

Denmark

The national tax system

Tax Unit

The Danish tax system has been subject to stepwise individualisation since 1970.

With few exceptions, income tax is paid by all persons living in Denmark. As a general rule, the personal income tax has developed towards being based on individual income and not influenced by family status.

Since some deductions in taxable income may be transferred between married persons (and homosexuals living in registered partnership), there are however elements of a family based taxation system left. By example, a married couple with one income of about 350.000 DKK a year will pay approx. 25.000 DKK less income tax than the same couple, if unmarried.

Tax bands

The calculation of personal income tax is somewhat complicated due to the various concepts of income used in the calculations. The basic components of personal income tax are:

- Fixed percentages of taxable income are paid as income tax ("bottom tax") to the municipality, the county, the central government and the State Church (if the person is a member of the State Church). The percentages paid to the municipality and the county are set by the respective local authorities. The percentage paid to the state is 12 percent. Average tax rates for the municipality and the county are 21.1 and 9.3 respectively. Average church taxes are 0.7 percent. A "personal deduction" of 30.400 DKK is made, before "bottom tax" is calculated. This implies that persons earning less than this amount pay no income tax at all.
- A fixed percentage (5 percent) of personal income and net capital income above 134.500 DKK is paid to the government (so-called "middle tax")
- A fixed percentage (15 percent) of personal income plus net capital income (if positive and above 20.700 DKK) is paid to the government (so-called "top tax"). Tax is only paid of the part of this tax base that exceeds 243.100 DKK.

To this can be added the special feature of a "total marginal tax limit" implying that the total marginal tax paid out of taxable income cannot exceed 62 percent. If this maximum is exceeded, an deduction is made in the "top tax".

The general principle is that personal income tax is calculated in an individual basis without regard to family status. The exceptions are:

- The general deduction in personal income tax can be transferred between married persons.
- The deduction of 134.500 DKK used to calculate the "middle tax" can be transferred between married persons.

There are monthly deductions of the estimated tax rates from the income of all tax payers. However, the final income tax to be paid is calculated on a yearly basis by the tax authorities.

A better impression of the working of the tax system may be gained from estimates from the Ministry of Finance (1996, fig. 6.23) indicating that personal income taxes as percentage of gross income varies from 25 percent for the lowest decile to just above 30 percent for the median income earner to approx. 43 percent for the highest income groups. Marginal tax rates vary from approx. 40 percent for lower

incomes to 50 percent for middle incomes and 60 percent for high income groups. Thus both the average and marginal tax rates in the Danish system are rather high.

Child benefit

Finally one should note that the number of dependent children or other family responsibilities has no influence on the calculation of personal income tax. Instead a compensation in cash is paid to all parents with children aged less than 18 years. This compensation varies with the age of each child and is exempted from taxation. The child allowance varies with the age of the child. For children aged 0-2 years the yearly benefit was 10,200 DKK, for the ones which were 3-6 years the normal yearly allowance in 1996 was 9,100 DKK. For children aged 7-17 years, the normal allowance was 7,100 DKK. Special rates apply for lone parents.

Social Security

Structure and contributions

In what follows, social security contributions is defined as payments by employers to public or private funds depending on number of employees, working hours or wages.

In general, social security contributions play a limited role in the Danish version of the Nordic welfare state. Public expenditure is financed mainly by general income taxation and indirect taxes. The right to social welfare and social pensions is mostly available to all citizens independent of the individual's own contributions (principle of universalism). However, in recent years there has been a trend towards adapting a more Central European model with greater emphasis on social contributions paid directly to ear-marked social funds, especially for pensions purposes.

The clearest example is the implementation, from 1994, of three so-called "labour market funds":

- The Unemployment Insurance Fund
- The Activation Fund
- The Sickness Payments Fund

The funds are jointly financed by a tax on gross income paid by both wage earners and self-employed. The amount paid is then deducted from the individual's gross income, before calculating taxable income for other income related taxes. The tax rate is at present approx. 8 percent. The labour market contributions from the employees are calculated by the tax authorities as a part of the ordinary collection of income taxes based on the yearly income declaration prepared for the purpose tax collection. Also, from 1997, all employers must pay a separate contribution to the funds based on gross income paid to employees of 0.3 percent (rising to 0.6 percent in 1998). Thus according to the definition used here, only this minor contribution is relevant. It depends solely on gross wages, not on individual hours worked etc.

Also, one should note, that an individual's rights to labour market related services (unemployment benefits, training and education etc.) are unrelated to the individual contributions to the "labour market funds".

Health care

The Danish health system is financed by general taxation and not by social contributions. Access to health care is independent of individual payment. User fees are rare.

Old age insurance and pensions

- Statutory

The statutory old age pension ("folkepension") is financed by general taxation and paid to (almost) all citizens from the age of 67. Deductions are made for supplementary income (incl. private pensions, income from work etc.) above a certain amount.

- Supplementary labour market pensions

In 1964 a mandatory supplementary labour market related pension was introduced (Labour Market Supplementary Pension). It is based on yearly contributions paid by wage earner (1/3) and employers (2/3). For a person working full-time, the yearly contribution is 2.333 DKK. The contribution is regulated by hours worked:

Above 117 hours/months:	full contribution
78 to 117 hours/month:	2/3 contribution
39-78 hours/month:	1/3 contribution
Less than 39 hours/month:	No contribution

Due to the small contributions paid, this scheme plays only a limited role in financing old age pensions.

Private pension funds

In the public sector and also among private white-collar workers supplementary pensions have often been established by collective agreement. These are organized around pensions funds (often divided along professional lines or sectoral lines). The amount paid to the fund is typically between 8-15 percent of the wage (1/3 paid by the wage earner and 2/3 paid by the employer). In recent years such funds have become common also among blue-collar workers. Around 80-85 percent of the wage-earners are now covered by such schemes.

Also at the firm level various pension schemes are found, typically as a part of the remuneration packet for an individual employee or group of employees.

Generally the payments by the employer to all such schemes will vary proportionally to the wage sum.

Unemployment insurance

The Danish unemployment insurance system is organised around approx. 40 private, but officially approved, unemployment insurance funds (mostly organized according to the educational background of the members). The rate of compensation is 90 percent of previous wage income with a maximum of approx. 136.000 DKK a year.

The unemployment insurance system is financed partly by contributions from the members (approx. 20 percent), partly by public subsidies. The employer pays no direct contributions to the system.

In order to reduce the incentive to temporary lay-offs, the employer has to pay the unemployment benefits for the first 2 days of unemployment, if the former employee has been employed for more than 4 weeks with working hours equivalent to 2 weeks full-time employment.

Other insurances

All employers are responsible for the consequences of accidents and other health problems related to the worksite. For private employers it is mandatory to have an insurance covering the obligations of the employer in case of accidents or professional diseases. The insurance is made with private insurance firms, and the premium paid typically varies with the number of employees and the estimated risk of accidents in the specific sector, where the employer is operating.

Payroll taxes for the employer

Until recently there has been no general payroll taxes in Denmark, but from 1997 all employers pay a contribution to the "labour market funds" of 0.3 percent of all wages (including a number of fringe benefits). This percentage increases to 0.6 percent in 1998 (cf. section 1 above).

Thresholds/Defintions of marginal part time

There are no strict definitions of marginal part time and income tax (including the "gross tax") is paid out of wages without regard to number of hours worked.

For the supplementary labour market pensions one finds a minimum limit of working hours (39 hours per months) below which no contribution is paid.

One may also regard the "personal tax deduction" of 30.400 DKK per year as an indication of a minimum level of income below which no tax is paid, but this level refers to all income, not only income from work.

Finally, in order to become a member of an unemployment insurance fund, one must work a least 16 hours per week to become part-time insured and 30 hours per week to become full-time insured. Normal full-time working hours (as defined by most collective agreements) are 37 hours per week.

Assumptions for model calculations

In this section the results from model calculations of gross earnings and net income after taxes are presented. The calculations are based on a number of common assumptions.

Tax rates and tax regulations are taken from 1996. If important changes have taken place since then, a note is made.

The figures for male and female gross earnings are taken from Denmark's Statistics figures on personal average income (arithmetic averages) for male and female wage earners from 1994, which are the latest published (Statistisk Årbog/Statistical Yearbook 1997, table 226). These figures have been adjusted to 1996-levels by available information on growth in nominal gross incomes in 1995 and 1996 (Det økonomiske Råds formandskab: Dansk Økonomi, foråret 1997, bilagstabel II.4). The figures are taken from administrative registers from the tax authorities. They include not only wage income, but also average levels of transfer incomes (eg. unemployment benefits). Since subdivision is not possible, the income figures include both full-time and part-time workers. Also overtime payments and other extra payments are included. The following table presents the figures used for earnings for male and female wage earners in 1996.

Gender	Average personal income in 1994	Estimated growth in gross income 1994 to 1996	Average personal income in 1996
	DKK (1,000s)	Percent	DKK (1,000s)
Male	236.4	8.0	255.3
Female	176.3	8.0	190.4

Source: *Statistisk Årbog 1997*, table 226, and Det Økonomiske Råds formandskab: *Dansk Økonomi, foråret 1997*, bilagstabel II.4.

In some cases, assumptions have to be made concerning various tax deductions. The main rule has been to include only those deductions, which apply to all tax payers. This implies for instance that deductions for interest paid on mortgages and for transportation are not included, since they apply to most - but not all - tax payers.

The number of children does not directly effect tax payments in Denmark. However, a special tax-exempt child allowance is paid in cash to all parents with children below 18. The allowance varies with the age of the child. For children aged 3-6 years the yearly allowance in 1996 was 9,100 DKK. For children aged 7-17 years, the allowance was 7,100 DKK. This allowance is included in the calculations for families with two children under the assumption that one child is below and the other above 7 years of age.

Finally, one may note that the difference between status as "single" and "married" in the calculations is related to formal marriage and not cohabitation. Living together without being formally married is quite common in Denmark - also for couples with children. Thus two singles in the tables may often form a couple in real life.

Tables

Average male incomes for men and women: Average income

	Gross earnings			Income Tax in percent			Net income after taxes		
	1,000 DKK			Percent			1,000 DKK		
	Male	Female	Both	Male	Female	Both	Male	Female	Both
Single	255,3			44,0			143,1		
Married									
Sole earner	255,3	0	255,3	36,8	0	36,8	161,3	0	161,3
M:AI F:marg.	255,3	43,4	298,7	42,1	16,9	38,5	147,8	36,1	183,8
M:AI F::25AI	255,3	63,8	319,1	42,5	26,6	39,3	146,8	46,9	193,7
M:AI F::5AI	255,3	127,7	383,0	43,7	36,8	41,4	143,8	80,7	224,5
M:AI F::75AI	255,3	191,5	446,8	44,0	41,4	42,9	143,1	112,2	255,3
M:AI F:AI	255,3	255,3	510,6	44,0	44,0	44,0	143,1	143,1	286,1

Average male incomes for men and women: high income

	Gross earnings			income tax in percent			net income after taxes		
	1,000 dkk			percen			1000 DKK		
	male	female	both	male	female	both	male	female	both
Single 2 AI	510,6			54,2			234,1		
married									
Sole earner 2 AI	510,6	0	510,6	50,3	0	50,3	253,9	0	253,9
M: 2 AI, F marg	510,6	43,4	554,0	53,2	16,9	50,4	238,8	36,1	274,9
M: 2 AI, 0,25 AI	510,6	63,8	574,4	53,4	26,6	50,4	237,8	46,9	284,7
M: 2 AI, F: 0,5 AI	510,6	127,7	638,3	54,0	36,8	50,6	234,9	80,7	315,5
M: 2 AI, F: 0,75 AI	510,6	191,5	702,1	54,2	41,4	50,7	234,1	112,2	346,3
M: 2 AI, F: AI	510,6	255,3	765,9	54,2	44,0	50,8	234,1	143,1	377,1
M: 2 AI, F: 1,5 AI	510,6	383,0	1021,2	54,2	50,7	52,7	234,1	189,0	423,0
M: 2 AI, F: 2 AI	510,6	510,6	891,4	54,2	54,2	54,2	234,1	234,1	468,1

Average male incomes for men and women: low income

	Gross earnings			income tax in percent			net income after taxes		
	1,000 dkk			percen			1000 DKK		
	male	female	both	male	female	both	male	female	both
Single 0,75 AI	191,5			41,4			112,2		
Sole earner M: 0,75AI	191,5	0	191,5	33,4	0	33,4	127,5	0	127,5
M: 0,75 AI, F: marg.	191,5	43,4	234,9	40,2	16,9	35,9	114,4	36,1	150,5
M: 0,75 AI, F: 0,25 AI	191,5	68,3	255,3	40,2	26,6	36,8	114,4	46,9	161,3
M: 0,75 AI, F: 0,5 AI	191,5	127,7	319,1	41,0	36,8	39,3	113,0	80,7	193,7
M: 0,75 AI F: 0,75 AI	191,5	191,5	383,0	41,4	41,4	41,4	112,2	112,2	224,5

Gender specific wages

Average Income (AI)

	Gross earnings			Income Tax in percent			Net income after taxes		
	1,000 DKK			Percent			1,000 DKK		
	Male	Female	Both	Male	Female	Both	Male	Female	Both
Single	255.3	190.4	*	44.0	41.3	*	143.1	111.7	*
Married									
Sole earner	255.3	0	255.3	36.8	0	36.8	161.3	0	161.3
M:AI F:marg.	255.3	32.4	287.7	42.0	7.0	38.0	148.2	30.1	178.3
M:AI F:.25AI	255.3	47.6	302.9	42.2	19.6	38.6	147.6	48.3	185.9
M:AI F:.5AI	255.3	95.2	350.5	43.1	33.3	40.4	145.4	63.5	208.8
M:AI F:.75AI	255.3	142.8	398.1	43.9	37.9	41.8	143.2	88.7	231.8
M:AI F:AI	255.3	190.4	445.7	44.0	41.3	42.8	143.1	111.7	254,8

Gender specific wages : High income

	Gross earnings			income tax in percent			net income after taxes		
	1,000 dkk			percen			1000 DKK		
	male	female	both	male	female	both	male	female	both
Single 2 AI	510,6			54,2			234,1		
married									
Sole earner 2 AI	510,6	0	510,6	50,3	0	50,3	254,0	0	254,0
M: 2 AI, F marg	510,6	32,4	543,0	53,1	7,0	50,4	254,0	30,1	269,4
M: 2 AI, 0,25 AI	510,6	47,6	558,2	53,3	19,6	50,4	239,3	38,3	276,9
M: 2 AI, F: 0,5 AI	510,6	95,2	605,8	53,7	33,3	50,5	238,6	63,5	299,8
M: 2 AI, F: 0,75 AI	510,6	142,8	653,4	54,1	37,9	50,6	236,4	88,7	322,8
M: 2 AI, F: AI	510,6	190,4	701,0	54,2	41,3	50,7	234,1	111,7	345,8
M: 2 AI, F: 1,5 AI	510,6	285,6	796,2	54,2	45,9	51,2	234,1	154,5	388,6
M: 2 AI, F: 2 AI	510,6	380,8	891,4	54,2	50,6	52,6	234,1	188,2	422,3

Gender specific wages : low income

	Gross earnings			income tax in percent			net income after taxes		
	1,000 dkk			percen			1000 DKK		
	male	female	both	male	female	both	male	female	both
Single 0,75 AI	191,5			41,4			112,2		
Sole earner M: 0,75AI	191,5	0	191,5	33,4	0	33,4	127,5	0	127,5
M: 0,75 AI, F: marg.	191,5	32,4	223,8	40,2	7,0	35,4	114,4	30,1	144,5
M: 0,75 AI, F: 0,25 AI	191,5	47,6	239,1	40,2	19,6	36,1	114,4	38,3	152,7
M: 0,75 AI, F: 0,5 AI	191,5	95,2	286,7	40,2	33,3	37,9	114,4	63,5	177,9
M: 0,75 AI F: 0,75 AI	191,5	142,8	334,3	41,3	37,9	39,9	112,3	88,7	201,0