

**Analysis of Differences in the Wages of Men and Women
Proposal of a Model Procedure for Determining the Proportion of
Discrimination**

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1 Introduction

After 1989 the Czech Republic commenced the transition to market economy and plural democratic political system. This resulted in a great number of changes. The country's policy in economic, legal, educational and social sector needed to be completely revised.

One of the problems that currently appear very important is elimination of all forms of discrimination and for many reasons the equality of pay between men and women is currently one of the issues that requires an increased attention. The equality of all citizens regardless their sex is a part of basic principles of a democratic society.

The principle of equality of men and women (therefore also the equality of pay) in the Czech Republic is generally provided by the Constitution, or by the Declaration of Fundamental Rights and Freedoms, as well as by other legal documents. The Czech Republic is bound to respect and practically exercise this principle by the requirements for the future membership in the EU.

The principle of equal pay for men and women for work of equal value in the EU is based on clause 119 of the Treaty of Rome and Directive 75/117/EEC from 1975 relating to the principle of equal pay for men and women. The Directive states in article I the following: "The principle of equal pay for men and women means that in the case of equal work or work of an equal value any discrimination on the basis of sex in relation to all aspects and conditions of remuneration is prohibited".¹ This should be achieved by "...using normal instruments of economic and social policy, especially instruments leading to increasing productivity and stimulation of economic growth, strengthening the fight against discrimination and promoting the solidarity between various social groups."

A research study is the first step towards the analysis of the differences in pay between men and women in the Czech Republic. The basic objective of the study was answering the following questions:

1. Whether differences between average incomes of men and women exist and what is their extent;
2. Whether this difference is caused by discrimination on the basis of sex;
3. Whether the extent and amount of this difference is constant or whether it changes with time.

Methodically the study is based on a secondary analysis of the available statistical material acquired from different sources (Czech Statistical Office, Ministry of Labour and Social Affairs - Trexima, EU), where the structure according to sex was studied.

This document is structured into a number of independent material sections. The first part explains the principle of equal pay for men and women in the European Union and Czech Republic legal regulations. The following chapters elaborate on those sectors that relate to (or influence) the differences in pay – legal working conditions for women, women's position in the current society, including the historical development, women's economic activity. The core of the study is the description of differences in wages between men and women according to individual groups, or statistically studied characteristics – education, age, job classification (KZAM), type of economic management, tariff classes and sector classification of economic activities; and the analysis of this difference based on the analysis of objective differentiation factors - hours worked, work overtime, type and duration of the employment contract, etc. Selected findings from carried out sociological researches are added to the economic analysis, making the description of this specific problem complete and providing a more complex view of the issue of wage differences between the sexes.

¹ Fair pay is defined herein as a pay sufficient for providing an employee a decent living standard.

Another part of this analysis focuses on the comparison of wage differences between the sexes in the individual EU member states, again according to various categories, including the attitude towards this issue.

This research study basically describes the original status, presents the first view of more complex issue of equal pay for men and women and should become a starting point for further studies of development in wage differences between men and women in the future.

2 Principle of Equal Pay for Men and Women in the EU and in the Czech Republic

2.1 Legal Regulations in the EU

The principle of equal pay for men and women is one of the keystones of the European Union. The principle of equal pay for men and women for equal work and the obligation to adhere to this principle is already determined in the Treaty of Rome (Treaty on Founding the European Economic Community - 1957) in article 119 (currently article 141 of the Consolidated Treaty on Founding the EC).

However, at the time of creation of this provision the national legal systems of most member states did not expressly prohibit the discrimination on the basis of sex. Due to the purely economic character of the EEC the main objective behind including article 119 in the Treaty was to deal with economic competition with advantageous position based on the differences between wages paid to men and women.

Respecting equality in pay for men and women without any discrimination on the basis of sex means that:

- The remuneration for equal work in piece wages is calculated using the same rate (i.e. equal rate per performance unit),
 - The remuneration for work in hourly (time) wages is the same for the same type of work,
- While this principle has a direct horizontal effect, i.e. must be applied also between private persons (employer and employee) and can be enforced through the national court. One of important facts is that this article applies to direct and open discrimination only, i.e. to discrimination that can be proven on the basis of concrete evaluation of work carried out by employees of different sexes inside the same company.

The principle of equal pay for equal work was put into practice from 1.1.1962, with the exception of Great Britain, Ireland and Denmark, where this principle was accepted in 1973. However, the procedure for implementation and promotion of this principle was slow and inconsistent. That is why in 1975 article 119 of the Treaty on EEC was completed with Directive no. 75/117/EEC, which elaborates on the issue of equality.

While article 119 mentions the same pay for the same work, the additional Directive mentions equal wages (remuneration) for work of an equal value, i.e. equal work. The concept of equal pay for equal work means that a woman, as well as a man who carry out equally demanding work must receive the same remuneration, unless a different explanation of the differences in wages, which is not of a discrimination character, exists. Some decisions of the European Court of Justice (hereinafter ECJ) suggest that the objective of the principle of equal pay for work of an equal value is to deal with underestimating positions usually held by women, if these positions are equally demanding as various positions usually held by men (see hereinafter case C43/75 G. Defrenne v. SABENA).

Remuneration means usual basic wage, minimum wage or salary and any other payment the employer makes directly or indirectly, in cash or in kind to an employee on the basis of an employment relationship. Therefore, the term remuneration contained in article 119 of the EC Treaty is wider than the term wage or salary according to the Czech law because apart from payments relating to the work performance it also includes the payments that depend only on the existence of the employment relationship and not the work performance.

The principle of equal remuneration for work of an equal value is directly valid and enforceable in the whole territory of the EU. This means that employees can address their complaints about any potential discrimination to their national courts regardless of the fact whether the Directive has or has not been implemented into the national legal order. The burden of proof is always on the employer's side (some of the decisions of the ECJ relating to

issues of burden of proof are 109/88 Danfoss, C - 127/92 Enderby, C - 400/93 Royal Copenhagen).

The Directive binds the EU member states to implement and observe the following items:

- Enabling employees to claim their rights by legal action;
- Taking measures to implement the principle of equal remuneration;
- Combating all discrimination between men and women according to the law;
- Taking measures to protect employees in the case of their complaint and enforcement of the equal remuneration principle;
- Informing all employees about legal regulations accepted according to the Directive using suitable (reasonable) means;
- Eliminating all discrimination on the basis of sex in all aspects and conditions of remuneration for equal work or work of an equal value; especially in those areas where the system of job classification is used to determine the particular remuneration.

This Directive also applies to cases of indirect discrimination.

However, the equal remuneration principle does not mean that the final man and woman's remuneration for equal work carried out must be equal, regardless of the circumstances. The amount of the remuneration depends on determined objective wage criteria, such as the quality of work, qualification, professional experience, flexibility, etc. These criteria can be applied, providing they are neutral from a gender perspective, i.e. the criteria are set in the same manner for all employees in the company.

The basic condition for implementing the principle of equal remuneration for men and women is implementing an evaluation system by member states. This evaluation system will be then used to assess employees' complaints about discrimination in those cases where the particular person does not carry out the same (identical) work but work of an equal value, according to this person's opinion. In those cases where the system of job classification is used, this system must be based on the same criteria for men and for women and must exclude any discrimination on the basis of sex.

Although the EC Directives expressly prohibit any direct or indirect discrimination on the basis of sex, they do not specify the term "discrimination" as such. Therefore, in practice it is very difficult to differentiate between the cases of direct and indirect discrimination. Any action of the employer that is "neutral" but in fact damages a significantly larger portion of persons (employees) of one sex can be deemed indirect discrimination. However, the exact definition of this term was not available for a long time and this definition has developed on the basis of individual decisions of court, including the best-known cases Kalanke and Marshall.

The European Court of Justice plays an important role in interpretation of requirements of community law norms. The court plays a key role in development of solutions in various disputable issues relating to equal treatment of men and women. One of the best-known cases, which consequently influenced the principle of equal treatment is the case Defrenne.

A physical person, Mrs. Defrenne, a flight attendant of the Belgian airline SABENA, was claiming her right to equal remuneration according to article 119 against her employer in the Belgian court. The subject of the dispute was the fact that male and female flight attendants who carry out the same duties do not receive equal wages. As it seemed that this article imposes the duty on the member states only, the particular Belgian court was not sure whether a private person could also claim the protection of their rights according to this provision. Therefore, this court asked the ECJ to make a decision on a preliminary issue according to article 177 of the Treaty on Founding the EEC. ECJ determined in their decision that article 119 has a direct effectiveness, i.e. that an individual can claim his/her rights according to this article in a national court.

This verdict was an important milestone for the beginning of development of a very rich source for the community law.

In the sphere of equal remuneration the ECJ also dealt with the question whether a comparison with better-paid work of a lower value is acceptable to determine equality of work.

This was the case of *Mary Murphy and others versus An Bord Telecom Eiteann*. The female employees brought a suit against their employer requesting that they receive the same wages for their work of a higher value as their male colleagues received for work of a lower value. The ECJ decided in their favour.

Although all member states implemented the obligations arising from the Directive into their national laws, the enforcement of equal remuneration for men and women is still not a reality. However, the equality of treatment for both sexes is gradually becoming an inseparable part of actions and functioning of companies in the European Union member states.

2.2 Legal Regulations in the Czech Republic

The principle of equal treatment for men and women in the Czech Republic is ensured through interstate regulations, as well as the country's obligations arising from international agreements.

The basic documents that regulate the issue of equality of men and women, or equality of their remuneration for work, in the Czech republic are the following:

- Resolution of the Czech National Committee no. 2/1993 Coll., on declaration of fundamental rights and freedoms as a part of constitutional order of the Czech Republic, as amended by constitutional law no. 162/1998 Coll.,
- Act no. 65/1965 Coll., Labour Code, as amended by act no. 177/2001 Coll.,
- Act no. 1/1992 Coll., on pay, remuneration for standby and average income,
- Act no. 143/1992 Coll., on pay and remuneration for standby in state and some other organisations and bodies.

The basic principles are expressed in the Declaration of Fundamental Human Rights and Freedoms. The Declaration ensures the fundamental rights and freedoms to everyone, regardless of their sex, race, skin colour, language, belief and religion, political or other opinion, national or social background, membership in national or ethnic minority, assets, descent or any other position (art. 3, par.1). The Constitution also determines an employee's right to just remuneration for work and to satisfactory working conditions (article 28). However, the constitutional determination of these principles was not a sufficient guarantee of their effectiveness, or their enforceability. Apart from these constitutional principles no clear definition of equal opportunities existed in the Czech Republic (the basic legal existence of equal opportunities for men and women was assumed on the basis of an article of the Constitution). Therefore, it was necessary to harmonise the Czech legal order with the community law and the principle of equality of both sexes was thus transported into a number of legal regulations.

The procedure of harmonisation with the legal order of the EU was commenced by accepting an amendment to the act on employment (Act no.167/1999 Coll.) and accepting the amendment to the Labour Code (Act no. 155/2000 Coll.). Although the Labour Code was based on the principle of equal treatment of men and women, these principles were not expressly incorporated in the text of the code.

As art. 1, par. 3 of the amended Labour Code states, employers must provide equal treatment for all employees in terms of their working conditions, including remuneration for work, professional training, and opportunity to achieve functional or other professional promotion at work. Employees who carry out equal work or work of an equal value have the right to equal wage, regardless of their sex. Article 1, paragraph 4 states: "Any discrimination of employees in labour-legal relationships on the basis of their race, colour of their skin, sex, sexual orientation, language, belief and religion, political or other opinion, membership or activity in political parties or political movements, trade unions and other associations, nationality,

ethnic or social background, assets, descent, health, age, marital and family status, or duties towards a family is prohibited. Any actions of an employer that do not discriminate directly but in their consequences are also prohibited. Cases determined by the Code, or a special legal regulation, or cases where a material reason based on the character of the work carried out by the employee necessary for the performance of this work exists are not deemed discrimination.”

Employers’ duty to ensure equal treatment for all employees means that employees who carry out equal work or work of an equal value have the right for equal pay, regardless of their sex. Equal work or work of an equal value means equally or comparably complex, responsible and demanding work that requires equal or comparable abilities and qualifications, carried out with equal or comparable efficiency and results.

If an employee feels that he/she has suffered damage as a result of a breach of the equal treatment principle, he/she can claim protection by filing a complaint at a labour office or a court. However, discrimination as such is not indictable, it must be related to concrete circumstances (such as remuneration, promotion, etc.). In the cases of disputes relating to breaches of equality of both sexes the burden of proof is always on the employer’s side. However, requiring employees of a certain sex is not deemed discrimination, providing a material reason for this requirement relating to the character of the work exists. These cases may include, for example, actors who are to interpret a main male or female part, female dancers, etc.

The prohibition of carrying out certain work, as determined by the Labour Code, or a special legal regulation, cannot be deemed discrimination. These cases include physically unsuitable work that cannot be carried out by women due to protection of their health, and work and workplaces prohibited to women, pregnant women and mothers up to the ninth month after childbirth.

The issue of remuneration for work is regulated especially by Act no. 1/1992 Coll., and Act no. 143/1992 Coll.

Act no. 1/1992 Coll., act on pay, remuneration for standby and average income, deals with the equality of remuneration in entrepreneurial sector. This act is based on the Declaration of Fundamental Rights and Freedoms, which determines an employee’s right to just remuneration for work. The act on pay applies to all employers, with the exception of allowance organisations.

The act on pay, remuneration for standby and average income (Act no. 1/1992 Coll.) states the right of every employee to a wage for the work carried out (art.4, par. 1). The wage means monetary payments or settlements of monetary values (wage in kind) provided to the employee by his/her employer for the work carried out according to:

- a) The complexity, responsibility and difficulty of the work,
- b) The difficulty of working conditions,
- c) Efficiency and achieved results (art. 4, par. 2).

Art. 4a, par. 1 states that conditions for providing wages must be the same for men and women. Employees who carry out equal work or work of an equal value are entitled to equal pay. Equal work or work of an equal value is equally or comparatively complex, responsible and demanding work carried out under the same or comparable conditions, requiring the same or comparable abilities and qualifications, and with the same or comparable efficiency and results in an employment relationship with the same employer.

Re a) Complexity, responsibility and difficulty of work is evaluated according to the level of education, extent of further education and practical knowledge and skills necessary for the performance of this work, according to the complexity of the subject of the work and the activity, according to organisational and controlling demands, according to the degree of

responsibility for damage and health and safety, according to physical, physiological and mental stress, and according to negative influence of the work.

Re b) Working conditions are evaluated according to the difficulty of working schedules arising from the structure of working hours (for example into shifts, days off work, work at night or work overtime), according to the harmfulness, health risks or difficulty of work arising from negative effects of working environment and according to the risk level of the working environment.

Re c) Professional abilities and skills of an employee are evaluated according to professional and mental ability, quality of senses, or physical fitness for carrying out the particular work.

Re d) Efficiency is evaluated according to the intensity and quality of the work carried out and results are evaluated according to the amounts and quality of the work.

Providing wages in the case of state employees is regulated by Act no. 143/1992 Coll., act on pay and remuneration for standby in state and some other organisations and bodies. According to art. 3, par. 1 of this act an employee is entitled to a wage for carried out work. The wage means monetary payments provided by an employer to an employee for the work carried out. The wage consists of wage rate, extra pay for management, for substitution, for work at night, for work on Saturdays and Sundays, position, extraordinary and personal extra pay, extra pay for divided shift, pay for work overtime and work on public holidays, other pay and remunerations. Reimbursement of salary, redundancy pay, travel expenses and remuneration for standby are not considered parts of the wage (par. 2). The sum of all wage components an employer provides must not be lower than the minimum wage. The principle that men and women are entitled to equal pay for equal work or work of an equal value is also included in this act, which hereby reflects the modifications made in the Labour Code.

The principle of equality of men and women in remuneration is guaranteed to a certain extent within the system established by the act on pay due to the specification of objective criteria for determining a wage rate, which is the same for men and women. The system of evaluating work, which determines an obligatory hierarchy according to the complexity, responsibility and difficulty of the work, is of a key importance. The next criterion is the extent of professional and specialised experience (length of service). As the wage rate can only express the relative “value of the employee’s work”, the act on pay determines also other wage components. As the employer directly influences the amounts of these wage components by his/her decision, when providing these wage components the employer is obliged not only to observe the conditions for providing the particular wage component, but also to pay attention to comparing results of the individual employees’ work from the perspective of equal remuneration for men and women for equal work.

Equal work does not mean only identical work but also work of an equal value. General criteria for evaluation of the work of an equal value are determined in art. 3, par. 3 of act on pay. However, the evaluation of work in practice is very difficult especially in the case of those kinds of work that do not produce any objectively measurable results, i.e. especially in the case of work included in higher wage categories, which is based on creative, conception, organisation, artistic, research and other similar activities.

In the case of a legal dispute on breach of a principle of equal remuneration it is the employer’s duty to prove that the particular employee has not been discriminated against on the basis of his/her sex.

2.2.1 Wage Categories, Minimum Wage Rates and Wage Scales

According to art. 4 of act no. 143/1992 Coll. an employee is placed into a particular wage category according to the type of work, the most difficult tasks the employee is required to fulfil and the fulfilment of qualification requirements; qualification requirements for

individual types of work are specified in the catalogue of works. The employee is entitled to the wage rate determined for the particular wage category the employee has been placed in. For the period between 1st January 2001 and 31st December 2001 the following minimum wage rates are valid for the individual wage categories:

Table 1 Wage categories - 12

Wage category	Minimum wage rate in CZK per month
1	3 250
2	3 550
3	3 850
4	4 250
5	4 700
6	5 150
7	5 700
8	6 350
9	7 000
10	7 750
11	8 800
12	10 000

A significant modification of the system – transition to 16 wage categories – has been under preparation since 1st January 2002 because the original classification of works into 12 wage categories proved to be insufficient during the use of the wage system. The legislative regulation prepared the transition to this system of minimum rates:

Table 2 Wage categories - 16

Wage category	Minimum wage rate in CZK per month
1	3 550
2	3 850
3	4 150
4	4 500
5	4 900
6	5 300
7	5 750
8	6 750
9	7 000
10	7 300
11	7 900
12	8 700
13	9 700
14	10 850
15	12 150
16	13 600

Increasing the number of wage categories is a result of the need to react to the recent development of the educational system, including especially the establishment of schools that provide higher vocational education and the continuously increasing number of Bachelor's study programs. However, this change will also require an increase of the differentiation

effectiveness of the wage system, i.e. more detailed differentiation of work with different complexity, responsibility and difficulty, together with meeting the requirements of certain sectors to create their own personnel (career) systems (army, diplomatic services, police, education).

Classification of an employee into a certain wage category depends on the calculation of the period relevant to this classification – period of the relevant length of service. An employer will include the following into the relevant length of service:

- Experience in the particular field after the completion of the required education;
- Other experience, according to the extent of the use of this experience for successful performance of the required work, the maximum accepted portion of this experience being two thirds of the duration;
- Basic (alternative) military service and civil service to the extent determined by the special law on the performance of the basic (alternative) military service;
- Maternity leave, other maternity leave, or parental leave, or permanent care for a child or children in the extent according to the duration of the maternity leave, other maternity leave, or parental leave as valid at the time of this care according to a special legal regulation, the maximum accepted duration being six years; the above-specified periods will not be included if the particular employee was concurrently attending daily or on-campus studies;
- Personal care for a child or children with a serious long-term physical handicap requiring special care, unless they were placed in an institution for these children, the maximum acceptable period being six years.

Experience in the particular field of the required work means for the purposes of this provision performance of work that requires knowledge of the same or similar specialisation as the knowledge necessary for the performance of the required work.

3 Principle of Equal Working Conditions for Women in the EU and the Czech Republic

3.1 Working Conditions for Women in the EU

The principle of equal treatment for men and women in terms of access to employment, professional training, professional promotion and working conditions is ensured by Directive no. 76/207/EEC from 1976. Implementing the principle of equal treatment means eliminating any discrimination on the basis of sex relating to the conditions of access, including selection criteria, to all jobs or professional positions, regardless of the field of sphere of activity, and to all levels of hierarchy of professional positions.

With this objective the member states will take the measures necessary to ensure that:

- All laws, regulations and administrative measures that are in conflict with the principle of equal treatment are cancelled;
- All provisions of collective agreements, individual employment agreements, internal company regulations and regulations relating to independent jobs and professions that are in conflict with the principle of equal treatment are declared invalid or can be modified;
- Those laws, regulations and administrative measures that were originally intended to protect but are no longer adequate and are in conflict with the principle of equal treatment are revised; where these regulations are included in collective agreements, employers and employees will be asked to make the necessary changes (article 3).

The principle of equal treatment for men and women in terms of working conditions is always valid, with the exception of those periods, when the woman requires a specific protection due to her pregnancy or motherhood. Therefore, this Directive cannot be enforced in the access to activities and professions that are reserved exclusively for men (such as work underground). However, the Directive provides the member states a relatively free choice to determine whether they exclude particular working activities where the employee's sex is an important factor from this principle or not. There is no universal rule regulating these cases.

The basic trend in this area, which is currently being promoted throughout the EU, is a general retreat from protecting women as such. The above-mentioned trend is justified by the state of the general health protection at work and the development of modern technologies, materials and working instruments that eliminate the safety risks that once existed. The member states are obliged to evaluate on regular basis whether the measures that have been taken remain to be necessary (for example the Netherlands cancelled the prohibition of work underground for women on the basis of one of these evaluations). The purpose of this regular monitoring is a gradual reduction of activities and professions with restricted access for men or women. The specification of professions with a restricted access for one of the sexes must be known in advance for the reasons of legal safeguard.

The protection of women is thus expressly focused on pregnant women, mother shortly after a childbirth and mother who breastfeed.

Article 8, par. 4 of the European Social Charter focuses on the protection of women at work. It contains two obligations for the member states:

- To regulate employment of women in night work in the industrial sector, and
- To prohibit women's work in underground mining and other works, if necessary due to the character of these works.

The legal regulation of the first mentioned obligation should provide the protection against harmful psychological effects of night work in the industry sector to employed women. The state is not obliged to take special measures relating to women, providing the protection implemented by general measures relating to all employees in the industry sector is sufficient.

These legal regulations must specify the conditions of night work, such as inspection of work, determining working hours, breaks from work, days of rest following the work at night, etc. The legal regulations relating to the prohibition of certain types of work for women include two restrictions. The first restriction is the ban of women's work in underground mining. This ban does not apply to other types of work carried out underground; especially work of a social and healthcare character. The second sentence of this item bans "according to appropriateness" all other types of work that are dangerous, harmful to health, or difficult. The member states may limit this ban of employing women in these professions to the cases of pregnancy protection, protection of mothers, or mothers shortly after a childbirth, etc.

3.2 Working Conditions for Women in the Czech Republic

Norms of women's safety and health protection at work and employers' duties connected with them are stricter in the Czech republic in comparison with the EU. The legal regulation of special conditions for women includes the ban of employing women with certain types of work and at certain workplaces. Special conditions for women are guaranteed by art. 29 of the Declaration of Fundamental Human Rights and Freedoms, which states: "Women, juveniles and persons with a physical handicap are entitled to increased protection of health at work and special working conditions."

The Labour Code generally regulates the working conditions for women with regards to two basic factors:

- Biological factor – physiological differences make women more vulnerable in terms of those types of work that include high physical stress, effects of harmful substances, workplaces with excessive noise, dust, and large variations of temperature and pressure,
- Social factor – this factor is based on the fact that apart from their jobs women carry out the larger part of the work associated with taking care of the family and household.

Types of work prohibited to women are defined in Ministry of Health Decree no. 261/1997 Coll. According to this decree women cannot be employed in work underground in mineral mining, and in work that includes manipulation with heavy objects and exposure to vibrations. The types of work unacceptable for women also include work at workplaces with higher air pressure than the atmospheric pressure, work that requires the use of insulating breathing apparatuses, work at workplaces with lower oxygen concentration and work in agriculture with animals with an increased risk of injuries.

The law also regulated women's work at night. However, this paragraph was cancelled and the legal regulation of work at night adjusted to regulations of the International Labour Organisation (ILO). The global ban of night work for women frequently became a significant obstacle to employing women at night work that can be carried out by women as well as by men without any harm to their health. No just reason for the global ban of work at night for women only existed and this ban was therefore understood as discrimination of women. Another significant factor that influenced this change was women's interest in work at night, which was motivated by their wages, as well as their professions.

4 Position of Women in the Czech Republic

4.1 Historical Development of Women's Employment in the Society

According to some sources, the gender problem was historically created by employing exclusively men's labour. Most working and labour-legal norms were created according to abilities of men and the character of work carried out by men. With time dexterity, accuracy and other characters typical for women's labour became important due to the development of economy and these changes were reflected by the regulations and norms additionally.

Women's employment and the character of women's labour in the Czech Republic have undergone significant changes from the end of the World War II. However, this development was very different from the development in the countries in Western Europe.

The fundamental factor that influenced the differences between employment and social and professional position of women in the Czech Republic and in the Western Europe was the political regime – a totalitarian and dictatorial regime in the Czech Republic, compared to a democratic and free market system in the states of Western Europe. These differences influenced different trends in the Czech Republic and in the democratic states of Western Europe in conditions and character of employment development, including a number of concrete aspects of social and professional position of women (legislation and labour norms, attitude to the importance of women's labour, different structure and division of labour, different understanding of family and professional roles, unwritten patterns of behaviour, activity or passivity of women in the fight for equal opportunities on the job market, timing of the changes).

In Western countries after the end of World War II the vast majority of women returned from the war economy to their households, established families and looked after children. This trend was promoted by the state and supported by the public opinion; women were from the job market eliminated to a great extent. The 60's brought economic growth and the job market absorbed the female labour once again; women are, however, mainly limited to lower positions, a great number of professions is not available to women, women are becoming an emergency reservoir of labour force. Women took great advantage of the expansion of educational activities in the 70's and 80's and the issues of social inequality of women and their discrimination attracted attention. This development resulted in accepting various changes in legislation with the objective to ensure equal position of men and women. During the 90's women in developed economies asserted their place in all levels of management, although the parity in the average wage indicators and social status criteria was not achieved.

In the Czech Republic during the first couple of years after the war not all women returned to households; women accounted for more than a third of labour force (almost 37 % - see table 3). As early as the end of the 40's and during the 50's women started to stream into the Czech job market in masses (the vast majority of them lacked any vocational training). This development was influenced by the state's orientation to industrialisation, extensive economic growth, 100% employment, low productivity and low wages (for men, as well as women). Women worked in low-status positions in agriculture and industry sector; during the 60's women started working more in administration and services. A typical division of work and wage categories between men and women was established in the Czech economy and society; men worked in preferred fields of manufacture (mining fuels and raw materials, metallurgy, heavy engineering, construction), including management positions in these and other fields, while women are concentrated in various fields of processing industry (food, textile industry, etc.) and in middle and lower positions in administration and services with lower wages. A generation of women with secondary and higher education entered the job market in the 70's and asserted their place in positions adequate to their qualification. During the following years the women's participation in the employment culminated (in 1980: 45.6 %; in 1985: 46.2 %)

and the education (in 1980: 71.4 %) and health care sectors (80.0 %) were occupied by women. In the 90's women had the opportunity to start their own enterprises and also became the first ones to be made redundant due to the companies' restructuring. The women's orientation to providing income as a condition for keeping the living standard of the family was generally promoted.

These trends changed the character of female labour force in the Czech Republic, which was represented mainly by unqualified manual labour at the beginning of the 50's but currently is present mainly in tertiary sector (services) at various levels of positions.

The main current differences in employment and the characteristics in female labour force between the Czech Republic and the countries of Western Europe can be summed up as follows:

- high employment of women has long been a part of the social and economic reality on the Czech Republic and this fact has influenced the lifestyle and orientation of a number of generations since the 50's; higher participation of women in the job market in Western Europe was asserted with great difficulties and slightly later (from the 60'),
- the previous extensive development still influences the characteristics of the female labour force in the Czech Republic (the portion of women with basic education only remains comparatively high – approx. 30 %, women with university education account for not even 8% of female population); the level of education in employed women in the Western Europe is – especially in the portion of graduates from the third educational cycle – higher,
- women's social activity (political, free-time, etc.) focused on the promotion of interests connected with harmonisation of differences in employment, remuneration, etc. is significantly higher in the Western Europe compared to the Czech Republic.

Table 3 Percentage of women from the total number of employees in various sectors of the national economy - %

Sector classification of economic activities - women	1948	1950	1955	1960	1970	1980	1990	2000
Agriculture	51.4	52.0	54.3	53.7	49.0	42.3	36.7	32.3
Industry total	28.0	29.3	35.1	38.4	43.0	40.7	38.6	37.4
Construction	3.7	3.3	7.7	11.1	12.8	14.0	11.8	10.5
Education	55.1	55.5	60.1	64.4	68.8	71.4	72.1	74.5
Healthcare	61.8	62.5	72.9	74.9	79.7	80.0	80.5	79.6
Total	36.5	37.0	42.3	43.7	46.4	45.6	44.3	44.8

Source: Time records of basic indicators of labour statistics (1948 - 2000), Czech Statistical Office, 2001

Women continued to represent a significant part of employees in productive age in the Czech Republic after 1989. The situation was different in Western countries where women's employment needed to be asserted in the society.

The development of women's employment, the extent of their working hours and the number of years at work, and intertwinement of family and professional roles are unique in comparison with the development of women's employment in Europe. One of the factors from the past development, which remains active to this day and influences wage possibilities of women, is the fact that although employment of women has been supported for a long time, this has been seen more as a saturation of the lack of labour force (lack of men), of family budgets (impossibility to support a family on one salary), or both.

4.2 Socio-economic Position of Women in the Society

In 2001 the Czech Republic had 10 260.4 thousand citizens, of which 48.7% were men and 51.3% women. Employment of Czech women has a long-term tradition; the portion of women in the economically active population² was 36.5% already after the World War II. This portion increased by a quarter during the following two decades –approximately to 44%. This

² Economically active persons include employed, as well as unemployed people.

level is maintained to this day with some small deviations (in 2001: 44.3%). The transformation of the Czech economy had only an insignificant influence on this level.

Women account for 63.2% of the total economically inactive population. The reasons of their economic inactivity vary: the most frequent reason is old-age or disablement pension with the majority of economically inactive women (63.4%)³, the second most frequent reason is study –14.2%, approximately 8.6% women are on maternity leave and approximately 7% of these women are housewives. The number of women who are housewives, or women who look after their families, has not changed significantly since 1993; the trend is slightly declining (in 1993: 8.0%, in 2001: 6.9%). Not even one percent of men takes care of the household (0.27%), and even less men are on maternity leave (0.16%). These facts prove that the traditional understanding of male and female roles, which sees a man as the provider and a woman as the person responsible for taking care of the family and children, still survives in the Czech Republic.

84% of the total number of people employed in the national economy work as employees (women account for 38.7% of the total number and men for 45.3%), 3.9% of these people are employers (women:0.9%; man:3.0%), and 10.6% of these people are self-employed 10.6% (women account for only 3.1% and men for 7.5%).

The unemployment rate for women, as well as men, increased at the beginning of the 90's; the increase was faster and more significant for women (the unemployment rate for women is consistently higher than for men). During 1990 – 1993 the increase in unemployment rate for women grew from 0.8% to 5.4 %, compared to the increase from 0.7% to 3.4% for men. The unemployment rate was continuously increasing during the following years; the unemployment rate in 2000 reached double the rate in 1993 (unemployment rate for men: 8.7%; unemployment rate for women: 10.6%). The unemployment rate in 2001 was 8.5%. Women accounted for 54% of unemployed people. A woman's possibility to find work is closely connected with her age, family situation, education; in the case of combination of a number of unfavourable factors (such as low education, taking care of children) the woman's possibility to find employment decreases significantly. Some employees in regions with high unemployment rate then offer women lower wages and/or worse working conditions compared to men⁴.

The reasons for terminating an employment relationship are also different for each sex: while the most frequent reason for termination of an employment relationship for men is being made redundant, with termination of the employer's activities as the second most frequent reason, the most frequent reason for women are personal or family circumstances (19%).

In the case of job seekers, 95% of unemployed men are looking for full-time work, while 16% of unemployed women are looking for a part-time work.

The level of education of the Czech population is quite high; almost three quarters of population have higher than basic education. Most people (36.2%) have secondary vocational education, 9.3% of people have university education. The educational structure varies according to the sex – especially in lower and higher education categories; the number of men with basic education is lower than the number of women with basic education (men:17.4%, women: 29.9%), men, on the other hand dominate the category of university educated people (men: 11.2%, women: 7.4%). Men with university education most frequently occupy management and highly qualified positions, women with secondary education work most often in administrative professions, men with vocational training (or secondary vocational education without passing A-levels) are most often employed as workers.

³ As women retire earlier and die on average later than men, they dominate especially this group.

⁴ Kuchařová, V.: Gender Impact of Social Security Reform in the Czech Republic, Research Institute for Labour and Social Affairs, Prague, 2002

The women's position on the job market is in general connected with lower wages, lower participation in management and decision making, lower prestige, higher danger of losing the position and higher unemployment rate.

5 Situation in the Czech Republic

5.1 Basic Methodical Approaches

The wage of an individual employee depends on a number of various factors that include those with an exact character that can be statistically analysed, as well as non-exact factors that cannot be statistically evaluated.

The issue of causes of disproportions between men and women's incomes is significant, persistent and remains unsolved. The key part of its solution is measuring the differences in remuneration. No uniform methodology for examining and evaluating these relationships currently exists in the Czech Republic. The analysis of men and women's incomes can generally use two basic methodical approaches based on:

- 1) Comparison of equal work in the same workplace,
- 2) Comparison of incomes of all employees throughout the economy.

Re 1) The most exact comparison can be made in cases where a man and a woman carry out the same work in the same position for the same company. Their wages are then compared to find out whether they are being paid equal amounts. However, this approach requires very detailed information about every employee in the particular company and this information is not usually available. Moreover, even a situation when a man and a woman work in the same position and carry out the same work does not necessarily mean that they have to be paid equally – the difference between their wages may be caused by various reasons (such as increase of the wage category according to the length of experience, etc.). However, the causes of the difference between the employees' wages must not be related to one of the employees' sex.

Re 2) Due to the existing lack of information documenting differences between men's and women's wages in exactly defined professions in one company most studies compare the average wage of a group of men with an average group of women. Two different approaches (methods) can be used within this approach.

The first method is based on the comparison of average or median incomes of men and women working full-time. One of the advantages of this method is a relative availability of the necessary information, however the disadvantages include a relatively inexact aggregating approach, which cannot reflect the differences in the productivity of the employees' work and does not compare wages of men and women who carry out the same or similar work.

The second method tries to explain the differences by choosing such characteristics that can influence the productivity or the final product – i.e. the level of education, the length of experience, etc. These data are then included into regressive analyses of data relating to work and at the same time suitable for this type of testing. Thus the measured wage difference does not change but an explanation of the difference or its changes in time is presented.

5.2 Sources and Character of Data

The basic condition for an exact analysis of difference between men's and women's incomes is the existence and availability of statistical data structured according to sex, preferably for a longer period of time. As the issue of equal remuneration for men and women did not receive the adequate attention before 1989, no relevant data in a continuous time series are currently available, preventing us from carrying out a more detailed analysis and comparison between times. Although currently a survey on employees' wages, or on average incomes, exists, it is still not usual to structure the data for the individual surveyed categories according to sex. Therefore, we are facing a certain deficit of well-organised and regularly published information focused on the comparison of data on men and women.

The analysis is based on two basic statistical sources that are currently available. These are firstly data acquired from the Czech Statistical Office from the regularly published materials based on selective surveys (“Employees’ Wages for the Particular Year” and related “Wage Differentiation of Employees”).

The Czech Statistical Office included the total of 459 140 employees in their selective statistical survey on wages for 2000; 355 440 people of this total (i.e. 77.4%; men:196 275, women: 159 165) were employees with more than 1700 paid hours per year. The analysis of partial groups works with the sample of persons with the number of paid hours 1700 and higher, excluding people with long-term illnesses or people who work part-time.

The second source is data from the Information System on Average Income (hereinafter ISAI) implemented by the Ministry of Labour and Social Affairs -Trexima. However, both of these sources are interconnected because the data of the Czech Statistical Office are based on the material provided by ISAI.

ISAI is a regular statistical selective survey on employees’ wage levels. The basic indicator of the current wage amount is the average hourly income, gross monthly wage and hours worked. The data collected from respondents are in the form of database files and contain information on the company-employer and information on employees. These data are usually adopted directly from internal company information systems for wage calculation and personnel records. The survey is exhaustive for economic subjects with 1000 and more employees and selective for economic subjects with 10 to 999 employees in all sectors of the national economy. The surveys are not based on a random selection. ISAI follows the wage indicators according to the type of economic management, region, field, size of the reporting unit, education, tariff classes, employees’ sex and age, and job classification (KZAM).

The information base for the IV.Q. 2001 were data on wages of 1 111 432 employees from companies of various fields, sizes, ownership, legal form and from various regions; from the total number of employees 617 529 were men (55.6%) and 493 903 were women (44.4%).

5.3 General Distribution of Wages in the Economy

The prevailing trend in the Czech economy is differentiation of individual wages. At the beginning (after 1989) this was represented especially by the above-average growth in the sphere of high wages. The relative difference of low and high wages increased and this trend still continues.

The growth of low wages was significantly higher than the dynamics of high wages. The state of differentiation of individual incomes at the end of the 90’s is the following: for 90 % of full-time employees who have worked their full hours the gross incomes are differentiated in the ratio of approximately 1:4.5 and net incomes approximately in the ratio of 1:4; for 80 % of employees this ratio is 1:3, or 1:2.75.

The basic factor of the differentiation was the necessity to remove the limits of individual incomes, which were reproduced for a long time in the social conditions of the totalitarian regime. Objectively, especially the creation of stimulating rating of incomes to the benefit of qualified, specialised and managing activity was necessary. A significant social change in the recipients of high wages occurred in the segment with high level of incomes. Employees preferred before the November 1989 are no longer included in the high-income segment (workers especially in mining and metallurgy) and leading and management professions and management and specialists from successful enterprises and banking sector newly appear in this segment. From 1993 to this day the relative differentiation of incomes has basically remained within the same limits created during the first transformation period.

Education has been the factor that influences the income differentiation during the last couple of years. However, its influence before 1989 was very weak due to equalised incomes. The significance of the influence of education on the income differences varies in different sectors

and its influence is more significant in activities that require higher qualification compared to those that require lower education. The significant and rapid change of wage levels in specialists with chiefly university education has mainly been caused by the fact that wages in the entrepreneurial sector could be determined on the basis of an agreement. This change removed the barriers created in the period before November 1989, which prevented adequate remuneration for difficult professional activities. The development in public services has been less dynamic and internally differentiated; there has been a significant positive change of wages in small groups of top specialists (judges, higher state officers, leading physicians, etc.); these changes, however, have not occurred in a large group of other specialists (majority of healthcare specialists, pedagogical specialists, especially on lower levels of education) (the main factor influencing this status being long-term budgetary limitations).

The wage differentiation proportions that were created according to the level of education between 1989 and 1996 are likely to reproduce themselves with partial corrections on a long-term basis. The corrections may be connected with the change of portion of employees with a particular level of education; they may also be influenced by changes of wage level for groups of specialists in public services (state sector).

5.4 Inequality of Men's and Women's Wages in the National Economy

Although the wage differences between men and women according to professions exist in every economy, their causes and extent may be different. The differences are evaluated for different periods of time and can be identified in countries with well-developed market economies, as well as in transforming countries, and in various socio-economic and organisational sectors of economies.

The average wage for women in the Czech Republic is currently 73.3% of average wage for men. In terms of long-term development (approx. 16 years) the average difference between men's and women's wages has decreased only very slightly; between 1984 and 2000 the average wage for women neared the average wage for men by only 4.4%. This development suggests quite significant rigidity of wages.

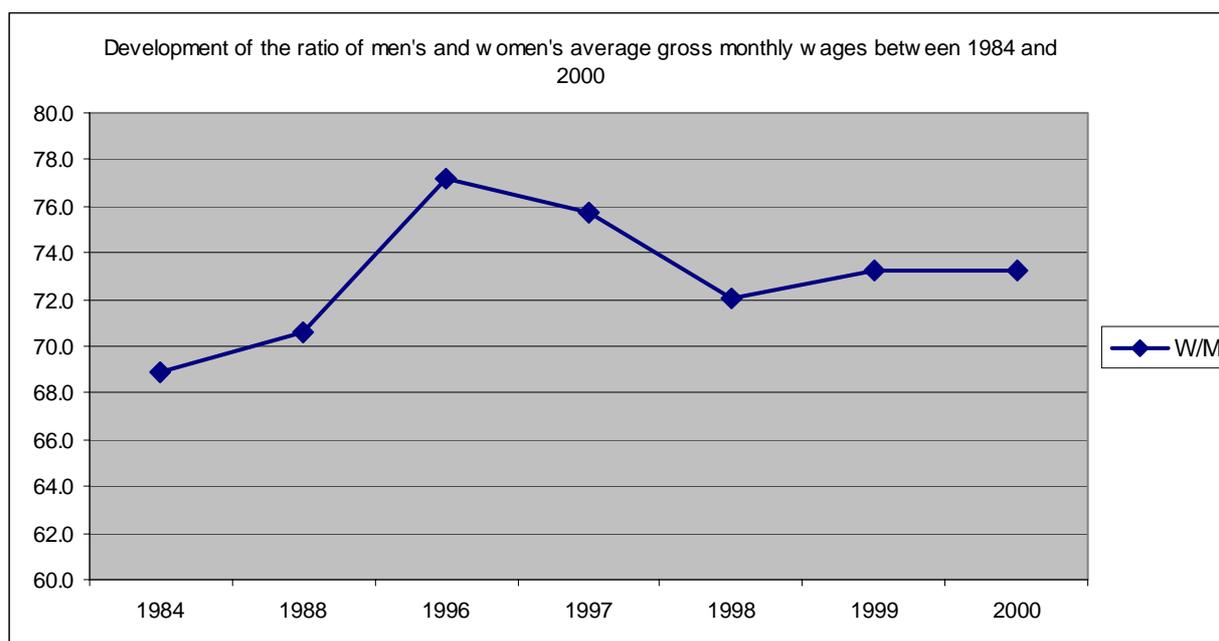
However, the development of the wage ratio between men and women during this period showed a number of turns in the trend (see Chart 1): between 1984 and 1996 men's and women's wages were gradually becoming equal; although this ratio decreased during the next two years, the development followed a different direction again in 1998 (maximum 1996: 77.2%; minimum 1998: 72.0%).

Table 4 Relationships between men's and women's average gross wages between 1984 and 2000

Year	Gross monthly wage (CZK)				Ratio %	
	Total	Men	Women	Difference women-men	Women/Men	Men/Women
1984	2515	3652	2515	-1137	68.9	145.2
1988	2801	3968	2801	-1167	70.6	141.7
1996	11069	12245	9449	-2796	77.2	129.6
1997	12572	14166	10730	-3436	75.7	132.0
1998	13361	15323	11036	-4287	72.0	138.8
1999	14097	16109	11793	-4316	73.2	136.6
2000	15187	17251	12641	-4610	73.3	136.5

Source: Baštýř, I.: Differentiation of individual incomes, qualification differential, differences in men's and women's remuneration, minimum wage position, Research Institute for Labour and Social Affairs, 2001

Chart 1 Development of the ratio of men's and women's average gross monthly wages between 1984 and 2000



The development of the ratio of men's and women's wages is strongly connected to the overall development of the economy (or economic cycle); the differences decrease during economic growth and increase during recession. Women's employment reacts very sensitively to changes in the job market and this fact enables the employers to set their wages at lower levels. Women classify as one of the disadvantaged groups on the job market due to these characteristics.

Although the ratio of men and women's wages based on net wages is more favourable (see Table 5), the principle of equal remuneration for men and women is based exclusively on the analysis of gross wages. Ratio of men's and women's wages, or international comparison, based on net wages is not relevant because it is strongly influenced by the taxation system currently in use, social and health insurance system, and family or personal status of an employee.

Table 5 Comparison of gross and net monthly wages in employees with full working hours

Year	Ratio W/M (%)	
	Gross monthly wages	Net monthly wages
1996	77.2	78.4
1997	75.7	77.2
1998	72.0	72.9
1999	73.2	73.8

Source: Women and men in numbers, Czech Statistical Office, Ministry of Labour and Social Affairs, Prague, 2000

The analysis of this difference on the basis of average hourly rates achieved by men and women once more proves the fact that women's hourly rate is equal to approximately three quarters of men's hourly rate, while the difference between 1993 and 2001 is not significant – although this difference is for a longer period of time, it is only 0.7 p.b.

Table 6 Average hourly rates according to sex

Year	Hourly wage*				Ratio %	
	Women	Men	Total	Difference W - M	W/M	M/W
I. Q. 1993	27.31	36.10	33.00	-8.79	75.7	132.2
I. Q. 1994	31.49	41.15	37.44	-9.66	76.5	130.7
I. Q. 1995	37.47	51.29	46.02	-13.82	73.1	136.9
I. Q. 1996	43.46	60.85	54.08	-17.39	71.4	140.0
I. Q. 1998	57.57	79.91	68.96	-22.34	72.0	138.8
I. Q. 2000	70.19	92.67	83.82	-22.48	75.7	132.0
I. Q. 2001	77.51	103.68	93.25	-26.17	74.8	133.8
IV.Q. 2001	83.11	110.79	98.49	-27.68	75.0	133.3

Source: ISAI, Ministry of Labour and Social Affairs-Trexima, IV.Q. 2001; Differences between men's and women's wages

Notes and explanations: * for all employees regardless of the number of paid hours

5.5 Inequality of Men's and Women's Wages According to Individual Groups

Wage differences between men and women occur with various intensity in various areas. This chapter analyses the difference between men and women's income according to individual groups, or characteristics, that can be statistically evaluated. The ratios of men and women's wages according to the following characteristics have been taken into account as these characteristics relate the closest to the individual characteristics of the labour force:

- Education;
- Age;
- Profession, or job classification;
- Sector classification of economic activities (sector),
- Tariff classes.

Additional characteristics that describe the environment in which the female labour force is used include:

- Ownership, or type of economic management;
- Sector.

The analysis is always performed for the period between 1996 and 2000. However, the individual influences cannot be exactly analysed as the factors that have been taken into consideration depend on each other, correlate.

5.5.1 Development of Wages according to Education

An employee's level of education achieved strongly influences his/her wage; for example, the average gross monthly wage in 2000 for employees with basic education was CZK 10 570, wage of employees with university education was higher by 143%, i.e. CZK 25 688. However, the influence of education on wages is differentiated for the individual sexes. The influence of the factor of education is stronger in men than in women (men with university education achieve 2.43 times higher wage than persons with basic education, while women's wage is only 2.08 times higher).

The analysis of the development of the ratio of men's and women's wages shows that the ratio of men's and women's wages for all education categories during the evaluated period of time got worse; the only exception being the group of employees with secondary education without passing the A-level exam, where this ratio remained the same as in 1996.

The lowest ratio of wage equality is in the category of employees with university education, where the ratio of men and women's wages reached approximately 63%. This category also experienced the most significant fall during the five-year period - to 0.85 of the original value.

On the other hand, the lowest difference was found in the group of employees with basic education - 74%.

Table 7 Average monthly wages of employees with the number of paid hours 1700 and higher - education

	1996	1997	1998	1999	2000	index 2000/1996
Basic education	76	75	75	75	74	0.97
Secondary education without passing A-levels	70	69	68	68	70	1.00
Secondary education with passing A-levels	78	75	72	73	73	0.93
Higher education (postgraduate)	76	73	68	75	70	0.91
University education	75	70	65	63	63	0.85
Total	77	76	72	73	73	0,95

Source: Wage differentiation of employees in 2000, Czech Statistical Office, 2001

The following table shows the same development.

Table 8 Average hourly earnings for levels of achieved education according to sex

Education	Portion of employees from their total number		Portion of women from the total number of employees in the particular level	Average hourly wage – difference	
	M	W		CZK	%
Basic	6.51	11.18	56.71	-14.22	30.02
Secondary	54.19	30.74	30.25	-21.69	43.85
Secondary, completed	23.82	42.92	57.90	-24.48	36.27
University	15.47	15.16	42.91	-47.99	52.02
Sample	100.00	100.00	43.33	-	-
Not stated	26.41	42.72	54.94	-27.33	41.10
Czech Republic total	126.41	142.72	46.26	-23.41	36.37

Source: Special statistics, Ministry of Labour and Social Affairs - Trexima, 2.Q.1999

The portions of men and women in the individual education categories vary; almost 55% men fall under the secondary education category (secondary vocational education), while employed women achieve completed secondary education. This ratio is almost equal for both sexes in the case of university education. On the other hand, women clearly dominate the category of basic education. The highest difference of average hourly wages is in the university education category, where this difference is almost 52% and thus becomes a permanent character for employees with university education. This could be partially explained by the concentration of women in sectors with permanently low wages (education, healthcare). The category of employees with basic education achieved the lowest differentiation.

5.5.2 Development of Wages according to Age

When comparing average monthly wages of employees according to age, two basic trends become apparent: the highest equality of wages is achieved in younger categories of employees (i.e. the age category up to 29 years). The “wage parity” decreases with the increasing age. The inequality is the most significant in the age category from 30 to 39 years (the ratio of women’s and men’s wages is 67%); the increase of incomes for middle-aged women is slower than for middle-aged men, difference in incomes and ratio of men’s and women’s wages increase. The incomes gradually come closer in older age groups, although no age group achieves as high equality as the young age group.

Increasing disproportions of wages between men and women (middle-age) are caused mainly by the women’s interruption of professional activities (employment) due to childbirth and the consequent care of the child. These situations result in a handicap for women. While women do not manage to catch up during their following professional career, middle-aged men’s professional career continues smoothly without any interruptions. The interrupted character of women’s professional career thus becomes one of the key factors influencing their lower wages.

When comparing the development of this ratio in time (between 1996 and 2000) its gradual increase again becomes apparent.

Table 9 Average monthly wages of employees with the total number of paid hours 1700 and higher – age categories

	Average monthly wage in CZK		Index between age categories %		Ratio W/M (%)				
	Women	Men	Women	Men	1996	1997	1998	1999	2000
Up to 19 years	9119	9795	100.0	100.0	96	91	85	88	89
From 20 to 24 years	11768	12691	129.0	129.6	90	85	83	84	84
From 25 to 29 years	14659	15759	160.8	160.9	79	76	73	79	81
From 30 to 34 years	15810	18199	173.4	185.8	74	70	67	67	67
From 35 to 39 years	15513	18394	170.1	187.8	75	73	68	68	67
From 40 to 44 years	15317	18013	168.0	183.9	74	73	69	70	71
From 45 to 49 years	15202	17733	166.7	181.0	75	74	71	72	72
From 50 to 54 years	15239	17420	167.1	177.8	76	77	74	74	75
From 55 to 59 years	16924	17709	185.6	180.8	84	85	77	84	84
From 60 to 64 years	18498	20315	202.9	207.4	65	65	60	60	62
From 65 and more years	12614	13657	138.3	139.4	76	74	75	68	72
Total	15187	17251	166.5	176.1	77	76	72	73	73

Source: wage differentiation of employees in 2000, Czech Statistical Office, Prague, 2001

The following table documents a similar development; the lowest difference in wages is in the category up to 20 years, the highest difference is in the age category 30 – 39 years, while the portions of men and women in the individual age categories are quite balanced.

Table 10 Average hourly earnings for individual age categories according to sex

Age categories	Portion of employees from their total number		Portion of women from the total number of employees in the particular age category	Average hourly wage – difference	
	M	W		CZK	%
Up to 20 years	1.0	1.4	55.0	-7.2	17.2
20-29 years	23.2	19.1	41.7	-17.8	29.7
30-39 years	22.6	23.1	47.0	-28.5	44.8
40-49 years	27.4	33.7	51.4	-26.4	39.8
50+	25.8	22.8	43.3	-22.6	32.8
Sample	100.0	100.0	46.4		
Not stated	2.2	1.7	40.5	-16.5	38.3
Czech Republic total	102.2	101.7	46.3	-23.4	36.4

Source: Special statistics, Ministry of Labour and Social Affairs – Trexima, 2.Q.1999

5.5.3 Development of Wages according to Job Classification (KZAM⁵)

Nine main classes of job classification (KZAM) represent basic classification of an employee's position in relation to the following two factors:

- a) Qualification;
- b) Responsibility connected with the position.

Positions with the highest qualification requirements and highest responsibility are included in class 1, the required qualification and the level of responsibility connected with the position decreases with the increasing number of class.

Employees in the first main class, which includes leading and management professionals in the state administration, managers and directors of large organisations and manufacturing companies, achieve the highest average gross monthly incomes (double the average wage). However, men prevail in this category (approximately 77%), the participation of women in the highest legislative, management and other similar positions is very low. According to the carried out research⁶, which focused on the comparison of the selected sample of directors and presidents of large organisations firms and companies, the ratio of the number of men in these positions to the number of women is 19:1.

At the same time, this category consistently achieves the greatest disparity in men's and women's wages – the ratio of average wages is only 54%. This striking difference can be explained by the fact that if women are placed into management positions, they usually hold positions with less responsibility, in companies with "lower prestige" (managers and directors of retailers or wholesalers). Another possible explanation is the influence of seniority principle (i.e. the influence of the length of experience). During the last five years this employment category also experienced the biggest decrease in the level of equality.

Low level of equality and its further decrease is also documented in the group of scientific and intellectual professions (in 1996: 79%, in 2000: 68%), where women are also likely not to hold high positions. Great differences between teaching and other professions (employees in banks) persist in this group. In the case of a concrete profession – medical doctors – the ratio

⁵ KZAM – an abbreviation for a list of categories (classification) of employment; this indicator is internationally comparable.

⁶ Equal opportunities of men and women in selected Czech companies 2000 – 2001, Gender centrum, Prague, 2001

of men's and women's wages is 82.7%; the equality of wages is in this case higher, which could be explained by a strong career orientation in both sexes. Category number seven also shows low equality of wages. This category includes workers in mines (miners, rope assemblers), i.e. professions carried out exclusively by men (with high difficulty, in unfavourable working conditions), as well as seamstresses, embroiderers, workers in textile manufacture, leather processing, i.e. "typically" female professions.

The highest equality of wages (85%) is achieved in qualified workers in agriculture, forestry and fishing.

Table 11 Ratio of average monthly wages of employees with the total number of paid hours 1700 and higher – job classification

	Ratio W/M (%)					index 2000/1996
	1996	1997	1998	1999	2000	
1 Legislators, managers and directors	63	58	54	53	54	0.86
2 Scientific and intellectual professions	79	73	69	67	68	0.86
3 Technical, healthcare and pedagogical professions	75	74	71	72	70	0.94
4 Lower administrative professions	82	82	80	78	78	0.95
5 Operation professions in services and commerce	72	59	71	74	75	1.03
6 Qualified workers in agriculture, forestry and fishing	86	83	84	84	85	0.98
7 Tradesmen, qualified manufacturers and process workers	69	70	68	68	69	1.01
8 Operation of machines and equipments	71	73	71	72	75	1.05
9 Assisting and unqualified staff	77	77	76	76	78	1.00
Total	77	76	72	73	73	0.95

Source: Wage differentiation of employees in 2000, Czech Statistical Office, Prague, 2001

Ratio of men and women's wages in concrete types of professions is shown in the following table:

Table 12 Average wage and wage difference for selected professions

Profession	Average wage (CZK)		Ratio of wages W/M (%)	Wage difference
	Men	Women		
Presidents of large companies	78552	47645	60.7	39.3
Financial and economic directors	46988	32586	69.3	30.7
Programmers	25652	20257	79.0	21.0
Medical doctors	30328	24905	82.1	17.9
Basic school teachers	16893	15941	94.4	5.6
Lower accountants	16437	12614	76.7	23.3
Cashiers	18908	14163	74.9	25.1
Waiters, waitresses	12316	10488	85.2	14.8
Shop-assistants	13540	9246	68.3	31.7
Operation of machine tools	14599	11259	77.1	22.9
Assisting workers	11493	9936	86.5	13.5

Source: Czech Statistical Office

As the comparison of concrete professions shows, the wage difference is high in demanding professions that require a high level of specialisation and lower in less demanding professions. However, this relationship does not apply in general; for example in the case of shop assistants the wage difference is 31.7%, in the case of teachers “only” 5.6%.

Although the difference within the whole educational sector is 28%, in the case of basic school teachers this difference is 5.6%; the wage difference within the whole catering and accommodation sector is 36.6%, while the ratio of waiters’ and waitresses’ wages is approximately 15%. The differences between men and women’s incomes for concrete professions are lower than the differences within the whole sector. This is caused by the “funnel” principle, where the wage disparity decreases with the decreasing level of the profession.

5.5.4 Development of Wages according to Type of Economic Management

The comparison of wages according to the type of economic management showed that employees in international organisations and foreign companies (most often with their offices in Prague) received the highest wages, the lowest wages were in cooperative organisations located in rural areas. The ratios of wages between men and women are different also for individual types of organisations (companies). The non-entrepreneurial sector achieves higher equality of wages in general (remuneration according to a table of wages compared to negotiated wages in entrepreneurial sector). The highest inequality of men and women’s wages was found in foreign organisations, where the ratio of men and women’s wages is around 64%.

Table 13 Average monthly wages of employees with the number of paid hours 1700 and higher – type of economic management

Type of management	Gross monthly wages - CZK			Ratio W/M (%)
	Total	M	W	
Entrepreneurial sector	15770	17407	12970	75
Non-entrepreneurial sector	12811	15522	11997	77
Private sector	14590	16077	11692	73
Cooperatives	11037	12517	9569	76
State organisations	14387	17254	12599	73
Municipal organisations	12250	14437	11577	80
Social organisations	12763	13130	12383	94
Foreign organisations	19333	23474	14986	64
International organisations	20078	22304	16341	73
Combined	16860	18217	14486	80
Total	15187	17251	12641	73

Source: wages of employees for 2000 from selective survey, Czech Statistical Office

5.5.5 Development of Wages according to Tariff Classes

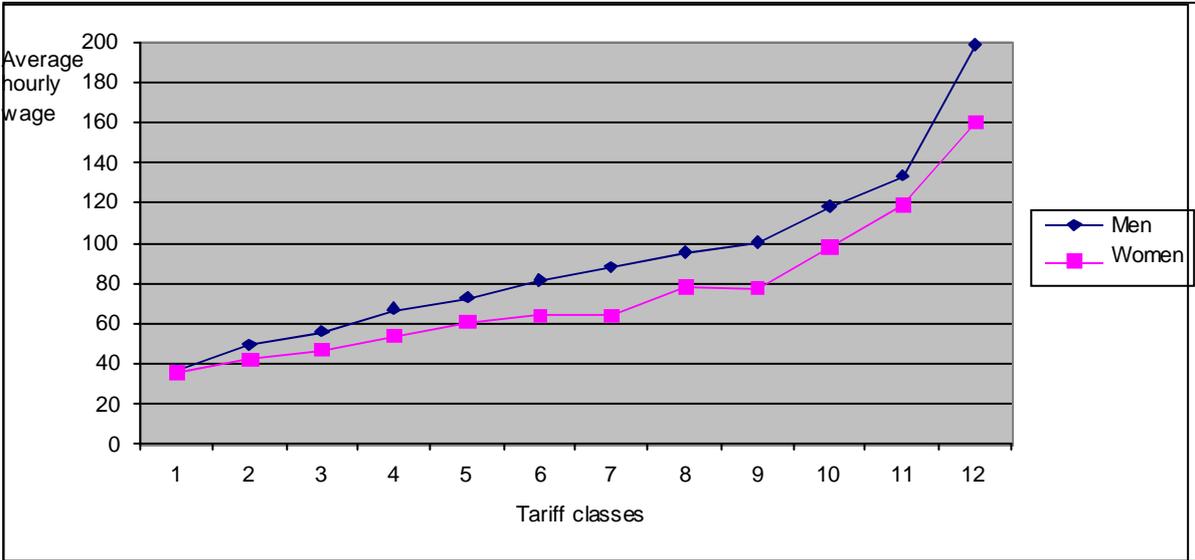
Information on distribution of employees into tariff classes and levels and differences of wages in the individual classes (more detailed structure of tariff classes according to the character of performed work – see attachment no. 2) is a significant source for evaluation of wage differences between men and women; this information enables us to analyse the influence of demands, responsibility and difficulty of work carried out by men and women on the wages and their differences. Twelve tariff classes (wage categories) are currently used for entrepreneurial, public and state sector. Professions of various difficulties are classified into

these 12 tariff classes according to the required special education and experience, responsibility, psychological and physical stress and other criteria determined by legal (wage) regulations.

As Table 14 and

Chart 2 show, men’s incomes (hourly wages) in all qualification levels are higher than women’s incomes and the differences between men’s and women’s wages increase with increasing tariff class. Two types of professions contrast in the lower middle and middle qualifications: men’s professions of a mainly trade character, compared to women’s professions, which are chiefly of a technically administrative character. Tariff class seven has the highest portion of women and at the same time the highest wage disparity (difference 36.6%): this is due to a contrast between men’s trades of a top character and women’s administrative professions. Although tariff classes concentrate similar types of professions, certain differences between the individual professions within one class still exist. The higher the tariff class, the higher the differentiation of professions inside the class is.

Chart 2 Development of men’s and women’s hourly wages according to tariff classes



Structure of employees (men and women) according to tariff classes varies significantly (see Table 14, for 2.Q.1999); most men fall under the fifth wage category (22.3 %), the most frequent wage category for women, on the other hand, is higher – the seventh wage category (23 %). The portion of women in the first three wage categories (not demanding, mainly manual work with low required level of professional training and education, usually requiring only an introductory training, with little responsibility and difficulty) is 27.4% of their total number, while men’s portion in these wage categories is only 11.3% of their total number. On the other hand, men dominate the highest wage categories (10 to 12, intellectual professions requiring specialised or university education, extensive and long-term experience, management skills and high responsibility); men: 9.3 %, women 5.0 %. On the whole the average tariff class for the second quarter 1999 (after the inclusion of the so-called “outside tariff” tariff class in the twelve classes, which is mainly special solutions for top managers or top specialists) for men’s professions was 6.27, compared to the average tariff class for women, which was 5.84. This difference in the average difficulty of professions suggests that men’s higher average hourly earnings are influenced by this factor to a certain extent (using the structure of distribution of work carried out by men women’s average hourly earnings

were higher by CZK 4.75 than the recorded earnings; this is approximately one fifth of the percentage difference of 34.4 % between the average men's and women's hourly wages). However, the gender differences in hourly earnings determined for the individual tariff classes are influenced by different factors than the average difficulty of professions; the current sources do not provide us with the necessary information for carrying out a numerical analysis. We can only hypothesize that within the individual tariff classes men more than women carry out professional activities with remuneration including special bonuses (for difficult, health damaging environment, work in continuous operations, work overtime, etc.), and that mainly men carry out the most difficult tasks in the case of higher tariff classes, which include a broader variety of activities with varying difficulty. The extent of wage differences within the individual tariff classes and the fact that these differences have a general character suggest that these differences most likely cannot be explained only by differences in the work carried out or employees' efficiency. A more detailed analysis requires thorough preparation and more detailed statistical, or sociological surveys.

Table 14 Average hourly earnings for individual tariff classes and sexes - 2.Q.1999

Tariff class	Portion of employees from their total number			Portion of women from the total number of employees in a particular class	Average hourly wage			Difference between average hourly wages ³⁾	
	Total	M	W		Total	M	W	CZK	%
1	1.6	0.7	2.5	75.3	36.0	36.6	35.7	-0.9	2.6
2	5.6	2.4	9.0	76.0	44.6	49.3	43.1	-6.2	14.3
3	10.7	8.2	13.2	58.6	51.2	56.2	47.7	-8.6	18.0
4	10.8	11.7	9.7	42.7	61.3	66.9	53.9	-13.0	24.1
5	15.3	22.3	7.8	24.0	70.1	73.3	60.2	-13.1	21.8
6	12.6	16.5	8.3	31.3	75.7	81.1	64.2	-16.9	26.3
7	15.9	10.5	22.0	65.5	72.4	87.9	64.3	-23.5	36.6
8	8.9	7.6	10.4	55.4	86.5	95.8	79.1	-16.7	21.1
9	9.4	7.9	11.2	56.4	87.6	100.5	77.7	-22.8	29.3
10	4.4	5.3	3.4	37.0	11.0	118.2	98.7	-19.5	19.7
11	2.3	3.0	1.4	30.2	129.4	133.9	119.2	-14.6	12.3
12 + outside tariff ¹⁾	2.6	3.9	1.1	20.3	191.5	199.2	160.2	-39.0	24.3
Total %	100.0	100.0	100.0	47.4	-	-	-	-	-
Respondents total ²⁾	671914	349083	318684	-	75.66	86.30	64.73	-22.08	34.4

Source: Special statistics, Ministry of Labour and Social Affairs – Trexima; calculations Trexima, Research Institute for Labour and Social Affairs

Notes and explanations: 1) The outside tariff class usually includes employees in positions such as top managers in the entrepreneurial sector. 2) Number of employees included in the survey. 3) CZK: $W - M$; % = $(W - M)/W * 100$

5.5.6 Development of Wages according to “OKEČ”⁷ Sectors

Significant segregation of male and female labour force according to economic sectors (activities) is characteristic for the Czech Republic; female labour force on one side and male

⁷ OKEČ – Abbreviation for “sector classification of economic activities”, internationally comparable indicator

labour force on the other side concentrate in certain economic segments; this sector concentration consequently influences also wage levels and relationships. A complex group of intertwined consequences and connections influences the gender distribution of labour force in sectors and wage relationships in the Czech Republic. The most significant factors are the following:

- **Historical factors.** Long-term influence of economic and social policy of the totalitarian regime (1948 – 1989) enforced by a number of state's dictatorial mechanisms (planning the preparation for employment and planning the distribution of labour force in individual sectors - activities – structured according to sex, planning and regulation of wages according to sectors with a heavy influence of state's political priorities, see paragraph 4.1) resulted in characteristic distribution of labour between men and women, which was reproduced over an extended period of time. The process of overcoming so strongly established gender structure of employment and wage proportions is gradual (limited flexibility of employees, limited resources – especially in the public sector, etc.);

- **Requirements related to labour force** that are more suitable either for women or for men (for women it usually is less demanding work that requires preciseness, with mainly regular working hours; for men it is physically stressful work, with more varying work load, in mobile or varying workplaces, etc.). Requirements relating to labour force that are more acceptable for men or women are a relatively stable factors, which influence similarly also more developed economies (with structured sectors); That is why certain characteristics of sector allocation of men and women are very similar in other European states (such as higher portion of women in processing sectors of industry and services, lower share in construction, etc.);

- **Market prosperity of a sector.** In the 90's positions of a number of sectors on the job market, as well as their wage positions were strongly influenced by the existing boom. A significant rise was documented especially in financial and insurance sector, whereas agriculture experienced a rapid fall; a flexibility of salaries depending of the prosperity of the particular sector is a reality for a great number of other sectors in the entrepreneurial sphere (construction, industrial sectors, trade, etc.).

Data included in Table 15 describe the situation in the structure of employees (men and women) and wage positions of major sectors of the national economy of the Czech Republic at the end of the 90's (the individual sectors are organised according to average monthly wages from the highest to the lowest):

Table 15 Employees' wages in individual sectors in 1999

"OKEČ" sectors	Employees (in thous. persons)		% of employees in the sector		% from the total employment		Average wages			
	Men	Women	Men	Women	Men	Women	Men	Women	Total	Ratio W/M
Finance and insurance	27.2	62.1	30.5	69.5	1.3	3.4	34 582	18 647	23 360	53.9
Manufacture and distribution of electricity, gas and water	60.8	17.7	77.5	22.5	2.9	1.0	17 866	14 316	17 021	80.1
Real estate, research	95.1	76.7	55.4	44.6	4.5	4.1	18 690	13 155	16 353	70.4
Mineral mining	67.2	8.9	88.3	11.7	3.2	0.5	17 074	12 326	16 311	72.2
Transport, warehousing, postal services and telecommunications	220.3	110.8	66.5	33.5	10.4	6.0	16 014	13 776	15 360	86.0
Construction	281.8	30.5	90.2	9.8	13.3	1.6	14 958	12 696	14 665	84.9
Processing industry	717.6	494.7	59.2	40.8	33.9	26.7	15 570	10 543	13 702	67.7
Public administration, defence, social security	142.2	136.4	51.0	49.0	6.7	7.4	16 551	12 655	13 632	76.5
Other public and social services	64.6	68	48.7	51.3	3.0	3.7	14 432	12 186	13 554	84.4
Catering and accommodation	48.3	78.8	38.0	62.0	2.3	4.3	17 038	10 807	13 128	63.4
Forestry, fishing	26.5	9.3	74.0	26.0	1.3	0.5	13 410	11 526	13 124	86.0
Trade, repairs	183.1	276	39.9	60.1	8.6	14.9	17 284	10 534	13 015	60.9
Healthcare, veterinary and social activities	42.8	212.5	16.8	83.2	2.0	11.5	17 352	11 826	12 871	68.2
Education	62.7	217.8	22.4	77.6	3.0	11.8	15 595	11 219	11 906	71.9
Agriculture, game keeping and related activities	77.7	47.1	62.3	37.7	3.7	2.5	12 223	9 434	11 407	77.2
Sectors - total	2118	1848	53.4	46.6	100.0*	100.0*	16 109	11 793	14 097	73.2

Source: Women and men in numbers, Czech Statistical Office, Ministry of Labour and Social Affairs, Prague, 2000

Notes and explanations: * the sum does not equal 100% because the sector "other economic activities" was excluded from the analysis due to the absence of data on average wages in this sector; sectors included in "other economic activities" account for 0.2% of the total employment of women and 0.1% of the total employment of men.

The following basic findings can be deduced from the overview:

a) The lowest share of female employees is documented in those sectors that require physical strength or include work carried out in unfavourable working conditions: construction (9.8 % women), mineral mining (11.7 %), manufacture and distribution of gas and electricity (22.5 %).

The wages paid for work in these sectors are comparatively high; in the total rating of all average wages these sectors are on the second (power-supply), fourth (raw material mining) and sixth place (construction);

b) Prevailing medium to high professional difficulty of working activities and provided services is characteristic for sectors with a large portion of female employees (healthcare, veterinary, social activities with 83.2 % of female employees, education 77.6 %, finance and insurance 69.5 %, trade and repairs 60.1 %, catering and accommodation 62.0 %). With the exception of finance and insurance sectors the wage levels in these sectors are within the lower half of the wage scale; especially wages paid for highly difficult work in education and healthcare are very low. It is obvious that a significant part of the issue of differences between men's and women's wages in the Czech Republic is connected with the problem of relatively low wages in these sectors;

c) Wages of the minority female labour force are “balanced” to a certain extent in the sectors with dominating male labour force (power supply, raw material mining, transport, and construction). Average wages of women in these sectors are relatively high in comparison with women’s wages in other sectors; this is clear from the fact that the highest women’s wages are documented in the six sectors with the highest total and average wages (male employees dominate five of these sectors).

d) Men employed in sectors with dominating female labour force hold management, directing and highly specialised positions and achieve (high) wages relevant to their professions (see education, healthcare);

e) The above-mentioned circumstances influence mutual proportions of average wages received by men and women in the individual sectors. These ratios vary from the lowest (approximately 53 % for finance and insurance sectors) to 85 to 86 % (transport, postal services, telecommunications, construction, forestry).

The indicated analysis proves the extent of relationships and connections between the character of the work, prosperity, historical factors and wage levels and positions of male and female employees in the main sectors of the national economy.

5.6 Factors that Influence Men’s and Women’s Wages

5.6.1 Hours Worked

One of the key factors that influence the difference in men and women’s incomes is the difference in the number of paid hours. If men work longer hours on average than women, their average monthly incomes are higher even if they are paid using the same hourly rate.

The average number of hours worked in full-time positions in the Czech Republic is 42.4 hours, men work for 43.5 hours on average and women for 40.8 hours on average, which means that their number of worked hours is lower by 6.6%.

Table 16 Usually and actually worked hours in one week

	Men		Women		Total	
	abs.	% in relation to the overall average	abs.	% in relation to the overall average	abs.	% in relation to the overall average
Average weekly number of usually worked hours	43.1	100.0	39.5	100.0	41.5	100.0
- full-time working schedule	43.5	101.0	40.8	103.4	42.4	102.1
- part-time working schedule	23.1	53.5	25.1	63.6	24.6	59.3
Average number of hours worked in the relevant week	43.3	100.6	39.1	99.1	41.5	100.0
- full-time working schedule	43.7	101.4	40.3	102.0	42.3	101.9
- part-time working schedule	24.8	57.6	25.7	65.1	25.5	61.4

Source: Employment and unemployment in the Czech Republic according to the Selective Survey of Labour Force, annual averages 2001

The highest disproportion of ours worked was documented in trade, motor vehicles repair, catering and accommodation, and construction. The lowest disproportion was found in raw material mining, public administration and electricity distribution.

Table 17 Hours worked according to sector and working schedule

Sector	Number of hours worked weekly					
	Fully worked hours					
	Usually			Actually		
	Men	Women	Total	Men	Women	Total
Agriculture, game keeping and related activities	45.0	41.9	44.0	45.6	41.9	44.5
Forestry, fishing, fish breeding	42.3	39.9	41.9	42.2	39.0	41.7
Raw material mining	39.0	39.2	39.1	38.6	38.3	38.5
Processing industry	41.7	40.1	41.1	41.5	39.4	40.7
Manufacture and distribution of electricity, gas and water	40.7	39.7	40.5	40.4	38.9	40.0
Construction	45.4	41.4	45.1	45.8	40.9	45.3
Trade, motor vehicles repair	46.5	41.9	44.2	46.8	41.5	44.1
Catering and accommodation	46.9	42.6	44.6	49.1	43.5	46.1
Transport, warehousing, postal services and telecommunications	43.8	40.1	42.7	44.5	39.2	43.0
Finance and insurance sector	44.0	41.4	42.5	43.4	40.7	41.8
Real estate, leasing, research	46.1	42.1	44.4	46.1	41.4	44.2
Public administration; defence; social security	41.5	40.5	41.1	41.4	39.7	40.6
Education	41.1	39.7	40.0	40.6	39.1	39.5
Healthcare, veterinary and social activities	43.8	41.0	41.6	44.5	40.7	41.6
Other public, social and personal services	43.3	40.9	42.1	43.4	40.3	41.8
Private households with a house personnel	-	47.2	47.2	-	47.2	47.2
Ex-territorial organisations and societies	41.9	40.9	41.5	41.3	39.1	40.3
Total	43.5	40.8	42.4	43.7	40.3	42.3

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force, annual averages 2001

Women's lower number of hours worked also influences the annual number of worked hours. The lowest number of worked hours, regardless of sex, is documented in the age category up to 20 years, working activity then culminates in the age category 40 – 49 years and then decreases again. Women of all age categories achieve lower number of hours worked than men; the difference is the lowest in the age category up to 20 years, where women's working hours are shorter only by 3%. The biggest difference in the length of working hours is in the age categories 20 – 29 years (6.7% for women) and 30 – 39 years (8.8%), which is a development corresponding with the development of the ratio of men's and women's wages.

Table 18 Average number of hours worked according to sex and age category¹⁾

Age category	Employee's number of hours worked per year - 2001			Ratio of hours worked W/M (%)
	Total	Men	Women	
Up to 20 years	646	656	638	97.3
20 - 29 years	1 472	1 513	1 418	93.7
30 - 39 years	1 576	1 633	1 501	91.9
40 - 49 years	1 610	1 646	1 574	95.6
50 - 59 years	1 608	1 639	1 565	95.5
60 years and older	1 344	1 420	1 175	82.7
Czech Republic - total	1 557	1 598	1 506	94.3

Source: Ministry of Labour and Social Affairs-Trexima, 2002

Notes and explanations: 1) for all employees regardless of the number of paid hours

Different number of worked hours is a basic factor that determines the extent of the differences between men and women's wages.

Table 19 Average time worked according to sex and job classification¹⁾

Main class	Employee's number of hours worked per year - 2001			Employee's hours worked relatively %	Ratio of hours worked W/M (%)
	Total	Men	Women		
1 Legislators, managers, directors	1 700	1 714	1 673	109.2	97.6
2 Scientific and intellectual professions	1 595	1 612	1 574	102.4	97.6
3 Technical professions (healthcare, pedagogy)	1 633	1 658	1 618	104.9	97.6
4 Lower administrative professions	1 479	1 483	1 478	95.0	99.7
5 Operation professions in trade and services	1 439	1 499	1 403	92.4	93.6
6 Workers in agriculture, forestry and fishing	1 524	1 557	1 490	97.9	95.7
7 Tradesmen, manufacturers and process workers	1 553	1 586	1 417	99.7	89.3
8 Operation of machines and equipments	1 557	1 609	1 445	100.0	89.8
9 Assisting and unqualified professions	1 365	1 406	1 336	87.7	95.0
Czech Republic - total	1 557	1 598	1 506	100.0	94.2

Source: Ministry of Labour and Social Affairs - Trexima, 2002

Notes and explanations: 1) for all employees regardless of the number of hours worked

An above-average number of hours worked was documented in the first three classes of employees, which also have the lowest differences in the number of hours worked between men and women (approximately 40 hours per year).

5.6.2 Type of Working Schedule and Duration of Employment

Another factor that influences men and women's incomes, of the extent of their difference, is the type of a working schedule. One of the reasons of higher average hourly wages for men may be the higher share of women working part-time because this type of work is usually paid with lower hourly rates. This is the situation, for example, in the EU member states, where majority of women work in part-time positions (the ratio of women's employment in part-time positions in the EU is 33.4%). However, the situation is different in the Czech Republic; most employees work full-time; only 4.9% of all employed people declared a part-time working schedule in 2001 (2.1% of employed men and 8.3% of employed women had a part-time working schedule).

However, women dominate the group of employees working part-time also in the Czech Republic; the vast majority of men (employees) work in positions with full-time working schedule (97%). Almost 77% of employees working part-time are women (approximately 80% in the EU)⁸. There are three major reasons why women do not work full-time:

- Taking care of children (in 1999: 22.9%; in 2000: 13.7%),
- Based on the employer's initiative (decision),
- Underemployment⁹.

⁸ The Czech Republic is different from the EU member states in terms of the total share of part-time employees, however the share of women within this group is not significantly different.

⁹ Underemployed are those persons who worked involuntarily shorter working hours than the determined working hours for the particular type of activity and who were looking for work or were prepared to do more work. People who did not work more than four weeks are not included in this category.

All three reasons are “forced” onto women, i.e. they did not make a voluntary decision to work part-time. The reasons are different for men; the main reason is a state of the particular employee’s health and the second reason is the fact that the part-time working hours suit the particular employee.

However, from the time development perspective, there is a slight decrease in the number of women working part-time – 1.6 p.b. The extent of part-time employees is so insignificant in our conditions that it cannot considerably influence the difference between men and women’s average wages.

Table 20 Reasons of part-time employment

	IV. Q. 1999 %			2001%		
	Men	Women	Total	Men	Women	Total
Employees working part-time*						
Cannot find suitable work full-time	2.9	8.7	7.3	4.8	11.5	9.8
From the employer’s initiative	8.7	21.3	18.4	9.5	20.5	17.7
Health reasons	29.0	11.4	15.5	29.4	12.4	16.6
Taking care of children	0.6	22.9	17.7	-	17.7	13.7
Studying at a school or a specialised course	11.6	1.9	4.2	12.6	-	5.6
Have a second job	2.1	0.7	1.0	-	-	-
Working part-time suits them	24.6	19.3	20.5	22.7	20.9	21.4
Other reasons	20.5	13.8	15.3	-	-	-
Underemployed	11.6	30.0	25.7	14.2	31.9	27.5

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force, IV. Q. 1999 and annual averages 2001

Notes and explanations: *excluding people who did not work four or more weeks – data not available

Another reason for unequal men’s and women’s wages is the duration of their contract, i.e. the duration of their employment; women declare shorter employment duration, which proves their less stable position on the job market, together with the fact that their time spent in one position is interrupted – for example by maternity leave (see Table 21).

Table 21 Employees according to a type of a working schedule and duration of employment

Employees in the civil sector (the only or a main job)	IV. Q.1999		2001	
	% men from the total	% women from the total	% men from the total	% women from the total
Type of a working schedule				
- full-time	58.3	41.7	58.2	41.8
- part-time	23.3	76.7	24.9	75.1
- did not work longer than 4 weeks	26.6	73.6	-	-
Total %	56.0	44.0	56.2	43.8
Duration of employment				
- up to 6 months	49.6	50.3	-	-
- 6 months to 1 year	49.8	50.2	51.1	48.9
- 1 to 3 years	53.6	46.4	54.5	45.5
- more than 3 years	58.0	42.0	57.6	42.4

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force, IV. Q. 1999 and annual averages 2001

Notes and explanations: *excluding people who did not work four or more weeks – data not available

5.6.3 Work Overtime

The fourth factor that influences the difference between men and women's wages is the extent of work overtime. Work overtime is work carried out outside the determined weekly working hours. An employer instructs an employee to work overtime in exceptional cases only to carry out extraordinary emergency work. An employer can instruct an employee to work the maximum of 150 hours overtime. Work overtime exceeding this limit can only be carried out exceptionally and with an employee's consent to perform this work (maximum possible number of hours of overtime work is 266 per year). As work overtime extends into the employee's free time, the employee is entitled to the usual wage, plus an extra bonus of 25 % from the average earnings.

Men's average hourly incomes are higher than women's incomes because the bonus for work overtime is spread over all hours worked. Therefore, the difference of men and women's average wages may be caused by different extent of work overtime between both sexes. Work overtime is more common for men – more than a third of men declare experience with work overtime. Approximately 80% of women have never worked overtime (for more detail see Table 22). As an employee can be instructed to work overtime only to a certain extent and work overtime exceeding this limit must be agreed by an employee, the question is whether women are willing to work overtime. This information cannot be acquired through analysis of the statistical data, this type of data requires a sociological survey.

Table 22 Frequency of overtime work

Frequency of work overtime	%		
	Men	Women	Total
- every week	14.9	6.2	10.9
- usually in one to three weeks in a month	7.8	4.1	6.1
- rarely, one week in a month at the most	10.4	8.2	9.4
- never work overtime	63.6	79.8	71.1
- determine their own working hours	3.3	1.6	2.5

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force, annual averages 2001

Reasons for work overtime are also different; the following reasons are stated as the three most common for both sexes: character of work requiring work overtime, organisational and technical reasons and supervisor's instruction. However, the following reasons vary: men are interested in an extra income (4.3%), while for women this reason is one of the least frequent (1.8%). The level and quality of the social environment is important to women. That is why they will choose worse paid work in a good working team with good relationships more often than men.

Table 23 Main reasons of work overtime

Main reasons for work overtime	%		
	Men	Women	Total
- supervisor's instruction	5.8	3.4	4.7
- interest in the extra income	4.3	1.8	3.1
- fulfilling tasks that could not be managed during the normal working hours	3.7	2.8	3.3
- character of the work requires work overtime	12.5	5.8	9.4
- other organisational or technical reasons	6.5	4.7	5.6
- other, personal reasons and not determined	0.4	0.2	0.3

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force, annual averages 2001

Table 24 Average usual number of hours of work overtime

Average usual number of hours of work overtime	Men		Women		Total	
	Abs.	%	Abs.	%	Abs.	%
	9.6	0.5	7.0	0.4	8.8	0.2

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force, annual averages 2001

6 Analysis

6.1 Income Difference of Tariff Classes

The following subchapter analyses the income difference of tariff classes. The analysis is based on the structure of tariff classes, whose detailed description is included in 5.5.5.

The average monthly wage in 2.Q. 1999 for men was CZK 15 699 and CZK 11 554 for women.¹⁰ The ratio of men and women's wages was 0.736 (73.6%). The wage differential was 0.26 or 0.3.

The lowest average hourly wage for men was CZK 36.6 (the first tariff class); the highest average hourly wage for men was CZK 199.2 (after the inclusion of outside-tariff remuneration into tariff class 12).

In case of men the wage difference between classes is 16.6%.

As the wage differential is 0.3, then 5.5% of the wage difference is caused by the difference between tariff classes, i.e. differences in complexity, difficulty and responsibility connected with the particular work.

6.2 Differences in Men's and Women's Working Hours

Two procedures are used due to the lack of relevant data on length of men's and women's working hours: the available data from statistical yearbooks published by the Czech Statistical Office are used and in the case of absence of the necessary data, these data are calculated. The analysis is made for II.Q.1999.

Firstly, we base our analysis on the average number of hours worked in a week for men and women employed in the civil sector of the national economy, structured into full-time employees and employees in total – i.e. also including people employed part-time, always structured into men and women.

Employees in CS	Average number of hours usually worked in a week	
	Full-time WH	Total (full and part-time WH)
Men	45.8	45.2
Women	42.7	41.1
Total	44.5	43.4

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force – II.Q.1999, Czech Statistical Office, Prague, 1999

Notes and explanations: WH - working hours, CS – civil sector of the national economy

Next, we determine the number of hours worked for one specific group of employees, again structured according to sex. However, only data on hours worked for employees working full-time are available from the statistical data.

Employees	Average number of hours usually worked in a week	
	Full-time WH	Total (full and part-time WH)*
Men	43.8	43.2
Women	42.1	40.5
Total	43.1	42.0

Source: Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force – II.Q.1999, Czech Statistical Office, Prague, 1999

Notes and explanations: * calculation according to Formula 1

¹⁰ Source: ISAI, Ministry of Labour and Social Affairs- Trexima, 2.Q. 1999

Hours worked for employees regardless of their working schedule was calculated according to Formula 1, which is based on the calculation of a conversion coefficient, which is a ratio of working hours of employed people and employees working full-time.

Formula 1 Calculation of the conversion coefficient

$$\text{Conversion coefficient (CC)} = \frac{E_{mF}}{E_{mT}}$$

Explanation:

- E_{mT} - Employed men total
- E_{wT} - Employed women total
- E_{mF} - Employed full-time - men
- E_{wF} - Employed full-time - women
- E_{s_mF} - Employees with full-time working schedule - men
- E_{s_wF} - Employees with full-time working schedule - women
- E_{s_mT} - Employees – men total
- E_{s_wT} - Employees – women total

The same method is used to calculate coefficients for other groups.

Conversion coefficient for the individual groups was the following:

Men	0.956331878
Women	0.985948478
Total	0.968539326

The following step is to determine the average number of the usual hours worked for employees total as multiple of the conversion coefficient and the average number of the usual hours worked for employed total (see Formula 2).

Formula 2 Calculation of the average number of the usual hours worked for employees total

$$E_{s_mT} = CC * E_{mT}$$

The average number of the usual hours worked for employees total was the following for the individual groups:

Men*	43.22620087
Women*	40.52248244
Total*	42.03460674

The third step is based on empirical observation that the average wage for women is lower than the average wage for men and therefore the following relation is valid – i.e. the ratio of the average wage for women to the average wage for men is less than (see Formula 3).

Formula 3 Empirical observation on the ratio of men’s and women’s average wages

$$\frac{W_w}{M_w} < 1$$

Then the difference between men's and women's wages is calculated as difference between 1 (situation when men's and women's wages are identical) and the actual ratio of wages (see Formula 1).

Formula 4 Calculation of the wage difference

Wage difference = 1 - ratio of men's and women's wages

The wage difference between average men's and women's wages for 1999 of 0.27 was determined.

The last step is to determine to what extent the different working hours influence this difference. The influence of the working hours is calculated as the quotient of the average hours worked for employees, structured into men and women (see Formula 5).

Formula 5 Calculation of the influence of men's and women's different working hours

$$\text{Influence of working hours} = \frac{E_{Sw}T}{E_{Sm}T}$$

6.3% of the wage difference can be explained by the different working hours of men and women.

6.3 Macroeconomic Wage Difference

The relevant share of men and women in the total economic wage bill is a relevant indicator and is studied in the EU. The total wage deficit of women can be measured from the macroeconomic perspective by comparing this indicator with the women's share in the total employment.

The analysis calculates this difference for 1997 when this survey was carried out in the EU and the results for the Czech Republic and the EU can be compared, as well as for 1999 to compare the time development of this indicator (Czech Republic only). As the analysis of this indicator in the EU was carried out on the basis of net wages, this indicator for the Czech Republic will also be calculated on the basis of net wages. Therefore, it is necessary to bear in mind that the acquired results slightly underestimate the actual difference.

Macroeconomic wage difference is calculated as difference between women's share in the total volume of wages and the women's share in the employment.

Formula 6 shows the procedure for calculation of the macroeconomic difference.

Formula 6 Procedure for calculation of the macroeconomic difference

*Total volume of women's wages = number of months in a year * net (gross) average wage for women * number of women employees*

Women's share in the total volume of wages = total volume of women's wages / total volume of wages for all employees

Women's share in the employment (%) = number of women employees / number of all employees

Macroeconomic wage difference (%) = women's share in the total volume of wages / women's share in the employment

Table 25 Numbers of employees in the civil sector in the Czech Republic and their average monthly wages

	Number of employees in the CS (thous. people)	Average wage CZK/month	
		Net	Gross
Women	1942.4	8278	10730
Men	2254.5	10725	14166
Total	4196.9	9590	12572

Source: Women and men in numbers, Czech Statistical Office, Ministry of Labour and Social Affairs, Prague, 2000

Women's share in the total employment in the Czech Republic is high – 46.3%; this value places the Czech Republic on the fourth place in comparison with the EU– 15 member states (women's share in the total employment is higher only in Portugal, Denmark, Finland and Italy). According to women's share in the total volume of wages the Czech Republic is on even higher, third place (after Finland and Denmark). According to the total macroeconomic difference the Czech Republic is on the fifth place, after Portugal, Denmark, Finland and Italy (for more detail see Table 26).

Macroeconomic analysis shows a favourable position of the Czech Republic in comparison with EU –15 member states in terms of a high women's share in the total employment, as well as high women's share in the total volume of wages and low women's wage deficit; the macroeconomic wage difference in 1997 was 86.2% (the higher this value is, the better women's position is).

Table 26 Macroeconomic wage difference (%)

Country ¹⁾	Women's share in the employment (1)	Women's share in the total volume of wages (2)	Macroeconomic wage difference (2)/(1)
Portugal	42.56	38.94	91.5
Denmark	47.42	41.83	88.2
Finland	50.81	44.36	87.3
Italy	39.40	34.13	86.6
Czech Republic ²⁾	46.28	39.93	86.2
Spain	34.82	29.50	84.7
France	45.89	38.77	84.5
Belgium	44.99	37.84	84.1
Greece	37.34	31.38	84.0
Luxembourg*	39.00	31.32	80.3
Ireland	42.45	33.34	78.5
Austria	41.66	32.55	78.1
Great Britain*	46.99	35.25	75.0
Netherlands	40.49	29.82	73.7
Germany*	40.78	28.57	70.1

Source: 1) Indicators on gender pay equality: the Belgian presidency 's report, 2001, Brussels; 2) Women and men in numbers, Czech Statistical Office, Ministry of Labour and Social Affairs, Prague, 2000

Notes and explanations: * data from 1996, other data from 1997, EU member states – data from the ECHP database

Women's share in the total employment in the Czech Republic for 1999 was 43.9%, which represents a slight decrease in comparison with 1997 (by approximately 2.4 p.b.), women's share on the total volume of wages also decreased - to 36.9%. The macroeconomic wage difference decreased from 86.2% (in 1997) to 84.1% (in 1999), which is yet another proof of

the deteriorating trend in women's wages. As net wages were used in the calculation, the macroeconomic wage difference has been underestimated to a certain extent; the macroeconomic wage difference calculated using gross wages is 83.6%.

6.4 Adherence to Equal Remuneration for Men and Women in Companies

Inspections of the adherence to the equal remuneration in companies carried out by labour offices should consist of the following steps:

First step is to determine the portions of men and women in the company, or employment ratio of men and women. The next step is to find out whether the company has a system that expresses the complexity, responsibility and difficulty of the carried out work, or if the company uses a certain system of work evaluation. If this system has not been established in the company, it is necessary to find out the method of determining the remuneration for the individual positions – is it determined individually or randomly?

If the company has a system of work evaluation, it is possible to find out what factors are considered when evaluating employees' work. The following step is to check whether the employee's remuneration (i.e. employee's wage) and the actual work carried out are balanced or whether there are unjustified differences.

When analysing the adherence to the equal remuneration principle in a particular (concrete) company, it is necessary to obtain (have available) a list of employees employed in the company, including their average wages, structured according to sex. The concrete differences can then be determined. Men and women's wages do not necessarily have to be identical, even in the case of adherence to the equal remuneration principle.

If, for example, 30 employees fall under wage category 5, ten of which are women and twenty of which are men, men's and women's wages in this category may be different. In this case it is necessary to determine the professions men are employed in (they may be employed, for example, as welders, who work in unfavourable working conditions – work outside, inhalation of harmful gasses, etc.) and compare them with women's professions (who may be employed in administrative professions). In this case factors of an objective character influence the differences in remuneration. If the company has no system for work evaluation, or unjustified differences between men's and women's wages have been found, it can be reasonably assumed that the company discriminates some of its employees on the basis of sex.

7 Situation in the EU

7.1 Women's Position in the EU

Although women's employment in Europe is continuously increasing, it is only 52.6% (see Table 27). Therefore, the difference between men and women's employment is significant – the overall difference is approximately 20 p.b. However, this difference varies significantly for individual countries; this difference almost disappeared in Scandinavian countries (for example in Sweden this difference is 3.2 pb.), in Spain, Greece and Italy this difference remains high - 30 pb. However, in terms of development the countries with the highest difference are currently experiencing the fastest growth of women's employment, i.e. the fastest reduction of this difference (especially in Spain and Ireland).

In the 60's less than 30% of economically active people in the EU were women; the current average is 59.2%. This is strongly influenced by the fact that although the overall employment in Europe decreased (1991-1992), women's access to the job market has not been impeded or prohibited. This was partially due to the services sector, which is mainly occupied by women and was relatively unaffected by the crisis. However, this is only a partial explanation of this development. The second important factor is the fact that the most significant growth of economic activities in all countries occurred in the age group from 25 to 49 years. This means that the increase in active population is caused mainly by growth in the economic activity of women of a productive age, whereas activity at the poles (extremes) of productive life is decreasing for men, as well as women. The decrease in young people's economic activity is a result of a longer time spent studying and in the case of older employees, especially men, it is caused by an earlier termination of economic activity (the current economic activity of men is very low, the average is approximately 78.1%). The age group from 25 to 49 years is clearly the category most affected by motherhood and relating issues of harmonising family and professional life. The influence of responsibility to a family on women's economic activity in the EU has decreased. This is an overall cultural, social and economic trend. Women increasingly focus on the male model of economic activity, which is becoming a standard in many European countries; the current situation is that although a woman aged 35 has two children, she still works, which up until recent was something quite unusual.

Again, certain differences can be observed in this general trend: for example, economic activity of women in Southern states, excluding Portugal and including Luxembourg, remains significantly lower than in Scandinavian countries. Economic activity of women in eight out of fifteen member states is above average.

Although the trend of growing economic activity can be observed in almost all countries, there are three different types of situations:

- Countries with a continuous economic activity of women, independent of age or family situation. This is the case of Scandinavian countries, France, to a certain extent Germany (as a result of the reunification) and Austria. The male model of economic activity is being established as a norm in these countries. This model is increasingly applied also in Portugal (in total in 7 EU member states).
- Countries where the so-called inactive model dominates. This category includes Spain, Italy, Greece, Luxembourg, Ireland and to a certain extent Belgium (in total 6 EU member states). Although a significant progress has been achieved in this sphere in the EU, women's activity in these countries is at its peak in young and childless women, with a significant decrease during the following stages of life. The woman's family situation is still a strong determining factor in these countries.
- The so-called bimodal model (or interrupted) is observed in the third group of countries. This model is a result of a certain interruption (temporary, not permanent)

of women's economic activity during the first couple of years after childbirth. This model can be identified especially in Northern and Central Europe, however, it is slowly disappearing. Currently, this model is surviving only in Great Britain and Netherlands.

7.2 Concentration of Female Labour Force in Sectors and Professions

Integration of women in the EU job market remains in certain situations connected with managements' gender-specific actions.

Women segregation in certain professions – horizontally, i.e. in certain sectors, as well as vertically, i.e. concentration in certain professions and impossibility to achieve more qualified positions – still commonly occurs.

Although in certain cases women work in “men's” professions, their number in low-income professions in services or administration that do not require high qualification has increased.

Women's share in the industry sector in the EU is very low – 16% women worked here compared to 39% men in 1998); on the other hand, their portion in the services sector is high – 80% women compared to 55% men. High concentration of women in four basic sectors (fields) can be observed in the EU; these are sectors with majority of women employed in the EU – healthcare, education and catering. This applies with certain exceptions – the concentration of women's professions in these sectors in Greece and Portugal remains high but agriculture still plays an important role in these countries; approximately 20% of Greek women are employed in agriculture compared to 3.7% of women in the EU as a whole.

Vertical segregation in professions is still a reality in the EU, despite the changes that have occurred. High level of women's education resulted in a significant increase in women's qualification. Approximately one third of management positions is occupied by women in those countries that achieved the most significant progress in this sphere. However, the positive trend of increasing women's qualification is limited by various factors: access to positions with higher required qualification is limited to the public sector, for example education, where the recognition of women's qualifications and abilities is less problematic. The so-called glass ceiling is present in highly competitive sectors: significantly smaller part of top management positions is occupied by women – approximately 6 to 10%. Segregation in professions is surprisingly higher in Scandinavian countries – only 3 to 4% of women work in senior management positions in Denmark, Sweden and Norway. However, the improvement is often connected with the process of qualification “polarisation”. Many women work in professions with low qualification requirements and equally low chances of professional promotion.

Table 27 Indicators of employment and unemployment in the EU for 1999 ¹⁾

		EU - 15	DK	FIN	S	D	A	B	F	L	NL	UK	IRL	E	EL	I	P
Employment (15 –64 years) ²⁾	Women	52.6	71.6	64.6	68.9	57.1	59.7	50.2	53.5	48.5	61.3	63.7	51.4	37.3	40.3	38.1	59.6
	Men	71.6	81.2	70.2	72.1	72.4	76.6	67.5	67.5	74.4	80.3	76.9	73.6	67.8	71.6	67.1	75.7
Extent of economic activity (15 – 64 years) ³⁾	Women	59.2	76.1	73.9	74.0	62.9	62.7	56.0	62.2	50.2	64.4	67.3	54.4	48.5	48.5	45.6	63.0
	Men	78.1	85.0	78.9	78.8	79.3	80.5	73.0	75.5	75.8	82.6	82.8	78.3	76.2	77.2	73.7	79.1
Unemployment	Women	11.0	5.9	2.4	6.9	9.2	4.8	10.2	14.0	3.3	4.9	5.2	5.5	23.0	16.5	16.3	5.2
	Men	8.2	4.5	11.0	8.3	8.6	4.7	7.5	10.5	1.8	2.7	6.9	5.9	10.9	7.0	8.8	4.1
Rate of part-time employment	Women	33.4	33.9	17.0	40.0	37.2	32.5	33.3	31.7	24.6	68.6	44.4	30.6	17.6	10.5	15.7	16.7
	Men	6.1	9.6	7.9	9.4	4.9	4.4	3.5	5.6	1.8	17.9	8.9	7.4	3.0	3.3	3.4	6.3

Source: Follow-up to the Beijing Platform for Action on the relationship between family life and working life, presidency report, Brussels, 2000

Notes and explanations:

1) All data are in percentages

2) Employment – numbers of persons in % from the total number of women or men aged 15 –64 years

3) Rate of economic activity – numbers of persons in % from the total number of employed and unemployed

DK –Denmark FIN – Finland S – Sweden D – Germany A – Austria B – Belgium F – France L – Luxembourg NL – Netherlands UK –Great Britain IRL – Ireland E – Spain
EL – Greece I – Italy P - Portugal

7.3 Sources and Character of Data

Two main databases that enable the comparison of inequality of men's and women's wages in EU member states exist in the European Union: Structure of Earnings Survey (ESES) and European Household Panel (EHP). However, neither of the data sources is completely adequate for international comparison of men and women's wages or for the monitoring of the development of the inequality (wages differences) in certain periods of time.

The following overview (Table 28) describes strong and weak points of these statistical sources. The main (but not the only) disadvantage of the **ESES** database is the fact that it excludes the state sector, as well as the so-called public services (which are important sectors for the comparison of men's and women's wages because the number of women working in these sectors is significantly higher than the number of men; 46% of all women and 22% of all men worked in these sectors in 1995); furthermore, the data from this source are available only for 1995. Another problem is the fact that this database is only available indirectly, in an aggregated version.

The main weak point of the **EHP** database is the fact that it includes information on net wages; however, the principle of equal remuneration is based on the comparison of gross wages because the influence of the tax system on wages is very different for the individual countries, as well as for different employees in one country according to their personal and family status.

Table 28 Comparison of advantages and disadvantages of the EU databases: ECHP and ESES

	ECHP		ESES	
	Advantages	Disadvantages	Advantages	Disadvantages
Coverage	Covers the entire population, including people who do not work. It is suitable for the use in wage equality with problems with skewness selection			Only employed people; only employees and firms with the minimum of 10 employees
	ECHP includes self-employed and employees; its use is suitable especially for those countries with significant number of self-employed people, especially women			
Family and household	It is a data file on households, i.e. it includes a great deal of important information relating to women: number and age of children, family status, etc.			No information on these variables
Economic sectors		Only 18 sectors included; this is problematic because the individual sectors are very heterogeneous from the sex perspective.	Data available on the NACE 2 numeric level; estimates made on numeric level 2 (OAXACA type of analysis); provide more limited wage differences than the data on the NACE 1 level of sectors in the ECHP database.	
Education levels		Three levels only	Seven levels	
Data on wages		Net wages, conversion to gross wages dependent on the family status, tax system and other circumstances	Gross wages provided by an employer	
		Monthly net wages only, without detailed information on structure of wages	Data file based on the structure of incomes	
Availability	Individual file of ECHP data can be acquired very easily (very low costs), its use is extensive	Due to the structure of data on wages and incomes, caution when working with the data is necessary	Using individual data <u>should be</u> very useful, for example in estimating inequality of wages using econometric methods.	ESES is available only in the form of cross tables or calculated by EUROSTATEM, however, only under very limited conditions (confidential)
Periodicity	Annual			4 years
	Panel data: individuals can be monitored annually			Without panel
Type of data		Employees' survey, which also means a subjectivity of answers and problems with no response, especially in case of data on income	Employers' survey, i.e. a good quality of data, especially in the case of data on wages.	

7.4 Analysis of ESES and ECHP Databases

7.4.1 Basic Methodical Approach

Basic indicators that must be taken into consideration when measuring the inequality of men and women's wages include:

- The total wage difference measured by hourly basic rate, including and excluding pay for work overtime, for all employees,
- The total wage difference measured by hourly basic rate, including and excluding pay for work overtime, for all full-time employees,
- The total wage difference measured by hourly basic rate, including and excluding pay for work overtime, for all part-time employees.

The inclusion and exclusion of pay for overtime and part-time employees allows the estimate to be relatively independent of working hours; using this method it is also possible to prove that the inequality of men's and women's wages cannot be explained by differences in working hours only. As a significant part of the wage discrimination on the basis of sex in certain EU member states is caused by segregation of women in part-time positions, it is necessary to calculate the total wage difference including and excluding part-time employees. In the case of wage difference for part-time employees it is more suitable to compare women's wages for part-time work with wages of full-time employees (men and/or women). Measuring the wage inequality regardless of monthly wages is also effective because it allows us to reflect the varying impact of different working hours on wages achievable for men and women.

The inequality of men and women's wages is still a major problem in the EU because it ranges between 10 and 30% of gross wages.

Table 29 Wage difference in EU member states, 1995, ESES

Country	Women's gross hourly wages/men's gross hourly wages (full-time employees)	Wage difference
Austria	75.92	24.1
Belgium	85.72	14.3
Denmark	86.35	13.7
Spain	76.37	23.6
East Germany	89.94	10.1
Finland	81.56	18.4
France	80.53	19.5
Greece	75.00	25.0
Ireland	75.22	24.8
Italy	80.92	19.1
Luxembourg	85.85	14.2
Netherlands	70.64	29.4
Portugal	71.67	28.3
West Germany	76.94	23.1
Great Britain	76.93	23.1
Sweden	88.31	11.7

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

Men in general work more hours than women, which explains the fact that monthly wages slightly increase the wage difference between men and women (also in the case of part-time employees); this fact is proven in the case if using gross wages, as well as net wages.

Table 30 Ratio of men's and women's wages for full-time employees and for all employees in the EU in 1995, ESES

Country	Gross hourly wages of women working part-time to wages of men working part-time	Wage difference	Women's gross monthly incomes /men's gross monthly incomes (only employees working part-time)	Wage difference
Austria	70.52	29.5	72.94	27.1
Belgium	98.65	1.3	84.30	15.7
Denmark	98.25	1.8	84.66	15.3
Spain	83.34	16.7	75.49	24.5
East Germany	90.08	9.9	87.16	12.8
Finland	95.93	4.1	78.35	21.7
France	84.17	15.8	80.05	20.0
Greece	92.70	7.3	72.88	27.1
Ireland	106.31	-6.3	70.18	29.8
Italy	84.54	15.5	78.95	21.1
Luxembourg	80.84	19.2	84.18	15.8
Netherlands	87.18	12.8	69.04	31.0
Portugal	79.33	20.7	70.79	29.2
West Germany	78.50	21.5	74.24	25.8
Great Britain	85.50	14.5	69.80	30.2
Sweden	91.78	8.2	84.48	15.5

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

Northern countries (Sweden, Denmark) achieve the highest equality of men and women's wages due to their long-term tradition of promoting equal opportunities for men and women. Former East Germany had the lowest inequality of wages. However, this result is influenced by the fact that the differentiation of wages was still very low in the time of the completion of this survey. Southern countries (Greece, Portugal) are among the states with the highest wage difference. Women's work, or women's financial income, in these countries is still seen as complementary to the total income in the household.

The inequality of men's and women's wages determined on the basis of net wages is generally less significant than the wage difference measured on the basis of gross wages – especially due to the progressive structure of tax system and the fact that the state sector is included in the ECHP database. In the case of Germany the net difference is greater, regardless of the procedure used (work part-time, work full-time, monthly income), which could be explained by the general tax system (cumulative taxation of incomes).

In all EU member states women working part-time earn proportionately less than women working full-time (with the exception of Austria).

Table 31 Ratio of gross hourly wages of women working part-time to gross hourly wages of women working full-time; 1995, ESES

Country	Gross hourly wages of women working part-time / gross hourly wages of women working full-time (%)
Austria	110.90
Belgium	88.93
Denmark	81.89
Spain	77.87
East Germany	83.82
Finland	90.68
France	78.99
Greece	96.90
Ireland	67.51
Italy	94.65
Luxembourg	83.74
Netherlands	90.84
Portugal	99.66
West Germany	91.02
Great Britain	70.33
Sweden	93.26

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

This is caused by a combination of disadvantages relating to work part-time – i.e. type of profession, sector, type of a contract (employment agreement). Disadvantages relating to work part-time tend to be absent in 9 out of 13 member states, where special compensation is provided, and is significantly decreased in another 5 countries (Ireland, Great Britain, Spain, France, Denmark).

Differences between both sources of data (and consequently between different positions of EU member states according to the wage inequality level) are caused by two basic factors, as previously mentioned in comparison table 17. Firstly, inclusion of public sector in the ECHP database could result in a significant change in the extent of the wage difference. This is partially true in case of Portugal, where according to the comparison of wage differences in private and state sectors the ratio of women's wages in the private sector to women's wages in the public sector is 56%. Secondly, the impact of the structure of tax system and social support must not be underestimated. That is why these indicators of the individual databases are not completely comparable: the correlation between two sets of indicators (ECHP/ESES) for the individual countries is only 24% for both databases (in the case of monthly wages the correlation is 50%). The biggest advantage of using the ECHP database is its dynamic aspect: i.e. providing the tax and social policies are stable, the development of each indicator can be monitored and it is consequently possible to ascertain whether an improvement or deterioration was achieved in the particular area.

7.4.2 Inequality of Men's and Women's Wages according to Individual Groups

Monitoring wage differences within certain groups (demographic, qualification, social) can increase our understanding of wage inequality according to sex. Especially the levels of wage inequality according to age and education are important.

Table 32 Inequality of men's and women's wages according to age, ECHP, all sectors

Country	Age group		
	16 – 24 years	25 – 49 years	50 –64 years
Germany*	92.7	74.2	65.7
Denmark	95.2	91.7	87.1
Netherlands	102.5	87.2	76.1
Belgium	102.2	92.9	92.2
Luxembourg*	89.7	84.8	84.3
France	105.2	92.0	80.9
Great Britain*	96.1	81.8	73.2
Ireland	100.8	87.4	71.9
Italy	95.5	95.5	90.8
Greece	90.2	92.7	82.7
Spain	87.0	95.0	82.1
Portugal	98.5	96.0	97.0
Austria	86.1	85.5	74.7
Finland	95.3	84.6	78.6

* data from 1996; other from 1997

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

Wage difference for the age group 16 – 24 years is very small. However, this group represents a relatively small part of the total employment. Similarly small difference is in wages in the age group 25 – 49 years.

The fact that the wage difference tends to increase with the increasing age suggests that female labour force has bigger problems maintaining equality with men in career or in life cycle.

Table 33 Gross wage differences according to age (ESES, private sector), 1995

	Total	Relative wage - 20	Relative wage 20-24	Relative wage 25-29	Relative wage 30-44	Relative wage 45-54	Relative wage 55 +
Belgium	84.30	78.08	84.87	90.60	88.00	86.54	83.28
Denmark	84.66	102.72	89.07	91.30	85.43	81.47	82.14
Germany (West)	74.24	79.37	83.00	85.40	77.71	70.61	68.95
Germany (East)	87.16	79.99	91.20	90.92	87.78	84.59	80.91
Greece	72.88	87.84	88.62	90.39	79.59	65.42	61.06
Spain	75.49	89.58	84.92	86.13	81.04	78.95	75.52
France	80.05	104.51	99.18	92.06	80.68	74.80	75.10
Ireland	70.18	91.57	86.15	81.55	73.67	64.92	67.87
Italy	78.95	95.90	91.63	87.43	82.28	77.56	80.71
Luxembourg	84.18	103.63	94.72	98.73	87.86	75.95	75.64
Netherlands	69.04	88.34	85.48	85.19	80.99	66.29	67.89
Austria	72.94	84.78	75.24	81.53	75.32	71.60	67.37
Portugal	70.79	91.64	86.48	79.47	73.48	72.17	67.42
Finland	78.35	87.60	83.87	83.98	79.03	74.60	72.50
Sweden	84.48	NA	90.70	90.33	86.24	81.48	82.01
Great Britain	69.80	87.83	81.06	83.00	72.93	60.16	65.34

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

As the above table shows, the wage difference between men and women in the EU increases with increasing age. The wage difference is the smallest for the age group up to 20 years; the average income of women in this age group in 1995 reached more than 90% of men's

incomes. This difference increases very slightly in the age group 20 – 29 years (which includes mainly university educated people). However, in the case of the following age groups (i.e. 29+) this difference increases significantly. Women in the age group 30 – 44 years earn on average 23 p.b. less than men and women in the age group 45+ earn 29 p.b. less. This development is identical for almost all EU member states. Women’s incomes in the age group up to 20 years are only slightly lower or even slightly higher than men’s incomes. Belgium and former East Germany are exception because the wage difference is higher here (approximately 20 p.b.), on the other hand very few men and women of this age are employed.

A very interesting conclusion can be drawn on the basis of the previously mentioned facts. The relative level of women’s wages decreases significantly with age. The decrease is considerably more rapid in certain EU member states. This is the case of Greece, France, Netherlands and especially Great Britain. The wage difference in the case of Belgium, former east Germany and Finland is influenced by age far less than in the case of the other countries. On the other hand, the wage difference for the age group 30 – 44 years is approximately 15 and more percent in all member states, with the exception of Belgium, Luxembourg, former East Germany and Sweden. Great Britain, Portugal and Ireland achieve the highest wage differences between men and women’s wages.

The lowest difference for the age group 45 – 54 years is recorded for Belgium, East Germany, Sweden and Denmark, where it does not exceed the borderline of 20%. This difference exceeds 30% in Great Britain, Ireland, Greece and Netherlands. The differences remain unchanged in the age group 55 and older because relatively few women of this age continue to work, especially full-time. However, on the basis of these indicators we cannot decide whether it is caused by the age effect (promotion or pay rise) or generation effect (decrease in wage difference in younger generation). As can be observed, the trend of the wage inequality development according to age in the Czech Republic is consistent with the trend of the development in the EU.

Wage differences also differ according to the level of education – the biggest wage differences in the EU as a whole can be observed in groups with low and high qualification.

Table 34 Gross wage difference according to education (ESES, private sector)

	Basic and lower secondary education (1)	Higher secondary education (2)	Tertiary education (3)	Ratio (1)/(2)	Ratio (3)/(2)
Belgium	81.31	83.31	76.50	97.60	91.83
Denmark	87.65	88.27	80.11	99.30	90.76
Germany (West)	78.93	78.22	78.42	100.91	100.25
Germany (East)	82.78	89.14	84.31	92.87	94.58
Greece	69.00	74.52	75.83	92.59	101.75
Spain	74.22	76.15	69.85	97.47	91.72
France	78.99	84.87	71.70	93.07	84.48
Ireland	62.43	72.94	70.83	85.59	97.10
Italy	80.05	77.22	75.42	103.66	97.67
Luxembourg	81.54	84.09	80.39	96.97	95.60
Netherlands	75.32	68.70	60.87	109.64	88.60
Austria	70.89	78.42	69.57	90.40	88.71
Portugal	70.76	73.01	72.95	96.92	99.92
Finland	80.87	81.61	82.72	99.09	101.36
Sweden	85.38	84.11	83.40	101.51	99.16
Great Britain	72.69	72.31	75.89	100.53	104.95

Source: Indicators on gender pay equality: the Belgian presidency’s report, 2001, Brussels

The wage inequality in groups with higher education is less significant only in 4, or 3 EU member states (according to the former structure including East and West Germany). This is illustrated in column 5 - Table 34; if the ratio of columns 3 and 2 exceeds 100, the wage difference (inequality) for highly qualified employees is less significant.

Table 35 Inequality of men's and women's wages according to education, ECHP, all sectors

Country	Education		
	Basic	Secondary	Tertiary
Germany*	72.8	77.4	73.5
Denmark	86.0	93.0	92.1
Netherlands	75.7	88.3	87.2
Belgium	87.4	90.7	83.6
Luxembourg*	90.8	82.3	82.6
France	82.8	89.1	84.6
Great Britain*	83.3	80.7	80.4
Ireland	86.8	83.0	69.2
Italy	90.4	94.2	83.9
Greece	85.9	80.8	77.1
Spain	85.5	79.4	82.1
Portugal	83.9	86.9	80.9
Austria	81.6	82.2	83.3
Finland	77.9	85.2	84.9

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

* data from 1996; other data from 1997

Data in table 35 (acquired from the ECHP database) document similar trends. This may be caused by various reasons: for example the fact that women with low qualifications are concentrated in less regulated and lower paid sectors and might often have an interrupted professional career, and women with higher education have a disadvantage compared to their male colleagues due to individual remuneration, which is being used increasingly especially to determine wages for university graduates. On the other hand, women with secondary education have better chance to assert themselves in competition with their male colleagues because wage systems in their professions are less related to individual factors than they are in the case of groups with higher education. Nevertheless, these are only hypotheses that do not necessarily apply for all periods and all countries.

In general, these findings prove that a part of the wage difference can be explained by lower wages for women with equal level of education.

Level of education, together with age enables us to understand the wage differentiation during the professional and life cycle and assume at the same time the existence of a significant generation effect¹¹.

7.4.3 Segregation on Job Market and Wage Distribution in the EU

To complete the indicators of wage differences according to sex it is necessary to determine the structure of wages and relationships between the structure of wages and the wage difference. EU suggests focusing on four basic problems:

- a) Low wages;
- b) Wages in professions/sectors where women are the majority;

¹¹ Generation effect is based on the fact that every new generation is different from the previous generation in various factors (educational, social).

- c) Wages in professions/sectors with a high portion of women;
- d) Relative wages in public and private sector.

Re a) Low wages

A large part of the inequality between men and women's wages is a result of concentration of women in groups of full and part-time employees with low incomes (Table 36). Indicators of a share of women in groups of employees with low incomes, level of low wages compared to median, portion of women that receive the minimum wage and level of minimum wage compared to average or median wage can explain the extent of women's concentration in very low-paid professions.

Distribution of wages in the EU member states shows some interesting differences – see Table 36. Data in the table are based on annual wages. The most interesting aspect in this table is woman's relative risk of being included in a group of badly paid labour force (the risk is calculated as a ratio of number of women in the low-income group and the number of men in the low-income group).

Table 36 Occurrence of persons with low income according to sex, ECHP, 1997, (%)

Country	Portion of men paid less than 60% of the median (1)	Portion of women paid less than 60% of the median (2)	Relative risk to become a low-paid employee, i.e. (1)/(2)	Share of women in low-paid employees	Average wage of low-paid women (60% of median of hourly wage)	Average wage of low-paid men (60% of median of hourly wage)
Germany*	3.96	29.98	7.57	85.91	71.46	74.53
Denmark	2.42	9.85	4.07	77.63	73.84	63.16
Belgium	6.18	28.83	4.67	79.01	71.96	76.13
Luxembourg*	1.8	9.50	5.28	81.50	74.90	62.8
France	2.66	19.41	7.30	86.34	73.18	68.93
Great Britain*	6.62	30.99	4.68	81.82	69.46	67.57
Ireland	6.02	23.08	3.83	75.47	71.19	76.23
Italy	3.00	14.38	4.79	77.11	76.86	82.31
Greece	5.74	12.36	2.15	59.38	75.67	81.83
Spain	5.50	20.47	3.72	68.81	74.51	81.64
Portugal	3.35	10.24	3.06	70.15	69.65	84.69
Austria	2.70	21.10	7.81	83.17	21.10	31.56
Finland	3.81	9.76	2.56	71.76	74.96	67.52

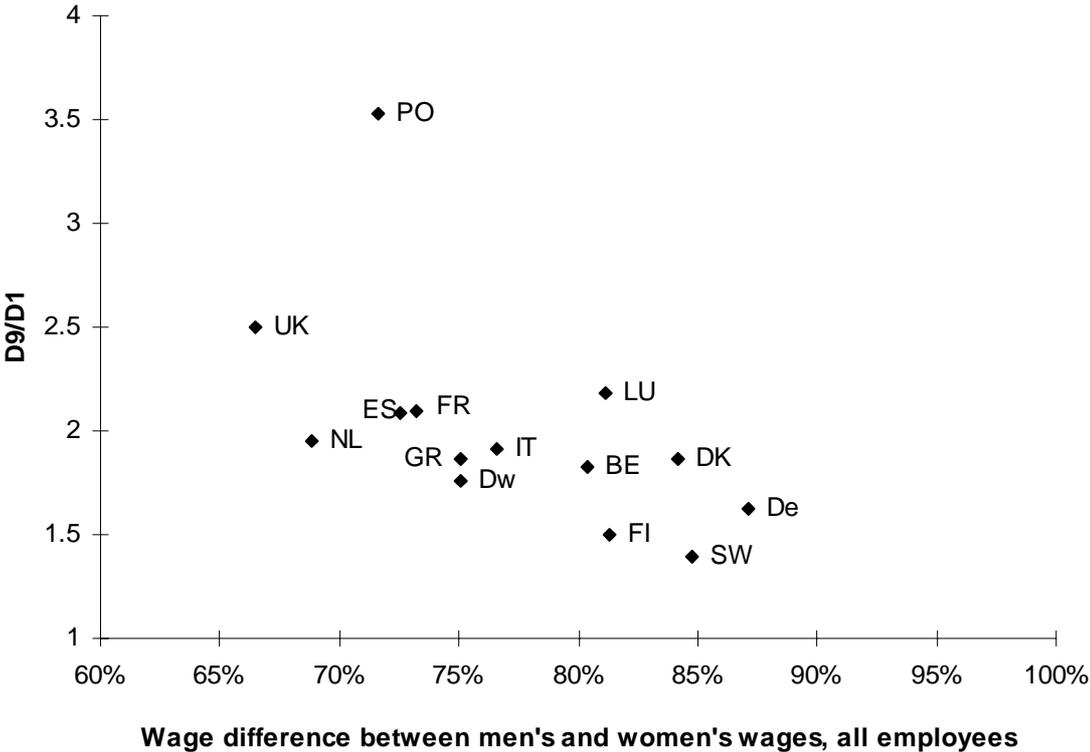
Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

* data from 1996; other data from 1997

Re b) Wage difference according to sex and wage distribution

Wage difference according to sex is connected with the overall distribution of wages in the economy; wide wage distribution tends to widen the total ratio of men and women's wages. This is caused by the fact that the wage difference between men and women is increased also by the extent of concentration of women at the bottom of the wage distribution and concentration of men at the top. The indicators of overall distribution of wages – measured by the ratio of deciles 1 and 9 – are indirect indicators of wage difference between men and women, excluding changes in the employment.

Chart 3 Wage inequality and wage difference according to sex, Europe, ESES, 1995

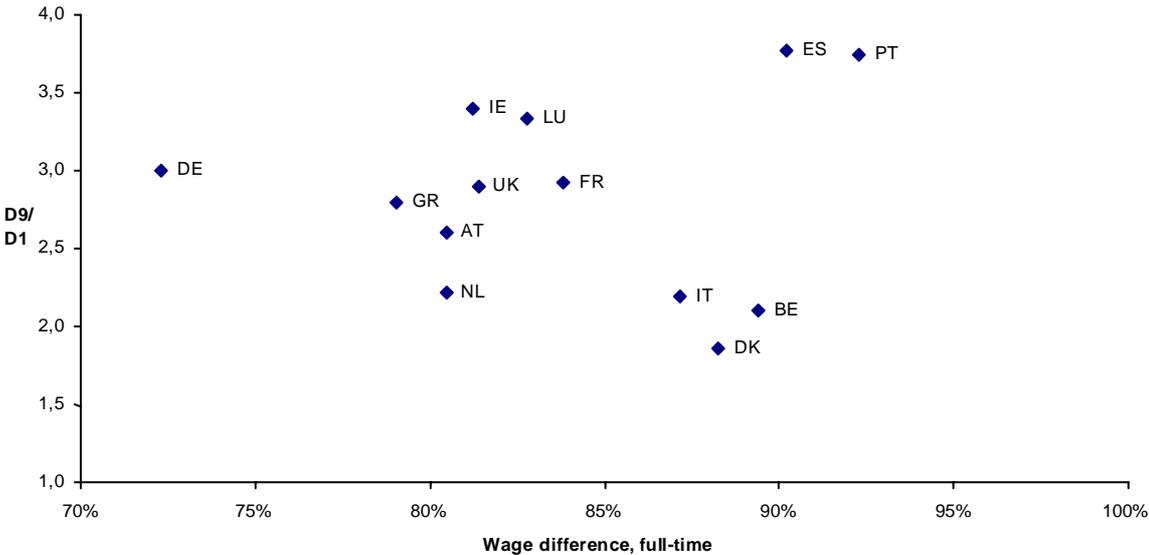


Notes and explanations:

Axes Y represents the ratio of the upper level of decile 9 and upper level of decile 1
 Axes X represents the ratio of women’s gross hourly wage /men’s gross hourly wage (full and part-time employees) BE – Belgium, De – former East Germany, Dw – West Germany, DK – Denmark, ES – Spain, FI – Finland, FR – France, GR – Greece, IT – Italy, LU –Luxembourg, NL – Netherlands, PO – Portugal UK – Great Britain, SW - Sweden

Source: Indicators on gender pay equality: the Belgian presidency’s report, 2001, Brussels

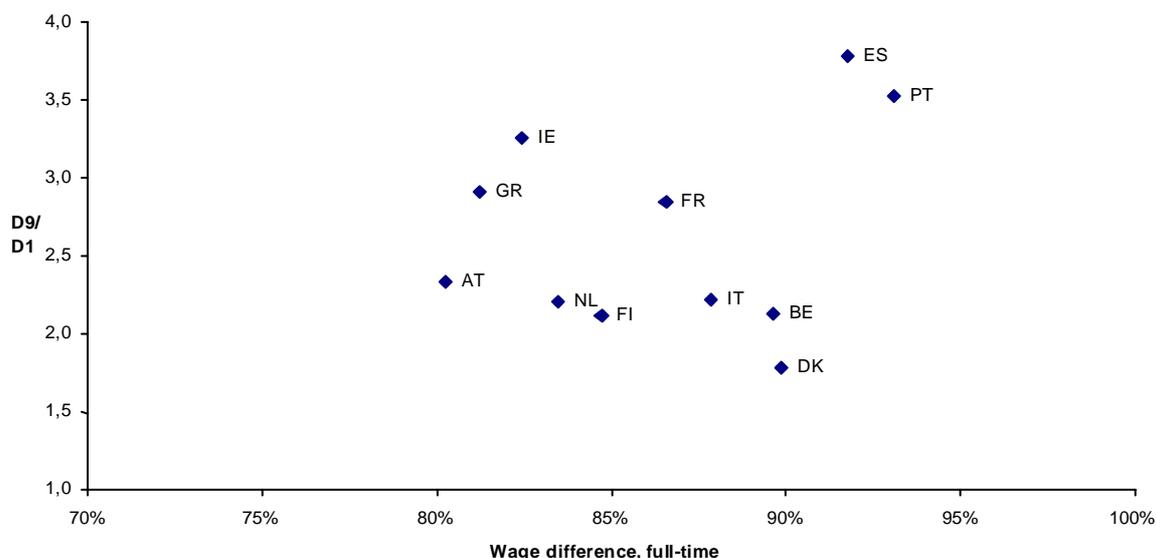
Chart 4 Wage inequality and wage difference according to sex, Europe, ECHP, 1995



Notes and explanations: axes X represents the ratio of women’s net hourly wage/men’s net hourly wage (full-time employees)

Source: Indicators on gender pay equality: the Belgian presidency’s report, 2001, Brussels

Chart 5 Wage inequality and wage difference according to sex, ECHP, 1997



Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

Re c) Effect of gender segregation in professions and sectors

The last three presented indicators are used to explain the impact of differences between countries in type and structure of wage systems and fines connected with gender segregation. As the number of sectors in the ECHP database is not quite sufficient, only segregation in professions was taken into account. Gender segregation can be examined using a number of methods. The first approach takes into consideration wage levels in five professions with the highest share of women on the job market and compares it with the overall women's wage level.

The second approach determines the gender segregation by comparing women's average wage structured according to professions with at least 66% female women (highly feminised professions) with women's average wage. The differences in the first indicator vary in the individual countries. In certain cases these differences significantly influence an increase of the wage difference.

Alternative approach for professions dominated by women could be examined, regardless of their relative participation in the overall women's employment; the basic argument against using this approach in the case of international comparison is the fact that certain professions occupied by women may only explain a small part of the total employment. The best strategy is focusing on wages in segregated professions and explaining the high share of women's employment in these professions.

Women's wages in sectors dominated by women are lower than women's average wages in all professions in almost all EU member states (9 out of 13); the situation is the opposite in the case of men in five member states (see Table 37)

Table 37 Women's and men's relative wages in sectors according to their participation

Country	Women's relative wage in professions dominated by women (more than 66% women)	Men's relative wage in professions dominated by men (more than 66% men)
Germany*	1.0014	0.9421
Denmark	0.886	1.145
Netherlands	0.8647	0.9548
Belgium	0.9050	1.1784
Luxembourg*	0.5845	1.3189
France	0.8116	1.2381
Great Britain*	0.9094	1.191
Ireland	0.7561	1.0699
Italy	1.7521	0.5093
Greece	-	-
Spain	0.8608	1.1167
Portugal	1.8363	0.6255
Austria	1.0328	0.9774
Finland	0.8542	1.1237

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

Notes and explanations: * data from 1996; other data from 1997; - data not available

Re d) Relative wages in public and private sector

Wage difference between private and state sector is especially important if the segregation according to sex between private and state sector is high. The cases of Spain and Portugal show this – the relationship between a high benefit of state sector in women's employment rate and high wage difference (to the benefit of the state sector) explains that, for example, Portugal moved from the group of countries with the lowest wage differences (calculated on the basis of the data from ECHP) into the group with the highest wage differences (calculated using the data from ESES).

Table 38 Wage difference in private and public sector, ECHP

Country	Average wage in private sector / average wage in public sector	Average wage in private sector / average wage in public sector
	Men %	Women %
Germany*	93.67	82.56
Denmark	105.24	101.71
Luxembourg*	78.57	74.04
France	95.46	85.20
Great Britain*	106.17	83.02
Ireland	79.33	67.65
Italy	95.36	80.28
Greece	75.81	71.41
Spain	82.84	65.44
Portugal	72.41	55.72
Austria	98.36	81.12
Finland	96.45	98.89

* data from 1996; other data from 1997

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

7.4.4 Macroeconomic Wage Difference

Relative share of men and women in the total wage bill in the economy is one of the relative indicators of pay equality monitored in the EU. Women's total wage deficit can be measured from the macroeconomic perspective by comparing this share with women's share in the

overall employment. The below table is based on net wages, therefore the data included in the table slightly underestimate the actual wage differences.

Table 39 Macroeconomic wage difference (ECHP, net monthly wages)

Country	Women's share in employment (1)	Women's share in the total volume of wages (2)	Macroeconomic wage difference (2)/(1)
Germany*	40.78	28.57	70.1
Denmark	47.42	41.83	88.2
Netherlands	40.49	29.82	73.7
Belgium	44.99	37.84	84.1
Luxembourg*	39.00	31.32	80.3
France	45.89	38.77	84.5
Great Britain*	46.99	35.25	75.0
Ireland	42.45	33.34	78.5
Italy	39.40	34.13	86.6
Greece	37.34	31.38	84.0
Spain	34.82	29.50	84.7
Portugal	42.56	38.94	91.5
Austria	41.66	32.55	78.1
Finland	50.81	44.36	87.3

Source: Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels

Notes and explanations: * data from 1996, other data from 1997

In the case of the macroeconomic wage difference calculation the higher its value, the better is women's position in terms of wages (i.e. women's share in the total volume of all wages is high), or overall women's wage deficit. According to this indicator the following countries are in the lead: Portugal (women's wage deficit is 8.5%), Denmark (11.8%), Finland (12.7%); last positions are taken by Great Britain (25%), Netherlands (26%) and Germany (30%).

8 Methodology of Wage Difference Analysis Used in the EU

As the databases currently available in the EU have not been completely standardized, the EU currently does not have a uniform methodology of wage analysis. The main objective of the EU in this area is therefore improving the quality of and completing the indicators included in the individual databases in such manner that will allow an international comparison to be carried out. Nevertheless, an attempt to analyse the determined wage differences on the basis of the available information was made using the below-described methodology – the so-called Oaxaca analysis.

Oaxaca and Blinder proposed such analysis of wage difference that distinguishes impact of those factors that influence the wage difference. This is based on a calculation (using a separate income equation estimated for men and women) of the ratio of the average wage difference as a result of the differences in the structure of male and female labour forces (at least those differences that can be identified according to the available variables) on one side, and the ratio of difference caused by different evaluation of men's and women's characteristics, which are never identical, on the other side.

The first component takes into consideration wage differences caused by women's concentration in a limited number of sectors, professions or types of companies. For example, different evaluation of men and women's professions (job classification and wage categories), differences in the level of education, professional experience (including indirect effect of interruption of professional career or periods of unemployment).

The second component of the wage difference is caused by different evaluation of identical characteristics: financial appreciation (return) of university education may be different for men and women, the number of years spent in a certain position (seniority), or all other characteristics used in the estimation of equations may be assessed differently.

Information acquired using this method of analysis is suitable for defining and implementing policies aiming to reduce income differences between men and women. If it appears that differences in professions significantly increase wage differences, suitable measures will harmonise men and women's ratio in various professions or revise classifications of professions.

If the impact of seniority appears to be significant, the convenience of career interruptions may be put in doubt. Nevertheless, if significant differences in evaluation of identical characteristics are found, this will suggest an important question of why identical professional experience is evaluated differently for men and women. Consequently, this analysis allows better monitoring of development of the individual components of the wage inequality between countries and enables us to define procedures for priority actions.

The use of this type of analysis appears to be a realistic choice for the EU member states. Oaxaca analysis is suitable and possible, and it is expected to be carried out in the EU every four years for all EU member states according to data included in the ESES database. The choice of this database was based on the quality of data on incomes and a high degree of differentiation of professions and sectors included in the database. As mentioned above, the absence of data on the public sector is the main factor preventing the use of the ESES database.

8.1 Analysis using the Oaxaca Method

Oaxaca showed that the difference between men and women's average hourly incomes (as a logarithm) can be analysed in the following manner:

Formula 7 Oaxaca Analysis

$$\overline{\ln(W_h)} - \overline{\ln(W_f)} = \overline{X_h}(\beta'_h - \beta^*) + \overline{X_f}(\beta^* - \beta'_f) + (\overline{X_h} - \overline{X_f})\beta^* , \text{ where}$$

- h are men, f are women,
- term on the left side of the equation measure the average value of gross hourly incomes (as a logarithm) for men and women,
- term \overline{X} represents average values or the frequency of occurrence of various variables (level of education, professional experience) for men and women,
- β' is acquired through an estimate of separate income equations for men and women:
- $\ln(W_{h,i}) = \beta_h X_{h,i} + \varepsilon_i \rightarrow \beta'_h$
- $\ln(W_{f,i}) = \beta_f X_{f,i} + \varepsilon_i \rightarrow \beta'_f$

β' - measures the yield of the variables included in vector \overline{X} for men and women

β^* - is the value that should be estimated for each of the coefficients in the case of absence of discrimination, i.e. if β' is identical for men and women, or if women's and men's individual characteristics are evaluated in identical manner.

Analysis of the equation:

- Left side of the equation measures the determined average wage difference between men and women (as a logarithm).
- The first term on the right side of the equation represents the advantage used by men. This consists of the additional incomes men gain from the fact that various variables included in vector \overline{X} have different impact on men's incomes than they could have in the case of absence of discrimination.
- The second term on the right side of the equation reflects the disadvantage that women suffer, i.e. loss of incomes due to the fact that various variables included in vector \overline{X} have different impact on women's incomes than they could have in the case of absence of discrimination.
- The third term on the right side of the equation measures the part of wage difference that is attributable to the differences in men and women's individual characteristics.

The equation can be modified as follows:

$$\overline{\ln(W_h)} - \overline{\ln(W_f)} = \overline{X_f}(\beta'_h - \beta'_f) + (\overline{X_h} - \overline{X_f})\beta'_h , \text{ where}$$

- Left side of the equation measures the average wage differential determined between men and women (as a logarithm),
- The first term on the right side of the equation represents price effect, i.e. the unexplained wage difference attributed to "net" discrimination,
- The second term on the right side of the equation measures the explained wage differential, i.e. the difference attributed to differences in men and women's individual characteristics.

8.2 Specification of the Income Equation

Explained variables:

- Naperian logarithm of gross hourly incomes (in national currency) included paid work overtime and bonuses for shift, night and weekend work. Bonuses such as an end-of-year bonus or share in profits are not included.

Explanatory variables:

- Level of education – in the case of the EU consists of 6 variables specifying the level of qualification achieved by an employee,
- Previous professional experience – number of years spent on the job market prior to entry into the last profession. This variable must be incorporated into the income equation: linear, quadratic or cubic.
- Number of years spent in the company (in the current profession) – number of years spent working for the current employer. This variable must be incorporated into the income equation: linear or quadratic. It is also necessary to incorporate a double variable with the value of 1, if the number of years of an individual's employment is not zero, otherwise 0.
- Profession – categorical variable, ISCO
- Naperian logarithm of the number of paid hours – including paid work overtime
- Type of working schedule – three categories of variables in the EU
- Bonuses for shift, night and weekend work – double variable: 1- if the employee receives these bonuses, otherwise 0
- Type of economic and financial management of the company (job) – categorical variable
- Paid overtime – double variable: 1 – if the individual has paid overtime, otherwise 0
- Sector: categorical variable NACE 2
- Naperian logarithm of the size of the company – logarithm of the number of employees in the company

Analysis of the wage difference between men and women's working income using the Oaxaca method will be carried out in the EU. The character of the input data of this analysis shows that the use of this technique will be possible also in the conditions in the Czech Republic. However, the main condition is an analysis of statistical data that could be acquired from the Czech Statistical Office or the Ministry of Labour and Social Affairs - Trexima.

8.3 Example for a Selected EU Member State – Belgium

Results from tables 40 and 41 are based on survey according to the Earnings Structure and Distribution database (hereinafter EESD) from 1995. The average wage differential between men and women in Belgium in 1995 was 25.4%, as shown in Table 40.

Approximately 50% of this wage difference is explained by the differences of individual characteristics of men and women (level of educational capital, type of an employment agreement, field of activity, number of paid hours, size of a company, etc.). However, there is a wage difference of 13.2%, which represents the “net” wage discrimination.

Table 40 Analysis of the wage differential between men and women using the Oaxaca method

	Average wage difference between men and women	Extent of wage difference	
		Explained $(\bar{X}_h - \bar{X}_f)\beta_h$	Not explained $\bar{X}_f(\beta_h - \beta_f)$
Logarithm	$\ln(\bar{W}_h) - \ln(\bar{W}_f) = 0.226$ [= 6.172 – 5.946]	0.108 (48%)	0.118 (52%)
Wage differential	$\frac{W_h - W_f}{W_f} = 0.254$ [= (479 – 382) / 382]	0.122 (48%)	0.132 (52%)

Source: EESD, 1995

Table 42 shows that differences in human capital (level of education, professional experience and duration of employment), profession and sector classification account for more than 75% of the explained wage difference. However, these differences create the wage differential of 9.2%.

It was found that:

- Sector classification and human capital explain wage differences more than the type of profession;
- Human capital variables, together with the number of years of work in the company are the main source of wage inequality between men and women.

Table 41 Participation of the individual factors in wage inequality

Variable	As a logarithm	Wage differential	% of explained total
Human capital	0.031	0.035	28.7%
- <i>education</i>	0.004	0.005	3.7%
- <i>experience</i>	0.009	0.010	8.3%
- <i>number of years with the company</i>	0.018	0.020	16.7%
Type of profession	0.017	0.019	15.7%
Type of sector	0.034	0.038	31.5%
Total	0.082	0.092	75.9%

Source: EESD, 1995

9 Summary, Conclusions, Recommendations

1. Analysis of relationships in remuneration of men and women in the Czech Republic is becoming a very urgent topic. Czech Republic is approaching its expected membership in the EU, where an increasing attention is being paid to issues of economic and social equality of men's and women's opportunities, including equal remuneration for work (wages, salaries)¹².

2. The analysis of differences in men's and women's wages in the Czech Republic and the comparison of the situation in the Czech Republic with the situation in EU member states presented herein showed once again that women achieve lower level of remuneration for work (earnings, wages, salaries) than men in all states in the overall economy, i.e. on the macroeconomic level, as well as in various sections – economically organisational (sectors, fields), and professional (professions, wage categories - tariff classes).

Two basic levels of analysis of gender pay relationships exist:

Firstly, these include analyses directly evaluating wage differences between men and women and the influence of differences between the value of work carried out by men and women on these differences (if it can currently be determined or at least estimated).

Secondly, they include analyses of wider social, historical, psychological and economic factors that influence the gender wage differences.

3. The evaluation of legal regulations, available statistical data and other information brought the following findings relating to differences between men and women's wages:

3.1 The basic legal regulations of remuneration for work in the Czech Republic (Labour Code, Act on Pay, Act on Salaries and their implementing regulations) are based on equality of creation (determination) of men and women's wages (salaries). Evaluation of working activities for determination of wages according to complexity, responsibility and difficulty or other characteristics of working activities is carried out centrally according to uniform criteria (procedures) and independently of sex of those who carry out these activities.

3.2 The relative level of average women's wage in the national economy during the second half of the 90's compared to men's wage ranged from 77 % (1996) to 73 % (2000).

A number of factors suggests that the higher level of men's wages compared to women's wages is to a certain extent attributable to the higher value of work they carry out. The concrete factors are the following:

- Polarisation of distribution of men's and women's work within the individual sectors of the national economy with high (men) monthly wages on one side and low (women) monthly wages on the other side. This gender segregation of working activities remains under the influence of dictatorial mechanisms that were used on long-term basis before November 1989 (rigidity of sector allocation of labour force influenced by professional training and work); overcoming this segregation is a long-term problem;

- Inclusion of work carried out by men into higher levels of the twelve standardized tariff classes. This fact is influenced by still existing women's lower level of professional training and experience;
- Greater number of worked (paid) hours and work overtime achieved on average by men, compared to women where the lower volume of hours worked is influenced by a greater extent of part-time work and preoccupation with taking care of families;

¹² From the Treaty of Rome (1957) regulations of primary and secondary union laws have been developing from general provisions preventing unequal competition conditions in wages to wider and more detailed regulations of equal social conditions in men's and women's positions, within which remuneration for work plays a significant role.

- Interruptions of women's professional careers caused by taking care of children (maternity leave, second maternity leave, taking care of children in the case of their illness, paid and unpaid time off work, etc.), higher share of taking care of a family in comparison with men; these facts result in lower accumulation of professional experience and less stable professional career of women compared to men.

More exact determination of the influence of differences in complexity, responsibility, difficulty and other criteria of activities carried out by men and women on the amounts of gender-structured earnings would require a significant improvement and extension of the available statistical data.

The basic objective is to gradually fulfil the requirements of the model of the wage difference analysis ("Oaxaca Analysis") in such manner that will allow the analysis of gender pay relationships to be coordinated with the EU member states¹³.

3.3 The comparison of indicators of macroeconomic wage difference (deficit) of women compared to men between the Czech Republic and the EU member states suggests that the situation in the Czech Republic is close to the average situation in the EU member states).

Country ¹⁾	Women's share in employment (1)	Women's share in the total volume of wages (2)	Macroeconomic wage difference (2)/(1)
Portugal	42.56	38.94	91.5
Denmark	47.42	41.83	88.2
Finland	50.81	44.36	87.3
Italy	39.40	34.13	86.6
Czech Republic ²⁾	46.28	39.93	86.2 ³⁾
Spain	34.82	29.50	84.7
France	45.89	38.77	84.5
Belgium	44.99	37.84	84.1
Greece	37.34	31.38	84.0
Luxembourg*	39.00	31.32	80.3
Ireland	42.45	33.34	78.5
Austria	41.66	32.55	78.1
Great Britain*	46.99	35.25	75.0
Netherlands	40.49	29.82	73.7
Germany*	40.78	28.57	70.1

Source: 1) Indicators on gender pay equality: the Belgian presidency's report, 2001, Brussels; 2) Women and men in numbers, Czech Statistical Office, Ministry of Labour and Social Affairs, Prague, 2000

Notes and explanations: * data from 1996, other data from 1997, EU member states – data from the ECHP database 3) the value of macroeconomic wage difference for 1999 was: 84.1%

As international comparison analyses may require longer time for preparation and implementation, an immediate verification of the possibilities of continuous monitoring of gender segregated data on working activities structure and income proportions on the macroeconomic and mezzo-economic (sector) level within the internal state (Czech Statistical Office) and sector statistics (Ministry of Labour and Social Affairs – Trexima) is recommended; establishing a group of specialists from the interested bodies (Ministry of Labour and Social Affairs, Czech Statistical Office, Research Institute for Labour and Social Affairs, etc.) would be also suitable.

¹³ Research Institute for Labour and Social Affairs recommends the commencement of consultations with workplaces that will be responsible for the preparation and implementation of comparison analyses in the EU.

4. Analysis of wider relations (Propositions)

1. Factors with long-term (relatively stable) character that influence women's lower incomes:

a) Interruption of professional development as a result of motherhood and taking care of a family

Harmonisation of family functions between men and women needs to be promoted in connection with this factor.

b) Different or stronger orientation on the professional career in men compared to women; "supplementary" character of income of a part of women, lower required level of income for women

Basic condition is individual evaluation of women - employees, elimination of uniform evaluation (individual and differentiated perception of a woman, considering the possibility of different approach to work and career).

2. Receding, short-term factors:

a) Lower level of professional preparation (education, experience),

b) Prevailing male decision-making environment.

As a consequence of these factors men achieve stable, uninterrupted professional career and higher accumulation of specialised and professional experience recognised by the job market.

3. Social factors:

a) People's set ideas and stereotypes of characteristics of the individual sexes

- The exclusive connection of women with their role of a mother (motherhood is considered to be a woman's purpose),
- A woman's profession is understood more as means of personal fulfilment,
- Men's "solidarity" at workplaces resulting in not accepting a woman in a management position.

Elimination of the so-called gender contract¹⁴ is a long-term objective, it requires a change of the society's traditional opinion on the division of labour in the family between men and women to the benefit of their mutual interchangeability.

4. Individual factors:

When evaluating employees, their individual characteristics and abilities are evaluated and consequently remunerated, i.e. willingness to take risks, work overtime, go on business trips and accept more difficult tasks.

Difference between men and women's incomes is influenced by a number of factors, which have their objective causes, as well as causes that are no longer valid but are reproduced by the society (traditional customs, norms in the society). Economic analysis of wage differences carried out on the basis of the available statistical data can provide only a part of explanation according to analysis of certain objective criteria (hours worked, complexity and difficulty of work, responsibility). However, its ability to reflect other variables that influence these relationships is limited. When dealing with this issue, a combination of economic analyses and sociological surveys is suitable.

The document presented herein is the first step on the journey towards equality of pay between men and women because not only do differences between the wages of men and women still exist, they have also increased during the last couple of years. This document should, therefore, be a starting point for their further determination and examination, which should ideally be carried out in accordance with the methodology used in the EU member states.

¹⁴ Gender contract is a set of implicit and explicit rules that assign various work and its value, different responsibilities and duties to men and women. These rules, which always put one of the sexes at a disadvantage in various areas, are applied and enforced in everyday life.

10 Literature

1. Baštýř, I.: Diferenciace individuálních výdělků, kvalifikační diferencíál, rozdíly v odměňování mužů a žen, postavení minimální mzdy (Differentiation of individual incomes, qualification differential, differences in remuneration of men and women, position of the minimum wage), Research Institute for Labour and Social Affairs, Prague, 2001
2. Baštýř, I.: Rozdíly v úrovni mezd mužů a žen v České Republice (Differences between men's and women's wages in the Czech Republic), Research Institute for Labour and Social Affairs, Prague, 1993
3. Časové řady základních ukazatelů statistiky práce (1948 - 2000) (Time series of basic indicators of labour statistics), Czech Statistical Office, Prague, 2001
4. Fuchs, J. : Rovné příležitosti pro muže a ženy (Equal opportunities for men and women), Social Policy No. 9, Prague, 1998, p. 3-5
5. Indicators on gender pay equality: the Belgian presidency's report, Brussels, 2001
6. Kalenská M. & col.: Směrnice Rady ES č. 75/117/EEC ke sbližování právních předpisů členských států týkající se uplatňování zásady rovného odměňování mužů a žen (EC Council Directive no. 75/117/EEC on approximation of laws of the member states relating to enforcement of the principle of equal pay for men and women), UK, Prague
7. Kuchařová, V.: Gender Impact of Social Security Reform in the Czech Republic, Research Institute for Labour and Social Affairs, Prague, 2002
8. Maříková H. : Proměny současné české rodiny (Transformation of a current Czech family), SLON, Prague, 2000
9. Mzdová diferenciacie zaměstnanců v roce 2000 (Wage differentiation of employees in 2000), Czech Statistical Office, Prague, 2001
10. Nemcová A.: Relácie priemerných miezd mužov a žien v roznych druhoch zamestnavateľských organizácií (obdobie do roku 1989 a osobitne do roku 1993) (Relations of men's and women's average wages in various types of organisations – for the period ending 1989 and especially 1993), Research Institute for Labour and Social Affairs, Bratislava, 1997
11. Princip rovného zacházení s muži a ženami v zaměstnání (Principle of equal treatment of men and women at work), Ministry of Labour and Social Affairs, Prague, 2000
12. Robinson, D.: Rozdíly v profesních výdělcích podle pohlaví (Differences in professional incomes according to sex), ILO 1998/1
13. Rovné příležitosti žen a mužů ve vybraných českých podnicích 2000 – 2001 (Equal opportunities for men and women in selected Czech companies 2000 – 2001), Gender centrum, Prague, 2001
14. Council Directive dated 10th February 1975 on harmonisation of member state's laws relating to enforcement of the principle of equal remuneration for men and women, European Communities Council, Brussels
15. Zaměstnanost a nezaměstnanost v České republice podle VŠPS (Employment and unemployment in the Czech Republic according to Selective Survey of Labour Force), Czech Statistical Office, Prague, 2001
16. Ženy a muži v číslech (Women and men in numbers), Czech Statistical Office, Ministry of Labour and Social Affairs, Prague, 2000

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