



**HOUSEHOLD SATELLITE ACCOUNT
(EXPERIMENTAL)
METHODOLOGY
Chapter 12 UK Account**

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12. UK ACCOUNT

Concepts

In order to bring the estimates for all the principal functions together in one account, we need to be sure that we have avoided double counting any of the output in more than one project, and that all our output estimates are on the same price basis.

The areas of potential overlap occur particularly in relation to adult care, childcare and voluntary activity. The output measure of childcare includes all care given as help to other households, but excludes care provided formally by organisations (which is counted in voluntary activity).

All informal help to adults is included in the output of adult care, but this includes meal preparation and DIY for relatives, friends and neighbours. In theory, these should be included in nutrition and housing respectively. The detail in the adult care data source is not sufficient for us to identify separately these activities. The output estimates of housing and nutrition do not include the provision of services for other households, so we know they have not been double counted. Because we have used a residential rate for continuous adult care, an adjustment does need to be made for accommodation and meals (see below).

To be comparable with each other and with adjusted GDP at market prices, we need to ensure that the outputs are all valued at purchasers' prices, i.e. inclusive of taxes on products, e.g. VAT. Where we have used an hourly rate to value care, this implies using gross rather than net wages. Because VAT is charged at a standard rate, and we have net wages for all the estimates where gross wages have been used, we can also calculate output at basic prices.

Having calculated the value of the output in each principal function, the various inputs need to be subtracted, in order to arrive at a figure for value added. Intermediate and capital consumption are apportioned to each project as described in the relevant chapters. Additionally, household production of housing, transport and nutrition must also be subtracted from the output of some of the projects. This can be done in a supply and use table, as shown in Annex 13.1 at the end of the chapter.

In order to compare the results with GDP in the National Accounts, we need to subtract from GDP the amounts which are implicitly or explicitly included in the HHSA – imputed rent of owner occupiers, tenant rents which are inputs to household production, and any other Household Final Consumption Expenditure which we have reclassified as intermediate consumption or final consumption. This adjusted GDP becomes Gross Market Product, and can be added to Gross Household Product – the value added by households as calculated in the HHSA – to give Gross Economic Product¹.

Methodology

Housing

The prices used to value nutrition, laundry services and continuous adult care all include the cost of premises, and so the contribution of housing must be deducted in order to arrive at the value added by households. This includes both a proportion of the output of owner-occupied

¹ As described by Duncan Ironmonger in Ironmonger, D. (1993) "Why Measure and Value Unpaid Work?" in *International Conference on the Measurement and Valuation of Unpaid Work, Proceedings* Ottawa: Statistics Canada

housing, and of the rents and other housing costs (utilities and insurance) paid by tenants.

The preparation of food generally takes place in the kitchen, and it seems sensible to assume that it is the cost of providing this room, where many meals will also be eaten, which should be taken into account. Because our housing estimate is based on the number of owner occupied and rented rooms, including the kitchen, and we assume that every dwelling has one kitchen, we can estimate the proportions of owner occupied and rented rooms which are accounted for by kitchens. However, meal preparation is not the only activity which takes place in a kitchen, and, particularly in smaller dwellings, it will be used for leisure as well as, in many cases, for another productive activity – providing laundry services. In order to calculate how much accommodation should be allocated to each, we made a broad assumption that 20 per cent of the kitchen is used for non-productive activities. We plan to examine this assumption in more detail at a later stage. We then took the average number of washing loads per household per week (5) over the average number of meals per household per week (21), and allocated 20 percent of the remaining kitchen accommodation to laundry services and 80 per cent to nutrition.

From the adult care estimates, we know the number of adults receiving continuous care in UK households. We know whether these adults are in owner-occupier or tenant households, and this proportion (number of rooms required for adult care over the total number of rooms in each category) gives the accommodation which needs to be allocated to the adult care project.

Transport

The prices used to value nutrition include the costs of transporting the meal ingredients from the outlet where they are purchased to the restaurant where they are prepared and served. Our estimate of the output of transport includes shopping journeys broken down into food-related shopping and all other shopping. The cost of the food-related shopping journeys is allocated to the nutrition project. The other shopping journeys remain in the transport project, because we have no way of allocating them to other principal functions.

Nutrition

The residential rate for continuous adult care includes the provision of meals, so an adjustment needs to be made to the output estimate. We have taken an average price for one breakfast plus two other meals per day per adult receiving continuous care, to make this adjustment.

Sensitivity analysis

The figures in the UK are sensitive to the assumptions described in each of the individual projects, and should be interpreted with caution, bearing this in mind.

Annex 12.1 Household Satellite Account Supply and Use table

Industries@ Products ⁻	National Accounts *	Housing: Accommodations services**	Transport	Nutrition	Clothing: Garments	Clothing: Laundry services	Childcare	Adult Care	Voluntary Activity	Total int. demand	Final cons. exp.	Gross capital formation	Total demand
National Accounts		Utilities, insurance, Cleaning materials, DIY goods & services, Other domestic services inc. employees	Petrol, insurance, car spares	Food, detergent,	Fabric, haberdashery	Washing powder	Equipment			Sub-total			ID+FCE +GFC
Accommodations services*				% rooms		% rooms		% rooms		Sub-total	X		Ditto
Transport services				Food shopping journeys			Escort journeys			Sub-total	X		Ditto
Meals								3 per adult per day			X		Ditto
Garments											X		Ditto
Laundry services											X		Ditto
Care services											X		Ditto
Voluntary Activity											X		Ditto
Total int cons	Zero	Sub-total	Sub-total	Sub-total	Sub-total	Sub-total	Sub-total		Sub-total	Total	Total	Total	TOTAL
Taxes - subs		Council tax	Car tax				Child Benefit			Sub-total			
GVA	NA output	<i>Output – int cons</i>	<i>Output – int cons</i>	<i>Output – int cons</i>	<i>Output – int cons</i>	<i>Output – int cons</i>	<i>Output – int cons</i>		<i>Output – int cons</i>	HHSA + adj to NA			
Total supply at market prices	<i>total value of output</i>	<i>total value of output</i>	<i>total value of output</i>	<i>total value of output</i>	<i>total value of output</i>	<i>total value of output</i>	<i>total value of output</i>		<i>total value of output?</i>	TOTAL			
Capital consumption		House, furniture, carpets, tools	Cars, motorcycles, bikes	Cookers, microwaves, fridges, freezers dishwashers		Washing machines, tumble driers			?% computers	Sub-total HHSA			
Nett value added HHSA		<i>GVA – cap cons</i>	<i>GVA – cap cons</i>	<i>GVA – cap cons</i>	<i>GVA – cap cons</i>	<i>GVA – cap cons</i>	<i>GVA – cap cons</i>		<i>GVA – cap cons</i>	Total HHSA			

* these are already included in the National Accounts – adjustments will be shown elsewhere

** owner occupied

X denotes an expected entry