European Added Value

of EU measures on the application of the principle of Equal Pay

ANNEX II

European added value of applying the principle of Equal Pay for men and women for equal work or work of equal value

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Abstract

This Study examines the Gender Pay Gap (GPG) in Europe and assesses the potential impact of the report adopted by the European Parliament in May 2012 (The Bauer Report).

The Study finds that the greatest potential would be with the streamlining of EU regulation and policy, greater transparency of pay data and broader and more systematic use of work evaluation and job classification. Each of these measures could result in an overall reduction in the GPG of a minimum of 1% point, which in turn has the potential to increase GDP by 0.1%.

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1. Policy findings and recommendations

This Study has focused on the following two objectives.

- To understand the extent and impact of the Gender Pay Gap (GPG) in Europe.
- To assess how proposals adopted by the European Parliament in May 2012 (The Bauer Report) could impact on reducing the GPG and economic growth.

1.1 Policy findings

The main policy findings of the Study are as follows:

- At a level of 16.4% the GPG across the EU remains large, with wide variation evident by country, sector and industry.
- Whilst the gap is lower in the public than the private sector, it is the private sector that has seen greater reductions over recent years.
- Evidence suggests that interventions to address the GPG can have a positive impact on economic growth.
- An estimate for this Study estimates that each 1% reduction in the GPG would result in an increase in GDP of 0.1%.
- Bauer Report recommendations all have the potential to positively impact on reducing the GPG.
- Large variation in terms of Member States which have partially, fully, or not implemented policies aligned to the Bauer Recommendations.
- Secondary assessment suggests the Bauer Recommendations that have greatest potential to impact on the GPG are:
 - 1. Streamlining of EU regulation and policy with a particular focus on part time work.
 - 2. Improved situational analysis and transparency of results in relation to pay
 - 3. Work Evaluation and Job Classification at Member State level underpinned by high levels of transparency.

It is estimated that the impact of introducing any one of the five Bauer Recommendations considered in this Study could lead to a reduction in the GPG of between 1% and 3%.

1.2 Recommendations

The main recommendations that can be drawn from the Study are as follows:

• The European Parliament's should continue to prioritise actions focused on reducing the GPG.

- The implementation of 2006 Equal Pay Directive and related European legislation should be assessed urgently to assess their effectiveness.
- Specific consideration should be given to the revision of Council Directive 97/81/EC.
- The impact of measures aimed at reducing the GPG and the manner in which
 this impacts on economic growth, should be assessed further in order to better
 understand how the former impacts upon the latter.
- Further work should also be undertaken to understand the interdependencies between EU and Member State policies and practice and so maximise overall policy impact.
- Assessment should take place as to how prioritise initiatives in the Bauer Report
 that have been shown to have the greatest potential and to bring these together
 into a single coherent policy and legislative response.

2. Executive summary

The European Parliament has urged the European Commission to improve existing EU legislation to close the GPG, including stricter sanctions on employers. The request for a legislative proposal points out that the GPG still averages 16.4% in the EU, and in some Member States is growing.

The principle of equal treatment of women and men is set out in the Treaty of Rome (1957). In 1975, the Council adopted **Directive 75/117/EEC - the Equal Pay Directive**. Additional Directives include **Directive 76/207/EE** (Equal Treatment Directive) and **Directive 97/80/EC** (Burden of Proof Directive). A total of seven Directives in the context of equal treatment between women and men were combined in 2006 in a single Directive to offer more distinctness to Community law and to support the field of equal treatment between women and men. The Commission also produced a "Roadmap for equality between women and men 2006-2010".

With the adoption by the European Parliament of the Bauer Report in May 2012 they have called on the Commission to propose new measures to reduce inequality in pay between the sexes through all relevant EU policies and national programmes. They also ask national governments to step up cooperation and develop new ideas to tackle the GPG.

2.1 Study objectives

This Study looks at the European Added Value of applying the principle of equal pay. There are four broad research questions. To assess:

- The extent of the GPG;
- The impact of the GPG on economic performance;
- The prevalence and effectiveness of measures similar to those in the Bauer Report that are currently implemented within Member States;
- The potential for the policy recommendations set out in the Bauer Report to further impact on reducing the GPG and increasing economic growth.

The aim of the Study is to provide a level of quantification to the recommendations contained in the Bauer Report that was debated and accepted by the European Parliament in May 2012.

2.2 Methods & approach

The Research Team undertook an Internet-based literature review alongside an assessment of the limited available data on the impact of policy on reducing the GPG. This was then used to provide a high-level estimate of the minimum and maximum level of impact that legislative action based upon the Bauer Recommendations could have on reducing the GPG and increasing GDP.

2.3 Scale of the GPG

There exists a **consistent picture** across the EU regarding the existence of the GPG, although its level varies. This gap is widest in Estonia, Austria, Germany, the Czech Republic and Slovakia and narrowest in Slovenia, Poland, and Italy (Eurostat, 2011 figures). Whilst almost all Member States have introduced specific gender equality regulations, the monitoring **practices and the enforcement mechanisms vary substantially** across Member States.

The most recent available unadjusted GPG data (% difference between average gross hourly earnings of male and female employees, as % of male gross earnings) shows the GPG ranges from 2.3 % in Slovenia to 27.3 % in Estonia (Eurostat, 2011 data). The data from 2011 shows that on average, women earned 16.2¹ % less on gross hourly earnings than men in the EU-27 (Eurostat, 2011 data).

Despite significant equal pay initiatives in local government and the health sector, there has been **little progress** in recent years in closing the GPG **in the public sector**, which currently stands at 14.6% (based on mean full-time hourly earnings) up from 13.9% in 2008. While the public sector GPG is significantly lower than the full-time **private sector GPG (21.6%)**, the private sector gap has fallen five percentage points since 1997.

2.4 Benefit of reducing the GPG

There is **mixed evidence** on the **impact of reducing the GPG on economic growth**. Whilst some studies are able to point to significant increases in GDP resulting from reductions in the GPG, others demonstrate small negative impacts.

The Study finding the largest aggregate impact of a reduction in the GPG on GDP came from Australia. This Study also assessed the potential for any reduction to impact on economic growth. Drawing upon secondary evidence it has been possible to establish that reducing the GPG can have a positive impact on economic growth. The economic assessment made for this Study suggests that a decrease in the gender wage gap by one percentage point would increase economic growth by 0.1 %.

2.5 Impact of the GPG

The secondary evidence search and review found limited quantitative evidence of the **costs to employers in terms** of loss of productivity, and no quantitative evidence of the costs of low staff morale and loss of reputation as a result of failure to provide equal pay. Evidence on cost to employers was largely indicative.

The Study identified evidence suggesting a link between the GPG and reduced productivity with one Study finding gender discrimination accounting for 29 % of the pay and productivity gap, which as a result impacts GDP and economic growth.

¹Provisional data as at March 2013

However, the Study did not quantify this impact. Smith & Bettio (2010) cite a Study by Elmeskov and Scarpetta (2000) which calculated that a "lower utilisation of labour contributes more than 20 percentage points to the gap in GDP per capita.

2.6 Bauer Report recommendations

In May 2012, the European Parliament adopted a legislative initiative report on Equal pay (Bauer Report), calling on the European Commission and other related bodies to review Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation, before February 2013.

The terms of reference for the Study required us to focus on five of the eleven recommendations and to assess their potential to positively impact upon the GPG. Our assessment established that each of the five measures that were considered could each positively impact on reducing the GPG.

Factors that would determine their level of impact were identified as being:

- evidence of the effectiveness of the particular measure;
- size of the GPG within a particular Member State; and
- the degree to which the measure has already been implemented partially or substantively within a Member State.

In Table 1 we set out the Research Team's summary assessment of the five sub-options within the Bauer Report that were subject to review.

Table 1: Overview of Bauer Recommendations

Option	Improved situational analysis and	Impact	
Assessment	transparency of results	Assessment	
Overview	Indirect impact through greater transparency of	Potential	High
	pay data.	Impact	
Baseline	Policies linked to income transparency;	Current	Medium
Situation	increasing the availability of data and wage	Member State	to High
	statistics; and preparation of comparative wage	Adoption	
	reports are particularly evident in Denmark,	Level	
	Finland, France, Italy, Portugal and Sweden.		
	Evaluations have viewed such schemes to		
	'serve as good practice'.		
Implementation	Some technical issues but relatively	Likely Impact	Medium
	straightforward implementation possible.		to Low
Summary	A strong and implementable measure, but	Approximate	Under
	already evident to a limited or greater extent	Potential GPG	2%
	in 26 out of 27 Member States.	Reduction	

Option Assessment	Work Evaluation and Job Classification	Impact Assessment	
Overview	To encourage Member States to introduce job classification and to make this process as transparent as possible	Potential Impact	High
Baseline Situation	Austria, Belgium and the Netherlands were identified as having made particular progress, with large-scale re-classifications concentrated in particular sectors e.g. Portugal and the hotel and restaurant sector.	Member State Adoption Level	Medium to Low
Implementation	A range of means available to develop such initiatives many of which are linked to establishing new targets for the reduction of the GPG.	Likely Impact	Medium to High
Summary	A strong and implementable measure, which has only been fully implemented in 3 out of 27 Member States.	Approximate Potential GPG Reduction	2%

Option	Equality Bodies and Legal Remedies	Impact	
Assessment		Assessment	
Overview	To empower and ensure adequate funding for	Potential	Low
	equality bodies within Member States and to	Impact	'
	enhance their mandate.		
Baseline	Wide variation in role and scope with some	Member State	Medium
Situation	being able to be proactive and other only	Adoption	to High
	reactive. Some research evidence of a	Level	
	reluctance of some bodies to pursue cases.		
Implementation	Some complication in terms of the legal basis	Likely Impact	Low
	for equality bodies but apparent that many		'
	Member States have already sought to develop		
	this route.		
Summary	A well established mechanism which is	Approximate	Under
	established to some degree in all 27 Member	Potential GPG	1%
States, but with only limited potential to		Reduction	1
	impact on the GPG		

Option Assessment	Sanctions	Impact Assessment	
Overview	For the Commission and Member States to be encouraged to strengthen current legislation.	Potential Impact	Medium
Baseline Situation	Variation in the type and level of sanctions and limited evidence of Member States explicitly implementing them.	Member State Adoption Level	Medium
Implementation	Member States have put considerable efforts into overcoming the challenges of setting systems up yet full implementation remains an issue.	Likely Impact	Medium
Summary	Just over a third of Member States are stated to have sanctions in place but 17 do not.	Approximate Potential GPG Reduction	Between 1% -2%

Option Assessment	Streamlining of EU regulation & Policy	Impact Assessment	
Overview	With a particular focus on part time work this may involve a revision of Council Directive 97/81/EC.	Potential Impact	High
Baseline Situation	Some notable schemes have been introduced within Member States, yet studies have shown how they may impact to reduce the GPG but also reduce per capita GDP, although again the picture is not consistent.	Member State Adoption Level	Medium
Implementation	A range of schemes have been developed to address the issue of part-time work as it impacts on the GPG.	Likely Impact	Medium
Summary	While there is evidence of 13 Member States having done this, nearly half have not.	Approximate Potential GPG Reduction	2%

This second table provides an overview of each of the initiatives by Member State with the shades of green representing potentially high impact resulting from European legislation based upon the Bauer Recommendations, the shades of orange representing mid-range impact and the shades of red suggesting limited impact for the measures within the particular Member State. A full description of the methodology and results is set out in Table 10.

The findings again suggest significant potential for Measures 2 and 5, a degree of impact for options 4 and 1 and only limited impact for option 3.

Table 2: Potential Impact of Bauer Recommendations by Member State

Member State	Measure 1 Transparency	Measure 2. Work	Measure 3. Equality	Measure 4. Sanctions	Measure 5. EU
	of Results	Evaluation	Bodies	50.210020215	Regulations
Austria					
Belgium					
Bulgaria					
Cyprus					
Czech					
Republic					
Denmark					
Estonia					
Finland					
France					
Germany					
Greece*					
Hungary					
Ireland					
Italy					

Member State	Measure 1 Transparency of Results	Measure 2. Work Evaluation	Measure 3. Equality Bodies	Measure 4. Sanctions	Measure 5. EU Regulations
Latvia					J
Lithuania					
Luxembourg					
Malta					
Netherlands					
Poland					
Portugal					
Romania					
Slovakia					
Slovenia					
Spain					
Sweden					
United					
Kingdom					

2.7 Conclusions

The GPG in the EU is significant, with evident variations between Member States. There is evidence of a body of both European law and Member State laws and initiatives, many of which have demonstrated the potential to have a positive impact on the GPG.

Each of the five Bauer report measures considered in this Study could have an impact on reducing the GPG, which in turn could positively impact on European GDP growth.

3. Introduction

The European Parliament has urged the European Commission to improve existing EU legislation to close the GPG, including stricter sanctions on employers. The request for a legislative proposal points out that the GPG still averages 16.4% in the EU, and in some member states is increasing.

MEPs have called on the Commission to propose new measures to reduce inequality in pay between the sexes through all relevant EU policies and national programmes. They also ask national governments to step up cooperation and develop new ideas to tackle the GPG.

3.1 Study Objectives

The aim of the Study is to provide a level of quantification as well as a qualitative assessment to the recommendations contained in the Bauer Report. Within the scope of the Study this will only be possible at an indicative level and further work would be required to establish precise estimations.

The overall study objective is to set out the current situation regarding the GPG across the 27 Member States of the European Union and to assess the costs of this at the level of the individual, industry and the wider society. The terms of reference set this out in terms of the following four objectives:

- 1. Provide an overview of the situation with respect to equal pay for men and women;
- 2. Examine the financial and economic costs of the GPG;
- 3. Outline the economic impact of the persisting GPG; and
- 4. Consider the costs to employers, deriving from the failure to provide equal pay

The fifth objective then focuses on assessing the potential impact of implementing the recommendation of the Bauer report, setting the precise objective to be:

5. Assess the economic added value of the measures proposed in the Bauer report compared to the existing legal framework.

3.2 Methods & Approach

As a rapid review we have utilised a limited range of research tools and a focused research design. The design has been focused on being able to produce a robust high-level indication of impact. The research tools employed were as follows:

- **Secondary Evidence** collated relevant materials provided by the client and have in addition undertaken an Internet based evidence review;
- **Data Review** We have accessed a range of relevant data from secondary sources at both a Member State and EU wide level including Eurostat.
- Client Engagement We have held a number of meetings with colleagues at the European Parliament to aid the development of the options and to validate research findings;

- Economic Assessment structured economic modelling is not feasible within the scope and timeframes for this Study, but we have developed an evidenced, robust and transparent means to consider each of the options to address the GPG;
- **Reporting** in line with the agreed terms of reference.

The Research Team undertook an Internet-based secondary evidence review in order to collate relevant documents and data to examine the extent of the GPG and its impact and to identify the extent to which each of the 27 Member States have introduced policies relating to the five recommendations from the Bauer report set out in the terms of reference for this Study. For the latter task we have created country profiles (Annex 1.) based on the secondary evidence, which present a high level Study of the policies already implemented and indicate through colour coding where the Member State has translated policy into mandatory, legislative requirements (significant development, coded green); where there has been partial development in the policy area, including focused efforts by the social partners (partial development, coded yellow); and where no references have been found on policy actions in the area linked to the Bauer recommendations (no development, coded red). This assessment will be used to help inform and establish the potential impact of measures relating to each of the five Bauer recommendations set out in the terms of reference at a pan-European level.

Given the high-level nature of this Study, we have not examined uptake or compliance in the Member State, nor do we present an evaluation of the effectiveness of the enforcement of these policies. The country profiles included in the Annex represent the findings from our evidence review to date.

In order to gather evidence for this Study, we have reviewed European-level documents, such as those produced by Eurofound, the European Commission and the OECD, in addition to national-level documents and research studies. Data on the extent of the GPG in the EU Member States was obtained through Eurostat. The GPG as measured by Eurostat in unadjusted form represents "the difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees" (Eurostat, 2012). The unadjusted indicator is "not adjusted according to individual characteristics that may explain part of the earnings difference" (ibid). The sources to inform the secondary evidence review are included in the references.

The report is structured as follows: **Section 4** provides an overview of the GPG within the European Union, examining evidence concerning impacts, existing data on costs and presents country-level analysis. **Section 5** focuses on the Bauer Report and the recommendations set out within it. It looks at examples within Member States that align to these recommendations, concluding with a section assessing the potential impact that each measure may have within Member States. **Section 6** estimates the economic impact of a reduction in the GPG. **Section 7** outlines the main Study conclusions and implications for future research in the area.

Assessing the GPG

This section provides a summary overview of the GPG in the European Union. In addition to an EU wide assessment, rates and trends in Member States are also considered. The chapter then presents a high level assessment of the economic impact of the GPG including particular consideration of costs to business.

4.1 The GPG in the European Union

The most recent available unadjusted GPG data (% difference between average gross hourly earnings of male and female employees, as % of male gross earnings) shows the GPG ranges from 2.3 % in Slovenia to 27.3 % in Estonia (Eurostat, 2011 data) (see Figure 1 below). The data from 2011 shows that on average, women earned 16.22 % less on gross hourly earnings than men in the EU-27 (Eurostat, 2011 data). The GPG for full-time employees is largest in Austria at 22 % and lowest in Italy at -1 % (based on 2010 figures) (Eurostat, 2010 data). A negative GPG (-1%) indicates that on average, women earn more than men. This does not necessarily mean that the labour market is more favourable for women, with the following factors being found to either positively or negatively influence the GPG:

- Female participation in the labour market
- Human capital
- Occupational segregation
- Part-time work and caring responsibilities
- Valuation of women's work
- Discrimination
- Structural and institutional factors (all cited by EWG, 2011)

The GPG for part-time workers also ranges from -17 % in Ireland (based on 2010 figures) to 35 % in Spain (Eurostat, 2013).

Whilst almost all Member States have implemented specific gender equality regulations, the actual enforcement mechanisms vary considerably between countries. In May 2012, European Parliament adopted the Bauer Report on the GPG, which calls on the European Commission to revise and amend the Recast Directive 2006/54/EC in order to close the GPG. The report contains recommendations for the Commission on equal pay.

² Provisional data as at March 2013

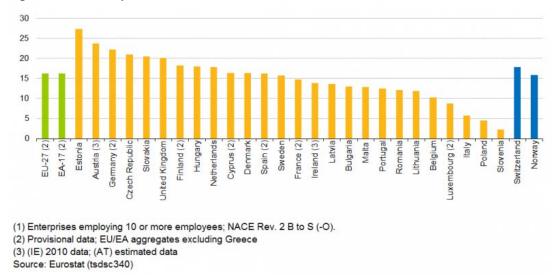


Figure 1: The unadjusted GPG, 2011, Eurostat

4.2 EU legislative framework

The European Union has addressed the issue of equal pay in a number of distinct ways. The fundamental principle of equal treatment of women and men is set out in the Treaty of Rome (1957). Within the Treaty **Article 157 of the TFEU** calls on Member States to ensure the application of the principle of equal pay for equal work or work of equal value for both men and women. The Article states that within its bounds individual Member States are able to take particular actions to address the issue within their own country.

The issue of gender pay was addressed directly in 1975 with the Equal Pay Directive 75/117/EEC. This Directive provided a newly defined principle of equal pay including that of remuneration for the same work or work of equal value. Significant case law relating both to Article 157 and the Directive 75/117/EEC has been developed by the Court of Justice subsequent to the introduction of the Directive.

Two other Directives of relevance to the GPG are as follows:

- **Directive 76/207/EEC**, implementing the principle of equal treatment for men and women in the area of employment, vocational training, promotion, and working conditions (Equal Treatment Directive)
- Directive 97/80/EC on the burden of proof, making the respondent responsible for proving that there has been no breach of principle of equal treatment if facts suggesting so are presented (Burden of Prof Directive).

In 2006 a single Directive sought to bring together a number of legislative streams. Seven Directives in the context of equal treatment between women and men were combined and by 2009 approximately 200 European Court of Justice (ECJ) decisions had been made with respect to the issue of gender pay.

In 2007 the Commission issued the Communication "Tackling the pay gap between women and men"³, setting out the following four priorities:

- Exploring ways to improve the legislative framework and its implementation.
- Exploiting to the full the European Strategy for Growth and Jobs.
- Encouraging employers to respect equal pay.
- Supporting the exchange of good practice at EU level.

In 2011 the European Commission published its "Roadmap for equality between women and men 2006-2010". The document sets out six priorities in the field of gender equality including the accomplishment of equal economic independence for women and men, with the elimination of the GPG set as one of the main objectives.

4.3 Assessment of the GPG

In Table 3, the unadjusted GPG for the 27 Member States. The unadjusted figure does not take account of differences in education, training, experience, and job characteristics among other things. An adjusted assessment would include the extent to which women and men are paid the same amount for equal work or work of equal value.

Table 3: Summary Table on Unadjusted GPG, Eurostat, 2011 data

Member State	Whole economy	Public Sector	Private Sector
Austria	23.7*	19.6 (2010 data)	24.6 (2010 data)
Belgium	10.2	-2.9%	13.8
Bulgaria	13.0	19.9	11.1
Cyprus	16.4*	0.3*	25.0*
Czech Republic	21.0	19.5	22.8
Denmark	16.4	13.5	18.2
Estonia	27.3%	:	:
Finland	18.2*	20.9*	18.3*
France	14.7*	13.2 (2010 data)	16.4 (2010 data)
Germany	22.2*	13.9*	25.8*
Greece	:	:	:
Hungary	18.0	20.5	15.3
Ireland	13.9 (2010 data)	12.1	21.6
Italy	5.8	3.8	16.7
Latvia	13.6	17.5	13.4
Lithuania	11.9	12.1	16.0
Luxembourg	8.7*	9.3 (2009 data)	10.9 (2009 data)
Malta	12.9	-1.3 (2010 data)	11.9 (2010 data)
Netherlands	17.9	18.1	18.1
Poland	4.5	0.1	17.2

³ COM/2007/424 final

Member State	Whole economy	Public Sector	Private Sector
Portugal	12.5	10.8	23.5
Romania	12.1	22.8**	2.9**
Slovakia	20.5	16.7	21.0
Slovenia	2.3	6.4	9.4
Spain	16.2*	12.3*	20.3*
Sweden	15.8	13.6	13.7
United Kingdom	20.1	20.3	26.0

(*) Provisional (**) Estimated data (:) Data unavailable

Note: A negative GPG indicates that on average, women earn more than men.

4.4 Public and private sector Comparisons

As the above table indicates, in most European states the GPG is lower in the public sector than in the private sector. This fact is especially interesting, considering that throughout the EU the proportion of women employed in the public sector is significantly higher than in the private sector. However, it can also be the case that in a country with low female labour market participation, the proportion of women working in the public sector is considerably higher compared to the overall female labour market participation.

Nevertheless, not only the level of pay divergence tends to differ, moreover different dynamics in closing the GPG in the public and private sector can be identified. A literature review of the GPG in the UK for example describes the following:

'Despite significant equal pay initiatives in local government and the health sector, there has been little progress in recent years in closing the GPG in the public sector, which currently stands at 14.6% (based on mean full-time hourly earnings) up from 13.9% in 2008. While the gap is significantly lower than the full-time private sector GPG (21.6%), the private sector gap has fallen five percentage points since 1997. Part of the lack of progress in the GPG in the public sector is explained by the lack of representation of females in senior management roles in the sector. Women represent 53% of all employees in the civil service, but occupy only 33% of senior management roles.' (EWG, 2011:3)

In addition the GPG may be at risk of widening up in some countries due to public sector job cuts, which depending on the proportion of women employed in the sector bears the risk of disproportionally affecting women.

Generally speaking, public sector employees are typically protected by collective pay agreements, which may be one of the reasons why there is a tendency for a lower GPG in the public sector. Other reasons for the persistence of wage gaps between public and private sector are, for example, the type of job carried out or the level of employees' qualifications, as the UK Office for National Statistics indicates:

Female employees in the public sector earn considerably more, on average, than female employees in the private sector. This is due to the different jobs that are

typically carried out by women in the public and private sectors. In the private sector women carry out a significant proportion of low paid jobs, such as cleaning and catering. In the public sector, while women still perform lower paid jobs, such as caring and clerical work, there are also a high proportion of women employed in professional, higher paid occupations, such as nursing or teaching. (...) overall, the public sector consists of a higher qualified workforce than the private sector. A higher qualified workforce would, on average, receive higher pay than a less qualified workforce. Therefore, it would be expected that, on average, the higher level of qualifications in the public sector would translate into higher average earnings in the public sector compared with the private sector.' (ONS, 2012: p.13)

While statistics show that the majority of EU Member States have a higher GPG in the private sector, this is not the case for countries such as Bulgaria, Latvia, Hungary, Romania, and Finland (see Eurostat, 2013). Foubert (2010) states that in Hungary, a higher GPG in the public sector could be attributed to the "limited opportunity in the public sector to resort to non-reported labour and non-reported payments" (Foubert, 2010:5); which is reported to be widely used in the private sector in Hungary.

4.5 Impact of Gender Gap

Secondary evidence was found to be limited in terms of relevant evidence on the economic and financial impact of the GPG across the EU, suggesting this to be an area which has not been examined in particular depth and could be an area for more detailed research in future. The limited available literature on this subject, however, suggests that the impact of reducing the GPG would result in a positive economic impact, in terms of an increase in GDP within Member States. The extent of the impact, however, varies considerably across the literature (and also varies significantly by country). One should also note that measuring economic performance using GDP overall undervalues women's total economic contribution as women's unpaid domestic activities do not appear in national accounts (Klasen, 1999; 2002, cited in Cassells et al, 2009).

The table below summaries the quantitative evidence in the existing literature of the economic impact of decreasing or increasing the GPG (or gender pap). This evidence suggests that decreasing the gender gap results in an increase in economic performance (GDP), whilst a widening of the gap results in a decrease in income/GDP.

Table 4: Summary of studies on economic impact of the Gender gap

	Source	Factors	Impact on GDP
Impact of decreasing the gender gap	Davy, 2007	Female employment levels rise to level of male employment	Increase in output per person of 0.3pp-0.4pp A net overall impact on GDP of 0.6 pp-0.7pp

	Caro, 2008 Löfström, 2008 Cassells et al, 2009	Increase in women's working hours as result of eradication of the GPG Transition to full gender equality in the labour market Decrease in the gender wage gap of 1 percentage point	Increase in GDP per capita of 17.6 % in spain GDP increase range from 14 % to more than 40 % across Member States Increase of 0.5 % of total GDP in Australia
	Goldman Sachs, 2011	Eradication of the GPG Elimination of the GPG between male and female	8.5 % of GDP or a growth in GDP of around \$93 billion Increase in GDP in America by 9 % and in the Euro Zone by 13 %
	The Institute for Women's Policy Research (2012) OECD, 2012	employment rate Eradication of GPG A 50 % decrease in	Growth in the US economy of at least 3 of 4 % GDP per capita annual
	, and the second	the gender gap in labour force participation rates Male and female labour force participation gap reduced by 75% by	growth rate of 0.3 percentage points GDP per capita annual growth rate of 0.5 %
		Total convergence of participation rates by 2030	GDP per capita annual growth rate of 0.6 percentage points, (equivalent to an overall increase of 12 % in GDP over 20 years.)
	The Women and Work Commission, 2009	Reduction in the GPG	Between £15 and £23 billion or 1.3 to 2 % of GDP saved every year in UK
	The Gender and Employment in Local Labour Markets Project, 2006 and TUC, 2008	Gap between hourly wages in full-time and part-time work closed	Total increase in GDP of £11.2 billion
Impact of widening the gender gap	Cavalcanti and Tavares ,2007	50 % increase in the GPG	Decrease in income per capita of a quarter of the original income per capita on cross country comparison

4.6 Discussion of the economic impact on GDP

A macroeconomic approach to gender equality indicates that increasing women's participation in the labour market has accounted for a quarter of annual economic growth in Europe since 1995 (OECD, 2008). This "positive development has contributed to greater recognition of the 'economic case' for gender equality'" (EC, 2011). Further research has shown that by narrowing the gender employment gap, the economic results are positively impacted and "could play a role in addressing the problems posed by an ageing population and the burden of pensions" (ibid.). For example, the Corporate Gender Gap Report 2010, World Economic Forum, quotes a possible increase of 13% in Euro-area GDP (Davy, 2007). Davy (2007) stated that the narrowing of the gender employment rates across the Eurozone had accounted for half of the growth in the Eurozone total employment rate and 0.4 percentage points of the 2.1% trend growth achieved since 1995 (Davy, 2007). Davy also concludes that if female employment were to rise to the level of male employment (all else being equal), GDP would increase by 21% in Italy; 19% in Spain; 9% in Germany and France; 8% in the UK; 5% in Denmark and 3% in Sweden (Davy, 2007). Davy (2007) states that:

"Empirical estimates suggest that raising the employment rate by 1 percentage point has, on average, an offsetting drag on output per person of 0.3pp-0.4pp (i.e., leaving a net overall impact on GDP of 0.6 pp-0.7pp). But the offsetting drag on productivity may be less than 0.3pp-0.4pp when the rise in employment is due to a narrowing of the male-female employment gap rather than, for instance, a generalised reduction in unemployment. Moreover, even accounting for these offsetting effects, the potential boost to income from raising female employment would still be substantial." (Davy, 2007)

Walby and Olsen (2002, cited in Cassells et al, 2009) also assess the impact of the GPG on productivity. They use wages as a proxy measure of productivity in order to estimate the impact of gender discrimination on the pay gap. They found that gender discrimination accounted for 29 % of the pay and productivity gap, which as a result impacts GDP and economic growth (however, they did not quantify this impact) (cited in Cassells et al, 2009). Cassells et al (2009) also found evidence in studies from Cavalcanti and Tavares (2007) and Caro (2008) that suggests "a higher gender wage gap (measured as female to male earning ratios) leads to lower output per capita indirectly" through female labour force participation. Through female labour force participation, they suggest that as "the gender wage gap decreases, women work more, due to the added wage incentive, and thus GDP per capita increases" (cited in Cassell et al, 2009).

However, Cassells et al (2009) also state that "differences in labour market structures" are an important consideration, citing a Study by Sequino (2000) who found that the GPG was a "stimulus (rather than a hindrance) to GDP growth in export-oriented economies, in her Study of semi-industrialised countries. However, this finding may only be relevant for semi-industrialised or developing countries that rely on manufacturing exports as a significant component of output." (cited in Cassells et al, 2009). Cavalcanti and Tavares

(2007) and Caro (2008) (cited in Cassells et al, 2009) found that as the GPG is reduced, the "opportunity cost of having children increased", which reduces the fertility rate, which in turn increases women's working hours and as a consequence GDP per capita is increased (cited in Cassells et al, 2009). Cavalcanti and Tavares (2007) used a cross-country analysis of both developed and developing countries and found that a "50 % increase in the GPG caused a decrease in income per capita of a quarter of the original income per capita and an increase in hours worked at home by 65 %" (cited in Cassells et al, 2009). Similarly, Caro (2008) found in a Study of Spain that eradication of the GPG would result in an increase in women's working hours of 20 % and an increase in GDP per capita of 17.6 % (cited in Cassells et al, 2009).

A Study by Löfström (2008) calculated the potential increase in GDP in the EU Member States following transition to full gender equality in the labour market – described as female activity becoming equal to that of men; women's part-time work declining to the level of that for men; and women's productivity becoming equal to that of men. The report suggests that each of these transitions would result in a positive GDP effect, with GDP increases ranging from 14 % in Slovenia to more than 40 % in Malta, Greece, and the Netherlands. "These estimates give an indication of the magnitude of the economic gains to be had from gender equality" (Löfström, 2008:26).

An Australian Study cited by Cassells et al (2009) also provides an account of the impact of the gender wage gap on economic growth and is of interest as it provides some guidance on the scale of the impact and also in terms of the assumptions and limitations underpinning the micro and macroeconomic models used to calculate the impact of the GPG. Using macroeconomic modelling techniques, the Study finds that the GPG impacts substantially on Australian economic performance, measured in terms of GDP per capita. The paper estimates that a decrease in the gender wage gap of 1 percentage point would equate to an increase of 0.5 % of total GDP and eradicating the GPG completely would be worth about 8.5 % of GDP or a growth in GDP of around \$93 billion (Cassels et al, 2009).

Cassells et al also model the impact of various factors to provide evidence on the negative effects of the pay gap on growth. They find that if the gender wage gap increased by one percentage point, average hours of work would decrease, and GDP per capita would fall by 0.318 %. This finding is explainable in the sense that if there was an increased GPG, this is likely to act as a disincentive to women to work longer hour and reduced working hours lowers economic growth (Cassells et al, 2009). Alternatively, a decrease the GPG has been "significantly associated" with an increase in women's hours of work" (Cassells et al, 2009; 23), however, Cassells et al note that the ability of women to increase their hours of work is affected by factors including unemployment rates; availability and affordability of childcare and access to flexible working arrangements. Other factors in the Cassells et al model, whilst not having statistically significant effects, show that (with the exception of labour market participation) if the gender wage gap increased by one percentage point, the effect on economic growth based on the impact of the various factors is negative (see Table 5).

Table 5: The impact of the gender wage gap on economic growth (GDP per capita)

Factors	Impact (co-efficients)		
Impact on GDP per capita	-0.250		
Investment= Impact on GDP per capita	-0.021		
Fertility= Impact on GDP per capita	-0.181		
Average hours of work = Impact on GDP per capita	-0.318		
Labour participation = Impact on GDP per capita	0.263		
Total impact on GDP per capita	-0.507		

Source: Cassells et al, 2009

Their simulated model also shows:

- "If the negative effects of being a woman, (which include direct discrimination) were removed, the gender wage gap would decrease by 60 %, or an equivalent \$1.87 per hour" (Cassells et al, 2009: 17). Based on an average working week of 35 hours for a women, this would equate to an additional earnings of \$65 a week, or \$3,394 in a year"
- If women and men were represented equally within industries, this could result in a 25 % reduction in the GPG. Based on a 35-hour working week this would mean an additional \$27 for the average female in Australia. "The hourly wage for women would increase by 22 cents per hour (seven % of the wage gap) if their labour market history was also equivalent to that of men" (Cassells et al, 2009:17)
- "If the representation of women with vocational qualifications increased to the same proportion as men, we would see the wage gap decrease by five %, or 15 cents per hour. Representation of women in larger firms to similar proportions as those of men would also have a positive impact on women's wages, decreasing the wage gap by three %, which would mean an increase in hourly wages of 11 cents on average" (Cassells et al , 2009:17) (see Table 6).

Table 6: Impact of reduction in the GPG in Australia

	% reduction in overall GPG	Cents/hour equivalent	\$/per 35 hour working week	\$/per year
Labour force	7	22	7.78	404
history	,		7.70	101
Vocational	5	15	5.26	273
qualification	3	13	5.20	2/3
Industry	25	79	27.52	1,431
segregation	23	19	27.52	1,401
Firm size	3	11	3.73	194
Female	60	187	65.26	3.394
Total	100	313	109.55	5,697

Note: These calculations use simulation methodology developed by Olsen and Walby

Source: Cassells R, Vidyattama Y, Miranti R, McNamara J (2009)

In a recent report, the OECD also explored the economic case for gender equality. The report focuses on the effects of convergence between male and simulation methodology developed by Olsen and Walby. It presents three scenarios: a no-change scenario where the gap between male and female labour force participation rates remain the same as those observed in 2010; a scenario whereby gender gaps reduce by 50 % by 2030; and a scenario whereby there is convergence in participation rates and the gender gap in labour force participation levels is eradicated by 2030 (OECD, 2012).

The report shows that on average across the OECD, a 50 % decrease in the gender gap in labour force participation rates would lead to an increase in the GDP per capita annual growth rate of 0.3 percentage points. If there was total convergence of participation rates by 2030, the increase would equate to 0.6 percentage points, which it states is equivalent to an overall increase of 12 % in GDP over 20 years. The largest increases, at more than 0.5 %, from total convergence, were forecast for Italy, the Czech Republic, Greece, Hungary, Luxembourg, Poland and the Slovak Republic (see Table 7 below) (OECD, 2012).

Table 7: OECD Projected average annual growth rate in GDP and GDP per capita in USD 2005 PPP, percentage, 2011-30

	No change in labour force participation rate (LFPR)	Male and female LFPS gap reduced by 50% by 2030	Male and female LFPS gap reduced by 75% by 2030	Male and female LFPS gap reduced by 100% by 2030
	GDP per capita	Increase in GDP per capita	Increase in GDP per capita	Increase in GDP per capita
OECD	1.8	0.3	0.5	0.6
Austria	1.5	0.3	0.4	0.5
Belgium	1.8	0.3	0.5	0.6
Czech Republic	2.6	0.4	0.6	0.8
Denmark	1.2	0.2	0.3	0.3
Estonia	3.4	0.3	0.4	0.5
Finland	1.9	0.1	0.2	0.3
France	1.7	0.2	0.3	0.4
Germany	1.6	0.2	0.4	0.5
Greece	1.7	0.4	0.7	0.9
Hungary	2.8	0.3	0.5	0.6
Ireland	1.6	0.3	0.5	0.6
Italy	1.4	0.5	0.8	1.0
Luxembourg	0.8	0.3	0.5	0.6
Netherlands	1.6	0.3	0.4	0.5
Poland	2.7	0.3	0.5	0.7
Portugal	1.6	0.3	0.4	0.5
Slovak Republic	2.9	0.3	0.5	0.7
Slovenia	1.9	0.3	0.4	0.5

	No change in labour force participation rate (LFPR)	Male and female LFPS gap reduced by 50% by 2030	Male and female LFPS gap reduced by 75% by 2030	Male and female LFPS gap reduced by 100% by 2030
	GDP per capita	Increase in GDP per capita	Increase in GDP per capita	Increase in GDP per capita
Spain	1.9	0.3	0.5	0.6
Sweden	1.9	0.2	0.2	0.3
United Kingdom	1.4	0.3	0.4	0.5

Source: OECD Secretariat's estimates based on OECD Economic Outlook, NO.91 long term database (Version 6, June 2012), OECD, cited in Closing the Gender Gap: Act Now, OECD, 2012

The Institute for Women's Policy Research in the United States also commented on a Study conducted by the American Association of University Women in 2010, that if the GPG were to close in the United States, the stimulus effect would grow the US economy by at least three or four % (cited in Huffington Post Politics, 24 October 2010). Similarly, the Economist in the UK reported in November 2011 that Goldman Sachs had calculated that eliminating the remaining GPG between male and female employment rates could increase GDP in America by a total of 9 % and in the Euro Zone by 13 % (Economist, 2011 Closing the gap, 26 November 2011).

Studies from the UK, also suggest that reducing the GPG would have a positive impact on economic performance. The Women and Work Commission (2009) estimated that factors such as gendered job segregation, the lack of part-time roles in senior positions and pay discrimination contributes to the loss of between £15 and £23 billion or 1.3 to 2 % of GDP every year (Women and Work Commission, 2009).

The Trade Union Congress (TUC) in the UK similarly used data from The Gender and Employment in Local Labour Markets project4 which found that 54 % of UK women employed part-time were 'employed below their potential', amounting to 2.8 million women (using figures from 2006), to suggest that if part-time jobs that paid £4 an hour more (the gap between hourly wages in full-time and part-time work) were available and women worked an average of 20 hours a week and 2.8 million women benefitted, the total increase in GDP would be £11.2 billion (TUC, 2008).

An attempt to provide empirical evidence from South America, based on a Study by Costa and Silva (2008) states that" gender inequalities act as barriers to pro-poor growth", using examples from Argentina, Brazil, Chile, El Salvador and Mexico. Using a simulated model where gender wage discrimination is eliminated in these countries, they

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⁴ Reported in Yeandle, S (2006) 'Local Labour Markets and the GPG', Paper to the European Sociological Association Interim Conference, Lisbon, 6 -8 September 2006

demonstrate that as a result women's pay would increase and in Argentina, Brazil and Mexico female earnings would even be higher than those of men because, on average, women in these countries are better qualified than men. This elimination of gender wage discrimination would contribute to greater economic growth and the conclusion is reached that "reducing gender inequalities implies benefits not only for women but also for men, children and the elderly, and for the poor as well as the rich." (Costa & Silva 2008:8).

4.7 Groups affected by the GPG and the consequences of the pay gap

Family situation and marital status are found to have a significant impact on the GPG (Belgian Presidency, 2010). The GPG is found to be larger for married women and increases further for married women with children, particularly in Austria, the Czech Republic, Germany, Denmark, Estonia, Finland, Hungary, Ireland, Lithuania, Luxembourg, Poland, Sweden, Slovenia, Slovakia and the United Kingdom (Belgian Presidency, 2010). This observation is however "less true of the new Member States where the widest gaps are often found among unmarried couples with a child/children" (Belgian Presidency, 2010: 76).

The GPG is lower in one-person households in Belgium, Denmark, Spain, Finland, France, Lithuania, Latvia and Sweden or unmarried couples without a child/children in Austria, the Czech Republic, Greece, Hungary, Poland, Slovakia and the United Kingdom (Belgian Presidency, 2010). The pay gap is in favour of single women in Greece, Hungary, Ireland, Poland, and Slovenia. It is in favour of married women without any children in Ireland and unmarried women in a relationship without children in Ireland, Italy, Lithuania, Poland, Portugal and Slovenia. The pay gap is also in favour of unmarried women in a relationship with a child/children in Austria, Spain, Italy and Portugal and women who are in single-parent family situations in Austria, Cyprus, Greece, the Netherlands, Poland and Portugal. It favours women in other household situations in Hungary and Slovenia ("although some of the results should be interpreted with caution because the number of observations is low") (all examples cited by Belgian Presidency, 2010).

Cassells et al (2009) cite evidence from the United States, conducted by Jones et al (2003) who state that the working hours of married women increase when the GPG is reduced. Jones et al (2003, cited in Cassells et al, 2009) found that married women were "more sensitive to changes in the gender wage gap than single women", finding that changes in the pay gap did not have a large effect on single women, but for married women "a small reduction in the gender wage gap generated a large labour supply response", resulting in a move from unpaid work in the home to paid employment" (ibid.). Cassells et al, 2009, however, also cite evidence from Fitzpatrick and Lester 2009 which showed the opposite impact for "partnered women", where an increase in earnings led to a decreased supply in labour (Fitzpatrick and Lester 2009, cited in Cassells et al, 2009).

In countries such as the Czech Republic, Finland, France, Germany, Greece, Hungary, Luxembourg, the Netherlands, Slovakia, Sweden and the United Kingdom) the pay gap is widest among the highest qualified (Belgian Presidency, 2010). This can be attributed to school choices; career paths; the individual pay negotiations of women and men; more women taking career breaks and occupational segregation (Belgian Presidency, 2010). However, in Belgium, Cyprus, Estonia, Latvia, Lithuania, Poland and Romania, the opposite is found, with the pay gap narrower among the highest educated (ibid.).

The GPG also has significant consequences "in a market-orientated" economy. Lower incomes for women put them at risk of poverty and female poverty is closely linked to child poverty. "Women's earnings may therefore be critical in preventing child poverty, primarily in single, but also in dual earning families" (OFMDFM, 2010:17). Other consequences of the pay gap include the development of a pension gap, as pension contributions are commensurate with pay levels and labour market participation. The pay gap also creates a greater reliance on social support and welfare payments, with female poverty increasing women's' need for social assistance and other subsidised services such as healthcare, housing and child care (Moncton, 1996). There are also particular correlations between low incomes and poor health (ibid.):

"The most important result of pay equity would be the full integration of women into the economy. Under the current system, women are faced with discrimination in employment, low purchasing power, financial dependence on governments for income support, and the stresses of a life in which they are not given equal credibility with men. Society pays a high price for maintaining the current system of compensating women on a lower pay scale than men, a price that will only rise in the future as poverty claims more women through single parenthood and old age" (Canadian Advisory Council on the Status of Women and Canadian Human Rights Commission, cited in Moncton, 1996).

4.8 Costs to employers

Limited evidence was found in the secondary evidence review about the financial costs to employers derived from failure to provide equal pay. In the UK, the Government Equalities Office (2011) found that the cost to an employer of an equal pay case (based on prices in 2010) is £5,283. This cost per employer is the average per case, which could consist of multiple or single claimants. The report disaggregates this cost as follows:

- Time spent on case by directors and senior staff: £1,912
- Time spent on case by other staff: £550
- Cost of advice and representation: £2,820

The assessment also found that, according to the UK 2008 Survey of Employment Tribunal Applications, the median compensation award for equal pay employment tribunal claims successful at tribunal is £13,411 (based on 2010 prices) (Government Equalities Office, 2011). In the UK, where equal pay claims are successful at hearings, this

can lead to the imposition of a pay audit. The Government Equalities Office's impact assessment suggested an average cost per pay audit of approximately £8,800 (ibid.).

4.9 Costs for lost productivity, low staff morale and loss of reputation

The secondary evidence search and review found no quantitative evidence of the costs to employers of loss productivity, low staff morale and loss of reputation as a result of failure to provide equal pay. Some discussion of these issues was identified however, for example, in the UK, the EHRC (2011) highlight the potential high loss in business productivity linked to defending equal pay claims. This defence is "time consuming as HR and line managers have to gather evidence, communicate with legal representatives and attend tribunal hearings" (EHRC, 2011:4), which impacts on productivity levels. Low staff morale can also lead to further loss in business productivity if employees perceive that there is pay discrimination within the organisation, as a result of equal pay claims in their workplace (EHRC, 2011). A report by the Employer's and Manufacturer's Association in New Zealand also observed that addressing the gender wage gap is strongly associated with higher morale and job satisfaction (EMA, 2012).

Equal pay claims in the workplace can also have a "negative impact on the business reputation, which could adversely affect the businesses ability to attract and retain the best employees" (EHRC, 2011). Loss of reputation can also impact customer attitudes and "ultimately the company's commercial success". Larger companies with shareholders also have an additional reputational risk (ibid.).

5. The Bauer Report

In May 2012, the European Parliament adopted a legislative initiative report on Equal pay (*Bauer report*)⁵, calling on the Commission, among others, to review Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation, before February 2013. In its official response to this report, the Commission has indicated that it does not intend to review the Directive to address the specificity of the causes for the current GPG within this deadline, but will instead draw up a report to be presented in the first half of 2013, reviewing the practical implementation of this Directive at national level.

The Bauer Report expressed concern relating to the European Commission's lack of response to Parliament's resolution of 18 November 2008, or to its resolution of 10 February 2010 and matters reflected in the Council Conclusions on the European Pact for gender equality for the period 2011 – 2020.

The report expressed further concern that in the past decade progress has only been achieved very slowly, that the wage differential between men and women has remained persistently high in recent years and that, despite the legally binding principle of equal pay for work of equal value, women's hourly earnings in the EU-27 were on average 17.5 % less than men's for the same work in 2009 (up to 30% less in the private sector, equal merit and qualifications).

The report goes on to highlight what it believes to be the nature and extent of the problem and sets out a series of challenges to the European Commission and Member States which in combination represents what it believes to be a coherent and structured set of policies to help reduce the GPG. In view of this response, the Committee on Women's Rights and Gender Equality requested an EAV assessment to be prepared as a follow-up and a strong additional justification to the legislative initiative report.

In the following section the Research Team set out the recommendations of the Bauer Report that were set out in the Study terms of reference. Each recommendation is set out in terms of detail and a high level assessment is made based on available secondary evidence as to the potential that it has to positively impact on the GPG

5.1 Recommendations of the Bauer Report

The Bauer Report sets out the following nine policy recommendations:

- Recommendation 1: Definitions
- Recommendation 2: Analysis of the Situation and Transparency of Results
- Recommendation 3: Work Evaluation and Job Classification

⁵ Resolution with recommendations to the Commission on application of the principle of equal pay for male and female workers for equal work or work of equal value 2011/2285(INI)

- Recommendation 4: Equality Bodies and Legal Remedy
- Recommendation 5: Social Dialogue
- Recommendation 6: Prevention of Discrimination
- Recommendation 7: Gender Mainstreaming
- Recommendation 8: Sanctions
- Recommendation 9: Streamlining of EU Regulation and EU Policy

The Study Terms of Reference requirement an assessment of the economic added value of the measures proposed in the Bauer report with a particular focus on the following five measures. In the following section we provide a précis of each option.

Recommendation 2 (Option 1): Better analysis of the situation and transparency of results

The Bauer Report stated that there is indication that regular pay audits and transparency have a series of positive effects as they improve talent development, the company's reputation and contribute to proper job evaluation- both internally and with relation to market forces.

The lack of information and awareness among employers and employees about existing of possible pay gaps within their company as well as their ignorance weakens the implementation of the principle enshrined in the Treaty and in existing legislation. Acknowledging the lack of accurate, comparable and coherent statistical data, including on the part-time GPG and the gender pensions gap, and the existing lower pay rates for women especially across professions traditionally dominated by women, Member States should take full account of the GPG in their social policies and treat it as a serious problem.

On this basis the option suggests regular pay audits, as well as the publication of their results, bearing in mind the personal data protection, are made compulsory within companies. The same requirement can also apply to information on remuneration in addition to pay. This information should be accessible to employees, trade unions and adequate authorities. Employers should provide employees and their representatives with results in the form of wage statistics, broken down by gender. This data should be compiled at sectoral and national level in each Member State.

In addition the measures suggest that there should be a requirement on employers to adopt transparency policy in relation to wage composition and structures, including extra pay, bonuses and other advantages forming part of remuneration. Equally where wage statistics show group or individual differences in pay on grounds of sex, employers are obliged to analyse these differences further and react to eliminate them.

Recommendation 3 (Option 2): Work evaluation and job classification

The Bauer Report suggest that the concept of the value of work must be based on qualifications, interpersonal skills and responsibility emphasising quality of work, with the aim of promoting equal opportunities between women and men. This concept should not be marked by a stereotyped approach unfavourable to women, for example putting the emphasis on physical strength rather than on interpersonal skills and has to ensure

that work that involves responsibility for human beings is not considered of lower value than those with responsibility for material or financial resources. The proposal suggests that women must therefore be provided with information, assistance and/or training in wage negotiations, job classification and pay-scaling. It must be possible for sectors and companies to be asked to examine whether their job classification systems reflect the gender dimension in the required manner, and to make the necessary corrections.

The Report states that a European Commission initiative should encourage Member States to introduce job classification complying with the principle of equality between women and men, enabling both employers and workers to identify possible pay discrimination based on a biased pay- scale definition. Respecting national laws and traditions concerning industrial relations systems remain important. Work evaluation and classification should also be transparent and be made available to all stakeholders and to labour inspectorates and equality bodies.

At the level of Member States the report recommends that each Member State should carry out a thorough assessment centred on professions dominated by women. A gender-neutral job evaluation should be based on new systems for classifying and organising staff and organising work and on professional experience and productivity assessed above all in qualitative terms, such as education and other qualifications, mental and physical requirements, responsibility for human and material resources, for use as a source of data and assessment grids for determining pay, with due regard to the principle of comparability.

Recommendation 4 (Option 3): Equality bodies and legal remedies

This option is focussed on enhancing the mandate of equality bodies, namely by reinforcing their legal powers to initiate investigations and impose sanctions, contribute to providing women with more efficient (i.e. more accessible and ideally at a lower cost) legal remedies.

The recommendation is based on the principle that equality promotion and monitoring bodies should play a greater role in diminishing GPG. The report asserts that bodies should be empowered to monitor, report, and, where possible, enforce gender equality legislation more effectively and more independently while they should be adequately funded. Article 20 of Directive 2006/54/EC should be revised so as to enhance the bodies' mandate by:

- supporting and advising victims of pay discrimination; providing independent surveys concerning the pay gap;
- publishing independent reports and making recommendations on any issue relating to pay discrimination;
- legal powers to initiate their own investigation;
- legal powers to impose sanctions in cases of breaching the principle of equal pay for equal work and/or to bring wage discrimination cases to court; and
- providing special training for the social partners and for lawyers, judges and

ombudsmen based on a toolbox of analytical instruments and targeted measures to be used either when drawing up contracts or when checking whether rules and policies to address the pay gap are being implemented, as well as providing training courses and training materials on non- discriminatory job evaluation for employers.

Recommendation 8 (Option 4): Sanctions

Under Directive 2006/54/EC, Member States are already obliged to introduce measures providing compensation or reparation (art. 18), as well as penalties (art 25) for failure to implement equal pay. The Study examines in what way (to what extent and using which modalities) has this requirement been implemented in Member States' national legal systems.

The Bauer Report stated that it is important that Member States take the necessary measures to ensure that infringement of the principle of equal pay for work of equal value is subject to appropriate sanctions according to the legal provisions in force. The Report goes on to state that in spite of the existing legislation, inspections and punitive action are often woefully inadequate where the principle of equal pay is concerned. The Report asserts that these matters need to be treated as a priority, and the agencies and bodies responsible for them must be provided with the necessary technical and financial resources.

The Report contends that provisions included in Directive 2006/54/EC on compensation and on penalties are not sufficient to avoid infringement of the equal pay principle. The Report concludes by suggesting consideration of:

- penalties, which must include the payment of compensation to the victim;
- administrative fines (for example in the event of failure of notification or of compulsory communication or unavailability of analysis and evaluation of wage statistics disaggregated by gender (according to Recommendation 2)) requested by labour inspectorates or the competent equality bodies;
- disqualification from public benefits, subsidies (including EU funding managed by Member States) and public procurement procedures, as already provided for by Directives 2004/17/EC1 and 2004/18/EC2 concerning the procurement procedure; and
- identification of offenders, which should be made public.

Recommendation 9 (Option 5): Streamlining of EU regulation and EU policy

A wage penalty appears to be linked to working part-time. The paper will examine the scale and the economic implications of this phenomenon for women.

The Bauer Report stated this to be an area for urgent action given that a wage penalty appears to be linked to working part-time. The Report suggests both an evaluation and possible revision of Council Directive 97/81/EC of 15 December 1997 concerning the

Framework Agreement on part-time work concluded by UNICE, CEEP and the ETUC - Annex: Framework agreement on part-time work, which prescribes equal treatment between full-time and part-time workers as well as more targeted and effective actions in collective agreements.

The Report concludes by arguing for a concrete target for reducing the pay gap in the Employment Guidelines, *inter alia*, regarding access to vocational training and recognition of women's qualifications and skills.

5.2 Implementation of Bauer Recommendations in Member States

In order to make an assessment of the potential for the recommendations set out in the Bauer Report to positively impact on the GPG it is necessary to establish a baseline for their current take up within Member States. Within the scope of the Study it is not possible to do this is a quantified form and Table 8 below indicates the countries that have implemented particular policies linked to the individual Bauer recommendations, based on the reviewed secondary evidence. The scope of the policies, however, differs significantly from one country to another.

The colours in the table indicate the following:

- Green: The Member State has made significant development in this area and translated policy linked to the indicated Bauer recommendation into mandatory, legislative requirements
- *Yellow:* There has been partial development in the Member State in the indicated policy area, perhaps including some focused effort by the social partners.
- *Red*: In the reviewed secondary evidence no references were found to policy actions in the area linked to the Bauer recommendation.

The coding is based on the evidence identified from the list of sources set out in Annex 1. It is important to note that where evidence of significant or partial development in a policy area linked to the Bauer recommendation is identified within a Member State, it does not interpret whether the policy is effectively implemented or whether compliance is achieved.

Table 8: Countries that have implemented policies linked to Bauer recommendations

Member	GPG	1.	2.	3.	4.	5.
State	(Whole	Improved	Work	Equality	Sanctions	Streamlining
	economy)	situational	evaluation	bodies	(recom.8)	of EU
	%	analysis and	and job	and legal		regulations
		transparency	classification	remedies		and EU
		of results	(recom.3)	(recom.4)		policy
		(recom.2)				(recom.9)
Austria	23.7*					
Belgium	10.2					
Bulgaria	13.0					

Member	GPG	1.	2.	3.	4.	5.
State	(Whole	Improved	Work	Equality	Sanctions	Streamlining
	economy)	situational	evaluation	bodies	(recom.8)	of EU
	%	analysis and	and job	and legal		regulations
		transparency of results	classification	remedies (recom.4)		and EU
		(recom.2)	(recom.3)	(recont.4)		policy (recom.9)
Cyprus	16.4*	(100011112)				(reelin)
Czech	21.0					
Republic	21.0		-			
Denmark	16.4					
Estonia	27.3%					
Finland	18.2*					
France	14.7*					
Germany	22.2*					
Greece	:					
Hungary	18.0					
	13.9					
Ireland	(2010)					
Italy	5.8					
Latvia	13.6					
Lithuania	11.9					
Luxembourg	8.7*					
Malta	12.9					
Netherlands	17.9					
Poland	4.5					
Portugal	12.5					
Romania	12.1					
Slovakia	20.5					
Slovenia	2.3					
Spain	16.2*					
Sweden	15.8					
United	20.1					
Kingdom (*) Provision	20.1 nal (:) Data una	railabla				

(*) Provisional (:) Data unavailable

The table above shows that, for the most part, there is currently no clear connection between the countries that have implemented particular policies linked to the individual Bauer recommendations and the size of the GPG. Italy is the exception here, with a whole economy GPG of 5.8 %, which is third lowest GPG amongst the Member States (behind Slovenia and Poland) and evidence of significant development in four of the Bauer policy areas. Austria, which has also made significant development across four of the five Bauer policy areas, conversely has the second highest GPG in Europe at 23.7% (behind Estonia at 27.3%). This may be attributable to the level of enforcement and compliance against the

policy areas or other factors at play within the Member States (such as the female employment rate).

5.2.1 Option One (Recommendation 2): Improved situational analysis and transparency of results

Policies linked to income transparency; increasing the availability of data and wage statistics; and preparation of comparative wage reports are particularly evident in Austria, Belgium, Cyprus, Denmark, Finland, France, Italy, Portugal, Spain and Sweden (all coded green).

Belgium

Narrowing the GPG is one of the priorities of the Belgian government in the equality field. Companies are required by law to produce an annual report on gender equality, which must be presented to the works council or trade union representatives. In March 2012, the Belgian parliament passed new legislation that obliges companies to report on rates of pay for men and women. Specifically, companies with more than 50 employees are now required to:

- report the wages of male and female employees in the 'social balance sheet' that all Belgian companies are required to include in their annual accounts
- draw up an analysis of their pay structure every two years. This analysis must be submitted to the company's works council and include wages, social benefits, supplementary insurances and other fringe benefits, measured as full-time equivalents, broken down by gender, blue/white-collar status, job level, seniority and level of qualification
- appoint a mediator (such as a union representative) within the company, who can
 independently search for a solution if any employee thinks they are a victim of wage
 discrimination.

In the case of companies with fewer than 50 employees, sectoral joint committees will be required to develop measures such as gender-neutral job function classifications. These will be submitted to the Federal Public Service for Employment, Labour and Social Dialogue which will assess them against the existing checklist for gender neutrality in job evaluation and classification, developed by the Institute for the Equality of Women and Men, which is a Federal Public Institute created to guarantee and promote the equality of women and men.

Source: European Industrial Relations Observatory 2012

Countries such as Austria and Denmark have implemented particular requirements on employers to deliver gender specific data, at regular intervals to national authorities (Foubert, 2010). For example, in Austria employers must produce income reports every two years, showing average/median pay by occupational category and gender and

failure to do so can result in the company being publically named on the website of the Ministry for Women's Affairs. Legislation in Denmark also requires employers with more than 35 staff to report wage statistics broken down by gender to the Statistical Bureau. Similarly, in Belgium and France organisations with over 50 employees must legally conduct a comparative analysis of the wages of men and women. In Italy, similar obligations fall on organisations employing more than 100 staff, with a requirement to conduct the analysis every two years. In Sweden, legislation requires employers with 25 or more staff to conduct a pay survey every three years and employers with ten or more staff to prepare an annual equal opportunities plan which contains a wage survey of gender pay differences and measures to remedy any inequalities. In Finland, employers with 30 or more employees must also produce an equality plan including an analysis of pay differentials between men and women's jobs. Foubert et al (2010) stated that the mandatory reporting requirements that exist in Austria, Finland, France, Italy and Sweden could "serve as good practices" to other Member States.

Mandatory equal pay plans required by employers in Finland, Sweden and Spain are also viewed as good practices (Foubert et al, 2010). The Foubert et al (2010) Study found there to be a "recurring call for legislation obliging employers to publish detailed information regarding wages paid and other advantages given to employees within the company" (Foubert et al, 2010).

Sweden

In Sweden, all organisations with 25 or more employees must by law carry out a wage mapping exercise every three years. The aim of this exercise is to detect whether any part of wage differentials is based on gender. It consists of mapping, analysis and the formulation of an action plan. If the mapping exercise shows that there are wage differentials based on gender, and the analysis shows that part of these is related to gender, the employer must take action to reduce the wage gap. In addition, the employer must make an action plan to prevent future gender-related wage differentials. This report or document must also be delivered to the relevant authorities as it will be used for follow-up studies in the future. So far, the results are that knowledge about wage structures in all enterprises in Sweden is much better today than it used to be. However, employer response to this obligation is below 100%, and this is probably due to a lack of direct sanctions. In addition, as yet the gender wage gap in Sweden is unchanged, remaining at approximately 15 percentage points.

Source: Åsa Löfström, Umeå University, Department of Economics, Swedish paper for the conference, Exchange of good practices on gender equality. Reducing the GPG (Berlin, 5-6 December 2011)

Policies more broadly aligned to awareness raising are evident in Cyprus, where legislation encourages employers to provide employees with equal pay information, including pay differentials, at agreed intervals. Similarly, in Spain GPG policies are contained in framework agreements with the social partners alongside legislation

requiring companies with 250 employees or more to negotiate equal pay plans. And in the UK, pay secrecy clauses are now unenforceable following the Equality Act 2010. Foubert et al (2010) observed that "when the ban on releasing pay information is loosened, it always seems to happen in the public sector first". Foubert observed this example in Latvia (Foubert, 2010), however, in the UK the ban on secrecy clauses applies to both the public and private sector.

Analysis and transparency tools are being used in countries such as Germany and Luxembourg (both coded yellow) (through the Logib programme), through which companies can voluntarily analyse their wage systems to uncover any GPGs. Similarly, in the Netherlands the 'Wage Indicator' (Loonwijzer) project attempts to share and compare wage information and the 'Equal Pay Quick Scan' software, also from the Netherlands, enables the analysis of company pay data to determine if an investigation into the payment system is required.

The Logib tool - Switzerland, Austria and Germany

The Logib tool (*Lohngleichheit im Betrieb* – Pay Equality in Companies) is a software tool consisting of a number of modules that build upon each other. It allows companies to identify differences in pay through self-assessments of pay equality on a voluntary basis. This tool was originally developed in Switzerland and is also used in Germany and Austria. After entering the pay levels and qualification characteristics of female and male employees, this web-based tool provides a standardised report on the results in PDF format for printing. This includes an extensive equality-oriented analysis of pay structures and, thus, an analysis of the wage gaps within the company or organisation, both unadjusted and adjusted. The reports on the results produced by the web-tool display any wage gap on a "gender-pay-gap clock" with the indication of GPG extent (from less than 5% to more than 25%). The calculations can be undertaken both for a company on the whole as well as for specific different company locations or departments.

Source: Summary paper for the conference, Exchange of good practices on gender equalitiy. Reducing the GPG (Berlin, 5-6 December 2011)

The secondary evidence review also found evidence from a survey conducted by the Lehman Brothers Centre for Women in Business at London Business School, in 2007. It analysed practices which have a gender implication across 61 organisations, operating in 12 European countries. One intervention identified by the research, was 'measurement and reporting'; which is broadly reflective of Bauer's second recommendation. These measures included progression (e.g. measuring and reporting on the career development of women at various stages); salary differences; the representation of women in senior roles; and the measurement and reporting of women's turnover rates (Lehman Brothers, 2007). The survey found that some 72% of organisations surveyed measured the proportion of women at key job levels and 66% measured the salary differences between men and women. The report stated that "in this way, it appears that many organisations

are laying good foundations for tracking the progression and equality of the women they employ" (Lehman Brothers, 2007).

5.2.2 Option Two (Recommendation 3): Work evaluation and Job Classification

Austria, Belgium and the Netherlands (coded green) were identified in the secondary evidence review as making the most significant developments in this policy area, beyond legal instruments declaring job classification systems should be gender neutral. In Belgium, a national agreement established that by 2016 all job classifications should be gender neutral to reduce the GPG and sector joint committees have been ensuring job classifications comply with the principle of gender equality through use of the EVA (Evaluation Analytique/analytische EVAluatie). In Belgium, Austria and the Netherlands, the social partners also appear to have made significant efforts in the area of gender neutral job classification in order to address income differences between men and women.

Belgium

Belgian national collective agreement number 25 on equal pay between men and women (last modified in 2008), which has binding legal status, encourages the social partners to integrate a gender-neutral approach to job classification. It states that job evaluation systems must by 2016 ensure equal treatment between men and women in terms of the criteria they use, the weighting of these criteria and the way in which they are implemented into remuneration. Those sectors and companies that have not yet evaluated their job evaluation and pay systems in terms of gender neutrality should do so and make any necessary adjustments (Article 3). The national collective agreement notes that some sectoral agreements in Belgium are indeed in need of revision in this area, while others do not have any provision for gender-neutral work evaluation and job classification. It also notes that all pay systems need to be transparent if they are to ensure gender neutrality.

Source: Belgian national collective agreement 25

Other developments in this policy area include the provision of guidelines/training on non-discriminatory analytical job evaluation, prepared by the state or social partners. This activity is apparent in Austria, Belgium, Cyprus, Denmark, France, Luxembourg, Lithuania, the Netherlands, Spain and Sweden (these countries have been coded yellow, unless further evidence was available). For example, in Austria a manual on job evaluation and wage differentials was produced by the Minister of Women and Civil Service in 2011, with cooperation from the social partners and in the Netherlands a guide on a gender neutral job evaluation was sent to the 12 providers of the most frequently used job evaluation systems in the Netherlands.

Equal pay and equality at GDF Suez

GDF Suez, the France-based energy and utilities multinational, formally signed in June 2012 a European-wide agreement on equality between women and men with three European-level trade union federations. The company hopes that this agreement, which has been characterised as groundbreaking, will make a significant contribution to ensuring equal pay for work of equal value for men and women at every level of the company. The agreement was concluded between GDF Suez management and representatives of the European trade unions industrial, the European Federation of Public Service Unions (EPSU), and CEC European Managers (CEC). The overall aim of the agreement is to achieve equal opportunities and pay equality between women and men, and a better work-life balance for all. It sets out a range of specific measures and actions, principally aimed at:

- changing thinking and behaviour, notably through social dialogue;
- providing information for employees, managers, employee representatives and trade union organisations;
- guaranteeing equal opportunities in recruitment, equality in career progression and equal access to vocational training;
- encouraging women's networking and mentoring, and better representation of women among employee and union representatives;
- identifying and rectifying gender pay inequalities, and ensuring pay equality;
- improving work-life balance for all employees;
- preventing sexual harassment.

The agreement's concrete objectives include ensuring that, by 2016, women make up at least:

- 30% of employees recruited on open-ended contracts (women currently make up 19% of the GDF Suez workforce);
- 25% of all executives with open-ended contracts.

The agreement also requires the introduction of equality action plans at the level of individual GDF Suez group companies with more than 150 employees, and it says union and employee representatives must be consulted on these. The plans will cover the issues and objectives set out in the European agreement and must be jointly reviewed each year on the basis of a set of indicators contained in the agreement.

A European-level commission, made up of the signatories, will review application of the agreement annually on the basis of an agreed set of equality indicators.

Source: European Industrial Relations Observatory, 2012.

Large-scale work re-classifications concentrated in particular sectors of the labour market have occurred in countries such as Austria (social and health services), the Netherlands (health sector), Portugal (hotel and restaurants) and the UK (local government and health service).

5.2.3 Option Three (Recommendation 4): Equality bodies and legal remedies

The role and ability of equality bodies/advisors to initiate investigations varies widely by country. In Belgium, Bulgaria, Finland, France, Hungary, Italy, Ireland, Latvia, Malta and the UK (coded green), for example, the equality bodies/advisors can initiate their own proceedings; however, in Austria, Cyprus, the Czech Republic, Estonia, Germany, Greece, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania and Slovenia, the equality bodies are not able to initiate judicial proceedings (however, due to the equality bodies possessing other functions, these Member States have been coded yellow). Even where the equality bodies do have the authority to initiate investigations, this does not mean they always do so (Foubert et al, 2010).

Ireland

Although Ireland does not currently carry out any systematic collection of the GPG in the workplace, voluntary equality reviews and action plans in the workplace have been initiated by the national equality body, the Equality Authority. A methodology for assessing equality in private and public sector workplaces covers issues such as occupational segregation, pay inequalities, the position of women in different occupational groups in the workforce and flexible working time. This has been carried out in cooperation with the national social partners, IBEC for employers and ICTU for trade unions. The initiative was funded by the National Framework Committee on Equal Opportunities at the Level of the Enterprise established under the national partnership agreement Sustaining Progress (2003-2005). This also provided resources for independent equality auditors to carry out equality reviews and action plans.

Source: Jane Pillinger, Irish paper for the conference, Exchange of good practices on gender equalitiy. Reducing the GPG (Berlin, 5-6 December 2011)

In Bulgaria, the Commission on Protection against Discrimination can impose penalties for infringements of anti-discrimination law and in Austria, the Equal Treatment Commission has the authority to oblige an employer to prepare a report analysing male and female comparisons if it suspects discriminatory practices and if infringements are identified, the Commission can request this report in subsequent years.

In Finland, the Equality Ombudsman can set a deadline for an employer to implement a pay mapping exercise and the Equality Board may, at the request of the Equality Ombudsman, impose a fine on the employer (Foubert et al, 2010) (for this reason, Finland is also coded green). In Hungary, the equality body can impose a fine if violation of equal pay is identified and they may be published on the equal body's website which would have the consequence of the organisation being excluded from applying for public funding.

Greece

In 2009 a series of legislative amendments were passed, aimed at more effective implementation of existing legislation on equal pay for men and women for equal work. In particular, Law 38(I)/2009 was passed for the purpose of harmonising national

legislation with European legislation, notably Council Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation, and also for the purpose of complying with Article 20 of the revised European Social Charter. In this context, the new law transposes the content of the recast Directive 2006/54/EC, both with regard to the replacement of the definitions of the most basic clauses of the legislation – namely those relating to 'direct discrimination', 'pay' and 'indirect discrimination', and also in relation to the addition of new articles:

- 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;
- the obligation of the Ministry of Labour and Social Insurance as the competent
 authority to enter into dialogue with non-governmental organisations (NGOs) which,
 according to their statutes, have a legal interest in helping to combat gender
 discrimination. The objective purpose of this dialogue is to promote the principle of
 equal pay for men and women.

Source: European Industrial Relations Observatory 2010

5.2.4 Option Four (Recommendation 8): Sanctions

Whilst the literature showed that most Member States have measures in place for non-compliance with equal pay legislation, as set out by Directive 2006/54/EC, there was less evidence of countries explicitly implementing sanctions within their monitoring systems. The sanctions in place differ and explicit sanctions for failure to implement equal pay were found to be evident in Austria, Belgium, Bulgaria, Finland, France, Hungary, Italy, Lithuania, Portugal and Sweden (coded green).

France

Pressure to close the GPG has been increasing in France over the past decade. In 2001, legislation obliged companies to negotiate on the question of workplace gender equality. In 2006, this obligation was extended in order to eradicate the wage gap between men and women, but without any sanctions being imposed. Most recently, the law of 9 November 2010, reforming the pension system, included a penalty of up to 1% of the payroll costs for companies with at least 50 employees that had not met their responsibilities to reduce the pay gap by 1 January 2012.

Further, companies with at least 50 employees must by law negotiate a collective agreement or draw up a unilateral action plan in consultation with employee representatives. Failure to comply will result in sanctions. The legislation not only stipulates the agenda for negotiations, but also compels the negotiators or company management to identify progress targets and the means of achieving them, and to put in place ways of measuring whether targets for narrowing the pay gap have been met. To support negotiations or the drawing up of an action plan, companies must compile an annual report on the comparative status of overall employment and training conditions for women and men. Companies that have fewer than 300 employees must draw up

agreements or action plans that include measures addressing at least two of eight topics listed in the guide, and at least three topics for companies with more than 300 workers. The topics are: recruitment; training; promotion; qualification and grading; working conditions; actual remuneration; work-life balance; dialogue with the administrative authority. Until now the negotiation of wage equality has been inadequate within the various sectors and even at company level, where this topic is rarely addressed specifically. It is hoped the fear of a penalty will have induced companies to introduce formal measures.

Source: European Industrial Relations Observatory, 2011.

Examples of existing sanctions include a warning fine of up to EUR 360 (source of data from 2012) in Austria for violation of the company obligations within the required income report. In France, companies which have not taken steps to close the GPG can be fined up to 1% of their payroll costs; in Italy a fine of between EUR516 to EUR1500 (source of data from 2010) can be issued when violation of anti-discrimination law is detected and in Lithuania violation of equal pay can result in administrative fines of between EUR 35 and EUR 1100 (source of data from 2010).

Lithuania

The Office of Equal Opportunities Ombudsman in Lithuania, which has been functioning since 1999, is an independent state institution answerable to the Parliament, and one of the key institutions within the gender equality machinery. It takes overall responsibility for the supervision and implementation of the Law on Equal Opportunities for Women and Men in Lithuania. The Ombudsman investigates individual complaints on gender discrimination and sexual harassment; submits recommendations and proposals to the Parliament, governmental institutions on the priorities of gender equality policy, including recommendations on amendments to relevant legislation. In cooperation with other offices the Ombudsman supervises mass media so that it does not place discriminatory advertisements and does not treat one gender as in any way superior or better in regard to the other. Additionally, the Ombudsman may participate at the interviews for a job and admission tests at educational institutions as an observer. The Office is actively working to raise public awareness on gender equality issues.

The decisions of the Ombudsman in cases of discrimination on grounds of sex include the right to refer the material of the complaints to the pre-trial investigation bodies, and to address the institutions with a recommendation to discontinue the violations of the Law on Equal Opportunities for Women and Men.

The Ombudsman has a right to investigate administrative cases and impose administrative sanctions for violations of the Law on Equal Opportunities for Women and Men, which is one of the most important and effective tools of the Lithuanian gender equality policy. Section 6, p. 1, of the Equal Opportunities Act of Women and Men states that violation of equal rights for women and men is sanctioned "according to the rules of administrative law": the Administrative Penalties Act 408 imposes administrative fines of approximately EUR 35 to EUR 1100.

Source: Office of Equal Opportunities Ombudsman, Lithuania, Foubert et al, 2010

5.2.5 Option Five (Recommendation 9): Streamlining of EU regulation and EU policy

Member States should have implemented legislation requiring equality between part-time and full-time workers as set out in Directive 97/81/EC (part-time work). Policies which include specific gender considerations in part-time working legislation, as shown by the literature, were evident in Austria, Belgium, Bulgaria, Cyprus, Germany, Ireland, Italy, Latvia, Portugal, Romania, Slovakia, Slovenia, Spain and the UK. Austria, Belgium, Bulgaria, Ireland, Italy, Portugal, Slovakia, Spain and the UK also make legislative statements about payment for overtime for part-time workers (therefore these Member States have been coded green).

United Kingdom

The Part-Time Workers (Prevention of Less Favourable Treatment) Regulations 2000 (amended in 2002) gave part-time workers a statutory right to be treated no less favourably than their comparable full-time colleagues. This meant that, in comparison with full-timers, part-time workers are entitled to:

- the same hourly rate of pay,
- the same access to company pension schemes,
- the same entitlements to annual leave and maternity/parental leave on a pro rata basis,
- the same entitlement to contractual sick pay, and
- no less favourable treatment in access to training.

The UK government states that less favourable treatment of part-time workers is not widespread in the UK. Nevertheless, where it does occur, it can affect a variety of terms and conditions, including pay, pensions, holidays and training, which was the reason behind the EU part-time work Directive, which is implemented in the UK by means of these Regulations. In the area of pay, the Regulations state that part-time workers must receive the same basic rate of pay as comparable full-time workers. They must not be given a lower hourly rate, unless justified by objective grounds.

One example where a different hourly rate might be objectively justified would be a performance-related pay scheme. If workers are shown to have a different level of performance measured by a fair and consistent appraisal system this could justifiably result in different rates of pay.

In general, the same principle applies to enhanced rates of pay. In special circumstances, special rates of pay apply. These may include bonus pay, shift allowances, unsocial hours payments or weekend payments. In these cases, part-time workers are entitled to the same hourly rate as a comparable full-time worker.

Source: Department for Business, Enterprise and Regulatory Reform (UK government archived material website).

In Austria, part-time workers have a legal claim to premium rates of pay of an additional 25% for overtime work. Foubert et al (2010) states that in Belgium, employers organisations have campaigned for the Federal Government to allow for more "flexible and cheaper overtime arrangements"; viewing the current legislation as "inflexible and expensive". Foubert et al state that the Government has reduced taxes on overtime pay to address these pressures, however Foubert et al note that "making overtime easier and cheaper for employers entails the risk of negatively impacting those workers – mostly women – for whom the performance of overtime work clashes with e.g. family duties. Their pay will not be increased with overtime pay and, as a consequence, the GPG will rise" (Foubert et al 2010).

Foubert et al (2010) also note that payment for women's overtime work in Bulgaria is typically low in the sectors in which women dominate and recognise that when women receive additional pay for overtime worked, "this is usually part of the grey economy and thus not counted for social security purposes" (Foubert et al, 2010).

Smith & Bettio (2010) comment that there is a clear negative economic impact and loss of productivity as a result of shorter working hours caused by higher levels of part-time work. Smith states that "shorter full-time working hours and higher levels of part-time work lead to lower recorded levels of GDP per capita in Europe compared to that in the United States". Smith, however, also states that in Nordic countries where there is higher female labour market participation, this helps address this impact. For example, Denmark, the Netherlands and Sweden have some of the highest levels of female labour market participation but these also have among the highest part-time rates (European Commission, 2011). Smith & Bettio (2010) cite a Study by Elmeskov and Scarpetta (2000) which calculated that a "lower utilisation of labour contributes more than 20 percentage points to the gap in GDP per capita in the European Union compared to that of the United States" (cited in Smith & Bettio, 2010).

Ireland

Under the Irish legislation, the *Protection of Employees (Part-Time Work) Act 2001*, there is provision for pro-rata entitlements with full-time employees. The Act states that if a condition of work is dependent on the number of hours worked by an employee, the extent to which that condition is provided to a part-time employee is related to the proportion that the normal hours of work of the part-time employee bears to the normal hours of the full-time employee. The conditions covered include remuneration, pensions, voluntary health contributions and access to sick pay.

Further, the Irish Industrial Relations Act 1990 (Code of Practice on Access to Part-Time Working) Declaration Order 2006 states that access to part-time work should, as far as possible, be available across different levels in the organisation. In addition, employers should, as far as possible, give consideration to requests by employees to transfer from full-time to part-time work, and to requests by employees to transfer from part-time to full-time work or to increase their working time, should the opportunity arise. The Code states that employees moving to part-time work should suffer no diminution of status or

employment rights generally, with the exception of pay, benefits as appropriate (unless there are objective grounds), and that the pro-rata principle should apply where appropriate.

Source: Protection of Employees (Part-time Work) Act 2001; Industrial Relations Act 1990 (Code of Practice on access to part-time working) (Declaration) Order 2006.

Table 9: Countries that have implemented policies or made efforts in the policy area linked to each of the Bauer recommendations

Bauer recommendation	Country
Option One (Recommendation 2):	AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES,
Improved situational analysis and	FI, FR, HU, IE, IT , LU, LT, LV, NL, PL,
transparency of results	PT, RO, SE, SI, SK, UK
Option Two (Recommendation 3): Work	AT, BE, CY, DE, DK, ES, FI, FR, IT, LT,
evaluation and job classification	LU, MT, NL, PL, PT, SE, SK, UK
Option 3 (Recommendation 4): Equality	AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES,
bodies and legal remedies	FI, FR, HU, IE, IT , LT, LU, LV, MT, NL,
	PL, PT, RO, SE, SI, SK, UK
Option 4 (Recommendation 8): Sanctions	AT, BE, BG, FI, FR, HU, IT, LT, PT, SE
Option 5 (Recommendation 9):	AT,BE, BG, CY, DE, ES, IE, IT, LV, PT,
Streamlining of EU regulation and EU	RO, SI, SK UK
policy	

Note: This table includes those Member States where policies have been translated into mandatory requirements (coded green) AND the Member States where there has been partial development and some focused effort in the policy area (coded yellow).

5.3 Interplay of Bauer Recommendations

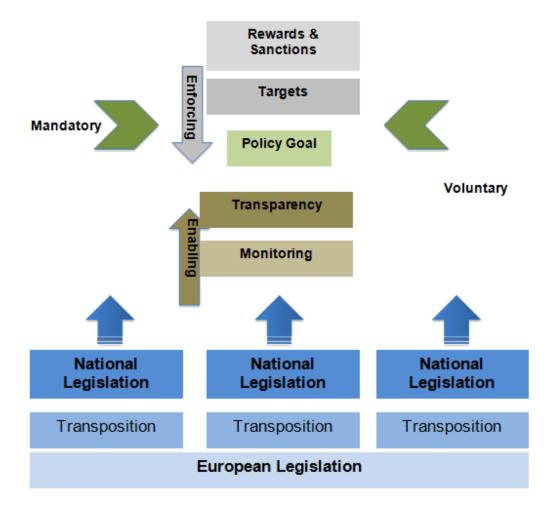
Each of the Bauer Report recommendations is focussed at a particular point in the policy process and is targeted at one of more stakeholder groups. As such it is possible to assess the extent to which combining one or more options may have a cumulative impact in excess to that of any one option. Again within the limited scope of this Study it is not possible to systematically assess this but in the following section we draw upon the secondary evidence review undertaken in relation to similar initiatives at a Member State level and make a qualitative assessment of the potential to gain a higher overall impact by combining measures set out in the Bauer Report.

In Figure 2 below we have set out how different policy instruments come together to impact on the achievement of a particular policy goal. When related to the options under consideration from the Bauer Report it is apparent that each relates to a particular element of the Model set out below.

Whilst some of the options set out in the Bauer Report maybe considered to be enforcing in nature in that they are focussed on rewards, sanctions and targets there are others which can better be seen as being enabling or facilitating in that they serve to support the policy goal by providing for higher levels o information and greater levels of transparency.

In assessing the five Bauer Recommendations that are the focus for this Study it is apparent that the enabling elements such as Option 1 on Transparency of Results can link to Option 4 on Sanctions to provide for a both a mix of options, but also for an interaction between options so that one may help to reinforce or underpin another. Whilst the Study has not been able to make any quantitative assessment of the potential additional impact of combining a number of policy options on the GPG and by association economic growth, it can be seen how their maybe such additional benefit.

Figure 2: Model outlining the relationship between the Policy Options



5.4 Impact Analysis

This section aims to provide an assessment of the potential impact of the measures outlined in the Bauer Report. It first outlines the evidence concerning impacts *at national level* associated with measures corresponding to the recommendations investigated as part of this Study, combines them with information concerning costs, and presents a simple cost-effectiveness analysis. The impact evidence is then combined with information concerning the baseline situation (presented in the previous sections) and information concerning compliance, to provide an assessment of the aggregate impact *at country level*.

The estimation of potential impact has been made by ascribing a high, medium or low grading to each country based upon a combined assessment of the following:

- Assessment on the potential of the measure to reduce the GPG; Options 1, 2 and 5 rated 'high' options 4 'medium' and option 3 'low'
- Level of the existing GPG within the Member State with higher levels suggesting higher scope to achieve a reduction assessed as under 10% rated 'low' 10-20% rated 'medium' and over 20% rated 'high'; and
- Current level of implementation of the initiative within the Member State where
 non-implementation provides higher scope to achieve a reduction. No evidence
 of implementation rates as 'high', some evidence 'medium' and strong evidence
 of having implemented a scheme equating to a 'low' potential for the particular
 Bauer recommendation to make additional benefit.

In relation to Table 10 the grading has been made on the following basis:

- Average score 3 'High' (Light Green)
- Average score 2.5 to 3 'high to medium' (Green)
- Average score 2 to 2.5 'medium to high' (Dark Green)
- Average score 2 'medium' (Orange)
- Average score 1.5 to 2 'medium to low' (Dark Orange)
- Average score 1 to 1.5 'low to medium' (Light Red)
- Average score 1 low (Red)

For example in the case of Austria it has a high GPG (over 20%), there is evidence that it has made significant progress with options 1, 2, 4 and 5 and some progress with 3. This is set against the underlying potential of the options such that a 'high' GPG plus a 'low' already evidence of policy having been implemented and a high underlying potential for the measure to impact positively on the GPG producing an overall rating of 2.3 (Dark Green).

Table 10: Potential Impact of proposed Measures on Member States

Member State	Measure 1.	Measure 2.	Measure 3.	Measure 4.	Measure 5.
	Transparency	Work	Equality	Sanctions	EU
	of Results	Evaluation	Bodies		Regulations
Austria	2	2.3	2	2	2.3

Member State	Measure 1. Transparency of Results	Measure 2. Work Evaluation	Measure 3. Equality Bodies	Measure 4. Sanctions	Measure 5. EU Regulations
Belgium	1.7	2	1.3	1.3	2
Bulgaria	2	2.7	1.3	1.7	2
Cyprus	1.7	2.3	1.7	2.3	2.3
Czech	2.3	3	2	2.7	3
Republic					
Denmark	1.7	2.3	1.7	2.3	2.7
Estonia	2.7	3	2	2.7	3
Finland	1.7	2.3	1.3	1.7	2.7
France	1.7	2.3	1.3	1.7	2.7
Germany	2.3	2.7	2	2.7	2.7
Greece*	2	3	1.5	2.5	3
Hungary	2	2.7	1.3	1.7	2.7
Ireland	2	2.7	1.3	2.3	2
Italy	1.3	2	1	1.3	1.7
Latvia	2	2.7	1.3	2.3	2.3
Lithuania	2	2.3	1.7	1.7	2.7
Luxembourg	1.3	2	1.3	2	2.3
Malta	2.3	2.3	1.3	2.3	2.7
Netherlands	2	2	1.7	2.3	2.7
Poland	1.7	2	1.3	2	2.3
Portugal	1.7	2.3	1.7	1.7	2
Romania	2	2.7	1.7	2.3	2.3
Slovakia	2.3	2.7	2	2.7	2.7
Slovenia	1.7	2.3	1.3	2	2
Spain	1.7	2.3	1.7	2.3	2
Sweden	1.7	2.3	1.7	1.7	2.7
United	2.3	2.7	1.7	2.7	2.3
Kingdom					

The previous analysis notwithstanding, another factor potentially influencing the effectiveness of the Draft Report is the **rate of compliance**, which in turn is based on two factors:

- The first one is the degree to which a Directive based on the recommendations in the Bauer Report would be transposed in Member States.
- The second factor concerns the degree to which companies in the various Member States implement it. In this regard, it is worthwhile looking at provisions on enforcement.

It needs to be stressed that the remit of the Study did not extend to an examination of levels of compliance within and across Member States and as such there is the potential for over or under estimation of potential impact within Table 10 above.

Economic Impact Assessment

Following standard microeconomic theory, levels of wages of workers should correspond to their productivity. Different pay levels would be related to differences in workers' productivity, which are caused, among other things by differences in skill levels. Once all differences in human capital are controlled for, for example by adjusting for different levels of education of men and women and differences in work experience (caused by differences in labour market participation), the GPG should disappear or at least narrow. However, as we know from much of the evidence, a persistent GPG is still found once for such factors have been accounted for. This GPG suggests that discrimination on the basis of personal characteristics exists. Social science research has identified multiple mechanisms that may cause the GPG, such as occupational segregation, dysfunctional social policy (which, for example, fails to offer adequate childcare) or further discrimination through differences in unionisation or job-role traditions.

Since Becker's original work (1957), we know that wage discrimination, which is unrelated to productivity differences caused by the heterogeneity of labour, reduces economic efficiency in the longer term because firms that do not discriminate tend to achieve a higher marginal product of labour and are more productive. This microeconomic mechanism allows us to derive clear long-term costs relating to discrimination, in particular due to the fact that a persistent GPG reduces output in the economy because of suboptimal allocation of labour in production. In addition, there are further mechanisms that additionally reduce economic output in the longer term: reduced investment in firms because they have lower productivity compared to a counterfactual world without discrimination, adverse effects on skills acquisition, labour force participation and working times for women, lower fertility rates, etc.

All these mechanisms suggest that long-term economic performance is higher in economies that set up mechanisms to achieve a narrower GPG/eradicate it. Welfare measures (such as GDP per capita) should be growing at consistently higher rates in countries with a low GPG compared to those with a large one when further characteristics such as the development of factors of production (capital stock/labour input at various skills/work experience levels) and general technical progress are controlled for.

In the first main part of this chapter, we present a *ceteris paribus* (i.e. all other things being controlled for simultaneously) estimate of the effects of the GPG on GDP per capita growth using macroeconomic data for a panel of EU Member States (from Conference Board, OECD and Eurostat data), for which data on the GPG is available for a medium-term period.

In the second part, the estimated impact of the GPG on economic growth is monetised using real 2012 \$s adjusted for purchasing power parities based on the method by Éltető, Köves and Szulc (EKS PPP) in order to provide an estimate of the costs of the GPG to GDP. We then contextualise this effect size in the light of available estimates of the impact of various policy options to reduce the GPG by certain percentage points, for

which a body of evidence exists from qualitative research (including the Matrix report). For example, impact estimates of how much the GPG could be reduced if better transparency of wages existed could then be translated into related output effects and show how the relative options would make an impact on GDP per capita.

We hope that our discussion of these findings helps to assess the differential output effects, which could be achieved in the EU if specific policies, for example those summarised under the Bauer recommendations, were consistently implemented across the EU.

6.1 Our approach

In our approach, we followed the Study by Cassells et al. (2009) on the quantitative impact of wage discrimination on GDP per capita growth in Australia, estimated on the basis of time series data, which was subsequently valued at market prices to show the costs of a persistent GPG in terms of foregone output. Implicitly, such estimates show how much higher social wealth would be if the GPG declined.

Similar to Cassells et al. (2009), we estimate a human-capital augmented growth model to obtain a *ceteris paribus* effect on how much a persistent gender wage gap reduces economic growth in the EU. We use data from the Conference Board, the OECD and the European Labour Force Survey countries in order to construct a macroeconomic panel data set of (most) EU countries over the past 10 years, with monetary values adjusted to constant prices and purchasing power parity. The empirical design benefits from the variation of the GPG and economic growth across countries and over time. Using regression models, we explain how:

- Dependent variables (GDP per capita or GDP per person employed as differences in logs) are explained by a set of
- Independent variables (investment, population growth, employment, total hours
 worked in the economy, human capital stock in logs as required for the
 estimation empirical growth models and a level measure for the country's GPG).

Assuming that a persistent gender wage gap results in economic inefficiency, a linear estimation of the effect of the GPG on differences in logged dependent variables provides an empirical estimate of the impact of the gender wage gap on the economic growth rate (similar to Seguino 2000).

We are aware that our dependent variable represents an imperfect indicator for the economic outcomes of reducing the GPG. GDP per capita only includes activities that can be valued at market prices and are observed consistently across time and countries. In contrast, economic activity taking place in households, for example looking after the children or some kind of home production, is not valued in national accounts.

However, these activities are likely to be reduced as female labour supply increases because of a smaller/eradicated GPG. With less time for home production available to women, households would resource more consumption from markets instead of home

production. Therefore, some of the observed increase in output would only represent substitution in household consumption patterns, but not a true gain in household wealth as such activities were just excluded from the formal economic system. The output increase would partially represent a substitution and not a genuine increase in economic activity. The estimated *ceteris paribus* effect of reducing the GPG would therefore overstate the true economic impact. In the context of this Study, we will not be able to control for such effects.

6.2 Outline Economic Model

We estimate an augmented Solow growth model using a dynamic panel data model for a total number of n countries and t time periods observed. The basic specification of the Solow growth model we use here is similar to that presented in Bond et al. (2001) although most empirical estimates we know of have a similar or identical form. Following Bond et al. (ibid.), we model our growth equation as:

$$\Delta y_{ii} = \gamma_{i} + (\alpha - 1)y_{i,i-1} + x'_{ii}\beta + \eta_{i} + v_{ii}$$
 for $i=1,...N$ and $t=2,...,T$ (1)

where $_{\Delta y_{_{\#}}}$ is the log difference in per capita GDP over a five year period, $_{_{y_{_{1,n-1}}}}$ is the logarithm of per capita GDP at the start of this period and $_{x'_{_{\#}}}$ is a vector of characteristics measured during the period.

The specific form of the Solow model requires inclusion of the logarithm of the investment rate (s_{it}), which we model on the basis of reported savings rates from the World Bank, and the logarithm of the growth rate of the population (η_i) plus 0.05, where 0.05 represented the sum of exogenous technical change (g) and a depreciation rates (δ). The augmented model as proposed in the original contribution by Mankiw et al. (1992) additionally includes a measure for the human capital stock in the economy, which in their Study was expressed as the logarithm of the secondary-school enrolment rate (enr_{it}). In our estimates, we specify human capital stock as the percentage share of people in the working-age population who achieved at least level four according to the International Standard Classification of Education (ISCED4). This is a measure for people in the working age population with either a full vocational or academic education following the end of mandatory secondary schooling.

In addition, the specification as a panel data model further implies that unobserved country-specific effects (η_i), which capture differences in the initial level of efficiency and period-specific intercepts γ_i , which capture productivity changes that are common to all countries.

6.3 Impact of the gender wage gap on growth

We extend this basic model by further specifying that economic efficiency varies across countries by specific level parameters η_i and the specific impact of a country's gender wage gap on economic efficiency, which enters the form in an additive-separable way as

suggested by Cassells et al. (2009) and Seguino (2000). The augmented Solow model then becomes:

$$\Delta y_{ii} = \gamma_i + (\alpha - 1)y_{i,i-1} + x'_{ii} \beta + \sigma W g a p_{ii} + \eta_{i} + v_{ii}$$
 for $i=1,...N$ and $t=2,...,T$

with
$$Wgap_{it} = \left[\frac{wm_{it} - wf_{it}}{wm_{it}}\right]$$

expressing the unadjusted gender wage gap, which is calculated as the difference between median earnings of men and women relative to median earnings of men. As is the standard in this literature, median earnings are related to wages and salaries in full-time work for dependent employment, i.e. avoiding differences, which could be caused by differences in working times and the larger share of women working in part-time employment compared to men. This should at least mitigate some of the differences between working-times of men and women, although the OECD acknowledges that men tend to work on average longer hours than women even when restricting the gap to full-time employees.⁶

We are aware of the problem that the unadjusted gender wage gap does not account for the specific characteristics of the employment structure in the different countries and that the gender wage gap is usually wider for people at lower formal education levels than for people with post-secondary education, at least for younger cohorts in the labour market. However, we do not know of consistent time-series data on the adjusted gender wage gap available for a larger sample of OECD or EU Member States and therefore rely on this sub-optimal measure. We do however believe that our model can at least address part of this weakness by including the percentage shares of people at least qualified to ISCED4 levels, which enter the form as the stock measure for human capital.

6.4 Empirical specification

In addition to the gender wage gap and differential levels in human capital, we further include variables to account for differences in growth caused by country-specific labour market participation patterns. This is especially relevant in the context of Europe, where employment and working time differs markedly, with higher working time in the formerly communist Central and Eastern EU Member States and lower working time in the continental economies of the west (in particular the Netherlands, Germany and France).

As was discussed in Cassells et al. (2009), this extension is necessary to separate the impact of general population growth on GDP per capita growth from the impact of changes in labour participation and changes in working times.

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⁶ http://www.oecd.org/std/37964069.pdf

⁷ See also: Table LMF1.5.A: Average annual earnings of females as a percentage of males by level of educational attainment and age-cohort, 2008 or latest year available. http://www.oecd.org/social/family/LMF1.5%20Gender%20pay%20gaps%20for%20full%20time%20workers%20-%20updated%20081212.pdf

The final specification of the model we estimate is:

$$\Delta y_{ii} = \gamma_{i} + (\alpha - 1)y_{i,i-1} + \beta_{1}s_{ii} + \beta_{2}n_{ii} + \beta_{3}hk_{ii} + \beta_{4}lfp_{ii} + \beta_{5}hpl_{ii} + \sigma Wgap_{ii} + \eta_{i} + \nu_{i,i}$$
(2)

with the vector of in-period covariates x_{it} in addition to the parameters described in relation to equation (1) now fully specified as:

- logarithm of the investment rate
- η_t logarithm of the growth rate of the population plus 0.05
- $_{hk}$ logarithm of the share of the working-age population with at least ISCED4
- logarithm of employment to population ratio
- logarithm of the average hours worked per person employed.

Descriptive statistics of the variables entering this form are presented in Table 11, as well as in Table 17 and Table 18 in the Appendix for some selected years. As can be seen from these descriptives, the specification finally estimated is restricted to countries of the European Economic Area (EEA) as information on the human capital stock (ISCED4 as percent of total working-age population) was obtained from micro data of the European Labour Force Survey (ELFS) is only available for these countries and for the period 2002-2011. Our country panel is further reduced by the GPG variable, which is currently only available for a subset of EEA countries, representing primarily the pre-2004 EU (EU15), the non-EU Member States of the EEA and Poland, the Czech and Slovak republics.

In addition, the nature of the time series information is "unbalanced", which implies that some of the time series (for example for the Netherlands) do not cover the full time-period as for example data for the UK, which is available for the full range between 2002 and 2010 used for this analysis. Since the form is estimated for t=2,...,T as the initial level effect at the beginning of the period estimated enters the equation as a regressor, the unbalanced panel is estimated for a maximum of eight years per country (like in the UK), but in some countries for fewer years.

6.5 Estimation

We estimate the model represented in (2) in two different estimates, specifying the vector of covariates x_{it} as either a) annual average values for each period of five years (Caselli et al. 1996) or b) as levels related to the specific year (Mankiw et al. 1992, Bond et al. 2001). We also estimate the models for two different dependent variables, either a) the gross domestic product (GDP) per capita in purchasing power parities based on the method by Éltető, Köves and Szulc (EKS PPP)⁸ in real values as of 2012 or b) the GDP in 2012 EKS PPP per person employed, which was obtained by multiplying the GDP per capita measure with the ration of population to employment (as in Canarella and Pollard 2003). The GDP per person employed represents a measure closer to productivity than GDP per capita and can to some extent control for the variation in labour market participation and demography across the sample.

⁸ http://stats.oecd.org/glossary/detail.asp?ID=5525

As suggested by the final specification, we estimate the growth model using the dynamic panel data model method, i.e. with lagged levels of the dependent variable included as a right-hand side regressor. While such a modelling can capture country-specific dynamics better than static panel data models, such as fixed or random effects models, there are econometric problems of estimating models with lagged dependent variables as generally with models including sources of endogeneity. We address this by estimating the dynamic panel data model using the estimator initially put forward by Arellano and Bond (1991), which has several advantages compared to static estimates of panel data:

- First, the form represented in (2) is estimated in first differences, which implies that time-invariant country-specific level effects represented by $_{\eta_i}$ cancel out similarly to a fixed effects model.
- Second, by taking the first differences and allowing the levels of the x_{it} to be correlated with unobserved country-specific fixed effects, the lagged first differences of x_{it} and y_{it} can be used as instruments in the level equations (see Bond et al. 2001). This property is specifically useful to the estimation of dynamic panel data models, which include a lagged dependent variable as a right hand side regressor (i.e. an "endogenous variable") as specified in (2). As a result of this, estimates obtained in OLS or Fixed/Random effects models would result in biased parameter estimates due to the correlation between one of the independent variables included in the model and the error term \Box_{it} . The Arellano/Bond estimator benefits of the availability of lagged levels of dependent and independent variables, which can be used as instruments for the differences of right-hand side regressors included, exploiting the fact that they are not correlated with the error term of the model in first differences. Both lagged levels of the dependent variable y_{it-2} until the earliest available point in time as well as levels of other covariates x_{it} for all periods before t-1 are used as instruments.

6.6 Results

We show the results of both specifications in Table 11 and Table 12 below. These estimates are qualitatively similar to what would be suggested by the standard empirical literature on Solow models:

- The coefficient of the lagged output is negative and strongly significant in all models.
- The sign of the savings rate is positive, albeit not significant. The sign of
 population growth is negative in two models, which is consistent the Solow
 model, but only significant in the final estimate specifying x_{it} as in-period levels.
- Consistent with Mankiw et al. (1992) and further augmented Solow models, human capital stock has a positive and significant effect on growth in all models.
- Consistent with the modelling of the dependent variables as either GDP per capita or GDP per person employed, labour force participation growth either significantly increases or decreases growth, while growth in working times per person employed have generally positive impact.

⁹ Note that this affects only typical panel where N is (relatively) large, but the number of periods T is small. A long time series would not suffer the same source of bias.

Table 11: Specification 1*

	Model 1: GDP per capita			Model 2: GDP per person employed		
	Coef.	Std. Err.	P	Coef.	Std. Err.	P
Уi,t-1	-0.5111	0.0525	0.0000	-0.4649	0.0576	0.0000
Sit	0.0512	0.0381	0.1790	0.1050	0.0477	0.0280
$n_{it}+0.05$	0.1560	0.0905	0.0850	0.0812	0.0954	0.3950
hk _{it}	0.1053	0.0251	0.0000	0.1702	0.0290	0.0000
lfp _{it}	0.1383	0.0637	0.0300	-0.3807	0.0660	0.0000
hpl _{it}	0.4767	0.1133	0.0000	0.4683	0.1200	0.0000
Wgap _{it}	-0.0008	0.0006	0.2310	-0.0012	0.0008	0.1200
Number of observations	125			125		
Number of groups (countries)	19			19		
Number of instruments	97			97		
Wald chi2(16)	2727			1075		
Prob > chi2	0			0		

^{*} with savings and population growth specified as annual average values for five years periods before t as in Caselli et al. 1996. Specification includes dummy variables for years. Instruments are t-2 lags of all independent variables.

Source: Conference Board Database, European Labour Force Survey, own calculations

Table 12: Specification 2*

	Model 1: GDP per capita			Model 2: GDP per person employed		
	Coef.	Std.	P	Coef.	Std. Err.	P
		Err.				
y _{i,t-1}	-0.4204	0.0470	0.0000	-0.3845	0.0530	0.0000
Sit	0.0147	0.0189	0.4370	0.0123	0.0214	0.5660
n_{it} +0.05	-0.0587	0.0597	0.3260	-0.1208	0.0654	0.0650
hk _{it}	0.0882	0.0244	0.0000	0.1441	0.0275	0.0000
lfp _{it}	0.2562	0.0755	0.0010	-0.2135	0.0713	0.0030
hpl _{it}	0.4961	0.1125	0.0000	0.4865	0.1162	0.0000
Wgap _{it}	-0.0007	0.0007	0.2730	-0.0014	0.0008	0.0620
Number of observations	125			125	125	
Number of groups	19			19	19	
(countries)						
Number of instruments	97			97	97	
Wald chi2(16)	2819			1141	2819	
Prob > chi2	0			0	0	

*with savings and population growth specified as period specific levels in t as in Bond et al. 1996. Specification includes dummy variables for years. Instruments are t-2 lags of all independent variables.

Source: Conference Board Database, European Labour Force Survey, own calculations

Assessing the quality of the estimates we obtained, we conclude that specification two leads generally to more plausible estimates as the sign of population growth in both models of specification one is not consistent with Solow. We acknowledge that the impact of changes in savings rates is not statistically significantly different from zero, but we also note that the effect size is relatively small for the period, for which data are available.

6.7 Main finding

Our preferred specification two also includes two estimates of the impact of the gender wage gap, which is negative. This is consistent with expectations as a persistent gender wage gap reduces economic efficiency. The only significant estimate found was related to the specification of growth of GDP per person employed. The size of the impact (-0.0014) suggests that a decrease in the gender wage gap by one percentage point would increase economic growth by 0.1 percent. This finding will be used in the following to illustrate the economic costs of the gender wage gap. More specifically, we will derive output increase, which could be achieved in the EU if measures causing specific reductions in the gender wage gap were introduced consistently across the EU.

Our finding compares low relative to the impact of the gender wage gap on economic growth for Australia (Cassels et al 2009), which is about 0.25 percent of a reduction of the GPG by 1 percentage point. However, since our data only represent the early 2000s, a longer-term impact as for Australia is unlikely to show in our data. We also believe that underlying growth dynamics differ markedly between Australia and Europe, with generally lower economic growth in Europe, which would be a plausible explanation for the impact of reducing the GPG in Australia perhaps being higher.

6.7.1 The economic impact of policies reducing the GPG

Building on the above empirical estimation of the impact of the GPG on growth in the EU, the following section sets out to contextualise the above findings by providing some possible results stemming from the introduction of different policy options aimed at reducing the GPG.

6.7.2 The potential economic impact of a reduction of the gender wage gap

Although the issue of the GPG and its potentially negative economic impact have been widely discussed both among academics and policy makers, as yet, only very little material actually quantifies the effects of different policy options to reduce the GPG. A recent report conducted for the European Commission, however, has estimated the reduction of the GPG within the European Union resulting from a range of potential policy options, such as sanctions or streamlining of existing EU regulations (Matrix, 2011).

Based on the estimates that have emerged from this chapter (see table 12, Model 2), together with a quantification of effects of different policy options, the following tables will illustrate the economic costs in terms of loss of output associated with the gender wage gap in Europe and an illustrative number of individual European Member States.

Leaving aside any policy options implying voluntary steps taken by employers such as regular reporting on GPG issues or more generally introducing more transparency in wage setting and progression criteria – both measures frequently referred to in the literature – the following section focus on five specific policy recommendations based on the Bauer report.

6.7.3 The potential economic impact of selected Bauer recommendations

Where introduced consistently across the EU, the five Bauer recommendations discussed in this paper, are likely to have a significant impact on economic output in the European Union. This is particularly the case for transparency of wages, reporting on the GPG and company level, and changes in the part-time work Directive (for each of these options, the GPG is estimated to be reduced by between two and three percentage points).

Based on the estimated size of the impact (-0.0014) which suggests that a decrease in the gender wage gap by one percentage point would increase economic growth by 0.1 percent, Table 13 shows the potential impact of selected Bauer recommendations. According to the policy impact indicated in Table 13, the Bauer recommendations would lead to a reduction of the gender wage gap of between one and three percentage points across the European Union.

Having set out the potential impact of a reduction in the GPG on economic output in the EU, using aggregated numbers for growth in total GDP as well as in GDP per capita help to contextualise the potential output effect a reduction in the GPG might have.

The minimum and maximum impact scenarios set out in table 13 show that a decrease of the GPG of 2 percentage points will result in an increase in total GDP of US\$ 43,902,370,000, which in turn will result in a GDP per capita increase of US\$ 87.49 across the EU.

Although this provides a more tangible indication of the economic impact of a reduction of the gender pay, in order to improve these estimates, further research on the actual effect of different policy options on closing the GPG will be needed to further specify which policy options are most beneficial in terms of benefits (in addition to further elaborating the costs of the implementation of different policies, see for example Matrix, 2011: pp.66). Moreover, given the heterogeneous situation across EU Member States in terms of the GPG, where countries have already partly implemented some of the policies summarised under the Bauer recommendations (see Annex 1 for an overview of different initiatives at Member State level), a more differentiated analysis may further add to the policy discussion.

6.7.4 The potential economic impact on individual EU Member States

As described in the introductory section of this chapter, the GPG currently varies substantially among European Member States (see Chapter 4). Some countries, such as Austria and the Czech Republic, have the widest GPG, exceeding 20 percentage points. At the other end of the scale, in Slovenia and Poland, only very modest differences in the remuneration between men and women can be found. These disparities mean that some countries have scope for greater reductions in the gender wage gap, and have the potential to reap part of the economic benefits resulting from a more equalitarian pay structure which other countries already enjoy to a certain extent.

Table 13: Potential impact of reductions of the GPG on economic output in the EU following the Bauer recommendations

Policy Options for closing the GPG	Opt	ion 1	Opti	ion 2	Opti	on 3	Opti	on 4	Opt	ion 5
Level of impact	Minimum impact	Maximum impact								
Decrease in GPG	-2 %	-3	-2	-3	0	-1	-1	-2	-2	-3
GDP increase (million US\$)	43,902.37	65,747.77	43,905.37	65,747.77	-	22,062.96	22,062.96	45,890.25	45,890.25	65,747.77
GDP p.c. increase (US\$)	87.49	131.02	87.49	131.02	-	43.97	43.97	87.49	87.49	131.02

Source: Own calculations, in US\$, PPP 2012 for the whole EU

Table 14: Estimated increase in GDP per capita across EU Member States

EU Member States	Current level of GPG (unadjusted GPG, Eurostat)	GDP p.c. increase between 2005-10 in percent	Increase in GDP p.c. (following 1 percentage point reduction of GPG)	Increase in GDP p.c. (following 5 percentage point reduction of GPG)	Increase in GDP p.c. (following 10 percentage point reduction of GPG)	Increase in GDP p.c. (following 20 percentage point reduction of GPG)
Austria	23.70	6.70	57.81	289.04	578.09	1,156.18
Belgium	10.20	5.61	54.44	272.22	544.44	*
Bulgaria	13.00	19.07	14.81	74.03	148.06	*
Cyprus	16.40	3.31	32.25	161.24	322.49	*
Czech Republic	21.00	14.62	33.26	166.29	332.57	665.15
Denmark	16.40	-1.65	55.92	279.59	559.17	*
Estonia	27.30	3.97	24.52	122.62	245.24	490.48
Finland	18.20	3.61	51.22	256.08	512.15	*
France	14.70	0.13	49.64	248.19	496.38	*
Germany	22.20	8.01	50.37	251.86	503.73	1,007.45
Greece	-	-0.40	41.08	205.39	410.77	821.54
Hungary	18.00	-0.23	26.74	133.72	267.43	*
Ireland	13.90	-7.28	59.60	298.02	596.05	*
Italy	5.80	-3.95	47.54	237.71	*	*
Luxembourg	13.60	3.22	114.62	573.11	1,146.22	*
Latvia	11.90	-0.84	19.94	99.68	199.35	*
Lithuania	8.70	6.83	21.44	107.19	*	*
Malta	12.90	8.68	33.37	166.85	333.69	*
Netherlands	17.90	5.32	58.38	291.91	583.82	*
Poland	4.50	26.20	21.72	*	*	*
Portugal	12.50	1.15	32.50	162.50	324.99	*
Romania	12.10	14.93	12.77	63.86	127.71	
Slovak Republic	20.50	24.73	25.27	126.35	252.70	505.39
Slovenia	2.30	9.64	37.47	*	*	*
Spain	16.20	-2.03	45.14	225.68	451.36	*
Sweden	15.80	7.51	56.17	280.84	561.69	*
United Kingdom	20.10	-0.14	55.38	276.92	553.84	1,107.68

In order to see how reductions of different size in the GPG would translate in economic benefits of diverse magnitude, Table 15 presents estimated increases in real GDP per capita in each of the EU Member States under four possible scenarios. The departure point to obtain these estimates is the total growth rate or percent change in real GDP per capital that each Member State experimented in the period 2005-2010. What would have happened if the GPG had been reduced by 1 percentage point during this period? The econometric analysis presented above suggests that this would have led to a total growth rate 0.14 percentage points higher over the entire period 2005-2010. The difference between the level of real GDP per capita that would have been obtained as a result of faster growth and the actual level of real GDP per capita provides an estimation of the economic gains produced by a more balanced pay structure. Other possible scenarios show what would be the economic gains if the GPG were reduced by 5, 10 and 20 percentage points over this period. A reduction of 5 percentage points in the pay gap over the period 2005-2010, for instance, would have led to a total growth rate 0.7 percentage points larger (0.14 times 5). Countries whose current GPGs are still over 10 or 20 could have experimented growth rates 1.4 and 2.8 percentage points larger over the 2005-2010 period, had they reduced these gaps in 10 and 20 points, respectively. The size of the economic gain, therefore, depends on the initial level of GDP per capita, the actual rate of growth over the period and the size of the reduction in the gender wage gap.

6.8 Concluding Comments on the Economic Assessment

This section has shown that there is a clear positive effect of closing the GPG on economic growth: a reduction of the gender wage gap of one percentage point might lead to an increase in economic growth of 0.14 of a percentage point, compared to a scenario in which the GPG remains stable, which in turn would increase total output as well as per capita output across the European Union.

As shown in Table 15 above, this 0.14 increase in economic growth could potentially increase per capita GDP, depending on how far the GPG is narrowed. As for example shown by the example of Austria, a reduction of 10 percentage points in the GPG would increase per capita GDP by US\$ 578.09. A further reduction of 10 percentage points on a current GPG of around 23 %, would result in a total GDP p.c. increase of US\$ 1,156.18. As this table shows, a reduction beyond the above suggested 2-3 % impact resulting from the implementation of policy options such as sanctions or increased transparency in wage formation, a substantial reduction of the GPG will have a clear positive impact on economic output in the EU.

7. Conclusions

This Study has used the Bauer Report as a basis to consider the question as to the current scale, nature and dynamics of the GPG across the EU and to assess the consequential economic impact. Focusing on five of the nine recommendations set out in the Bauer Report, the Study has gone on to consider the potential impact of a EU wide legislative package of measures on the GPG.

The above sections provide a snapshot of the potential impacts associated with the recommendations in the Bauer Report. Given the nature and scope of this Study, the research is largely limited to a subset of measures presented in the report and covers only a selection of impacts. In addition, the secondary data used in the Study has its limitations, in particular due to the lack of "counterfactual" cases, which could help isolate the magnitude of the impact generated.

The Study helps to inform the current discussion concerning the potential added value of the measures in the Bauer Report. The research design and the causal relationships identified can be used to develop a more detailed methodology and a larger research programme including primary research to support secondary data collection.

Potential aspects of the recommendations in the Draft Report which could not be analysed as part of this Study, but which could add valuable insights include:

- Distribution of impacts across Member States, industry sectors, and employer groups;
- Interaction between national and EU framework;
- Detailed modelling of impact with expected company compliance levels;
- Comprehensive costing of the individual recommendations, including costs to public authorities; and
- Isolation of impact and comparison against counterfactual.

Given the limited insight into the impacts of measures proposed in the Bauer Report in existing literature, such analysis is likely to enhance the state of knowledge in the field and to support EU policy-making in the area. This report constitutes the first step in this process.

The Study has also been able to identify a number of research areas that would warrant further attention. Whilst it is apparent that there is a significant amount of research being undertaken on initiatives that are seeking to reduce the GPG there is still insufficient quantification of impact. Understanding the links between the GPG and economic growth is also an area which warrants further attention.

This not withstanding the Study has confirmed that the GPG is an issue that warrants attention at a European level. The five of the nine recommendations within the Bauer

Report that were considered for this Study each have the potential to positively impact on reducing the GPG. The impact each one percent reduction in the GPG has on economic growth is a further motivation to focus collective efforts. Given that the Study also found significant variations across Member States in terms of the manner and extent to which they are addressing the issue of the GPG it would see evident that European legislation can continue to help focus efforts on initiatives which may have the greatest impact on reducing the GPG and to do so in a manner which will bring a degree of uniformity across the EU.

Recognising that there are a number of ways to measure the GPG, the European Parliament could consider the role it can play in improving the consistency and reporting of data so as to have an improved sense of where progress is being made as where it is not being made as well as the drivers for change. In this way European Institutions can focus on providing European added value by providing a legislative base, improved monitoring and reporting and clear policy goals and in doing so support Member States to make significant improvements in reducing the GPG and in doing so facilitate economic growth.

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Annex 1: Country Profiles of Current Policy Initiatives

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Table 1: Individual country assessment Austria

Gender	Whole economy ¹⁰	23.7% (provisional)
pay gap	Public sector 11	19.6% (2010 data)
pay sap	Private sector	24.6% (2010 data)
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 The National Action Plan - 'Gender Equality in the Labour Market', by Minister of Women and Civil Service (2008–2013) aimed to reduce gender differences in employment. There was social partner agreement in May 2010 on 16 measures including an online pay calculator; guidelines for works councils and HR professionals for the analysis of pay gaps and job evaluation; and pay transparency in job announcements and income transparency reports. From 2010 onwards, employers have been legally required to produce income reports according to company size¹². These reports must contain the number of men and women employed including the collective agreement category attached to it, the company assignment category, the average median income and adjusted working time for men and women (BKA, 2010:.67). Income transparency reports are anonymous and conducted every two years. They show average/median pay by occupational category by gender and are available to the works council/employees (EF, 2012b). In October 2011, the unions in the metal, mining, gas and heating sectors, GPA-djp und PRO-GE, concluded a major new collective agreement for about 165,000 workers. This included a minimum guaranteed increase of EUR 80 a month for the lowest paid and an extension of parental leave time from 10 months to 16 months -seen as important to narrow the GPG as female workers get fewer promotions because of time away from employment, through maternity or parental leave (ITUC, 2012). The GPA-DJP stated in 2011 that special negotiations could occur three times over a 10-year period, where employers and trade unions discuss sectoral pay figures and develop measures to reduce pay inequality between men and women (ITUC, 2012). The Minister of Women and Civil Service established an online Salary Calculator to compare average salaries for women and men¹³ (EC, 2011). This calculator was set up to provide easily accessible and current information on pay schemes in particular occupations/sectors (BA
	2. Work evaluation and job classification (recom. 3)	 Job classification systems (plant level and in sector collective agreements) must take into account the principle of equal pay for equal and equivalent work (Foubert et al, 2010).

[■] The high GPG is attributed to gender specific labour market

¹⁰ Data on GPG in EU Member States someguegation. Reconstate (management GPGa ROLL publics as gented) by ¹¹ Data on public and private GPG sourced from Eurostat (unadjusted GPB by economic control, 5,

¹¹ Data on public and private GPG sourced from Eurostat (unadjusted GPB by economic control, 5, 2011, unless stated)

 $^{^{12}}$ Companies with more than 1000 employees from 2011 for the year 2010, more than 500 from 2012 for 2011, more than 250 from 2013 for 2012, more than 150 from 2014 for 2013).

¹³ Link to tool: http://www.gehaltsrechner.gv.at/

	 Trade Unions and as a result a guideline for the application of non-discriminatory analytical work evaluation was developed in 2004 (EC, 2006). Nationwide collective agreement signed in social and health services (where the vast majority of employees are women) in 2003 covering 35,000 employees in the private sector. This agreement established a pay scheme for nine different pay levels according to skills and experience and replaced more than 200 different pay schemes in individual company regulations (EC, 2006). A manual on the analysis of income differences and job evaluation was prepared for works councils, HR specialists and employees in 2011 by the Austrian Minister of Women and Civil Service involving the social partners as cooperation partners.
3. Equality bodies and legal remedies (recom.4)	 All public sector authorities at federal level are obliged to take action to eliminate gender inequality (EIRO, 2004). Labour Constitution Act obliges employers to consult with work councils on positive action for women at company level (Eurofound, 2002). If the Equal Treatment Commission suspects discriminatory practices, it can oblige the employer to submit a report of male and female comparisons regarding "conditions of work". If a violation is detected, the Commission can request this report "for one for more subsequent years" (Foubert et al, 2010). "The Equality Bodies (Ombudsperson or Equality Affairs) have always played an important role, not only by counselling and supporting individuals, but also by conducting surveys and studies, by inventing and installing instruments as well as by information supply and capacity building of all stakeholders" (ibid.)
4. Sanctions (recom.8)	 Since 2011 there has been a company obligation to indicate the minimum wage and, where appropriate, the possibility of over payment in job announcements in their income report. Violating these regulations results in a first warning fine of up to EUR 360 (EC, 2012a).
5. Streamlining of EU regulations and EU policy (recom.9)	 Alongside labour market segregation, the high GPG is attributed to the high proportion of part-time work performed by women (EIRO, 2009). ¹⁴ The EC (2012) states: 'Steps have been taken to improve the situation of women in the labour market by extending care services as well as by introducing measures to raise awareness of the substantial GPG in Austria. However, the measures are not commensurate with the existing challenges.' (2012:26) From August 2007 a legal claim to premium rates of pay of an additional 25% for overtime work was introduced for part-time workers; aimed to improve the incomes of women engaged in part-time work (EF, 2010a).

 $^{^{14}}$ However, as noted in the National Action Plan on the equal treatment of women and men in the labour market in Austria highlights, also when only analysing wage differentials among persons working full time year-round, there is still a GPG of 22 percent (BKA, 2010).

Table 2: Individual country assessment Belgium

	Whole economy	10.2%
GPG	Public sector	-2.9%
	Private sector	13.8%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 Companies are obliged to produce an annual report on gender equality, which must be presented to the works council or trade union representatives (EIRO, 2004). Every two years organisations with over 50 workers must conduct a comparative analysis of the wage structure of female and male employees. If this analysis shows that women earn less than men the organisation is obliged to produce an action plan (EC, 2013). Since 2001, a set of indicators have been used to evaluate gender pay differences in the country's annual report on the GPG. These indicators have been regularly adapted (EC, 2010). Since 2007 the Belgian government has published yearly the report "The gender wage gap in Belgium" (EC, 2013) In the context of the Europe 2020 strategy, Belgium has identified an objective of reducing the GPG from 9 % in 2009 to 5 % in 2020 (see NRP 2011). In April 2012 a law was passed on reducing the GPG, stating that differences in pay and labour costs between men and women should be outlined in companies' annual audit ("bilan social") (EC, 2013)
	2. Work evaluation and job classification (recom.3)	 Federal government has encouraged modernisation of job classifications; legislation allows government to formulate conditions that JE systems must fulfil (organisations which use job classification systems must ensure they are gender neutral) (Foubert et al, 2010). There was a national agreement in 2010 to ensure that by 2016 all job classifications are gender neutral in order to reduce the GPG (EC, 2011c; EC, 2010). Through inter-industry agreements the social partners are encouraged to adopt a "gender neutral approach to job classification" (EC, 2013) A guidebook on job classification is available for employers and trade unions to avoid and eliminate gender bias in pay systems (2006; EC, 2007): Sector joint committees have been ensuring that wage and analytical job classifications in collective agreements are free
		from gender bias (EF, 2010a; EF, 2008a) through the EVA ((Evaluation Analytique/analytische EVAluatie)) project (Foubert et al, 2010). This project has three key objectives: revision of training programmes, organisation of new training courses and "sensitisation of the social partners;

analysis of the gender effect of the development and the introduction of analytical methods on wages Fand Aha (Ligiga

of a universal analytical gender-neutral job classification

method to analyse all job types" (EC, 2006:49).

	 Article 37 of the Gender Act however allows the Federal Government to take steps to guarantee that job classifications comply with the principle of gender equality (Foubert et al, 2010)
3. Equality bodies and legal remedies (recom.4)	 In 2006 Federal government implemented an annual report for companies, monitoring progress in reducing the GPG (EC, 2007; EIRO, 2004). The Institute for the Equality of Women and Men was established to change job classification through the EVA project, with the aim of reducing pay differences between women and men (EF, 2010a) and the Institute produced an equal pay report which brought transparency to official data (EHRC, 2010). The Institute for Equality between Women and Men is entitled to initiate judicial proceedings in the case of unsuccessful negotiations (Milieu, 2011).
4. Sanctions (recom.8)	■ The Labour Inspectorate can apply sanctions to organisations that violate the compulsory requirements of the Collective Agreements Act (1968); however Foubert et al, state there is no known occurrence of such intervention (Foubert et al, 2010)
5. Streamlining of EU regulations and EU policy (recom.9)	National legislation on overtime for part-time workers exists and provides the terms for payment of overtime.

Table 3: Individual country assessment Bulgaria

GPG	Whole economy	13.0%
	Public sector	19.9%
	Private sector	11.1%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2) 2. Work evaluation	 Awareness raising campaign to reduce the GPG was launched by the Government in 2008 (EC, 2011c).
	and job classification (recom.3)	
	3. Equality bodies and legal remedies (recom.4)	■ Commission on Protection against Discrimination is entitled to initiate judicial proceedings and bring claims before the court (Milieu, 2011). The Commission can establish infringements of anti-discrimination law; it can set out measures for the prevention of such infringements, and can impose penalties and "apply measures of administrative coercion" (Foubert et al,2010)
	4. Sanctions (recom.8)	 Commission on Protection against Discrimination can impose penalties for infringements of anti-discrimination law (Foubert et al, 2010)
	5. Streamlining of EU regulations and EU policy (recom.9)	 The Government introduced a measure supporting part-time employment for up to three months by paying those moving to part-time employment 120 BGN (EUR 60) in addition to their lowered wages. The aim of this measure was to protect income levels of people moving to part-time employment caused by the recession (Smith, 2009). National legislation on overtime for part-time workers also exists and states the terms for overtime pay, however Foubert, 2011 states that remuneration for overtime work is very low.

Table 4: Individual country assessment Cyprus

	Whole economy	16.4% (Provisional)
GPG	Public sector	0.3% (Provisional)
	Private sector	25.0% (Provisional)
	1. Improved situational analysis and transparency of results (recom.2)	 In 2008, the Ministry of Labour and Social Insurance put forward measures aimed at reducing the GPG, including voluntary equality schemes for organisations (focused on larger organisations) and increased awareness of the inspection system (EIRO, 2009). Foubert et al state that Article 6(2) of Law No. 177(I)/2002 provides that trade unions will inform employees to ensure the application of equal pay through written announcements posted on boards in the workplace (Foubert et al, 2010). Foubert et al state that Article 6(A)(2) encourages employers to promote equal treatment for men and women in a systematic way in the workplace and provide employees (and their representatives, upon request) at appropriate intervals, with information on equal pay for men and women in the organisation. This information can "include an overview of the proportions of men and women at different levels of the organisation, their pay and pay differentials and possible measures to improve the situation in cooperation with employees' representatives" (ibid.) Awareness raising campaigns, publication of guidelines and codes of practice have also been documented; with some of these measures co-funded by ESF (EP, 2012)
	2. Work evaluation and job classification (recom.3)	■ Trade Unions and Employers' Organizations have been reported to arrange seminars for training their officers on job evaluation schemes and conduct gender equality surveys (Foubert, 2010:68).
	3. Equality bodies and legal remedies (recom.4)	 In the 2008 proposals by the Ministry of Labour and Social Insurance measures including a programme of theoretical and practical training for officials responsible for monitoring and implementing the legislation on workplace gender equality and the establishment of a new monitoring body: 'Working Environment Gender Equality Certification Body for Enterprises' responsible for the monitoring of practices implemented to tackle gender discrimination (EIRO, 2009) were put forward. The Equality and Equal Treatment Department of the Democratic Labour Federation of Cyprus have also provided their officers with guidance on equal pay, training and seminars to raise awareness of the GPG and to promote gender equality in wage setting (EF, 2010a). The Authority Against Discrimination also has responsibility for investigating cases of pay discrimination (EC, 2006).
	4. Sanctions (recom.8)	- Auti-le (/1) of Leve No. 7(/1) /2002 and the date of the
	5. Streamlining of EU regulations and EU policy (recom.9)	Article 6(1) of Law No. 76(I)/2002 provides that a part-time employee shall not be treated less favourably than a comparable full-time employee unless different treatment is justified on objective grounds. It also states that every part-time employee is "entitled to equal terms and conditions of employment and to equal treatment and shall be afforded the same protection as that given to a comparable full-time employee, in particular with regard to salary and benefits" (Foubert et al, 2010)

A number of interventions, designed and financially supported by the ESF¹⁵, were implemented, including an ERDF co-financed programme aimed at enhancing entrepreneurship among women. A target was also set to reduce the GPG by 5 percentage points by 2015 (EC 2006: 12)
 Soumeli (2009) stated that 'In April 2009, a number of amendments were made to the existing legislation on equal pay for men and women for equal work or work of equal value....in particular the amendment aims to harmonise national legislation with the European directive on equal opportunities and equal treatment of men and women in employment, and also to comply with the revised European Social Charter' (Soumeli, 2009).

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¹⁵ 'The above activities are laid down in the National Action Plan for reducing GPG covering the period 2010-2015 with a budget of EUR 3,5 million (co-financed by the ESF). The set target is to reduce by 2015 the GPG by 5 pp, down to 18% from 23% where it stood in 2009.' (Ibid.)

Table 5: Individual country assessment Czech Republic

	Whole economy	21.0%
GPG	Public sector	19.5%
	Private sector	22.8%
	1. Improved situational analysis and transparency of results (recom.2)	 Foubert et al identified that there "are no strategies to require the release of information about pay broken down by gender. Information on pay is regarded as private information and is not normally released by employers; employees may even be obliged by some labour contracts not to inform other employees about their salary" (Foubert et al, 2010) The social partners however try to encourage individual companies to use different approaches such as screening of job descriptions to check that they do not contain discriminatory elements, reviewing of pay criteria to check that they are not discriminatory, equality plans, modernisation of pay systems (ETUC, 2009). The Confederation of Industry also distributed a guide for employers called —How to tackle the pay gap in July 2007 (ETUC, 2009).
	2. Work evaluation and job classification (recom.3)	
	3. Equality bodies and legal remedies (recom.4)	 There is a specific body dealing with gender equality in employment: the Government Council for the Equal Opportunities of Women and Men (EF, 2010a) and employers are by labour inspectorates, "according to Act No. 251/2005 Coll., on labour inspection" (Foubert, 2010) The Committee for Equal Opportunities for Women and Men of the Czech-Moravian Confederation of Trade Unions (čMKOS) also promotes equal pay for equal work (EC, 2006). The Action Plan for 201016 contains 37 items including the balanced participation of men and women in the labour market and the GPG. No.17 requires the Ministry of Labour and Social Affairs to monitor compliance with employment law. This includes compliance with: the provisions prohibiting discrimination on the grounds of gender; the principles of equal pay for work of equal value; and opportunities for promotion at work. The Ministry of Labour and Social Affairs can then conduct "a statistical analysis of the inspections on compliance" (EC, 2010).
	4. Sanctions (recom.8)	,
	5. Streamlining of EU regulations and EU policy (recom.9)	

¹⁶ 'At present, there is no specific action plan to close the GPG in the Czech Republic. However, measures were included in a general government action plan for gender equality. Since 1998, the action plan has been updated periodically each year. In action plans, the Czech government instructs ministries and other central administrative bodies to carry out specific measures in order to promote gender equality. Some tasks are for general adoption by all ministries.' (Ibid.)

Table 6: Individual country assessment Denmark

	Whole economy	16.4%
GPG	Public sector	13.5%
	Private sector	18.2%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	■ The 'Act on gender specific pay statistics', states that companies with more than 35 employees and groups with a minimum of 10 women and 10 men that hold the same job are obliged to report on wage statistics broken down by gender to the Statistical Bureau(EF, 2010a; Foubert et al, 2010). If the employer requests it, the Statistical Bureau will process the data and deliver gender-specific statistics for the individual employer's business" (Foubert et al, 2010:78)
	2. Work evaluation and job classification (recom.3)	 There is no mandatory job evaluation. Ministry of Labour published analysis in 2001 stating job evaluation may be route to narrowing GPG. Guidance on the use of job evaluation has been published as a tool to promote equal pay in the municipal sector (EC, 2006). A campaign 'Charter for more women in management' was undertaken by the Minister for Gender Equality in 2008 and was targeted at combating vertical segregation. The charter includes guidelines, which companies are expected to comply with (EF, 2010a).
	Equality bodies and legal remedies (recom.4)	 Board of Equal Treatment is entitled to initiate judicial proceedings. It can bring a case before the judiciary if other non-judicial proceedings have failed (Milieu, 2011). The Equality Complaints Board is permitted to deal with complaints about discrimination on grounds of sex including equal pay claims. This body cannot however conduct independent surveys concerning discrimination, or make recommendations on any issue relating to such discrimination and it cannot start cases at its own initiative. "It is therefore not a monitoring body" (Foubert, 2010).
	4. Sanctions (recom.8)5. Streamlining of EU	
	regulations and EU policy (recom.9)	

Table 7: Individual country assessment Estonia

GPG	Whole economy	27%
	Public sector	Unavailable
	Private sector	Unavailable
	1. Improved situational analysis and transparency of results (recom.2)	 An Action plan to reduce the GPG was approved in 2012, which included improving the implementation of the existing Gender Equality Act (improvement of the collection of statistics, awareness raising) and analysing organisational practices and pay systems in the public sector (EC, 2013). There was also a target for reducing the pay gap (EC, 2007) in the action plan of the Ministry of Social Affairs 2007–10. The target aimed to reduce the GPG from 24% to 20% by 2010 (EC, 2006). The Ministry of Social Affairs also started a project to analyse the GPG and its causes (Foubert et al, 2010). EIRO (2009) however stated that few initiatives had been taken to address to gap.
Policies	2. Work evaluation and job classification (recom.3)	
relating to Bauer report	3. Equality bodies and legal remedies (recom.4)	 In 2008, the Promotion of Gender Equality programme was launched by the Gender Equality Department at the Ministry of Social Affairs (EF, 2010a). Confederation of Estonian Trade Unions provided their officers with guidance on equal pay, training and seminars to raise awareness on the GPG and to promote gender equality in wage setting (EF, 2010a). Foubert et al (2010) stated that the Commissioner for Gender Equality and Equal Treatment has "a relatively extensive competence under the law to make policy recommendations". According to Article 16 of the Equal Treatment Act (ETA), the Commissioner can monitor compliance with the requirements of the gender equality act (Foubert et al, 2010)
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	

Table 8: Individual country assessment Finland

	Whole economy	18.2% (Provisional)
GPG	Public sector	20.9%
	Private sector	18.3%
	1. Improved situational analysis and transparency of results (recom.2)	 Has country target for reducing the pay gap (EC, 2007, EC, 2013). 17 The Ministry of Social Affairs and Health established a working group in 2004 for equal pay. The main aim of the programme was to reduce the GPG by 5 percentage points until the year 2015 (EC, 2006). Also addresses the GPG by directing funds to female-dominated/and or low paid sectors through central level negotiations (EF, 2008b). Employers are required to carry out a specific pay survey and investigate reasons for gender pay differences as part of the gender equality planning required under the Act on Gender Equality between women and men (2005) (Warth, 2009; EIRO, 2004). Employers with 30 or more employees have a duty to promote equality in terms of pay and other terms of employment. An equality plan is drawn up every year, although by local agreement, the plan interval can be extended to up to three years (Foubert et al, 2010). The plan is written in cooperation with employee representatives and it must include an analysis of the placement of women and men in different jobs, and an analysis of the job classification, and pay differentials of women's and men's jobs." (Foubert et al, 2010) One of nine goals of the Equal Pay Programme set up by the Finish government (from 2006-2011) was to develop pay statistics which are sector- and gender-specific by 2010. Another objective was to conduct more pay surveys(EC, 2010).
	2. Work evaluation and job classification (recom.3)	 The social partners created a job evaluation system for implementation at organisational level (EF, 2002). The Government's 2008–2011 Action Plan included an objective to reduce the GPG – in particular, through initiatives aimed at tackling occupational segregation (EF, 2010a). Trade union policy measures focus on analytical job evaluation schemes (EC, 2006).
	3. Equality bodies and legal remedies (recom.4)	Responsibility for monitoring whether companies comply with the Gender Equality Act lies with the Office of the Ombudsman for Equality (EIRO, 2004). The Office of the Ombudsman for Equality published a gender equality 'toolkit' providing guidelines on how to draw up the legally sanctioned gender equality plans (Ibid.).
	4. Sanctions (recom.8)	■ The Equality Ombudsman may set a deadline for an employer to implement a pay mapping exercise. The Equality Board may, at the request of the Equality Ombudsman, impose a conditional fine on the employer. Foubert et al (2010) state that the resources of the Equality Ombudsman to monitor this duty are however limited.
	5. Streamlining of EU regulations and EU policy (recom.9)	

 $^{^{\}rm 17}$ The government's Equal Pay Programme seeks to reduce the GPG to 15% by 2015 and to implement the principle of 'equal pay for work of equal value'

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Table 9: Individual country assessment France

	Whole economy	14.7% (Provisional)
GPG	Public sector	13.2% (2010 data)
	Private sector	16.4% (2010 data)
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 Law from 2001 made it compulsory for companies and sectors to negotiate equality and to introduce equality in all bargaining areas, including pay (EC, 2006) and the 2006 Act on Equal Pay between Women and Men requires companies to report on salaries and plans to close the GPG (EC, 2013) Employers with at least 50 employees are required by the Labour Code to produce a comparative annual report of the employment position of men and women including the actual pay for each occupational category, for the work council (EF, 2002). There is mandatory publication of these indicators at the workplace by the employer (Foubert, 2010). Employers must legally negotiate at company and sector level on the objectives of occupational gender equality (EF, 2002; Foubert, 2010). Companies with fewer than 300 employees can also receive financial assistance from the State in order to conduct a Study of their employment equality position and the measures which would help to re-establish equal opportunities for men and women (Article R 1143-1 of the Labour Code). The financial incentives can account for up to 70% of the costs of the audit. (Foubert et al, 2010)
	2. Work evaluation and job classification (recom.3)	 The HALDE (Haute Autorité de Lutte contre les Discriminations et pour l'Egalité, French national anti-discrimination authority, which has been integrated into the Défenseur des Droits) emphasised building technical knowledge of the GPG and built expertise amongst researchers, social partners, lawyers, institutions, and training was delivered by "evaluation of experience specialists and task evaluation specialists" (EHRC, 2012:6). Contracts for greater gender balance in employment allow women to individually take on traditional male jobs in their company. Tripartite contracts are signed by the state, the employer and the female employee. Firms with fewer than 600 staff are eligible. The state may meet up to 50% of training costs and of the costs of changing facilities; and may pay 30% of pay costs during relevant training (EIRO, 2004).
	3. Equality bodies and legal remedies (recom.4)	 The HALDE (<i>Haute Autorité de Lutte contre les Discriminations et pour l'Egalité</i>, French national anti-discrimination authority, which has been integrated into the <i>Défenseur des Droits</i>) is entitled to initiate judicial proceedings. Pension reform law included a penalty of up to 1% of the payroll costs for companies with at least 50 employees, and which had not met their obligations to reduce the pay gap by 1 January 2012 (EF, 2012). Law on pay equality between men and women (March 2006)
		strengthened women's rights in respect of maternity leave; and provided an obligation for organisations to take steps to close the GPG by 31 December 2010 (EC, 2007) National intersectoral agreements on gender equality and gender belongs in workforce composition were also concluded.

gender balance in workforce composition were also concluded in France in April 2004 and covered issues such as narrowing the GPG; preventing maternity leave from adversely affecting

women's career progression and addressing labour market

	 segregation (EF, 2008b). Génisson Law 2001 is an obligation for the social partners to have compulsory negotiations on occupational gender equality (including equal pay) (Foubert, 2011)
4. Sanctions (recom.8)	■ French companies that have not taken steps to close the pay gap between women and men, through a collective agreement or unilateral action plan, may be fined up to 1% of their payroll costs from 1 January 2012 (EF, 2012).
5. Streamlining of EU regulations and EU policy (recom.9)	

Table 10: Individual country assessment Germany

	Whole economy	22.2%18
GPG	Public sector	13.9% [Provisional data]
	Private sector	25.8% [Provisional data]
	1. Improved situational analysis and transparency of results (recom.2)	■ The federal government is pursuing measures to address the causes of the GPG. These measures include analysis and transparency tools such as the 'Logib-D programme, through which companies can voluntarily analyse their wage systems and detect a GPG'(EC, 2010).
	2. Work evaluation and job classification (recom.3)	 The unions have been campaigning for upgrading of "typically female jobs" since early 1990s; "gender fair" job evaluation in the public sector and the IG Metall metalworkers union demanded reassessment of female dominated jobs (EF, 2002). The German trade union Ver.di led a campaign to re-evaluate the pay of women working in the social and childcare sectors (EC, 2011c). In 2010 social partners reached an agreement to continue negotiations on a transparent wage group system to replace the traditional – sex discriminatory – collective agreement for white-collar workers within the public services (Bundesangestelltentarifvertrag, BAT) (Foubert et al, 2010).
	3. Equality bodies and legal remedies (recom.4)	 Efforts to introduce legal remedies and mandatory obligations have been opposed by employers' organisations in the past. There was a preference among the social partners to develop voluntary models (EF, 2002). The 2001 Federal Equality Act for the Public Sector provided for the establishment of workplace-specific equality plans (EIRO, 2004). German United Services Union have provided their officers with guidance on equal pay, training and seminars to raise awareness on the GPG and to promote gender equality in wage setting (EF, 2010a).
	4. Sanctions (recom.8)	- Doling on post time growting house in the location day of the
	5. Streamlining of EU regulations and EU policy (recom.9)	 Policy on part-time working hours includes gender specific considerations. The Part-Time Work Act (Teilzeit- und Befristungsgesetz) serves to protect part-time workers and protect against indirect discrimination of women. "It is applicable to both individual contracts and collective agreements, and it stipulates that part-time work has to be remunerated" on a pro-rata basis (Foubert et al, 2010).

 $^{^{\}rm 18}$ Data form Germany shows that the GPG is significantly lower in its new $\it Bundes \it laender$. For data on East and West Germany see

https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/VerdiensteArbeitskosten/VerdienstunterschiedeMaennerFrauen/Tabellen/Verdienstabstand.html

Table 11: Individual country assessment Greece

	Whole economy	Unavailable
GPG	Public sector	Unavailable
	Private sector	Unavailable
	1. Improved situational analysis and transparency of results (recom.2)	 Guidance exists on the integration of gender equality in organisations, including equal pay for work of equal value, with recommendations for public administration and social partners (EC, 2007; EC, 2006). The General Secretariat of Gender Equality (GSGE) introduced incentives for employers to promote gender equality; however, Foubert et al, state that these do not specifically address the GPG (Foubert, 2010).
	2. Work evaluation and job classification (recom.3)	
Policies relating to Bauer report	3. Equality bodies and legal remedies (recom.4)	 A National Commission for Gender Equality was established. This composed of representatives of ministries, local authorities, the Economic and Social Committee, social partners' federations, three NGOs and two experts, and was chaired by the Minister of the Interior, according to Foubert et al (2010). The purpose of this body was "to implement the requirements of Directive 2002/73 for social dialogue; propose gender equality policies and measures and assess their implementation" (Foubert, 2010). The equality body can open investigations, but cannot start judicial proceedings (Foubert et al, 2010). The Ombudsman cannot lodge judicial proceedings or impose sanctions (ibid.) and it mainly deals with complaints through mediation (Foubert et al, 2010). By law there is a gender based employment quota in the public sector and positive action for promoting gender equality is allowed
	4. Sanctions (recom.8	
	5. Streamlining of EU	
	regulations and EU policy (recom.9)	

Table 12: Individual country assessment Hungary

	Whole economy	18.0%
GPG	Public sector	20.5%
	Private sector	15.3%
	1. Improved situational analysis and transparency of results (recom.2)	 An Equal Opportunity Plan (EOP) is mandatory for public employers (and for employers with a majority state share), provided that they have more than 50 employees (EC, 2007; EIRO, 2004; Foubert et al, 2010). The content of the EOP and its implementation depends on the employer and Foubert et al (2010) states that it often does not address the pay gap (Foubert et al, 2010) Under the National Confederation of Hungarian Trade Unions, an interactive database for GPGs, and a monitoring mechanism was established (EC, 2006).
	2. Work evaluation and job classification (recom.3)	
Policies relating to Bauer report	3. Equality bodies and legal remedies (recom.4)	 A specific body dealing with gender equality in employment has been established (Equal Treatment Authority) (EF, 2010a) and it is entitled to initiate judicial proceedings (Milieu, 2011). The equality body can proceed only where there has been violation of equal treatment provisions and normally it only acts upon a claim. If violation of equal pay is detected, the equality body can impose a fine. An additional sanction is the publication of the final decision on the equality body's website. This means that the employer would be excluded from "the qualification of having 'orderly labour relations', a precondition of applying for public money" (Foubert et al, 2010:23) Foubert et al (2010), however state the body has no power to promote active measures to close the pay gap
	4. Sanctions (recom.8)	See above
	5. Streamlining of EU regulations and EU policy (recom.9)	

Table 13: Individual country assessment Ireland

	Whole economy	13.9% (2010 data)
GPG	Public sector	12.1%
	Private sector	21.6%
	1. Improved situational analysis and transparency of results (recom.2)	■ The social partners have helped develop and improve statistical monitoring of pay differentials (ETUC, 2009)
	2. Work evaluation and job classification (recom.3)	
Policies relating to Bauer report	3. Equality bodies and legal remedies (recom.4)	 The Equality Authority is entitled to initiate judicial proceedings (Milieu, 2011). In 2003, the Equality Authority launched an 'equality review and action plan' scheme - a voluntary employer/employee-led initiative designed to promote gender equality in the workplace. The initiative received EUR 6.3 million in funding over five years (EIRO, 2004). Introduced the National Women's Strategy 2007–2016, along with a programme of positive action measures, including the Equality for Women Measure 2008–2013 (EF, 2010a).
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	 Under the "Protection of Employment (Part-Time Employees) Act 2001 there is provision for pro-rata entitlements with full-time employees. The Industrial Relations Act 1990 (Code of Practice on Access to Part-Time Working) Declaration Order 2006341 states that requests by employees to transfer from full-time to part-time work and vice versa or to increase working hours should be granted." (Foubert et al, 2010:144)

Table 14: Individual country assessment Italy

	Whole economy	5.8%
GPG	Public sector	3.8%
	Private sector	16.7%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	■ There is an obligation on public and private organisations employing more than 100 staff to provide statistical information on the employment conditions of their employees broken down by gender every two years (1991 Law on Positive Actions; Article 9, Act 125/1991). Companies must provide the report to local equality advisors and trade unions (EC, 2007; EC, 2006; EF, 2010a).
	2. Work evaluation and job classification (recom.3)	 According to Article 28 of Law No. 903 of 9 December 1977, job classification systems have to adopt the same criteria to determine wage levels for men and women (EF, 2010a). Foubert et al (2010) state that there are "innovative systems of job evaluation for those who are involved in family-care activities, in order to avoid their marginalization" (Foubert et al, 2010)
	3. Equality bodies and legal remedies (recom.4)	 Some sectoral agreements contain provisions such as the establishment of joint equality bodies, observatories and working groups to monitor employment data and promote analysis aimed at designing positive equality action plans (EIRO, 2004). National body established to promote initiatives such as affirmative action, surveys, exchange of information to tackle gender based discrimination, although Eurofound state that implementation of this was difficult. A decree law supported the activities of the National Equal Opportunities Committee (Eurofound, 2002). Equality Advisors are entitled to initiate judicial proceedings before Labour Tribunal and Regional Administrative Tribunal (Milieu, 2011).
	4. Sanctions (recom.8)	■ Under the Code for Equal Opportunities, both the Labour Inspectorate and Equality Bodies can issue an order to end unlawful practice and in such cases payment of an administrative sanction may be requested (Foubert et al, 2010). The fine to be paid by employers (EUR 516 to EUR 1 500) is issued in case of infringement of anti-discrimination legislation (Foubert et al, 2010).
	5. Streamlining of EU regulations and EU policy (recom.9)	 National legislation on overtime for part-time workers exists and states the conditions for payment of overtime.

Table 15: Individual country assessment Latvia

	Whole economy	13.6%
GPG	Public sector	17.5%
	Private sector	13.4%
	1. Improved situational analysis and transparency of results (recom.2)	■ Information on pay in the public sector was to be made accessible through amendments to legislation. These amendments were to provide an obligation for employers in the public sector to provide information on the pay of individuals employed by the public sector (Foubert et al, 2010)
	2. Work evaluation and job classification (recom.3)	 Division into 'male' and 'female' jobs is considered to be a 'normal' occurrence. Female' jobs are paid less and women agree to work for a lower salary, which is considered typical (EF, 2010a).
	3. Equality bodies and legal remedies (recom.4)	 The Gender Equality Council was established in 2002 to promote gender equality policy in public administration institutions and to draft recommendations (EF, 2010a). The Labour Inspectorate and the Ombudsman Office perform the tasks of the National Equality Body. "The Labour Inspectorate formally has the right to monitor the application of all labour law stipulations by employers. However, so far, this institution has not taken any action to tackle the pay gap systematically. Similarly, the Ombudsman Office has not taken any action to address the problem of the pay gap" (Foubert et al, 2010), but the Ombudsman is entitled to initiate judicial proceedings (Milieu, 2011).
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	Policy on part-time work includes gender specific considerations.

Table 16: Individual country assessment Lithuania

	Whole economy	11.9%
GPG	Public sector	12.1%
	Private sector	16.0%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 At company level social dialogue between employers and trade unions plays an important role and collective agreements help to maintain equal pay (ETUC, 2009); however Foubert et al state that "there are no legal or other instruments that oblige employers to address the issue of equal pay. Voluntary instruments are almost unknown in Lithuania" (Foubert et al, 2010) The National Programme on Equal Opportunities for Women and Men for 2010-2014 however sets out a priority to reduce the GPG including actions to increase salaries in female-dominated sectors such as education, arts and culture and social work (EC, 2013)
	2. Work evaluation and job classification (recom.3)	 An example of addressing gender neutral job classification is the 'model collective agreement' which is used to draw up collective agreements. Social partners recommend applying the Methodology for the Assessment of Jobs and Positions in order to ensure fair pay. This methodology is based on an assessment of a job using eight main factors: education, professional experience, levels of positions and management, scope of decision making and freedom of action, autonomy and creativity at work, responsibility, work complexity, and conditions of work (EF, 2010a). Job (re-)evaluation schemes involve a review of job characteristics based on objective criteria, from a gender perspective. This can achieve a favourable re-evaluation of typically female occupations (EF, 2008b). Under Section 188(3), Labour Code it is stated that "within the work classification system for determining pay, the same criteria shall be equally applicable to both men and women, and the system must be worked out in such a way as to avoid any discrimination on the grounds of sex" (Foubert et al, 2010)
	3. Equality bodies and legal remedies (recom.4)	 There is an obligation for social partners to bargain on equal pay (under law of June 2004). Collective bargaining has to take into account the principle of equal pay between men and women (EC, 2007). The Office of the Equal Opportunity Ombudsman was created in 1999 for gender equality purposes, but most cases investigated are not linked to gender equality in employment (Foubert et al, 2010)
	4. Sanctions (recom.8)	Section 6, p. 1, of the Equal Opportunities Act of Women and Men states that violation of equal rights for women and men is sanctioned "according to the rules of administrative law": the Administrative Penalties Act 408 imposes administrative fines of approximately EUR 35 to EUR 1100 (Foubert et al, 2010)
	5. Streamlining of EU regulations and EU policy (recom.9)	

Table 17: Individual country assessment Luxemburg

	Whole economy	8.7% (Provisional)
GPG	Public sector	9.3% (2009 data)
	Private sector	10.9% (2009 data)
	1. Improved situational analysis and transparency of results (recom.2)	 The Ministry of Equal Opportunities developed a programme to encourage private organisations to focus efforts on achieving equality between men and women. Such programmes could "include specific provisions on the GPG" (Foubert et al, 2010:169). The Ministry for Equal Opportunities and the Central Service for Statistics and Economic Studies developed software which allows employers to check gender pay equality in their organisation. The software (LOGIB) was developed by the Swiss Federal Office for Equality between women and men. The tool "should enable companies to check whether wage differences between female and male workers can be explained by objective factors" (Foubert et al, 2010)
	2. Work evaluation and job classification (recom.3)	 Job evaluation was included in the 2001-5 Action Plan on equal opportunities (EF, 2002). GPG policies focus on more systematic application of job evaluation systems (EC, 2006). The Ministry of Equal Opportunities, with the Chamber of Commerce provide training courses on gender-neutral evaluations of job classifications for company management (EC, 2006).
	3. Equality bodies and legal remedies (recom.4)	 Legislation stipulates employers must negotiate equal treatment, including the negotiation of an equality plan. All collective agreements must provide for the application of the principle of equal pay for women and men (UN, 2009). A specific body dealing with gender equality in employment has been established (Inter-ministerial Gender Equality Committee) (EF, 2010a).
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	

Table 18: Individual country assessment Malta

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Table 19: Individual country assessment Netherlands

	Whole economy	17.9%
GPG	Public sector	18.1%
	Private sector	18.1%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 Trade union policy initiatives focus on providing information, for example website tools to check pay levels (EC, 2006). The 'Wage indicator' project attempts to improve information about 'real' wages for men and women, beyond the 'formal' wages agreed in collective bargaining agreements (EC, 2006). The 'Equal Pay Quick Scan' software programme allows employers pay data to be analysed, to determine whether an investigation into the pay system is required (Foubert, 2011).
	2. Work evaluation and job classification (recom.3)	 Job evaluation seen as means to achieve gender equity in the Netherlands. In 2001 the social partners developed a check list to prevent unequal pay for use when implementing and evaluating pay systems (EF, 2002; EF, 2010a). The Equal Pay Checklist, ('Je verdiende loon'; 'The wage you deserve') prepared by the national representatives of the social partners (Stichting van de Arbeid, STAR) with the support of the Ministry of Social Affairs can be applied by employers, works councils, union representatives and individual employees (Foubert et al, 2010: 188). The Dutch Equal Treatment Commission conducted a job evaluation for 18 hospitals involving over 600 employees (EHRC, 2010). Foubert et al (2010) state that "\$2 (Articles 7-12) of the ETA gives special rules on the definition of pay, on how to compare jobs, on job evaluation, on other elements of pay (not just pecuniary) and on how to compare jobs/pay in case of part-time work "(Foubert et al, 2010:186). Foubert et al (2010) also reported that a guide on sex-neutral job evaluation which provides guidance on how to evaluate whether a job evaluation system is free from gender bias was sent to the 12 owners of the most frequently used job evaluation systems in the Netherlands. (ibid.: 188)
	3. Equality bodies and legal remedies (recom.4) 4. Sanctions (recom.8) 5. Streamlining of EU	 In December 2008, the Labour Inspectorate (<i>Arbeidsinspectie</i>) was given responsibility for enforcing the obligation on employers to scrutinise pay inequalities in their organisation (EF, 2010a). The National Working Group on Equal Pay brings together organisations relevant to equal pay – employees and employers' organisations, the Equal Treatment Commission, the Dutch Human Resources Policy Association and the Dutch Association for Employee Participation and has responsibility for awareness raising and promoting the implementation of equal pay (EC, 2006; EC, 2007; EF, 2010a). The Government stated [in 2008] that it had instructed the Labour Inspectorate to investigate claims of probable unequal pay given by the Trade Unions, the ETC or NGOs and to request employers to investigate and to report on these. The Labour Inspectorate can force the employer to do more analysis and discuss results with the Workers Council (Ondernemingsraad). "The Labour Inspectorate, at this point, has no mandate to sanction the employer." (Foubert et al, 2010: 186)
	regulations and EU policy (recom.9)	

Table 20: Individual country assessment Poland

	Whole economy	4.5%
GPG	Public sector	0.1%
	Private sector	17.2%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	■ Policy exists on decreasing gender wage differentials (EC, 2006).
	2. Work evaluation and job classification (recom.3)	■ Legislation "obliges the employer to apply objective and just criteria in the evaluation of employees and the results of their work" (Foubert et al, 2010:201); however "a general system of occupational classifications for the purpose of determining remuneration, as well as a universal system for valuing work and establishing criteria permitting comparison of various kinds of work is still lacking" (Foubert et al, 2010:201).
	3. Equality bodies and legal remedies (recom.4)	 Awareness raising actions have been taken concerning labour laws and workers' rights. Lawyers, judges, police officers, prosecutors, trade union representatives, employer organisations, labour inspectors, NGO representatives and government officials have been educated and trained (EC, 2006). The Government Plenipotentiary for Equal Treatment has the "role of equality body in the sense of EU equality directives" (Foubert, 2010)
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	

Table 21: Individual country assessment Portugal

GPG	Whole economy	12.5%
	Public sector	10.8%
	Private sector	23.5%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 Law No 35/2004, of 29 July, Articles 452 to 457 and 490) provided an obligation for employers to visibly display for at least 30 days, a list of their staff indicating each employee's earnings, with the exception of central, regional and local administrations, public institutes and other collective public bodies, as well as employers of domestic service workers (EC, 2007; EC, 2006). This information was available to public authorities and to trade unions and employers' associations on demand (EC, 2006). The Labour Code (Law No 7/2009, 12 February 2009) removed the obligation to post this information in a public place, however employers are still required to prepare a data set and submit this to the labour inspection authorities. The 4th Plan for Equality includes among its objectives the reduction of the GPG and introduction of equality plans (EC, 2013)
	2. Work evaluation and job classification (recom.3)	 JE practice has been difficult, but is viewed by the trade unions as an important tool for creating gender pay equity. (EF, 2002). The hotel and restaurant sector was the first sector in Portugal to develop a job evaluation method free from gender bias. This 'Revalue work to promote gender equality' project was funded by the EQUAL Community Initiative and coordinated by the General Confederation of the Portuguese Workers, however, a partnership comprising employee and employer representatives, state public bodies and researchers developed the methodology, which compares the value of occupations. The method also enables an evaluation of whether the existing GPG results from gender prejudice and stereotypes (EWCO, 2009).
	3. Equality bodies and legal remedies (recom.4)	■ Training on gender equality for judges and other partners involved in justice administration has been promoted by the Commission for Equality in Labour and Employment (EC, 2007; EC, 2006).
	4. Sanctions (recom.8)	 Non-compliance of Law No 35/2004, of 29 July, Articles 452 to 457 may result in a fine of between UC 2 and 15 (each UC corresponds to EUR 89) (EC, 2006).
	5. Streamlining of EU regulations and EU policy (recom.9)	 National legislation on overtime for part-time workers exists and states the terms for payment of overtime.

Table 22: Individual country assessment Romania

GPG	Whole economy	12.1%
	Public sector	22.8% (Estimated data, Eurostat)
	Private sector	2.9% (Estimated data, Eurostat)
	1. Improved situational analysis and transparency of results (recom.2)	■ The Labour Inspection Office (<i>Inspecția Muncii</i>) monitors measures seeking to ensure equality of opportunity between men and women, including equal pay (EF, 2010a).
	2. Work evaluation	
	and job classification (recom.3)	
Policies relating to Bauer report	3. Equality bodies and legal remedies (recom.4)	 There is a specific body dealing with gender equality in employment: The National Commission for Equal Opportunities between Women and Men (EF, 2010a). The Labour Inspection Office (<i>Inspecția Muncii</i>) monitors measures seeking to ensure equality of opportunity between men and women, including equal pay (EF, 2010a).
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom	■ The 2003 Labour Code as well as the provisions of the 2007-2010 National Collective Bargaining Agreement stated that part-time workers should "benefit from the same rights as full-time workers and no form of discrimination is allowed based on working hours" (Foubert et al, 2010)

Table 23: Individual country assessment Slovakia

	Whole economy	20.5%
GPG	Public sector	16.7%
	Private sector	21.0%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	■ The National Labour Inspectorate checked companies for compliance with gender equality principles in 2009, regarding pay for the equal work and work of equal value. As part of the control checks, the labour inspectorate requested employers to address any infringements (EWCO, 2010).
	2. Work evaluation and job classification (recom.3)	Act No. 311/2001 Coll. on Labour Code defines entitlement to pay based on an evaluation of the work performed according to its complexity, difficulty and responsibility without any discrimination by gender (EF, 2010a). Legislation states that "where the employer implements a system of job classification for determining pay, it shall be based on the same criteria for both men and women without any discrimination on ground of sex" (Foubert at al, 2010:220)
	3. Equality bodies and legal remedies (recom.4)	 Regional offices of the National Labour Inspectorate carried out inspections on equal access to employment and equal pay (EC, 2011c). There is a specific body dealing with gender equality in employment: The Permanent Committee for Gender Equality and Equal Opportunities for the Parliamentary Committee for Social Affairs and Housing. Gender equality is negotiated at the national tripartite Economic and Social Council (EF, 2010a).
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	 National legislation on overtime for part-time workers exists and states the terms for the payment of overtime.

Table 24: Individual country assessment Slovenia

GPG	Whole economy	2.3%
	Public sector	6.4%
	Private sector	9.4%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	Public authorities obliged to produce periodical plans and biannual reports on the implementation of the National Programme for Equal Opportunities for Women and Men (2002 Act on Equal Opportunities for Women and Men) (EIRO, 2004). The National Programme for Equal Opportunities of Women and Men (2005–2013) has among its direct objectives the aim of reducing the GPG (EF, 2010a).
	2. Work evaluation and job classification (recom.3)	
	3. Equality bodies and legal remedies (recom.4)	The equality body can only help victims of pay discrimination by giving legal advice (Foubert et al, 2010)
	4. Sanctions (recom.8)	
	5. Streamlining of EU regulations and EU policy (recom.9)	 Policy on part-time working includes gender-specific considerations.

Table 25: Individual country assessment Spain

	Whole economy	16.2% (Provisional)
GPG	Public sector	12.3% (Provisional)
	Private sector	20.3% (Provisional)
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 GPG policies are mostly linked to awareness-raising measures contained in framework agreements by the social partners (EC, 2006). The Organic Act 3/2007 for the Effective Equality between Women and Men, Corporate Equality Plans (Equinet, 2008) included requirements for companies with more than 250 employees to negotiate equality plans, setting strategies for achieving equal treatment and closing the GPG (EC, 2007; EF, 2008a).
	2. Work evaluation and job classification (recom.3)	 JE is viewed as an 'essential means of fighting pay discrimination' (EF, 2002). However, there has been a lack of agreement on what constitutes 'the value of work'. Published 'Guide to good practices in JE' in 2000 to help detect and remedy pay discrimination. (EF, 2002). Foubert et al (2010) state that "the use of common rules for both sexes and neutral criteria to elaborate the different categories and groups integrating the classification systems is stated in Article 22 of the Workers' Statute." (Foubert et al, 2010: 230).
	3. Equality bodies and legal remedies (recom.4)	■ The labour inspectorate implemented a programme,which ran until 2010, which set out equality guidelines. The aim was to provide a methodology to enable an external analysis to be conducted of issues affecting equal treatment of men and women in individual organisations (Foubert et al, 2010:19).
	4. Sanctions (recom.8) 5. Streamlining of EU regulations and EU policy (recom.9)	 National legislation on overtime for part-time workers exists and states the terms of payment of overtime.

Table 26: Individual country assessment Sweden

	Whole economy	15.8%
GPG	Public sector	13.6%
	Private sector	13.7%
Policies relating to Bauer report	1. Improved situational analysis and transparency of results (recom.2)	 The 2009 Discrimination Act requires employers with 25 or more employees to conduct a pay survey every three years to identify and address gender differences in pay, employment terms and conditions, and prepare an equal pay action plan (EC, 2011c, EC, 2013). The Equal Opportunities Act states that all employers with a minimum of ten employees are required to prepare an annual equal opportunities plan, which must contain a wage survey of pay differences between men and women, indicating the measures to be implemented to remedy any inequality (EC, 2007; EIRO, 2004). Since 2001 it has been explicitly stated by law the purpose of the mandatory annual plans to prevent wage discrimination and estimate cost of pay adjustments (EF, 2002; EC, 2006).
	2. Work evaluation and job classification (recom.3)	 Eurofound state that job value discrimination has been brought to the Swedish Labour Court on many occasions but there is a history of these cases being rejected on basis of "contribution of market-based wages", which are typically higher for men. Some change in more recent years (EF, 2002). "The Equality Ombudsman provides specific tools that may assist in establishing gender-neutral job evaluation schemes and pay systems. There is the pay evaluation scheme 'Analys Lönelots' and a more general tool for gender equality analysis of pay, 'Jämställdhetsanalys av löner – steg för steg'" (Foubert et al, 2010)
	3. Equality bodies and legal remedies (recom.4)	■ The Equal Opportunities Ombudsman (<i>JämO</i>) is responsible for ensuring that employers review the GPG. (EIRO, 2004).
	4. Sanctions (recom.8)	 The Equal Opportunities Commission (<i>Jämställdhetsnämnden</i>) can impose administrative fines on employers if they do not comply with the law by preparing equality plans and reviewing gender pay differentials (EIRO, 2004; EC, 2006). The EOO can also submit requests to the Equal Opportunities Board for the application of a penalty on employers who "do not observe the rules on 'active measures'." (EC, 2006:37).
	5. Streamlining of EU regulations and EU policy (recom.9)	

Table 27: Individual country assessment United Kingdom

	Whole economy	20.1%				
GPG	Public sector	20.3%				
	Private sector	26.0%				
	1. Improved situational analysis and transparency of results (recom.2)	 Employers are prohibited from imposing pay secrecy clauses on employees (Foubert et al, 2010) following the Equality Act 2010. Public sector employers are required to conduct equal pay reviews within their organisation (Foubert et al, 2010) Job evaluation is viewed as means to achieve equal pay for 				
	2. Work evaluation and job classification (recom.3)	work of equal value. Public sector increasingly used job evaluation to address historical inequalities (EF, 2002). Two Agreements: the 'Single Status' agreement in local government and the 'Agenda for Change' in the NHS were negotiated with the aim of bringing all employees within equal pay and grading structures. These agreements have led to large numbers of equal pay claims (EF, 2010a).				
	3. Equality bodies and legal remedies (recom.4)	 The Equality and Human Rights Commission and the Equality Commission for Northern Ireland are entitled to initiate judicial proceedings (Milieu, 2011). Efforts to introduce legal remedies and mandatory obligations have been opposed. There is a preference among the social partners to develop voluntary models (EF,2002). The Equality Act (2006) placed a statutory duty on all public authorities to eliminate unlawful discrimination and promote equality between men and women (EC, 2007). In December 2010 the Coalition government announced it would not implement the gender pay reporting requirements in section 78 of the Equality Act 2010 (compulsory gender pay audits in companies with more than 250 employees from 2013) and instead would focus on working with organisations with 150 employees or more to encourage voluntary publication of gender pay data (EIRO,2011). Efforts by the Women and Work Commission resulted in a Government Action Plan to increase the availability of quality, part-time work; to introduce a public sector gender duty, and to ensure career guidance free from gender stereotyping (EF, 2010a). The Government Equalities Office (GEO), the Trades Union Congress (TUC), the Confederation of British Industry (CBI), the Chartered Institute of Personnel and Development (CIPD) and the Equal Opportunities Commission (EOC) developed a gender equality checklist to increase employer awareness of the implications of their practices (EF, 2010a) The Trades Union Congress conducted a project in 2003 which involved workplace equal-pay representatives being trained to 				
	4. Sanctions (recom.8)	address the GPG and conduct equal pay reviews (EF, 2006a). The Part-Time Workers (Prevention of Less Favourable				
	5. Streamlining of EU regulations and EU policy (recom.9)	Treatment) Regulations 2000 gave part-time workers "a statutory right to be treated no less favourably than their comparable full-time colleagues. This meant that part-time workers should be paid the same hourly rates as comparable full-time workers. Part-time workers are entitled to overtime pay at the same rate as full-time workers only once they work more than the normal number of hours for a comparable full-time worker" (Blake Lapthorn, 2009).				

Annex 2: Data appendix

Table 15: Population and GDP per capita

	Total population in 1,000s		GDP per	GDP per capita in 2012 EKS\$			
	_	_	2010	_	_	2010	
Aatualia	2000	2005		2000	2005	47,312	
Australia	19,053	20,232	21,515	39,533	43,946		
Austria	8,113	8,185	8,214	38,350	41,316	44,083	
Belgium	10,264	10,364	10,423	36,302	38,910	41,095	
Bulgaria	7,819	7,450	7,149	7,723	10,582	12,600	
Canada	31,100	32,386	33,760	38,571	41,996	42,779	
Chile	15,316	16,128	16,916	10,819	12,815	14,728	
Cyprus	841	924	1,008	21,621	23,048	23,812	
Czech Republic	10,270	10,241	10,202	19,397	23,769	27,245	
Denmark	5,337	5,432	5,516	38,215	39,964	39,303	
Estonia	1,380	1,333	1,291	11,984	17,527	18,223	
Finland	5,169	5,223	5,255	32,487	36,603	37,925	
France	61,163	62,965	64,843	33,726	35,476	35,521	
Germany	82,447	82,704	81,906	35,055	36,001	38,885	
Greece	10,559	10,668	10,750	24,334	29,358	29,241	
Hungary	10,147	10,058	9,992	15,447	19,113	19,070	
Iceland	281	297	309	39,319	45,902	44,401	
Ireland	3,822	4,199	4,623	36,655	42,599	39,498	
Israel	6,115	6,743	7,354	27,037	27,314	31,007	
Italy	57,814	59,068	60,781	33,057	33,977	32,635	
Japan	126,776	127,715	127,579	34,860	36,722	37,377	
Korea	46,839	48,005	48,636	21,602	26,254	31,258	
Luxembourg	439	469	498	73,405	81,920	84,560	
Latvia	2,376	2,290	2,218	9,249	14,248	14,128	
Lithuania	3,654	3,597	3,545	10,364	15,321	16,368	
Malta	390	399	407	22,874	23,849	25,918	
Mexico	99,927	106,203	112,469	13,341	13,780	14,149	
Netherlands	15,915	16,283	16,558	39,982	41,725	43,944	
New Zealand	3,803	4,049	4,253	27,964	31,667	31,898	
Norway	4,492	4,593	4,676	51,783	56,469	57,604	
Poland	38,654	38,558	38,464	13,306	15,526	19,594	
Portugal	10,336	10,566	10,736	22,786	23,227	23,494	
Romania	22,447	22,197	21,959	6,835	9,128	10,491	
Slovak Republic	5,400	5,431	5,470	14,296	18,060	22,526	
Slovenia	2,011	2,011	2,003	22,422	26,778	29,359	
Spain	40,589	43,704	46,506	29,584	32,258	31,605	
Sweden	8,924	9,002	9,074	35,461	40,144	43,160	
Switzerland	7,270	7,441	7,762	43,143	44,980	47,955	
Turkey	67,329	72,674	77,804	9,673	11,196	12,236	
United Kingdom	59,225	60,574	62,438	34,987	39,583	39,527	
United States	282,738	296,119	309,961	45,370	48,752	48,199	

Sources: Conference Board Total Economy Database.

Table 16: Savings rates, employment rates and hours worked

	Savings as % of GDP		Employment as percent of resident population			Hours worked per employed person			
	2000	2005	2010	2000	2005	2010	2000	2005	2010
Australia	24%	25%	27%	47%	49%	52%	1,795	1,735	1,693
Austria	26%	27%	26%	46%	47%	50%	1,800	1,764	1,653
Belgium	26%	26%	23%	40%	41%	43%	1,543	1,563	1,546
Bulgaria	13%	12%	21%	41%	47%	50%	1,640	1,659	1,653
Canada	26%	26%	20%	48%	50%	51%	1,788	1,749	1,711
Chile	23%	30%	30%	35%	39%	45%	2,293	2,189	2,111
Cyprus	19%	17%	12%	37%	40%	39%	1,926	1,849	1,842
Czech Republic	28%	29%	28%	47%	48%	50%	1,904	1,827	1,811
Denmark	27%	26%	22%	52%	51%	51%	1,558	1,556	1,523
Estonia	25%	27%	27%	41%	45%	43%	1,988	2,010	1,880
Finland	30%	26%	20%	44%	46%	47%	1 <i>,</i> 751	1,716	1,677
France	21%	19%	17%	42%	42%	41%	1,523	1,495	1,478
Germany	23%	22%	23%	48%	47%	50%	1,471	1,431	1,407
Greece	11%	12%	8%	40%	44%	44%	2,121	2,095	2,016
Hungary	24%	22%	25%	42%	42%	41%	2,036	1,992	1,943
Iceland	16%	16%	23%	56%	54%	54%	1,885	1,794	1,698
Ireland	37%	39%	31%	44%	47%	40%	1,933	1,883	1,804
Israel	20%	19%	18%	41%	41%	44%	2,017	1,931	1,929
Italy	22%	21%	18%	40%	41%	41%	1,861	1,819	1,775
Japan	27%	24%	21%	51%	50%	49%	1,839	1,815	1,759
Korea	33%	32%	32%	45%	48%	49%	2,507	2,351	2,193
Luxembourg	44%	48%	52%	60%	66%	72%	1,662	1,560	1,521
Latvia	17%	20%	21%	40%	45%	42%	2,209	2,144	1,934
Lithuania	13%	17%	16%	38%	41%	38%	1,846	1,871	1,882
Malta	17%	15%	17%	38%	38%	41%	1,960	1,895	1,833
Mexico	22%	22%	23%	38%	38%	39%	2,167	2,207	2,067
Netherlands	28%	28%	26%	51%	51%	52%	1,435	1,393	1,381
New Zealand	23%	22%	21%	48%	52%	51%	1,769	1 <i>,</i> 751	1,700
Norway	37%	38%	35%	52%	51%	55%	1,455	1,423	1,415
Poland	18%	19%	20%	38%	36%	41%	1,919	2,079	2,050
Portugal	17%	14%	12%	49%	48%	46%	1,969	1,939	1,942
Romania	14%	12%	20%	48%	42%	41%	1,853	1,853	1,883
Slovak Republic	23%	24%	22%	37%	38%	40%	1,816	1,770	1,807
Slovenia	24%	27%	23%	45%	46%	48%	1,710	1,697	1,675
Spain	23%	24%	21%	40%	44%	41%	1,731	1,686	1,674
Sweden	25%	26%	25%	48%	48%	50%	1,642	1,605	1,640
Switzerland	28%	29%	31%	57%	57%	59%	1,674	1,652	1,623
Turkey	18%	16%	14%	33%	28%	30%	1,960	1,936	1,877
United Kingdom	16%	14%	13%	46%	48%	47%	1,712	1,676	1,651
United States	17 %	14 %	11%	49 %	48 %	45%	1,740	1,7 10	1,692

Sources: World Bank; Conference Board Total Economy Database, own calculations.

Table 17: Human capital stock and gender wage gap

	Share of ISCED4 of the total working-age population			Gender wage gap (unadjusted)		
	2000*	2005	2010	2000	2005	2010
Australia				17%	16%	14%
Austria		24%	27%	23%	22%	19%
Belgium		29%	33%	14%	12%	7%
Bulgaria		18%	20%			
Canada				24%	21%	19%
Chile						
Cyprus		28%	33%			
Czech Republic		13%	16%	22%	19%	
Denmark		28%	27%	15%	12%	12%
Estonia		33%	35%			
Finland		29%	32%	20%	19%	19%
France		24%	26%	10%	12%	
Germany		27%	29%	21%	22%	21%
Greece		26%	30%		17%	12%
Hungary		16%	19%	14%	4%	6%
Iceland		26%	33%		13%	
Ireland		34%	43%	20%	14%	11%
Israel					22%	21%
Italy		12%	14%	7%		11%
Japan				34%	33%	29%
Korea				40%	38%	39%
Luxembourg		26%	32%			
Latvia		26%	28%			
Lithuania		43%	46%			
Malta			21%			
Mexico						
Netherlands		29%	31%	21%	17%	
New Zealand				7%	10%	7%
Norway		31%	33%	10%	9%	8%
Poland		17%	23%		6%	6%
Portugal		12%	14%		16%	13%
Romania		13%	16%			
Slovak Republic		11%	15%		20%	15%
Slovenia		17%	20%			
Spain		26%	28%		13%	6%
Sweden		31%	35%	16%	14%	14 %
Switzerland		27%	35%	22%		19%
Turkey						
United Kingdom		25%	30%	26%	22%	19%
United States				23%	19%	19%

 $Sources: IES\ aggregation\ of\ ISCED 4\ population\ based\ on\ ELFS\ microdata\ (available\ from\ 2002);\ OCED.$

Table 18: Calculated Aggregates

		2000	2005	2010
EU	Population	485,506	493,898	501,830
	GDP	14,120,052	15,601,718	16,398,745
US	Population	282,738	296,119	309,961
	GDP	12,827,830	14,436,509	14,939,725

Source: Conference Board Total Economy Database, own aggregation