Unpaid domestic work: 60 billion hours in 2010

Delphine Roy, Redistribution and Social Policy Unit, INSEE

very day, the residents of France devote above 3 hours on average to domestic tasks (cooking, cleaning, shopping, childcare...), which produce services they benefit from. Yet these services are not included in Gross Domestic Product (GDP), whereas they would be if they were purchased on the market - as hours of paid housekeeping or childcare, for example. To get a more inclusive measure of the standard of living, it is necessary to value this production. Depending on exactly which activities are included, the total time spent on domestic work over a year amounts to between 100 and 200 percent that spent on paid work. Using intermediate definitions of what is included, unpaid home production is estimated at 33% of GDP and is mainly carried out by women (64% of hours).

Besides paid work, we carry out a certain number of useful tasks every day: shopping, preparing meals, cleaning, caring for children or elderly relatives. This unpaid work produces valuable services that contributes materially to our well-being, yet is not counted in national production as measured by gross domestic product (GDP). The Stiglitz report, which deals with the measurement of well-being "beyond GDP", emphasizes the need to account for household production in order to have a more complete picture of households' standard of living. By providing detailed data on the daily activities of the population residing in France, the 2010 French Time Use Survey carried out by INSEE, allows the estimation of the amount of time spent on such tasks.

The "halo" of unpaid domestic work

Defining domestic work may seem obvious, as it immediately evokes such chores as cleaning, cooking, and ironing, but exactly where it stops is not easy to delineate (*box*). Three criteria are usually used: it must be unpaid, productive, and could be delegated to someone else. But some productive and delegable activities border on leisure (gardening, construction and repairs, etc.) and more generally, the question arises as to what can or cannot be delegated. This means that there is a "halo" of domestic work, just as one can speak of the "halo" of unemployment. Yet there is currently no international standard providing guidelines for the interpretation of the above criteria, comparable to the definition provided by the International Labour Organization for unemployment. Three definitions of domestic work are therefore considered here, according to a more or less restrictive interpretation of the criteria (table 1). This allows calculating an initial estimate and, at the same time, reflects the sensitivity of the measurement of domestic work to the choice of definition.

The "core" definition corresponds to essential household chores: cooking, cleaning, basic child care (watching, feeding, clothing them), laundry, household management. Accompanying a child or adult is also part of the core definition. In addition to these chores, the intermediate definition includes activities bordering on leisure, such as shopping, gardening, construction and repairs, playing with children... The most expansive one adds dog walking and driving (*box*).

In 2010, individuals aged 11 and over living in France spent an average of 2 hours and 7 minutes daily on core domestic activities (nearly 15 hours per week). Using the intermediate definition, domestic work takes 3 hours a day (21 hours 30 minutes per week), and with the most expansive definition, almost 4 hours a day, or 27 hours per week (table 1). Thus, over the course of a year, the average French person spends 765 hours on core domestic tasks, including 217 hours cooking, 199 hours cleaning, 118 hours on childcare, and 69 hours doing laundry and ironing. Using the intermediate definition adds 129 yearly hours spent on shopping, 74 hours of construction and repairs, 63 hours of gardening, 30 hours of activities with children (graph). The broadest definition adds 253 hours of transportation by car, and 19 hours of walking the dog.



Three definitions of unpaid domestic work

	Definition			
	Core (I)	Intermediate (II)	Broad (III)	
	cooking, dish washing	(I) and	(II) and	
	cleaning	shopping	driving a car	
Activities included	household upkeep	home repairs	walking the dog	
	physical care and supervision of children and elderly gardening			
	laundry, ironing	playing with		
	household management children			
	accompanying children or adults			
Average time spent on domestic work				
daily	2 h 07	3 h 04	3 h 53	
weekly	14 h 50	21 h 30	27 h 14	
Share of domestic work as help or				
volunteer work (%)	3.7	3.8	5.0	
Share of domestic work hours done by women (%)	72	64	60	

Scope of coverage: individuals aged 11 and over, France (excl. French Guyana and Mayotte). Source: INSEE, 2010 Time Use Survey.

Definition of unpaid domestic work: accepted criteria and some "grey zones"

In 1981, Fouquet and Chadeau gave the following definition of unpaid domestic work: "Contributes to domestic production any unpaid activity, carried out by a household member (...) and resulting in the creation of a good or service necessary to the conduct of everyday life and for which a substitute can be purchased (service available on the market or paid person) under the current social norms." This definition implies that what cannot be delegated to someone else (eg, sleeping or eating) is not domestic work. But it leaves questions unanswered.

1) Personal care (bathing, dressing, doing one's hair...) is sometimes entrusted to others: hairdressers or manicurists for healthy adults, for example, or childminders and carers for children and the disabled elderly. But since in the case of healthy adults, it is rarely delegated, we choose to count only the care of children and dependents in domestic work.

2) Gardening, construction and repairs, hunting, fishing and pet care are productive but often also leisure activities, performed for themselves and not for their product, and thus cannot be delegated without losing all interest. In addition, given their potentially recreational character, the time devoted to them might be greater than that a professional would take. For example, a dog-sitter will walk a dog in a few minutes, whereas walking one's own dog can be an opportunity to take a walk and last much longer. 3) Driving a car can be delegated to a driver, but when we have to go somewhere, we cannot leave to someone else the task of moving from one place to the other. Therefore, driving children or another person is an activity that can be fully delegated, while driving a car to transport oneself can only be partly delegated (in the sense that the time is not fully freed to do anything else, you still have to be in the car). Thus, driving someone else is always productive, but driving oneself may or may not be included in domestic work. Finally, travelling using other means of transportation (such as a bus or a train) is never counted because driving is already delegated. It is assumed here by convention that being driven by a chauffeur would not free more time to do other things.

4) Childcare can be delegated to a nanny or a babysitter. But caring for a child can be done at the same time as something else. Ultimately, the time spent sleeping in the same house as a young child could be counted as domestic work, as someone must necessarily be there and parents can pay a babysitter for that. Furthermore, should playing or talking with one's child be counted as domestic work ?

Accordingly, this paper considers three definitions of domestic work, which interpret the criteria summarized by Fouquet and Chadeau more or less strictly.

Decomposition of the average yearly time spent on unpaid domestic work by activity (intermediate definition)



Scope of coverage: individuals aged 11 and over, France (excl. French Guyana and Mayotte). Source: INSEE, 2010 Time Use Survey.

Women in a couple with children: the 34-hour domestic workweek

The figures above represent averages for the entire population aged 11 and over. But time spent on domestic work varies widely by sex and age, by whether one lives in a couple or not and by the number of children in the household. In 2010, a woman living with a partner and with at least one child under 25 spent an average of 28 hours per week on chores included in the core definition, 34 hours with the intermediate definition, and 41 hours with the broadest one, vs. 11, 17, and 23 hours respectively for a man living alone (table 2). These figures can be compared with the time spent on paid work for each category, bearing in mind that paid work hours are averaged over the entire population (including those out of work), and over every day of the year (including weekends and holidays). Using the intermediate definition, the average weekly time spent on unpaid domestic work by a woman in a couple with children (34 hours) is comparable to the amount of time spent on paid work by a man in the same situation (33 hours). On the other hand, the latter spends the same amount of time on unpaid domestic work that the former spends on paid work (18 and 20 hours, respectively). The total time spent working is thus equivalent. However, using the narrow definition that

hours

Weekly hours of domestic work by household type, gender and status within the household

	Weekly unpaid domestic work			Weekly unpaid domestic work as help				
		Definition		Definition			Weekly paid	
	Core	Intermediate	Broad	Core	Intermediate	Broad	work	
Woman, not in a couple, without children	16	22	27	0.8	1.1	1.6	10	
Man, not in a couple, without children	11	17	23	0.5	0.8	1.4	18	
Woman in a couple without children	23	29	35	1.1	1.3	1.9	10	
Man in a couple without children	9	20	27	0.7	1.5	2.5	15	
Woman in a couple with children ¹	28	34	41	0.5	0.5	0.8	20	
Man in a couple with children	10	18	26	0.3	0.5	0.9	33	
Daughter, living with 2 adults in a couple	7	10	14	0.4	0.4	0.7	5	
Son, living with 2 adults in a couple	3	7	12	0.1	0.1	0.5	7	
Woman, single mother	23	28	34	0.5	0.8	1.1	21	
Man, single father	17	22	30	0.3	0.3	1.0	26	
Daughter in a single-parent family	6	10	15	0.1	0.2	0.2	3	
Son in a single-parent family	3	5	8	0.1	0.5	0.8	7	
Woman, other type of household	22	27	31	0.6	0.7	1.1	10	
Man, other type of household	9	17	23	0.4	0.9	2.0	17	
All together	15	21	27	0.6	0.8	1.4	16	

1. In a family comprising at least one child under 25. When a household comprises several generations but all children are over 25, it is classified as "other type of household". Note: paid work hours are computed over the entire year, and the entire population. They therefore include people without a job and weekends and holidays of people with a job. Scope of coverage: individuals aged 11 and over, France (excl. French Guyana and Mayotte). Source: INSEE, 2010 Time Use Survey.

excludes semi-recreational activities such as gardening, construction and repairs, and playing with children, the total weekly work time (paid and domestic) for the woman is 5 hours above that of the man. Indeed, the closer one gets to the core of housework, the larger the share done by women: 72% of hours using the core definition, against 60% with the broadest one. Finally, domestic work done as help to other households or as volunteering represents 4% to 5% of the total (*table 1*).

Between 100 and 200 percent of the time spent on paid work

At the macroeconomic level, depending on the chosen definition, between 42 and 77 billion hours of domestic work were carried out in France in 2010. Given that 38 billion hours of paid work were counted over the same period, the time spent on unpaid domestic work is at least as great as that spent on paid work. With the broadest definition, it amounts to twice as much (*table 3*).

33% of GDP using an intermediate valuation

To estimate the value of domestic work, for example in order to compare it to the

gross domestic product of the country over the same period, we need to assign a monetary value to these hours of work. This value can only be hypothetical since there is no actual market transaction, and therefore no observed wage. One solution is to value the time at the minimum wage a person employed for these tasks would have earned, *i.e.* the net minimum wage (€6.95 per hour as of January 1, 2010). This is a natural choice because the minimum wage is the lower bound for hourly wages in practice, but it could be questioned insofar as certain chores may be done less quickly or efficiently by household members than they would be by a professional.

Another solution is to consider what one would have to pay to have that domestic work done. This requires using an hourly rate which includes employer's and employee's contributions, i.e. a gross wage. Again, one can use the minimum "generalist substitute" wage (the method), or choose, for each domestic task, the average gross hourly wage of the corresponding occupational category (the "specialized substitute"). One hour of childcare would then be valued at the average hourly cost of a babysitter, one hour of cleaning at that of a maid. etc.

Using the core definition and the net minimum wage, the value of domestic

work amounts to 292 billion euros in 2010, or 15% of GDP (*table 4*). By way of comparison, this is slightly higher than the contribution to GDP of all manufacturing done in France (13%). Using the intermediate definition and the gross minimum wage, a middle-of-the-road approach in all respects, domestic work is worth one third of GDP. Finally, using the broadest definition (which is still in the realm of generally accepted international standards) and the "specialized substitutes" gross wages brings the value of domestic work to 71% of GDP.

An issue for international comparisons

The Stiglitz report emphasizes that accounting for domestic production allows for more relevant comparisons of standards of living across countries compared with using GDP per capita. A country with substantial household production may have a lower GDP than another where more goods and services are provided through the market, whereas households actually enjoy the same consumption once their own production is taken into account. However, the magnitude of the variation in the figures presented for France in 2010, depending on the definitions and valuations for domestic work that are

10 Total unpaid domestic work time in France in 2010

	Definition		
	Core	Intermediate	Broad
Million hours	42,068	60,964	77,245
% of the time spent on paid work	110	159	201

Scope of coverage: individuals aged 11 and over, France (excl. French Guyana and Mayotte). Source: INSEE, 2010 Time Use Survey and National Accounts (for hours of paid work).

Value of the total unpaid domestic work of households in France in 2010 by definition and valuation method

		Definition					
Valuation Co method Billion Euros	C	Core		Intermediate		Broad	
	% of GDP	Billion Euros	% of GDP	Billion Euros	% of GDP		
Gross specialized wages	721.1	37.2	1,043.8	53.9	1,366.5	70.5	
Gross minimum wage	438.8	22.6	635.9	32.8	805.7	41.6	
Net minimum wage	292.4	15.1	423.7	21.9	536.9	27.7	

Scope of coverage: France.

Source: INSEE, 2010 Time Use Survey; DADS 2008 (for wages by profession); National Accounts (for GDP - 2010 semi-definitive account).

used, shows that concepts and methods must first be harmonized before any relevant international comparison can be made. Given the economic magnitude of household production, it is a task worth undertaking.

Finally, from a well-being perspective, one may wish to go further and account for the fact that domestic work, while its production increases household consumption, "costs" time and effort to the person who carries it out. To get at a measure of well-being, we should therefore also take into account the individuals' leisure time, in addition to income and consumption.

Sources

The French 2010 Time Use Survey was conducted by INSEE from September 2009 to December 2010 in mainland France, La Réunion, Guadeloupe and Martinique. 16 242 individuals aged 11 and over filled diaries describing their activities over one or two days (one weekday and one weekend day, in this case).

References

• Ahmad N., Koh S.-H., "Incorporating Estimates of Household Production of Non-Market Services into International Comparisons of Material Well-Being", *OECD Statistics Working Papers* no. 2011/07, October 2011.

• Chadeau A. and Fouquet A., "Peut-on mesurer le travail domestique ?", *Économie et Statistique* no. 136, INSEE, September 1981.

• Ricroch L., "En 25 ans, moins de tâches domestiques pour les femmes, l'écart de situation avec les hommes se réduit", *INSEE Références*, Femmes et hommes - Regards sur la parité, 2012 edition.

• Roy D., "La contribution du travail domestique non marchand au bien-être matériel des ménages : une quantification à partir de l'enquête Emploi du Temps", *Document de travail* no. F1104, INSEE, March 2011.

• Stiglitz J. E., Sen A., Fitoussi J.-P., Report of the Commission on the Measurement of Economic Performance and Social Progress, 2009.

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