

Web Appendix for “Home Hours in the United States and Europe” *

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A Comparison with Aguiar and Hurst(2006, 2007)

This section explains the differences between our estimates and the estimates constructed by Aguiar and Hurst (2006, 2007) for the United States. Aguiar and Hurst (2007) document the allocation of time in the years 1965, 1975, 1985, 1993, and 2003. These researchers focus on the trend in leisure time and how leisure has evolved for men and women of different levels of education. Because their aim is to determine how leisure has changed across educational groups, Aguiar and Hurst create estimates holding constant the demographic composition of the population by sex, age group, educational attainment, and the presence of children. In the earlier version of their paper, Aguiar and Hurst (2006), these researchers also report the average time allocation per week that is not weighted by the demographic shares. Table A1 reports the estimates from both papers. The estimates from Aguiar and Hurst (2007) are labeled “A & H*”, and the estimates from Aguiar and Hurst (2006) are labeled “A & H. It is

*The views expressed here are the opinions of the authors only and do not necessarily represent those of the Federal Reserve Bank of Atlanta or the Federal Reserve System.

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obvious that weighting does not change the estimates significantly. In what follows, we first compare the un-weighted estimates for the U.S. from the MTUS data with those of Aguiar and Hurst (2006). We then describe the adjustments made to the un-weighted means that generate our estimates in the paper.

To replicate the un-weighted means, we follow the same sample selection criteria as Aguiar and Hurst (2006) to restrict the age to 21-65 and to exclude retirees. The MTUS data are from the same data sources as those used by Aguiar and Hurst. The last two rows of Table A1 exhibit the sample size for our estimates as well as those of the data presented by Aguiar and Hurst. The sample sizes are fairly similar except for that of 1985.¹ The 1985 survey was conducted via both mail and phone. Aguiar and Hurst include both, but the MTUS restricts the diaries to those conducted by mail.

MTUS release 5.8 contains two sets of activity categories: a set of 41 activities and a set of 69 more narrowly defined activities. We attempt to group the activities as closely as possible to those reported by Aguiar and Hurst (2006). Hence, we use the 69 activity-topology for our comparison.² The activities from the 69 topology for the core market, the total market, and the core home are very close to those defined by Aguiar and Hurst. However, the 69-activity topology does not separate the time spent on travel for personal (excludes medical) or household care from the time spent on travel for shopping. Travel for personal and household care is included in the “personal care” time-use category by Aguiar and Hurst. This leads to the estimates for “shopping” from the MTUS to include more time than the estimates for “shopping/obtaining goods and services” defined by Aguiar and Hurst.

¹The sample sizes are close, but not exact, in the other years. The MTUS estimates include only the diaries marked as “good” (those in which the total time equals up to 24 hours). We conjecture that the difference in sample size is derived from the different criteria used to evaluate which diaries should be included in the sample.

²Unlike Aguiar and Hurst, the focus of this paper is not on leisure. We thus do not attempt to replicate their measures of leisure.

The rows labeled “MTUS” in Table A1 report the un-weighted means of time allocation constructed from the MTUS data.³ The estimates for the core market work and total market work are nearly identical to the un-weighted means from Aguiar and Hurst (2006). The estimates for core home are consistently within one hour per week of one another. The biggest difference in the estimates comes from the category “shopping” because of our inability to exclude the travel for personal and household care from the travel for shopping. The difference in “total non-market” is due to the difference in “shopping”.

We next explain why the estimates from the MTUS in Table A1 differ from those reported in the paper. The objective of this paper is to estimate the allocation of time for the average working-age individual. For this purpose, we restrict the age to 15-64 and include the retirees in this age group. The un-weighted estimates are reported in Table A2 in the row labeled “15-64 raw”. For comparison, the rows labeled “Baseline” repeat the “MTUS” rows in Table A1. The biggest difference arises in the later years for market hours. The home production time remains largely unchanged. We also weight the survey observations to reflect the characteristics of the population in the survey year. We weight the survey observations to reflect the population composition of sex, employment status (active/inactive), and age group (15-19, 20-24, 25-34, 35-44, 45-54, 55-59, and 60-64) for each year.⁴ We choose to weight the observations by employment status because employment status is the most significant determinant of time allocation. We construct the weights from *OECD Labor Force Statistics*.⁵ The rows labeled “15-64 weight” report the weighted estimates. As displayed in the table, the weighted and un-weighted estimates are fairly similar in all years except 1965. The reason is that the 1965 survey over-sampled the employed individuals.

³As in Aguiar and Hurst (2006), the estimates are only weighted to ensure that each day of the week is equally represented across the sample.

⁴Although it may be ideal to also weight the survey observations by marital, education, and family status, a consistent source of information for all countries/years is not available.

⁵Each survey reports a suggested survey weight, but we choose not to use these weights because some surveys provide weights only for age groups, whereas others provide weights for finer categories.

Unfortunately, the MTUS 5.0 release does not include the finer 69-activity categories. Instead, it includes only the 41-activity topology. Because several surveys included in the paper are from the 5.0 release, to create time allocation categories that are comparable across countries, we use the 41-activity topology. The row labeled “final” in Table A2 displays the weighted estimates for individuals aged 15-64 using the 41-activity topology, which also correspond to the estimates for hours per person reported in the paper. The 41-activity categories are not sufficiently fine to create the same estimate for “core market work”. The core market hours now include paid meals, breaks, and other time at the work place. The 41-category estimates for total market work and core home work are the same as those for the 69 categories. The 41-category estimates for “shopping” also include time spent on travel for child and adult care purposes, i.e., including dropping children off at daycare or similar activities. This adds additional time to “shopping,” making the estimates for “shopping” and “total non-market” greater than those reported in the “15-64 weighted” data.⁶

B Comparison with Sevilla and Gimenez-Nadal (2012)

This section compares our estimates with those of Gimenez-Nadal and Sevilla (2012). Because both estimates are constructed from the same data source, the difference arises from the sample selection criteria and the procedures used to construct the estimates. First, similarly to Aguiar and Hurst, Sevilla and Gimenez-Nadal (S&G) construct the estimates of time allocation while holding the demographic composition of the population constant. Second, S&G also restrict the age group to 21-65 and exclude students and retirees. In their appendix, these researchers also report the estimates with retirees included. Third, the activity classification differs slightly. Schoolwork is considered part of market work, and

⁶The 1965 survey allocates “consume other services” to an activity category that is allocated to “shopping” in the 69-activity topology and allocated to a non-shopping-related category in the 41-activity topology, making the 1965 *Final* estimate slightly smaller.

gardening is considered part of leisure in S&G, whereas we do not include schoolwork in market work and include gardening in home work. S&G report the results for men and women but not the population as a whole. In Table A3, we report the estimates from Sevilla and Gimenez-Nadal (labeled “S&G”). The table also includes the estimates from Sevilla and Gimenez-Nadal with retirees included (labeled “ $\widetilde{S\&G}$ ”). Table A3 includes only the countries from Gimenez-Nadal and Sevilla (2012) that are also included in our sample. The estimates for France in 1998 are reported in the column for the 1990s following Gimenez-Nadal and Sevilla (2012).

To compare with S&G, we construct estimates using our weighting scheme as discussed in appendix A but restrict the age group to 21-65 with retirees included. The estimates are labeled “F&M in Table A3. The F&M series also use the same activity classifications as S&G. Hence, the differences between F&M and $\widetilde{S\&G}$ arise from the differences in the weighting schemes. The differences between F&M and the estimates in the paper arise from the differences in age group and activity classifications. Because the time spent on school work and gardening is small, most of the differences between F&M and the estimates in the paper arise from the age differences.

As the table indicates, the differences in total home hours between the three series are small for most of the cases, typically within 1-2 hours. This implies that the differences in weighting do not change the home hours greatly. The estimates of the F&M for child care are also close to $\widetilde{S\&G}$. In addition, the estimates of the total home hours and child care for F&M and in this paper are similar. More importantly, all three series demonstrate an increasing trend in the total home hours for men, a decreasing trend in the total home hours for women, and an increasing trend in child care for both sexes. In addition, the decline of home hours for women are larger than the increase for men, implying a declining trend in home hours per person. These observations are consistent with the estimates in the paper.

In contrast, the differences in the market hours between the three series in Table A3 are

sometimes large. This is not surprising because the inclusion of retirees has a bigger effect on the market hours than the home hours. Moreover, because labor force participation is the primary determinant of market hours worked, the estimates that are weighted by the labor market status (F&M) differ from the estimates that are not weighted by the labor market status (S&G and $\widetilde{S\&G}$). The differences in the market hours between the F&M series and those in the paper are within 2-3 hours and are the result of differences in the age groups.

C Comparison with GGDC

One commonly used source of aggregate data for the market hours is the *Total Economy Database* reported by the Gronigen Growth and Development Centre (GGDC). Table A4 compares our estimates of the average weekly core market hours per worker with the estimates from GGDC. The estimates from the GGDC are derived by dividing the annual hours worked per worker by 52. We also show the weekly market hours per person aged 15-64 years from both sources. The market hours per person from the GGDC are computed as the aggregate hours divided by the population aged 15-64. Because we use the same source for the fraction of active/inactive population as the GGDC, most of the differences in market hours per person are the result of the market hours per worker.

The GGDC collects data from the OECD, the Eurostat, and country-specific sources to construct the data series for hours worked per employed person.⁷ The following quote is an excerpt of the detailed source notes from the GGDC Total Economy Database:

Series on hours actually worked per person employed per year are presently available for 52 countries and cover the period 1950-2011. The estimates are intended to include paid overtime and exclude paid hours that are not worked due to sickness, vacation and holidays, etc. Estimates of working hours involve serious

⁷See “Detailed Sources - Output, Labor, and Labor Productivity on the Total Economy Database website <http://www.conference-board.org/data/economydatabase>

measurement problems and international comparability is troublesome. Even for individual countries very different estimates can circulate, primarily because the numbers are obtained either via labor force surveys or from establishment surveys. An advantage of estimates based on labor force surveys is their comprehensive nature, i.e. all adjustment for overtime, sickness, etc. are included. A disadvantage, however, is that there seems to be a general tendency towards slight overestimation of hours actually worked. Figures based on establishment surveys are usually only for hours paid and may include overtime, and require further adjustments to account for various types of absence.

The estimates for market hours per worker from the MTUS data are not adjusted to account for sick time, vacation, or maternity leave. It is likely that those ill or on vacation do not complete their time-use surveys. For this reason, the MTUS estimates of the weekly market hours are biased upward. Table A4 indicates that, in most cases, the MTUS estimates of weekly hours per worker are higher than those reported by GGDC. This is not true in all cases. The estimates for the Netherlands and the U.K from the MTUS are lower in certain years. We can only speculate the reason because there does not appear to be anything fundamentally wrong with the surveys. The Netherlands surveys are all conducted in the first week of October, with a diarist maintaining a diary for all days of the week. The MTUS surveys for the U.K. with lower market hours per worker, also survey an entire week. All other surveys cover a day or two. This suggests that the weekly survey may more often capture sick/vacation and unemployment activities compared with other surveys. More details about the surveys are available in appendix E.

D MTUS 5.0 Adjustments

The MTUS 5.0 release only included individuals aged 20-59 years. The surveys from MTUS 5.0 are Italy 1979, Germany 1965, and France 1966 and 1974. For these surveys, we assume that the individuals aged 15-19 who are active in the labor market allocate the same amount of time to market work and home production as do the active individuals of the same sex in the 20-24 age group. We also assume that the inactive individuals aged 15-19 allocate the same amount of time to home production as the inactive individuals of the same sex in the 20-24 age group. This likely leads to an over-estimation of both the home and the market hours for the 15-19 age group because this age group is likely to be in school and likely to work part-time, even if active in the labor market. In addition, the individuals of this age group are less likely to have their own children, suggesting that they likely spend less time in home production than their counterparts in the 20-24 age group. We make a similar assumption for individuals aged 60-64 using the 55-59 age group as a reference group. We are more confident about the similarities in the time allocations of the active/inactive individuals of each sex between these two age groups because the people of both age groups are not likely to be in school or taking care of their own children at home.

Although time allocation data for individuals aged 15-19 are not available, data are available to construct the demographic weights. In other words, we have data on the labor force participation rate and the share of the population that each age group represents. Table A5 displays the shares of the total population that each age group represents (by sex) as well as the labor force participation rate of each age group.

To check the sensitivity of our estimates to the above assumptions, we construct estimates for the 15-19 and 60-64 age groups under alternative scenarios. Scenario 1 is the scenario presented in the paper. For scenario 2, we assume that individuals aged 15-19 work 75% of the time at home and in the market that their counterparts in the 20-24 age group work. We

assume that the individuals aged 60-64 work 75% of the time in the market and the same amount of time at home that their counterparts in the 55-59 age group work. Scenario 3 is the same as scenario 2 for the individuals aged 60-64. For the 15-19 age group, we assume that the hours worked at home and in the market are 50% of those worked by the individuals aged 20-24.

Table A6 displays the comparison of the estimates for the core market hours, core home hours, and total home hours for the 15-19, 60-64, and 15-64 age groups (the column “Total”) under the three different scenarios for both sexes. As displayed in the table, there are differences in the total series generated under the different scenarios. However, the differences are relatively modest. This is because the shares of the population in these two age groups are relatively small, as reported in Table A5. Tables A7 and A8 report the change in the core market and core home hours relative to those in the year 2000 under the three different scenarios. Although there are differences between the different scenarios, the sign of the change is the same for each age group from all four surveys. This implies that the trend movement does not change for the different scenarios.

E Country Notes

The time-use data in the paper are obtained from the Multinational Time Use Survey (MTUS) Gershuny et al. (2010). A user’s guide and country notes are available from the MTUS website. Data on the population weights by age, sex, and employment status are from *OECD Labor Force Statistics* (OECD) whenever available. When the OECD data are not available, the demographic weights are constructed from the *International Labor Organization LABORSTA* (ILO) data. Below, we provide a brief summary of the data for each country.

France

We include surveys from 1966, 1975, and 1998 for France. The following table provides a brief summary of the MTUS data for France.

Survey period	Ages covered	Diary days	Response Rate
1966	20-59*	One & seven day	
May 1974 - Apr 1975	20-59*	One day	66%
Feb 1998 - Feb 1999	15+	One day	91%

MTUS 5.0 release

The demographic weights for 1998 are constructed from the OECD data. The demographic weights for 1966 and 1974 are constructed from the ILO data. Because the data in 1966 and 1974 are not available, we use a linear interpolation between 1962 and 1968 to construct the weights for 1966 and use a linear interpolation between 1968 and 1975 to construct the weights for 1974.

Germany

We include surveys from 1965, 1991, and 2001-2002 for Germany. The 1965 survey only includes West Germany. The following table provides a brief summary of the MTUS data for Germany.

Survey period	Ages	Diary days	Response Rate
May - June, 1965	20-59*	One day	73%
Sep - Oct, 1965	20-59*	One day	88%
Oct - Nov, 1991	12-75	Two days	
Jan - July, 1992	"	"	
Apr 2001 - Mar 2002	10+	Three days, one weekend	95-99%

*MTUS 5.0 release

The demographic weights for the surveys from 1991 and 2001 are constructed from the OECD data. The weights for 1965 are constructed from the ILO data. Because the data in

1965 are not available, we use a linear interpolation between 1961 and 1970 to construct the weights for 1965.

Italy

We include surveys from 1979, 1989, and 2002 for Italy. The following table provides a brief summary of the MTUS data for Italy.

Survey period	Ages	Diary days	Response Rate
1979	20-59*	Not specified	Not specified
Jun 1988 - May 1989	3+	One day	70%
Apr 2002 - Mar 2003	3+	One day	91.8%

*MTUS 5.0 release

The demographic weights for the surveys from 1989 and 2002 are constructed from the OECD data. The weights for 1979 are constructed from the ILO data. Because the data in 1979 are not available, we use a linear interpolation between 1971 and 1981 to construct the weights for 1979.

Netherlands

We include surveys from 1975, 1980, 1985, 1990, 1995, and 2000 for the Netherlands. The following table provides a brief summary of the MTUS data for the Netherlands.

Survey period	Ages	Diary days	Response Rate
Oct 5 - Oct 18, 1975	12-98	One week	76%
Oct 1980	12+	One week	54%
Oct 6 - Oct 19, 1985	12-91	One week	59%
Oct 5 - Oct 18, 1990	12-90	One week	49%
Oct 5 - Oct 18, 1995	12-90	One week	20%
Oct 1 - Oct 14, 2000	11-99	One week	25%

The demographic weights for 1990, 1995, and 2000 are constructed from the OECD data. The demographic weights for 1975, 1980, and 1985 are constructed from the ILO data.

Because the data in 1975 and 1980 are not available, we use a linear interpolation over the period 1971-1981 to construct the weights for 1975 and 1980.

Norway

We include surveys from 1971-1972, 1980-1982, 1990, and 2000-2001 for Norway. The following table provides a brief summary of the MTUS data for Norway.

Survey period	Ages	Diary days	Response Rate
Sep 1971 - Aug 1972	16-74*	Two-three days	58%
Jan 1980 - Oct 1982	16-74*	Two days	65%
Feb 1990 - Jan 1991	16-79*	Two days	64%
Feb 2000 - Feb 2001	9-80	Two days	50%

*Individuals aged 15 are assumed to allocate time as their demographic counterparts aged 16-19

The demographic weights for the surveys from 1981, 1990, and 2000 are constructed from the OECD data. The weights for 1971 are constructed using the ILO data.

United Kingdom

We include surveys from 1974 - 1975, 1983-1984, 1987, 1995, and 2000 for the United Kingdom. The MTUS has a survey available for the UK in 1961, but data are not available to construct the weights for the employment status. Hence, we exclude this survey. The following table provides a brief summary of the MTUS data for the U.K.

The demographic weights for the surveys from 1987, 1995, and 2000 are constructed from the OECD data. The demographic weights for the surveys from 1974 and 1983 are constructed from the ILO data. Because the ILO data are available for the years 1971, 1981, and 1985 but not available for the years 1974 and 1993, we use a linear interpolation to construct the weights for 1974 and 1983.

Survey period	Ages	Diary days	Response Rate
Aug 14-20, 1974	5+	One week	60%
Sep 4-10, 1974	5+	Monday and Tuesday	60%
Feb 12 - 18, 1975	5+	One week	62%
Feb 26 - Mar 4, 1975	5+	One week	62%
Nov 1983 - Feb 1984 ^s	14-97	One week	51%
May - June, 1995	16-94*	One day	93%
Jun 2000 - Aug 2001	8+	One weekend & weekday	45%

*Individuals aged 15 are assumed to allocate time as their demographic counterparts aged 16-19. Information for the 1987 survey are not currently available.

United States

We include surveys from 1965, 1975, 1985, 1992, and 2003 for the United States. There are also surveys for the years 1994-1995 and 1998-1999 for the United States, but we choose not to include these surveys because they are small. The following table provides a brief summary of the MTUS data for the U.S.

Survey period	Ages	Diary days	Response Rate
Nov 15 - Dec 15 1965	19 - 65*	One day	74% - 82%
Jan 1 - Feb 18, 1966	"	"	"
Mar 7 - May 20 , 1966	"	"	"
Oct - Dec, 1975	18+*	One day	72%
Jan - Dec, 1985	11+	One day	51%
Sep 1992 - Oct 1994	0-94	One day	63%
Jan -Dec, 2003	15+	One day	57%

*Individuals aged 15 -18 are assumed to allocate time as their demographic counterparts aged 18-19

The demographic weights are constructed from the OECD data.

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Table A1: A&H compare, All individuals

Core Market	1965	1975	1985	1993	2003
A & H*	29.63	28.79	27.74	29.93	28.63
A & H	28.25	27.37	27.29	30.61	29.82
MTUS	28.79	26.98	27.61	31.03	30.05
Total Market					
A & H*	35.98	33.79	32.67	33.22	31.71
A & H	34.24	32.13	32.13	34.11	33.01
MTUS	34.37	31.91	32.69	34.79	33.07
Core Home					
A & H*	13.02	11.34	10.82	8.75	8.66
A & H	14.42	11.55	10.55	8.23	8.01
MTUS	14.74	12.44	10.57	8.77	8.82
Shopping					
A & H*	6.18	5.4	5.84	5.20	5.19
A & H	6.09	5.26	5.97	5.35	5.27
MTUS	6.79	6.43	6.65	7.16	6.67
Total Home					
A & H*	22.09	20.15	21.00	18.4	18.31
A & H	23.52	20.3	20.64	17.94	18.00
MTUS	24.72	22.69	21.46	19.75	20.65
Sample size					
A & H	1862	1712	3283	5465	15244
MTUS	1865	1815	2046	5640	14634

Table A2: Weight and age group comparison, All individuals

Core Market	1965	1975	1985	1993	2003
Baseline	28.8	27.0	27.6	31.0	30.1
15-64 raw	27.8	25.0	24.4	28.0	27.3
15-64 weight	25.8	24.5	24.7	26.9	27.4
Final	28.6	26.5	26.4	27.9	27.2
Total Market Work					
Baseline	34.4	31.9	32.7	34.8	33.1
15-64 raw	33.3	29.7	29.1	31.6	30.2
15-64 weight	31.6	29.3	29.6	31.2	29.7
Final	31.6	29.3	29.6	31.2	29.7
Core Home					
Baseline	14.7	12.4	10.6	8.8	8.8
15-64 raw	13.9	12.4	9.9	8.4	8.4
15-64 weight	13.5	11.9	9.8	9.4	8.2
Final	13.5	11.9	9.8	9.4	8.2
Shopping					
Baseline	6.8	6.4	6.7	7.2	6.7
15-64 raw	6.5	6.2	6.6	7.1	6.6
15-64 weight	6.6	6.1	6.6	7.2	6.5
Final	6.1	7.4	7.5	7.8	8.1
Total Home					
Baseline	24.7	22.7	21.5	19.8	20.7
15-64 raw	23.5	22.2	21.0	19.2	20.1
15-64 weight	23.5	21.7	21.1	19.5	19.8
Final	22.7	22.7	21.2	19.6	20.4
Sample size					
Baseline	1865	1815	2046	5640	14634
15-64 all	1948	1949	2539	6556	16760

Table A3: Sevilla and Gimenez-Nadal Comparison

Men															
Total Market	1970s			1980s			1990s			2000s			Change		
	S&G	S&G	F&M	S&G	S&G	F&M	S&G	S&G	F&M	S&G	S&G	F&M	S&G	S&G	F&M
France	40.44	40.39	43.39	..	..	..	41.94	37.04	36.06	..	..	..	1.50	-3.35	-7.33
The Netherlands	39.37	33.30	36.47	38.25	30.85	34.32	41.91	33.93	35.65	43.36	33.18	39.67	3.99	-0.12	3.20
Norway	45.36	42.49	44.02	42.08	38.03	39.05	41.80	35.41	38.25	40.76	32.79	37.31	-4.60	-9.70	-6.71
United Kingdom	47.14	39.93	44.93	38.30	31.70	35.75	37.10	27.23	39.34	34.05	26.59	39.57	-13.09	-13.34	-5.36
Total home															
France	11.48	11.47	11.31	..	..	..	12.62	13.55	10.15	..	..	..	1.14	2.08	-1.16
The Netherlands	10.39	12.28	11.34	12.95	14.39	14.03	13.32	15.22	15.01	13.33	16.01	14.07	2.94	3.73	2.73
Norway	11.47	11.96	11.22	12.28	13.14	12.60	14.38	16.01	14.83	16.75	18.54	16.65	5.28	6.58	5.43
United Kingdom	7.65	9.11	8.66	13.69	15.45	14.20	10.83	11.94	11.01	16.15	18.23	14.31	8.50	9.12	5.65
Childcare															
France	1.45	1.44	1.39	..	..	..	1.91	1.78	1.38	..	..	..	0.46	0.34	-0.01
The Netherlands	2.05	1.76	1.56	2.19	1.78	1.56	2.66	2.24	1.66	2.71	2.15	1.67	0.66	0.39	0.11
Norway	1.77	1.52	1.31	2.73	2.21	2.16	3.13	2.45	2.40	3.34	2.61	2.32	1.57	1.09	1.01
United Kingdom	0.67	0.53	0.67	1.67	1.40	1.55	2.70	1.91	2.49	2.11	1.54	1.76	1.44	1.01	1.09
Women															
Total Market	1970s			1980s			1990s			2000s			Change		
	S&G	S&G	F&M	S&G	S&G	F&M	S&G	S&G	F&M	S&G	S&G	F&M	S&G	S&G	F&M
France	19.96	19.84	17.87	..	..	..	22.15	18.20	22.98	..	..	..	2.19	-1.64	5.11
The Netherlands	6.15	5.58	9.44	9.26	8.17	9.82	14.85	12.94	14.32	18.51	15.63	19.72	12.36	10.05	10.28
Norway	14.51	13.24	14.48	19.92	17.03	21.59	24.28	19.54	23.06	26.13	20.08	24.63	11.62	6.84	10.15
United Kingdom	18.06	13.69	15.44	15.42	11.82	18.25	20.88	13.10	23.52	19.26	12.65	23.53	1.20	-1.04	8.09
Total home															
France	34.98	35.06	35.90	..	..	..	30.98	31.58	26.63	..	..	..	-4.00	-3.48	-9.27
The Netherlands	35.65	35.21	34.58	34.31	33.96	33.89	30.19	30.27	30.41	28.25	28.82	26.48	-7.40	-6.39	-8.10
Norway	37.45	37.12	37.06	29.43	30.50	27.35	25.60	27.10	25.47	24.15	25.69	24.09	-13.30	-11.43	-12.97
United Kingdom	30.75	30.59	30.84	31.40	31.94	29.65	24.78	25.89	23.58	29.19	30.43	27.02	-1.56	-0.16	-3.82
Childcare															
France	5.84	5.82	6.00	..	..	..	6.51	5.82	4.48	..	..	..	0.67	0.00	-1.52
The Netherlands	5.89	5.22	4.24	6.35	5.60	4.63	6.37	5.58	4.77	5.61	4.99	4.56	-0.28	-0.23	0.32
Norway	6.53	5.27	5.19	6.97	5.37	4.94	8.79	6.13	5.89	9.31	6.72	5.96	2.78	1.45	0.77
United Kingdom	2.63	1.89	2.77	5.29	4.00	4.35	7.77	4.71	5.65	5.18	3.26	4.44	2.55	1.37	1.67

Table A4: Weekly Market Hours, 15-64

		Hours per employee		Hours per person	
		GGDC	MTUS	GGDC	MTUS
France	1966	39.5	45.6	27.8	29.2
France	1974	35.9	38.3	25.3	24.6
France	1998	29.5	32.8	19.2	22.9
Germany	1965	40.0	45.0	27.8	31.4
Germany	1991	29.8	35.6	20.8	25.9
Germany	2001	27.9	25.9	20.1	18.9
Italy	1979	36.2	39.3	18.6	23.9
Italy	1989	36.1	37.1	18.1	22.9
Italy	2002	35.2	35.6	19.1	22.0
Netherlands	1975	33.5	27.3	20.6	16.9
Netherlands	1980	32.2	27.6	20.2	16.9
Netherlands	1985	30.1	23.7	18.2	14.3
Netherlands	1990	29.0	24.2	18.9	16.3
Netherlands	1995	28.0	25.6	19.0	18.2
Netherlands	2000	27.6	29.7	20.7	23.3
Norway	1971	34.9	39.0	23.6	24.2
Norway	1981	30.2	32.4	21.7	24.9
Norway	1990	28.9	30.3	22.3	23.7
Norway	2000	28.0	30.6	25.4	20.1
UK	1974	37.6	34.5	25.4	24.9
UK	1995	33.5	33.7	22.0	25.5
UK	1983	35.0	30.8	21.6	22.3
UK	1987	34.8	29.1	22.3	22.6
UK	2000	32.9	32.4	22.7	25.3
USA	1965	36.2	43.4	23.5	28.6
USA	1975	33.8	37.3	22.0	26.5
USA	1985	33.5	34.6	23.7	26.4
USA	1992	33.0	35.9	24.4	27.9
USA	2003	32.9	34.9	24.6	27.2

Source: GGDC *Total Economy Database* for hours per employee and aggregate hours.
 OECD *Labor Force Statistics* for population aged 15-64

Table A5: Population Shares and Labor Force Participation

Italy 1979	<i>Male</i>	<i>Female</i>	<i>All</i>
<i>%of pop 15-19,</i>	0.07	0.07	0.14
<i>LF part. 15-19,</i>	0.44	0.35	0.39
<i>%of pop 60-64,</i>	0.03	0.04	0.07
<i>LF part. 60-64,</i>	0.32	0.09	0.20
Germany 1965	<i>Male</i>	<i>Female</i>	<i>All</i>
<i>%of pop 15-19,</i>	0.05	0.05	0.10
<i>LF part. 15-19,</i>	0.74	0.72	0.73
<i>%of pop 60-64,</i>	0.04	0.05	0.09
<i>LF part. 60-64,</i>	0.71	0.19	0.41
France 1966	<i>Male</i>	<i>Female</i>	<i>All</i>
<i>%of pop 15-19,</i>	0.07	0.06	0.13
<i>LF part. 15-19,</i>	0.44	0.33	0.39
<i>%of pop 60-64,</i>	0.04	0.05	0.09
<i>LF part. 60-64,</i>	0.67	0.33	0.49
France 1974	<i>Male</i>	<i>Female</i>	<i>All</i>
<i>%of pop 15-19,</i>	0.07	0.07	0.14
<i>LF part. 15-19,</i>	0.43	0.31	0.37
<i>%of pop 60-64,</i>	0.04	0.05	0.09
<i>LF part. 60-64,</i>	0.66	0.32	0.48

Table A6: World 5.0 Adjustment Scenarios

<i>Men</i>	<i>Scenario</i>	<i>Core Market</i>			<i>Core Home</i>			<i>Total Home</i>		
		<i>15-19</i>	<i>60-64</i>	<i>Total</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>
Italy 1979	<i>1</i>	18.8	19.2	34.7	1.2	4.6	2.2	3.7	11.3	6.5
	<i>2</i>	14.1	14.4	33.7	0.9	4.6	2.1	2.8	11.3	6.4
	<i>3</i>	9.4	14.4	33.0	0.6	4.6	2.1	1.9	11.3	6.2
Germany 1965	<i>1</i>	36.4	33.8	44.4	1.0	3.1	1.4	5.3	6.8	6.8
	<i>2</i>	27.3	25.4	42.8	0.8	3.1	1.4	3.9	6.8	6.6
	<i>3</i>	18.2	25.4	41.8	0.5	3.1	1.4	2.6	6.8	6.5
France 1966	<i>1</i>	21.2	32.4	40.9	2.9	6.5	3.5	12.3	14.3	10.7
	<i>2</i>	15.9	24.3	39.5	2.1	6.5	3.4	9.2	14.3	10.3
	<i>3</i>	10.6	24.3	38.8	1.4	6.5	3.3	6.2	14.3	9.9
France 1974	<i>1</i>	19.6	25.9	34.5	3.0	6.9	4.3	9.0	15.5	11.0
	<i>2</i>	14.7	19.4	33.3	2.2	6.9	4.2	6.8	15.5	10.7
	<i>3</i>	9.8	19.4	32.6	1.5	6.9	4.1	4.5	15.5	10.4
<hr/>										
<i>Women</i>	<i>Scenario</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>
Italy 1979	<i>1</i>	12.6	4.1	13.5	11.6	40.2	28.7	15.8	50.1	36.3
	<i>2</i>	9.5	3.1	13.0	8.7	40.2	28.3	11.9	50.1	35.7
	<i>3</i>	6.3	3.1	12.6	5.8	40.2	27.9	7.9	50.1	35.2
Germany 1965	<i>1</i>	30.7	8.0	18.7	14.2	30.8	26.3	19.8	39.1	33.7
	<i>2</i>	23.0	6.0	17.8	10.6	30.8	25.9	14.8	39.1	33.3
	<i>3</i>	15.3	6.0	17.1	7.1	30.8	25.6	9.9	39.1	32.8
France 1966	<i>1</i>	15.1	13.0	17.6	23.6	29.8	27.0	31.9	40.8	36.4
	<i>2</i>	11.3	9.7	16.9	17.7	29.8	26.2	23.9	40.8	35.4
	<i>3</i>	7.6	9.7	16.4	11.8	29.8	25.5	16.0	40.8	34.4
France 1974	<i>1</i>	11.4	12.0	14.9	21.7	28.4	26.2	29.4	37.1	34.9
	<i>2</i>	8.5	9.0	14.2	16.3	28.4	25.5	22.1	37.1	33.9
	<i>3</i>	5.7	9.0	13.9	10.8	28.4	24.8	14.7	37.1	33.0
<hr/>										
<i>All</i>	<i>Scenario</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>	<i>15-19</i>	<i>60-64</i>	<i>Total</i>
Italy 1979	<i>1</i>	15.9	11.0	23.9	6.3	23.8	15.6	9.6	32.2	21.6
	<i>2</i>	11.9	8.3	23.2	4.7	23.8	15.4	7.2	32.2	21.3
	<i>3</i>	7.9	8.3	22.6	3.1	23.8	15.1	4.8	32.2	20.9
Germany 1965	<i>1</i>	33.5	19.7	31.4	7.4	18.5	14.3	12.3	24.8	20.7
	<i>2</i>	25.1	14.8	30.1	5.5	18.5	14.1	9.2	24.8	20.4
	<i>3</i>	16.8	14.8	29.2	3.7	18.5	14.0	6.2	24.8	20.1
France 1966	<i>1</i>	18.2	22.2	29.2	13.2	19.2	15.3	22.2	28.8	23.7
	<i>2</i>	13.6	16.6	28.1	9.9	19.2	14.9	16.7	28.8	23.0
	<i>3</i>	9.1	16.6	27.5	6.6	19.2	14.5	11.1	28.8	22.3
France 1974	<i>1</i>	15.5	18.5	24.6	12.2	18.3	15.3	19.1	27.0	23.0
	<i>2</i>	11.6	13.9	23.7	9.2	18.3	14.9	14.3	27.0	22.3
	<i>3</i>	7.7	13.9	23.2	6.1	18.3	14.4	9.6	27.0	21.7

Table A7: Core Market Change Relative to 2000 by Age

<i>All</i>	<i>Scenario</i>	<i>15-24</i>	<i>25-54</i>	<i>55-64</i>	<i>Total</i>
Italy1979	<i>1</i>	-9.4	-0.2	-3.6	-1.9
	<i>2</i>	-7.2	-0.2	-2.5	-1.1
	<i>3</i>	-4.9	-0.2	-2.5	-0.6
Germany1965	<i>1</i>	-23.8	-7.6	-13.2	-11.7
	<i>2</i>	-19.9	-7.6	-10.8	-10.4
	<i>3</i>	-15.9	-7.6	-10.8	-9.6
France1966	<i>1</i>	-12.9	-3.5	-14.9	-6.3
	<i>2</i>	-10.5	-3.5	-12.2	-5.2
	<i>3</i>	-8.1	-3.5	-12.2	-4.6
France1974	<i>1</i>	-9.1	1.3	-10.8	-1.7
	<i>2</i>	-7.0	1.3	-8.5	-0.8
	<i>3</i>	-5.0	1.3	-8.5	-0.3

<i>Men</i>	<i>Scenario</i>	<i>15-24</i>	<i>25-54</i>	<i>55-64</i>	<i>Total</i>
Italy1979	<i>1</i>	-11.1	-3.3	-8.4	-4.2
	<i>2</i>	-8.4	-3.3	-6.3	-3.2
	<i>3</i>	-5.7	-3.3	-6.3	-2.5
Germany1965	<i>1</i>	-25.7	-16.0	-24.3	-18.9
	<i>2</i>	-21.4	-16.0	-20.3	-17.2
	<i>3</i>	-17.1	-16.0	-20.3	-16.2
France1966	<i>1</i>	-15.0	-11.8	-22.7	-12.5
	<i>2</i>	-12.2	-11.8	-18.8	-11.2
	<i>3</i>	-9.4	-11.8	-18.8	-10.5
France1974	<i>1</i>	-11.3	-4.9	-15.3	-6.1
	<i>2</i>	-8.7	-4.9	-12.2	-5.0
	<i>3</i>	-6.1	-4.9	-12.2	-4.3

<i>Women</i>	<i>Scenario</i>	<i>15-24</i>	<i>25-54</i>	<i>55-64</i>	<i>Total</i>
Italy1979	<i>1</i>	-7.5	2.3	-0.1	0.0
	<i>2</i>	-5.7	2.3	0.3	0.6
	<i>3</i>	-3.9	2.3	0.3	1.0
Germany1965	<i>1</i>	-21.9	-0.1	-4.2	-5.0
	<i>2</i>	-18.3	-0.1	-3.2	-4.1
	<i>3</i>	-14.7	-0.1	-3.2	-3.4
France1966	<i>1</i>	-10.8	4.8	-7.8	-0.0
	<i>2</i>	-8.7	4.8	-6.2	0.8
	<i>3</i>	-6.7	4.8	-6.2	1.2
France1974	<i>1</i>	-6.8	7.7	-6.9	2.7
	<i>2</i>	-5.3	7.7	-5.4	3.4
	<i>3</i>	-3.8	7.7	-5.4	3.8

Table A8: Core Home Change Relative to 2000 by Age

<i>All</i>	<i>Scenario</i>	<i>15-24</i>	<i>25-54</i>	<i>55-64</i>	<i>Total</i>
Italy1979	<i>1</i>	-1.4	-2.9	-2.5	-1.5
	<i>2</i>	-0.5	-2.9	-2.5	-1.2
	<i>3</i>	0.4	-2.9	-2.5	-1.0
Germany1965	<i>1</i>	-3.1	-4.9	-3.9	-3.9
	<i>2</i>	-2.2	-4.9	-3.9	-3.7
	<i>3</i>	-1.3	-4.9	-3.9	-3.5
France1966	<i>1</i>	-6.9	-3.6	-2.8	-4.0
	<i>2</i>	-5.1	-3.6	-2.8	-3.6
	<i>3</i>	-3.3	-3.6	-2.8	-3.2
France1974	<i>1</i>	-6.2	-4.1	-2.3	-4.0
	<i>2</i>	-4.6	-4.1	-2.3	-3.6
	<i>3</i>	-3.0	-4.1	-2.3	-3.2

<i>Men</i>	<i>Scenario</i>	<i>15-24</i>	<i>25-54</i>	<i>55-64</i>	<i>Total</i>
Italy1979	<i>1</i>	0.2	0.9	1.9	1.1
	<i>2</i>	0.4	0.9	1.9	1.1
	<i>3</i>	0.5	0.9	1.9	1.1
Germany1965	<i>1</i>	1.6	3.7	5.1	3.7
	<i>2</i>	1.7	3.7	5.1	3.7
	<i>3</i>	1.8	3.7	5.1	3.8
France1966	<i>1</i>	-0.6	1.2	-0.3	0.6
	<i>2</i>	-0.2	1.2	-0.3	0.7
	<i>3</i>	0.2	1.2	-0.3	0.7
France1974	<i>1</i>	-0.7	0.1	-1.3	-0.2
	<i>2</i>	-0.3	0.1	-1.3	-0.1
	<i>3</i>	0.1	0.1	-1.3	-0.0

<i>Women</i>	<i>Scenario</i>	<i>15-24</i>	<i>25-54</i>	<i>55-64</i>	<i>Total</i>
Italy1979	<i>1</i>	-3.1	-6.2	-5.4	-3.6
	<i>2</i>	-1.5	-6.2	-5.4	-3.2
	<i>3</i>	0.2	-6.2	-5.4	-2.8
Germany1965	<i>1</i>	-8.0	-12.1	-10.1	-10.5
	<i>2</i>	-6.4	-12.1	-10.1	-10.1
	<i>3</i>	-4.7	-12.1	-10.1	-9.8
France1966	<i>1</i>	-13.5	-8.6	-4.2	-8.6
	<i>2</i>	-10.3	-8.6	-4.2	-7.9
	<i>3</i>	-7.1	-8.6	-4.2	-7.1
France1974	<i>1</i>	-12.1	-8.6	-2.8	-7.9
	<i>2</i>	-9.2	-8.6	-2.8	-7.2
	<i>3</i>	-6.3	-8.6	-2.8	-6.4