

## Concepts in the Danish Working Time Accounts (WTA)

For a description of the transition from concepts in the WTA to the concepts in the National Accounts, reference is made to the publications describing the National Accounts.

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### Employment

Average employment comprises of the average number of persons who every day during the reference period have been paid either as self-employed, assisting spouse or as employee in their primary job. Assisting spouses who have transferred income from the self-employed company's business are included. Working proprietors are included, if it is estimated that there is sufficient activity to constitute a job, based on information from administrative sources. Unpaid family workers are generally not included. Employment (and jobs) also comprises subsidized employment if the person is paid. Persons who are temporarily absent for any reason but are attached to a workplace in the form of having a job to return to, are counted as being employed. Persons who have not received any wages for a period of 45 days, but who have subsequently returned to the same employer are counted in the period without any payment of wages. Leave from employment comprises persons on maternity leave and sickness leave. Until 2010 leave also included persons on child-care leave.

As it is possible to be on part-time leave, the different types of leave and employment can consequently take place at the same time.

For the same reason it is no longer possible to add the number of persons to the different types of leave together with the number of primary jobs and consequently deduct the number of persons in employment.

$$\begin{aligned} \text{number of employed} &\leq \\ &\quad \text{number of primary jobs} \\ &\quad + \text{persons on childcare leave} \\ &\quad + \text{persons on sickness leave} \\ &\quad + \text{persons on maternity leave} \end{aligned}$$

$$\begin{aligned} \text{Just as} \\ \text{number of persons on leave} &\leq \\ &\quad \text{number of persons on childcare leave} \\ &\quad + \text{persons on sickness leave} \\ &\quad + \text{persons on maternity leave} \end{aligned}$$

$$\begin{aligned}
 \text{number of sideline employed} &\leq \\
 &\text{number of sideline jobs} \\
 &+ \text{number on childcare leave from sideline jobs} \\
 &+ \text{number on sickness leave from sideline jobs} \\
 &+ \text{number on maternity leave from sideline jobs}
 \end{aligned}$$

## Jobs

The average number of jobs comprises both primary employment of persons employed and any sideline jobs held by the person. Persons who have not received any pay for a period of up to 45 days, but who have subsequently returned to the same employer are counted in the period without any payment of wages. Persons who are temporarily absent from work due to leave are not included in the estimation of jobs in the WTA. The leave is due to childbirth or illness, and until 2010 also include childcare leave. In order for sick leave to be excluded in the calculation of jobs, the duration must be beyond the employer period (where the entire period of absence then is subtracted). If the person on leave does not receive pay during absence, the leave period have a maximum duration of 3 months. Employment of less than 1 hour of paid work per week is excluded from the delimitation of jobs. The same requirement applies to the delimitation of persons in employment. However, 1 hour of paid work per week during leave is not necessary. Subsequently, there is the following relation between the number of jobs and persons employed:

$$\text{Number of jobs} = \text{number of primary jobs} + \text{and number of sideline jobs}$$

## Hours worked

Hours worked (sometimes referred as hours actually worked) are defined as hours paid by employers, including paid overtime and excluding paid hours of absence. Paid meal breaks are regarded as hours of availability and are included in hours worked. Paid hours of overtime are defined as the number of paid hours worked in excess of normal paid hours (i.e. contractual hours) and include extra hours of work for part-time employed without additional overtime pay. Hours worked include hours paid by employers, including the hours in jobs that are not part of the person's primary job. It is not possible to obtain detailed information on unpaid overtime hours worked as well as criminal hours of work (including black work). Consequently, unpaid hours and criminal hours of work are excluded from the estimation of hours worked in the Working Time Accounts<sup>1</sup>.

Hours worked during the month is estimated on the basis of the following relation:

*Number of hours worked during the month*

= *number of paid hours during the month*

$$* \left( \frac{\text{Hours of work during the year}}{\text{Paid hours during the year}} \right)$$

$$* \frac{\frac{\text{Average number of hours worked per job during the month}}{\text{Average number of hours worked per job during the year}}}{\frac{\text{Average number of paid hours per job during the year}}{\text{Average number of paid hours per job during the month}}}$$

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<sup>1</sup> However, the National Accounts contain supplements for unpaid overtime work and criminal work.

The first part, paid hours during the month, comprises information on all persons in employment, which is derived from the labour market accounts (LMA) and used in the WTA<sup>2</sup>. During the projection period the WTA receive information on paid hours during the month from the statistics on employees in employment.

The second part, the relation between hours worked and paid hours during the year, is estimated on the basis of the structural statistics on earnings in order to convert the concept of paid hours into hours worked, and thereby taking into account that not all paid hours are necessarily performed, as the employed may be entitled to paid absence.

The last part is a redistribution of hours throughout the year, where the development in paid hours does not follow the development in the number of hours worked throughout the months of the year, as absence, e.g. holidays, sickness, public holidays are not equally distributed throughout the months of the year.

It is not possible to obtain detailed information on unpaid overtime hours worked as well as criminal hours of work (including black work). Consequently, unpaid hours and criminal hours of work are excluded from the estimation of hours worked in the Working Time Accounts<sup>3</sup>.

### **Recalculation of hours worked December 2022**

For the release of the third quarter 2022, a recalculation of the hours worked back to 2008 has been made. New sources from the regional and local payroll systems on absences of employees with quasi official employment relationships for the years 2015 to 2021 have been incorporated, so that the calculation basis in relation to hours worked is considerably larger and covers a much broader range of branches and sectors than before. On the basis of the new and old data, a monthly redistribution factor per year has been calculated, in the same way as described above. Then an average monthly allocation factor has been made based on the 7 years available for the whole time series.

## **Compensation of employees**

Compensation of employees in the WTA includes compensation of employees in cash or in kind which the employer pays to an employee for work performed over a period. Conceptually, compensation of employees in the WTA is identical to the one published in the statistics on employment in businesses. The compensation of employees in the WTA comprises A-income, salaries, fees, etc., including holiday allowances, wages and salaries during sickness and leave, wage subsidies of any kind, remunerations to board members, committees, etc. and pension-like payments to previous employees, all amounts include labour market contributions. Compensation of employees also includes contributions to the Danish Labour Market Supplementary Scheme and the taxable value of fringe benefits. Also included are the total actual contributions to pension schemes from the Central Pensions System operated by the Danish tax authorities. Reimbursement of maternity and sickness benefits for the employer are not part of compensation of employees in the WTA.

Compensation of employees in the WTA only include earned pensions in pension funds, but exclude, for the time being, earned public service pension. The reason for this is that Statistics Denmark is not able to unequivocally identify economically active civil servants and employees in public service-like pension schemes and neither does Statistics Denmark have a system for calculating earned contributions at individual level for these groups. When the system is fully developed, earned contributions for public service pension will be incorporated as part of compensation of employees in the WTA.

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<sup>2</sup> In the Labour Market Accounts (LMA), 'paid' hours of work are calculated for self-employed and assisting spouses **in their main job** as the average paid hours of work by employees in primary jobs in the same group (calculated on the basis of Employment Statistics for Employees broken down by industry, gender, age group and reference month) adjusted with an aggregated adjustment for how much more self-employed and assisting spouses say they work more than employees say they work in primary jobs in the Labour Force Survey (LFS). 'Paid' hours for self-employed and assisting spouses **in sideline jobs** are calculated as 'paid' hours in main job, but adjusted for how many fewer paid hours of work employees work in sideline jobs compared to paid hours of work by employee in main jobs.

<sup>3</sup> However, the National Accounts contain supplements for unpaid overtime work and criminal work.

Eventuelle henvendelser rettes til

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