

Time Use Across the World: Findings of a World Compilation of Time Use Surveys

Jacques Charmes



Jacques Charmes is an economist and statistician. Currently emeritus research director at the French Scientific Research Institute for Development (IRD, formerly ORSTOM), he was until recently director of the Department of Social and Health Sciences at this institute, and professor of economics at the University of Versailles and at the Institute for Political Science (Sciences Po) in Paris. He has been involved in the design and analysis of many labour force, living standards, informal sector and time-use surveys in North and sub-Saharan Africa, and has written extensively on the measurement of informal labour and National Accounts, with special emphasis on women. He is one of the founding members of the international network WIEGO (Women in the Informal Economy: Globalizing and Organizing).

ABSTRACT

This paper is based on 102 time use surveys carried out in 65 countries. Reports of the surveys were mostly found on the websites of national statistical agencies or other official institutions. Access to micro-data was not necessary.

Survey data have been gathered in a single database and used for in-depth comparative analysis. Such a compilation did not take care of the fact that age groups differ from country to country, but only retained the surveys for analysis based on: a) use of a diary as a survey instrument, or the record of all activities performed during a 24-hour day (with the exception of Latin American countries where none used a diary), b) a sufficiently detailed classification of activities (these first two criteria excluded all living standards surveys) and c) national level coverage (with a few exceptions, such as China, India, the Islamic Republic of Iran and Panama).

One of the major difficulties of the exercise was the precise identification of certain groups of activities, because there is still much progress needed in harmonization of classifications. The compilation provides interesting regional and subregional profiles, with a gender perspective, for two major categories (paid and unpaid work) as well as for learning, social life and leisure, personal care and maintenance. For a few countries, especially those using the new International Classification for Time-Use Statistics (ICATUS), more detailed information is made available on informal and formal work time, or time dedicated to water and firewood fetching.

Introduction

Since the early 1970s, time use surveys have been carried out at national level and with some attempts to standardize instruments of data collection, firstly in Europe (Norway) and other developed countries. They were designed to assess progress in lifestyles, focussing on time spent for leisure, and on transport and commuting, and also to compare paid and unpaid work. In the late 1990s, after the 1995 Beijing Fourth World Conference on Women, the first time use surveys were implemented in developing and transition countries, with the main objective being to measure the gender gap in paid and unpaid work, and tentatively to establish satellite accounts of household production.

To date, nearly a hundred surveys for 65 countries are available for in-depth comparative analyses. These have been gathered for the present exercise, with the stipulation that access to micro-data was not necessary. More countries and surveys have undertaken time use data collection, but the related information was not accessible for this exercise, which has been limited to countries for which survey reports are freely available on the websites of national institutions (mainly, national statistical offices). The few exceptions to this rule are Latvia and Lithuania (accessed through the Harmonised European Time Use Survey or HETUS website) and Australia, Germany, Hungary, Poland and Slovenia (accessed through the Organisation for Economic Co-operation and Development or OECD website). These websites, as well as those of the International Association of Time Use Research (IATUR), the Centre for Time Use Research (CTUR, University of Oxford) and the United Nations Statistics Division are rich sources of time use data. All national and international sources can be found in the references at the end of this report.

Conditions of the study

The present study¹ was undertaken as part of the preparation of the *Human Development Report 2015*. It gathers as many time use survey data and metadata as possible, and builds synthetic indicators on time use across the world, based on this data set.

In order to facilitate cross-country comparisons and ensure a certain degree of quality and relevance, this exercise deals only with:

¹ This paper was updated in February 2016 by adding time use surveys for two countries—the Republic of Moldova (2011-2012) and the former Yugoslav Republic of Macedonia (2014-2015). Two new surveys were added for the United Republic of Tanzania (2014) and the United States of America (2014). These surveys were not publicly available at the time of writing the *Human Development Report 2015*.

Surveys conducted at national level, or at least on large samples of different regions in the country (China, India) or at the urban level (Islamic Republic of Iran, Panama), and not surveys covering only the capital city.

Surveys based on a diary, i.e., a questionnaire designed for defining time spent on various activities, per time slots of—at most—one hour (and more usually 10, 15 or 30 minute slots) along the 24 hours of a day.

Surveys using a detailed classification of time use activities, i.e., one of the international classifications (ICATUS or HETUS) or national classifications based on a systematic classification of the activities. Data collection based on a too short list of activities (less than 10 items) have not been taken into account. Therefore, living standards surveys collecting data for a limited list of activities (usually less than 10) and for a reference period of a week or a month have not been considered.

In other words, the time use surveys gathered and analysed here are nationwide, based on diaries, and provide data that allow distinguishing between various components of paid work (formal, informal, subsistence) and unpaid work (unpaid domestic services, care work, voluntary), as well as various components of leisure and cultural activities (sports, hobbies, culture, mass media), and finally time spent for satisfying physiological needs (sleeping, eating, self-care, etc.). The database built for this work does not contain surveys restricted to a town (capital or not) or small region; pilot surveys limited to small, non-representative samples; or surveys using a methodology not based on diary questionnaires and a detailed classification of activities.

There is, however, an exception for Latin America. None of the seven Latin American countries included in the database used a diary for data collection on time use. They have developed a detailed questionnaire for each eligible household member asking the number of hours spent weekly (on weekdays, on the one hand, on weekend days, on the other hand) according to a detailed list of activities (from 16 broad categories for the least detailed, to more than 80 subcategories for the most detailed). The national reports published their results in numbers of hours and minutes per week rather than in hours and minutes per day.

Table 1 and Chart 1 list the 65 countries and 102 surveys included in the database, with the following classification of countries.

Nine countries (and 10 surveys) belong to the **Middle East and North Africa** region, which includes Turkey (which could be classified under West Asia or OECD countries), the Islamic Republic of Iran (which could be classified in Central Asia), the three Maghreb countries (Algeria, Morocco and Tunisia, which could be classified in North Africa), Iraq and the State of Palestine (West Asia), as well

as the Gulf countries (Oman and Qatar, which could be in West Asia). Only the State of Palestine has repeated its time use survey in a 12-year interval.

Eight countries (and 10 surveys) belong to the **sub-Saharan Africa** region: three countries in West Africa (Benin, Ghana and Mali), two countries in East Africa (Ethiopia and the United Republic of Tanzania), and three countries in Southern Africa (Madagascar, Mauritius and South Africa). Only South Africa repeated its survey in a 10-year interval.

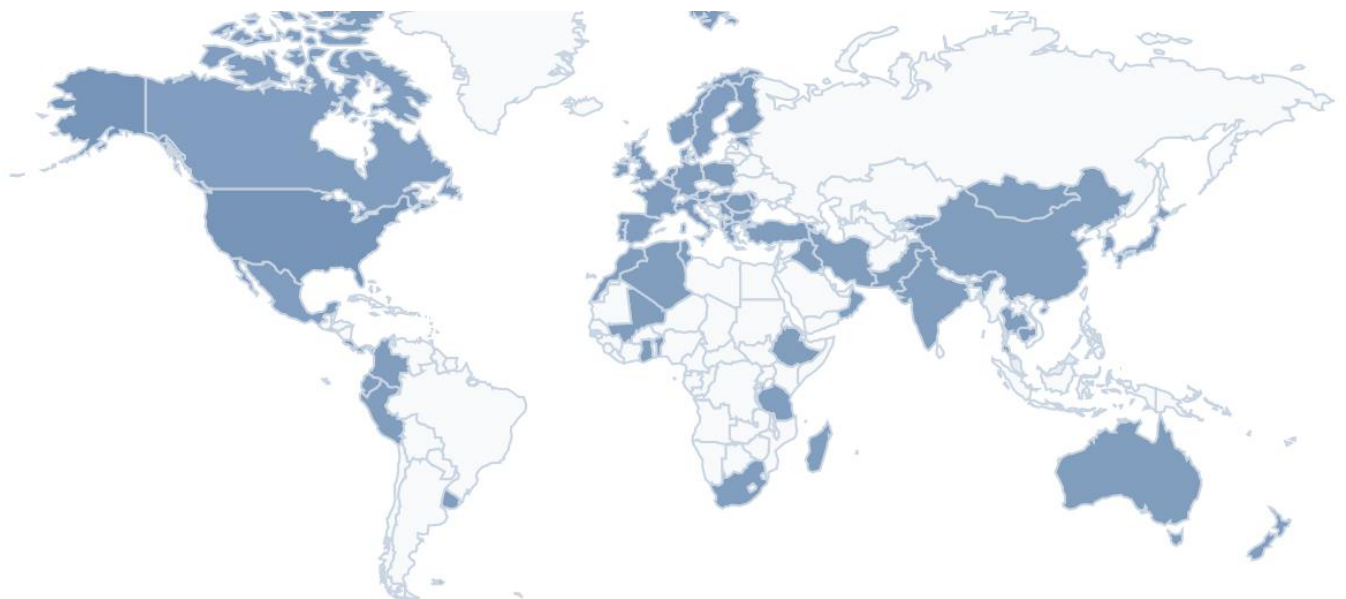
Nine countries (and 13 surveys) belong to the **Asia** region: Armenia (which could also be classified under West Asia as well as all Middle East and North African countries, or under transition countries), India and Pakistan (South Asia), China (East Asia), Mongolia (East Asia), the Republic of Korea (East Asia, which could be also classified with OECD/developed countries), Cambodia and Thailand (South-east Asia), and Kyrgyzstan (Central Asia). Japan is classified with developed or OECD countries. Only three countries repeated their surveys: Mongolia and Thailand twice, and the Republic of Korea three times, all in five-year intervals.

Table 1: Time-use surveys: list of countries and surveys (years) by region

Middle East and North Africa (9 countries, 10 surveys)	Sub-Saharan Africa (8 countries, 10 surveys)	Asia (9 countries, 13 surveys)	Latin America (7 countries, 8 surveys)	Europe (15 countries, 29 surveys)	Transition (12 countries, 12 surveys)	North America (2 countries, 14 surveys)	Other developed countries (3 countries, 6 surveys)
Algeria (2012)	Benin (1998)	Armenia (2004)	Colombia (2012-13)	Austria (2008-09)	Albania (2010-2011)	Canada (2005) (2010)	Australia (2006)
Islamic Republic of Iran (2009)	Ethiopia (2013)	Cambodia (2004)	Costa Rica (2004)	Belgium (1999) (2005)	Bulgaria (2009-2010)	United States of America (2003) (2004) (2005) (2006) (2007) (2008) (2009) (2010) (2011) (2012) (2013) (2014)	Japan (2001) (2006) (2011)
Iraq (2007)	Ghana (2009)	China (2008)	Ecuador (2012)	Denmark (2001)	Estonia (2009-2010)		New Zealand (1998-1999) (2009-2010)
Morocco (2011-2012)	Madagascar (2001)	India (1998-99)	El Salvador (2010)	Finland (1979) (1987) (1999) (2009)	Hungary (1999-2000)		
Oman (2007-2008)	Mali (2008)	Republic of Korea (1999) (2004) (2009)	Mexico (2002) (2009)	France (1986) (1999) (2010)	Latvia (2003)		
State of Palestine (1999-2000) (2012-2013)	Mauritius (2003)	Kyrgyzstan (2010)	Panama (2011)	Germany (2001-2002)	Lithuania (2003)		
Qatar (2012-2-13)	South Africa (2000) (2010)	Mongolia (2007) (2011)	Peru (2010)	Greece (2013-2014)	Former Yugoslav Republic of Macedonia		

					(2014-2015)		
Tunisia (2005-2006)	United Republic of Tanzania (2006) (2014)	Pakistan (2007)		Ireland (2005)	Moldova (2011-2012)		
Turkey (2006)		Thailand (2004) (2009)		Italy (1988-1989) (2002-2003) (2008-2009)	Poland (2003-2004)		
				Netherlands (2005-2006)	Romania (2011-2012)		
				Norway (1970) (1980) (1990) (2000) (2010)	Serbia (2010-2011)		
				Portugal (1999)	Slovenia (2000-2001)		
				Spain (2002-2003) (2009-2010)			
				Sweden (2000-2001) (2010-2011)			
				United Kingdom (2000) (2005)			

Chart 1: Countries in the database



Seven countries (and eight surveys) belong to **Latin America**: five countries could also be classified under Central America (Costa Rica, El Salvador, Honduras, Mexico and Panama) and three countries under the South America region (Colombia, Ecuador and Peru). Only Mexico repeated its survey in a seven-year interval.

With 15 countries (and 29 surveys), **Europe** has the richest dataset, and even more if we add the 10 transition countries of Eastern Europe. Five belong to Western Europe (Austria, Belgium, France, Germany and the Netherlands), four to Southern Europe (Greece, Italy, Portugal, Spain, and possibly Albania, Serbia and Slovenia), six to Northern Europe (Denmark, Finland, Norway, Sweden, Ireland and the United Kingdom, and possibly Estonia, Latvia and Lithuania), and four to Eastern Europe, including transition countries (Bulgaria, Hungary, Poland and Romania). Except for transition countries, most European countries have repeated their surveys, but only eight are in the database) with various time intervals (5 to 10 years in general). Surveys for Luxemburg and Switzerland could not be accessed from the websites.

The **transition** countries do not constitute a geographical category, although they are all located in Eastern Europe, including the Baltic countries. Armenia and Kyrgyzstan could also be included in this broad category, but they probably have fewer common characteristics with the others, which justifies leaving them with other Asian countries. The reason for a specific category for transition countries lies in the fact that, as former socialist economies, they were characterized by high female economic participation rates, high rates of wage-employment and large facilities for childcare provided by the State, all features that could explain strong specificities in time use. Twelve countries belong to this category of transition countries (with possibly two more in Asia). None of them have repeated their surveys yet.

In **North America**, Canada and the United States have repeated their surveys, and in the latter, the American Time Use Survey (ATUS) has been conducted on a yearly basis since 2003.

Finally, in the last category of **other developed countries**, one can find three countries: Australia, Japan and New Zealand, all OECD countries. Two have repeated their surveys in a 5-year (Japan) or 10-year (New Zealand) interval.

Two more countries have carried out a time use survey based on a diary: Cuba (2001) and Bangladesh (2012), but they did not make their results available in a way that allows international comparisons. Data for Cuba are only available disaggregated by urban and rural areas, and for Bangladesh disaggregated by working/not working. Also, data have been collected in Djibouti (2012), Benin (2015, repeated survey) and Cameroon (2015), but they have not been analysed and published.

It is the first time that such a worldwide comparison has been attempted. Some earlier efforts exist at the aggregate or regional level: for instance, at the European or OECD country level (see, for

example, OECD 2014, the gender data portal) or at the Asia regional level (OECD 2012). These comparisons pay significant attention to harmonizing age groups (15-64 years, 18-64 years or 15-74 years) and categories of activity (regrouping work and education, for example, travel and commuting related to these activities being included). In this report, harmonizing the age group has not been attempted. That would have required access to micro-data. But we have tried to make the categories of activities consistent, in particular with regard to the inclusion or not of travel related to work, education, leisure, etc., and with regard to the definition of paid and unpaid work.

Objectives of the study

How women and men spend their time is a question with important implications and impacts on our knowledge of human behaviours related to work for earning a living, the different degrees of involvement in domestic and care work, as well as voluntary work. The lengthening time spent in commuting correlated with the rate of urbanization and the spatial expansion of cities greatly impacts time devoted to leisure that the civilization of leisure was supposed to increase (see Friedmann 1960, Dumazedier 1960). The role and importance of socializing compared to time spent alone in individual leisure activities vary across regions and over time, as well as the time spent using (listening, watching or using) the mass media. All these issues make time use a very sensitive indicator of social change, social resistance and social resilience, in close relation with progress in human development.

This study was expected to provide sound indicators of time use regarding:

Paid work, distinguishing—where possible and depending on the type of classification used—between work in establishments in the formal sector, work for the household in the informal sector or for subsistence.

Unpaid work defined as comprised of:

- Domestic work,
- Care work (care of children, of adults),
- Voluntary work (care of other households, work for the community) and
- Education (at school and at home).

Social life and leisure, distinguishing between:

- Socializing (with others, family, relatives, friends),
- Leisure (hobbies, sports, culture) and

- Mass media (including reading).

Personal care and maintenance (sleeping, eating, self-care).

The usual indicators published by time use surveys are of three types:

- The average daily time spent in a given activity of the classification by the population engaged (or involved) in the activity;
- The participation rate (the number of people engaged in the activity divided by the total population—engaged or not—of the sample); and
- The average daily time spent in a given activity by the total population, engaged or not in the activity.

In this report, all tables refer to the third of these three indicators.

Some surveys restrict their publications to the two first indicators, and it has been necessary to calculate the third indicator on the basis of the first two. Tables of the results are generally presented by sex and age groups, matrimonial status, family size, activity status, weekdays and weekend days, geographical location, etc.

Assessment of the survey methodologies

Table A1 synthesizes the main characteristics of time use survey methodologies, in terms of period (length of data collection), type of survey, minimum age, sample size, type of sample, type of survey instrument, mode of data collection and classification used.

Europe has the longest tradition of time use surveys. These surveys have been carried out as stand-alone surveys since the early 1970s. Among the 15 European countries, only two (Belgium and the United Kingdom in 2005) have carried out their time use survey as a module of a household survey. Time use surveys are generally conducted over an entire year (with rotating samples: an equal part of the sample is surveyed each month or each quarter) in order to take seasonal variations into account, except in Portugal, where the survey was carried out over two months, and in the United Kingdom in 2005, where it was carried out in four months across the year. The minimum age varies from 8 (United Kingdom in 2000) and 9 (Norway since 2000) to 20 (Sweden), and there is a maximum age in these last two countries (74 before 2000 and 79 since 2000 for Norway, 84 for Sweden). Italy uses a special module for the age group 3-14, and France collects data for ages 11 and over, but publishes basic tables for 15 and over. Sample size varies from 1,023 individuals (Ireland) to 50,968 individuals (Italy). All countries have collected time use survey data on all eligible members of

selected households, except the United Kingdom in 2005, where the survey involved a random selection of one household member. The survey instrument is the diary in all countries, and systematically two diaries (one for weekdays and one for weekend days), except in Austria, Italy, Portugal and Spain, where the days of the week are spread across the sample. Except in Portugal and the United Kingdom in 2005, the mode of data collection is mixed. This means that individuals fill the diaries, while interviewers fill the household and individual questionnaires. Each country has developed its own ad hoc detailed classification of time use activities. The HETUS classification is the result of a harmonization process that attempted to reconcile countries' classifications.

The 10 **transition countries** of Europe have benefitted from this harmonization process, and all use HETUS as their time use classification. All surveys are stand-alone surveys conducted over the year (Latvia over eight months). The minimum age is generally 10 (except Serbia at 15), with standardization (or publication) for the age group 20-74 or 15-74 or 15-64. All countries use two diaries as a survey instrument, and the mixed method as the mode of data collection (self-filled diary and interview). All eligible members of households are part of the sample. The sample size varies from 2,384 individuals in Lithuania to 7,225 in Estonia.

The two countries of **North America**, Canada and the United States of America, use the computer-assisted telephone interview for their time use surveys. The American time use survey has been an annual stand-alone survey since 2003, with a sample of 2,190 individuals aged 15+ (one person randomly selected in each household) per month, and a single diary, using its own classification (ATUS). Canada carries out its time use survey every five years as a module of the rotating sample of a household survey. The sample size is 25,000 individuals with one diary.

Among the three **other developed countries**, Japan carries out a time use survey every 5 years and New Zealand every 10 years, both stand-alone surveys conducted in a month in Japan, and over the year in New Zealand. The minimum age is 10 in Japan, 12 in New Zealand and 15 in Australia, with self-recorded diaries (one diary in Japan, two diaries in New Zealand) and ad hoc detailed classification, Activity Classification for Time Use Surveys (ACTUS) for New Zealand.

In the nine **Middle East North Africa countries**, 10 surveys have been conducted during the past 15 years with one repetition in the State of Palestine. Turkey and the three Maghreb countries have used the HETUS classification (or a variant of it), while the Islamic Republic of Iran and the State of Palestine used ICATUS, and Iraq, Oman and Qatar a pre-listing of more than 20 activities. In Iraq (2007), the time use survey was a module of a household survey. The other countries conducted stand-alone surveys (as a subsample of an existing household survey in Oman and Tunisia). The period of data collection is the entire year, except in Algeria and Iraq (two consecutive months). Iran collected data on three quarters (winter, autumn and summer). The minimum age varies from 7 (Morocco) to 15, and the sample size from 4,605 individuals (the State of Palestine in 2012) to 22,138

(Algeria), with one diary (except in Tunisia and Turkey with two diaries). All eligible individuals are surveyed except in the State of Palestine (two adults, one male, one female, randomly selected) and Morocco (two adults, one male, one female, randomly selected, and one child in every five households). The technique of the self-recorded diary was used in the Islamic Republic of Iran (urban areas), Morocco and Tunisia.

In the eight countries of **sub-Saharan Africa**, where illiteracy is more widespread, the interview technique is systematic, and data are collected with a single diary over a month or two months except in South Africa (three rounds in 2000) and the United Republic of Tanzania (four quarters). The minimum age ranges from 5 (United Republic of Tanzania) and 6 (Benin, Madagascar and Mali, which also used a maximum age of 65) to 10. Three countries have conducted their time use survey as a module of a household survey (Benin, Mauritius and United Republic of Tanzania) and one as a subsample of a household survey (Madagascar). The sample size ranges from 2,249 individuals (Mali) to 52,262 (Ethiopia), with all eligible members selected except in Mali (two individuals randomly selected in three age groups) and South Africa (two individuals). Most countries use ICATUS or a pre-listing of more than 60 activities inspired by ICATUS. Only South Africa repeated its survey.

In **Asia**, three countries used ICATUS (Mongolia, Pakistan and Thailand), China used a mix of HETUS and ICATUS, Armenia applied the HETUS classification, and the others used a list of activities (Cambodia and India) or an ad hoc detailed classification (Republic of Korea). Only two countries (Republic of Korea and Thailand) have repeated their surveys every five years. All surveys are stand-alone except in Cambodia, which used a module in a household survey. The sample size ranges from 1,342 individuals in Armenia to 83,880 households/individuals in Thailand, and the minimum age from 5 (Cambodia, but data are published for ages 15-64) and 6 (India) to 15 (Armenia and China). A maximum age is used in China (74) and Armenia (80). The survey instrument is a single diary in Cambodia, Kyrgyzstan, Mongolia, Pakistan and Thailand, two diaries in Armenia and China, and three diaries in India (a normal day, an abnormal day and a weekly variant of the past week). All eligible members are interviewed except in Pakistan (where two members are randomly selected) and in Thailand (one member). Only the Republic of Korea and Thailand use a self-recorded diary. China and India carried out their surveys in several states, but not at the national level.

In **Latin America**, none of the seven countries used a diary (as already explained, an exception to the rule applied in this report), turning instead to a questionnaire with a series of questions on various activities. Consequently, the data collected are not strictly comparable with the other regions. Three countries carried out a stand-alone survey and four a module in a household survey. Only two countries conducted the survey over a year (Colombia and El Salvador). The minimum age ranges from 10 (Colombia and El Salvador) to 15 (Panama), and the sample size from 3,305 households (El Salvador) to 148,492 individuals in Colombia. All household members were interviewed for weekdays

and for weekend days (except in Colombia and Costa Rica). The classifications used are detailed and ad hoc, but close to CAUTAL (Clasificación de Actividades de Uso del Tiempo para América Latina y el Caribe in the 9-28-82 categories). Only Mexico has repeated its survey at a seven-year interval.

Difficulties and limits of international comparisons

The above description of survey methodologies across the world highlights the limits of international comparisons. The two main factors that analysts (in particular at the European Union and OECD) have been dealing with are age groups and the classification of activities. European Union comparisons (EUROSTAT 2004), including transition countries, have standardized the age group at 20-74, while OECD comparisons have standardized the age group at 15-84 (OECD 2014).

Age groups: Table A1 shows the diversity of age groups used for data collection on time use: from a minimum age of 5 and 6 (and even 3) to 15, 18 and even 20. Some countries use a maximum age of 65 or 74. In this report, the age groups are those used in national official publications.

Classification of activities: ICATUS is mainly used in developing countries in Africa and Asia. HETUS has the privilege of anteriority and is a means of harmonization in Europe and in transition countries. Attempts have been made to disseminate it in North Africa and other regions. Many countries use their own classifications, based on HETUS or ICATUS. The main issues to tackle are the exact content and meaning of the main concepts in use and how they are interpreted: paid work, unpaid work, voluntary work, leisure, personal care, travel and commuting. We comment on this issue in the next section of this paper.

Capture of weekly and annual (seasonal) variations in time use: Many surveys, especially in developing countries, do not capture seasonal variations in time use, limiting the data collection to a duration of one or two months. Others organize the data collection in two, three or four rounds. Most countries organize a rotating sample over the year (an equal share of the total sample is surveyed each month). Regarding the weekly variations of time use, two solutions prevail: either the data are collected with two (or more) diaries, one for a weekday and one for a weekend day, or the data collection methodology is organized to make sure that there will be diaries for each day of the week.

Finally, another issue that is too rarely addressed in the survey methodologies is the representativeness of the sample, especially with regard to non-responses. Of course, all surveys apply the rules of household sampling that ensure the representativeness of households. But there is not often required information about the representativeness of individuals who fill the diaries. Most surveys consulted for this study have not published such non-response rates for individuals. There are two categories of surveys: either all eligible (that is, all members above the minimum age) are

interviewed (or fill the diary) or only one, two or three members, randomly selected. The methodology of the time use survey in Mongolia was the only one that clearly specified that the eligibility criteria for being interviewed were age and presence at home at the time of the visit of the interviewer. But in both cases, the number of non-responses may be high (especially in the case of interviews, because the persons are not present at the time when the interviewer visits the households. As a consequence, persons who are often absent from home (at work or at school, for example) will be more difficult to interview. It is therefore necessary to adjust the sample before extrapolating the results to the whole population. This issue is of particular importance when one wants to analyse global indicators of time use for the whole population of a country, and not only for a subcategory of population.

Notwithstanding these difficulties, the main issue lies in the definition of concepts.

The concepts used for time use analysis

Paid work and unpaid work: The definitions of these two categories are of major importance in the determination of gender gaps, and they should not be ambiguous, given that they are defined by international concepts of the labour force (International Labour Organization or ILO) and of national accounts (SNA 2008). Work is basically defined as any human activity that can be delegated to a third person for the production of goods and services destined to satisfy a person's needs: education (in the sense of going to school) or playing a game or watching television are not work because they cannot be delegated to a third person, but preparing meals or caring for children are work because it is possible to hire somebody to do it.

The production of goods and services measured in gross domestic product (GDP) by national accounts is the basis for the definition of the labour force and employment (by the ILO). It defines the boundaries of 'paid work' (the production boundary under the System of National Accounts or SNA) as the work that produces goods and services destined for the market (in addition to government and non-profit services), as well as all goods (but not services) produced by households for their own final use. 'Unpaid work' (corresponding to the general production boundary) is therefore defined as household work that produces services for their own final use, such as domestic services and care of children and adults within households or for other households (voluntary work). 'Voluntary work' also comprises unpaid work for the community.

If these definitions seem rather clear, they are not devoid of ambiguities. For instance, 'paid work' is not necessarily paid (or for profit) and the former 'unpaid family workers' (a category of the international classification of status in employment) have nowadays been replaced by the 'contributing family workers', whose work, though unpaid, contributes to the formation of GDP and

is part of 'paid work'. Similarly, activities such as water or firewood fetching, or collection of fuel, are considered by the SNA, since its early revision in 1968, as extraction of goods and consequently as 'paid work'. But feminist economists may rightfully raise the question why these activities are classified as such even though national accounts fail to measure them (Elson 2000, Budlender 2004). Certainly, national accounts that take such activities into account are not many, due to a lack of data, but insufficient practice does not justify a change in definitions and rules of measurement.

Another example that illustrates the subtleties of classifications involves care of domestic animals. In HETUS and developed countries, pet care is definitely 'unpaid work', while in developing countries and subsistence economies, care of domestic animals such as cows, sheep, goats or poultry are productive activities of animal husbandry. Milking the cow or feeding the poultry is an economic activity that should be measured in GDP. In this report, adjustments have been made to include these activities in 'paid work'.

This contradiction in definitions of production by national accounts and of the labour force by the ILO has resulted in increasing discrepancies in the statistics of employment or in difficulties in international or time comparisons. While many countries continue to ignore large shares of women's productive work in agriculture (especially in the Middle East and North Africa, and in South Asia: see Charmes and Remaoun 2014), those that decide to collect data through a strict application of the definition (the United Republic of Tanzania, for example, see National Bureau of Statistics, United Republic of Tanzania 2007) have generated global figures that are not comparable with those of neighbouring countries. This explains why feminist economists insist on measuring 'unpaid work', including some components of 'paid work'. It also explains why ICATUS uses a very detailed list of categories for paid work, distinguishing 'work in establishments' (in the first trial ICATUS) as now 'work for the formal sector' (in the most recent revision: work for corporations, quasi-corporations, non-profit institutions and government), on the one hand. On the other hand, there is 'work for household in primary activities', 'work for household in non-primary production activities', 'work for household in construction activities' and 'work for household providing services for income', all of which delineate work in the informal economy. Only four countries in the database (Ghana, Ethiopia, the State of Palestine and Thailand) have provided such detailed data, and to a certain extent (with fewer details) a few other developing countries of sub-Saharan Africa and Asia (Pakistan and Mongolia). In countries where labour force surveys fail to fully capture women's work because it is often confounded with household work, time use surveys have an important role to play in order to improve data collection on the labour force (Charmes and Hirway 2006).

The issue of 'unpaid work' and its measurement in national accounts and the labour force has been widely discussed in the literature since the issue arose at the Beijing Conference. The SNA 1993 (and 2008) recommended building satellite accounts of household production in order to capture its

contribution, but it is only recently that the International Conference of Labour Statisticians (ICLS), in charge of definitions of the concepts of labour force, took over the issue (see Box 1 and Chart 2).

Box 1: Extract from resolution 1 concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2-11 October 2013

6. Work comprises any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own use.

(a) Work is defined irrespective of its formal or informal character or the legality of the activity.

(b) Work excludes activities that do not involve producing goods or services (e.g. begging and stealing), self-care (e.g. personal grooming and hygiene) and activities that cannot be performed by another person on one's own behalf (e.g. sleeping, learning and activities for own recreation).

(c) The concept of work is aligned with the General production boundary as defined in the System of National Accounts 2008 (2008 SNA) and its concept of economic unit that distinguishes between:

(i) market units (i.e. corporations, quasi-corporations and household unincorporated market enterprises 2);

(ii) non-market units (i.e. government and non-profit institutions serving households); and

(iii) households that produce goods or services for own final use.

(d) Work can be performed in any kind of economic unit.

7. To meet different objectives, five mutually exclusive forms of work are identified for separate measurement. These forms of work are distinguished on the basis of the intended destination of the production (for own final use; or for use by others, i.e. other economic units) and the nature of the transaction (i.e. monetary or non-monetary transactions, and transfers), as follows:

(a) own-use production work comprising production of goods and services for own final use;

(b) employment work comprising work performed for others in exchange for pay or profit;

(c) unpaid trainee work comprising work performed for others without pay to acquire workplace experience or skills;

(d) volunteer work comprising non-compulsory work performed for others without pay;

(e) other work activities (not defined in this resolution).

8. These "other work activities" include such activities as unpaid community service and unpaid work by prisoners, when ordered by a court or similar authority, and unpaid military or alternative civilian service, which may be treated as a distinct form of work for measurement (such as compulsory work performed without pay for others).

9. Persons may engage in one or more forms of work in parallel or consecutively, i.e. persons may be employed, be volunteering, doing unpaid trainee work and/or producing for own use, in any combination.

10. Own-use production of goods, employment, unpaid trainee work, a part of volunteer work and “other work activities” form the basis for the preparation of national production accounts within the 2008 SNA production boundary. Own-use provision of services and the remaining part of volunteer work complete the national production accounts i.e. beyond the 2008 SNA production boundary but inside the General production boundary.

11. The form of work identified as employment sets the reference scope of activities for labour force statistics. The concept labour force refers to the current supply of labour for the production of goods and services in exchange for pay or profit.

Chart 2: Forms of work and SNA 2008

Intended destination of production	For own final use		For use by others				
	Own-use production work		Employment (work for pay or profit)	Unpaid trainee work	Other work activities	Volunteer work	
Forms of work	Of services	Of goods				In market and non-market units	In households producing
			Goods	Services			
Relation to 2008 SNA			Activities within the SNA production boundary			Activities inside the SNA general production boundary	

Source: Resolution 1, 19th ICLS.

According to the ICLS resolution, ‘employment work’ now excludes ‘own-use production work’, and this later category includes the production of services. Interestingly, the resolution specifies that the reference period is “one or more 24-hour days within a seven-day or one-week period, for own-use provision of services.” Still, the contributing family workers not involved in own-use production work are included in employment as “persons who work for pay or profit payable to the household or family.” The next step will be the revision of the International Classification of Status in Employment (ICSE), which is on the agenda of the next ICLS (2018). It is expected that the report to be prepared for discussion by the conference will address the issue for all categories of work.

In the tabulations in the following section, ‘paid work’ will be presented in one category for all regions and countries, in two subcategories (formal, informal) for developing countries and in five subcategories (formal, household primary, non-primary production, construction, services) for a

small set of developing countries. ‘Unpaid work’ will also be presented in one aggregate category for all countries and regions, and in three subcategories (domestic services, caregiving services, volunteering activities). Developed countries and more generally all countries using HETUS often merge paid work and education, and focus on, and specify, several subcategories of unpaid household work/domestic services such as: food preparation, household upkeep, construction and repairs, shopping, etc.

Learning or education or study comprises time spent at school, time spent studying at home and travel related. As explained above, many European countries (using HETUS) merge the category with paid work at the aggregate level. Where the school-age population is part of the targeted population, that is, where the minimum age is less than 15, the average time spent in this activity is much more important than in countries where the minimum age is more than 15. This must be kept in mind for international comparisons. Learning has clearly been distinguished from work in this report.

Travel and commuting is an important category of time use activities because it is often related to all other activities. Data are collected by purpose: paid work, unpaid work, education, leisure and personal care. In many surveys, the category is disaggregated by each time use activity, but in some surveys it is captured as a whole so that it is not always possible to know what share is related to paid work and to unpaid work. Consequently, it is preferable to analyse paid and unpaid work without travel related to them.

Social life or leisure is the next broad category of time use. It comprises several subcategories: ‘socializing’ (with others: family, relatives, friends, but also community participation), ‘attending cultural and entertainment events’, ‘hobbies, games and other past-times’, ‘indoor and outdoor sports participation’ and ‘mass media’. There are several causes of disharmony between ICATUS on the one hand and HETUS and similar classifications on the other hand. Religious activities may be considered ‘community participation’, but in some countries (France, for instance) they are classified with ‘personal care and maintenance’ whereas in other countries (in the Maghreb, for instance), time devoted to ‘prayer’ has been clearly distinguished. On the contrary, ‘resting’ is classified (in France, for example) as ‘other free time’ and leisure, and not under ‘personal care and maintenance’: these divergences could not be corrected in all surveys and may explain some discrepancies in time spent in ‘personal care and maintenance’. Among other areas of discrepancies, ‘using computer technology’ is classified under ‘mass media’ although it has not always been possible to distinguish between the uses of this technology for games or for information. ‘Travel related to leisure’ or social life is most often merged in the general category ‘travel’.

Personal care and maintenance should be, in theory and across countries, the most stable category of the classification. This is not entirely true for the reasons explained above, depending on

where ‘resting’ is classified (under ‘other free-time’ or ‘time out’ and leisure, or under ‘personal care and maintenance’), as well as ‘religious activities’, which are classified under ‘participatory activities’ and ‘voluntary work and meetings’ in HETUS and under ‘personal care and maintenance’ in ICATUS. The classification of ‘religious activities’ by HETUS does not fit with the definition of volunteering work as unpaid work.

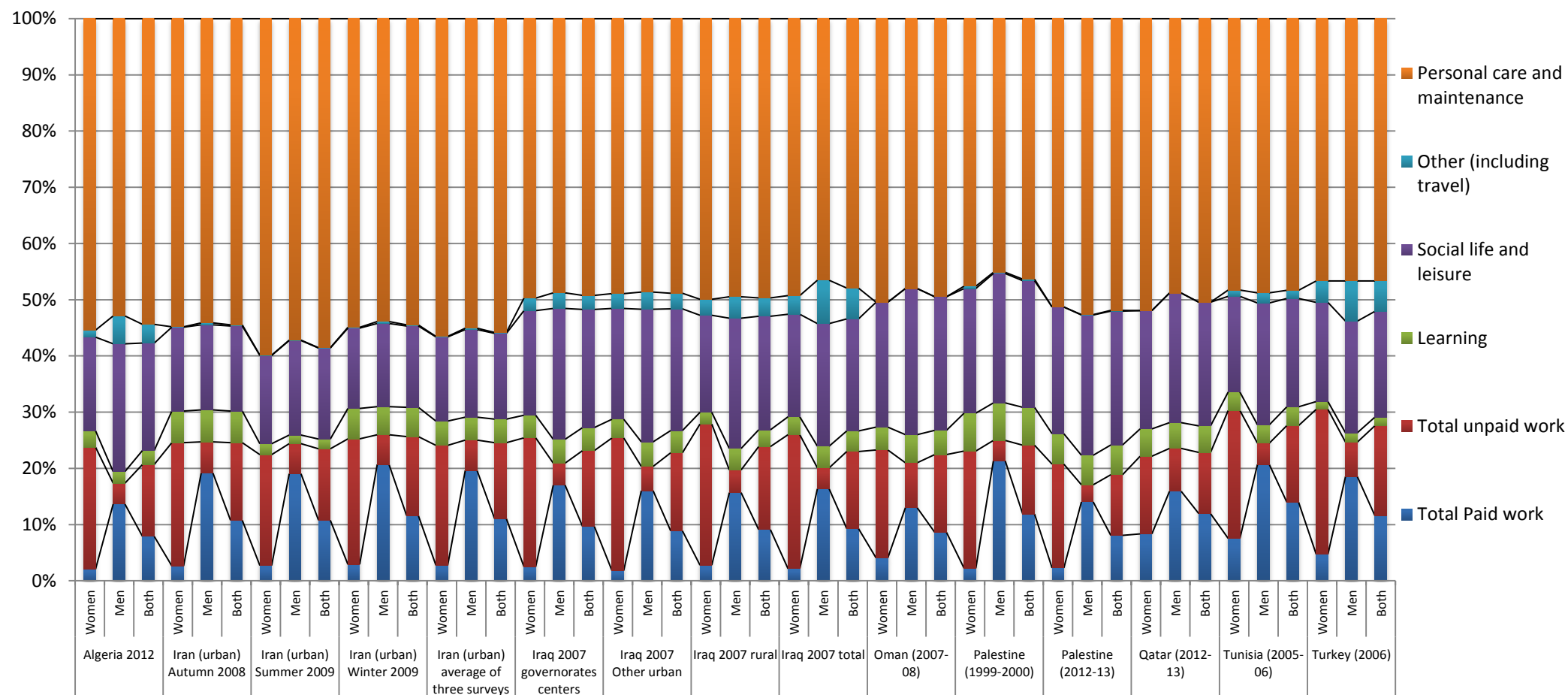
Data analysis: how women and men spend their time across the world

When analysing the data and figures on time use, it should be remembered that they are averages for all days of the week (workdays and weekends) and for all people (occupied, unoccupied and inactive) for a whole age group. All figures presented in this section are extracted from the database prepared by the author.

For each region, we will present first an overall picture of a 24-hour average day, then focus on paid work and unpaid care and domestic work, and enter into the details of these activities each time data are available in a comparative perspective.

For the **Middle East and North Africa** region, where gender gaps in paid work and unpaid work are among the most pronounced, Chart 3 provides a picture of a 24-hour average day, with the distribution of time by the main categories of activities in the classification. Personal care and maintenance occupies approximately half of the day, from a minimum of 46.7 percent in Turkey and 48.3 percent in Tunisia to a maximum of 60 percent for women in urban Islamic Republic of Iran (in summer). The winding curves (impacted by gender disparities) of paid work and unpaid work, partially compensated for when cumulated, show that work occupies between more or less 16 percent of the day for women in Algeria and men in the State of Palestine (2013), and more or less 30 percent of the day for rural women in Iraq, and women in Tunisia and Turkey. If we add learning to work, these proportions are raised to 20-22 percent for the minimum and up to 30-32 percent for the maximum. The remaining time for social life, entertainment and other free time ranges from 15 percent in urban Islamic Republic of Iran to 26 percent for men in Oman. In most countries, women have less time than men to devote to social life and leisure, a gap that tends to diminish in urban areas.

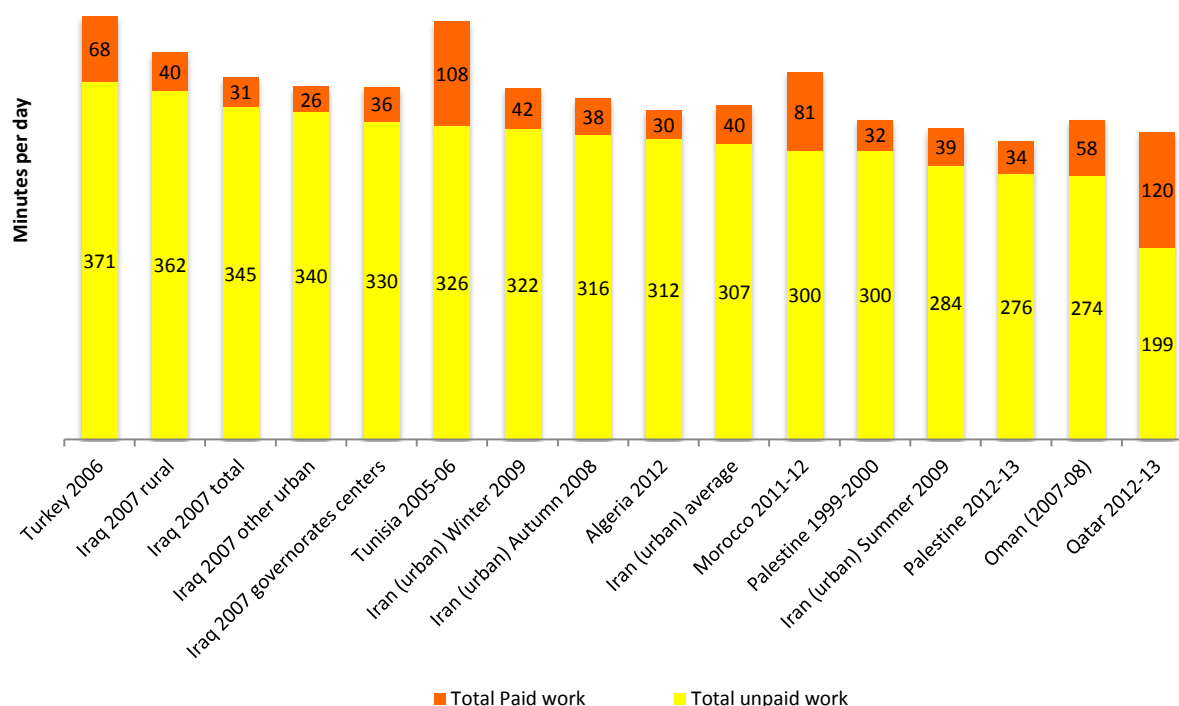
Chart 3: Distribution of time spent in various activities in a 24-hour average day in countries in the Middle East and North Africa



Source: For all charts, the source is the database established for countries and surveys by the author for 2015 Human Development Report, unless stated differently.

Women devote longer hours to unpaid work and much less time to paid work than men compared to most other parts of the world. Charts 4 and 5 below show the wide gender gaps for these two indicators. In Chart 4, countries are ranked by decreasing order of time spent by women in unpaid work, whereas in Chart 5, countries are ranked by increasing order of time spent by men in unpaid work, so that countries where gender inequalities are the highest can be seen on the left side and countries with the lowest inequalities are on the right side.

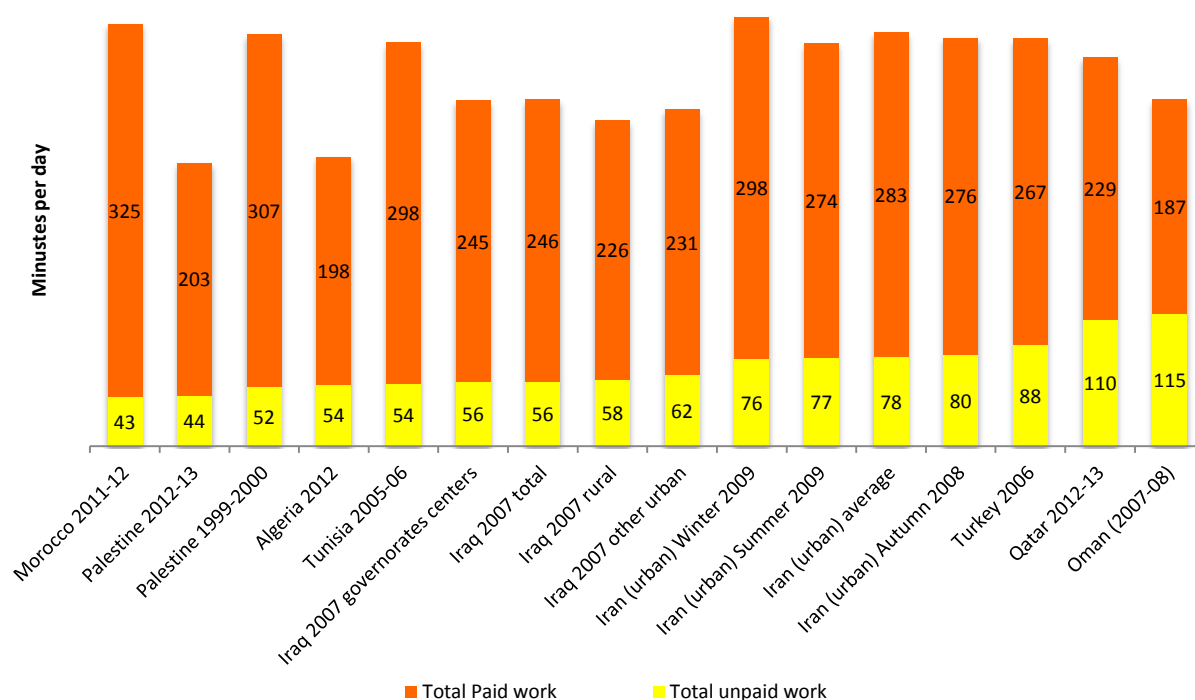
Chart 4: Average time spent by women in unpaid and paid work (in minutes per day) in countries in the Middle East and North Africa



Turkey is the country where women devote the longest time to household chores and care of children (6 hours and 11 minutes per day), and with 1 hour and 8 minutes dedicated to paid work, it is also the country in the region where women’s total work burden (paid and unpaid) is the heaviest (7 hours and 19 minutes). As regards total workload, Turkey is followed by Tunisia, where the number of hours spent by women in unpaid work is lower (5 hours and 26 minutes), but their economic participation rate is much higher (1 hour and 48 minutes), so that, in total, Tunisian women spent 7 hours and 14 minutes per day at work. Morocco comes in third position with 5 hours in unpaid work and 1 hour and 21 minutes in paid work. Qatar is the country where women’s burden in unpaid work is the lowest (3 hours and 19 minutes, but this is due to the contribution of (foreign) paid domestic workers. Women’s participation to the labour market there is the highest (2 hours).

For men, the situation is the reverse: time spent in unpaid work is very low, from 43 minutes per day in Morocco, to 1 hour and 50 minutes in Qatar or 1 hour and 55 minutes in Oman. Interestingly, in these two countries, time spent by men in paid work is also relatively low (3 hours and 7 minutes in Oman). But fewer hours in paid work do not always result in more hours in unpaid work as exemplified by Algeria or the State of Palestine (2012-2013), due to the deterioration of the labour market in this last case.

Chart 5: Average time spent by men in unpaid and paid work (in minutes per day) in countries in the Middle East and North Africa



The highest burden of men's work is in urban Islamic Republic of Iran (6 hours and 14 minutes), in Morocco (6 hours and 8 minutes) and in the State of Palestine in 1999-2000 (almost 6 hours). In all countries of the region, men's burden of work is less than women's.

Charts 6 and 7 show that unpaid work represents more than 75 percent of women's total work burden in all countries of the region (except Qatar at 62 percent), and 85 percent or more in most countries, with the maximums in Iraq (other urban, 93 percent, and in the whole country, 92 percent) and Algeria (91 percent), and the minimums in Turkey (85 percent), Morocco (79 percent) and Tunisia (75 percent). For men (Chart 7), unpaid work represents less than 25 percent of total work in all countries (except Oman and Qatar), with minimums in Morocco (12 percent), State of Palestine (2000, 14 percent) and Tunisia (15 percent), and maximums in urban Islamic Republic of Iran (22 percent) and Turkey (25 percent).

Chart 6: Share of unpaid and paid work in total women’s work in countries in the Middle East and North Africa

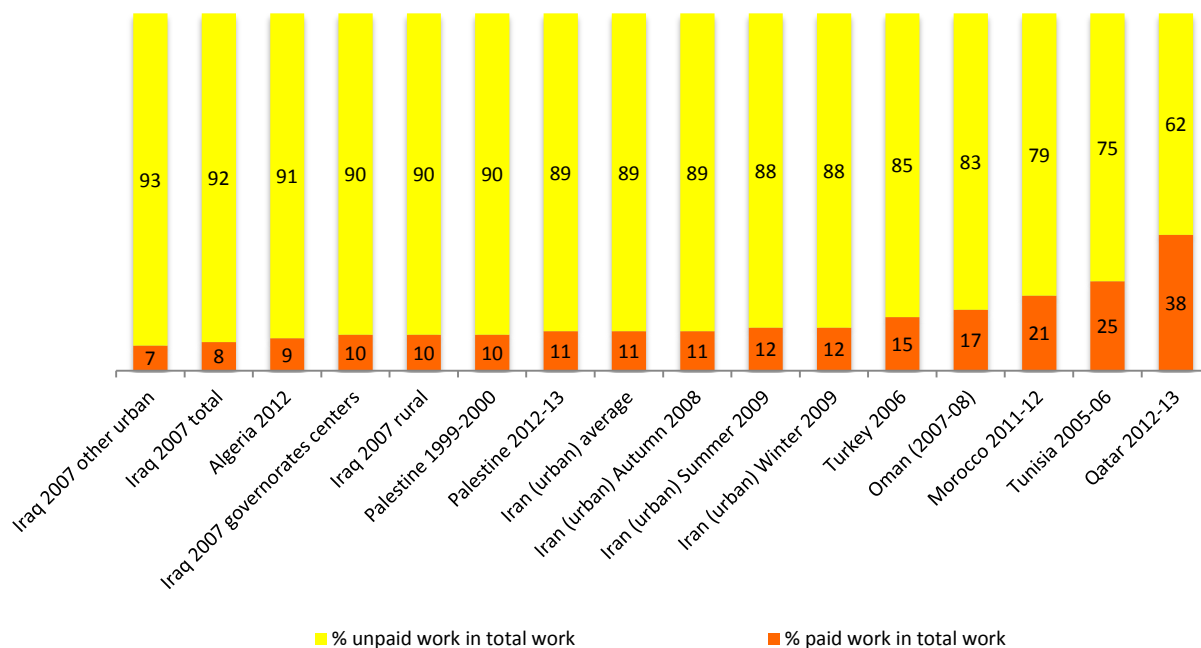
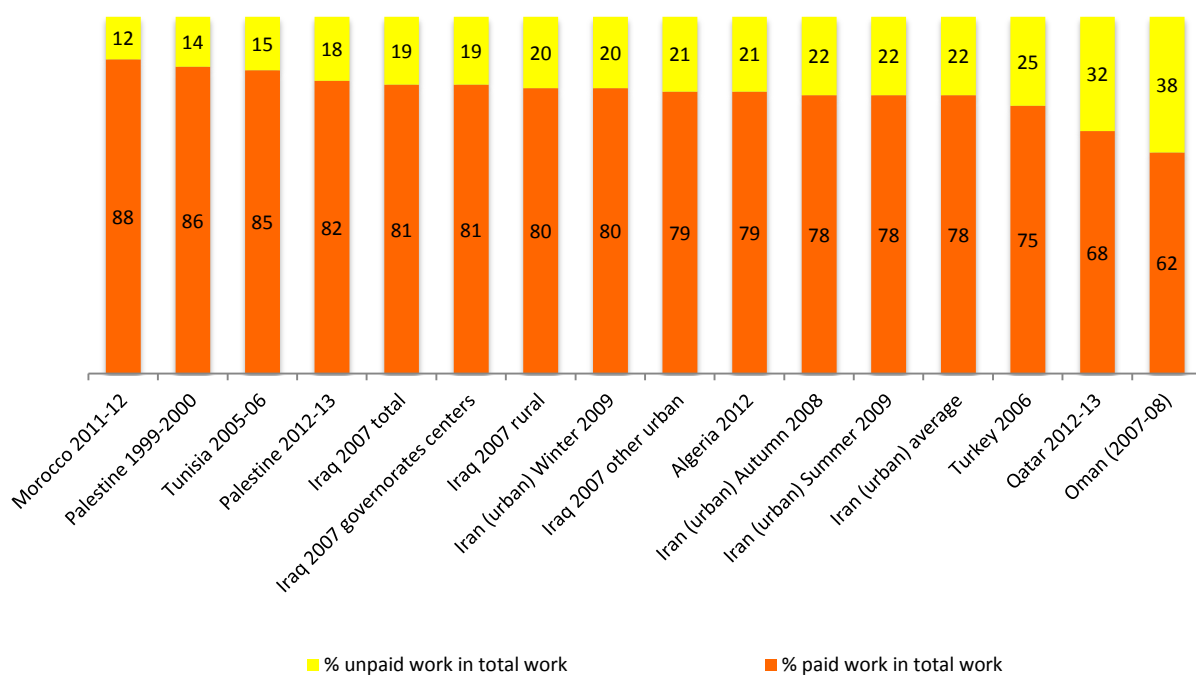


Chart 7: Share of unpaid and paid work in total men’s work in countries in the Middle East and North Africa



Charts 8, 9 and 10, which rank countries (and surveys) by increasing order of the ratio of women to men regarding time spent (conceived in negative terms, as a handicap), highlight the gender gaps in paid work, unpaid work and total work, by measuring the time spent by women in terms of time spent by men in these three areas. The indicator measures the number of times the time spent by women in paid, unpaid and total work exceeds the time spent by men. In the State of Palestine (2000), Iraq and urban Islamic Republic of Iran, women's paid work counts for less than 15 percent of men's paid work (Chart 8). Algeria is just above 15 percent, Morocco just below 25 percent and Turkey just above 25 percent, while Tunisia is outstanding at more than 36 percent, not to mention Qatar with 52.4 percent. Except for Qatar, which is a particular case, women in the region experience huge inequalities regarding their access to the labour market.

Inequalities are also huge in unpaid work, and interestingly, the ranking of countries (and surveys) is not the same as for paid work. The ratio of women to men in unpaid work is highest in countries where the ratio in paid work is the lowest (Chart 9): In Morocco, women spent nearly seven times more time in unpaid work than men, and six times more in Tunisia. Oman and Qatar are again exceptions to this relationship, with ratios comparable to developed countries. Algeria and the State of Palestine are also above five times. One can also note that urban Islamic Republic of Iran is on the right side of the chart because the survey is limited to urban areas where gender disparities are less marked.

Chart 10 shows the ratio in total work is higher than 1 in 10 surveys (out of 16), ranging from 1.035 in Morocco and 1.099 in Oman to 1.237 in Turkey, 1.357 in Algeria and 1.415 in rural Iraq.

Chart 8: Number of times the time spent by women in paid work exceeds men's in countries in the Middle East and North Africa

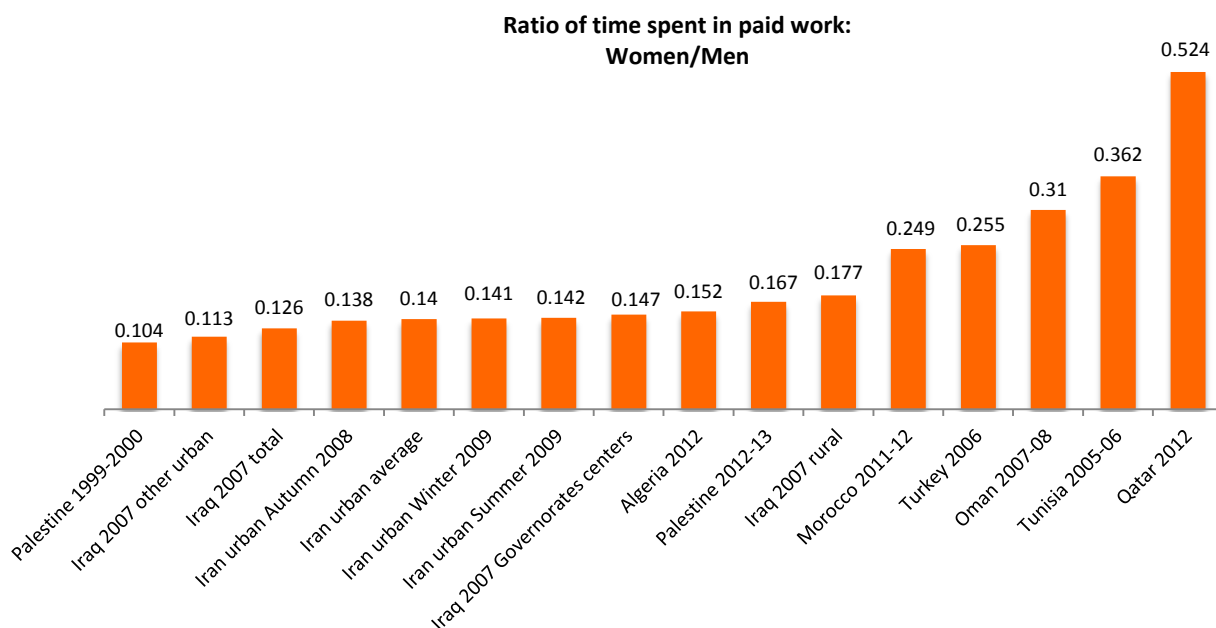


Chart 9: Number of times the time spent by women in unpaid work exceeds men's in countries in the Middle East and North Africa

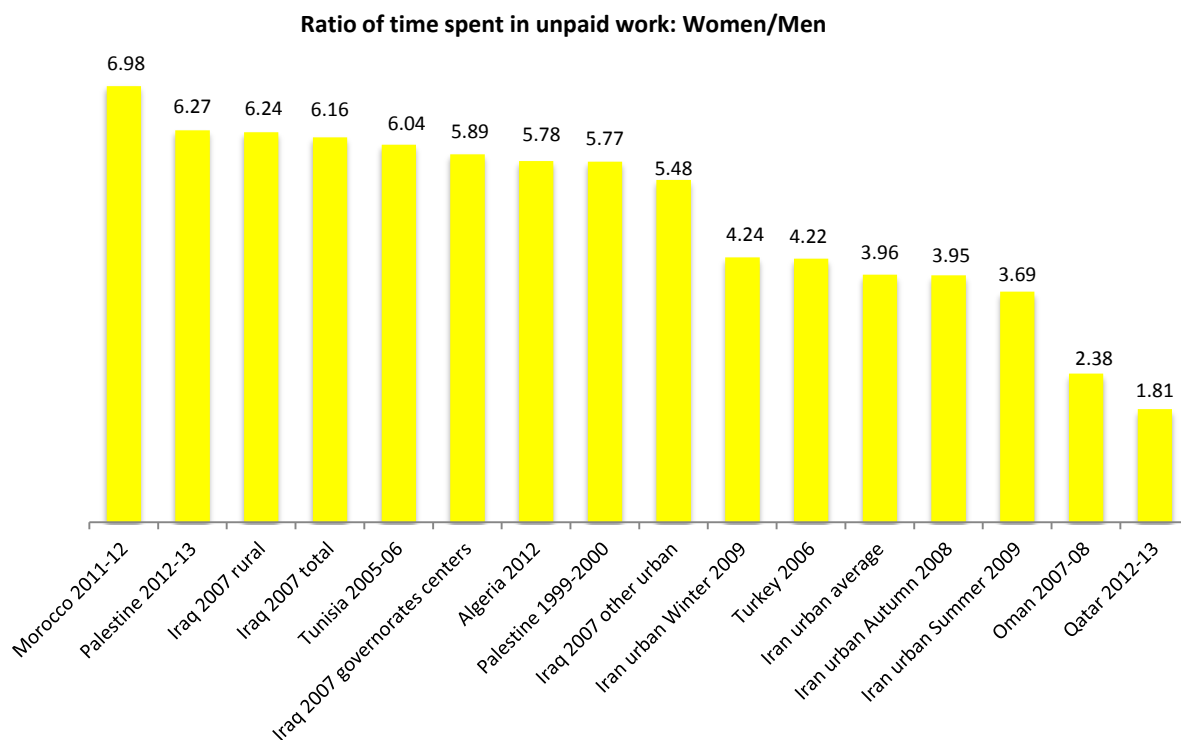
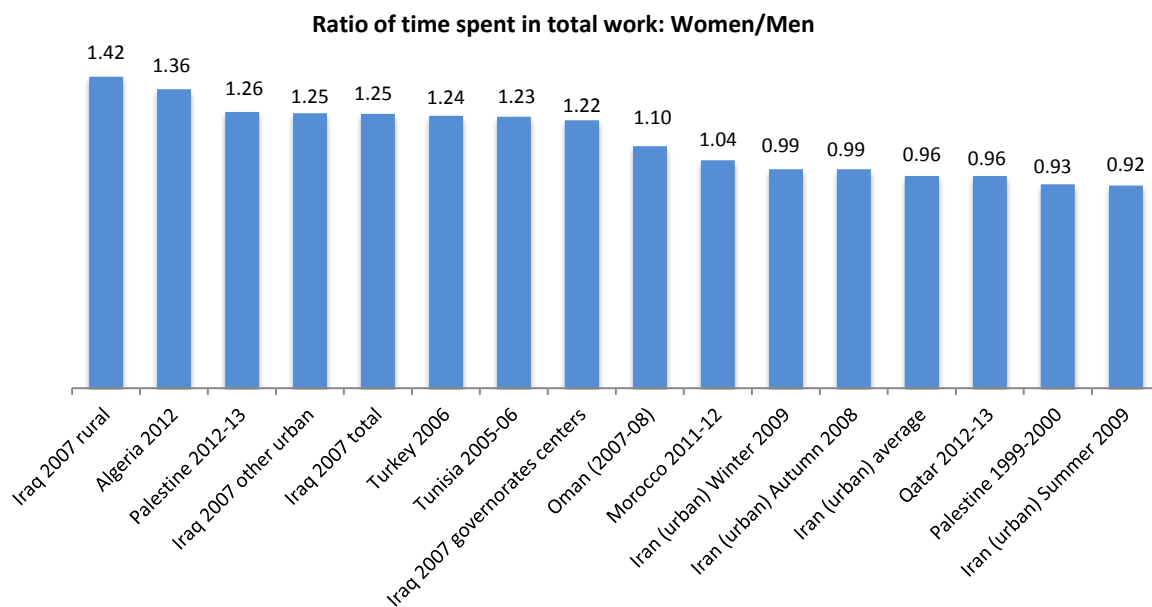


Chart 10: Number of times the time spent by women in total work exceeds men's in countries in the Middle East and North Africa



Charts 11 and 12 express the preceding ratios of women to men in terms of gender gaps.

Chart 11: Gender gap in paid work in countries in the Middle East and North Africa (percentage)

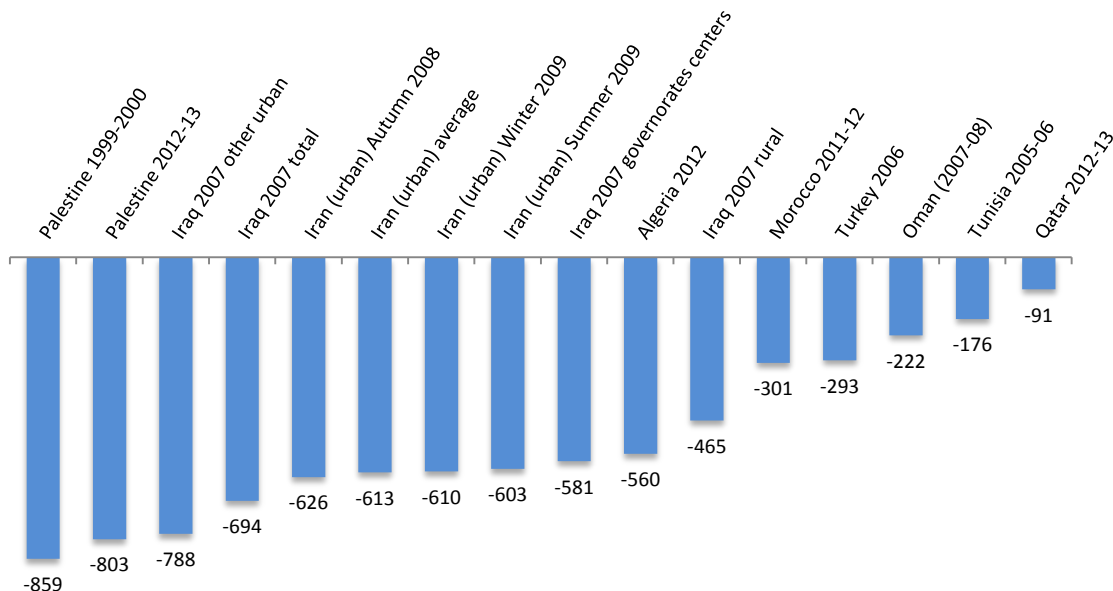
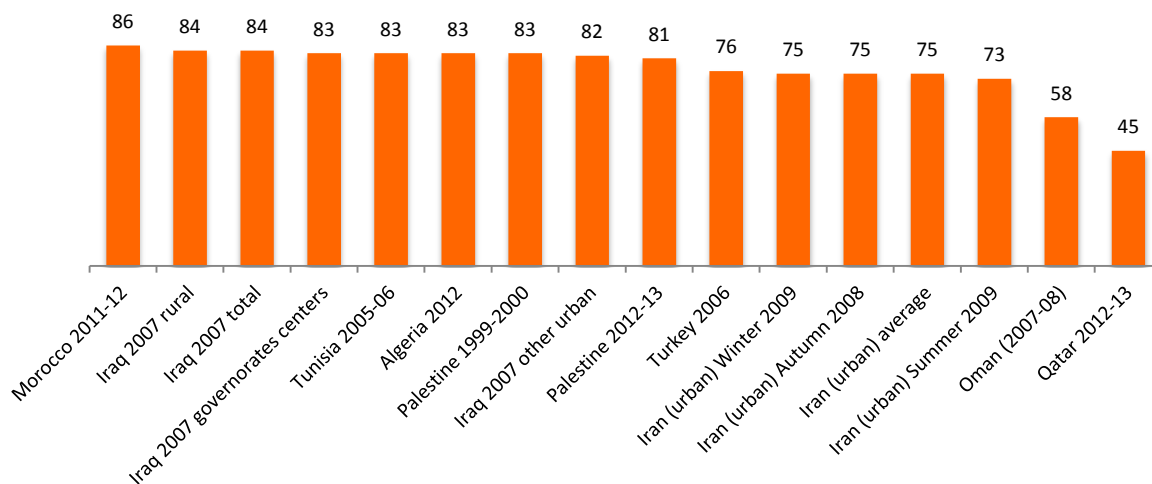


Chart 12: Gender gap in unpaid work in countries in the Middle East and North Africa (percentage)



Data on countries in the Middle East and North Africa do not provide much information on the distribution of paid work between formal and informal work, mainly because these countries do not use the ICATUS classification. Only the State of Palestine has published such data, which show that formal work ('work for establishments: work for corporations/quasi-corporations, non-profit institutions and government') accounts for more than one third (34.4 percent) of total paid work and for more than half (55.6 percent) for women. Another third (33.8 percent) is for 'work for household providing services for income', and the last third (31.8 percent) is for 'work for household' in primary production (10.6 percent), non-primary production (9.9 percent) and construction (11.3 percent).

Table 2: Distribution of paid work between formal and informal work in the State of Palestine (2012-2013)

	In minutes per day			Percentage		
	Women	Men	Both	Women	Men	Both
Formal work	20	84	52	55.6	33.7	34.4
Informal primary	8	25	16	22.2	10.0	10.6
Informal non-primary	2	12	15	5.6	4.8	9.9
Informal construction	0	34	17	0.0	13.7	11.3
Informal services	6	94	51	16.7	37.8	33.8
	36	249	151	100.0	100.0	100.0

Table 3 shows the distribution of 'unpaid work' between its various components: 'provision of unpaid domestic services for own final use within household' and 'provision of unpaid caregiving services to household members' in the three countries that made this information available (Algeria in 2012, Iraq in 2007 and Turkey in 2006). Table 4 includes the third component of unpaid work (not available for the three previous countries), 'provision of community services and help to other households', in two countries, the State of Palestine and Tunisia.

Caregiving accounted for a little bit less than 10 percent (9.6 percent) of total women's unpaid work and for 22.2 percent of men's in Algeria (2012), and for 13.9 percent of women's unpaid work (against 19.6 percent of men's) in Turkey (2006), while it accounted for 12.4-13.9 percent of women's unpaid work (but only 8.1-8.9 percent of men's) in Iraq. Where volunteering (caregiving for other households) is taken into account (Table 4), it represents from 2.6 percent of total unpaid work in Tunisia. In the State of Palestine, it represents up to 6 percent in 1999-2000 and 8.8 percent in 2012-2013. Its share in total unpaid work is relatively more important for men (from 8 percent in Tunisia to 25 percent in the State of Palestine in 2012) than for women (from 1.9 percent in Tunisia to 6.2 percent in the State of Palestine in 2012).

Table 3: Distribution of unpaid work between unpaid domestic services and unpaid care services in three countries in the Middle East and North Africa

% in unpaid work of	Algeria 2012			Iraq 2007 governorates centres			Iraq 2007 other urban			Iraq 2007 rural			Iraq 2007 total			Turkey (2006)		
	Women	Men	Both	Women	Men	Both	Women	Men	Both	Women	Men	Both	Women	Men	Both	Women	Men	Both
Domestic services	90.4	77.8	90.3	86.1	91.1	86.7	87.6	91.9	88.0	87.6	91.4	88.3	87.0	92.9	87.6	86.1	80.4	85.3
Care services	9.6	22.2	9.7	13.9	8.9	13.3	12.4	8.1	12.0	12.4	8.6	11.7	13.0	7.1	12.4	13.9	19.6	14.7

Table 4: Distribution of unpaid work between unpaid domestic services, unpaid care services and unpaid services to other households in two countries in the Middle East and North Africa

% in unpaid work of	State of Palestine (1999-2000)			State of Palestine (2012-2013)			Tunisia (2005-2006)		
	Women	Men	Both	Women	Men	Both	Women	Men	Both
Domestic services	77.0	72.7	76.6	78.6	79.5	78.6	90.0	84.0	89.0
Care services	23.0	27.3	23.4	21.4	20.5	21.4	10.0	16.0	11.0
Services to other households	3.4	22.7	6.0	6.2	25.0	8.8	1.9	8.0	2.6

In **sub-Saharan Africa**, the time use pattern of a 24-hour average day (Charts 13 and 14), with time distributed by the main categories of activities in the classification, highlights the high disparity between women and men regarding unpaid work, with a maximum unpaid workload in rural Ethiopia and a minimum in urban Benin for women, and a maximum in rural Ethiopia again and a minimum in Mali for men. Personal care and maintenance occupies approximately half of the day, from a maximum of 59 percent in the United Republic of Tanzania to a minimum of 49 percent in Mauritius for women, and from a minimum of 46 percent in urban Mali to a maximum of 60 percent in the United Republic of Tanzania for men. Total work never goes below 24 percent of the day (in South Africa) and never exceeds 35 percent (in rural Ethiopia and rural Mali) for women, whereas it ranges from 19 percent in South Africa to 30 percent in rural Ethiopia for men. The remaining time for social life, entertainment and other free time ranges from 6 percent in rural Ethiopia and 7 percent in the United Republic of Tanzania to 19 percent in Mauritius, South Africa and urban Mali for women, and from 10 percent in rural Ethiopia, rural Madagascar and the United Republic of Tanzania to 22 percent in Mali and Mauritius for men. Again, in most countries, women have less time than men to devote to social life and leisure, a gap that tends to diminish in urban areas.

Chart 13: Distribution of time spent by women in various activities in a 24-hour average day in sub-Saharan African countries

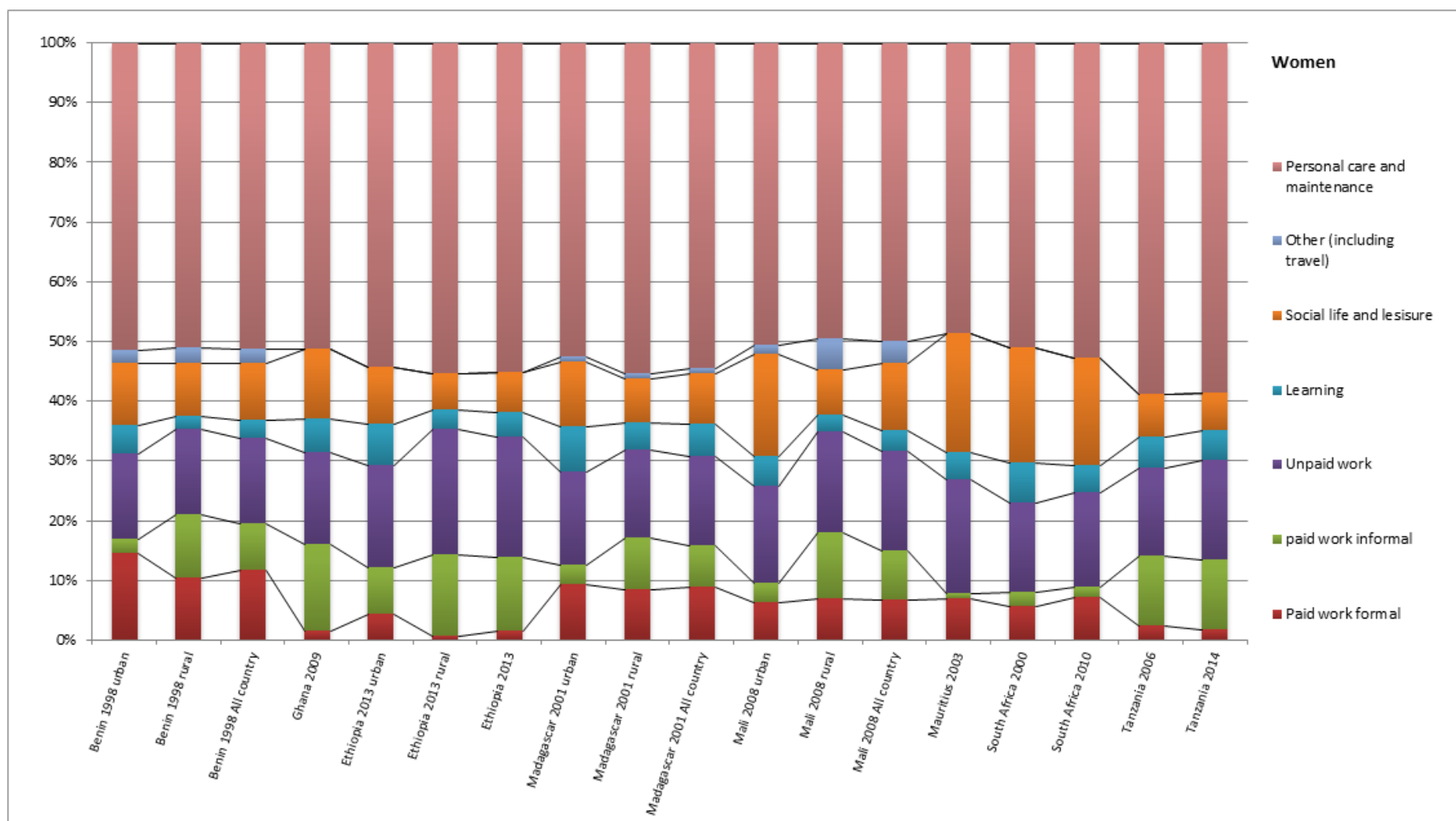
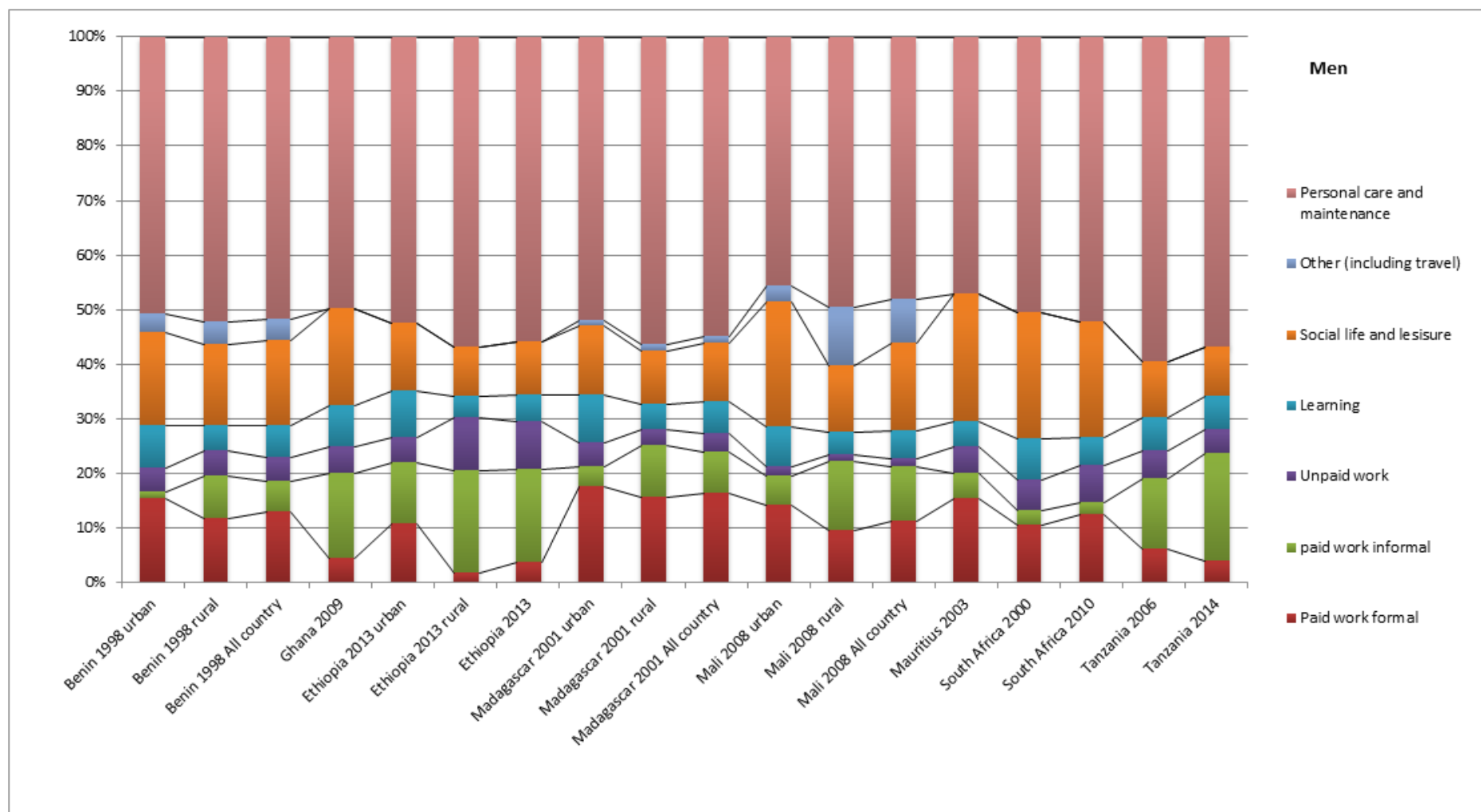


Chart 14: Distribution of time spent by men in various activities in a 24-hour average day in sub-Saharan African countries



In the region, disparities among countries are the highest and the total workload for women is also the highest, particularly in rural areas. Women spent 8 hours and 38 minutes per average day in paid and unpaid work in Benin, 8 hours and 30 minutes in rural Ethiopia and 8 hours and 27 minutes in rural Mali (Chart 15), or one to three hours more than their male counterparts (Chart 16).

In contrast with the Middle East and North Africa, sub-Saharan African women devote much more time to paid work: in Benin, Ghana, Madagascar and Mali, their number of hours in paid work is longer than in unpaid work, especially in rural areas. In Mauritius, South Africa and also in urban Mali, on the contrary, the number of hours women devote to paid work is much lower than to unpaid work, but still remains much higher than in Middle East and North African countries. The time spent by women in total work exceeds 6 hours and 40 minutes (400 minutes) per day in 13 surveys (out of 18), against 3 surveys (out of 16) in the Middle East and North Africa. Comparatively (Chart 12), time spent in total work by men is above this same line (400 minutes per day) in 4 surveys only (rural Ethiopia, Madagascar and the United Republic of Tanzania, and nationally for Ethiopia).

In sub-Saharan Africa, women spend fewer hours in unpaid work than in the Middle East and North Africa and men more hours, except in Mali.

The share of unpaid work in total work is nearly equal to 70 percent in one country (Mauritius) and less in all other surveys, down to a minimum of 40.5 percent in rural Benin. For men, this share ranges from 5.3 percent in rural Ethiopia to 32.3 percent in urban Benin, slightly below the levels of Middle East and North African countries (Charts 17 and 18).

The ratio of time spent in paid work by women and men (Chart 19) is above parity in Benin (urban, rural and national), with an indicator above 1, and it is above 0.5 in all surveys except Mauritius (0.392) and urban Mali (0.489), reflecting the fact that African women's economic participation is generally quite high, even if they operate in subsistence agriculture and more generally as contributing family workers or own-account workers in informal activities.

The ratio of time spent in unpaid work by women and men (Chart 20) is in all surveys more than double parity. It ranges from a minimum of 2.2-2.3 (in Ethiopia, rural and national, and South Africa 2010) to more than 8 and even 13 in Mali (urban at 8.7, national at 11.4 and rural at 13.6), meaning that in rural Mali, women spent over 13 times more time than men in household chores and care of children. Except for Mali, the gender gaps in unpaid work are generally below the levels observed in the Middle East and North Africa.

Cumulating paid and unpaid work results in ratios of total work by women and men (Chart 21) ranging from a minimum of 1.07-1.1 (United Republic of Tanzania 2014, Mauritius, urban Madagascar and urban Ethiopia) to a maximum of 1.46-1.49 (from urban Benin to rural Mali). All countries are above parity, meaning that in sub-Saharan Africa, women work more than men.

Chart 15: Average time spent by women in unpaid and paid work (in minutes per day) in sub-Saharan African countries

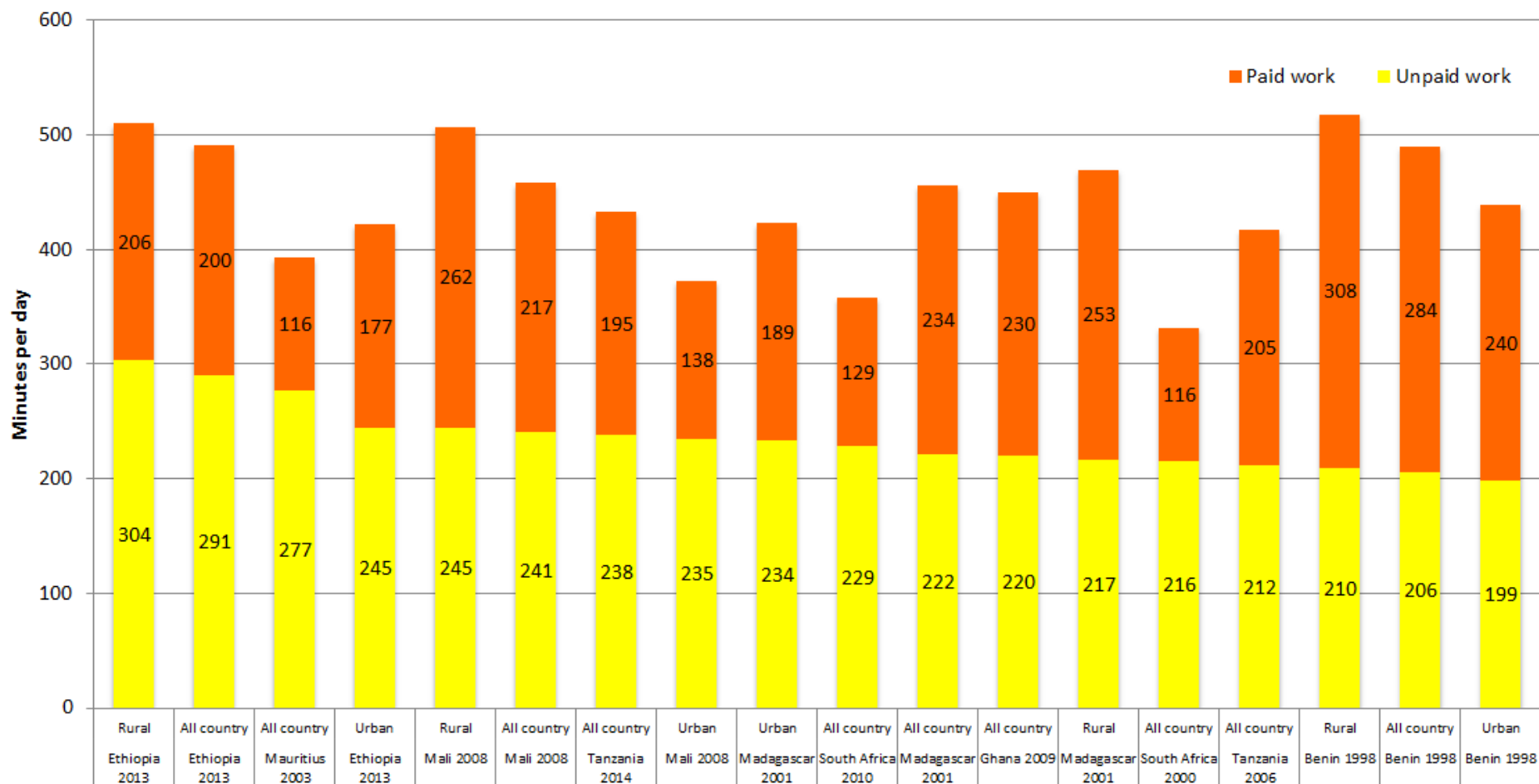


Chart 16: Average time spent by men in unpaid and paid work (in minutes per day) in sub-Saharan African countries

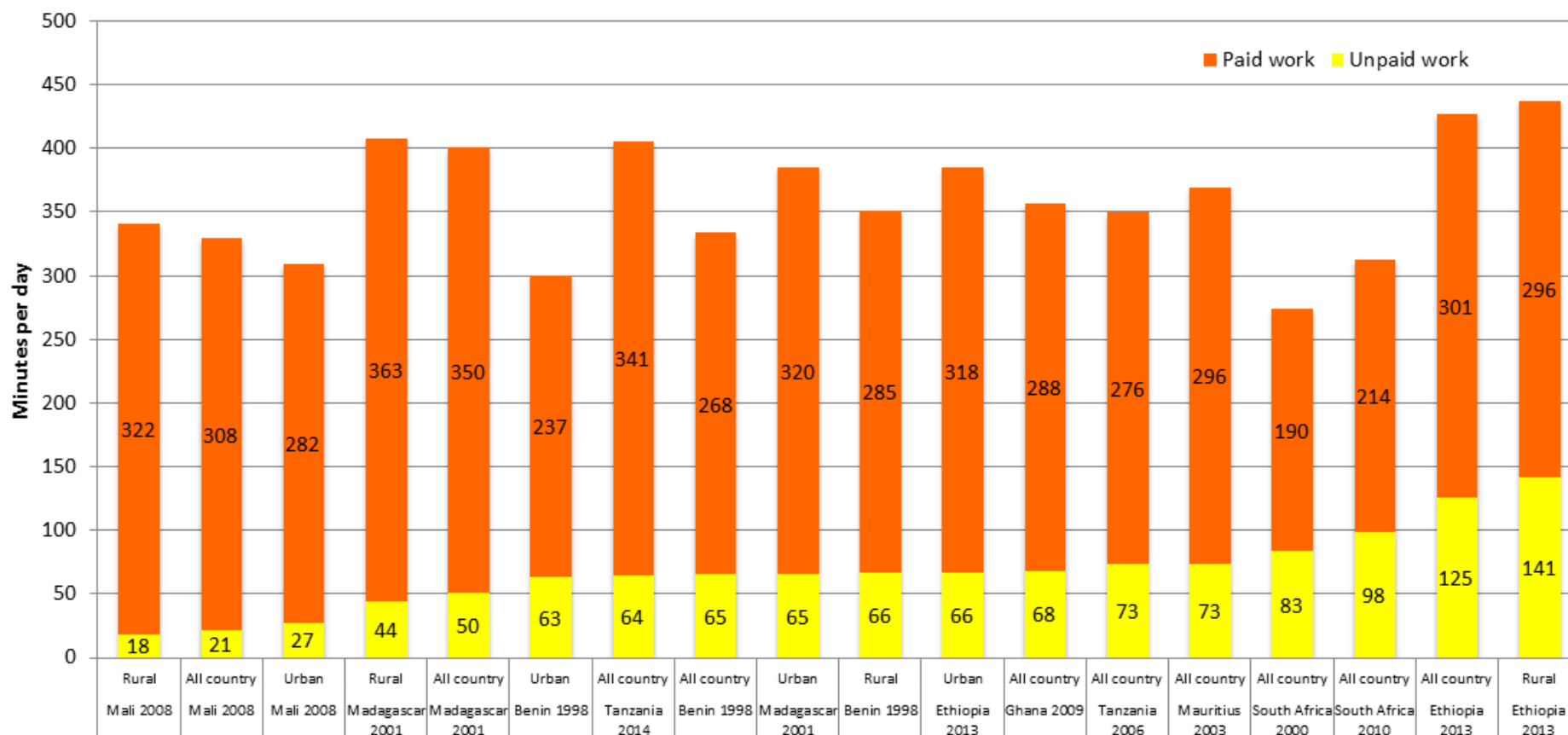


Chart 17: Share of unpaid and paid work in total women’s work in sub-Saharan African countries

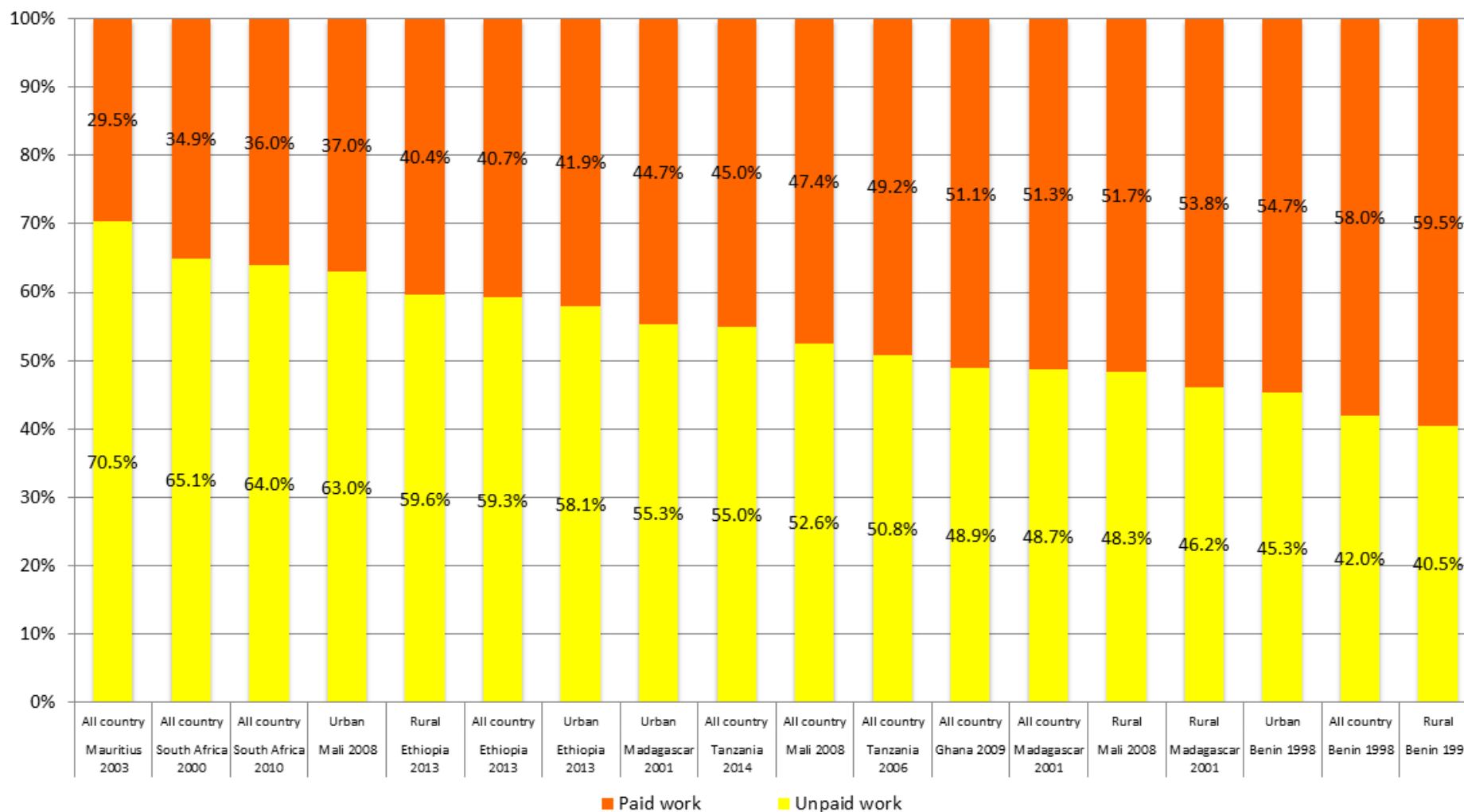


Chart 18: Share of unpaid and paid work in total men's work in sub-Saharan African countries

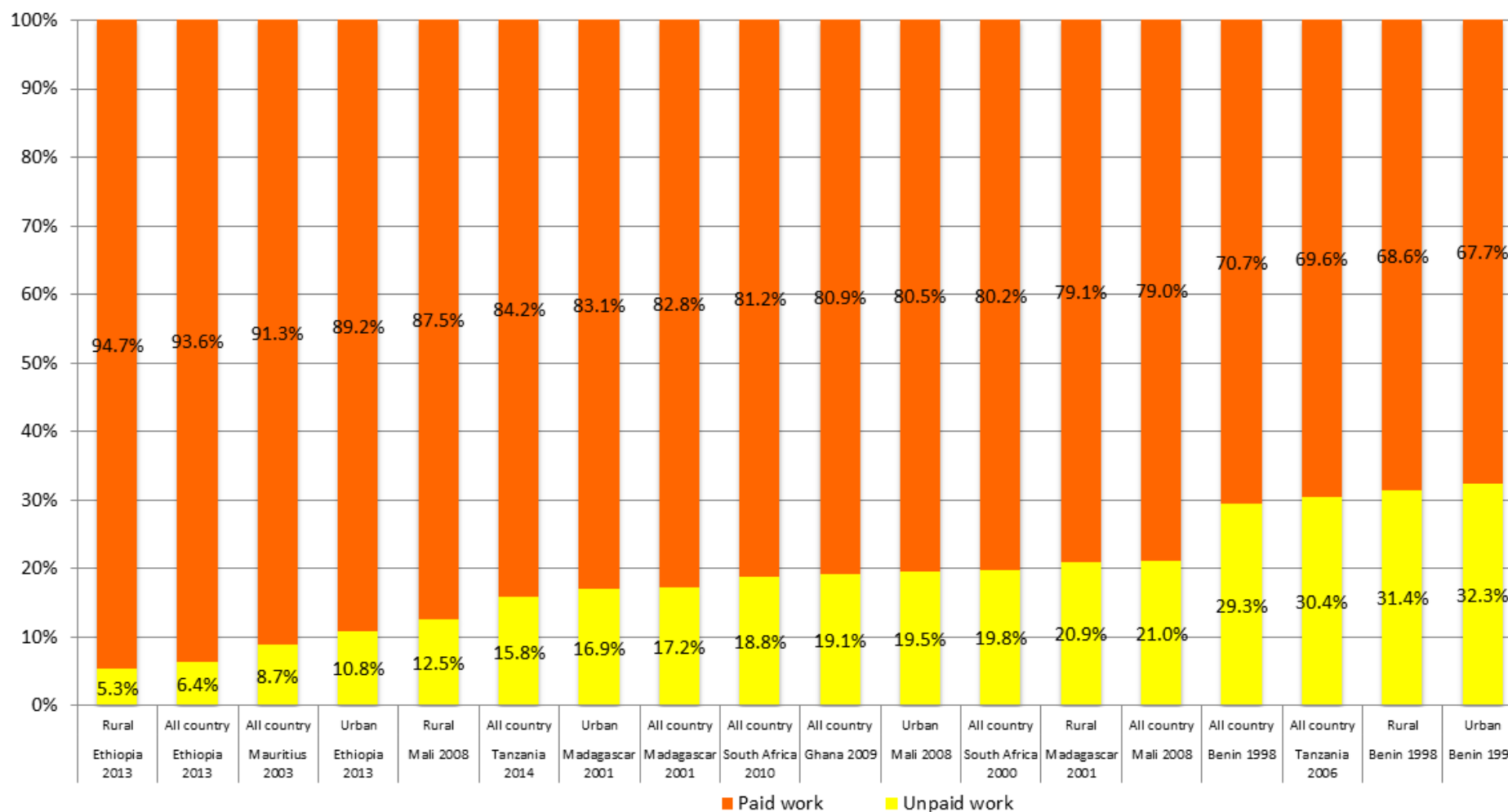


Chart 19: Number of times the time spent by women in paid work exceeds men’s in sub-Saharan African countries

Total paid work

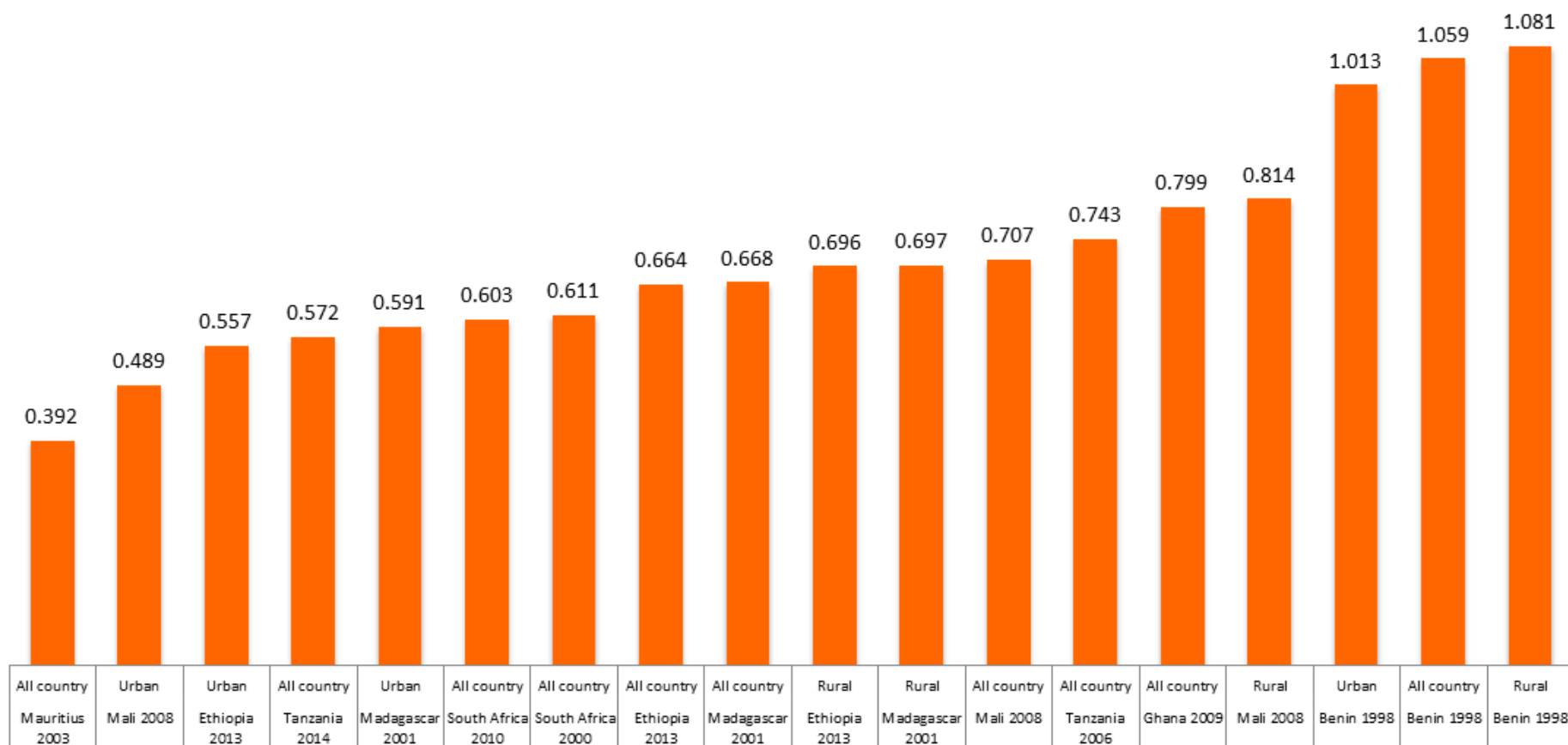


Chart 20: Number of times the time spent by women in unpaid work exceeds men's in sub-Saharan African countries

Unpaid work

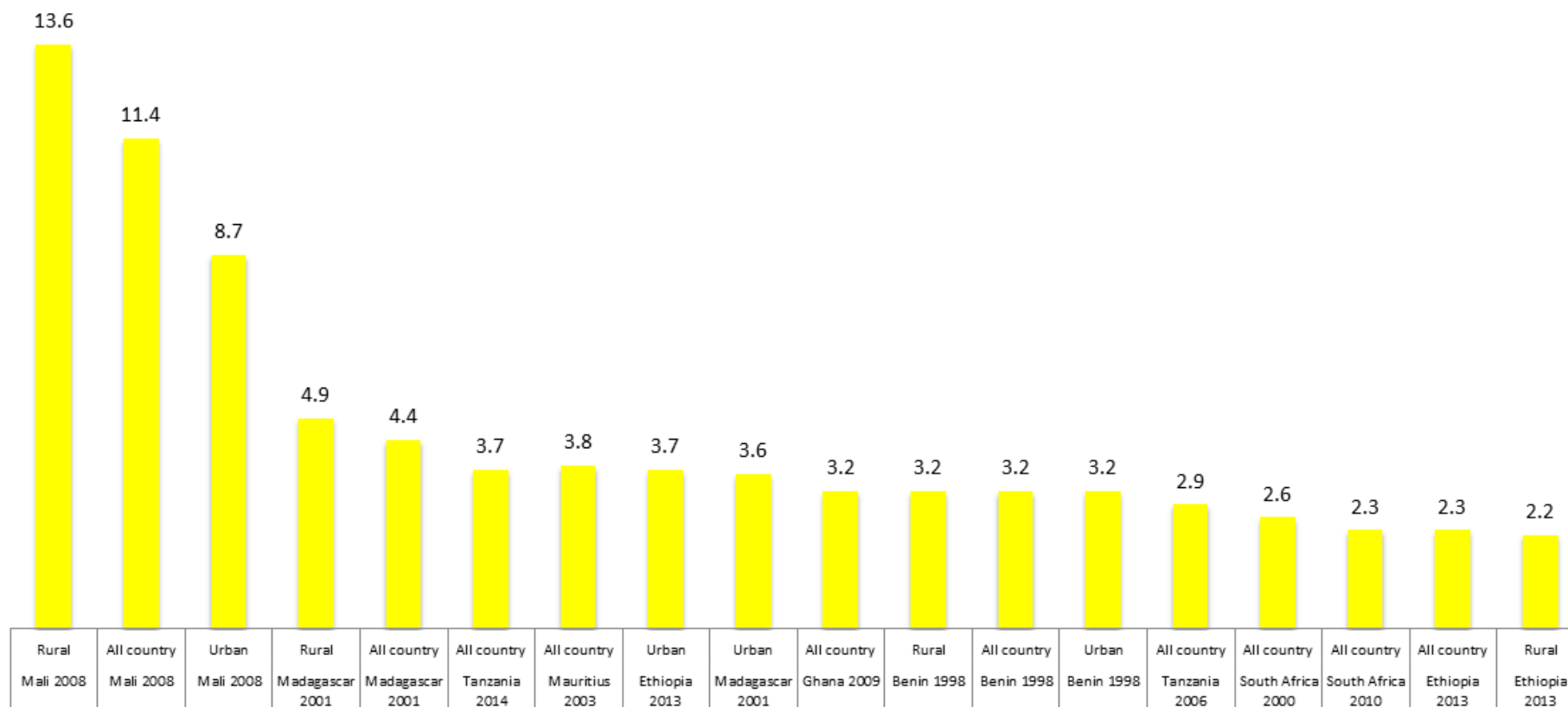
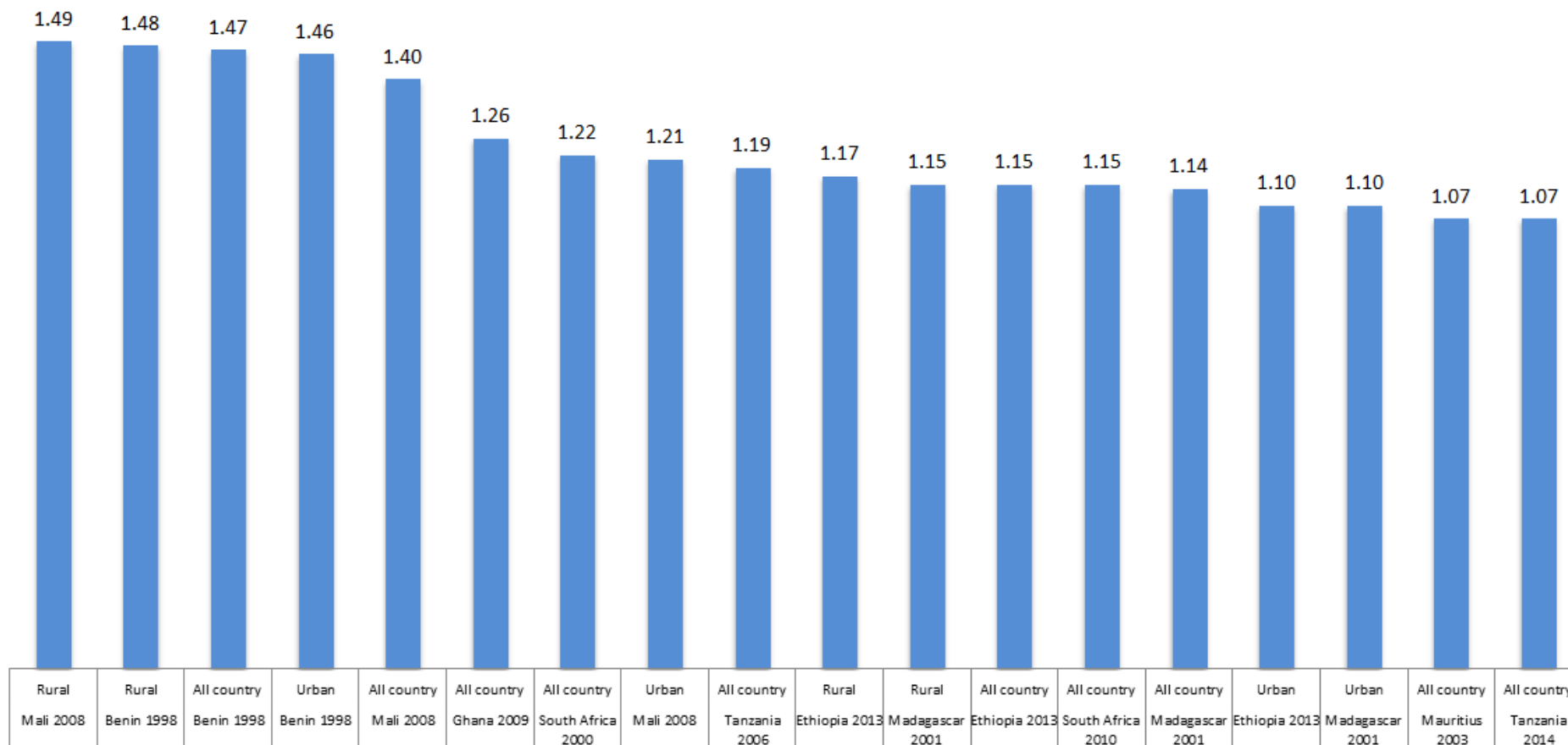


Chart 21: Number of times the time spent by women in total work exceeds men’s in sub-Saharan African countries

Total work



Although the use of ICATUS as the classification for time use in sub-Saharan Africa allows a distinction between formal paid work and informal paid work, this is, however, not quite the case. The first trial ICATUS distinguished between ‘work for establishments’ and ‘work for the household’. As a matter of fact, many informal activities operate in establishments, whatever the rudimentary aspects of the premises. The new ICATUS is theoretically closer to the definition of ‘informal sector’ as it distinguishes between ‘work for corporations, quasi-corporations, non-profit institutions and government’, and four categories of work for the household (primary, non-primary production, construction, services for income). Application of the classification remains difficult, however. Surveys results show a gap between countries using the new ICATUS (Ethiopia and Ghana), where informal activities surpass formal paid work, and countries using the former ICATUS, where formal paid work is in fact assimilated in ‘work for establishments’. Informal activities include agriculture, and this is why informal paid work is generally more important in rural than urban areas.

Table 5 shows that time spent by women in formal paid work does not exceed more than 10 percent of total time spent in paid work in Ghana and 12 percent in Ethiopia. And whereas women spend most of their paid work time in informal services (44.8 percent) and in primary production (35.9 percent) in Ghana, this shifts mostly to primary production (57.5 percent) and less in informal services (16.5 percent) in Ethiopia.

Table 6 presents the distribution of ‘unpaid work’ between its various components: ‘provision of unpaid domestic services for own final use within household’, ‘provision of unpaid caregiving services to household members’ and ‘provision of community services and help to other households’ in six countries.

Caregiving accounts for more than 24 percent of women’s total unpaid work in Ghana, around 16 percent in Ethiopia, Mauritius and the United Republic of Tanzania and a little bit more than 12 percent in Madagascar and South Africa.

Generally, men spend more time than women in volunteering (caregiving for other households), which represents a higher share of total unpaid work among men (from 5.1 percent in South Africa up to 25 percent in Ghana) than among women (from 1.4 percent in the United Republic of Tanzania and Mauritius, up to 5.5 percent in Ghana).

Sub-Saharan Africa is also the region where data on water and firewood fetching—two activities, at the border between unpaid domestic work and unpaid contributing work, but that are officially classified within the GDP boundaries—have been more systematically collected. Charts 22 and 23 show the importance of time spent in these activities in five sub-Saharan African countries, in rural and urban areas. Women spent 45 minutes a day collecting water in Benin, 35 minutes in Ghana, 27 minutes in Madagascar and 22 minutes in the United Republic of Tanzania. Rural women are

overloaded with this task in Benin, where they spend more than 1 hour a day (62 minutes). They spend more than half an hour in Madagascar (32 minutes) and in Ethiopia (31 minutes). Men devote less than four times the time allocated to women in Benin and in rural Ethiopia, less than three times in Madagascar.

Table 5: Distribution of paid work between formal and informal work in Ghana and Ethiopia

	Ghana 2008						Ethiopia 2013					
	Minutes per day			%			Minutes per day			%		
	Women	Men	Both	Women	Men	Both	Women	Men	Both	Women	Men	Both
Formal work	23	65	42	10.0	22.6	16.4	24	54	38	12.0	17.9	15.3
Informal primary	70	121	92	30.4	42.0	35.9	115	178	146	57.5	59.1	58.6
Informal non-primary	33	21	28	14.3	7.3	10.9	25	9	17	12.5	3.0	6.8
Informal construction	1	10	5	0.4	3.5	2.0	3	18	11	1.5	6.0	4.4
Informal services	103	71	89	44.8	24.7	34.8	33	42	37	16.5	14.0	14.9
Total paid work	230	288	256	100.0	100.0	100.0	200	301	249	100.0	100.0	100.0
Formal work	23	65	42	10.0	22.6	16.4	24	54	38	12.0	17.9	15.3

Table 6: Distribution of unpaid work between unpaid domestic services, unpaid care services and unpaid services to other households in seven sub-Saharan African countries

% in unpaid work of	Ghana 2008			Ethiopia 2013			Madagascar 2001			Mauritius 2003			South Africa 2010			United Republic of Tanzania 2006			Average		
	W	M	Both	W	M	Both	W	M	Both	W	M	Both	W	M	Both	W	M	Both	W	M	Both
Domestic services	70.5	58.8	68.0	79.4	69.6	76.6	84.2	70.6	81.4	82.7	76.7	81.8	85.2	89.8	86.7	82.7	76.7	81.8	80.8	73.7	79.4
Care services	24.1	16.2	22.9	16.2	6.4	13.4	12.6	15.7	13.6	15.9	17.8	16.5	12.7	5.1	10.3	15.9	17.8	16.5	16.2	13.2	15.5
Services to other households	5.5	25.0	9.2	4.5	24.0	10.0	3.2	13.7	5.0	1.4	5.5	1.7	2.2	5.1	3.0	1.4	5.5	1.7	3.0	13.1	5.1

Chart 22: Time spent in fetching water in five sub-Saharan African countries

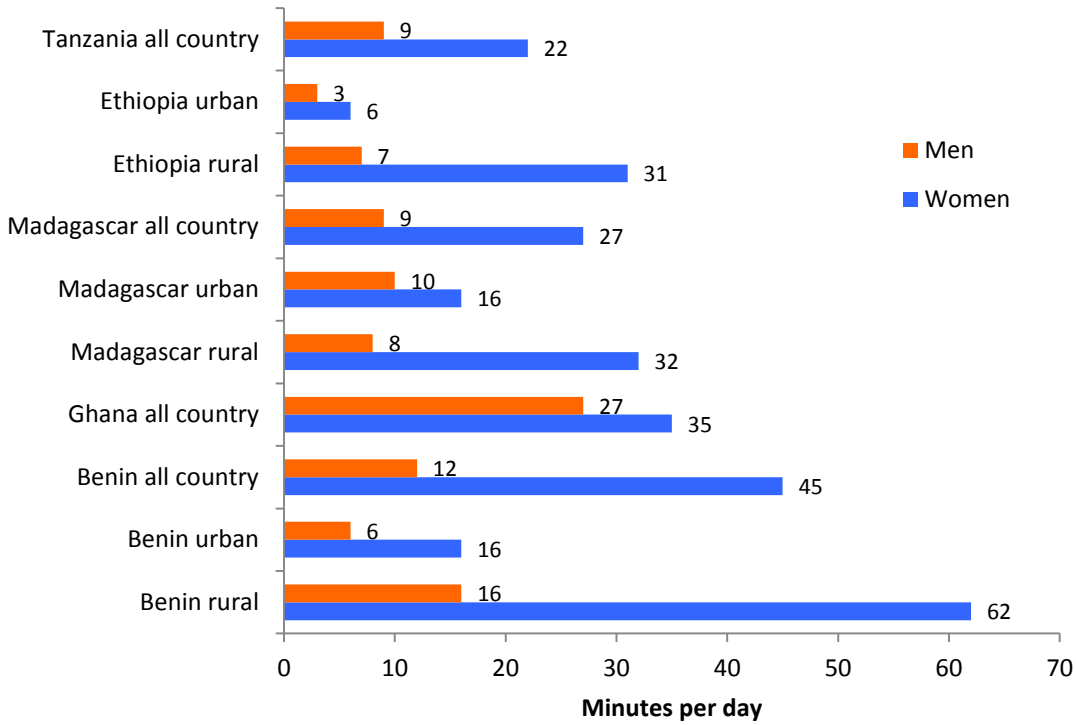
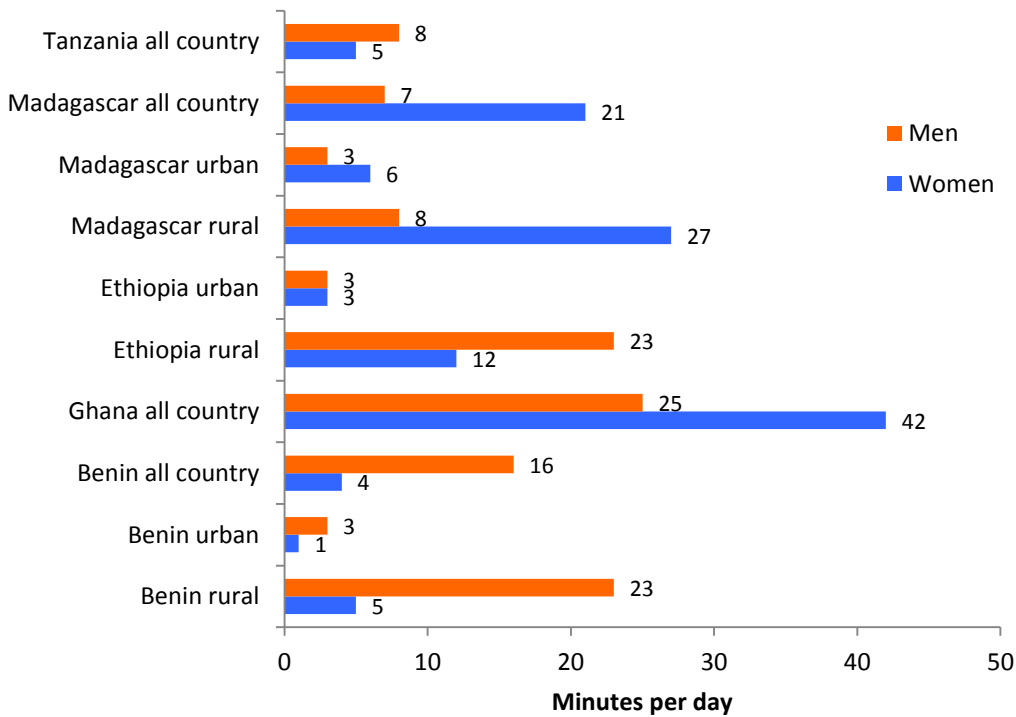


Chart 23: Time spent in fetching firewood in five sub-Saharan African countries



Time spent for fetching firewood is shared more between women and men. It is a male activity in Benin, Ethiopia and the United Republic of Tanzania. In Ghana, however, women spend 42 minutes a day for this task against 25 minutes for men. Fetching firewood, contrary to fetching water, can be undertaken for sale in the market, which may explain the reversal in gender attribution in some countries.

In **Asia**, the patterns of time use in a 24-hour average day for women and for men (Charts 24 and 25) clearly highlight gender disparities in paid and unpaid work, as well as time devoted to learning, and the consequent impact on time dedicated to social life and leisure, which is lower for women.

Chart 24: Distribution of time spent by women in various activities in a 24-hour average day in Asian countries

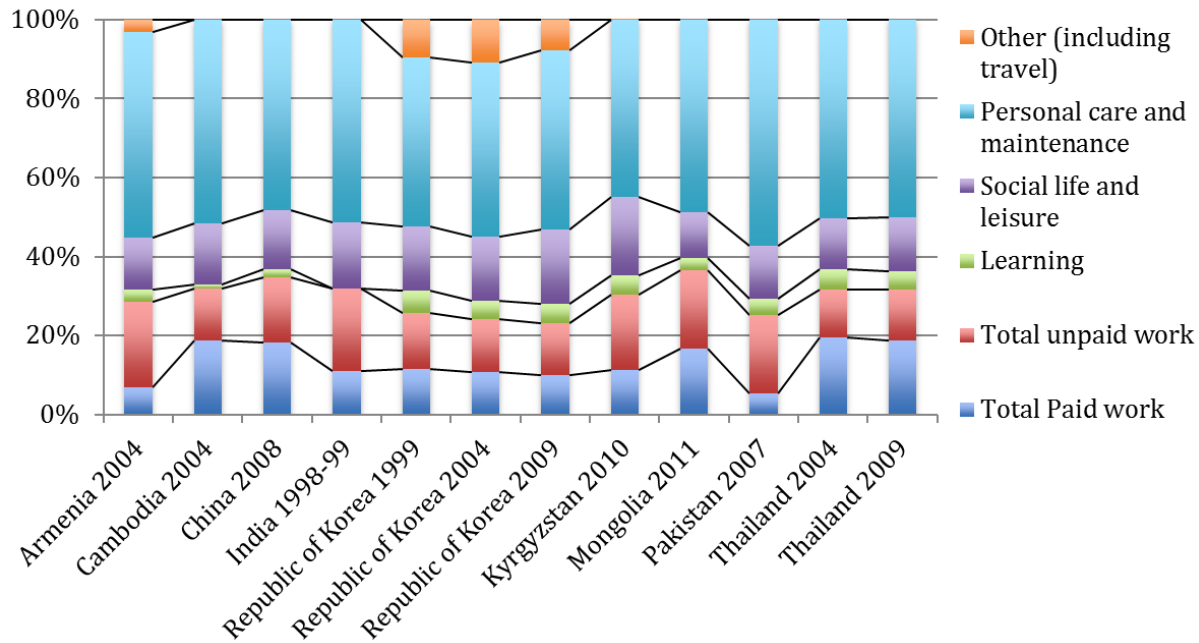
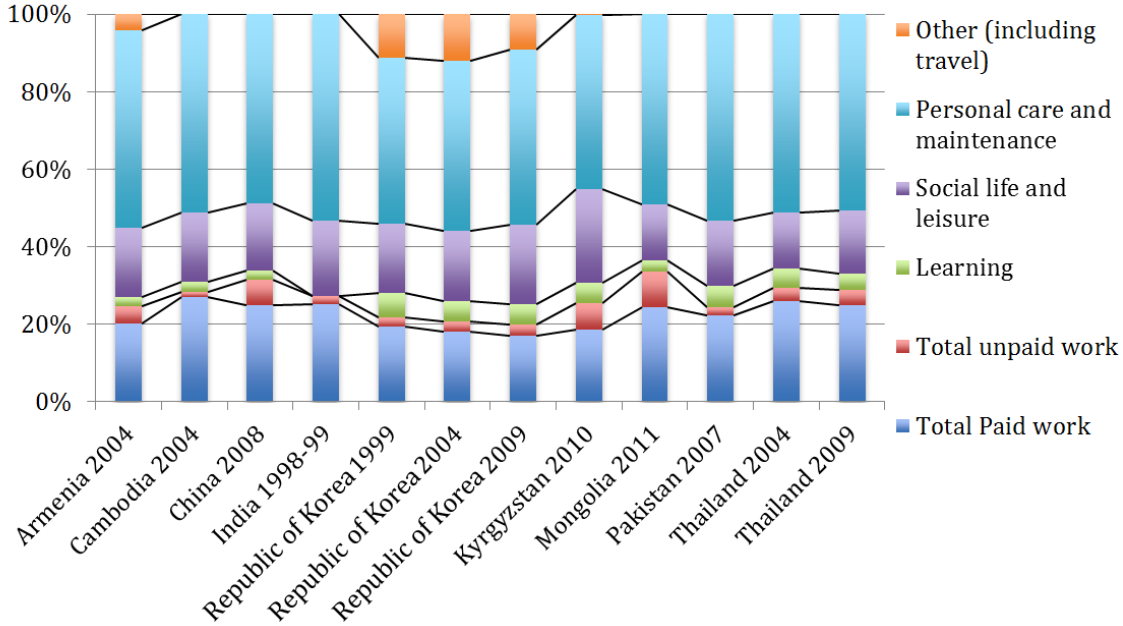


Chart 25: Distribution of time spent by men in various activities in a 24-hour average day in Asian countries



The time spent by women in paid work exceeds the time they spend in unpaid work in 4 surveys (out of 12): in Cambodia, China and Thailand (2004 and 2009) (Chart 26). It exceeds 400 minutes (6 hours and 40 minutes) per average day in seven countries (Armenia, Cambodia, China, India, Kyrgyzstan, Mongolia and Thailand). Mongolia is characterized by a high level of women’s paid work and unpaid work, and represents the maximum, with 8 hours and 44 minutes of total work per average day. Pakistan is the most unbalanced, with levels of women’s paid (low) and unpaid (high) work comparable with those in countries in the Middle East and North Africa, whereas the Republic of Korea is very close to developed country patterns. As regards men (Chart 27), Mongolia is also outstanding, with the highest level of total work (a high level of paid work and the highest level of unpaid work for men).

Unpaid work represents more than 50 percent of women’s total work (Chart 28) in eight surveys, with the maximum in Pakistan (78.6 percent) and Armenia (75.5 percent), and the minimum in Thailand (38.2 percent) and Cambodia (41.0 percent). The share of unpaid work in men’s total work (Chart 29) ranges from 4.4 percent in Cambodia to 27.2-27.3 percent in Kyrgyzstan and Mongolia.

The ratio of time spent in unpaid work by women and men (Chart 30) is very high in the region, ranging from 2.18 in Mongolia to 10.44 in Cambodia, with three countries above 9 (Cambodia, India and Pakistan). None of the countries reaches parity in paid work (Chart 34), but nine countries are above 0.5 and three countries are below (Armenia, India and Pakistan).

Chart 31 shows that in all countries, women work more time than men with an indicator ranging from 1.04 in Pakistan (due to very low female economic participation) to 1.19 in Kyrgyzstan and the Republic of Korea (1999).

In the two countries with repeated surveys (the Republic of Korea and Thailand), all three indicators of a gender gap are moving over time towards parity.

Chart 26: Average time spent by women in unpaid and paid work (in minutes per day) in Asian countries

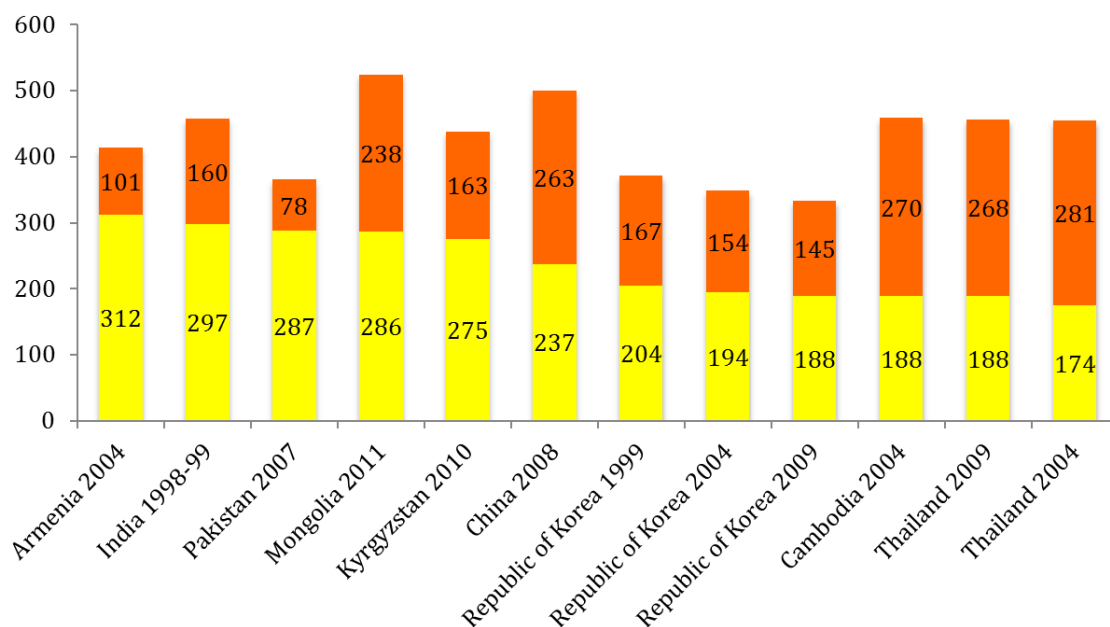


Chart 27: Average time spent by men in unpaid and paid work (in minutes per day) in Asian countries

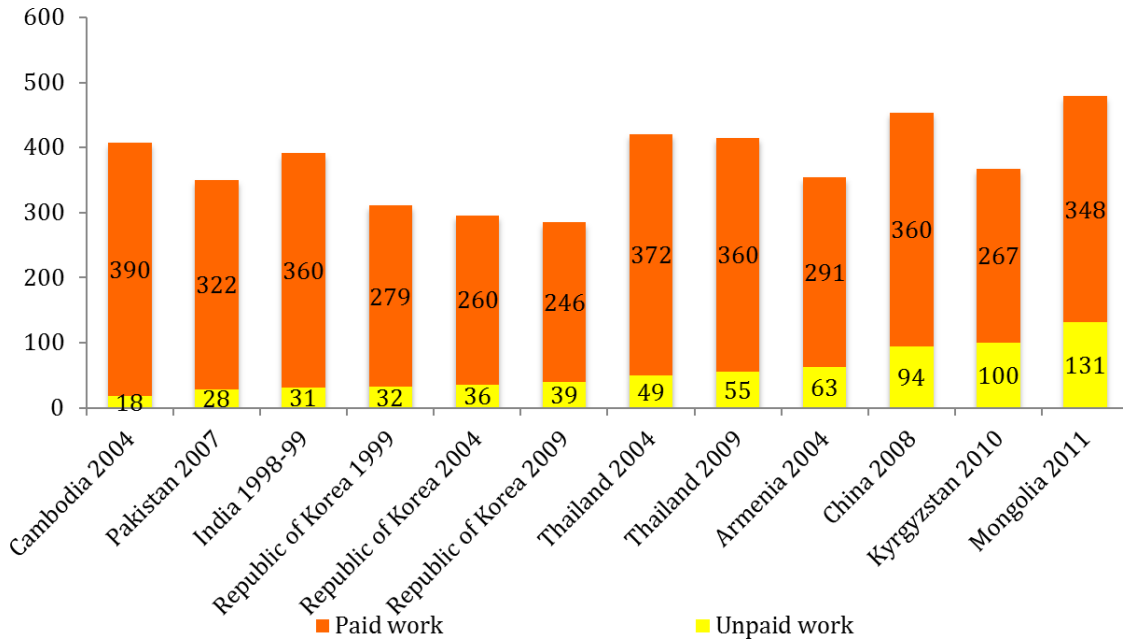


Chart 28: Share of unpaid and paid work in total women’s work in Asian countries

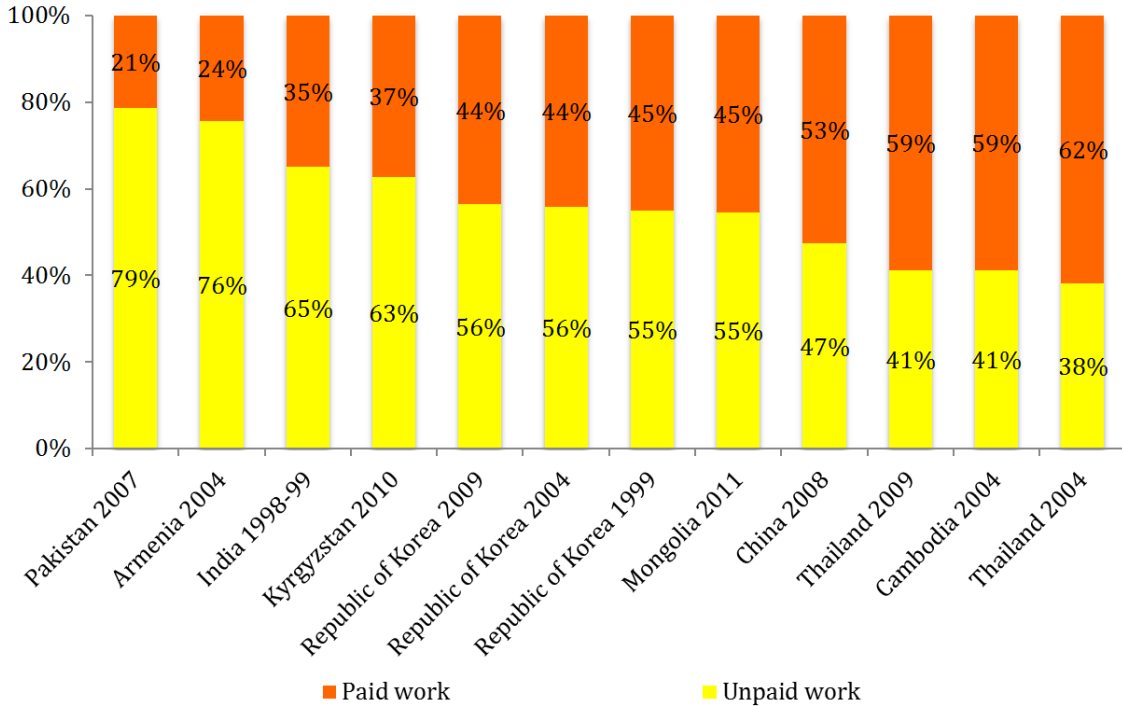


Chart 29: Share of unpaid and paid work in total men’s work in Asian countries

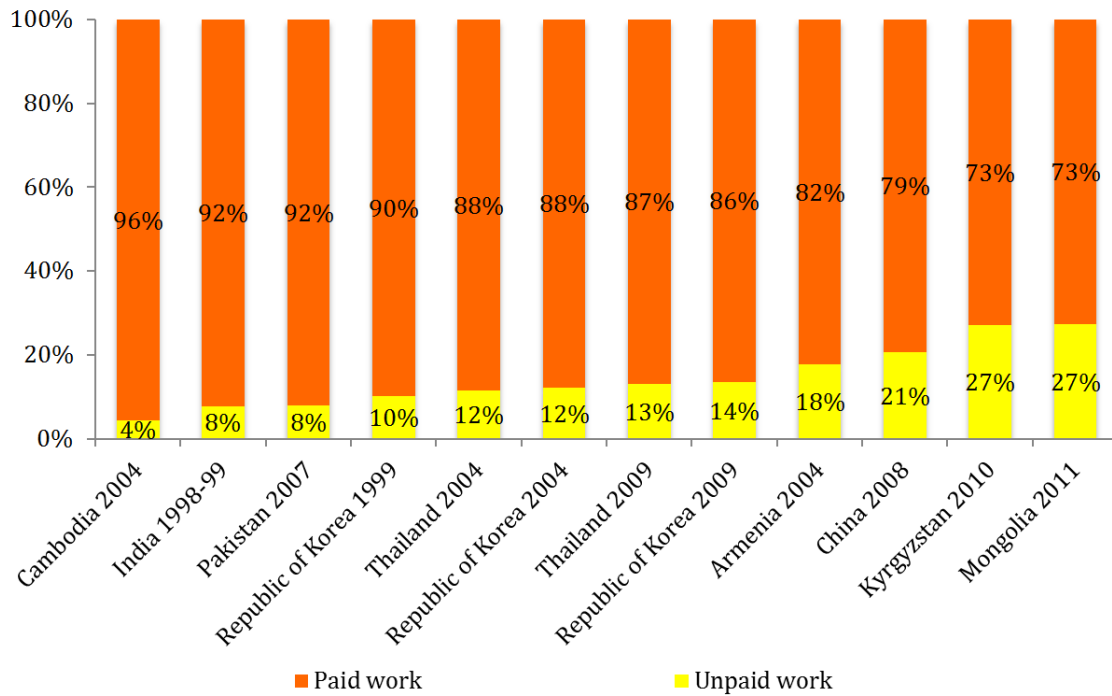


Chart 30: Number of times the time spent by women in unpaid work exceeds men’s in Asian countries

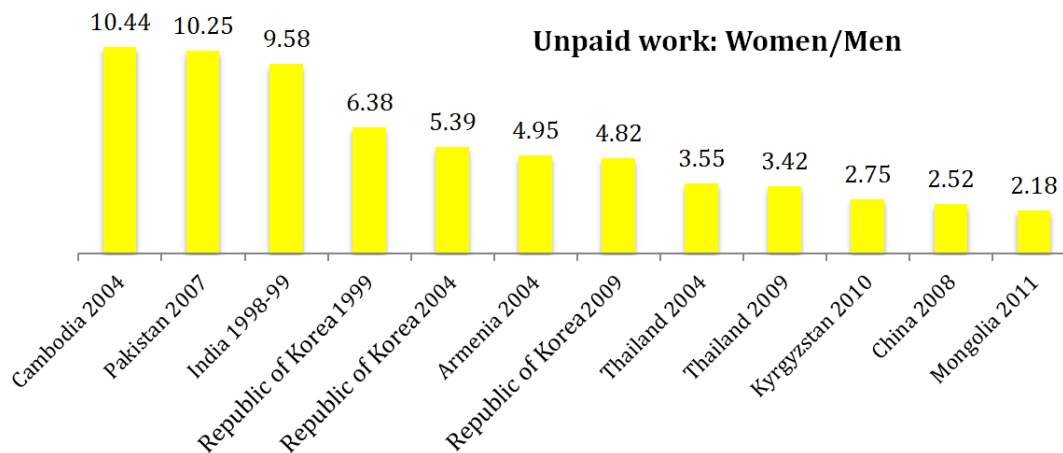
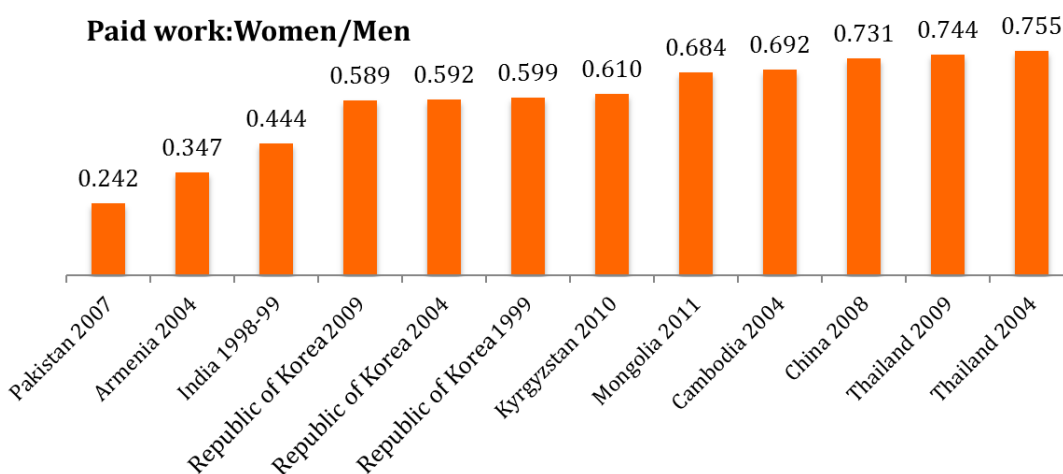
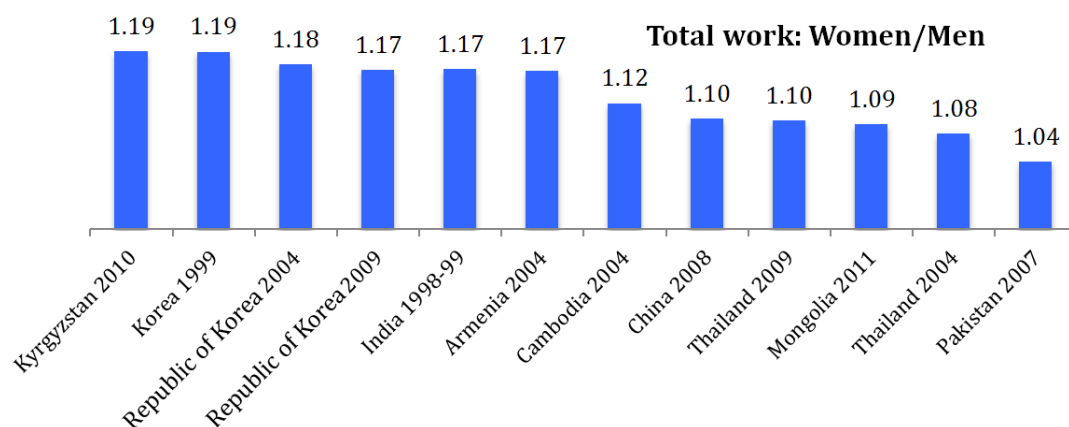


Chart 31: Number of times the time spent by women in paid work exceeds men's in Asian countries**Chart 32: Number of times the time spent by women in total work exceeds men's in Asian countries**

In Asia, four countries tried to distinguish between formal and informal paid work in their time-use surveys, Cambodia, Mongolia, Pakistan and Thailand, but only Thailand identified clearly all the components of paid work for the household. As explained above, it is not sure that the category 'work in establishments' does not comprise informal activities in the other countries. Table 7 shows that paid work in the formal sector hardly represents 30-31 percent of total time spent at paid work. In comparison, the same category (but questionable in its content) represents between 40 percent and 55 percent. Paid work for household in primary production accounts for 30 percent to 41 percent of total work and work for household providing service for income accounts for 20 percent to 29 percent of total paid work in Thailand. Women devote relatively more time than men in the formal sector and in services for household.

Table 7: Distribution of paid work between formal and informal work in Thailand 2004 and 2009

In minutes per day and %	Thailand 2004		Thailand 2009		Thailand 2004		Thailand 2009	
	Women (min-utes)	Men (min-utes)	Women (min-utes)	Men (min-utes)	Women %	Men %	Women %	Men %
Paid work in formal sector	89	111	91	113	31.7	29.8	34.0	31.4
Work for household in primary production	97	152	81	139	34.5	40.9	30.2	38.6
Work for household in non primary production	19	13	17	13	6.8	3.5	6.3	3.6
Work for household in construction	3	17	2	22	1.1	4.6	0.7	6.1
Work for household providing service for income	73	79	77	73	26.0	21.2	28.7	20.3
Total paid work	281	372	268	360	100.0	100.0	100.0	100.0

Regarding unpaid work (Table 8), women devote, as in other regions, most of their time in unpaid work to domestic tasks: More than 80 percent on average, ranging from 72 percent in Thailand to 85.7 percent in China and 90.9 percent in Kyrgyzstan. Care for children and adults represents 18.3 percent on average of their unpaid work (from 7.3 percent in Kyrgyzstan up to 25 percent in Thailand), against only 1.6 percent dedicated to volunteer work and services to other households.

On average, men devote relatively less time to household chores (71.5 percent) than women, and more time to care of children and adults (20.6 percent) and to services to other households (7.9 percent), a pattern observed in other regions. With some exceptions (such as Kyrgyzstan and Mongolia), this does not mean that the absolute time dedicated to these activities is longer than women's.

Table 8: Distribution of unpaid work between unpaid domestic services, unpaid care services and unpaid services to other households in six Asian countries

Countries		In minutes per day and % in unpaid work of:							
		Domestic services		Care services		Services to other households		Total unpaid work	
China 2008	Women	203	85.7	31	13.1	3	1.3	237	100.0
	Men	80	85.1	11	11.7	3	3.2	94	100.0
Republic of Korea 1999	Women	160	78.4	41	20.1	3	1.5	204	100.0
	Men	20	62.5	8	25.0	4	12.5	32	100.0
Republic of Korea 2004	Women	149	76.8	42	21.6	3	1.5	194	100.0
	Men	22	61.1	10	27.8	4	11.1	36	100.0
Republic of Korea 2009	Women	146	77.7	40	21.3	2	1.1	188	100.0
	Men	27	69.2	10	25.6	2	5.1	39	100.0
Kyrgyzstan 2010	Women	250	90.9	20	7.3	5	1.8	275	100.0
	Men	82	82.0	9	9.0	9	9.0	100	100.0
Mongolia 2007	Women	244	84.7	41	14.2	3	1.0	288	100.0
	Men	104	83.9	15	12.1	5	4.0	124	100.0
Mongolia 2011	Women	232	80.0	54	18.6	4	1.4	290	100.0
	Men	111	79.9	20	14.4	8	5.8	139	100.0
Pakistan 2007	Women	231	80.5	55	19.2	1	0.3	287	100.0
	Men	17	60.7	9	32.1	2	7.1	28	100.0
Thailand 2004	Women	130	74.7	39	22.4	5	2.9	174	100.0
	Men	31	63.3	12	24.5	6	12.2	49	100.0
Thailand 2009	Women	136	72.3	47	25.0	5	2.7	188	100.0
	Men	37	67.3	13	23.6	5	9.1	55	100.0
Average	Women		80.2		18.3		1.6		100.0
	Men		71.5		20.6		7.9		100.0

As noted, the surveys in **Latin America** are not based on diaries (the only exception is Cuba, but the published results are not aggregated at national level and are insufficiently detailed for this comparative report). That means the responses recorded by the interviewers cannot be cross-checked with the 24 hours of the day, for two reasons: Firstly, data are collected for the week, and secondly, simultaneous activities are embedded in the interviewees' responses. This is why Charts 35 and 36 show such high levels of time dedicated to unpaid work, especially for women. It is also the reason why women's total work exceeds 400 minutes per day in all countries and even 500 minutes in five countries. Surprisingly, Uruguay did not mention the time spent in paid work in its survey report.

The pattern of time use in a 24-hour average day for women and for men (Charts 33 and 34) is therefore notably different from the patterns of other regions, with less time dedicated to personal care and maintenance, which hardly reaches 50 percent of the day (except in Ecuador), while more time is devoted to social life and leisure (in relatively equal proportion for women and men). As mentioned, a relatively longer time is spent by women in unpaid work.

According to Chart 37, the share of unpaid work in women’s total work exceeds 50 percent in all surveys and ranges from 58.7 percent in Ecuador to 75.9 percent in Mexico (2002) and Peru. For men (Chart 38), the share of unpaid work ranges from 11.1 percent in Costa Rica to 25.1 percent in Peru. For comparison purposes, the share of unpaid work in total women’s work accounted for 71 percent against 33 percent for men in Cuba (2001).

The ratio of time spent in unpaid work by women and men (Chart 39) is at its maximum in El Salvador (5.2) and Mexico (2002, 4.38) and at its minimum in Uruguay and urban Panama (respectively, 2.32 and 2.38). Such values are intermediate between the highest observed in Asia, sub-Saharan Africa, and Middle East and North African countries, and the lowest observed in developed countries. The index for paid work (Chart 40) is above 0.5 in three countries (El Salvador, Panama and Peru), and below in the other countries, with the minimum in Costa Rica (0.347). The index for total work (Chart 41) is above 1 in all countries, above 1.1 in four countries and above 1.2 in Mexico (2002). Data for Mexico show an improvement towards better parity for all indices (unpaid, paid and total work) between 2002 and 2009.

Chart 33: Distribution of time spent by women in various activities in a 24-hour average day in Latin American countries

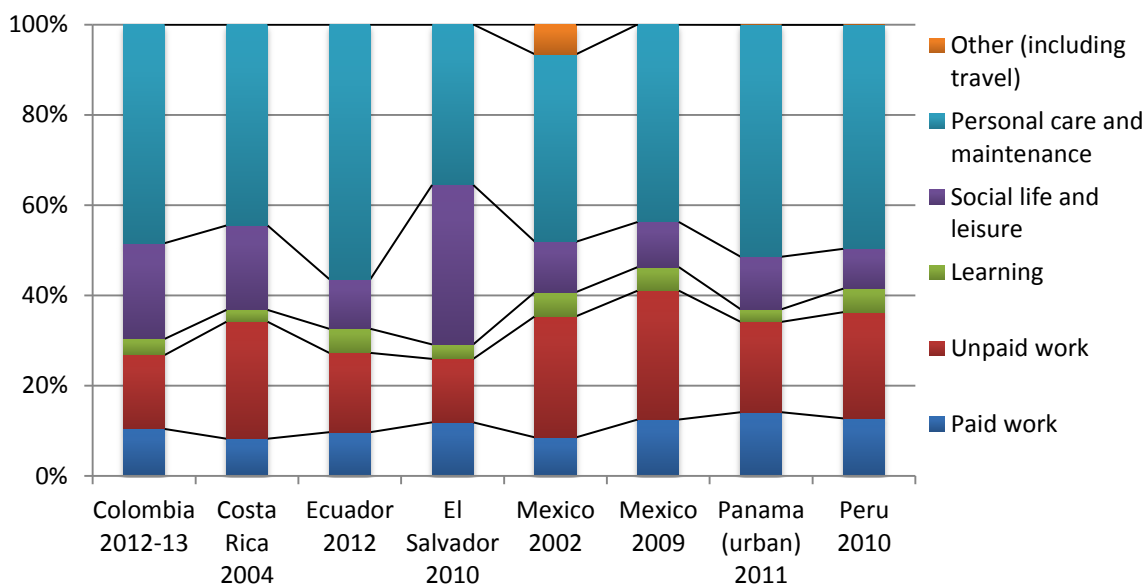


Chart 34: Distribution of time spent by men in various activities in a 24-hour average day in Latin American countries

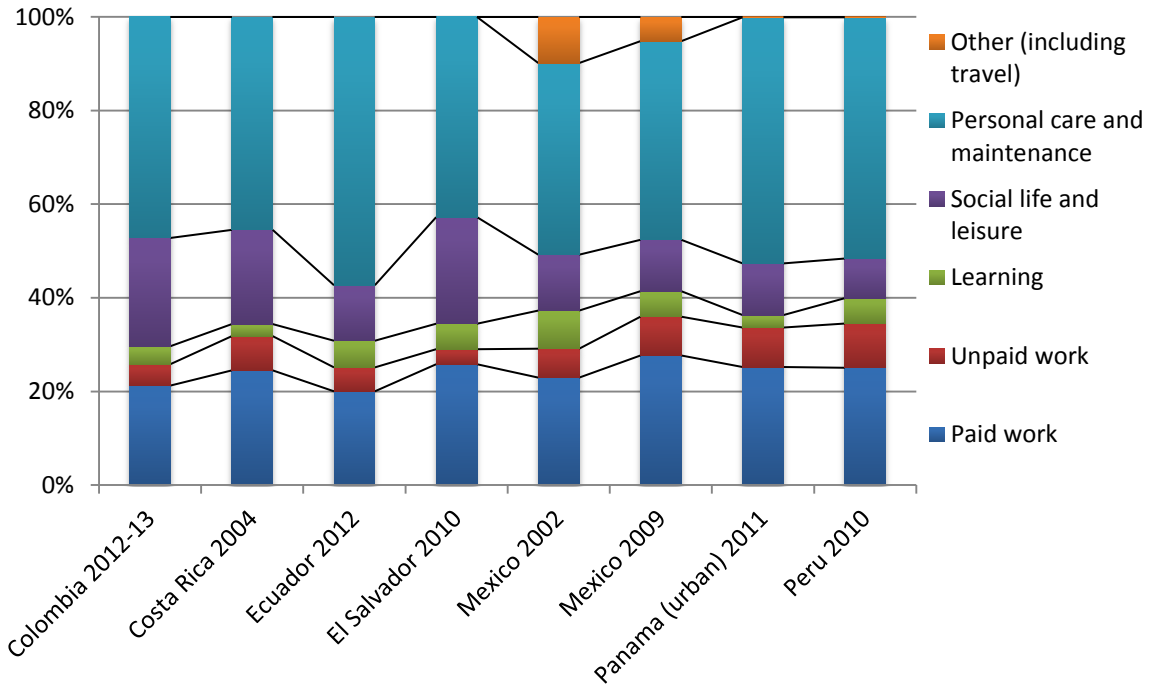


Chart 35: Average time spent by women in unpaid and paid work (in minutes per day) in Latin American countries

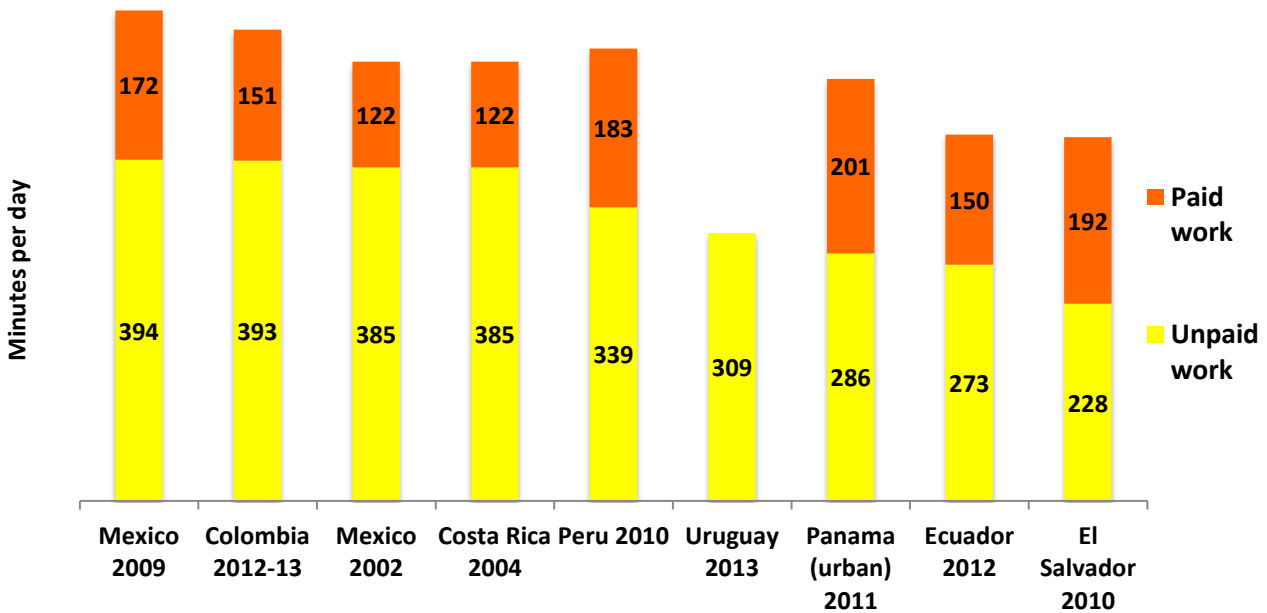


Chart 36: Average time spent by men in unpaid and paid work (in minutes per day) in Latin American countries

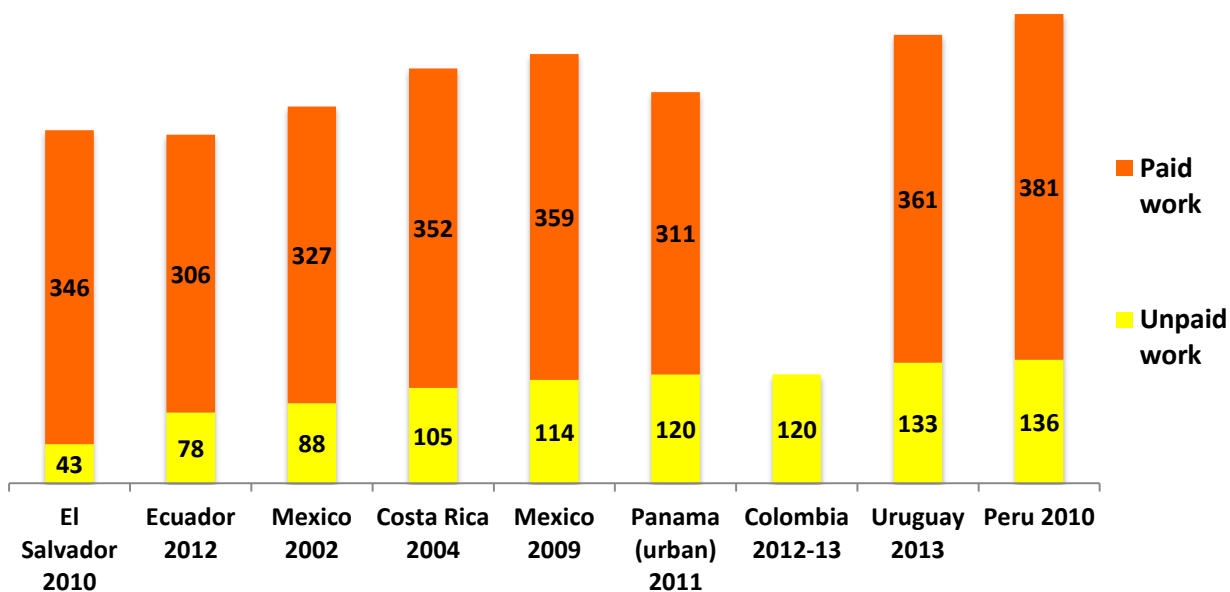


Chart 37: Share of unpaid and paid work in total women's work in Latin American countries

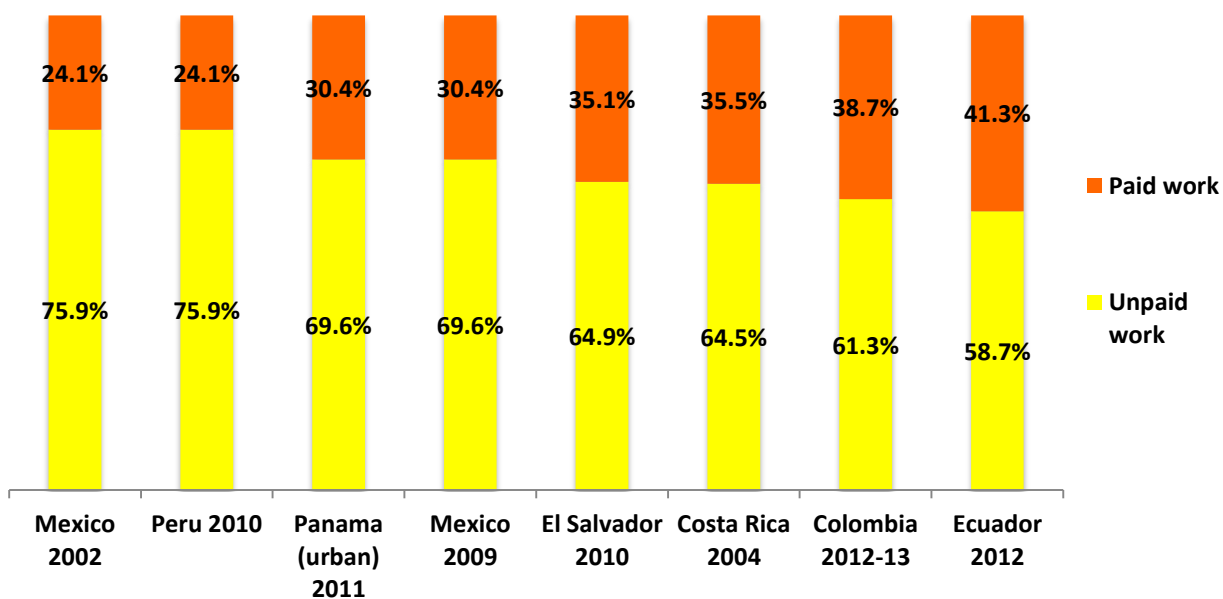


Chart 38: Share of unpaid and paid work in total men’s work in Latin American countries

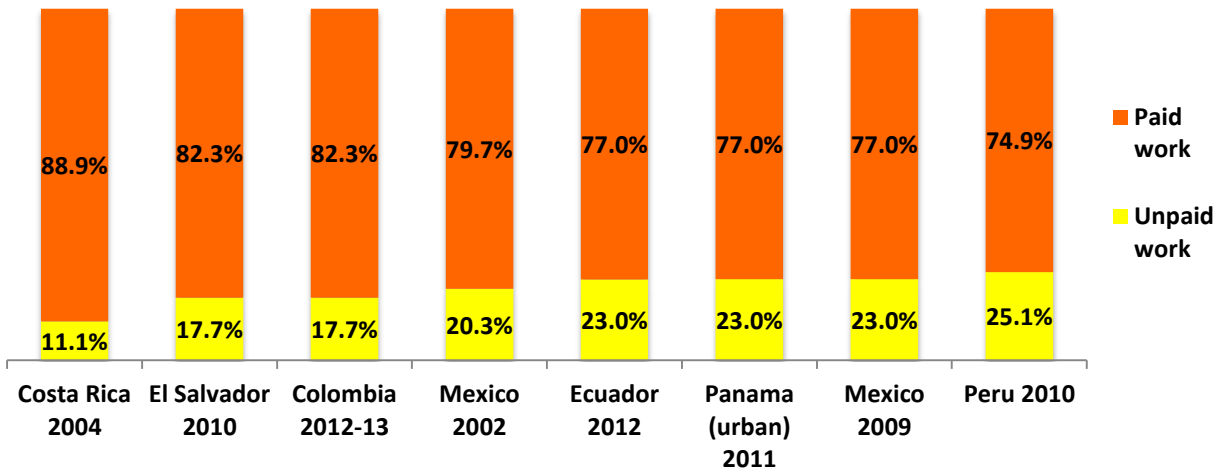


Chart 39: Number of times the time spent by women in unpaid work exceeds men’s in Latin American countries

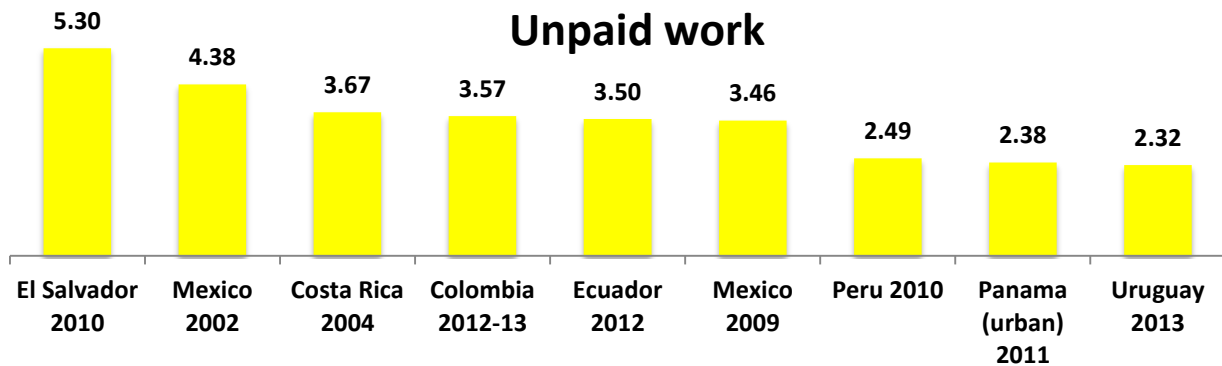


Chart 40: Number of times the time spent by women in paid work exceeds men’s in Latin American countries

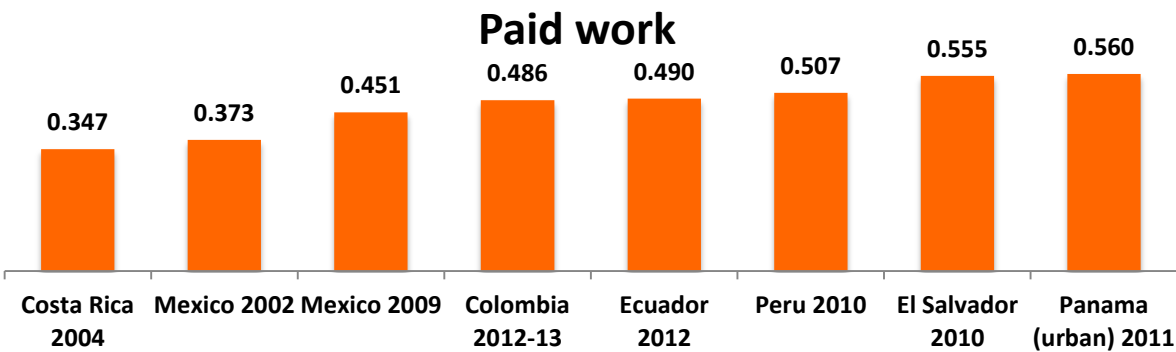
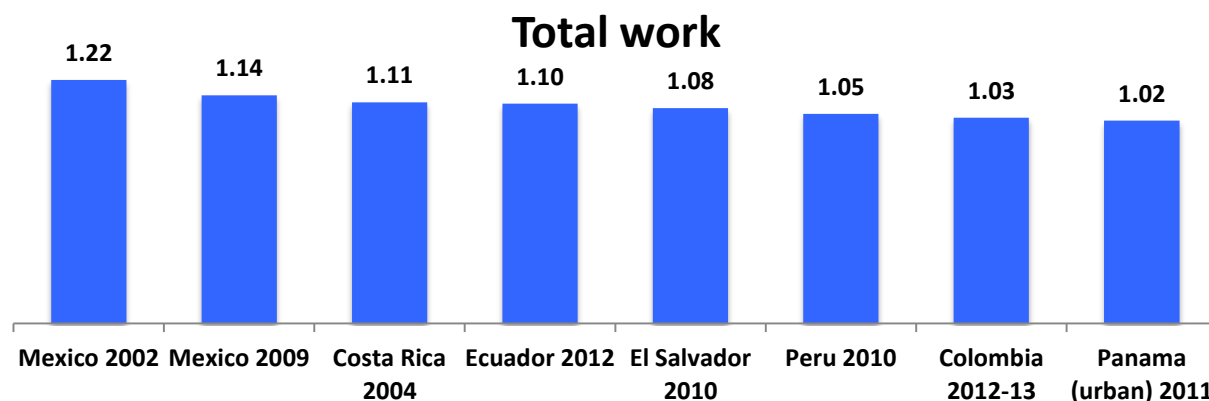


Chart 41: Number of times the time spent by women in total work exceeds men's in Latin American countries



Europe is, with North America and other developed countries, the region with the greatest number of time use surveys. Consequently, the analysis will not consist of ranking the countries by increasing or decreasing order of the variables, but rather by subregion (Western, Northern and Southern) and by year of survey. The transition countries will represent the Eastern part of Europe.

Chart 42 shows that the time spent by women in total work in Northern European countries is around 400 minutes per average day in almost all countries, slightly decreasing over the years due to the slow but sure decline of time spent in unpaid work. In Norway, the country for which the longest observation is available, women's unpaid work has decreased from nearly 6 hours per day in 1970 to less than 4 hours in 2010, while men's unpaid work increased by nearly half an hour during the same period (Chart 43). At the same time, women's paid work increased by nearly one hour, showing that gains of time in unpaid work allow more economic participation in the labour market.

The picture is different in Western Europe, where time spent by women in total work is below 400 minutes per day (except for France in 1986, Austria and the Netherlands where it is equal to 400) due to less involvement in both unpaid and paid work. The decline of women's participation in unpaid work over the years is also visible, though less important than in Northern European countries (hardly half an hour in France from 1986 to 2010, and accompanied by a decline in paid work).

In Southern Europe, the time spent by women in unpaid work is clearly at higher levels than in the other European regions, whereas time spent by women in paid work is at lower levels. Over time, slight changes can be observed, for instance, in Italy and in Spain (with inverse developments for men, as shown in Chart 44).

In Western Europe (except in Austria and Netherlands) and moreover in Southern Europe, men's total work is most often lower than 350 minutes per day and even as low as 250 minutes per day (Greece).

For the most recent period, the share of women's unpaid work in total work (Chart 45) is around 60 percent in Northern Europe, against 65 percent in Western Europe and 70 percent in Southern Europe, whereas men's (Chart 46) is above 40 percent in Northern Europe and in Western Europe (except in the Netherlands), and below 40 percent in Southern Europe.

The ratio of time spent in unpaid work by women and men (Chart 47), which was commonly above 2 in the early 1970s and 1980s, has steadily decreased since then, and is currently and almost everywhere below 2 in Western and Northern Europe, diminishing from 2.42 to 1.58 in France between 1986 and 2010, from 1.88 to 1.52 in Finland between 1979 and 2009, and from 2.67 to 1.28 in Norway between 1970 and 2010. It is only in Southern Europe that the indicator remains above 2 and more, although it is diminishing in Spain, from 2.77 to 2.09 between 2003 and 2010, for example. It increased in Italy from 2.75 to 2.95 between 2003 and 2009, after a dramatic decrease from 4.49 to 2.75 between 1989 and 2003.

The ratio of time spent in paid work by women and men (Chart 48) is above 0.5 in all regions of Europe, having increased from 0.354 to 0.723 in Norway, for example, between 1970 and 2010. It remains under 0.5 only in Italy (2009).

Finally, the ratio of time spent in total work by women and men (Chart 49) remains above 1 in all countries of Europe except the Netherlands (0.97), but below 1.1 in Western and Northern Europe, and above 1.1 and more in Southern Europe (the maximum is in Greece, with 1.37). Only three countries are below 1 in the recent period: the Netherlands, Norway and Denmark (respectively, 0.97, 0.97 and 0.98), meaning that in these countries women do not work more than men, which is the case in all other countries of the world (except New Zealand).

Charts 50 and 51 show the time use patterns for women and men.

Chart 42: Average time spent by women in unpaid and paid work (in minutes per day) in Europe

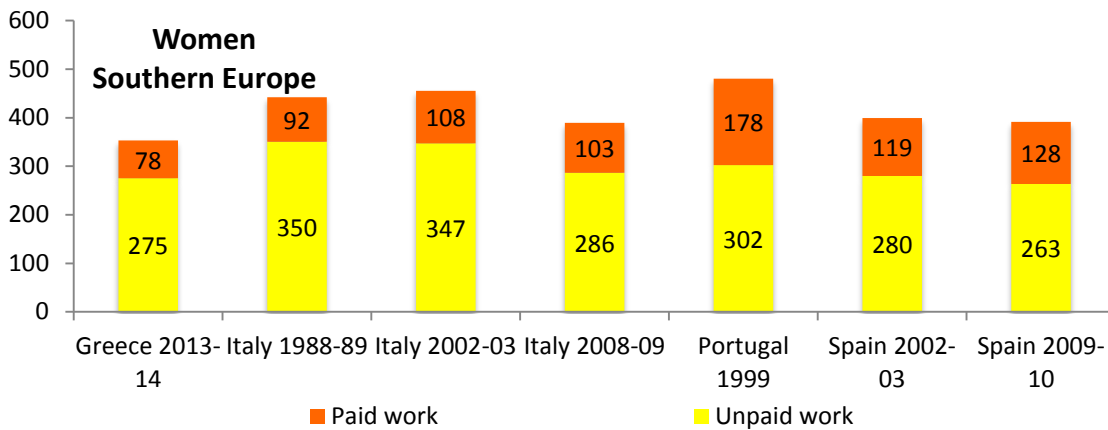
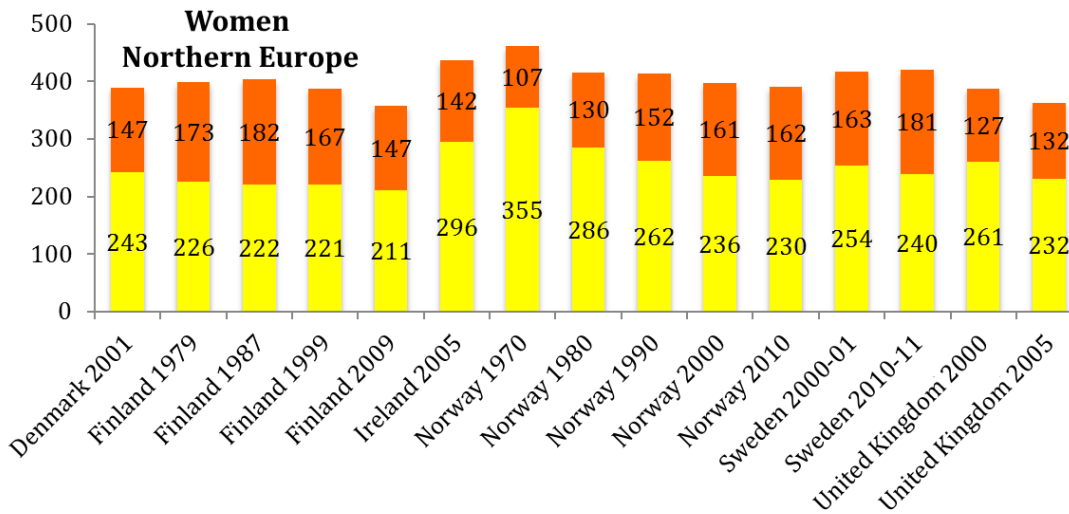
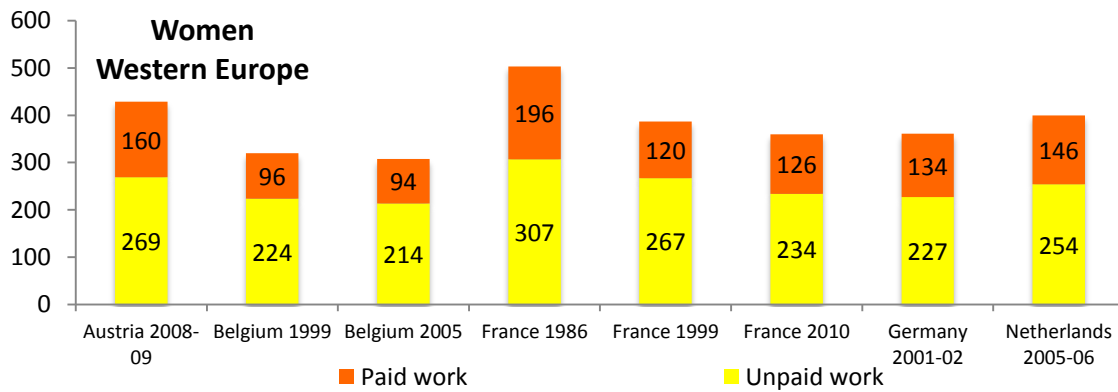


Chart 43: Average time spent by men in unpaid and paid work (in minutes per day) in Europe

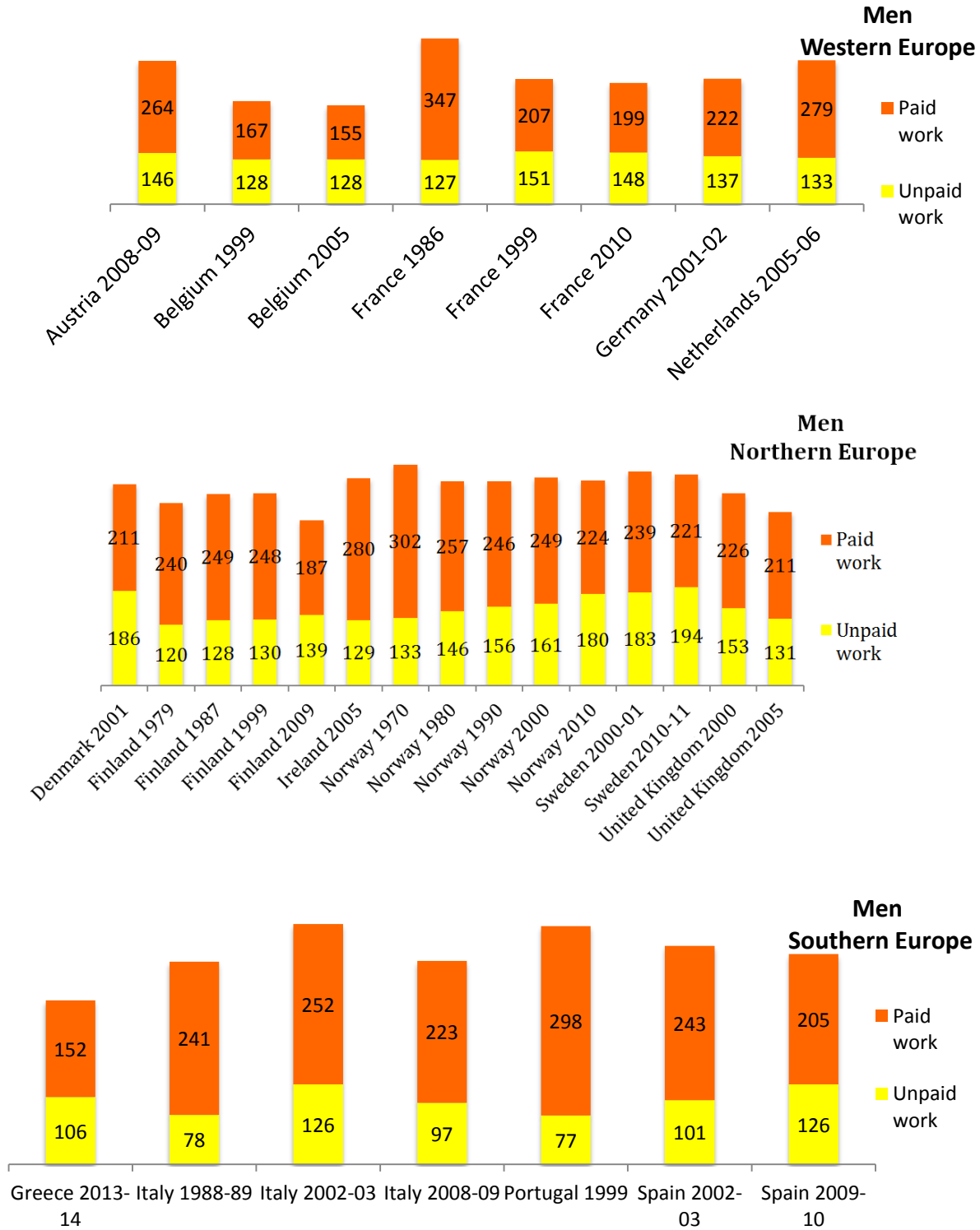
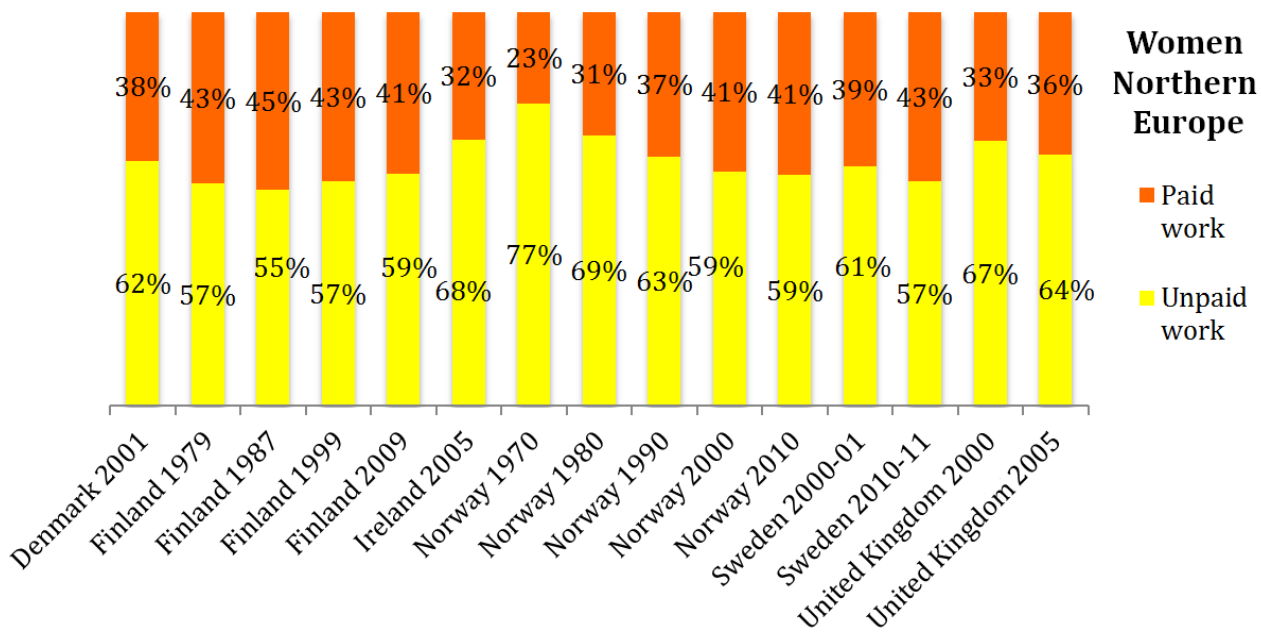
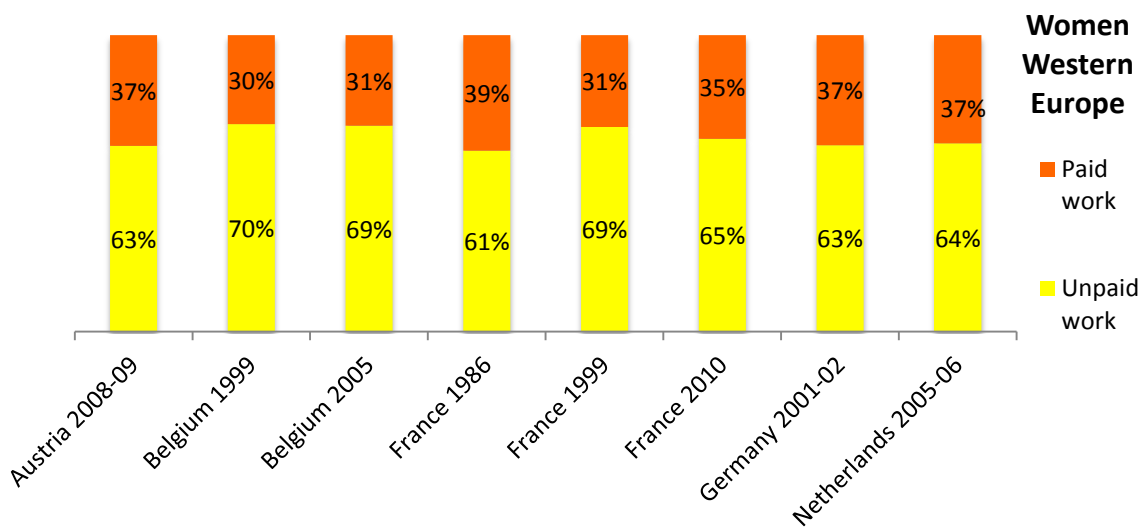


Chart 44: Share of unpaid and paid work in total women’s work in Europe



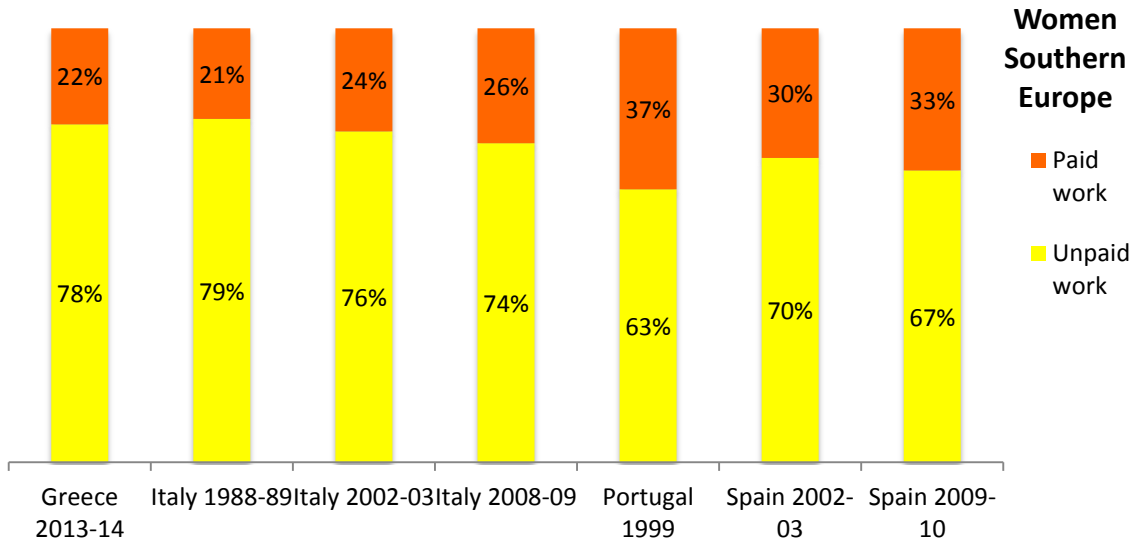
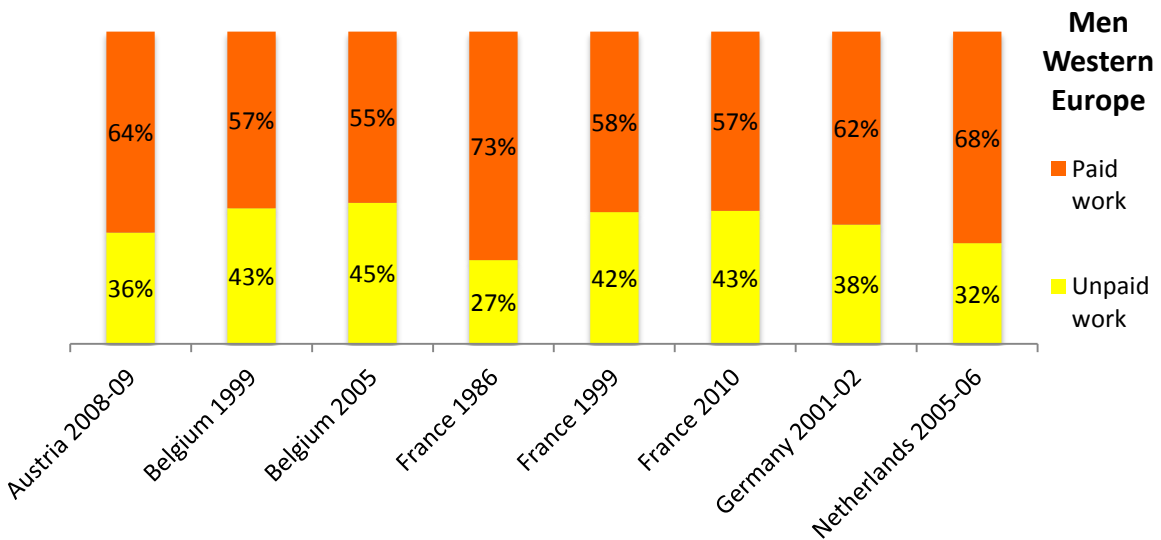


Chart 45: Share of unpaid and paid work in total men's work in Europe



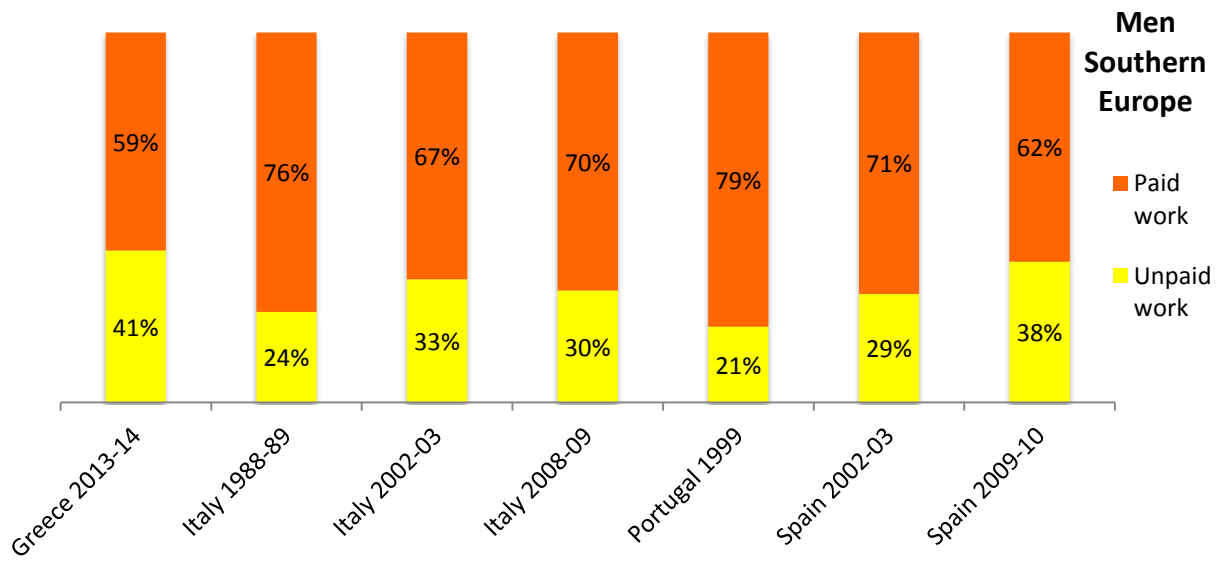
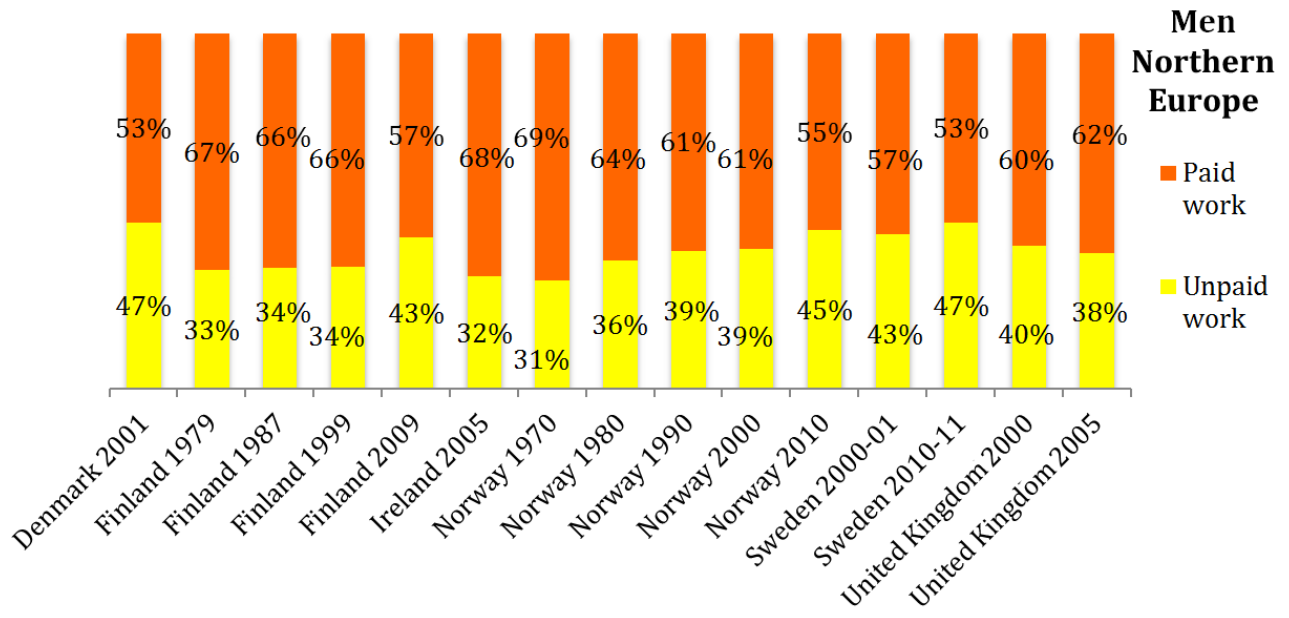
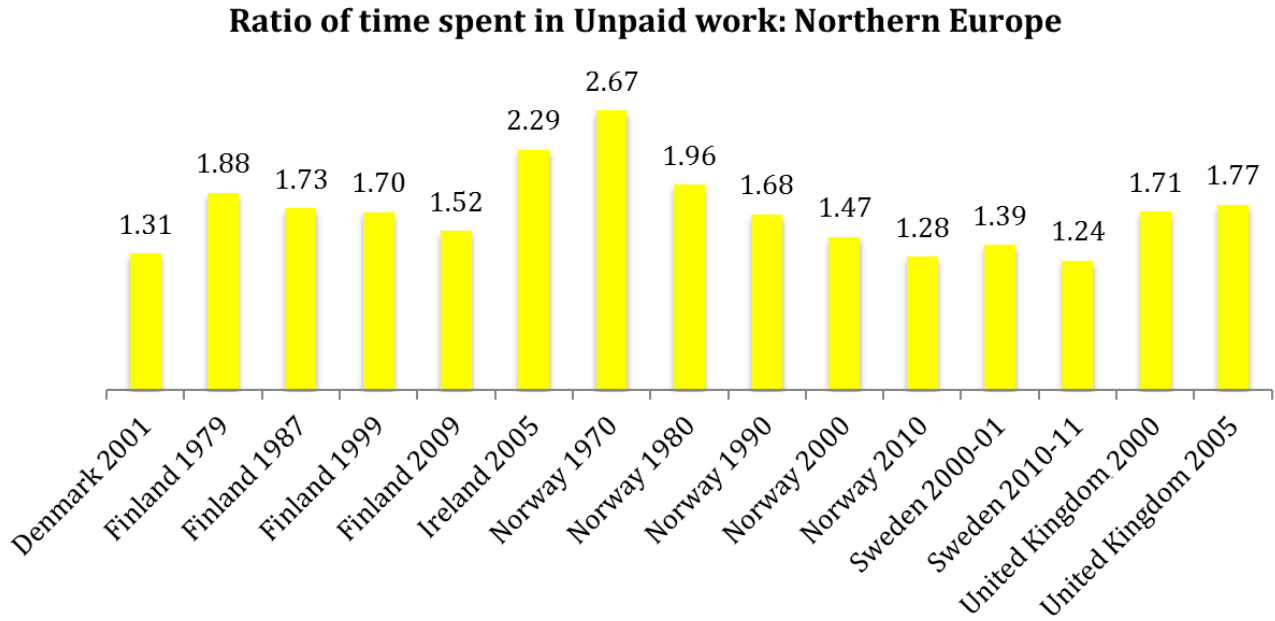
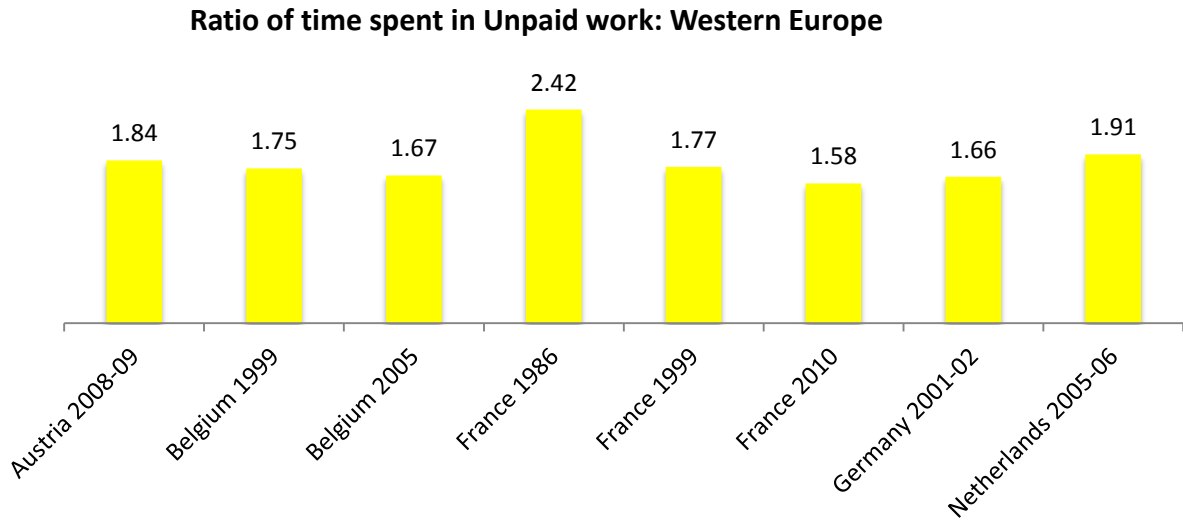


Chart 46: Number of times the time spent by women in unpaid work exceeds men’s in Europe



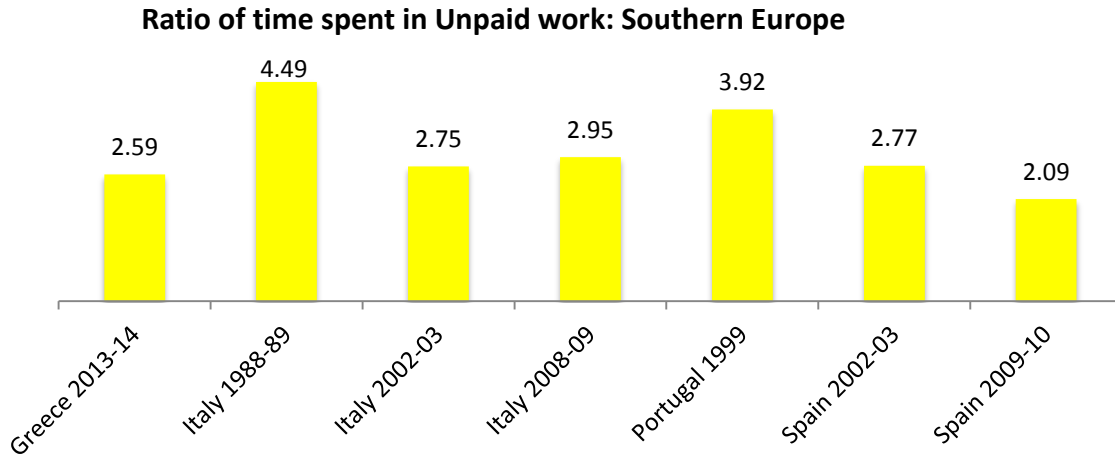
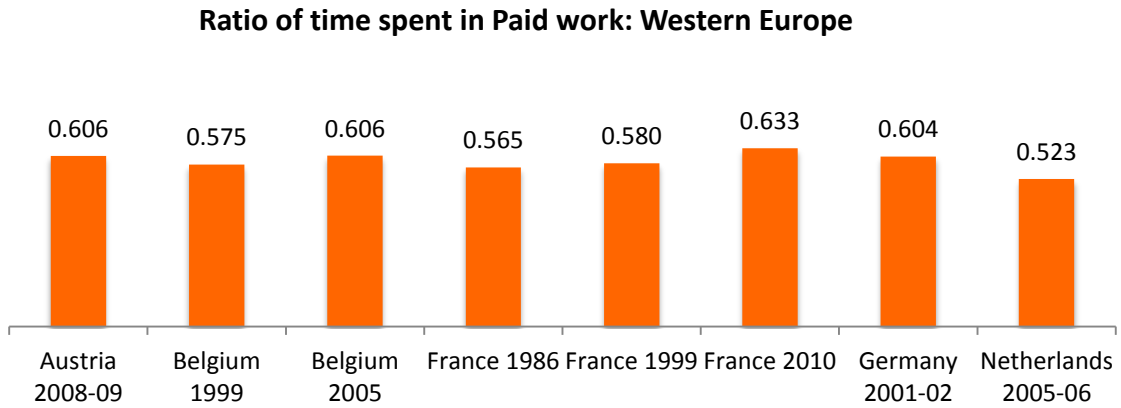
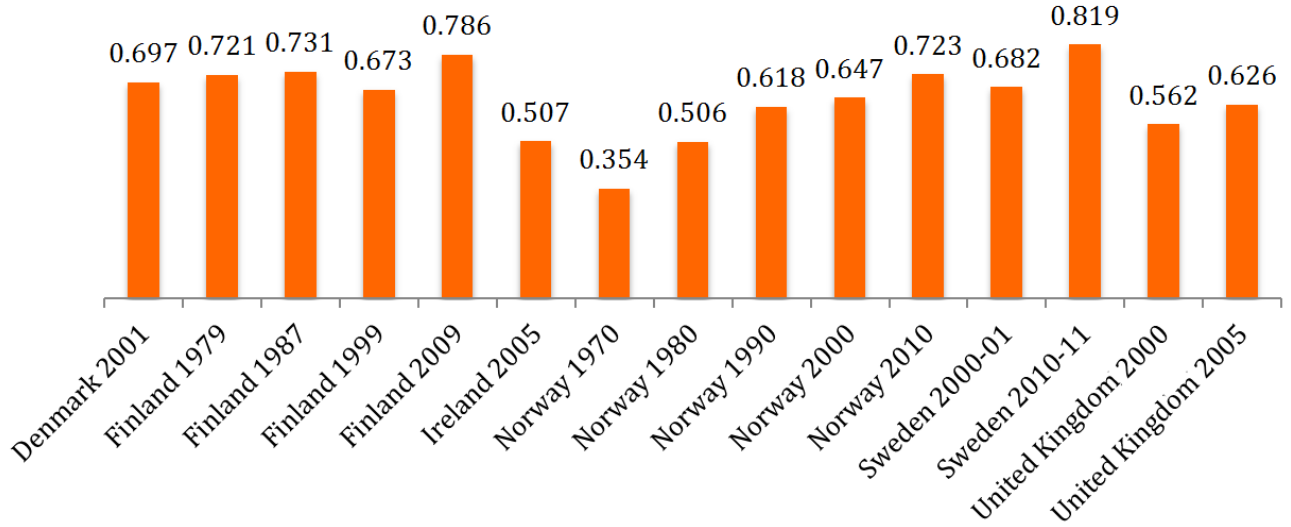


Chart 47: Number of times the time spent by women in paid work exceeds men’s in Europe



Ratio of time spent in Paid work: Northern Europe



Ratio of time spent in Paid work: Southern Europe

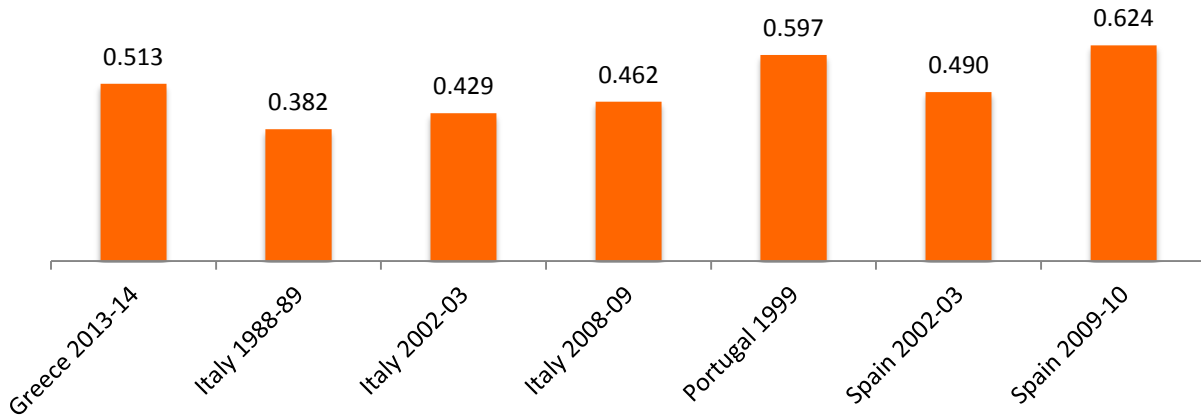
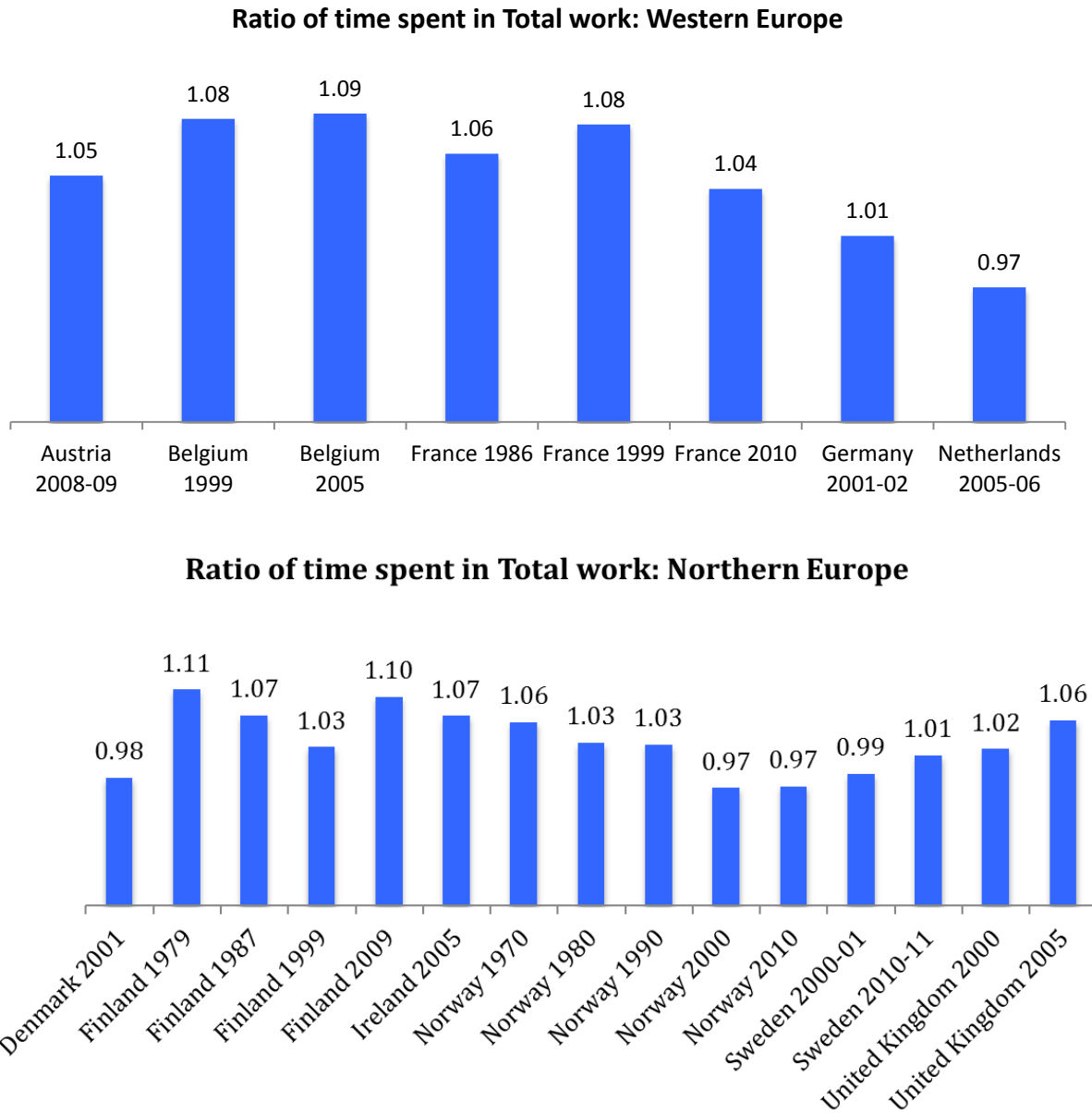


Chart 48: Number of times the time spent by women in total work exceeds men's in Europe



Ratio of time spent in Total work: Southern Europe

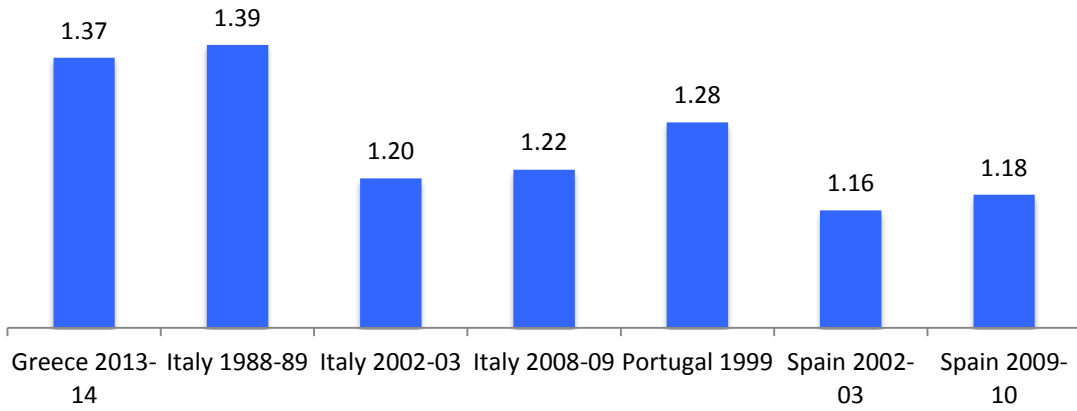
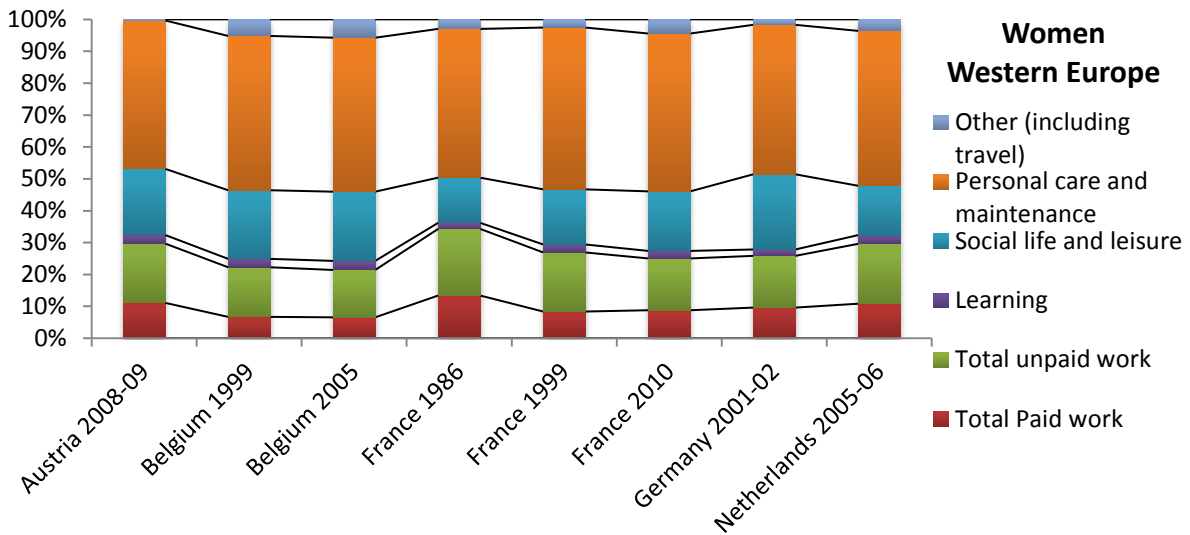


Chart 49: Distribution of time spent by women in various activities in a 24-hour average day in Europe



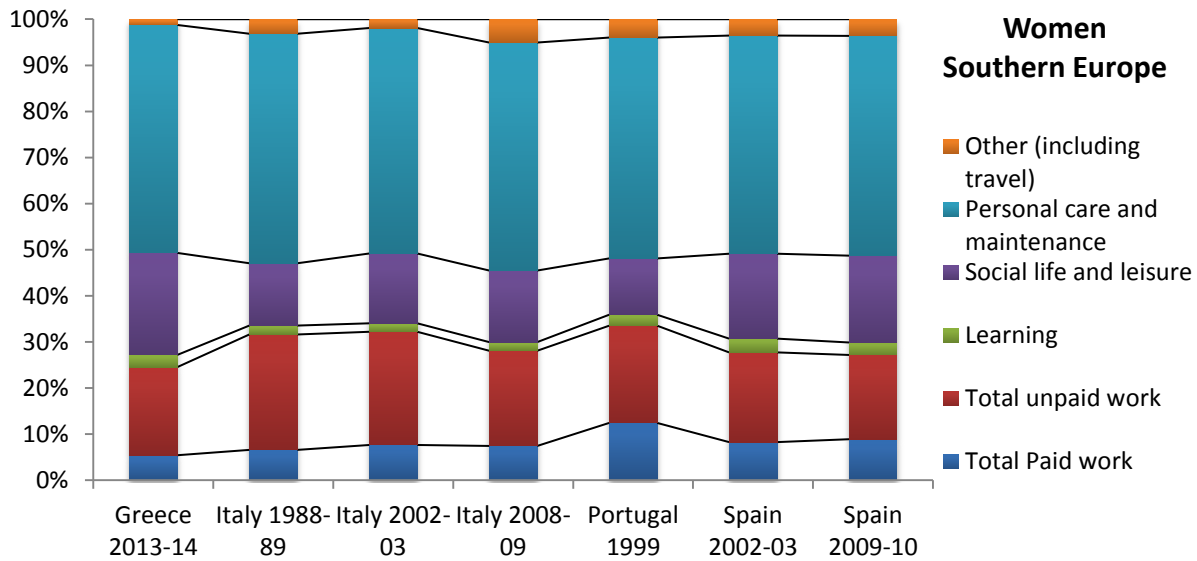
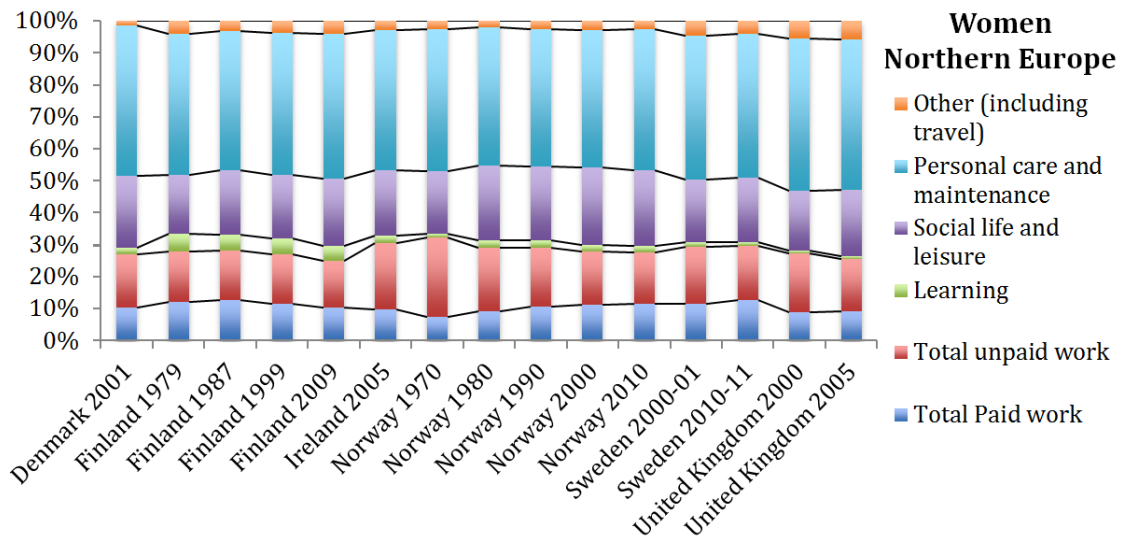
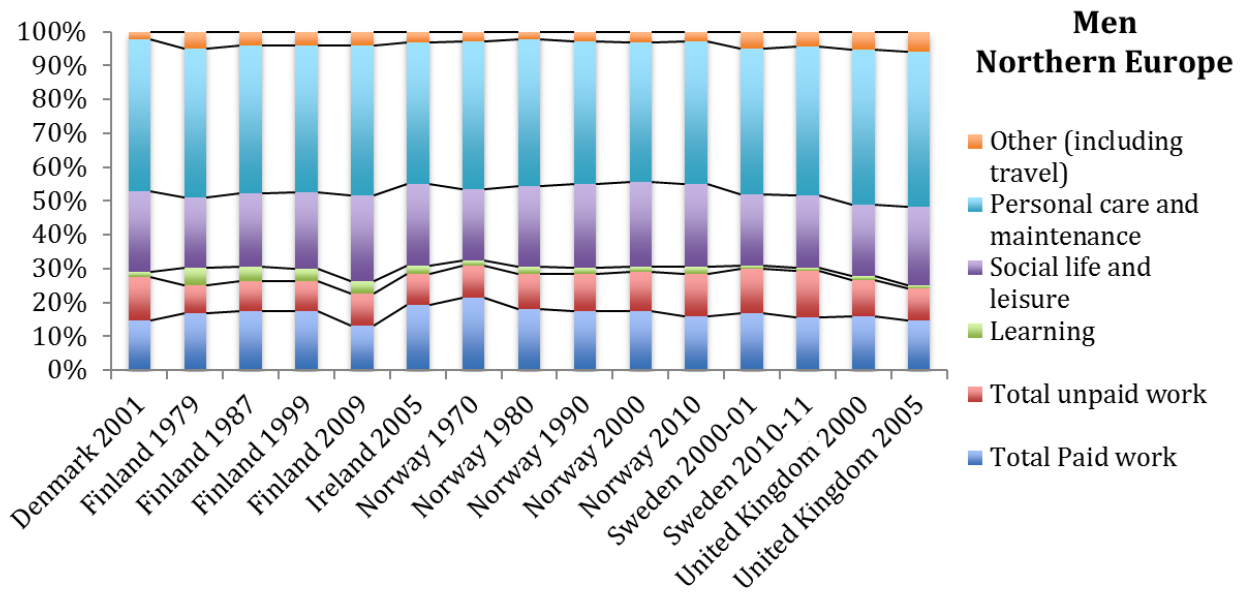
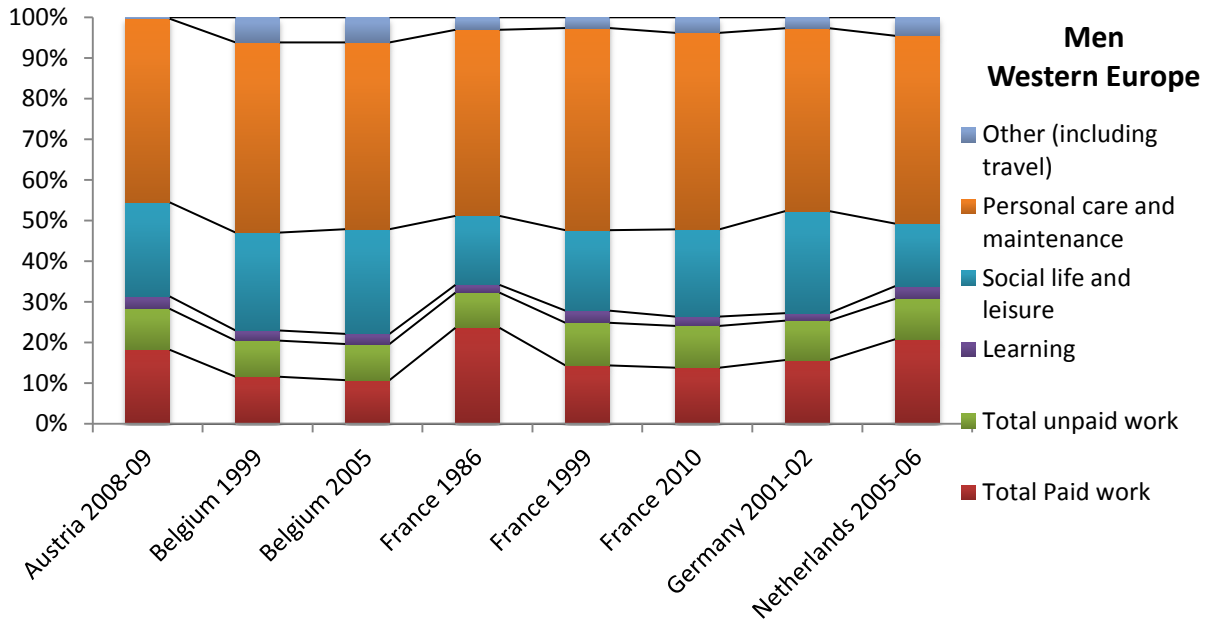
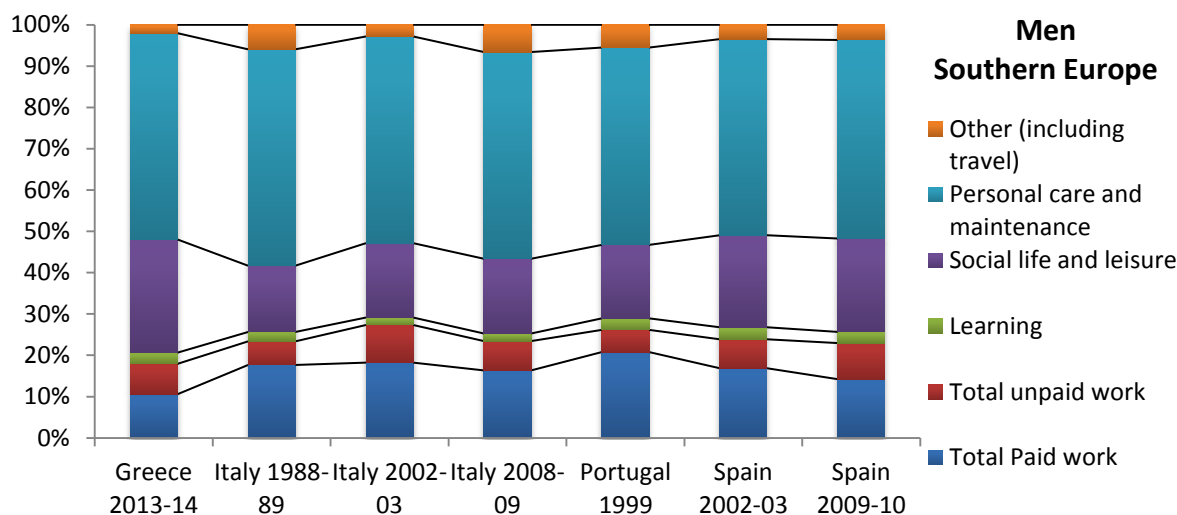


Chart 50: Distribution of time spent by men in various activities in a 24-hour average day in Europe





In the **transition countries of Eastern Europe**, the time spent by women in unpaid work is remarkably comparable (between 4 and 5 hours per average day), as well as time spent in paid work (between 2 and 4 hours). Except in the former Yugoslav Republic of Macedonia and Romania, women spend more than 400 minutes per day in total work (Chart 51) in all countries, and more than 500 minutes in two countries (Latvia and Lithuania). The fact that female economic participation rates were usually high in former socialist economies explains why it is interesting to analyse these countries as a group.

Albania is the only country of the region that presents some similarities with countries from Southern Europe. With the largest time spent by women in unpaid work and the least time in paid work, Albania is also characterized (Chart 52) by less time dedicated by men to unpaid work (and more time dedicated to paid work). In all countries, except Estonia, Latvia, Lithuania and Moldova, men spent less than 400 minutes per day in total work, and even less than 300 minutes per day in the former Yugoslav Republic of Macedonia and Romania.

Latvia and Lithuania are also exceptions for the share of unpaid work in women's total work with their index below 60 percent (Chart 53), whereas all other countries are above 60 percent and even 70 percent for Albania and Romania. The region is also characterized by high shares of unpaid work in men's total work: More than 30 percent in 10 countries (exceptions are Latvia, which is very close to 30 percent, and Albania and the former Yugoslav Republic of Macedonia), and even more than 40 percent in seven countries (Chart 54).

The ratio of time spent in unpaid work by women and men (Chart 55) ranges from 1.5 to 2.1 with the exceptions of Albania (6.04) and the Former Yugoslav Republic of Macedonia (2.64), which can

be assimilated to developing countries with high gender disparities. If these two exceptions are excluded, the minimum is observed in Estonia (1.54) and the maximum in Hungary and Romania (2.11). Estonia is also the country closest to parity regarding paid work (Chart 59) with an index at 0.817. Albania is the only country in the region below 0.5 (at 0.455). For total work (Chart 56), all countries are above 1, and all but one (Latvia) above 1.1, culminating with Albania at 1.39.

Patterns of time use by sex are shown in Charts 57 and 58.

Chart 51: Average time spent by women in unpaid and paid work (in minutes per day) in the transition countries of Eastern Europe



Chart 52: Average time spent by men in unpaid and paid work (in minutes per day) in the transition countries of Eastern Europe

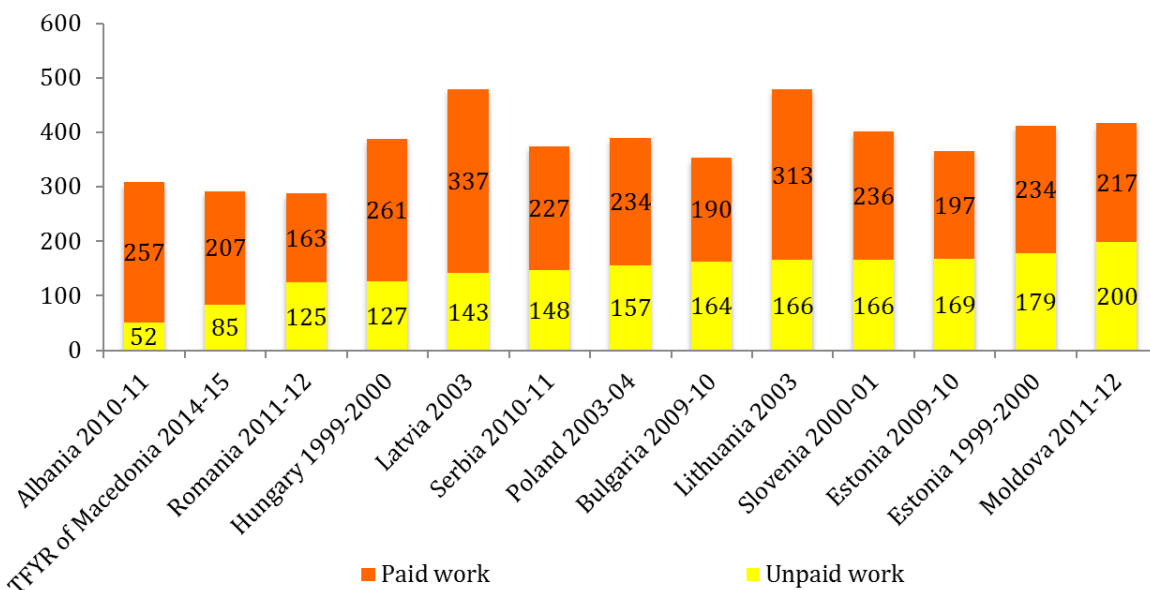


Chart 53: Share of unpaid and paid work in total women’s work in the transition countries of Eastern Europe

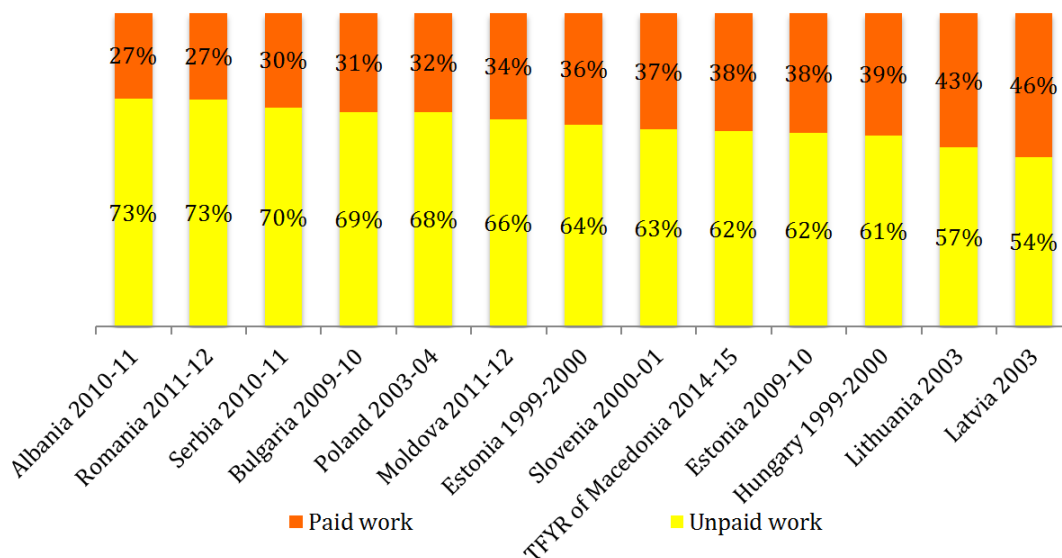


Chart 54: Share of unpaid and paid work in total men’s work in the transition countries of Eastern Europe

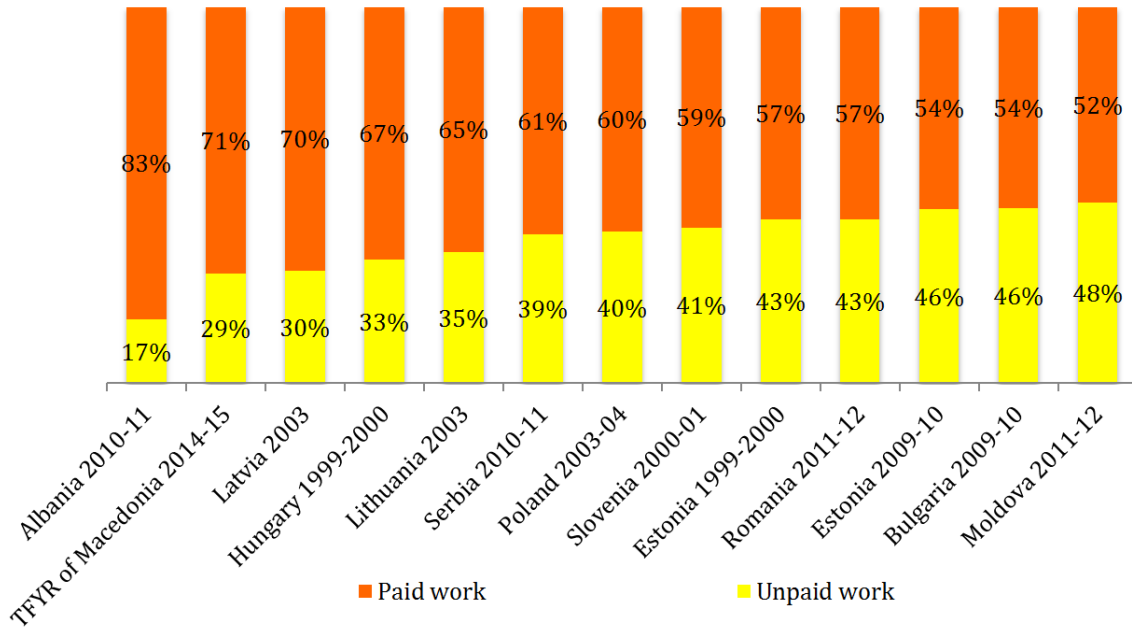


Chart 55: Number of times the time spent by women in unpaid work exceeds men’s in the transition countries of Eastern Europe

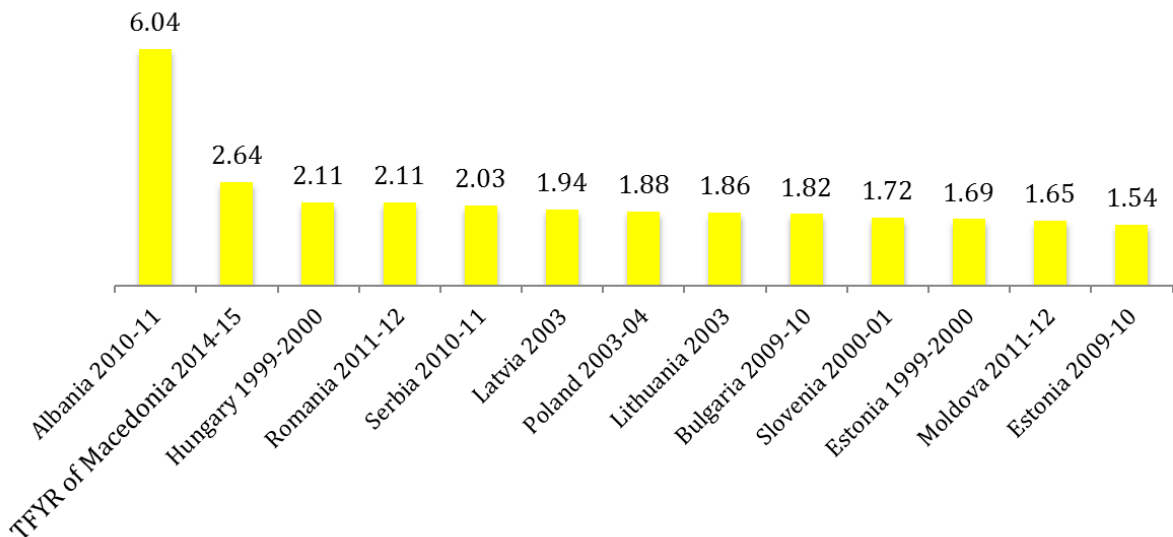


Chart 56: Number of times the time spent by women in paid work exceeds men's in the transition countries of Eastern Europe

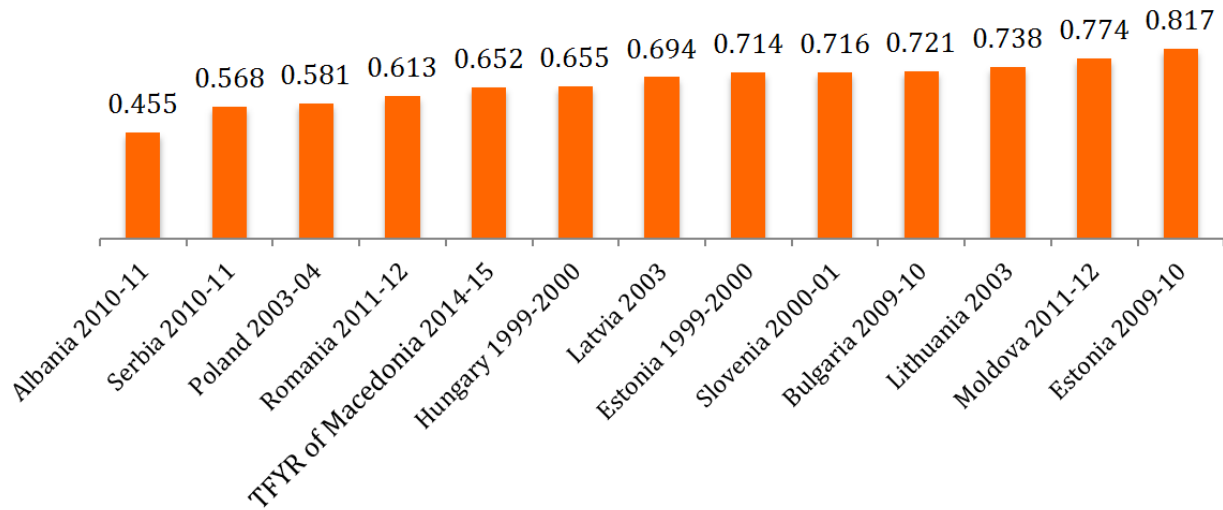


Chart 57: Number of times the time spent by women in total work exceeds men's in the transition countries of Eastern Europe

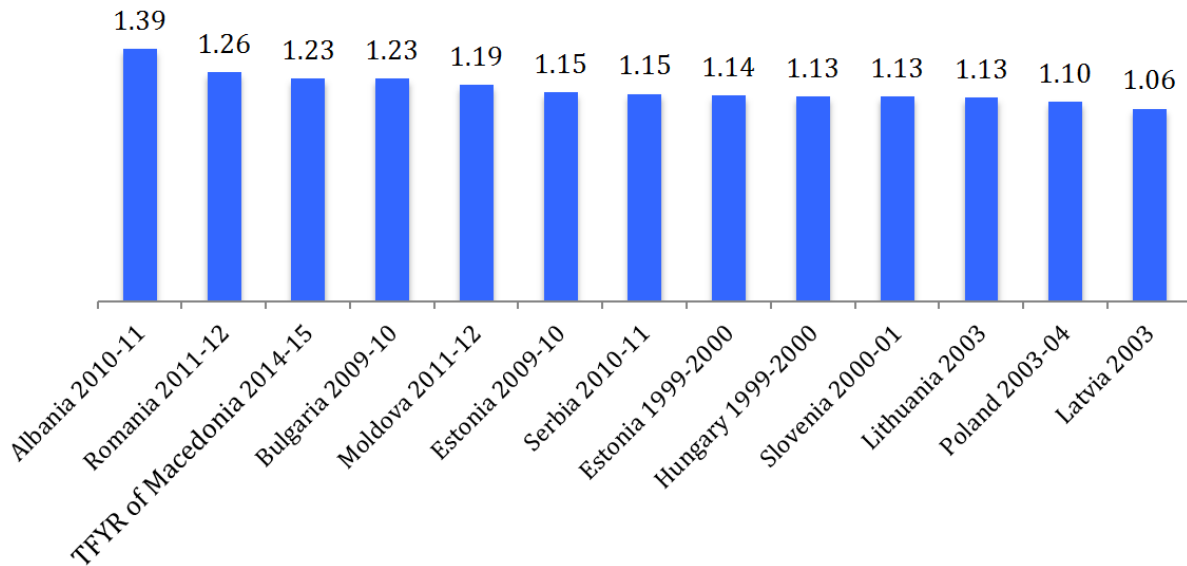


Chart 58: Distribution of time spent by women in various activities in a 24-hour average day in the transition countries of Eastern Europe

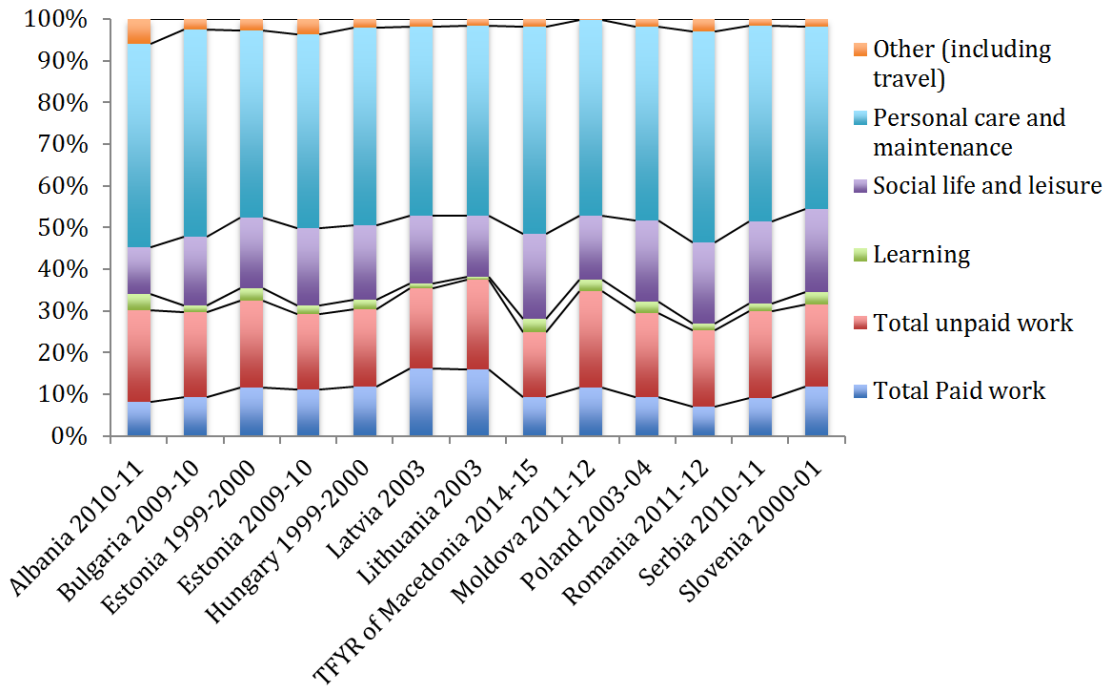
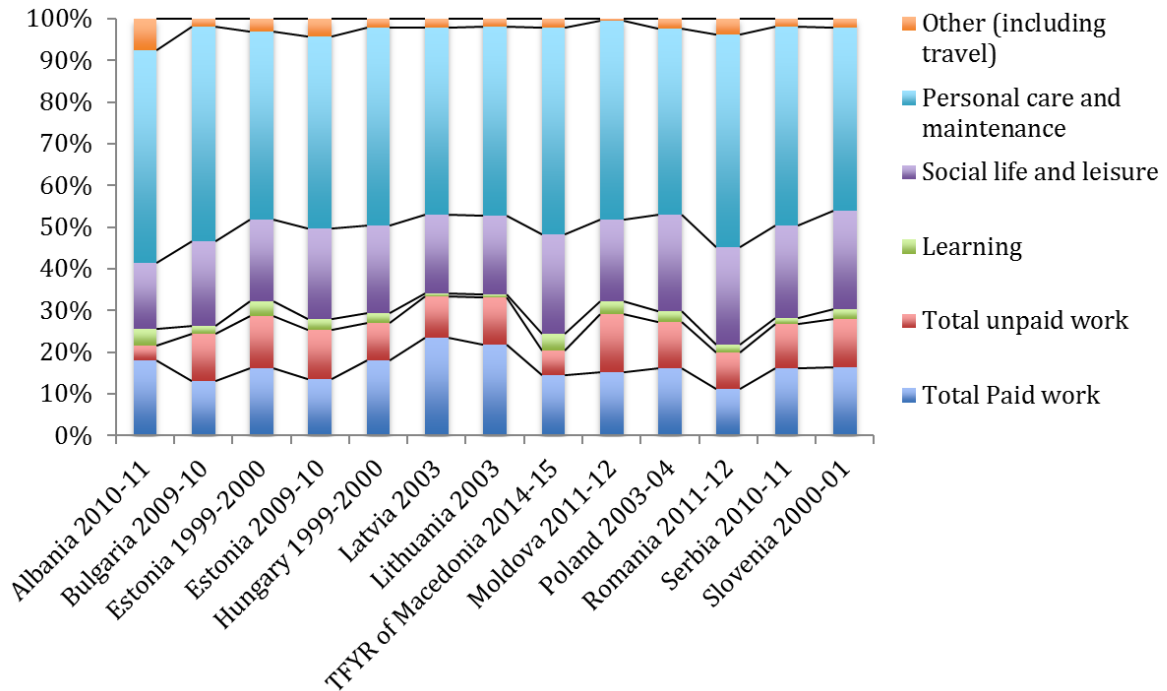


Chart 59: Distribution of time spent by men in various activities in a 24-hour average day in the transition countries of Eastern Europe



With only two countries, **North America** offers a picture of remarkable stability in time use patterns.

Women's unpaid work accounts for between 4 hours and 10 minutes and 4 hours and 20 minutes in an average day in all surveys (Chart 60). The average day of work is between 7 hours and 7 hours and 30 minutes. Women' unpaid work slightly increased (by 5 minutes) in Canada between 2005 and 2010, whereas it decreased (by 21 minutes) in the United States of America from 2003 to 2014 (with a recent increase of 3 minutes from 2012 to 2013). During the same period, men's unpaid work (Chart 61) increased (by 14 minutes) in Canada, but decreased (by 6 minutes) in the United States.

The share of unpaid work in total work accounts for 58-60 percent for women and for 38-40 percent for men (Charts 62 and 63).

The ratio of time spent in unpaid work by women and men (Chart 64) is situated between 1.5 and 1.6 in the two countries. The annual observation for the United States shows that the index is following a cyclical trend. It would be interesting to compare it with the trends in the labour market.

The ratio of time spent in paid work by women and men (Chart 65) follows similar (but not identical) trends, with values above 0.6 and occasionally 0.7. Finally, the ratio of time spent in total work (Chart 66) is for all surveys equal to 1 or above, varying between 1 and 1.05, meaning that a quasi-parity has been reached for this indicator.

Charts 67 and 68 illustrate the stability of time use patterns by sex in the two countries.

Chart 60: Average time spent by women in unpaid and paid work (in minutes per day) in North America

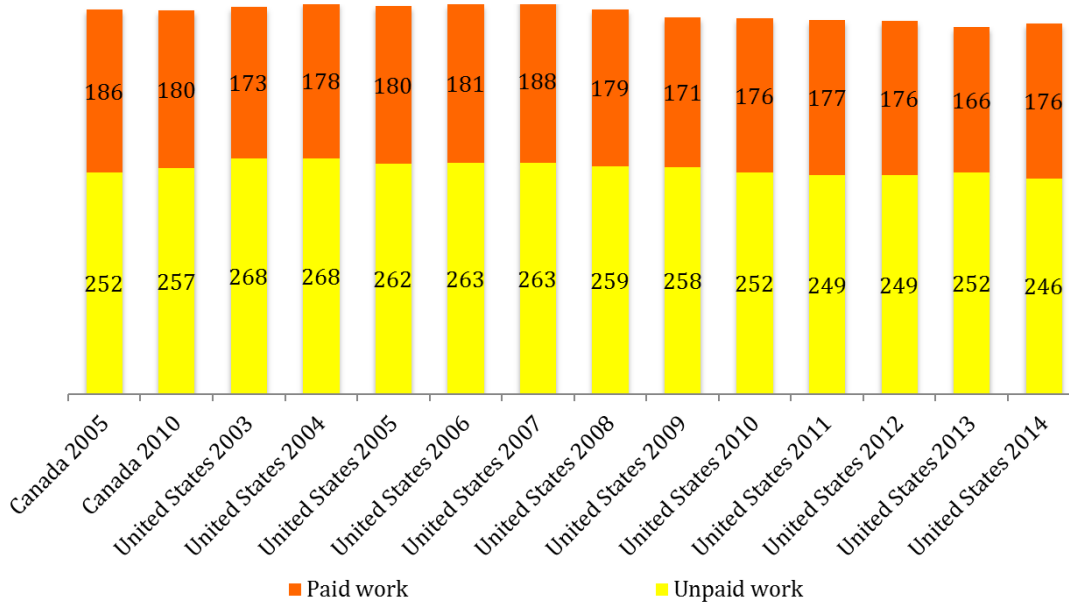


Chart 61: Average time spent by men in unpaid and paid work (in minutes per day) in North America



Chart 62: Share of unpaid and paid work in total women’s work in North America

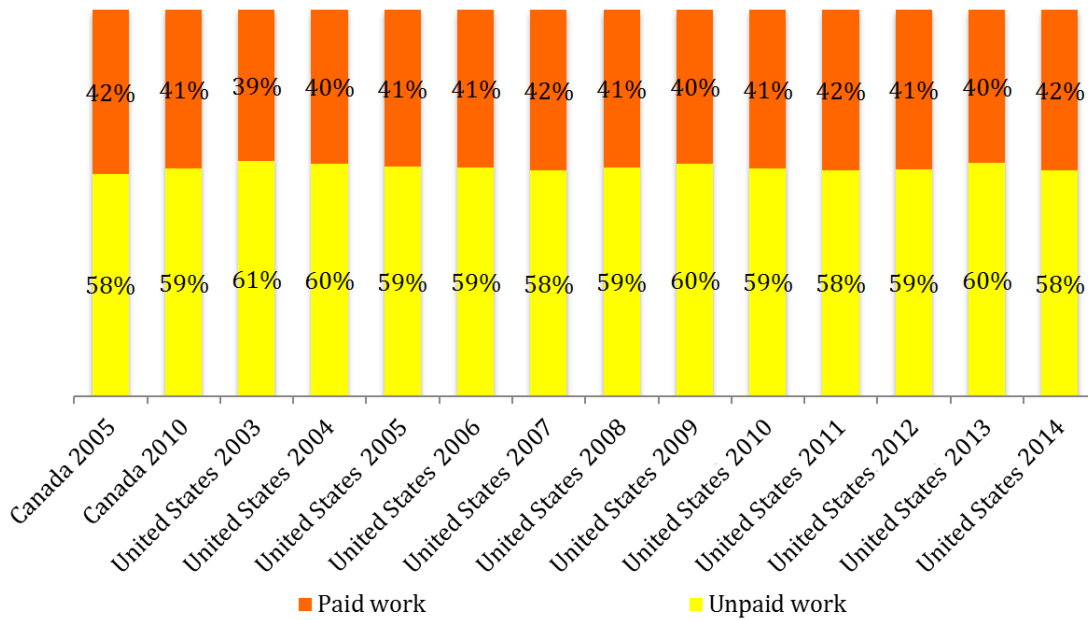


Chart 63: Share of unpaid and paid work in total men’s work in North America

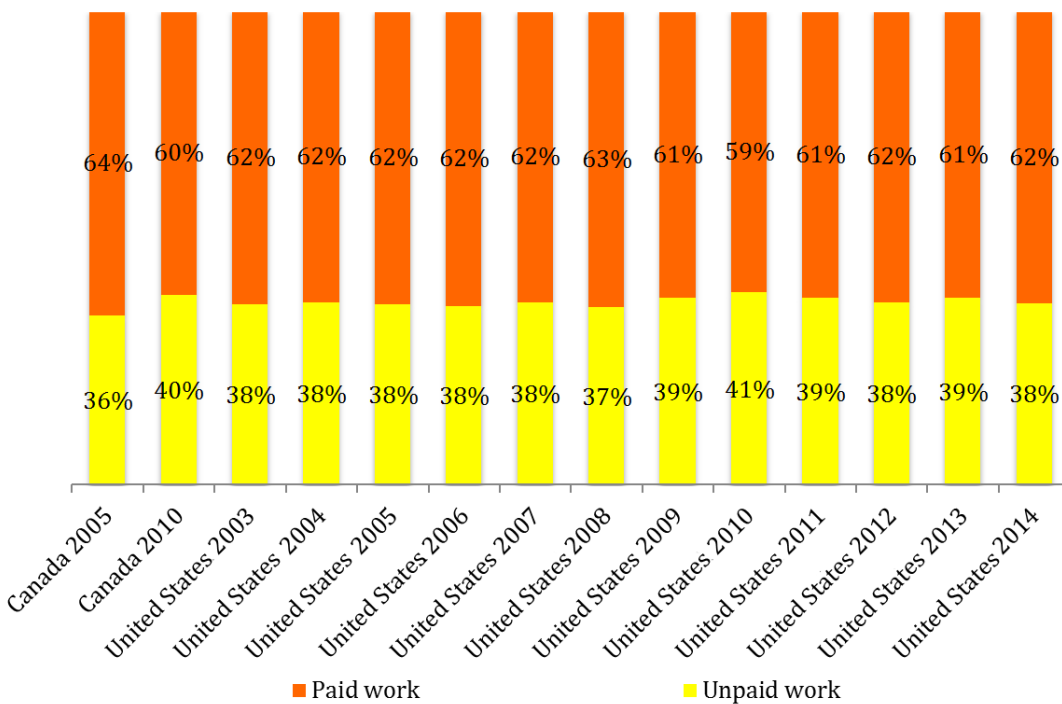


Chart 64: Number of times the time spent by women in unpaid work exceeds men's in North America

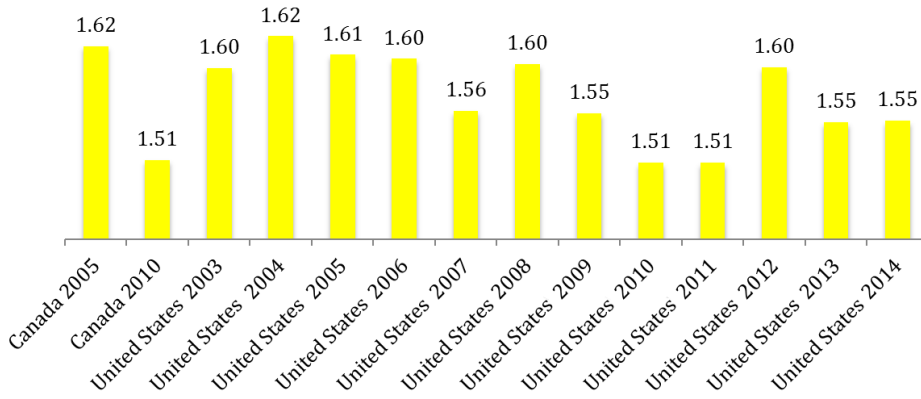


Chart 65: Number of times the time spent by women in paid work exceeds men's in North America

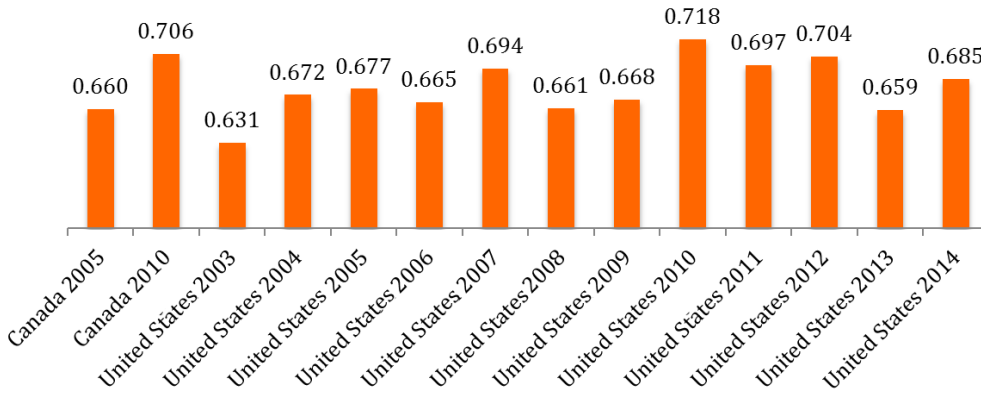


Chart 66: Number of times the time spent by women in total work exceeds men's in North America

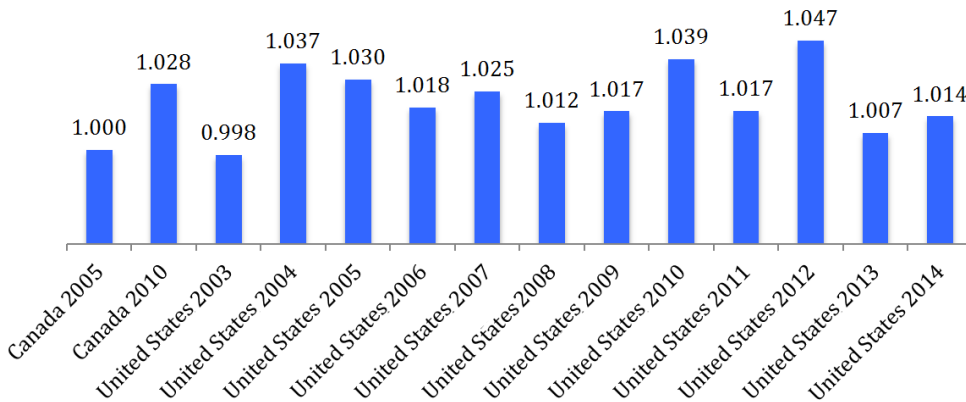


Chart 67: Distribution of time spent by women in various activities in a 24-hour average day in North America

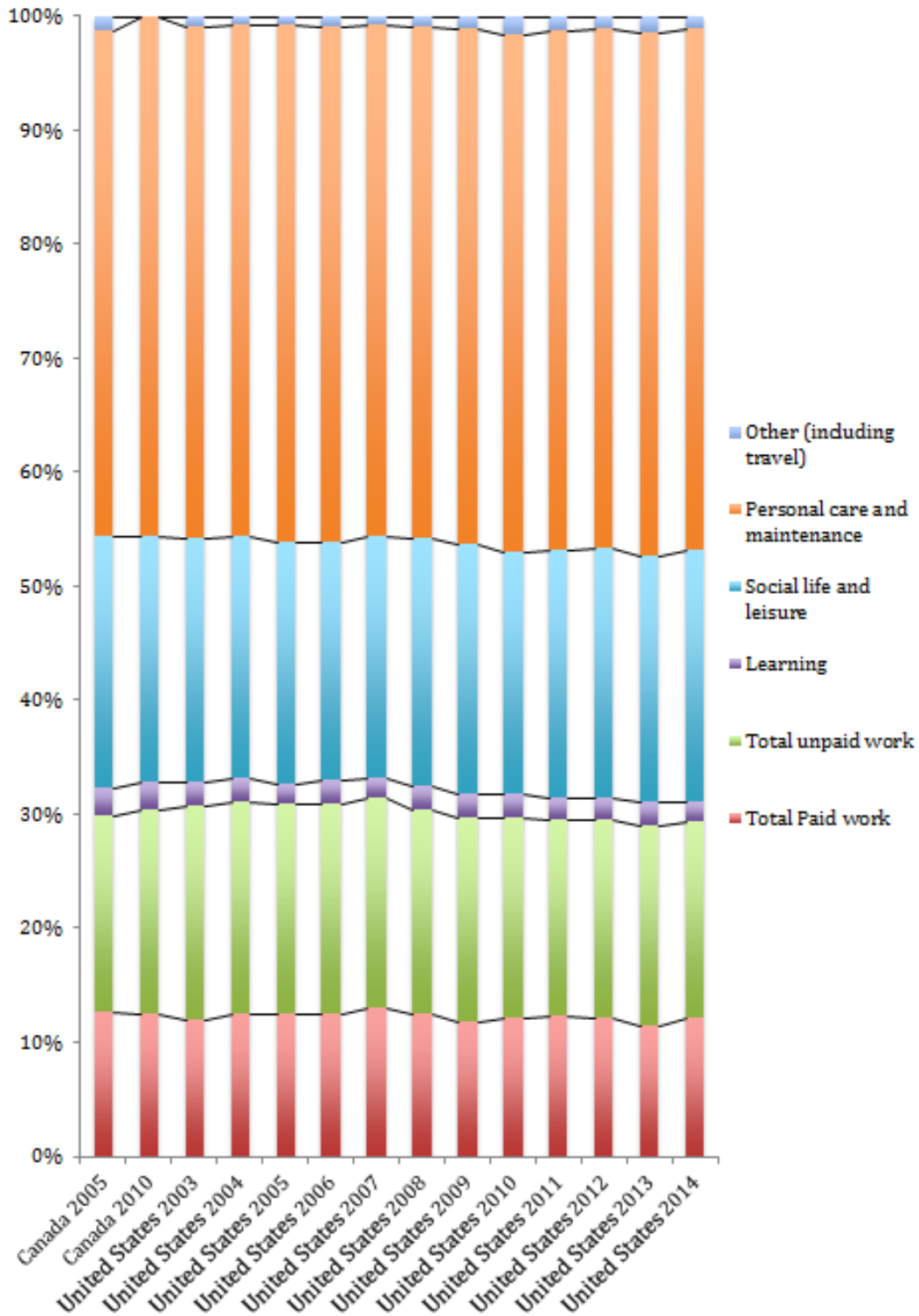
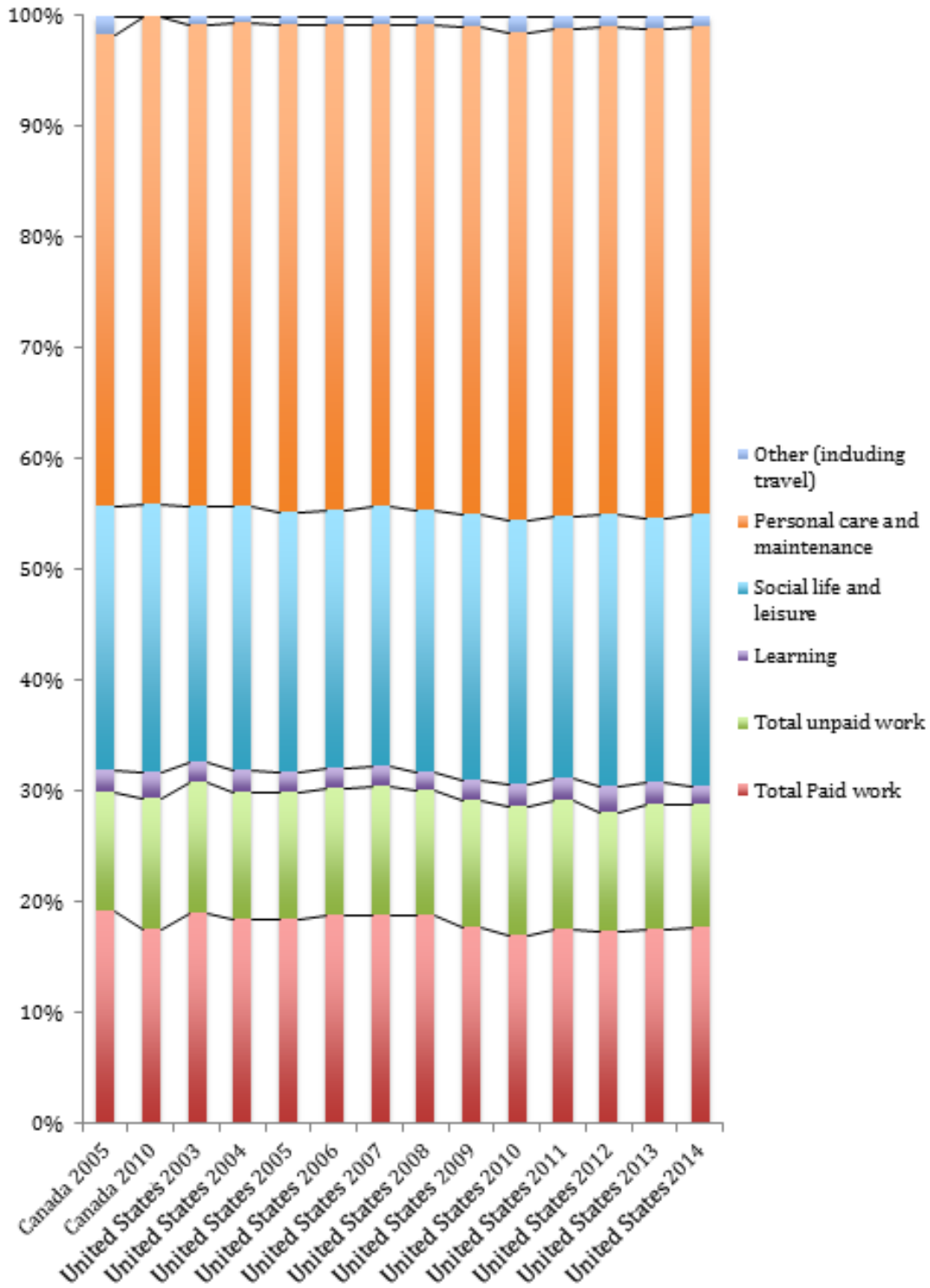


Chart 68: Distribution of time spent by men in various activities in a 24-hour average day in North America



Among the **other developed countries**, Japan presents time use patterns that vary from those in Australia and New Zealand in that men contribute to unpaid work for only 77 minutes (2011, Chart 69) or approximately half of the time they spend in the two other countries. Their contribution has increased from only 35 minutes in 2001 and 44 minutes in 2006, but remains low by developed country standards. In all three countries, time spent in total work accounts for approximately 400 minutes for both women and men (Charts 70 and 71).

While unpaid work accounts for 35 percent of men’s total work in New Zealand and for 41 percent in Australia, it is as low as 18.9 percent in Japan. As for women, their share of unpaid work in total work ranges from 60.3 percent in Japan to 63.3 percent in New Zealand and 70.8 percent in Australia (Charts 72 and 73).

The ratio of time spent in unpaid work by women and men (Chart 74), which was as high as 6.26 for Japan in 2001, dropped to 5.12 in 2006 and 3.3 in 2011. It is at 1.75 in New Zealand and 1.81 in Australia, intermediary levels by developed country standards.

The ratio of time spent in paid work ranges from 0.5 in Japan to 0.563 in New Zealand (Chart 75). For total work, the three countries are quite close to parity: 0.99 in New Zealand, 1.03 in Japan and 1.05 in Australia.

Time use patterns by sex are presented in Charts 76 and 77.

Chart 69: Average time spent by women in unpaid and paid work (in minutes per day) in other developed countries

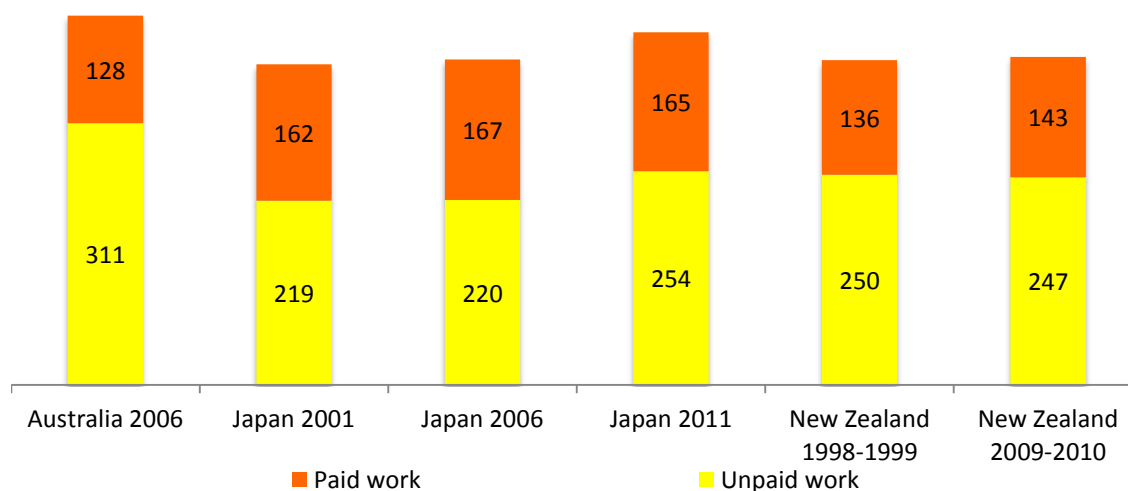


Chart 70: Average time spent by men in unpaid and paid work (in minutes per day) in other developed countries

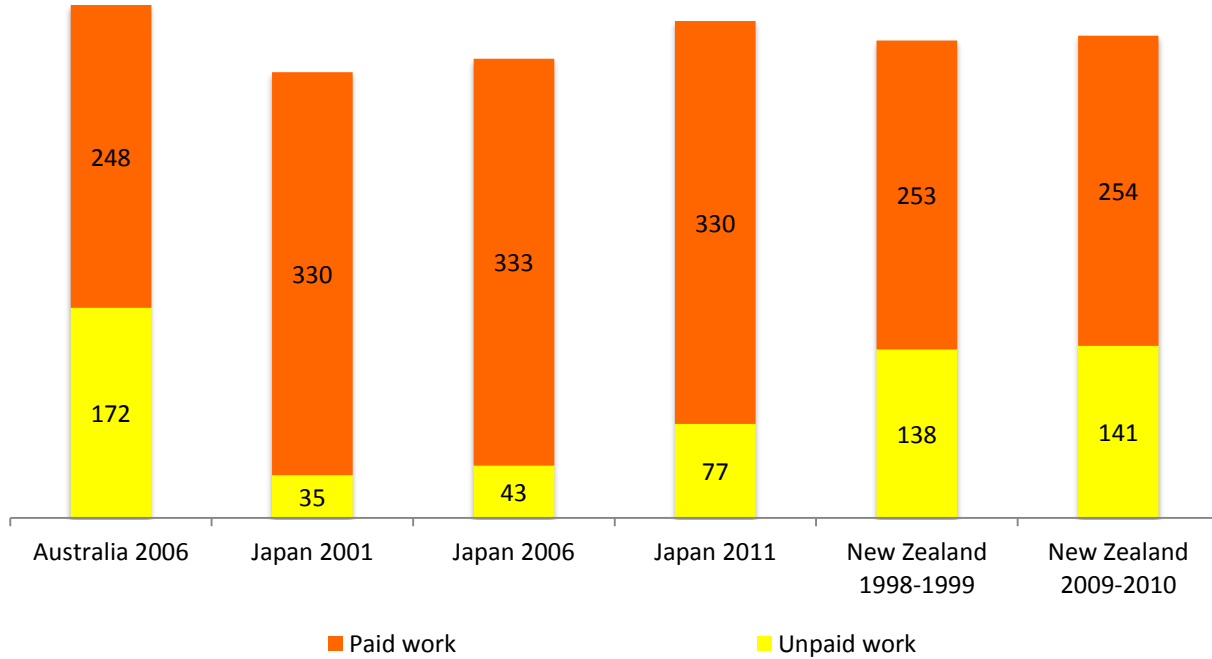


Chart 71: Share of unpaid and paid work in total women’s work in other developed countries

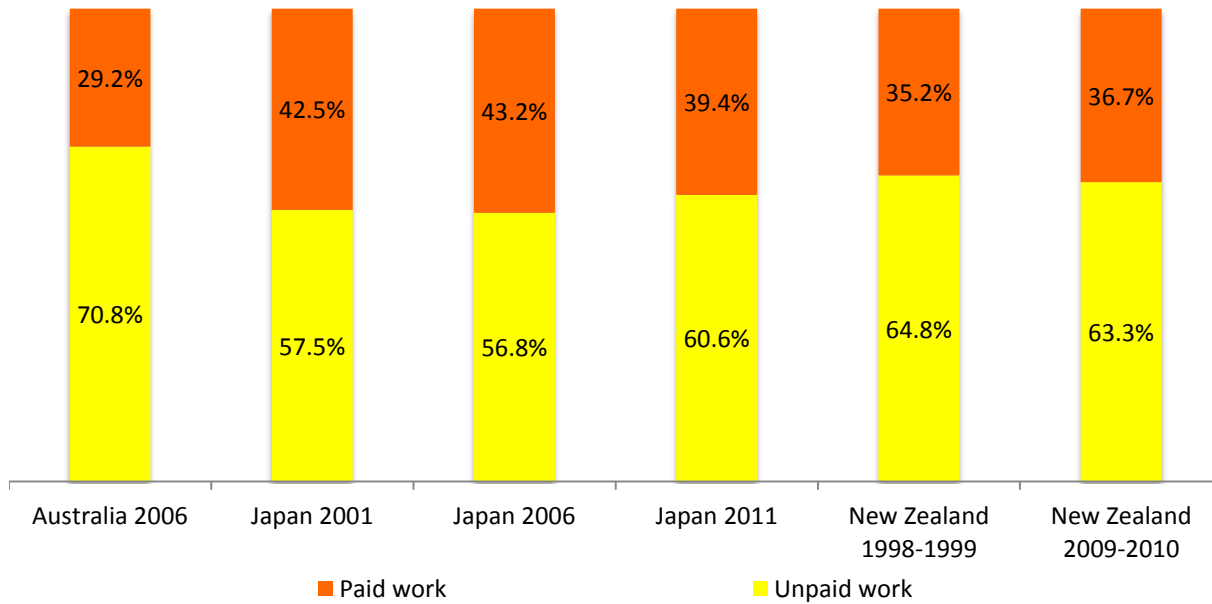


Chart 72: Share of unpaid and paid work in total men’s work in other developed countries

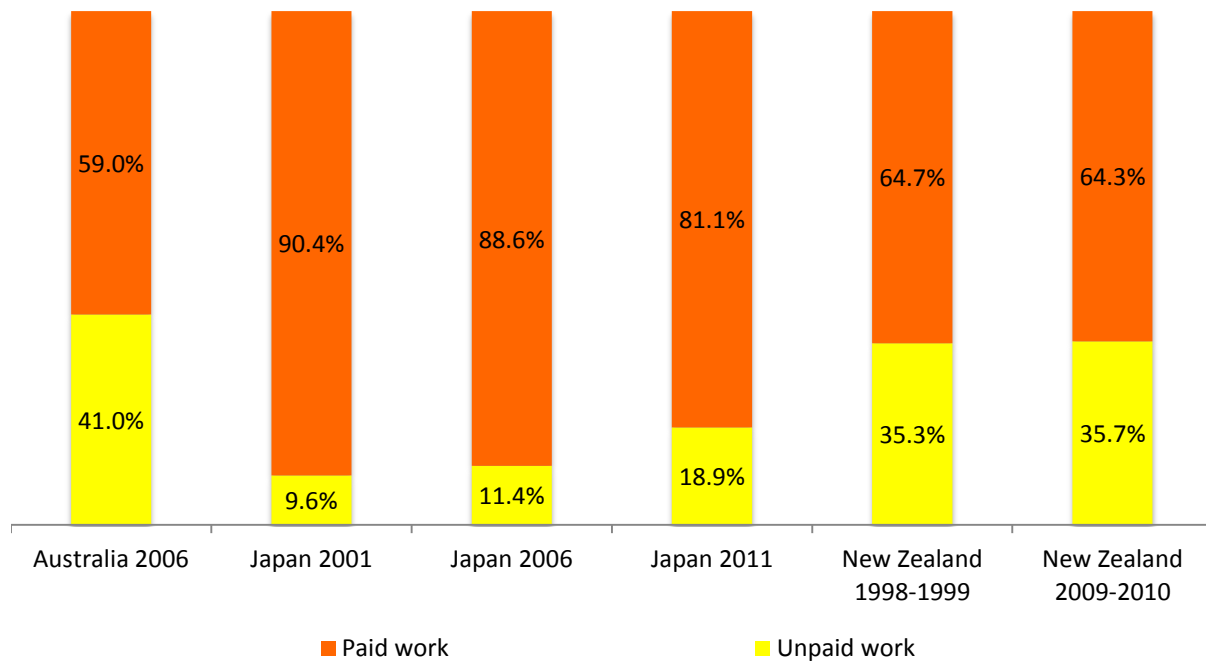


Chart 73: Number of times the time spent by women in unpaid work exceeds men’s in other developed countries

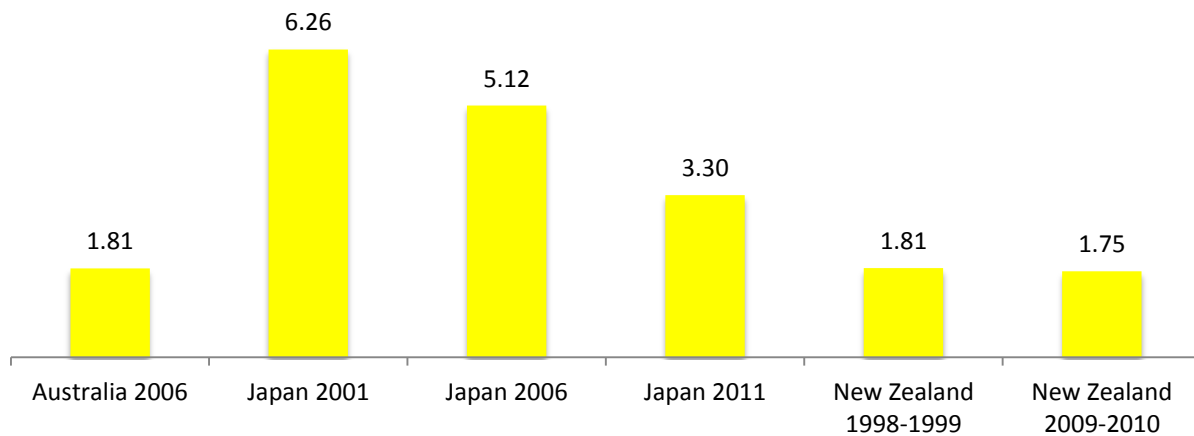


Chart 74: Number of times the time spent by women in paid work exceeds men's in other developed countries

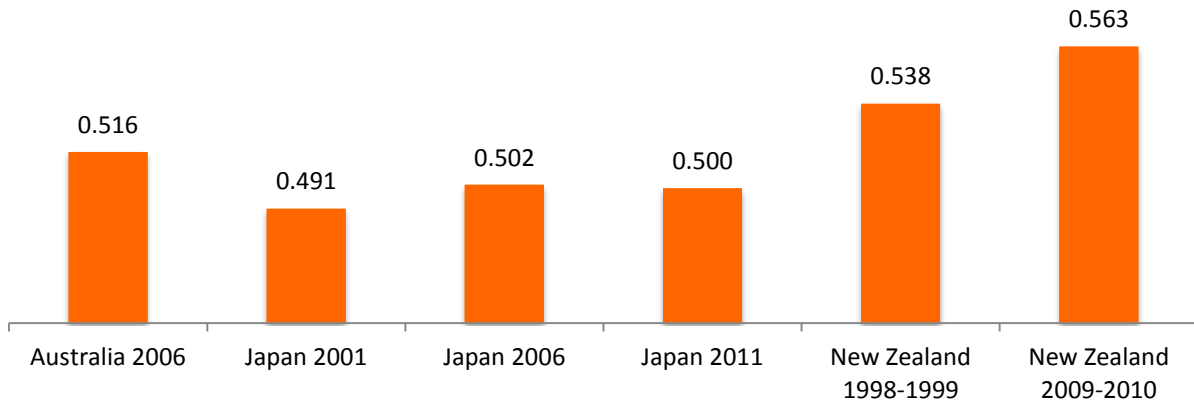


Chart 75: Number of times the time spent by women in total work exceeds men's in other developed countries

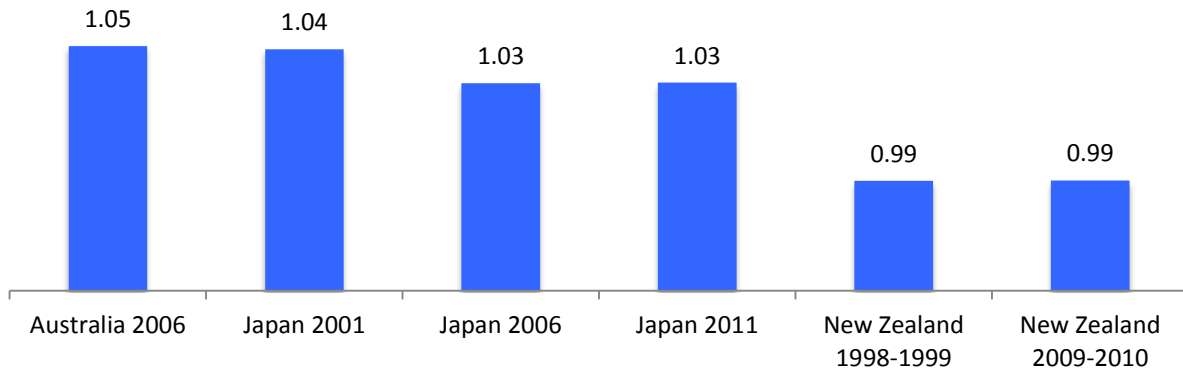


Chart 76: Distribution of time spent by women in various activities in a 24-hour average day in other developed countries

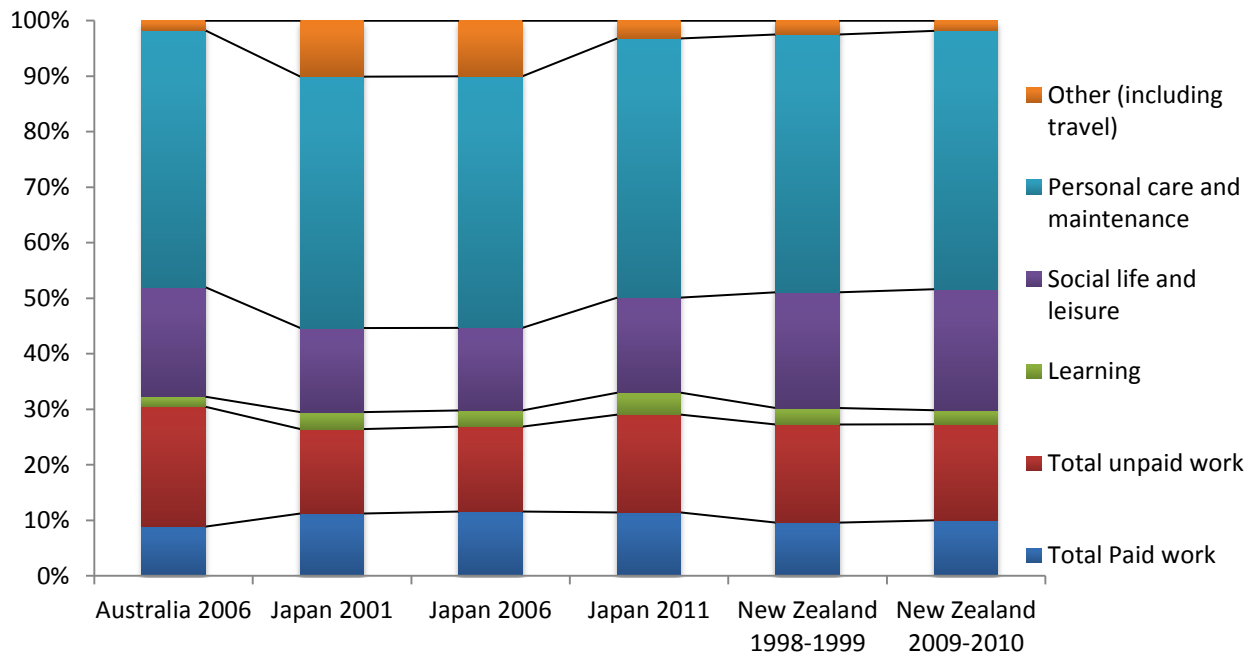
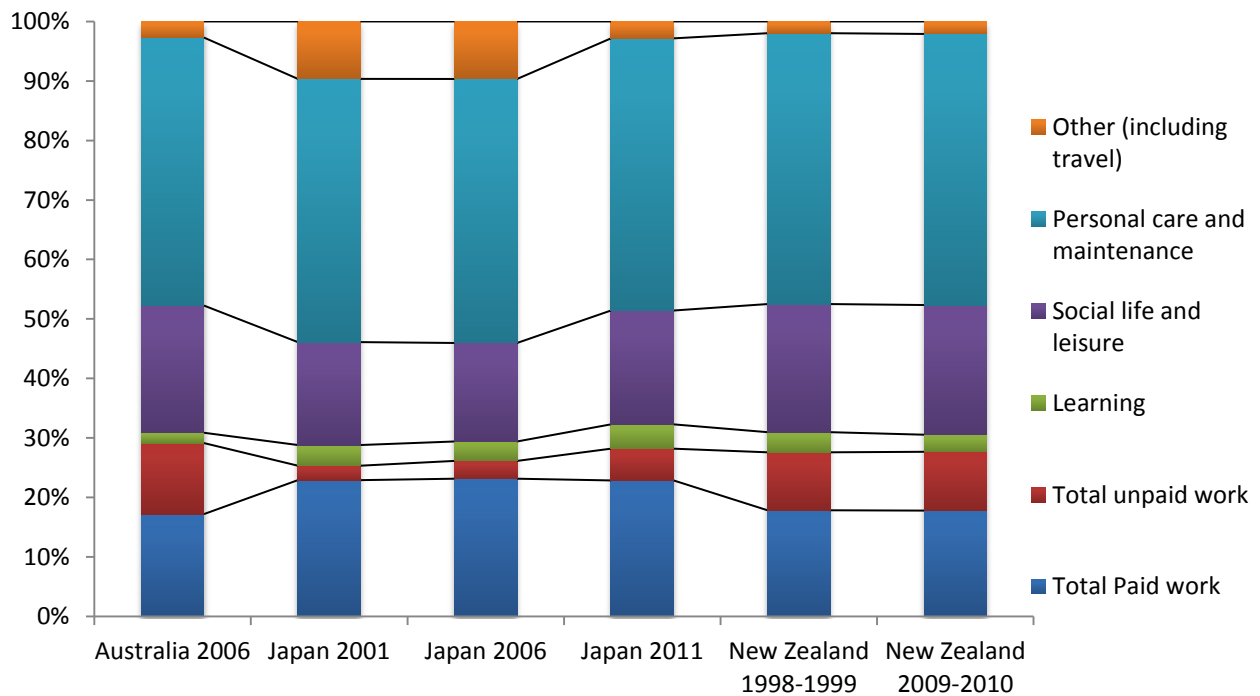


Chart 77: Distribution of time spent by men in various activities in a 24-hour average day in other developed countries



Conclusion

This study is a first step towards a more in-depth and systematic comparison of aggregate concepts such as paid work (formal and informal) and unpaid work (household chores, care work and volunteer work). This allows measurement of a major gender disparity in the world of work, between work providing income (in cash or in kind) and work ensuring the reproduction of the family. The relative share of time devoted to these various forms of work is shaped by social structures and cultural behaviours, and has an impact on the well-being of individuals and societies. Time poverty and the ‘feminization of poverty’ are, for example, two orientations of research on gender inequalities. International comparisons across regions are particularly enlightening in that they show important variations or similarities that may be rooted in the specificities of the status of women in various societies and their situation in the labour market.

Data made available to common users—the materials of the present study—are sufficiently detailed for such analyses. But at the same time, these data clearly show the limits of the exercise, which largely depends on the real content of the concepts and methodologies used to collect the data. Efforts towards a harmonization of the classification of time use activities goes in the right direction, but, as we have seen in the course of this study, there are still huge discrepancies between the main classifications currently used. In a time when developing countries are more and more involved in the implementation of time use surveys, it was important that the United Nations Statistics Division initiate the ICATUS. An example of ambiguities and ambivalence that classifications have to tackle is, for instance, the activity of caring for domestic animals, which is an important economic activity in rural societies and in developing countries, whereas it involves pets in developed societies. Similarly, hobbies such as gardening or do-it-yourself projects in developed countries are important subsistence economic activities in developing countries.

The comparative approach is difficult but necessary towards our better understanding of our ways of life and the gender inequalities they conceal.

Table A 1: Overview of the main characteristics of time use surveys across regions and countries

	Year	Period	Type of survey	Minimum age	Sample size (individuals)	Type of sample	Survey instrument	Mode of data collection	Classification used
Middle East-North Africa									
Algeria	2012	2 months	Stand-alone	12+	22,138	All eligible	One diary	Interview	HETUS
Iran	2009	3 quarters		15+			One diary	Mixed	ICATUS
Iraq	2007	2 months	Module of household	10+	6,048 househ	All eligible	One diary	Interview	Pre-listing (27)

			survey		olds				activities)
Morocco	2011 - 2012	Year	Stand-alone	7+	9,200 house- holds	Random selec- tion	One diary	Mixed	HETUS
Oman	2007 - 2008	Year	Stand-alone, subsample of household survey	15+	9,063		One diary		Pre-listing (23 activities)
State of Palestine	1999 - 2000 2012 - 2013	Year	Stand-alone	10+	8,038 4,605	Random selec- tion	One diary	Interview	ICATUS
Qatar	2012 - 2013	Year		15+	16,754		One diary		Pre-listing
Tunisia	2005 - 2006	Year	Stand-alone, subsample of household survey	15+	11,594	All eligible	Two diaries	Mixed	HETUS
Turkey	2006	Year	Stand-alone	15+	11,815	All eligible	Two diaries	Interview	HETUS
Sub-Saharan Africa									
Benin	1998	2 months	Module of household survey	6-65	12,604	All eligible	One diary	Interview	Pre-listing (63 activities)
Ethiopia	2013	1 month	Stand-alone	10+	52,262	All eligible	One diary	Interview	ICATUS
Ghana	2009	2 months	Stand-alone	10+	9,297	All eligible	One diary	Interview	ICATUS
Madagascar	2001	2 months	Stand-alone, subsample of household survey	6-65	7,749	All eligible	One diary	Interview	Pre-listing (77 activities)
Mali	2008	2 months	Stand-alone	6-65	2,249	Random selec- tion	One diary	Interview	Pre-listing (63 activities)
Mauritius	2003	2 months	Module of household survey	10+	6,480 house- holds	All eligible	One diary	Interview	ICATUS
South Africa	2000 2010	3 rounds 4 th quarter	Stand-alone	10+	14,553 30,897	Random selec- tion	One diary	Interview	ICATUS
United Republic of Tanzania	2006 2014	4 quarters	Module of household survey	5+	10,553	All eligible	One diary	Interview	ICATUS

	Year	Period	Type of survey	Minimum age	Sample size (individuals)	Type of sample	Survey instrument	Mode of data collection	Classification used
Asia									
Armenia	2004	1 month	Stand-alone	15-80	1,342	All eligible	Two diaries	Interview	HETUS
Cambodia	2004	3 months	Module of household survey	5+ (15-64)	15,000 households	All eligible	One diary	Interview	Pre-listing (22 activities)
China	2008	1 month	Stand-alone	15-74	37,142	All eligible	Two diaries	Interview	Mixed HETUS/ ICATUS
India	1998 - 1999	4 rounds	Stand-alone	6+	77,593	All eligible	Three diaries	Interview	Ad hoc list
Republic of Korea	1999 2004 2009	1 month 1 month 2 rounds	Stand-alone	10+	46,109 21,000 20,657	All eligible	Two diaries	Mixed	Ad hoc detailed
Kyrgyzstan	2010	Year	Stand-alone	12+	4,929 households	All eligible	One diary	Interview	
Mongolia	2007 2011	Quarterly	Stand-alone	12+	3,135 (7,136) 4,000	All eligible who were at home	One diary	Interview	ICATUS
Pakistan	2007	2 months	Stand-alone	10+	19,380 households	Random selection	One diary	Interview	ICATUS
Thailand	2004 2009	1 month 1 quarter	Stand-alone	10+	79,560 households 83,880 households	Random selection	One diary	Mixed	ICATUS
Latin America									
Colombia	2012 - 2013	Year	Stand-alone	10+	148,492	All eligible	Yesterday	Interview	Ad hoc detailed
Costa Rica	2004	1 month	Module of household survey	12+	32,437	All eligible	Yesterday	Interview	Ad hoc detailed
Ecuador	2012	2 months	Stand-alone	12+	20,767 households	All eligible	Week-day, week-end day	Interview	CAUTAL
El Salvador	2010	Year	Module of household	10+	3,305 house-	All eligible		Interview	Ad hoc detailed

			survey		holds				
Mexico	2002 2009	1 month 2 months	Module of household survey Stand- alone	12+	5,445 house- holds 17,000 house- holds	All eligible	Week- day, week- end day	Interview	Ad hoc detailed
Panama	2011	1 month	Stand- alone	15+	6,907	All eligible	Week- day, week- end day	Interview	Ad hoc detailed
Peru	2010		Stand- alone	12+	4,580 household s	All eligible	Week- day, week- end day	Interview	Ad hoc detailed

	Year	Period	Type of survey	Min- imum age	Sample size (indi- viduals)	Type of sample	Survey instru- ment	Mode of data collection	Classifi- cation used
Europe									
Austria	2008- 2009	Year		10+	8,200	All eligible	One diary	Mixed	HETUS
Belgium	1999 2005	Year	Module of household survey	12+	8,382 6,400	All eligible	Two diaries	Mixed	Ad hoc detailed
Denmark	2001					All eligible		Mixed	Ad hoc detailed
Finland	1979 1987 1999 2009	Year	Stand- alone	10+	3,795	All eligible	Two diaries	Mixed	Ad hoc detailed
France	1986 1999 2010	Year	Stand- alone	15+ 11+ (15+)	15,441 17,383	All eligible	Two diaries	Mixed	Ad hoc detailed
Germany	2001- 2002			10+	12,655	All eligible	Three diaries	Mixed	Ad hoc detailed
Greece	2013- 2014	Year	Stand- alone	10+		All eligible	Two diaries	Mixed	HETUS
Ireland	2005		Stand- alone	18+	1,023	All eligible	Two diaries	Mixed	Ad hoc detailed
Italy	1988- 1989 2002- 2003 2008- 2009	Year	Stand- alone	3+ (15+)	50,968	All eligible	One diary	Mixed	Ad hoc detailed
Nether- lands	2005- 2006			12+		All eligible		Mixed	Ad hoc detailed
Norway	1970 1980 1990 2000	Year	Stand- alone	16-74 16-74 16-79 9-79	4,000	All eligible	Diaries for two conse- cutive	Mixed	Ad hoc detailed

	2010			9-79			days		
Portugal	1999	2 months	Stand-alone	15+	10,013	All eligible	One diary	Interview	Ad hoc detailed
Spain	2002-2003 2009-2010	Year	Stand-alone	10+	19,295	All eligible	One diary	Mixed	HETUS
Sweden	2000-2001 2010-2011	Year	Stand-alone	20-84	7,955 diaries	All eligible	Two diaries	Mixed	Ad hoc detailed
United Kingdom	2000 2005	Year 4 months over the year	Stand-alone Module of household survey	8+ 16+	21,000 diaries 5,000 diaries	All eligible Random selection	Two diaries	Mixed Interview	Ad hoc detailed

	Year	Period	Type of survey	Minimum age	Sample size (individuals)	Type of sample	Survey instrument	Mode of data collection	Classification used
Transition									
Albania	2010-2011	Year	Stand-alone	10+	10,333 diaries	All eligible	Two diaries		HETUS
Bulgaria	2009-2010	Year	Stand-alone	10+	5,503	All eligible	Two diaries	Mixed	HETUS
Estonia	2009-2010	Year	Stand-alone	10+	7,225	All eligible	Two diaries	Mixed	HETUS
Hungary	1999-2000		Stand-alone	15-74					HETUS
Latvia	2003	8 months	Stand-alone	10+ (20-74)	3,804 diaries	All eligible	Two diaries	Mixed	HETUS
Lithuania	2003	Year	Stand-alone	10+ (20-74)	4,768 diaries	All eligible	Two diaries	Mixed	HETUS
Former Yugoslav Republic of Macedonia	2014-2015	Year	Stand-alone	10+	2,080 households	All eligible		All eligible	HETUS
Moldova	2011-2012	Year	Stand-alone	10+	10,642 households	All eligible		All eligible	HETUS
Poland	2003-2004		Stand-alone	15-64					HETUS
Romania	2011-2012	Year	Stand-alone	10+			Two diaries	Mixed	HETUS
Serbia	2010-2011	Year	Stand-alone	15+	2,340 households	All eligible	Two diaries	Mixed	HETUS
Slovenia	2000-	Year	Stand-	10+	2,364	All	Two		HETUS

	2001		alone	(20-74)	households	eligible	diaries		
North America									
Canada	2005 2010	Year	Module of household survey	15+	25,000		One diary	Computer-assisted telephone interview	
United States of America	2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	Year	Stand-alone	15+	3,375 households per month in 2003 2,190 households per month since 2004	Random selection (one person)	One diary	Computer-assisted telephone interview	ATUS
Other developed									
Australia	2006			15+					
Japan	2001, 2006 2011	1 month	Stand-alone	10+	19,982		One diary	Mixed	
New Zealand	1998- 1099 2009- 2010	Year	Stand-alone	12+	9,159	Random selection (two persons)	Two diaries	Mixed	ACTUS

Notes: Blanks mean that no information was found in the methodological documents or that the survey results were obtained from an international database (OECD for example). The mixed mode of data collection means that diaries are self-recorded by the interviewees and individual/household questionnaires are filled by interviewers.

GENERAL

- Budlender, D. 2004.** *Why should we care about unpaid carework?* New York: UNIFEM.
- Charmes, J. 2005.** “Gender and time poverty in Sub-Saharan Africa: A review of empirical evidence.” In M. Blackden and Q. Woddon, eds., *Gender, time-use and poverty in sub-Saharan Africa*, pp. 39-72. World Bank Working Paper No. 73. Washington, DC: World Bank.
- Charmes, J. and I. Hirway. 2006.** “Estimating and Understanding Informal Employment Through Time Use Studies.” Paper presented at the 9th meeting of the Delhi Group on Informal Sector Statistics. New Delhi, 11-12 May.
- Charmes, J. and M. Remaoun. 2014.** *L’emploi des Femmes en Algérie: contraintes et opportunités.* BIT Alger.
- Dumazedier, J. 1960.** “Current problems of the sociology of leisure.” *International Social Science Journal* XII(4): 522-531.
- Elson, D. 2000.** *Progress of the World’s Women 2000.* New York: UNIFEM.
- EUROSTAT. 2009.** “Harmonised European time use surveys, 2008 guidelines.” Luxembourg: European Communities.
- Friedmann, G. 1960.** “Leisure and Technical Civilization.” *International Social Science Journal* XII(4): 509-521.
- National Bureau of Statistics, United Republic of Tanzania. 2007.** “Analytical Report for Integrated Labour Force Survey ILFS 2006.” Dar es Salaam.
- SNA (System of National Accounts). 1993.** System of National Accounts. New York: Commission of the European Communities, IMF, OECD, United Nations, World Bank.
- _____. 2008.** System of National Accounts. New York: Commission of the European Communities, IMF, OECD, United Nations, World Bank.

REFERENCES FOR TIME USE SURVEYS

SUB-SAHARAN AFRICA

Benin

INSEA/PNUD (Institut Nationale de la Statistique et de l’Analyse Economique et Programme des Nations Unies pour le Développement). 1998. *Enquête emploi du temps au Bénin, Méthodologie et résultats.* Cotonou

Ethiopia

Central Statistical Agency. 2014. *How Women and Men Spend Their Time, Ethiopian Time Use Survey 2013, Main Report.* Addis Ababa.

Ghana

Ghana Statistical Service. 2012. *How Ghanaian women and men spend their time, Ghana Time-Use Survey 2009, Main Report.* Accra: GSS-UNECA.

Madagascar

INSTAT (Institut national de la statistique) 2001. *EPM 2001—Module Emploi du Temps.* INSTAT-DSM/PNUD-MAG/97/007. Antananarivo.

Mali

INSTAT (Institut national de la statistique). 2009. *Rapport de l’enquête malienne sur l’utilisation du temps.* EMUT 2008. Bamako.

Mauritius

Republic of Mauritius, Central Statistics Office. 2004. *Continuous Multi-Purpose Household Survey 2003, Main results of the time-use study.*

South Africa

Statistics South Africa. 2001. *How South African Women and Men Spend Their Time, A survey of time use.* Pretoria.

_____. 2013. *A survey of time use 2010.* Pretoria.

United Republic of Tanzania

Fontana, M., and L. Natali. 2008. "Gendered Patterns of Time Use in Tanzania: Public Investment in Infrastructure Can Help." Paper prepared for the International Food Policy Research Institute project on Evaluating the Long-Term Impact of Gender-focussed Policy Interventions.

National Bureau of Statistics, United Republic of Tanzania. 2007. *Analytical Report for Integrated Labour Force Survey ILFS 2006*. Dar es Salaam.

_____. 2015. *Analytical Report for Integrated Labour Force Survey 2014, Tanzania mainland*. Dar es Salaam.

MIDDLE EAST AND NORTH AFRICA

Algeria

Office National des Statistiques. 2013. *Enquête Nationale Emploi du Temps ENET 2012*. Alger.

Islamic Republic of Iran

Statistical Centre of the Islamic Republic of Iran. 2012a. *Summary findings of time use survey in urban areas, Autumn 2008 (23 September 2008-22 December 2008)*.

_____. 2012b. *Summary findings of time use survey in urban areas, Summer 2009 (22 June-22 September)*.

_____. 2012c. *Summary findings of time use survey in urban areas, Winter 2009 (22 December 2008-20 March 2009)*.

Iraq

COSIT (Central Organization for Statistics and Information Technology) of Iraq, KRSO (Kurdistan Region Statistics Organization) and World Bank. 2008. *Iraq Household Socio-Economic Survey IHSES 2007*. Volumes I-III. Baghdad.

UNESCWA (United Nations Economic and Social Commission for West Asia) and COSIT (Central Organization for Statistics and Information Technology). 2010. [Time use in gender statistics in Iraq](#). Amman.

Morocco

Royaume du Maroc, Haut Commissariat au Plan. 2014a. *Le Budget temps ou l'Enquête Nationale sur l'Emploi du Temps au Maroc 2011-12, Présentation des premiers résultats par Monsieur Ahmed LAHLIMI ALAMI, Haut-Commissaire au Plan*. Rabat.

_____. 2014b. *Le Budget temps ou l'Enquête Nationale sur l'Emploi du Temps au Maroc 2011-12, Principaux résultats*. Rabat.

Oman

Sultanate of Oman. 2011. *Time use survey for the period 20/05/2007-19/05/2008*. Presented at the Arab Time Use statistics workshop, Amman, 25-28 April.

State of Palestine

Palestinian Bureau of Statistics. 2000. *Time Use in the Palestinian Territory: Main Findings of Survey 1999-2000*. Ramallah.

Palestinian Bureau of Statistics. 2014. *Main Findings of Time Use Survey 2012/13*. Ramallah.

Tunisia

République Tunisienne, Ministère des Affaires de la Femme. 2011. *Budget temps des femmes et des hommes en Tunisie, 2005-06*. Tunis.

Turkey

Turkstat. 2007. "Results of the Time Use Survey 2006." Press Release No. 119, 25 July. Ankara. See [tables](#) for more details.

ASIA

Armenia

National Statistical Service of the Republic of Armenia. 2005. *Armenia time use pilot survey, 2004 July 1-31*. Yerevan.

_____. 2009. *Report on Time Use Sample Survey in the Republic of Armenia, 2008 October 1-31*. Yerevan.

Cambodia

Hang Lina. 2013. "2004 time use survey in Cambodia." International seminar on gender statistics, Incheon, Republic of Korea, 12-14 November.

Uy Bossadine. 2005. "Time Use Profile of Cambodia 2004." Workshop of final statistical analyses of CSES 2003-04, Phnom Penh Hotel, 16-17 June.

China

Liu Wei. 2010a. "2008 time use survey in China." International Workshop on Social Statistics, Beijing, China, 22-24 November.

_____. 2010b. "Unpaid Housework, Women Burden More." Global Forum on Gender Statistics, Manila, Philippines, 11-13 October.

National Bureau of Statistics. 2009. *Time Use Patterns in China: Abstract of the 2008 Time Use Survey*. China Statistics Press.

Xiao-Yuan Dong and Xinli An. 2012. *Gender Patterns and Value of Unpaid Work, Findings from China's First Large-Scale Time Use Survey*. UNRISD Research Paper. Geneva.

India

Gupta, P. 2007. *Time Use Survey in India*.

Ministry of Statistics and Programme Implementation. 2000. *Report of the India Time Use Survey 1998*. New Delhi.

Narasimhan, R. L., and R. N. Pandey. 1999. *Some main results of the pilot time use survey in India and their policy implications*. New Delhi.

Pandey, R. N. 1999. *Operational Issues in Conducting the Pilot Time Use Survey in India*. Delhi.

Rajivan, A. 1999. "Policy Implication for Gender Equity: The India Time Use Survey 1998-1999." International Seminar on Time Use Surveys, Ahmedabad, 7-10 December.

Republic of Korea

Jonghee Choi. 2009. "New Approaches of the 2009 Korean Time Use Survey." Paper presented at the IATUR Conference.

[Tables for time use surveys 2001, 2004 and 2009.](#)

Kyrgyzstan

National Statistics Committee. 2014. *Results of the time use survey in Kyrgyzstan, 2010*. Presented at the Time Use Survey Data Analysis Workshop, Bangkok, 11-15 October.

Mongolia

NSO (National Statistical Office of Mongolia). 2009. *Report of the time-use survey 2007*. Ulanbaatar: NSO and UNDP.

_____. 2014. *Time Use Survey Mongolia*. Presented at the Time Use Survey Data Analysis Workshop, Bangkok, 11-15 October.

Pakistan

Federal Bureau of Statistics. 2009. *Time Use Survey 2007*. Islamabad.

Thailand

National Statistical Office. 2014. *The time use survey in Thailand*. Presented at the Time Use Survey Data Analysis Workshop, Bangkok, 11-15 October.

[Tables for time use surveys 2001, 2004 and 2009.](#)

General references

OECD (Organisation for Economic Co-operation and Development). 2012. "[How Do People in the Asia/Pacific Region Spend their Time?](#)" In *Society at a Glance: Asia/Pacific 2011*. Paris: OECD Publishing.

_____. 2014. "[Time use across the world.](#)" Gender data portal.

LATIN AMERICA**Brazil**

IBGE (Instituto Brasileiro de Geografia e Estadística). 2014. *First Results of the Brazilian Pilot Time Use Survey 2009*. Presented at the 5th Forum on Gender Statistics, Aguascalientes, Mexico, 3-5 November.

Colombia

DANE (Departamento Administrativo Nacional de Estadística). 2013. "Encuesta nacional de uso del tiempo (ENUT), Año 2012-2013 Datos definitivos." Diciembre 5 de 2013, Boletín de Prensa, Bogotá.

_____. 2014. *Medición de la Economía del Cuidado*. Bogotá.

Data are available at the [DANE website](#).

Costa Rica

Comisión Técnica Interinstitucional de Contabilización del Trabajo Femenino. 2008. *¿2 + 2 = 6? El trabajo que hacen mujeres y hombres en Costa Rica no se cuenta igual. Principales Resultados del Módulo de Uso del Tiempo 2004*. San José.

Cuba

Oficina Nacional de Estadísticas. 2002. *Encuesta sobre el uso del tiempo*. La Habana.

Ecuador

INEC (Instituto Nacional de Estadística y Censos). 2013a. *Metodología de la Encuesta Específica de Uso del Tiempo 2013*. Quito.

_____. 2013b. [Plan de tabulados EUT](#).

_____. 2014. *Encuesta de Uso del Tiempo*. Quito.

El Salvador

Dirección General de Estadística y Censos. 2012. *Principales Resultados de Encuesta del Uso del Tiempo*.

Mexico

INEGI (Instituto Nacional de Estadística y Geografía). 2005. *Encuesta Nacional sobre el Uso del Tiempo ENUT 2002, Tabulados básicos definitivos*. Aguascalientes.

_____. 2010a. *Clasificación mexicana de actividades de uso del tiempo CMAUT*. Aguascalientes.

_____. 2010b. *Encuesta Nacional sobre el Uso del Tiempo ENUT 2009, Metodología y tabulados básicos*. Aguascalientes.

Tables are available at the [INEGI website](#).

Panama

INEC (Instituto Nacional de Estadística y Censo). 2013a. *Encuesta De Uso Del Tiempo, Comentarios*.

_____. 2013b. *Encuesta De Uso Del Tiempo, Síntesis metodológica y indicadores generados*.

_____. 2013c. *Informe Sobre La Planificación Y Ejecución De La Encuesta De Uso Del Tiempo*.

Tables are available at the [INEC website](#).

Peru

INEI (Instituto Nacional de Estadística e Informática). 2011. *Encuesta Nacional De Uso Del Tiempo 2010, Principales Resultados*. Lima.

Uruguay

INE (Instituto Nacional de Estadística). 2008. *Uso del tiempo y trabajo no remunerado en el Uruguay, Módulo de la Encuesta Continua de Hogares*. Septiembre 2007. Montevideo.

_____. 2014. *Uso Del Tiempo Y Trabajo No Remunerado En Uruguay 2013*.

EUROPE

Several countries offer the opportunity for creating tables on their website. Links are listed by country name.

[Belgium](#)

[Estonia](#)

[Finland](#)

[Netherlands](#)

[Norway](#)

[Portugal](#)

[Spain](#)

[Sweden](#)

Multinational websites

[Time use and lifestyle](#)

[HETUS](#)

[OECD](#)

[OECD gender data portal](#)

[Centre for Time Use Research, University of Oxford](#)

[UN Statistics Division](#)

Austria

Statistik Austria. 2009. *Zeitverwendung 2008/09, Ein Überblick über geschlechtsspezifische Unterschiede*. Wien.

Belgium

Glorieux, I., J. Minnen and T. P. van Tienoven. 2008. *Une semaine en Belgique. Résultats de l'enquête 2005 sur l'emploi du temps en Belgique EET'05*. Brussels: Vrije Universiteit.

France

Dumontier, F., et J. L. Pan Ké Shon. 2000. *Enquête emploi du temps 1998-99, Description des activités quotidiennes*. INSEE Résultats. Paris.

Ricroch, L., et B. Roumier. 2011. *Depuis 11 ans, moins de tâches ménagères, plus d'Internet*. INSEE Première, No. 1377. See [tables](#) for more details.

Greece

ELSTAT (Hellenic Statistical Authority). 2014. *Time Use Survey 2013-14*. Press release. Athens.

Ireland

Mc Ginnity, F., H. Russell, J. Williams and S. Blackwell. 2005. *Time Use in Ireland 2005, Survey Report*. Dublin.

Italy

Istat (Italian National Institut of Statistics). 2007. *L'uso del tempo, Indagine multiscopo sulle famiglie "Uso del tempo" Anni 2002-2003*. [Tables and survey 2008-2009](#).

Norway

[Tables online at SSB Norway](#).

Portugal

Instituto Nacional de Estatística. 2001. *Inquérito à Ocupação do Tempo, Principais Resultados 1999*. Lisboa.

Spain

Instituto Nacional de Estadística. 2004. *Encuesta de Empleo del Tiempo 2002-2003, Tomo I. Resultados Nacionales*. Madrid.

Sweden

Statistics Sweden. 2003. *Tid för vardagsliv, Kvinnors och mäns tidsanvändning 1990/91 och 2000/01 (Time for everyday life, Women's and men's time use 1990/91 and 2000/01)*. Living Conditions Report No. 99.

———. 2012. *Nu för tiden, En undersökning om svenska folkets tidsanvändning år 2010/11 (Swedish Time Use Survey 2010/11)*. Living Conditions Report No. 123.

United Kingdom

Lader, D., S. Short and J. Gershuny. 2006. *The Time Use Survey 2000, How we spend our time*. London: Office for National Statistics.

General

EUROSTAT. 2004. *How Europeans spend their time, Everyday life of women and men 1998-2002*. Luxemburg.

TRANSITION COUNTRIES

Albania

Institute of Statistics. 2011. *Albania Time Use Survey 2010-2011*. Tirana.

Bulgaria

National Statistical Institute. 2011. *2009-2010 Time Use Survey, Basic Results*. Sofia.

For more information, see online [tables](#)

Estonia

[Tables](#) can be created online.

Former Yugoslave Republic of Macedonia

Државен завод за статистика (State Statistical Office). 2015. *АНКЕТА за користење на времето, 2014/2015 година (Time use survey, 2014/2015)*. Скопје, Статистички преглед / Државен завод за статистика. Население и социјални статистики (Skopje, Statistical Review, State Statistical Office, Population and Social Statistics).

Moldova

Biroul Național de Statistică. 2013. *Utilizarea timpului în Republica Moldova, Sinteză*. Chișinău.

Statistica Moldovei. 2013. [Utilizarea timpului în Republica Moldova, Principalele rezultate ale cercetării „Utilizarea timpului”](#)

Romania

National Institute of Statistics. 2013. *Time use in Romania*. Press release No. 307 of 20 December. Bucharest.

Serbia

Statistical Office of the Republic of Serbia. 2012. *Time Use in the Republic of Serbia 2010-11*. Belgrade.

NORTH AMERICA

Canada

Statistics Canada. 2011. *General Social Survey—2010, Overview of the Time Use of Canadians* Ottawa. For more click [here](#).

United States

Bureau of Labor Statistics. 2011. “American time use survey 2010 results.” News release. For more click [here](#).

Bureau of Labor Statistics and US Census Bureau. 2014. *American time use survey user’s guide*.

OTHER DEVELOPED COUNTRIES

Australia

For more click [here](#).

Japan

For information in English click [here](#); see also [statistical tables](#).

New Zealand

Statistics New Zealand. 2011. *Time Use Survey 2009/10*. Wellington. See [tables](#) for more data.

UNDP Human Development Report Office
304 E. 45th Street, 12th Floor
New York, NY 10017, USA
Tel: +1 212-906-3661
Fax: +1 212-906-5161
<http://hdr.undp.org/>

Copyright © 2015
by the United Nations Development Programme
1 UN Plaza, New York, NY 10017, USA

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission. This paper does not represent the official views of the United Nations Development Programme, and any errors or omissions are the authors' own.