



Finnish cost estimation approach - methodology and impact

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COST OF LOST LABOUR INPUT

Why and how to calculate/estimate? What impact?

- Objective of calculations
- Main steps in the process
- Necessary basic data
- Impact





OBJECTIVE OF CALCULATION

- Estimate the scope of poor working conditions in monetary terms
- Indicate the level of hidden costs for enterprises related to loss of labour input
- Assist in making the impact (costs) of poor working conditions visible and display the magnitude (need for action)
- Earlier attempts has led to disagreements between experts and non-constructive public discussions
- Developing a new methodology to calculate/estimate the monetary costs was aimed at achieving joint understanding and agreement on what can be calculated and what methodology to use
- The desired outcome was to be able to focus on prevention instead of academic disagreement



MAIN STEPS OF THE PROCESS

- Recruiting representative experts from different (tri-partite) parties into an advisory group
- An internal group in the ministry compared alternative calculation/estimation methodologies, whereas the identification of available and reliable data played an essential role
- Detailed discussions on the different methodologies developed by the ministry group and comparison/identification of the data sources in cooperation of and with support of the expert advisory group
- Open and frank presentation of the results, the methodology and possible inaccuracy for stakeholders



AVAILABLE DATA

- Finland is fortunate to have high-coverage statistical data easily accessible
 - The supportive nature of the accident and disease insurance system (no fault compensation) supports the comprehensive reporting of accidents and diseases to create reliable statistics
 - The results of sample surveys are reliable, because the citizens are not afraid that replying will lead to sanctions
 - A part of the used data was calculated by combining statistics with results of sample surveys
- In cases, where exact data was not available, were openly reported and the use of an educated guess was clearly justified

Data sources: Finnish Workers' Compensation Centre, Statistics Finland, Finnish Centre for Pensions, Finnish Institute for Health and Welfare, KELA (pensions), Finnish Institute for Occupational Health



BASIC DATA USED

The following data was used for the calculations:

- Insurance compensations (occupational accidents and diseases)
- Total amount of sickness absence
- Average salaries as per employer sector and level of education
- Compensation from KELA (disability pension) for long term sickness absence
- Health care costs of the economically active population

The following data was estimated based on statistics and sample surveys:

- The amount of short sickness absences
- Worker distribution in different sectors (state, municipality, private)
- Disability pension recipients according to level of education



AVAILABLE DATA - CHALLENGES

- The causes in work of sickness absence and the cost of health care for the economically active population could not be estimated, as the diagnosis do not include such information
- Presenteism and indirect costs of accidents are real facts, but their magnitude is an educated guess
- Due to not sufficiently detailed basic data the total cost is not linked to one single cause; it is noted that the causes are basically work, but also life style, genes and even chance can have an impact
 - **HOWEVER, the magnitude of the cost is so huge that it is necessary to put the main focus on prevention, and on a multifaceted prevention to be effective!**



RESULTS OF INDIVIDUAL CALCULATIONS

- **Sickness absence ≈ EUR 3.4 billion**
- **Presenteeism ≈ EUR 3.4 billion**
- **Incapacity for work ≈ EUR 8 billion**
- **Occupational accidents and diseases:**
 - **occupational accidents ≈ EUR 2 - 2.5 billion**
 - **Compensated occupational diseases ≈ EUR 0.1 billion**
- **Health care costs: EUR 7.8 billion (preventive measures excluded)**
- **In total: EUR 24.45 – 24.95 billion (any overlap has been subtracted)**

Link to

summary: https://stm.fi/documents/1271139/1332445/Cost+of+lost+labour+input_en.pdf/d5790088-8e3e-4d13-a5cd-56c23b67de0c/Cost+of+lost+labour+input_en.pdf



PRESENTATION MATERIAL

- Report in Finnish, English
- Executive summary in English
- Leaflet/abstract in Finnish, Swedish, English

https://stm.fi/documents/1271139/1332445/Cost+of+lost+labour+input_abstract.pdf/7191c072-7809-4713-a064-5cc6c6724a02/Cost+of+lost+labour+input_abstract.pdf

Cost of lost labour input

OCCUPATIONAL ACCIDENTS AND DISEASES

The total costs of occupational accidents are **2–2.5 billion €** per year.

Occupational accidents cause direct and indirect costs. The direct costs amount to 500 million € per year, and the share of indirect costs has been estimated at 1.5–2 billion € per year.

Compensation for costs caused by occupational diseases amounted to **100 million €** in 2012.

DISABILITY PENSIONS

The value of labour input lost because of disability pensions was calculated to **8.0 billion €**.

Finland lost 180 928 person-years of labour because of disability pensions. The value of labour input (pay including non-wage labour costs) was calculated for groups of different education levels. The size of each group was estimated on the basis of a study of the Finnish Centre for Pensions. Then the group size was multiplied by the pay data for the group, received from Statistics Finland.

SICK LEAVES

The value of the loss of labour input because of sick leaves was **3.4 billion €**.

According to Statistics Finland, the total of wages and salary earners' sick days due to various reasons was 20 193 000 in 2012. The pay costs including non-wage labour costs were calculated on the basis of pay data from Statistics Finland and from the Social Insurance Institution of Finland (Kela).

PRESENTEEISM

The value of the loss of labour input because of presenteeism was estimated at **3.4 billion €**.

Presenteeism means attending work while sick. In that case the employee is working but is not capable to fully carry out his or her tasks. International research shows that presenteeism causes larger losses than sick leaves. The losses were estimated with caution, and therefore the estimated losses due to presenteeism equal the losses due to sick leaves.

COST OF MEDICAL CARE

The costs of medical care of the working age population, excluding any preventive measures, was **7.8 billion €** in 2011.

This information for Finland is based on material collected for OECD.



TOTAL LOSS

The losses of the Finnish national economy (employers, employees, public finances) exceed **24 billion €** per year, or more than **2 billion €** per month.

The calculations for Finland have been made using mostly data from 2012¹. The calculations were presented in December 2014, and the calculation methodology is widely accepted. The calculations show the minimum costs because the indirect costs due to loss of labour input have not been taken into account, with the exception of occupational accidents. Several research institutions offered their expertise for the planning of the calculations².

¹ Rosanna M. Kouvola, "Mentetyin työpörosen kustannus [Cost of Lost Labour Input, Investigation], Ministry of Social Affairs and Health, Finland, Department for OSH 2014

² Niku Pöllänen, Research supervisor, Research Institute of the Finnish Economy ETIA, programme for public finance and economic policy



PUBLICATION OF RESULTS

- The results were largely published in an tri-partite event and supported by all partners
- The media showed great interest at the launch event and in later articles
- The academic disagreement on calculation methodologies came to an end
- The results have, to their part, helped to visualise sickness absence and early retirement due to lack of work ability. These have had much attention in the media
- The impact of the calculations has been the acceptance of the magnitude of the costs of lost labour input ==>

THUS, the focus is now on prevention, not only related to work, but also more multifaceted prevention



MEDIA ATTENTION

- Launch in a tri-partite event with comments from partners and stakeholder
- Experts were interviewed by the media (money is interesting!)
- The total costs 24 billion euros per year has been reported by Finnish Ministers and experts in a variety of international events
- Other articles have used individual cost calculations

- Academic (disagreement) discussion has ended
- Institutions and municipalities have used the methodology and results to start well-being at work projects
- A variety of corresponding projects/calculations has been done at work places



IMPACT

- The total costs related to work ability (and the lack of it) are recognised in the society
- ESPECIALLY for bigger (safety and productivity conscious) organisations (enterprises, municipalities, hospitals, etc.) have access to a multitude of services to maintain the work ability of employees
- Pension institutes, occupational health centres, OSH consultants are providing such services based on an understanding of positive impact on productivity and cost saving



IMPACT - CHALLENGES

- In smaller enterprises accidents occur on average quite rarely ==> in an enterprise with 10 workers an accidents (less than 4 lost days) once in two years; a severe accident (over 3 days) once in 4 years
- Early retirement occur on a average one case/120 workers in a year. On average in a 10 worker size enterprise once in 12 years, in an enterprise with 1200 workers 10 cases/year.

WHO WILL SEE THIS AS A REAL PROBLEM?

- A substantial part of the cost of lost labour input are paid collectively (accident insurance and taxes), especially for smaller enterprises



IMPACT – CHALLENGES (2)

- The timeline between preventive actions (cost) and possible savings (lack of accidents) is long. This requires long-term strategies, also in major enterprises/organisations, to achieve visible results.
- The necessity of prevention and the corresponding economic gain seems to be small, especially in small enterprises
- The practical implementation/interpretation for small enterprises requires further work
- Economic arguments must be accompanied by legal and ethical arguments to ensure safe and healthy working conditions



WHO PAYS (2012)?

- Employers pay directly 31,3 %
- Employers pay collectively 5,2 %
- Wage that employees has lost (don't get) 20,6 %
- Employees and entrepreneurs pay collectively 4,4 %
- Employees pay collectively 0,05 %
- Lost non-wage labour costs 6,3 %
- Lost "Taxes" 6,7 %
- Social funds in workplace 0,2 %
- Third sector (RAY) 0,4 %
- Payments by insurances 0,5 %
- Working age populations deductibles 6,1 %
- State and municipalities share of health care expenditures (working age people) 18,2 %



CONCLUSIONS

- H&S is a basic human right
- however, in today's world, showing the cost of lost labour input has an impact on prevention
- enterprises cannot see the total cost of poor working conditions in their bookkeeping, it requires additional calculations
- FI has developed a calculation method <http://piku.ttl.fi/#/form/section/0>
- the level of the cost estimate assists policy decision makers in making informed decisions on prevention
- tri-partite agreement on calculation results is crucial for impact and adds credibility

A common calculation/estimation methodology for the EU countries would be a strong tool



Finnish cost estimation approach:

Reliable and acceptable facts are essential for evidence-based policy decisions

