (Martínez Galarraga, Prat, 2016; López Losa, Piquero Zarauz, 2021).

Criticism of this methodology, especially the concerns raised by Humphries more than a decade ago, has emphasized how atypical the family unit chosen by Allen (a married couple with two young children) was in the English context, and how the model undervalued the economic resources necessary for the family's maintenance, given that most households contained considerably more children than Allen's model supposed. Other criticisms included the equating of female nutritional needs with male ones, the invisibility of women's economic contribution to family subsistence, and the changes in consumption patterns over time and over the course of the family life course (Humphries, 2013). In response, Allen improved his barebone basket by raising the calories consumed by his typical family (two adults and two children) to 2,500 (Allen, Murphy and Schneider, 2015; Allen, 2015).

The voicing of these criticisms has had a significant influence and has led scholars to reconsider the use of local family budgets in preference to Allen's model<sup>11</sup>. Using new approaches, studies are revising the widely held interpretations of the evolution of working-class living standards in the transition from the nineteenth to the twentieth century<sup>12</sup>. This methodological renewal has focused on the review of dietary guidelines, based on the current understanding of the different nutritional needs according to gender and age<sup>13</sup>. In terms of income, more attention is now paid to family income, considering not just the male wage but the contributions of all members of the family unit as well, especially those of the wife and children. Given the type of historical budgets available in our country, some of these analyses have only been made possible by cross-referencing enumerator municipal books data with data from other sources. Examples include the analysis of family budgets of workers and fishermen in Catalonia and Galicia in 1924 (Borderías and Muñoz-Abeledo, 2018) in which the budgets were reconstructed by cross-referencing information on the composition of families throughout the life course and the income of the different members of the household as recorded in the 1924 registers with data on family consumption from local sources. Thanks to the use of this and other civil registers (for example, the 1920 register from Jaén), in this special issue we can extend our socio-geographic scope to other regions such as the Basque Country, Andalusia, Murcia, and Balearic Islands to develop a geography of family wages in Spain.

One of the main strengths of the studies in this special issue is their use of the same main source: namely, the enumerator municipal books. These registers offer a unique opportunity to analyse the activity and composition of the family income and, therefore, to establish how widely the breadwinner model was applied among the working classes, which is our fundamental objective. These data are affected by a familiar problem: the under-registration of female activity and the irregular reporting of their income, especially among married women. The reliability of the registers also varies widely: some are highly flawed in terms of the reporting of women's activity and wages, and are only useful for reconstructing the income of heads of household; others, without being exhaustive, contain a reasonable amount of data and allow the analysis of wage differences according to occupation, age and gender and of the family economies based on the employment and wages of their members. Some of the civil registers might even be used to establish some

<sup>11</sup> Local budgets have also been used in the classic studies of Spanish towns and cities, such as Pérez-Castroviejo, 1992, 2006; Escudero, Pérez-Castroviejo, 2010; Escudero, Barciela, 2012, 2003; Vilar, 2014; Deu, 1987; Ballesteros, 1997a,1997b; Lana Berasain, 2002, 2007; Colomé, Saguer, Vicedo, 2002; Garrabou, Ramon-Muñoz, Tello, 2015; Borderías, López Guallar, 2001, 2003; Pérez de Perceval, Trescastro, Martínez Soto, 2023; Marco-Gracia, Delgado, 2024.

<sup>12</sup> Other reconstructions of prices and wages in contemporary Spain coincide in pointing out that, at least until the end of the 1920s, male wages were insufficient to cover the economic needs of peasant and working-class families. See in this regard: Pérez-Fuente,s 1993; Camps, 1995; Maluquer de Motes, 2005, 2006, 2013; Escudero, 2002, 2003; Silvestre, 2005; Llonch, 2007; Vilar, 2014). This hypothesis has been corroborated by the analysis of family budgets in rural areas (Deu, 1987; Lana Berasain, 2002, 2007; Colomé, Saguer, Vicedo, 2002; Garrabou, Ramon-Muñoz, Tello, 2015), and in urban working-class districts (Pérez-Castroviejo, see footnote 13, Borderías and López Guallar, 2001, 2003; Gallego 2016, Borderías 2021; Borderías, Muñoz-Abeledo, Cussó-Segura 2022). Gallego Martínez, 2016; Marco-Gracia, Delgado 2024. "Obstáculos comerciales y salariales a la transición nutricional en la España de comienzos del siglo XX", *Investigaciones de Historia Económica*, 12, 154-164.

<sup>13</sup> Borderías, Pérez-Fuentes, Sarasúa, 2010; Mancini 2017.

comparisons with the 1958 Family Budget Survey carried out by the INE. Other complementary sources have been used to complete or contrast the data from the municipal registers, including the Bulletin of the Institute of Social Reforms (1904-1924), the Statistical Yearbook of Spain (1914-1930), the National Population Census (1910-1930), and other local sources.

The main objective of the articles included in this special issue is to estimate the diffusion of the family wage among the working classes over the course of the first third of the twentieth century. For this reason, our unit of analysis is a married couple with two or three children who are not yet economically active -the one used by social theorists and institutions in the eighteenth and nineteenth centuries to draw up their family budgets-. This family model was characteristic of most families in Spain in the 1920s and 1930s, except for certain parts of the Basque Country and Catalonia. In this situation, the lack of resources could affect not just the capacity to work but also biological reproduction and could aggravate social conflicts such as the ones that occurred in Spain during the time frame of our study. Indeed, surveys of the economic situation of the working classes proliferated in many European countries at this time of increasing poverty and growing social tensions.

In estimating the family basket, we draw on local data of working-class consumption collected in budgets drawn up by local institutions, doctors, hygienists, employers, workers' associations and various social theorists. Regarding food, we use the local diets considered most common among the working classes of the time, the cost of which accounted for at least 65% of total expenditure<sup>14</sup>. To contrast the nutritional level of these workers' diets, we use as a reference a diet considered "optimal"<sup>15</sup> that would compensate for the energy expenditure caused by work and be sufficient to ensure a healthy life, considering the differences in needs based on gender, age, and type of work performed. These diets are "realistic" because they reflect the consumption of products available and consumed locally by the working classes, following the methodology used in Borderías, Muñoz-Abeledo 2018, Borderías, Muñoz-Abeledo, Cussò-Segura 2022, and Borderías, Cussó-Segura 2023. Given the elasticity of consumption to the available family resources, measuring the capacity of the male wage to cover the typical working-class shopping basket may not be indicative of a standard of living that allows a healthy existence, or a life regarded as "decent or respectable" in a given historical context – hence the need to establish the minimum sufficient consumption in nutritional terms. As regards food costs, the minimum prices recorded in the budgets have been used, or, failing that, those published in other sources such as municipal bulletins, supply registers, statistical yearbooks, and so on).

Housing, clothing and footwear, and household expenses such as lighting and heating are the most important among the remaining items of expenditure, although their availability is more irregular and their variations more pronounced. Even scarcer are data on medical care and the cost of education, which appear only very rarely in the published budgets, and on what are known as social expenses (money spent in taverns, on tobacco, on newspapers), which tended to be a male prerogative (Borderías, López Guallar 2001).

The results of the analysis of workers' budgets carried out in Catalonia and Galicia, regions with very different development models characterized respectively by textile and canning industries, suggest the presence of traditional models of cooperative family economy based on the accumulation of income well into the 1920s. In neither region did the working classes follow the breadwinner and housewife model, apart from construction workers and skilled workers in certain trades. The analysis of income throughout the life course in these two regions as late as 1924 has shown that in the first stage of family formation, when the household comprised only the married couple and two economically inactive children, the contribution of the wives was essential. Even so, the family income was insufficient to ensure a satisfactory diet (something that would often have dire consequences for the health of its members), and the money available for other outlays was necessarily limited. This was also true of Barcelona, considered one of the cities with the high-

<sup>14</sup> Similar data can be found in Maluquer de Motes, 2013.

<sup>15</sup> These diets are based on the methodology of food balances (García Barbancho, 1960) based on data from 1926 or those used by other authors (Simpson, 1989) and Cussó-Segura (2005) on current conversion tables (mainly BEDCA) (Cussó-Segura, 2005); or, in any case, on diets that respect the estimates of energy and nutrient needs developed by the WHO/FAO, adapting the type of diet to the eating habits of the working classes in each of the studies presented in the special issue.

est wages in Spain (Borderías, Cussó-Segura 2023). In other cities with inferior wages such as Zaragoza the results of analysing the enumerator books in 1924 are similar. The working-class households still requiring the labour of women to meet basic consumption needs (Marco-Gracia, Delgado, 2024).

Thus, the reconstruction of family budgets that we explore in this special issue centres above all on a comparison of the implantation of the male breadwinner model in different locations in Spain. The authors have applied a common methodology in their use of the sources, focusing their attention on the same type of family in the same phase of the family cycle, and using a shopping basket which is based on the consumption of local produce and includes the nutrients necessary for a healthy, active life. Given that one of our objectives is to analyse the differences in the purchasing power of heads of households (and other family members) depending on their type of employment, as far as possible we have used the same system to classify their occupations, namely the HISCO-HISMA system or alternatively PSTI system. Similarly, our analysis of family structure applies Laslett's typology. These methodological choices allow a better comparison of the results between the municipalities analysed. As we pointed out above, our main source for the analysis of family and occupational structures and income is the municipal register of inhabitants for 1924 – the sole exception being Jaén, where the 1920 register is used because it contains information on wages. By using these registers, we have been able to reproduce the structure of the populations in the different municipalities in terms of gender, age, family types and composition, and occupations. In addition to the registers, we have also used various statistical resources prepared by official bodies such as the National Institute of Statistics, the Institute of Social Reforms and the Ministry of Employment. Other local sources consulted include the municipal statistics reports, documentation from town councils, reports from the Provincial Boards of Subsistence and civil governments, local accounts and monographs, the statistical yearbooks published by local organizations and associations, workers' censuses, and company records. All these sources have provided data on wages that have helped us to assess the reliability of the statements recorded in the registers. They have also provided information on the retail prices of products consumed by the working classes and in some cases the maximum and minimum prices of housing, clothing, and other family expenses, as well as data on the labour market.

Some of the articles in this issue present a regional vision. For example, the research carried out by Borderías, Palau and Pujadas-Mora focuses on Catalonia, and the paper by Morey, Seguí, Pujadas and Jover-Avellà on the Balearic Islands.

The article dedicated to Catalonia covers 24 municipalities with a wide selection of economic models: agricultural towns, towns specializing in textiles, cork, wood, or metal production, and mixed towns that combine agriculture and industry, in addition to twelve textile company towns. Using a database containing 21,290 households (88,068 individuals), the article analyses the purchasing power of the wages declared by different occupational groups in the 1924 census. The analysis of food consumption is based on the nutritional needs of different ages and sexes according to the FAO. The results of this study show that male heads of household were able to cover an average of 60% of the family budget, and thus failed to attain the family wage. So, the authors show that the male breadwinner model did not manage to impose itself in Catalonia – not among the labour aristocracy, that is to say, the better-off skilled workers, nor even among the majority of the managers and professionals. It was the dual-income economies that managed to balance the budget. In comparison with other European countries, the results show that the male heads of household contributed less to covering the budget than elsewhere, while women contributed more. This finding underlines the vital role that wives played in the family economy, even though their occupations tended to be poorly paid.

The article on the Balearic Islands presents a wealth of sources; in addition to those already mentioned, the authors draw on private sources from farms in Mallorca that collect peasants' accounts books and data on payments in kind. In addition, the interviews conducted with peasant women provide valuable insights into the forms of work and consumption that characterized the period. The paper focuses on nuclear families, Laslett type 3 b, which made up more than 70% of the population. These families were employed above all in the secondary sector and in commerce, while multiple families tended to work in the primary sector. The research provides data on the spending of urban working-class families in the cities of

Palma and Mahon and peasant families in Mallorca; as in all the articles in this issue, food represented the largest item in the family's outlay, at between 60% and 80%. Once again, the family income was unable to cover family spending; the income of the head of the household covered an average of 80% of the family wage, a contribution that was nonetheless higher than the figure for Catalonia. The authors suggest that in the cities this deficit could be alleviated by working longer hours, and in the countryside through the food surplus provided by home-grown crops.

As for the studies of provincial capitals – Bilbao, La Coruña, and Jaén – the article by Beascoechea, Pareja and Serrano addresses the analysis of the living standards of workers in the metropolitan area of the Bilbao Estuary in 1924. The data are based in three municipalities of the estuary that are especially representative of the metropolitan area (Bilbao, Getxo and Sestao) with a total population of 55,041 inhabitants. The data base represents the 20.4% of the total population of the estuary. Furthermore, the paper uses a highly representative sample of Laslett type 3b nuclear families: 2,851 families living in three municipalities, the capital (Bilbao), Sestao, and Getxo. These families, in which the wives did not declare income in the register, applied two main strategies: providing accommodation for relatives and lodgers when the children were small, and sharing rented housing with other families in a context (especially in the city of Bilbao) where housing was scarce and expensive. This practice allowed workers to adjust their budgets and ensured survival in difficult times. The study also breaks new ground in the appraisal of living standards in the Basque Country, as it highlights differences in wages within the same professional groups according to the municipality of residence. It can be concluded that in unskilled working-class families living in the three municipalities the wages of the head of the household alone were unable to meet the daily expenses necessary for a respectable lifestyle.

Muñoz-Abeledo's article aims to establish the living standards in a port city in the north of Spain, A Coruña, in the 1920s. Although primarily involved in the service sector and in port and fishing activity, the city also offered employment opportunities for women in industry (for example in tobacco, textiles, and clothing) and in commerce. The article reconstructs the occupational structure by sector and the family budgets of type 3b nuclear families, who made up most of the population. The paper calculates the average income of heads of households and their wives according to occupational group, and also reconstructs the main items of food, considering an "optimal" diet comparable to Allen's "respectability basket" but adapted to local consumption habits for the calculation of the cost of living, as in the article on Catalonia by Borderías, Muñoz-Abeledo, Cussó-Segura (2022). In addition, the study takes account of self-provisioning when calculating the food cost of fishing and farming families. The author concludes that neither the workers in the primary sector (peri-urban workers and fishermen) nor those in the secondary sector attained the male bread winner model; dual-income families, who accounted for almost 90% of the families in the sample of 1,531 households, were able to achieve equilibrium, as in Catalonia, thanks to the contribution of the wives.

A third appraisal of the living standards in Spanish cities, written by Martínez-López, Martínez Martín, Gracia Moya, focuses on Jaén in 1920. Its main source is the census certificates of 1920, particularly interesting because many of them include information on rent prices. The reconstruction of the occupational structure of the population and families, as well as the social and income structure, includes 4,853 male workers and 3,780 households. The article reconstructs a typical budget for the city using as a basis for calculating food the one published by Borderías, Muñoz-Abeledo, Cussó-Segura (2022), but adapting the diet to the city of Jaén and differentiating according to sex and age. Food prices come from a different source, the budget of the city's provincial hospital. In addition, the article traces the evolution of the income of type 3b families throughout the life cycle. The conclusion is that without the contribution of female labour, the budgets of families of manual workers with dependent children would not be viable, and not even the dual-income model was sufficient. So, these families had to develop survival strategies, resorting to their relatives, to charity, or in the most extreme cases, to begging or crime.

The last article focuses on living standards in mining families, workers of Rio Tinto Company. The article also uses the municipal register of inhabitants of Nerva in 1924 because this town had the largest number of inhabitants working for Rio Tinto. However, the objectives and methodology of this research are different from the rest of the articles of this special issue. The article "Wages and family strategies in

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Spanish mining in the 1920s. Río Tinto" uses rich documentation available for this mining company in order to know wages as well as family expenses. This research reconstructs the general expenses of nuclear families made up of four/ five members with a father, mother and two or three children. It also reconstructs the income of the male bread winner working for Rio Tinto. The article concludes that the average income of a male breadwinner in Nerva do not reach the food expenses for a four-member family neither for a five-member family.

In short, despite their socio-geographical and occupational differences, all the articles coincide in pointing out that, in the initial phase of the family life cycle before the children become economically active, male wages were not sufficient by themselves to ensure a respectable standard of living for the family. In labour markets with opportunities for female employment, wives' wages, though precarious, could help to balance the family budget, despite a particularly intensive double working day. In the absence of this possibility, other frequent resources were the extension of the working day, taking on extra employment, taking in lodgers, self-provisioning, loans and charity, although the information obtained on these other activities is very limited. Alternatively, they might cut their spending, and thus risk a deterioration in their living conditions.

Taken together, the evidence gathered in this issue obliges us to reassess the prevailing view of real wages and living standards in the second decade of the 1920s, and the corresponded assumption that by this decade the male breadwinner model had passed from being an ideological model to being a widespread mode of family economy in Spanish society, even among the working classes.

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