**Engel and Simmel: Sharing Meals at Home in Cyprus**

**Author Details**

Author 1 Name: David Jacobson

Department: DCU Business School

University/Institution: Dublin City University

Town/City: Dublin 9

State (US only):

Country: Ireland

Author 2 Name: Caroline McMullan

Department: DCU Business School

University/Institution: Dublin City University

Town/City: Dublin 9

State (US only):

Country: Ireland

Author 3 Name: Christos Minas

Department: SESA

University/Institution: Frederick University

Town/City: Nicosia

State (US only):

Country: Cyprus

**Corresponding author:** David Jacobson

**Corresponding Author’s Email: david.jacobson@dcu.ie**

**Biographical Details**

[Author 1 bio] David Jacobson is Emeritus Professor of Economics at Dublin City University. He has worked in research and teaching in Economics and International Political Economy, mainly at DCU but also in other universities in Britain, France, Cyprus, Japan, China, USA and Israel. His has been publishing academic articles and books on economics and policy for many years.

[Author 2 bio] Dr Caroline McMullan is the Associate Dean for Teaching and Learning at DCU Business School where she specialises in Emergency, Crisis and Business Continuity Management. Caroline’s teaching and research cover a broad spectrum of subjects including her key interests Building Resilient Organisations and Business Continuity Management. At a national level, Caroline has contributed to the development of emergency management policy and was the architect of the first National Risk Register.

[Author 3 bio] Christos Minas teaches at Frederick University, Nicosia, Cyprus. He has a BA (Hons) in Accounting and Finance from Manchester Metropolitan University, MSc in Accounting and Finance from De Montford University and PhD from Dublin City University. Dr Minas is also an Academic Member of the Association of International Accountants. His research interests are household expenditure patterns especially relating to food consumption and home acquisition, and welfare regimes affecting such patterns.

**Structured Abstract:**

Purpose: The aim of the paper is to show the relationship between food as a shared good (or public within the household) in the economic sense, and food as a shared meal in the sociological sense.

Design/methodology/approach (mandatory): Quantitative data derived from a household budget survey in Cyprus are used to set up questions to which answers are suggested using the qualitative approach of in-depth interviews.

Findings: The main finding is that the relatively high expenditure by elderly couples on food for home consumption may be explained by frequent inter-household, intra-extended family meals in Cyprus.

Research limitations/implications (if applicable): The paper provides evidence that household expenditure on food may not be directly indicative of household consumption of food. Researchers interested in household consumption of food should therefore be aware of the differences between household and extended family and, where extended family continues to be significant, they should be wary of using data from household budget surveys to analyse food consumption. One limitation is that the results are derived from in-depth interviews with a purposive sample of nine households. It may be appropriate to replicate the study, either in Cyprus or in similar societies where extended family remains significant, at a larger scale.

Practical implications (if applicable): The evidence that household expenditure may not be indicative of household consumption suggests that questions on consumption should be included in household budget surveys.

Originality/value: This paper draws together, for the first time, economic ideas on expenditure on food derived from the quantitative research of Ernst Engel on one hand and implications of the theories of Georg Simmel on the sociology of the meal on the other. The paper shows that some issues arising from quantitative analysis of household budget surveys cannot be explained using data from that source; this is particularly so where consumption of food is inter-household.

**Keywords: Engel, Simmel, Cyprus, food, shared, extended family, household, Deaton-Paxson Paradox, meals, public, private.**

**Article Classification: Research Paper.**

**Engel and Simmel: Sharing Meals at Home in Cyprus**

**1 Introduction**

Among writers whose work in the 19th and early 20th centuries can be considered to be seminal to research on expenditure on and consumption of food, Ernst Engel (1821-1896) and Georg Simmel (1858-1918) are to the forefront. Engel’s (1895) work has contributed to and been developed mainly by economists, for example through such ideas as “inferior goods” and “Engel curves”. His basic finding was that, out of additional income, a declining proportion is spent on food[[1]](#endnote-1). There are many papers using ideas derived from Engel's work, including a sophisticated econometric study of expenditure on food at home in Germany published in the *British Food Journal* (Burzig and Herrmann, 2012) and a household budget survey (HBS)-based study of expenditure on food in Cyprus published in the *Journal of European Social Policy* (Jacobson *et al*., 2010).

Simmel’s work is more familiar to, and referenced by, sociologists. Among his papers of most relevance in the context of food research is “The Sociology of the Meal” (1998), first published in German in 1910. Simmel considered the development of the meal into a time for sharing food as reflecting the evolution from “primitive” to more “cultivated” social existence (though he noted that the physical act of eating of course remains individual)[[2]](#endnote-2). Like Engel, Simmel will also be familiar to readers of *British Food Journal*.The Simmellian idea that there are both social and physical elements to eating is used by Brown *et al*. (2013) in their study of the lunchtime meal among students in Britain. The “socialisation of the meal” (Simmel, 1998, p.132) may in some ways have been reversed in recent times; Warde (1999) for example writes of the increasing absence of routine in Western eating habits that makes it less and less likely that the household will eat together.

Given the importance to research on food of these two writers, it is of interest to consider an area of overlap between them and that is what this paper sets out to do. Much of the work inspired by Engel is quantitative, often using as its data source HBSs as undertaken in most developed and many less developed countries. In the present paper a puzzle emerging from a HBS in Cyprus is identified and some possible explanations associated with Engel are considered. A more sociological explanation, associated with Simmel, is then posited – arising from primary qualitative research – as more likely.

Household budget surveys measure the expenditure of households based on the assumption that all the consumer products purchased by a household are consumed by that household. Where families are to a greater extent extended families, with different generations living in different households but in other ways continuing to live as one extended family unit, then some consumption is inter-household and HBSs may not be an accurate measure of consumption behaviour. This paper provides evidence of this from Cyprus, suggesting that using the HBS to show Engel-type relationships between income and expenditure may be inappropriate. Using evidence from in-depth interviews the paper suggests that food consumption behaviour of families may be more related to culture than to income. To be more precise, the Engel-type approach provides evidence that the expenditure on food by older couples is relatively high, but does not provide an explanation for this finding. The Simmellian question at the heart of the paper is then, whether this relatively high expenditure on food by older couple households is related to extended-family, inter-household meals in Cyprus. The paper is structured with a brief methodology section following this introduction; next there is a literature review in which the question from the Cyprus HBS is raised and explained. In the fourth section possible explanations are considered; this is followed by a presentation of some of the information from the interviews; the final section offers results, discussion and conclusion.

**2 Methodology**

This paper draws on data from a household budget survey reported on in Jacobson *et al*. (2010) and on interviews with nine households reported on in Minas *et al*. (2013a). HBS data were collected on 625 households, the addresses of which were obtained, as a random sample, from the Cyprus Phone Directory. A household comprises “one or more persons (related or not) who live together and share principal meals, in the sense that the household's food supply is obtained out of a common budget, and have common arrangements for supplying basic living needs” (DSR, 1999, p.31).

The rate of response was very high at over 80 per cent. The high response rates are attributable to the commitment of the trained interviewers, all drawn from Frederick Institute of Technology undergraduates in the final year of their studies, and to the readiness of Cyprus households to participate in a survey conducted by a respected institution after they were clearly informed about the survey's purpose and objectives and after being guaranteed confidentiality.

It might be argued that the use of the telephone directory as a sample frame leads to a non-representative sample because those without telephones are omitted. However, household landline penetration at the time of the survey (2004) was very high, over 90 per cent in Cyprus, exceeding that of France and comparable to that of Germany (Enterprise Ireland, 2007) thus any sample frame error is minimal.

As concerns the interviews, the methodology is qualitative; nine households (or cases) were chosen, using purposive sampling, for in-depth study. As argued by Flyvberg (2006), the paradoxes and anomalies arising from quantitative research can sometimes be resolved by the greater depth achieved from case studies. Nine salient characteristics were identified (single person household; single parent household; a two parent family with children; household where the mother participates in the labour force; household where the mother does not participate in the labour force; a low income household; a high income household; a rural household; an urban household) and a household was selected to reflect each of these. The households used were drawn from those surveyed in the HBS.

The research questions were derived from the literature review and the previous research of the authors. Semi-structured interviews were then used to collect the data required to answer these questions. The interviews were recorded, transcribed and translated into English. A simple coding system was used to cluster the key issues in the interview data (Bell, 2005). The issues were derived from questions arising in previous research (Jacobson *et al*., 2010). Given the focus on how meals were actually taken, a different symbol was used for each of the main possibilities in Cyprus, namely at home, in pubs and cafes, in restaurants, and at the homes of parents or parents-in-law. Thus any mention in an interview of one of those ways of consuming food was flagged with its particular symbol. This facilitated the construction of Table 2 and the discussion in Section 6.

**3 Literature Review: HBS and Food**

Among the vast literature on, and using, HBSs is a recent debate on household size and food consumption (Lanjouw and Revallion, 1995; Deaton and Paxson, 1998; Horowitz, 2002; Gan and Vernon, 2003; Perali, 2008). These references constitute only a selection from this small sub-set of papers using HBSs. This particular debate focused on what became known as the “Deaton-Paxson paradox”.

Lanjouw and Revallion (1995), in addressing the relationship between household size and poverty, consider among other things, food consumption. They conclude that “the relationship between poverty and household size should be interpreted with considerable caution” (Lanjouw and Ravallion, (1995, p.1432). Deaton and Paxson (1998), in a sense ignoring this warning, posit and test the theory that the relationship between household size and per capita expenditure on food should be positive. Their empirical testing of this theory shows the opposite, that the relationship is inverse, and this, in essence, is the Deaton-Paxson paradox. At the heart of the Deaton-Paxson paradox is the question of shared vs private consumption of food where “shared” means public – as in economists’ use of the term “public goods” – within the household. The sharing of a meal in Simmellian terms is very different, referring to the social or cultural process of being together while eating a meal.

A large number of papers have addressed the Deaton-Paxson paradox, including Horowitz (2002), Gan and Vernon (2003) and Perali (2008), with different theoretical and statistical suggestions. Perali’s (2008) resolution is obtained through different statistical methods from those of Deaton and Paxson (1998). Rather than focusing on per capita expenditure, Perali (2008, p.1536) focuses on total expenditure and examines whether “food share increases with household size at a diminishing or increasing rate”. This leads to empirical results that match the theoretical expectation that an increase in household size should be associated with an increase in the food share.

Data from the HBS for Cyprus undertaken by Jacobson *et al*. (2010) have been used to address aspects of the Deaton-Paxson paradox. More consistent with Perali (2008) than Deaton and Paxson (1998), they use total expenditure as the basis for the analysis. They distinguish between expenditure on food at home and food from elsewhere (like take-aways and restaurants). With Horowitz (2002) and Gan and Vernon (2003) they find, among other things, that expenditure on clothing goes up more than on food at home as household size increases.

In the analysis of HBS data for Cyprus, Jacobson *et al*. (2010) also find a number of characteristics of food consumption not remarked upon in the other papers referenced here. They note, for example, a strong correlation between the age of the household – in particular the age of the woman of the household – and expenditure on food at home. Older households spend more, relatively, on food at home. Table 1, based on the data from the HBS and presented here for the first time, shows that older, two-person households spend 55 per cent more per person on food at home than younger, four-person households.

**Table 1 about here**

**4 Explanation: Engel or Simmel?**

There are a number of possible explanations for the findings in Table 1. Among these are that older households are better off than younger households, that economies of scale are highly significant, that food for children is cheaper than food for adults, and that older households increase their expenditure on food at home (and reduce expenditure on food out). The first of these is ruled out by evidence that expenditure on food at home is not related to income of the household (Jacobson *et al*., 2010).

For economies of scale to be the explanation, an additional person should cost less than the previous additional person. A third child should cost less than a second child, in terms of expenditure on food at home, and so on. Again using the data from the HBS, it emerges that the cost of the first child – in terms of food at home – calculated by subtracting the cost per couple household from the cost per household with one child, is 59.99 (Cyprus pounds per month). Using the same method, the cost of the second child is 69.65. Therefore, economies of scale do not provide the explanation for the data in Table 1.

If younger children eat – and cost – less than adults, the data should indicate that for younger households, for example where the age of the woman of the household is under 40, the cost of an extra child is less than the cost of an extra child in older households, for example where the age of the woman of the household is over 40[[3]](#endnote-3). Again this is not confirmed by the data. The cost of an extra child, on average, for households in which the woman of the household is 30-39 is 61.11. The cost of an extra child, for households in which the woman of the household is 40-49 is 43.38.

The higher expenditure on food at home by older couples could be explained simply by the fact that the “retired decide to spend more time on shopping and meal preparation. Empirical evidence suggests that this happened in the US (Aguiar and Hurst, 2005) and in Italy (Battistin *et al*., 2009)” (Burzig and Herrmann, 2012, p.1382). Burzig and Herrmann (2012) find partial support for this explanation in Germany in that, although the retired increase their expenditure on food at home, the ratio between expenditure on food at home and food out stays the same. However, in follow up work using the German Time-Use Survey, Velarde and Herrmann (2014, p.8) find that “After retirement, the probability of consuming food away from home declines whereas the probability of engaging in food production at home rises as does the average time of doing so.” This may be a factor in Cyprus, but given the low labour force participation rate especially of older women (see Table 3), and the much greater importance of inter-household family in Cyprus than elsewhere (Minas *et al*., 2014) it is likely to be only a minor factor. In other words it may explain some of the extra 55 per cent of Table 1, but other factors are likely to be more important.

Another possible explanation for the data in Table 1 is that older households are buying and preparing food that is being consumed not just by themselves, but also by their children and their children’s households. For people with a familiarity with Cypriot society, this is the most likely explanation; however, quantitative evidence in support cannot be adduced from the type of household-specific expenditure data generated by HBSs, because HBSs in general assume that products purchased by a household are consumed by that household.

An approach generated by a focus on the questions and issues raised by Engel-type theories and data led in the first instance to the Deaton-Paxson paradox. This has been the catalyst for a great deal of interesting work on theory, on substance and on methodology in papers on expenditure on and consumption of food. However, what emerges from the above is that some questions, especially those associated with consumption behaviour that crosses conventionally defined households, are not susceptible of resolution using data on household budgets. Questions, for example, on such issues as who shares meals, are closer to the cultural and sociological concerns of theories emanating from the work of Simmel.

**5 Food and Extended Family in Cyprus: Evidence from Interviews**

At the core of the difference between the Engel-type research using aggregated household expenditure on food, and the Simmel-type examination of individual families’ food consumption behaviour, is the extended family. The extended family may, following elements of nuclearisation (Verdon, 1998), live in different households. However, the additional homes are in many cases – especially in Cyprus (Minas *et al*., 2013b) –obtained through the support of the extended family. In addition the extended families, though living apart, frequently have meals together. Even where they do not actually eat together, the meals for the children or grandchildren may be prepared by the grandparents (Lazarou and Soteriades, 2010). Mediterranean European countries including Cyprus, “are characterised by the extreme importance they attribute to family cohesion and intergenerational solidarity” (Böhnke, 2008, p.136).

The data on food consumption from the interviews is summarised in Table 2. The ratings (low, moderate or high) are based on the information from the interviews on how food is obtained. “Low” is defined as once a week or less; “moderate” as two or three times a week; and “high” as more than three times a week. In many of the households, a high proportion of the food consumed is obtained from parents or parents-in-law of the adults in the household. The most important result of the interviews for the present context is that unless specific factors – like distance – prevent it, meals are regularly shared between households, within extended families. The location of these shared meals is most often the original family home, and generally the payment for the meals is by the couple in the family home, namely the parents/grandparents of the people in the other households (confirming Lazarou and Soteriades, 2010).

**Table 2 about here**

The case narratives provide some illustration. In Household 6 (rural household), for example, there is “low” inter-generational sharing of meals. The couple, Yiannakis and Marina[[4]](#endnote-4), work in relatively low-paid jobs in a small village, Yiannakis in his own business and Marina in an office. The main meal of the day for them and their children is in the evening, prepared by Marina. She says: “I get home from work tired and have to prepare food for me and the kids. If only my Mum lived nearer, she’d be happy to do this for me”. They travel to her parents’ home for a family get-together, including a meal, on Saturdays. Given the greater frequency of inter-generational meals of other households interviewed, once a week is rated as “low”.

Households 3 (high income) and 4 (low income) are more typical of those interviewed. In both cases there are daily inter-generational, inter-household meals, paid for and prepared by the grandparental household. In Household 3 the mother leaves her child with his grandparents in the morning. They take him to the kindergarten and pick him up at lunchtime. The mother comes from work during her lunch break and eats with them, often joined by her siblings during their lunch breaks. In Household 4, similarly, the mother, her children and often her siblings, all eat a midday meal in the grandparental home, prepared by the grandmother. In both households, too, the evening meal is often leftovers brought home after the midday meal.

In Household 1 (single person household) Fivos is a retired professional who, when his mother was alive, almost always ate at home the food that his mother prepared. Now he almost always eats in restaurants. The exception is when he eats with other relatives. Household 2 (single parent) is that of a divorced woman and her young child. The child always and the woman almost always eat at the woman’s mother’s house. As the woman says, “There’s always food for me at my Mum’s”.

In Household 7 (urban household) the three children always eat lunch at their grandparents’ but the parents work in different towns so they eat separately. Their household has a meal together at home most evenings. Household 8 (two parents with children) is one in which three of the four grandparents have passed away, and the fourth, the father’s mother, has a small business so is not available to prepare meals or mind children.

Finally, Household 9 (wife/mother not in labour force) is that of George and Spyroula. He has a successful business and she works in the home; she prepares most meals herself. They have consciously decided to bring their children up more within the nuclear family than with the help of grandparents; this is related to the fact that George does not get on with Spyroula’s parents. This is the only example, among the households interviewed, where proximity and availability would have facilitated grandparental help with meals but where nevertheless the rating under “Parents/In-laws” is “none”. It may be that a rating of “moderate” or “none” in this column is more common for households where the woman of the household is not in the labour force, but a larger, random sample would be necessary for this to be verified.

Other than this possibility, the interviews suggest that, in relation to food consumption, it is the norm for different generations of a family, including married siblings, to eat at least some meals together, in some cases daily. The food is generally provided by the grandparents, and this is the case for families at all income levels and therefore seems to be unrelated to income. This is consistent with the finding of Jacobson *et al*. (2010) from the HBS data, that expenditure on food at home is unrelated to income.

The purchase by grandparents of food consumed by the extended family thus seems to explain the data in Table 1. But why – in contrast to the findings of Warde (1999) for “the West” – is there a prevalence of regular, shared meals in Cyprus?

Brewis and Jack (2005) argue that “time seems increasingly to be of the essence when it comes to Western food habits” (p.51). “Time poverty” for busy households, reduces the likelihood of time being allocated for shared meals. This is all the more the case where women, traditionally the housewife and cook of the family, obtain paid employment. This is happening in Cyprus too but as can be seen from Table 3, the labour force participation rate for women over 54 is still low. So while it is likely that increasing labour force participation by women will make it less and less likely that the household will eat home prepared meals together in the future (see Warde, 1999), there is still wide availability of grandparents, especially grandmothers not in the labour force, to prepare meals for extended families. Moreover, the over-54 female participation rate in Cyprus is consistently below the EU average, and the percentage of inactive females 55-64 who are inactive because of family responsibilities, at 55 per cent, is the highest in the EU and over four times the EU average of 13 per cent (Eurostat, 2012).

**Table 3 about here**

Underlying this is that there is still in Cyprus – and other similar societies[[5]](#endnote-5) – importance attached to the extended family. A number of writers (e.g. Allen, 2006; Kemeny (2006); Hoekstra, 2010) have identified a “Mediterranean welfare regime” in which the extended family is the key welfare pillar (in contrast to other welfare regimes in which the state – Scandinavia – or the market – USA – is the main pillar). Among others who explicitly include Cyprus in this type of welfare regime are Kääriäinen and Lehtonen (2006), Böhnke (2008) and Gal (2010). With direct examples of how the importance of the extended family impinges on behaviour in relation to housing acquisition (Minas *et al*., 2013b) and in relation to patterns of food consumption as shown here, it is clear that the Simmellian evolution is still at the shared meal stage in Cyprus. The reversal evident from the work of Warde (1999) has not (yet?) reached Cyprus.

**6 Results, Discussion, Conclusion**

Data from HBSs have been analysed in many ways, many of them emerging from the theories of Ernst Engel. A recent study on household size and food consumption in Cyprus (Jacobson *et al*., 2010) has shown that in terms of the economic concept of how shared (or public-within-the- household) food is, it is not the best example as it is less shared than clothing. This emerges from the Deaton-Paxson literature, and in particular from a HBS implemented in Cyprus in order to address the Deaton-Paxson paradox.

Also emerging from the Cyprus HBS is that expenditure on food at home in older households is substantially greater per person than in younger households. Using the data from the Cyprus HBS, it has been possible to reject a number of possible explanations for this finding. Without a national Time-Use Survey like that in Germany, it is not possible to identify the extent to which retirement leads to a change in lifestyle and associated food consumption behaviour which might explain some of the extra 55 per cent of Table 1. The employment data and the interviews together suggest that it is not an important part of the explanation.

There was no way of using the HBS data to confirm or reject the suggestion that Table 1 could be explained by the fact that older households were providing food for younger households in the same multi-household family. To address this, an approach more informed by the theories of Simmel was appropriate. This approach involved in-depth interviews with individual households to obtain information on the extent to which their meals are shared – as a social process – within extended families, between households. These interviews, and other research on Cyprus (Minas *et al*., 2013a), suggest moreover that the direction of support in the inter-household families is much more from the older households to the younger ones than vice versa. There is no evidence, for example, that the greater food at home expenditure of the older household is compensated for by other expenditure (for example on meals out) by the younger household.

In short, why is the expenditure per person in older, smaller households on food at home 55 per cent greater than in younger, larger households? The answer suggested in this paper is that it is because so many of the older, smaller households are those of grandparents that buy and prepare food for their children and their grandchildren.

If this conclusion is correct, then a great deal of the empirical analysis of HBSs used in the papers on the Deaton-Paxson paradox may be called into question. After all, if the food at home purchased apparently for consumption in the two-person households in Table 1 is actually consumed in many cases by families of more than one household, then the extent of sharing (in both senses) is much greater than the HBS data suggest. Much of the Deaton-Paxson debate focuses on relatively poor countries, where extended families are much more common than in more industrialised countries. If the extended – or multi-household – family in Cyprus explains a greater sharing of food in Cyprus than suggested by the HBS, then it is likely that this is true, too, for the countries subject to analysis in the debate on the Deaton-Paxson paradox.

At the very least, the present paper suggests the need for a reconsideration of what to include among the questions in standard household budget surveys. It also suggests the need for caution, where the HBS data are from countries with strong family pillars, like those of southern Europe and the Mediterranean. Finally, it follows that some of the questions relating to household and/or family food consumption are better addressed from the theories of Simmel than of Engel.

**Table 1: Average Expenditure on Food at Home in Cyprus, Cyprus Pounds**

|  |  |
| --- | --- |
|  | **Food at Home** |
|  | **2+2 Household\*** | **2 Household\*\*** |
| **Age of Woman of Household**  | 25-34 | 50+ |
| **Average Expenditure Per Person Per Month** | 94.47 | 146.30 |
| **Ratio of Older, 2 HH to Younger, 2+2 HH**  |  | 1.55 |

Notes: \* 2+2 person household (n = 47); \*\* 2 person household (n = 44)

Source: Jacobson *et al*. (2010), survey data.

**Table 2: Food Consumption – Location and Source**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| House-holdNumber | PeopleinHousehold | Home | Take-away | Pubs and Cafes | Restaurants | Parents/In-laws |
|  |  |  |  |  |  |  |
| 1 | 1 | None | High | None | High | None |
| 2 | 2 | Moderate | Low | None | Low | High |
| 3 | 3 | Low | Moderate | None | Low | High |
| 4 | 4 | Moderate | Low | None | Low | High |
| 5 | 4 | Low | Moderate | Low | Low | High |
| 6 | 5 | High | Low | None | Low | Low |
| 7 | 5 | High | Low | None | Moderate | Moderate |
| 8 | 6 | High | None | None | Low | None |
| 9 | 7 | High | Low | None | Low | None |

Source: Data from Interviews (see also Minas *et al*., 2013a)

Note: Low = once a week or less; moderate = two or three times a week; high = more than three times a week

**Table 3: Male and Female Labour Force Participation Rates, 1999, 2006 and 2012 (%)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **1999** | **2006** | **2012** |
| **Age** | **Men** | **Women** | **Men** | **Women** | **Men** | **Women** |
| **15-24** | 40.9 | 39.5 | 45.0 | 38.3 | 42.8 | 35.5 |
| **25-54** | 95.2 | 65.3 | 95.3 | 77.4 | 93.8 | 82.0 |
| **55-64** | 69.8 | 30.1 | 74.1 | 37.8 | 71.2 | 41.3 |
| **65+** | 14.1 | 2.5 | 17.0 | 4.4 | 15.0 | 4.9 |

Source: Republic of Cyprus, Statistical Service, *Statistical Portrait of Women in Cyprus 2008*; Republic of Cyprus, Statistical Service, *Labour Force Survey 2012*.

**References**

Aguiar, M. and Hurst, E. (2005), “Consumption versus expenditures”, *The Journal of Political Economy*, 113(5), 919-948.

Battistin, E., Brugiavini, A., Rettore, E. and Weber, G. (2009), “The retirement consumption puzzle: evidence from a regression discontinuity approach”, *The American Economic Review*, 99(5), 2209-26.

Böhnke, P. (2008) “Are the Poor Socially Integrated? The Link Between Poverty and Social Support in Different Welfare Regimes”, *Journal of European Social Policy*, 18(2), 133-150.

Brown, L., Edwards, J. and Hartwell, H. (2013) “Eating and emotion: focusing on the lunchtime meal”,

*British Food Journal*, 115(2), 196-208.

Burzig, J. and Herrmann, R. (2012) “Food expenditure patterns of the generation 50+: an Engel-curve analysis for Germany”, *British Food Journal*, 114(10), 1380-1393.

Deaton, Angus S., and Paxson, Christina (1998) “Economies of Scale, Household Size, and the Demand for Food.” *JPE,* Vol. 106, pp. 897-930.

Department of Statistics and Research (DSR) (1999). Family Budget Survey, 1996/1997, Ministry of Finance, Republic of Cyprus (in English).

Engel, E. (1895) “Die Lebenskoten belgischer Arbeiter-Familien früher and jetzt”, *International Statistical Institute Bulletin* 9, 1–74 (first published, 1857).

Enterprise Ireland (2007) “Areas of Opportunity in Cyprus”:

[http://www.enterprise-Ireland.com/Contact/Overseas+Offices/Areas+of+Opportunity+in+Cyprus.htm](http://www.enterprise-Ireland.com/Contact/Overseas%2BOffices/Areas%2Bof%2BOpportunity%2Bin%2BCyprus.htm) (accessed January 2009).

Eurostat (2012) “Female Labour Market Participation”, Fig.11b, from Labour Force Survey 2012: <http://ec.europa.eu/europe2020/pdf/themes/31_labour_market_participation_of_women.pdf>, accessed 3rd March 2014.

Gal, J. (2010) “Is There an Extended Family of Mediterranean Welfare States?” *Journal of European Social Policy* 20(4), 283-300.

Gan, Li, and Vernon, Victoria (2003) “Testing the Barten Model of Economies of Scale in Household Consumption: Toward Resolving a Paradox of Deaton Paxson.” *JPE*, Vol. 111, pp. 1361-1377.

Horowitz, A.W. (2002) “Household size and the demand for food: A Puzzle to be Resolved?”, Sam M. Walton College of Business, University of Arkansas, Working Paper.

Jacobson, D., Mavrikiou, P.M., and Minas C., (2010) “Household size, income and expenditure on food: The case of Cyprus”, *Journal of Socio-Economics*, *39*(2), 319-328.

Lanjouw, P. and Ravallion, M. (1995) “Poverty and household size,” *Economic Journal*,105(433), 1415-1434.

Lazarou, C. and Soteriades, E.S. (2010) “Children's physical activity, TV watching and obesity in Cyprus: the CYKIDS study”, *European Journal of Public Health*, 20(1), 70-77.

Minas, C., Jacobson, D., Antoniou, E. and McMullan, C. (2014) “Welfare regime, welfare pillar and southern Europe”, *Journal of European Social Policy*, 24(2), 135-146.

Minas, C., Jacobson, D. and McMullan, C. (2013a) “Food in Cyprus: A Qualitative Approach to Household Consumption Research”, *Journal of European Social Policy*, Vol. 23, No. 3, pp.300-314.

Minas, C., Mavrikiou, P. and Jacobson, D. (2013b) “Homeownership, Family and the Gift Effect: The Case of Cyprus”, *Journal of Housing and the Built Environment*, Vol. 28, No. 1, pp.1-15.

Perali, F. (2008) “The second Engel law: Is it a paradox?”, *European Economic Review*, 52(2008), 1353–1377.

Simmel, G. (1998) “The Sociology of the Meal” in Frisby, D. and Featherstone, M. (eds.) *Simmel on Culture: Selected Writings*, Sage.

Velarde, M. and Herrmann, R. (2014) “How Retirement Changes Consumption and Household Production of Food: Lessons from German Time-use Data”, *The Journal of the Economics of Ageing*, 3, 1-10.

Verdon, M. (1998) *Rethinking Households: An Atomistic Perspective on European living Arrangements*. London and New York: Routledge.

Warde, A. (1999) ‘Convenience Food: Space and Timing’, *British Food Journal* 101 (7): 518-527.

1. A search in Google Scholar for “Ernst Engel food” gets 13,300 “hits” (24/02/2014). [↑](#endnote-ref-1)
2. A search in Google Scholar for “Georg Simmel food” gets 13,800 “hits” (24/02/2014). [↑](#endnote-ref-2)
3. The data includes information on age of parents, not on age of children. [↑](#endnote-ref-3)
4. Names have been changed to preserve confidentiality. [↑](#endnote-ref-4)
5. Italy, Greece, Spain, Portugal and Malta are also above the EU average of women out of the labour force because of family responsibilities (Eurostat, 2012). [↑](#endnote-ref-5)