**Appendix 2**

This data appendixfirst describes how vectors of household consumption have been calculated in this study. Given that the final consumption appears classified in the SIOT only in three levels, namely, Households, Non Profit Institutions Serving Households (NPISH), and Government, we need a procedure to extract the consumption related to both dependent and worker households from the total of households. To accomplish this, we have used the HBS microdata of 2012 containing total statistics of the household consumption expenditure. By defining specific data filters based on the main source of income over a sample of roughly 24.000 households, we are able to determine the distribution of the consumption basket for those households where the reference person receives dependency benefits (column $b\_{dep}$in Table 1). The monetary value of the exogenous consumption (column$c\_{dep}$in Table 1) is then obtained by applying the distribution $b\_{dep}$ to the total coststhat both the administration and dependent households allocate for consumption.

The endogenous consumption is obtained from the HBS by following a similar procedure to the above. In this particular case, we identify those households where the reference person is in employment to calculate the consumption basket (column$b\_{ldep}$ in Table 1). Furthermore, the monetary value of the endogenous consumption (column$c\_{clep}$in Table 1) results from applying such consumption propensities to the sectoral wages $w\_{c}$ earned by workers in payment for the production of the exogenous consumption.

Regarding these consumption results, it is important to mention that VAT and trade taxes have been deducted from the purchasing prices of goods and services, as long as the exogenous demand must be accounted in producer prices to make it compatible with TSIO data.

Table 1 shows the estimates for the consumption baskets above described. We estimate separately the level of consumption linked to both economic allowances and service provision that are considered in the DA.

Table 1. Consumption baskets for dependent and worker households (2012).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | Cash benefits | 2,660,572,869 | In-kind services | 4,544,858,021 |
|  |  |  | Administration | 1,356,097,469 | Administration | 2,493,644,713 |
|  |  |  | Households | 1,304,475,400 | Households | 2,051,213,308 |
| Sector | $$b\_{dep}$$(%) | $$b\_{ldep}$$(%) | $$c\_{dep}$$(euros) | $$c\_{ldep}$$(euros) | $$c\_{dep}$$(euros) | $$c\_{ldep}$$(euros) |
| A | 3,56% | 2,80% | 48.281.256,84 | 30.532.990,15 | 0,00 | 64.874.639,67 |
| B | 0,08% | 0,04% | 1.092.463,41 | 412.379,50 | 0,00 | 876.198,87 |
| C | 36,21% | 32,94% | 491.094.735,04 | 359.180.225,68 | 0,00 | 763.164.288,93 |
| D | 5,30% | 4,67% | 71.884.732,98 | 50.874.683,60 | 0,00 | 108.095.432,21 |
| E | 1,49% | 1,23% | 20.151.094,01 | 13.441.435,23 | 0,00 | 28.559.543,72 |
| F | 1,10% | 0,91% | 14.866.428,74 | 9.918.720,08 | 0,00 | 21.074.692,91 |
| G | 11,58% | 13,86% | 156.999.361,36 | 151.117.145,51 | 0,00 | 321.084.515,93 |
| H | 1,76% | 1,99% | 23.809.601,65 | 21.656.100,44 | 0,00 | 46.013.564,53 |
| I | 9,29% | 12,92% | 126.003.252,32 | 140.824.379,74 | 0,00 | 299.215.073,51 |
| J | 3,70% | 3,70% | 50.141.144,70 | 40.355.161,56 | 0,00 | 85.744.191,84 |
| K | 3,79% | 4,14% | 51.398.609,01 | 45.093.848,48 | 0,00 | 95.812.665,47 |
| L | 7,17% | 5,87% | 97.240.536,71 | 63.986.256,41 | 0,00 | 135.954.104,33 |
| M-N | 1,75% | 0,91% | 23.690.239,54 | 9.975.101,07 | 0,00 | 21.194.487,80 |
| O | 0,08% | 0,06% | 1.047.427,63 | 672.511,29 | 0,00 | 1.428.911,08 |
| P | 1,33% | 2,08% | 18.068.708,95 | 22.648.938,52 | 0,00 | 48.123.086,48 |
| Q86 | 3,26% | 2,96% | 44.248.778,60 | 32.297.617,70 | 0,00 | 68.624.012,93 |
| Q87-88 | 0,77% | 0,32% | 1.314.941.900,73 | 3.535.133,84 | 4.544.858.021,00 | 7.511.237,28 |
| R-U | 7,79% | 8,60% | 105.612.596,75 | 93.775.111,59 | 0,00 | 199.247.651,29 |
| **Total** | **100,00%** | **100,00%** | **2.660.572.869,00** | **1.090.297.740,39** | **4.544.858.021,00** | **2.316.598.298,78** |

Note: A: Agriculture, forestry and fishing; B: Mining and quarrying; C: Manufacture; D: Electricity, gas, steam and air conditioning supply; E: Water collection, treatment and supply and waste collection; F: Construction; G: Wholesale and retail trade; H: Transport; I: Accommodation and food service activities; J: Information and communication; K: Financial and insurance activities; L: Real estate activities; M-N: Professional, scientific and technical activities; administrative and support service activities; O: Public administration, defence; P: Education; Q86: Health services; Q87-88: Social work activities; R-U: Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies

Once that we have obtained both the exogenous and endogenous consumption in our model, the total production$x\_{dep}$ is calculated by applying equation (1). In short, $x\_{dep}$is an18×1 vector containingthe total domestic output necessary to obtainthegoods and servicesthatbothdependenthouseholds and thoseworkersrequired to meettheconsumptionneeds of suchdependenthousehold can purchase. Table 2 shows the output linked to the above results of consumption.As done previously, we separately consider both types of benefits in this study: economic allowances and service provision.

Table 2. Output generated by the consumption of dependent and worker households (2012).

|  |  |  |  |
| --- | --- | --- | --- |
| Cash benefits | 2.660.572.869,00 | In-kindservices | 4.544.858.021,00 |
|  | Administration | 1.356.097.469,00 | Administration | 2.493.644.713,00 |
|  | Households | 1.304.475.400,00 | Households | 2.051.213.308,00 |
| Sector | $$x\_{dep}$$(euros) | $$x\_{ldep}$$(euros) | $$x\_{dep}$$(euros) | $$x\_{ldep}$$(euros) |
| A | 98.204.454,30 | 79.709.133 | 29.812.081,55 | 168.569.485 |
| B | 8.855.467,75 | 6.701.055 | 4.560.080,35 | 14.171.442 |
| C | 971.554.000,37 | 795.800.656 | 497.346.437,55 | 1.682.965.317 |
| D | 209.898.357,15 | 163.939.915 | 123.163.601,89 | 346.701.388 |
| E | 46.049.152,92 | 34.936.960 | 24.466.378,88 | 73.884.950 |
| F | 59.680.494,61 | 37.492.655 | 66.119.568,81 | 79.289.753 |
| G | 310.804.199,33 | 274.971.826 | 255.104.697,77 | 581.512.523 |
| H | 126.997.354,44 | 108.738.839 | 83.227.070,32 | 229.961.730 |
| I | 152.739.588,14 | 191.974.016 | 54.782.322,74 | 405.988.117 |
| J | 124.004.143,65 | 97.486.731 | 95.116.839,93 | 206.165.684 |
| K | 134.135.523,89 | 114.188.499 | 93.500.021,83 | 241.486.713 |
| L | 158.130.997,78 | 128.807.449 | 57.198.320,06 | 272.402.979 |
| M-N | 177.788.786,61 | 103.626.956 | 204.997.964,77 | 219.151.080 |
| O | 17.110.444,01 | 12.261.860 | 15.765.445,13 | 25.931.476 |
| P | 29.852.368,95 | 34.949.001 | 21.444.588,60 | 73.910.414 |
| Q86 | 105.705.993,66 | 47.628.705 | 192.695.620,80 | 100.725.550 |
| Q87-88 | 1.331.719.945,84 | 1.557.556 | 4.597.464.632,19 | 3.293.932 |
| R-U | 137.677.426,77 | 10.765.195 | 41.894.997,39 | 22.766.316 |
| **Total** | **4.200.908.700,16** | **2.245.537.008** | **6.458.660.670,57** | **4.748.878.848** |

Note: A: Agriculture, forestry and fishing; B: Mining and quarrying; C: Manufacture; D: Electricity, gas, steam and air conditioning supply; E: Water collection, treatment and supply and waste collection; F: Construction; G: Wholesale and retail trade; H: Transport; I: Accommodation and food service activities; J: Information and communication; K: Financial and insurance activities; L: Real estate activities; M-N: Professional, scientific and technical activities; administrative and support service activities; O: Public administration, defence; P: Education; Q86: Health services; Q87-88: Social work activities; R-U: Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies