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Consumption Expenditures Patterns in France: Historical Trends and Distribution

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Consumption Expenditures in France: Historical Trends and Distribution

Emmanuel Combet, Franck Nadaud*

This working paper proposes a gallery of commented graphics to illuminate the different aspects of the developments in private consumption. In a first place, it gives the aggregate consumption patterns for all household, without considering at this stage any differences between social groups (section 1). The distribution of consumption patterns with respect to income will then be studied (section 2).

1. Aggregate consumption (1959-2012)

The aggregate consumption of the French population has been multiplied by 4.1 over the last fifty years (see Figure 1-1). Expressed in real term – that is, corrected from prices inflation –, private consumption has increased from about 200 2005-Billion euros¹ to about 900 Billion. Hence, an average growth rate of 2.7 % per year over that period has been recorded, showing that consumption has largely benefited from the growth in production and real incomes (real GDP has grown by 3.0 % on average).

Looking at the composition of consumption, we observe that all twelve categories have increased. But some have grown at a lower rate than the 2.7 % average: alcohol (+0.9 %), restaurants and hostels (+1.4 %), clothing (+1.6 %), food (+2.0 %) and private education expenditures (+2.1 %). While some others have grown at higher rates: housing and domestic energy (+2.9 %), furniture and housing maintenance (+3.0 %), miscellany² (+3.1%), transports (+3.3 %), recreation and culture (+4.9 %), private health expenditures (+5.2 %) and communications (+9.4 %). The last five categories have also increased faster than real GDP (income).

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¹ The 2012 edition of the national accounts use 2005 has base year. The Households Consumption Expenditures at constant 2005 prices are available in the French National Accounts edited by the *Institut National de la Statistique et des Etudes Economiques* (INSEE). According to the international SEC 95 standard, a chained Consumer Price Index (CPI) is used to correct expenditures from prices inflation and to get a consumption data in real term (2005 euros).

² This item includes various services and goods: insurance (34%), social protection (16%), personal care (20%), and other components for 30%. As its development over time has been important, we shall study the contribution of its major components in the next phase of the project.

Figure 1-1

Real consumption by purpose at 2005 prices since 1959, National Accounts

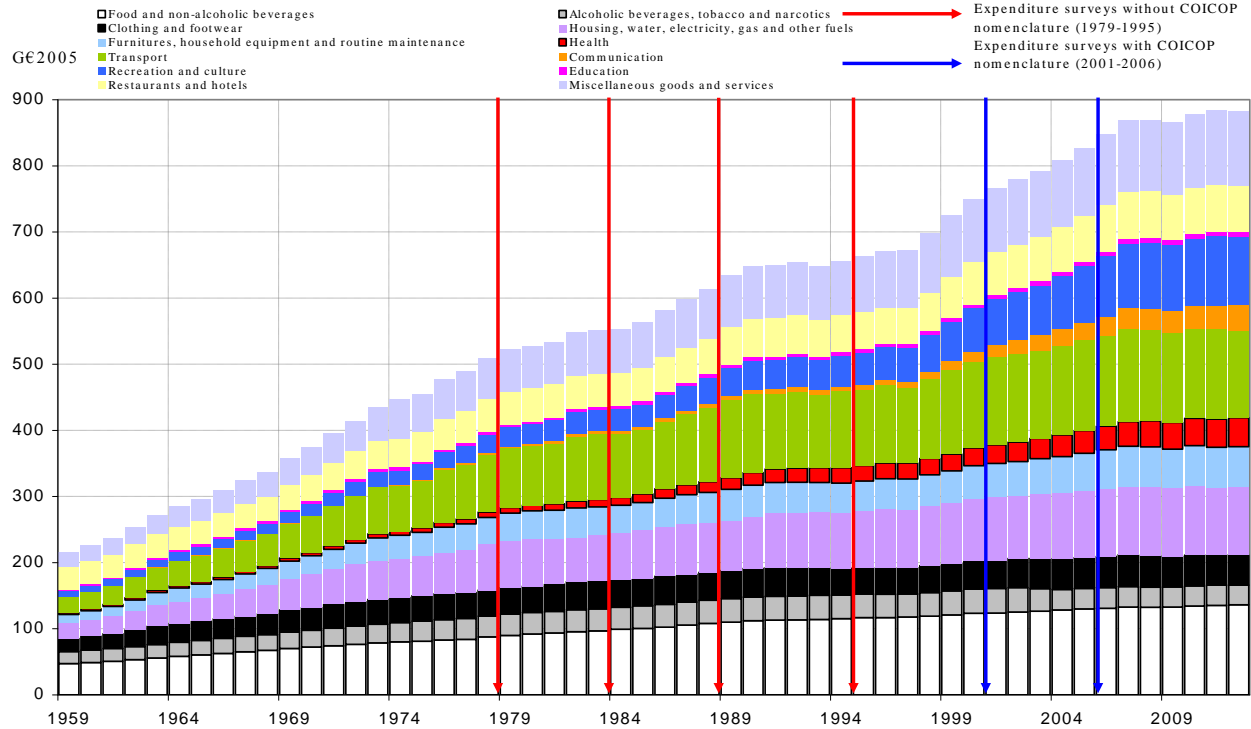
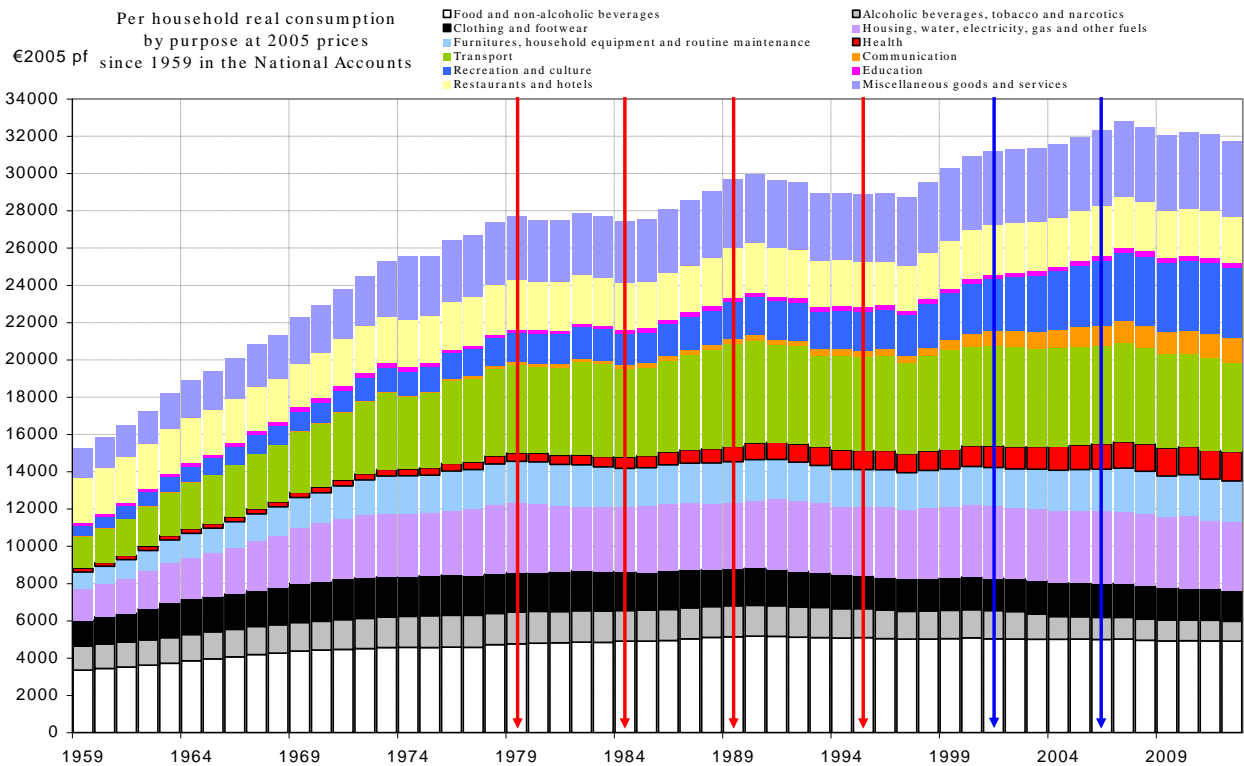


Figure 1-2

Per household real consumption by purpose at 2005 prices since 1959 in the National Accounts



Notice: the coloured arrows indicate the years for which we have some data on distribution (*Budget des Familles*, BDF surveys). For the first four BDF surveys (1979, 1984, 1989 and 1995), data have been made compatible with the COICOP nomenclature.

Nevertheless, those aggregate figures do not mean that the French households are consuming much more of each item in 2012 than in 1959. Indeed, the regularity of the trends results in part from an important demographic factor. Over the period, the size of the population has increased regularly from 45.2 to 63.5 million people; While, at the same time, the number of households has almost doubled (14.1 million in 1959, 27.8 in 2012)³. Thus, the historical picture is somewhat different when we look at the real (mean) expenditures *per household* instead of the real total expenditures (see figure 1-2).

The development trend of the consumptions per household displays two distinct historical phases (Figure 1-2). During a first twenty years period of time, from 1959 to 1979, the growth of households' consumptions has been important, regular and mostly shared between most of the twelve categories of consumption goods. Since 1979, during a thirty years period of time, the progress of households' consumption has been slower and considerably more irregular.

During the post-war "*Trente Glorieuses*"⁴ phase (1959-1979), the French real GDP and income growth rates were around 5 %. In just 20 years, the mean consumption per household was multiplied by 1.81 (an annual growth of 3.0 % to be compared with the +3.5 % annual growth rate of GDP per household). It was a period of diffusion into the French society of a mass consumption lifestyle, with an increased number of automobile and electric appliances. Therefore, we observe that the most rapid and important progression rates for housing and transportation expenditure categories: housing and domestic energy (+4.1%), furniture and housing equipment (+4.6%) and transport (+5.3%). In this period of prosperity, recreation and culture also progressed significantly (+5.2%), as well as communications (+9.7 %) and private health expenditures (+3.9 %), although those consumption purposes still remained marginal at the end of the period (in any event compared with their progress during the next modern phase). Finally, the development of food (+1.8%), alcohol (+1.4%) and clothing (+2.1%) have been effective but smaller.

During the modern phase of consumption development (1980-2012), the pace of progress that has been recorded was way below the 3.0 % experienced during the *Trente Glorieuses*. The annual growth rate of consumption per household was much closer to zero (+0.004%), and this drastic slowing down mirrored the drop of the French GDP growth per household since the 80s (+0.006%). Therefore, the contrast with the preceding period is sharp: more than 80% reduction of the growth rate both for

³ The average number of persons per household decreased from 3.2 to 2.3. This results from a decrease in the number of children per woman and an increase in the divorce rate. With the extension of education, the date of family formation tends to increase too.

⁴ Expression from the French economist Jean Fourastié, denoting as the "glorious thirty years" the prosperity that France and most industrialized countries experienced from the end of World War II until the first oil crisis (1973). Looking at aggregate consumption, we extend this period towards the beginning of the 80s, as consumption have grown still importantly in the aftermath of the first oil shock.

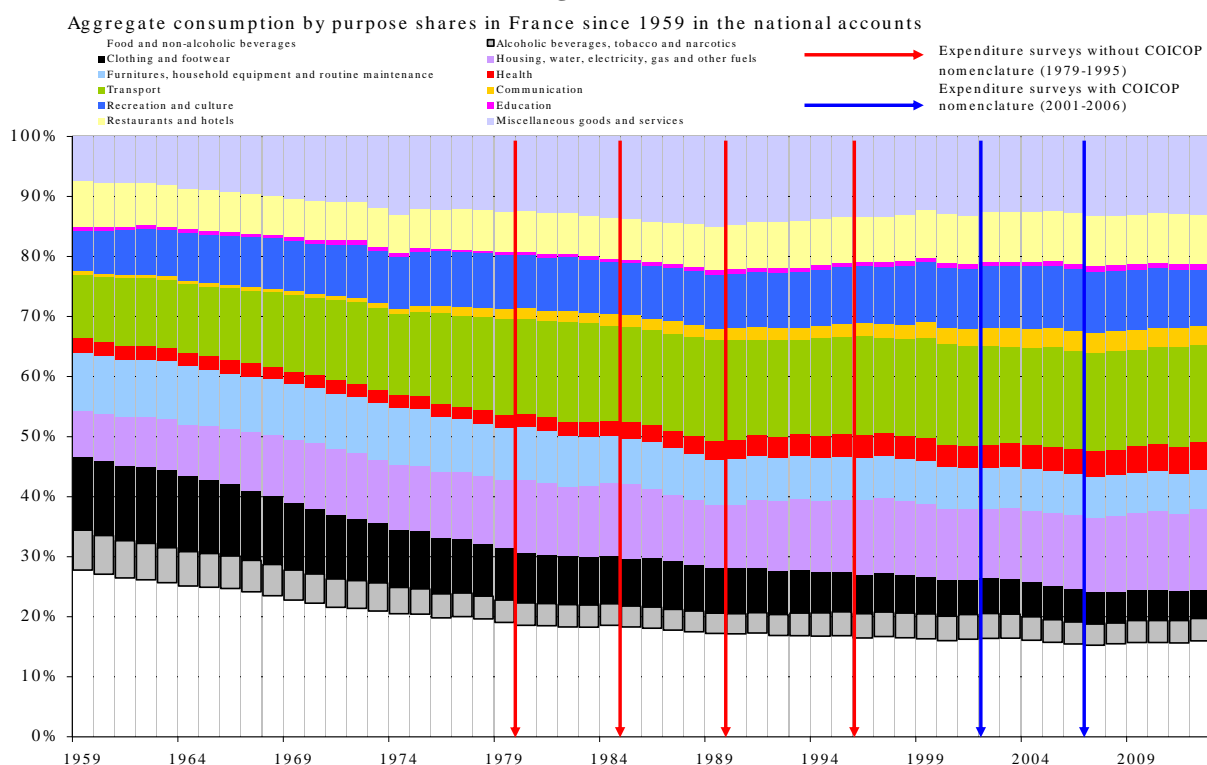
consumption and GDP per household. In addition, the steady growth of the *Trente Glorieuses* gave way to a more cyclical pattern, as the level of consumption followed the succession of slumps and booms France has faced (see Appendix, Figure A-1)⁵. During that period, the increase in consumption no longer concerns all categories. The real expenditures per households of some items stabilised or even regress⁶ from the beginning of the period, like housing (12% since 1980) hostels and restaurants (8% since 1999), clothing (12% since 1966) and alcohol (3.7% since 1979). Others seem to stabilise but after a further increase: transports (16.7% since 1989) and food (15.2% since 2007). While some items, whose consumption was minor in the previous period, continued their constant increase and grew faster than all other categories: private health (4.6%), communications (7.5%), recreation and culture (3.4%) and miscellaneous goods (1.3%).

Along with the increase in the number of households and the rise of incomes, the structure of the consumption basket of the French population has also changed. Figure 1-3 shows a reduction in the percentage shares of some consumption categories since 1959, and how the remaining budget has been reallocated. In accordance with the well known Engel's law in economics, the percentage spent on food has decreased as total incomes have increased. Households used to spend 27.8 % of their budget on food in 1959, while they are nowadays (in 2012) spending only 16.0 % on it. The other items whose shares have decreased are alcohol and tobacco (from 7% to 4%), clothing (from 12 % to 5%) and furniture and house equipment (from 10% to 7 %). Overall, those consumptions – for which we observe saturation at the population level – have been slashed by half over this period of fifty years (from 56.3 % to 29.0%).

⁵ France has experienced three major periods of recession over the period 1980-2012: in the first half of the 80s (repercussions of the first oil choc and oil counter-shock), in the mid-90s (aftermath of the 1992 Soros raid against the Italian Lira and the British pound), in the beginning of the XXIe century (burst of the internet bubble), and since 2008 (on-going Great Recession).

⁶ Let us recall that a single CPI index has been used to compute these time series on real consumption at constant 2005 price. This is an approximate measure of the evolution of the quantities of food consumed. A specific part of the project will focus on this.

Figure 1-3



Notice: the coloured arrows indicate the years for which we have some data on distribution (*Budget des Familles*, BDF surveys). For the first four BDF surveys (1979, 1984, 1989 and 1995), data have been made compatible with the COICOP nomenclature.

The rise of incomes has therefore funded an increase in the consumption shares of the other goods. The categories that have benefited the most from economic growth are housing (from 7.7% to 13.4%), Miscellaneous goods and services (from 7.5 % to 13.0 %), private health expenditures (from 2.4% to 4.5%), and the highest of all, the share of communication, has been multiplied by 5 (from 0.6% to 3.1%). Those four categories have seen their budget shares increase by more than 70% over the period. Other categories have increased as well but more modestly. This is the case for restaurants and hostels (from 7.6% to 8.2%), recreation and culture (from 6.8% to 9.4%), transports (from 10.7% to 16.2%) and private education services (from 0.6% to 1.0%).

In 2012, the next biggest consumption shares after food (16.0 %) are for transport (16.4 %) and housing (13.2 %). Together with clothing, those purposes account for a half of the French population budget, which is not too far from the situation that was prevailing in 1979 (54,9 %). This observation indicates the growing importance of housing and transports in the allocation of incomes, and we shall pay a close attention to those categories in the next phase of the project, for those categories have something to do with the resource-intensive nature of the development path in France. Over the period,

housing and transports shares have increased while real income and consumption per household have grown (1.6% and 1.4 % per year respectively). Nevertheless, at the end of the period, the consumption levels per household has stabilised because the pace of income growth has slowed (1.5% per year since 1985) whereas the number of households has continued to increase (+7.335 millions).

In figures the figure below (1-1, 1-2 and 1-3), the years for which we have some data on the heterogeneity of consumption into the population (distribution by social groups) have been indicated as colored arrows. We will consider distribution in a moment (section 1.2), but it is worth noting here that the six *Budget des Familles* surveys (BDF) do not seem to have taken place in particularly exceptional dates with regards to the modern phase of consumption development (1980-2012). Rather, according to aggregate figures, they slowly register the gradual evolution that has occurred since 1979.

We find very similar results by aggregating the microeconomic data for the six BDF surveys (see annexes, figure A-2 and table A-1). Therefore, those “micro-data” and the aggregation weights⁷ associated can be used to study the distribution of expenditures patterns according to some social dimensions (poor/rich, rural/urban population, etc.). As the global picture is rather the same to the one described below, we could consider that the observed distributions are consistent with it. Nevertheless, the reader should have a look and keep in mind the few discrepancies (see annexes).

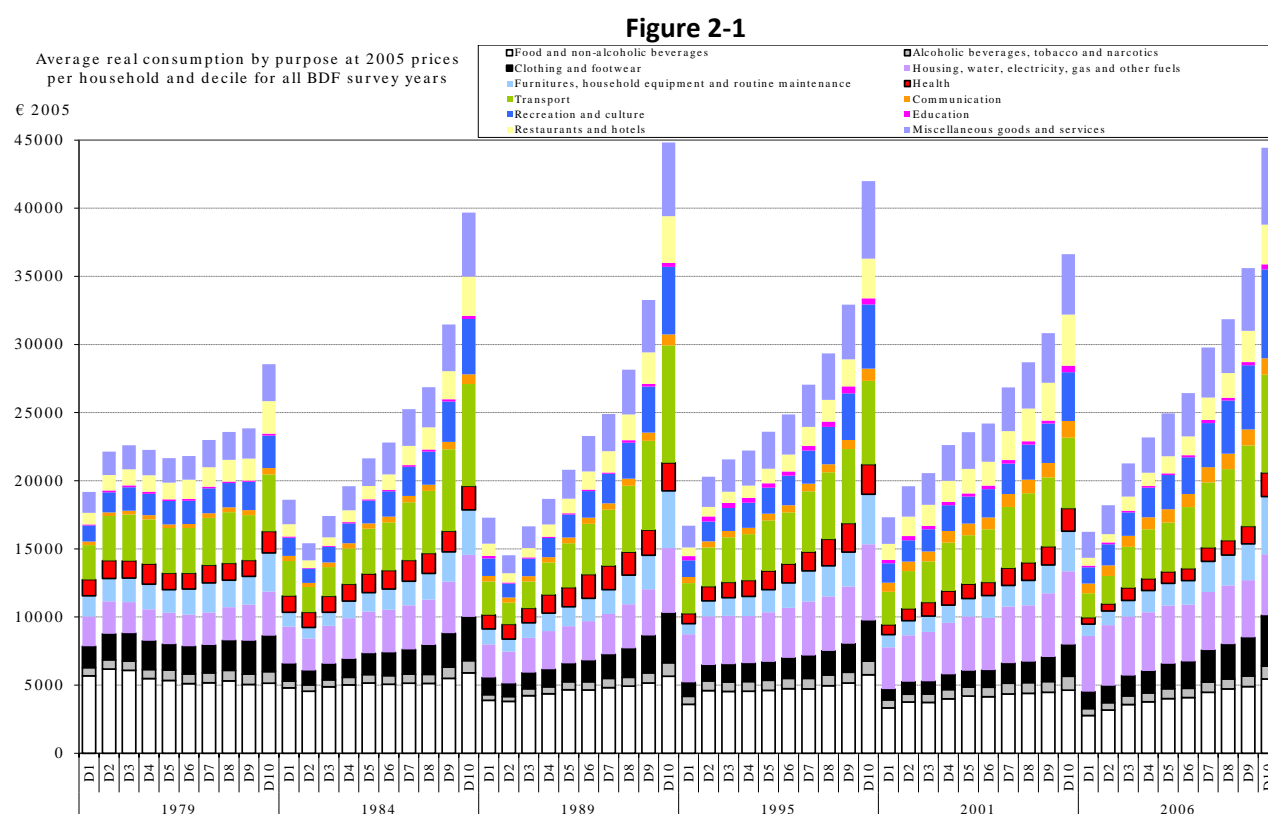
2. Distribution by income groups

The next figures display the distribution of expenditures profiles according to ten income groups of households and for the six available years (1979, 1984, 1989, 1995, 2001 and 2006). Income group D1 stands for the lowest decile (10% poorest households) and D10 for the top decile (10% richest households). The population of households has not been strictly ranked by income but rather by a measure of “economic standard of living”, which take into account the size and composition of households. This measure of living standard is equal to the total current income of the household divided by the number of its “consumption units” (CU). This number is computed using the OECD’s equivalence scale (1 CU for the first adult, 0.5 CU for any other person above 14 and 0.3 CU per children up to 14).

⁷ Ponderation weights are needed to get a representativeness of the French population. A multiplying factor is associated to each household surveyed (around 10 000 per survey). These weights are computed by INSEE with a documented and homogeneous method since 1995 only. For earlier years INSEE used ad-hoc weights that are not properly documented. We had no other alternatives than using those weights anyway. Nevertheless, we checked that they were computed to aggregate households on consumption.

The survey's consumption nomenclatures have been harmonised to correspond to the previous COICOP categorisation⁸. The next figures present distributions for the twelve categories studied so far.

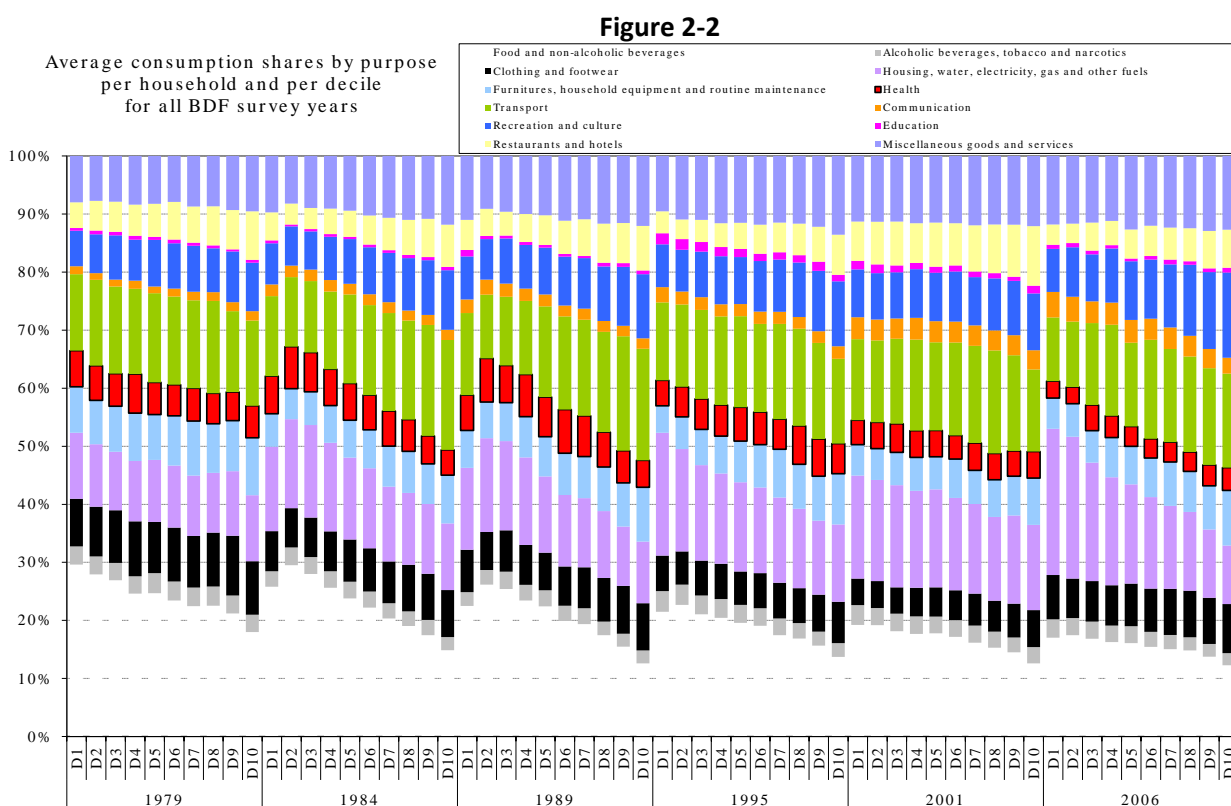
Overall, the *consumption disparities between income groups have not decrease over time with economic growth* (see Figure 2-1). We observe a fairly similar pattern over time, although with far less disparities in 1979. Nevertheless, we shall consider this peculiarity with caution, as we know there was no strong surge in inequality after 1979⁹. In all other years, the consumption levels of the richest 10% households (top decile) have ranged from two to three times the consumption of the poorest 10% households (bottom decile). Consumption inequalities have been the highest in 1989 and 2006 and the lowest in 1995 and 2001 (apart from 1979). Therefore, as for income (annexes, figure A-3), we observe no clear tendency to inequality reduction over the period, in any case without considering composition.



⁸ The results presented hereafter were obtained by tedious manipulations of the raw data. Data were available in COICOP nomenclature only for 2001 and 2006. We therefore had to harmonize the nomenclatures for the previous surveys. We also had to compute the number of consumption units for each household surveyed using the OECD equivalence scale instead of the Oxford equivalence scale that has been used before 2001. Finally, after computing the standard of living variable for each household surveyed, we ranked them from the poorer to the richer and aggregated them in ten different income groups (by using the sampling weights computed by INSEE).

⁹ Rather, the coverage of expenditures for high income households and the computation of weights must have been improved in more recent surveys. The fact that food consumption appears higher for low income than for high income is another indication of poor data reliability in 1979.

Considering now our twelve consumption categories, we observe that *disparities in the composition of consumption have evolved over time* (see Figure 2-2). In particular, we notice a convergence of the budget shares devoted to the group of five items whose consumption in the population has decreased during the modern phase¹⁰ (food and non-alcoholic beverages, alcohol and tobacco, clothing and furniture, home equipment and maintenance). Therefore, disparities in the consumption of those items are mainly due to disparities in income (the size of budgets): the income of the richest 25% households account for about twice the income of the 25% households (2.3 in 1989, 1.7 in 2001, and 2.1 in 2006), and their consumption is about 50% higher (1.701 in 1989, 1.383 in 2001, and 1.562 in 2006). In 2006, food, beverages and tobacco account for around 28% of the budgets of each income group.



We observe higher disparities in the budget shares devoted to the other consumption categories – those which have grown over the period 1980-2012 at population level. The highest disparities concern the budget shares devoted to housing and domestic energy: the bottom decile uses 25.6% of its budget, while the top decile only 10.4%. However, the economic burden of these expenses for owners is somewhat underestimated as repayments of building loans and major repair work are not taken into

¹⁰ See above: the description of aggregate trends.

account¹¹. Another growing category for which the budget share is higher on the budget of the poor is communication (in 2006, 4.4% for the bottom decile, 2.7 for the top decile). This disparity, probably due to a wide diffusion of mobile phones and internet equipments, seems also to have increased over time.

Other important disparities act in the opposite direction: the consumption of other growing categories account for larger or equal shares in the budget of the rich than in the budget of the poor. Thus, those consumptions benefit more to richer households than to poorer ones, and not only because they get higher incomes, but also because they dedicate a same or larger part of their budget to them. This is the case for recreation and culture (7.4 % of the budget of the bottom decile in 2006, 14.7 % for the top decile), and restaurants and hotels (3.5 % and 6.6 % respectively). It is harder to identify a clear pattern over time for transports, private education and health expenses, and miscellaneous goods and services. Nevertheless, the budget shares for transports have been important for all income group (between 11.0 % and 17.0 % for all years), and overall, those shares have remained rather high despite the improvement in engine efficiency. As for housing, we shall have a closer look at this consumption category in the next phase of the project.

In general, we shall further the analysis of distribution by considering other important dimensions of social heterogeneity than income. Indeed, we observe huge inequalities *within* income groups and those inequalities may exceed the inequalities *between* income groups we have just seen. Among the other dimensions of heterogeneity, we shall give a special importance to the factors that influence the level of energy consumption and environmental pressure. For instance, location that influences mobility and heating needs, house size and equipments that influence domestic energy consumption, and socioeconomic factors like occupation, age and number of people in households that influence their lifestyle and constraints of everyday living.

¹¹ See section below: focus on the measurement of housing expenditures.

Annexes

Figure A-1: Comparison of the Historic Growth Rates of Consumption and Real GDP (1959-2012)

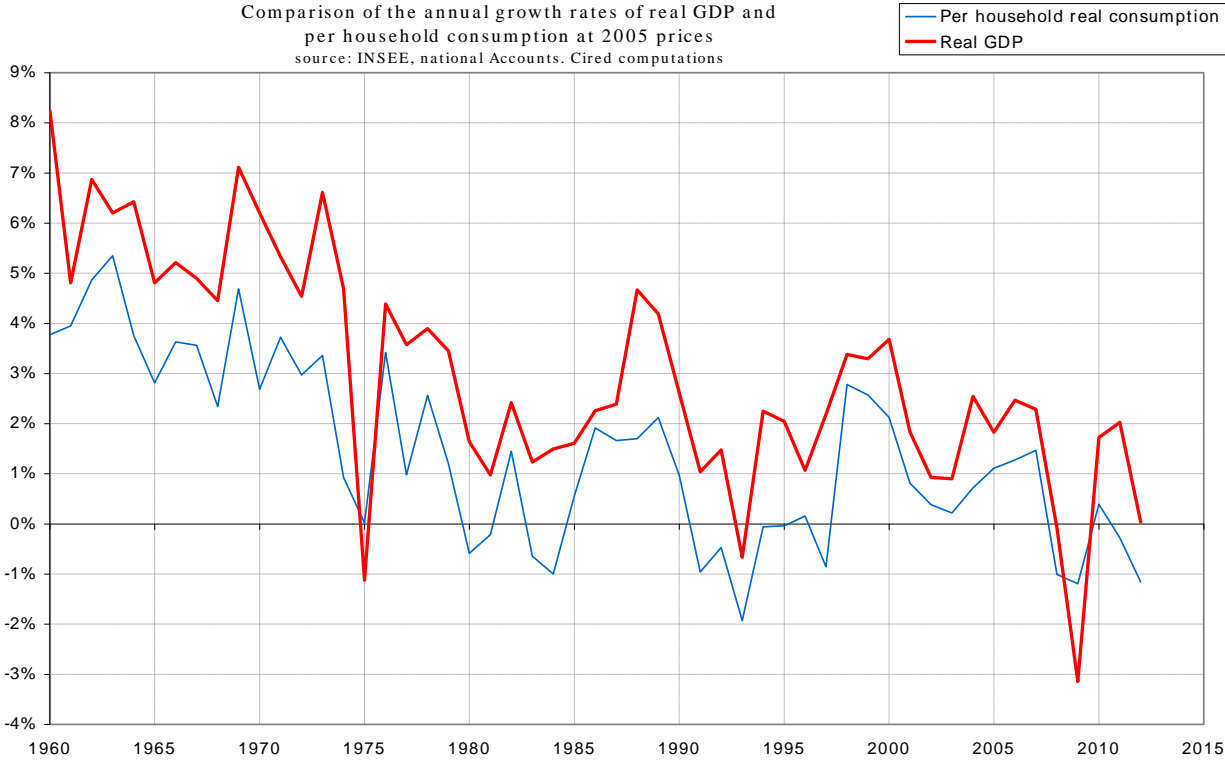


Figure A-2: Aggregate patterns - Comparison between BDF (red & blue) and National accounts data (black)

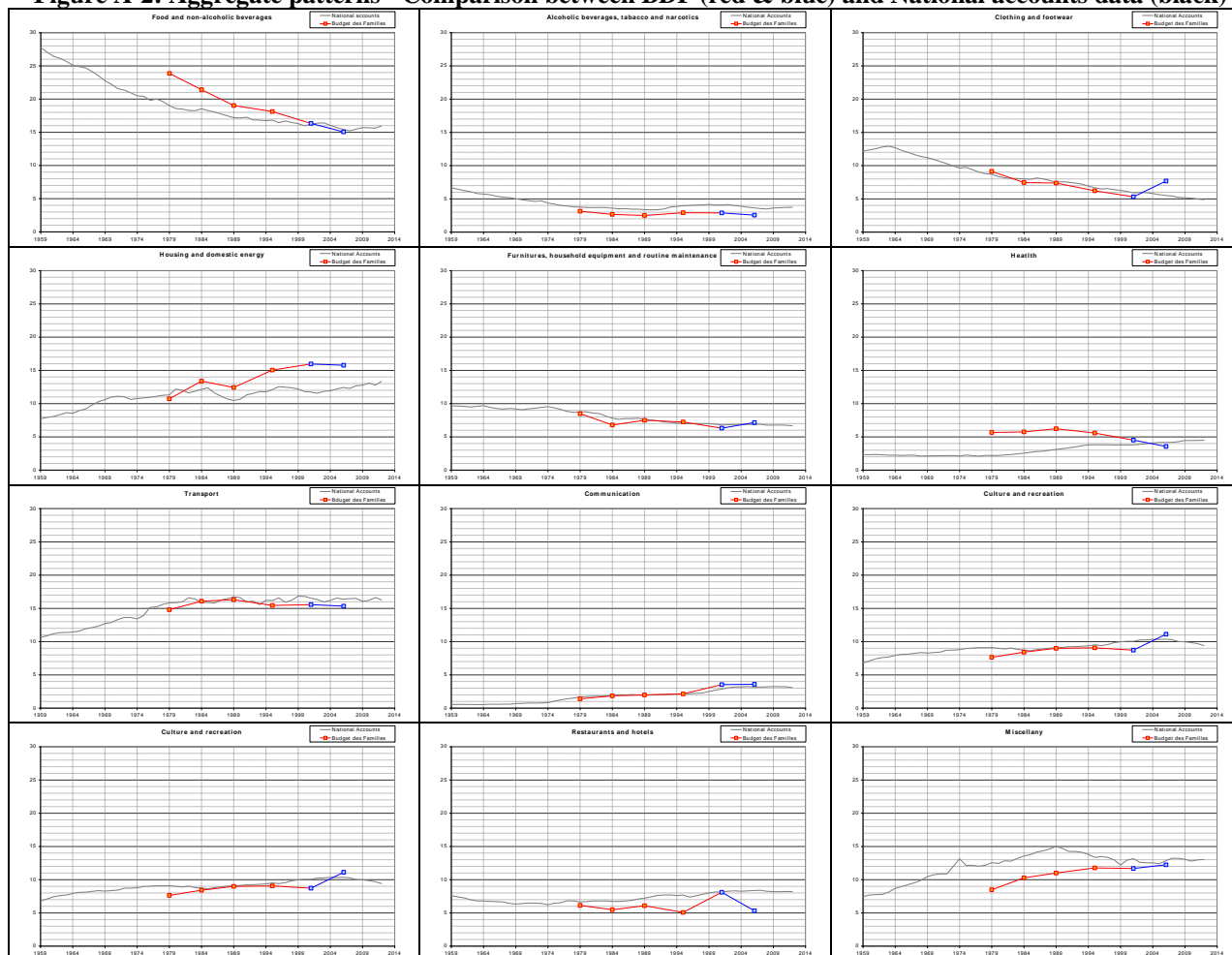


Table A-1: Aggregate patterns - Comparison between BDF and National accounts data

COICOP	Year of BDF Survey																	
	1979			1984			1989			1995			2001			2006		
	BDF	NA	Diff	BDF	NA	Diff	BDF	NA	Diff	BDF	NA	Diff	BDF	NA	Diff	BDF	NA	Diff
Food and non-alcoholic beverages	23.9	19.0	4.8	21.4	18.5	2.9	19.0	17.2	1.8	18.1	16.8	1.3	16.3	16.2	0.1	15.1	15.4	-0.4
Alcoholic beverages, tobacco and narcotics	3.1	3.7	-0.6	2.7	3.6	-0.9	2.5	3.4	-0.9	2.9	4.0	-1.1	2.9	4.1	-1.2	2.5	3.6	-1.1
Clothing and footwear	9.1	8.7	0.4	7.5	8.0	-0.5	7.4	7.5	-0.1	6.2	6.7	-0.4	5.3	5.9	-0.6	7.7	5.5	2.2
Housing, water, electricity, gas and other fuels	10.7	11.3	-0.6	13.4	12.2	1.2	12.4	10.5	2.0	15.0	12.1	2.9	16.0	11.7	4.2	15.8	12.4	3.4
Furnitures, household equipment and routine maintenance	8.5	8.8	-0.3	6.8	7.8	-1.0	7.5	7.6	-0.1	7.2	7.0	0.2	6.3	6.8	-0.5	7.1	6.9	0.3
Health	5.7	2.2	3.5	5.7	2.6	3.2	6.2	3.1	3.1	5.6	3.8	1.8	4.5	3.8	0.7	3.5	4.2	-0.6
Transport	14.8	15.8	-1.0	16.1	15.8	0.3	16.3	16.7	-0.4	15.4	16.2	-0.8	15.6	16.5	-1.0	15.3	16.4	-1.0
Communication	1.4	1.7	-0.3	1.8	1.9	-0.1	2.0	1.9	0.1	2.1	2.2	0.0	3.5	2.9	0.7	3.6	3.2	0.4
Recreation and culture	7.6	9.1	-1.5	8.4	8.7	-0.3	9.0	9.1	-0.1	9.1	9.5	-0.5	8.7	10.0	-1.3	11.1	10.4	0.8
Education	0.5	0.5	0.1	0.5	0.6	-0.1	0.6	0.7	-0.1	1.4	0.7	0.7	1.1	0.7	0.4	0.7	0.9	-0.2
Restaurants and hotels	6.1	6.6	-0.5	5.5	6.7	-1.2	6.1	7.2	-1.1	5.1	7.7	-2.6	8.1	8.1	0.0	5.3	8.4	-3.0
Miscellaneous goods and services	8.5	12.6	-4.1	10.3	13.6	-3.3	11.0	15.0	-4.0	11.8	13.3	-1.6	11.7	13.2	-1.5	12.2	12.8	-0.6

Table A-2: Average real consumption by purpose at 2005 prices per decile for all years of BDF survey

Year	Consumption Purpose	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	Average	Median
1979	Food and non-alcoholic beverages	5681	6181	6088	5476	5345	5110	5170	5309	5053	5145	5456	5228
	Alcoholic beverages, tobacco and narcotics	599	686	676	671	750	713	729	781	745	844	719	731
	Clothing and footwear	1573	1901	2050	2102	1909	2026	2047	2192	2451	2632	2088	1967
	Housing, water, electricity, gas and other fuels	2187	2383	2274	2313	2309	2328	2389	2430	2652	3248	2451	2319
	Furnitures, household equipment and routine maintenance	1515	1673	1774	1838	1691	1869	2165	1994	2072	2832	1942	1780
	Health	1193	1318	1271	1497	1202	1172	1297	1234	1181	1573	1294	1187
	Transport	2530	3276	3392	3268	3324	3312	3481	3749	3315	4183	3383	3318
	Communication	260	252	270	310	255	300	338	359	371	470	318	277
	Recreation and culture	1172	1480	1725	1572	1733	1701	1827	1779	2084	2385	1746	1717
	Education	90	144	138	153	119	136	123	117	89	143	125	128
	Restaurants and hotels	848	1130	1171	1196	1227	1414	1430	1588	1614	2384	1400	1321
	Miscellaneous goods and services	1532	1715	1780	1862	1786	1728	2001	2044	2222	2720	1939	1757
1984	Food and non-alcoholic beverages	4805	4550	4875	5023	5149	5067	5134	5120	5495	5907	5113	5108
	Alcoholic beverages, tobacco and narcotics	496	471	510	556	628	631	667	674	824	894	635	629
	Clothing and footwear	1285	1043	1180	1348	1570	1697	1812	2151	2500	3210	1780	1633
	Housing, water, electricity, gas and other fuels	2706	2366	2782	2990	3052	3140	3251	3329	3777	4550	3194	3096
	Furnitures, household equipment and routine maintenance	1053	807	996	1256	1394	1510	1768	1924	2177	3298	1618	1452
	Health	1210	1116	1173	1229	1372	1362	1521	1472	1522	1738	1371	1367
	Transport	2561	1848	2145	2628	3320	3542	4263	4586	6007	7501	3840	3431
	Communication	374	303	347	385	390	422	472	456	545	709	440	406
	Recreation and culture	1319	1044	1145	1461	1667	1849	2141	2433	2965	4069	2009	1758
	Education	95	48	72	92	86	103	121	147	165	224	115	95
	Restaurants and hotels	896	554	628	864	977	1147	1412	1624	2071	2891	1307	1062
	Miscellaneous goods and services	1808	1267	1561	1774	2038	2335	2685	2955	3412	4690	2453	2187
1989	Food and non-alcoholic beverages	3887	3800	4229	4370	4666	4638	4817	4918	5148	5647	4612	4652
	Alcoholic beverages, tobacco and narcotics	412	367	501	506	579	605	681	660	744	998	605	592
	Clothing and footwear	1263	951	1182	1282	1346	1578	1758	2112	2743	3650	1787	1462
	Housing, water, electricity, gas and other fuels	2435	2348	2558	2812	2733	2868	2963	3246	3397	4760	3012	2800
	Furnitures, household equipment and routine maintenance	1119	908	1107	1312	1421	1676	1785	2138	2504	4196	1816	1548
	Health	1048	1090	1063	1353	1420	1751	1745	1691	1842	2070	1507	1585
	Transport	2445	1596	1974	2364	3250	3730	4122	4859	6556	8616	3951	3490
	Communication	401	378	374	396	423	439	471	531	597	803	481	431
	Recreation and culture	1287	1014	1296	1406	1682	1959	2171	2636	3373	4956	2178	1820
	Education	193	80	86	91	97	112	93	186	217	298	145	105
	Restaurants and hotels	893	679	680	903	1062	1331	1570	1892	2298	3429	1474	1196
	Miscellaneous goods and services	1903	1321	1601	1865	2124	2596	2716	3284	3840	5403	2665	2360
1995	Food and non-alcoholic beverages	3585	4599	4539	4547	4619	4741	4723	4956	5158	5754	4722	4680
	Alcoholic beverages, tobacco and narcotics	600	709	698	714	733	755	774	785	794	1011	757	744
	Clothing and footwear	1016	1166	1298	1351	1356	1501	1668	1763	2091	2985	1619	1428
	Housing, water, electricity, gas and other fuels	3537	3577	3544	3460	3632	3676	3972	4006	4198	5584	3919	3654
	Furnitures, household equipment and routine maintenance	772	1125	1330	1430	1673	1834	2247	2253	2519	3672	1885	1754
	Health	735	1052	1130	1188	1377	1389	1401	1940	2115	2188	1451	1383
	Transport	2240	2870	3308	3396	3697	3779	4440	4910	5448	6134	4022	3738
	Communication	441	453	469	465	493	525	559	596	665	898	556	509
	Recreation and culture	1231	1464	1692	1833	1911	2168	2438	2749	3423	4706	2362	2039
	Education	316	369	359	356	332	315	342	380	519	461	375	324
	Restaurants and hotels	633	690	824	907	1058	1246	1384	1593	1979	2902	1322	1152
	Miscellaneous goods and services	1589	2219	2370	2577	2720	2941	3100	3417	4014	5700	3065	2831
2001	Food and non-alcoholic beverages	3329	3758	3729	3998	4190	4156	4343	4390	4470	4623	4099	4173
	Alcoholic beverages, tobacco and narcotics	591	577	621	681	679	694	794	792	795	1027	725	686
	Clothing and footwear	790	915	934	1115	1187	1249	1473	1534	1798	2326	1332	1218
	Housing, water, electricity, gas and other fuels	3072	3406	3617	3782	3984	3849	4147	4138	4673	5374	4004	3917
	Furnitures, household equipment and routine maintenance	924	1063	1163	1298	1318	1622	1557	1832	2089	2952	1582	1470
	Health	727	889	1009	1046	1070	983	1265	1307	1343	1674	1131	1026
	Transport	2419	2760	3009	3548	3577	3876	4495	5092	5082	5187	3905	3726
	Communication	657	701	720	841	855	868	944	988	1058	1216	885	861
	Recreation and culture	1429	1567	1639	1901	1973	2088	2231	2569	2891	3584	2187	2031
	Education	255	298	239	241	242	252	262	256	216	481	274	247
	Restaurants and hotels	1168	1436	1551	1547	1794	1764	2134	2408	2771	3755	2033	1779
	Miscellaneous goods and services	1958	2222	2325	2618	2703	2802	3208	3385	3645	4433	2930	2752
2006	Food and non-alcoholic beverages	2765	3177	3581	3769	4012	4081	4478	4725	4896	5453	4094	4047
	Alcoholic beverages, tobacco and narcotics	515	539	628	659	727	686	732	722	778	936	692	706
	Clothing and footwear	1244	1234	1490	1608	1829	1970	2367	2563	2831	3747	2088	1900
	Housing, water, electricity, gas and other fuels	4092	4450	4341	4315	4269	4164	4259	4311	4199	4478	4288	4216
	Furnitures, household equipment and routine maintenance	859	1032	1168	1589	1635	1775	2250	2231	2669	4222	1943	1705
	Health	477	528	944	865	850	879	1008	1069	1283	1745	965	864
	Transport	1782	2045	3002	3634	3603	4513	4780	5234	5924	7195	4171	4058
	Communication	714	783	797	882	977	952	1111	1130	1179	1211	974	965
	Recreation and culture	1202	1551	1722	2163	2520	2696	3237	3899	4717	6518	3023	2608
	Education	116	132	136	134	123	167	242	204	232	370	185	145
	Restaurants and hotels	573	611	1025	968	1245	1376	1643	1807	2291	2918	1446	1311
	Miscellaneous goods and services	1915	2119	2441	2590	3157	3175	3670	3964	4601	5639	3327	3166

Figure A-3: Real income by deciles in each BDF year

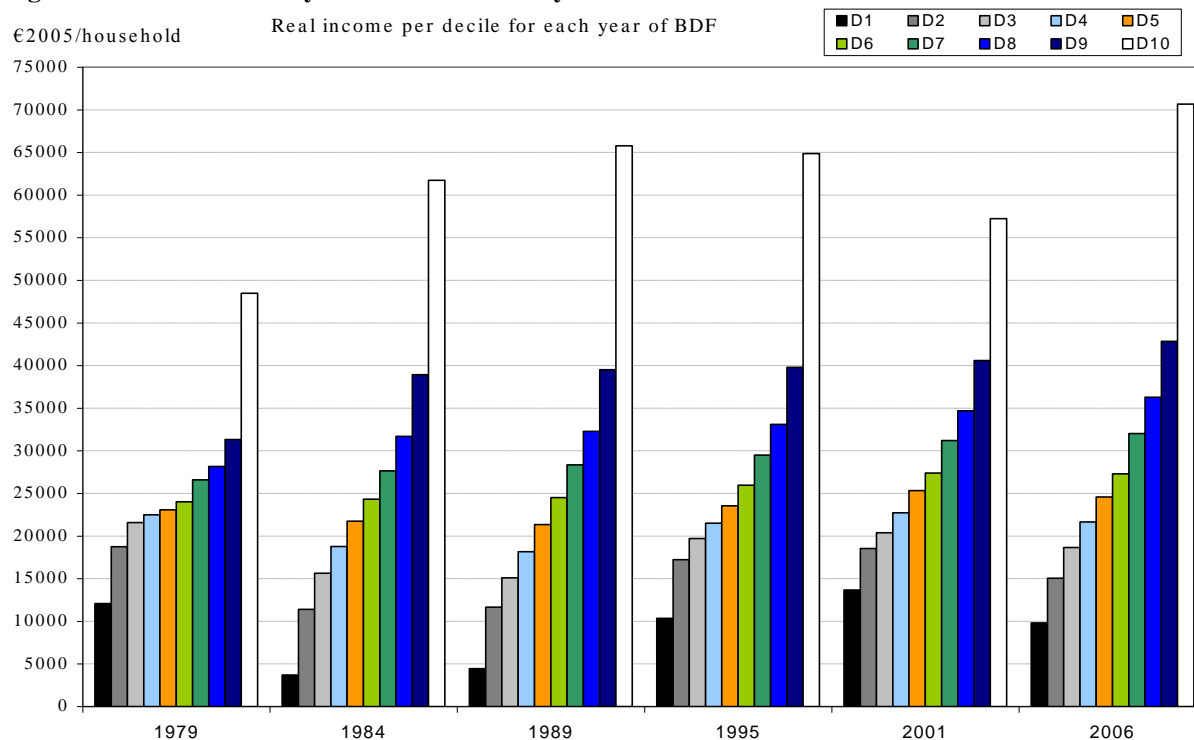


Table A-3: Consumption profiles by deciles of standard of living in each BDF year

BDF year	COICOP categories	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	Average share	Median share
1979	Food and non-alcoholic beverages	29.6	27.9	26.9	24.6	24.7	23.4	22.5	22.5	21.2	18.0	23.9	24.1
	Alcoholic beverages, tobacco and narcotics	3.1	3.1	3.0	3.0	3.5	3.3	3.2	3.3	3.1	3.0	3.1	3.4
	Clothing and footwear	8.2	8.6	9.1	9.4	8.8	9.3	8.9	9.3	10.3	9.2	9.1	9.1
	Housing, water, electricity, gas and other fuels	11.4	10.8	10.1	10.4	10.7	10.7	10.4	10.3	11.1	11.4	10.7	10.7
	Furnitures, household equipment and routine maintenance	7.9	7.6	7.8	8.3	7.8	8.6	9.4	8.5	8.7	9.9	8.5	8.2
	Health	6.2	6.0	5.6	6.7	5.6	5.4	5.6	5.2	5.0	5.5	5.7	5.5
	Transport	13.2	14.8	15.0	14.7	15.4	15.2	15.1	15.9	13.9	14.6	14.8	15.3
	Communication	1.4	1.1	1.2	1.4	1.2	1.4	1.5	1.5	1.6	1.6	1.4	1.3
	Recreation and culture	6.1	6.7	7.6	7.1	8.0	7.8	7.9	7.5	8.7	8.4	7.6	7.9
	Education	0.5	0.6	0.6	0.7	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.6
	Restaurants and hotels	4.4	5.1	5.2	5.4	5.7	6.5	6.2	6.7	6.8	8.3	6.1	6.1
	Miscellaneous goods and services	8.0	7.7	7.9	8.4	8.2	7.9	8.7	8.7	9.3	9.5	8.5	8.1
	1984	Food and non-alcoholic beverages	25.8	29.5	28.0	25.6	23.8	22.2	20.3	19.1	17.5	14.9	21.4
Alcoholic beverages, tobacco and narcotics		2.7	3.1	2.9	2.8	2.9	2.8	2.6	2.5	2.6	2.3	2.7	2.8
Clothing and footwear		6.9	6.8	6.8	6.9	7.3	7.4	7.2	8.0	7.9	8.1	7.5	7.3
Housing, water, electricity, gas and other fuels		14.5	15.3	16.0	15.3	14.1	13.8	12.9	12.4	12.0	11.5	13.4	13.9
Furnitures, household equipment and routine maintenance		5.7	5.2	5.7	6.4	6.4	6.6	7.0	7.2	6.9	8.3	6.8	6.5
Health		6.5	7.2	6.7	6.3	6.3	6.0	6.0	5.5	4.8	4.4	5.7	6.2
Transport		13.8	12.0	12.3	13.4	15.3	15.5	16.9	17.1	19.1	18.9	16.1	15.4
Communication		2.0	2.0	2.0	2.0	1.8	1.9	1.9	1.7	1.7	1.8	1.8	1.8
Recreation and culture		7.1	6.8	6.6	7.5	7.7	8.1	8.5	9.1	9.4	10.3	8.4	7.9
Education		0.5	0.3	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.4
Restaurants and hotels		4.8	3.6	3.6	4.4	4.5	5.0	5.6	6.0	6.6	7.3	5.5	4.8
Miscellaneous goods and services		9.7	8.2	9.0	9.0	9.4	10.2	10.6	11.0	10.8	11.8	10.3	9.8
1989		Food and non-alcoholic beverages	22.5	26.2	25.4	23.4	22.4	19.9	19.3	17.5	15.5	12.6	19.0
	Alcoholic beverages, tobacco and narcotics	2.4	2.5	3.0	2.7	2.8	2.6	2.7	2.3	2.2	2.2	2.5	2.7
	Clothing and footwear	7.3	6.5	7.1	6.9	6.5	6.8	7.1	7.5	8.2	8.1	7.4	6.6
	Housing, water, electricity, gas and other fuels	14.1	16.2	15.4	15.1	13.1	12.3	11.9	11.5	10.2	10.6	12.4	12.7
	Furnitures, household equipment and routine maintenance	6.5	6.2	6.7	7.0	6.8	7.2	7.2	7.6	7.5	9.4	7.5	7.0
Health	6.1	7.5	6.4	7.3	6.8	7.5	7.0	6.0	5.5	4.6	6.2	7.2	

	Transport	14.1	11.0	11.9	12.7	15.6	16.0	16.6	17.3	19.7	19.2	16.3	15.8
	Communication	2.3	2.6	2.2	2.1	2.0	1.9	1.9	1.9	1.8	1.8	2.0	2.0
	Recreation and culture	7.4	7.0	7.8	7.5	8.1	8.4	8.7	9.4	10.1	11.1	9.0	8.3
	Education	1.1	0.6	0.5	0.5	0.5	0.5	0.4	0.7	0.7	0.7	0.6	0.5
	Restaurants and hotels	5.2	4.7	4.1	4.8	5.1	5.7	6.3	6.7	6.9	7.6	6.1	5.4
	Miscellaneous goods and services	11.0	9.1	9.6	10.0	10.2	11.2	10.9	11.7	11.5	12.1	11.0	10.7
	Food and non-alcoholic beverages	21.5	22.7	21.1	20.5	19.6	19.1	17.5	16.9	15.7	13.7	18.1	19.3
	Alcoholic beverages, tobacco and narcotics	3.6	3.5	3.2	3.2	3.1	3.0	2.9	2.7	2.4	2.4	2.9	3.1
	Clothing and footwear	6.1	5.7	6.0	6.1	5.7	6.0	6.2	6.0	6.4	7.1	6.2	5.9
	Housing, water, electricity, gas and other fuels	21.2	17.6	16.4	15.6	15.4	14.8	14.7	13.6	12.8	13.3	15.0	15.1
	Furnitures, household equipment and routine maintenance	4.6	5.5	6.2	6.4	7.1	7.4	8.3	7.7	7.7	8.7	7.2	7.2
1995	Health	4.4	5.2	5.2	5.3	5.8	5.6	5.2	6.6	6.4	5.2	5.6	5.7
	Transport	13.4	14.1	15.3	15.3	15.7	15.2	16.4	16.7	16.5	14.6	15.4	15.4
	Communication	2.6	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1
	Recreation and culture	7.4	7.2	7.8	8.2	8.1	8.7	9.0	9.4	10.4	11.2	9.1	8.4
	Education	1.9	1.8	1.7	1.6	1.4	1.3	1.3	1.3	1.6	1.1	1.4	1.3
	Restaurants and hotels	3.8	3.4	3.8	4.1	4.5	5.0	5.1	5.4	6.0	6.9	5.1	4.8
	Miscellaneous goods and services	9.5	10.9	11.0	11.6	11.5	11.8	11.5	11.6	12.2	13.6	11.8	11.7
	Food and non-alcoholic beverages	19.2	19.2	18.1	17.7	17.8	17.2	16.2	15.3	14.5	12.6	16.3	17.5
	Alcoholic beverages, tobacco and narcotics	3.4	2.9	3.0	3.0	2.9	2.9	3.0	2.8	2.6	2.8	2.9	2.9
	Clothing and footwear	4.6	4.7	4.5	4.9	5.0	5.2	5.5	5.3	5.8	6.4	5.3	5.1
	Housing, water, electricity, gas and other fuels	17.7	17.4	17.6	16.7	16.9	15.9	15.4	14.4	15.2	14.7	16.0	16.4
	Furnitures, household equipment and routine maintenance	5.3	5.4	5.7	5.7	5.6	6.7	5.8	6.4	6.8	8.1	6.3	6.2
	Health	4.2	4.5	4.9	4.6	4.5	4.1	4.7	4.6	4.4	4.6	4.5	4.3
2001	Transport	14.0	14.1	14.6	15.7	15.2	16.0	16.7	17.7	16.5	14.2	15.6	15.6
	Communication	3.8	3.6	3.5	3.7	3.6	3.6	3.5	3.4	3.4	3.3	3.5	3.6
	Recreation and culture	8.2	8.0	8.0	8.4	8.4	8.6	8.3	9.0	9.4	9.8	8.7	8.5
	Education	1.5	1.5	1.2	1.1	1.0	1.0	1.0	0.9	0.7	1.3	1.1	1.0
	Restaurants and hotels	6.7	7.3	7.5	6.8	7.6	7.3	7.9	8.4	9.0	10.3	8.1	7.4
	Miscellaneous goods and services	11.3	11.3	11.3	11.6	11.5	11.6	11.9	11.8	11.8	12.1	11.7	11.5
	Food and non-alcoholic beverages	17.0	17.5	16.8	16.3	16.1	15.4	15.0	14.8	13.8	12.3	15.1	15.8
	Alcoholic beverages, tobacco and narcotics	3.2	3.0	3.0	2.8	2.9	2.6	2.5	2.3	2.2	2.1	2.5	2.8
	Clothing and footwear	7.7	6.8	7.0	6.9	7.3	7.5	8.0	8.0	8.0	8.4	7.7	7.4
	Housing, water, electricity, gas and other fuels	25.2	24.4	20.4	18.6	17.1	15.8	14.3	13.5	11.8	10.1	15.8	16.4
	Furnitures, household equipment and routine maintenance	5.3	5.7	5.5	6.9	6.6	6.7	7.6	7.0	7.5	9.5	7.1	6.6
2006	Health	2.9	2.9	4.4	3.7	3.4	3.3	3.4	3.4	3.6	3.9	3.5	3.4
	Transport	11.0	11.2	14.1	15.7	14.4	17.1	16.1	16.4	16.6	16.2	15.3	15.8
	Communication	4.4	4.3	3.7	3.8	3.9	3.6	3.7	3.5	3.3	2.7	3.6	3.8
	Recreation and culture	7.4	8.5	8.1	9.3	10.1	10.2	10.9	12.2	13.3	14.7	11.1	10.2
	Education	0.7	0.7	0.6	0.6	0.5	0.6	0.8	0.6	0.7	0.8	0.7	0.6
	Restaurants and hotels	3.5	3.4	4.8	4.2	5.0	5.2	5.5	5.7	6.4	6.6	5.3	5.1
	Miscellaneous goods and services	11.8	11.6	11.5	11.2	12.7	12.0	12.3	12.4	12.9	12.7	12.2	12.3

TableA-4 : Nomenclature of consumption categories: COICOP at aggregation level 2

ECOPA	EUROSTAT CODE	DESCRIPTION
Food & non alcoholic beverages	01.1	Food
	01.2	Non-alcoholic beverages
Alcohol, tabacco and narcotics	02.1	Alcoholic beverages
	02.2	Tobacco
	02.3	Narcotics
Clothing & footwear	03.1	Clothing
	03.2	Footwear
Housing & home energy ⁽¹⁾	04.1	Actual rentals for housing
	04.3	Maintenance and repair of the dwelling
	04.4	Water supply and miscellaneous services relating to the dwelling
	04.5	Electricity, gas and other fuels

Furniture, home equipment and maintenance	05.1	Furniture and furnishings, carpets and other floor coverings
	05.2	Household textiles
	05.3	Household appliances
	05.4	Glassware, tableware and household utensils
	05.5	Tools and equipment for house and garden
	05.6	Goods and services for routine household maintenance
Private health	06.1	Medical products, appliances and equipment
	06.2	Out-patient services
	06.3	Hospital services
Transport	07.1	Purchase of vehicles
	07.2	Operation of personal transport equipment
	07.3	Transport services
Communication	08.1	Postal services
	08.2	Telephone and telefax equipment
	08.3	Telephone and telefax services
Recreation & Culture	09.1	Audio-visual, photographic and information processing equipment
	09.2	Other major durables for recreation and culture
	09.3	Other recreational items and equipment, gardens and pets
	09.4	Recreational and cultural services
	09.5	Newspapers, books and stationery
	09.6	Package holidays
Private education	10.1	Pre-primary and primary education
	10.2	Secondary education
	10.3	Post-secondary non-tertiary education
	10.4	Tertiary education
	10.5	Education not definable by level
Restaurants and hostels	11.1	Catering services
	11.2	Accommodation services
Miscellaneous	12.1	Personal care
	12.2	Prostitution
	12.3	Personal effects n.e.c.
	12.4	Social protection
	12.5	Insurance
	12.6	Financial services n.e.c.
	12.7	Other services n.e.c.

Source: Eurostat ;

(1) imputed rent 4.2 have been subtracted as indicated in the text for ECOPA study.