When a woman's euro is 76 cents, so the man's euro is 75 cents

What do they tell us?

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Trigger warning

This book breaks the myth of "a woman's euro is 80 cents". If you believe in feminism, women's studies, or gender studies, the revelations in this book may be distressing. The truth is distressing some people.

To release the stress, it is recommended to read Milja Saari's doctoral dissertation (TANE publication 17/2016), Paula Koskinen Sandberg's dissertation (Internet), and the Ministry of Social Affairs and Health's reports and memoirs 2019: 28: "Fundamentals and Promotion of Equal Pay". Anxiety should be eased immediately because they present a completely opposite view to calculating gender eage gap as in this book.

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CONTENTS

This book is translated from the Finnish book “Kun naisen euro on 76 senttiä, niin miehen euro on 75 senttiä - Mitä ne kertovat?” partilly with the help of Google Translator. Internationally uninteresting part 2 is leaved out.

BRIEF SUMMARY OF THE STUDY

In her book, "A Finnish Woman and Man", in 1968, Elina Haavio-Mannila, an adjunct professor at the University of Helsinki, hypothesized that the difference in pay between men and women might be due to the fact that men invest more in work. He examined the difference in earnings between men and women from the statistics. Quote: “It is not clear here whether men and women do as much work to achieve these different prizes. Some data, for example, on the work of doctors and dentists show that women's lower income is linked to the fact that they work less than men each day. " This hypothesis has not been studied further.

Equal contributions have been called for by the EU, the UN, the ILO, the Court of Justice, the European Parliament and many other bodies and researchers. They require that the pay gap be calculated taking into account the quantitative productivity (hours worked) and the qualitative productivity (hours worked), which has been renamed the 'work performance' in Finland.

In addition to the entities listed above, non-discriminatory salary items include: overtime pay, allowances for uncomfortable working hours and working conditions. Non-discriminatory bonuses are all allowances defined by law or collective agreements that are paid to men and women on an equal basis.

In this study, we calculate as required by the above mentioned international organisations and the Finnish Constitution, the Gender Equality Act and the common snse to get as close as possible to the equal pay gap calculation. Our result is probably not the final truth, but we think it is the best possible calculation so far, given the demands of Elina Haavio-Mannila's hypothesis and equality.

The conclusion: When calculating equally, men receive an average of 75 cents gross before normal withholding and 68 cents net on their bank account in normal working hours, each time women receive an euro from the same amount of work.

Female wage earners earn about 76% of male wage earners.
The salary level of salaried male employees is about 75% of the salary level

of salaried women.

This hourly wage comparison is made over the course of a lifetime, with military service hours taken into account, wage and pension per hour of work. This calculation does not address the question of whether men and women have on average equal value of work in terms of job requirements or other salary factors mentioned in Chapter 7. They are ignored due to lack of data.

The myth of the woman's euro has been broken.

Keywords: Earnings, hourly wage level, wage gap, equality, equality policy

KEY VOCABULARY

THE ADJUSTED GENDER HOURLY WAGE GAP

In this study, the adjusted gender hourly wage gap is defined as the difference between the gross hourly wage (before tax and parafiscal charges) of wage earners and women, calculated as much as possible over the life cycle, earnings, pensions and hours worked. Comparisons include adjusted qualitative and quantitative productivity, increases in uncomfortable working hours and working conditions, and hours during military service. Chapter 7 explains the salary variables that are not taken into account because the absence of data.

Similarly, the adjusted gender hourly net wage gap is calculated from the amount of cash paid to the bank account by the employee net of taxes and tax-related benefits.

THE GENDER GAP IN EARNINGS

The EU's unadjusted gender hourly wage gap is calculated by dividing the gross monthly earnings of men and women, minus the hourly overtime pay, by the monthly paid hours of men and women. It does not therefore take into account the hours worked.

Finland's unadjusted gender monthly pay gap is calculated by comparing the gross monthly earnings of men and women, minus the hourly rates of overtime pay (for men, about 3.2% of payroll, for women, about 1.2% of payroll). Again, hours worked are not taken into account. The monthly salary for wage earners is obtained by artificially multiplying the average hourly wage by 170 (hours per month).

The difference in earnings calculated by the Finnish Center for Pensions is calculated from the gross earnings that are included in the calculation of the pension factor, so for example overtime bonuses are included. ETK has its own rules for reducing the monthly salary. The hours worked have nothing to do with ETC calculations.

EARNINGS DIFFERENCES ARE EASY TO MEASURE

Comparing the difference in earnings between two individuals / groups then compares gross hourly / gross monthly earnings without taking into account equality. **Female salary earners earn about 76% of men's earnings.**

IT IS DIFFICULT/IMPOSSIBLE TO MEASURE HOURLY WAGE DIFFERENCES

Wage levels should be lowered per unit of measurement in terms of qualitative productivity (hours worked) and qualitative productivity (equivalent quality and quantity of work per hour). Uncomfortable working conditions, working hours and other non-discriminatory allowances shall be excluded from the calculation. In addition, the comparison must take into account the number of hours worked throughout the life cycle and the earnings-related pension. Note the non-discriminatory background variables of pay mentioned in Chapter 7, although we have not been able to do so in the absence of data. **The hourly wage level of salaried men is about 75% of the hourly wage level of women, calculated as equally as we can.**

QUANTITATIVE PRODUCTIVITY

The EU defines quantitative productivity, for example, in Resolution 2008/2012 (INI) as 'physical hours of work in a workplace'. Workplace is a broad concept here. It depends on the employer 's interpretation of where and when the employee can be considered to be doing an acceptable job for the employer. It can be located in the employer's premises, at home, in public transport, at the customer's premises, etc. Quantitative productivity is generally improved, especially among highly educated people, through the so-called unreported overtime. A study shows that around 33% of men and about 17% of women worked over 40 hours a week. In total, men work more than four times as much as women do overtime. In contrast, hourly compensated overtime worked by men at just under 2% and women at just under 1% of their annual working time.

QUALITATIVE PRODUCTIVITY

There is a (sometimes vague) norm for each job, which can be considered qualitatively and quantitatively acceptable per hour. If the standard is not met, the employer may first give warnings and if they do not help, the employment may be terminated. Disputes can be taken to court. For exceeding the standard, workers' organizations demand higher than normal wages. Piecework pay are commonly used for various types of work contracts, monthly salaries can include commissions, personal and group production bonuses, performance bonuses, etc. Within and between general

salary increases, individual salary increases can be granted for performing a good job.

DONE WORKING HOURS

The hours worked have been defined by the ILO, for example in ILO BULLETIN OF LABOR STATISTICS, 2001-1. It says, among other things, that paid-for meal time is not working time. The EU Working Time Directive again defines on-call time done at workplace as working time. On-call time at home (standby time), on the other hand, is not working time. Whether or not the traveling time of the mobile worker is working time, in whole or in part, depends on the collective agreement. A variety of practices exist.

REGULAR WORKING HOURS

Regular working time as defined in the Working Time / Employment Contract / Collective Agreement means the minimum working time that an employee has to work per week in order for the employer to pay the agreed wage. The Working Time Act (1996) defines the persons and forms of work to which the Working Time Act applies.

Regular working hours include non-working hours, eg. public holidays, annual holidays, meal time if paid, sick pay, maternity, paternity and parental leave, short parental leave due to childhood illness, employer-prescribed training leave, trustee hours; all of the foregoing only on the terms stated in the employment contract or collective agreement. Regular working hours do not include overtime, whether paid or not. The regular working time shall not exceed 40 hours per week on a long-term basis.

EARNINGS FOR REGULAR WORKING TIME

According to Statistics Finland and official Finnish data on the difference in earnings, the phrase "regular working time earnings" is haunting. It distributes disinformation. The Finnish wage systems and the Working Time Act are so open to any interpretation of the period in which earnings are paid that it is impossible for Tax Administration or Statistics Finland's pay records to distinguish the portion of earnings paid for regular working hours to all wage earners.

INTIMATE PARTNER VIOLENCE

Intimate partner violence includes physical and mental male or female violence, male or female violence against children, and physical and / or chemical (alcohol, pharmaceuticals, drugs, tobacco) violence on a fetus.

SECTION 1 GENDER HOURLY WAGE DIFFERENCE SURVEY, DONE AS EQUALLY AS POSSIBLE

CHAPTER 1 FOREWORD

1.1 Legal and gender equality background of the study

Here are nine key points to consider when making equal hourly wage comparisons in order to comply with international and domestic decisions that are binding Finland:

1. The first official international agreement ratified by Finland on the gender wage gap is the ILO 100 Convention of 29 June 1951 (official version in Annex 1). It was ratified by Finland in 1963. It states, inter alia: "Article 1: For the purpose of this Convention—
(a) the term remuneration includes the ordinary, basic or minimum wage or salary and any additional emoluments whatsoever payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment;
(b) the term equal remuneration for men and women workers for work of equal value refers to rates of remuneration established without discrimination based on sex"

In addition, it has taken a position on which supplements to the basic salary are taken into account. Here's an excerpt: "3. Differential rates between workers which correspond, without regard to sex, to differences, as determined by such objective appraisal, in the work to be performed shall not be considered as being contrary to the principle of equal remuneration for men and women workers for work of equal value.

In other words, non-discriminatory allowances paid according to the same tables must be distinguished from wage comparisons. The Finnish translation is so cryptic (googlate!) and only the English and French versions are official, so there is an English translation attached.
Attention: It says not: "Same pay for same job" but "same pay for work of equal value." For example, it is not equal if one makes less work than another!

2. Another major international agreement defining the gender pay gap is the 1957 Treaty of Rome, which created the European Economic Community. It says e.g.:
Article 141
"2. For the purpose of this Article, 'pay' means the ordinary basic or minimum wage or salary and any other consideration, whether in cash or in kind, which the worker receives directly or indirectly, in respect of his employment, from his employer.
Equal pay without discrimination based on sex means:
(a) that pay for the same work at piece rates shall be calculated on the basis of the same unit of measurement;
(b) that pay for work at time rates shall be the same for the same job."

Point (a) refers to qualitative productivity (intensity and quality of work) and point (b) refers to quantitative productivity (hours of work involved).
Finland joined the European Union in 1995, when a similar article was in the Maastricht Treaty and in the current Lisbon Treaty it is Article 157.
3. In Finland, Elina Haavio-Mannila drew attention to the productivity mentioned in previous agreements. Finland's first sociological study on equality was published in 1968. It is Elina Haavio-Mannila's study in the book "A Finnish Woman and Man" (WSOY Porvoo, 1968). In this essay on women and men, she compares (page 69) women's earnings as percentage of men's earnings. She chose different occupational groups and their salaries over four years. Quote: "It is not clear here whether men and women do as much work to achieve these different prizes. For example, some data on the work of doctors and dentists show that women's lower income is linked to the fact that they work less than men daily. (Haavio-Mannila 1964, Kääriä 1965/66)."
According to Haavio-Mannila's hypothesis, the difference in wages and salaries in general can be attributed to unequal labor force and amount by men and women. This hypothesis has not been proven true or false by any Finnish (official) researcher, since none of them has investigated the effect of different quantitative and qualitative productivity of men and women on wages according to Haavio-Mannila's hypothesis. Even this study, in your hands, would not need to be published if, over the decades, Finnish pay gap researchers had understood what the hypothesis put forward by Elina Haavio-Mannila means for the possible cause of the gender wage gap.

4. In 1998, in the case of Sweden (Jämo C-236/98) concerning night workers, the EU Court of Justice ruled that the comparison of wages should not include wage supplements paid for uncomfortable working hours. The same requirement for the removal of non-discriminatory bonuses is contained in the ILO-100 Convention.
5. In 2004, a study on the establishment of the Equal Pay Program was published ex. from the Ombudsman for Equality: "Ministry of Social Affairs and Health Working Group Memoranda 2004: 13, Tuulikki Petäjäniemi: Study on the preconditions for building a government equal pay program together with the labour market partners." In it, he says on page 16: "It is well-established in the labor market and case-law that the pay gap resulting from full-time and part-time work, overtime and extra or different conditions is acceptable." He says, therefore, that quantitative productivity must be taken into account and that non-discriminatory bonuses must be eliminated when comparing equal pay.
6. The Equal Pay Directive 2006/54 / EC, adopted in 2006, does not define equal pay or the method of calculating the pay gap, except for occupational pensions. But it says in the preamble 37: "For the sake of a better understanding of the different treatment of men and women in matters of employment and occupation, comparable statistics disaggregated by sex should continue to be developed, analysed and made available at the appropriate levels."
The Directive does not define what it means by "comparable". It is therefore necessary to refer to the definitions of the other institutions of the European Union and the rulings of the European Court of Justice.
In point 13 of the preamble, the directive states: In its judgment of 17 May 1990 in Case C-262/88, the Court of Justice determined that all forms of occupational pension constitute an element of pay within the meaning of Article 141 of the Treaty.
7. In 2008, the European Parliament's Committee on Women's Rights and Gender Equality (FEMM, with 31 women, 4 men) brainstormed and drafted a resolution recommending to the European Parliament that productivity be taken into account in the equal pay gap.
The EU Parliament endorsed FEMM's Recommendation 2008/2012 (INI) on "Recommendations on the application of the principle of equal pay for men and women".
It says (excerpt from G): "whereas the pay gap is not based solely on disparities in gross hourly earnings and account should also be taken of factors such as individual pay supplements, job classification, work

organisation patterns, professional experience and productivity, which should be measured not only in quantitative terms (hours when the worker is physically present at the workplace) but also in qualitative terms."
Former finnish members of parliament voted in favor, irrespective of gender and party affiliation.
8. In 2009, a report was published: "Equality Policies at Work" by Julkunen, Raija, Title of the work: Reports of the Ministry of Social Affairs and Health 2009: 53, Report for the Government Equality Program.
Quote from the report: "The Equality Authority has produced and acquired new information on the mechanisms that create the pay gap. For example, Reija Lilja (2000), who was familiar with the National Action Plan for the EU Employment Strategy, considered it important to break the pay gap into its components. It was also a way of locating policies. "
In fact, the potential pay gap is almost impossible to rectify without knowing the reasons for the component's accuracy. Therefore, earnings must be broken down into components. The pay of all components must be equal. The differences in quantitative and qualitative productivity between men and women are so significant that they cannot be excluded from equal calculations.
9. In 2012, the EU Parliament adopted Resolution 2011/2285 (INI) "Equal pay for equal work or work of equal value", developed and presented by FEMM. It recommends that the Commission and the Member States calculate: "The gender pay gap, which should not be limited to gross hourly pay, should distinguish between the unadjusted and the net pay gap."

Do these (INI) Resolutions (2008/2012 (INI) and 2011/2285 (INI) have legal effect? Outi Anttila says in her dissertation" Towards effective equality? Prohibitions on gender discrimination during legal pluralism" (2008): "The various EU institutions have created a lot of non-legally binding soft law documents on gender equality. Such soft regulation includes, but is not limited to, recommendations, opinions, codes of conduct and guidelines, resolutions, guidelines, framework strategies and codes of conduct". "And:" According to Article 288.5 TFEU, recommendations and opinions are not legally binding. , where they affect EU In determining the content of acts, the EU Court of Justice has held that national courts are also obliged to take into account EU soft law instruments when interpreting national law. "

What follows from items 1-9 above?

At the moment, all 9 points above are ignored when calculating Finland's official pay gap. When the official equality public organs occupied by feminists and the STM Equality Unit have failed to comply with the requirements of the EU Equal Pay Directive to develop pay gap calculations, it is up to us to do so. This lack of authority is understandable as it can obscure the true picture of the pay gap. When Tarja Halonen stated in her inaugural presidential address on March 1, 2006, "A woman's euro is still only 80 cents", this myth became a reality and authorities did not have to do anything then and later to correct it.

The purpose of this study is to disprove this "official truth", the myth of a woman's euro, and to tell her how many cents, calculated on an equal basis, a man earns from an equal amount of work, from which a woman is paid a euro in salary or pension.
The second used research material is Statistics Finland's Time Use Survey, which is a representative sample of all Finnish wage earners (margin of error is about 2-3%), it can be used as a sample of Statistics Finland as it is a representative sample of all wage earners. We use the taxable income of the employees of the Tax Administration as taxpayers' wages as they are collected from all taxable citizens in Finland. It has to be corrected because it includes overtime and other bonuses, side income, etc.

From the tax administration's tax data and from the Time Use Survey of Statistics Finland, four researchers from Tampere, Satu Ojala, Pasi Pyöriä, Hanna-Mari Ikonen and Tuija Koivunen, conducted a study published in Pasi Pyöriä's book "Work Myths and Reality", Chapter 8: For 1999, they found that the average hourly earnings of employees were euro 13.16 per hour and euro 13.03 per hour for women. In that study, the male wage earner's euro was 99 cents. As income, they used the median income, not the average income, of all taxable annual earnings. The median taxable income of women was 78.8% of that of men. The average taxable income of women was approximately 76% of that of men in 2017. Their earnings include non-discriminatory elements that men generally receive, such as overtime pay, working time, working conditions and productivity gains. But here was a good start trying to make an equal pay gap calculation, a tribute to them. After all, they were trying to calculate the gender wage gap almost according to EU rules, unlike all feminist scholars.

1.2. A short presentation of the principles and results of the study

The official earnings difference in Finland, calculated by Statistics Finland and interpreted by the STM's Equality Unit, is 16%. The official opinion of the Finnish State is that the pay from women's regular working hours are 16% lower than men's. The same difference is found in EU statistics, which Statistics Finland calculates from gross hourly earnings. This study shows that it is not regular working hours but full-time earnings, minus Sunday work and hourly paid overtime bonuses (totaling about 2-3% of total pay). Statistics Finland's data include hundreds of thousands of wage earners, whose monthly earnings are not from regular working hours but full-time earnings (eg primary, higher education workers like, university, senior public officials, senior executives, senior executives, senior executives, who get no overtime pay)

Moreover, it is not a difference in wages but in earnings. There is a difference in earnings between tax information (female wage earners account for about 76% of male wage earners, depending on the tax year), but it includes overtime and sacred work, as well as payroll tax and any other remuneration. Capital income is not included in payroll tax information. They are included in the income level, which is one of the other indicators used.

The official 'earnings difference' in Finland is the difference in monthly earnings calculated from Statistics Finland's earnings index, unadjusted in monthly earnings. The calculation uses the salary data compiled by Statistics Finland, which is not a statistically representative sample of all employees. It excludes Sunday bonuses and hourly overtime pay, and no other bonuses. And the payroll data does not include information on hours worked. According to the EU Commission's publication, the official EU gender pay gap is calculated on the basis of the unadjusted gender hourly wage gap.

International treaties binding on Finland provide many different bases for determining wages, which should be taken into account when calculating the equal pay gap. The most important of these, even in the EU Treaty, are the quantitative productivity (hours worked) and quantitive productivity (quality and quantitivity of work produced per hour). And in EU the occupational pension is an integral part of salary. According to EU citizen’s rights, also other non-discriminatory values can decrease the value in wage

comparisons. The same is required by the ILO 100. Other non-discriminatory pay bases in the table 7 later in this study.

A distinctive feature of Finland is that we have unsalaried forced labour male soldiers who do national defense work, more than 9 months on average. We have more than 20,000 unpaid military soldiers every year (and in addition to that we have civil servants and some have to do the service in jail). Finland cannot be compared to other countries, when verifieded, how the military defence is arranged and therefore the gender wage gap is calculated. And note: EU justice has a decision, where it is said that armed service is as well suited for both women and men (EU Justice Decision C-285/98).

This study examines the above and other factors missing from Finland's official "gender pay gap" and concludes that a man's gross earnings are about 75 cents from women's when calculated on an equal basis. It is calculated dividing the average hourly earnings by working hours. It handles the salary and related pension, national defense hours and non-discriminatory pay components.

1.3 Unadjusted monthly earnings Statistics

The average earnings level for all female employees in 2017 was approximately 76% of men's earnings, according to the Tax Administration's website, www.vero.fi.

YLE reported: "Compare your salary to others: A woman's euro is only 76 cents" December 21, 2017, Eemeli Martti, Anna Karismo (https://yle.fi/uutiset/3-9986070). Here is a typical headline that mixes the unadjusted pay gap with the adjusted wage gap. The right title would read, "Compare your own earnings to those of others."

Finnish Center for Pensions ends up with the same result, though it calculates the difference in its own way.

The data of the Finnish Center for Pensions cover all persons during the reference year. Income data have been determined by the Finnish Center for Pensions for all employed persons except entrepreneurs and agricultural entrepreneurs. This covers about 2.1-2.2 million monthly wage earners.

The Finnish Center for Pensions calculates monthly earnings for employees based on calendar months. The calculation principle is illustrated in the publication Finnish Employees' Pension Insurers 2016. If the earnings-related earnings of the pension insured were EUR 2,000 and the work was done over the month ending, in that case, the monthly earnings used in the statistics were € 2,000 / 2 = € 1,000 / month because the work was done over two different months. ”
When calculating the average earnings of all Finnish women and men wage earners from the Finnish Center for Pensions data, the result is that in 2016 the average earnings of women was 76 per cent of the average earnings of men.

1.4 Equal adjusted hourly wage comparison
What is the result of equal adjusted wage comparisons if they are calculated according to international law and the Finnish concept of equality?

As a result, the average wage level of the female employee in Finland is approximately 33% higher than that of a man calculated on the basis of the same amount of work, taking into account the pension benefits. The man's euro is 75 cents.

The research is done using classical sciences. When compared to feminist research methods, the research method used here, despite its classics, is not feminist empiricism using classical research methods.

1.5 Feminist Research Methods (not used in this study)
In "Keywords - 10 Steps to Feminist Research," Johanna Matero explains in her article "Knowledge" that the three-fold division of feminist knowledge science is according to Sandra Harding’s and Julia Kristeva's concept: 1. Feminist empiricism, which assumes women are capable of doing more objective science, 2. Stand-point feminism, which takes women's experiences as the starting point for knowledge, and 3. Postmodern feminism, which is skeptical of the idea of reaching the perfect truth.
Feminist empiricism is needed because “the theorists of patriarchal sciences have not been sufficiently objective or rational”. Postmodern feminism tells: “Knowledge, rationality and objectivity lose the grounds on which they are based. Or at least that the grounds are dissolved and set in motion.

The primacy of reason in the processes of knowledge production is questionable."

We do not believe that only women can be right, nor that women's feelings are always true, but we do believe that in the long run, science will correct its mistakes and the truth will gradually be approached. There is hardly any absolute truth in human affairs, but we think that it can be approached also by classical methods. With the help of classical science, we strive to reduce the unadjusted gender monthly pay gap as much as possible.

1.6 Breakdown of monthly earnings for men and women into components

In order to convert monthly earnings comparisons into equal hourly pay comparisons, we need to divide monthly earnings into its components. It is also required in the report: "Work Equality Policy", Author: Julkunen, Raija, Title of the work: Reports of the Ministry of Social Affairs and Health 2009: 53, Report for the Government Equality Program. Quote from the report: "The Equality Authority has produced and acquired new information on the mechanisms that create the pay gap. For example, Reija Lilja (2000), who was familiar with the National Action Plan for the EU Employment Strategy, considered it important to break the pay gap into its components. It was also a way of locating policies. "

Second quote: "The Equality Authority has produced and acquired new information on the mechanisms that create pay gaps." So huh, what are they? Are they produced equally?
Julkunen continues: "Economics is developing more sophisticated methods, disaggregation and regression models to identify the sources of the pay gap. When research methods and data vary, comparing the results and getting an overall picture is difficult for the normal person. Breaking down the pay gap does not necessarily change the situation into a female-friendly policy. Taking into account all possible factors accepted or conceivable in the salary model, including the premenstrual syndrome, the woman's euro, according to Korkeamäki and Kyyrä (2007), is 96 cents instead of 80 cents. The proportion of direct discrimination will be negligible. "

Here we see that Raija Julkunen was wrong in her claim. For example, the Korkeamäki and Kyyrä studies did not take into account the differences in

quantitative and qualitative productivity mentioned in the EU Treaty. We will take that into account, even though it "does not turn into a tool for women-friendly politics". Why Raija Julkunen insists on a woman-friendly policy in Finland, wouldn't equal policy be a better option?

Earnings are influenced by background variables (components)

The following table lists the non-discriminatory earnings background variables that should be removed from the equal pay comparison. We will handle them in this chapter in numerical order.

Table: Income background variables and non-discriminatory wage components

	Who said and what?-->	1	2	3	4	5	6	7	8	9
	Background variable	EU1	EU2	EU3	EU4	EU5	ILO 100	UN	TEM	Other
1	Quantitative productivity ie work hours	X	X		X			X	X	X
2	Qualitative productivity	X	X				X			X
3	Education				X			X	X	X
4	Education type							X	X	
5	Work experience		X		X			X		
6	Professional skills		X							X

7	Work years							X	X	
8	Type of job				X					
9	Pension advantages			X		X				
10	Extras from unsuitable work hours					X	X		X	
11	Extras from unsuitable work conditions						X		X	X
12	Other non-discriminatory extras						X			
13	complexity of job, , Supervisor position								X	X
14	Others, includes overtime pay								X	X

Table Explanations:
Reciter partners
1 EU1 = EU Treaty, Art. 141 of the Treaty of Rome or Art. 157 of the Treaty of Lisbon
2 EU2 = European Parliament Resolutions 2008/2012 (INI) and 2011/2285 (INI)
3 EU3 = EU Employment Equality Directive 2006/54 / EC
4 EU4 = Publication "Tackling the gender pay gap in the European Union" by the Directorate General for Legal Affairs of the European Commission
5 EU5 Decisions C-262/88 and C-236/98 of the EU Court of Justice

6 ILO 100 Convention
7 UN and ILO webinar online http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/@multi/documents/meetingdocument/wcms_156288.pdf
8 TEM publication: Pietiläinen ja Keski-Petäjä "Labor discrimination in Finland", Work and Entrepreneurship 53/2014
9 Other, incl. Website of the Ombudsman for Equality, prof. Kevät Nousiainen, ex. Ombudsman for Equality Tuulikki Petäjäniemi, some PhD's

What did these reciters say?

1. The EU Treaty (Rome § 141, Lisbon § 157) states: "For the purposes of this Article, pay means the ordinary basic or minimum wage or salary and any other consideration, whether in cash or in kind, which the worker receives directly or indirectly from his employer. And (a) the pay due on the result of the work shall be calculated in the same unit of measurement; (b) the remuneration paid for the period of employment is the same for the same job."
Point (a) refers to qualitative productivity. For example, the efficiency of work, commission, performance, and production bonuses must be eliminated from the equal pay comparison. Point (b) refers to quantitative productivity, which implies that those who work more hours must be paid more on the same principle as part-time work is paid in relation to hours worked.
2. European Parliament resolution 2008/2012 (INI): 'G. whereas the pay gap is not only based on the difference in gross hourly wages, but should also take into account individual wages, professional skills, work organization, professional experience and productivity, which must be measured not only quantitatively (physical presence at work) but also qualitatively,… '
3. EU Employment Equality Directive 2006/54 / EC: Introduction, paragraph 13: "In its judgment of 17 May 1990, the Court of Justice stated in C-262/88 that all forms of occupational pensions form part of pay within the meaning of Article 141 of the Treaty."
4. The publication "Tackling the gender pay gap in the European Union" by the Directorate General for Legal Affairs of the European Commission says: "In the EU, the gender pay gap is officially mentioned, all the factors

that impact on gender pay gap, such as differences in education, labor market experience, hours worked, type of job, etc. ”
5. EU court of Justice C-262/88: In its judgment of 17 May 1990 in Case C-262/88 (1), the Court of Justice determined that occupational pensions of any kind constitute a component of remuneration within the meaning of Article 141 of the Treaty.
EU court of Justice C-236/98: In the case of Sweden (Jämo C-236/98), the European Court of Justice has ruled that night-time wage supplements paid for uncomfortable working hours should not be included to equal salary verifications.

6. ILO 100 Convention: Article 1

For the purpose of this Convention—

(a) the term remuneration includes the ordinary, basic or minimum wage or salary and any additional emoluments whatsoever payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment;

(b) the term equal remuneration for men and women workers for work of equal value refers to rates of remuneration established without discrimination based on sex.

Article 2

1. Each Member shall, by means appropriate to the methods in operation for determining rates of remuneration, promote and, in so far as is consistent with such methods, ensure the application to all workers of the principle of equal remuneration for men and women workers for work of equal value.

2. This principle may be applied by means of--

(a) national laws or regulations;

(b) legally established or recognised machinery for wage determination;

(c) collective agreements between employers and workers; or

(d) a combination of these various means.

Article 3

1. Where such action will assist in giving effect to the provisions of this Convention measures shall be taken to promote objective appraisal of jobs on the basis of the work to be performed.

2. The methods to be followed in this appraisal may be decided upon by the authorities responsible for the determination of rates of remuneration, or, where such rates are determined by collective agreements, by the partíes thereto.

3. Differential rates between workers which correspond, without regard to sex, to differences, as determined by such objective appraisal, in the work to be performed shall not be considered as being contrary to the principle of equal remuneration for men and women workers for work of equal value.

7. UN and ILO webinar asked: "Why Gender Pay Gap?" And said, “Characteristics of individuals and of organizations; Educational level and field study; Work experience and Seniority; Number of working hours; Size of organization and sector activity ...
8. TEM (MEE Ministry of Employment and the Economy) publication: Pietiläinen ja Keski-Petäjä “Labor Discrimination in Finland”, Work and Entrepreneurship 53/2014: Salary background variables include: Occupation, municipality, educational background, number of working hours, number of hours worked, sector and company differences in salary, job demand levels, loose job titles, working conditions allowances, etc.
9. Other: Extract from the Ombudsman's website: “According to the Preamble to the Gender Equality Act, acceptable reasons for the pay gap may be at least one's education, professionalism, initiative and aptitude for more demanding positions. The competitive situation due to the scarcity of skilled labor can also be a reason for this. ”
During the Equal Pay Program on 4 December 2014, Professor Nousiainen stated that Finland is bound by eg the following treaties: the EU Treaty

(TFEU) Article 157 of the Lisbon Treaty, ILO 100 the Equal Pay Agreement, the decisions and recommendations of the European Parliament and the European Commission, and the decisions of the EU Court of Justice.
Ex. The Ombudsman for Equality, Tuulikki Petäjäniemi, says in her report on STM 2014: 13: “Explanation of the preconditions for building a government equal pay program with the social partners” as follows: "It is a well-established view in the labor market and case-law that the pay gap resulting from full-time and part-time work, overtime and additional work, or different conditions of work is acceptable."

In his doctoral dissertation, Juho Jokinen says that supervisors recognize and reward employees on the basis of their performance. Researchers who publish more scientific articles and, in other cases, are more productive, get better performance evaluations, are more likely to be promoted and earn more. These were especially male researchers.
Päivi Aalto-Nevalainen argued about the salaries of sports managers and directors. She found that the number of subordinates had a positive correlation with pay. The same observation can be made, for example, with the hiring of the city / mayor. In the big cities / municipalities, the salaries of the mayors are on average higher than in the small towns / municipalities, even though there is little difference in the job description of the managers.

Other statements

"When assessing equal pay, differences in labor input should not affect the results of the comparison. Thus, pay comparisons should be made per unit labor input, such as hours worked." Reija Lilja - Eija Savaja (2013) Research: “Gender Equality in Private Services.”
"Comparable results can only be obtained by looking such regular wages that reflect the amount of work input." Outi Viitamaa-Tervonen, Project Manager of the Equality Unit, Ministry of Social Affairs and Health. Powerpoint presentation in Parliament at TANE 25.2.2015.
Anna-Maija Lehto, a researcher at Statistics Finland, says in YLE's "Ballad on the Income Index" program: "Anyone understands that if the income of the two groups is compared, then the labor input must be roughly the same." http://ohjelmaopas.yle.fi/1-1772118.

In a letter signed by Director General Heli Jeskanen-Sundström on March 30, 2011, Dnro TK-41-274-11 Statistics Finland says: "The fact that gender is one of the classification factors in earnings structure statistics is not called and cannot be called gender equality statistics."

SOCIAL POLICY 84 (2019): 5-6 Magazine Satu Ojala & Paula Koskinen Sandberg & Armi Mustosmäki: "Ilkka Engineer earns over 13,000 euros more than Sari Nurse?" It states: 'The differences described here do not account for a significant part of the differences in working hours, although the data does not include hours worked. When we look at working hours in the 2015 Labor Force Survey of Statistics Finland for 30-45 year-olds in the private and municipal sectors, there is no difference in weekly working hours between women and men in the health and social sectors; in the industry and infrastructure sectors, by contrast, men's working hours have been a few hours higher than women's." Where is the evidence that the effect is not significant?

1.7 Official EU definition of the pay gap

"What is the unadjusted gender pay gap?" Answer: The average difference between men's and women's hourly earnings (before any deductions for income tax and social security contributions are made) is known as the unadjusted gender pay gap. This is the official definition of the EU. "

Statistics Finland and the official equality organisations of Finland claim that this implies a difference in gross monthly earnings for men and women (after deduction of hourly paid overtime bonuses).
The EU accepts the gender pay gap as a definition: The average difference in hourly earnings between men and women.
In this study, we will look at how it is calculated on an equal basis, that is, how the “unadjusted” background factors should be eliminated.
In paragraph 37 of the EU Equality Directive 2006/54 / EC: "In order to better understand the reasons for the different treatment of men and women in matters of employment and occupation, comparable gender-based information and statistics should be developed and made available at appropriate levels."
The directive is complemented by EU resolution 2011/2285 (INI) "Equal pay for male and female workers for equal work or work of equal value", which states that the Commission and the Member States shall calculate: "The gender pay gap, which should not be only unadjusted gross gender pay gap."

CHAPTER 2 QUANTITATIVE PRODUCTIVITY AND EARNINGS

2.1 Why should productivity be taken into account in the pay gap comparison?

More than 60 years ago, my history teacher told me that the core of Karl Marx's economic theory was: "An employee sells his leisure time and sweat to the owners of production machines and tools." This doctrine is still applied as a basis for wage formation. “Leisure time loss” is working hours and “sweat” is the effort of work.

2.1.1 The EU Treaty, the EU's "Constitution"
The impact of productivity on wages is defined in the EU Constitution, the Treaty. It is enshrined in 141 of the founding treaties of the EU, the 1957 Treaties of Rome. It has run concurrently with the current Lisbon Treaty of 2007, with Article 157.

Excerpt from Article 157: " Equal pay without discrimination based on sex means: (a) that pay for the same work at piece rates shall be calculated on the basis of the same unit of measurement; (b) that pay for work at time rates shall be the same for the same job.”

Article 157 (a) Qualitative productivity, ie work power in the same unit (eg hour).
Article 157 (b) quantitative productivity means the hours worked.
2.1.2 European Parliament resolution 2008/2012 (INI)
The same requirement for productivity to be taken into account in wage comparisons can also be found in the European Parliament resolution 2008/2012 (INI) 'Recommendations on the application of the principle of equal pay for men and women'. And this resolution is not produced by the Patriarchate, but has been conceived, defined, formulated and submitted to the European Parliament for decision by the Committee on Women's Rights and Gender Equality (FEMM) of the European Parliament, with 31 female and 4 male parliamentarians.
Extract: " G. whereas the pay gap is not only based on the difference in gross hourly wages, but should also take into account individual wages, professional skills, work organization, professional experience and

productivity, which must be measured not only quantitatively (physical presence at work) but also qualitatively,…".

2.1.3 European Parliament resolution 2011/2285 (INI)
In 2012, the EU Parliament will adopt Resolution 2011/2285 (INI) "Equal pay for equal work or work of equal value", developed and presented by FEMM. It recommends that the Commission and the Member States calculate: "The gender pay gap, which should not be limited to gross hourly pay, should make difference between the unadjusted and adjusted pay gap."

Do these (INI) Resolutions (2008/2012 (INI) and 2011/2285 (INI) "have legal effect? Outi Anttila says in her doctoral thesis "Towards Effective Equality?" of Gender Equality and Soft Regulation: "A number of non-legally binding soft law documents have been produced by various EU institutions to promote equality. Such soft regulation includes, but is not limited to, recommendations, opinions, codes of conduct and guidelines, resolutions, guidelines and framework strategies." And: According to Article 288.5 TFEU, recommendations and opinions are not legally binding. The EU The Court of Justice has an opinion that national courts are also obliged to take into account EU soft law instruments if they are interpreting directives like in this case.
Equal pay is just that kind, the EU Equal Pay Directive 2006/54 / EC does not specify how the equal pay is defined or calculated, but resolutions 2008/2012 (INI) and 2011/2285 (INI) do both.

Since there is more information on quantitative productivity in Finland and it is a more significant factor in the wage comparison than qualitative productivity, we will deal with it first.

2.2. Quantitative productivity (annual working hours) surveys

In the Working Conditions Survey, about one-third of employees say they do not report their working hours to any system. In addition, the clock card and electronic time tracking systems always carry the risk of not reporting correctly to the system when traveling, at the customer's desk or at home. So there are no statistics on actual hours worked from employers.

Research information needs to be found somewhere else. There are many studies on the annual working hours of men and women, reliable and

unreliable. Reliable information can only be obtained on an annual basis, otherwise the effects of annual leave, for example, are ignored. The working hours of the same months also vary from year to year because holy days and weekends are in different months in different years. October is one of the longest working months of the year, although it can have either four or five weekends.
Other errors in working hours may be taken in traveling hours. They are counted as working time only if agreed in the collective agreement. This is hardly ever the case for senior staff. Finally, it is to be noted that the military hours worked by conscripts are missing from all statistics as they are considered to be outside the labor force, in a similar institution than a prison and an hospital for the mentally ill.

2.2.1 Why is the Labor Force Survey data unreliable?
The reason is the data collection method. The Labor Force Survey asks employees on the phone how many hours they did last week. In that survey meal hours are working hours if they are paid for. This is contrary to the definition of working hours in ILO BULLETIN OF LABOR STATISTICS, 2001-1, in Adriana Mata Greenwood's article, "The Hours That We Need: The Data We Get,". The Labor Force Survey answers are given on an hourly basis and hired employees who do not work or receive pay are also counted as employees. As the majority of lay-offs are men, this reduces the average number of hours worked by men. An hour's precision, on the other hand, is not suitable for those who work 7.5 hours, for example, five days a week.
I purchased the material from Statistics Finland Labor Force Survey and you can see immediately that the material to cope with the sensitivity analysis of the reliability test. Hours worked by those who have worked more than 40 hours a week are too often 45, 50, 55, 60 and 65 hours, and almost never in the intervals between them. The same phenomenon of five split hours is seen, albeit more modestly, in those who work less than 40 hours a week. When hours of work are not remembered exactly, respondent thinks of an even number.

Memory researchers say, “The longer it takes for an event, the harder it is to remember. Routine daily activities are mixed up in memories, and last week's Thursday assignments cannot be remembered as separate events; Thursday's work is now part of an uninterrupted stream of similar working

days. ” (Minna Huotilainen, Leeni Peltonen: A New Age Notebook, Otava 2020, ISBN 978-951-1-34193-2, page 38)

Quotes from the article: Hulkko, Laura (2004) “Survey on working time statistics in Finland and internationally”, Statistics Finland: Working Hours in the Finnish Labor Force Survey, ISBN 952-467-327-4, Edita Prima: “Akava's Labor Market Survey separately asks for work at work and other time spent at work. The results show that about 80% of working time is spent at work, the rest being at home or on business, for example. Hours worked outside the workplace add up to an average of eight hours per week for senior staff. These hours may be difficult for the defendant to perceive as working time, and may not follow the hours spent at home. "
“On the other hand, working hours are sometimes exaggerated. Previous research findings have shown that post-employment evaluation gives some overestimation of working hours in interview studies. ”
"Regular day-time employees may report hours worked in accordance with normal practice, even if they had worked longer or even earlier in the week." "Regular deviations from normal working hours are remembered, but in practice you may not always be able to accurately remember the actual working time of a week or two ago."

Statistics Finland's researcher Iiris Niemi (see 2.2.3) refers to the general observation that respondents in surveys tend to be socially acceptable. They drink a little alcohol, exercise a lot and work hard, but not too much overtime. Fathers don’t want to be appointed “cell phone fathers”? The working hours are changed upwards or downwards as needed to be socially acceptable, so the “too” high weekly hours are lowered and “too” low hours are increased.

Empirical researchers in the field of time use around the world have found that reliable working time data can only be obtained with real-time data. Most commonly, this is done by giving employees a daily or weekly diary filled in real time every 10 minutes on the day form and every 15 minutes on the weekly form. You report the work you have done in the previous 10/15 minute period. In Finland, for example, Iiris Niemi, Hannu Pääkkönen and Laura Hulkko are such empirical researches.

When comparing the results of the Labor Force Survey with the Time Use Survey, due to both methodological error and conceptual differences, the

Labor Force Survey gives a difference of up to 10 percentage points less than the Time Use Survey for men and women. In Hannu Pääkkönen's comparison, “Methodological differences in measuring working time”, the Labor Force Survey gave a 10% difference to wage earners, while the Time Use Survey yielded 20.5% (Statistics Finland Labor Market 2003: 8, Changes in Working Time, ed. Laura Hulkko). Such a large difference does not fit within the statistical margin of error.

Here are some statements from a foreign researcher: Professor Robinson [15] from the US says ”... the burden of evidence clearly points to the strong likelihood that time diaries are the only viable method of obtaining valid and reliable data on activities.” Norwegian researcher Ragni Hege Kitterød [16] says “There is no dispute that studies based on time diaries form the best data source concerning people's time allocation ...”. Danish Jens Bonke [17] says' Time-use information is obtained from Diaries as this method is considered more reliable than information from Questionnaires'.
Perhaps the most strongly expressed researchers are Jonathan Gershuny, Kimberly Fisher, Anne Gauthier, Sally Jones and Patrick Baert, saying: ”The yesterday diaries are less accurate than a near-contemporaneously recorded diary, and in practical terms they are limited to one-day diary format.”
So, in practice, you can only try to remember the hours of the previous day and that information is less reliable than the information from a real-time journal.

2.2.2 Elina Haavio-Mannila's study of doctors 1964 and Leena Kääriä's study of dentists 1965-66

Finland's first sociological study on equality was published in 1968. It is Elina Haavio-Mannila's study “A Finnish Woman and Man” (WSOY Porvoo, 1968). In this essay on women's research, she compares women’s earnings percentage of men's earnings of different occupational groups over four years. Quote: “It is not clear here whether men and women do as much work to achieve these different prizes. Some data, for example, on the work of doctors and dentists show that women's lower income is linked to the fact that they work less than men on a daily basis (Haavio-Mannila 1964, Kääriä (Dental Journal 1965/66)).”

2.2.3 The Iiris Niemi study of 1993

According to this study, it was published in 1993, but the data is from 1987. That means, there was already research evidence that there are differences in the working hours of men and women for men.

Iiris Niemi Research: SYSTEMATIC ERROR IN BEHAVIORAL MEASUREMENT: COMPARING RESULTS FROM INTERVIEW AND TIME BUDGET STUDIES, Social Indicators Research 30. pp. 229-244 1993

Part of the table II Iiris Niemi, 1993

1987 September-November	n	Hours/week Diary	Women/ Men hours/week %
M Upper white collar	256	38,8	
M Lower white collar	306	38,7	
M Blue collar workers	732	39,8	
M together	1294	39,34	
W Upper white collar	184	36,2	
W Lower white collar	693	31,3	
W Blue collar workers	346	35,2	
W Together	1223	33,14	82,2 %

The effect of longer holidays for women is 2-3%. The study involves overtime.

That is, women working full-time in 1987 made less than 80% of the hours worked by full-time male employees.

2.2.4 EU study on accidents at work 2003

EU research: Kauppinen, Kaisa; Kumpulainen, Riitta; Houtman, Irene & Copsey, Sarah (2003), “Gender Issues in Safety and Health at Work.” A review. European Agency for Safety and Health at Work. Researchers say: page 35: Accidents, Key points: "Men are more likely to suffer major or fatal accidents than women. Their seriousinjury rate is almost three times higher. When adjusted, it is still over twice as high. "

They don't tell the difference in hours worked, but mathematically, that means that they say men's annual contribution is nearly 30% higher. Taking into account more women's part-time jobs, the difference is about 25% for full-time workers.

Here are some calculation examples of what does this mean: Accidents at work are "almost three" per person and work accidents are "still over twice" per hour worked:

Work accidents ”almost three”	Work accidents per working hour ”Still over twice”	Women’s working hours of men %	Men do more working hours %
2,79	2,14	76,9	30,3
2,8	2,2	78,6	27,3
2,85	2,15	75,4	32,6
2,9	2,1	72,4	38,1

2.2.5 Statistics Finland, Iiris Niemi and Hannu Pääkkönen: Changes in Time Use in the 1990s

Hours worked by wage and salary earners from Time Sheet Survey Form 3/1999 - 2/2000 by socio-economic status. See the first four columns in the table for a title publication on pages 21, 67, and 69). The last column ("All") is the first three columns together calculated by me.

Hours/year	Upper white collar	Lower white collar	Blue collar			All together
Men	1965	1849	1904			1908.5
Women	1442	1563	1479			1515.7
Amount men 1000	261	211	478			950
Amount women 1000	236	547	214			997

Wage and salary earners accounted for 79.4% of men's annual working hours in the 12 months between 3/1999 and 2/2000, a period when can be

considered as normal economic growth. It should be noted that part-time workers are also involved.

2.2.6 Pauli Sumanen's study, “The Quantitative Productivity of Full-Time Working Male and Female Employees in Finland” (http://www.hrpub.org/download/20151130/SA6-19605042.pdf)

I studied working hours for the same time period as Iiris Niemi and Hannu Pääkkönen (see 2.2.4), but using the data from the weekly time use survey I purchased from Statistics Finland. The result is about the same.

Table Pauli Sumanen: Number of hours worked by wage and salary earners at work 3 / 1999-2 / 2000 calculated from weekly time use survey forms

Weekly working hours	Men persons	Hours/ week	Men persons	Hours/week
Hours 0.1–35	332,13	7 857.33	493,50	11 760.35
Hours 36–40	323,86	12 484.02	320,94	12 192.71
Hours 41–44	116,15	4 924.41	93,80	3 975.96
Hours 45 -	260,13	14 023.54	105,49	5 431.74
Total	1032,27	39 289.30	1013,73	33 360.76

In order to understand the table, it should be noted that the original data has many times more people, but the data has been reduced to approximately 1000 employees for ease of calculation. Another noteworthy fact is that those who had not done even 15 minutes of paid employment during the week of the survey did not return the form. Part-time employees are included.

At the time of the survey, about 33% of men and about 17% of women worked over 40 hours. Men work overtime hours more than four times as much as women.

According to the table, women accounted for 84.9% of men's weekly working hours. If we believe that wage earners in the Labor Force Survey correctly remember whether they were at work the previous week, we can

correct the percentage down 5 percentage points, as the wage and salary earners' employment rate was about 83% and that of men about 88%.

That is, female wage earners made just under 80% of men's annual working hours. The figure calculated on the one day form was 79.4%. An explanation for the difference can be found in Appendix 1 of Statistics Finland, Changes in Working Time (ed. Laura Hulkko). Hannu Pääkkönen has observed that the weekly form gives a difference of about half per cent higher in the comparison of working hours between men and women.

From the weekly data we can conclude that this 20% difference is made up of half (10 percentage points, later py) of men's higher unreported overtime, a quarter (5 py) of women's more paid leave (annual leave, sick leave and parental leave) and the rest of the difference in regular weekly working hours (5 py).

2.2.7 Peer-reviewed study on entrepreneurs and employees
In "The Myths and Reality of the Workplace," edited by Pasi Pyöriä, (2017 Gaudeamus), Chapter 8: "Working Time and Income of Entrepreneurs", Satu Ojala, Pasi Pyöriä, Hanna-Mari Ikonen and Tuija Koivunen, Labor Market Researchers, have calculated from the Time Use Survey of Statistics Finland that in 1999, that female wage and salary earners accounted for 79.6% of men's annual working hours.

2.3 Differences in working hours in the same professions

Although there are differences in working hours between men and women throughout the economy, this does not mean that they must be diffences in the same professions. Mathematically, this cannot be deduced.
However, we have some research on the differences in working hours in the same professions.

2.3.1 In the book "Time Burst" (2004), researchers Raija Julkunen, Jouko Nätti and Timo Anttila have found from their survey data that, with the exception of teachers, men work more weekly hours than women (pages 229-231). This exception would probably be eliminated if teachers were divided into groups according to the subject (math lecturers, physical activity lecturers, etc.). The biggest difference was found among experts (16%). Because this was a questinnary, the difference can be even greater.

2.3.2 Male and female doctors have also been examined. Hospitals have working time monitoring systems, so they can produce fairly reliable results. On November 7, 2008, a quote from Ulla Järvi's article in a magazine of Medical Association: "Is a woman a different doctor?". "In Finland, male doctors are also better at advancing their career and working longer hours, which is also reflected in their income levels," Kaisa Kauppinen points out. Kaisa Kauppinen is a Research Professor at the Finnish Institute of Occupational Health and a docent at the University of Helsinki. Another quote: "According to research, the working time of female doctors is about a fifth shorter than that of male doctors, and women also spend a little more time on one patient. In practice, this means that more (female) doctors are needed to do the same work."

2.3.3 The Medical Association reports in 2017 that the pay gap between men and women has narrowed. One reason is that long-time working male doctors are retiring more and are increasingly being replaced by female doctors who do not work as many hours. New graduate male doctors also work less hours than older male doctors. Another phenomenon is following that the proportion of doctors born abroad is constantly increasing. It is already about 10% of the medical doctors in Finland. Education levels are not increased and male and female doctors entering the profession work shorter working days than retiring physicians. Thus the need for medical doctors will have to be filled with medical doctors born abroad.

2.4 Summary of the impact of the quantitative productivity gap in the pay gap

We use the data of the Tax Administration for the tax year 2017 (www.vero.fi) as the difference between the earnings of men and women. Income of wage and salary earners in 2017 invludes all wage and salary earners during the tax year, also short time workers working during summer vacation, congestion helpers, temporary work, etc. The Labor Force Survey includes over 2.2 million waage and salary earners. Earnings include all possible kinds of earnings, holiday pay, bonuses, awards etc. Also included are all over 200 different extras paid in addition to the base salary. Only income from the grey and black economy that is not known to the taxpayer or the police is missing from labor income.

	Taxable earnings	Persons	Earnings per person	Women/ men %
Men	49 084 907 145	1 453 005	33 782	
Women	36 676 901 565	1 420 473	25 820	76,4 %

In section 2.2 above, we found that female wage and salary earners make slightly less than 80% of men's annual working hours. **So is the gender difference in earnings per hour worked about 3%?**

No, because tax information includes all hours-related bonuses that do not add to working hours, such as inconvenient hours, hourly overtime bonuses, holy weekdays, Saturday and Sunday bonuses, extra night work that men do twice as much as women, on call duty etc. Overtime allowances account for about 2.5% of wages and salaries, Sunday, Sunday and night and shift work for about 3.5% of wages. I could not find data for extras of alarm pay and on-call emergency duty at home.

The combined effect of these is that I estimate that men's pay should be reduced by at least 3% more than women. About 2 percentage units come from paid overtime.

In the 1998 case of Sweden (Jämo C-236/98) concerning night workers, the European Court of Justice has ruled that equal pay should not include wage supplements paid for uncomfortable working hours. This same requirement can be found in the ILO-100 Convention.

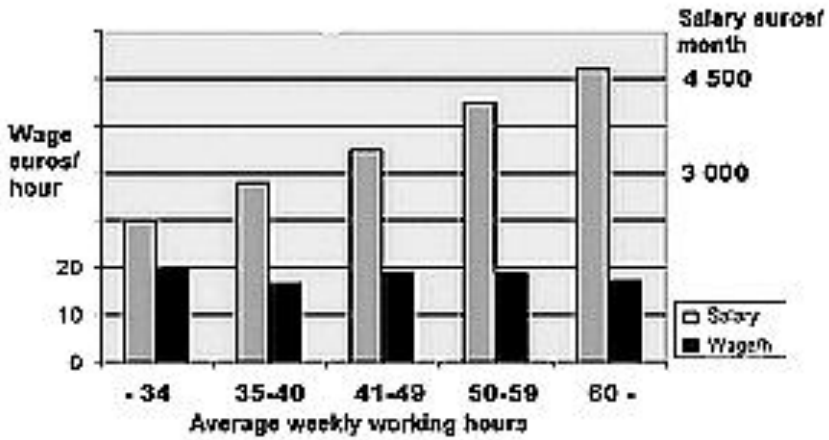
Milja Saari writes on tasaarvovaje.fi: “Media always talks about nurses' salaries in general. They often include extras, which is wrong. Allowances are a reward for working in inhumane times and when others are sitting at the Christmas table. ” Interestingly in her dissertation on wage differential policy, Milja Saari made no reference to calculations where working time bonuses were removed.

2.5. How are overtime payments remunerated when they are not paid on an hourly basis?

Comparison of wages shows that while men work overtime hours many times as much as women, overtime workers are not paid extra overtime bonuses at all, but receive a simple hourly rate for overtime hours.

It also emerges from the aforementioned “Time Bump” study: Raija Julkunen, Jouko Nätti and Timo Anttila: "Time Bump - The Middle Class in the Compression of Work". The book contains a lot of interesting research information on productivity and hours worked. Here is a graph of weekly hours worked versus hourly and monthly earnings. The monhly salary data and weekly working hours are from their study.

Data from the survey: Julkunen, Nätti, Anttila: Aikanyrjähdys - Keskiluokka työn puristuksessa page 100



We find that monthly earnings are linearly related to weekly hours worked, with hourly wages remaining approximately the same. If we increase the number of weekly hours worked by 50%, the monthly salary increases by about 50%. According to their survey, 34% did not receive extra pay for overtime and 15% worked regularly for more than 50 hours. They also mention that academically trained employees were often unable to tell what kind of employment contract they had in terms of compensation for

overtime. Further quote from the study: "Regularly extended working hours were most often done by men in the private sector."
From my own work history, I can tell you the last time I received a separate salary for overtime in 1969, when I was 26 years old. After that, I only had one sum in my pay slips for my different jobs, which also covered the compensation for overtime. Neither party stated what the share of overtime pay was in my monthly salary. This is still common practice for senior staff. I did travel work, but no job was paid for travel, except for work done on a Sunday, our from hour basis. As a project manager, I often had a situation where I received significantly less total revenue per month than my subordinates in the project. The project manager calculates the cost of the project and knows the salaries of others.

The impact of unreported overtime on earnings in the United States is reported in Youngjoo Cha, Kim A. Weeden, "Overwork and the Slow Convergence in the Gender Gap in Wages" (2014). They came to the same result as us: A significant part of the difference in earnings is explained by unreported overtime.

2.6 Sectoral differences in Pay According to the Labor Force Survey

The annual working hours in the municipal sector are about 10% lower than in other sectors. It should be noted that average monthly earnings in the municipal sector are also about 10% lower than in the private sector. The municipal sector is thus not an underpaid sector, although it is often claimed.

2.7 Summary of the consideration of quantitative productivity in the calculation of the gender pay gap

When non-discriminatory working time bonuses (hourly overtime pay and inconvenient working time allowances) defined as non-discriminatory by international jurisprudence or collective agreements, **men and women receive the same average hourly earnings per hour worked.**

It should be noted that, according to the study, those who work unreported overtime are paid no more than normal hourly wages. If we believe that overtime work should be paid more than a simple hourly wage, it is men

who suffer the most, as they work more than four times as much as unreported overtime hours than women.

There is no legal definition of part-time. In some statistics, Statistics Finland defines a person as a part-time worker who contributes less than 90% of the working hours of others. So the average woman is a part-time worker if we consider the average man's working hours as the norm.

Quantitative productivity is defined by the EU as the number of hours worked in the workplace. It does not alone represent a person's overall productivity. Total productivity can only be found out when we know what a person's qualitative productivity is, ie the workload per hour. Their combined effect refers to the productivity that an employer receives from a person's total labor input per year.

After taking into account quantitavive productivity, the man and the woman earn both 100 cents on our way to equal pay comparisons.

CHAPTER 3 THE EFFECT OF QUALITATIVE PRODUCTIVITY ON EARNINGS

Background

In this study, qualitative productivity refers to the amount of quality work effort per unit time. At its simplest, for example, tree seedlings planted in an hour cost EUR 15 per hour. He who plants the highest number of tree plants per hour is qualitatively the most productive planter. Qualitative productivity is reflected in earnings statistics by paying productivity bonuses on top of basic salary such as various forms of contract bonuses, sales commissions, individual and group production bonuses, performance bonuses, personal bonuses for doing a good job, etc. "Good man / woman supplement". One of the synonyms of qualitative productivity has recently been "job performance".

Measuring qualitative productivity is difficult and has therefore not been much researched or done. In the workplace, measurement is usually left to the foreman or other supervisor. Assessing job performance is extremely difficult for those with intellectual work. And it's not always easy for all vendors. I was an IT manager at a company that used mainframes. When I asked a computer retailer if the business was successful. He replied, "I sold one machine two years ago, it's been quieter since then." And yet he was one of the most productive salesmen in his company. His main source of income was sales commission.

In this context, it should be noted that when qualitative productivity has not been succesfully measured, substitutes have been developed to replace it. These include, for example, assessment of the impact of initial education and experience, as well as age and experience allowance. As we will see later, these are quite schematic tools for evaluation, and we show that there can be up to four times the productivity gap in coping with the same job, so these are not the right solution. Not all those with the same education do their work as efficiently, and not all increase their efficiency as their years of experience increase. In many professions, in-service learning is even more important than basic education, and many professions include built-in lifelong learning.

Although productivity was one of the top projects in the EU in the 2010s, investigating the measurement of personal qualitative productivity is a black hole in labor market research. Studies do not exist, although the EU Treaty requires qualitative productivity to be taken into account in the pay gap comparison.

3.2 Studies on qualitative productivity

There is hardly any research in international literature either. The following is a summary of the data found that deals with qualitative productivity.

3.2.1 Comparison of female and male doctors in the Medical Journal

“Studies show that women doctors work about a fifth shorter than men, and women also spend a little more time on one patient. In practice, this means that more (female) doctors are needed to do the same work. ”
http://www.laakarilehti.fi/index.html?opcode=show/news_id=6468/type=1, From Article Ulla Järvi: Is a Woman a Different Doctor?

3.2.2 Azmat & Ferrer's study of lawyers

Azmat, G, and R Ferrer (2016), Gender Gaps in Performance: Evidence from Young Lawyers, Journal of Political Economy, forthcoming. This study, which is extensively discussed in Helsingin Sanomat, shows that the higher earnings of professional men are explained by the fact that they work more hours and are otherwise more productive workers. They mm. acquire more and better new clients for their law firm. The study was published in various magazines in Finland in spring 2016.

3.2.3 Dissertation of Juha Jokinen at the University of Jyväskylä August 18, 2017

Her doctoral thesis was titled: "Essays on Wages, Promotions and Performance Evaluations". The following is an excerpt from the dissertation: "Good performance is rewarded".
“According to a survey of university researchers, managers recognize and reward employees based on their performance. Researchers who publish more scientific articles and, in other cases, are more productive, get better performance evaluations, are more likely to be promoted and earn more.

On the other hand, employees who have worked for the same employer for longer have been rated better than their more productive but less experienced colleagues, Jokinen says.
Research also shows that male and female researchers of similar background and productivity gain equal performance appraisals and salary increases, and are equally likely to advance to more demanding jobs.
The gender pay gap is explained not only by differences in background factors, but also by differences in scientific publishing activity. Female researchers produce less peer-reviewed scientific articles than men in similar academic positions and with similar backgrounds. ”

The same was said by Eeva Rantala, Executive Manager of the Federation of Finnish Scientists, interviewed by Keskisuomalainen: “As a rule, personal performance is also higher for men than for women. Researchers' personal performance is estimated to be up to three percent lower than men's. ”

3.2.4 Päivi Vuorinen-Lampela's Dissertation 2018, "Differentiated Labor Results in Higher Education", explains in the chapter: Conclusions and Discourse: "As public institutions, including the universities in 2009, have moved to a new performance-based pay system, this is also likely to have increased the pay gap for men."

3.2.5 Aalto University research
At Labor Research Days 2018, MSc Juha Eskelinen from Aalto University School of Economics presented a joint project by Aalto University, Nordea company and Nordea staff to measure the qualitative productivity of people working in customer service and its relation to well-being at work. From the results, the best results in the productivity index were above 50% the average and weaker than 50% below the average. There was thus a fourfold difference in the qualitative productivity of the extremes. Unfortunately, there is no gender division in research results.
Ahola S., Eskelinen J., Heikkilä-Tammi K., Kuula M., Larjovuori R-L. and Nuutinen S. (2018) Digitizing for Work Suction? - Study on the relation between well-being at work and productivity in a financial services company. (Https://aaltodoc.aalto.fi/handle/123456789/34429)

3.2.6 Extracted from magazines

In February 2019, on consecutive days, we read in magazines about working at work. First, on February 14, 2018, Kauppalehti reported that, in a 2018 Economic Union poll, "28% of respondents said they had received a personal pay increase."

And the next day, in Helsingin Sanomat, the City of Helsinki's Asta Enroos, Senior Vice President, Human Resources, stated: “During the year, the City of Helsinki will invest in personal pay. This applies to all professions. ”

According to several trade unions, production premiums are higher for men than for women, also in percentage terms. In commission work, the sales commissions of men are larger than those of female agrologists (Agrologi 4/2007).

In January 2020, Helsingin Sanomat reported that Elisa has a male salesperson for telephone contracts, Joonas Lahti, 24, who earns more than Elisa's CEO.

3.2.7 Aspasia Bizopoulou: "Job Tasks and Gender Wage Gaps within Occupations", VATT Working Papers 124

Aspasia Bizopoulou's research “Job Tasks and Gender Wage Gaps within Occupations” survey is based on an OECD survey. It asked respondents to indicate how often they performed 40 general tasks that are typical of their profession. They were also asked how many hours a week they work.
Helsingin Sanomat reported in the study as follows: “According to a recent study by VATT, the State Economic Research Center, there are other reasons for the gender pay gap that have so far been hidden. According to the study, it seems that the pay gap is partly explained by the fact that men perform tasks that are more central to their job description than women, VATT states. The study is based on a recent OECD survey of more than 250 professions from 13 European countries. Respondents were asked how often they perform 40 of the most common tasks for their profession. " And, “The observation was surprising: women report, on average, performing key tasks less frequently than men”. “On average, the difference was 12 percent,” Bizopoulou says. “The study ruled out a number of influential factors, such as overly cautious reporting. Also, the

number of hours worked did not seem to have a significant impact on how vigorously the key tasks were performed. ”
The study involved Denmark and Norway. No material satisfying research needs has been collected from Finland.

3.3 Summary of studies on qualitative productivity
Although we have found that, according to studies, men are qualitatively more productive than women in the same job or occupation, it cannot be inferred that they are automatically at the level of the whole economy. See Chapter 11 for details.
We reduce that 12% productivity gap by a few percent, which means we would consider the 7% difference in qualitative productivity more credible.

There is a similar difference between men's and women's sports scores.
If that 7% is not believed, the only way to take qualitative productivity into account is to investigate how much qualitative productivity bonuses (contract fees, production bonuses, performance bonuses, commissions, etc.) are included in Statistics Finland's data, even though Statistics Finland does not represent the whole economy. The next step is to do the same for personal pay bonuses, as the reason for paying them is generally to reward 'performance'.

How much are the deductions made from the total pay of men and women? However, the result is not the whole truth, as the share of personal performance allowances, especially in the private sector, is not separated from the monthly earnings. In particular, the benefits of graduates are underestimated, because while the graduate usually negotiates his / her salary during the recruitment interview, the personal workload rate is included in the total monthly earnings agreed during the negotiations and does not appear anywhere. Personal performance salary increases are also generally made by adding them to the total salary and are not collected in a separate field in the payroll.

3.4 Comparison of earnings between men and women, taking into account qualitative productivity

Either we subtract earnings-related benefits from qualitative productivity and believe that they have been fairly calculated, or we partly believe in VATT's research, and we consider it correct that men are about 7% more

qualitatively productive than women. In any case, international law requires qualitative productivity to be taken into account.

3.5 Why are men qualitatively more productive than women?

To our knowledge, there are no research findings, so the following statements are hypotheses. Lipponen's / Marin's government programs mention that the government is investing in research into measuring the complexity of jobs. So official! It is based on the idea that wages should be paid according to the demands of the job. Unfortunately, in the public sector, this model is valid because it does not measure the impact of personal productivity. In the private sector, wages are paid based on the size of the labor input and the value of the personal labor input to the company. The amount of work input can be increased quantitatively (by working more hours) and / or qualitatively (by working more effectively per hour). The value of your work input can also be personally enhanced, for example, by developing work methods or a product / service. The government should use the money they spend to find and develop methods to measure personal productivity.

3.5.1 Male wage earners are on average smarter than female wage earners
All men who enter the armed forces take an intelligence test (so-called block test) as soon as they enter the service, because the Defense Forces want the training to be rational in terms of national defense. This test is quite reliable, though there are always those who want to get out of the service as quickly as possible and therefore deliberately fail in the intelligence test. However, their number is so small that it does not need to be taken into account. There are studies that track the later stages of military service, and there is a clear correlation between intelligence score and job success. Some of the correlation is probably due to leadership training received during military service, but not all.
Antti Kivimäki, editor of Helsingin Sanomat, says in his article “Men control the extremes”: “The phenomenon is called the male variability hypothesis. In many cases, the genders are very similar in terms of the characteristics of the people on average, but in men the variation is greater, that is, at the extremes they stand out in terms of both pros and cons. The most phenomenon has been observed in skills and intelligence tests. ” (https://www.hs.fi/tiede/art-2000006230567.html)

With about 75% of men who are in the work force, it is obvious that the lowest 25% are men who do not pass the aptitude and intelligence tests. Otherwise, one should question employers' recruitment methods. When women's distribution curves are higher in the middle, and when we take 25% off at the bottom of both curves, this means that men in the workplace are on average more skilled and intelligent than women in the workplace. And that is why men's average hourly wages per hour worked should be on average higher than women's, but for some reason this is not the case in Finland, as we have shown.

The same hypothesis of male variability can be seen in the leaders of our country. Having more men than women at both ends of the intelligence and skill tests means that when we take the top 3% of the intelligence curve, there are many men per woman. Three per cent of the wage and salary earners make about 60,000. Most of them work in family businesses where the selection process is unique. Hopefully, leaders in both the private and public sectors in Finland will be selected from this group of smart and skilled people. There are several top-smart and talented men in this group for every intelligent and talented woman. The same ratio nowadays is reflected in leaders. It is not, therefore, a revenge of the patriarchate on the female sex, but a fair selection process. (That is, if we want the most skilled and intelligent leaders to be chosen.)

When the International coder school (HIVE) came to Finland, the search was made open to everyone, and the search advertising was specifically targeted at women. Thousands of students applied for it, and after a series of entrance examinations lasting several months, the first course was selected. "When Hive Helsinki started the coder school, a fifth of the students were women, " YLE reported. (https://yle.fi/uutiset/3-11019083) The entrance tests focused on logical intelligence, so there was nothing new under the sun.

3.5.2 Men receive useful leadership training in military service

We will return to the harms of conscription later on, but one of the benefits of conscription is that a man learns to live in an environment of equality with all men of his age group. This is an important skill in working life, where teamwork is becoming more common. Officers receiving officer

training will learn how to act as both subordinates and supervisors. Both of these are useful in working life.
“Captain Jukka Toivonen thinks that there is no much difference between military leadership and civilian leadership, because in both of them the leader has to adjust his way of managing according to the situation. The leader has to adapt to what his or her group is. Here too, it is emphasized that it is essential to know your own subordinates. You will then be able to find strengths and identify weaknesses. Then you know who can do a certain task. ” (Https://yle.fi/uutiset/3-11146403)

Erik Lindqvist, a Swedish researcher, has shown that Swedish men with military training who completed their military service between 1970 and 1988 were more successful than others. The effect of intelligence was removed by selecting men with about the same intelligence quotient from the data, so that when selected, some of them went to officer training for the nip button and some were below the nip button bar. Thus, the intelligence levels of both groups were nearly the same. https://www.talouselama.fi/uutiset/nyt-loytyi-naytto-armeijasta-saa-potkua-johtajauralle/bc695164-44bc-328a-9b2b-9f8b39adabec

3.5.3 The way men work is more effective

In the last century, female researchers developed the concepts of dripping brains for women and tube brains for men, in which they sought to make women superior to men. Sirkka-Liisa Anttila, MP from the center, said: "A woman has the dripping brain, which allows us to do two and three things at a time, and everything works out very well. I have many experiences with it." (Anttila was chairman of the board of the Confederation of Women's Organizations (NJKL) and chairman of the board of Women's Associations in Co-operation (Nytkis).)

When the allegations of drip bread brains were medically proven wrong, female researchers switched to the notion that women multitask. Apparently, the men then monotask. Recently, brain researchers have shown that male monotasking is more productive in working life than female multitasking. There are some translations available for multi-tasking, such as multi-jumping. Women start many jobs at the same time. Men start one job, finish it, and move on to the next job.

However, there is only one "processor" in the brain. Only one job can be moved forward at a time. Brain scientists explain the disadvantages of multitasking as follows: “Every time you change jobs, the cost of changing jobs is incurred. It means slowing down the task, but there is more to it. For example, the probability of errors increases as we switch from one task to another. In addition, switching from one task to another is more burdensome than having to complete the same task in peace and then switch to another at your own pace. The unfinished things in the mind are a burden even when they are not in the conscious memory. ” (Minna Huotilainen, Leeni Peltonen: A New Age Notebook, Otava 2020, ISBN 978-951-1-34193-2, page 106.)

3.5.4 Women's endurance at work

In the previous paragraph, we found out that women overload their brains with multitasking. This results in work-related stress. Obviously, this habit is inherent, as women already suffer from mental health problems already at primary and secondary school. Top news: "Depression and anxiety are particularly felt by girls in upper school and secondary education, according to the latest school health survey every fifth of them." (Https://yle.fi/uutiset/3-11124573)

Mental health problems are the most common health problem among third degree students. 22% of male students and 37% of female students have weekly mental problems. Every tenth student has depressive symptoms and over four per cent of college students have anxiety every week. (Mental health problems can delay studies. Sirpa Pääkkönen HS Published: Feb 15, 2016 9:10 AM)

“Sick leave due to mental health problems is on the rise. One group stands out in the statistics: young women. For them, shaking one's mind in one way or another is clearly the biggest reason for being absent. This was revealed when Terveystalo recently published a report on the subject. ”
Katarina Baer. The author is the head of HS's lifestyles editorial office. (Https://www.hs.fi/mielipide/art-2000006067156.html)

Nurse's chairman Millariikka Rytkönen says that “kiky” added to mental health absences. (Https://www.iltalehti.fi/politiikka/a/d0954826-f325-4888-aa88-70ee00804ca9)

So, the news says that when nurses who worked less than 1,600 hours a year had because of “kiky” 24 extra hours a year more mental health problems. How low is woman's true tolerance, when community nurses had 24.9 days of sick leave in 2018, compared to about average of 7 in the private sector (for all male workers)? And for those men, the annual working hours are over 1,800!

According to Social Security Institute of Finland registers, the causes of depression (especially among young women) are already at the forefront of women's retirement. In men, the major single cause is musculoskeletal disorders, which occur particularly in older workers, who do physical work.

One year ago, I read from the state budget that the STM estimated average sick leave for men 7 and 9 days for women. So women are about 30% more sick.

Women 's tendency to neuroticism

In working life, neuroticism appears to be detrimental when a person strives to complete neurotic work. He does not dare to finish the task if he believes there is still room for improvement. In school life, this is known as a "full dozen student".

I was never the best student in the class at a secondary school because my classmate was a girl who knew all the textbooks. He dropped out of high school for first grade because he could no longer read everything outside, and on the other hand, he had to start combining and applying what he had learned and studying independently outside of textbooks. No more tens of copies of textbooks were obtained in the tests. He became a good bank clerk, where a totally flawless performance is appreciated.

Neuroticism has recently been studied. Two Examples: Maria Kristiina Mrena, Master's Thesis, Psychology, Department of Behavioral Sciences, University of Helsinki, October 2014: Relationship of Big Five personality traits to metabolic syndrome in Finnish adults. The research material was collected at random and is well representative of Finns. The average for women's neuroticism was 2.48 and for men 2.22. Of course, we do not know whether the sample represents employees. It may be that neurotic women are more likely to be excluded from working life.

Dissertation of Anneli Kuusinen-Laukkala, 2019: "Supporting Depressed Life Management in Primary Health Care". Extract from page 30: "Women also have more psychiatric symptoms than men, whose anxiety and neuroticism also predispose them to depression (Piccinelli 2000)." From page 54: "Women are more neurotic than men, therefore the risk of (mental health problems) is about double." Page 77: “Personality and coping strategies influence how work stress is experienced. Emotionally oriented coping and a neurotic personality trait lead to negative interpretations, for example in organizational changes. ” From page 261: “Many described themselves as performance-oriented and always stated that they were always striving for perfection, whatever they were doing. The stress experienced was often long-lasting and intense and eventually exhausted, leading to depression. There were several triggers in parallel or in succession. Neuroticism as a personality trait also served as a predisposing factor. ”

3.5.6 Values, attitudes, competitiveness and attitudes towards productivity

In value and attitude studies, statistically significant differences in the male-female comparison are found in the concepts that are important to men: work, money, and career advancement, and those important to women: family, home, and friends.

Men are also more competitive than women. According to Muriel Niederleand, Lise Vesterlund: Gender and Competition, women want to compete less than men, and when women compete against men, the pressure of competition increases the performance of men more than that of women.
(Https://web.stanford.edu/~niederle/NV.AnnualReview.Print.pdf).

On Finnish Research Halko, M-L., & Sääksvuori, L. (2017). Competitive behavior, stress, and gender. Journal of Economic Behavior and Organization, 141, 96-109. (https://doi.org/10.1016/j.jebo.2017.06.014) (a brief introduction at: https://www.julkari.fi/handle/10024/127185)
It states, for example: “Our findings show that women are more likely to ignore competition-based remuneration than men (54% of women and 72% of men chose competition-based remuneration).

Loss of women's competition and lower performance gains in competition mean that women have lower qualitative productivity.

Anna-Maija Lehto, a researcher at Statistics Finland, in her book "Genderizing Practices in Working Life" (ppweight 71-87), discusses how women view productivity and efficiency in the workplace negatively. She says in her article that one problematic aspect for women in terms of productivity thinking is that productivity and competition are emphasized, which is unsuitable for women.

In his dissertation, Paula Koskinen Sandberg attempts to negate the impact of productivity on wages: "To view wages as purely reflecting productivity, individual choise or market forces is to oversimplify the issue." And "While we utilise mainstream methodology, the aim of the analysis is not primarily to explain the gender pay gap with productivity factors." She thus acknowledges that the impact of productivity on wages is ignored in the dissertation.

In the light of the lack of information on the differences in qualitative productivity between men and women, we find it plausible that men's qualitative productivity is on average about 7% higher than women's. (A similar difference can be seen in sports scores.)

According to our hypothesis, some of the reasons for this are higher male intelligence among employees, male leadership training during conscription, women's multiple use of work at risk, greater health and mental health problems, a greater tendency for women to have neuroticism, and and differences in men's and women's values, attitudes, willingness to compete, and women's negative attitudes towards productivity and efficiency requirements.
The fact that men do about 25% more annual working hours results in men having on average 25% more work experience than women. Men are therefore, on average, 25% more experienced workers than women. A more experienced employee is considered to have higher qualitative productivity.

At this point, the man's euro is 93 cents on the road to equal pay comparison.

CHAPTER 4 WHAT OTHER NON-DISCRIMINATORY BENEFITS MUST BE REMOVED TO COMPARE EQUAL ADJUSTED GENDER WAGES

In the above, we have taken into account, on the road to equal pay comparison, hourly wages, overtime, shift and night-time bonuses, Saturday, Sunday, and public holidays bonuses and qualitative productivity bonuses (e.g., contract bonuses, commission bonuses, production bonuses, performance bonuses, tantalums, etc.).

ILO 100 Agreement, all other non-discriminatory supplements, which is mentioned in the law or which is made of workers and between employers' agreement that they will not be paid according to gender, must be removed from the equal pay comparison.

In 2004, a study on the establishment of the Equal Pay Program was published. from the Ombudsman for Equality: "Ministry of Social Affairs and Health Working Group Memoranda 2004: 13, Tuulikki Petäjäniemi: Study on the preconditions for building a government equal pay program together with the labour market partners." In it, he says on page 16: "It is well-established in the labor market and case-law that the pay gap resulting from full-time and part-time work, overtime or different working conditions is acceptable."

According to one estimate, over 200 different types of bonuses have been recorded in collective agreements. Hardly any supplement is paid to men and women according to different tables. So, the basic principle is that any salary supplements that cannot be considered as part of the basic salary and for which an acceptable counterpart must be accepted must be excluded from the equal pay comparison. Benefits in kind (eg housing, car and food benefits) must be retained as part of your salary.

Let's take one example: A musician who plays in the orchestra with his own instrument is entitled to a supplement for the instrument. He may waive the allowance, in which case the employer will have to show (buy, rent) him an instrument for playing and practicing. When comparing the

salaries of two musicians, the instrument surcharge must not be taken into account.

Other supplements are left unnoticed, as they are not specified in tax data, but Statistics Finland's data provide some approximate information on the above-mentioned inconvenient working conditions. These include, for example, high, cold or hot, hazardous, heavy and dirty work. In addition, if extra pay is paid for outdoor work, it must be eliminated. Because men are more likely to do the above-mentioned jobs than women, men's payroll is lowered more than women's. We are cautious and estimate the difference as only one percentage point of payroll. You have to wait to see what Statistics Finland's statistics say, if their data is ever published.

The man's euro is, after taking into account circumstance bonuses (1%), on the way to the equal wage comparison 92 cents.

CHAPTER 5 PAYMENT OF PENSION

If you want to make an equal pay comparison, some things have to be taken into account at the lifetime level because they do not show up when comparing one month or even one year earnings.

Satu Ojala & Paula Koskinen Sandberg & Armi Mustosmäki write in an article in Social Policy (84 (2019): 5-6) “Ilkka Engineer over € 13,000 more than Sari Nurse?” as follows: “Differences in earnings also multiply annually and over the life cycle. In addition to hourly or monthly wage comparisons, earnings should be examined on an age basis and in terms of benefits. The benefits partially offset the (absolute) difference in annual earnings between men and women, but only part of the benefits affect the level of retirement in particular. ” Here we will deal only with the retirement benefit, other benefits will be discussed later.

Pension is defined as a part of salary in several international agreements that bind Finland.

1. The EU Treaty (Rome § 141, Lisbon § 157) states: "For the purposes of this Article," pay "means the ordinary basic or minimum wage or salary and any other consideration, whether in cash or in kind, which the worker receives directly or indirectly from his employer.
The pension is paid as an indirect salary from retirement age forward. In order to pay the pension, pension contributions are collected from both employees and employers. The employee is paid a pension contribution from the gross wages paid in advance.

2. The EU Court of Justice and the EU Equal Pay Directive
The Equal Pay Directive 2006/54 / EC, adopted in 2006, does not define equal pay or the method of calculating the pay gap, except for occupational pensions. It states in paragraph 37: 'In order to better understand the reasons for the different treatment of men and women in matters of employment and occupation, comparable gender-specific data and statistics should be developed and made available at the appropriate levels.'

The Directive does not define what it means by "comparable". It is therefore necessary to refer to the definitions of the other institutions of the European Union and the rulings of the European Court of Justice.
In point 13 of the preamble, the directive states: 'In its judgment of 17 May 1990 in Case C-262/88, the Court of Justice stated that occupational pensions of any kind constitute a component of remuneration within the meaning of Article 141 of the Treaty.'

3. ILO 100 Convention: For the purposes of this Agreement
(a) the expression "pay" means the actual basic or minimum wage or salary and any other consideration, whether in cash or in kind, which the employer receives directly or indirectly from his employment.

5.1 How much does taking into account the pension affect?

A fairly good calculation has been made by Reija Lilja, Research Director at the Center for Wage and Salary Research. It has been published on the STM website. (Http://stm.fi/artikkeli/-/asset_publisher/reija-lilja)
In her article, she calculates lifetime earnings when a man and woman get the same pay throughout their working lives and work the same amount of time. Their earnings before they both retire are € 1,463,600. Their pension is € 310,400 until the man's death, and the woman's pension after the man's death is € 146,000 over six years. Lilja uses the age of death prediction that a woman dies 6 years after a man. That is, a woman earns 8.2% more than a man for the same salary during her lifetime. It is assumed that they work the same number of hours a year.
Statistics Finland's Deceased, however, says: In 2017, the average death rate for men was 74.8 and for women 81.9. Thus, on average, women died 7.1 years older than men, so with this average mortality rate in 2017, a woman's actual retirement benefit is about 10% better than a man's.

As the pension system in Finland is not personally funded, but the basic principle is that the annual pension contributions cover the annuities that we pay, we can also calculate the pension benefit for women on the basis of annual reports from the pension companies. In 2012, around € 7.9 billion in earnings-related pension contributions were collected from women and their employers and around € 11.1 billion from men. In the same year, women were paid about EUR 9 billion in employment pensions and men were paid about EUR 10 billion. Of the pension contributions for men and

their employers, 1.1 billion per year were transferred to women to cover the gap in women's pension funding, which is about 10% of the pension contributions paid by men and their employers. The pension contribution deducted from men's salary goes entirely to women's pensions.

5.2 The lower retirement age of women and the better pension accrual have not been taken into account

Reija Lilja's calculation assumes that retirement age and pension accrual are the same for men and women for the same working years. In reality, women have on average a better pension accrual and a lower full retirement age than men. This is due to the fact that the pension accrual rate in the public sector until 1995 was 2.2% and in the private sector 1.5%. After 40 years of work, the maximum pension was 66% in the public sector and 60% in the private sector. The retirement age for the public sector was generally 55-63, depending on the occupation, while it was 63-65 for the private sector. In the public sector, the transition to a higher retirement age and a lower retirement age began in the 1990s and will continue until at least 2025. Hundreds of thousands of such people with better benefits are already retired or continue to work. With the majority of these being women, the average pension accrual for all employees and retirees is better for women and the average full retirement age is lower for a woman than for a man. We couldn't calculate the value of this benefit in the absence of data.

Summary

Retirement pension is part of the salary and women benefit from it 10% every year. The man's euro is now 82 cents.

The myth of a woman’s euro has been broken on the basis of international agreements and laws concerning equal pay.

CHAPTER 6 CONSIDERATION OF MILITARY CONSUMPTION IN EQUAL SALARY COMPARISON DURING LIFETIME

Article 6 of the Constitution Equality (FINLAND)

“People are equal before the law.
No one shall be discriminated against without any valid reason on grounds of **sex**, age, origin, language, religion, belief, opinion, state of health, disability or any other reason related to the person.”

If we count the number of working hours of military service work in the same way as we do for those enlisted in the military, we get about 5,000 hours. Calculation: 40 weeks of service, about 125 hours a week of service or on-call work at the work place makes 5,000 hours for conscripts.

Military conscripts do basic military training first, then special training for combatants, and then work for the Finnish Defense Forces (with the police, border guards and base personnel) and even without pay. Defense Minister Jussi Niinistö asked the Chancellor of Justice (in order to secure his own view) whether conscripts could be sent to counter an enemy attack without declaring war. The Chancellor replied that it could be when the conscripts have sworn a military oath and completed combat training. The military oath is sworn in about 5-6 weeks after entering the service and the combatant's special training period is 9 weeks. In other words, a conscript is eligible for parole within less than three months of taking up his post.
The Defense Forces have taken advantage of the Chancellor of Justice's statement to form a special contingent of conscripts who are more capable of leaving when ordered to leave. They are also already equipped with the best possible weapons.

6.1 What does military service mean when calculating the pay gap on an annual and life-cycle basis?

It can be calculated in many different ways. One way is to calculate its disadvantage to gainful employment. In Statistics Finland's book “Decades of Major Changes in Working Life” (ed. Anna Pärnänen and Kaisa-Mari Okkonen), Pekka Myrskylä, a researcher at Statistics Finland, says on page

82 that men enter the labor market on average two years older than women because of military service. This is because conscription is a bad match for a man's civilian education. The average length of working life in Finland for retirees in 2015 was 35.5 years, which means that the conscription will shorten it by about 5.6%. but those years of work that are not done are the last two years of work and in Finland their earnings are much higher than the average, so we consider the estimate about 7% disadvantage.

Another way is to calculate it in working hours. During his working life, the man works for about 36 years and, on average, 1,850 hours a year, or about 66,600 hours in total. With about 5,000 hours of military service, the total number of hours is about 71,600, of which about 7% is military service.

Both calculations still lack the disadvantage of losing a two-year earnings pension benefit. if a man could be in paid employment for two years longer, his pension would be 3 percentage points higher. It does almost a percent of all life time earnings.

The third way is to accept the hours worked by conscripts as working hours and add them to the total hours of all men. This way we can calculate the effect of free work on lowering men's average hourly earnings. Men make 2,240.6 million working hours a year and 25,000 conscripts and civil servants contribute about 12.5 million hours, or about 5.6%. When we consider that the last two years of work are better paid than the average year, and that there is no pension accrued for the hours worked by the conscripts, this method of calculating disadvantages for men results in about 8%.

Not all men are forced into military service, either for mental or physical reasons. On average, for all men, we can consider the value of 7% to be a disadvantage in military service throughout life, with the loss of retirement benefits.

In other words, the average annual loss of earnings for male employees is about 7% due to conscription.

At this point, on the road to an equal pay gap calculation, a man's euro is 75 cents throughout his life time.

CHAPTER 7 OTHER ISSUES TO BE TAKEN INTO ACCOUNT IN EQUAL WAGE COMPARISON

In the above chapters, we discussed only some of the factors that influence equal pay comparisons. More background variables and other factors affecting pay are taken from different sources. The sources are both domestic and foreign.

demanding job
managerial position
number of subordinates
work experience
seniority
professional competence
job type
field of study
training
initiative and aptitude for more demanding tasks
competitive situation due to scarcity of skilled labor supply
profession
place of residence and work
company-specific differences in payroll ability

No studies on the effects of the factors listed above were found, and not all of them are even unambiguous.

We raise our hands and disregard the impact of the other background variables listed above in making an equal pay gap.

CHAPTER 8 NET SALARY DIFFERENCES

Above, we have calculated the gross pay gap before deducting taxes and parafiscal charges. Only after these deductions have been made will the employer pay the difference net to the wage and salary account in a bank.

Table: Data from Internet tax-pages of Finland

	Men mill. euro		Women mill euro	Part % Women/Men
Earnings per year	49 845		36 677	74,7 %
State tax	4 854		1 693	34,9 %
Communal tax	8 437		5 687	67,4 %
Taxes togethher	14 615	Tax- % 29,8 of men	8 410	Tax- % 22,9 of women
Taxes + other, includes pension fee	18 624	Deduction- % 37,9 of men	11 322	Deductuin- % 30,9 % of women

That is, men pay 37.9% in taxes and parafiscal charges and women pay 30.9%. Men pay 7 percentage points more.

A man gets 68 cents a net euro in a bank account every time a woman is paid a euro.

SUMMARY OF PART 1

During normal working hours, male wage and salary earners receive 75 cents gross before tax and 68 cents net on their bank account each time female wage and salary earners receive an euro.

Female wage and salary earners earn about 76% of men's earnings.

The hourly wage level of male employees is about 75% of the hourly wage level of female employees.

This equal hourly wage comparison is made over the course of a lifetime, with military service hours taken into consideration, from salary and pension for an equal amount of hourly labor. The hourly work is done on the same time of the day and on equal working conditions. There is no opinion here on whether the average work done is of equal value or on the other salary affecting factors in chapter 7.

Part 2 of the Finnish book handles specific gender equality politics items in Finland and therefore Part 2 is not tranlated here.

Back cover of the book translated:

In her book "Finnish Woman and Man", Elina Haavio-Mannila, an adjunct professor at the University of Helsinki, in 1968 hypothesized that the difference in pay between men and women is due to the fact that men invest more in work. Unfortunately, this hypothesis has not been investigated by any our pay gap researchers.

Since 1968, the EU, the UN, the ILO, the EU Court of Justice, the EU Parliament and many others have demanded that equal efforts should be noticed in gender hourly wage gap calculation. In this book, we count to the best of our ability, as required by the above, the Finnish Constitution and the common sense, to get as close as possible to the gender hourly wage gap calculation.

Outcome: Female wage and salary earners earn about 76% of male wage and salary earners. During normal working hours, male wage and salary earners receive 75 cents gross before tax and 68 cents net on their bank account for the same amount of work, each time female wage and salary earners receive the euro. The salary level of salaried male employees is 75% of the salary level of salaried women.
This salary comparison is made over the lifetime of a career, with military service hours taken into account, including salary and work dependable pension.

The second part of the book deals with the gender pay gap and gender equality policies that have been and continue to be under the full control of state feminists in Finland. In spite of good speeches, presenting a male perspective is not allowed.

APPENDIX 1 ILO 100 –CONTRACT (articles 1, 2, 3 and 14)

C100 Equal Remuneration Convention, 1951

Article 1

For the purpose of this Convention—

(a) the term remuneration includes the ordinary, basic or minimum wage or salary and any additional emoluments whatsoever payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment;

(b) the term equal remuneration for men and women workers for work of equal value refers to rates of remuneration established without discrimination based on sex.

Article 2

1. Each Member shall, by means appropriate to the methods in operation for determining rates of remuneration, promote and, in so far as is consistent with such methods, ensure the application to all workers of the principle of equal remuneration for men and women workers for work of equal value.

2. This principle may be applied by means of--

(a) national laws or regulations;

(b) legally established or recognised machinery for wage determination;

(c) collective agreements between employers and workers; or

(d) a combination of these various means.

Article 3

1. Where such action will assist in giving effect to the provisions of this Convention measures shall be taken to promote objective appraisal of jobs on the basis of the work to be performed.

2. The methods to be followed in this appraisal may be decided upon by the authorities responsible for the determination of rates of remuneration, or, where such rates are determined by collective agreements, by the partíes thereto.

3. Differential rates between workers which correspond, without regard to sex, to differences, as determined by such objective appraisal, in the work to be performed shall not be considered as being contrary to the principle of equal remuneration for men and women workers for work of equal value.

Article 14

The English and French versions of the text of this Convention are equally authoritative.