

Salary statistics from IDA and DI

Comparison of the statistics from IDA and The Confederation of Danish Industry (DI) with a focus on comparable groups and identical salary definitions, 2018.

Salary statistics from IDA and DI

This memo compares the salary levels in the statistics from IDA and from DI (The Confederation of Danish Industry) for Master of science in Engineering (M.Sc.Eng) and Bachelor of Engineering (B.Eng.) respectively.¹

The point of the memo is that differences in methodology in the salary statistics from the various organisations often exist, and that this makes it difficult to ascertain whether there are actual differences between the salary levels shown. As far as salary levels are concerned, the typical differences in the statistics are associated with both the definition used (i.e. what salary components are included in the salary) and the population included in the statistics (e.g. based on training- and job functions).

IDA's analysis department explains in this memo that once the different salary definitions and the various populations have been accounted for, the salary levels for the two groups of engineers are practically identical in the statistics from DI and IDA respectively.

Thus we at IDA still believe that IDA's salary statistics are a very reliable tool for our members to use when negotiating salaries with their employers.

Table 1 below compares the average salaries for respectively Master of science in Engineering and Bachelor of Engineering from the two statistics. The abovementioned differences have been taken into account. The table also shows the difference in average salaries and the percentage divergence from IDA's average salary.

Table 1. Average salaries for engineers in DI's and IDA's salary statistics.

Work Experience	Master of science in Engineering				Bachelor of Engineering			
	DI, salary, DKK	IDA, salary, DKK	Difference (IDA-DI)	Pct. compared to IDA	DI, salary, DKK	IDA, salary, DKK	Difference (IDA-DI)	Pct. compared to IDA
>1 year	38,991	39,276	285	0.7%	37,022	37,263	241	0.6%
>1 year	41,302	40,159	-1,143	-2.8%	38,428	39,071	643	1.6%
>2 years	44,762	42,368	-2,394	-5.7%	41,367	40,922	- 445	-1.1%
>3 years	44,564	44,893	329	0.7%	44,408	43,586	- 822	-1.9%
>4 years	48,380	47,793	-587	-1.2%	45,320	46,063	743	1.6%
5-9 years	52,077	51,694	- 383	-0.7%	50,469	49,574	- 895	-1.8%
10-14 years	58,810	59,221	411	0.7%	55,510	55,777	267	0.5%
15-19 years	64,537	64,478	- 59	-0.1%	59,245	59,073	- 172	-0.3%
20-24 years	69,220	68,667	- 553	-0.8%	62,172	62,069	- 103	-0.2%
25< years	71,190	71,100	- 90	-0.1%	64,840	64,843	3	0.0%

Source: DI lønstatistik 2019 (DI's salary statistics 2019) (3rd quarter 2018), p. 39 and 48, and IDA lønstatistik 2018. For definitions and population see the text below.

According to the table, the differences for **Masters of science in Engineering** amount to less than DKK 500 (and less than 1 percent) for most years compared with the average monthly salary in the two statistics. For instance, the table shows that a recently graduated M.Sc.Eng (less than one year's work experience) in DI's statistics is paid DKK 38,991 a month while a similar M.Sc.Eng in IDA's statistics gets DKK 39,276 a month.

¹ From DI: Lønstatistik 2019, Ingeniørarbejde (Salary Statistics 2019, Engineering), December 2018, based on the 3rd quarter of 2018.

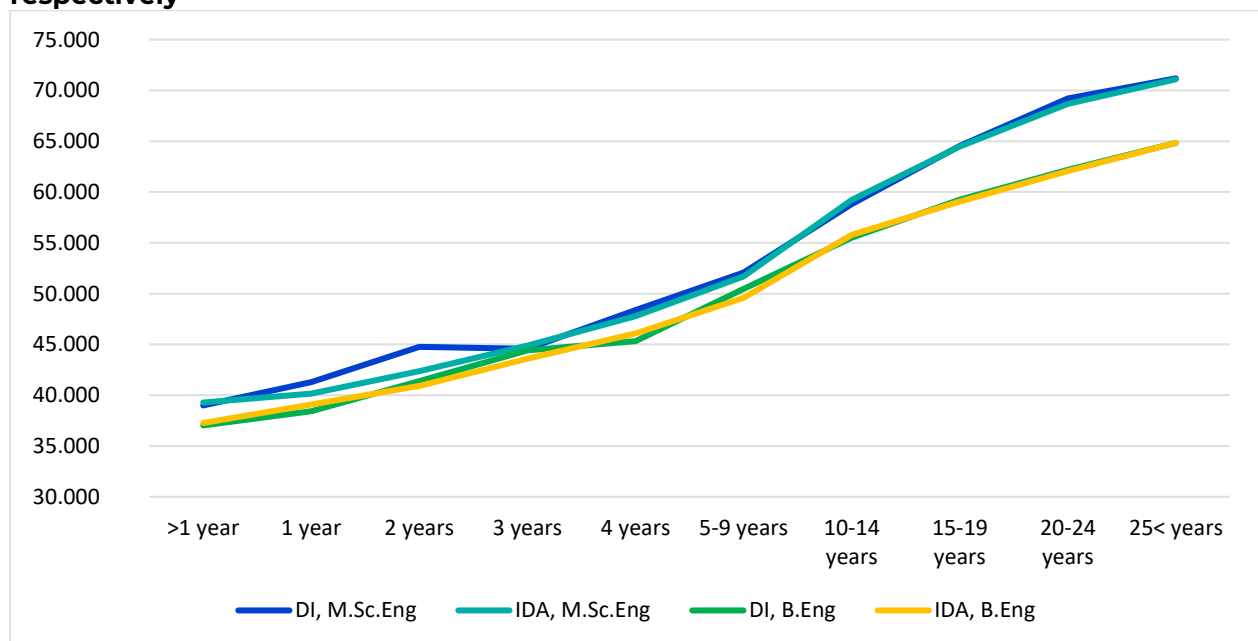
This is a difference of DKK 285 or 0.7 percent in the average monthly salaries. In the cases where the difference is larger than DKK 500 the table shows that the salary level is higher in DI's statistics than in IDA's. For seven of the ten years of engineering graduates DI has a higher monthly salary than IDA.

For **Bachelors of Engineering** there is a similar pattern in Table 1. The difference between the average monthly salaries is typically less than DKK 500 for the various years of graduation. For recent graduates (less than 1 year's work experience) the difference is DKK 241 for the average monthly salary, corresponding to 0.6 percent. DI has a higher monthly salary than IDA for five of the ten years of engineering graduates.

Also according to the table there are no systematic divergences between the two statistics, so the salary level in one does not score systematically higher than in the other for comparable groups. The typical divergences are less than 1 percent, and the divergence only exceeds 2 percent for two groups (M.Sc.Eng with 1 or 2 years of work experience respectively) (both groups have a higher salary in DI's statistics than in IDA's statistics).

The figure below features the salaries for the two groups of engineers, and it merely illustrates the points in Table 1, namely that the two statistics show practically identical salaries for comparable groups.

Figure 1. Average salaries for M.Sc.Eng and B. Eng. based on DI's and IDA's salary statistics respectively



Populations

DI's statistics for engineers here include M.Sc.Eng and B.Eng. who are "regular wage earners".² IDA's statistics include M.Sc.Eng and B.Eng. without managerial responsibilities.³

The applied salary definitions

In order to be able to compare the salary levels in the two sets of statistics it is necessary to ensure that the same salary definition is used.

DI has since 2016 used the salary definition "*Direct monthly salary including pension etc.*" This means that e.g. the "irregular" payments are included in DI's salary definition. That is a different salary definition than the one IDA uses, in which the irregular payments are not included in the gross salary reported in the salary statistics. Thus, in order to make the comparison, IDA has worked out a salary definition that factors in the bonus paid out to members. In practice 1/12 of the annual bonus has been added to the monthly salary.

² Limited to employees who are not managers, but who perform job functions on DISCO levels 2 or 3.

³ I.e. excluding top-level managers, directors of operations and heads of department.