

CENTRE FOR RESEARCH ON WOMEN'S ISSUES "DIOTIMA"

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The Effects of the Economic Crisis on Gender Pay Gap: A Comparative Analytical Report between Cyprus, Greece and Portugal (2008-2014)



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Preface

This comparative report has been produced in the framework of the European Progress project titled “Bridging the Gender Pay Gap. Transnational cooperation – Cyprus – Greece – Portugal” 2014-2016, by the transnational partnership consisting of the following researchers /experts of the project partners:

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Introduction

Under European treaties, gender equality is a cornerstone of the European Union as a fundamental right. The promotion of the EU's values and the prosperity of its peoples therefore relies on effective safeguarding of fundamental human rights and thus of gender equality, which is the responsibility of the EU and its Member States to uphold for their citizens.¹

The Gender pay gap has been declared as the most crucial discrimination against working women in all over the world and the more persistent since it is related to a number of social and institutional frames, to a range of policies, (local) labour market structures and dynamics, and overall the intersection of class, gender, race, education and other social parameters.

In the context of the specific project "Bridging the Gender pay Gap – Cyprus, Greece, Portugal" funded by the EU Programme "Progress" the attempt has been to identify trends and also changes/reforms made in the industrial relations, legal and administrative framework and their impact in the GPG in the crisis period among three countries which have been in debt crisis and have experienced extended austerity measures and Memoranda. In addition there has been studied the GPG changes that have been occurred in the same period based in the processing of the basic socio-economic data and statistics which are presented in the second part of the comparative study.

Also the aim was to highlight the role that trade unions, the social partners in general as well as other public Gender Equality bodies have played in protecting women's working rights and their position into the labour market and employment.

Methodological note

The legal framework and policy comparative analysis has been based on axes of questions and the gathering of information and documentation on specific strands/sections of investigation in each specific country, such as:

- a) the *Legal Framework of the GPG* in an effort to identify its adequacy and efficiency in monitoring and eliminating the gender pay gap
- b) the role that the institution of *collective bargaining*, the social dialogue and the social partners have been played in addressing the gender pay gap since 2008, with reference to the most important measures, policies, clauses and tools.
- c) Changes and reforms made in relation to the *social and institutional construction of the gender pay gap* by paying attention to the impact of recession on reconciliation policies and measures, the social and work benefits and the social security system in a gender approach
- d) Changes in the *guarantee of the national minimum wage* focuses on the changes in the level of the national minimum wage due to crisis and austerity which may have affected the gender pay gap in the participating countries.

¹ http://www.gsee.gr/userfiles/file/2011_NEWS_KEIMENA/NOMIKI/26-5-2011-psifisma-dikaiomata-anthropou.pdf & <http://www.mfhr.gr/notices.asp?ln=0&cm=viewarticle&id=333&pg=6> .

Section 1. Legal framework of the GPG

In this first section we discuss the legal framework in each country with regard to gender pay equity (e.g. legislation on equal pay for work of equal value, other relevant legislation, proactive legislation, clauses/provisions in the collective agreements). We also try to identify basic provisions of the respective legal framework and how the relevant legislation has been – if so - changed since 2008, the reasons for these changes and the specific role played by the economic crisis in these developments.

Overall, we could say that legislation is generally considered appropriate and sufficient in all three countries to ensure gender equality in access to employment and in the work, as well as to eliminate the pay gap. More specifically per country:

In **Cyprus** Equal Pay Between Men and Women for the same Work and for Work of Equal Value Law [177(I)/2002] harmonises Cypriot equal pay legislation with the European *acquis communautaire*, a law which has been amended three times; in 2004, 2009 and 2014. More particularly, it aimed to harmonise the national legislation with two Council Directives: (a) the 75/117/EEC on the approximation of the laws of the Member States relating to the application of the principle of equal pay for men and women and (b) the 97/80/EC on the burden of proof in cases of discrimination based on sex. It covers all workers and employees working in the Republic of Cyprus. Also, the “Equal Treatment of Men and Women in Employment and Vocational Training” Law [205(I)/2002] and the “Combating of Racism and Other Discrimination (Commissioner) Law [42(I)/2004].

In **Portugal** apart from the constitution, the principle of equal pay is concretely mentioned in the labor law, including the Labour Code, in Articles 23^o (fixing concepts on equality and non-discrimination, including the concepts of "equal work" and "work of equal value"), 24^o (right to equal access to employment and labor) and 31^o (equal working conditions, in particular salary).

In **Greece**, equal pay and prohibition of discrimination are safeguarded in a set of constitutional and legislative provisions. However, a significant proportion of them were passed into law following processes and pressure from the women’s movement in Greece. Law 3896/2010 on the implementation of the principle of equal opportunities and equal treatment of men and women in employment and occupation reflects a new, fuller regulatory framework for the more effective implementation of the principle of gender equality at work through a system of extended legal protection and innovative legal instruments. The Law also incorporates Directive 2006/54/EC of the European Parliament and of the Council of 5 July 2006 into the Greek legal framework. In addition the Law No [4097/2012](#) provides for equal treatment between men and women in exercising self-employed activities.

Law enforcement and monitoring mechanisms

In **Cyprus**, the main competent authority for the implementation of this law is the Minister of Labour, Welfare and Social Insurances. More particularly, the Ministry appoints a body of Inspectors, who have the responsibility to safeguard the implementation of the law. The Inspectors are public employees of the Ministry who are assigned this duty, among other things. According to the law, they must have the appropriate education and qualifications, and they ought to receive continuing training. The inspectors have the responsibility and the right to conduct investigation and act towards the monitoring and the

implementation of the law - by their own initiative or as a result of a complaint by a citizen. They also provide employers and employees with information and advice, and report to the Minister any problems faced with regard to the implementation of the law.

However, in 2004 a new law amended the legislation and gave authority to the Commissioner for Administration and Human Rights (ombudsman) to also receive complaints for the violation of equal pay. Thus the Commissioner can also monitor the law and receive complaints for the violation of pay equality. This authority was given to the Commissioner on the grounds of the Combating of Racial and other Discriminations (Commissioner) Law of 2004 [Law no. 42(I)/2004], since the Commissioner is the competent authority for its implementation. The Commissioner is a senior independent state officer. S/he constitutes an institution of extra judicial control of the administration and protection of human rights. S/he has the power to investigate complaints against any public service or officer for actions that violate human rights, or are exercised in contravention of the laws or the rules of proper administration and correct behaviour towards the people administered. After the submission of a complaint to the Commissioner, s/he starts an investigation. Based on the Combating Discrimination law the Commissioner has the authority to issue a decree demanding the termination of a situation that is against the law. If the person refuses to comply with Commissioner's decree, the latter has the authority to enforce a financial sanction, no more than 510 euros.

Beyond The Equal Pay Between Men and Women for the Same Work or for Work of Equal Value Law and The Combating of Racism and Other Discrimination (Commissioner) Law, there is a third law related to equal pay, namely The Equal Treatment of Men and Women in Employment and Vocational Training Law of 2002 [205(I)/2002]. The competent authority for the implementation of this law is also the Ministry of Labour, Welfare and Social Security along with the Inspectors. However, this law assigns a crucial role to the Gender Equality Committee in Employment and Vocational Training, giving this Committee the authority to submit or accept complaints regarding equal treatment in employment, including equal pay. The Gender Equality Committee forwards the complaint to the Chief Inspector of the Ministry and the procedure continues in a similar context as the one described regarding the Equal Pay Law and the Inspectors' role in implementing it.

To summarize, in Cyprus a person who considers her/himself wronged because of the violation of pay equality can submit a complaint to:

- a) the body of the Inspectors of the Ministry of Labour, Welfare and Social Security.
- b) the Commissioner for Administration and Human Rights,
- c) To the Gender Equality Committee in Employment and Vocational Training,

The law of 2009 (closer to the Directive 2006/54/EC) included the addition of new articles which referred to the obligation of the social partners to enter into social dialogue for the purpose of furthering the principle of equal pay between men and women and the obligation of the Ministry of Labour and Social Insurance to enter into dialogue with **non-governmental organizations**. It also provides for the independent assistance to the person who reports discriminatory treatment, provided by the Committee of Gender Equality in Employment and Vocational Training thus upgrading its role with greater financial independence and provision of a permanent Equality Officer.

In Portugal the audit of working conditions and the enforcement of labor law in all its aspects are the responsibility of Authority for Working Conditions (ACT), which is the public body (from state) whose mission is to improve the working conditions and enforcement of norms on labor matters. The ACT has the powers to enforce compliance and impose administrative penalties (fines). Budget cuts that determined the reduction of means and human resources, materials and technicians of various services and agencies, has caused the limitation in the activity of ACT and the slowdown in its activity resulting in less supervision and higher levels of non-compliance with labor standards and a sense of impunity in the employers, compounded by the general environment of devaluation of work, workers and their rights.

The Commission for Equality at Work and Employment (CITE) is another public body with responsibilities in the area of equality and non-discrimination between women and men at work, employment and vocational training. It is a collegial body, tripartite, with representatives of the Government, trade unions and employers' associations. Its main tasks are equality and non-discrimination between men and women in working life, the protection of parenthood and reconciling professional, family and personal life. Their tasks range from the issuing opinions (some mandatory) in its areas of competence, monitoring and assistance to victims of discrimination based on sex in the workplace and in the employment, to the appreciation of the legality of provisions on equality and non discrimination between men and women in work and employment, contained in collective labor regulation instruments, the promotion and development of studies in the area of equality and formation.

In Greece the Ministry of Labour, Social Insurance and Social Solidarity and its services (Labour Inspectorate), is the public authority having the responsibility of supervising labour relations and working conditions, collective bargaining and gender pay equity. Recently, the Greek Ombudsman plays a key role as an independent authority by investigating complaints, mediating and making recommendations in order to implement equal pay.

In addition, the General Secretariat for Gender Equality, the Prefectural Equality Committee (PEC)PEPIS and KETHI (Centre of Research on Equality Issues) are also entities under political and administrative responsible of which is to monitoring, consult and intervene even though for long periods no actual initiative have been taken place and their role is merely consultative.

Overall, we could say that inadequacies due to shortages of resources of the body of inspectors in all countries have caused the low level of monitoring and investigating the situation in terms of pay equality and being mobilized, mostly in cases of complaints. A well functioned and efficient body of inspectors would not only increase the efficiency of the complaints' investigation but would also provide a stronger culture in favor of equal pay. That would give more confidence to employees to submit their complaint when subjected to discrimination and would also be a prohibitive factor with regards to employers who consider breaking the law.

The limitations and strengths of the existing legislation with regard to its efficiency in eliminating the gender pay gap

No evaluation process has been conducted to evaluate the impacts of the legislation on equal pay and whether it had positive effects on the pay gap in all three countries we investigated. Also, either not at all or very rarely a case has ever been to court on the ground of unequal pay. One reason for this is probably

because in case of unequal pay for equal work, most employees would address the trade-unions and the Collective Agreements, rather than go to the Ministry and take the case to the court.

In Cypriot report is indicated that the most significant limitation of the legislation relates to job evaluation. According to the law, men and women must be paid equally for the same work, as well as for work of equal value. Although the first part of the law - namely the one concerning equal pay for the same work - can be successfully implemented, the second part - referring to work of "equal value" - remains theoretical rather than applicable. This occurs due to the lack of measurable criteria that would consist objective tools for the authorities to evaluate compared jobs. Although the law sets some criteria, they are vague and highly subjected to interpretation. According to the law, the criteria that should be considered are: the nature and the level of responsibilities, the skills and the working experience needed for the job position, the competences, the effort and the working conditions. However, no more particular measurable tools are used by law to define "work of equal value". This way, the implementation of the legislation on practical level works only in cases of clear and direct discrimination. Consequently, in Cyprus the implementation of the legislation on practical level works only in cases of clear and direct discrimination.

In addition, in terms of particular strengths in the Cyprus legislation, the fact is that national legislation, as it is today, was introduced only with the purpose of harmonising the equal pay legislation with the relevant EU legislation. Since the legislator basically copied the EU law, no particular strengths can be found in the national framework in comparison to the average EU laws.

The lack of proactive legislation should also be considered as an important limitation of the legislative framework. Another limitation of the national legislation refers to Labour Inspectors' body which is understaffed and with little resources also to crisis cuts and therefore incapable to do inspections and issue fines when needed, which is also the case with both Portugal and Greece.

Legal weaknesses are mainly lying with the concepts of "equal work" and "work of equal value" as it is also mentioned in the Portuguese Report. These definitions are to be not very accurate and, as such, are sufficiently ambiguous to allow multiple interpretations. In the absence of a uniform and generally accepted interpretation, they are made some interpretations to circumvent legal prohibitions and are often the cause of gender pay gaps.

On the other hand, failure to comply with the law and a breach of the prohibitions of discrimination on wages are other problems that explain the existence and persistence of wage disparities.

In Greece, there have been identified no legal limitations and even though the pay gap between women and men is significant, it has never been systematically measured at a national level, moreover so during the crisis, despite the adverse economic impact on working people of successive austerity measures and the nearly complete deregulation of employment relations.

Still, the international bodies that audit the implementation of the international gender equality conventions to which Greece is committed (ILO, 2012 & UN CEDAW, 2013) note that² the austerity measures in combination with the deregulation of the protective framework for labour have also led to the principle of equality in the employment of men and women being violated and to an increase in direct and mainly indirect discrimination against women in terms of remuneration and working conditions.

Section 2. Collective bargaining and gender pay equity

This section focuses on the extent and ways in which gender pay equity is introduced in collective bargaining and the subsequent agreements at the different levels these may be implemented.

In 2012 the Women's Bureau of the Pancyprian Federation of Labour (PEO), which is the largest syndicate in Cyprus, it went through 292 Collective Agreements in order to identify particular weaknesses and strengths with regard to equal treatment between men and women and make observation and comments. The latter were sent to the Minister as well as to the trade-unions. The recommendations were sent but still the proposed changes did not ever occur within the context of the beginning (2012) of a serious recession which caused either "stagnation" or "regression" in regard to the Collective Agreements.

More general we could mention that in Cyprus, the three biggest trade-union organisations PEO, SEK and DEOK during their regular visits in the workplace, they inform their members about the provisions of the legislation on equal pay and equal treatment.

Cyprus Employers & Industrialists Federation (OEB) is also conducting annual multi-company seminars to their members, which include seminars on gender equality and equal pay and handbooks addressed to business people, industrial relations and HR practitioners.

In Cyprus, the trade-unions went through Collective Agreements and replaced the gender discriminative terms of job titles/descriptions with gender neutral definitions. However, this procedure has not been completed for all the Collective Agreements. For example, in the case of the hotel industry there are still job titles that are defined as female or male.

Operational Programme "Employment, Human Capital and Social Cohesion" 2007-2013, co-funded by the European Social Fund and the Republic of Cyprus was decided before the crisis and continued irrespectively with the aim to strengthen and upgrade the mechanisms for monitoring equality in employment, to create a more favourable work environment which would foster gender equality and the career advancement of women, to combat gender-based job segregation, to increase information and awareness, and promote research on equal treatment at work. Some of the measures included:

- *Training of Inspectors, social partners and other officials involved in the monitoring and the implementation of the relevant legislation* (around 150-200 hours of training, the content of the

² INE/GSEE, see sub-section 2.2.1, 'The impact of austerity measures on women's jobs and working conditions', pp. 34-39.

training included subjects such as interpretation and analysis of the legislation, mediation techniques, communication skills and bargaining techniques for Inspectors).

- Production of *information material* (guides, manuals, publication of circulars for better mediation in order to address complaints and cases of unequal pay).
- Establishment of a *Gender Equality Certification Body* which evaluates enterprises as regards the incorporation or the implementation of best practices relating to equal treatment and/or equal pay principles.
- *Measures for combating gender-based job segregation* (providing information and awareness for teachers in primary and secondary schools, adapt school curricula in order to eliminate the stereotypes that are perpetuated regarding the role of women at work, in the family and in society at large).
- Public awareness-raising activities with regard to the gender pay gap in Cyprus.

In Greece, INE/GSEE's analysis in the 'Women and Unions' section³ states that the real promotion of gender equality has consistently been a demand of the trade union movement in Greece through collective bargaining and collective employment agreements, which can guarantee gender mainstreaming in the rules governing employment relations by incorporating special issues into their regulatory field such as the promotion of gender pay equality, the strengthening of protection against discrimination, the facilitation of employees with family responsibilities, the protection of motherhood, fatherhood and the family, the combating of sexual and psychological harassment etc. (ILO, 2012). As far as the issue of reconciling family life and professional life of employees through collective bargaining is concerned, through collective bargaining it has become important as a major issue in the fields of employment, education and economic policy, particularly due to the increase in more particular forms of family organisation such as single-parent families of either kind.

The EGSE (National General Collective Employment Agreement) functioned for decades as the institutional means, with regulatory power, for setting minimum levels of protection for working conditions for all employees, on the basis of free collective bargaining between leading organisations representing the interests of employers and workers.

The real promotion of gender equality has consistently been a demand of the trade union movement in Greece through collective bargaining and collective employment agreements, which can guarantee gender mainstreaming in the rules governing employment relations by incorporating special issues into their regulatory field such as the promotion of gender pay equality, the strengthening of protection against discrimination, the facilitation of employees with family responsibilities, the protection of motherhood, fatherhood and the family, the combating of sexual and psychological harassment etc. (ILO, 2012). Its institutional and political influence stems from the fact that it was legally binding on all employment relations in the broader public and private sector, including state public services for employees in a dependent employment relationship.

³ INE/GSEE, see 3.1, 'Women and Unions in Greece', pp. 49-53.

With a series of consecutive legislative interventions (Laws No [3899/2010](#), No [4024/2011](#), No [4046/2012](#), No [4093/2012](#), No [4172/2013](#)), the new system took the following characteristics: **(a)** the EGSEE and the sectoral collective agreements are applicable only to the members of the signatory parties, **(b)** the previous existing mechanism of extending the sectoral collective agreements has been abolished, **(c)** the company-based agreements are implemented by priority, even if they include less favourable wages and terms of employment than the relevant sectoral agreements, **(d)** the mechanism of Arbitration ([OMED](#)) can only be used if both parties (employers and employees) agree and the Arbitrator's Decision can only define the basic minimum wage. This provision was partly reversed in 2014 by the issuing by the Council of State of a decision regarding the constitutionality of voluntary arbitration, which now permits it again. Nevertheless, the Ministry of Labour following up on this decision, legislated a series of preconditions as regards the use of voluntary Arbitration, which in fact make it difficult to take place. Additionally, under Law No [4046/2012](#), the collective agreements (national, sectoral, company-based) cannot be valid for more than 3 years when the employer has the right to proceed unilaterally into a decrease in the wages of the employee up to a certain level by cutting allowances. Differently, the employer can enforce more wage decreases by signing a new personal job contract with the employee.

Since 2012 and onwards the national social partners no longer have the ability to set the national minimum wage through the National General Collective Employment Agreement (EGSSE). With the new legislation (the [Law 4046/2012](#) and the [Law 4093/2012](#)), the Greek Government for the first time after 1990 intervened to the free collective bargaining and the formation of the national minimum wages through the Collective Agreement (EGSSE) in which a systemic intervention for gender mainstreaming, due to its leading institutional role could have been succeeded.

This is because the drastic interventions in fundamental rules and principles governing collective employment agreements, such as their duration and regulatory content, put at risk the power of this leading collective measure on many levels.

At the same time, the commitments of the stability programme and the country's international loans under the memorandums have meant that any – usually unofficial – dialogue with the State has been virtual, mainly characterised by the announcement of measures that have already been decided, with no margin for real tripartite social dialogue.

The result has been that institutional regression in respect of established women's rights efforts over the last fifteen years have to a great extent halted.

Direct and knock-on effects are noted: on the bargaining power of female employees (especially mothers, older women and immigrants) in terms of employment conditions and type of employment contract, with the result that an overconcentration of women has been observed in precarious and low-paid work;⁴ on

⁴ The increasing precariousness of women in terms of their work situation and their concentration in part-time or low paid jobs can be seen on a pan-European level (ETUC, 2011 a). Jobs with fixed-term contracts are more often offered to women than to men, while men on fixed term contracts have more chance of making them permanent than women. At the same time, women's working conditions have deteriorated. Unpaid arrears, stress, psychological and sexual harassment, workload and additional working hours, usually undeclared and without payment of overtime, have become the norm, as has pressure from employers on female employees with families not to make use of parental leave or any kind of benefit provided for under the law (ETUC, 2011 a).

maternity and having and raising children in general, due to the financial insecurity that they experience as employees; on how the children of working parents are raised, particularly during their first years of life, due to the known shortcomings of state childcare structures; in the increasingly negative impact of family obligations at work and in the consolidation of gender stereotypes in the family and at work, with responsibility for childcare and the elderly members of the family not being shared equally; on the increase of discrimination on many levels, such as gender and/or ethnic/racial origin and/or age and/or family obligations and/or disability, resulting in increased risk of social exclusion for these women.

One consequence of the crisis is that many women withdraw from the “formal labour market”, moving to informal and unpaid or underpaid work. The collapse of fundamental and absolutely necessary benefits and services of the social state, the drastic reduction of the already reduced household income and the high cost of goods and services lead many women to work for the family, i.e. without pay. This work includes women being employed in services previously provided by the state or done for pay.⁵ This development, in combination with the aforementioned rise in female unemployment, has led to a further widening of inequalities. This is chiefly due to the determination of working conditions and pay becoming more individualised and specific with individual contracts of employment, leading to increasing discrimination on the basis of gender and family status in the workplace, but it is also due to the much higher percentage of women obliged to work in precarious conditions, without the basic equality of treatment guaranteed by the provisions in the collective employment agreements.

Impact of the European economic governance to the tripartite social dialogue and their implications for the gender pay gap

In Portugal Social dialogue had little role during the crisis period, having been turned into a farce designed especially to approve the social partners various measures and policies not favorable to workers and citizens in general. They not discussed the pay gap. During the period of crisis and in the context of austerity policies has never been a relevant topic.

The economic crisis in Cyprus had two “waves” – the first one was during 2009-2010 and the second was during the end of 2011 until 2014. The second wave was more detrimental on different levels since it was accompanied by austerity measures and the bank deposit levy (or ‘haircut’) that was imposed in 2013 by Eurogroup, European Commission (EC), European Central Bank (ECB) and International Monetary Fund (IMF). Since the second “wave”, and especially since the ‘haircut’, the trade-unions set as their priority to preserve and defend very basic working rights, mainly to prevent dismissals of employees and decreases of wages. The working movement focused on defending the *status quo* rather than demanding improvements in working terms and conditions. In this context, the issues of gender equality and corrections towards equal pay were seen as less urgent or non-realistic.

A characteristic example relates to the initiative of the Women’s Bureau of PEO in 2012. During that initiative, the Women’s Bureau went through 292 Collective Agreements in order to identify particular weaknesses and strengths with regard to equal treatment between men and women and make relevant

⁵ These services concern, for example, care of dependent persons (children, pensioners, etc.) and housework.

observations and comments. The latter were sent to the Minister of Labour, Welfare and Social Security as well as to the trade-unions that were concerned. Thus each trade-union received specific suggestions and recommendations by the syndicate of PEO to promote some changes in the texts of the Collective Agreements. However, as the recommendations were sent in 2012 – namely the beginning of the second wave of recession - most trade-unions did not proceed to proposing them because on the one hand their strategy was to defend the existing Collective Agreement rather than to propose improvements and on the other hand the issue of gender equality wasn't seen as priority.

Another example of the way that the economic crisis and austerity measures affected the trade-union policies towards eliminating the gender pay gap was the prevention of raises. An enduring practice by the trade-unions until 2010 was the demand for small increases in wages mostly directed towards lower paid jobs. That could lead to decreasing the gap between higher and lower paid jobs. Since the latter mainly concerned women employees, the continuation of this policy could contribute to the decrease of the gender pay gap. However, in 2011, following the requests of economic governance at EU level (particularly based on Cyprus' commitments under the EuroPlus Pact and the Country Specific Recommendations-CSRs) the government decided the total freezing of wages, salaries and pensions in the broader public sector for a period of two years (2011-2012). Similarly, since 2012 and 2013 the crisis and the 'haircut' resulted in the freezing of wages in the private sector and the abolition of the trade-union policies to demand wage increases.

In **Greece**, National Collective Agreement (known as EGSSE), which set the national minimum wage, as well as dealing with other broader issues such as leaves and training. At the same time bargaining at sectoral/occupational level and then at company level built on this basis in order to provide better pay and conditions.

This structure has been fundamentally changed by the measures introduced at the beginning of 2010. The setbacks imposed on the system of collective bargaining and collective employment agreements since 2010,⁶ with successive legislative provisions in the framework of implementation of the commitments of the international lending mechanism for Greece, specifically targeted EGSSSEs, but also sectoral collective employment agreements, as basic mechanisms for setting minimum levels for pay and work. The authors report that there was an immediate effect on collective bargaining and employment demands of broader social interest. This is because the drastic interventions in fundamental rules and principles governing collective employment agreements, such as their duration and regulatory content, put at risk the power of this leading collective measure on many levels, with a grave impact:

- on the regulation of labour rights, on the basis for diagnosing the needs of employees
- on its function as an educational tool and as a tool for dismantling retrograde stereotypes in the workplace
- on the reinforcement of the feeling of employment insecurity, because of the abolition of the collective arrangements through which not only economic but also social balance was achieved in the workplace.

⁶ INE/GSEE, see sub-section 3.1, *'Promotion of gender equality through the tools of collective bargaining and action'*, pp. 51-53.

With a series of consecutive legislative interventions (Laws No [3899/2010](#), No [4024/2011](#), No [4046/2012](#), No [4093/2012](#), No [4172/2013](#)), the new system took the following characteristics: (a) the EGSEE and the sectoral collective agreements are applicable only to the members of the signatory parties, (b) the previous existing mechanism of extending the sectoral collective agreements has been abolished, (c) the company-based agreements are implemented by priority, even if they include less favourable wages and terms of employment than the relevant sectoral agreements, (d) the mechanism of Arbitration ([OMED](#)) can only be used if both parties (employers and employees) agree and the Arbitrator's Decision can only define the basic minimum wage. This provision was partly reversed in 2014 by the issuing by the Council of State of a decision regarding the constitutionality of voluntary arbitration, which now permits it again. Nevertheless, the Ministry of Labour following up on this decision, legislated a series of preconditions as regards the use of voluntary Arbitration, which in fact make it difficult to take place. Additionally, under Law No [4046/2012](#), the collective agreements (national, sectoral, company-based) cannot be valid for an indefinite period of time; the maximum period of an agreement can be up to 3 years. In the case, when a collective agreement expires and a new agreement is not signed during 3 months after the expiration date, then the employer has the right to proceed unilaterally into a decrease in the wages of the employee up to a certain level by cutting allowances. Differently, the employer can enforce more wage decreases by signing a new personal job contract with the employee.

At the same time, having removed the ability to fix the minimum salary and wage from the scope of the EGSEE, the social partners at a national level seem ready to deal with broader issues regarding the labour market, although nothing in particular has come up yet.

Initiatives of the social partners in light of the current economic crisis to assess and monitor, to prevent or address, the impact of the current economic downturn on gender pay gap because of the economic crisis

Not any particular initiatives have been taken in this direction. The only action it could be mentioned that relates to the impact of the current economic downturn on gender pay gap is part of the running project (*Bridging the GPG. Transnational Cooperation: Cyprus, Greece, Portugal*). Particularly, one of the project's partner is SYXKA-PEO, the trade-union of PEO in hotels and restaurants and one of the activities in which SYXKA participates is the research study which examines the gender pay gap in the hotel industry of Cyprus in light of the economic crisis. The final version of the study will soon be ready for publication.

An enduring practice by the **Cypriot** trade-unions until 2010 was the demand for small increases in wages mostly directed towards lower paid jobs. That could lead to decreasing the gap between higher and lower paid jobs. Since the latter mainly concerned women employees, the continuation of this policy could contribute to the decrease of the gender pay gap. In 2011, following the requests of economic governance at EU level (particularly based on Cyprus' commitments under the EuroPlus Pact and the Country Specific Recommendations-CSRs) the government decided the total freezing of wages, salaries and pensions in the broader public sector for a period of two years (2011-2012). Similarly, since 2012 and 2013 the crisis and the 'haircut' resulted in the freezing of wages in the private sector and the abolition of the trade-union policies to demand wage increases.

A similar example of how the crisis affected the policies for eliminating the gender pay gap was the freezing of the minimum wage since 2012. Although in 2011 the minimum wage was increased by a decree of the

Ministry of Labour, Welfare and Social Security, since 2012 the minimum wage remained at the same level due to the economic crisis.

In the 2014 EGSSE in Greece, a new arrangement of parental leave was introduced. It was agreed that fathers would also be able to take time off in order to look after their children, in cases where the mother was self-employed.

In both Greece and Portugal, under the directions of the ILO, the national representatives of employees and employers run joint nationwide actions on Wednesday, 4 March 2015 to promote equality and combat prohibited workplace discrimination under the slogan “**The world of work together for equality**”⁷. These joint actions represent a commitment by the parties to the 2014 National General Collective Employment Agreement, highlighting its critical regulatory role and its connection with society. The common objective is to make it known all over Greece that workers’ and employers’ organisations are together in the fight against discrimination and social exclusion. (project implemented in the framework of the Operational Programme “Human Resources Development” 2007-2013).

In the same spirit, from 2013, the 6th March day was chosen as National Equal Pay Day in Portugal, being the day that marks the number of extra days that women would have to work in a year to reach the same wage as men earned in the previous year.

In Portugal legislative changes that promoted the weakening of collective bargaining, with a view to its settlement as an instrument of protection of workers and social progress began long before the crisis, in 2003, with the Labour Code, which introduced the mechanism of expiry of instruments collective regulation and distorted the principle of more favorable treatment. This path was deepened with the 2009 revision (not reinstated the rights) and more, with subsequent amendments to the labor laws during the rescue period and the adoption of austerity policies in the attack on collective bargaining, intensified and acquired new dimensions. Trade unions though have never failed to raise this issue and try to bring this discussion to the public agenda, pressing for solutions to put an end to the gender pay gap, in fact prohibited by law.

The Portuguese trade Unions and CITE have continued to raise the issue. The CITE has promoted studies and initiatives in this area of the pay gap. (See for example the Report on gender pay gap by branches of activity, June 2014 (which can be found at <http://www.cite.gov.pt/pt/acite/disparidadessalarias.html>).

Not any particular initiatives have been taken by the social partners in both Cyprus and Greece to monitor the impact of the current economic downturn on GPG more over that “the gender pay gap in Cyprus has not widen but rather it was eliminated (a) because most industries hit by unemployment were male dominated (e.g. constructions) and (b) due to the wide expansion of part-time employment towards the female labour force.

Initiatives taken by the trade unions or other public bodies e.g. Gender Equality and/or gender equality committees to raise the issue of gender pay gap

In Cyprus, after a letter from the Minister of Labour, Welfare and Social Securities in 2011 that invited social partners to reexamine the collective agreements in light of gender discriminations; the Women’s

⁷ Joint Press Release by GSEE, SEV, GSEVEE, ESEE and SETE, 2 March 2015.

Bureau of PEO went through 292 Agreements in order to make relevant observations and comments. The latter were sent to the Minister as well as to the trade-unions that were concerned. Thus each trade-union of PEO received specific suggestions and recommendations for changes in the texts of the Collective Agreements. The Bureau hasn't evaluated this process by examining whether the Collective Agreements actually went through the proposed changes. However, from some indicative interviews we've taken to fill this questionnaire it seems that the proposed changes did not occur. According to the trade-unionists we interviewed, the initiative stayed unfinished due to the fact that the recommendations were sent in 2012 which was the beginning of a serious recession which caused either "stagnation" or "regression" in regard to the Collective Agreements.

The main comments of the Women's Bureau out of the 292 Collective Agreements were the following:

Negative provisions:

- Sixty Collective Agreements did not include any provision for maternity and thirteen Agreements, although they mentioned maternity leave, they didn't state that the employment should complete the maternity allowance. (As will be explained in question 3.1.a, during maternity leave the law provides allowance from the Social Insurances Services, which equals to 70% of the regular wage of the employee. However, most Collective Agreements include also a provision stating that the employer has to provide an additional allowance. The latter equals to the percentage of the wage that is not covered by the Social Insurances and thus the allowance by the Social Insurances and the allowance by the employer equal full allowance during maternity leave. If a Collective Agreement has no provision for additional maternity allowance, the mother receives only the allowance by the Social Insurances, which is around 70% of her regular wage).
- Forty three Collective Agreements defined several jobs by the use of the female gender (e.g. carer, cleaner, nurse, seller, secretary etc).
- Two Collective Agreements still included - as two separate job titles - the jobs "female worker" and "male worker" accompanied by a lower wage for the female.
- Ten Collective Agreements included the job descriptions "worker A" and "worker B" without job descriptions. The first received higher wage than the second. In practice, the two jobs usually equal to a male worker and a female worker respectively.
- Thirty three Collective Agreements provided less than 18 weeks for maternity leave, thus did not agree with the law.

Positive provisions:

- Four Collective Agreements included a provision for parental leave with full payment between two and five days and one Agreement provided parental leave with 50% of the wage paid for a week. Four Agreements included unpaid parental leave.
- One Collective Agreement included provision for one day paid paternity leave and one Agreement provided three days of paid paternity leave and three days of unpaid paternity leave.

- Three Collective Agreements included a general provision declaring the reconciliation of family and professional life (but not something specific).
- Three Collective Agreements included a special provision that declared equal pay between men and women as a general principle.

Another project worth mentioning is a case-specific research on *The wage gap between men and women in the semi-government sector in Cyprus* that was published in 2012. It was an initiative of the monitoring and control mechanism for the implementation of the legislation on equality by means of collective agreements, which was also established by the Women's Bureau of the Pancyprian Federation of Labour. The project was funded by the National Machinery for Women's Rights of the Ministry of Justice. It was conducted and published by the research team of the Institute of Labour of PEO.

The project analyses the fact that in 2006 the gender pay gap in the semi-government sector in Cyprus was 40.4%. According to the research, although the percentage of women and men participating in the labour market is now similar, the labour market is divided into a "higher" and a "lower" fragment, with the latter consisting mainly of young people, migrants, women and workers with low expectations. This division agrees with the traditional model of social reproduction, namely the "breadwinner model", within which men are supposed to be responsible for the household income. Although in the context of the contemporary society both partners work, men are still understood as the primary "breadwinner" while women's income is considered to be secondary or complementary.

Furthermore, the research explains that in Cyprus the occupational segregation between genders is quite strong and is the main factor which determines the gender pay gap. However, according to the study, the gap is also determined to some extent by what the research calls "clear" discrimination. This refers to a percentage of the gap that could not be explained by any other characteristic of the worker other than their gender (such as education and skills, the job position or the characteristics of the sector).

In **Greece**, it has been reported no any initiative by the trade unions to raise the issue of the gender pay gap. Moreover, as it is proved in the following text of the conclusions of the tripartite summit meeting of October 2014, [social partners] reaffirmed the need for a number of measures still there is no direct reference to the Gender pay gap issue: "measures to be taken to reduce the country's nightmarish unemployment; to fight against uninsured and undeclared work; to restore the full and universal effect of the EGSSE; to reinstate sectoral-level bargaining and the extension mechanism for collective employment agreements for reasons of equal treatment of employees and avoidance of unfair competition of enterprises; to improve the real contribution and participation of the national social partners in policies concerning vocational training & education, development of skills and recognition of professional qualifications and skills; and to promote awareness in the workplace of difference and multi-racial and interdependent modern society'.

Section 3: welfare state, family and social reproduction

This section focuses on the social and institutional construction of the gender pay gap (e.g. institutional changes and their impact on policies and measures for reconciliation purposes, employment structure, social and work benefits and social security system) and more generally their impact on working rights of women.

Changes which have been made due to crisis in terms of public service provisions, in relation to parental and motherhood leaves, public care for children and dependent family members, etc

In Portugal, there is no uniform policy of **reconciliation** but, especially, individual measures. These measures focus mainly on the expansion of the network of kindergartens and time of kindergartens and schools (full time school) and also incentives for companies to promote conciliation support policies for workers / with family responsibilities; however, companies also focused this support in offering own kindergartens or vouchers to cover their tuition and general monetary aid or various equivalents (health insurance, support for performance of some tasks, etc.).

In Portugal the expansion of the network of kindergartens and time of kindergartens and schools (full time school) and also incentives for companies to promote reconciliation support policies for workers with family responsibilities; however, companies also focused this support in offering own kindergartens or vouchers to cover their tuition and general monetary aid or various equivalents (health insurance, support for performance of some tasks, etc.).

On the social level, there have been profound changes that reflected negatively on household incomes, in particular the reduction in the value of family benefits (child benefit for children and young people and prenatal allowance) and restriction the conditions for access to the same benefits that determined the loss of the right for many families. These restrictions simultaneously reached the school social support, making difficult the access to education. On the other hand, access to public health services was also difficult, either by increasing the utilization rates and restriction of exemptions such as fees, by budget cuts in the health sector, that reduced the Health National Service capacity to provide health care necessary (e.g. the depletion of vaccines included in the National Vaccination Plan, the difficulties of access, with long hours of waiting, to the emergency services, encerramento hospitals and other health services).

Profound changes that reflected negatively on household incomes, in particular the reduction in the value of family benefits (child benefit for children and young people and prenatal allowance) and restriction the conditions for access to the same benefits have caused the loss of the rights for many families.

Changes in the Portuguese labour legislation, both before and during the period considered, in terms of **working time** to promote flexibility in working hours, but this flexibility (in many forms from time to adaptability to banks hours) is applied only in the exclusive interest of the companies, helping to make it more difficult through deregulation of schedules, the reconciliation of work and family and personal life.

Employment and labour market changes due to crisis

In **Portugal** have been implemented many measures to reform the labor market and labor regulations, all unfavorable for the workers - increasing the working time and reduced labor costs in various ways (direct

reduction of wages, reducing the number of holidays and vacation days, decrease the value of the additional work, reducing the amount of compensation for dismissal) were the main. On the other hand, during the period considered, the unemployment rates reached very high levels, which also caused changes in the labor market - the increasing precariousness of employment, including the emergence or growth of various precarious contractual forms, rising unemployment long-term, strong discrimination based on age in access to employment.

All these changes, which reached most workers, will inevitably reflect more negatively on the most vulnerable groups, aggravating various types of discrimination also against women - for example women of childbearing age and / or with children are strongly discriminated against in access to employment, whereas older women are affected by discrimination based on age.

In terms of social protection to self-employed basically have the same rights as dependent workers. The difference is that the self-employed have to bear alone the charges of the contribution rate for social security, while in the case of dependent workers the payment of this fee is shared between the workers and their respective employers. With the growth of the phenomenon of false self-employment, this difference has become a very serious problem to the extent that these false self-employed (in reality economically dependent on the respective employers authorities) do not receive sufficient income to support the appropriate social charges.

Greece is one of the countries that was relatively quick to incorporate many of the Community Directives concerning reconciliation of work, family and personal life (maternity leave, parental leave, leave of absence in case of illness of dependents, single-parent leave, etc.).⁸ The first legislative provisions concerned protection of the reproductive role of working mothers, with the aim of making it easier for women to carry out their professional obligations in tandem with family obligations (e.g. childbirth/maternity leave).

In 2014, a joint ministerial decision by the Minister of Finance and the Minister of Labour, Social Insurance and Welfare ([Φ.10060/15858/606/Government Gazette B 2665/08.10.2014](#)) established the process and supporting documents for the grant of maternity benefit to women directly insured in the Single Fund for the Independently Self-Employed (ETAA) in application of Article 6 of Law [4097/2012](#) (A 235), wherein self-employed women directly insured in ETAA who are exclusively self-employed are entitled, due to pregnancy and childbirth, to a monthly maternity benefit of two hundred (200) euro for a period of four (4) months.

Indicatively, other relevant laws are:

-[Law 3655/2008](#) concerning special leave for the protection of motherhood (lasting up to 6 months for mothers insured with IKA-ETAM and working in private sector undertakings or enterprises). Protection of motherhood and the reconciliation of professional and family/personal life for public-sector employees are laid down in the Codes for Public-Sector Employees.

⁸ INE/GSEE, see sub-section 3.1, *'Promotion of gender equality through the tools of collective bargaining and action'*, p. 50-51.

-[Law 3996/2011](#), which concerns the protection of motherhood and prevents the female employee's contract or working relationship being terminated by the employer both during pregnancy and for eighteen (18) months after birth, or during her absence for a longer period due to illness arising from pregnancy or birth, unless there is a serious reason for the termination.

- [Law 4075/2012](#) which concerns the right to parental leave (as an individual non-transferrable right of every parent) and defines the scope and the relevant conditions for its recognition, with the aim of reconciling parental and professional responsibilities. Leave is now set at 4 months until the age of six years. Finally,

-the similarly very important [Law 4097/2012](#), which for the first time covers self-employment and incorporates European Directive 2010/41/EU which concerns equal treatment of men and women and self-employment.

Through collective bargaining it has become important as a major issue in the fields of employment, education and economic policy, particularly due to the increase in more particular forms of family organisation such as single-parent families of either kind.

In the [2014 EGSSE](#)⁹, a new arrangement of parental leave was introduced. It was agreed that fathers would also be able to take time off in order to look after their children, in cases where the mother was self-employed. In this context, the employed father has an independent right to parental leave to look after a child under the same conditions laid down in National General Collective Employment Agreements (part-time), a right which is also granted in the case of the mother being self-employed. Where both parents are wage-earners, they may choose which parent will make use of the parental leave to look after a child with a joint declaration made to their respective employers, unless, by a joint declaration, they set the times when each of them will make use of this right during its period of application.

The onset of the crisis in Greece resulted in benefits being reduced (main and supplementary pensions, lump-sum benefits, social benefits, etc.) and social spending being reduced, resulting in a serious deterioration in the population's living standards and a worsening of social problems.

The social state is shrinking under the asphyxiating pressure of the economic crisis, with the restriction of social spending on health, education, benefits and social security. According to an [OECD](#) report,¹⁰ it occupies the depressing 'first place' of OECD countries with the fastest decline in social spending despite the fact that the approximately one-third of the population that is out of work expects support from the state.

Massive unemployment rates, the five-year recession and major budget cuts led to a dramatic rise in the number of uninsured persons from less than 500,000 in 2008 to about 2,500,000 (or almost one in five Greeks) at the beginning of 2015 on the basis of data from the Atlas information system,

The 45% fall in main and supplementary pensions and lump-sum benefits during the 2010-2014 period¹¹ worsened the standard of living of pensioners, while at the same time capital reserves for social security

⁹ <http://kepea.gr/article.php?cat=15>

¹⁰ November 2014, <http://www.oecd.org/els/soc/OECD2014-Social-Expenditure-Update-Nov2014-8pages.pdf>

¹¹ Savvas Robolis, <http://robolis.gr/asfalistiko.html>

shrank significantly. At the same time, the current conditions in the social security system are evolving into a trap for women. This is because: a) retirement ages increased dramatically after 2012; b) women continue to experience higher unemployment rates. The curtailment of rights and social security arrangements have culminated in Laws [3863/2010](#), [3865/2010](#) and [4093/2012](#).

Social welfare structures, particularly those concerning the care of children and the elderly, are rapidly being dismantled, and the resulting burden is mainly being shouldered by women.

The social security system

In Greece, according to data from [Eurostat](#)¹² also confirm the depressing ‘first place’ occupied by Greece, which emerges at the top of the list of OECD countries with the fastest decline in social spending. In 2014, total general government expenditure in the EU was almost half (48.1%) of European GDP. In Greece, spending as a percentage of GDP represented a decline of 10.7 percentage points since 2013. Greece is one of the countries with the lowest expenditure, less than 35% of total general government expenditure. Spending on the elderly, including pensioners, is the largest part of social spending still leaving much smaller sums for very important sub-categories such as “illness and disability” (2.5% against an EU average of 5.8%,) “family and children” (just 1.1% against 3.5% in the EU), and “unemployment”, on which Greece spends just 1.5% of total expenditure, when in the rest of Europe the corresponding figure amounts to 3.2% (EU) or 3.8% in the Eurozone.

The 45% fall in main and supplementary pensions and lump-sum benefits during the 2010-2014 period¹³ worsened the standard of living of pensioners, with a fall of expenditure on pensions under the Social Security System by 32%; contributions fell by 33% due to declining salaries; revenues fell by 4 billion euro due to unemployment revenues. At the same time, the current conditions in the social security system are evolving into a triple trap for women. This is because: a) retirement ages increased dramatically after 2012; b) they are again the main victims of changes instituted with the third Memorandum (abolition of all intermediate age limits for retirement) and c) women continue to experience higher unemployment rates with the result that either they do not even receive a pension (no pension with 20 years of insurance, as will be required from 2018 onwards) or they will receive the minimum pension after the age of 67, because they are not tied to a fund (at least 100 or 150 stamps a year for five years, depending on the circumstances) after the age of 56 (unemployed elderly), which would allow them to retire at the age of 62.

¹² July 2015, <http://ec.europa.eu/eurostat/documents/2995521/6899478/2-07072015-AP-EN.pdf/797f4af9-c37f-4631-8211-5dd0b32fcb31>

¹³ Savvas Robolis, <http://robolis.gr/asfalistiko.html>

→ Social security is in decline, so that we have about 28%¹⁴ uninsured, but women are hit particularly hard, since they are more likely to be unemployed and are often employed in work where social security is not usually paid, e.g. domestic work.

→ Social welfare structures, particularly those concerning the care of children and the elderly, are rapidly being dismantled, and the resulting burden is mainly being shouldered by women.

A characteristic example that reflects this development is the Ad Hoc “*Study on combining family life and work: April-June 2010*”¹⁵. The main objectives of the ad hoc 2010 questionnaire on combining family life and work were: a) to examine whether people who have young children or are carers for dependent adults (patients, the elderly, etc) face problems at work (or cannot work) because of the lack of suitable care services. b) to study the flexibility offered in the workplace so that problems arising from family commitments can be addressed, and estimate the proportion of people who interrupt their careers because of family commitments, as well as the number of people who benefit from the law on parental leave.

In Greece, According to data from the survey, 191,546 people are not in full-time employment or do not work at all because they are responsible for the care of young children or dependent adults. These people are chiefly women.

Furthermore, 102,090 people are in part-time employment or do not work at all because they face childcare problems. The most common problem (in 70.1% of cases) is associated with the cost of childcare, while for 20.4% the most significant problem is the lack of such services and for 9.5% of those surveyed, the main problem is the quality of childcare services. As regards the ability of wage earners to alter their working time in the case of a family problem, the majority (63.9%) are unable to change the time that they start or finish work or to be absent for a whole day without using their leave. A small percentage (4.3%) have a flexible pattern of work and either set their working time themselves or work some form of flexitime. Finally, 31.8% are able to change their working time or can take emergency leave to deal with family problems.

A significant proportion of women (17.5%) interrupted or gave up work to raise a child¹⁶ whereas the corresponding proportion for men is significantly lower, at 4.4%

In Cyprus, regarding reconciliation of work, personal and family life, the relevant legislation and the Collective Agreements basically include paid maternity leave and unpaid parental leave.

¹⁴ Massive unemployment rates, the five-year recession and major budget cuts led to a dramatic rise in the number of uninsured persons from less than 500,000 in 2008 to about 2,500,000 (or almost one in five Greeks) at the beginning of 2015 on the basis of data from the Atlas information system, http://vmediagr.blogspot.gr/2015/05/blog-post_12.html, <http://www.efsyn.gr/arthro/vivliario-ygeias-gia-25-ekat-anasfalistoys>

¹⁵ Hellenic Statistical Authority, February 2012, http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0102&r_param=SJO23&y_param=2010_00&mytabs=0

¹⁶ This proportion does not include women who took pregnancy, childbirth or maternity leave.

Maternity leave is provided by the Protection of Maternity Laws of 1997 to 2015 [100(I)1997]. It lasts 18 weeks. During maternity leave the law provides allowance from the Social Insurances Services, which equals to 70% of the regular wage of the employee. However, most Collective Agreements include also a provision stating that the employer has to provide an additional allowance. The latter equals to the percentage of the wage that is not covered by the Social Insurances and thus the allowance by the Social Insurances in addition to the allowance by the employer equal full allowance during maternity leave. If a Collective Agreement has no provision for additional maternity allowance, the mother receives only the allowance by the Social Insurances, which is around 70% of her regular wage. In addition, for nine months after the birth or the adoption of the child, the mother can work one hour less than her normal working hours every day (the hour is paid).

There is also the Parental Leave and Leave on Grounds of Force Majeure Principal Law [47(I)/2012] which gives the right to employees who are parents - both mothers and fathers - to be absent from their work for the purpose of taking care and participating in the raising of their child. It covers all employees who have children under eight years old and it can last up to eighteen weeks for each child. In the cases where one parent has taken parental leave of minimum two weeks, he/she is allowed to transfer to the other parent two weeks from the rest of the total duration of his/her leave. Although men and women are both allowed to use this leave, it is generally rarely used by either – since it is unpaid – and when used it is mainly used by women.

In terms of the childcare system, there are 271 state kindergartens and 83 community kindergartens in the Republic of Cyprus. Because pre-primary education regarding one year before entering the primary school is obligatory, the state kindergartens are free and cover all the demand of the children who are more than four years and eight months old. However, regarding younger children, the state kindergartens have fees (42euros/month) and cover only 50% of the demand. In regard to the community kindergartens, their fees are decided from the community but in general they are more expensive than the state ones – around 130-170 euros approximately - and cheaper than the private ones – which cost around 200-300 euros. However, some community kindergartens offer their service for less to families with low incomes. Community kindergartens were affected from the economic crisis in the sense that the state reduced the funding of the local communities.

Parental Leave It covers all employees who have children under eight years old and it can last up to eighteen weeks for each child. In the cases where one parent has taken parental leave of minimum two weeks, he/she is allowed to transfer to the other parent two weeks from the rest of the total duration of his/her leave. Although men and women are both allowed to use this leave, it is generally rarely used by either – since it is unpaid – and when used it is mainly used by women.

Child care facilities: under 4 years and 8 months of age the state kindergartens have fees (42euros/month) and cover only 50% of the demand. Particularly, the fees are not always the same because they are decided by the Community Councils. In general they are around 130-170 euros while the private ones cost around 200-300 euros. Moreover, some community kindergartens offer their services for less to families with low incomes. The community kindergartens, decide their fees but in general they are more expensive than the state ones – around 130-170 euros approximately - and cheaper than the private ones – which cost around 200-300 euros.

In Cyprus, state lowered the funding to local communities which affected the pre-primary community schools. Additionally, there has been a decrease of the maternity allowance but the amount of the decrease is not quite considerable.

However, the local communities cover some of the demand for care services. They have a system of voluntary councils named “Volunteering Community Councils (SKE)” (Συμβούλια Κοινοτικού Εθελοντισμού - ΣΚΕ) which take responsibility for providing care services for children and adults in their communities.

Beyond child care, many SKE’s offer adult/elderly care services which also have fees that are decided by the SKE. In 2013, there were 3 state adult/elderly houses in Cyprus, 41 community houses and 71 private houses.

It is obvious by the numbers that public care system is inadequate. At the same time, the community care system is also less than the demand and, as we’ll explain in the next question, between 2008 and 2016 the state funding to local communities was decreased significantly which resulted in shrinking even more the accessibility to community care services.

In Cyprus, the main differences between the self-employed rights and the dependent employee is that they don't receive an unemployment allowance from Social Insurances. They also don't receive allowance for sick leave unless they are sick for more than nine days nor they receive allowance for vacation leave. The self-employed have been affected importantly by the economic crisis in the sense that sellings were reduced which caused their incomes as well as their insurances benefits.

The old-age pension has been affected because there was an increase of the years one must contribute to the Social Insurances Fund in order to have the right to old-age pension. Particularly, the years increased from 10 years to 15 years. Taking under consideration that women have more gaps in their working lives, and thus in their insurances, this has worked negatively for the gap in the pensions of men and women.

Nevertheless, there are some Collective Agreements that include a more tailored framework for reconciliation. For example, although the law provides unpaid parental leave, there are four Collective Agreements which include a provision for parental leave with full payment between two and five days and one Agreement that includes parental leave with 50% of the wage paid for a week. Moreover, while there is no provision for paternity leave in the law, there is one Collective Agreement that includes provision for one day paid paternity leave and one Agreement that provides three days of paid paternity leave and three days of unpaid paternity leave.

Section 4. Changes in minimum wage

In this section the focus is on the changes in the level of the national minimum wage due to crisis and austerity which may have affected the gender pay gap in the participating countries. To make clear though that we do not refer to the false correction of the GPG that was the result of increased unemployment among men. Women however are more likely to find themselves in less secure employment relationships (e.g. in temporary contracts and part-time work), that make them more vulnerable in times of recession.

In Cyprus although in 2011 the minimum wage was increased by a decree of the Minister of Labour, Welfare and Social Security, since 2012 the minimum wage remained at the same level. The gender pay gap

in Cyprus was eliminated during the economic crisis (a) because most industries hit by unemployment were male dominated (e.g. constructions) and (b) due to the wide expansion of part-time employment towards mainly to the female labour force.

According to the statistics, the wage gap between women and men in **Portugal** was not significantly affected by the crisis, remaining constant. With rising unemployment, economic recession and the cheapening of labor costs determined by a number of legislative changes, there was a general salary reduction, the salary levels dropped considerably, but the pay gap has remained at the same level although now by reference at lower salary levels.

In **Portugal** the minimum wage is guaranteed by law and such a rule has not been changed by the crisis. However, the minimum wage was strongly affected, with the respective value frozen at 485 euros for almost four years. It was increased to 505 euros in October 2014 (and to 530 euros in January 2016 a year out of the period of the study). There were not adopted measures to counter the loss of household income; on the contrary, the social support measures that exist to compensate the loss or income reduction were severely restricted during the crisis due to austerity measures. There has been some social emergency measures, of welfarist nature, in order to attend to the basic needs people and families in very vulnerable situation, but almost all of the private sector - private institutions of social solidarity and charity - although some of them partly financed by the state.

In **Greece**, the new national minimum wages determined to 586,08 Euros and 510,95 Euros for employees under 25 years old. According to eurostat the gender pay gap is 15%¹⁷ (the average gender pay gap in the EU is 16.3%).¹⁸ The difference in total earnings between the sexes is the difference between the average annual earnings of women and men. It takes into account three types of disadvantages faced by women:

- lower hourly earnings
- shorter working hours in paid employment, and
- lower employment rates (for example career breaks to look after children or relatives).
- In Greece, the difference in total earnings between men and women is 45.2%¹⁹ (the average difference in total earnings between men and women in the EU is 41.1%)²⁰.

Some factors reinforcing the gender pay gap are:

¹⁷ EUROSTAT, 2010

¹⁸ EUROSTAT, 2013

¹⁹ EUROSTAT, 2010

²⁰ EUROSTAT, 2013

→ Managerial and supervisory positions are usually taken by men. In every sector, men are promoted more often than women and are therefore better paid. This trend is most apparent in the highest positions, with women accounting for less than 3% of managing directors.

→ Women undertake significant unpaid duties such as housework and the care of children or relatives on a larger scale than men. Working men spend an average of nine hours a week on unpaid care activities and housework, whereas women spend 26 hours – which means at least four hours a day. This fact is reflected in the labour market, with more than one in three women reducing their remunerated hours in part-time employment, while only one in 10 men do the same.

→ Women tend to spend periods away from the labour market more often than men. These career breaks not only affect hourly earnings but also have an impact on future earnings and pensions.

→ Segregation in education and the labour market: this means that in some sectors and professions, women have the tendency to be overrepresented, while in other sectors, men are overrepresented. In Greece, professions undertaken chiefly by women, such as teaching or sales, offer lower hourly wages than professions chiefly undertaken by men, even when the same level of experience and education is required.

→ Wage discriminations, which although illegal, continue to accentuate the gender pay gap.

According to ELSTAT,²¹ in addition to recession and a sharp increase in unemployment, the economic crisis over the last six years (2010-2015) has also had the effect of reducing net salaries, while at the same time, the gap in net pay between men and women in the private sector remained unchanged. Over the six years a significant shift in net wages was observed in the direction of lower wages, as there was:

- a reduction in jobs with high monthly salaries of €900 and above, which are mainly performed by men rather than women (69% men - 31% women, or 304,000 men vs 137,500 women)
- an approximately equal increase for men and women of jobs with low net monthly salaries of up to €699 (168,100 men against 160,800 women),
- an almost equal increase for men and women of part-time jobs with net monthly salaries of up to €499 (42,358 men against 45,046 women),

Concluding remarks

Collective bargaining is a hugely important mechanism for reducing pay discrimination. However, despite significant progress in this area, many problems still exist in fully integrating gender pay inequalities into collective bargaining and in taking account of structural gender gaps.

In the context of the crisis new thinking is required about how gender can be more effectively integrated into union strategies, policies and representation (Briskin 2014).

In addition, there are concerns that the EU's economic governance procedures are undermining collective bargaining, wage setting and gender equality. The EU recommendations on decentralising collective

²¹ Labour Force Survey, 2010 – 2015, third quarter, data edited by INE/GSEE (G. Kritikidis)

bargaining, freezing of minimum wage and wages in general, and linking wages more closely to productivity, inevitably impact on the capacity of unions to negotiate in reducing the Gender pay gap.

This report has shown that the economic crisis has had a negative effect on gender equality and on women's pay, reducing the capacity unions have to negotiate on gender pay inequalities.

Wage cuts, pay freezes and wage moderation principally affects the public sector and increasingly impacts on women.

The introduction of specific measures to address pay inequalities, in the light of the economic crisis has decreased and unions have had greater difficulties in persuading employers to address gender considerations in negotiations.

Despite the unfavorable context, Portuguese and Cypriot unions in a lesser extent are trying to keep a lens on gender equality issues and the gender pay gap/pay inequalities between women and men.

In the three countries, as in most of them, no gender impact assessment has been carried out during the austerity measures and wage cuts

The crisis has not only undermined the autonomy of collective bargaining, it has also exacerbated existing inequalities between women and men, with crisis policy interventions often neglecting to analyse or address the disproportionate impact on women of austerity measures and pay cuts. Most importantly unions reported that it is now harder to persuade union negotiators and employers to address gender pay inequalities in negotiations and to implement gender sensitive collective bargaining.

Wage transparency and the relevant lack of gender disaggregated data on pay impedes the capacity of unions to adequately negotiate on pay inequalities limiting the role that unions can play in negotiations and in addressing the complex issues associated with the undervaluing of women's work and skills and in identifying criteria to implement equal pay for work of equal value.

Unions and social partners in the reporting countries have not addressed gender pay inequalities in collective agreements, either because of a lack of union commitment or capacity, or because of a negative context and climate for bargaining to reduce pay inequalities between women and men.

Recommendations

Efforts should be made by all relevant stakeholders to defend the role of collective bargaining and agreement at all levels (national, sectoral and company), putting priority to sectoral level in order to avoid decentralisation and fragmentation of bargaining systems. Sectoral agreements should be promoted as they can provide an important framework for gender equality across a sector based on common criteria.

At company level unions should cooperate to persuade employers to take gender equality issues seriously, with a 'business case for equality' approach and in specific in establishing transparency in pay systems/job classification, increasing the pay of women in female dominated sectors, increasing the value of women's work through job evaluation, implementing workplace pay surveys/pay audits and gender sensitivity in performance related pay.

Also, measures about reconciliation, training and career development, and pay increases for low paid workers could bring about the erosion of gender discriminations.

In integrating a gender perspective in all negotiations and collective agreements, consideration should be given to:

- occupational segregation and the under-valuing of women's work based on a strategy to level out pay differences between female-dominated sectors and male-dominated sectors
- making use of the right to parental leaves by gender
- paying attention to the rights of part-time workers and women working in precarious jobs

- providing training and career development opportunities for women, particularly for part-time workers and workers with flexible working time arrangements
- how women’s low pay can be addressed through sector specific minimum wages as an important tool for closing the gender pay gap
- gender based violence and sexual harassment in the workplace.
- how earnings impact on pension entitlements.

Unions should continue to lobby governments and the EU to make pay audits mandatory for companies to provide workers and their trade unions with gender disaggregated data, including data on non-basic pay elements such as bonuses, overtime payments and other benefits.

Gender equality action plans should be put in place to address any unjustified gender pay inequalities, setting out solutions and monitoring of outcomes. Similarly unions should actively encourage employers and governments to implement the recommendations in the European Commission’s (2014)

Union confederations need to give much greater attention to addressing gender stereotypes and cultural assumptions about women’s and men’s work, and how they impact on the value of women’s work and low pay, which is essential to ending gender segregation. This also requires more emphasis to be given to addressing the impact of women’s care responsibilities so that women are not disadvantaged in terms of their pay or careers. Crucial to this is creating a climate where men share family responsibilities equally with women, including parental leave, alongside a commitment to strengthening public services in the provision of childcare and elder care.

Unions should run regular training courses for negotiators, members of collective bargaining teams, officials and workplace representatives on gender mainstreaming, gender-neutral criteria for bargaining, negotiating agendas and how to bargain to reduce inequalities in pay. Finally, there is a growing need for gender balance in collective bargaining teams and unions need launch strategies and policies to ensure equal or proportional representation of women and men (ETUC recommendations, 2010).

Relevant studies published in the 2008-2015 period

- Papadopoulou, A. (2008), Equality between women and men in collective labour agreements, Nicosia: Women’s Bureau of the Pancyprian Federation of Labour (PEO).
- Ιωακείμογλου – Σουμέλη (2012), Το χάσμα αμοιβών ανδρών και γυναικών στον ημικρατικό τομέα της Κύπρου, Λευκωσία: INEK-ΠΕΟ.
- Report on gender pay gap by branches of activity in Portugal, June 2014 (at <http://www.cite.gov.pt/pt/acite/disparidadessalariais.html>).
- INE/GSEE, see. Section 2, ‘The Economic and Social Framework of the Study: the economic crisis, its impact on employment relations and increased gender discrimination’,

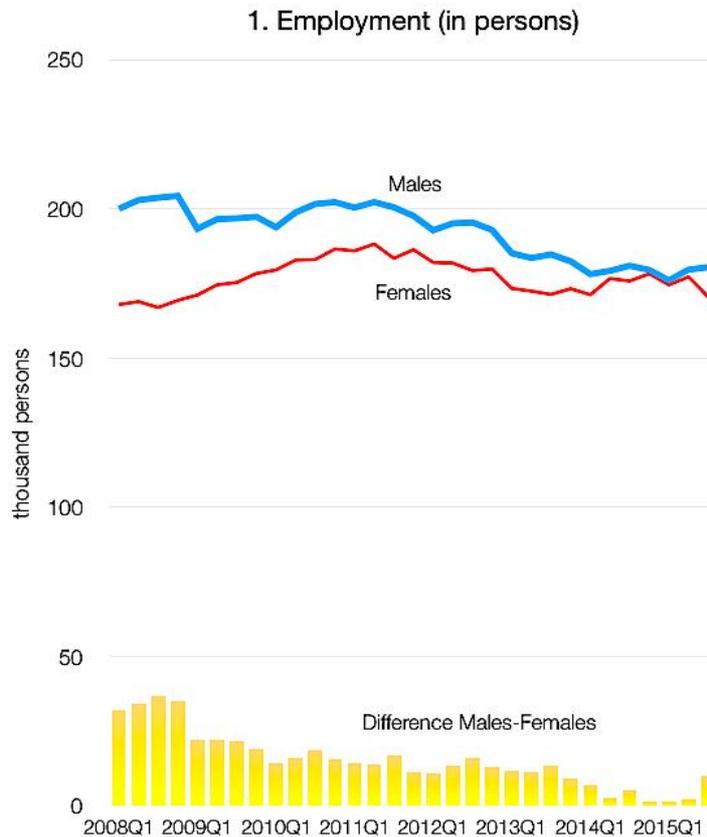
-Characteristics and Changes in Employment and Unemployment of Men/Women, 2008 – 2015,
Edited by INE/GSEE (G. Kritikidis)

-INE/GSEE, see sub-section 3.1, 'Promotion of gender equality through the tools of collective bargaining and action',

Cyprus

1.1. Trends in employment, labour force and unemployment

Male employment decreased in Cyprus from approximately 200 thousand persons in 2008Q1 to 180 in 2015Q3 while female employment remained roughly unchanged (168 and 170 thousand persons correspondingly).

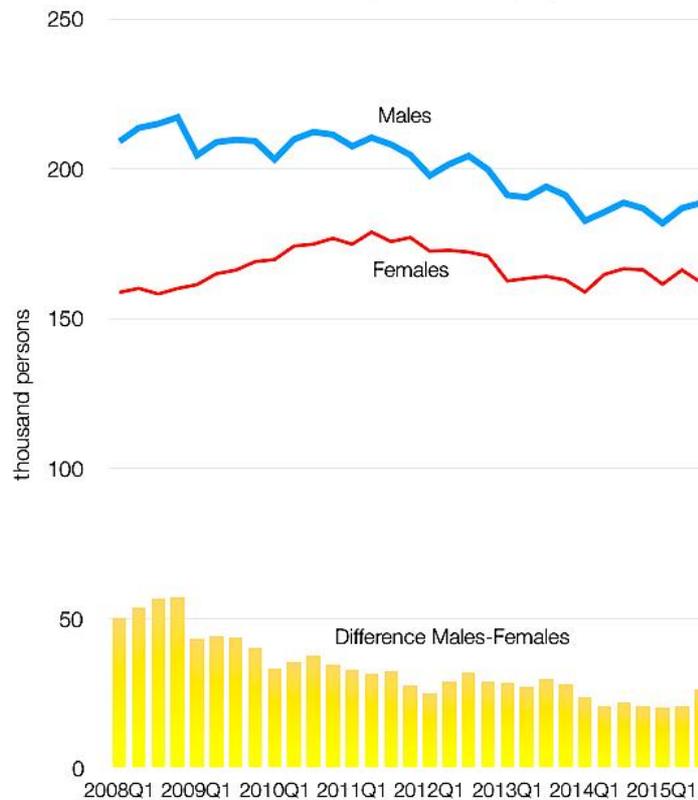


Male employment follows a rather linear decreasing trend while female employment remains roughly constant since 2013Q1. Thus the difference between male and female employment decreased from 32 to 10 thousand persons during the same time (figure 1). It appears then that there is almost full convergence in male and female employment since the employment gender gap was only 5% during 2015. Nevertheless, gender differences in part-time and thus in hours of work, lead to an overestimation of the convergence. Once the data is adjusted for hours of work (figure 2, full-time equivalent employment), the female employment curve shifts downwards and the adjusted gender employment gap is 16% in 2015Q3 (compared to 5% before adjustment). The same conclusion holds when the analysis is done with employment rates, (the employment rate is the ratio of employment to population of 15 to 64 years) (figure 3). The gender employment rate gap, after adjustment for hours of work, was 14% in 2015Q3 compared to 23% in 2008Q1 (figure 4). It is evident then that although there is convergence in male and female employment, a considerable gap persists.

The convergence in employment and employment rates (before adjustment for hours of work) does not reflect an improvement in female employment. It reflects (a) the expansion of female part-time and (b) the decline in male employment because industries and sectors

of activity in which male workers are predominant were affected harshly by the crisis. It is thus the worsening of the conditions of workers of both sexes that paradoxically is represented in the narrowing of the gender employment gap.

2. Full-time equivalent employment

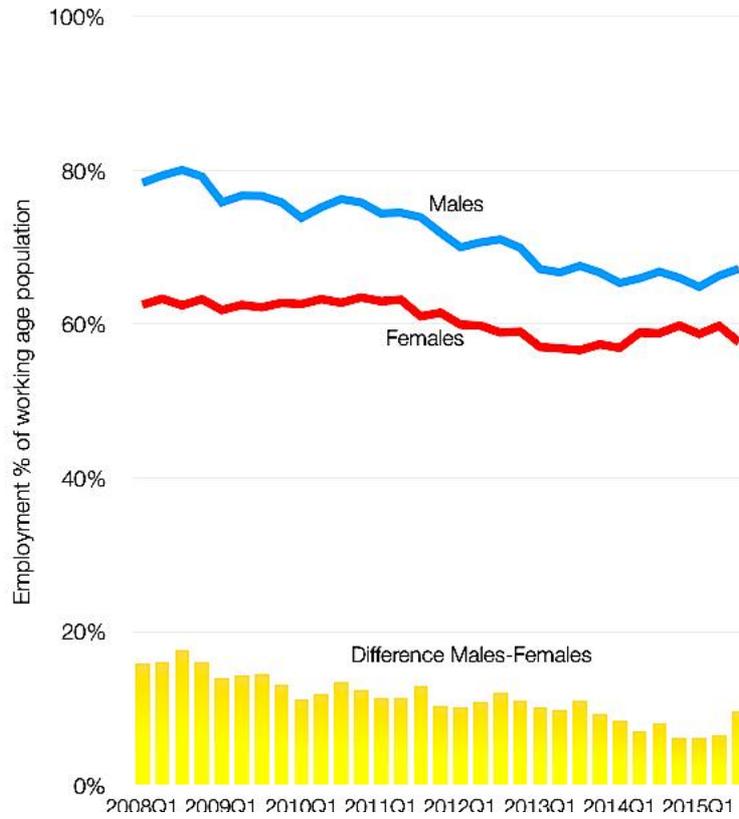


Until the end of 2013, the falling trend in male employment combined to constant labour force led to rising unemployment (figure 5). Since 2014Q1 though, as employment stabilised and the labour force started to decline as a result of falling male participation, the number of the unemployed decreased. Female unemployment increased to a lesser extent in spite of increased labour force (figure 6) resulting from rising participation. *The decrease in male participation can be attributed to the discouraged worker effect²² and the increase in female participation to the additional worker effect²³.* The number of discouraged workers, mostly men, increased from 10 to 25 thousand persons between 2008Q1 and 2015Q2. On the other hand, during the same time, additional workers arising from increasing female participation rose to 15 thousand persons. *Summing-up, during years of crisis 2008-2015, female unemployment surged as a result of higher participation while male unemployment rose as result of lower employment.*

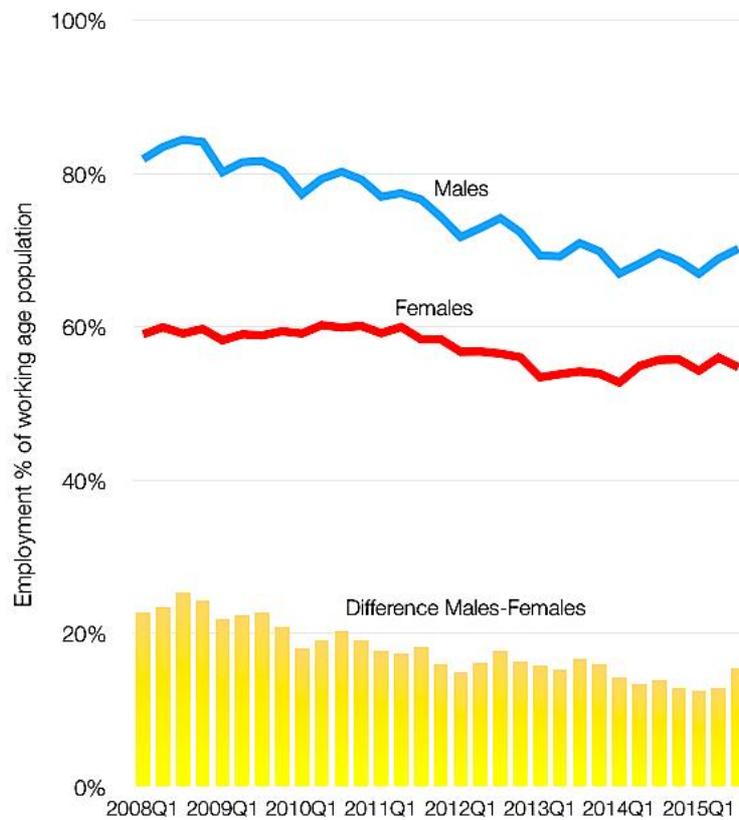
²² There is a high probability that people who have been unemployed for a time exceeding two years are discouraged and therefore not looking for a job. Correcting unemployment for these “missing workers” who are not counted as unemployed since they are not actively seeking work, adds approximately 5 percent points to the unemployment rate of Cyprus.

²³ The propensity of the spouse to participate to the labour market is bolstered when her husband is or is expected to be unemployed or paid a lower wage.

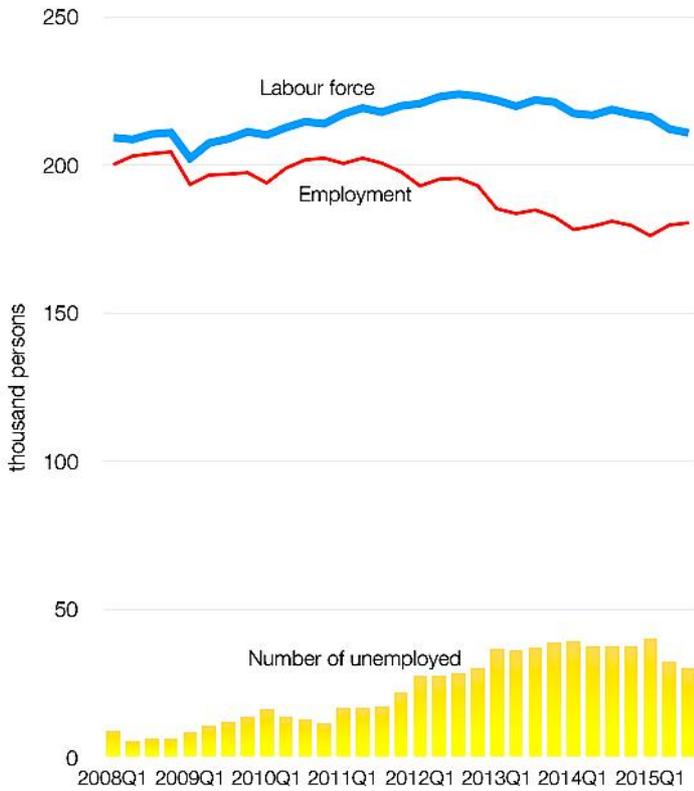
3. Employment Rate



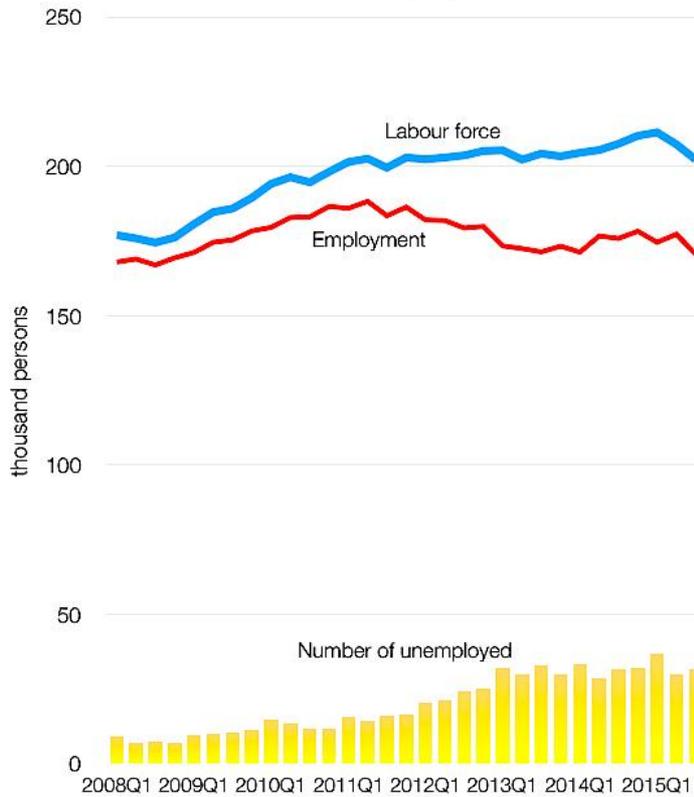
4. Employment Rate adjusted for hours of work



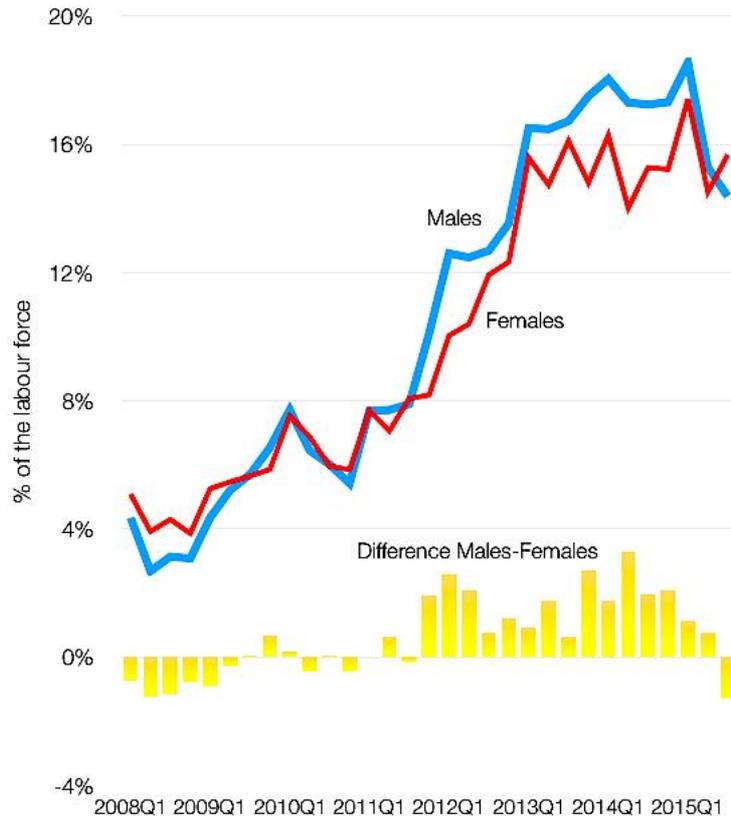
5. Male employment, labour force and unemployment



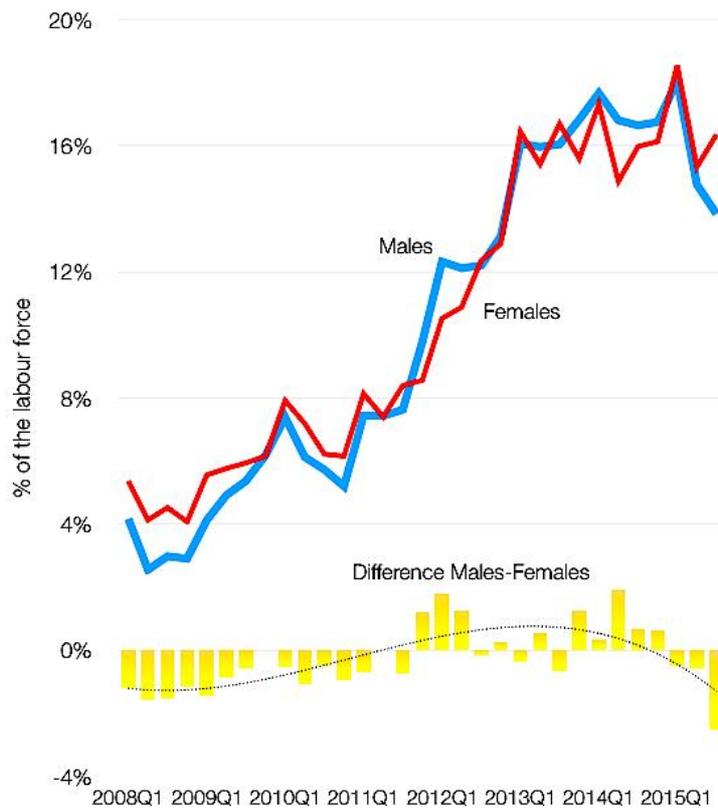
6. Female employment, labour force and unemployment



7. Unemployment rate



8. Unemployment rate adj. for hours of work



Since 2011Q3 and until the summer of 2015, the male unemployment rate exceeded the corresponding female rate (figure 7) in contrast to pre-crisis period when women were affected by unemployment more than men. Adjusting though for hours of work, we find that the gender unemployment gap is hovering around zero (figure 8).

1.2. Characteristics of male and female employees in 2008Q3 and 2014Q3

The number of male employees decreased by 12 thousand until 2014Q3. Conversely, there were more female employees in 2014Q3 than in 2008Q3 (+10 thousand).

There was a difference in the distribution of ages between the two sexes in 2008Q3 and 2014Q3 in the range above 50 years. The difference was clearly smaller in 2014. As a result, the gender age gap was 1,8 years in the summer of 2008 and only 0,8 years in the summer of 2014.

The median age was 38 years for both sexes and both years. Only 25% of employees were older than 48 years. The young (less than 30) were 25% of total employees.

“Age” is a variable we use in the GPG regressions to describe the accumulation of professional experience²⁴. The marginal increase of professional experience with age may differ depending on the profession: in the case of higher qualification, professional experience and corresponding earnings increase rapidly and continuously with age while in the case of unskilled work increases are slower and lower. Therefore, we interpret higher (lower) marginal earnings respective to age in wage regressions as the result of higher (lower) qualification (depending on profession).

Tenure (that is the years of work in current job) is the variable we use in individual wage regressions to describe firm specific and job related professional experience.

The differences in tenure between men and women, as well between 2008Q3 and 2014Q3 are small. There was though some progress: The tenure gender gap (measured whether by the mean or the median) narrowed from 2 years to 1 year between the two dates. 25% of employees (men or women) were employed at their current job for less than a year and 50% for less than 6 years. Distributions of individual earnings show the high concentration of employees around low values of tenure indicating that turnover is high. This is contrasting with 25% of employees keeping their job for more than 15 years. *The contrast between the first and the last quartiles of the distributions is due to the division of employees in an upper segment where qualified work is concentrated and a lower segment where unskilled and less skilled work is predominant. Average tenure in the upper segment is 11 years compared to 6 years in the lower segment.*

Males worked on average 41 hours per week in 2014Q3 as well as in 2008Q3 and the median duration of weekly work remained unchanged at 39 hours. Most of men were concentrated around the median as can be seen by the values of quartiles in Table 1. The distribution of hours of work of women does not differ substantially from the distribution

²⁴ The variable “Age” is often corrected for the duration of education which may differ between men and women. Since in Cyprus differences in the education level between the two sexes are minimal, the correction of variable “Age” is omitted here.

of men albeit the difference in the mean value (female employees worked on average two hours per week less than male employees in 2014Q3 and three in 2008Q3).

Table 1. Hours of work by gender

		Mean	Max.	Min.	Percentile 25	Median	Percentile 75
2008Q3	Male	41	98	5	38	39	40
	Female	38	77	3	36	38	40
2014Q3	Male	41	98	5	38	40	42
	Female	39	90	2	38	40	42

In 2014Q3, female education level in Cyprus was higher than the corresponding male level: 49% of women had a tertiary education against 41% of men. The corresponding figures for 2008Q3 were 44% and 34%. It follows that there was an improvement in the general level of education narrowing to some limited extent the female educational advantage. This educational advantage of women is not reflected in supervising other employees: one out of four men was a supervisor against one out of ten women in 2014Q3 as well as in 2008Q3 (Table 2).

Table 2. Educational level and supervision by gender

	2008Q3			2014Q3		
	Males	Females	Difference	Males	Females	Difference
Secondary Education	43,8%	37,1%	6,7%	43,5%	35,1%	8,4%
Tertiary Education	34,1%	43,8%	-9,7%	41,3%	49%	-7,7%
Supervision	25,1%	10,4%	14,7%	24,1%	11,3%	12,8%

Three out of four women employees are working in eight industries / sectors (Table 3) in which they predominate (except for Public Administration). Seven out of ten female employees are working in nine occupations (Table 4). In each of the eight industries / sectors, female employees are concentrated in one occupation. Table 5 shows the structure of female employment in the industries-occupations space for 2014Q3. This structure did not change significantly between 2008 and 2014.

Table 3. Concentration of female employment in industries / sectors

	2008Q3			2014Q3		
	Males	Females	Difference	Males	Females	Difference
Manufacturing of food products	3,2%	3,7%	-0,5%	3,3%	3,1%	0,2%

Trade	14,5%	17,9%	-3,4%	14,8%	16,6%	-1,8%
Accommodation and Restaurants	6,3%	8,1%	-1,8%	8,6%	9,7%	-1,1%
Financial_Legal_Accounting_Services	5,7%	9,7%	-4,0%	6,2%	9,8%	-3,7%
Public Administration	11,8%	8%	3,8%	11,1%	6,8%	4,4%
Educational activities	4%	11,5%	-7,5%	5,2%	11,8%	-6,6%
Health	1,7%	4,3%	-2,6%	1,9%	5,5%	-3,7%
Domestic Personnel	0,1%	11,3%	-11,2%	0,4%	12,3%	-12%
Other	52,7%	25,5%	27,2%	48,5%	24,4%	24,1%
Total	100%	100%		100%	100%	

Table 4. Concentration of female employment in occupations

Occupations 2014Q3	Males		Females	
	share in total male employment	number of employees	share in total female employment	number of employees
Cleaners_and_Helpers	0,6%	880	18,2%	28662
Shop Workers and Cashiers	4,8%	6933	12,1%	18997
Financial Admin. & Sales Associate Professionals	3,6%	5177	9,3%	14626
Secretaries and Office Clerks	0,8%	1181	9,5%	14951
Teaching Professionals	3%	4292	8,1%	12827
Cooks, Waiters, Bartenders	5,1%	7402	3,8%	5940
Numerical Clerks	0,5%	762	4,3%	6807
Finance Admin Sales Professionals	3,1%	4470	4%	6257
Nursing and Midwifery Professionals	0,8%	1112	2,5%	3978
Total of 9 occupations in total employment	22,3%		71,8%	

Table 5. Concentration of female employment in industries / sectors and occupations

Female Workers* 2014Q3	Cleaners & Helpers	Shop Workers & Cashiers	Financial Administrative Sales Associate Professionals	Secretaries and Office Clerks	Teaching Professionals	Cooks, Waiters and Bartenders	Numerical Clerks	Finance Administrative Sales Professionals	Nursing and Midwifery Professionals
Manufacturing of food products									
Trade		17,7%							
Accommodation and Restaurants	2,7%					10,7%			
Financial Legal and Accounting Services			6,6%				1,9%	4,5%	
Public Administration				2,1%					
Education activities					14,2%				
Health activities									3,9%
Domestic Personnel	16,7%								
Total of 8 Industries / Sectors									100%

* only employment shares exceeding 2% appear in the table

Both in 2008 and 2014, the distribution of female employees in units of production²⁵ of different sizes does not differ significantly from the corresponding distribution of males, except for small and very small units of production where female labour predominates due mainly to the strong presence of female work in households employing domestic personnel.

The presence of immigrants in the Cypriot labour market is important and gender diversified: one out of ten male employees was not Cypriot against two out of ten females. The stronger presence of female immigrants is due, at least partly, to the development of caring and cleaning services demanded by households.

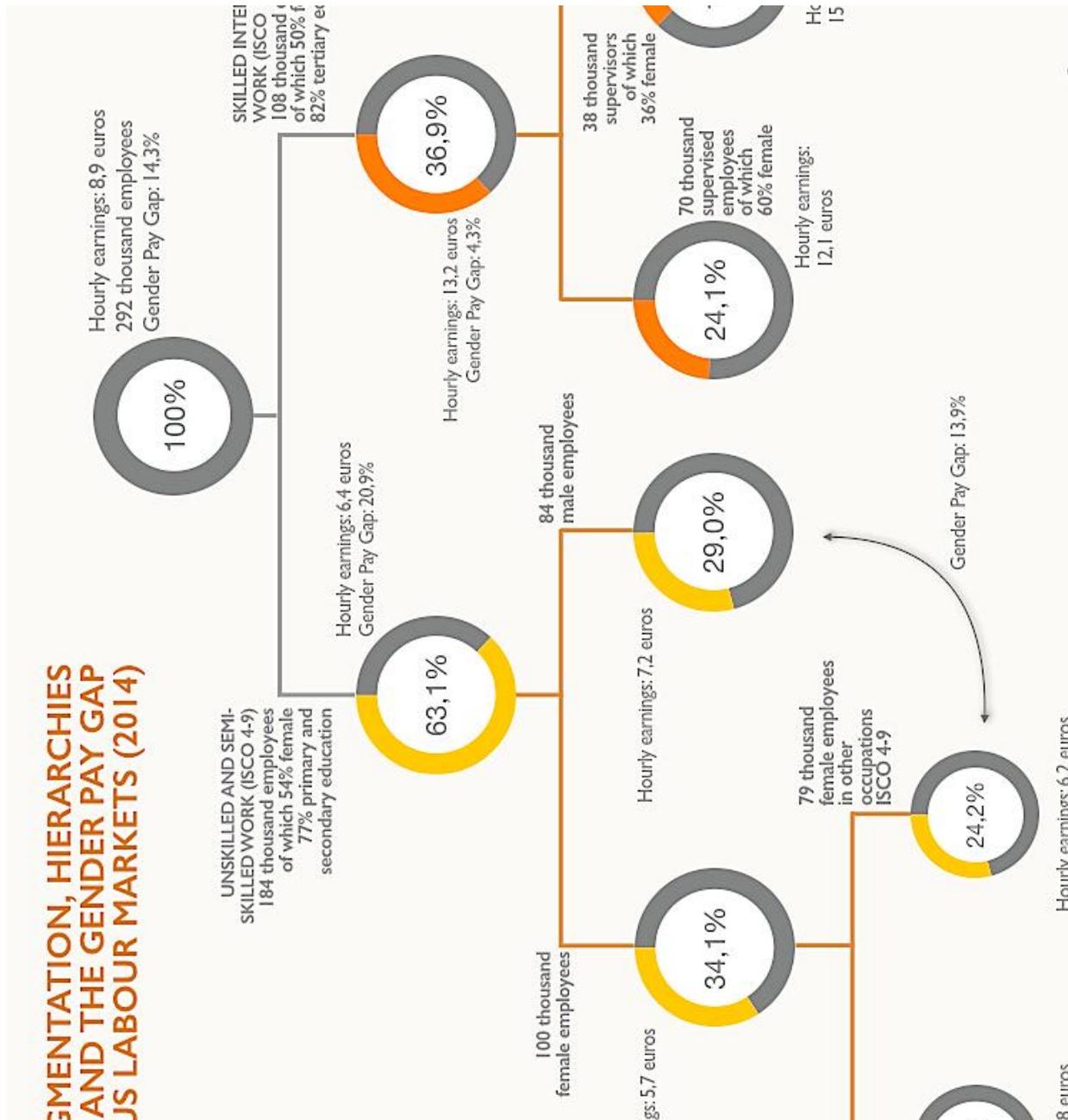
Individual wage regressions show that unemployed workers when hired obtain lower hourly earnings than workers of the same characteristics (individual, job related or firm specific characteristics). In 2008Q3 there were only 2,5% male and 3,4% female workers that were unemployed in 2007Q3. In 2014Q3, the corresponding figures were 8,8% and 6,6%.

The labour market in Cyprus is segmented along three major dividing lines: first, skilled intellectual work / less skilled and unskilled work (whether intellectual or manual work), second, supervisors / supervised employees, and third male / female workers. By applying

²⁵Firms, households, public services etc.

standard statistical techniques we obtain the classification tree shown in figure 9 for the third quarter of 2014.

Figure 9. Segments of wage labour in 2014



In 2014Q3, approximately one out of three employees was working in the skilled intellectual work segment (“upper segment” of wage labour). 82% of these employees had tertiary education (figure 9). 63,1% of employees were working in the less skilled and unskilled work segment (“lower segment”) in which 77% employees had primary or secondary education. Average gross hourly earnings in the lower segment was 52% lower than the corresponding average in the upper segment.

The unadjusted GPG in the upper segment was 4,3% compared with an overall GPG of 14,3%. The corresponding figure for the lower segment is 20,9%.

The lower segment is divided by gender in two fractions in which average hourly earnings of 100 thousand women was 5,7 euros against 7,2 euros for 84 thousand male employees. The female fraction is further divided in a group of 21 thousand immigrant *Cleaners and*

Helpers and a group of 79 thousand female employees working in other jobs. Average hourly earnings for immigrant Cleaners and Helpers (10% of total employment) were 2,8 euros while 6,2 euros for women in other jobs of the lower segment. The presence of low pay immigrant women working as Cleaners and Helpers increases GPG in the lower segment by 7 percent points (20,9% instead of 13,9%).

Figure 11 shows that the structure of wage labour in 2008 remained unchanged throughout the years of crisis. Even so, during years of crisis 2008 to 2014, some important changes occurred from the point of view of the GPG:

1. The GPG decreased from 18,8% in 2008 to 14,3% in 2014.
2. The share of employment in the upper segment increased by 14 thousand employees. This development is shown also in figure 12.
3. Eleven out of fourteen thousand new jobs in the upper segment were filled by women and only 3 thousand by men.
4. The number of supervisors in the upper segment increased by 4 thousand of which 3 thousand were women.
5. Average hourly earnings of supervisors increased from 14,2 euros in 2008 to 15,4 euros in 2014.
6. As a result of points 2 to 5 above, the GPG in the upper segment decreased from 5,3% in 2008 to 4,3% in 2014.
7. The share of employment in the lower segment contracted by 7 thousand as a result of a rise in female employment by 4 thousand and a decrease in male employment by 11 thousand.
8. Average hourly earnings in the lower segment declined from 7,3 euros in 2008 to 6,4 euros in 2014 (appr. -9%). The decline was significantly higher for men (-14,3%) than for women (-8,1%). As a result, GPG in the lower segment subsided from 26,2% to 20,8%.
9. Employment of immigrant Cleaners and Helpers was 21 thousand in 2014 against 17 thousand in 2008 and their corresponding average hourly earnings declined from 3,0 to 2,8 euros (-6,6%). Consequently, low pay of immigrant women working as Cleaners and Helpers increased GPG in the lower segment by 8,4 percent points in 2008 against 7,0 percent points in 2014.

SEGMENTATION, HIERARCHIES AND THE GENDER PAY GAP IN US LABOUR MARKETS (2008)

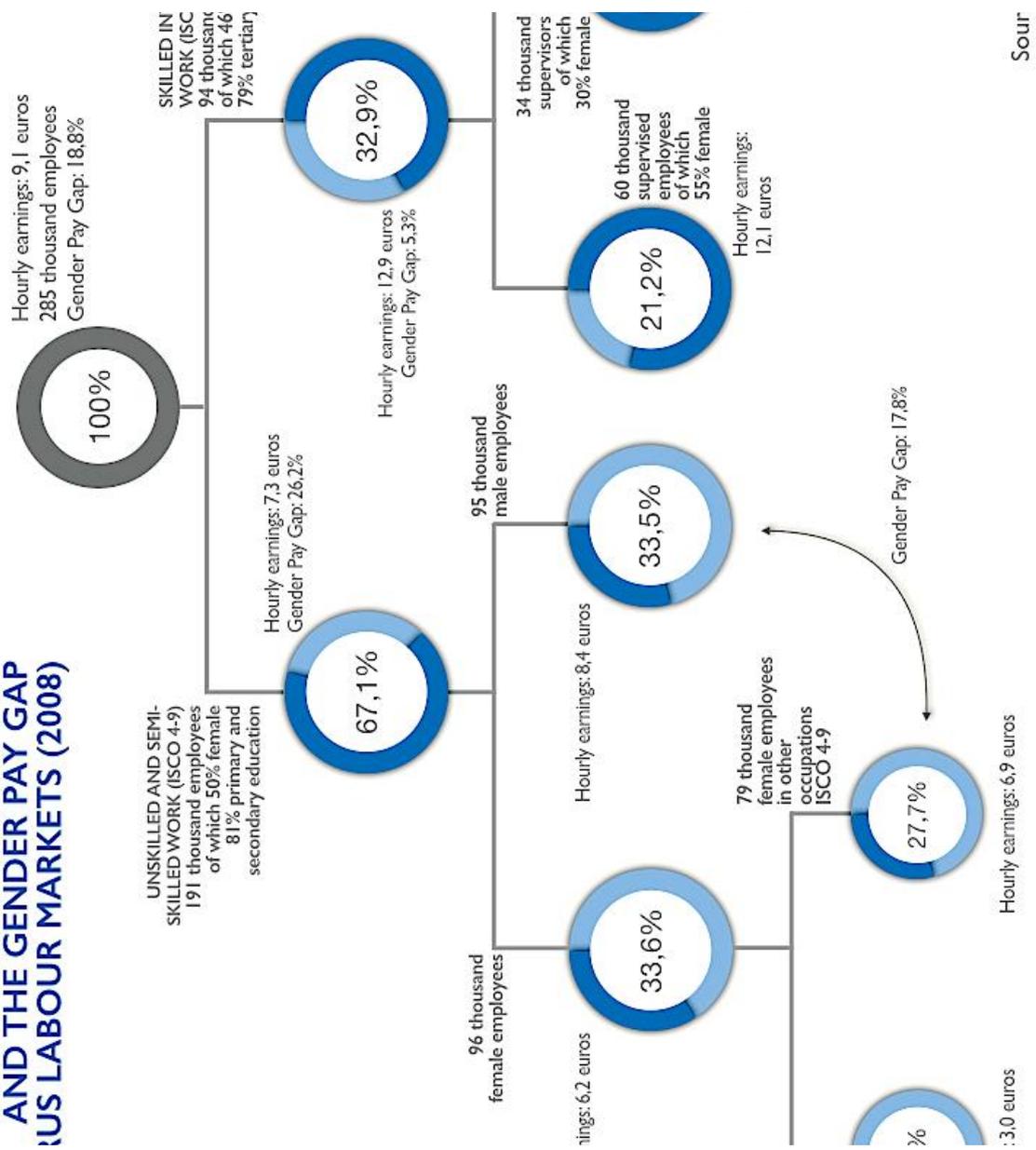
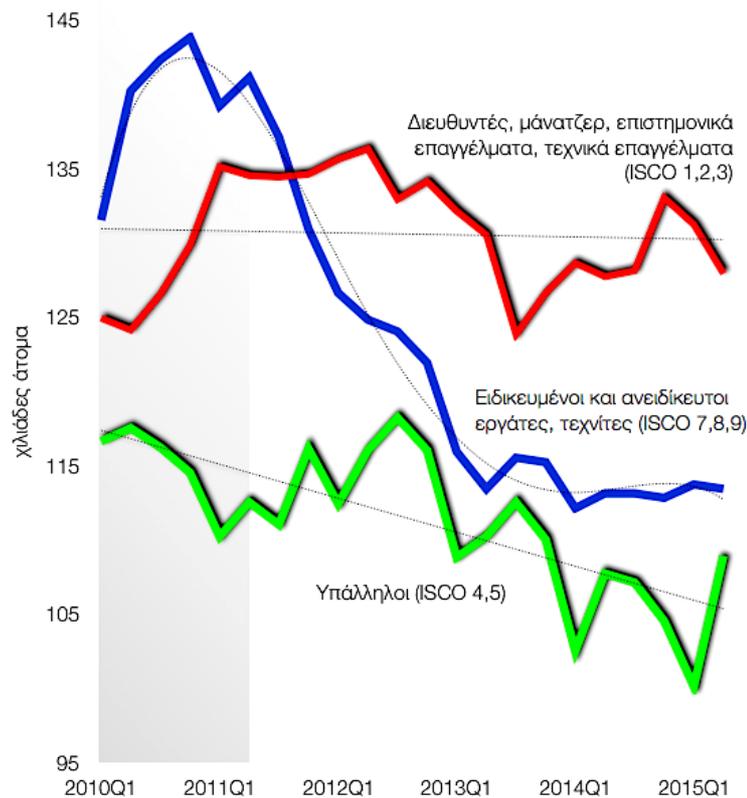


Figure 12. Employment by broad groups of occupations

Figure 11. Segments of wage labour in 2008



10.

As shown in figure 13, female hourly earnings present two differences vis-a-vis male wages:

First, female earnings are more concentrated around values lower than 5 euros per hour. Second, for values exceeding 20 euros per hour, which is the area of top management earnings, there are clearly more men than women.

As can be depicted in figure 14, the first difference was more pronounced in 2008. *During years of crisis 2008 to 2014, the distribution of males has shifted to the left that is to lower hourly earnings concentrating more workers in the range of earnings below 5 euros per hour.* This shift corresponds to the 14% decrease in the average hourly earnings of male workers in the lower segment of wage labour.

The second difference was less pronounced in 2008. Fewer managers and other top personnel (men or women) were paid hourly earnings higher than 20 euros per hour. *The top 5% earned more than 17,1 euros in 2008 and 18,8 euros in 2014 (+10%). This shift corresponds to the 8,5% increase in the average hourly earnings of the supervising fraction of the upper segment (compare figures 13 and 14). More educated female employees benefited from this shift towards higher earnings by occupying more jobs at the managerial level.*

Figure 13. Distribution of individual hourly earnings by gender in 2014

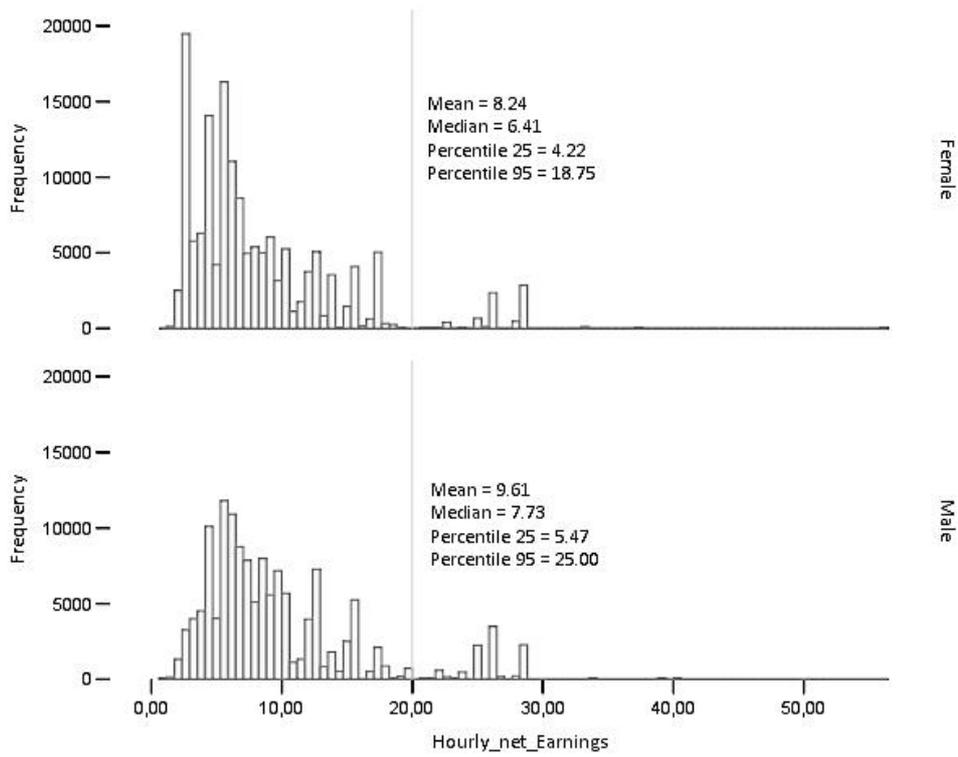
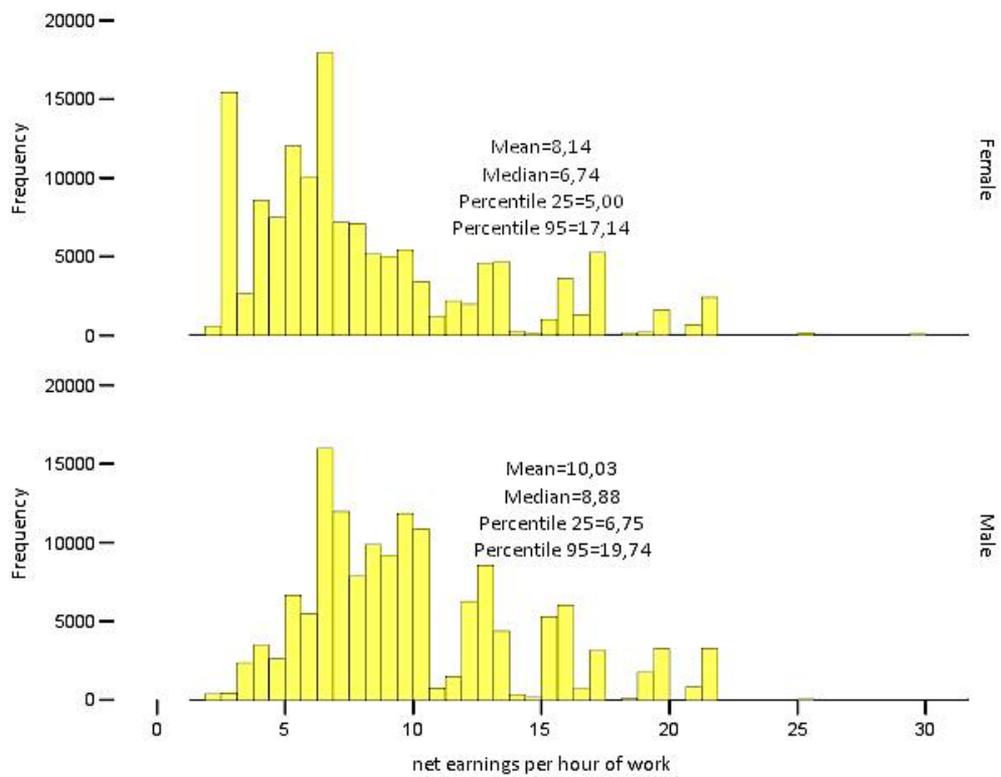


Figure 14. Distribution of individual hourly earnings by gender in 2008



Summing-up, the male distribution of hourly earnings of less skilled and unskilled workers shifted towards lower values and the distribution of skilled supervisors shifted to higher values. The female distribution of hourly earnings remained broadly unchanged with the exception that the distribution of skilled female supervisors shifted to the right.

It follows that lower GPG in 2014 relative to 2008 is due to a deterioration in the situation of male unskilled and less skilled workers on the one hand, and to an improvement in the situation of female highly skilled employees in supervising duties on the other.

These conclusions are corroborated by the results of the decomposition of the GPG into its components, which is obtained applying the Oaxaca and Ransom technique on the LFS individual data of 2008Q3 and 2014Q3.

1.3. Decomposition of the gender pay gap

The technique we use to decompose the Gender Pay Gap in Cyprus and Greece into its components and estimate the contribution of each determinant to the total gap is similar to that of Oaxaca and Ransom (1994) instead of the technique proposed by Juhn, Murphy and Pierce (1991, 1993)²⁶. We apply this standard technique on individual wage equations for male and female hourly earnings.

The wage equation we use to decompose the gender pay gap includes occupation and industry dummies together with individual characteristics, firm specific and job related variables. Our empirical analysis is based on micro-data from the Labour Force Survey (LFS). The data is not corrected for selectivity bias (Heckman 1979); we do not consider this hindrance important, since “even if working women is a self-selected group with better than average characteristics than the whole group of women, these are the ones whose productive characteristics are evaluated by employers” (Sapsford and Tzannatos 1993: 233).

Considering the availability of LFS data, the independent variables of the equation for individual wages are education attainment, years of accumulated general work experience, tenure for specific experience in current job, establishment size, shift and night work, part-time, overtime, and supervisory tasks. We have also introduced into this equation other variables such as industry and occupation, marital status, nationality, duration of contract, and full/part-time work. Our reasons for including these other variables are because marital status may affect discipline at work, social skills, and benefits; nationality may be associated with wage discrimination against non-nationals; and the duration and type of contract is related to the individual bargaining power of the employee. Dummy variables for industry and occupation are included in the equation as independent variables to describe industry / sector and occupational segregation.

The variables used for our empirical analysis are shown in Table 6. Variables found statistically not significant are not mentioned in the rest of the report.

²⁶ Using the Juhn, Murphy and Pierce (JMP) technique, researchers explain changes in the gender pay gap partly by changes in wage inequality. The technique is subject to criticism: Suen (1997), shows that the JMP decomposition is subject to bias. According to Lemieux (2006), “While JMP’s synthesis of the causes of growing wage inequality had a major impact in labor economics and other fields, there is a growing number of problems with the story”. Furthermore, JMP technique has led in the past to biased conclusions concerning the increase in wage inequality in the USA during the 1980’s (for criticism see Card and DiNardo 2002). The JMP technique underestimates discrimination. Therefore, “researchers may choose between the standard Oaxaca decomposition and JMP decomposition depending on their emphasis on discrimination or the price of unobserved skills.” (Yun 2007).

Table 6: Definition of Variables

Independent variables	Definition	Designed to capture
Age, Age2	Age of worker and age squared	Accumulated labor market experience
Tenure, Tenure2	Tenure and tenure squared	Accumulation of firm-specific skills, recent work experience
Secondary Education, Tertiary Education	Education attainment level	Formal knowledge and skills, ability to perform complicated tasks
Supervision	Supervising other workers	Compensating differential
InSize	Log size of establishment	Market power and productivity of the firm
NACE dummy variables	Industry or sector in which the employee works.	Industry / Sector Segregation
ISCO123	Occupations in ISCO 1, 2, 3 (Managers, Professionals, Technicians etc)	Occupational Segregation
Married	Married	Family allowances, wage premium for men, and wage discount for women related to family responsibilities
Was unemployed last year	Employee was unemployed last year	Lower bargaining power of the employee due to last year's unemployment
Cypriot	Nationals	Discrimination against migrants
Partime	Part-time	Lower bargaining power of part-timers – higher non-wage costs
Shift	Shift work	Increased average hourly wage rate for shifts
Night	Night work	Increased average hourly wage rate for night work
Temporary	Contract of limited duration	Lower bargaining power of the employee due to precariousness
Overtime	Overtime work	Increased average hourly wage rate for overtime work
Dependent variable: lnw	Logarithm of individual hourly wage rate*	wage

* Bonuses are included in the gross wage rate per hour worked.

The average characteristics of employees, males and females, and the gender differences are shown in Table 7. Men have on average more professional experience (Age and Tenure) than women. Still, the male advantage in 2014Q3 was clearly lower than in 2008Q3. Supervision is assigned mostly to males although in 2014Q3 more women than in 2008Q3 were supervising other employees. Progress has been made also in the distribution of the two sexes in firms: there was higher concentration of females in small and mini firms in 2008Q3 than in 2014Q3. The female advantage in highest education attainment has been eroded to some degree but still remains important. There was also an improvement in the distribution of women in industries / sectors and occupations.

Table 7. Average characteristics in 2008 and 2014

	Average Characteristics 2014			Average Characteristics 2008			Female Improvement (+)
	Males	Females	Difference	Males	Females	Difference	
Age	39,6	38,8	0,8	39,8	38,0	1,8	1,0
Tenure	9,3	8,0	1,3	9,6	7,0	2,6	1,3
Secondary Education	43,5%	35,1%	8,4%	43,8%	37,1%	6,7%	-1,7%
Tertiary Education	41,3%	49,0%	-7,7%	34,1%	43,8%	-9,7%	-2,0%
Supervision	24,1%	11,3%	12,8%	25,1%	10,4%	14,7%	1,9%
lnSize	2,890	2,710	0,180	3,000	2,800	0,200	0,020
Manufacturing of food products	3,3%	3,1%	0,2%	3,2%	3,7%	-0,5%	-0,7%
Trade	14,8%	16,6%	-1,8%	14,5%	17,9%	-3,4%	-1,6%
Accommodation and Restaurants	8,5%	9,8%	-1,3%	6,3%	8,1%	-1,8%	-0,5%
Financial Legal and Accounting Services	6,1%	9,9%	-3,8%	5,7%	9,7%	-4,0%	-0,2%
Public Administration	11,1%	6,8%	4,3%	11,8%	8,0%	3,8%	-0,5%
Education activities	5,1%	11,8%	-6,7%	4,0%	11,5%	-7,5%	-0,8%
Health activities	1,9%	5,5%	-3,6%	1,7%	4,3%	-2,6%	1,0%
Domestic Personnel	0,4%	12,3%	-11,9%	0,1%	11,3%	-11,2%	0,7%
Construction	11,5%	1,2%	10,3%	19,4%	2,2%	17,2%	6,9%
Upper segment of wage labour	38,8%	35,8%	3,0%	35,4%	31,7%	3,7%	0,7%
Married	65,1%	62,3%	2,8%	70,1%	66,8%	3,4%	0,6%
Last year was unemployed	8,8%	6,6%	2,2%	2,5%	3,4%	-0,9%	-3,1%
Cypriot	88,9%	78,1%	10,8%	90,6%	80,5%	10,1%	-0,7%

Summing-up, in Cyprus *between 2008Q3 and 2014Q3, there was a general improvement in average characteristics of women vis-a-vis men employees.*

This improvement is reflected in the results of the decomposition of GPG into its components: the gender differences in average characteristics added 12,5 percent points to the GPG in 2014Q3 instead of 15,2 in 2008Q3. On the contrary, average market prices paid for observed characteristics have been increased for males relative to females as shown in Table 8, with the notable exception of education and health activities, domestic personnel, and construction (as male employment in this industry plummeted). An improvement for women has been made in the reward of their longer studies and their marital status.

Table 8. Market prices paid for observed characteristics in 2008 and 2014

	Market prices paid for observed characteristics in 2014			Market prices paid for observed characteristics in 2008			Female Improvement (+)
	Males	Females	Difference	Males	Females	Difference	
Age	0,007	0,005	0,002	0,002	0,000	0,002	0,000
Tenure	0,013	0,014	-0,001	0,009	0,015	-0,006	-0,005
Secondary Education	0,055	0,109	-0,054	0,063	0,085	-0,022	0,032
Tertiary Education	0,190	0,209	-0,019	0,227	0,188	0,039	0,058
Supervision	0,112	0,126	-0,014	0,086	0,138	-0,052	-0,038
lnSize	0,085	0,052	0,030	0,071	0,045	0,026	-0,007
Manufacturing of food products	-0,113	-0,195	0,082	-0,159	-0,151	-0,008	-0,090
Trade	-0,038	-0,061	0,023	-0,082	-0,085	0,003	-0,020
Accommodation and Restaurants	-0,174	-0,130	-0,044	-0,149	-0,041	-0,108	-0,064
Financial Legal and Accounting Services	0,284	0,164	0,120	0,246	0,206	0,040	-0,080
Public Administration	0,097	0,114	-0,017	0,085	0,141	-0,056	-0,039
Education activities	0,361	0,305	0,056	0,307	0,221	0,086	0,030
Health activities	0,027	0,097	-0,070	0,085	0,058	0,027	0,097
Domestic Personnel	-0,673	-0,536	-0,137	-0,611	-0,526	-0,085	0,052
Construction	0,094	0,158	-0,064	0,065	0,019	0,046	0,110
Upper segment of wage labour	0,203	0,342	-0,139	0,119	0,290	-0,171	-0,032
Married	0,102	0,061	0,041	0,114	0,019	0,095	0,054
Last year was unemployed	-0,162	-0,066	-0,096	-0,120	0,003	-0,123	-0,027
Cypriot	0,180	0,112	0,068	0,099	0,138	-0,039	-0,107

The results from the decomposition of the gender pay gap are presented in Table 9 below.

Table 9. Decomposition of the gender pay gap in Cyprus

	2014Q3	2008Q3
	Percentage of pay gap	
1. Occupational and Industry / Sector Segregation effect	4,5%	6%
2. Gender differences in observed characteristics	4,7%	4,5%
3. Different market prices by gender paid for observed characteristics = wage discrimination by employers.	11,3%	2,3%
4. Gender differences in unobserved characteristics + measurement errors + wage discrimination by employers unrelated to observed characteristics	-6,2%	6%
Gender Pay Gap as percentage of the average male pay	14,3%	18,8%

The first component of the gender pay gap measures the impact of gender related employment segregation on the gap. It accounted for 4,5 percent points of the gender pay gap in 2014Q3 and 6,0 percent points in 2008Q3, so there was progress in the narrowing of the GPG. A remarkable extreme example of segregation and under-valuation of female work is domestic personnel occupied in the sector of households, in which female workers predominate. Domestic personnel in Cyprus, which is mostly female cleaners and helpers, added 7,2 percent points to the GPG in 2008Q3 and 6,2 in 2014Q3.

The second component of the gap is gender differences in observed individual and firm characteristics, accounted for approximately 4,5 percent of the total gender pay gap both in 2014Q3 and 2008Q3. In both cases, age and tenure (general and firm or job specific experience) and supervision of other workers accounted for 2/3 of the effect of gender differences in observed characteristics.

The third component of the gap refers to wage discrimination related to gender differences in prices paid by employers for observed characteristics. Its contribution to the total gender pay gap while very small in 2008Q3 became very important in 2014Q3, so it contributed to the widening of the GPG.

The fourth component of the gap refers to gender differences in unobserved characteristics, measurement errors of observed characteristics, and wage discrimination by employers unrelated to observed characteristics. Its contribution to the total gap was 6,0% in 2008Q3 but -6,2% in 2014Q3. In any case, wage discrimination by employers unrelated to observed characteristics is small.

The sum of the first and second components corresponds to pre-market discrimination *social practices*. It accounted for 10,5 percent points in 2008Q3 and 9,2 percent points in

2014Q3. The sum of the third and fourth components corresponds to the upper bound of gender wage discrimination *practiced by individual employers*. Thus the upper bound does not exceed 5,1% in 2014Q3 and 8,3% while the corresponding lower bounds were 0% and 6%.

Summing-up, gender discrimination in Cyprus between 2008Q3 and 2014Q3, emanating whether by social practices or by individual employers choices, decreased.

Taking into account both gender differences in observed characteristics and different market prices by gender paid by employers, we find that professional experience increased GPG by 2,6 percent points. The increase is not attributed to differences in observed characteristics since average age and tenure of female employees converge to the corresponding male values. It comes from high increases in market prices paid by employers for professional experience of male employees. We interpret higher prices respective to age and tenure in wage regressions as the result of higher skill (observed or tacit), accumulated through the years of working life as one climbs the learning curve. We interpret the surge in professional experience and skills between 2008 and 2014 as the effect of job losses during the crisis. It is probable that unobserved skills of workers who lost their jobs between 2008Q3 and 2014Q3 were fewer or of a lesser quality than average. In that case, workers who survived the crisis possess more or higher quality skills and the variables “age” and “tenure” capture now professional experience of a higher quality and higher labour productivity than before²⁷. Hence, the price paid by employers for one year of professional experience (after controlling for other characteristics) is now higher.

This effect of creaming off of the more productive male workers does not hold for female employees since their number increased, neither for employees of the upper segment of wage labour which was not affected by the crisis.

²⁷ The negative sign of the fourth component of the GPG (table 9) (which describes gender differences in unobserved characteristics plus measurement errors plus wage discrimination by employers unrelated to observed characteristics) corroborates the above interpretation. If variables “age” and “tenure” could be adjusted for capturing unobserved skills, we would expect the sign of the fourth component of the GPG to turn from negative to positive.

1.4. Summing-up the results for Cyprus

Wage labour in Cyprus is segmented along three major dividing lines: First, skilled intellectual work / less skilled and unskilled work (whether intellectual or manual). Second, supervisor / supervised work. Third, male / female work.

These divisions generate a structure of wage labour including an “upper or primary segment” defined as the *skilled, intellectual and supervising work* segment and a “lower or secondary segment” defined as the *less skilled and unskilled work* segment.

In the summer of 2014, approximately one out of three employees was working in the primary segment. Four out of five employees in this segment had tertiary education.

Two out of three employees were working in the secondary segment in which four out of five had primary or secondary education.

The average gross hourly earnings in the secondary segment was half the corresponding average in the primary segment.

The unadjusted Gender Pay Gap (GPG) in the primary segment was 4,3% compared with 20,9% in the secondary segment and an overall GPG of 14,3%.

The primary segment of wage labour was not affected by the crisis: employment increased by 14% and hourly earnings increased by 8% for supervisors.

On the contrary, male workers in the secondary segment have been hit by the crisis, as industries, sectors of activity and occupations in which they are prevailing declined. Consequently, during years of crisis 2008-2014, male unemployment of the unskilled and the less skilled rose as a result of lower employment (-11,6%). The corresponding average hourly earnings plummeted by -14,3%.

The secondary segment is divided by gender in two fractions in which average hourly earnings of 100 thousand women was 5,7 euros in 2014Q3 against 7,2 euros for 84 thousand male employees. The female fraction is further divided in a group of 21 thousand immigrant Cleaners and Helpers (2014Q3) and a group of 79 thousand female employees working in other jobs. Average hourly earnings for immigrant Cleaners and Helpers (10% of total employment) were 2,8 euros while 6,2 euros for women in other jobs of the lower segment. The presence of low pay immigrant women working as Cleaners and Helpers increases the gender pay gap in the lower segment by 7 percent points (20,9% instead of 13,9%).

Contrary to male unemployment, female unemployment does not originate from lower employment. The number of male employees was 157 thousand in 2008Q3 and it decreased by 12 thousand until 2014Q3. Conversely, there were more female employees in 2014Q3 than in 2008Q3 (+10 thousand). Female unemployment surged because women participate now more in the labour market to compensate for actual or expected losses of income resulting from unemployment, lower wages or/and lower social benefits.

The structure of wage labour in 2008 remained unchanged throughout years of crisis. Even so, from the point of view of the GPG some important changes occurred during years of crisis 2008 to 2014:

- The GPG decreased from 18,8% in 2008 to 14,3% in 2014.
- The share of employment in the upper segment increased by 14 thousand employees. Employment in the lower segment contracted by 7 thousand as a result of a rise in female employment by 4 thousand and a decrease in male employment by 11 thousand.
- The male distribution of hourly earnings of less skilled and unskilled workers shifted towards lower values and the distribution of skilled supervisors shifted to higher values. The female distribution of hourly earnings remained broadly unchanged except for skilled supervisors of the upper segment whose earnings shifted to higher values. Average hourly earnings of supervisors increased from 14,2 euros in 2008 to 15,4 euros in 2014. More educated female employees benefited from this shift towards higher earnings by occupying more jobs at the managerial level: Eleven out of fourteen thousand new jobs in the upper segment were filled by women and the number of supervisors in the upper segment increased by 4 thousand of which 3 thousand were women. As a result of the above, the GPG in the upper segment decreased from 5,3% in 2008 to 4,3% in 2014.
- Average hourly earnings in the lower segment declined from 7,3 euros in 2008 to 6,4 euros in 2014. The decline was significantly higher for men (-14,3%) than for women (-8,1%). As a result, GPG in the lower segment subsided from 26,2% to 20,8%.
- Employment of immigrant Cleaners and Helpers was 21 thousand in 2014 against 17 thousand in 2008 and their corresponding average hourly earnings declined from 3,0 to 2,8 euros (-6,6%). As a result, low pay of immigrant women working as Cleaners and Helpers increased the GPG in the lower segment by 8,4 percent points in 2008 against 7,0 percent points in 2014.

It is thus evident that *(a) the gender pay gap issue in Cyprus is an issue for the unskilled and the less skilled, and (b) the narrowing of the GPG in the lower segment during the crisis does not reflect an improvement in the condition of female workers but a deterioration in the condition of male workers.*

Segregation (including under-valuation of female work) remains an important issue: Three out of four women employees are working in eight industries / sectors of activity in which they prevail (except for Public Administration). Seven out of ten female employees are working in nine occupations. In each of the eight industries / sectors, female employees are concentrated in one occupation. Table 5 shows the structure of female employment in the industries-occupations space for 2014Q3. This structure did not change significantly

between 2008 and 2014. Gender related employment segregation accounted for 4,5 percent points of the gender pay gap in 2014Q3 and 6,0 percent points in 2008Q3, so there was progress. A remarkable extreme example of segregation and undervaluation of female work is domestic personnel occupied in the sector of households, in which female workers prevail. Domestic personnel in Cyprus, which is mostly female cleaners and helpers, added 7,2 percent points to the GPG in 2008Q3 and 6,2 in 2014Q3.

Between 2008Q3 and 2014Q3, there was a general improvement in average characteristics of women vis-a-vis men employees. This improvement is reflected in the results of the decomposition of GPG into its components: the gender differences in average characteristics added 12,5 percent points to the GPG in 2014Q3 instead of 15,2 in 2008Q3.

On the contrary, average market prices paid for observed characteristics (all other factors remaining constant) have been increased for males relative to females, with the notable exception of education and health activities and domestic personnel. A remarkable improvement for women has been made in the reward of their longer studies and their marital status. We interpret the fact that average market prices paid for observed characteristics of male employees increased (after controlling for other factors) as a result of the surge in professional experience and skills between 2008 and 2014 emanating from male job losses during the crisis: it is probable that unobserved skills of workers who lost their jobs between 2008Q3 and 2014Q3 were fewer or of a lesser quality than average. In that case, workers who survived the crisis possess more or higher quality skills and the variables “age” and “tenure” capture now professional experience of a higher quality and higher productivity than before. Hence, the price paid by employers for one year of professional experience (after controlling for other characteristics) is now higher.

This effect of creaming off of the more productive male workers does not hold for female employees (since their number increased), neither for employees of the upper segment of wage labour (which was not really affected by the crisis).

The gender gap in observed individual and firm characteristics, accounted for approximately 4,5 percent of the total gender pay gap both in 2014Q3 and 2008Q3. In both cases, age and tenure (general and firm or job specific experience) and supervision other workers accounted for 2/3 of the effect of gender differences in observed characteristics.

Pre-market discrimination due to social practices accounted for 10,5 percent points in 2008Q3 and 9,2 percent points in 2014Q3. The upper bound of gender wage discrimination practiced by individual employers, according to our estimations, has an upper bound that did not exceed 5% in 2014Q3 and 8% in 2008Q3 while the corresponding lower bounds were 0% and 6%.

Annex of Tables Cy

Table Cy1. Individual wage equation for men (2008)

2008	Male employees	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	Adjusted R2=0,548					
(Constant)		1,492	0,004		333,988	0
Age		0,002	0	0,048	18,862	0
Tenure		0,009	0	0,211	87,678	0
Secondary edu		0,063	0,002	0,075	31,375	0
Tertiary edu		0,227	0,003	0,255	83,773	0
Supervision		0,086	0,002	0,087	42,862	0
ln_Size_of_unit		0,071	0,001	0,182	92,462	0
nace_Manufacturing of food products		-0,159	0,004	-0,069	-37,39	0
nace_Trade		-0,082	0,002	-0,068	-34,225	0
nace_Accomodation and Restaurants		-0,149	0,003	-0,086	-44,913	0
nace_Financial_Legal_Accounting_Services		0,246	0,003	0,134	70,178	0
nace_Public Administration		0,085	0,003	0,066	32,28	0
nace_Educational activities		0,307	0,004	0,145	73,757	0
nace_Health		0,085	0,006	0,026	14,396	0
nace_Households_Domestic Personnel		-0,611	0,022	-0,049	-27,385	0
nace_Construction		0,065	0,002	0,061	29,253	0
ISCO123		0,119	0,002	0,135	52,618	0
Married		0,114	0,002	0,124	57,43	0
was Unemployed last year		-0,12	0,005	-0,044	-24,206	0
Cypriot		0,099	0,003	0,07	37,128	0

Table Cy2. Individual wage equation for women (2008)

2008	Female employees	Unstandardized Coefficients		Standardized Coefficients		
	Adjusted R2=0,729	B	Std. Error	Beta	t	Sig.
(Constant)		1,405	0,005		261,939	0,000
Age		1,74E-05	0	0	0,199	0,842
Tenure		0,015	0	0,22	119,357	0,000
Secondary edu		0,085	0,002	0,076	37,536	0,000
Tertiary edu		0,188	0,003	0,17	72,796	0,000
Supervision		0,138	0,003	0,077	50,039	0,000
ln_Size_of_unit		0,045	0,001	0,09	54,052	0,000
nace_Manufacturing of food products		-0,151	0,004	-0,053	-35,453	0,000
nace_Trade		-0,085	0,002	-0,059	-34,382	0,000
nace_Accommodation and Restaurants		-0,041	0,003	-0,02	-12,846	0,000
nace_Financial_Legal_Accounting_Services		0,206	0,003	0,111	69,053	0,000
nace_Public Administration		0,141	0,003	0,072	44,05	0,000
nace_Educational activities		0,221	0,003	0,129	73,757	0,000
nace_Health		0,058	0,004	0,022	14,228	0,000
nace_Households_Domestic Personnel		-0,526	0,004	-0,31	-135,322	0,000
nace_Construction		0,019	0,005	0,005	3,543	0,000
ISCO123		0,29	0,002	0,245	127,977	0,000
Married		0,019	0,002	0,017	11,156	0,000
was Unemployed last year		0,003	0,004	0,001	0,638	0,523
Cypriot		0,138	0,003	0,1	47,938	0,000

Table Cy3. Individual wage equation for men (2014)

2014	Male	Unstandardized Coefficients		Standardized Coefficients		
employees		B	Std. Error	Beta	t	Sig.
	Adjusted R2=0,600					
(Constant)		0,99	0,006		165,721	0,000
Age		0,007	0	0,148	59,73	0,000
Tenure		0,013	0	0,217	91,432	0,000
Secondary Education		0,055	0,003	0,049	18,683	0,000
Tertiary Education		0,19	0,004	0,166	53,921	0,000
Supervision		0,112	0,003	0,084	42,031	0,000
ln_Size_of_Unit		0,085	0,001	0,167	89,974	0,000
Manufacturing of food products		-0,113	0,006	-0,037	-20,578	0,000
Trade		-0,038	0,003	-0,024	-12,681	0,000
Construction		0,094	0,003	0,052	28,124	0,000
Accommodation and Restaurants		-0,174	0,004	-0,086	-45,768	0,000
Financial Legal and Accounting Services		0,284	0,004	0,122	65,816	0,000
Public Administration		0,097	0,003	0,055	28,248	0,000
Education activities		0,361	0,005	0,143	74,654	0,000
Health activities		0,027	0,007	0,007	3,734	0,000
Domestic Personnel		-0,673	0,017	-0,068	-39,047	0,000
ISCO123		0,203	0,003	0,175	72,48	0,000
Married		0,102	0,003	0,086	40,547	0,000
Last year was unemployed		-0,162	0,004	-0,081	-44,774	0,000
Cypriot or Greek		0,18	0,003	0,099	53,926	0,000

Table Cy4. Individual wage equation for women (2014)

2014 Female employees	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Adjusted R2=0,695					
(Constant)	1,074	0,006		173,484	0,000
Age	0,005	0	0,095	51,438	0,000
Tenure	0,014	0	0,184	97,317	0,000
Secondary Education	0,109	0,003	0,082	37,826	0,000
Tertiary Education	0,209	0,003	0,166	65,526	0,000
Supervision	0,126	0,003	0,063	41,123	0,000
ln_Size_of_Unit	0,052	0,001	0,091	54,451	0,000
Manufacturing of food products	-0,195	0,005	-0,054	-36,007	0,000
Trade	-0,061	0,003	-0,036	-20,898	0,000
Construction	0,158	0,008	0,027	18,985	0,000
Accommodation and Restaurants	-0,13	0,004	-0,061	-36,196	0,000
Financial Legal and Accounting Services	0,164	0,004	0,076	46,499	0,000
Public Administration	0,114	0,004	0,045	28,324	0,000
Education activities	0,305	0,003	0,155	89,294	0,000
Health activities	0,097	0,004	0,035	22,513	0,000
Domestic Personnel	-0,536	0,004	-0,282	-124,09	0,000
ISCO123	0,342	0,003	0,259	131,607	0,000
Married	0,061	0,002	0,047	31,194	0,000
Last year was unemployed	-0,066	0,004	-0,026	-17,395	0,000
Cypriot or Greek	0,112	0,003	0,074	35,788	0,000

Table Cy5. Oaxaca and Ransom analysis (2008)

Returns		Average Characteristics						$\Delta(X_m - X_i) \beta^*$	
β^*	β_m	β_f	$\beta_m - \beta^*$	$\beta^* - \beta_f$	cm-cf	X_m	X_f	$X_m - X_i$	$X_m (\beta_m - \beta^*)$
	1.492	1.405			8.7%				
0.001	0.002	0.00002	0.001	0.00098		39.8	38.0	1.8	0.2%
0.012	0.009	0.015	-0.003	-0.003		9.6	7.0	2.6	3.1%
0.069	0.063	0.085	-0.006	-0.016		43.8%	37.1%	0.1	0.5%
0.180	0.227	0.188	0.047	-0.008		34.1%	43.8%	-9.7%	-1.7%
0.117	0.086	0.138	-0.031	-0.021		25.1%	10.4%	14.7%	1.7%
0.062	0.071	0.045	0.009	0.017		3.00	2.80	0.20	1.2%
-0.179	-0.159	-0.151	0.020	-0.028		3.2%	3.7%	-0.5%	0.1%
-0.110	-0.082	-0.085	0.028	-0.025		14.5%	17.9%	-3.4%	0.4%
-0.122	-0.149	-0.041	-0.027	-0.081		6.3%	8.1%	-1.8%	0.2%
0.184	0.246	0.206	0.062	-0.022		5.7%	9.7%	-4.0%	0.4%
0.095	0.085	0.141	-0.010	-0.046		11.8%	8.0%	3.8%	0.4%
0.211	0.307	0.221	0.096	-0.010		4.0%	11.5%	-7.5%	-1.6%
0.027	0.085	0.058	0.058	-0.031		1.7%	4.3%	-2.6%	-0.1%
-0.643	-0.611	-0.526	0.032	-0.117		0.1%	11.3%	-11.2%	7.2%
0.122	0.065	0.019	-0.067	0.103		19.4%	2.2%	17.2%	2.1%
0.221	0.119	0.290	-0.102	-0.069		35.4%	31.7%	3.7%	0.8%
0.061	0.114	0.019	0.063	0.042		70.1%	66.8%	3.4%	3.7%
-0.063	-0.120	0.003	-0.057	-0.066		2.5%	3.4%	-0.9%	-0.1%
0.118	0.099	0.138	-0.019	-0.020		90.6%	80.5%	10.1%	1.2%
									15.2%
									55.7%
									9.2%

GPG

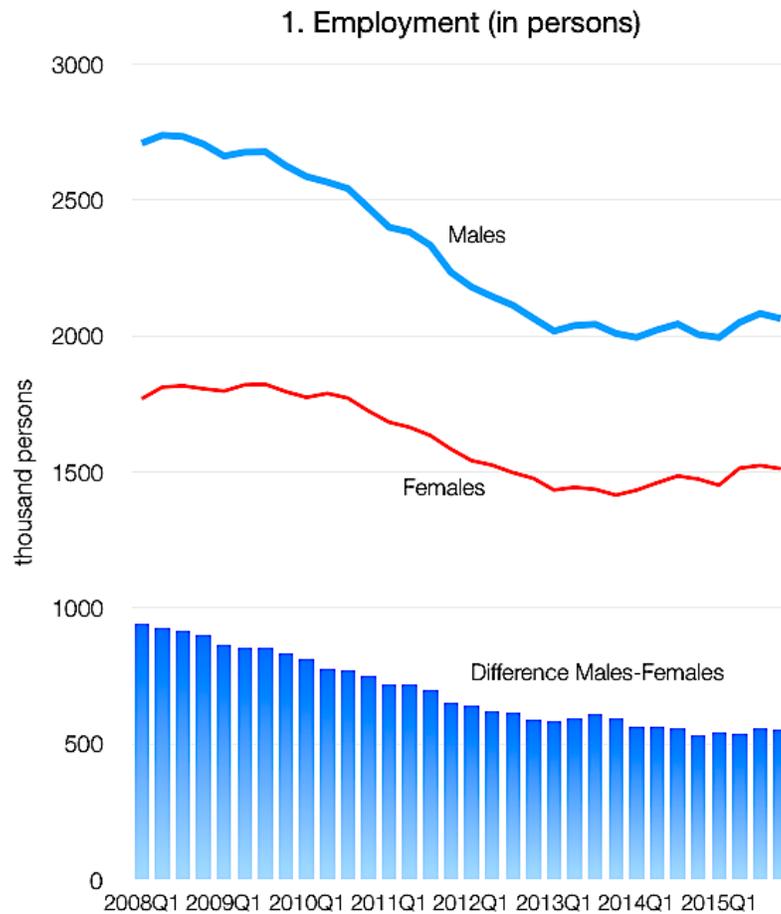
Table Cy6. Oaxaca and Ransom analysis (2014)

turns	Average Characteristics								
	β_m	β_f	$\beta_m - \beta_f$	$\beta^* - \beta_f$	cm-cf	X_m	X_f	$X_m - X_f$	$(X_m - X_f) \beta^* X$
	0.990	1.074			-8.4%				
	0.007	0.005	0.001	0.001		39.6	38.8	0.8	0.5%
	0.013	0.014	-0.001	0.000		9.3	8.0	1.3	1.8%
	0.055	0.109	-0.028	-0.026		43.5%	35.1%	8.4%	0.7%
	0.190	0.209	-0.004	-0.015		41.3%	49.0%	-7.7%	-1.5%
	0.112	0.126	-0.019	0.005		24.1%	11.3%	12.8%	1.7%
	0.085	0.052	0.014	0.019		2.89	2.71	0.18	1.3%
	-0.113	-0.195	0.049	0.033		3.3%	3.1%	0.2%	-0.0%
	-0.038	-0.061	0.023	0.000		14.8%	16.6%	-1.8%	0.1%
	-0.174	-0.130	-0.011	-0.033		8.5%	9.8%	-1.3%	0.2%
	0.284	0.164	0.085	0.035		6.1%	9.9%	-3.8%	-0.8%
	0.097	0.114	-0.008	-0.009		11.1%	6.8%	4.3%	0.5%
	0.361	0.305	0.053	0.003		5.1%	11.8%	-6.7%	-2.1%
	0.027	0.097	-0.029	-0.041		1.9%	5.5%	-3.6%	-0.2%
	-0.673	-0.536	-0.116	-0.021		0.4%	12.3%	-11.9%	6.6%
	0.094	0.158	-0.034	-0.030		11.5%	1.2%	10.3%	1.3%
	0.203	0.342	-0.074	-0.065		38.8%	35.8%	3.0%	0.8%
	0.102	0.061	0.021	0.020		65.1%	62.3%	2.8%	0.2%
	-0.162	-0.066	-0.054	-0.042		8.8%	6.6%	2.2%	-0.2%
	0.180	0.112	0.036	0.032		88.9%	78.1%	10.8%	1.6%
									12.5%
									64.7%

2. Greece

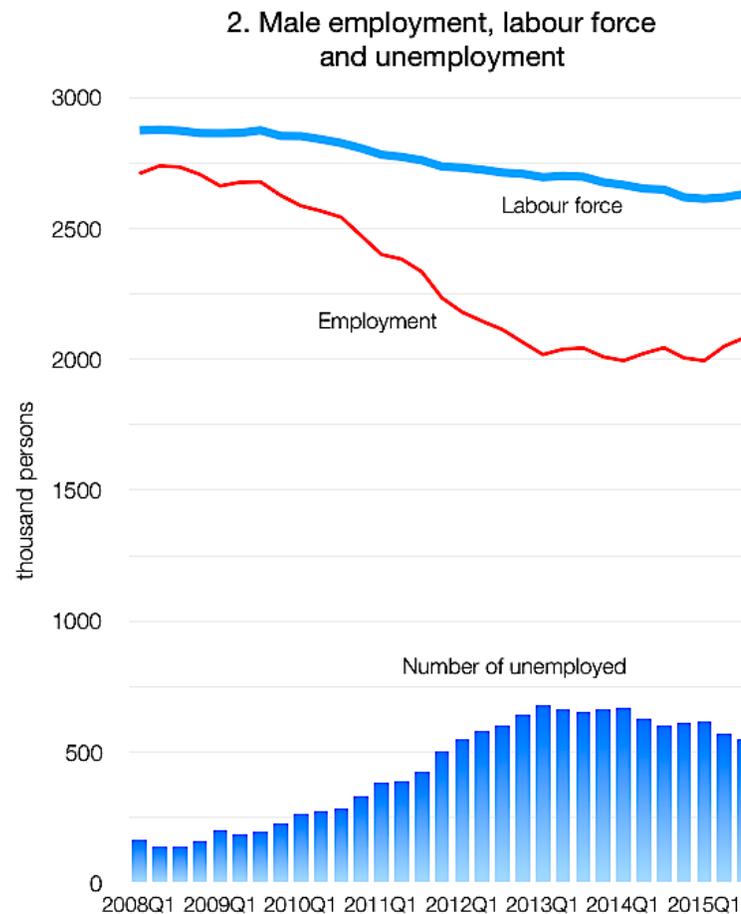
2.1. Trends in employment, labour force and unemployment

Male employment decreased in Greece from approximately 2,7 million persons in 2008Q1 to 2,0 in 2015Q3 (-627 thousand persons that is a fall of 24%) while female employment decreased by 246 thousand persons or 14,5% of employed persons in 2008Q1.



As depicted in figure 1, both male and female employment followed a linear decreasing trend until the end of 2012 although at a different pace. Since then, employment stagnated and even increased slightly during the second semester of 2014 and the first semester of 2015 following the loosening of the fiscal effort during that time (in view of general elections and during negotiations with the troika). Thus the difference between male and female employment decreased during the long depression of the Greek economy from 940 thousand persons in 2008Q1 to 560 thousand in 2015Q3, so there was a convergence of 41% in the employment gender gap. When employment is adjusted for gender differences in hours of work the corresponding convergence is 37%. The same conclusion holds when the analysis is done with employment rates instead of number of employed persons.

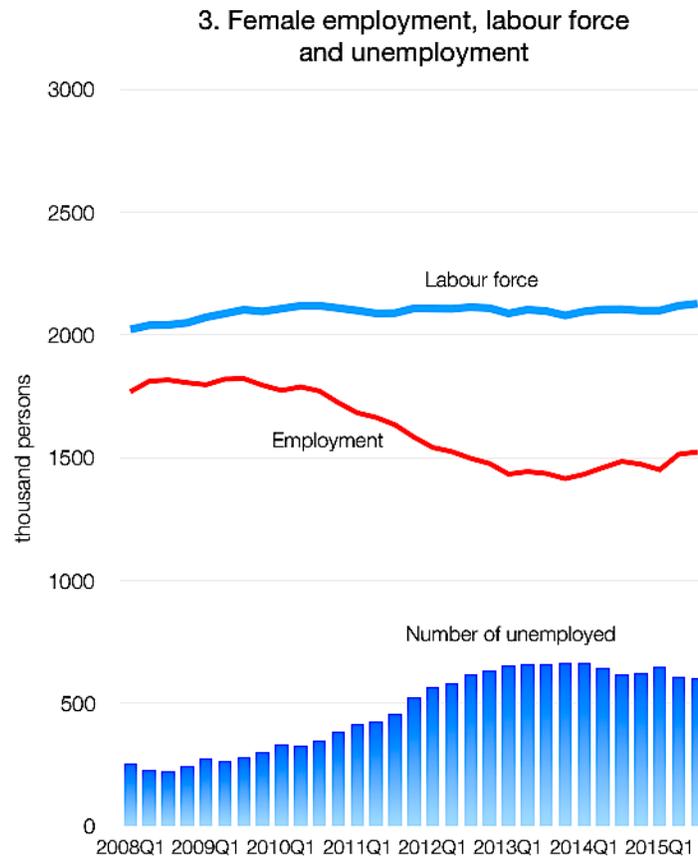
Just as in the case of Cyprus examined in section 1 of this report, the convergence in employment and employment rates, whether before or after adjustment for gender differences in hours of work, does not reflect an improvement in female employment but a relatively bigger drop in male employment because industries and sectors of activity in which male workers are predominant were disproportionately affected by the crisis. Hence, behind the striking narrowing of the gender employment gap lies a worsening of the conditions of workers of both sexes.

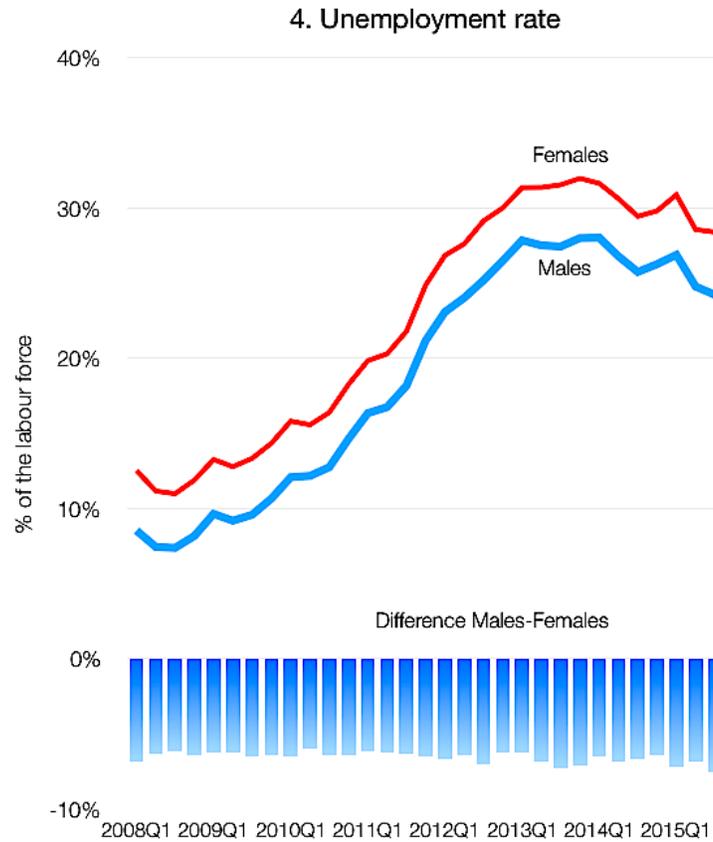


Since the beginning of the crisis and until the end of 2012, as male employment plummeted, the number of the unemployed surged (figure 2) in spite of falling male labour force (figure 2). Since 2013Q1 though, as employment remains broadly unchanged and the labour force keeps falling (as a result of falling male participation and shrinking population), the number of the unemployed decreases.

Female unemployment increased to a lesser extent as female job losses were less than the corresponding male losses. The female labour force increased somewhat (figure 3) following rising participation and albeit a 5% drop in population.

As in the case of Cyprus, analysed previously, the decrease in male participation can be attributed to the discouraged worker effect and the increase in female participation to the additional worker effect.





Male unemployment rate exceeded the corresponding female rate (figure 4) to the same degree as in the pre-crisis period (approximately seven percent points of the labour force). This stability though, dissimulated different realities for two sexes: During years of crisis 2008-2015, female unemployment surged as a result of lower employment and higher participation while male unemployment rose as a result of lower employment and despite discouragement and lower male population (which *ceteris paribus* lead to a fall in the unemployment rate).

2.2. Characteristics of male and female employees in 2008Q3 and 2014Q3

According to LFS, the number of male employees decreased by 480 thousand between 2008Q3 and 2014Q3. The corresponding drop in female wage labour was 230 thousand persons. That makes a total loss of 707 thousand workers, most of which are now long term unemployed.

The average characteristics of employees in 2008Q3 and 2014Q3 are shown in Table 1. In 2014Q3, female workers were 46,3% of employees against 42,3% in 2008Q3 as during the crisis male employment decreased faster than average.

There was some convergence in professional experience of the two sexes during the same period as differences in age and tenure gap narrowed and are now less than a year. Female workers preserved their educational advantage over male workers. The share of tertiary education in female employment exceeds remarkably the corresponding male figure.

Supervisor work is still a male job. In 2014Q3 there was still only one female supervisor for every two male employees supervising other workers.

Furthermore, men employees are somewhat more concentrated in bigger firms although the gender difference is not dramatic.

Male employment in construction collapsed and the advantage of well paid men in construction activities fade away during the crisis.

Methodological note

“Age” is a variable we use in the GPG regressions to describe the accumulation of professional experience. The marginal increase of professional experience with age may differ depending on the profession: in the case of higher qualification, professional experience and corresponding earnings increase rapidly and continuously with age while in the case of unskilled work increases are slower and lower. Therefore, we interpret higher (lower) marginal earnings respective to age in wage regressions as the result of higher (lower) qualification (depending on profession).

The participation of men increased in low earnings industries Trade and Accommodation and Restaurants as a result of the debacle in construction where earnings were higher than average. They remained preponderant in Transport, Public Administration and Metallurgy but remarkably lesser in Educational and Health Activities. Domestic Personnel is composed almost entirely by women.

In 2014Q3, two out of three women employees were working in five sectors of activity. They were somewhat more concentrated than in 2008Q3. Men on the contrary are much more dispersed in different activities.

Table 1. Average characteristics in 2008 and 2014

	2014Q3			2008Q3		
	Males	Females	Differences	Males	Females	Differences
Female	54%	46%	7,4%	58%	42%	15,4%
Age	40,5	39,8	0,7	39,2	38,0	1,2
Tenure	10,2	9,3	0,9	10,1	8,7	1,4
Tertiary Education	33,5%	43,7%	-10,2%	27,7%	37,6%	-9,9%
Upper Secondary Education	46,3%	41,7%	4,6%	56,2%	52,7%	3,5%
Supervision	15,0%	8,8%	6,2%	12,6%	7,7%	4,9%
log size of unit	2,778	2,654	0,120	2,650	2,500	0,090
Construction	7,0%	0,4%	6,6%	15,8%	0,5%	15,3%
Transport	5,3%	1,1%	4,2%	5,0%	0,9%	4,1%
Metallurgy	2,6%	0,3%	2,3%	2,8%	0,4%	2,4%
Telecommunications	0,8%	0,5%	0,3%	0,7%	0,5%	0,2%
Manufacturing of foods	3,2%	3,1%	0,1%	2,7%	2,7%	0,0%
Trade	14,9%	16,5%	-1,6%	10,2%	17,0%	-6,8%
Accommodation and	9,6%	10,8%	-1,2%	5,9%	8,2%	-2,3%
Financial Legal and	2,9%	5,3%	-2,4%	3,2%	5,9%	-2,7%
Public Administration	15,9%	10,9%	5,0%	13,3%	11,4%	1,9%
Educational Activities	7,5%	16,8%	-9,3%	6,1%	14,7%	-8,6%
Health Activities	3,7%	10,7%	-7,0%	3,1%	8,8%	-5,7%
Domestic Personnel	0,2%	4,4%	-4,2%	0,2%	5,4%	-5,2%
Other	42,1%	21,5%	20,6%	55,3%	25,9%	29,4%
Qualified occupations	26,5%	37,7%	-11,2%	25,2%	36,3%	-11,1%
Married	61,1%	59,5%	1,6%	58,4%	58,2%	0,2%
was Unemployed last year	7,0%	6,6%	0,4%	2,2%	4,0%	-1,8%
Greek	90,9%	92,2%	-1,3%	86,6%	90,6%	-4,0%
Temporary	13,0%	13,9%	-0,9%	10,7%	14,7%	-4,0%

Nevertheless, the concentration of female workers in relatively few sectors of activity is not an obvious disadvantage since almost 30% of women are working in Educational Activities and Public Administration where earnings are higher once adjusted for individual, job and firm characteristics. The high share of female employees in these activities, as well as in Health Activities, is reflected in the high share of women in jobs of high qualification: we find one out of three women working in managerial, scientific, professional and technical occupations (ISCO 1, 2 and 3 respectively) against one out of four men.

According to LFS 2014Q3, 10% of employees were not Greek compared with 13% in 2008Q3. It is well known that the presence of immigrants in the Greek labour markets is much more important than it appears in statistics. Since the early 1990s there was massive inflow of immigrants mostly from the Balkans in the secondary segment of the labour market. Approximately half of the immigrants are female workers many of them occupied in the sector of households as domestic personnel. During the neoliberal era, in Greece, social reproduction activities have been partly relocated from public institutions into the private household, and many use values produced domestically have been replaced to a large extent by commodities. Female labour reserves have been thus dragged into the labour market to earn income and temporary foreign migrant workers perform live-in domestic work such as cleaning, elder care, cooking, and other household tasks. The work of these immigrants is in most cases undeclared and one can assume that LFS data underestimate severely the number of immigrant workers. The comparison of data on domestic work between Greece and Cyprus, two countries in which structures of social reproduction are similar is revealing: Undeclared domestic work of female immigrants is obviously much higher in Greece than in Cyprus where 12% of female employees were domestic personnel against 5% in Greece, Individual wage regressions show that unemployed workers when hired obtain 8% lower hourly earnings than workers of the same characteristics (individual, job and firm specific characteristics). In 2008Q3 there were only 2,2% male and 4,0% female workers that were unemployed in 2007Q3. In 2014Q3, the corresponding figures were 7,0% and 6,6%.

The labour market in Greece is segmented along three major dividing lines:

- first, skilled intellectual work / less skilled and unskilled work,
- second, supervisors / supervised employees, and
- third, workers of high / low professional experience job or firm specific (tenure exceeding 10 years).

By applying standard statistical techniques of classification we find that gender is less important than these major dividing lines in determining the structure of wage labour in Greece. However, to analyse the position of women in wage labour we force gender in

the classification analysis. The results are shown in figure 6 for the third quarter of 2014 and figure 7 for the third quarter of 2008.

SEGMENTATION, HIERARCHIES AND THE GENDER PAY GAP IN THE HUNGARIAN LABOUR MARKET (2014)

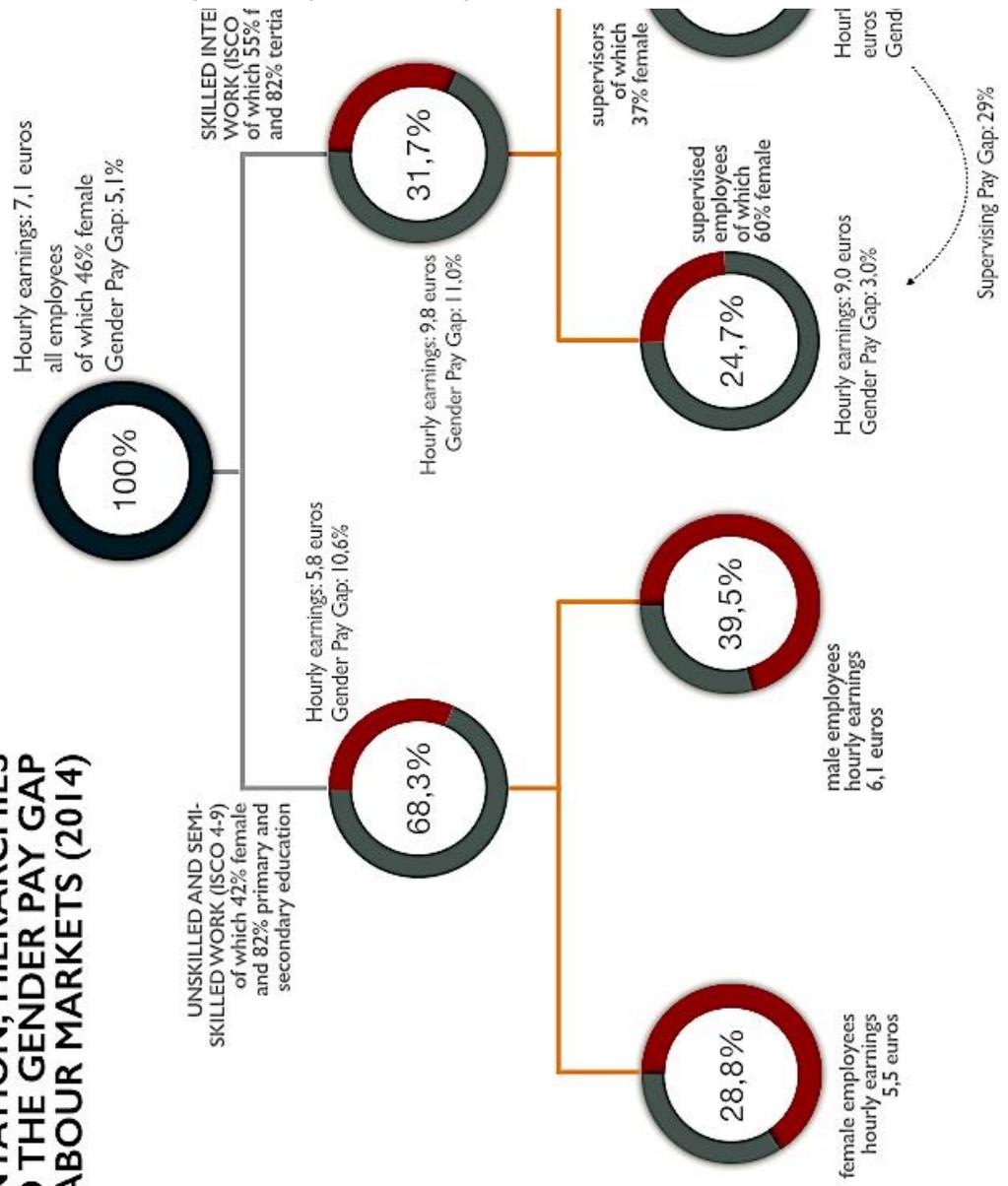


Figure 6. Segments of wage labour in 2014

In 2014Q3, approximately one out of three employees was working in the skilled intellectual work segment (“upper segment” of wage labour). 82% of these employees had tertiary education (figure 6). 68% of employees were working in the less skilled and unskilled work segment (“lower segment”) in which 82% employees had primary or secondary education. Average gross hourly earnings in the lower segment were 41% lower than the corresponding average in the upper segment.

The unadjusted GPG in the upper segment was 11% compared with 10,6% in the lower segment. The paradox that the gap both main segments of wage labour is higher than the average gap in total economy (5,1%) is due to the poor quality of the Gender Pay Gap index: the average gap in total economy is not the simple or the weighted average of GPG in its constituent segments (except in the marginal case that workers of the two sexes are evenly distributed in the segments).

The lower segment is divided by gender in two fractions in which average hourly earnings of women was 6,1 euros against 7,1 euros for male employees.

We have not been able to distinguish a female fraction of *Cleaners and Helpers* (as in the case of Cyprus) because of massive undeclared immigrant work.

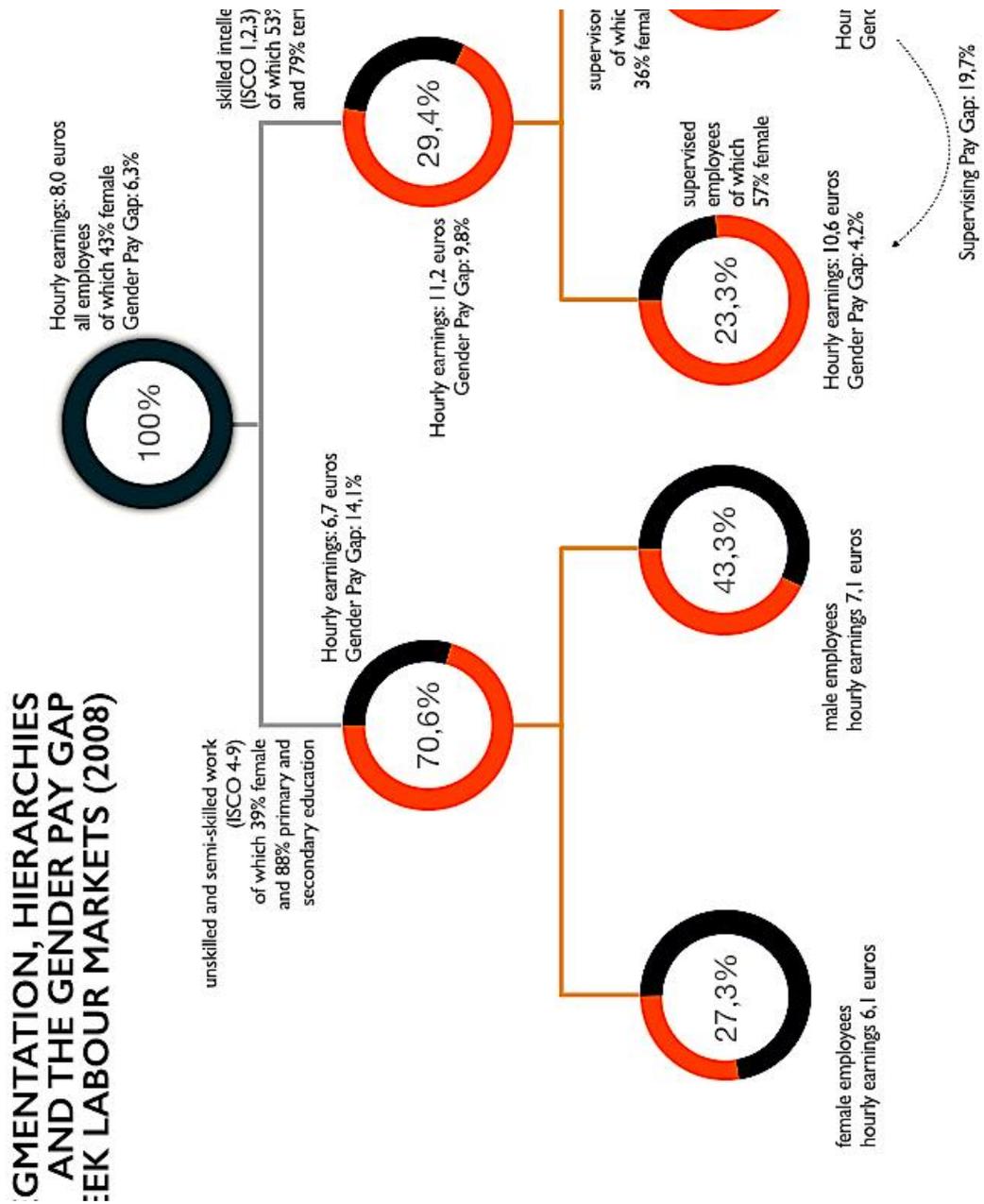
A large pay gap (almost 30%) can be observed into the upper segment between supervising and supervised employees. Supervision increases hourly pay by 80% relative to the average of total labour earnings. There is only 37% of women benefiting from high pay in the supervising fraction of employees. In the upper segment we find also a second fraction of employees composed of scientific and skilled technical workers, in which the average hourly wage is 27% higher than the average of total earnings and where the participation rate of women is high (60%).

Figure 7 shows that the structure of wage labour in 2014Q3 remained broadly unchanged throughout the years of crisis although some small changes occurred concerning the GPG:

- The unadjusted GPG remains small and decreased from 6,3% in 2008 to 5,1% in 2014. Nevertheless, unadjusted GPG is much higher in separate segments due to poor quality of the GPG index. While unadjusted GPG is around 11% in each one of the principal segments of wage labour (upper and lower segments as described above, the GPG in total economy was 5,1%.
- The share of the upper segment in total employment increased by 2 percent points.
- The share of women in the supervising fraction, where wage decreases were very small during the crisis, remained almost unchanged while increasing in the “scientific and skilled technical” fraction where wages

decreased by 15%. As a result, the unadjusted GPG increased from 9,8% in 2008Q3 to 11,0% in 2014Q3.

Figure 7. Segments of wage labour in 2008



- The share of employment in the lower segment contracted from 70% to 68% as a result of the crisis. It is still surprising that changes in the structure of wage labour were small given the tectonic changes in Greek economy and society during years of crisis 2008-2014.

- The only remarkable change in the structure of wage labour was in the lower segment where the share of unskilled and less skilled male workers in total employment decreased by 4 percent points. This loss of unskilled and less skilled male jobs was followed by a 14% reduction in the net hourly earnings of the corresponding fraction in the lower segment.
- Female average hourly earnings in the lower segment declined by approximately 10%. As a result, unadjusted GPG in the lower segment subsided from 14,1% to 10,6%.

As shown in figures 8 and 9, in 2014Q3 compared with 2008Q3 both female net hourly earnings were more concentrated in values lower than 6 euros per hour. The shift was somewhat more pronounced for men.

In other words, during years of crisis 2008 to 2014, the distribution of males has shifted to the left (that is to lower hourly earnings) concentrating more workers in the range of earnings below 6 euros per hour. That was true also for female workers but to a lesser degree. These gender-differentiated shifts led to the decrease in the unadjusted GPG in the lower segment of wage labour. It is worth noting again though, that this change in GPG is remarkably small in face of the colossal structural adjustment that the Greek economy underwent during crisis years 2008 to 2014.

It follows that lower unadjusted GPG in 2014 relative to 2008 is due to a deterioration in the condition of male unskilled and less skilled workers. Contrary to Cyprus, in Greece there was no improvement in the situation of female highly skilled employees in supervising duties leading to a narrowing of the GPG.

These conclusions are corroborated by the results of the decomposition of the GPG into its components, which is obtained applying the Oaxaca and Ransom technique on the LFS individual data of 2008Q3 and 2014Q3.

Figure 8. Distribution of individual hourly earnings by gender in 2014Q3

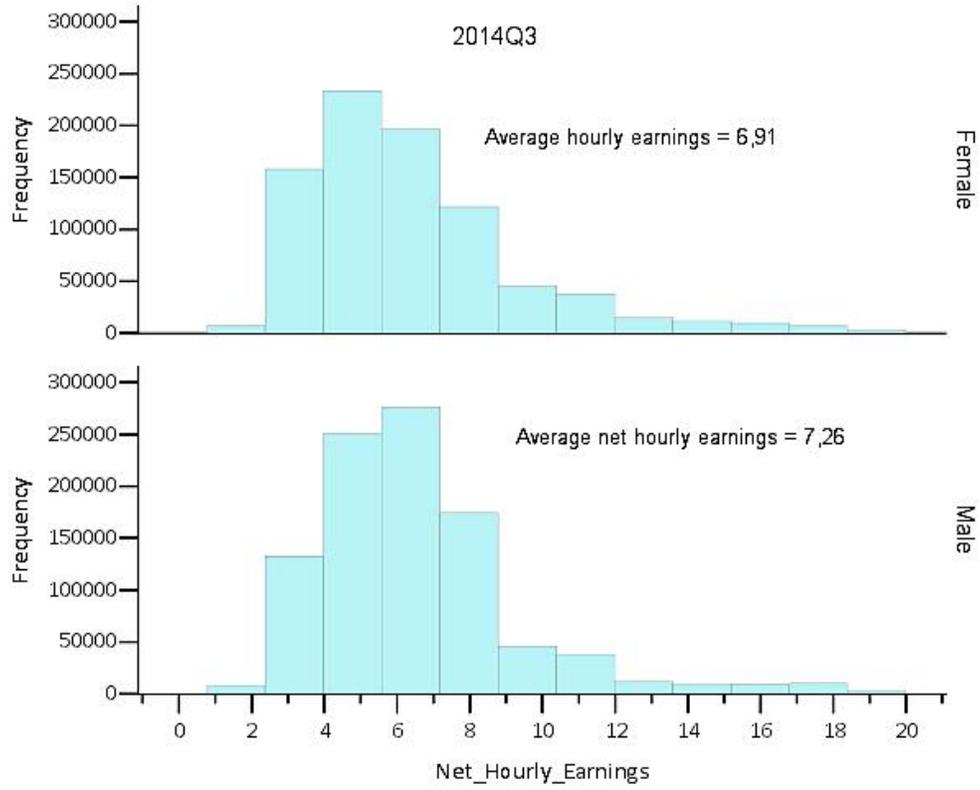
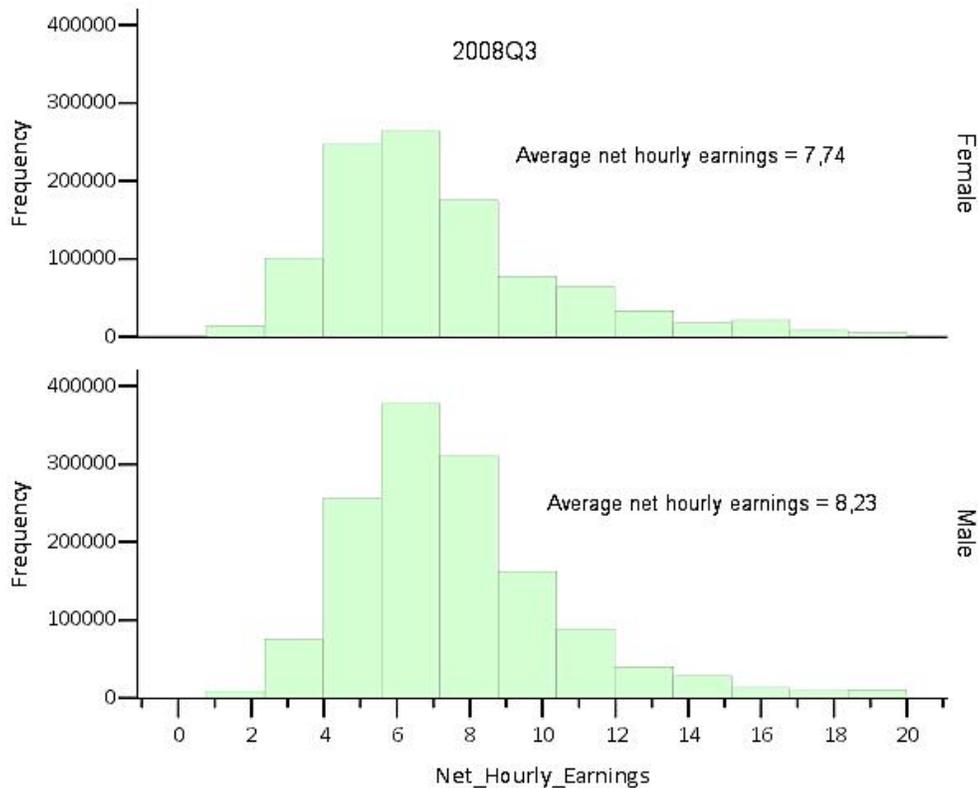


Figure 9. Distribution of individual hourly earnings by gender in 2008Q3



2.3. Decomposition of the gender pay gap

Considering the availability of LFS data, the independent variables of the equation for individual wages are Age (as a proxy for years of accumulated general work experience), Tenure for specific experience in current job, education attainment (Tertiary Education and Upper Secondary Education), Supervision for supervisory tasks, log size of unit for establishment size, Shift and Night Work, Part-time, Overtime, and Temporary for contracts of limited duration. We have also introduced into this equation other variables such as marital status and nationality. Dummy variables for industry and occupation are included in the equation as independent variables to describe industry / sector and occupational segregation.

The variables used for our empirical analysis are shown in Table 2. Variables found statistically not significant are not mentioned in the rest of the report.

The average characteristics of employees, males and females, and the gender differences are shown in Table 1 and described in paragraph 2.1.

Summing-up the analysis of average characteristics, between 2008Q3 and 2014Q3 there was not clearly a general improvement in average characteristics of women vis-a-vis men employees.

This absence of such a clear improvement is reflected in the results of the decomposition of GPG into its components: gender differences in average

characteristics added 1,5% percentage points to the GPG in 2014Q3 instead of 1,3% in 2008Q3 (Table 3).

On the contrary, average market prices paid for most observed characteristics have been increased for males relative to females (Table 2) except for education and health activities, public administration, trade, accommodation and manufacturing of foods and metal products.

A relative loss for women has been made in the reward of their educational advantage while they were losing ground in already weak positions (supervision, size of the unit and qualified intellectual work).

The results from the decomposition of the gender pay gap are presented in Table 3 below.

Table 2. Market prices paid for observed characteristics in 2008 and 2014

	Market prices paid for observed characteristics in 2014			Market prices paid for observed characteristics in 2008			Female Improvement (+)
	Males	Females	Difference	Males	Females	Difference	
Age	0,0051	0,0038	0,0013	0,0041	0,0043	-0,0002	-0,0015
Tenure	0,0068	0,0116	-0,0048	0,0084	0,0120	-0,0036	0,0012
Tertiary Education	0,168	0,183	-0,015	0,165	0,233	-0,068	-0,053
Upper Secondary Education	0,063	0,057	0,006	0,074	0,095	-0,021	-0,027
Supervision	0,189	0,150	0,039	0,125	0,114	0,011	-0,028
log size of unit	0,066	0,049	0,017	0,054	0,051	0,003	-0,014
Construction	0,037	-0,075	0,112	0,057	0,024	0,033	-0,079
Transport	0,111	0,106	0,005	0,068	0,202	-0,134	-0,139
Metallurgy	0,012	0,286	-0,274	-0,039	-0,066	0,027	0,301
Telecommunications	0,017	0,075	-0,058	-0,000	0,090	-0,090	-0,032
Manufacturing of foods	-0,130	-0,118	-0,012	-0,087	-0,098	0,011	0,023
Trade	-0,056	-0,010	-0,046	-0,052	-0,065	0,013	0,059
Accommodation and Restaurants	-0,027	-0,028	0,001	-0,045	-0,015	-0,030	-0,031
Financial Legal and Accounting Activities	0,132	0,128	0,004	0,080	0,085	-0,005	-0,009
Public Administration	0,008	0,080	-0,072	0,102	0,148	-0,046	0,026
Educational Activities	0,217	0,258	-0,041	0,357	0,344	0,013	0,054
Health Activities	-0,080	-0,047	-0,033	0,081	0,008	0,073	0,106
Domestic Personnel	0,028	-0,108	0,136	-0,124	-0,143	0,019	-0,117
ISCO123	0,202	0,202	0,000	0,163	0,178	-0,015	-0,015
Married	0,112	0,043	0,069	0,087	0,057	0,030	-0,039
was Unemployed last year	-0,077	-0,089	0,012	-0,069	-0,042	-0,027	-0,039
Greek	0,121	0,022	0,099	0,102	0,052	0,050	-0,049
Temporary	-0,057	0,025	-0,082	-0,094	-0,093	-0,001	0,081

Table 3. Decomposition of the gender pay gap in Greece

	2014Q3	2008Q3
	Percentage of pay gap	
1. Occupational and Industry / Sector Segregation effect	-2%	-0,8%
2. Gender differences in observed characteristics	1,5%	1,3%
1+2. Pre-market discrimination practices	-0,5%	0,5%
3. Different market prices by gender paid for observed characteristics = wage discrimination by employers.	13,5%	-2,4%
4. Gender differences in unobserved characteristics + measurement errors + wage discrimination by employers unrelated to observed characteristics	-7,9%	8,2%
3+4. Discrimination practiced by individual employers + Gender differences in unobserved characteristics + measurement errors	5,6%	5,8%
1 +2 +3 +4: Gender Pay Gap as percentage of the average male pay	5,1%	6,3%

The gap has been decomposed in four components:

The first component of the gender pay gap measures the impact of gender related employment segregation on the gap. It accounted for -2,0 percent points of the gender pay gap in 2014Q3 and -0,8 percent points in 2008Q3. It seems then that although gender occupational and sectoral segregation has little importance it contributes to the narrowing of the gap. This is explained mostly by the strong presence of female workers in the upper segment of wage-labour and in educational activities of the public sector. The contribution of segregation in the narrowing of the GPG became even more important during the crisis as male employment in the construction industry collapsed and the corresponding wages have been dramatically reduced.

The second component of the gap, which is gender differences in observed individual and firm characteristics, accounted for around 1,5 percent of the total gender pay gap both in 2014Q3 and 2008Q3.

The third component of the gap refers to wage discrimination related to gender differences in prices paid by employers for observed characteristics. Its contribution to the total gender pay gap while very small in 2008Q3 became very important in 2014Q3, as prices paid characteristics of men increased substantially.

The fourth component of the gap refers to gender differences in unobserved characteristics, measurement errors of observed characteristics, and wage discrimination by employers unrelated to observed characteristics. Its contribution to the total gap was 8,2% in 2008Q3 but -7,9% in 2014Q3.

The sum of the first and second components corresponds to pre-market discrimination *social practices*. It accounted for 0,5 percent points in 2008Q3 and -0,5 percent points in 2014Q3.

The sum of the third and fourth components corresponds to the upper bound of gender wage discrimination *practiced by individual employers*. Thus the upper bound does not exceed 5,6% in 2014Q3 and 5,8% in 2008Q3.

Summing-up, gender discrimination in Greece between 2008Q3 and 2014Q3, emanating whether by social practices or by individual employers choices, remained practically unchanged.

What is remarkable in the data is that during years of crisis there were high increases in market prices paid by employers for observed characteristics of male employees. We interpret this paradox as the result of a *creaming off* of male labour power that is the surge in skills between 2008 and 2014 as the effect of job losses during the crisis. The unobserved skills of workers who lost their jobs between 2008Q3 and 2014Q3 were fewer or of a lesser quality than average, so that workers who survived the crisis possess more or higher quality skills and the independent variables capture now skills of a higher quality and higher labour productivity than before. The negative sign of the fourth component of the GPG (table 3), which describes gender differences in unobserved characteristics plus measurement errors plus wage discrimination by employers unrelated to observed characteristics, corroborates the above interpretation: if independent variables could be adjusted for capturing unobserved skills, we would expect the sign of the fourth component of the GPG to turn from negative to positive.

This effect of *creaming off* of the more productive male workers does holds also for female employees but to a lesser extent, since female employees are better placed in the relatively protected upper segment of wage-labour. Even in the lower segment, male jobs were affected more than female jobs.

The low values of GPG in Greece are partly due to the following factors:

- The high participation of female workers in the public sector and education activities (which are mostly public). In the private sector of the economy the gap was 9,4% in 2014Q3 instead of 5,1% in the whole economy.

- Domestic personnel is severely underestimated as in most cases it is undeclared.

Segmentation, hierarchies and the gender pay gap in the Greek business sector are shown in figures 10 and 11 (for 2014Q3 and 2008Q3 correspondingly). As depicted in these figures, the GPG is almost twice higher in the business sector compared with the gap in total economy. This is due to the very low GPG in the public sector, which predominates in Public Administration, Education and Health where female workers are highly concentrated. The division between skilled intellectual work on the one hand and unskilled and semi-skilled work on the other is equally deep in the business sector and total economy (the corresponding gap is almost 40% in both cases). The average hourly earnings in the business sector are approximately 10% lower than in total economy. The scientific and technical staff in the business sector is clearly lower than in the public sector. While 2 out of 3 of workers are unskilled and semi-skilled in total economy, the corresponding ratio for the business sector is 4 out of five. Six out of ten are unskilled and semi-skilled and have a rather short job and firm specific professional experience (less than 10 years) compared to only three out of ten in total economy.

Figure 10. Segments of wage labour in the Greek business sector (2014)

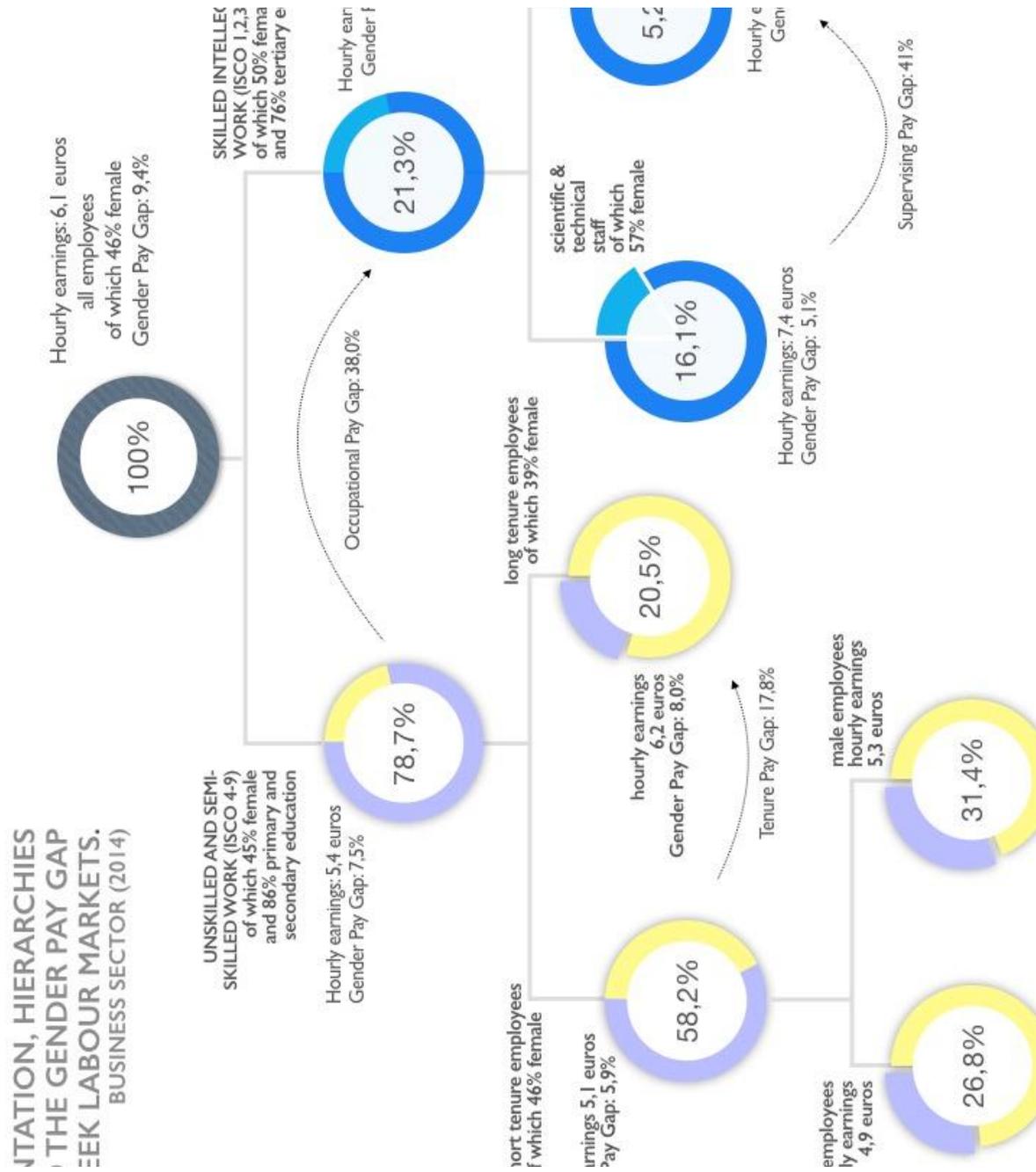
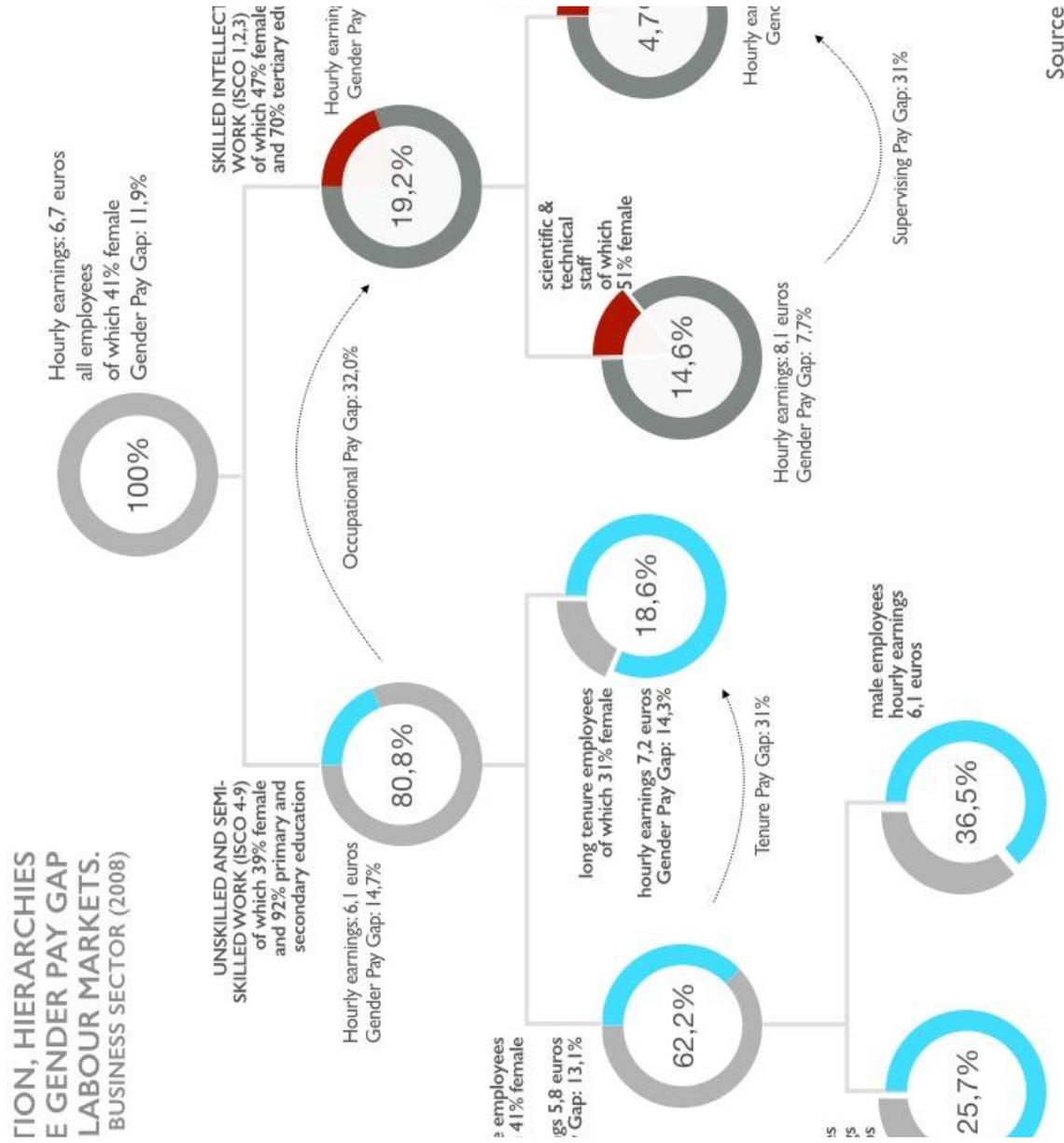


Figure 11. Segments of wage labour in the Greek business sector (2008)



Source

2.4. Summing-up the results for Greece

The structure of wage labour, as depicted in figures 6,7,10,11, remained broadly unchanged throughout the years of crisis. However, some important changes occurred from the point of view of the GPG:

The same divisions as in the case of Cyprus generate a structure of wage labour including an “upper segment” defined as the *skilled, intellectual and supervising work* segment and a “lower segment” defined as the *less skilled and unskilled work* segment. In 2014, approximately one out of three employees was working in the upper segment but the ratio was one out of five in the business sector. Four out of five of these employees had tertiary education. 63,1% of employees were working in the lower segment (78,7% in the business sector) in which four out of five of these employees had primary or secondary education. The average gross hourly earnings in the lower segment was 40% lower than the corresponding average in the upper segment (whether in business or public sector).

The unadjusted Gender Pay Gap (GPG) in the upper segment of *total economy* was 11,0% compared with 10,6% in the lower segment and an overall GPG of 5,1%. The unadjusted Gender Pay Gap (GPG) in the upper segment of *the business sector* was 19,2% compared with 7,5% in the lower segment and an overall GPG of 9,4%. These important differences are due to the strong presence of female work in the public sector, especially in Education, Health and Public Administration where the pay gap is very low. The upper segment of wage labour was affected by the crisis less than the lower segment: its share in total employment increased and average hourly earnings of supervisors in the business sector increased by 7%. On the contrary, male employment in the lower segment with less than 10 years of tenure have been hit hard by the crisis as industries, sectors of activity and occupations in which they are predominant declined. The corresponding average hourly earnings dropped by 14% in both the total economy and the business sector. As a result, the GPG in the lower segment of the total economy decreased by 3,5 percent points. The decrease was impressive in the business sector where it reached 7,2 percent points.

As in the case of Cyprus, male unemployment reflects lower employment but female unemployment originates not only from lower employment but also because women participate now more in the labour market to compensate for actual or expected losses of income resulting from unemployment, lower wages and lower social benefits.

It follows from the analysis shown in figures 6,7,10,11, that firstly, the narrowing of the GPG in the lower segment during the crisis does not reflect an improvement in the condition of female workers but a deterioration in the condition of male workers, and secondly, that the increase in the upper segment is the result of increases in earnings of the top 5% of male executives. This is a notable difference with Cyprus, where the increase of the top 5% earnings was captured mostly by women. In Greece, more

educated female employees did not benefit from this shift towards higher earnings of the top 5% as men increased their share at the managerial level.

During the crisis, the male distribution of hourly earnings of male unskilled and less skilled workers shifted towards lower values and the distribution of skilled male supervisors shifted to higher values. The decrease in the overall effect on GPG is the composition of these opposite movements (an increase of GPG in the upper segment and a decrease in the lower segment). Since the volume of the lower segment is much larger than the corresponding volume of the upper segment (4 to 1 in the business sector and 2 to 1 in total economy) the decrease of GPG in unskilled and semi-skilled work outweigh the increase of GPG in skilled work.

The low values of the GPG in total economy, both in 2008 and 2014, are due to the high participation of female workers in the public sector and education activities (which are mostly public). In the private sector of the economy the gap was 9,4% in 2014Q3 instead of 5,1% in the whole economy. Moreover, domestic personnel is severely underestimated as in most cases it is undeclared.

Annex of Tables Gr

Table Gr1. Individual wage equation for men (2008Q3)

2008	Male employees	Unstandardised Coefficients		Standardised Coefficients		
	Adjusted R2=0,496	B	Std. Error	Beta	t	Sig.
(Constant)		1,027	0,002		627,061	0,000
Age		0,0041	0,000	0,107	119,828	0,000
Tenure		0,0084	0,000	0,183	217,246	0,000
Tertiary Education		0,165	0,001	0,172	154,88	0,000
Secondary Education		0,074	0,001	0,086	97,312	0,000
Supervision		0,125	0,001	0,098	148,435	0,000
ln_size		0,054	0	0,129	191,389	0,000
Construction		0,057	0,001	0,049	66,029	0,000
Transport		0,068	0,001	0,034	54,081	0,000
Metallurgy		-0,039	0,002	-0,015	-24,58	0,000
Telecom		-4,07E-05	0,003	0,000	-0,014	0,989
Manufacturing of food		-0,087	0,002	-0,035	-55,749	0,000
Trade		-0,052	0,001	-0,037	-55,385	0,000
Accommodation and Restaurants		-0,045	0,001	-0,024	-37,115	0,000
Financial Legal Accounting Activities		0,08	0,002	0,032	50,947	0,000
Public Administration		0,102	0,001	0,083	115,551	0,000
Educational Activities		0,357	0,001	0,203	278,969	0,000
Health Activities		0,081	0,002	0,033	51,646	0,000
Domestic Personnel		-0,124	0,006	-0,013	-22,342	0,000
ISCO123		0,163	0,001	0,163	190,4	0,000
Married		0,087	0,001	0,099	135,588	0,000
was Unemployed last year		-0,069	0,002	-0,023	-37,085	0,000
Greek		0,102	0,001	0,083	121,387	0,000
Temporary work		-0,094	0,001	-0,067	-103,791	0,000

Table Gr2. Individual wage equation for women (2008Q3)

2008	Female employees	Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	t	Sig.
	Adjusted R2=0,536					
(Constant)		0,918	0,003		360,405	0,000
Age		0,0043	0,000	0,089	95,075	0,000
Tenure		0,012	0,000	0,210	219,278	0,000
Tertiary Education		0,233	0,001	0,233	161,428	0,000
Secondary Education		0,095	0,001	0,099	78,072	0,000
Supervision		0,114	0,001	0,064	91,195	0,000
ln_size		0,051	0,000	0,105	142,903	0,000
Construction		0,024	0,005	0,003	4,883	0,000
Transport		0,202	0,004	0,037	54,969	0,000
Metallurgy		-0,066	0,005	-0,009	-13,924	0,000
Telecom		0,09	0,005	0,013	18,955	0,000
Manufacturing of food		-0,098	0,002	-0,034	-47,965	0,000
Trade		-0,065	0,001	-0,05	-61,511	0,000
Accommodation and Restaurants		-0,015	0,001	-0,008	-10,621	0,000
Financial Legal Accounting Activities		0,085	0,002	0,041	55,735	0,000
Public Administration		0,148	0,001	0,098	123,479	0,000
Educational Activities		0,344	0,001	0,256	282,945	0,000
Health Activities		0,008	0,001	0,004	5,682	0,000
Domestic Personnel		-0,143	0,002	-0,067	-77,212	0,000
ISCO123		0,178	0,001	0,177	181,421	0,000
Married		0,057	0,001	0,058	80,45	0,000
was Unemployed last year		-0,042	0,002	-0,016	-23,448	0,000
Greek		0,052	0,001	0,032	37,829	0,000
Temporary work		-0,093	0,001	-0,067	-92,534	0,000

Table Gr3. Individual wage equation for men (2014Q3)

2014Q3 Male employees	Unstandardised Coefficients		Standardised Coefficients		
	B	Std. Error	Beta	t	Sig.
Adjusted R2=0,456					
(Constant)	0,786	0,002		357,206	0,000
Age	0,0051	0,000	0,113	110,803	0,000
Tenure	0,0068	0,000	0,134	134,345	0,000
Tertiary Education	0,168	0,001	0,17	133,243	0,000
Secondary Education	0,063	0,001	0,068	64,367	0,000
Supervision	0,189	0,001	0,145	180,482	0,000
ln_size	0,066	0,000	0,15	180,462	0,000
Construction	0,037	0,002	0,02	24,632	0,000
Transport	0,111	0,002	0,053	67,732	0,000
Metallurgy	0,012	0,002	0,004	5,36	0,000
Telecom	0,017	0,004	0,003	4,455	0,000
Manufacturing of food	-0,13	0,002	-0,049	-63,748	0,000
Trade	-0,056	0,001	-0,043	-48,995	0,000
Accommodation and Restaurants	-0,027	0,001	-0,017	-20,212	0,000
Financial Legal Accounting Activities	0,132	0,002	0,047	61,098	0,000
Public Administration	0,008	0,001	0,007	7,17	0,000
Educational Activities	0,217	0,002	0,122	136,839	0,000
Health Activities	-0,08	0,002	-0,032	-40,849	0,000
Domestic Personnel	0,028	0,008	0,003	3,656	0,000
ISCO123	0,202	0,001	0,191	184,311	0,000
Married	0,112	0,001	0,117	133,199	0,000
was Unemployed last year	-0,077	0,001	-0,042	-52,667	0,000
Greek	0,121	0,001	0,075	91,231	0,000
Temporary work	-0,057	0,001	-0,041	-49,968	0,000

Table Gr4. Individual wage equation for women (2014Q3)

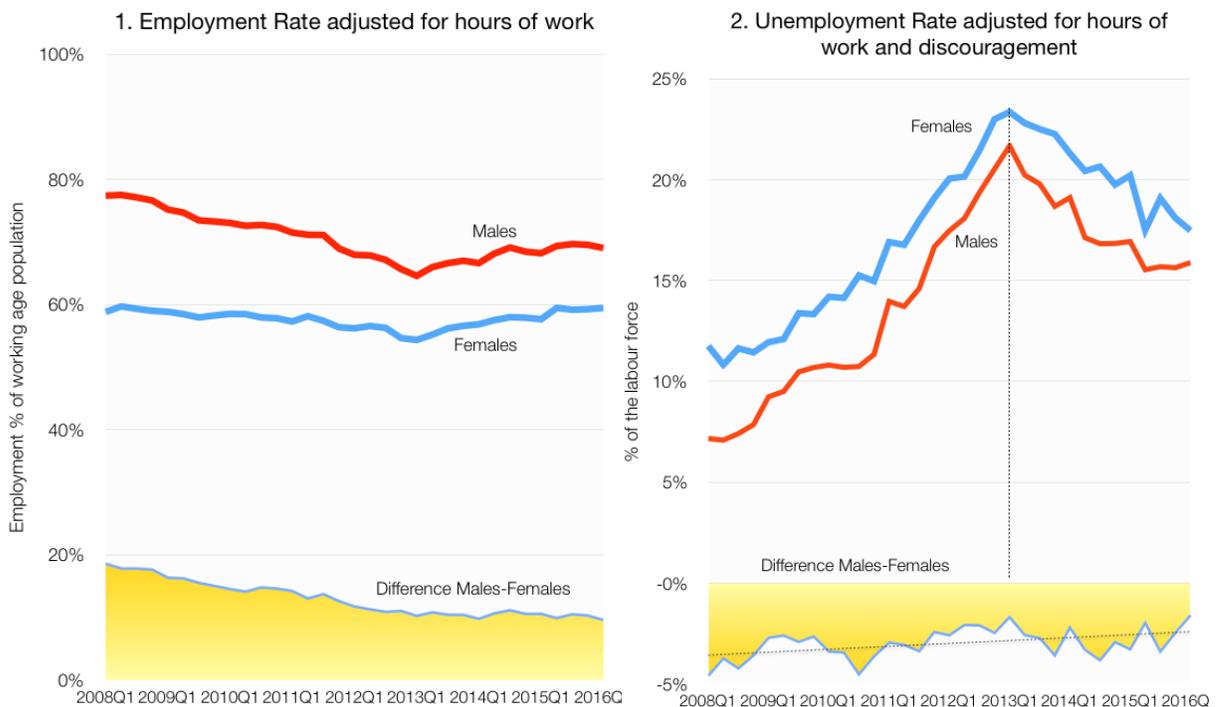
2014Q3 Female employees	Unstandardised Coefficients		Standardised Coefficients		
	B	Std. Error	Beta	t	Sig.
Adjusted R2=0,457					
(Constant)	0,869	0,003		314,706	0,000
Age	0,0038	0,000	0,078	76,282	0,000
Tenure	0,0116	0,000	0,209	190,381	0,000
Tertiary Education	0,183	0,001	0,19	125,252	0,000
Secondary Education	0,057	0,001	0,059	46,194	0,000
Supervision	0,15	0,001	0,09	106,8	0,000
ln_size	0,049	0	0,105	119,788	0,000
Construction	-0,075	0,006	-0,01	-12,663	0,000
Transport	0,106	0,004	0,023	28,454	0,000
Metallurgy	0,286	0,007	0,032	39,907	0,000
Telecom	0,075	0,005	0,011	13,696	0,000
Manufacturing of food	-0,118	0,002	-0,043	-50,518	0,000
Trade	-0,01	0,001	-0,007	-7,419	0,000
Accommodation and Restaurants	-0,028	0,002	-0,018	-18,385	0,000
Financial Legal Accounting Activities	0,128	0,002	0,06	67,36	0,000
Public Administration	0,08	0,001	0,052	53,801	0,000
Educational Activities	0,258	0,001	0,203	178,864	0,000
Health Activities	-0,047	0,002	-0,031	-31,216	0,000
Domestic Personnel	-0,108	0,002	-0,046	-47,741	0,000
ISCO123	0,202	0,001	0,206	174,616	0,000
Married	0,043	0,001	0,044	51,526	0,000
was Unemployed last year	-0,089	0,002	-0,046	-54,973	0,000
Greek	0,022	0,002	0,013	13,52	0,000
Temporary work	0,025	0,001	0,018	20,068	0,000

Table Gr6. Oaxaca and Ransom analysis (2014)

Returns	Average Characteristics											
	β_m	β_f	$\beta_m - \beta_f$	$\beta^* - \beta_f$	cm-cf	Xm	Xf	Xm-Xf	$(Xm-Xf)\beta^*$	$Xm(\beta_m - \beta_f^*)$	$Xf(\beta^* - \beta_f)$	cm-cf
	0.786	0.669			-8.3%	40.5	39.8	0.7	0.3%	1.2%	4.0%	-8.3%
t	0.0051	0.0038	0.0003	0.0010		10.2	9.3	0.9	0.8%	-2.2%	-2.4%	
	0.0088	0.0116	-0.0022	-0.0026		33.5%	43.7%	-10.2%	-1.8%	-0.2%	-0.4%	
	0.188	0.183	-0.0050	-0.0100		46.3%	41.7%	4.6%	0.3%	0.0%	0.2%	
	0.063	0.057	0.0010	0.0050		15.0%	8.8%	6.2%	1.2%	0.0%	0.3%	
	0.189	0.150	0.0020	0.0370		2.778	2.654	0.12	0.7%	1.9%	2.7%	
	0.066	0.049	0.0070	0.0100		7.0%	0.4%	6.6%	0.4%	-0.1%	0.1%	
	0.037	-0.075	-0.0170	0.1290		5.3%	1.1%	4.2%	0.6%	-0.2%	0.0%	
	0.111	0.106	-0.0300	0.0350		2.6%	0.3%	2.3%	0.2%	-0.2%	-0.1%	
	0.012	0.286	-0.0610	-0.2130		0.8%	0.5%	0.3%	0.0%	-0.0%	-0.0%	
	0.017	0.075	-0.0280	-0.0300		3.2%	3.1%	0.1%	-0.0%	0.0%	-0.0%	
	-0.190	-0.118	0.0010	-0.0130		14.9%	16.5%	-1.6%	0.1%	-0.2%	-0.5%	
	-0.056	-0.010	-0.0130	-0.0330		9.6%	10.8%	-1.2%	0.0%	0.1%	-0.1%	
	-0.027	-0.028	0.0070	-0.0060		2.9%	5.3%	-2.4%	-0.3%	0.1%	-0.1%	
	0.132	0.128	0.0230	-0.0190		15.9%	10.9%	5.0%	0.2%	-0.5%	-0.5%	
	0.008	0.080	-0.0290	-0.0430		7.5%	16.8%	-9.3%	-2.1%	-0.0%	-0.6%	
	0.217	0.258	-0.0060	-0.0350		3.7%	10.7%	-7.0%	0.6%	0.0%	-0.4%	
	-0.080	-0.047	0.0090	-0.0420		0.2%	4.4%	-4.2%	0.5%	0.0%	-0.1%	
	0.028	-0.108	0.1490	-0.0130		26.5%	37.7%	-11.2%	-2.3%	-0.1%	0.1%	
	0.202	0.202	-0.0020	0.0020		61.1%	59.5%	1.6%	0.1%	2.1%	2.0%	
	0.112	0.043	0.0350	0.0340		7.0%	6.6%	0.4%	-0.0%	0.0%	0.1%	
	-0.077	-0.089	0.0020	0.0100		90.9%	92.2%	-1.3%	-0.1%	3.8%	5.3%	
	0.121	0.022	0.0420	0.0570		13.0%	13.9%	-0.9%	0.0%	-0.5%	-0.6%	
	-0.057	0.025	-0.0360	-0.0440								
	1.962	1.933		4.9%	GFG				-0.5%	5.3%	8.6%	-6.3%

3. Portugal

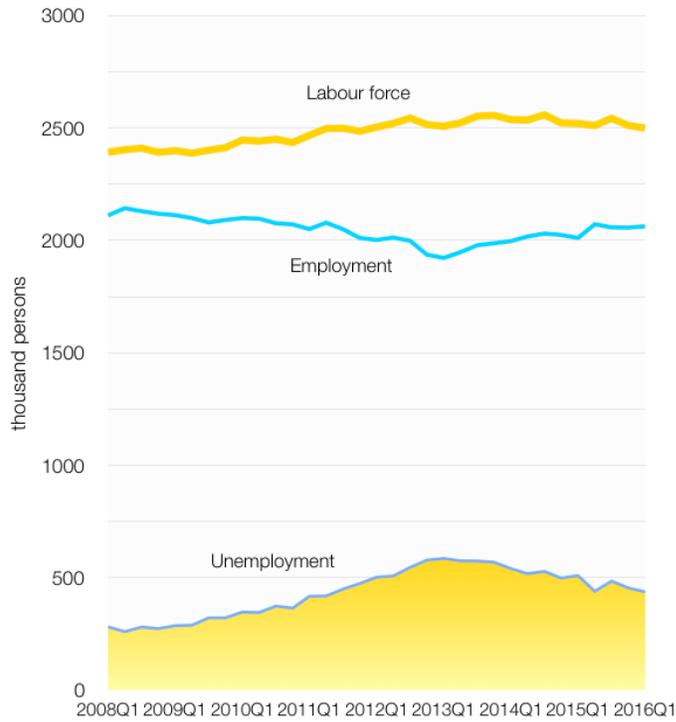
Male employment rate adjusted for hours of work decreased in Portugal from approximately 80% in 2008Q1 to 70% in 2016Q1 while female employment rate remained roughly unchanged at 60%. It is evident then that full convergence in male and female employment is not achieved although significant progress has been made. Nevertheless, as in the case of Cyprus and Greece, gender differences in part-time and thus in hours of work lead to an overestimation of the convergence. The gender employment rate gap, after adjustment for hours of work, was 10% in 2016Q1 compared to approximately 20% in 2008Q1 (figure 1). It is evident then that although there is convergence in male and female employment rates, a considerable gap persists.



The convergence in employment rates reflects the expansion of female part-time and the decline in male employment because industries and sectors of activity in which male workers are predominant were affected harshly by the crisis. It is thus the worsening of the conditions of workers of both sexes that is reflected in the narrowing of the gender employment gap.

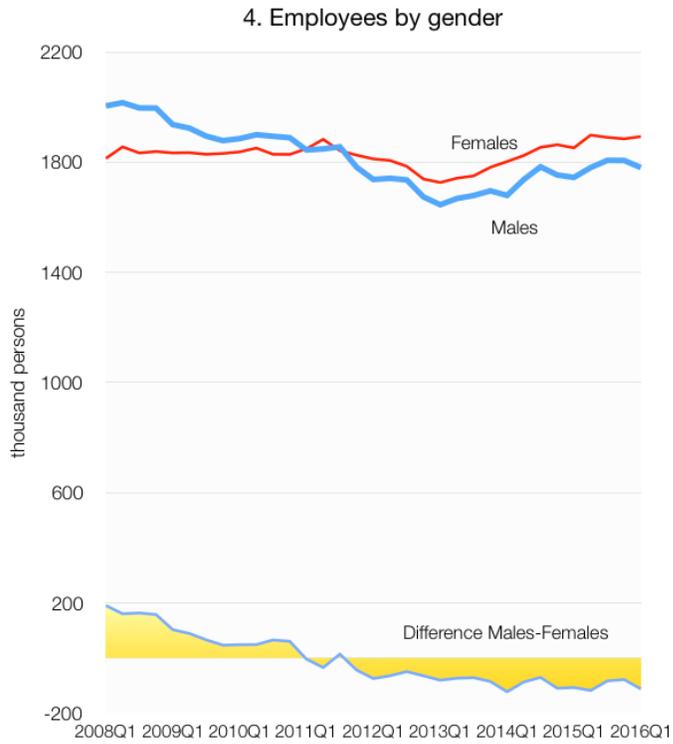
Male and female unemployment rates have converged in Portugal. Once adjusted for hours of work and discouraged workers (figure 2), the female unemployment rate curve shifts upwards and it becomes evident that female workers in Portugal are still affected by unemployment more than males.

3. Female employment, labour force and unemployment adjusted for hours of work and discouragement



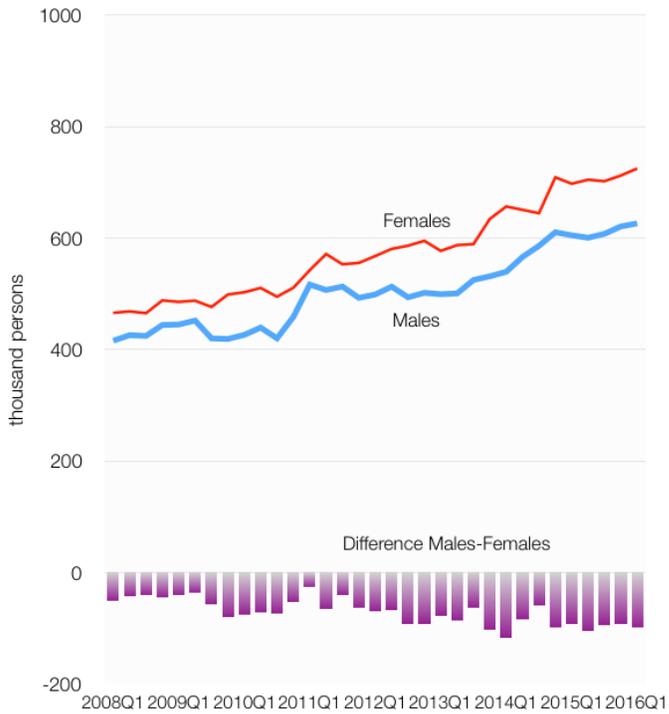
From the beginning of the crisis and until 2013Q1, the falling trend in female employment (adjusted for hours of work) combined to rising labour force (adjusted for hours of work and discouraged workers) led to increased unemployment (figure 3). Since then, as employment recovers and the labour force remains constant, the number of female unemployed persons decreases.

Male labour force, on the other hand, decreased monotonically during the crisis; this can be attributed to the discouraged worker effect, while persistent female participation rates are probably due to the additional worker effect.

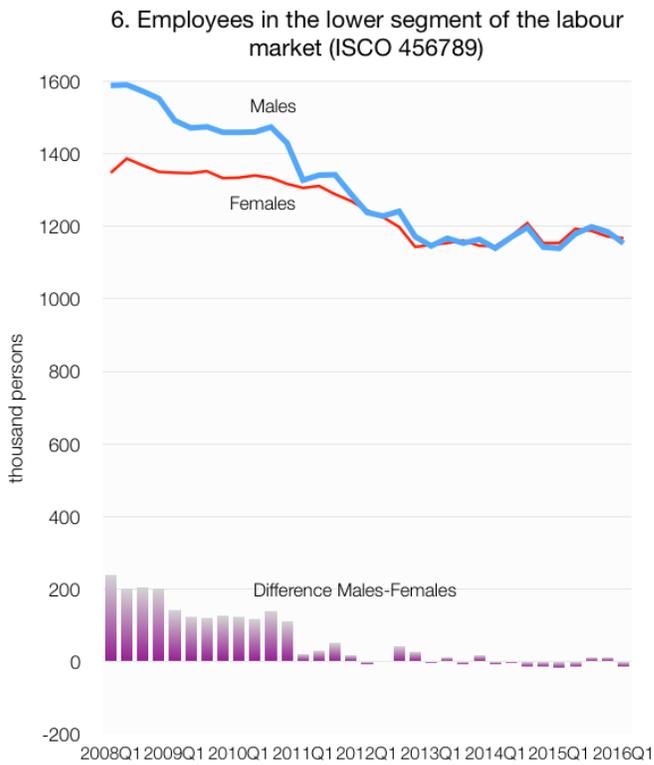


The number of female employees remained constant since the beginning of the crisis and until the end of 2013, and then rose at a level slightly higher compared to 2008 (figure 4). The number of male employees, on the contrary decreased during the crisis by approximately 200 thousand persons. As a result the number of female employees exceeds the corresponding number of male employees since 2012. As depicted in figures 5 and 6, this compositional change in wage labour reflects gender differences in the distribution of employees in occupations.

5. Employees in the upper segment of the labour market (ISCO 123)

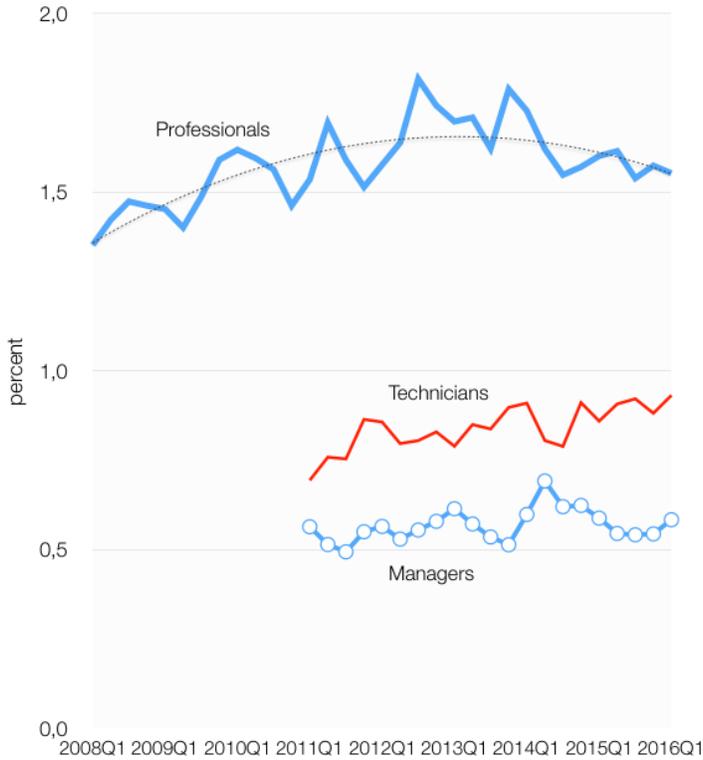


Female employees in the upper segment of the Portuguese labour market were already prevalent at the beginning of the crisis. In 2008, their number was approximately 10% higher than the corresponding number of male employees. In the course of the crisis, the initial gap widened and reached 16% in 2016.



By contrast with good employment performance in the upper segment of the Portuguese labour market, both male and female employment in the lower segment of wage labour decreased dramatically. The fall in the number of employees was approximately 180 for women and 450 for men. In 2008, male employees were prevalent in the lower segment of wage labour but since 2011 the female / male employment ratio moved near unity. However, as indicated above, convergence in the number of male and female employees might be attributed, at least partly, to female part-time and shorter working hours.

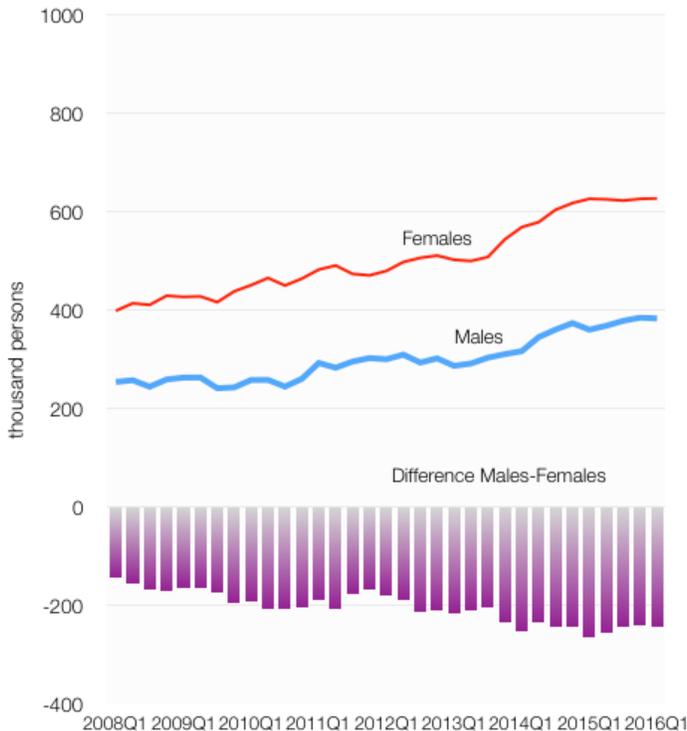
7. Female / Male Employees Ratio by occupation (ISCO 123)



As can be depicted in figure 7, there are still less women than men working in the broad occupational categories of managers and technicians (ISCO 1 and 3 correspondingly). The female / male employment ratio is now moving near unity but there is still one female manager for every two male managers.

In contrast, female employees are prevalent in professional occupations (mostly scientific occupations). There are three women for every two male professionals.

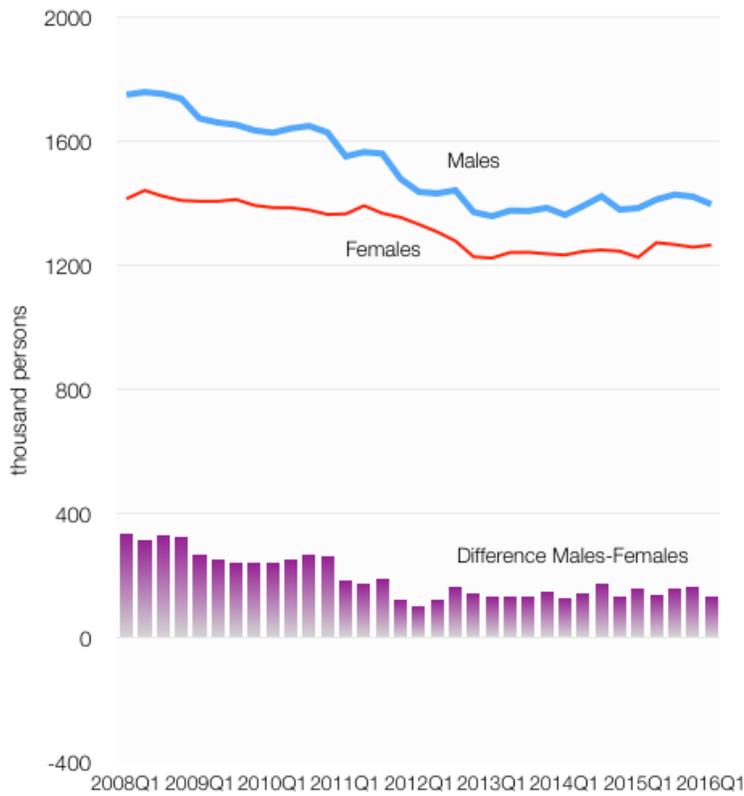
8. Tertiary education employees



This gap must be attributed to an advantage of women in tertiary education. As shown in figure 8, this advantage has been increasing during the crisis. There were already in 2008, 160 thousand female professionals working in Portugal, while in 2016 their number exceeded largely 200 thousand persons.

Figure 8 shows also that educated wage labour increased in the course of crisis for both sexes. The increase was spectacular as it reached 240 thousand persons for females and 130 thousand for males.

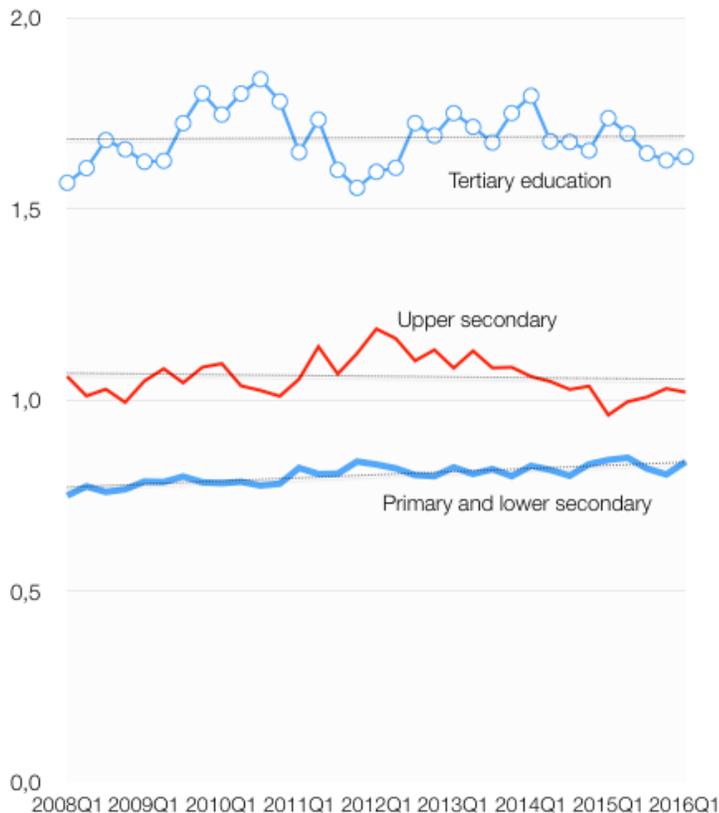
9. Primary and secondary education employees



Conversely, employment of primary and secondary education workers plummeted for both men and women. The number of employees decreased by approximately 350 thousand persons for males compared to 150 thousand for females as industries and sectors of activity in which male workers are predominant were severely affected by the crisis.

As a result, while the number of male primary and secondary education employees was around 350 thousand in 2008, it was reduced to 130 thousand in 2016.

10. Female / Male Employees Ratio by level of education



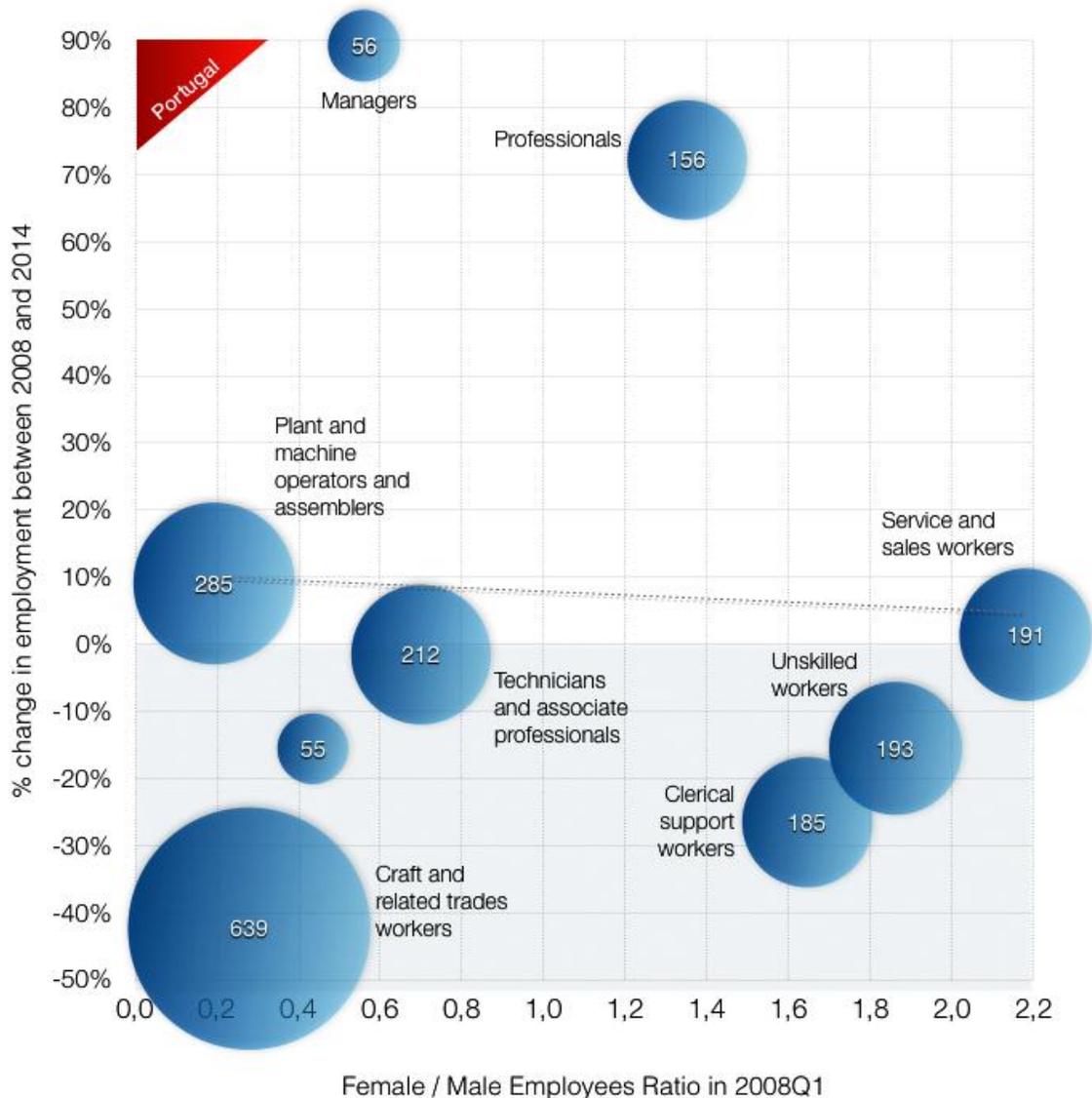
The educational advantage of female employees in Portugal is depicted in figure 10. The female / male employees ratio for tertiary education is hovering around a constant value of 1,6. The ratio for upper secondary is also fluctuating around a constant value of 1,05 indicating a very small advantage of female workers. The educational advantage is reflected also in the female / male ratio for primary and lower secondary education, which is clearly lower than unity.

It is remarkable that the educational gap in favour of women in Portugal is not a phenomenon of crisis or affected by it. It is rather a persistent structural feature of the Portuguese wage labour.

Changes in employment by broad category of occupations are depicted in figure 11 as a function of the male / female ratio in these categories. Craft and related trades occupations, in which the participation of women is limited has been severely affected by the crisis: 253 thousand men out of 639 thousand and 93 thousand women out of 174 thousand in 2008Q3 working in craft and related trades lost their job. These losses are 1/3 of the total loss of employment in the secondary segment of wage labour (all unskilled and semi-skilled labour, ISCO 4 to 9). Unskilled workers and clerical support workers, where female / male ratio is very high, suffered also big losses in employment

11. Change in employment by occupation as a function of Female / Male Employees Ratio

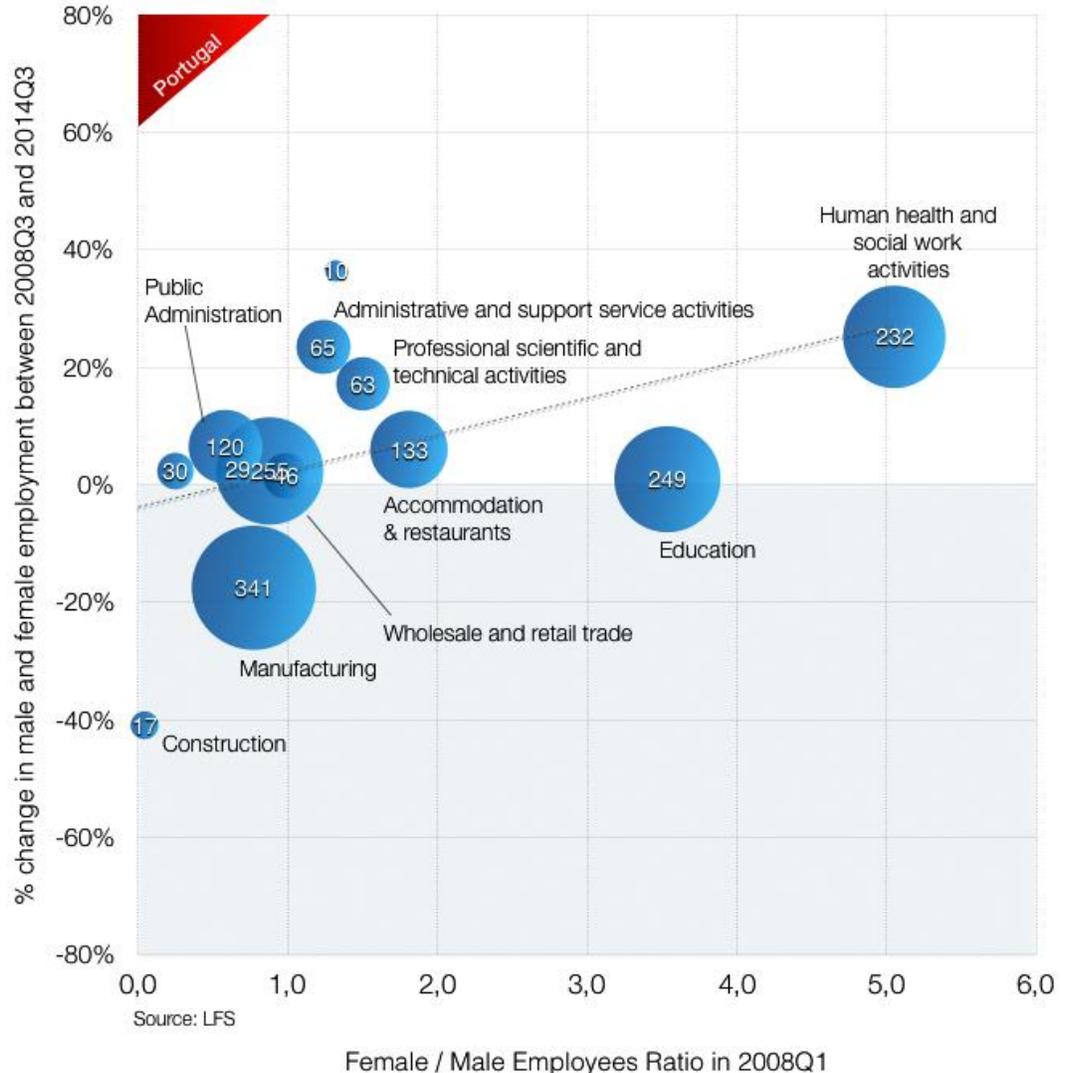
Each bubble represents a category of occupations. The size of the bubble is proportional to the number of male employees in 2008.



(figure 11).

12. Change in industry employment as a function of Female / Male Employees Ratio

Each bubble represents an industry or sector of activity. The size of the bubble is proportional to the female number of employees in the industry / sector of activity in 2008Q1.



Male unskilled workers lost around 50 thousand jobs out of 193 thousand in 2008Q3 while female losses did not exceed 50 thousand out of 386 thousand. In 2014Q3, the number of service and sales workers, where female participation is highest, was roughly unchanged. In the occupations of technicians and associate professionals, where male participation is high, the number of workers in 2014Q3 was as high as in 2008Q3. Occupations of plant and machine operators and assemblers, where male participation is highest, gained during the crisis 10% more jobs, but the gain went exclusively to female workers (+70 thousand persons). The number of professionals, where female / male ratio is high, surged by more than 70%, and the number of managers by 90%.

Changes in employment in industries of sectors of activity as a function of female / male employment ratio are depicted in figure 12.

Female employees in Portugal are highly concentrated in two sectors of activity, in Education where there were no job losses during the crisis and Health and social work activities that expanded by around 25%. Important losses are reported for Construction and Manufacturing, where female participation is low. There were also some gains in female employment in Public Administration, Administrative and support service activities, and Professional, scientific and technical activities.

In contrast to Cyprus and Greece, the Gender Pay Gap in Portugal increased from 8,4% in 2006 to 14% in 2014. This increase contrasts with the fact that industry or sectoral gender pay gaps decreased (with the exception of business services and construction where there was an increase and banks where it remained unchanged). We conclude that the increase in Portuguese GPG can be attributed, partly, to a *composition effect* arising from changes in the distribution of males and females in industries or sectors of activity. In order to investigate the magnitude of the composition effect we decompose the gender pay gap as follows:

Let

W^m, W^f the hourly wages for males (m) and females (f),

X^m, X^f the corresponding vectors of shares of employment in industries (or sectors of economic activity) and

β^m, β^f , the corresponding vectors of hourly wages in industries (or sectors of economic activity).

It follows that $W^m = \beta^m X^m$ and $W^f = \beta^f X^f$ and $W^m - W^f = \beta^m(X^m - X^f) + (\beta^m - \beta^f)X^f$

The term $\beta^m(X^m - X^f)$ is the Composition Effect and the term $(\beta^m - \beta^f)X^f$ is the Sectoral Earnings Effect, so that the unadjusted gender pay gap in euros is the sum of the two effects. The GPG adjusted for changes in the distribution of employees in industries and sectors of activity equals the Sectoral Earnings Effect (or equivalently the unadjusted

Table 1

	CompositionEffect	SectoralEarningsEffect	Gender Pay Gap in euros	UnadjustedGenderPayGap %	AdjustedGenderPayGap %
2006	-1,41	2,03	0,61	8,4%	27,8%
2014	-0,52	1,73	1,21	14,0%	20,1%
Difference (2014-2006)	0,89	-0,30	0,59	5,6%	-7,7%

GPG minus the Composition Effect). The results of our calculations are shown in Table 1.

Once adjusted for the Compositional Effect, stemming from changes in employment in sectors of activity, the change in GPG between 2016 and 2014 becomes negative; in other words the gap in 2014 was clearly lower than in 2006.

These developments are analysed further in figure 13.

As shown in figure 13, the compositional bias in the calculation of the GPG is analysed, firstly, in four components stemming from increases in male participation (relative to female participation) in Education, Transport storage and communication, Business services, and Financial intermediation, and secondly, two components deriving from decreases of male participation in Construction and Trade.

