EIGE
European Institute
for Gender Equality

Gender Equality Index

Report

1 —— 100

Europe Direct is a service to help you find answers to your questions about the European Union.

**Freephone number (*):
00 800 6 7 8 9 10 11**

(*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

Printed in Germany

Halfway towards equality

Equality between women and men is a fundamental value of the European Union and is vital to its economic and social growth. To reach the objectives set by the EU in the Europe 2020 growth strategy; face current economic and social challenges; secure social justice; and achieve smart and sustainable development, gender equality has to be included at the very centre of political debate in Europe. Despite 50 years of policies and actions at European level, Member States have not yet managed to overcome gender gaps, thus there is a need for further efforts.

Policy improvement cannot bear fruit without systematic and consistent measurement of gender gaps at EU and Member States level. The process began when the European Commission proposed to introduce an assessment tool on gender equality in the Roadmap for Equality between Women and Men 2006–2010, and subsequently included it in the Action Plan of its Strategy for Equality between Women and Men 2010–2015. The creation of the assessment tool was undertaken by the European Institute for Gender Equality (EIGE) since the start of its operations, in June 2010.

This report is a result of the Institute's work of the past three years, which presents a synthetic measure of gender equality – the Gender Equality Index. I am proud to say that it is the only index that gives a comprehensive map of gender gaps in the EU and across Member States based on the EU policy framework.

The Gender Equality Index relies on a trustworthy statistical methodology. In spite of the scarcity of data, stringent criteria are applied to the gender indicators, requiring that variables are available and comparable across all Member States. The computation of the Gender Equality Index avoided subjective decisions in the way a weighting and aggregation method for the Index was selected. The process relied on a computation of more than 3,000 alternatives in order to choose the best and most robust Index.

In the report, scores for each Member State and an EU average are presented to enable a detailed assessment of how close the EU and Member States have come towards achieving gender equality in each of the critical domains and within the EU policy agenda. It is also evident that gender equality is correlated more with social indicators such as public expenditure on education and research, rather than with traditional economic indicators such as GDP. With an average score of 54.0, (where 1 stands for absolute gender inequality and 100 for full gender equality), the European Union is only halfway towards a gender equal society.

The results obtained show that the domain of power highlights the biggest gender gaps, with an average score of only 38.0 at EU level. The wide differences in the proportion of women and men in decision-making across the EU-27 is a strong call for the improvement of policy and decisive action, such as the introduction of quota systems, initiated by the European Commission in 2012. The domain of time is marked by wide differences between women and men when it comes to time spent on unpaid caring and domestic activities. This is the second domain where the widest gender gaps can be observed, with an average score of 38.8 at the EU level.

The Institute foresees regular updates of this first Gender Equality Index, which is specifically tailored towards the EU's needs in a present policy context and hopes to offer EU policy makers a reliable tool in assessing the progress and effectiveness of policies and initiatives aimed at improving gender equality in general and specific policy areas.

On behalf of the Institute and its team, I would like to thank all institutions and experts who contributed to the creation of the Gender Equality Index, and especially to the European Commission: Directorate-General for Justice; Joint Research Centre; Eurofound; International Labour Organisation; European Women's Lobby; EIGE's Management Board; Experts' Forum; Working Group on the Gender Equality Index; and my colleagues at EIGE. We firmly believe that the Index will give impetus for broader debate on the challenges of gender equality, and will contribute to making equality between women and men in Europe a reality for all.

Virginija Langbakk,
Director
The European Institute for Gender Equality (EIGE)

The European Institute for Gender Equality (EIGE) is an autonomous body of the European Union, established to contribute to and strengthen the promotion of gender equality, including gender mainstreaming in all EU policies and the resulting national policies, and the fight against discrimination based on sex, as well as to raise EU citizens' awareness of gender equality. Further information can be found on the EIGE website (eige.europa.eu).

European Institute for Gender Equality
Gedimino pr. 16
LT-01103 Vilnius
LITHUANIA
Tel. +370 52157444
E-mail: eige.sec@eige.europa.eu
http://eige.europa.eu
http://www.twitter.com/eurogender
http://www.facebook.com/eige.europa.eu
http://www.youtube.com/eurogender

Contents

1. Introduction

Equality between women and men is a fundamental value of the European Union, enshrined in its Treaties, including the Charter of Fundamental Rights of the European Union. The capacity of EU institutions to help shape gender relations in its Member States has been present since its earliest days (Verloo and Lombardo, 2007). Although the Treaty of Rome was signed at a time when the gender equality landscape looked substantially different from the contemporary one, it nevertheless contained a clause on equal pay between women and men, a precursor to the legislation and policy approaches that emerged throughout Europe in later years. Gender equality is recognised as vital to economic growth, prosperity and competitiveness, as exemplified by the Council's commitment to fulfil EU ambitions on gender equality through the adoption of the European Pact for Gender Equality (2011–2020) (7349/11 adoption of the European Pact) and the European Commission's Strategy for Equality between Women and Men (2010–2015) (COM(2010) 491 final). The EU, as a multi-level governance framework, plays a crucial role in enabling a concern for gender equality in Member States' policies, gender norms and cultures to filter down from the international and EU level to national, regional and local levels.

The acknowledged importance of gender equality in the EU manifests itself in the development of distinct gender-aware policies. The evaluation of the effectiveness of these policies is, however, a complex and challenging endeavour given that the EU is a multi-level polity, comprising of subnational, national and supranational institutions, with actors and discourses interacting in complex ways to enact gender legislation and policy. The development and dissemination of EU-wide, comparable and reliable gender statistics and indicators have contributed to better monitoring and assessment of progress, for example, through the process of Gender Mainstreaming in the EU. It is therefore important to develop further monitoring and evaluation indicators. To assist with the measurement of gender equality at EU level, and in order to demonstrate the success of promoting gender equality in each Member State, the creation of a composite indicator on gender equality, a Gender Equality Index, as a common assessment tool was initially introduced by the European Commission in The Roadmap for Equality between Women and Men (2006–2010) (COM(2006) 92 final) and proposed in the Action Plan of the Strategy for Equality between Women and Men (2010–2015) (SEC(2010) 1079/2) that followed.

The elaboration of the Gender Equality Index became one of the major assignments decided by the European Institute for Gender Equality (EIGE) in its first Mid-term Work Programme (2010–2012), following its establishment. The Gender Equality Index is a composite indicator that provides a measure, across Member States and eventually over time, of the concept of gender equality as a multi-dimensional concept. It is a sophisticated tool that synthesises this complexity into a user-friendly and easily interpretable measure. It is formed by combining gender indicators according to a conceptual framework, into a single summary measure.

1.1. Structure of the report

The first section positions the Gender Equality Index as a measure of gender equality for the EU. It shortly reviews the definitions and approaches to gender equality, as well as main existing gender equality indices along with their main shortcomings. The rationale behind producing a Gender Equality Index is also set out.

The second part of the report outlines the conceptual framework used for the Gender Equality Index. It describes the major areas of concern in the field of gender equality that are of particular interest to European policy.

Subsequently, the methodology employed is described. It gives information on how the conceptual structure (underpinned by policy and theory) was translated into a measurable structure (underpinned by data and statistical considerations), as well as the steps followed to compute the Index.

The fourth section presents an overview of the gender indicators, by domain, used to construct the Gender Equality Index. For each indicator, a detailed analysis of both levels of achievement and gender gaps is provided, at EU level, across Member States and where possible over time.

The report then provides with a detailed breakdown of the Gender Equality Index score for each country. It also discusses the contribution of each indicator to the Gender Equality Index. Lastly, this section analyses the results in conjunction with other contextual variables in Member States such as GDP and spending on key policy areas.

Finally, the report concludes with the main findings of the Gender Equality Index.

Accompanying this report is a set of 27 Country Profiles which provide an overview of the score of the Gender Equality Index for each Member State, along with listed main policy initiatives for the promotion of gender equality and key data at national level. The profiles aim to support decision-makers and researchers alike in drawing conclusions to feed into national and EU level debates on closing the gender equality gap even further.

1.2. Definitions of gender equality in the EU

Gender equality is a complex and multi-dimensional concept, as well as a normatively and politically controversial subject, with a diversity of meanings across Europe (Verloo and Lombardo, 2007). Gender equality is not consistently defined in EU policy texts. Furthermore, although definitions attempt to be gender neutral, there is a general tendency to conflate this approach with one that focuses on women specifically.

At EU level, treaties and policy documents (for example, Art. 2 and 3(3) TEU and Art. 8 TFEU) discuss gender equality in different ways, including conceptualisations that encompass a mixture of equal access to resources and assets and equal access to dignity and integrity. The European Commission defines gender equality as 'the result of the absence of discrimination on the basis of a person's sex in opportunities and the allocation of resources or benefits or in access to services' (European Commission, 2010). An expanded definition is provided in the European Commission's Women's Charter (2010) (COM(2010) 78 final) which focuses on the following elements:

- life choices and economic independence;
- the full realisation of women's potential and the full use of their skills;
- a better gender distribution in the labour market, more quality jobs for women;
- the promotion of genuine opportunities for both women and men to enjoy a work-life balance;
- human dignity, the right to life and the right to the integrity of the person.

At national level, there are also various meanings of gender equality across individual Member States. Differences mostly reside in the ideology of gender roles most represented at

national level. In those Member States that see women as primary carers, the bulk of policy aims at supporting women in those roles. In other Member States, the focus is on challenging gender roles with a policy framework that tends to focus on changing the behaviours of both women and men (Rubery, 2002).

To counter the difficulties of agreeing on a definition of gender equality, and in light of the imperative need to operate from an agreed definition, the Gender Equality Index bases itself on a simplified overarching definition of gender equality: *equal share of assets and equal dignity and integrity between women and men.*

1.3. Gender equality approaches

The task of developing the Gender Equality Index calls for a clear direction of what is the purpose of gender equality. However, this is greatly hampered by the insufficient agreement of what constitutes gender equality and what it should achieve. There are contrasting ways in which to address the purpose of gender equality, with three broad approaches: equality through sameness (equal opportunities or equal treatment); equal valuation of difference (special programmes) and the transformation of gendered practices and standards of evaluation (Walby, 2005). This section presents these three approaches before outlining how they are incorporated into the Gender Equality Index.

1.3.1. The sameness approach

The sameness approach highlights the necessity to include women into a world from which they have typically been excluded. Equality policies should seek gender-neutrality and extend the dominant practices and values to all individuals (Verloo, 2005). Differences between women and men are often attributed to a gender identity which is inscribed in the process of a lifetime of learning experiences (Epstein, 1988) and which as a consequence often characterises women in a disadvantageous position as opposed to men.

In this approach, the emphasis is on women becoming equal to men. This entails women entering previously male domains, and has the unintended consequence that the male norm remains the standard (Walby, 2005). Equality strategies based on the male as norm may in fact disadvantage women (Plantenga et al., 2009). This is problematic in that it may place women in a position of defensiveness, to be explained and justified, as well as falsely constructs men as belonging to one homogenous category (Bacchi, 1996). In addition, encouraging women to become more

like men does not tackle the need to re-examine and re-evaluate social roles and values including 'caring roles' and care itself (Maddock, 1999).

1.3.2. The difference approach

The second approach reflects a move towards the equal valuation of the existing and different contributions of women and men in a gender segregated society (Walby, 2005). This approach suggests that women's physical difference from men results in different life patterns, psychology and moral values. This approach often sees a call for parity rather than sameness (Cockburn, 1991). Men and male cultures and practices are often problematised and the need to construct new spaces that accommodate non-hegemonic gender identities and cultures are called for (Verloo, 2005).

A number of difficulties exist with this approach. It is difficult to recognise differences, while avoiding the trap of essentialism and relying on essentialist notions of femininity and masculinity. It can reinforce existing stereotypes and the current organisation of labour and care (Fraser, 1997). The debate on the sameness/difference approach was criticised because it provides limited possibilities for change (Cockburn, 1991), may divert attention to other problems such as the problem of caring for children and the elderly (Bacchi, 1996) and maintains a political frame of arguments that reifies male definitions in order to be heard (Maddock, 1999). It is also unclear as to whether there can be an effective route to gender justice in which existing separate gender norms/standards are retained, in that it is not possible to be 'different but equal' because differences are too entwined with power and resources (Fraser, 1997).

1.3.3. The transformative approach

The third approach is one where, rather than having to choose between the sameness and difference approach, a new standard for both men and women is created, that is, the transformation of gender relations (Walby, 2005; Walby, 2009). It aspires to move 'beyond gender' and attempts to problematise not only the exclusion of women, or men as a norm, but the gendered world in itself (Verloo, 2005).

For example, Fraser (1997) provides a vision of what this may entail and calls for men to change their lifestyles so that they resemble more that of women's. In the 'univer-

sal caregiver model', gender equality implies a change in the lives of both women and men through the promotion of greater equality in the distribution of paid and unpaid work, while also indicating that an equal distribution of paid and unpaid work is not enough.

1.3.4. Drawing on all three approaches

Indeed, these three approaches are intertwined with, and build on, one another (Daly, 2005). In practice, the three approaches are not mutually exclusive but can be (and are) combined: the sameness approach can be seen as an integrationist approach which may lead to cultural changes, while the approach of difference could be transformative in questioning both femininity and masculinity (Verloo, 2005).

These steps remain necessary in order to achieve deep cultural changes, create new structures and transform the gendered nature of society (Martin, 2003). It is important to integrate these different approaches under the same goal: that of achieving greater gender equality.

These three approaches can be observed in the European Commission's approach to gender equality over the last three decades (Rees, 1992):

- Tinkering – equal treatment (legal redress to treat women and men the same);
- Tailoring – positive action (recognising that there are differences between men and women and that specific measures are required to address disadvantages experienced by women as a consequence of those differences);
- Transforming – gender mainstreaming (how existing systems and structures cause indirect discrimination and altering or redesigning them as appropriate).

This perspective of gender equality as a particular combination of sameness, difference and transformation, is clearly reflected in key EU policy documents. The Women's Charter (2010) (COM(2010) 78 final) presents the commitment of the European Commission to five priorities based on agreed principles of equality between women and men that draw on these several perspectives. These five priorities are translated into concrete measures in the Commission Strategy for Equality between Women and Men (2010–2015) (COM(2010) 491 final).

The measures range from getting more women into company boardrooms and tackling gender-based violence to raising the transparency of pay structures. The Strategy underlines that gender equality is not only equated with equal positions of women and men within paid employment (equality-as-sameness strategy), but embedded into a more broadly defined 'gender equal regime', as a result of which relevant policies might also refer to, for example, equal sharing of power between women and men, reducing the school drop-out rate for boys, improving fathers access to parental leave and combating domestic violence.

The perspective of gender equality adopted in the Gender Equality Index attempts to combine these different approaches, by reflecting this plurality of drawing on sameness and difference of outcomes, but also on engaging with a broader reflection on how to transform gender relations to achieve greater gender equality for both women and men in Europe.

To combine these positions, the Gender Equality Index considers gender gaps, in an attempt to distance itself from the sameness-difference debate inherent in measuring levels of achievement. Gender gaps, indeed, provide an opportunity to reflect on gender equality from a transformative perspective, as they provide a single equality point to be achieved.

By focusing on measuring gender gaps, the Gender Equality Index places the equality point between women and men as a benchmark, meaning that women and men should have equality in outcomes. In some instances, it is also necessary to consider the approach of difference, by recognising the specificities of women or other groups, for example, in terms of violence or social exclusion where the focus is on protecting the integrity and dignity of individuals, and where certain groups are more at risk because of power relations in society. Finally, the transformative approach can be introduced through opening up a debate on the division of time between women and men.

It is, however, not possible to focus solely on genders gaps and ignore levels of achievement altogether. In light of the crisis for example, gender gaps have greatly reduced across the EU in some areas. Unfortunately, this is not a sign of greater gender equality, but shows the hard reality of how much the life of women and men have been affected over the past few years (European Commission, 2013). In order to ensure that gender gaps cannot be

regarded positively where they point to an adverse situation for women and men, the Gender Equality Index also takes levels of achievement into consideration by adjusting gender gaps to reflect these. This is the case, for example, where gender gaps are low in employment rates, but where that is associated with low, and possibly worsening, participation rates.

1.4. Measuring gender equality through indices

The Gender Equality Index does not represent the first attempt to measure gender equality through a composite indicator. Several indices that measure gender equality at international level already exist (a summary is provided in Table 1.1.). They represent an extremely valuable starting point to assist in the measurement of the effectiveness of gender equality policies at EU level. However, there are also a number of drawbacks, which are discussed in this section.

The evolution of indices can be traced back to the Gross National Product (GNP) and the Gross Domestic Product (GDP) as internationally applicable measures of a nation's economic development. Subsequently, the United Nations Development Programme's (UNDP) 'Human Development Report' sought to extend this measure to capture some aspects of human as distinct from purely economic development. This led to the Human Development Index in 1990.

By 1995, along with the elaboration of the Beijing Platform for Action, a strong case emerged for a more comprehensive investigation of gender inequality in economic and social arrangements throughout the world that would require analyses and empirical research. Two initial gender indices were thus developed. The Human Development Index was adjusted to build the Gender-related Development Index (Bardhan and Klasen, 1999) by adding disaggregation of the indicators by sex. The Gender Empowerment Measure departed from these initial indices by focusing on indicators related specifically to women's empowerment issues (Bardhan and Klasen, 1999). It does not attempt to measure women's progress in well-being, but, rather, their roles as agents in society. Other gender indices have since been developed, expanding on the theoretical positions and conceptual frameworks of these initial gender indices.

1.4.1. Theoretical positions

The theoretical positions of gender indices are different and have developed from several theoretical perspectives including human development, women's empowerment or, increasingly, gender equality. The Gender Development Index supported the premise of seeing gender inequality as a human development issue (not primarily an issue of women's empowerment) that would facilitate policy discussions on gender inequality and further the collection of sex-disaggregated data for analysis and policy (Bardhan and Klasen, 1999).

Other indices were built with an explicit focus on adopting women's empowerment position. Examples of such indices include: the Relative Status of Women Index, based on the same indicators as the Gender Development Index and Human Development Index, but instead using relative measures that assess the position of women compared to that of men (Dijkstra and Hanmer, 2000); the Gender Inequality Index which is designed to capture women's disadvantage in the dimensions of empowerment, economic activity and reproductive health.

The European Union Gender Equality Index (Plantenga et al., 2009) departs from a perspective of women's empowerment and embraces a gender approach. It does so by encompassing the universal caregiver model outlined by Fraser (1997), in which gender equality, as 'equal sharing of paid work, money, knowledge, decision-making power and time', is seen as central (Plantenga et al., 2009).

1.4.2. Enlarging the frameworks

Numerous studies attempted to expand on the conceptual frameworks of the initial gender indices, with some attempting to construct alternative indices. Examples of alternative indices along with their main conceptual frameworks are provided below in Table 1.1.

Table 1.1. Existing gender indices and their conceptual framework

Indices	Conceptual framework	Source
Gender Development Index	▪ Educational attainment ▪ Longevity ▪ Income	UNDP
Gender Empowerment Measure	▪ Participation in governmental, managerial decision-making ▪ Participation in professional roles and in economic activities in general	UNDP
Gender Inequality Index	▪ Labour market ▪ Empowerment ▪ Reproductive health	UNDP
Gender Gap Index	▪ Economic participation and opportunity ▪ Educational attainment ▪ Health and survival ▪ Political empowerment	World Economic Forum
Gender Equity Index	▪ Education ▪ Economic participation ▪ Women empowerment	Social Watch
Social Institutions and Gender Index	▪ Discriminatory family code ▪ Restricted physical integrity ▪ Son bias ▪ Restricted resources and entitlements ▪ Restricted civil liberties	OECD
Relative Status of Women	▪ Ratio of the female and male index for education (educational attainment) ▪ Ratio of the female and male index for life expectancy (longevity) ▪ Relative female and male returns to labour	Dijkstra and Hanmer (2000)
Inequality-adjusted Human Development Index	▪ Health (inequality-adjusted life expectancy index) ▪ Education (inequality-adjusted education index) ▪ Income (inequality-adjusted income index: Quintile income ratio; income Gini)	UNDP
European Union Gender Equality Index	▪ Equal sharing paid work (labour force participation, unemployment) ▪ Money (gender pay gap, income) ▪ Decision-making power (political power, socio-economic power) ▪ Knowledge (gender gap in education and training, gender gap in educational attainment) ▪ Unpaid time (caring time, leisure)	Plantenga et al. (2009)
European Gender Equality Index	▪ Education (education level, lifelong learning and internet, educational segregation) ▪ Work (participation, contract conditions, occupational and pay segregation) ▪ Power (political, managerial)	Bericat (2011)

The multiplicity of domains in the different conceptual frameworks of existing indices reflect the specificity of the objectives and region that the index targets. For this reason, they may not provide an adequate tool for Member States comparisons at EU level.

Criticisms of existing gender related indices also point to the sometimes over-simplistic nature of what is being measured and point to the need to extend to other dimensions that better reflect critical areas of gender equality, as well as take into account more subtle and relevant indicators of gender equality. This section summarises the shortcomings identified within the perspectives of human development, women's empowerment and gender equality.

While crude indicators such as life expectancy suggest that women have a major advantage over men (and this might also apply to levels of educational attainment) this is not mediated by reference to quality of life and levels of ill health and disability in later life. Critics are thus calling for an index that measures gendered well-being (Chant, 2006) or captures gender gaps in mortality and disability-free life expectancy (Hooper, 2006).

The uneven sharing of (paid and unpaid) work and the consequences of this in terms of access to financial resources and the likelihood of falling into the poverty trap is pointed out as an important area. A gender equality index should therefore focus on sex-specific employment and unemployment rates (Cueva, 2006), on disposable income (Klasen, 2006), and on the economic returns of women's and men's labour (Chant, 2006). It needs to measure the time spent on care (Schüler, 2006; Chant, 2006; Klasen, 2006; Permanyer, 2011) and the time spent in the informal sector, including leisure activities (Permanyer, 2011; Klasen, 2006). The importance of measuring individual disposable time, net of financial and time responsibilities associated with care, has also been raised (Folbre, 2006).

The absence of any provision in gender equality indices in relation to gender-based violence and violence against women, which ignores a major sphere in which gender inequalities are sustained and magnified, in the home, workplace and society, has been heavily criticised. It is imperative that a gender equality index focus on forms of violence against women (Ellsberg et al., 2008); more particularly, on physical security and absence of violence (Klasen, 2006) or empowerment at the household level, related to violence, control over one's body, sexuality and reproduction (Cueva, 2006). The focus on gender-based violence against women also calls for measures of gender equality norms and values (Klasen, 2006) as these are the root of gender inequality in the first place (Inglehart and Norris, 2003).

Finally, there is a call for a gender equality index to take into consideration other vulnerable groups such as poor women, (Chant, 2006) in order to avoid a situation which solely reflects the position of economically advantaged women (Cueva, 2006; Bericat, 2011).

Collectively, researchers agree on the need for a comparative index that broadens the measures of gender equality, but such measures have not yet been collated into a cohesive inter-country index. Due to the lack of available harmonised data, computation remains heavily constrained. However, this lack of data should not constrain the conceptual base of the domains of gender equality to be measured. In summary, existing gender indices have fallen short of providing the kind of measures that would illuminate debate and contribute to decision-making at EU and national levels. It points to the need for a more comprehensive, EU based index that feeds into key policy decisions at EU and national levels.

1.5. The added-value of a Gender Equality Index

The Gender Equality Index provides a synthetic measure of gender equality that is both easy to understand and to communicate. This tool should play an important role by supporting decision-makers in assessing how far a given Member State is from reaching gender equality. The use of the Gender Equality Index allows meaningful comparisons to be made between different policy areas. Last but not least, it will give visibility to gender equality by making it possible to measure its progress over time.

In response to the shortcomings of other gender equality indices, the Gender Equality Index provides a more comprehensive framework of gender equality. In line with the EU's framework on gender equality for both women and men, the Index adopts a gender approach rather than focusing on women's empowerment. Moreover the Gender Equality Index benefited from the consultation process with the National Statistics Offices and with the experts from the National Machineries of the EU Members States. Their contribution has determined an important added value to this Index.

The Gender Equality Index ensures that it draws upon all three approaches to gender equality (sameness, difference and transformative). It does so by relying on gender gaps, that is the difference in the levels of achievement between women and men on a given gender indicator. No distinction is made as to the direction of this gap, meaning that the gender approach takes into account the situation of women and men in various domains of economic and social life, including those where men are in disadvantaged situations. The target is the equality point, and a given Member State is equally treated whether a gap is to the advantage of women or men. However, levels of achievement are also taken into account in order to avoid situations whereby gender gaps are low, despite an adverse situation for both women and men.

A limitation of existing global gender equality indices is an apparent lack of sensitivity to location. There is a need to provide a more informative tool within a narrower geographical area (Hooper, 2006; Plantenga et al., 2009). The global approach of the Gender Development Index and the Gender Empowerment Measure, in the context of Europe, may lose the subtleties of differences between Member States (Permanyer, 2011). As its purpose is to offer an arena for debate and to support the development of policy and research at EU level, it is imperative that the Gender Equality Index remain closely aligned with domains pertinent to both EU policy and specific gender equality policy.

To sum up, in line with its policy foundations, the objectives of the Gender Equality Index are not only to measure gender equality throughout the Member States and the EU, but also to allow an analysis of gender equality both over time and geographical areas; to give more visibility to the situation of women and men in the Member States overall and in selected areas of concern for gender equality; and to support the evaluation of the degree of effectiveness between different measures and policies implemented in the field of gender equality at EU level.

Having set out the definition and approach taken by the Gender Equality Index, and defined its added value, the Report now turns to the development and presentation of its conceptual framework.

2. Conceptual framework

A conceptual framework for gender equality is a prerequisite to guide the way in which gender indicators will be selected and combined to provide a suitable measure of gender equality relevant to the EU policy context. Describing the dimensions of gender equality is a challenging exercise. It is necessary to deal with the complexity of the concept, since it draws on different perspectives and disciplines, different age groups and a more general heterogeneity within the population itself, adding further complexity to the attempt to construct a conceptual framework of gender equality.

It is also essential for the Gender Equality Index to render what it seeks to describe as simple as possible. It is crucial to bear in mind that this simplicity is not a marker of triviality. Instead, users should be aware that it represents the main elements of an intricate concept. This process of simplification is the result of carefully negotiating the balance of drawing out the main elements without losing the essence of gender equality.

The conceptual framework aims to provide a hierarchical tree structure that can adequately map the main equality concerns within the framework of EU policy and EU gender equality policy. It establishes the domains and associated sub-domains into which gender gaps within relevant indicators can be measured. The development of this structure is driven by both policy objectives and explicit reference to (gender) equality frameworks, which this section outlines before presenting in detail the domains and sub-domains of the conceptual framework.

2.1. Gender equality theoretical frameworks

In order to make sense of the variety of meanings of gender equality observed in EU policy documents, some key frameworks that could explicate gender equality at the macro level were analysed. They broadly cover two main areas: equality or equity frameworks and capability approaches. These, taken together, combine the sameness, difference and transformative frameworks to gender equality also adopted in the Gender Equality Index, and provide various domains of gender equality to be taken into account.

2.1.1. Equality and equity frameworks

Several equality and equity frameworks, sometimes applied specifically to gender, have been developed. A perspective of 'equality of condition' is proposed by Baker et al. (2004) in a social equality framework. Although this concept of equality is not specifically dedicated to the question of gender equality, but rather to social equality in general, it provides a possible approach to determine relevant domains of gender equality. This approach is particularly relevant to contemporary developed societies and aims at eliminating major inequalities. It sees inequalities as rooted in changing and changeable social structures, particularly in structures of domination and oppression. Instead of seeing individuals as responsible for their successes and failures, the approach of equality of condition emphasises the influence of social factors on people's choices and actions. The framework offers some interesting dimensions which are adaptable to the context of gender and which include five dimensions of equality which are seen to cover most issues that contemporary egalitarians are concerned with: equal respect and recognition; equality of resources; love, care and solidarity; equality of power; and working and learning as equals.

Another framework that is focused specifically on gender has been proposed by Pascall and Lewis (2004). This framework names five areas as key elements of gender regimes, for the purpose of analysing and assessing welfare systems and social politics with respect to gender equality. It maps social politics for gender equality across the domains of paid work, care work, income, time and voice. It argues that gender equality policies have been limited in effect, because they have addressed only part of the system rather than the whole, in particular, individual women's possibilities for equal earning (Pascall and Lewis, 2004), which shows the importance of ensuring that a conceptual framework of gender equality is as comprehensive as possible.

The gender framework developed by Fraser (1997) departs from the concept of gender equality, instead using the term gender equity and establishing principles for thinking systematically about gender equity in the context of welfare state models. This change in terminology reflects the idea that equity is concerned with fairness and justice between women and men in relation to the share of benefits and responsibilities. The equity concept moves from allocating tasks equally to allocating them fairly. It suggests that gender equality can only be reached when both women and men change their lifestyles and the way in which they allocate shares of social and economic participation. Gender equity is defined as a complex idea, and relies on shattering the dichotomy between sameness and difference. Against the background of a multi-dimensional concept, it determines the dimensions of gender equity as a compound of seven distinct principles, to which welfare systems must conform in order to meet the claim of gender equality: anti-poverty; anti-exploitation; income equality; leisure time equality; equality of respect; anti-marginalisation; and anti-androcentric.

2.1.2. Capability approaches

The meaning of gender equality has also been taken from the perspective of capabilities. Attempts to measure gender equality, notably the Human Development Index and Gender-related Development Index, have largely adopted this approach and drawn upon the framework of Sen's capability approach (Sen, 1980; 1993). It argues that a concept of equality should be concerned with what people are able to be and to do, and not with their income, or what they can consume. The focus should be on the real opportunities that people have for well-being and leading a valuable life. According to this equality concept, it is not important to equate people with the distribution of material resources, but rather to ask how, against the concrete background of their different individual situations, resources can be used to open options for choice and secure people's well-being. People with physical disabilities, for example, require more resources to attain an equal degree of mobility, power to act and choice. The parameters for equality are capabilities, which are necessary for the realisation of meaningful activities and positive states of being. Sen's capability approach itself only provides a general framework without proposing a concrete list of capabilities because, in his opinion, it is not up to the theorist to make these decisions, but rather to a democratic process among the relevant agents (Robeyns, 2007).

Some researchers have extended the original capability approach and applied it to gender, such as Nussbaum (2003), whose considerations on gender equality build upon Sen's capability approach. She argues that, in order to supply concrete and useful guidance, a definite list of the most relevant capabilities have to be formulated, even one that is tentative and revisable. She has thus developed a list of central human capabilities (in terms of universal human needs and entitlements) of which everyone should be entitled to a minimum threshold, even while considering this list as open-ended and subject to ongoing revision and rethinking. Nussbaum lists these capabilities as: life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; control over one's environment; and equal worth of individuals. Each of these capabilities is seen as crucial to full equality. Neglecting one or more of them is construed as a failing in gender justice.

Robeyns (2003), like Nussbaum (2003), argues against completing a definitive list of universal capabilities but suggests a procedural approach to defining relevant capabilities for determining what to measure and how to observe gender inequality, where interested parties can propose further capabilities pending a reasonable argument. The list of gender equality capabilities she proposes consists of: life and physical health; mental well-being; bodily integrity and safety; social relations; political empowerment; education and knowledge; domestic work and nonmarket care; paid work and other projects; shelter and environment; mobility; leisure activities; time-autonomy; respect; and religion (Robeyns, 2003).

These frameworks provide a solid basis on which to conceptualise gender equality in the EU policy context, including a list of overlapping domains. Before proceeding, however, the report provides an overview of the development of the concept of gender equality within legal and strategic documents at EU and international level in order to identify the domains of gender equality present in these documents, and to map the concept of gender equality.

2.2. Gender equality policy context

To understand the concept of gender equality in EU policy, a thorough analysis of some key documents was undertaken. The EU treaties were the first main reference as the binding agreement between EU Member States, complemented by the body of other EU strategic documents promoting compliance with the principle of gender equality. Finally, relevant international frameworks such as the UN are discussed. The fields of action and priority areas that appear in these policy documents are set out in this section.

2.2.1. Gender Equality in the EU Treaties

Policies in the area of gender equality have been drawn up since the creation of the European Economic Community in 1957 with the Treaty of Rome. Following the establishment of this founding treaty, this basic principle was gradually clarified and developed by several Council Directives, which dealt mostly with economic perspectives, including pay, participation, health and safety, maternity and parental leave, as well as other issues pertinent to work-life balance (European Parliament, 2009). None of these legal measures, however, dealt specifically to the principle of gender equality.

The principle of gender equality has been strengthened, notably since the 1997 Treaty of Amsterdam (97/C 340/05), by inscribing the principle of gender mainstreaming in a foundation text of the EU. The perspectives of gender equality started to widen and, although still largely adopting an economic perspective, it sought an improved understanding of gender equality and requested that gender mainstreaming be applied to all activities of the Community.

Subsequently, the introduction of the Lisbon Treaty (2007/C 306/01) in 2009 marked a turning point, as it directly addressed the principle of gender equality, and the policies to support it, as a central element of EU policy. It emphasised the importance of eliminating all types of discrimination, including those based on sex, through the Charter of Fundamental Rights of the European Union (2000/C364/01), and gave renewed attention to how gender-based violence of the European Union (2000/C 364/01) threatened the integrity and dignity of women and men in the EU.

2.2.2. Gender equality in the EU strategic policy documents

In light of the increasing impetus for gender equality and in order to fulfil these gender equality ambitions, the treaties of the EU, the European Commission and other EU institutions have developed several strategic and/or legislative documents.

Since 1996 the European Commission has followed a dual approach to gender equality by both implementing gender mainstreaming and initiating specific measures the first comprehensive policy was introduced in the a Community Framework Strategy on Gender Equality (2001–2005) (COM(2000) 335 final) in 2000, having as its main objective to 'establish a framework for action providing for gender mainstreaming in all Community activities in such a way that they help to attain the goal of removing inequalities and promoting gender equality'. The framework identified several inter-related fields of action in the promotion of gender equality in economic life: equal participation and representation; equal access and full enjoyment of social rights for women and men; gender equality in civil life; change of gender roles and stereotypes.

Following this, the European Commission developed the Roadmap for Equality between Women and Men (2006–2010) (COM(2006) 92 final), outlining six priority areas, each with specific key objectives and actions, and therefore marking a clear advance in terms of providing measures and targets. To measure progress, the roadmap calls for the development of comparable sex-disaggregated statistics, gender sensitive indicators to monitor progress towards gender equality and the creation of a Gender Equality Index. Its priority areas consist of: equal economic independence for women and men; the reconciliation of private and professional life; equal representation in decision-making; the eradication of all forms of gender-based violence; the elimination of gender stereotypes; and the promotion of gender equality in developing countries.

In 2010, on the occasion of International Women's Day, the European Commission unveiled the Women's Charter (COM(2010) 78 final), which aims at strengthening the European Commission's commitment to 'making equality between women and men a reality'. This includes strengthening gender perspectives in all policy work undertaken by the Commission and dedicating the necessary resources to its realisation. The Charter is based on five gender equality principles: equal economic independence; equal pay for

equal work and work of equal value; equality in decision-making; dignity, integrity and an end to gender-based violence; gender equality beyond the EU.

In the same year, and following on from the Roadmap, the European Commission developed the Strategy for Equality between Women and Men (2010–2015) (COM(2010) 491 final), which, building upon the Women's Charter (COM(2010) 78 final), presents current priorities. The Strategy aims at contributing 'to improving the place of women in the labour market, in society and in decision-making positions both in the European Union and the world', and reiterates the call for increased cooperation between all European institutions and Member States. The main priority areas it identifies are: economic independence of women; equal pay; equality in decision-making; dignity, integrity and an end to gender-based violence; gender equality in external actions; and horizontal issues. Importantly, in its action plan, the Strategy for Equality between Women and Men mandates the construction of the Gender Equality Index to the European Institute for Gender Equality.

The year 2010 also saw the launch of the European Union's 10-year growth strategy, Europe 2020 (IP/10/225), which, although it does not refer specifically to gender equality, emphasises the need to foster growth that is smart, sustainable and inclusive. Under both the smart and inclusive growth agendas, EU targets look at employment (making specific references to gender inequality and other grounds of inequality) and education. The employment target aims for 75 % of 20- to 64-year-olds to be employed, while the education targets aim to reduce school drop-out rates below 10 % and ensure that at least 40 % of 30- to 34-year-olds have completed third level education or equivalent. The inclusive agenda has an additional EU target for reducing the number of people in or at risk of poverty and social exclusion by at least 20 million.

The work undertaken at European level by the European Commission was reinforced in 2006 by a commitment at Member State level. In the first European Pact for Gender Equality (2006) (7775/1/06 REV 1), the European Council requested that Member States strengthen attention to gender equality and support the objectives of the road-map. In 2011 a new Pact for the period 2011–2020 (7349/11) was adopted. It urges the EU and Member States to work towards achieving equality, to close gender gaps in employment, education and social inclusion, ensure equal pay for equal work and promote the equal access and participation of women and men in decision-making. The

Pact also calls for the promotion of work-life balance for both women and men and action to reduce all forms of violence against women.

2.2.3. Gender equality in international platforms

Outside of the EU context, United Nation (UN) institutions have been significant actors in terms of their work in the field of gender equality. The United Nations General Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) on 18 December 1979, providing a historic document positioning discrimination against women as a violation of fundamental rights. Its scope is very wide and includes, for example, Sex Role Stereotyping and Prejudice (Article 5); Prostitution (Article 6); Political and Public Life (Article 7); Representation (Article 8); Education (Article 10); Employment (Article 11); Health (Article 12); or Marriage and Family Life (Article 16).

At the conclusion of the United Nations 4th World Conference on Women in 1995, the Beijing Platform for Action (BPfA) was unveiled. It highlighted 12 critical areas of concern for gender equality, which include: Women and Poverty; Education and Training of Women; Women and Health; Violence against Women; Women and Armed Conflict; Women and the Economy; Women in Power and Decision-making; Institutional Mechanisms for the Advancement of Women; Human Rights of Women; Women and the Media; Women and the Environment; The Girl-child. The BPfA was ratified by the EU Member States who have committed to regularly monitor progress in each area. In addition, following the ratification of the BPfA, the establishment of gender mainstreaming became a major global strategy for the promotion of gender equality. Within this context, all 27 Member States committed to a dual approach of gender equality, namely specific actions and gender mainstreaming. Although the primary responsibility lies with the EU Member States to advance the BPfA agenda, the European Council committed the EU to its principles in the same year. The High Level Group on Gender Mainstreaming, established and chaired by the European Commission, undertook to review the implementation of each of the critical areas of concern in an annual work programme, with which each EU Presidency country collaborates.

The UN also adopted the Millennium Declaration in 2000, listing eight international development goals to be reached by 2015. The third Millennium Development Goal (MDG3) is promoting gender equality and empowering women,

with targets that aim at tackling issues in employment, pay, political representation, education or poverty. The fifth Millennium Development Goal (MDG5) also highlights the promotion of maternal health and access to reproductive health, particularly when it comes to contraception and antenatal care coverage.

The Council of Europe also works actively to promote gender equality. Article 14 and Protocol 12 of the European Convention for the Protection of Human Rights and fundamental Freedoms, whose implementation is monitored by the Council, have helped to improve the legal protection and status of women in recent decades. In April 2010, the Committee of Ministers of the Council of Europe adopted a Convention on preventing and combating violence against women and domestic violence, also known as Istambul Convention.

This review of the main developments of gender equality policy at EU and international level provides a solid base on which to derive critical areas of gender equality for the purpose of building the Gender Equality Index. They, together with the theoretical frameworks reviewed above, have been mapped to provide a comprehensive conceptualisation of gender equality issues at EU policy level.

2.3. Domains of gender equality

Having reviewed the main domains of gender equality considered by some leading theoretical frameworks, as well as international policy documents, this section now turns to how these were organised into a coherent framework for the Gender Equality Index, before describing them in more detail.

2.3.1. From theory and policy to domains

An analysis of key policy documents and gender equality frameworks enabled the translation of the concept of gender equality, with all its complexity and layers of meaning,

into a hierarchical tree structure. Each domain was then further subdivided into sub-domains. The process of designing this structure[1] was carried out with the advice of the members of EIGE's Experts Forum and Working Group on the Gender Equality Index[1]. It was also based on a study for the development of the basic structure of a European Union Gender Equality Index commissioned by the European Institute for Gender Equality (Plantenga et al., 2011) and a feasibility study commissioned by and presented to the European Commission (Plantenga et al., 2003).

During this process, the domains and sub-domains were also developed against the backdrop of wider international framework agreements, such as the CEDAW and the BPfA. Where possible, the critical areas of the BPfA were taken into account because they provide a worldwide framework and because a commitment exists by the European Union to continue to review its indicators to review the progress of gender equality. A detailed account of how each domain relates to the framework examined is provided in Annex 1.

Using some of the conceptualisations of gender equality and key frameworks of gender equality reviewed above, the domains used in the Gender Equality Index are now presented (Figure 2.1.). It consists of eight domains, the first six being combined into a core index, and an additional two satellite indices. The satellite indices are conceptually related to gender equality, but cannot be included in the core index because they measure an illustrative phenomenon – that is, a phenomenon that only applies to a selected group of the population. This occurs when considering issues that are related to women only, as in the case of gender-based violence against women, or when examining gender gaps among specific population groups (people with a disability; lone parents or carers; etc). Creating a framework of a core index with satellite accounts, as was initially proposed in the work of Plantenga et al. (2011), provides more flexibility to the Gender Equality Index and thus increases its usefulness.

---

[1] The Working Group on the Gender Equality Index is a board officially established by EIGE's Management board in 2011 to provide the technical support in the construction of the Gender Equality Index and in developing a strategy to disseminate it. The Experts' Forum is the Institute's advisory body. Its principle function is to provide expertise knowledge in the field of gender equality.

Figure 2.1. Domains of the Gender Equality Index
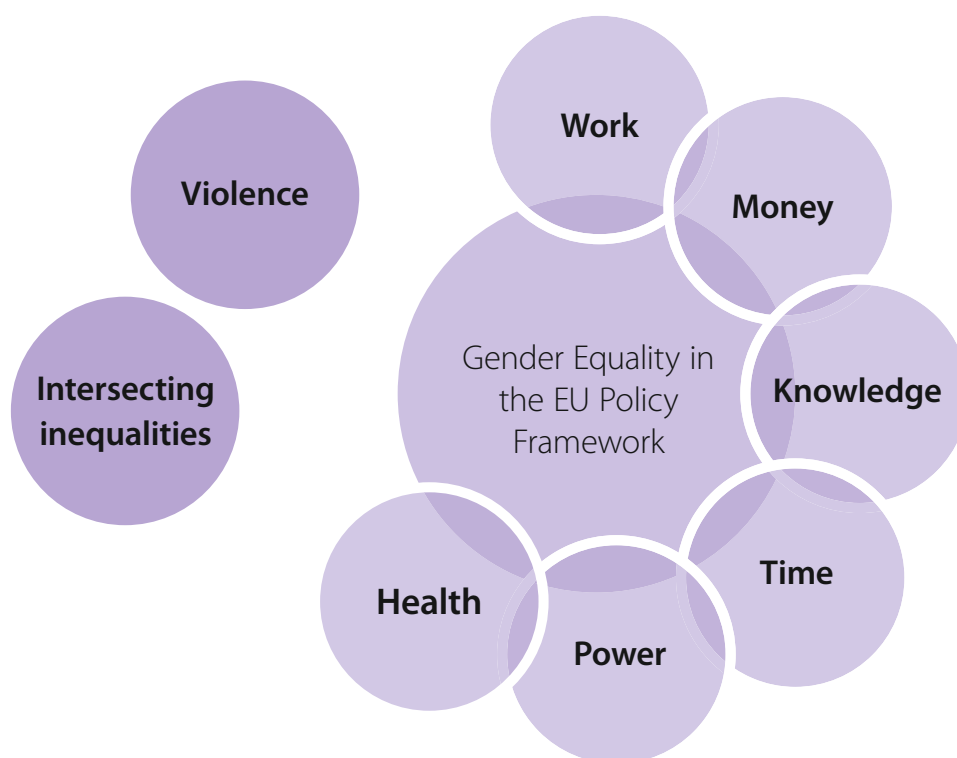
Each of the domains is discussed in greater detail below, along with associated sub-domains. The link between the concept of gender equality and each domain is outlined, and the section expands on how domains relate to theoretical approaches of gender equality, as well as how each addresses a gender equality policy concern at the EU level.

2.3.2. Domain 1: Work

The first domain, *work*, relates to gender gaps in the position of women and men in the European labour market. This means that, in line with EU policy focus, it mostly considers paid work. It is an important area to consider, as gender gaps in employment have been linked to slower rates of economic growth because of an artificial reduction in the pool of talent in the labour market (Klasen and Lamanna, 2009).

The domain of *work* relates to the conceptual models of gender equality identified in the literature. Access is emphasised in equality frameworks with a focus on the capability of individuals to work in the labour market or to undertake projects (Robeyns, 2003). Importance is given to the equal value and share of work between women and

men (Pascall and Lewis, 2004), and to the equal distribution of burdens and benefits of work. In addition to equal share, the conditions under which people work need to be much more equal in character to achieve equality (Baker et al., 2004). This may mean being capable of controlling one's environment, including exercising practical reason and entering into meaningful relationships of mutual recognition with other workers (Nussbaum, 2003). This focus on the conditions in which work is undertaken to achieve gender equality can be framed as a more general anti-exploitation principle (Fraser, 1997).

At policy level, the domain of *work* is relevant because of the importance given to increasing both the number of jobs and labour market participation. Some of the key benchmarks in this domain of EU policy are the Europe 2020 (IP/10/225) and the European Employment (COM(2003) 6 final) strategies, with a target to achieve a participation rate in employment of 75 % of 20- to 64-year-old Europeans. Gender differences are tackled by a number of documents. The Treaty on the Functioning of the EU (Article 153) (2010/ C83/01) includes a commitment to support Member States in achieving equality between women and men with regard to labour market opportunities and treatment at work. This is reinforced by the European Commission, the

European Parliament and the European Council with Directive 2006/54/EC, which deals with the implementation of the principle of equal opportunities and equal treatment of women and men in matters of employment and occupation. Furthermore, strategic documents such as the Roadmap (2006–2010) (COM(2006) 92 final), the Women's Charter (2010) (COM(2010) 78 final), the Pact (2011) (7349/11) or the Strategy (2010) (COM(2010) 491 final)have translated these concerns mainly in terms of increasing women's employment, currently well below that of men's, as well as reducing labour market segregation.

The focus of EU policy has moved away from only attempting to provide more jobs, to also ensuring that these are better jobs. Quality of work, for example, is at the heart of the European Social Model and the European Employment Strategy (COM(2003) 6 final). The Lisbon Strategy (2000) and Europe 2020 (IP/10/225) call not only for the creation of more jobs for women, but also better jobs for women and men. The issue of quality can refer to a number of job characteristics and may also be defined as the match between the characteristics of the job and the worker, and the workers' subjective assessment of their job in terms of satisfaction, job security, career prospects and so forth (Green, 2006; European Commission, 2001) (COM(2001) 313 final). The principles of quality of work were developed following statements from the Lisbon and Nice European Councils in 2000, where there was an emphasis on the promotion of quality in all areas, including quality of work (EMCO, 2010). Under the Lisbon Strategy, Member States have acknowledged the major contribution that guaranteeing quality and productivity at work can play in promoting economic growth and employment (COM(2003) 728 final). The focus of EU policy on quality of work also includes the promotion of flexible working arrangements, with a strong emphasis on work-life balance, often translating into policies related to family leave or childcare arrangements, for both women and men, seen, for example, in the Pact (2011) (7349/11). Quality of work became a priority area of the Social Policy Agenda of the European Union (2006–10) (COM(2005) 33 final) and subsequently developed into the Europe 2020's call for more and better jobs.

The domain of *work* is divided into three sub-domains which consist of *participation, segregation* and *quality of work* (Figure 2.2.).

Figure 2.2. Domain of *work* and its sub-domains
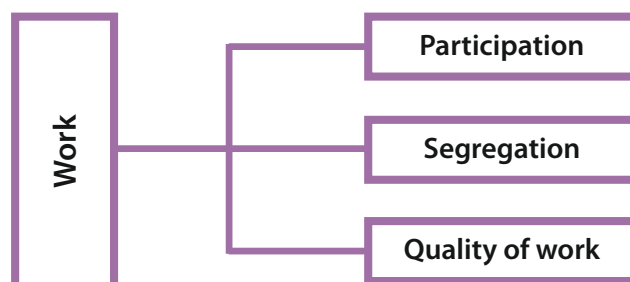
The first sub-domain, *participation*, is important for gender equality given that gender gaps in participation have narrowed dramatically across the lifespan of the EU, although women remain less likely than men to participate in the labour market. Furthermore, when women do participate, it is more frequently on a part-time basis, leading to increased patterns of segregation and lower quality of work (European Commission, 2009). Despite the EU policy focus on paid employment, it is important to point out that participation is also highly gendered by patterns of participation in the formal and informal labour market. While the participation of women in paid employment has reached one of the highest levels in history, women's involvement in so-called 'invisible' areas should not be forgotten. This can take the form of work performed at home (piece-rate labour), in the black economy or working undeclared in a family business (Chant and Pedwell, 2008).

Women are more likely to move in and out of the labour market, because their disproportionate responsibility to take on caring roles leads to more career interruptions compared with men (Annandale and Hunt, 2000). The participation of women and men in work is fundamentally different and can be summarised by the so-called '30:30:40' model (Hutton, 1995). In this model, society is divided into approximately 30 % of the population that are unemployed or inactive, a further 30 % that are active but in some form of precarious conditions (such as some forms of self-employment or forced part-time employment) and the remaining 40 % in permanent employment or established and secure self-employment. Of course, adopting a gender perspective for this model shows that a fundamental difference is that women are disproportionately represented in the last two categories (Crompton, 1997). Many forms of policy can influence the participation rate of women, including fiscal policies; benefits, allowances or subsidies; various forms of leave; flexible forms of working including part-time work (Jaumotte, 2003).

The second sub-domain examines gender *segregation*, as it continues to contribute to gender inequality in Europe and also results in less efficient economies (Anker, 1998). Segregation refers directly to patterns of segregation in the labour force both horizontally and vertically. Segregation in the labour market has been a pervasive issue over a long period of time. Occupational, or horizontal, segregation is defined as the concentration of women and men in different types and levels of activity and employment, with women being confined to a narrower range of occupations than men. Often, the most feminised sectors are those that provide market substitutes for services women historically provided in the household, such as childcare, elder care, nursing or teaching (Folbre, 2006). The segregation of the labour market has detrimental effects on the labour market generally because it contributes to the gender pay gap, and impacts career advancement and access to training (Magnusson and Nermo, 2009).

Hierarchical, or vertical, segregation refers to the under-representation of women at the top of career ladders and over-representation in roles that are deemed more menial, with the ordering of occupations often done on the basis of desirable attributes such as income, prestige and conditions (Bettio and Verashchagina, 2009). Horizontal segregation has had a tendency to shift towards fewer differences over time, with an increase in the proportion of women in most sectors. However, some sectors, such as science and technology, still lag behind. Vertical segregation also remains strong despite the increase in the number of women entering top positions. A symbolic and very telling example of this is the lack of progress made regarding the number of women on company boards. Furthermore, evidence suggests that some degree of tokenism prevails, or that within equal job descriptions, the tasks of women and men remain fundamentally different. Importantly, research suggests that the power structures of the labour market have remained largely intact despite women infiltrating all levels and areas, with the most attractive positions still out of reach of women (Annandale and Hunt, 2000).

The third sub-domain, *quality of work*, refers not only to work participation, but also looks at the features of that employment (COM(2001) 313 final). Indeed, the increase in the number of jobs in response to EU policy may have been at the expense of quality (Leschke et al., 2008), and the patterns of segregation of the labour market may heighten differences in the quality of jobs between men and women (European Commission, 2009). For example, segregation entails that women-dominated jobs may hold fewer

opportunities for training and ensuing promotion, which in turn contributes to further segregation and a widening of the gap (Eurofound, 2012). The nature of employment, and thereby its quality, is being affected by new ways of working, the rise of new Internet technologies allowing for a greater permeability between the private and public spheres. The greater need for flexibility on the part of organisations has given rise to greater low-paid and less secure types of employment, often on a part-time or temporary basis, with positions that are filled by more women than men (Bradley and Healy, 2008). This is gendered, as it often entails that women become disproportionately involved in non-standard and/or precarious work (Rubery, 2002).

Quality of work can be examined at the individual level, but it is also possible to adopt a social (stemming from quality of work) or an organisational (ensuring a productive workforce) perspective (UNECE, 2010). But only the individual perspective can be implemented in a composite indicator. Quality of work is a multi-dimensional concept that can be summed up under several pillars (Eurofound, 2002). The first pillar is career and employment security. This is very gendered because, despite their upward mobility, women's progress in many sectors is still very uneven due to a 'glass ceiling', masculine culture and lack of transparent promotional processes (European Commission, 2007a). In addition, women hold a slightly higher percentage than men of fixed-term contracts, including involuntary short-term contracts (European Commission, 2009). The second pillar is that of the health and well-being of workers, where although historically men were more exposed to women because of their greater involvement in industrial occupations, the gaps are now starting to close (European Commission, 2009). The third pillar concerns skills and competences, notably their under-utilisation in work (European Commission, 2009).

The experience of women and men within the domain of *work* varies significantly, mostly to the detriment of women because the tendency is for lower participation, greater segregation and differences in quality of work. Narrowing the segregation gender gap would positively impact both women and men, as it would contribute to reducing the gap in participation and quality. Overall, it is important not to lose sight of the fact that quality of work should also be improved for both women and men.

2.3.3. Domain 2: Money

The second domain, *money,* examines gaps between the financial resources and economic situation of women and men. It is an important domain of gender equality given that women are generally disadvantaged financially, exposing them to greater risks of social exclusion.

This domain echoes the majority of the theoretical frameworks of equality reviewed above. Equality can be viewed as having approximately the same range of key resources as others, such as income and wealth (Baker et al., 2004). Gender equality in pay and income rules out unequal pay for equal work and emphasises the importance of equalising pensions and benefits between women and men (Fraser, 1997; Pascall and Lewis, 2004). This goes together with a call for a substantial reduction in the vast discrepancy between women's and men's income – following divorce, for example, when women's income tends to decrease sharply while men's increases (Fraser, 1997). Because of interrupted careers, women tend to rely more often on social transfers and may be disadvantaged by transfer incomes which are calculated on the basis of former income from employment. Finally, because of the predominance of traditional gender roles in the household, a considerable number of women do not have a market income of their own, placing them in a situation of financial dependence.

Equalising money needs to be combined with preventing poverty to achieve gender equity as seen in Fraser's (1997) anti-poverty dimension. Eradicating gender-based poverty is achievable through the introduction of a decent minimum wage (Pascall and Lewis, 2004) and being able to hold property (both land and movable goods) on an equal basis with others (Nussbaum, 2003).

At EU policy level, the domain of *money* is part of the Lisbon Treaty (2007/C 306/01), which requires Member States to ensure that the principle of equal pay for male and female workers for equal work or work of equal value is applied. This is central to the work of the EU and its commitment to equal pay (Article 141 (ex 119) of the Treaty EC) (2010/C 83/01). The elimination of the gender pay gap is emphasised in all key policy documents (Roadmap 2006–2010 (COM(2006) 92 final), Women's Charter 2010 (COM(2010) 78 final), Commission's Strategy 2010–2015 (COM(2010) 491 final), Pact 2011 (7349/11)). This includes not only pay, but also income in the form of transfers. This is flagged by Europe 2020 (IP/10/225), which states that Members States need to 'fully deploy their social security and pension systems to ensure adequate income support'.

Another key priority of the European Union, related to economic situation, is the fight against poverty (Pact, 2011) (7349/11). Women have a higher risk of poverty, and tackling gender-based poverty can lead to equal economic independence. Poverty can be defined as the non-fulfilment of a person's human rights to a range of basic capabilities (Office of the High Commissioner for Human Rights, 2002). Europe 2020 (IP/10/225) has a strong focus on poverty with the aim to reduce the number of individuals living below the national poverty lines by 25 %, thereby decreasing the number of individuals at risk of poverty by 20 million.

The domain of *money* examines two sub-domains: *financial resources* and *economic situation* (Figure 2.3.).

Figure 2.3. Domain of *money* and its sub-domains
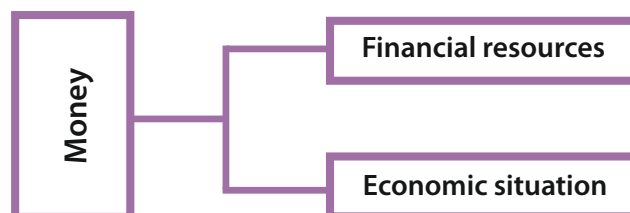
Examining gender gaps in *financial resources* is important because there are strong differences between women and men's income. Gender equality in pay can contribute to an increase in economic growth, as it could lead to higher rates of savings, improved investments, better credit reimbursing and investing in the human capital of the next generation (Klasen and Lamanna, 2009). The main causes of the gender pay gap in the EU have been attributed to: discrimination in the workplace; structural factors; as well as workplace practices and promotion procedures (European Commission, 2011a).

In addition to earnings, other incomes (for example, income from property, stock, and other financial assets) constitute another realm of unequal distribution among women and men. Women are generally less likely than men to hold economic assets, such as property, with legislation for transfer in the case of divorce often working to the detriment of women (UNECE, 2010). At the same time, women are also less likely to be able to control economic assets, including their use of disposable income, which may be related to their bargaining position in the household. For example, in a situation of necessity, women deplete their assets to a greater extent than men (UNECE, 2010).

Another important source of income, especially for those who do not participate in the labour market, is transfer income. These are defined as monies received, usually from the government, in the form of social benefits or subsidies. Given that women in the EU consistently earn less per hour than men, women earn less over their lifetimes. Therefore, women are often entitled to lower social benefits and pensions then men, and are at a greater risk of poverty, especially in old age, than men.

Finally, access to financial resources – for example, through access to credit – is also gendered. Evidence suggests that, globally, access to the formal financial sector is more limited for women because of their lower levels of collateral and assets, which means lower returns for banking institutions (United Nations, 2009). For example, in the EU, women are twice as likely as men to find themselves completely excluded from financial services (Lämmermann, 2010).

The second sub-domain, *economic situation,* considers economic inequality and takes into account the vertical distribution of disposable income. These patterns often reflect lower work participation coupled with segregation in the labour market. As a consequence, women are much more at risk of poverty than men (European Commission, 2011), since men's vulnerability to poverty is linked to labour market events as opposed to women which is their greater dependence on a partner's income (Callens and Croux, 2009). A major limitation of research undertaken on gender and poverty is its reliance on measuring economic resources at the household level, assuming that all individuals in one household are equally poor or rich (Bárcena-Martín and Moro-Egido, 2011), an approach which does not properly reflect the impact of gender when considering poverty or income inequality. Assessing poverty and income distribution in general will remain problematic as long as it is only assessed on the assumption that there is a single head of household (Chant, 2006).

In summary, there are notable gender gaps in the ability to access money through the labour market, as well as through government transfers and benefits. In both cases, women may be at a financial disadvantage compared with men due to the differences in earnings and other received incomes, which widens through the lifecourse for complex and interacting reasons (tenure, interruptions, working time, segregation in the labour market, unpaid caring work, allocation of income between household members, etc.), thus leaving women more exposed to lower levels of income and at a greater risk of poverty.

2.3.4. Domain 3: Knowledge

The third domain, *knowledge,* examines gaps between women and men in terms of education and training. Despite education's recognised importance towards greater gender equality, including combating gender stereotypes and segregation in the labour market (European Association for the Education of Adults, 2007), gender differences and inequalities persist in education in terms of subject preferences and performance (Lynch and Feeley, 2009).

The historical dimension of gender and education should not be underplayed. While the trend is now for women to reach or even to exceed men's educational attainment, this is only a relatively recent social achievement. Up to the 1980s, the differences between women and men were more marked. This has important implications for today's society, as the population consists of individuals who have experienced these two gender patterns in education, with marked differences among older people. As time goes on, these differences will start to fade (Walby, 1997). A link between gender inequality in education and economic performance has been noted. This is explained by this type of gender inequality leading to decreased levels of investment in human capital (Klasen and Lamanna, 2009).

Many frameworks see education as a paramount pillar under which to examine gender equality. Equality can be seen through the ability to learn as equals (Baker et al., 2004). People need to have access to the same educational opportunities, ensuring that everyone is enabled to develop their talents and abilities, and that everyone has a real choice among occupations that they find satisfying or fulfilling. In the capability approach, *capability* means being able to use the senses, to imagine, think, and reason – and to do these things in a 'truly human' way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. This includes, for example, being able to use imagination and thought in connection with experiencing and producing works and events (Nussbaum, 2003). Education and knowledge are seen as providing the capability to be educated and to use and produce knowledge (Robeyns, 2003).

At policy level, the importance of gender equality in education and training has been highlighted in several EU policy documents because of its potential to reduce risks of unemployment and social exclusion. In addition, it can help foster human potential (Council Resolution, 2007/C300/01).

Europe 2020's targets on educational attainment include reducing the drop-out rate to 10 per cent from the current 15 per cent, and increasing the share of the population aged 30–34 having completed tertiary education from 31 % to at least 40 % in 2020 (IP/10/225).

Gender equality in the EU can be formulated not only in terms of equal participation and equal success without a gender bias, but also through the elimination of segregation with regard to educational paths as well as to disciplines and professions – as seen in the European Pact for Gender Equality (2011–2020) (7349/11) – given that education and training paths are still heavily segregated by gender. In terms of segregation in education, educational stereotypes affect the life choices and the economic independence of many women, according to the Women's Charter (2010) (COM(2010) 78 final). One of the key challenges of European policy remains enabling and supporting non-traditional educational paths to create equal possibilities of choices.

There is also a focus on lifelong learning since it is considered an indispensable means for promoting adaptability, employability, active citizenship and personal and professional fulfilment. Lifelong learning, according to the Council (2002/C 163/01), should enable all citizens to acquire the necessary knowledge to take an active part in the knowledge society and the labour market. The Digital Agenda for Europe (COM(2010) 245 final/2) identifies a gap in digital literacy and skills, as well as a need to increase the supply of ICT practitioners by making the sector more attractive, particularly to young women. Europe 2020 (IP/10/225) declares that Europe must act in the fields of education, training and lifelong learning to contribute to delivering smart growth.

The domain of *knowledge* is divided between three sub-domains: *educational attainment, segregation in education* and *lifelong learning* (Figure 2.4.).

Figure 2.4. Domain of *knowledge* and its sub-domains
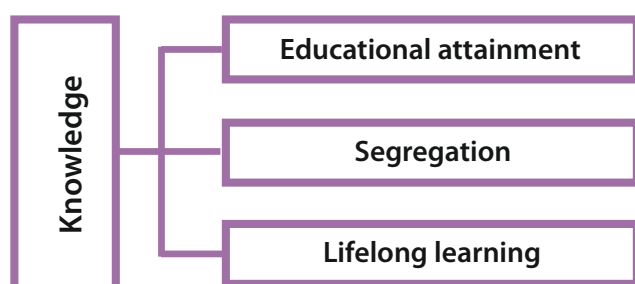
The first sub-domain, *educational attainment,* is important in gender terms because a greater proportion of young women now reach at least upper secondary school, and they outnumber men as university graduates in the EU (European Commission, 2011). Given that educational attainment promotes greater labour market participation and provides greater economic independence, this reversal needs to be taken into account. Gender-based attainment patterns are important to consider for gender equality, as boys typically achieve lower levels of literacy. The lower attainment of boys has been linked to a perception of masculinity which is associated with not being good at school work and not overtly showing a commitment to school (Phoenix, 2009). Girls also tend to obtain higher grades and perform better on final school examinations, leading the way to university entry. These patterns can be compounded by social class, ethnicity or belonging to another minority group.

The second sub-domain, *segregation,* considers the unequal representation of women and men in some fields of study, despite the increased feminisation of education at all levels. If a greater number of women enter male-dominated fields, however, the contrary is not true, possibly because of the risk of stigmatisation. The most visible fields of segregation are those of science, technology, engineering and mathematics. While women have become increasingly present in fields such as medicine and law, they remain over-represented in education, social sciences and humanities (Lynch and Feeley, 2009). However, the majority of gender equality policies focus on the study choices of girls, rather than on that of boys (Eurydice, 2010). Unfortunately, the subject-based areas preferred by women are less congenial to labour market participation and reinforce patterns of both vertical and horizontal segregation in the labour market (Annandale and Hunt, 2000).

The third sub-domain examines *lifelong learning.* Skills and competences are initially developed within formal education. However, throughout the lifecourse, they are expanded through lifelong learning, within or outside formal structures. It is an important area from a gender perspective because it is essential to improve quality of life, exercise a voice and engage in the labour market, communities, families and politics. Participation rates in lifelong learning show that women are over-represented in this area of education (European Association for the Education of Adults, 2007). Examples of key competencies for lifelong learning could be the level of proficiency in language or digital activities (European Commission, 2007). Lifelong

learning remains segregated in terms of access, participation and outcomes (Leathwood and Francis, 2006).

In summary, there are important gaps between women and men when it comes to knowledge. Differences are set in the initial educational attainment of individuals, further cemented by the segregation of subjects and leading to very different outcomes in terms of further learning (life-long learning) and ultimately participation in the labour market and social activities.

2.3.5. Domain 4: Time

The fourth domain is *time,* an area which is particularly gendered largely because of the disproportionate amount of care time apportioned to women. Time is not only about the dichotomy of paid and care work, but also social, personal and civic activities (Eurofound, 2006). This is an important area in terms of gender equality because the division of activities into productive and reproductive spheres, along with the devaluation of the latter against the former, form the basis of gender inequality (Crompton, 2006; Walby, 1990).

The basis of gender inequality is linked to important gaps in the division of time and responsibilities between women and men (Robeyns, 2003). The division of work into categories usually follows the lines of work that are performed in or out of the market. Market work can be measured in terms of economic activities, while non-market work can be seen as sub-divided between care work and work that contributes to social well-being, such as voluntary work, supporting charities or training sports teams (Miranda, 2011). Greater involvement in any of these three areas (economic, care and social) represents a potential trade-off from other areas.

In (gender) equality frameworks, a key element to understand gender regimes is that of care work and time (Pascall and Lewis, 2004). For instance, one of Robeyns' (2003) capabilities is time autonomy: the ability to exercise autonomy in allocating one's time. Time use surveys systematically identify that women work (paid and unpaid) more than men. In addition to time allocation, theoretical frameworks associate time sharing with values of love, care and solidarity (Baker et al., 2004). This can promote circumstances in which everyone has ample scope for forming valuable human attachments. A key element in this task is to make sure that the work involved in providing love and care is properly recognised, supported and shared. This emotional as-

pect of time sharing and care is also picked up by capability approaches (Nussbaum, 2003; Robeyns, 2003), in which women and men should have the capability to engage in domestic work and nonmarket care, that is to raise children and to take care of others. Because the debate goes beyond work and family, it is important to also consider leisure time, time for oneself. Being able to laugh, to play, to enjoy recreational activities is central to capability approaches. The leisure time equality principle is also present to examine the distribution of leisure time (Fraser, 1997). This principle, crucially, explicitly rules out arrangements that would equalise incomes while requiring a double shift of work from women but only a single shift from men.

Equality frameworks do not rely on the notion of time alone, but also on participation in activities. The participation of individuals in decisions that influence their lives is emphasised. This is seen in terms of engagement, for example, through the principle of anti-marginalisation (Fraser, 1997), which entails the full participation of women on par with men in all areas of social life – in employment, in politics, in the associational life of civil society. It can also be seen through the capability to have the right of political participation and to be able to participate effectively in political choices that govern one's life (Nussbaum, 2003), or to be able to choose to live or not to live according to a religion (Robeyns, 2003). Overall, gender regimes should enable a 'voice' (Pascall and Lewis, 2004).

At *policy level,* participation in economic, care and community life is fundamental, requiring time to be allocated to each of these activities. The emphasis on integrating work and life is therefore at the heart of EU policy. Many key documents emphasise the disproportionate share in family responsibilities and the difficulties in balancing work with private life affecting women, including the Strategy (2010–2015) (COM(2010) 491 final), the Women's Charter (2010) (COM(2010) 78 final) and the Pact (2011) (7349/11).

The European Commission has recognised the importance of the issue of gender inequalities in the division of tasks by declaring the importance of promoting long-lasting changes in parental roles, family structures, institutional practices and the organisation of work and time, and emphasising that these do not merely affect women but also men and the whole of society. It concludes that there is a need to adapt the organisation of society to a fairer distribution of women's and men's roles (European Commission, 1996). As stated in the establishment document of the Task Force on Eurostat's Time Use Survey (ECE/CES/BUR/2010/

NOV/2/Add.2), the measurement of time use is not only essential to present the various aspects of people's activities (for example, leisure, commuting, social connection or civic engagement), but it is also of central importance for the economy, for governmental economic and social policy and society at large.

The domain of *time* is divided into three sub-domains: *economic activities, care activities* and *social activities* (Figure 2.5.).

Figure 2.5. Domain of *time* and its sub-domains
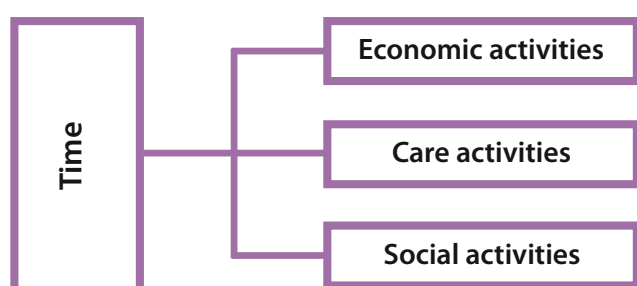
The sub-domain of *economic activities* is strictly concerned with time spent in paid work or associated activities. Time spent in the economic sphere has been the subject of a wide shift in the space of several decades. While the time spent by men in this sphere has remained relatively stable, women's involvement in this area has strongly increased, despite similar time spent in caring activities and at the expense of free time (Sayer, 2005). The amount of time invested in economic activities is strongly linked to the life-course, with the prime working age being between 25 and 54, coinciding with a period of child rearing and in which the widest gap between the working time of women and men can be observed (Eurostat, 2012) and part-time work disproportionally used by women in order to integrate different areas of their lives better (Eurofound, 2009). Another strategy to achieve better integration is to reduce commuting time, since women tend to commute shorter distances than men by choosing places of employment that are closer to home (Crane, 2007).

The second sub-domain focuses on time in *care activities*, such as housework, children or other dependent relatives. The committment of time to care constrains one's possibilities to participate in the labour market and to gain equal economic independence as working counterparts. Thus, care time is a central domain to be analysed and a key prio-rity to enhance equality between women and men

because it constrains the ability to allocate time to other activities. Research suggests that the amount of care work performed by women has decreased alongside greater participation in the labour market, although the burden of care remains disproportionately women's responsibility (Walby, 1997). Despite the decreasing differences between women and men, this is seen as the result of women's reduced involvement rather than men's greater contribution (Crompton, 1997). Among other means, time devoted for care responsibilities could be further decreased by ensuring accessible and affordable childcare and elderly care provisions.

The third sub-domain examines *social activities*. Social activities encompass the time spent on all activities other than paid work (economic) and unpaid work (care), and also incorporates time spent on activities that relate to civic participation and personal development activities (Eurofound, 2006). This sub-domain considers the ability of individuals to engage in leisure, political or educational activities, and their participation in organisations that include, for example, cultural or religious activities. When it comes to leisure, it appears that men enjoy a slightly higher amount of time than women (Burda et al., 2007; OECD, 2009), but that the way in which this time is experienced is very different. It may be because the quality of women's leisure time is undermined by interruptions of work; by having to combine both work and care (Bittman and Wajcman, 2000); or by the pressure of domestic work that cannot be put off (Robeyns, 2003).

The share of time in different activities remains very different for women and men within the EU, showing large gender gaps. It is an important domain of gender equality to be considered, as it undermines to such an extent the abilities of women and men to engage equally in other domains of social and economic life, distorting the level of economic resources that women and men have access to throughout the lifecourse.

2.3.6. Domain 5: Power

The fifth domain, *power,* focuses on women's and men's gap in different levels of representation in the political, social and economic spheres and their share of positions of power. Gender equality is affected by the lack of participation and access to decision-making, including political, social and economic spheres, all of which have detrimental consequences.

The topic of *power* in decision-making appears in some conceptualisations of equality. Baker et al.'s (2004) framework is concerned with equality of power, in civil and personal rights and liberal democracy. It examines the ability of each person to influence the decisions that affect their lives, recognising that power takes many forms, is often diffuse and has to be challenged in many different ways. Similarly, Robeyns (2003) sees this domain as the capability to participate in, and have a fair share of influence in, political decision-making.

The domain of power is prominent at *policy level*. Policy initiatives focus mostly on the equal participation of women and men in decision-making according to the Roadmap (2006–2010) (COM(2006) 92 final), the Pact (2011) (7349/11) and the Women's Charter (2010) (COM(2010) 78 final). Greater gender balance and fairer representation are also advocated in the Commission's Strategy (2010–2015) (COM(2010) 491 final).

There are three main areas in which equality in decision-making needs to be achieved, according to the main policy documents. Political power is a central priority of the EU on gender equality. The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), Article 7, stipulates that States need to ensure equality between women and men in political and public life, including public functions, non-governmental organisations or other associations. In Article 8, State parties are required to ensure that women and men are equally represented in governments at international level and in the work of international organisations. The issue of power is recognised at international level and is present within the framework of the Millennium Development Goals (MDG 3: equality of seats by sex in national parliaments). Increasing women's representation in the political process and government decision-making bodies was reaffirmed in the 2005 World Summit.

Other policy priority areas in gender equality at EU level include economic and social areas. The increased participation of women in science and technology is assumed to be positively associated with a growth in innovation and improvements in quality of research. For this reason, the EU set the goal of a female share of 25 % in leading positions in the public research sector which is not yet fulfilled (Roadmap 2006–2010 (COM(2006) 92 final), Commission's Strategy 2010–2015) (COM(2010) 491 final). The Strategy for Equality between Women and Men (European Commission,

2010–2015) (COM(2010) 491 final) promoted women's inclusion on boards with its 'targeted initiatives to get more women into top jobs in decision-making' and launched a 'Women on the Board Pledge for Europe' (European Commission, 2011).

The domain of *power* is divided into three sub-domains that all examine representation of women and men in decision-making: p*olitical, social* and *economic decision-making* (Figure 2.6).

Figure 2.6. Domain of *power* and its sub-domains
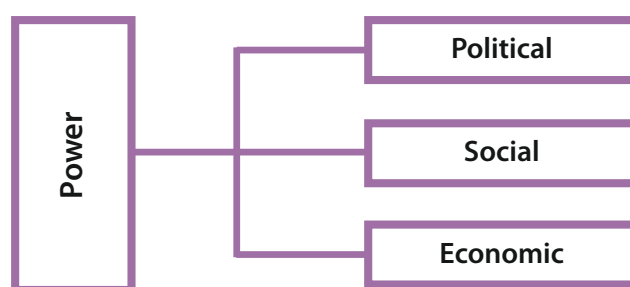
In the first sub-domain, *political* power, the focus lies on the gender gap in the representation of women and men, causing a democratic deficit at EU levels emphasised in the Roadmap (20006–2010) (COM(2006) 92 final) and the Strategy (2010–2015) (COM(2010) 491 final). It is important to promote political legitimacy, but also to modify gender relations by changing the attitudes, behaviours and opinions of women and men, and at the same time provide role-models (Tremblay, 1998). It is also important to consider that the feminisation of politics is currently constructed as being the responsibility of women, who must overcome social barriers (caring responsibilities) and psychological barriers (confidence) to become more like men without questioning why men do not accept to leave some of these spaces themselves (Meier et al., 2004).

Social power is considered because of its symbolic impact on society. It includes access to positions of power in the fields of science and technology, academia, media, religious organisations or civil society, all of which present challenges in terms of gender equality. For example, the proportion of women in top positions on scientific boards is low, causing concern because of the potential impact on the research agendas of the future (European Commission, 2012a). Similarly, the proportion of female professors

at university levels remains disappointingly low, and represents a great waste of talent (European Commission, 2005). Another facet is the representation of women in the judiciary, which, while rising, still comprises a low proportion of women (European Commission, 2007).

Finally, the last sub-domain considers the *economic* power of women and men. A balanced participation of women and men is not only to be achieved from an equality point of view, but also can contribute to better economic performance (Roadmap 2006–2010 (COM(2006) 92 final); Strategy 2010–2015 (COM(2010) 491 final)). The participation of both women and men is needed in business and economic areas, including boards of quoted companies and financial institutions such as central banks. To date, unfortunately, women remain greatly under-represented at board level in quoted companies (European Commission, 2007).

Equality in the domain of power is important because it ensures that both women and men are given the same voice in top decision-making positions and are thus given the same opportunity to play a role in shaping the agendas in various sectors for the Europe of tomorrow. It is an area where large gender gaps remain, and which, because of its symbolic impact on other domains, needs to be addressed.

2.3.7. Domain 6: Health

The sixth domain is *health*. One of the main issues of gender and health relates to the necessity to go beyond the biological aspect of health and consider the impact of gender on women's and men's health (Annandale and Hunt, 2000), where strong gaps persist.

Differences between women and men have been explained not only in terms of biological differences, but also how these are mitigated by behavioural factors (Kirby, 2000; Doyal, 2001). However, biological differences between women and men invariably mean that there are sex specificities, such as reproductive health for women, which can obviously not be analysed in a comparative way. Controversies have arisen regarding how to measure health, and how to move from essentially quantitative measures to more qualitative ones in order to take these aspects into consideration (Popay and Groves, 2000). Gender, along with other grounds of inequality, mediates health inequalities, and the old adage 'women get sicker but men die quicker'

hides many complexities (Annandale and Hunt, 2000). The domain of health is important to gender equality because it is positively related to economic independence and increased bargaining power in the household for women (Backhans et al., 2007).

Health is a central feature in equality frameworks. Equality means that individuals should have access to goods and services, such as their right to public services and environmental factors, i.e., safe and healthy surroundings (Baker et al., 2004) while capabilities should focus on being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living (Nussbaum, 2003). Equality is also seen as the capability of individuals to be physically healthy, enjoy a life of normal length and be mentally healthy (Roybens, 2003).

At the policy level, there is a strong focus on health and long-term care (Roadmap 2006–2010) (COM(2006) 92 final); supporting research on health (Roadmap 2006–2010) (COM(2006) 92 final); and reducing health inequalities (Europe 2020) (IP/10/225). The Strategy for equality between women and men (2010–2015) (COM(2010) 491 final) emphasises that gender-based inequalities are present in healthcare and long-term care and health outcomes, and that gender-specific health risks and diseases have to be adequately addressed. Recognising the gender domain in health is also one of the key priorities in the Roadmap (2006–2010) (COM (2006) 92 final).

The focus of EU policy is to ensure better access to healthcare systems (Europe 2020) (IP/10/225); Roadmap 2006–2010) (COM(2006) 92 final), particularly quality and responsiveness to new specific needs (Roadmap 2006–2010) (COM(2006) 92 final) in relation to demographic change (Europe 2020) (IP/10/225). The EU also takes into account the problems of use of and access to health structures by promoting the coordination of national healthcare policies through the Open Method of Coordination with a particular focus on access, quality and sustainability. The key objectives in these three areas are: access to health promotion, disease prevention and curative care (Social Protection Committee, 2004).

The domain of *health* is divided in three sub-domains: *health status, behaviour* and *access to health* (Figure 2.7.).

Figure 2.7. Domain of *health* and its sub-domains
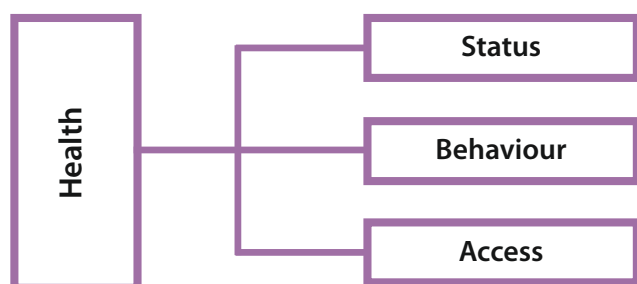
The first sub-domain deals with health *status*. Health includes all aspects of women and men both physically and psychologically, as well as the activities individuals are able to engage in as a result of their health status. There are biological differences between women and men, most notably in terms of reproductive functions. However, differences extend to genetic, hormonal and metabolic factors, all of which shape the health status of women and men. These differences may be responsible for the incidence, symptoms and prognosis of other health issues, including, most notably, the greater risk for men to develop heart disease (Doyal, 2001). Women are usually advantaged compared to men in terms of life expectancy (Doyal, 2000; Payne, 2009). But a paradox exists in terms of gender and health: Although women live longer, their length of *healthy* life – that is, living without debilitating chronic illness – is more limited than men (Kirby, 2000). Differences in the health status of women and men can be linked to a variety of determinants of health, including socio-economic status, labour market participation, sector of employment and income levels (Payne, 2009).

The second sub-domain looks at the *behaviours,* predominantly from the perspective of risks that can affect health. It aims at capturing the gender related behavioural differences behind inequalities in health. The influence of biology should be regarded as forming only part of the range of complex factors that affect the health status of women and men; the importance of gendered patterns of behaviours should not be underplayed (Waldron, 2000; Doyal, 2001). The behaviours of men and women differ according to patterns of masculinity and femininity (Backhans et al., 2007). The consequence for men is that they may feel compelled to take risks to assert their masculinity (Doyal, 2000; Doyal, 2001). The factors affecting this domain include lifestyles, behaviours and socio-economic factors. Men are more likely to be victims of murders; to die in

a car accident; to smoke and drink more; and to engage in unsafe sex (Doyal, 2000). While men were historically more likely than women to smoke and drink alcohol, the gap is now closing (World Health Organization, 2009). This potential has important implications for the future in terms of devising policies that address the specific needs of women and men in Europe.

The third sub-domain concerns *access* to health structures, particularly the strengthening of health promotion and disease prevention, and the need to address barriers to health services (Social Protection Committee, 2004). Given that sex and gender are both related to health differences, it is important to ensure that the needs of both women and men are taken into consideration in the planning and delivery of care (Doyal, 2001). In this sub-domain, the concern is to capture the discrepancy between needs and provision, for example, with unmet needs for medical examination, and to look at the degree of access to health services for women and men in Europe. There are a number of inequalities in access to health resources, as women are more likely than men to access health structures visit a doctor or hospital (Kirby, 2000). These different interactions with health structures can be explained by biological differences; reproductive health needs (birth control, pregnancy and menopause); greater interactions and familiarity with the structures as a result of caring responsibilities; and behavioural aspects linked to masculinity and social norms (Payne, 2009; Davis et al., 2011). However, some women can be deprived of access to healthcare due to their household situation – often with few supports and exposure to abuse. Gender roles may dictate that the health needs of others, often men, are given priority over their own (Doyal, 2000). In addition, women are often disadvantaged when it comes to access to health because of poverty and discrimination (Doyal, 2001). Evidence suggests that women's issues may be less taken into account than men's and, as a result, women may not be afforded the same supportive attitude by medical practitioners and attention in research studies (Doyal, 2001).

The domain of *health* is an important element to understand gender equality at EU level. Gender gaps remain, with women living longer but in poorer health than men, at least in some part because of gender practices such as behaviours and different interactions with health structures and institutions. Health is also very important given that it is a prerequisite to participation in other domains of activities.

2.3.8. Domain 7: Intersecting inequalities

Intersecting inequalities forms the seventh domain of the Gender Equality Index. Since women and men are not homogeneous groups, it is important to consider other characteristics that may influence their experience. Intersecting inequalities are concerned with the effect of gender combined with these other characteristics, and how gender operates within different groups. The domain of intersecting inequalities explores gender gaps among specific groups of women and men, particularly for these groups which may be more or less vulnerable or marginalised.

Intersecting inequalities are present in some equality frameworks. Fraser's second principle, anti-exploitation, looks predominantly at vulnerable people (Fraser, 1997). When these vulnerable individuals are in receipt of aid, and where this aid is also stigmatised or discretionary, the principle of anti-exploitation is not satisfied. This framework makes a direct link between the economic situation of more vulnerable groups and the level of state support they may receive. Equality can also be about the capability to be treated as a dignified being whose worth is equal to that of others (Nussbaum, 2003). This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, religion or national origin.

The principle of intersecting inequalities is enshrined in **EU Treaties**, particularly following the Treaty of Amsterdam (97/C 340/05), which marked a turning point. After its enactment in 1997, discrimination moved beyond the two grounds of nationality and sex, to include race and ethnicity, religion and belief, age, disability and sexual orientation. Furthermore, the use of the Treaty of Amsterdam (97/C 340/05) meant that for the first time, discrimination grounds could not only be tackled separately but also by taking the approach of looking at multiple discrimination horizontally (Kantola, 2000). Article 10 of the Lisbon Treaty (2007/C 306/01) further declared that the European Union shall aim to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation; Article 19 declares that the EU may take appropriate action to combat such discrimination. The Charter of Fundamental Rights of the European Union (2000) (2000/C 364/01) asserts that non-discrimination should be observed namely on the grounds of sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, opinions, membership of a national minority, property, birth, disability, age or sexual orientation (Art 20–26).

Other international documents, such as the BPfA, rely on the notion of intersectionality by pledging to, 'Intensify

efforts to ensure equal enjoyment of all human rights and fundamental freedoms for all women and girls who face multiple barriers to their empowerment and advancement because of such factors as their race, age, language, ethnicity, culture, religion or disability, or because they are indigenous people' (paragraph 32, BPfA). This emphasis goes as far back as the Universal Declaration of Human Rights, in Article 2, which stipulates that, 'Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status' (Universal Declaration of Human Rights, 1948).

In key documents of the EU's gender equality policy, different groups of women are taken into account with a focus on 'older women, single parents, women with a disability, migrant women and women from ethnic minorities' (Commission's Strategy 2010–2015) (COM(2010) 491 final). This represents an approach that considers differences and inequalities within certain categories of concern rather than the true multiplicity of possible characteristics (McCall, 2005). Thus, when it comes to 'translating' gender equality objectives into indicators and variables to measure the extent of gender equality, the approach is often to take different groups into account that are especially affected by gender inequalities in terms of 'double discrimination' (Roadmap 2006–2010) (COM(2006) 92 final). While the field of policy in this area is constantly developing, it is important to recognise that policy strategies need to be rooted not only within the similarities between groups, but also their distinctiveness (Verloo, 2006).

Taking intersectionality into consideration represents a difficult balancing act. On the one hand, the concept of diversity contends that focusing solely on the binary categories of gender is not sufficient, while on the other hand the number of intersecting categories is theoretically as great as the number of individuals concerned. The problem is compounded by pragmatic issues such as determining the areas of gender equality that can be examined under the principle of intersectionality. Being a horizontal issue, different gender gaps exist between different groups in all of the domains considered here. Following this argument, it would therefore be necessary to build a multitude of Gender Equality indices, one for each group of interest – an impossible task in itself and one which would take away from the power of a single composite measure.

The approach of the Gender Equality Index is therefore to focus on illustrative groups to examine how some intersectional groups fare. Although this masks both the

complexity of the inequalities that individuals face and the differences present within and between groups, it nevertheless represents a pragmatic approach. At policy level, the viability of an analysis needs, by its very definition, to move away from the complexity and to operate in more general terms.

Following the policy focus of Europe 2020 (IP/10/225) on poverty and social exclusion, the focus of *intersectional inequalities* is employment. Employment has several benefits at diffe-rent levels. At the macro level, participation in the labour market is widely recognised as essential for economic and social development (UNECE, 2013). At the individual level, employment has been seen as a route to social inclusion (Dahl et al., 2009) and a tool to combat poverty by giving equal access to resources to both women and men (UNECE, 2013). The relationship between employment rate, access to resources and gender equality is complex, making it unwise to regard employment rate as a sole explanatory factor for gender inequality. However, it provides a practical and interesting aspect to consider. At a minimum, the analysis of gender gaps in employment among selected illustrative population groups aims at stimulating greater actions and discussions.

Figure 2.8. Domain of *Intersecting Inequalities* and its sub-domains
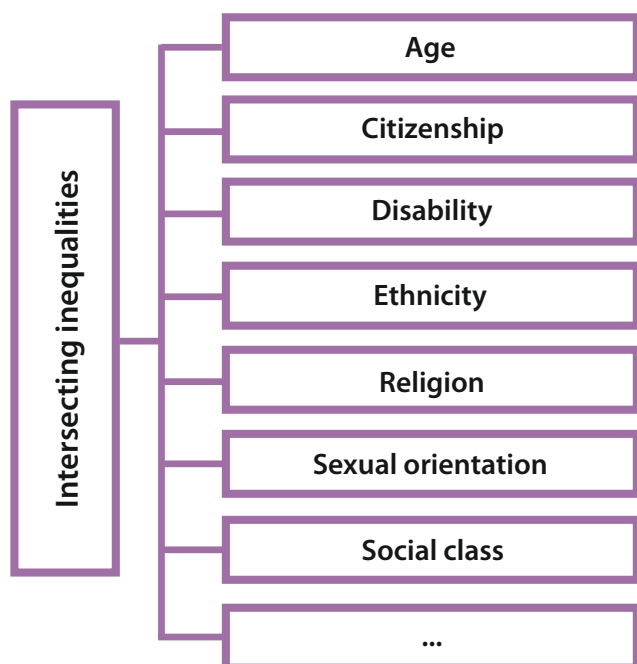
The sub-domain combines potential illustrative groups arising from the *grounds of discrimination* that individuals may face, including *citizenship, ethnicity, sexual orientation, disability, religion* or *age*. Since intersectionality is about more than multiple-discrimination, sub-domains can also include illustrative *social categories* such as *social class,* a societal construct which is mainly rooted in historical, social and cultural developments, and also contribute greatly to lower levels of economic resources generally, as well as between women and men.

Focusing on intersectional inequalities is a challenging but necessary step since women and men do not represent homogeneous groups. It takes into account a broader perspective of diversity, without losing sight of the importance of gender. In addition, while the conceptual structure of a composite indicator does not easily lend itself to a multi-discrimination perspective, its aims are to build upon measures of gender gaps among illustrative groups, thereby feeding into the debates on intersectionality.

2.3.9. Domain 8: Violence

The eighth and final domain is *violence*. It departs from the approach of all the domains presented so far in that it does not focus on gaps but levels. Indeed, the aim is not to reduce the gaps of violence between men and women but to eliminate violence altogether. Furthermore, the area further departs in that it does not adopt a gender approach and instead focuses on women's perspectives. *Violence,* for the purpose of the Gender Equality Index, is therefore assimilated to gender-based violence against women, since it recognises that violence is an expression of power linked to the domination of some forms of masculinity, mostly over women. It combines several forms of violence and analyses them in terms of power relations and as something that is common to all women (Bunch, 2008).

Theoretical frameworks on gender equality examine both violence and gender-based violence against women. This is particularly prevalent in capabilities-based approaches where the emphasis is on being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence (Nussbaum, 2003); or the capability to be protected from violence of any sort (Robeyns, 2003). Another conceptualisation present in the literature is that of cultural violence. This is linked to the ability to be respected and treated with dignity (Robeyns, 2003), equal respect and recognition in the freedom to live one's life without the burden of contempt and enmity from the dominant culture (Baker et al., 2004). This perspective also looks at the principle of equality of respect, which is

crucial to gender equity given the routine representation of post-industrial culture of women as sexual objects for the pleasure of male subjects (Fraser, 1997). The principle of equal respect rules out social arrangements that objectify and depreciate women or trivialise women's activities and ignore women's contributions. Fraser's last principle, that of anti-androcentric, problematises men's dominant life patterns as representing the norm for all, and women's recognition and income security depend on their conformity to those norms. This principle requires decentricing masculinist norms – in part by revaluing practices and traits that are currently undervalued because they are associated with women. It entails changing men as well as changing women.

There is a strong focus in EU measures on eradicating gender-based violence and on the commitment of the EU to combat all forms of violence against women (Pact, 2011 (7349/11); Roadmap, 2006–2010 (COM(2010) 92 final) (COM(2010); Women's Charter, 2010 (COM(2010) 78 final); Commission's Strategy, 2010–2015) (COM (2010) 491 final), including domestic violence, sexual harassment, rape and sexual violence. Gender-based violence against women constitutes a violation of fundamental rights (human dignity, the right to life, the right to the integrity of the person) and hampers exercising a self-determined life. In the Lisbon Treaty (2007/C 306/01), the Declaration on Article 3 of the Treaty on the Functioning of the European Union declares that 'in its general efforts to eliminate inequalities between women and men, the Union will aim in its different policies to combat all kinds of domestic violence' (Treaty of Lisbon, 2007) (2007/C 306/01). There is a general focus on dealing with the consequences of gender-based violence against women, partly by supporting victims, but also by addressing the cause by focusing on men and boys (Pact, 2011) (7439/11).

In addition to measures specifically targeted at gender-based violence against women, policy has focused on the issue of stereotypes. Combating a stereotyped, degrading and offensive manner of portraying women in the media was mainly included in prior policy documents as an area of equality policy on its own (Framework, 2001–2005; Roadmap, 2006–2010) (COM(2006) 92 final). Outside of the media area, policy and measures have started to tackle the area of stereotypes in education and employment (Roadmap, 2006–2010 (COM(2006) 92 final); Commission's Strategy, 2010–2015 (COM(2010) 491 final); Pact, 2011) (7349/11).

The domain of *violence* is divided into two sub-domains: *direct violence and* indirect violence (Figure 2.9.).

Figure 2.9. Domain of *violence* and its sub-domains
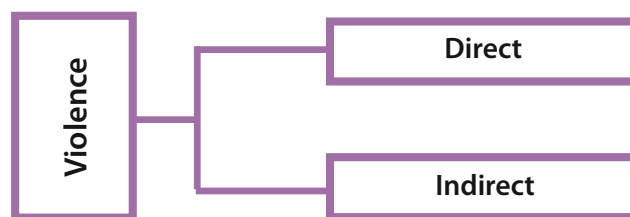
The first sub-domain, *direct violence*, should be understood as a violation of human rights and a form of discrimination against women. It focuses on all acts of gender-based violence that result in, or are likely to result in, physical, sexual or psychological harm or suffering to an individual, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life (EU guidelines on violence against women and girls, 2008). The problem of gender-based violence against women remains high in Europe; between one-fifth and one-quarter of all women have experienced physical violence at least once during their adult lives (Council of Europe, 2011). Most violence is perpetrated by men against men, but such violence differs significantly from patterns of violence perpetrated by some men against women and children in the context of gender-based violence. Violence itself can be seen as aggressive behaviour which is an expression of masculinity and an assertion of power. In order to preserve the power structure between women and men, this aggressive behaviour is used in various forms, such as sexual harassment to control the behaviour of women in public or work spaces; rape to assert domination both on strangers or intimate partners; or assaults on lesbian women who may or may not transgress gender norms as a 'corrective' measure (O'Toole et al., 2007). The settings of gender-based violence vary and take place in a variety of settings, including the home, public spaces and places of employment. A number of actions have taken place in the latter to tackle forms of sexual harassment at work.

The second sub-domain, *indirect violence,* focuses predominantly on attitudes and stereotypes, as the slow progress in the area of gender equality has been attributed to limited attention to the cultural norms and attitudes that underpin gendered practices (Friedman, 2011). Attitudes and stereotypes can be seen as being a cause of gender-based violence examined in the first sub-domain. Social attitudes on gender have consequences by imposing codes of femininity and masculinity on women and men respectively. This ranges from the disapproval given to mothers who work full-time to the collision of behavioural expectations of femininity and leadership which can put women at a

disadvantage in terms of accessing positions of power in decision-making or normative expectations of care (Robeyns, 2007). Although the attitudes of younger generations have changed, behaviours remain largely unaltered, leaving much work to be undertaken (Tinklin et al., 2005).

In addition, it is useful to focus on stereotypes. Stereotypes are a manifestation of cognitive ability to classify and comprehend the information present in the environment, meaning that they reflect shared social beliefs, values and norms that dictate gender roles (DeLamater and Myers, 2007). They are internalised unconsciously and are the result of a cumulative learning process shaped by culture and society. Unfortunately, while there is a degree of truth in the stereotypes formed by individuals, and shared by society, these represent gross oversimplifications of reality. In addition, the value system superimposed on these stereotypes can be detrimental to gender equality (Robeyns, 2007), as is the case in the accession for women to some employment, positions of power or fields of education.

In summary, focusing on violence as a critical area of gender equality is very important since the impact of gender-based violence against women is enormous from the viewpoint of the survivors, but also from the viewpoint of its symbolic impact on society. Gender-based violence against women is a direct form of violence which can be seen as indirectly underpinned by norms and attitudes in society, themselves rooted and relayed by stereotypes.

2.4. Conclusion

This section has presented the conceptual framework for the Gender Equality Index (Table 2.1.). The results of analysing EU policy documents and other theoretical frameworks laid the basis for a conceptualisation of gender equality at EU level that consists of eight domains. A strong connection exists between all domains. The strongest connections occur between three of the domains: *work; money; and knowledge*. For example, the domain of *work* is strongly connected with both *money* and *time* and is disproportionately affected by *knowledge* and *health*. In addition, *work* is also strongly connected to the risk of gender related poverty among individuals facing *intersecting inequalities*. In the domain of *money*, differences persist despite the relative advantage of women in some areas of *knowledge*, although the greater level of educational attainment of women may counteract differences in pay (Dougherty, 2005). The domain of *knowledge*, with educational attainment, segregation, skills and competences, dictates many of the inequalities in the domains of *work* and *money*.

The scope of gender equality outlined in the conceptual framework is very comprehensive, even more so given that it underpins the construction of a composite indicator which aims at simplifying the concept. This comprehensiveness reflects the efforts that have been made to ensure that all relevant gender equality policy areas can be monitored for progress.

Table 2.1. Gender Equality Index domains and sub-domains

Domains	Sub-domains
Work	Participation; segregation; quality of work
Money	Financial resources; economic situation
Knowledge	Educational attainment; segregation; lifelong learning
Time	Economic activities; care activities; social activities
Power	Political power; social power; economic power
Health	Status; behaviour; access
Intersecting inequalities	Age; citizenship; disability; ethnicity; marital status; religion; sexual orientation; …
Violence	Direct violence; indirect violence

Overall, the conceptual framework outlined in this section provides a very appropriate framework upon which to build a Gender Equality Index. The next section discusses how this conceptual framework can be implemented amidst the technical requirements of constructing a composite indicator on gender equality and presents the methodology adopted.

3. Methodology

Previous sections have outlined the main theoretical gender approach of developing the Gender Equality Index, discussed the added-value that this new index of gender equality offers and provided a conceptual framework of gender equality areas as framed by EU gender equality policy. This section outlines how the Gender Equality Index operationalises this conceptual structure (underpinned by policy and theory) into a measurable structure (supported by data and statistical considerations).

As with any other composite indicator, the Gender Equality Index is a measure obtained by compiling individual indicators on the basis of an underlying model of the multi-dimensional concept that is being measured. In other words, it is a mathematical combination of a set of individual indicators, which aims to provide a summary of a complex reality.

The construction of composite indicators involves different stages where several choices have to be made, which is why it is essential to work with a solid and transparent methodology based on sound statistical principles. The methodology applied to compute the Gender Equality Index is based on the widespread and internationally accepted procedure developed by the OECD and the European Commission's Joint Research Centre (Nardo et al., 2008), which establishes the following ten steps:

1. **Developing a theoretical framework**, that defines and structures what is measured and provides the basis for the selection and combination of variables into a meaningful index.
2. **Selecting variables**, based on the analytical soundness, measurability, country coverage, cross-country comparability and relevance of indicators.
3. **Imputing missing data**, in order to obtain a complete dataset for all countries.
4. **Conducting a multivariate analysis** to study the overall structure of the dataset, assess its suitability and guide subsequent methodological choices.
5. **Normalising the data**, if needed, to ensure the comparability of variables.

6. **Weighting and aggregating indicators**, according to both the theoretical framework and the results of the multivariate analysis.
7. **Conducting an uncertainty and sensitivity analysis**, to assess the robustness of the index in terms of all possible sources of uncertainty in its development (choice of imputation method, normalisation scheme, weighting system or aggregation method).
8. **Returning to the data** in order to analyse what domains and sub-domains are driving the index results.
9. **Identifying possible association with other variables**, as well as existing known and commonly used indicators.
10. **Presenting and disseminating the index results** in a clear and accurate manner.

These 10 guiding principles ensure that the methodology used for the construction of the Gender Equality Index is based on transparent and robust methodological choices consistent with the soundness of a strong theoretical framework, while at the same time being user-friendly, simple and easy to understand.

This section presents this process by outlining the methodological considerations and choices that were made during the development of the Index. First, the criteria applied for selecting a potential set of variables to be included in the Index are discussed, touching on how they were processed to develop a metric of analysis. Second, the section presents the multivariate analysis performed to develop the measurement framework. Third, the methodological choices made in computing the Index are outlined, including the choices made in selecting, weighting and aggregation techniques. To remove as much subjectivity as possible, a robustness analysis was carried out based on the principle of multi-modelling, and served as a guide to select the best index within all possible alternatives. Finally, the section concludes with a description of the analysis carried out to assess the quality of the Index.

3.1. Indicators and measures

During the course of the development of the conceptual framework, an initial inventory of gender indicators was created by screening the literature and all existing sources of official statistics at international level. The list of sources that were scanned for potential variables included European Commission (Eurostat, Directorate-General for Justice, Directorate-General for Health and Consumers, and Directorate-General for Communication), Eurofound, UNECE and OECD.

3.1.1. Selection of indicators

In selecting the initial indicators several criteria were followed. First, the theoretical basis of the core domains and the satellite domains were taken into account in the sense that all the variables included needed to:

- focus on individuals, rather than on institutions or countries;
- consist of outcome variables, which measure a current status as opposed to process or input variables;
- reflect an equal share of assets and resources (applicable only to the domains that consider both women and men).

Second, the quality criteria defined by Eurostat (2005) in its 'Code of Practice' were used. Variables were considered providing they were sex-disaggregated and they met the following properties:

- harmonised at EU level and thereby comparable between Member States;
- accessible, updated on a regular basis, punctual and comparable over time;
- relevant and selected with methodological soundness, measuring an aspect of gender equality and meeting the objective of the Index;
- accurate, measuring in a reliable way the phenomenon it intends to measure and being sensitive to changes;
- coherent when they are originated from different sources, being reliably combined.

After the initial selection of existing potential indicators a process of conceptual mapping was applied, classifying gender indicators as measures in each domain and sub-domain with reference to the conceptual framework, noting which indicators are endorsed in the EU within the framework of either the Beijing Platform for Action or the Europe 2020 Strategy (IP/10/225).

It is important to highlight that variables that represent both objective and perceptual data have been considered. Although perceptual data introduces a degree of subjectivity, particularly across Member States due to varying cultural contexts, they nevertheless generate important information on the underlying constructs measured by the Gender Equality Index. The validity of the perceptual indicators used is further increased by ensuring that they are examined together, and positively correlated, with other indicators.

Another aspect taken into account was availability over time and across Member States, as the construction of an index relies on a database that is free of missing values. Therefore, the reference year chosen was 2010, since it ensures maximum data availability. Where appropriate, imputation methods were used[1]. Variables with fewer than 10 % of missing values and where the imputation could be confidently estimated were retained, otherwise they were dropped.

Having created a database of gender indicators, the next step involved ensuring that all underlying variables measured gender equality aspects in a homogeneous way, by transforming them where needed. This is the case when it comes to the sign or the direction of the interpretation of a variable. The direction of all indicators needs to stay homogenous and the Gender Equality Index can only consider variables that have a positive sign. The majority of variables in the dataset already had a positive sign, meaning that higher values could be regarded positively. For example, variables measuring participation in tertiary education or healthy life years are deemed to have a positive direction, as it is desirable to increase educational attainment or to live a long healthy life. On the contrary, the variable measuring being at risk of poverty implies a negative sign or interpretation, since its occurrence ought to be minimised.

---

[1] An imputation is a mathematical procedure which allows the precise estimation of a data point when it is not available. Direct imputations have been applied where possible. This occurs where there is an equal proportion of women and men, and where the value for women (w), men (m) or for the total (t) is missing, the value of the data point is calculated by applying the definition $t = w + m$. In some cases, where the proportions are not equal, for example 75 % of women and 25 % of men, the missing category is calculated by applying the definition $t = 0.75\,w + 0.25\,m$. In other more complex cases, a regression method was applied.

To reverse variables, a number of techniques exist depending on the nature of the variable, including calculating the complementary value of the variables when dealing with percentages (20 % of people at-risk-of-poverty is equivalent to 80 % not at risk of poverty) or computing the inverse (S80/S20 income quintile share compares the 20 % of the population with the highest income with the 20 % of the population with the lowest, while its inverse, S20/S80, keeps comparing the same percentages but meaning the higher the share the greater the equality).

To allow comparisons between populations of different structures and sizes, most variables needed to be expressed in relative terms. This produced ratios that were obtained by dividing the variable of interest by its closest reference population. For example, to measure labour force participation, the number of women and men in employment was divided by the active population (closest reference population). In the case of measuring training at work, an indicator was calculated as the percentage of women and men receiving training among all workers (closest reference population). The variables were converted in relative terms according to the following formula:

$$\widetilde{X}^k_{it} = \frac{X^k_{it}}{\text{reference population}^k_{it}} \qquad \begin{matrix} k = w, m, a \\ i = 1, \dots, 27 \\ t = 2010 \end{matrix} \qquad (1)$$

where the indicator X for group k, women (w), men (m) or average (a); for the i-th country in the period t is divided by the closest reference population in order to be expressed in relative terms ($\widetilde{X}^k_{it}$). When the variable does not need to be expressed in relative terms (for example mean income), then $\widetilde{X}^k_{it} = X^k_{it}$.

3.1.2. Development of the metric

Having compiled a database of variables that are valid, easily interpreted, sex-disaggregated, harmonised at EU level, available over time and complete for all Member States, homogenised and relative, attention turned to the development of a single measure of gender equality for each variable that can be used to compute the Gender Equality Index.

An initial measure was developed as a metric based on a number of properties. In line with the gender approach of the Index, it needed to measure gender gaps by taking into account the relative position of women and men to each other. The approach of the Gender Equality Index also implies that all gaps, regardless of whether they were to the advantage of women or men, were taken into consideration and treated in the same way. However, this means that it becomes necessary for the measure to ensure no compensatory effects can take place. A situation where a Member State has a greater score of gender equality, because it scores badly in a domain where women are disadvantaged and badly in another where men are disadvantaged should indeed be avoided. This is solved by using absolute values.

In addition, the metric used needs: (i) to be bound, so that it varies in a given interval with a fixed minimum and maximum in order to allow for the interpretation and comparison of the scores; (ii) to ensure that it is possible to identify a single value that can be associated with absolute equality. Considering these properties, the starting point for computing gaps between women and men is:

$$\Upsilon_{(X_{it})} = \left| \frac{\widetilde{X}^w_{it}}{\widetilde{X}^a_{it}} - 1 \right| \qquad (2)$$

where the calculation is carried out for the variable *X* for the *i-th* country in the period t in order to obtain the percentage that women ($\widetilde{X}^w_{it}$) represent over the total average for both sexes ($\widetilde{X}^a_{it}$).

This is a relative indicator with values that fall in the interval [0; 1] and can be computed for any values for women and men. In this way $\Upsilon_{(X_{it})}$ always identifies the gender equality point at 0. For reasons of interpretability, this indicator is reversed by taking:

$$1 - \Upsilon_{(X_{it})} \qquad (3)$$

This yields values where 1 stands for complete gender equality, with any value below that indicating a proportional lack of gender equality in a given indicator, with full gender inequality at 0.

This initial measure was used to compute gender gaps for all the indicators included in the database. Subsequently, a correcting coefficient based on the average or total levels (original values) of the variables was applied to each gap. Its effect is to ensure that levels of achievement are taken into account, by applying a correction to gender gaps which also meet lower levels. This considers the context of Member States and ensures that obtaining a score that is near 1 is the reflection of both low gender gaps and high levels of achievement. These correcting coefficients, $\propto_{(X_{it})}$, have been calculated according to the following formula:

$$\propto_{(X_{it})} = \frac{\widetilde{X}_{it}^a}{\max_i \widetilde{X}_{it}^a} \tag{4}$$

where $\max_i \widetilde{X}_{it}^a$ represents the maximum value of the average or total of each variable used for the correction (usually the original variable[2]), expressed in relative terms and reversed if necessary, observed across all Member States.

The final metric is provided by the product of the formula used to compute gender gaps (equation 3) and the correcting coefficient (equation 4). However, for mathematical reasons (avoiding the presence of zeroes which would impede possibilities to aggregate indicators, sub-domains and/or domains), the final metric is rescaled so that it cannot take a value below 1. This final metric, $\Gamma_{(X_{it})}$ used in the calculation of the Index, provides a measure of gender gaps adjusted by levels of achievement, and can be expressed as:

$$\Gamma_{(X_{it})} = 1 + [\propto_{(X_{it})} \cdot (1 - \Upsilon_{(X_{it})})] \cdot 99 \tag{5}$$

In summary, the metric used is dimensionless (allowing comparability since measurement units of variables have been eliminated) and bound between [1; 100]. It satisfies the property of interpretability of each variable considered in terms of distance from the equality point, set at 100, and maintains comparability among indicators within each country. An added benefit of using this metric is that the normalisation step (step number 5 in the OECD-JRC methodology) is not needed, since using $\Gamma_{(X_{it})}$ removes the presence of different units of measurement and the potential distorting effect of different scales, making all indicators comparable across domains and sub-domains, across Member States and over time.

Figure 3.1.
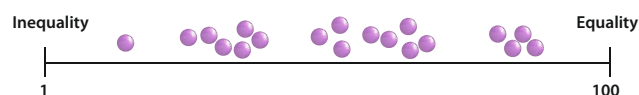
After the treatment and transformation of all potential indicators into comparable gender gaps, the next step involved choosing the final dataset for the Index calculation. The choice of indicators to be included in a composite indicator is vital. This set must both conform to measuring the conceptual framework and also to a number of strict methodological criteria. This selection process also allows for the identification of data gaps, related to inexistent data, lack of harmonisation, comparability or availability. However, not all indicators that fulfil the necessary conceptual and methodological criteria can be included in a composite indicator. Considering the principle of parsimony, a composite indicator should be a simple measure, easily interpretable, reflecting a good balance between the number of variables involved in its computation and the conceptual coherence. The final selection is ultimately determined through an exhaustive multivariate analysis, which is discussed next.

---

[2] Exceptions and greater details are provided in Table 3.2.

Table 3.1. Summary of the metrics used

Initial metric: Gender gap $$\Upsilon_{(x_{it})} = \left| \frac{\widetilde{X}_{it}^{w}}{\widetilde{X}_{it}^{a}} - 1 \right|$$	It considers the position of women and men to each other, treating them in the same way and avoiding compensation effects. It facilitates interpretability of the score towards equality/inequality.
Correcting coefficient: $$\propto_{(x_{it})} = \frac{\widetilde{X}_{it}^{a}}{\max_{i}\widetilde{X}_{it}^{a}}$$	It considers the context and the different levels of achievement of Member States, ensuring that a good score is the reflection of both low gender gaps and high levels of achievement.
Final metric: Gender gap corrected by levels of achievement $$\Gamma_{(x_{it})} = 1 + [\propto_{(x_{it})} \cdot (1 - \Upsilon_{(x_{it})})] \cdot 99$$	It is bound between [1; 100]. It satisfies the interpretability of each variable considered in terms of distance from the equality point, set at 100, and maintains comparability among indicators within each country.

3.1.3. Multivariate analysis

A composite indicator is formed when individual indicators are compiled into a single index, on the basis of an underlying model of the multi-dimensional concept that is being measured. The principal aim of multivariate analysis is to examine the statistical structure by measuring the extent to which the conceptual framework receives statistical support from a selection of indicators.

The validation of the underlying structure of the data along the indicators and countries has been mainly done by using two multivariate analysis methods: cross-correlations analysis and principal component analysis (PCA). Both have been applied to the variables already processed following the steps presented earlier, that means directly applied to $\Gamma_{(x_{it})}$.

The cross-correlations analysis measures the association between variables. It has been performed on all the variables with a double aim: as a tool to understand the interrelationship between them and as a tool to further refine the dataset, keeping only variables with meaningful and coherent correlations.

This was followed by a statistical procedure called principal component analysis (PCA) that attempts to find natural groupings (factors or components) based on the correlations among variables. The difficulty resides in finding a suitable set of variables forming together statistically coherent groupings that can be related to a common model. Taken together, these factors provide the measurement

framework used for the Gender Equality Index. Ideally, these factors need to correspond as much as possible to the sub-domains of the conceptual framework, however, in practice there are often slight differences between the measurement and conceptual framework at sub-domain level.

Initially, variables were grouped according to their meaning within domains and sub-domains established using conceptual mapping. Next, the PCA was applied at domain level to the core structure, allowing for the development of factors that could map sub-domains. The high number of variables used for the analysis relative to the number of observations prevented the use of a PCA technique to reify the overall theoretical structure. For this reason the PCA was applied to each domain separately[3]. Due to lack of data in the domains of Violence and Intersecting inequalities, the PCA was not applied.

The results of these two multivariate analysis methods, shown in Annexes 2–4, have provided the final selection of the variables to be used in the computation of the core Index as well as its structure, which will be fully described in the next sections.

Annex 2 presents the main descriptive measures for the final metric $\Gamma_{(x_{it})}$ used in calculating the Gender Equality Index. Although the variability of the metric is not significantly high, meaning that this is therefore of little consequence, those with greater standard deviations will have a greater impact in the computation of the Index. In terms of data availability, it also shows the excellent data cover-

---

[3] The data matrix of the Gender Equality Index had not enough degree of freedom. Statistic refers to degree of freedom (df) as the number of values in a final calculation of a statistics that are free to vary. If n is the number of observation and k the number of independent variables the df is (n-k). In other words the df is the minimal number of values which should be specified to determine all the data points.

age, as there is only one missing value for one country. It is the case of Greece for the variable 'Mean monthly earnings', which has been imputed considering its last available values (2006).

Annex 3 offers the correlation matrix of the dataset, calculated with the Pearson's correlation coefficient. Although the data come from different sources and are measured predominantly at macro level, significant levels of association between variables can be observed, suggesting that they are measuring a common concept. These associations are the base of the statistical structure of the data, structure which is summarised in Annex 4, where the main results obtained in the PCA are presented.

3.1.4. Selected indicators and their treatment

The quality criteria established for selecting indicators and the results provided by the multivariate analysis allowed to determine the final set of variables used in the construction of the core Index, as well as its structure in domains and sub-domains. Table 3.2. provides this list of indicators, together with detailed step by step information on how the original variables, X_{it}^{k}, were treated regarding sign homogenisation, expression in relative terms if needed, $\widetilde{X}_{it}^{k}$ and application of the correcting coefficients $\propto_{(X_{it})}$.

The final set consists of 27 indicators for the 27 Member States, processed at aggregated level (macro level) for 2010. It was important to ensure that all variables refer to the same year in order to provide a better and reliable cross-sectional picture of the gender equality situation in the EU 27. Therefore the year of 2010 was chosen as it is the last year for which all the variables considered were available.

Table 3.2. Processing of variables

Variables (X)	Signs and Reversion	Reference population used to express in relative terms if needed	Expression of the variable in relative terms if needed $(\widetilde{X})$	Variable used to calculate the correcting coefficient $\propto_{(X_{it})}$	Source
Full-time equivalent employment	+ Not reversed	15+ population	Full-time equivalent employment (% 15+ population)	Original variable in relative terms	Eurostat – EU Labour Force Survey
Duration of working life (years)	+ Not reversed	-	Duration of working life (years)	Original variable	Eurostat – EU Labour Force Survey
Employment in Education, Human Health and Social Work activities	+ Not reversed	15–64 employed	Employment in Education, Human Health and Social Work activities (% 15–64 employed)	Employment in tertiary sector- NACE Rev. 2, categories G-U (% total employment)	Eurostat – EU Labour Force Survey
Employees with a fixed start and end of a working day or varying working time as decided by the employer	+ Not reversed	15–64 employed	Employees with a non-fixed start and end of a working day or varying working time as decided by the employer (% 15–64 employed)	Original variable in relative terms	Eurostat – EU Labour Force Survey
Workers perceiving that their health or safety is not at risk because of their work	+ Not reversed	15+ workers	Workers perceiving that their health or safety is not at risk because of their work (% 15+ workers)	Original variable in relative terms	Eurofound – European Working Conditions Survey
Workers having undergone training paid for or provided by their employer or by themselves if self-employed	+ Not reversed	15+ workers	Workers having undergone training paid for or provided by their employer or by themselves if self-employed (% 15+ workers)	Original variable in relative terms	Eurofound – European Working Conditions Survey
Mean monthly earnings – NACE Rev. 2, categories B-S excluding O, 10 employees or more (PPS)	+ Not reversed	-	Mean monthly earnings – NACE Rev. 2, categories B-S excluding O, 10 employees or more (PPS)	Original variable	Eurostat – Structure of Earnings Survey
Mean equivalised net income, 16+ population (PPS)	+ Not reversed	-	Mean equivalised net income (PPS,16+ population)	Original variable	Eurostat – EU Statistics on Income and Living Conditions
At-risk-of-poverty, ≤60 % of median income	– Reversed using the complementary	16+ population	Not-at-risk-of-poverty, ≥60 % of median income (% 16+ population)	Original variable in relative terms and reversed	Eurostat – EU Statistics on Income and Living Conditions
S80/S20 income quintile share, total population	– Reversed using the inverse	-	S20/S80 income quintile share (total population)	Original variable reversed	Eurostat – EU Statistics on Income and Living Conditions
Graduates of tertiary education	+ Not reversed	15–74 population	Graduates of tertiary education (% 15–74 population)	Original variable in relative terms	Eurostat – EU Labour Force Survey
Tertiary students in the fields of Education, Health and Welfare, Humanities and Art – ISCED 5–6	+ Not reversed	Tertiary students	Tertiary students in the fields of Education, Health and Welfare, Humanities and Art – ISCED 5–6 (% tertiary students)	Population with tertiary level of education attained – ISCED 5–6 (% 15–74 population)	Eurostat – UNESCO/OECD/Eurostat (UOE) questionnaires on Educational Statistics
People participating in formal or non-formal education and training	+ Not reversed	15–74 population	People participating in formal or non-formal education and training (% 15–74 population)	Original variable in relative terms	Eurostat – EU Labour Force Survey

Workers caring for and educating their children or grandchildren, everyday for one hour or more	+ Not reversed	15+ workers	Workers caring for and educating their children or grandchildren, everyday for one hour or more (% 15+ workers)	Original variable in relative terms	Eurofound – European Working Conditions Survey
Workers doing cooking and housework, everyday for one hour or more	+ Not reversed	15+ workers	Workers doing cooking and housework, everyday for one hour or more (% 15+ workers)	Original variable in relative terms	Eurofound – European Working Conditions Survey
Workers doing sporting, cultural or leisure activities outside of their home, at least every other day	+ Not reversed	15+ workers	Workers doing sporting, cultural or leisure activities outside of their home, at least every other day (% 15+ workers)	Original variable in relative terms	Eurofound – European Working Conditions Survey
Share of Ministers	+ Not reversed	18+ population	Share of Ministers (% 18+ population)	Not used	EC-DG Justice – Women and Men in Decision Making
Share of members of Parliament	+ Not reversed	18+ population	Share of members of Parliament (% 18+ population)	Not used	EC-DG Justice – Women and Men in Decision Making
Share of members of Regional Assemblies	+ Not reversed	18+ population	Share of members of Regional Assemblies (% 18+ population)	Not used	EC-DG Justice – Women and Men in Decision Making
Share of members of boards in largest quoted companies, supervisory board or board of directors	+ Not reversed	18+ population	Share of members of boards in largest quoted companies, supervisory board or board of directors (% 18+ population)	Not used	EC-DG Justice – Women and Men in Decision Making
Share of members in all key decision-making bodies in Central Bank	+ Not reversed	18+ population	Share of members in all key decision-making bodies in Central Bank (% 18+ population)	Not used	EC-DG Justice – Women and Men in Decision Making
Self-perceived health: good or very good	+ Not reversed	16+ population	Self-perceived health, good or very good (% 16+ population)	Original variable in relative terms	Eurostat – EU Statistics on Income and Living Conditions
Life expectancy in absolute value at birth (years)	+ Not reversed	-	Life expectancy in absolute value at birth (years)	Original variable	Eurostat – Demographic Statistics
Healthy life years in absolute value at birth (years)	+ Not reversed	-	Healthy life years in absolute value at birth (years)	Original variable	Eurostat – EU Statistics on Income and Living Conditions combined with Eurostat's Demographic Statistics
Population without unmet needs for medical examination	+ Not reversed	16+ population	Population without unmet needs for medical examination (% 16+ population)	Original variable in relative terms	Eurostat – EU Statistics on Income and Living Conditions
Population without unmet needs for dental examination	+ Not reversed	16+ population	Population without unmet needs for dental examination (% 16+ population)	Original variable in relative terms	Eurostat – EU Statistics on Income and Living Conditions

Table 3.2. shows that only two variables have been reversed in order to work with a dataset with the same sign of interpretation (i.e. the higher the value the better). Only population at risk of poverty and income quintile share had to be reversed. Most indicators had to be converted into relative terms, however, indicators with the measurement units years or Euros did not require transformation.

The fifth column of Table 3.2. presents the variables used in the calculation of the correcting coefficients $\propto_{(X_{it})}$. In most cases, the formula in equation (4) has been applied to the original variable in relative terms, $\widetilde{(X)}$ However, some exceptions exist:

- For the variable 'Employment in Education, Human Health and Social Work activities (% 15–64 employed), the correcting coefficient has been calculated using the percentage of people employed in the tertiary sector. The original variable cannot be used for the correction because what matters are gender inequalities within and across sectors (segregation) rather than actual numbers in a particular sector. Because patterns of segregation are linked to the structure of the labour market, the employment rate in the tertiary sector has been used as there are more opportunities for segregation among Member States where participation in this sector is higher (Hakim, 1996; Charles and Bradley, 2002).
- For the variable 'Tertiary students in the fields of Education, Health and Welfare, Humanities and Arts – ISCED 5–6 (% tertiary students) the correcting coefficient has been calculated using the percentage of population of which the highest level of education attained is the tertiary level, based on the same reasoning as aforementioned.
- For the five variables measuring the representation of women and men as ministers, members of parliament, members of regional assemblies, members of boards in the largest quoted companies and members in all key decision-making bodies in central banks, the correcting coefficient was not applied because these variables represent shares (i.e. the representation of women and the representation of men adds up to 100 %). In addition, the number of persons in decision-making positions is limited and it is therefore not desirable to maximise the number of these positions. For example, what is important is to increase the share of women on company boards and not to increase the size of boards per se.

The last column of Table 3.2. presents the sources of the variables. These include: EU Labour Force Survey (Eurostat), EU Statistics on Income and Living Conditions (Eurostat), Structure of Earnings Survey (Eurostat), UNESCO/OECD/Eurostat questionnaires on Educational Statistics (Eurostat), Demographic Statistics (Eurostat), Working Conditions Survey (Eurofound) and Women and Men in Decision Making (European Commission, DG Justice). These sources provide harmonised data at EU level, allowing for comparability across countries.

3.1.5. Data considerations and excluded indicators

Not all variables relevant to the concept of gender equality can be included into a composite indicator. Variables can be excluded based on several criteria outlined previously, including their nature, poor quality, availability or double-counting.

The nature of the variables is an important criteria since the Gender Equality Index needs to rely exclusively on outcome variables. As a result, input variables such as provision of childcare services or levels of social benefits, although very important in terms of gender equality, cannot be part of the Index.

The reliability, including precision and lack of stability over time often due to small samples, of some variables for certain countries was problematic. As a result a number of variables were removed from further consideration, although they were important and relevant indicators in the measurement of gender equality. This included, for example, variables such as involuntary part-time or temporary part-time work.

Another issue concerned the validity of data. The majority of the data sources used in the analysis have been produced with the aim of studying the labour force (i.e. LFS), or the income and material conditions of households or individuals (i.e. EU-SILC), but not to focus on gender issues directly. This has implications in terms of validity since potential gender biases in data collection are neither acknowledged nor assessed. It is the case when studying work-life integration without taking into consideration different social and cultural factors between women and men.

Additionally, several variables were excluded due to availability problems, as it was the case of determinants of health (i.e., consumption of alcohol) as they were not available for all 27 Member States. Other variables were not sex disaggregated such as consumption of tobacco. Double counting problems were avoided, as for example with the variables 'duration of working life' and 'retirement age', where only the first one could be included in the Index.

Other indicators relevant to the measurement of gender equality had to be expressed with the metric developed for the Index, rather than in their original form, in order to maintain comparability between indicators. This is the case of the gender pay gap, which is expressed as the ratio of women's earnings to average earnings, rather than men's earnings as in its original form.

Another issue to take into account is the internal coherence of the data. The structure that keeps together the variables needs to rely strictly on positive correlations, to avoid opposite interactions creating compensations during the aggregation process. In the case of both segregation at work and in education, a negative correlation exists with other variables in the domains measuring participation. As a result, it has been necessary to adopt variables measuring participation in selected sectors, rather that those more common measures of segregation, such as the Gini index or the Dissimilarity index.

The final selection of variables needed to conform strictly to the structure reified by the PCA analysis. This means that all variables must work together, according to a statistical structure, in explaining a common phenomenon. It was relatively straightforward in most instances, however, it was difficult to identify a suitable measurement structure that fitted this requirement in the case of quality of work, predominantly because of the multi-dimensional aspect of this concept. The best subset of variables identified that obeyed the statistical criteria in the sub-domain of quality of work covers three out of four aspects used by Eurofound (2002) and the European Commission (2009) in defining job quality: health and well being of workers, flexible working time arrangement and skills development. The remaining uncovered aspect is related to career prospect and employment security. Variables, such as precarious employment were tested, but it was not possible to find a structure which was statistically sound.

There are many variables which could have been included, however, technical and statistical issues have limited these possibilities. The Gender Equality Index is, nevertheless, a synthetic measure for assessing and monitoring gender equality in Europe, which analysed together with other variables can provide valuable gendered analysis. For this purpose, the Index is supported by contextual data provided in a set of Country Profiles.

3.1.6. Comparison between conceptual and measurement frameworks

The measurement framework for the Gender Equality Index that results from the multivariate analysis is presented in Table 3.3. Within the six domains of gender equality identified for the core index at theoretical level, it was possible to derive a measurement structure consisting of 27 indicators distributed across 12 sub-domains.

This comparison of the statistical structure of the data and the structure provided by the conceptual framework shows that the majority of sub-domains remained unchanged. Two sub-domains were split in the statistical structure. Within the domain of work, the sub-domain of segregation was merged by the statistical analysis with quality of work. In the domain of knowledge, the sub-domain educational attainment comprises both formal education and segregation within the measurement framework. The fact that segregation, in work and knowledge, consistently loaded with another sub-domain is typical of a high degree of correlations between related issues (see Annex 4 for more detailed information).

A further two of the sub-domains remained empty due to lack of suitable data: social power in the domain of power and behaviour in the domain of health. In these cases several problems related to data quality, homogenised information or unavailable sex-disaggregated data, were found. Finally, no indicators were used for economic activities in the domain of time because of concerns over double-counting as well as the trade-off nature of sharing time between economic, care and social activities. The two satellite domains of intersecting inequalities and violence, because they are dealing with illustrative groups, were not included as part of the PCA, as it was mentioned before. The domain of intersecting inequalities, is measured using available indicators on employment, without aggregating them further, so as to provide indicative results. The domain of violence remains empty due to lack of suitable data.

Table 3.3. Comparison of conceptual and measurement frameworks in the Gender Equality Index

Domain	Conceptual framework	Measurement framework	Concept measured		Indicators
Work	Participation	Participation	FTE employment	v1	Full-time equivalent employment rate (% 15+ population)
			Duration of working life	v2	Duration of working life (years)
	Segregation	Segregation and quality of work	Sectoral segregation	v3	Employment in Education, Human Health and Social Work activities (% 15–64 employed)
	Quality of work		Flexibility of working time	v4	Employees with a non-fixed start and end of a working day or varying working time as decided by the employer (% 15–64 employed)
			Health and safety	v5	Workers perceiving that their health or safety is not at risk because of their work (% 15+ workers)
			Training at work	v6	Workers having undergone training paid for or provided by their employer or by themselves if self-employed (% 15+ workers)
Money	Financial resources	Financial resources	Earnings	v7	Mean monthly earnings – NACE Rev. 2, categories B-S excluding O, 10 employees or more (PPS)
			Income	v8	Mean equivalised net income (PPS, 16+ population)
	Economic situation	Economic situation	Poverty	v9	Not-at-risk-of-poverty, ≥60 % of median income (% 16+ population)
			Income distribution	v10	S20/S80 income quintile share (total population)
Knowledge	Educational attainment	Educational attainment and segregation	Tertiary education	v11	Graduates of tertiary education (% 15–74 population)
	Segregation		Segregation	v12	Tertiary students in the fields of Education, Health and Welfare, Humanities and Arts – ISCED 5–6 (% tertiary students)
	Lifelong learning	Lifelong learning	Lifelong learning	v13	People participating in formal or non-formal education and training (% 15–74 population)

Domain	Conceptual framework	Measurement framework	Concept measured		Indicators
Time	Economic	-	-	-	-
	Care activities	Care activities	Childcare activities	v14	Workers caring for and educating their children or grandchildren, everyday for one hour or more (% 15+ workers)
			Domestic activities	v15	Workers doing cooking and housework, everyday for one hour or more (% 15+ workers)
	Social activities	Social activities	Sport, culture and leisure activities	v16	Workers doing sporting, cultural or leisure activities outside of their home, at least every other day (% 15+ workers)
			Volunteering and charitable activities	v17	Workers involved in voluntary or charitable activities, at least once a month (% 15+ workers)
Power	Political	Political	Ministerial representation	v18	Share of Ministers (%, 18+ population)
			Parliamentary representation	v19	Share of members of Parliament (%, 18+ population)
			Regional assemblies representation	v20	Share of members of Regional Assemblies (%, 18+ population)
	Social	-	-	-	-
	Economic	Economic	Members of boards	v21	Share of members of boards in largest quoted companies, supervisory board or board of directors (%, 18+ population)
			Members of Central Bank	v22	Share of members in all key decision-making bodies in Central Bank (%, 18+ population)

Domain	Conceptual framework	Measurement framework	Concept measured		Indicators
Health	Status	Status	Self-perceived health	v23	Self-perceived health, good or very good (% 16+ population)
			Life expectancy	v24	Life expectancy in absolute value at birth (years)
			Healthy life years	v25	Healthy life years in absolute value at birth (years)
	Behaviour	-	-	-	-
	Access	Access	Unmet medical needs	v26	Population without unmet needs for dental examination (% 16+ population)
			Unmet dental needs	v27	Population without unmet needs for dental examination (% 16+ population)
Intersecting inequalities	Discrimination and other social grounds	Discrimination and other social grounds	Employment rates: minorities and/or migrants older workers lone parents/carers	v28	Employment of people born in a foreign country (% 15–64 population born in a foreign country)
				v29	Employment of people aged 55–64 (% 55–64 population)
				v30	Employment rates of people living in a household with one adult and one or more dependent children (% 15–64 corresponding population)
Violence	Direct	-	-	-	-
	Indirect	-	-	-	-

This measurement framework provides the hierarchical structure used for computing the Gender Equality Index and the corresponding indices for each domain and sub-domain. This results in an overall index, six indices at the domain level and 12 indices at the sub-domain level. Although not all domains and sub-domains reflected in the conceptual framework can be incorporated, the measurement framework provides a conceptually valid and empirically reliable index, giving the possibility to emphasise lack of data and the need to increase efforts in data collection and harmonisation in some of these critical areas.

3.2. Computing the Index

The Gender Equality Index is a powerful analytic tool for policymakers as it provides an easily interpretable synthetic measure of gender equality as a complex phenomenon over time and across Member States. The growing number of composite indicators in various policy areas testifies to their political importance and operational relevance in decision-making. Nevertheless, in their construction, composite indicators remain as tools that can include varying degrees of subjectivity.

It is, however, essential to ensure that the Gender Equality Index remains as objective as possible, by relying on strong and transparent methodological choices that can best represent gender equality. Its computation therefore aims to eliminate as much subjectivity as possible.

Subjectivity is introduced in composite indicators through the choices made to compute them. To remove this subjectivity, the Gender Equality Index adopts the principle of multi-modelling (Saisana and Saltelli, 2011). This means that instead of relying on a single model, a set of potential indices are computed in order to select the one that best measures gender equality. This is the one that is most robust. An Index is said to be robust when changing assumptions do not significantly affect its ability to measure the concept of interest.

The four main grounds of subjectivity relate to assumptions in operational choices such as imputation of missing data (see previous section); normalisation; weighting; and aggregation at the level of sub-domains and then domains. The different options considered to compute the Gender Equality Index are described below, before the section discusses which options were adopted as a result of conducting the robustness analysis.

3.2.1. Normalisation

The normalisation is a process that ensures that variables can be compared by harmonise the scales or units. Within the multi-modelling approach applied in the Gender Equality Index, the only normalisation method used is the metric $\Gamma_{(X_{it})}$, presented in equation (5), which provides the gender gaps adjusted by levels of achievement. No other alternative is considered because the metric $\Gamma_{(X_{it})}$ is already a normalisation method. It adjusts for the measurement unit of the original variable and corrects for the range of variation of each variable by ensuring it is bound between [1;100]. Furthermore, it satisfies the property of interpret-

ability, as it provides a measure of the distance of each variable from the equality point, set at 100, and maintains comparability across domains and Member States.

3.2.2. Weighting

The second key decision concerns the weights, or relative importance, assigned to each indicator, sub-domain and domain during the aggregation process, tested in the multi-modelling procedure of the Index. Several methods for assigning weights can be applied. The four methods tested consist of equal weights, a modified version of equal weights, weights retrieved from statistical analysis and finally weights derived from experts' opinions.

In the first method tested, all domains, sub-domains and indicators are assigned equal weights (this is equivalent to not assigning weights). Although equal weights may appear to be a simple solution, it is however far from a neutral one and, as with any other weighting method, involves a normative judgement. This is because differences in the spread of values, or alternatively high correlations, some elements can have a greater degree of influence in the final composite score.

Secondly, a modification to the methods of equal weights was also tested within the two domains that involved indicators of segregation. Although, as stated in the conceptual framework, the sub-domain of segregation (in work and in knowledge) was placed as a separate sub-domain, the multivariate analysis provided a structure where segregation consistently loaded with another sub-domain. As a result, this method attributed a weight representing half the sub-domain, distributing the other half equally among the remaining indicators. For example, in the domain of work, segregation was assigned a weight of 1/2, while the three indicators measuring quality of work received a weight of 1/6 each.

The third method, as an alternative, retrieves weights endogenously from the data. The multivariate analysis, used to confirm the structure of the Index through principal component analysis (PCA), provides correlations between the indicators selected and their respective domains. These correlations, called factor loadings, can be used to determine weights by rescaling them so they add up to one in each domain. This weighting method can only be applied at sub-domain levels, since the PCA can only be used to reify the structure at this level, as previously explained. It is important to note that because this weighting method is based on the data correlation structure is not a

mere measure of theoretical importance among the indicators. It has the added benefit of correcting overlapping information, as evidenced by correlated variables.

Finally, the fourth weighting method tested, Analytic Hierarchy Process (AHP), was based on experts' opinions. Rather than relying on technical measurements, it is a participatory method which requires the input of gender experts (Nardo et al, 2008). This method is particularly relevant since the Gender Equality Index is underpinned by EU policy and the method provides a basis to assess and discuss gender policy action. Its strength is thus in provi-ding a systematic representation of experts' opinions, and is credited for increasing the transparency and legitimacy of the Gender Equality Index as a tool to support gender equality policy in the EU (Nardo et al, 2008). The experts consulted consisted of members of the EIGE's Working Group on the Gender Equality Index and EIGE's Expert Forum. Experts' opinions on weights were sought at the domain level, only for core domains. This consultation process was undertaken in the last quarter of 2012, and resulted in an acceptable response rate of almost 50%.

The Analytic Hierarchy Process (AHP) is time consuming but easy to perform, even though assigning weights to a complex phenomenon such as gender equality is a difficult task. It combines both qualitative aspects, by asking to express a preference between two domains, and quantitative aspects, by giving a score to the preference intensity. The AHP is based on ordinal pairwise comparison of domains. Experts were first asked to make a pair-wise comparisons of domains, and secondly, to assign a strength of preference to the chosen domain in a scale from 1 (equal importance of domains) to 9 (the most important domain). The relative weights for each expert can then be computed in order to obtain the overall score for each domain[4]. The procedure is able to determinate whether weights are consistent, that is if they are numerically coherent across pair-wise comparisons. For example, if work is more important than power, and power more important than health, then health cannot be more important than work. However, since incoherence is an integral part of human thinking, an inconsistency threshold is generally tolerated (Saaty, 1980). The AHP, after solving for inconsistency, was able to keep 60% of experts' weights. These experts' weights were averaged before being tested. Only average experts' weights by domain were used.

In summary, there is no general consensus as to what an appropriate weighting measure should be. Furthermore, there exists an inherent bias in the selection of a weighting method, as they all represent a subjective choice which has a bearing on the final scores. It is therefore necessary to consider them all as part of a multi-modelling procedure. The selection of a weighting method goes hand in hand with choices of aggregation methods, which are outlined next.

3.2.3. Aggregation

The aim of this step is to group the data according to the structure provided by the measurement framework. First all variables within each sub-domain are aggregated, creating indices at the sub-domain level. Subsequently these are aggregated at the domain level. Finally, all the domain indices are aggregated, creating the overall Gender Equality Index.

Three aggregation methods have been tested to calculate the Index: arithmetic, geometric and harmonic means. In the context of composite indicators, the main differences between these three types of averages are in the extent to which they allow for compensations. The arithmetic mean between two values is always greater than or equal to the geometric mean between those same values, and itself always greater than or equal to the harmonic one. The table below provides the mathematical expressions of these three different weighted averages, considering the sum of all weights equal to 1.

Table 3.4. Mathematical expression of the arithmetic, geometric and harmonic means

Arithmetic mean
$$\bar{X} = \sum_i w_i x_i$$
Geometric mean
$$\bar{G} = \prod_i (x_i{}^{w_i})$$
Harmonic mean
$$\bar{H} = \left(\sum_i w_i x_i^{-1} \right)^{-1}$$

---

[4] The overall score for each domain for each expert is calculated using Saaty's eigenvector method, EM (Saaty, 1990).

The arithmetic mean allows full compensability, and thus has the potential to offset a poor performance in some variables by a sufficiently large advantage in other variables, while the geometric and harmonic decrease this potential compensatory effect. An illustrative numerical example is provided in Table 3.5., which shows how the harmonic, geometric and arithmetic means are progressively allowing more compensability, and therefore a higher score.

Table 3.5. Examples of compensatory effect with different means

Example of data points	(50; 50)	(50; 75)	(50; 100)
Arithmetic mean	50	63	75
Geometric mean	50	61	71
Harmonic mean	50	60	67

3.2.4. Towards the selection of the best index

The construction of the Gender Equality Index necessitates various decisions to be made as to the imputation of missing data, as well as the methods used for weighting and aggregation. The choice of one method instead of another has implications for the final result of the country score, as well as in its ranking. However, it is possible to evaluate how and how much the results change over the different range of alternatives by considering them all through robustness analysis. This analysis follows a multi-modelling principle: this means that since it is not desirable to trust one single model, the approach then becomes to test a multitude of possible scenarios based on various combinations of normalisation, weighting, missing data and aggregation methods. In other words, since there is no unique recipe in constructing composite indicators, the approach is to compute them all before making a final selection.

The robustness analysis of the Gender Equality Index is based on the combination of the alternatives for weights, aggregation and imputation of missing data presented in Table 3.6.

Table 3.6. Sources of uncertainty and alternatives tested

Sources of uncertainty	Alternatives
Weighting	Equal weights
	Modified equal weights
	PCA weights
	AHP weights
Aggregation	Arithmetic mean
	Geometric mean
	Harmonic mean
Imputation	100 simulations for imputed missing data

First, weights present a large source of uncertainty, which needs to be accounted for. The four methods outlined above are used in the robustness analysis.

Second, a gradually compensatory aggregation method has been adopted. This means that the compensation allowed is higher within the aggregation at indicators level, where the arithmetic average is always considered. However, it becomes gradually less compensatory within sub-domain and domains level, where only geometric or harmonic means are allowed.

The last source of uncertainty deals with the issue of the estimation of missing data. Since missing data was imputed, leading to greater uncertainty, it is necessary to ensure that the final index remains robust to potential inaccuracies in these estimated values. Estimations for missing data were sampled from their probability distribution through Monte Carlo simulations (100 runs).

The robustness analysis involved combining all possible sources of variations (simulations of imputed data, all weights and aggregation alternatives). Altogether, this resulted in the computation of 3 636 sets of scores, which corresponds to the overall index distribution of all possible scenarios generated. The robustness analysis has been used as a tool for selecting the best alternative within this distribution.

The selection process of the best Gender Equality Index first relied on the calculation of the median[5] Index by Member State within these 3,636 scenarios. Second, the differences by country between each scenario and the median index were computed. The best index, according to the robustness analysis, consists of the one that minimise these differences and lies closest to the median.

$$d_j = \sqrt{\sum_{i=1}^{27}(I_{ij} - I_{me_i})^2} \qquad \begin{array}{l} j = 1, \ldots, 3636 \\ i = 1, \ldots, 27 \end{array} \quad (6)$$

In particular, the best index was chosen considering the Euclidean distance d_{ij}, defined as the square root of the sum of the squared differences between each index I_{ij} and the overall median index I_{me_i}. The combination closest to the median I_{me_i} is the one which minimised the distance d_j.

Following this procedure, the combination presented in Table 3.7. was adopted to compute the Gender Equality Index. It consists of the arithmetic mean and equal weights at variable level; the geometric mean and equal weights at sub-domain level; and the geometric mean and experts' weights at domains level.

Table 3.7. Characteristics of the Gender Equality Index

	Variables	Sub-domains	Domains
Normalisation	Metric $\Gamma_{(X_{it})}$ by construction acts as a normalisation method		
Weighting	Equal	Equal	AHP
Aggregation	Arithmetic	Geometric	Geometric

Mathematically, it is expressed as:

$$I_i^* = \prod_{d=1}^{6}\left\{\prod_{s=1}^{12}\left(\sum_{v=1}^{27} w_v \Gamma_{(X_{idsv})}\right)^{w_s}\right\}^{w_d} \qquad \begin{array}{l} i = 1, \ldots, 27 \\ d = 1, \ldots, 6 \\ s = 1, \ldots, 12 \\ v = 1, \ldots, 27 \\ w_v, w_s, w_d \in [0,1] \\ \sum w = 1 \end{array} \quad (7)$$

where I_i^* identifies the best Gender Equality Index for the i-th country $\Gamma_{(X_{idsv})}$ is the metric described in (5) aggregating at variable level (v), sub-domain level (s) and domain level (d), w_v stands for equal weights computed at variable level and w_s for the weights at sub-domain level, while w_d stands for the experts' weights used at domain level and retrieved from the Analytic Hierarchical Process (AHP).

The overall Index is composed of 6 domain indices and 12 sub-domain indices, all of them bound between [1,100], where 1 stands for complete gender inequality, with any value above indicating a proportional increase of gender equality, with full gender equality at 100.

The Gender Equality Index, so defined, represents the most robust combination of assumptions among the possible scenarios considered. This combination provides lower levels of compensability at sub-domain and domain levels since it relies on geometric means. In addition, because it uses equal weights and arithmetic aggregation at the level of variables, it allows higher compensability within sub-domains. The potential for higher compensability is not problematic since the correlation matrix does not include any correlations above 0.90.

Finally, at domain level, the robustness analysis selects a combination of weights that relies on those provided by using the Analytic Hierarchy Process with the network of EIGE's experts. Table 3.8. provides the mean experts' weights used for the Gender Equality Index at domain level. These weights are equally shared at sub-domain and indicator level.

---

[5] The median is the middle value in a distribution. Since it is not dependent on the observed values of the data set, only on their positions, it is not affected by extreme values.

Table 3.8. Mean experts' weights used for the Gender Equality Index

Work	Money	Knowledge	Time	Power	Health
0.193	0.154	0.216	0.146	0.191	0.099

3.2.5. Quality assessment

Following the computation of the Gender Equality Index, several statistical methods were applied to verify its quality and robustness. This section provides a summary of the main results.

Conducting a robustness analysis, as described in the previous section, allows quantifying the level of confidence associated with the selected final Index score. Figure 3.2. shows how the main results of the Index can change along with variations in assumptions. It shows the distribution of the difference between all possible ranks obtained out of the 3 636 scenarios considered and the rank of the Gender Equality Index selected, I_i^*. It provides an overview of the robustness of the Index with respect to the sources of uncertainty considered and shows a clear peak around zero, which represents no differences in rankings. This is a sign of robustness in itself. The overall range of variation between [-6,6].

Figure 3.2. Histogram of all possible rank differences, Index_i rank – Gender Equality Index rank (27 * 3 636 values)
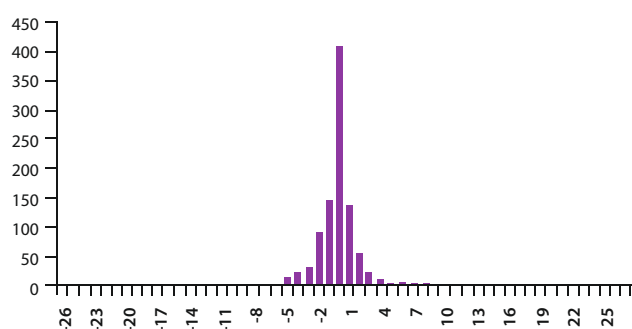
Table 3.9. Percentage of cases in the shifted rank

Rank difference interval	Percentage of cases
[-6,-4]	4.01 %
[-3,-1]	27.78 %
[0,2]	61.52 %
[3,5]	4.12 %
[6,8]	1.95 %
[9,11]	0.00 %
[12,14]	0.62 %
[-2,2]	85.91 %
[-1, 1]	70.88 %
[0]	41.67 %

A closer look of the distribution in Table 3.9. shows that almost 42 % of cases have not shifted positions, by keeping the exact same ranking, while in 71 % the shift in rank is at most of one position, and in 86 % of cases changed at most of two positions. Overall, this analysis demonstrates that the Gender Equality Index I_i^* is robust and stable with respect of the selected sources of uncertainties.

Additionally, in order to assess the structure of the selected index, the correlation matrix between the overall Index, domains and sub-domains was examined. In Table 3.10., the Pearson's correlation matrix shows very strong correlations with the domains of *Knowledge* and *Time* (r = 0.90), as well as with *Power* (r = 0.81) and *Work* (r = 0.82). Strong correlations with the domains of *Money* (r = 0.68) and *Health* (r = 0. 52) can also be observed. These results confirm the structure of the domains as meaningful in explaining the overall Index. This means that the domains of gender equality selected, individually or together, successfully describe overall levels of gender equality.

Moreover, the correlation matrix reflects the weights assigned through the participatory process (AHP) in that the domains having received the highest weights correspond to those with higher correlations. The only exception is that of the domain of *time*, where the highest correlation (0.90) is despite having received a relatively low experts' weight compared to other domains. However, the correlation between the Index and the domain itself remain high, as the strong structure of the data has somewhat overturned the effect of the attributed weights.

The structure of the Gender Equality Index is also confirmed at sub-domain level as highlighted in Table 3.10.Consistently all sub-domains contribute most to their respective domains. For example, *Financial resources* registers the highest correlation (r = 0.97) to its own domain *Money*. An additional sign of good fit of the Index resides in that all the domains and sub-domains are significantly correlated with the Index at a 5 % level of significance (Table 3.10.).

Overall, this analysis demonstrates that the Gender Index Equality is a robust measure with an internal structure that is both statistically coherent and consistent with the conceptual framework of the Index.

Table 3.10. Pearson's correlation matrix between the Index, domains and sub-domains

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Index	1																		
2	Work	0.82***	1																	
3	Money	0.68***	0.70***	1																
4	Knowledge	0.90***	0.77***	0.66***	1															
5	Power	0.81***	0.52***	0.24*	0.60***	1														
6	Time	0.90***	0.69***	0.69***	0.82***	0.57***	1													
7	Health	0.52***	0.55***	0.85***	0.54***	0.12	0.50***	1												
8	Participation	0.50***	0.59***	0.03	0.51***	0.54***	0.35*	-0.19	1											
9	Segregation and quality of work	0.72***	0.88***	0.84***	0.65***	0.33*	0.66***	0.78***	0.14	1										
10	Financial resources	0.63***	0.65***	0.97***	0.67***	0.18	0.65***	0.85***	0.01	0.80***	1									
11	Economic situation	0.42**	0.46**	0.56***	0.26*	0.24	0.43**	0.37**	0.06	0.51***	0.34*	1								
12	Educational attainment and segregation	0.66***	0.50***	0.56***	0.84***	0.39***	0.57***	0.57***	0.31*	0.43**	0.64***	0.03	1							
13	Lifelong learning	0.88***	0.82***	0.60***	0.89***	0.62***	0.83***	0.40**	0.56***	0.68***	0.55***	0.40**	0.50***	1						
14	Political	0.84***	0.65***	0.56***	0.69***	0.83***	0.63***	0.42**	0.45**	0.54***	0.54***	0.23	0.50***	0.69***	1					
15	Economic	0.60***	0.31*	-0.04	0.38*	0.88***	0.40**	-0.17	0.49***	0.09	-0.13	0.25	0.20	0.44**	0.49***	1				
16	Care activities	0.86***	0.74***	0.75***	0.75***	0.54***	0.94***	0.57***	0.30	0.75***	0.68***	0.54***	0.49***	0.79***	0.66***	0.34*	1			
17	Social activities	0.67***	0.40**	0.32*	0.64***	0.49***	0.79***	0.13	0.40**	0.28	0.34*	0.08	0.48***	0.62***	0.42**	0.42**	0.56***	1		
18	Status	0.43**	0.42**	0.74***	0.46**	0.14	0.39**	0.91***	-0.22	0.65***	0.78***	0.21	0.54***	0.29	0.41**	-0.13	0.46***	0.06	1	
19	Access	0.41**	0.50***	0.60***	0.41**	0.02	0.44**	0.63***	0.00	0.60***	0.53***	0.47***	0.32*	0.40**	0.20	-0.14	0.47**	0.20	0.25	1

Level of significance for N=27: *** p<0.01; ** p<0.05, *p<0.10

3.3. Conclusion

This section has outlined the methodology employed to construct the Gender Equality Index and presented its measurement framework, including the selection of gender indicators. The purpose of this section is to be as transparent as possible in regards to what computation process was used. This is crucial to ensure that the Index provides a measure of gender equality that is at the same time unambiguous and accurate.

The development of the Gender Equality Index relies on strict statistical criteria combined with a solid theoretical framework. First, it is essential to ensure that variables are chosen on the basis of technical and methodological grounds, as outlined in this section. Furthermore, this selection also showed how the validity of the measurement structure was ascertained through multivariate analysis. The development of the measurement structure reified to a large extent the conceptual structure outlined in Section 2. Finally, the section presented the results of the robustness analysis. This is based on the principle of multi-modelling, whereby one single model is not trusted, and the selection of the Index relies on selecting the best model in terms of robustness out of all possible alternatives considered. This ensures that the Gender Equality Index is truly representative of the concept of Gender Equality in the EU and across Member States, and not biased by a subjective choice in weights or aggregation method.

Having described the methodology employed for the construction of the Gender Equality Index and shown how the selected model was the most robust available, the report now turns to a description of the indicators selected in the Gender Equality Index to measure the concept of gender equality within the EU policy framework.

4. Indicators

The Gender Equality Index provides a synthetic tool that measures the progress made in reducing gender gaps throughout Member States. Gender equality and its critical domains, within the context of EU gender equality policy, have been set out in Sections 1 and 2 of this report. The technical and methodological decisions inherent to the construction of the Gender Equality Index have been set out in the previous section (Section 3), and show how the conceptual framework can be implemented through a measurement framework. The measurement framework presents the operationalised domains and sub-domains of the Gender Equality Index together with their associated gender indicators.

This section presents these gender indicators, along with their definitions and frequency of dissemination. Within each domain, an analysis of the gender indicators used is presented both in the EU-27 and across Member States. This includes looking at levels of achievement in 2010, but also examining gender gaps. These gaps can work towards women (where women are over-represented compared with men) or towards men (when the reverse is true). This analysis provides a comprehensive overview of the gender indicators selected and provides valuable data to illustrate the key gender equality issues identified by the conceptual framework of the Gender Equality Index.

4.1. Work

The domain of work measures the extent to which women and men can benefit from equal access to employment and appropriate working conditions. These, together with the elimination of all forms of discrimination and segregation, allow equal access to economic resources and contribute to the elimination of poverty.

This domain includes three conceptual sub-domains to be measured: *participation, segregation* and *quality of work*. Participation is measured by two gender indicators: participation rates in employment in full-time equivalence (FTE), as well as gender gaps in duration of working life. Because of the strong link between sectoral segregation and working conditions (European Commision, 2009; UNECE, 2013), a relationship confirmed by the correlation structure during the multivariate analysis, gender indicators measuring segregation and quality of work are aggregated into one single sub-domain: *Segregation and quality of work*. Sectoral segregation is measured by an indicator looking at the participation of women and men in the education and the human health and social work activities. It is combined with indicators measuring gender gaps in flexibility at work, with the start and end of the working day, health risks at work and work-based training (see Table 4.1.).

Vertical segregation is left unmeasured, as it is partly covered by the gender differences in earnings in the domain of money and the representation of women and men in the economic sphere of power. It is indeed methodologically essential to avoid overlaps in building composite indicators.

Table 4.1. Measurement framework for the domain of work

Measurement framework	Concept measured	Indicator	Source
Participation	FTE employment	Full-time equivalent employment rate (% 15+ population)	Eurostat – EU Labour Force Survey
	Duration of working life	Duration of working life (years)	Eurostat – EU Labour Force Survey
Segregation and quality of work	Sectoral segregation	Employment in Education, Human Health and Social Work activities (% 15–64 employed)	Eurostat – EU Labour Force Survey
	Flexibility of working time	Employees with a non-fixed start and end of a working day or varying working time as decided by the employer (% 15–64 employed)	Eurostat – EU Labour Force Survey
	Health and safety at work	Workers perceiving that their health or safety is not at risk because of their work (% 15+ workers)	Eurofound –European Working Conditions Survey
	Training at work	Workers having undergone training paid for or provided by their employer or by themselves if self-employed (% 15+ workers)	Eurofound –European Working Conditions Survey

4.1.1. Full-time equivalent employment rate

Women are less likely than men to participate in the labour market, that is, less likely to be employed or actively looking for a job and moreover, when they do participate, women tend to work fewer hours than men (Eurostat, 2008). A measure of participation adjusted by working hours is therefore an important indicator as it relates to all other aspects of economic and social participation.

Variable definition: Full-time equivalent (FTE) employment rate (% 15 + population)

This indicator measures employment rates adjusted for working time. It is obtained by dividing working hours by the average number of full-time hours. Full-time equivalence is a more precise unit to measure participation in employment as it takes into account the different number of hours that individuals may work during the course of a week. The unit is obtained by comparing the average number of hours worked to the average number of hours of a full-time worker. A full-time person is counted as one FTE, while a part-time worker is awarded a score proportional to the hours worked (Eurostat, 2013) (corresponds to Europe 2020 targets, see annex 5).

Data source: Labour Force Survey, Eurostat (emplrate_ft_equiv)

Periodicity: annual

Full-time equivalent participation in the labour force was consistently higher for men in all Member States in 2010, with an EU-27 average of 41 % for women and 56 % for men (see Figure 4.1.). Across Member States, this stretched between 28 % (MT) and 48 % of women (FI, DK, SE and CY) compared with between 49 % (LT) and 63 % of men (CY and CZ).

Figure 4.1. Full-time equivalent participation by sex in EU Member States, 2010
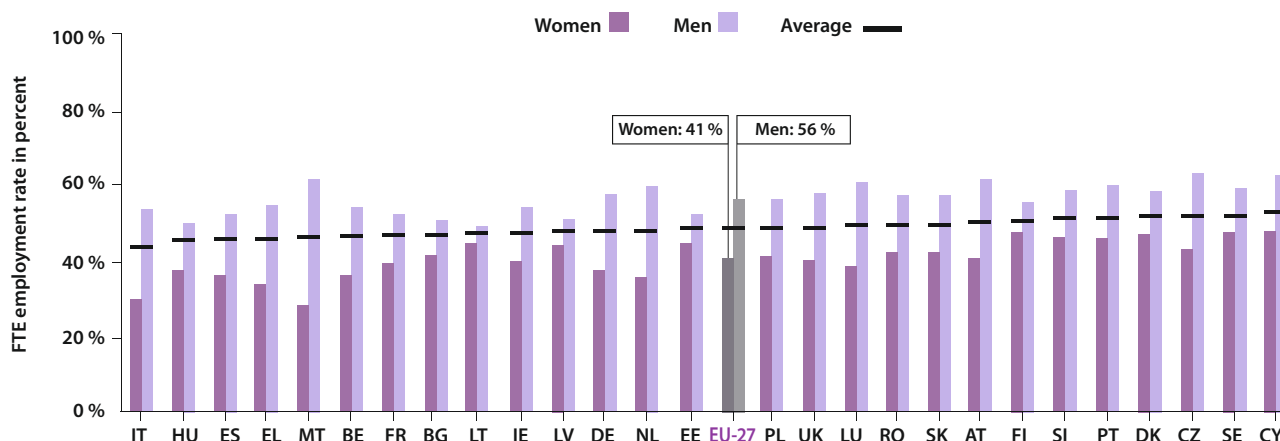
Source: Eurostat, LFS (data calculated by Eurostat at EIGE's request) (emplrate_ft_equiv)

This corresponds to an EU-27 average gender gap of 15 percentage points in 2010. The scale of this gender gap was wide, ranging from less than 10 percentage points in Lithuania, Latvia, Estonia, Finland and Bulgaria to as much as 33 percentage points in Malta (see Figure 4.2.).

Figure 4.2. Gender gaps in full-time equivalent participation in EU Member States, 2010
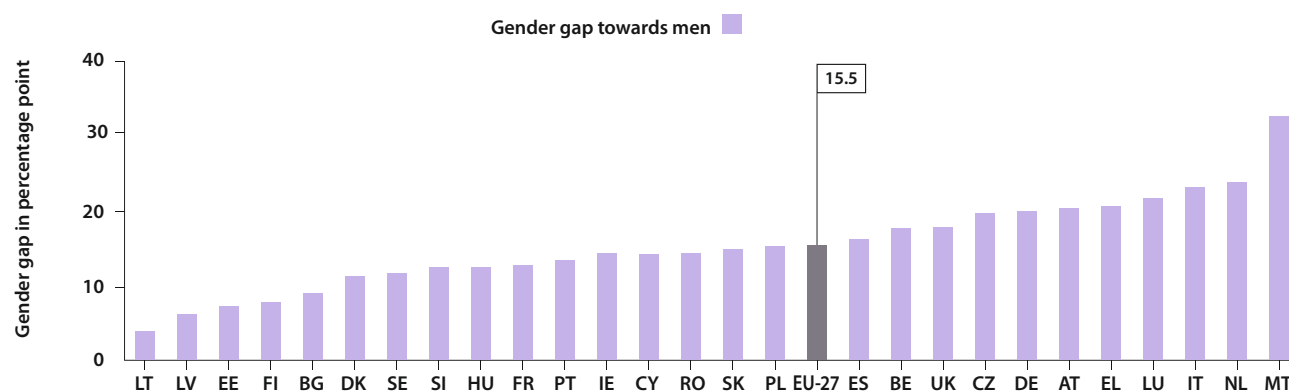
Source: Eurostat, LFS (data calculated by Eurostat at EIGE's request) (emplrate_ft_equiv)

4.1.2. Duration of working life

The second gender indicator used to measure participation is duration of working life. It is an important indicator from a gender perspective as women are more likely than men to have career interruptions and/or to opt out of labour force participation.

Variable definition: Duration of working life (years)

The Duration of working life (DWL) indicator measures the number of years a person at a given age is expected to be active in the labour market. It provides valuable information on participation in the labour force by adding a life course perspective, as it captures issues such as youth unemployment or early withdrawal from the labour force (Eurostat, 2012).

Data source: Labour Force Survey, Eurostat (lfsi_dwl_a)

Periodicity: annual

Duration of working life increased slightly for both women and men between 2000 and 2010. During this period of time, men's duration in working life increased by about a year, from 36 years to 37 years. Women saw a slightly larger increase of three years, going from 29 years in 2000 to 32 in 2010. The data presented in Figure 4.3. shows that on average in the EU-27, in 2010, women worked for 32 years, compared with 37 years for men. At Member States level, women worked as few as 22 and 24 years in Malta and Italy respectively, but as much as 38 years in Denmark and 39 years in Sweden. Duration of working life was longer for men, starting as low as 31 years in Hungary, but reaching 41 years in Cyprus, the United Kingdom and Denmark and 42 years in the Netherlands and Sweden.

Figure 4.3. Duration of working life by sex in EU Member States, 2010
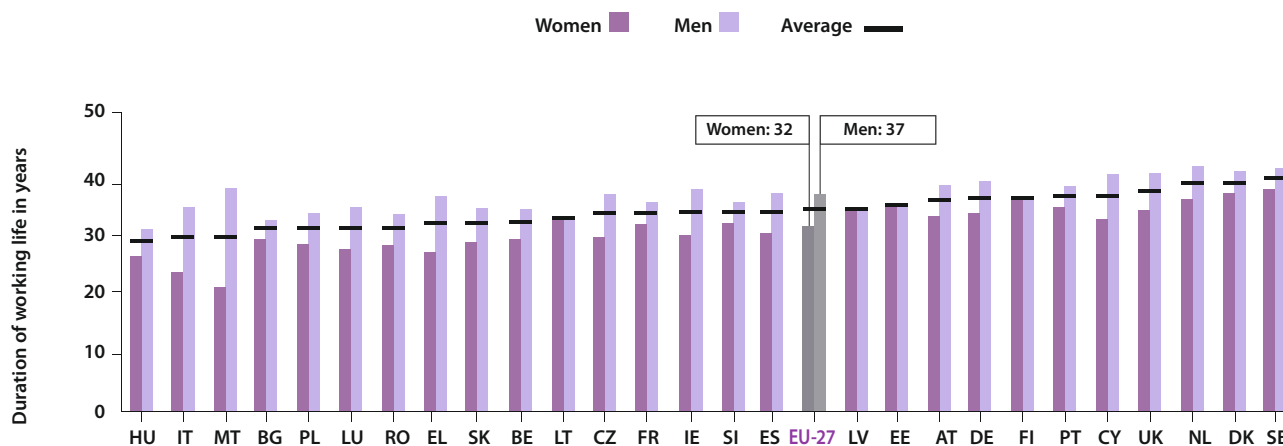
Source: Eurostat, LFS (lfsi_dwl_a)

Duration of working life was in 2010 almost always exclusively longer for men than women, with an average of six years difference overall in the EU-27. This constitutes a slight decrease since 2000, when a seven year difference existed. Differences between the duration of working life of women and men were quasi-inexistent in the three Baltic States (LT, LV and EE), with Lithuania the only Member State where women's duration of working life exceeded that of men. Overall, men worked as much as an additional 10 years in Greece and Italy, or even 17 years extra in Malta (Figure 4.4.).

Figure 4.4. Gender gaps in duration of working life by in EU Member States, 2010
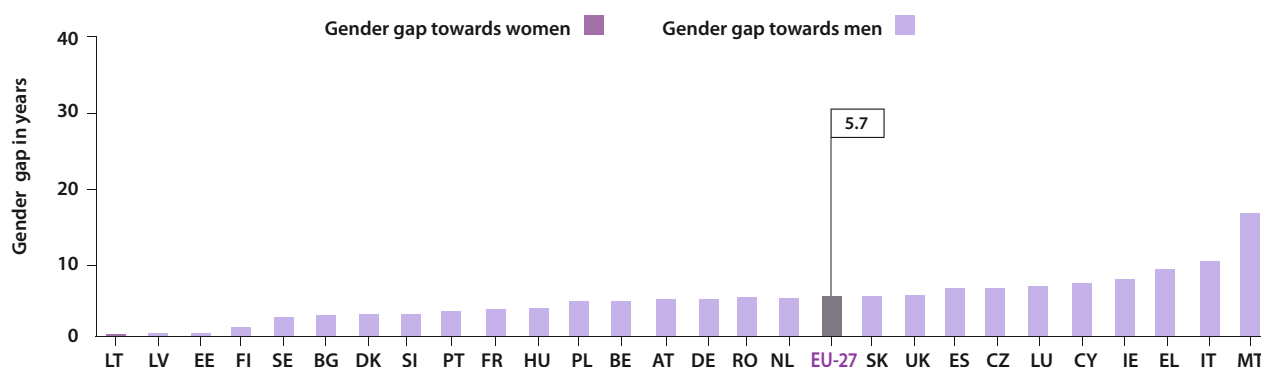
Source: Eurostat, LFS (lfsi_dwl_a)

4.1.3. Segregation

The third gender indicator used in the domain of work measures segregation. Segregation in the labour market encompasses the extent to which women and men tend to work in different sectors, or contractual terms and conditions. Gender-based patterns of segregation remain widespread throughout the EU, which affects economic independence and representation in decision-making.

Segregation is measured by gender gaps in the proportion of women and men employed in the education and the human health and social work activities sectors, according to the second revision of the statistical classification of economic activities in the European Community (NACE Rev 2).

Variable definition: Employment in *Education, Human health and social work* activities (% 15–64 employed in all NACE Rev. 2)

This indicator reflects the percentage of women and men employed in certain economic activities, as defined by the European standard classification of productive economic activities (NACE Rev 2). The indicator is based on employment in two economic activities, which corresponds to the most feminised sectors: Education (P), Human health and social work activities (Q) (Eurostat, 2013b) (corresponds to Europe 2020 targets, see Annex 5).

Data source: Labour Force Survey, Eurostat (lfsa_egan2)

Periodicity: annual

Sectoral segregation is flagrant at EU level. In 2010, women represented over two-thirds of those involved in *Human health and social work activities* (78 %), *Education* (72 %) or *Other service activities* (66 %). On the contrary, they were greatly under-represented in other more men-dominated economic activities, including *Mining and quarrying* (12 %) and *Construction* (9 %). A detailed breakdown is provided in Annex 6.

The two most feminised occupations in 2010 consisted of *Human health and social work activities*, as well as *Education*. On average, in the EU-27, in 2010, 29 % of women were involved in these two sectors compared with just 8 % of men. While men's presence in these sectors remained low in all Member States, between just 4 % in Bulgaria, Latvia, Romania and Slovakia and 13 % in Denmark. Some Member States had more than a third of women involved in these sectors, including Ireland (35 %), Finland (38 %), Belgium (38 %), the Netherlands (39 %), the United Kingdom (39 %), Denmark (43 %) and Sweden (44 %) (see Figure 4.5.).

Figure 4.5. Employment in the *Education* and the *Human health and social work activities* sectors by sex in EU Member States, 2010
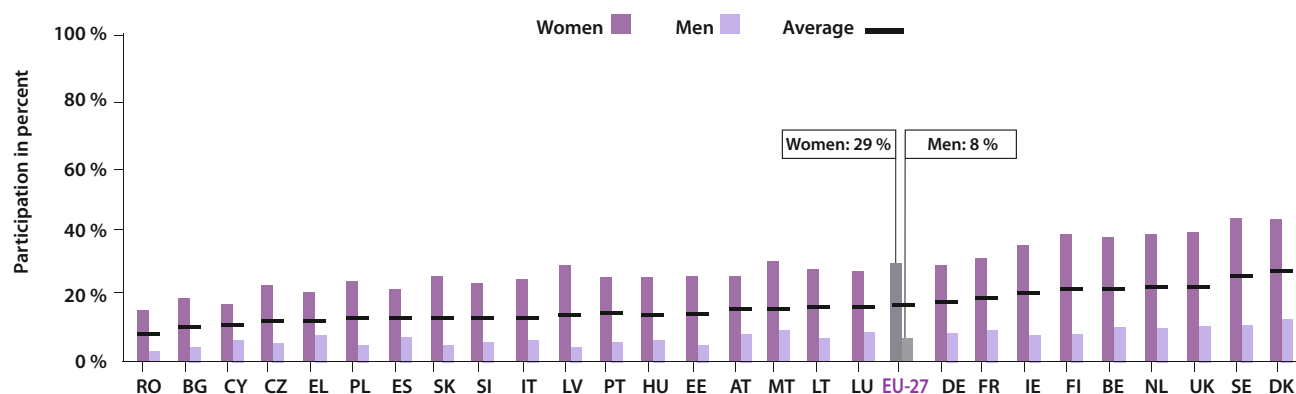
Source: Eurostat, LFS (lfsa_egan2)

An analysis of gender gaps shows that women are always over-represented in the sectors of *Education*, as well as *Human health and social work activities*. This is neither surprising, nor informative, as it is the premise upon which the indicator was built. However, what is more relevant is the size of the gender gap, which reached as much as 22 percentage points on average at EU level. The gap was narrowest in Cyprus and Romania, with 12 percentage points, and widest for Sweden with 33 percentage points (see Figure 4.6.).

Figure 4.6. Employment in the *Education* and the *Human health and social work activities* sectors by gender gap in EU Member States, 2010
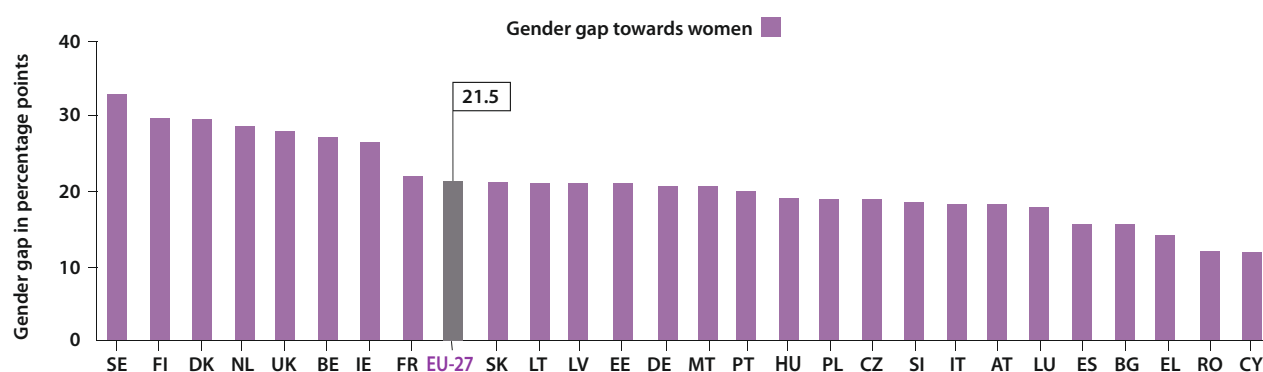
Source: Eurostat, LFS (lfsa_egan2)

4.1.4. Possibility to vary the start and/or stop of the working day for family reasons

In order to measure flexibility, as one aspect of quality of work, a gender indicator linked to work flexibility is used. It is an important indicator to consider given that women and men may need to organise their working time in different ways, largely taking into account the disproportionate responsibility for care attributed to women. Furthermore, flexibility can be strongly linked to segregation (European Commision, 2009), as some sectors are more favourable when it comes to support work-life balance. Flexibility is measured by the ability for women and men to vary the start and/or the end of the working day.

Variable definition: Employees with a non-fixed start and end of a working day or varying working time as decided by the employer (% 15–64 employed)

This indicator examines flexibility of working time by providing information on the ability of workers to have a flexible start and end of the working day (Eurostat, 2013c).

Data source: Labour Force Survey, Eurostat (lfso_10fvareco)

Periodicity: annual

Flexibility of working time favours men throughout most of the EU-27. This somewhat surprising pattern has been documented in other studies and linked to patterns of sectoral segregation in the labour market (European Commision, 2009). On average, in the EU-27, in 2010, 39% of women and 45% of men reported not having a fixed start and/or end of a working day or varying working time, as decided by an employer. Across Member States, the data shows that this, however, varies enormously. Fewer than one in five women could do so in Latvia (16%), Hungary (16%) and Bulgaria (18%), while this appeared to be available to over half of all women in Greece (51%) and Finland (57%). Corresponding figures showed a similar picture for men, with 20% in Latvia and as many as 68% in Finland (see Figure 4.7.).

Figure 4.7. Employees who do not have a fixed start and end of a working day or varying working time as decided by the employer by sex, in EU Member States, 2010
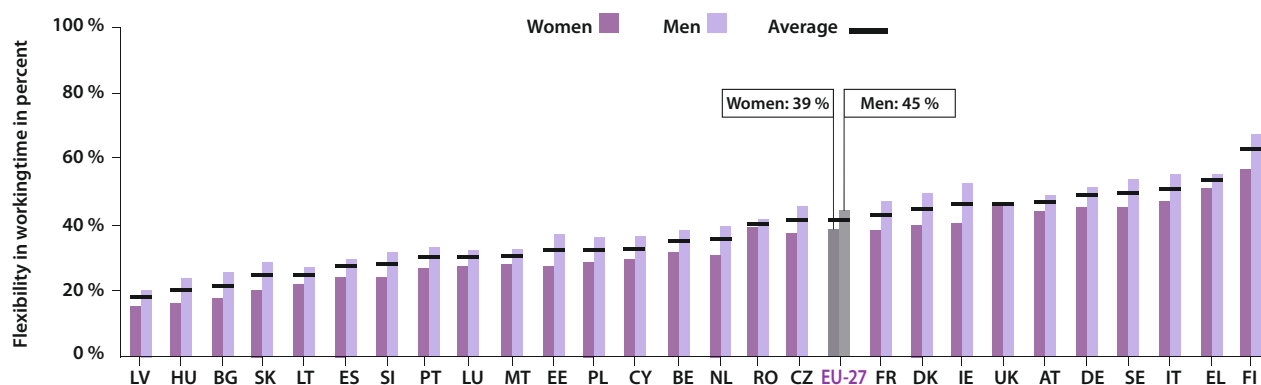
Source: Eurostat, LFS (lfso_10fvareco)

The overall gender gap, for the percentage of employees that reported not having a fixed start and end of a working day or varying working time, stood at six percentage points on average in the EU, for 2010. There were important differences across EU Member States, ranging from a gender gap in the United Kingdom that is practically inexistent to as much as 10 percentage points, to differences in Denmark and Estonia, 11 in Finland and 12 in Ireland (see Figure 4.8.).

Figure 4.8. Gender gaps in employees who do not have a fixed start and end of a working day or varying working time as decided by the employer in EU Member States, 2010
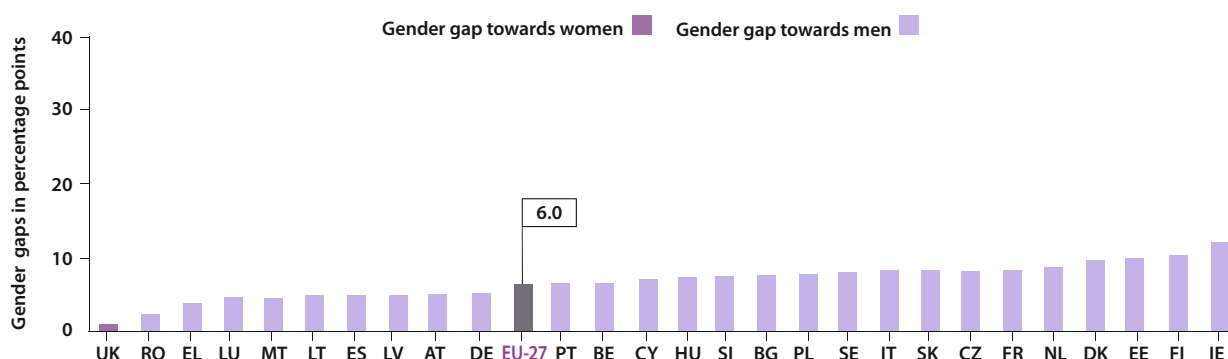
Source: Eurostat, LFS (lfso_10fvareco)

4.1.5. Health and safety risks at work

Gender gaps in health and safety at work, as a dimension of quality of work, are included in the Gender Equality Index. This issue, in gender terms, is important given that historically, sectoral segregation has meant that men were more likely to experience health and safety risks at work. It is measured by looking at the percentage of women and men who report not experiencing health and safety risks at work.

Variable definition: Workers perceiving that their health or safety is not at risk because of their work (% 15 + workers)

This indicator measures workers' self-perceived experience, over the past 12 months, of health and safety risks in their working environment (Eurofound, 2012).

Data source: European Working Conditions Survey, Eurofound

Periodicity: every five years

The data confirm that women are less likely to experience health and safety risks at work. Figure 4.9. shows that, on average in the EU, in 2010, the majority of individuals, 81 % of women and 71 % of men, did not report experiencing health and safety risks at work. For women, this ranged between 61 % of women in Latvia to 89 % in the Netherlands. The interval was much wider for men: as few as 45 % of men in Latvia and up to 84 % in Denmark.

Figure 4.9. Perceptions that health and safety is not at risk because of work by sex in EU Member States, 2010
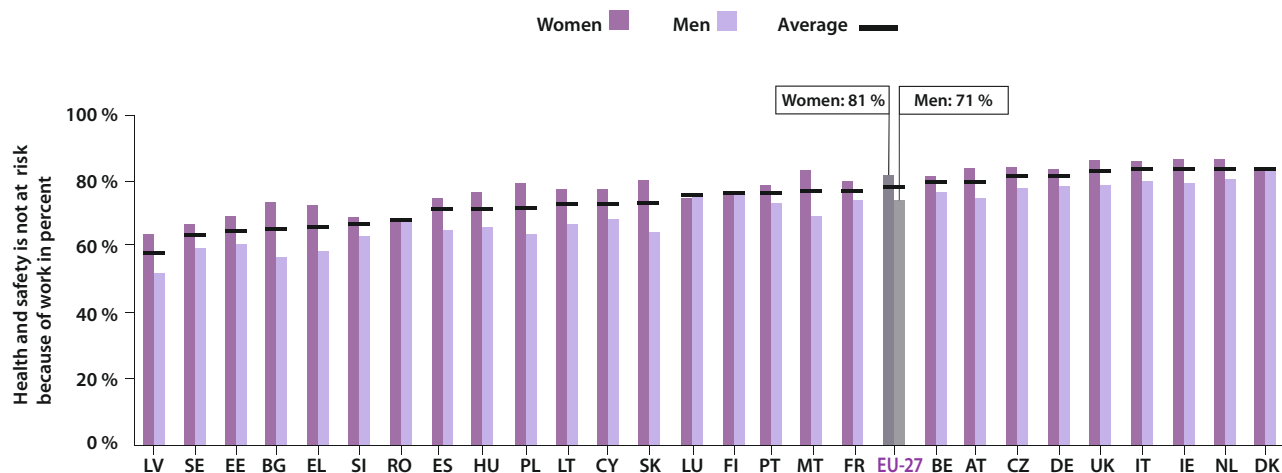
Source: Eurofound, EWCS, 2010

In 2010, in all Member States except Finland, women were less likely than men to report experiencing health and safety risks at work. This represents a percentage point difference between women and men wider than 15 percentage points in Bulgaria, Poland, Slovakia, Malta, Greece and Latvia (see Figure 4.10.).

Figure 4.10. Gender gaps in perceptions that health and safety is not at risk because of work by EU Member States, 2010
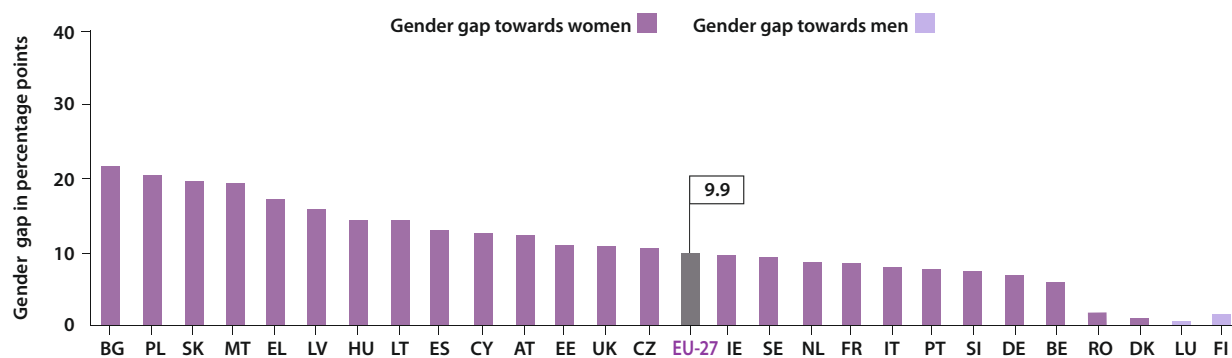
Source: Eurofound, EWCS, 2010

4.1.6. Training at work

The final indicator used in the domain of *work,* to measure gender gaps in quality of work, examines the number of women and men that have received training at work.

Variable definition: Workers having undergone training paid for or provided by their employer or by themselves if self-employed (% 15+ workers)

This variable provides information on workers' access (employees and self-employed), over the past 12 months, to employer-paid training in order to improve their skills and expertise (Eurofound, 2012).

Data source: European Working Conditions Survey, Eurofound

Periodicity: every five years

Around a third of women and men, overall in the EU-27, benefited from training paid for or provided by their employer (or themselves if self-employed), in 2010. Across Member States, the pattern is divided. Only 11 % of women and 8 % of men underwent training at work in Bulgaria, compared with as many as 50 % of men in the Netherlands and 55 % of women in Finland (see Figure 4.11.).

Figure 4.11. Gender gap in workers having undergone training paid for or provided by their employer (or themselves if self-employed) by sex in EU Member States, 2010
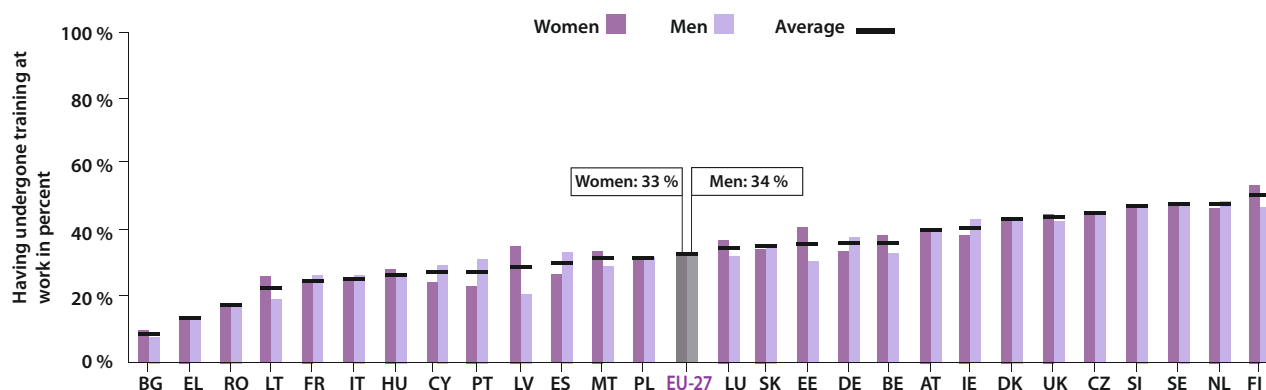
Source: Eurofound, EWCS, 2010

Although there was only a very small difference between women and men on average in the EU, in 2010, some large differences existed in some Member States. Furthermore, gender gaps were not homogenously towards either women or men. For example, as shown in Figure 4.12., women were more likely to receive training at work in Estonia and Latvia, with a percentage point difference of 10 and 15 respectively. On the other side of the spectrum, men were more likely to have received work-based training in Spain and Portugal, with a gender gap of 7 and 8 percentage points.

Figure 4.12. Gender gap in workers having undergone training paid for or provided by their employer (or themselves if self-employed) by EU Member States, 2010
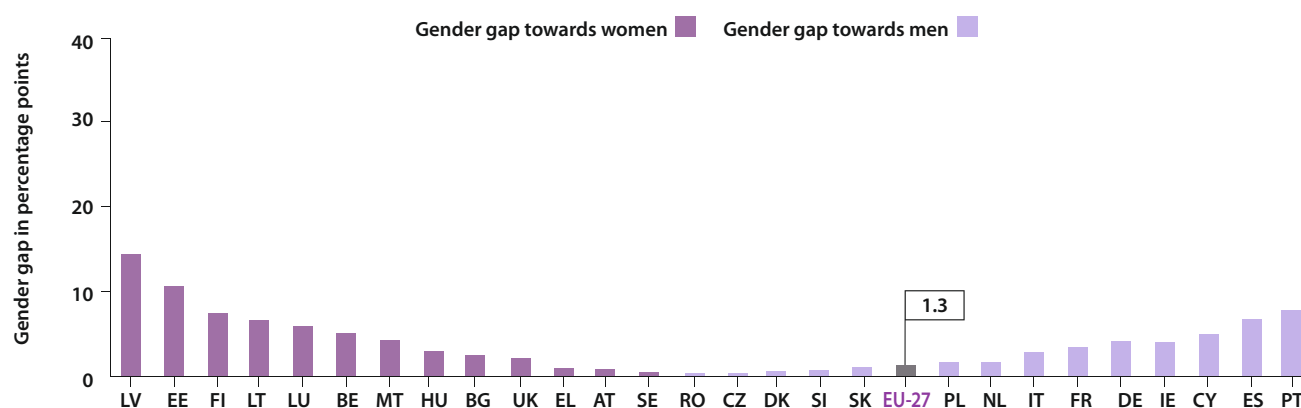
Source: Eurofound, EWCS, 2010

4.1.7. Summary

The gender indicators used by the Gender Equality Index in the domain of work, when it comes to full-time equivalent employment rate, show the extent to which women and men differ in terms of entering and working in the labour market. Not only are women less likely to participate, but throughout all EU Member States, they are also working fewer hours when they do so, and spend fewer years overall in work than men.

Gender gaps also show the extent to which sectoral segregation remains a feature of the EU labour market, with women persistently representing a strong majority of those working in typically feminised sectors such as education, health services and social work.

Notwithstanding the difficulties of measuring the multiplicity of dimensions of quality of work, the three indicators used showed a mixed picture in gender terms. On average, men in the EU, in 2010, were more likely to be able to control their working hours; however, were still more at risk when it came to health and safety at work. Training at work did not present a uniform picture favouring women, men or equality, depending on Member State.

4.2. Money

The domain of money is important in gender terms because of the need to ensure women's and men's equal rights and access to financial resources, as well as the need to address the feminisation of poverty and income inequality. This domain includes indicators that measure the gaps between the financial resources and economic situation of women and men, consisting of two measurement subdomains, matching the conceptual framework. The first sub-domain, financial resources, is measured by differences in earnings between women and men, as well as gender gaps in equivalised income. The issues of poverty and unequal income distribution form the second sub-domain and rely on indicators that measure gender gaps: those not-at-risk-of-poverty and the income quintile share ratio between poorest and richest in the population (variables and data sources are presented in Table 4.2.).

Table 4.2. Measurement framework for the domain of money

Measurement framework	Concept measured	Indicator	Source
Financial resources	Earnings	Mean monthly earnings – NACE Rev. 2, categories B-S excluding O, 10 employees or more (PPS)	Eurostat – Structure of Earnings Survey
	Income	Mean equivalised net income (PPS,16+ population)	Eurostat – EU Statistics on Income and Living Conditions
Economic situation	Poverty	Not-at-risk-of-poverty, ≥60% of median income (% 16+ population)	Eurostat – EU Statistics on Income and Living Conditions
	Income distribution	S20/S80 income quintile share (total population)	Eurostat – EU Statistics on Income and Living Conditions

4.2.1. Earnings

Differences in earnings between women and men represent the first gender indicator in the domain of financial resources. It is an important aspect to measure, as differences in earnings are directly related to gendered issues such as work and caring responsibilities.

Variable definition: Mean monthly earnings – NACE Rev. 2, categories B-S excluding O (Purchasing Power Standard)

Mean monthly earnings represent the earnings obtained by an employed person, before any tax deductions and social security contributions, payable by wage earners and retained by the employer. These are restricted to gross earnings which are paid in each pay period during the reference month (Eurostat, 2012). The indicator takes into consideration all sections of the NACE classification (B to S) with the exception of sector O, which corresponds to public administration and defence compulsory social security (Eurostat, 2008).

Data source: Eurostat calculation based on the Structure of Earnings Survey (SES), Eurostat (earn_ses10_20)

Periodicity: annual

Examining earnings shows the extent of the differences between women and men throughout the EU-27. The average monthly wage at EU level in 2010 was of 2,021 PPS for women and 2,533 PPS for men. However, earnings were as low as 713 PPS for women and 822 PPS for men monthly, in Bulgaria. In contrast, women earned 2,872 PPS in Luxembourg, and men 3,461 in Denmark (see Figure 4.13.).

Figure 4.13. Mean monthly earnings by sex in EU Member States, 2010

Women ■ Men ■ Total ▬
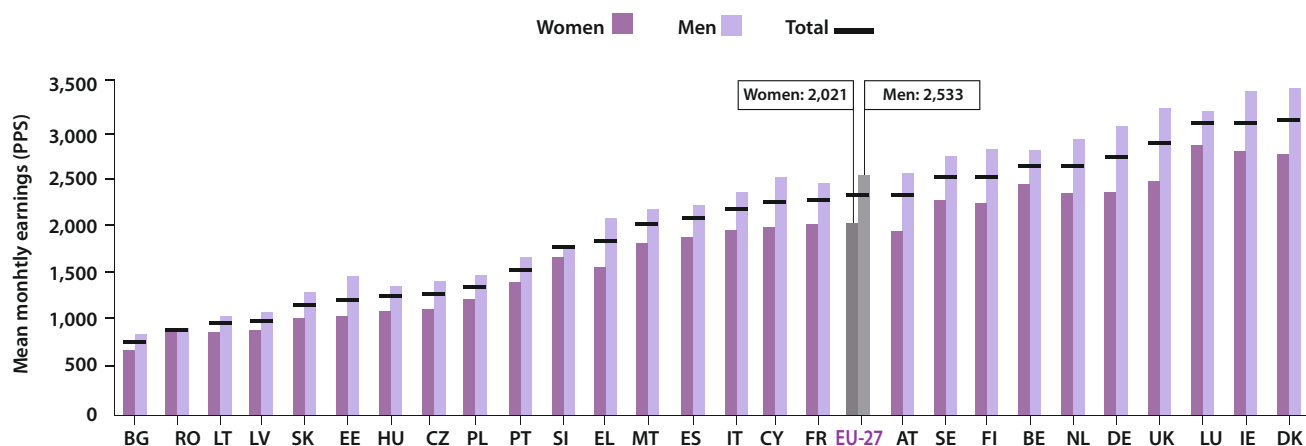
Source: Eurostat, SES (earn_ses10_20) (for EL: earn_ses06_20)

These figures correspond to a gender gap of 20% on average in the EU, in 2010. However, although the gap is below 10% in Slovenia and Romania, in Estonia it is highest at 29% (see Figure 4.14.).

Figure 4.14. Mean monthly earnings by gender gap in EU member states, 2010

Gender gap towards men ■
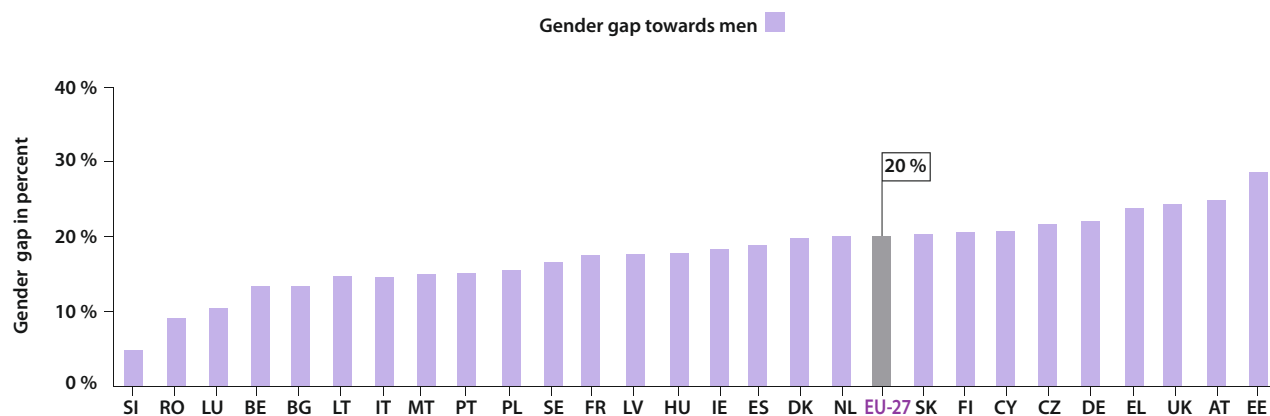
Source: Eurostat, SES (earn_ses10_20) (for EL: earn_ses06_20)

4.2.2. Mean equivalised income

In addition to pay, women also tend to have lower overall income than men, for example, in the form of financial investments or social benefits. This is measured by the second gender indicator in the domain of money, which examines differences in mean equivalised income.

As a gender indicator, it is imperfect, as it assumes that income is equally shared among household members. This is likely to seriously under-estimate the true extent of the gap in overall income as it ignores gender norms and power relations that may lead to inequalities in how the allocation of income is made. In the absence of an alternative measure of income, it nevertheless provides a good proxy to determine gender gaps in income.

Variable definition: Mean equivalised net income (PPS, 16+ population)

Mean equivalised income is calculated by dividing the total disposable income of a household (after direct taxes, social insurance contributions and other deductions made and benefits received) among household members according to an equivalence scale (Eurostat, 2013).

Data source: EU-Statistics on Income and Living Conditions, Eurostat (ilc_di03)

Periodicity: annual

In 2010, mean equivalised income for women was 16,512 PPS and 17,367 PPS for men on average, in the EU. As shown in Figure 4.15., mean equivalised net income (in PPS) of individuals in the EU Member States varied considerably, and women in 2010, without exception, had a lower income compared with men. Romania had the lowest income, with 4,204 and 4,270 PPS for women and men respectively. This is to be compared with incomes more than seven times as large in Luxembourg, with 30,222 PPS for women and 31,627 PPS for men.

Figure 4.15. Mean equivalised income by sex in EU Member States, 2010
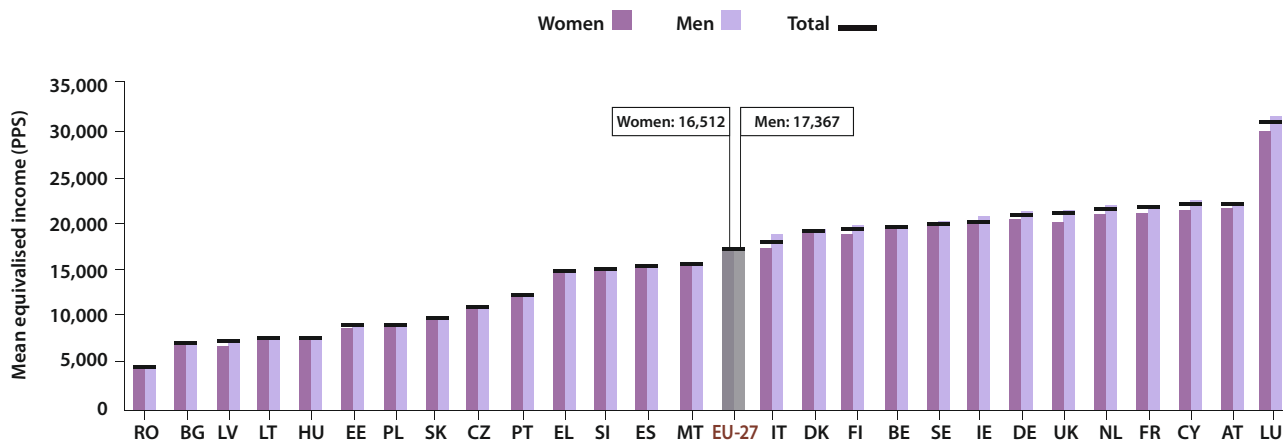
Source: Eurostat, EU-SILC (ilc_di03)

Overall, at EU level, the average gap between women and men was 5 %. It reached as much as 6 % in Estonia and the United Kingdom, but was only of 2 % in Romania, Poland and Spain (see Figure 4.16.).

Figure 4.16. Gender gap in mean equivalised income in EU Member States, 2010
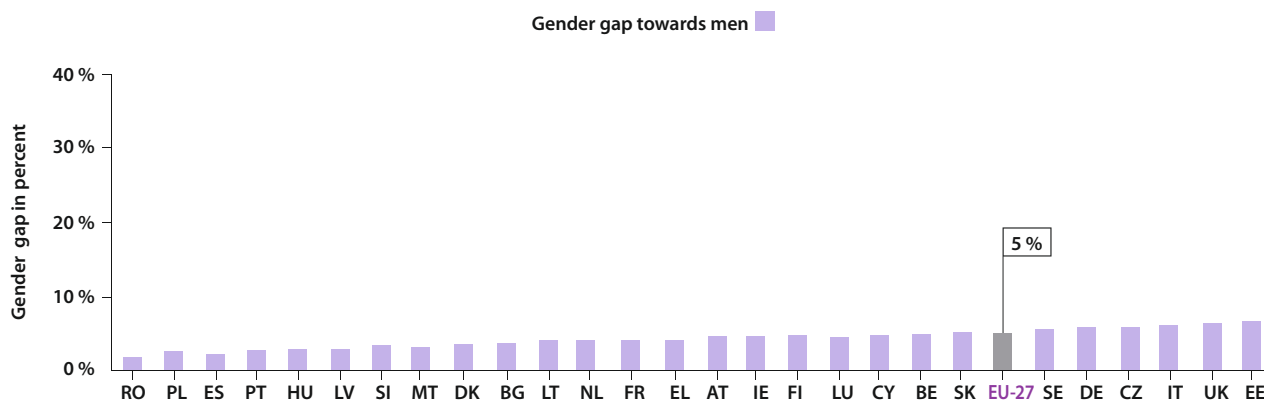
Source: Eurostat, EU-SILC (ilc_di03)

4.2.3. Not-at-risk-of-poverty

The feminisation of poverty, that is women's greater propensity to be affected by poverty, is a crucial area of gender equality throughout the EU. In terms of gender equality, it is therefore pertinent to include an indicator that provides information on the percentage of women and men that are not at risk of poverty.

Variable definition: Not-at-Risk-of-Poverty, ≥60 % of median income (% 16+ population)

This indicator is defined as the percentage of individuals with an equivalised disposable income (after direct taxes and social transfers) that is equal to or above the at-risk-of-poverty threshold, set at 60 % of the national median equivalised disposable income. It is looking at the percentage of individuals that are therefore not considered to be at-risk-of-poverty. Although this indicator provides a measure linked to poverty, it does not provide a direct assessment of poverty as a relative measure of the percentage of individuals on low income, in comparison to other residents in that country does not necessarily imply

a low standard of living (Eurostat, 2013). Given that the calculation of this indicator is based on dividing income among household members, using an equivalised scale, it also presents shortcomings in that it may underestimate the true extent of the existing gender gap (headline indicator of Europe 2020 and included within the framework of the Beijing Platform for Action indicators, see Annex 5).

Data source: EU-Statistics on Income and Living Conditions, Eurostat (ilc_li02)

Periodicity: annual

The difference between women and men that were not-at-risk–of-poverty in 2010, at the EU level, is small, with men slightly more likely not to be at-risk-of-poverty than women. In 2010, 83 % of women were not at-risk-of-poverty compared to 85 % of men. Furthermore, the proportion of both women and men were not at-risk-of-poverty has hardly changed in the period between 2000 and 2010. The small scale of the difference between women and men at EU level hides some important national differences.

Figure 4.17. Individuals not-at-risk-of-poverty by sex in EU Member States, 2010
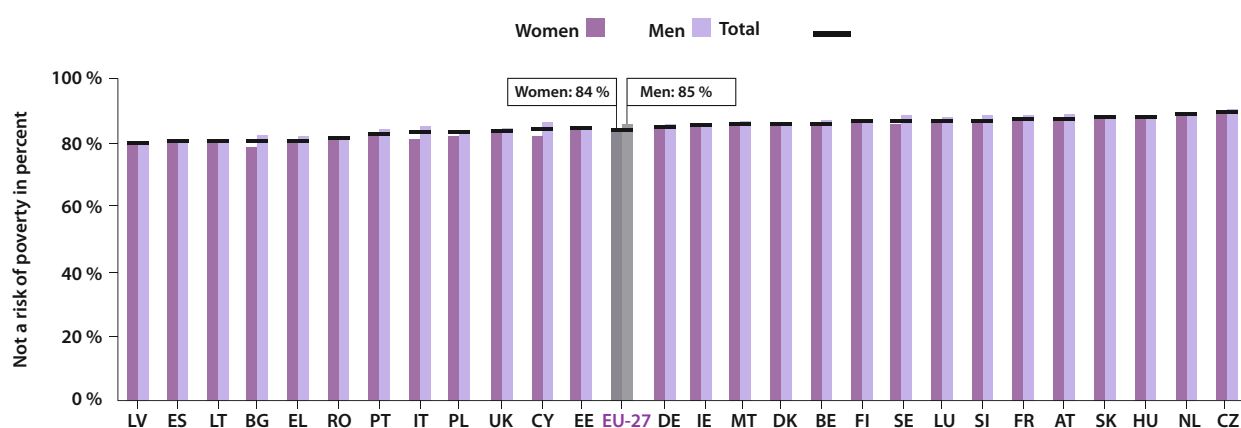
Source: Eurostat, EU-SILC (ilc_li02)

Not being at-risk-of-poverty is heavily influenced by where individuals are located among EU Member States. As shown in Figure 4.17., in 2010, women were slightly more likely not to be at-risk-of-poverty than men in Lithuania and Ireland, with no gender gaps in a further three Member States (HU, LV and DK). In all other Member States, the risk of poverty worked to the detriment of women. The gap was highest in Slovenia, Bulgaria and Cyprus, where it reached a 4 percentage point difference (see Figure 4.18.).

Figure 4.18. Gender gap in individuals not-at-risk-of-poverty in EU Member States, 2010

Gender gap towards women ■   Gender gap towards men ■
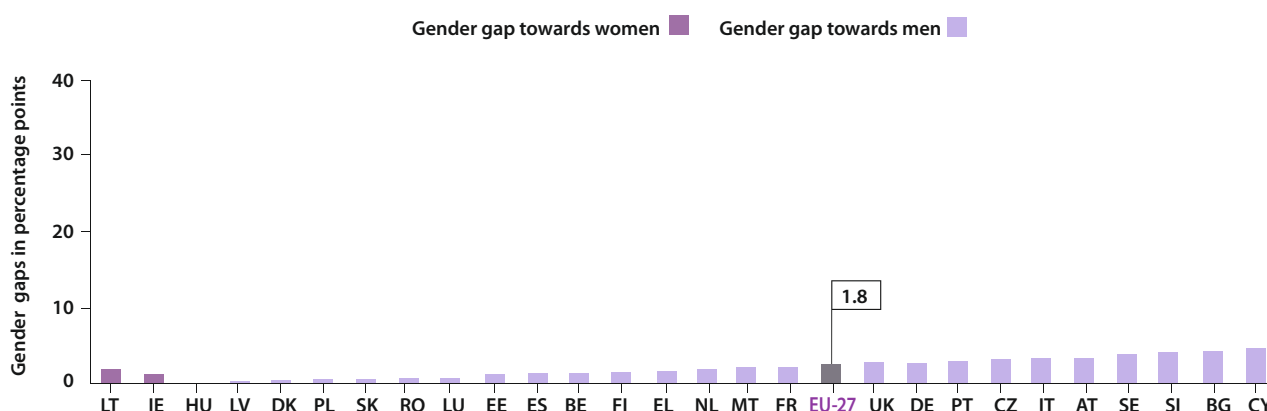
Source: Eurostat, EU-SILC (ilc_li02)

4.2.4. Income distribution

Poverty is one facet of the lack of equality in society in terms of income distribution. The second gender indicator, used in the sub-domain of economic situation, focuses on differences between the wealthiest and poorest women and men in society. As above, this indicator is calculated on the basis of mean equivalised income, and may therefore underestimate the true extent of gender gaps in income distribution.

Variable definition: S20/S80 income quintile share (total population)

This indicator is a reversal of the income quintile share ratio (S80/S20), and also provides a measure of differences in income distribution. The original indicator (S80/S20) is obtained by dividing the total income received by the top quintile (the 20 % of women and men that receive the most income) by the total income of the bottom quintile (the 20 % of women and men that receive the least income) (Eurostat, 2013). As indicators need to provide a measure of equality, rather than difference, the indicator is reversed by taking the ratio S20/S80 before inclusion in the Index.

Data source: EU-Statistics on Income and Living Conditions, Eurostat (ilc_di11)

Periodicity: annual

Income distribution tended to be slightly more equal among women than men overall, with on average in the EU-27, the bottom quintile of men receiving 20.0 % of the income of the top quintile, compared with 20.4 % for women. Income distribution throughout the EU-27 ranged from the poorest quintile of women receiving 15 % of the income of the richest women in Spain, to 30 % in Hungary. Corresponding figures for men ranged from 12 % in Lithuania to 29 % in Slovenia (see Figure 4.19.).

Figure 4.19. Income distribution (S20/S80) ratio of the bottom and top quintiles by sex in EU Member States, 2010
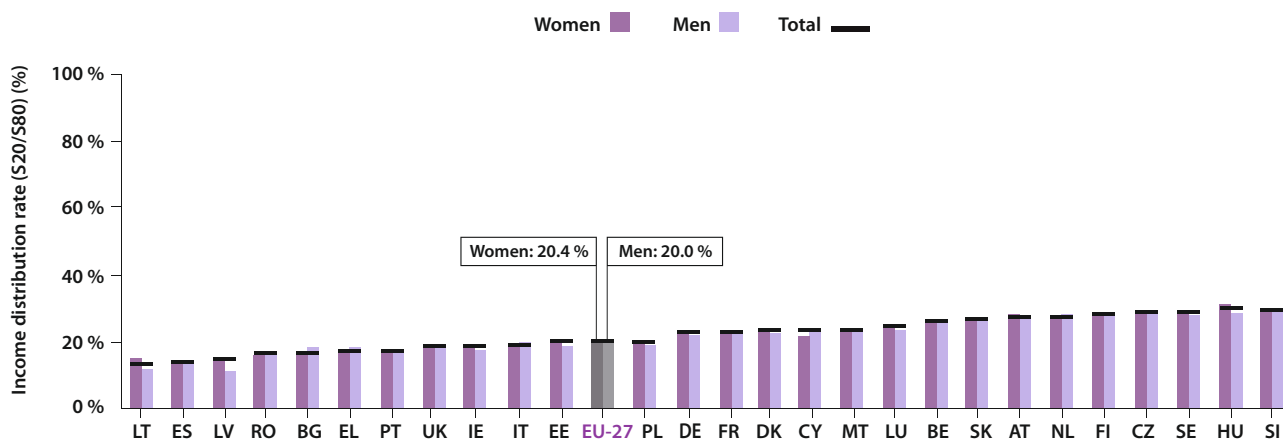
Source: Eurostat, EU-SILC (ilc_di11)

Gender gaps in income distribution were practically non-existent on average at EU level in 2010. However, across Member States, there was more heterogeneity in gender gaps. In Latvia and Lithuania, for example, income equality was higher among women than men, with over two percentage point difference. However, in Cyprus, the opposite was true, with slightly lower income equality among women than men (1.5 pp).

Figure 4.20. Income distribution (S20/S80) ratio of the bottom and top quintiles by sex in EU Member States, 2010
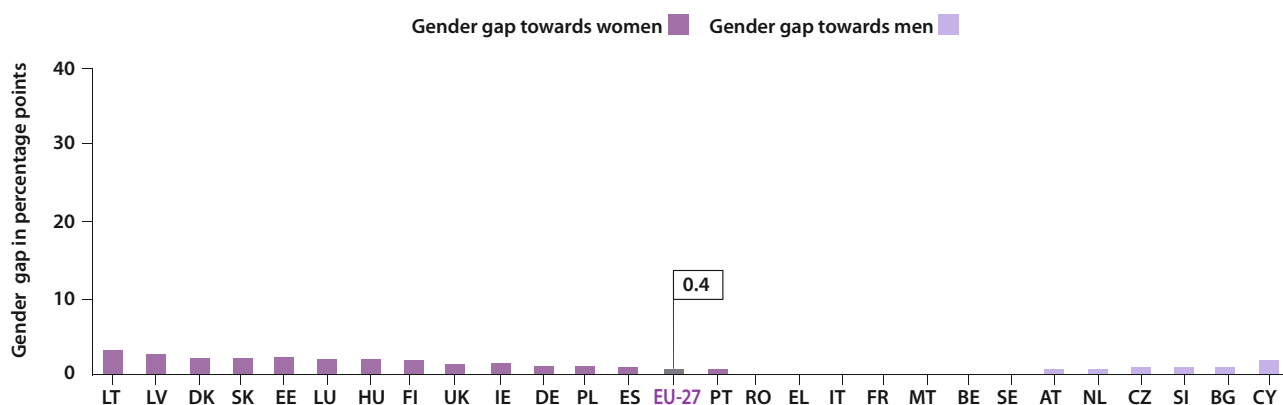
Source: Eurostat, EU-SILC (ilc_di11)

4.2.5. Summary

Unequivocally, a gender analysis of gender gaps in the domain of *money* shows that women are, with few exceptions, disadvantaged compared to men. In 2010, throughout the EU-27, women earned less than men, with progress in closing the gender gap painstakingly slow. Across EU Member States, mean equivalised disposable income was also lower for women than for men. As a result, women on average were more likely than men to be at-risk-of-poverty. Finally, income inequalities were sightly more pronounced among men than women in the majority of Member States.

The domain of *money* showed the more precarious situation of women throughout the EU in terms of acquired financial resources and as a result their economic situation. However, caution should be exercised in analysing gender indicators which calculations are based on equivalised income as they are measured at household level and are likely to underestimate the true extent of the gender gap. This underestimation is largely due to the fact that the calculation assumes that income is shared equally among all members of the household, thereby ignoring possible gender and power relations that may result in further disparities in the allocation of income. However, in the absence of a more suitable measure, these gender indicators provide a pertinent assessment of gender gaps in the domain of *money*.

4.3. Knowledge

The domain of *knowledge* examines differences between women and men in education and training. This includes ensuring equal access and attainment, eliminating gender segregation in education fields and promoting lifelong learning for both women and men. In line with the results of the multivariate analysis (Section 3), indicators for educational attainment and segregation have been merged into one sub-domain (see Table 4.3.).

This combination is not surprising, because notwithstanding differences between the two concepts, they are highly inter-related. It is measured by two cross-sectional gender indicators that examine the percentage of women and men that have attained a tertiary level of education and segregation in educational fields. The second sub-domain matches the conceptual framework and covers the area of lifelong learning. It is measured by an indicator looking at participation in formal or non-formal education and training.

Table 4.3. Measurement framework for the domain of knowledge

| Measurement framework	Concept measured	Indicator	Source
Educational attainment and segregation	Tertiary education	Graduates of tertiary education (% 15–74 population)	Eurostat – Structure of Earnings Survey
	Segregation	Tertiary students in the fields of Education, Health and Welfare, Humanities and Arts (ISCED 5–6) (% tertiary students)	Eurostat – UNESCO/OECD/Eurostat (UOE) questionnaires on Educational Statistics
Lifelong learning	Lifelong learning	People participating in formal or non-formal education and training (% 15–74 population)	Eurostat – EU Labour Force Survey

4.3.1. Tertiary education

The gender gaps present in tertiary education are complex, and important to monitor, given that they are indicators of a change in society, with women now outnumbering men among university graduates.

Variable definition: Graduates of tertiary education (% 15–74 population)

This indicator measures educational attainment, defined as the percentage of people aged 15–74 that have attained a given educational level, as measured by International Standard Classification of Education (ISCED) (Eurostat, 2013). This indicator focuses on educational attainment for ISCED levels 5 and 6, which represents those who have achieved the first or second stage of tertiary education (Eurostat,

2013) (corresponds to Europe 2020 headline indicators, see Annex 5).

Data source: EU Labour Force Survey, Eurostat (edat_lfs_9903)

Periodicity: annual

The percentage of women and men at EU level who have attained tertiary level education has increased markedly in the space of a decade. In 2000, 15 % of women and 17 % of men had reached tertiary education, compared with 22 % and 21 % in 2010 respectively. The attainment rate for women in 2000 was 2 percentage points lower than that of men; however, since 2008, there has been a reversal in the gender gap leading to a rate for men that is, in 2010, 1 percentage point lower than that of women's.

Figure 4.21. Population having attained first and second stage of tertiary education (levels 5 and 6 ISCED) by sex in EU Member States, 2010
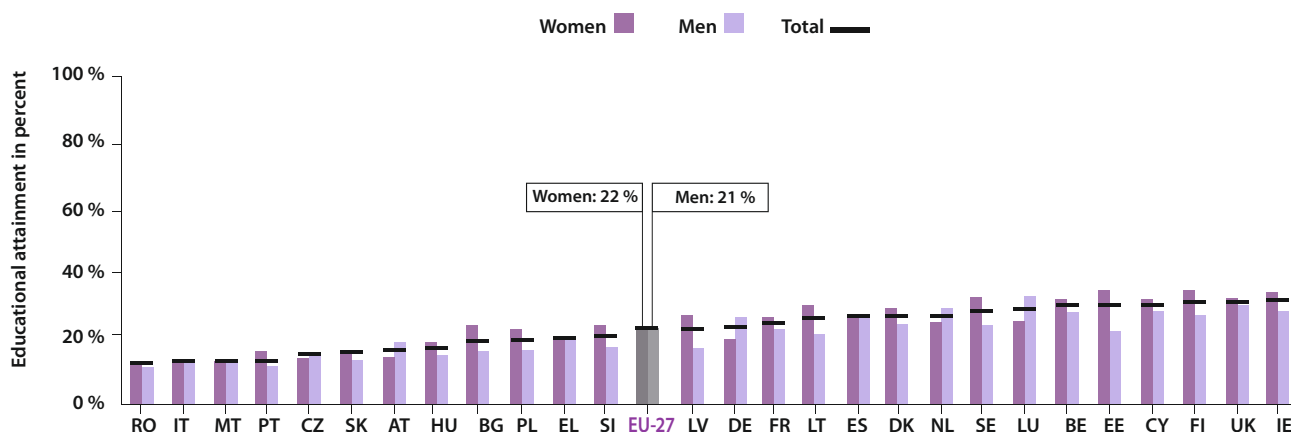
Source: Eurostat, LFS (edat_lfs_9903)

The EU level analysis masks some wide gender differences at member states level. In 2010, as few as 11 % of women reached tertiary level education in Romania and 10 % of men in Portugal. Fewer than one in six women reached this level in Austria, the Czech Republic, Malta, Romania, Slovakia, Portugal and Italy. The situation was mirrored for men in the Czech Republic, Malta, Romania, Italy, Slovakia, Hungary, Portugal and Bulgaria, showing a clear imbalance for men in terms of educational attainment. The gender gap reaches 7 percentage points towards men in Germany (26 % for men; 19 % for women) and Luxembourg (32 %; 25 %). However, in most Member States, the gender gap operates to the detriment of men with a gap as wide as 14 percentage points in Estonia (36 % for women; 22 % for men) or nearly 10 percentage points in Latvia (26 % for women; 17 % for men) (see Figure 4.21. and Figure 4.22.).

Figure 4.22. Gender gap in population having attained first and second stage of tertiary education (levels 5 and 6 ISCED) in EU Member States, 2010
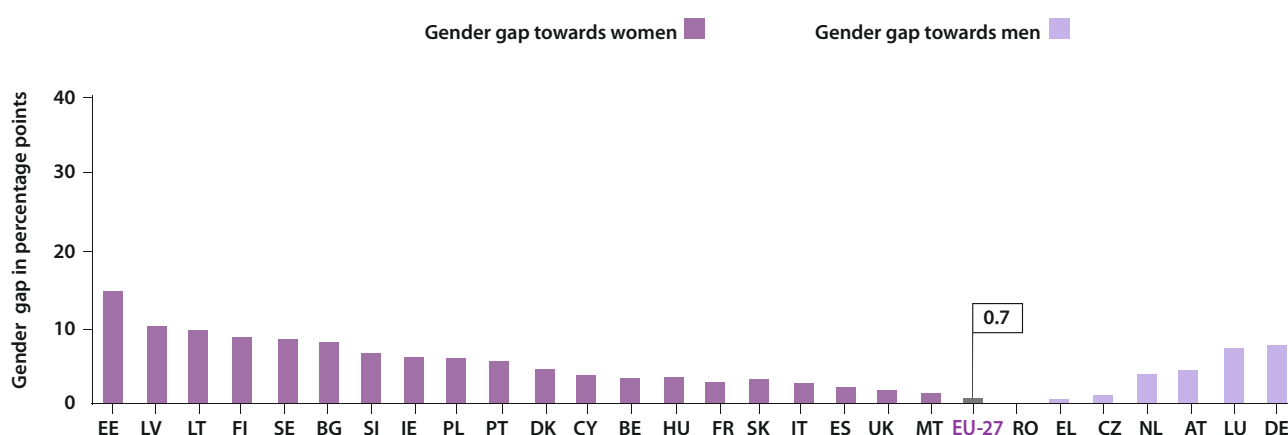
Source: Eurostat, LFS (edat_lfs_9903)

4.3.2. Segregation

Patterns of segregation in educational fields remain very widespread in the EU, with some very strong under and over-representations in some disciplines. Consequences of these patterns include greater gender gaps in labour market segregation, as well as pay.

Variable definition: Tertiary students in the fields of *Education, Health and welfare, Humanities and arts* (ISCED 5–6) (% tertiary students)

This variable refers to students who are attending the first and second stage of tertiary education by field of education, following the International Standard Classification of Education – ISCED (Eurostat, 2013). It takes into account participation in the most feminised fields in 2010, which include health and welfare, as well as teacher training and education science (headline indicator of Europe 2020, see Annex 5).

Data source: UNESCO/OECD/Eurostat (UOE) questionnaires on educational statistics, Eurostat (educ_enrl5)

Periodicity: annual

An analysis of gender representation of these fields is telling. In the EU-27 in 2010, women were over-represented in the educational fields of *education* (77 %) or *Health and welfare* (74 %) (see Figure 4.23.). In all Member States, with the exception of Greece, women represented over 70 % of students enrolled in the field of *Education* (as much as 92 % in both EE and IT, 93 % in RO), and without exception represent well above 60 % of students enrolled in the fields of *Health and welfare* (up to 88 % in EE). See Annex 7 for detailed figures of participation in educational fields at Member State level.

On the contrary, at EU level in 2010, women were greatly under-represented in the field of *Engineering, manufacturing and construction* (25 %). Across Member States, women usually represented much less than a third of students enrolled in *Engineering, manufacturing and construction* (as low as 16 % in IE). Although women represented 38 % of those studying in the field of *Science, mathematics and* *computing* in 2010, on average in the EU-27, an analysis at Member State level shows a more nuanced picture. Women were greatly under-represented in some Member States, such as the Netherlands (20 %) or Belgium (29 %), however, differences are small or inexistent in other Member States, including Sweden (42 %), Portugal (46 %), Bulgaria (47 %), Malta (47 %), Italy (52 %) or Romania (53 %).

Figure 4.23. Tertiary students (ISCED 5–6) by field of education and sex in EU-27, 2010
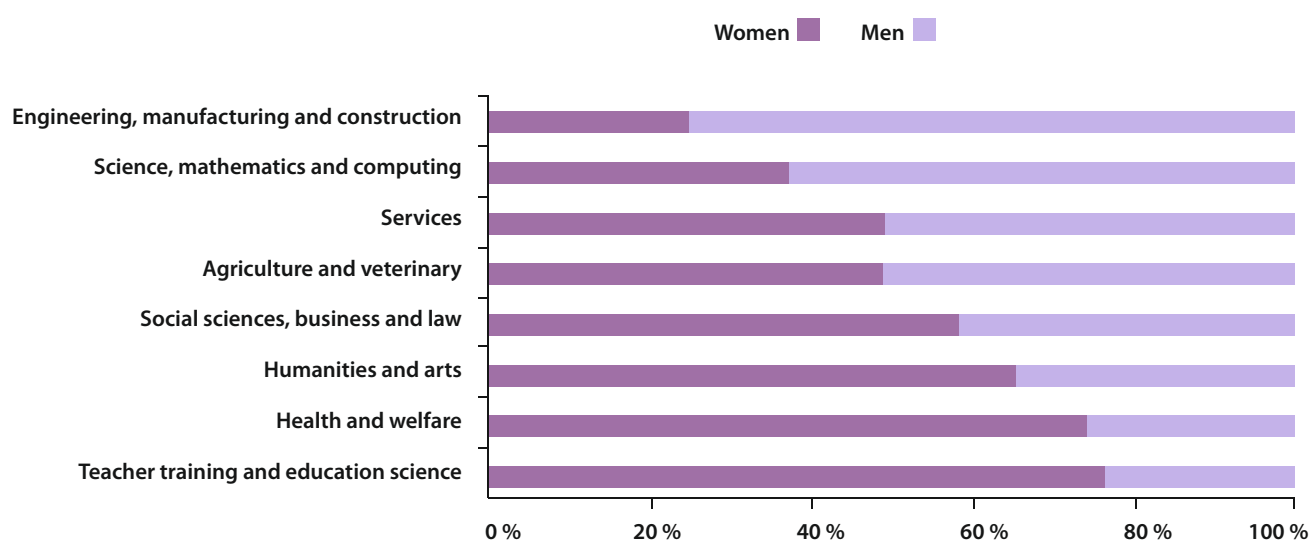
Source: Eurostat, Education Statistics (educ_enrl5)

The gender indicator used to compute the Gender Equality Index consists of measuring gender gaps between the three most feminised educational sectors, namely *Teacher training and education science*, *Health and welfare, and Humanities and arts*. On average, throughout the EU-27, in 2010, the participation rate of women in these fields was double that of men, with 44 % and 22 % participation respectively. Although only 20 % of women were involved in those fields in Romania, in other Member States participation concerned more than half of women, including in Finland (50 %), Ireland (50 %), the Netherlands (51 %), the United Kingdom (53 %), Belgium (53 %), Germany (54 %), Sweden (54 %) and Denmark (58 %). Men's participation in these educational sectors never exceeded a third, ranging between 12 % in Latvia and Romania and 31 % in Malta (see Figure 4.24.).

Figure 4.24. Participation in the educational fields of *Teacher training and education science, Health and welfare, Humanities and arts* by sex in EU Member States, 2010
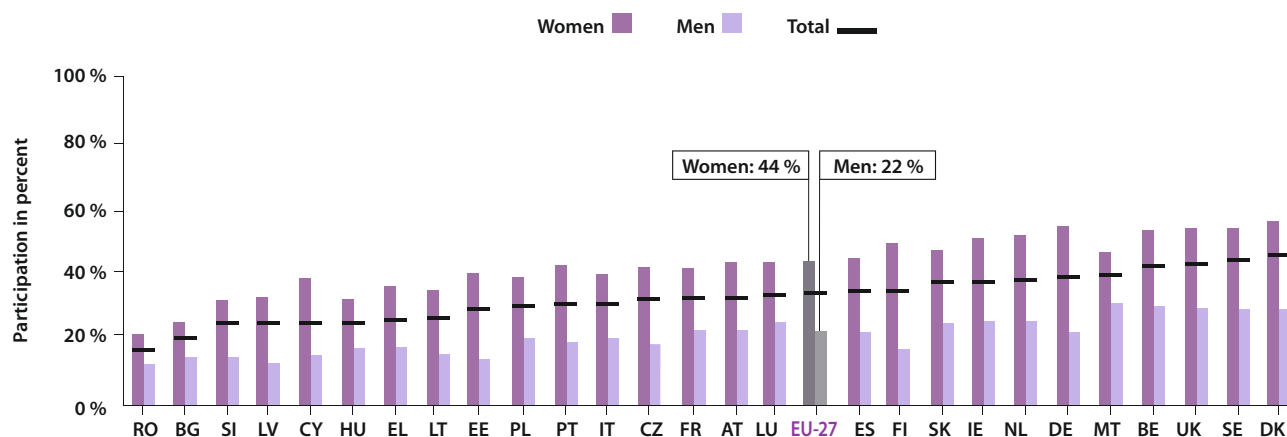
Source: Eurostat, Education Statistics (educ_enrl5)

Gender gaps in educational fields of studies across Member States, were by construction of the indicator, always towards women. The relevant and important information is therefore that of the width of this gender gap. At EU level in 2010, the difference in participation in these fields was 22 percentage points. Figure 4.25. shows that across Member States, gender gaps were as small as 9 or 11 percentage points in Romania and Bulgaria respectively, with the biggest gaps above 30 percentage points in Germany or Finland.

Figure 4.25. Gender gap in participation in the educational fields of Teacher training and education science, Health and welfare, Humanities and Arts in EU Member States, 2010.
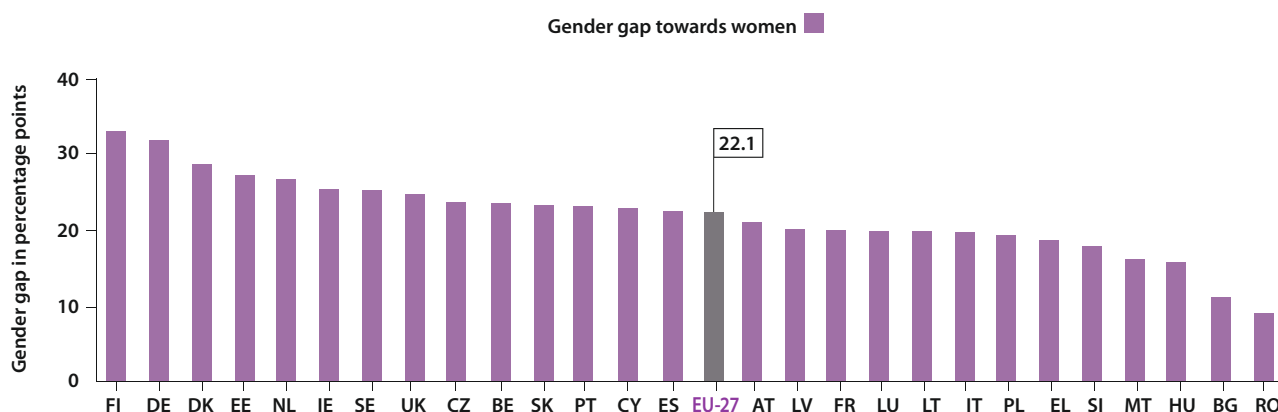
Source: Eurostat, Education Statistics (educ_enrl5)

4.3.3. Formal and non-formal education and training

Lifelong learning is a key driver of economic participation and social inclusion, following on from initial education and training. From a gender perspective, it is important as it contributes to greater gender equality in economic participation, access to economic resources and empowerment (UNECE, 2013).

Variable definition: People participating in formal or non-formal education and training (% 25–64 population)

This indicator considers women and men's participation in formal or non-formal education and training. As this indicator relates to persons aged 25 to 64, it predominantly relates to the learning that takes place after an initial period of formal education.

Data source: Labour Force Survey, Eurostat (trng_lfs_09)

Periodicity: annual

Involvement in formal and non-formal learning suggests that a large proportion of Member States do not meet the Europe 2020 target of 15 % of adults (aged 25 to 64) participating in lifelong learning.

In 2010, an average of 17 % of women and 16 % of men participated in formal or non-formal education and training in the EU-27. Participation was highest in the Nordic countries, including 39 % of individuals in Denmark (45 % of women and 33 % of men), 30 % in Sweden (36 % of women and 25 % of men) and 29 % in Finland (33 % of women and 26 % of men). However, participation remained below 15 % for women and men respectively, in 10 Member States (BG, RO, EL, HU, PT, SK, MT, IT, LV and IE) (see Figure 4.26.).

Figure 4.26. Participation in formal or non-formal education and training by sex in EU Member States, 2010
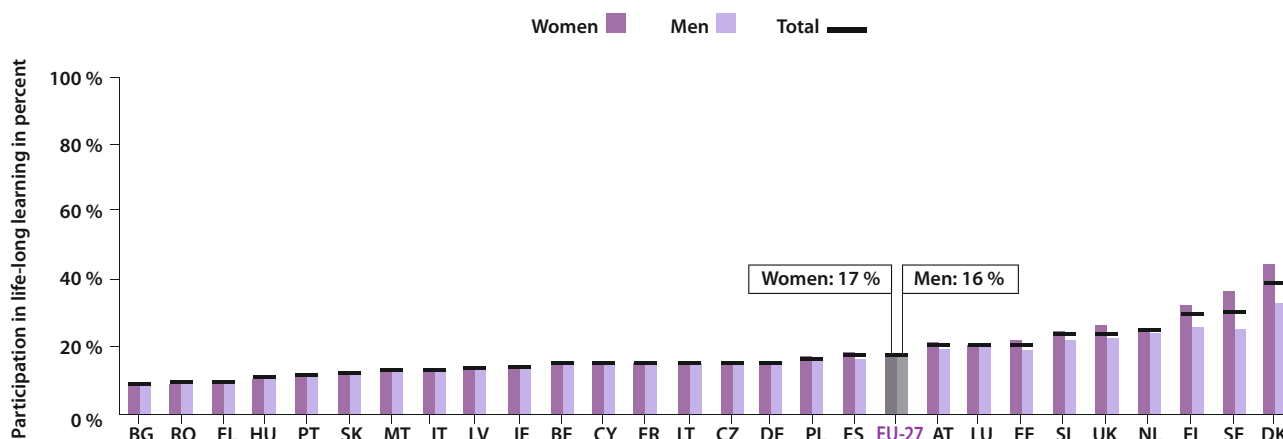
Source: Eurostat, LFS (trng_lfs_09)

For the majority of Member States, in 2010, the gender gap was small or non-existent, particularly where participation was lowest. Higher participation therefore coincided with larger gender gaps, with a disproportionately greater number of women in Finland (7 percentage points), Sweden (11 percentage points) and Denmark (12 percentage points) (see Figure 4.27.).

Figure 4.27. Gender gap in participation in formal or non-formal education and training in EU Member States, 2010
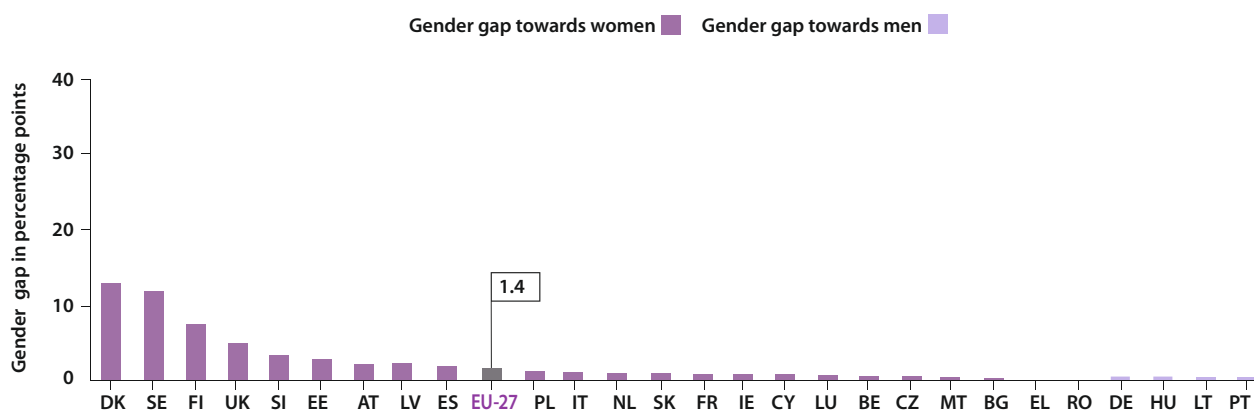
Source: Eurostat, LFS (trng_lfs_09)

4.3.4. Summary

The majority of gaps in other domains act to the detriment of women; however, in knowledge the situation is more nuanced. Participation rates in tertiary education have reversed, and men have now become a minority. This is bound to have implications for the labour market and the economy and society in general, in the long run. It is crucial to begin to think about what this reversal in trends will mean for the gender equality landscape of the future.

What remain largely unchanged are the gender-based patterns of segregation throughout Member States, with greater under-representation of women and men in certain fields, such as education for men or engineering, manufacturing and construction for women. It is important to monitor segregation, given that it translates into gender inequality patterns at the level of labour market participation and society more generally.

Finally, there is very uneven participation in lifelong learning across the EU-27. As identified by the strategic framework for European cooperation in education and training (ET 2020), lifelong learning needs to be priority, as it contributes greatly to employment, economic success and the full participation of women and men in society. However, in the majority of Member States, only a minority of women and men participated in learning and training. In the few Member States where participation is higher, gender gaps indicate that this is disproportionately women who do so.

4.4. Time

The domain of *time* attempts to capture the gendered nature of the allocation of the time spent between *economic, care* and *social activities*. It is important from a gender perspective, given the imperative to ensure a better integration of work and life for women and men. It should be noted that there exists a strong trade-off between all types of activities (Miranda, 2011), meaning that measuring two types of activities is itself indicative of how individuals divide their time. Furthermore, as some gender indicators already measure aspects of participation in the labour market, in the domain of *work*, no further gender indicators have been adopted for the sub-domain of e*conomic activities*.

The domain of time is therefore measured by two sub-domains (see Table 5). The first sub-domain, care activities, considers gaps between women and men workers' involvement in caring and educating their children or grandchildren, as well as their involvement in cooking and housework. As for the sub-domain looking at social activities it measures gender gaps in involvement in sporting, cultural or leisure activities, combined with involvement in volunteering and charitable activities.

Table 4.5. Measurement framework of the domain of time

Measurement framework	Concept measured	Indicator	Source
Care activities	Childcare activities	Workers caring for and educating their children or grandchildren, everyday for one hour or more (% 15+ workers)	Eurofound – European Working Conditions Survey
	Domestic activities	Workers doing cooking and housework, everyday for one hour or more (% 15+ workers)	Eurofound – European Working Conditions Survey
Social activities	Sport, culture and leisure activities	Workers doing sporting, cultural or leisure activities outside of their home, at least every other day (% 15+ workers)	Eurofound – European Working Conditions Survey
	Volunteering and charitable activities	Workers involved in voluntary or charitable activities, at least once a month (% 15+ workers)	Eurofound – European Working Conditions Survey

4.4.1. Care and education of children and/or grandchildren

Differences between women and men in the distribution of care activities (Eurofound, 2012), as dictated by gender roles, remain prevalent and have been repeatedly linked to the lack of progress made in terms of achieving greater gender equality (Esplen, 2009). The second gender indicator used in measuring gaps in care activities examines the involvement of women and men in the care and education of children and/or grandchildren, every day for an hour or more.

Variable definition: Workers caring for and educating their children or grandchildren, every day for one hour or more (% 15+ workers)

This indicator measures women and men workers' involvement in activities of caring and educating children outside of their work, every day for one hour or more (Eurofound, 2012).

Data source: European Working Conditions Survey, Eurofound.

Periodicity: every five years

There were important differences in the involvement of women and men in the care and education of children and/or grandchildren in 2010, with an EU average of 41 % for women and 25 % for men. Men's involvement ranged from 12 % in Bulgaria to a maximum of 42 % in Denmark. For women, involvement ranged from 25 % in Finland to 55 % in Cyprus (see Figure 4.28.).

Figure 4.28. Involvement in the care and education of children and/or grandchildren every day for an hour or more by sex in EU Member States, 2010

Women ■ Men ■ Total ▬
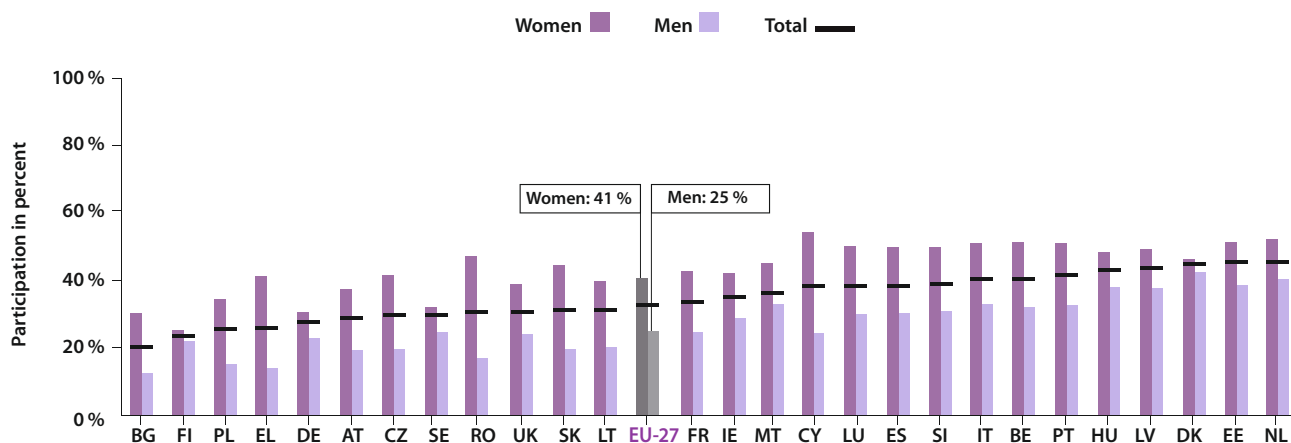
Source: Eurofound, EWCS

The data shows clearly that women remained disproportionately responsible for the care and education of children and grandchildren with an average percentage point difference of 16, in the EU-27, in 2010. Although the gender gap was relatively small in some Member States, with a 4 percentage point difference in Denmark, Finland and Sweden, in other countries important gender gaps prevailed. Differences were most important in the Czech Republic, Slovakia, Greece, Romania and Cyprus (see Figure 4.29.).

Figure 4.29. Gender gap in involvement in the care and education of children and/or grandchildren, every day for an hour or more in EU Member States, 2010

Gender gap towards women ■
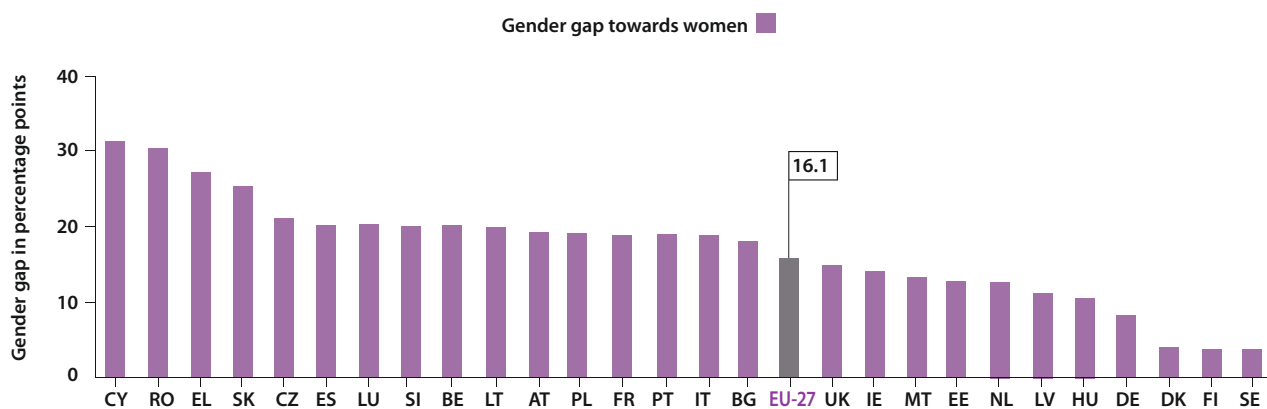
Source: Eurofound, EWCS

4.4.2. Cooking and housework

Wide differences between women and men exist in terms of time spent on domestic tasks, such as cooking and housework. It is an important area to monitor as it is linked to gender roles in society (Sironi and Mencarini, 2009).

Variable definition: Workers doing cooking and housework, every day for one hour or more (%15+ workers)

This indicator measures women and men workers' involvement in cooking and housework activities, every day for one hour or more (Eurofound, 2012).

Data source: European Working Conditions Survey, Eurofound.

Periodicity: every five years

The mean hours per day spent on cooking and housework across the EU-27 Member States, in 2010, ranged between just over half an hour for men and nearly two hours for women (see Figure 4.30.). Differences between women and men are manifest: women spend more than two hours on average on cooking and housework, in 10 Member States (SI, RO, UK, NL, PL, PT, IE, ES, CY and MT). However, although men in Sweden spend just over an hour on these activities, in all other Member States, the average number of hours is below one, reaching less than half an hour in 10 Member States (EL, BG, IT, SK, RO, CY, MT, AT, CZ and HU).

Figure 4.30. Involvement in cooking and housework, every day for an hour or more, by sex in EU Member States, 2010
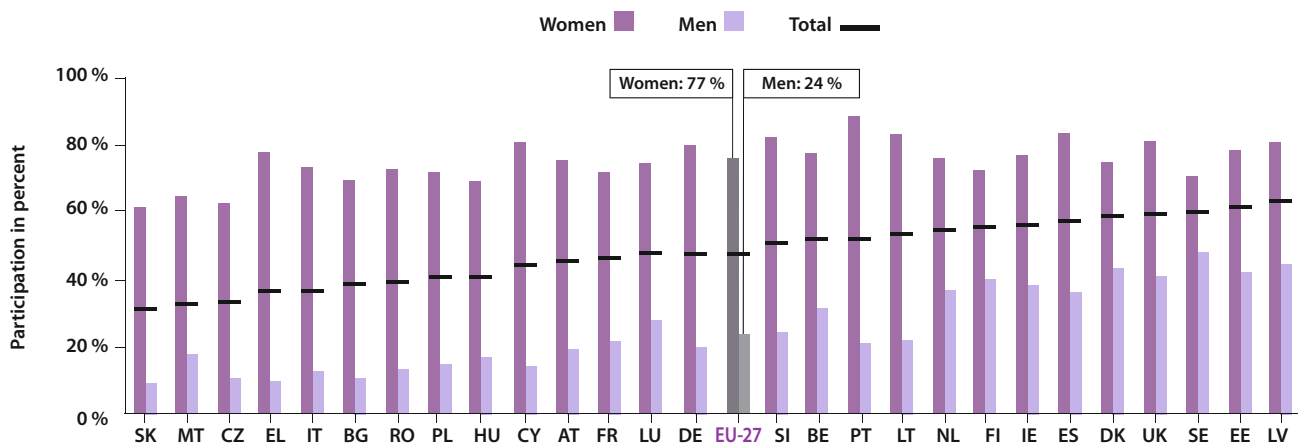
Source: Eurofound, EWCS

Women spent a greater number of hours per day on cooking and housework across all Member States. On average, throughout the EU-27, in 2010, women spent 1.3 additional hours daily compared with men. This gender gap was smallest, below one hour, in Estonia, Latvia, Denmark, Finland and Sweden; however, it reached over two hours in Malta (see Figure 4.31.).

Figure 4.31. Gender gap in Involvement in the cooking and housework, every day for an hour or more in EU Member States, 2010
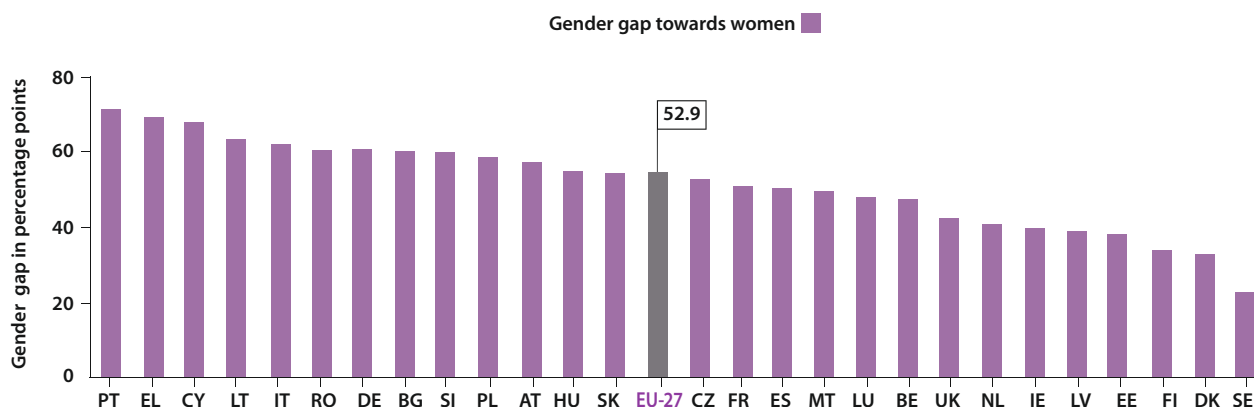
Source: Eurofound, EWCS

4.4.3 Sporting, cultural or leisure activities

Given women's disproportionate responsibilities for care activities, along with an increased feminisation of the labour market, it is important to measure gender gaps in some of the remaining time in the life of women and men. One aspect of social activities is measured with a gender indicator, examining participation of women and men in sporting, cultural or leisure activities on a regular basis.

Variable definition: Workers doing sporting, cultural or leisure activities outside of their home, at least every other day (%15+ workers)

This variable collects information on the level of workers' involvement in activities of sporting, culture or leisure out-

side of their home and work, every second day for more or less than one hour (Eurofound, 2012).

Data source: European Working Conditions Survey, Eurofound

Periodicity: every five years

The percentage of individuals in sporting, cultural or leisure activities at least every other day varies significantly throughout the EU. This percentage was lowest in Romania (1 % and 3 % for women and men respectively) and markedly high in Finland (38 % and 39 % respectively), with an average of 11 % of women and 14 % of men throughout Europe, in 2010 (see Figure 4.32.).

Figure 4.32. Involvement in sporting, cultural or leisure activities at least every other day by sex in EU Member States, 2010
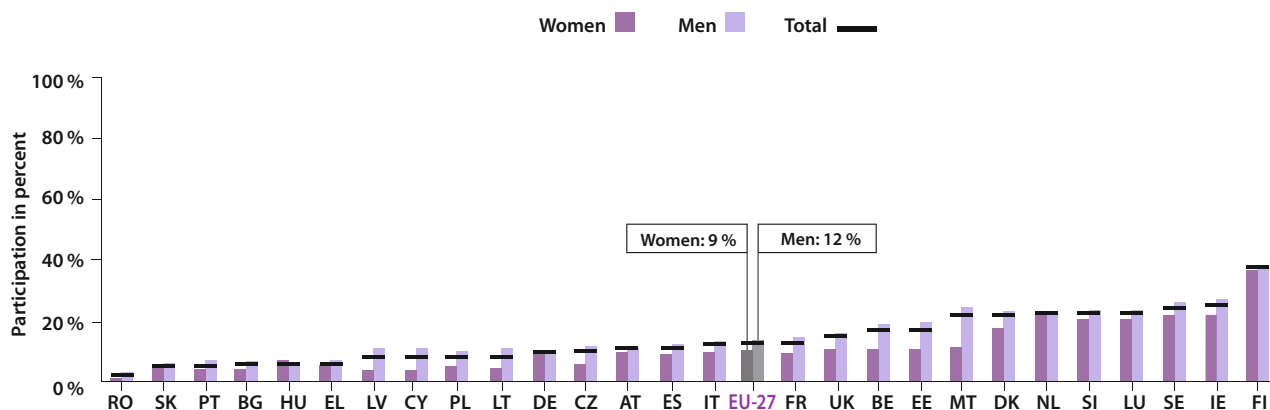
Source: Eurofound, EWCS

In all EU Member States except Hungary, women's participation in sporting, cultural or leisure activities were lower than those of men's in 2010. In six Member States (MT, LT, CZ, CY, LV and RO), men's participation was over double the participation rate of women. Nevertheless, the biggest gender gaps were recorded in Malta, Estonia, Belgium (see Figure 4.33.).

Figure 4.33. Gender gap in involvement in sporting, cultural or leisure activities at least every other day in EU Member States, 2010
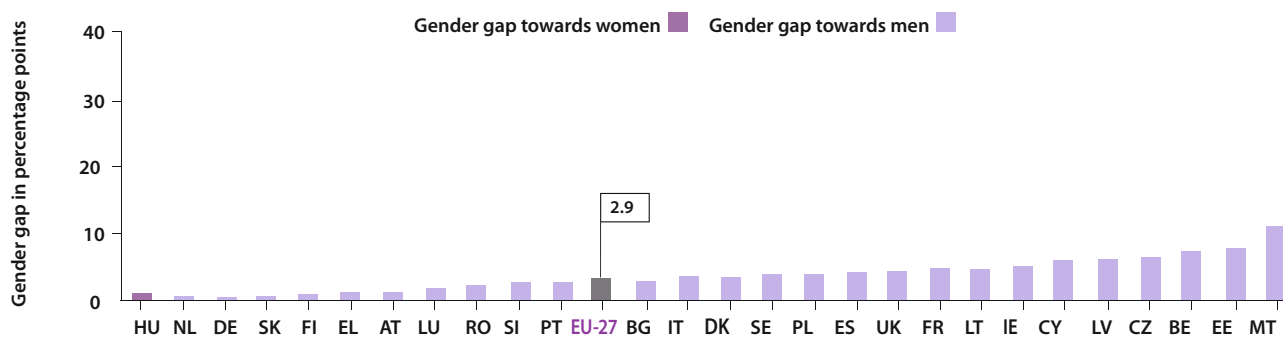
Source: Eurofound, EWCS

4.4. Voluntary or charitable activities

The focus on social activities also encompasses time spent on voluntary or charitable activities. This area has been identified as important in gender terms because voluntary or charitable activities can be constructed as an extension of women's responsibility for caring activities (Neysmith and Reitsma-Street, 2000). The second gender indicator used measures differences between women and men's involvement in activities, other than in the care and economic spheres, is that of involvement in voluntary or charitable activities.

Variable definition: Workers involved in voluntary or charitable activities, at least once a month (% 15+ workers)

This variable collects information on the level of workers' involvement in voluntary or charitable activities outside of their work for at least once a month (Eurofound, 2012).

Data source: European Working Conditions Survey, Eurofound.

Periodicity: every five years

The participation rate of women and men in voluntary and charitable activities, at least once a month, varied greatly throughout Member States, in 2010, with an average of 15 % for women and 14 % for men overall in the EU-27. The participation rates in voluntary and charitable activities fell below one in 10 in a significant number of Member States (PT, SK, EL, LT, BG, PL, ES, RO, CZ, LV and CY), with more similarities than differences between women and men. At the other extreme, in the Netherlands, more than one in three were involved in these activities at least once a month, with 38 % of women and 34 % of men (see Figure 4.34.).

Figure 4.34. Involvement in a voluntary or charitable activity, at least once a month, by sex in EU Member States, 2010
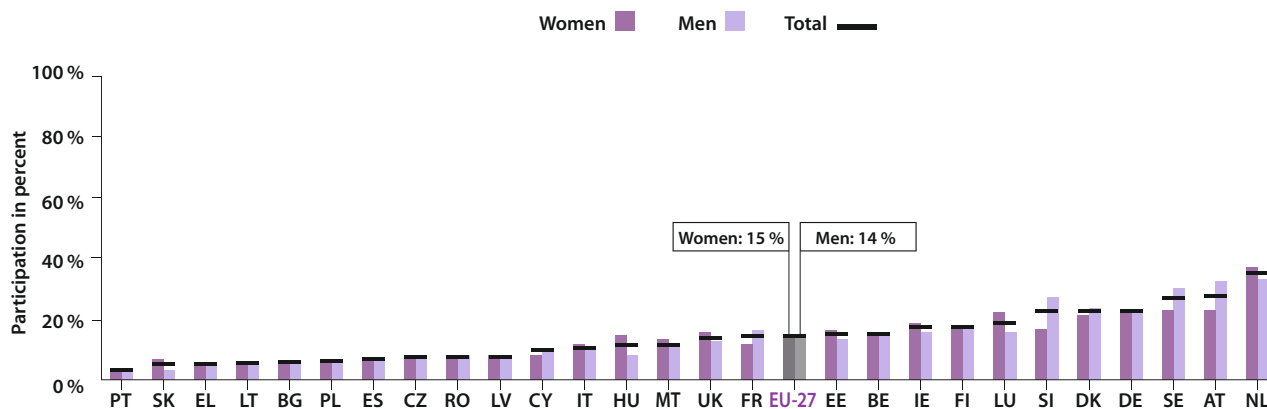
Source: Eurofound, EWCS

Gender gaps in involvement in a voluntary or charitable activity, at least once a month, were usually low or inexistent in 2010, with no difference on average in the EU-27. The gender gap was widest towards women in Hungary and Luxembourg, and towards men in Sweden, Austria and Slovenia, showing that despite the perceived idea that voluntary and charitable activities are more of a woman's activity, this is not supported by the data (see Figure 4.35.).

Figure 4.35. Gender gap in involvement in a voluntary or charitable activity, at least once a month, in EU Member States, 2010
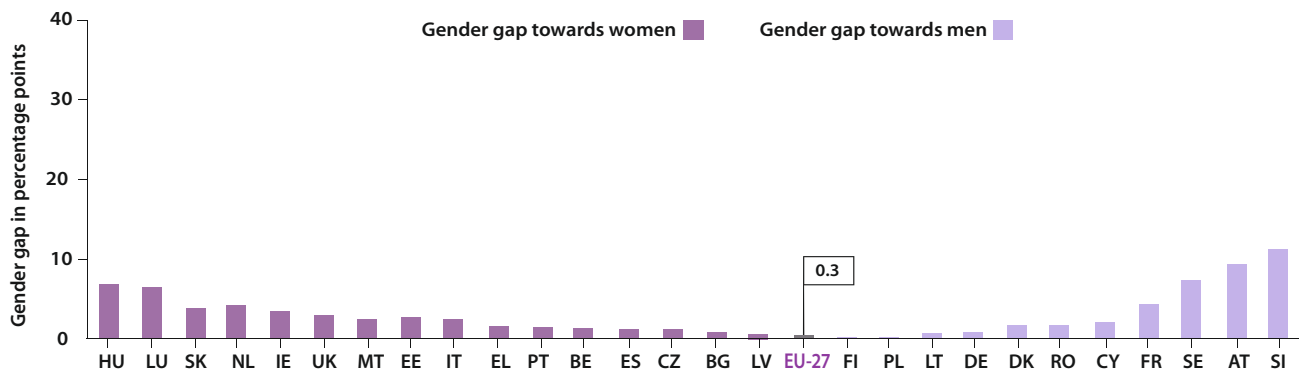
Source: Eurofound, EWCS

4.4.5 Summary

The amount of time spent by women and men in the EU-27, in activities other than economic, show strong differences by sex. In 2010, men were more likely than women, in all Member States but one, to participate in sporting, cultural or leisure activities on a regular basis. The situation was more divided when it came to involvement in voluntary or charitable activities, as although inexistent in some Member States, in others gender gaps existed towards both women and men.

This domain highlights the core of the division between women and men in the EU-27: the wide gender gap in activities related to care. Throughout all Member States, it was women that performed the bulk of these caring activities, with extremely wide gender gaps between the time spent on caring and educating children and grandchildren, as well as time spent on cooking and housework.

4.5. Power

The domain of *power* focuses on the representation of women and men in decision-making positions, as there is a general consensus that greater gender balance in positions of power will have a positive effect on gender equality.

At the conceptual level, three sub-domains of decision-making power were identified: *political, social* and *economic*. Unfortunately, as the sub-domain of social power is not well covered by gender indicators, the domain of power is limited to only measure political and economic power through participation at a decision-making level.

The first sub-domain, political power, is measured by three gender indicators that examine representation in ministers, parliaments and regional assemblies. The other sub-domain, economic power, focuses on the share of women and men on the boards of national largest quoted companies, in conjunction with the share of women and men members of all key decision-making bodies in central banks across Member States.

Table 4.6. Measurement framework for the domain of power

Measurement framework	Concept measured	Indicator	Source
Political	Ministerial representation	Share of Ministers (%, 18+ population)	EC-DG Justice – Women and Men in Decision Making
	Parliamentary representation	Share of members of Parliament (%, 18+ population)	EC-DG Justice – Women and Men in Decision Making
	Regional assemblies representation	Share of members of Regional Assemblies (%, 18+ population)	EC-DG Justice – Women and Men in Decision Making
Economic	Members of boards	Share of members of boards in largest quoted companies, supervisory board or board of directors (%, 18+ population)	EC-DG Justice – Women and Men in Decision Making
	Members of central banks	Share of members in all key decision-making bodies in Central Bank (%, 18+ population)	EC-DG Justice – Women and Men in Decision Making

4.5.1. Ministries

The first gender indicator that measures political power measures high level representation, with a gender indicator that examines women's and men's share of ministerial posts.

Variable definition: Share of Ministers (%)

This indicator relies on the share of women and men ministers in national governments. The positions covered are senior ministers: members of the government who have a seat on the cabinet or council of ministers and junior ministers: members of the government who do not have a seat on the cabinet (EC, 2013) (Included within

the framework of the Beijing Platform for Action indicators, see Annex 5).

Data source: Database on 'Women & Men in Decision-Making', DG Justice, European Commission (1st quarter 2010)

Periodicity: quarterly

At EU level, the representation of women at ministerial level remained relatively stable between 2000 and 2010, with an average of 24 % of women. At national level, in 2010, there were important differences, ranging from no representation whatsoever in Hungary and near parity or full parity in Sweden (45 %), Denmark (47 %) and Finland (52 %) (see Figure 4.36.).

Figure 4.36. Ministers by sex in EU Member States, 2010
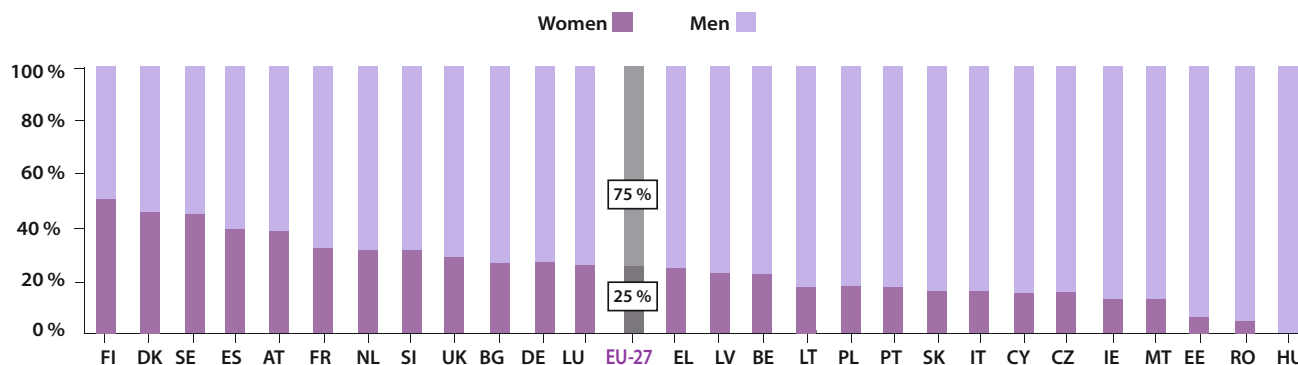
Source: European Commission's database 'Women & Men in Decision-Making'

4.5.2. Parliaments

The second indicator that measures political power examines gender gap in the representation of women and men in national parliaments.

Variable definition: Share of members of Parliament (%)

This indicator provides data on the share of women and men member of national parliaments. The count includes the President, members of upper and lower houses and single houses. Where a Parliament has two houses, lower and upper, members of both houses are taken into consideration when available (European Commission, 2013) (Included within the framework of the Beijing Platform for Action indicators, see Annex 5).

Data source: Database on 'Women & Men in Decision-Making', DG Justice, European Commission (1st quarter, 2010)

Periodicity: quarterly

In 2010, the average representation of women as members of parliament in the EU was just under a quarter of members (23 %). Women remained greatly underrepresented in all Member States, except for Finland, and Sweden where the percentage of women reached 40 %, and 47 % respectively of members of parliament. At the other extreme, in Malta, the representation of women as members of parliament accounted for only 9 % (see Figure 4.37.).

Figure 4.37. Members of parliaments by sex in EU Member States, 2010
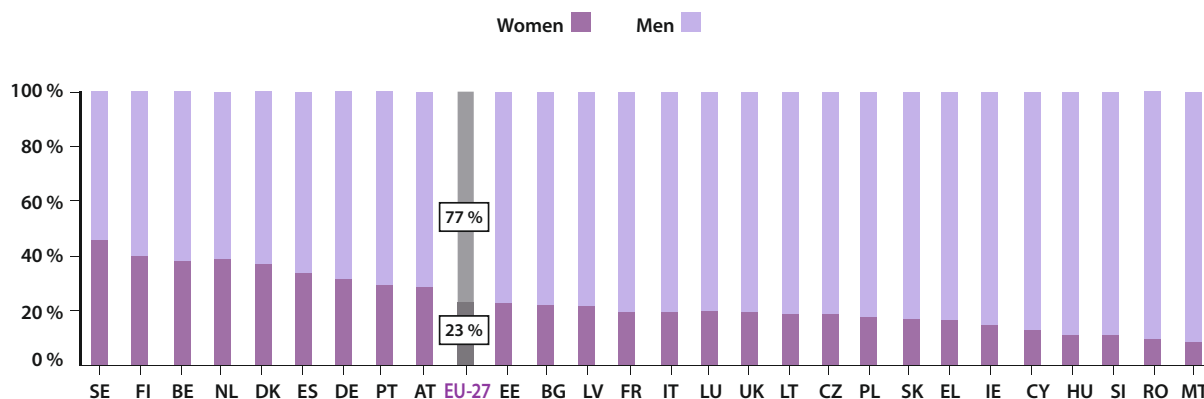
Women ■ Men ■

Source: European Commission's database 'Women & Men in Decision-Making'

4.5.3. Regional assemblies

The third gender indicator to measure the representation of women and men in political decision-making measures the share of seats between women and men at the level of regional assemblies.

Variable definition: Share of members of regional assemblies (%)

This indicator measures the share of women and men members of regional assemblies. Although regional authorities are situated between the central government and local authorities, this does not necessarily imply a hierarchical relationship between regional and local. In addition, regional authorities are not applicable in all countries (EC, 2013). In those cases the data on local and municipal members, including mayors and other leaders,

were taken (BG, EE, IE, CY, LT, LU, MT and SI) (Included within the framework of the Beijing Plaform for Action indicators, see Annex 5).

Data source: Database on 'Women & Men in Decision-Making', DG Justice, European Commission

Periodicity: annual except in the case of elections when the data for affected regions are updated with the next quarterly update of political data.

The representation of women at EU level in regional assemblies increased steadily from 22 % to 30 % between 2000 and 2010. At national level, this figure also masks differences. The representation of women in regional assemblies ranges from just above one in 10 women in Italy (12 %) to near parity in Sweden (47 %) and France (48 %) (see Figure 4.38.).

Figure 4.38. Members of regional assemblies by sex in EU Member States, 2010
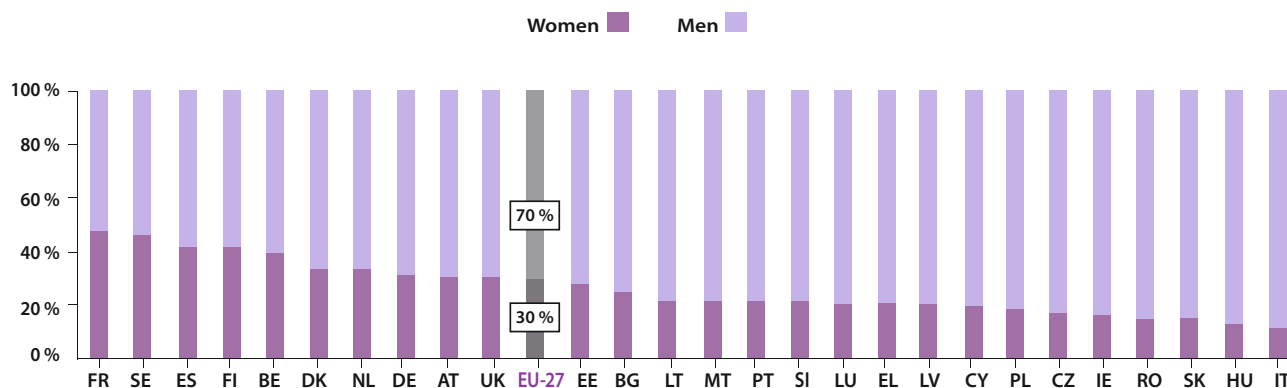
Source: European Commission's database 'Women & Men in Decision-Making'

4.5.4. Members of the boards of largest quoted companies

The first gender indicator used to measure power through representation in decision-making in economic activities looks at the largest quoted companies at national level.

Variable definition: Share of members of boards in largest quoted companies (supervisory board or board of directors) (%).

This indicator measures the share of women and men as board members (including chairpersons) in the largest publicly listed companies (traded on the stock exchange) at the national level.

Data source: Database on 'Women & Men in Decision-Making', DG Justice, European Commission

Periodicity: annual

The representation of women on the boards of quoted companies increased from 9 % in 2000, to 12 % in 2010, representing a relatively small increase. Only five Member States (FI, SE, LV, RO and SK) had more than 20 % of women as members of the largest quoted companies. In addition, a further five Member States had less than 5 % representation (CY, IT, LU, MT and PT) in 2010 (see Figure 4.39.).

Figure 4.39. Members of the boards of the largest quoted companies by sex in EU Member States, 2010
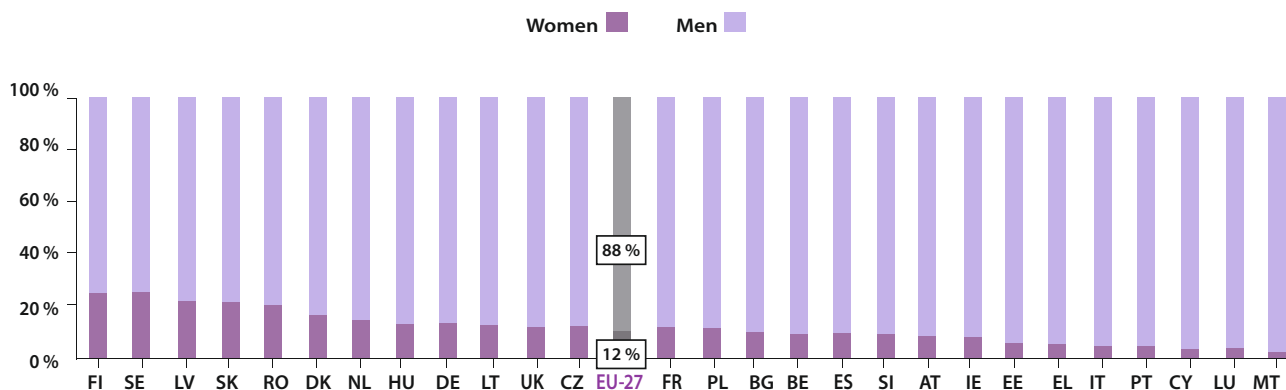
Source: European Commission's database 'Women & Men in Decision-Making'

4.5.5. Members of central banks

The second gender indicator used to measure *economic power* looks at the representational distribution of women and men as members of central banks.

Variable definition: Share of members in all key decision-making bodies in Central Bank (%).

This indicator measures the share of women and men in all key decision-making bodies in central banks, including the head governor (included within the framework of the Beijing Plaform for Action indicators, see Annex 5).

Data source: Database on 'Women & Men in Decision-Making', DG Justice, European Commission

Periodicity: annual

The number of women members of central banks declined slightly from 21 % in 2000, to 18 % in 2010, on average at the EU-27 level. Across Member States, the proportion of women represented in central banks, in 2010, ranged from none (AT, CY, LT and LU) to more than the critical mass of 30 % in other Member States (FR, FI and SE) (see Figure 4.40.).

Figure 4.40. Members of the central bank by sex in EU Member States, 2010
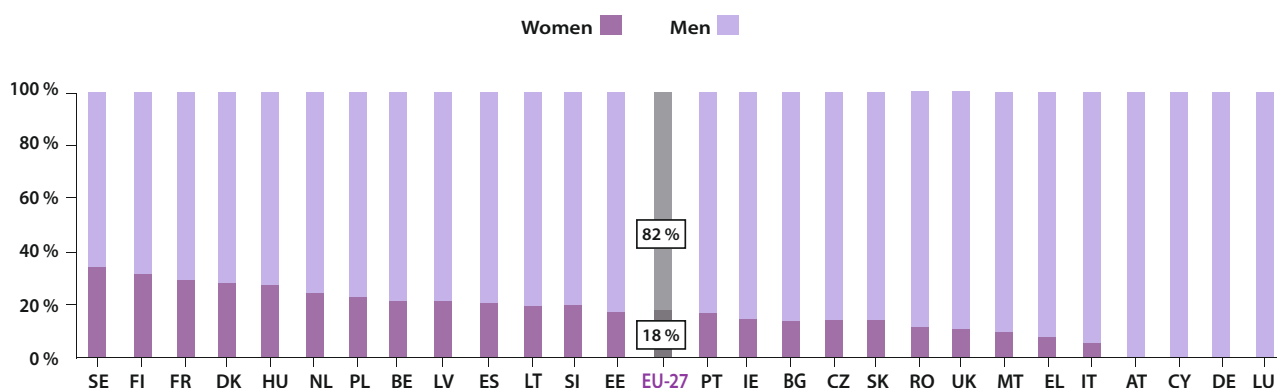
Source: European Commission's database 'Women & Men in Decision-Making'

4.5.6. Summary

Women, compared with men, are grossly under-represented in some parts of political and economic decision-making. The level of representation of women in political spheres, although already low with less than a third at regional level, decreases even further in parliaments and ministries (included within the framework of the Beijing Platform for Action Indicators, see Annex 5).

Although there is a dearth of representation of women in the political sphere, this is even more pronounced in the economic sphere. Women are greatly under-represented among board members of the largest quoted companies and among members of central banks in the vast majority of Member States.

Addressing these democratic and economic gaps are crucial to ensure that gender equality is an issue seriously addressed throughout policy in Member States and that both women and men are involved in the recovery following the current crisis.

4.6. Health

The final core domain examines issues related to gender and *health*. Conceptually, it includes three critical areas: *health status, health behaviours and access to health structures.*

Because of constraints of data availability, it is only possible to measure two sub-domains out of three indicated in the conceptual framework. Notably, as variables related to health behaviours are not disaggregated by sex, the second sub-domain is not measured. The gender indicators selected are thus divided into the first and third sub-domain. For health status, the gender indicators selected measure gender gaps in self-perceived health, life expectancy and healthy life years. As for access to health structures, the selected indicators examine gender gaps in unmet medical, as well as dental needs.

Table 4.7. Measurement framework for the domain of health

Measurement framework	Concept measured	Indicator	Source
Status	Self-perceived health	Self-perceived health, good or very good (% 16+ population)	Eurostat –EU Statistics on Income and Living Conditions
	Life expectancy	Life expectancy in absolute value at birth (years)	Eurostat –demographic statistics
	Healthy life years	Healthy life years in absolute value at birth (years)	Eurostat – EU Statistics on Income and Living Conditions combined with Eurostat's demographic statistics
Access	Unmet medical needs	Population without unmet needs for medical examination (% 16+ population)	Eurostat – EU Statistics on Income and Living Conditions
	Unmet dental needs	Population without unmet needs for dental examination (% 16+ population)	Eurostat – EU Statistics on Income and Living Conditions

4.6.1. Self-perceived health

The first gender indicator used to measure health status is self-perceived health.

Variable definition: Self-perceived health, good or very good (% 16+ population)

This indicator focuses on self-perceived health, based on an auto-evaluation that excludes any temporary health problem. It is a subjective measure, which although is influenced by impressions or opinions from others, provides an account of a woman or man's assessment of their health relative to their own beliefs and attitudes (Eurostat, 2013). The categories considered are 'good' and 'very good'.

Data source: EU-Statistics on Income and Living Conditions, Eurostat (hlth_silc_01)

Periodicity: annual

Average self-perceived health throughout the EU-27 was relatively high in 2010, at 66 % for women and 71 % for men, having increased between 2005 and 2010, by 5 percentage point for women (up from 61 % in 2005) and 4 percentage points for men (up from 67 % in 2005).

At national level, there were however vast differences between Member States. Over three-quarters of women and men perceived their health as good or very good in the Netherlands (76 % for women; 80 % for men), the United Kingdom (79 %; 80 %), Sweden (78 %; 82 %) and in Ireland (83 %; 84 %). This is to be compared with Member States such as Portugal, Latvia or Lithuania where comparatively fewer of the women's population feel in good or very good health (44 %, 54 %, and 57 % respectively), although, the self-perceived health of their male counterparts was slightly higher (55 %, 54 % and 57 % respectively) (see Figure 4.41.).

Figure 4.41. Good or very good self-perceived health by sex in EU Member States, 2010

Women ▉ Men ▉ Total ▬
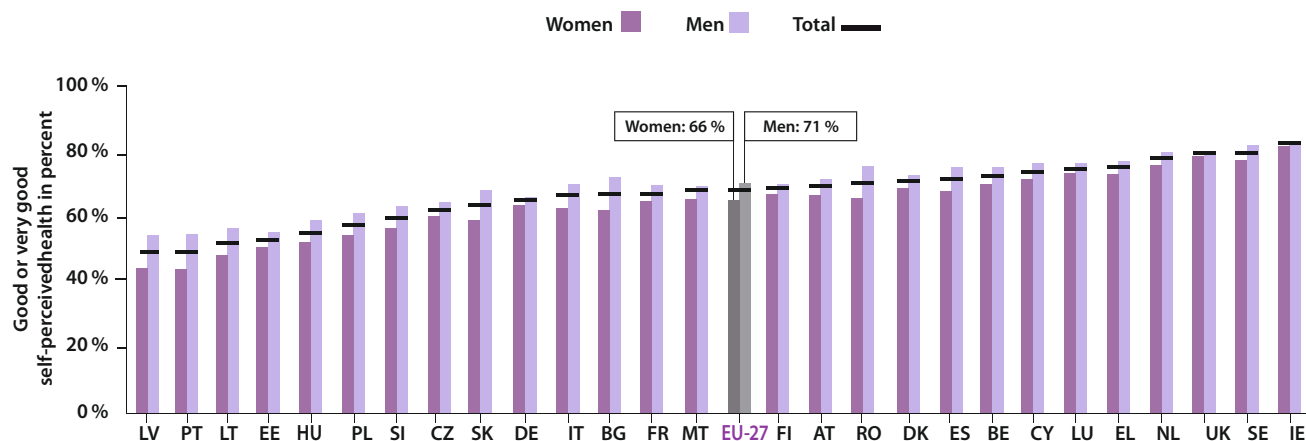
Source: Eurostat, EU-SILC (hlth_silc_01)

However, at EU level, in 2010, there was a gender gap of 5 percentage points between women and men, as only two-thirds (66 %) of women, compared with 71 % of men, assessed their health as good or very good. At national level, women had a lower perception of their health in all Member States. While differences were very small or practically inexistent in Ireland or the United Kingdom, the gender gap reached more than 10 percentage points in Bulgaria and Portugal and stood at around 10 % in Romania and Latvia (see Figure 4.42.).

Figure 4.42. Good or very good self-perceived health by gender gap in EU Member States, 2010

Gender gap towards men ▉
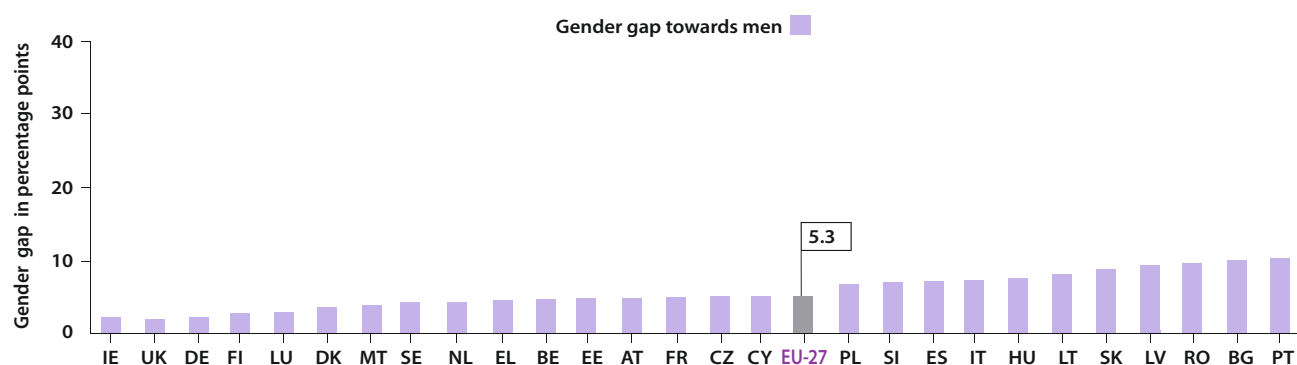
Source: Eurostat, EU-SILC (hlth_silc_01)

4.6.2. Life expectancy

The second gender indicator used for the sub-domain of health status is life expectancy. This is an indicator that measures gaps not only in terms of gender, but also in terms of sex. It is indeed complex to disentangle how biological factors affect health outcomes and how much these are in fact mitigated by gender (Kirby, 2000).

Variable definition: Life expectancy in absolute value at birth (years)

This indicator measures the mean additional number of years that a person can expect to live, assuming current mortality conditions are maintained (Eurostat, 2013).

Data source: Eurostat's demographic statistics, Eurostat (hlth_hlye)

Periodicity: annual

In 2010, the average expectancy at birth in EU-27, for women was 83 years of age and 77 years for men, with life expectancy lowest for women in Bulgaria (77 years) and for men in Lithuania (68 years). However, women lived an additional seven years, reaching 85 in countries such as France, Italy or Spain. Men lived as much as an additional 12 years, reaching 80 years of age in Italy (see Figure 4.43.).

Figure 4.43. Life expectancy at birth by sex in EU Member States, 2010
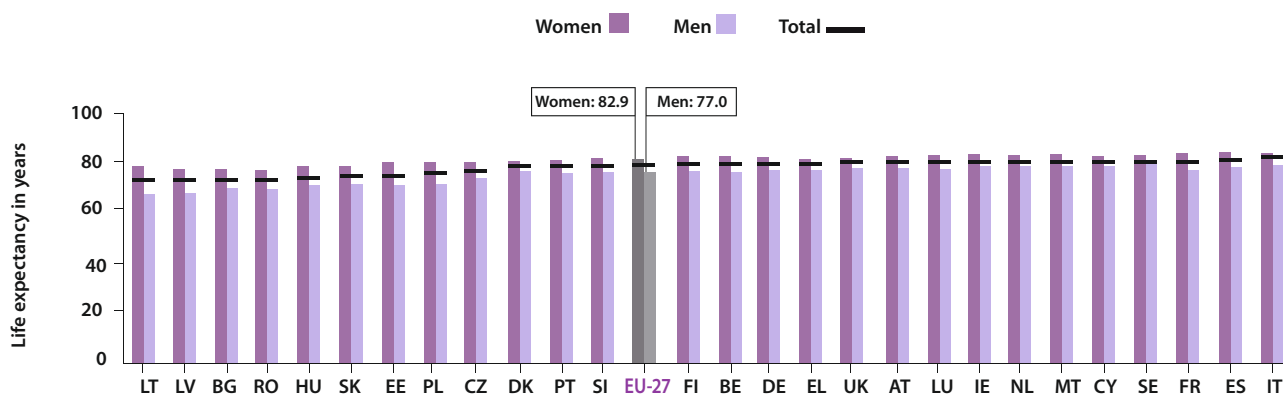
Source: Eurostat, demographic statistics (hlth_hlye)

Without exception, women outlived men across all Member States, in 2010, with an average gender gap at EU level of just over six years. At national level, important differences existed. Women lived as few as four years longer than men in Sweden, the Netherlands, the United Kingdom, Denmark, Malta and Greece; however, at the other end of the spectrum, there were much wider gaps. Women in the Baltic States (LT, EE, LV) lived for a decade or more longer than their male counterparts (see Figure 4.44).

Figure 4.44. Life expectancy by gender gap in EU Member States, 2010
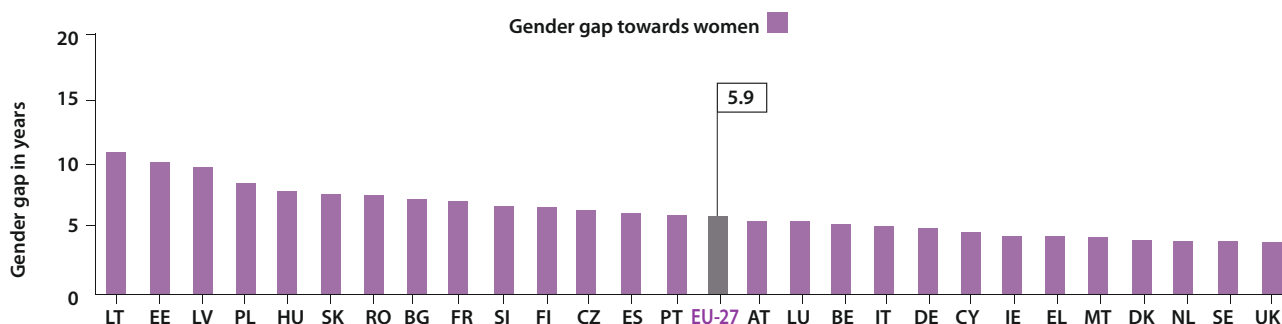
Source: Eurostat, demographic statistics (hlth_hlye)

4.6.3. Healthy life years

The last gender indicator used to measure health status is the number of healthy life years. Although women and men's life expectancy has been rising, health should be examined in the context of factors that may affect the quality of these additional years (UNECE, 2013). Healthy life years measures quality of life, because it focuses only on years spent as being healthy, contrary to life expectancy (Eurostat, 2013) (included within the framework of the Beijing Platform for Action Indicators, see Annex 5).

Variable definition: Healthy life years in absolute value at birth (years)

This indicator measures the number of healthy life years that a person is expected to live without any severe or moderate health problems. Health problems are based on self-perceptions, including that of having limitation because of one's health status (Eurostat, 2013).

Data source: EU-Statistics on Income and Living Conditions combined with Eurostat's demographic statistics, Eurostat (hlth_hlye)

Periodicity: annual

Women and men enjoyed a total of 63 and 62 years, respectively, of healthy life on average in the EU-27, in 2010. The range across Member States is enormous with some women and men enjoying as much as an additional 20 years of healthy life between the lowest and highest Member State. The number of healthy life years was lowest for both women and men in Slovakia, with 52 years, compared with nearly 72 years for women in Malta and men in Sweden (see Figure 4.45.).

Figure 4.45. Healthy life years by sex in EU Member States, 2010
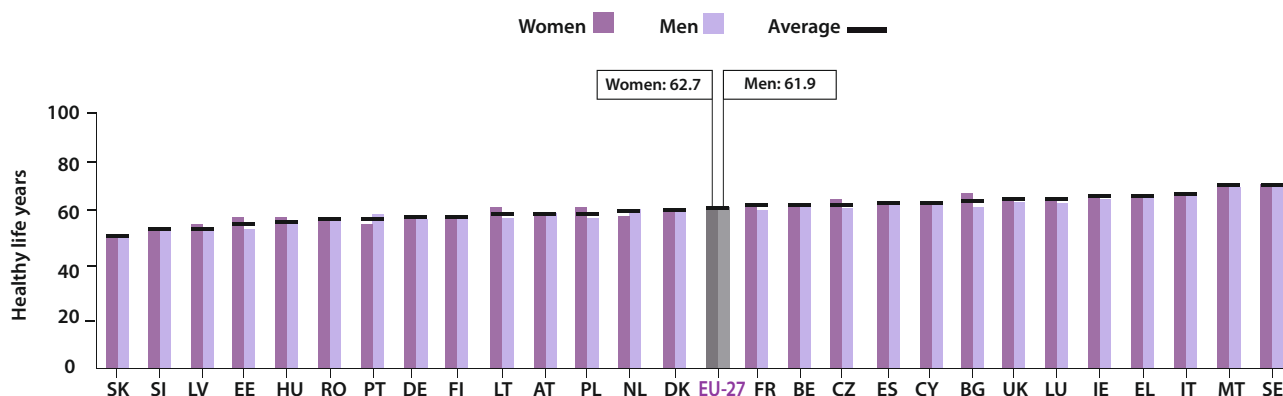
Source: Eurostat, demographic statistics and EU-SILC (hlth_hlye)

Despite important differences across the EU-27, differences between women and men were more moderate within each Member State. The gender gap only exceeded three additional years for women in Latvia, four years in Poland, Estonia and Bulgaria and finally five years in Lithuania, showing that generally, where there were larger differences, women benefited from a greater number of healthy life years. Gender gaps towards men reached just little less than three additional healthy years for Portugal and more than a year in Belgium and the Netherlands (see Figure 4.46.).

Figure 4.46. Healthy life years by gender gap in EU Member States, 2010
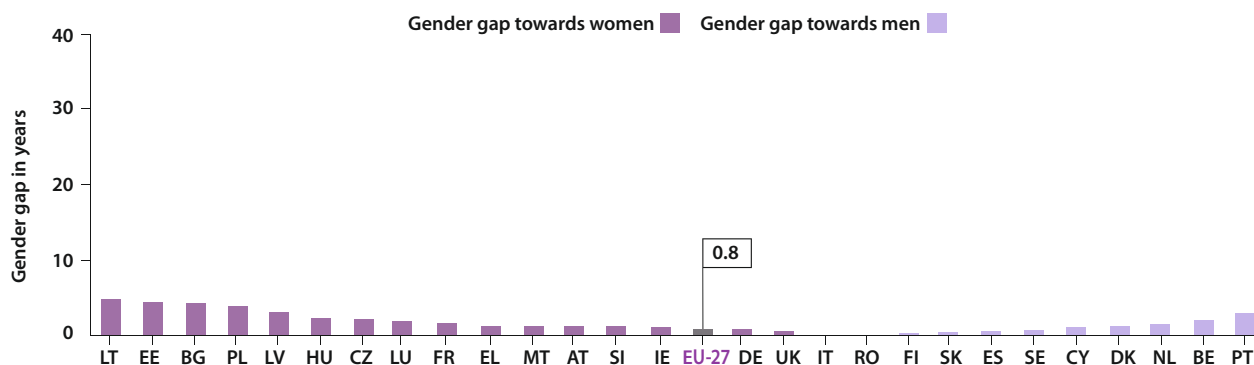
Source: Eurostat, demographic statistics and EU-SILC (hlth_hlye)

4.6.4. Unmet medical needs

The first gender indicator used to measure access to health structures examines gender gaps in terms of unmet medical needs.

Variable definition: Population without unmet needs for medical examination (% 16+ population)

This indicator examines people's perceptions of the accessibility to health care. It reflects respondents' own assessment of not having a need for medical examination or treatment fulfilled (Eurostat, 2012) (included within the framework of the Beijing Platform for Action Indicators, see Annex 5).

Data source: EU-Statistics on Income and Living Conditions,

Eurostat (hlth_silc_08)

Periodicity: annual

The issue of unmet medical needs is not problematic for the vast majority of Europeans. Overall, there are no notable differences between women and men, as respectively 93 % and 94 % of them had no unmet medical needs in 2010, on average in the EU-27. These figures show a small, but welcome, improvement from the situation in 2003, where on average in the EU-27, 90 % of women and 91 % of men had no unmet medical needs (Figure 4.47.).

Figure 4.47. Individuals without unmet medical needs by sex in EU Member States, 2010
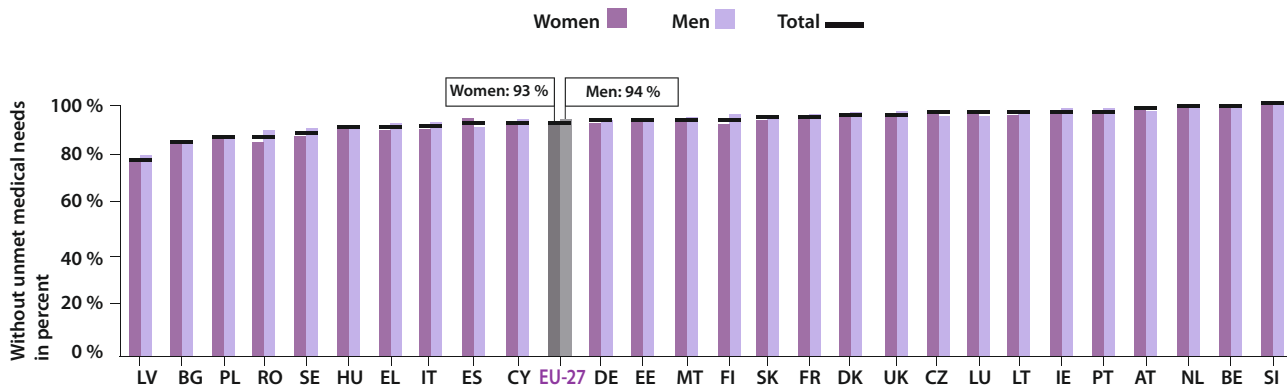
Source: Eurostat, EU-SILC (hlth_silc_08)

Examining the situation at national level shows that differences are also relatively small between women and men, combined with relative gender equality. Where gender gaps were widest, it was to the detriment of men with, for example, 2 or more percentage point difference in Latvia, Greece, Sweden, Finland or Romania (see Figure 4.48.).

Figure 4.48. Individuals without unmet medical needs by gender gap in EU Member States, 2010
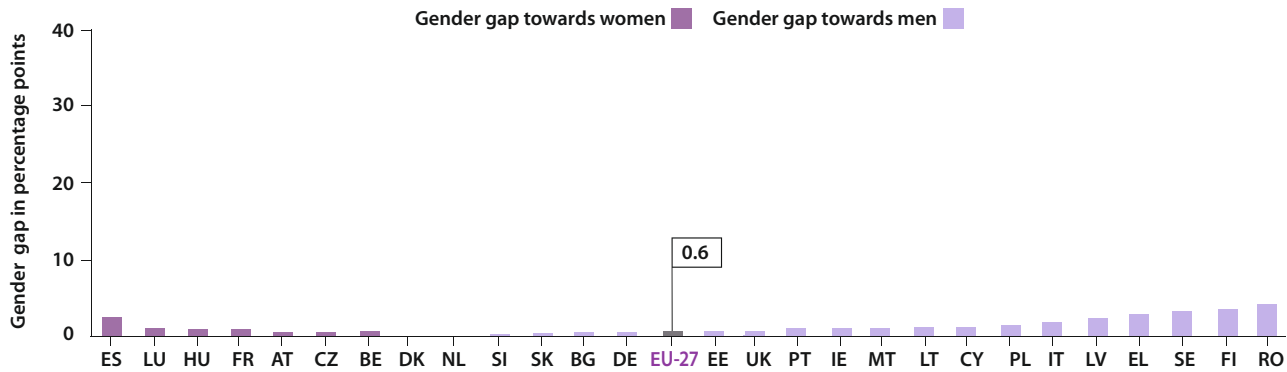
Source: Eurostat, EU-SILC (hlth_silc_08)

4.6.5. Unmet dental needs

The second gender indicator used to measure access to health structures examines gender gaps in terms of unmet dental needs.

Variable definition: Population without unmet needs for dental examination (% 16+ population)

This indicator examines people's perceptions of the accessibility to health care. It reflects respondents' own assessment of not having a need for dental examination or treatment fulfilled (Eurostat, 2012). For the purpose of the

Gender Equality Index, the indicator is reversed, providing data on individuals who do not have dental needs.

Data source: EU-Statistics on Income and Living Conditions, Eurostat (hlth_silc_09)

Periodicity: annual

By 2010, on average in the EU-27, 93% of women and men had no unmet dental needs, up from 88% in 2003. The lowest level of unmet needs in 2010, was recorded in Latvia (79% for women and 78% for men) while in Slovenia it reached 99% for both women and men (see Figure 4.49.).

Figure 4.49. Individuals without unmet dental needs by sex in EU Member States, 2010
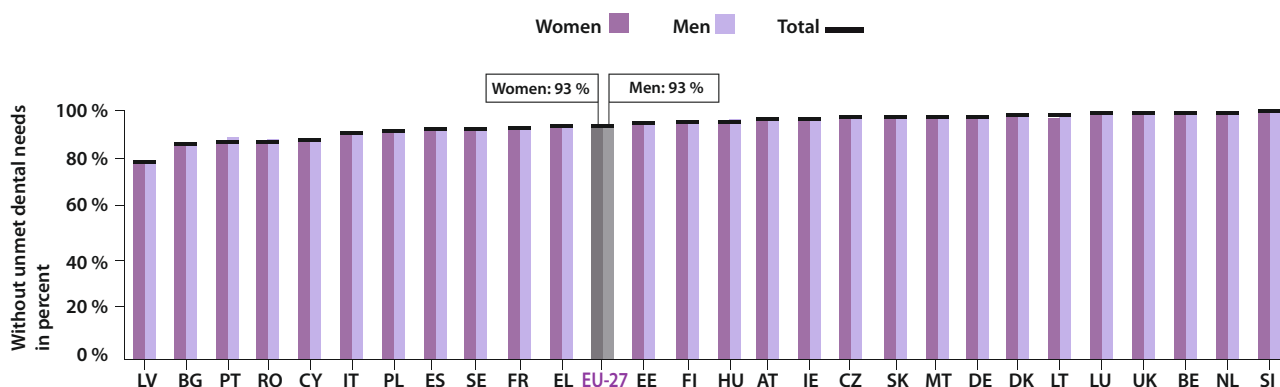
Source: Eurostat, EU-SILC (hlth_silc_09)

The gender gap in terms of unmet dental needs was practically inexistent in 2010, on average in the EU-27. Very small gender gaps, just above 2 percentage points, were present to the detriment of women in Denmark and to the detriment of men in Romania and Portugal (see Figure 4.50.).

Figure 4.50. Individuals without unmet dental needs by gender gap in EU Member States, 2010
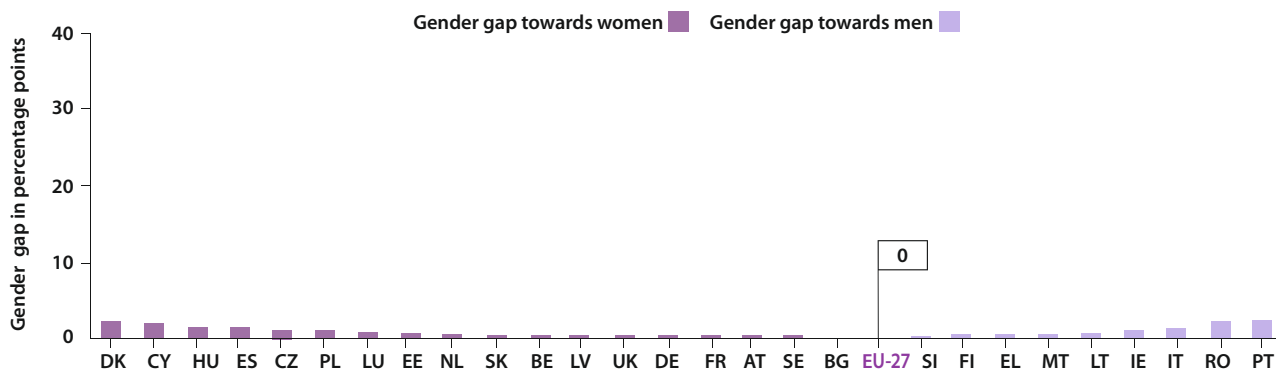
Source: Eurostat, EU-SILC (hlth_silc_09)

4.6.6. Summary

The gender indicators used in the domain of health show that there is a large degree of truth, both at EU level and across Member States, to the old adage that 'women get sicker and men die younger'. In terms of gender gaps, the domain of health presents a mixed picture. Although there are small or no gender gaps in terms of unmet needs, medical or dental, this hardly translates into health status, where important gender gaps can be seen.

Furthermore, although the levels of indicators of health status and unmet needs are relatively high in some Member States, it appears that in others, it remains necessary to focus on the health of women and men. Given that health is directly linked not only to economic independence, but also to physical integrity and dignity, it is therefore crucial to ensure that efforts continue to go in this direction, while at the same time maintaining small gender gaps or eliminating them altogether.

4.7. Intersecting inequalities

The domain of intersecting inequalities examines gender gaps within categories outside of the mainstream. The indicators selected explore employment rates, as these can serve as relevant proxies to illustrate how certain groups of women and men fare in the EU in terms of economic participation, as a means of tackling poverty and social exclusion. Three illustrative groups are examined: people born in a foreign country (as a proxy for migrants), people aged 55 to 64 (older workers) and people living in a household with a single adult and one or more children (as proxy for lone parents or carers).

As this is a satellite domain, each of the indicators selected are only indicative of existing gender inequalities. This means that they are not combined into a single subindex of intersecting inequalities, nor aggregated into the main index.

Table 4.8. Measurement framework for the domain of intersecting inequalities

Measurement framework	Concept measured	Indicator	Source
Discrimination and other social grounds	Employment rates: minorities and/or migrants older workerslone parents/carers	Employment of people born in a foreign country (% 15–64 corresponding population)	Eurostat – EU Labour Force Survey
		Employment of people aged 55–64 (% 55–64 population)	Eurostat – EU Labour Force Survey
		Employment rates of people living in a household with one adult and one or more children (% 15–64 corresponding population)	Eurostat – EU Labour Force Survey

4.7.1. Employment for people born in a foreign country

The first gender indicator focused on individuals that were born in a foreign country and their participation rate in employment. Being born in a foreign country is a difficult proxy to understand, and although very imperfect, goes some way towards providing information on people that may be part of a minority and/or who are migrants. It is an important indicator from a gender perspective given that women from a minority and/or migrant background tend to have lower rates of participation in employment, leading to greater disparities in income and higher risk of poverty (European Union Agency for Fundamental Rights, 2010).

Variable definition: Employment of people born in a foreign country (% 15–64 population born in a foreign country)

This indicator measures employment rates among people that are foreign born – that is, outside of their country of residence (Eurostat, 2013).

Data source: EU Labour Force Survey, Eurostat (lfsa_ergacob)

Periodicity: annual

The average EU-27 participation rate for people born in a foreign country was 54 % for women and 70 % for men. Fewer than half of women born in a foreign country participated in the labour market in 2010, in Slovakia (39 %), Poland (44 %), Belgium (45 %), Malta (47 %) or Bulgaria (48 %), however, it reached as much as 71 % in Cyprus. Men's participation was consistently higher, ranging from just over half in Bulgaria (52 %) but involving over three-quarters of men in a number of Member States, including Italy (76 %), Greece (77 %), Malta (77 %), Luxembourg (79 %), the CzechRepublic (79 %) and Romania (83 %) (see Figure 4.51.).

Figure 4.51. Employment rates for people born in a foreign country by sex in EU Member States, 2010
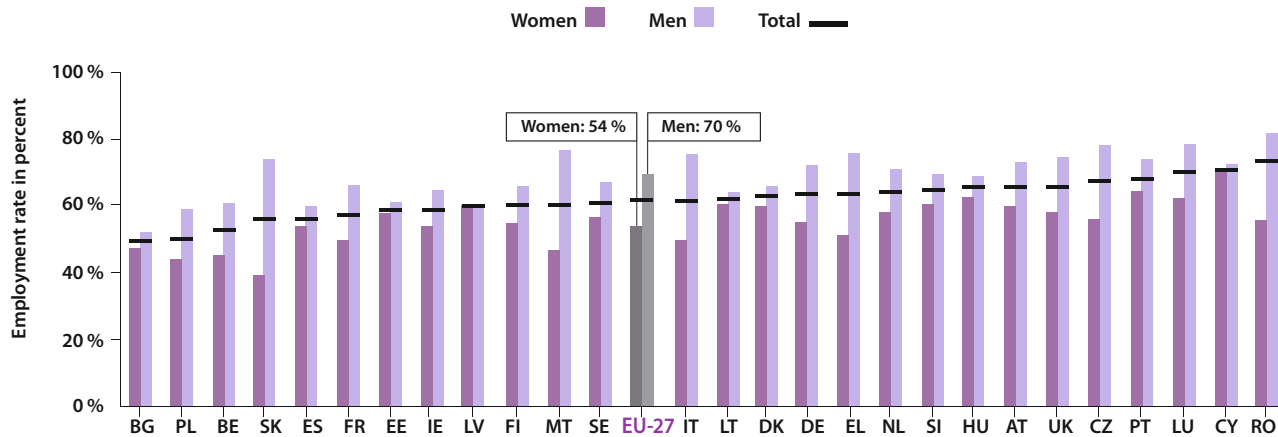
Source: Eurostat, LFS (lfsa_ergacob)

Gender gaps in 2010, showed that men born in a foreign country were consistently more likely to participate in the labour market across Member States than their women counterparts, with an EU-27 average difference of 16 per- centage points. These differences varied enormously across Member States, ranging from a difference of 36 percent- age points in Slovakia, 31 percentage points in Malta, to a practically inexistent difference in Latvia (see Figure 4.52.).

Figure 4.52. Employment rates for people born in a foreign country by gender gap in EU Member States, 2010
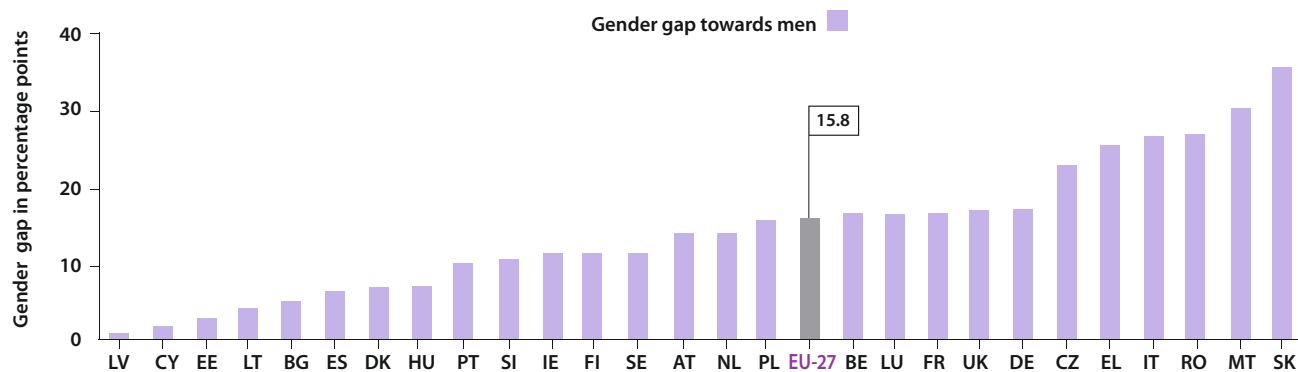
Source: Eurostat, LFS (lfsa_ergacob)

4.7.2. Employment for older workers

The second gender indicator measures employment rates among older workers, defined as those aged between 55 and 64 years of age. It is an important indicator as it represents one of the targets of the European Employment Strategy, that is to ensure that by 2010, at least 50 % of the EU population aged between 55 and 64 should participate in employment. Furthermore, gender gaps are particu-

larly acute within this age category and prove to be quite resilient (Bosch and Schief, 2005).

Variable definition: Employment of people aged 55–64 (% 55–64 population)

This indicator measures employment rates among older workers, defined as individuals aged 55 to 64 (Eurostat, 2012).

Data source: EU Labour Force Survey, Eurostat (lfsa_ergacob)

Periodicity: annual

Although the average participation of men older workers is above the target of 50 % in the EU-27, in 2010, this was not true for women older workers, as they only represented 39 % of labour force participants. Moreover, only six

Member States were above this target for women older workers, including the United Kingdom (50 %), Germany (51 %), Denmark (54 %), Estonia (55 %), Finland (57 %) and Sweden (67 %), compared with 18 Member States when men older workers are concerned. For men older workers, participation rates reached 71 % in Cyprus and 74 % in Sweden (see Figure 4.53.).

Figure 4.53. Employment rates for older workers by sex in EU Member States, 2010
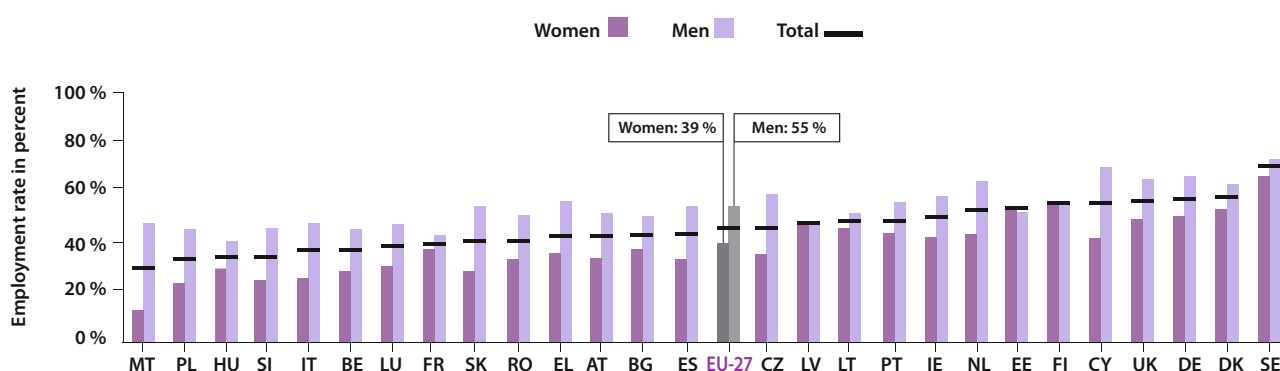
Source: Eurostat, LFS (lfsa_ergacob)

In the majority of Member States, men older workers had a higher participation rate than women older workers, with an EU-27 average of 16 percentage points in 2010. Differences were important in a large number of Mem-

ber States, above 25 percentage points in Greece, Cyprus or Malta. The differences were almost inexistent though in favour of women in Estonia, Finland and Latvia (see Figure 4.54.).

Figure 4.54. Employment rates for older workers by gender gap in EU Member States, 2010
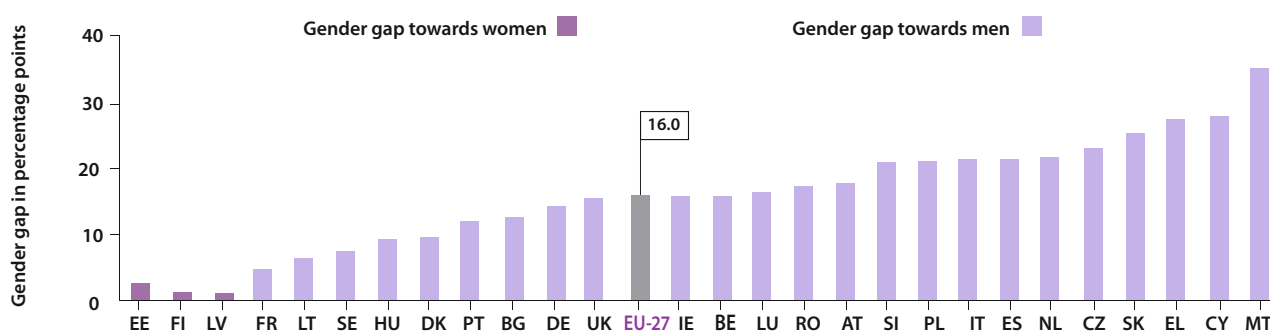
Source: Eurostat, LFS (lfsa_ergacob)

4.7.3. Employment for lone parents/carers

The final gender indicator used to illustrate gender gaps among intersecting inequalities examines employment rates among lone parents or carers. It is important from a gender perspective, because lone parents are more often than not lone mothers. This means that women may be less able to participate in the labour market and hence face higher risks of poverty (EC, 2010).

Variable definition: Employment of people living in a household with one adult and one or more children (% 15–64 population living in a household with one adult and one or more children)

This indicator measures employment rates in households composed of a lone adult with one or more children aged below 15, or under 25 years old, and in full social and economic dependence from other household member/-s (parents/adults) (Eurostat, 2012).

Data source: EU Labour Force Survey, Eurostat (lfst_hheredty)

Periodicity: annual

Participation in the labour market among people that were living in a household with a single adult and one or more children was relatively high on average at EU level, in 2010, with a 66 participation rate among women and 80 % among men. Across Member States, participation was lowest among lone adults with children in Ireland and Malta, both with 46 % participation for women compared with rates of 57 and 58 % for men, respectively. Participation rates were very high for lone men with one more children, with nine in 10, or more, participating in the labour force in Slovenia (90 %), the Czech Republic (91 %) and Slovakia (92 %) (see Figure 4.55.).

Figure 4.55. Employment rates for persons living in a household containing a single adult with one or more children by sex in EU Member States, 2010
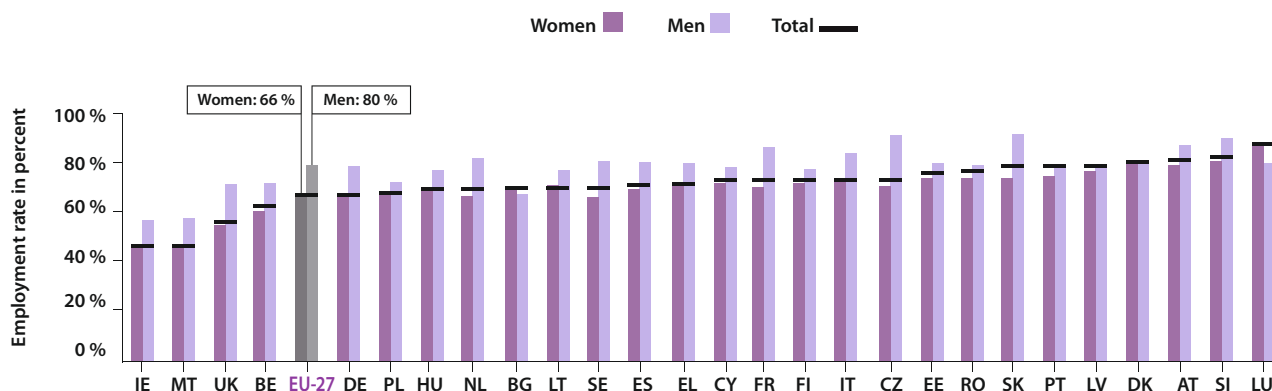
Source: Eurostat, LFS (lfst_hheredty)

Throughout most EU Member States, in 2010, men living in a household with a single adult and one or more children were more likely than women in their situation to participate in the labour force. On average, in the EU-27, the gender gap stood at 14 percentage points towards men. The participation of men was as much as 20 percentage points higher than women's in the Czech Republic. Exceptions can be seen in Bulgaria and Luxembourg, where women are more likely to participate, with gender gaps of three and nine percentage points respectively (see Figure 4.56).

Figure 4.56. In employment rates for persons living in a household containing a single adult with one or more children by gender gap in in EU Member States, 2010
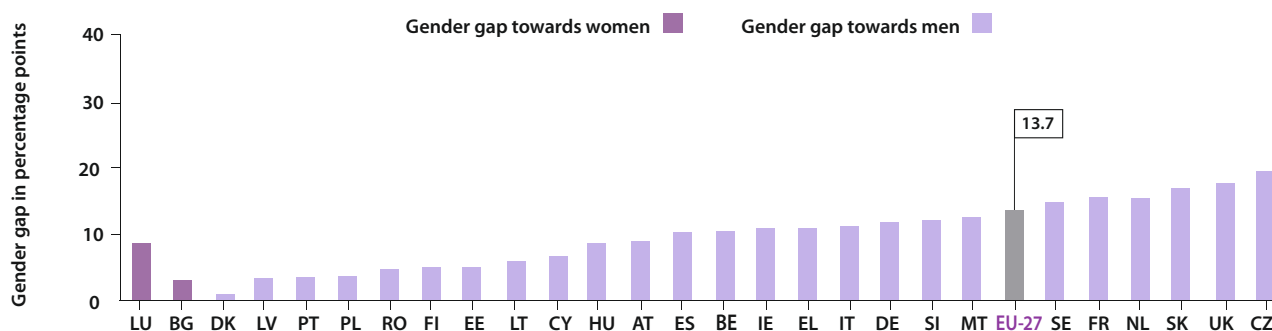
Source: Eurostat, LFS (lfst_hheredty)

4.7.4. Summary

Examining gender gaps in employment rates among illustrative groups showed patterns of difference that provide a valuable initial reflection point. In all the grounds taken into consideration by the gender indicators selected, that is country of birth (as a proxy for belonging to a minority group and/or being a migrant), being older or being a lone parent/carer, men on average were more likely to participate in the labour force than women. Moreover, although differences were small or inexistent in some Member States, in others, large differences existed pointing to the importance of measuring these gender gaps. Although relying on illustrative groups is not in itself sufficient to draw on strong conclusions as to how intersecting inequalities contribute to gender equality overall, they represent an opportunity to debate this important area in greater depth.

4.8. Violence

The final domain, that of *violence,* consists conceptually of two domains divided into direct and indirect violence.

Table 4.9. Measurement framework for the domain of violence

Conceptual framework	Measurement framework
Direct	-
Indirect	-

4.8.1. Direct violence

The first sub-domain, direct violence, attempts to measure gender-based violence against women, including violence that can be physical, psychological, sexual or economic. Because of the dearth of available data, in particular in light of the lack of comparable indicators, this sub-domain cannot be measured. Although several surveys exist at Member States level, their lack of consistency and harmonisation prevent international comparisons (UNECE, 2013).

The development of indicators within the framework of a dedicated survey in the EU is severely lacking. Developments are in process, notably through the European Union Agency's for Fundamental Rights Survey on gender-based violence against women, to be released in 2013. The survey will capture women's experiences of physical, sexual and psychological violence in different settings. However, concerns remain regarding other types of violence, not covered by this survey and the continuity of the survey in the future.

The EU Safety Survey (SASU) proposed by Eurostat, originally envisaged from 2013, has not been approved by the European Parliament. The Commission is expected to provide a new legislative proposal in support of the survey. It remains unclear how the process will develop.

The sub-domain on *direct violence* thus remains blank, flagging that this is an important area in which to measure gender equality, and with the hope that it will be soon possible to rely on indicators. This space should be seen as a call to urgently measure this important dimension of gender equality.

4.8.2. Indirect violence

The second sub-domain is *indirect violence*. It aims at measuring the gender norms, attitudes and stereotypes, which underpin current patterns of gender-based violence against women, in addition to other forms of gender inequality.

This sub-domain is also without indicators, as none have thus far been developed to monitor this dimension of gender equality. As emphasised for the sub-domain of *direct violence,* it is crucial that this blank leads to reflections on how to begin the monitoring of this dimension.

4.8.3. Summary

Despite the importance of gender-based violence against women, in all its forms, and that of the gender norms, attitudes and stereotypes that underpin them, the availability of gender indicators is sorely lacking. Although no gender indicators could be selected to measure gender gaps in this domain, it nevertheless remains as a blank space, ready to be filled at the first opportunity.

4.9. Conclusion

This section has provided a descriptive analysis of the gender indicators considered in the Gender Equality Index. For each critical area of gender equality, within the framework of EU policy, the gender gaps in each selected gender indicator depicts the situation across Member States. It is by focusing on closing the gender gaps in each on these critical areas of gender equality that policy can effectively contribute to progress in making gender equality a reality.

This section provides a useful background upon which to better understand the scores of the Gender Equality Index. Following this analysis, at the level of gender indicators, these measures are now aggregated at sub-domain and domain level according to the structure of the measurement framework to provide synthetic measures of gender equality, overall but also within domains and sub-domains. The aggregation and weighing is done in accordance with the methodology outlined in Section 3 and the scores resulting from this process are the object of the following section.

5. Index results

For the first time, the Gender Equality Index provides a synthetic, yet comprehensive measure of the gender equality gaps in the EU and across Member States based on the EU policy framework. It offers a valuable tool to support the EU's efforts to close gender gaps and a strong call for action at the level of Member States.

This report on the development of the Gender Equality Index has provided a full picture of how this composite indicator was constructed, from how it deals with gender approaches (Section 1), through an extensive conceptual framework (Section 2), and how to operationalise it through a measurement framework (Section 3). In the previous section (Section 4), the report presented an in-depth analysis of gender gaps and levels of achievement across Member States, for each of the gender indicators used in the computation of the Index.

Building upon this work, this section now focuses on the scores of the Gender Equality Index in each Member State and in the EU overall to offer a detailed assessment of where EU Member States stand in achieving gender equality. The section first discusses how scores can be interpreted, before giving a breakdown at domain and sub-domain level. It concludes with an analysis of how the Gender Equality Index performs in relation to other relevant and commonly used indicators.

5.1. Scoring gender equality

The scores of the Gender Equality Index range from 1 to 100, where 1 stands for absolute gender inequality and 100 marks the level of full gender equality. For example, a score of 50 can be interpreted as half way or 50 % towards gender equality.

The Gender Equality Index adopts a gender perspective, embracing both the gender equality approaches of difference and sameness present at policy level and inscribing them in a largely transformative perspective. The scores of the Index reflect this position and provide information on gender gaps, instead of on the specific position of women and men individually. It is therefore not possible to derive sexed information from the scores. Not losing sight of the overwhelmingly disadvantaged position of women throughout society, it is however imperative that EU decision-makers engage in a reflective process of how to make gender equality for both women and men a reality. Because of the gender approach it takes, the Gender Equality Index is precisely the tool that can assist in providing evidence to back up and support this reflection at EU level and across Member States.

Furthermore, although the focus is on gender gaps, scores are also taking into consideration levels of achievement, in order to ensure that a low gender gap does not result in a high score in the context of low levels of achievement.

Consequently, the scores of the Gender Equality Index provide a synthesis of gender equality in terms of gender gaps and levels of achievement. Although it represents a useful tool in itself, it can be further used in the context of a detailed analysis of both gender gaps and levels of achievement such as the one provided in the previous section (Section 4) to allow a deeper analysis of these scores. An outline of these results is provided in the following section.

5.2. Far, far away from gender equality?

The scores, overall and in each core domain (work, money, knowledge, time, power and health) are presented in Table 5.1.

Despite more than 50 years of gender equality policy at EU level, the report shows that gender gaps are prevalent across the EU-27. With an average score of 54.0, the EU remains far from reaching its gender equality aim. The range across Member States, from 35.3 to 74.3, shows the broad scale of variation throughout the EU in the level of Gender Equality achieved overall. The remainder of this section provides a breakdown and outline of the scores in each of the domains of the Gender Equality Index.

Table 5.1. Scores of the Gender Equality Index

Country	Index	Work	Money	Knowledge	Time	Power	Health
SE	74.3	78.6	80.2	66.3	63.9	74.3	93.1
DK	73.6	81.6	79.2	75.1	64.9	60.0	91.8
FI	73.4	82.0	78.4	67.0	63.8	68.8	89.9
NL	69.7	73.1	82.5	65.5	71.3	52.2	94.7
UK	60.4	76.6	74.3	68.8	43.2	35.2	95.4
BE	59.6	66.4	79.3	54.7	45.3	45.2	94.1
FR	57.1	67.0	75.9	49.4	35.8	50.3	90.6
SI	56.0	69.1	70.2	51.4	49.1	36.0	88.7
IE	55.2	71.0	77.0	52.8	53.4	26.5	96.4
ES	54.0	61.3	60.7	53.5	33.8	47.2	90.7
DE	51.6	72.5	76.3	44.1	41.6	28.0	89.5
LU	50.7	66.4	90.9	61.1	48.9	14.7	93.9
AT	50.4	73.9	77.9	44.6	40.0	24.3	91.6
EE	50.0	64.6	49.1	53.0	51.4	27.5	83.8
CZ	44.4	71.6	59.3	37.3	23.2	29.6	89.6
LV	44.4	54.9	42.0	38.8	35.2	38.6	77.1
PL	44.1	61.4	52.2	44.0	20.9	34.5	82.6
LT	43.6	61.0	41.5	47.4	24.1	32.1	84.9
CY	42.0	68.7	74.1	52.9	25.3	12.2	91.1
MT	41.6	55.0	68.2	34.0	37.5	18.7	93.2
HU	41.4	55.9	54.4	35.1	32.5	24.4	83.7
PT	41.3	66.2	56.3	30.4	22.4	30.6	84.5
SK	40.9	61.0	53.7	35.0	17.8	33.1	85.8
IT	40.9	60.6	68.2	32.1	33.0	18.6	90.8
EL	40.0	59.7	63.3	36.7	17.4	24.4	92.4
BG	37.0	49.9	40.7	32.0	17.3	33.8	84.5
RO	35.3	60.4	39.0	28.8	17.8	24.9	84.0
EU-27	*54.0*	*69.0*	*68.9*	*48.9*	*38.8*	*38.0*	*90.1*

5.2.1 Women at work

In the domain of *work,* on average, the EU-27 has achieved a score of 69.0, that is more than two-thirds of the way towards equality. Moreover, all Member States are above halfway towards equality in this domain, but with only four of them going over the threshold of three-quarters of the way towards gender equality. Scores for the domain of *work* are highest for Finland with a value of 82.0, Denmark with 81.6 and Sweden having attained 78.6 % towards gender equality (see Table 5.2.). A more detailed breakdown of scores is provided in Annex 8.

Table 5.2. Gender Equality Index scores for the domain of work

Country	Work	Participation	Segregation and quality of work	Sectoral segregation*	Quality of work*
FI	82.0	88.3	76.1	31.8	90.8
DK	81.6	90.1	73.9	45.8	83.3
SE	78.6	91.2	67.7	38.1	77.6
UK	76.6	79.7	73.7	42.4	84.2
AT	73.9	79.0	69.1	39.9	78.9
NL	73.1	77.6	68.8	36.9	79.5
DE	72.5	76.7	68.6	40.1	78.0
CZ	71.6	77.3	66.4	25.9	79.9
IE	71.0	73.9	68.1	36.6	78.6
SI	69.1	82.7	57.7	27.7	67.7
CY	68.7	84.9	55.6	49.1	57.8
FR	67.0	76.1	59.1	43.2	64.4
BE	66.4	70.7	62.3	41.2	69.4
LU	66.4	70.3	62.7	53.0	65.9
PT	66.2	85.6	51.1	28.6	58.6
EE	64.6	84.9	49.2	24.7	57.3
PL	61.4	73.4	51.3	25.2	60.0
ES	61.3	71.6	52.5	43.0	55.6
LT	61.0	81.9	45.4	30.9	50.3
SK	61.0	75.3	49.3	22.3	58.3
IT	60.6	57.8	63.4	35.8	72.7
RO	60.4	74.5	49.0	20.9	58.3
EL	59.7	65.4	54.4	44.0	57.9
HU	55.9	68.3	45.7	31.9	50.3
MT	55.0	53.0	57.0	45.5	60.9
LV	54.9	83.2	36.2	22.7	40.7
BG	49.9	75.5	33.0	25.4	35.5
EU-27	*69.0*	*76.6*	*62.2*	*37.0*	*70.7*

* during the computation of the overall Index, sectoral segregation and quality of work are aggregated into a single sub-domain, with respective weights of 0.25 and 0.75, in line with the structure derived from the multivariate analysis.

Participation is measured by focusing on gender gaps in full-time equivalent employment rate and duration of working life. The analysis of the gender indicators in this sub-domain showed that men were, across all Member States, more likely to participate in the labour market (in full-time equivalent) and also to spend more years than women working.

The sub-domain of *participation* is highest on average in the EU-27 with a gender equality score of 76.6, nearly three-quarters of the way towards gender equality. Gender equality in participation is highest for Finland, Denmark and Sweden with scores of 88.3, 90.1 and 91.2 respectively.

Malta, however, with a score of 53.0 shows that progress needs to be made in this subdomain. Figure 5.1. shows that full-time equivalent participation and duration of working life are positively associated with the domain of work, which means that an increase in the values of these variables implies a rise in the scores in the domain. The association is measured by the Pearson´s correlation coefficient, registering a value r = 0.59. Taking into account that this coefficient reaches its maximum value in 1, it means that the intensity of the relationship is moderate. This provides information about the impact of the sub-domain *participation* on gender equality scores in the domain *work*.

Figure 5.1. Relationship between the domain of *work* and *participation*

R² = 0.34589
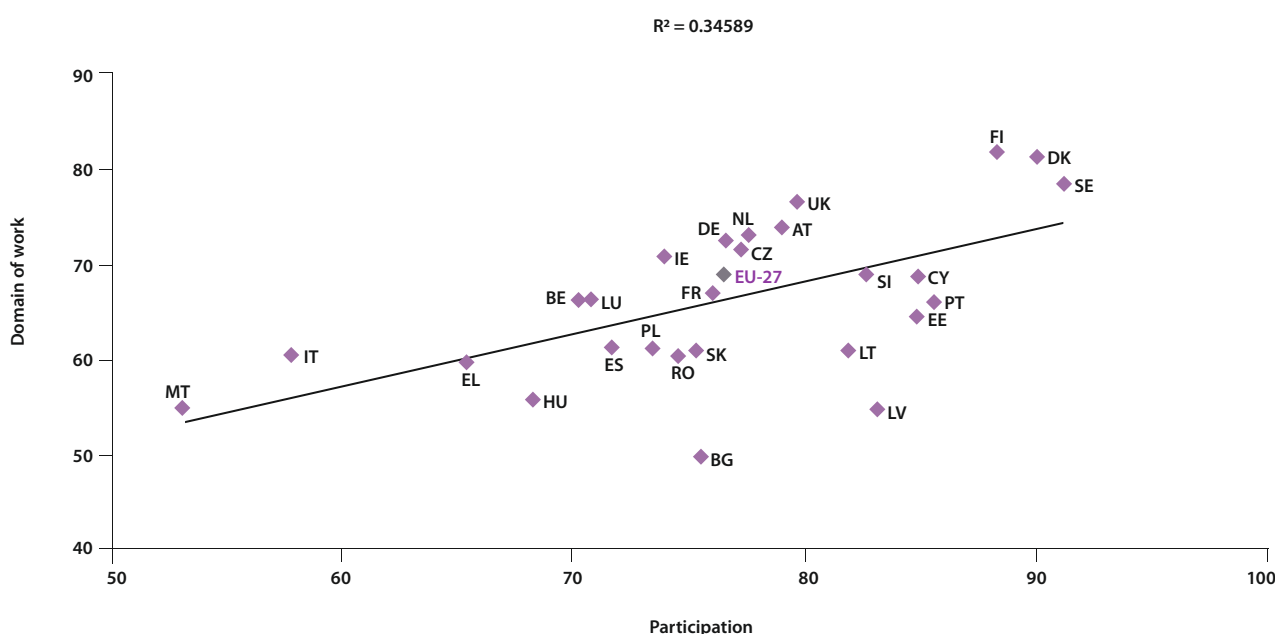
Source: EIGE's calculations

As shown in Table 5.2., *segregation and quality of work*, the second sub-domain of work, measures sectoral segregation (taking participation of women and men in selected segregated sectors, here being *Education, Human health and Social work activities*), as well as aspects of quality of work, including flexibility, training at work and health and safety.

Segregation into different sectors has repercussions on working conditions (European Commission, 2009; UN-ECE, 2013) as can be seen in the statistical structure of the gender indicators employed in the Index (Annex 6).

The structure shows a positive relationship between sectoral segregation and not experiencing health and safety risks (r = 0.44), as well as being able to vary the start and end of the working day (r = 0.34).

This second sub-domain has considerable variability, with scores that extend from low gender equality in Bulgaria (33.0) and Latvia (36.2) to higher levels of gender equality in Denmark (73.9) and Finland (76.1). The EU average reaches the value 62.2, nearly two-thirds of the way towards gender equality.

The sub-domain of *segregation and quality of work* has a strong positive relationship with the domain of work (r = 0.88), demonstrating that this combination of gender indicators contributes significantly to the overall domain of *work* (see Figure 5.2.).

Regarding sectoral segregation, on average at EU level, gender equality is a distant goal, with an average score of 37.0. Across all Member States, only Luxembourg makes it past halfway towards gender equality, with a value of 53.0, and scores are below a quarter in Romania (20.9), Slovakia (22.3), Latvia (22.7) and Estonia (24.7).

The EU average score for quality of work stands at 70.7, suggesting a moderate level of gender equality. However, across Member States, nine have reached scores above 75. This includes Sweden (77.6), Germany (78.0), Ireland (78.6), Austria (78.9), the Netherlands (79.5), the Czech Republic (79.9), Denmark (83.3), the United Kingdom (84.2) and Finland (90.8). This is not the case in all Member States, with Bulgaria (35.5) and Latvia (40.7) below halfway towards gender equality.

Figure 5.2. Relationship between the domain of *work* and *segregation and quality of work*
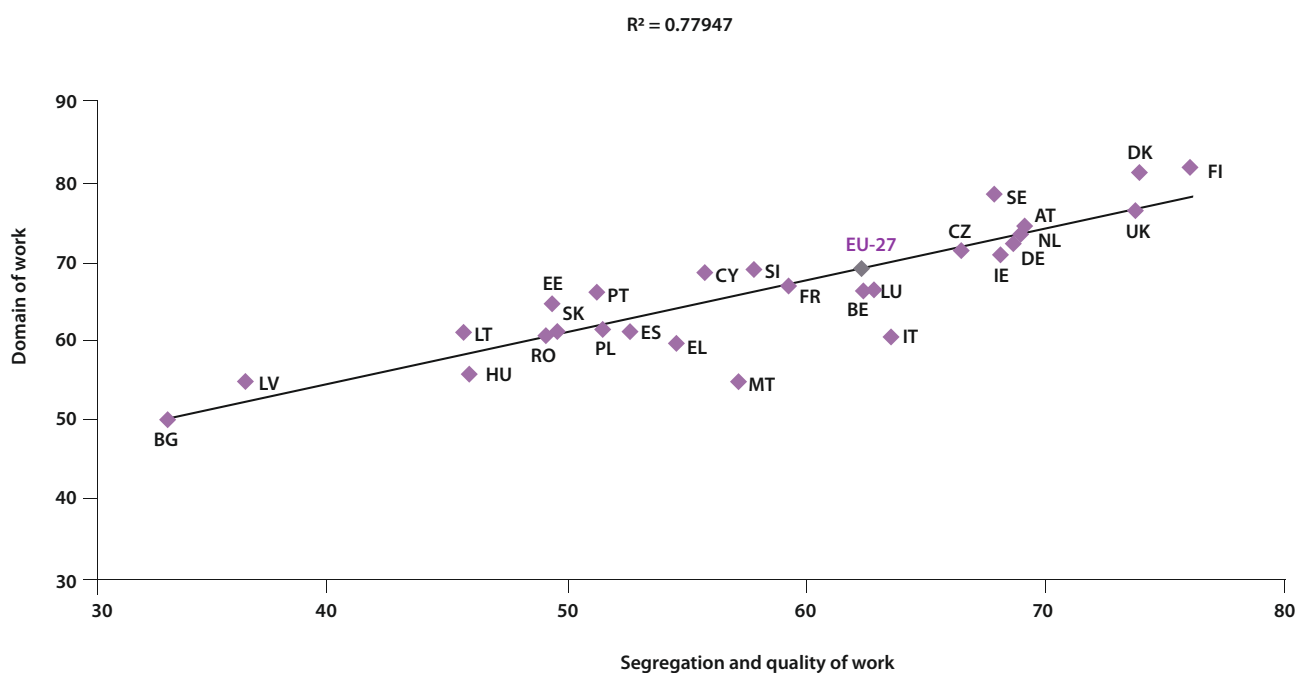
Source: EIGE's calculations

This domain shows that much remains to be done in terms of equalising FTE employment and duration of working life, in addition to ensuring that gender gaps are closed in the indicators measuring quality of work. The scores also show that sectoral segregation remains a serious concern across all Member States, one which can have a serious impact on overall scores for the domain of work. It is therefore important to measure not only the extent to which women and men are getting in the labour market, but also how they are getting on there. The analysis of the domain of work in general, and quality of work in particular, could benefit from harmonised and comparable gender-sensitive indicators on work-life balance at EU level for all Member States. It is an important aspect of analysis from a gender perspective, which could well complement the measurement framework of the Gender Equality Index.

5.2.2. Money matters

The domain of *money*, with a score of 68.9 on average at EU level, shows that the EU-27 is over two-thirds of the way in achieving gender equality when it comes to the financial resources and economic situation of its citizens. It is likely that this score actually underestimates the true extent of the gap between women and men when it comes to the share of income, as available gender indicators ignore the power relations between women and men which can lead to an unequal sharing of income within households.

Twenty-four Member States achieve a score that is above halfway towards gender equality, with three Member States going beyond four-fifths of the way towards gender equality: Sweden (80.2), The Netherlands (82.5) and Luxembourg (90.9). In other Member States, the domain of *money* shows lower scores, with the lowest score for Romania with 39.0 (see Table 5.3.). A more detailed breakdown of scores is provided in Annex 9.

Table 5.3. Gender Equality Index scores for the domain of *money*

Country	Money	Financial resources	Economic situation
LU	90.9	95.0	86.9
NL	82.5	71.8	94.8
SE	80.2	67.7	95.1
BE	79.3	69.7	90.3
DK	79.2	74.8	83.9
FI	78.4	66.3	92.7
AT	77.9	65.9	92.1
IE	77.0	76.8	77.2
DE	76.3	70.6	82.6
FR	75.9	67.0	86.1
UK	74.3	72.7	76.0
CY	74.1	66.5	82.6
SI	70.2	51.8	95.1
MT	68.2	54.1	86.0
IT	68.2	60.2	77.3
EL	63.3	54.3	73.9
ES	60.7	54.2	67.9
CZ	59.3	35.9	97.9
PT	56.3	42.3	75.0
HU	54.4	30.5	97.1
SK	53.7	31.7	90.9
PL	52.2	34.6	78.8
EE	49.1	31.0	77.9
LV	42.0	26.7	66.0
LT	41.5	26.8	64.3
BG	40.7	23.2	71.3
RO	39.0	21.0	72.5
EU-27	*68.9*	*59.5*	*79.6*

The first sub-domain, *financial resources*, measures gaps in earnings, as well as in disposable income. With an average score of 59.5 at EU level, it suggests that gender inequalities remain in this area. Even though Luxembourg, with a score of 95.0, attains a high level of gender equality, the majority of Member States reach a more moderate level, with over a third of Member States below halfway towards gender equality. Gaps in earnings and income are lowest in Romania (21.0), Bulgaria (23.2) and Latvia (26.8).

A very strong positive link exists between *financial resources* and the domain of *money* (r = 0.97), showing that this sub-domain makes a strong contribution to the gender scores of *money*.

Figure 5.3. Relationship between the domain of *money* and f*inancial resources*
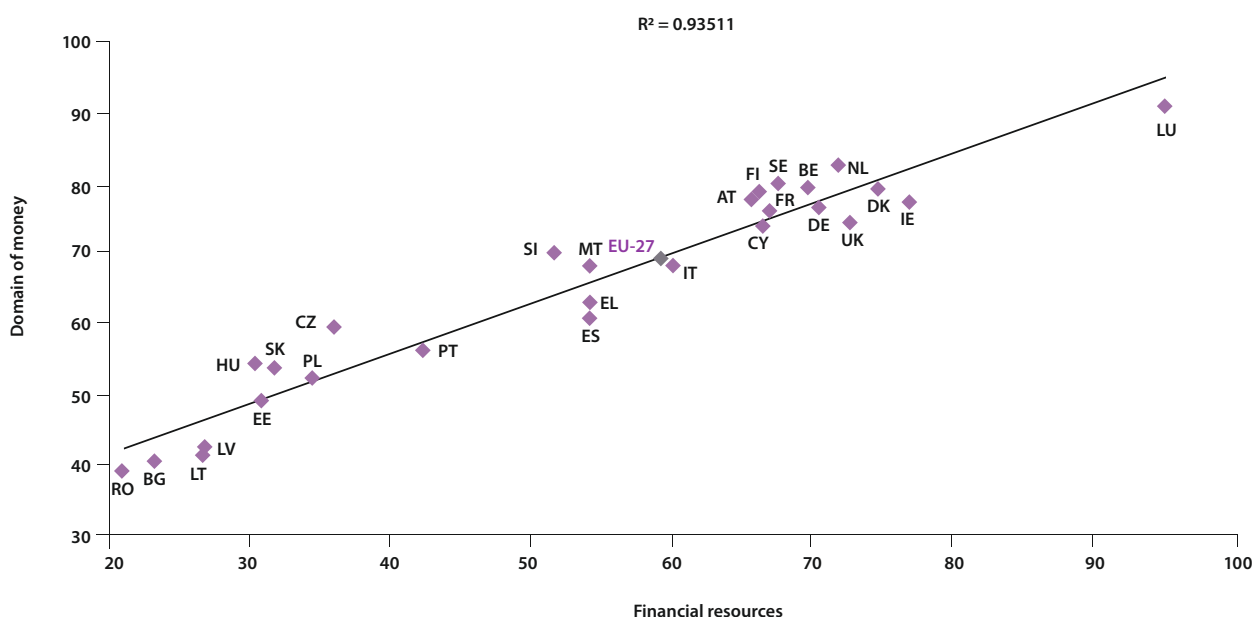
Source: EIGE's calculations

The sub-domain of *economic situation*, measured by individuals not identified as being at risk of poverty and by the distribution of income, shows a score of 79.6 in the EU-27. Lithuania, with a value of 64.3, shows the lowest score of all Member States. In other Member States, scores show that women and men are relatively equal in terms of their economic situation, such as in Hungary (97.1) and the Czech Republic (97.9). This sub-domain is positively associated with the domain of *money* (r = 0.46).

Figure 5.4. Relationship between the domain of *money* and *economic situation*
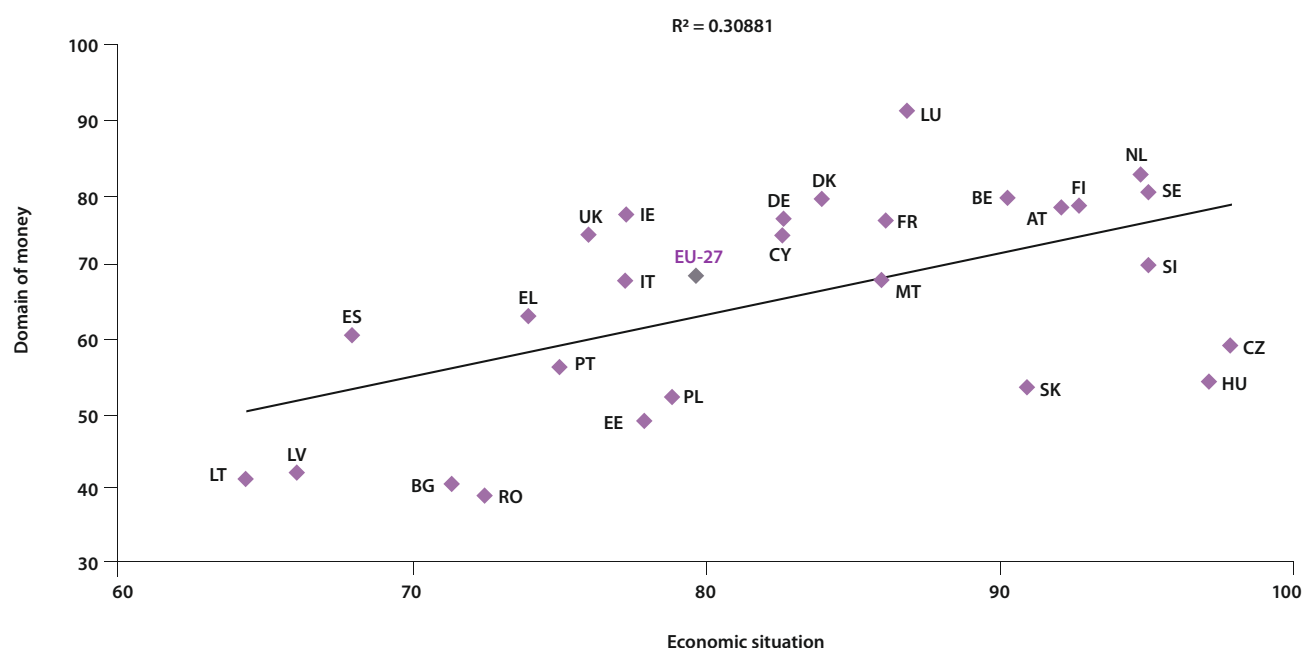
Source: EIGE's calculations

The scores of the Gender Equality Index show that progress remains to be made in terms of *money*, overall in the EU, particularly since the indicators available to measure these issues are likely to underestimate the true extent of the gaps. The situation is not homogenous across Member States, with some being near to closing gender gaps, while others remain far away from gender equality. Not-at-risk-of-poverty and income distribution, although far from perfect in all Member States, occasionally show relatively high scores, while earnings and income show large degrees of gender inequality in some Member States.

5.2.3. Knowledge exchange

The domain of *knowledge* shows that on average, EU Member States have only attained the middle point towards gender equality with a mean value of 48.9 at EU level, showing that the domain of *knowledge* remains unequal in terms of gender, although this varies greatly across Member States. Gender equality scores range from as little as 28.8 in Romania to just above three-quarters of the way towards gender equality in Denmark (75.1) (Table 5.4.). A more detailed breakdown of scores is provided in Annex 10.

Table 5.4. Gender Equality Index scores for the domain of *knowledge*

Country	Knowledge	Educational attainment and segregation	Educational attainment*	Educational segregation*	Lifelong learning
DK	75.1	66.6	78.5	54.6	84.7
UK	68.8	81.3	97.3	65.4	58.2
FI	67.0	67.4	85.5	49.2	66.6
SE	66.3	68.3	76.3	60.2	64.3
NL	65.5	67.5	80.5	54.5	63.5
LU	61.1	72.2	81.7	62.6	51.8
BE	54.7	78.6	89.0	68.2	38.0
ES	53.5	69.3	81.7	56.9	41.3
EE	53.0	57.3	70.3	44.4	49.0
CY	52.9	73.5	91.6	55.5	38.0
IE	52.8	78.5	90.9	66.1	35.4
SI	51.4	46.2	53.8	38.7	57.1
FR	49.4	64.3	75.4	53.2	38.0
LT	47.4	58.3	67.1	49.5	38.5
AT	44.6	39.5	45.2	33.8	50.2
DE	44.1	49.7	60.4	39.0	39.0
PL	44.0	46.5	52.2	40.9	41.6
LV	38.8	45.7	54.1	37.4	32.9
CZ	37.3	36.1	44.2	28.0	38.5
EL	36.7	50.8	62.0	39.5	26.5
HU	35.1	42.3	49.0	35.7	29.1
SK	35.0	38.0	43.6	32.5	32.1
MT	34.0	35.2	38.5	31.8	32.9
IT	32.1	31.3	36.0	26.6	32.9
BG	32.0	45.2	49.0	41.4	22.7
PT	30.4	29.9	33.4	26.3	30.9
RO	28.8	32.2	36.6	27.9	25.8
EU-27	*48.9*	*57.2*	*69.0*	*45.4*	*41.8*

* during the computation of the overall Index, attainment and segregation are aggregated into a single sub-domain, using equal weights, in line with the structure derived from the multivariate analysis.

The first sub-domain measures both e*ducational attainment and segregation* in tertiary education, since they are very closely associated (r = 0.95), and that this strong relationship is picked up by the statistical structure of the Gender Equality Index. Educational attainment is measured by the percentage of the population that has achieved third-level education, while segregation measures women and men's participation in selected segregated sectors (here being *Education, Health and welfare, Humanities and art*).

The sub-domain *educational attainment and segregation* presents scores that vary from 29.9 for Portugal to 81.3 for the United Kingdom. The EU-27 average registers the value 57.2, with 13 countries that are below halfway towards gender equality (see Table 5.4.).

The contribution of gender indicators on *educational attainment and segregation* is asserted by the strong correlation between them and the domain of *knowledge* (r = 0.84), as shown in Figure 5.5. This illustrates that an improvement in this sub-domain has direct implications on the increase of the gender scores of *knowledge*.

In terms of educational attainment, there is a large degree of gender equality in the majority of Member States, with

an average score of 69.0 at EU level. However, although some countries are close to the equality point, for example the United Kingdom with a value of 97.3, others remain far away. A third of Member States (PT, IT, RO, MT, CZ, SK, AT, HU and BG) remain below halfway towards gender equality.

Relatively high levels of gender equality in educational attainment, where they occur, are mitigated by lower scores in terms of educational segregation, with an EU average of 45.4, showing that high levels of gender segregation prevail. Scores extend from very low gender equality in educational segregation in Portugal (26.3) and Italy (26.6), to relatively higher scores in the United Kingdom (65.4), Ireland (66.1) and Belgium (68.2).

Figure 5.5. Relationship between the domain of *knowledge* and *educational attainment and segregation*
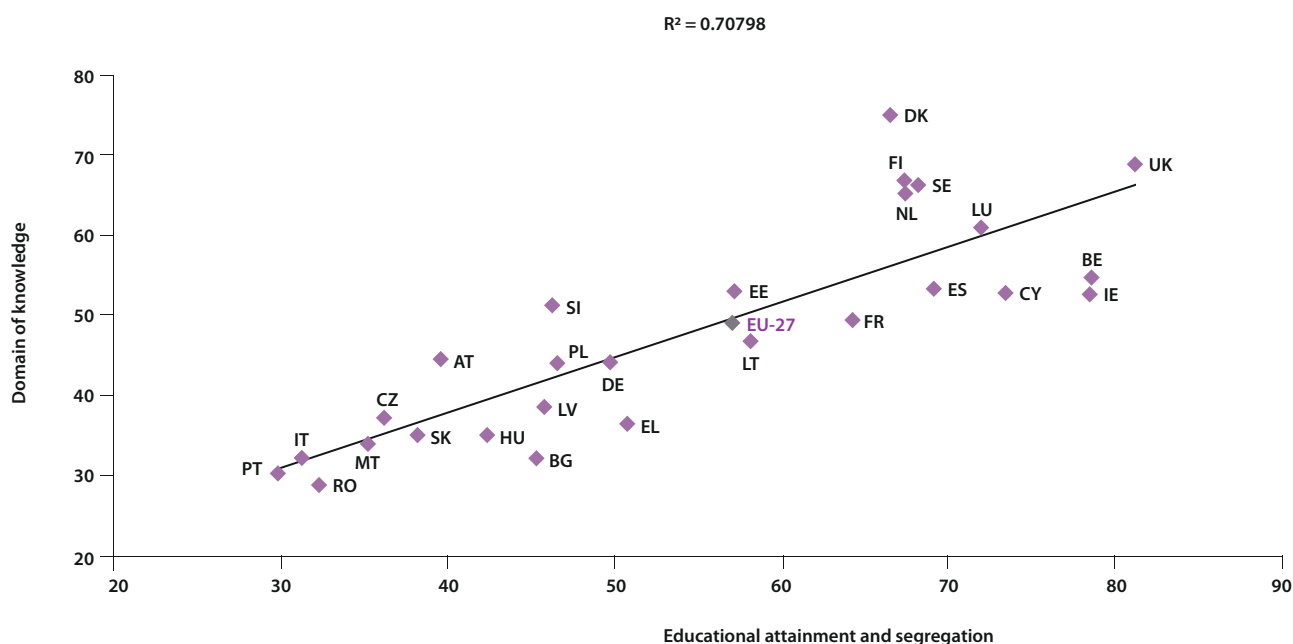
Source: EIGE's calculations

The second sub-domain focuses on measuring gender equality in lifelong learning participation. Its scores show that the EU remains quite far from gender equality in terms of *lifelong learning*, with an average score of 41.8. Moreover, throughout Member States, only eight are above halfway towards gender equality, although the maximum score extends to 84.7. In contrast, gender equality scores remain very low in a significant number of Member States, not exceeding 30.0 in Bulgaria, Romania, Greece and Hungary.

The sub-domain of *lifelong learning* is another strong contributor to the domain of *knowledge*, displaying a strong positive association (r = 0.89). An improvement in this sub-domain implies a similar increase in the gender scores of *knowledge*.

Figure 5.6. Relationship between the domain of *knowledge* and *lifelong learning*

R² = 0.78764
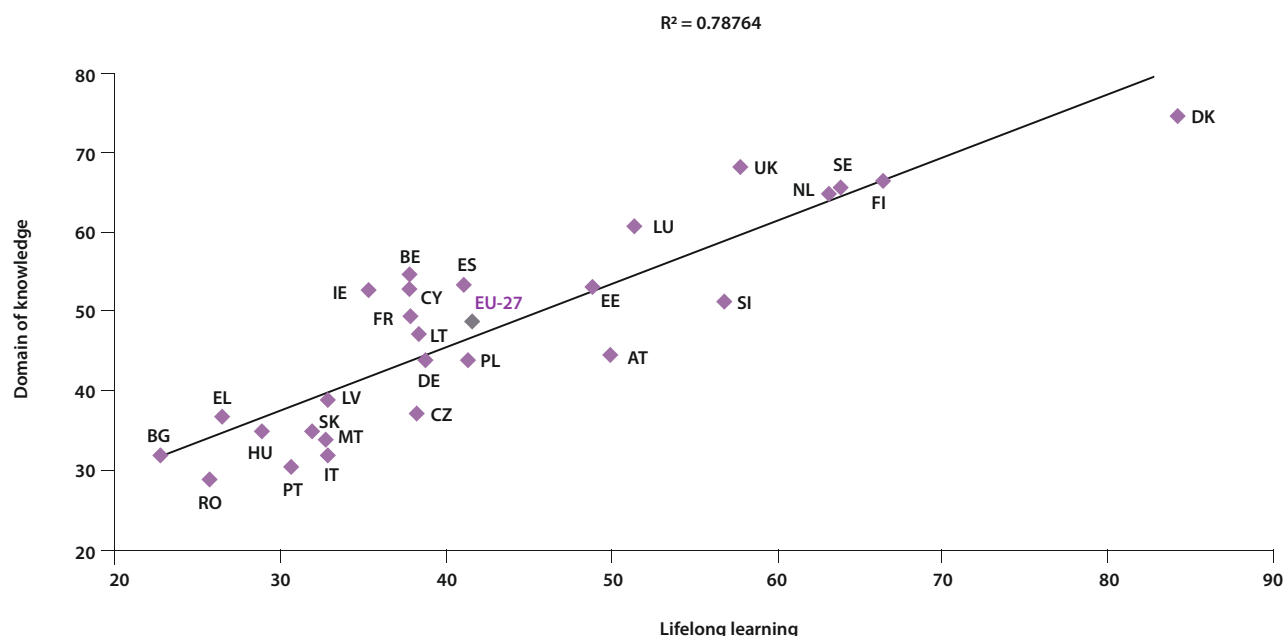
Source: EIGE's calculations

The domain of *knowledge* shows a mixed picture in terms of gender equality. Overall, gender equality patterns display large variations across Member States. Some see a moderate to high level of gender equality in terms of participation in tertiary education and lifelong learning, although patterns of educational segregation continue to show a more unequal side to knowledge in terms of gender. In other Member States, both levels of achievement and gender gaps in all aspects of knowledge remain lead to low gender equality scores. The domain of knowledge therefore shows not only the need to close gender gaps, but also to reduce existing differences between Member States.

5.2.4. Time is of the essence

The Gender Equality Index shows that there are very important differences between women and men in the division of time spent on care and social activities. The domain of time presents the lowest gender equality scores, with an average of 38.8 at EU level, well below halfway towards gender equality. Scores range from below 20.0 in Bulgaria, Greece, Slovakia and Romania to a maximum of 71.3 in the Netherlands (Table 5.5.). A more detailed breakdown of scores is provided in Annex 11.

Table 5.5. Gender Equality Index scores for the domain of *time*

Country	Time	Care activities	Social activities
NL	71.3	70.7	71.9
DK	64.9	80.4	52.4
SE	63.9	69.7	58.7
FI	63.8	54.4	74.8
IE	53.4	60.2	47.5
EE	51.4	75.4	35.1
SI	49.1	51.1	47.2
LU	48.9	52.0	46.0
BE	45.3	56.9	36.1
UK	43.2	56.6	32.9
DE	41.6	40.1	43.3
AT	40.0	35.6	45.0
MT	37.5	44.4	31.6
FR	35.8	43.6	29.3
LV	35.2	76.2	16.3
ES	33.8	58.2	19.6
IT	33.0	42.5	25.6
HU	32.5	53.5	19.7
CY	25.3	35.9	17.8
LT	24.1	40.2	14.5
CZ	23.2	28.9	18.7
PT	22.4	50.6	9.9
PL	20.9	27.6	15.8
RO	17.8	27.0	11.8
SK	17.8	27.0	11.7
EL	17.4	20.0	15.1
BG	17.3	20.9	14.3
EU-27	*38.8*	*45.5*	*33.0*

The first sub-domain examines gender gaps in the proportion of women and men that spend an hour or more every day in caring for and educating children and/or grandchildren, as well as on domestic tasks such as cooking and housework. The average score at EU level shows that the situation remains a long way from gender equality with a score of 45.5.

This average score at EU level masks some very large variations between Member States. There is a wide degree of gender inequality when it comes to care activities in Greece and Bulgaria with scores of 20.0 and 20.9 respectively. However, scores reach over three-quarters of the way towards gender equality in Estonia (75.4), Latvia (76.2) and Denmark (80.4). A very strong association exists between participation in care and domestic activities and the domain of time (r = 0.79).

Figure 5.7. Relationship between the domain of *time* and *care activities*

R² = 0.63086
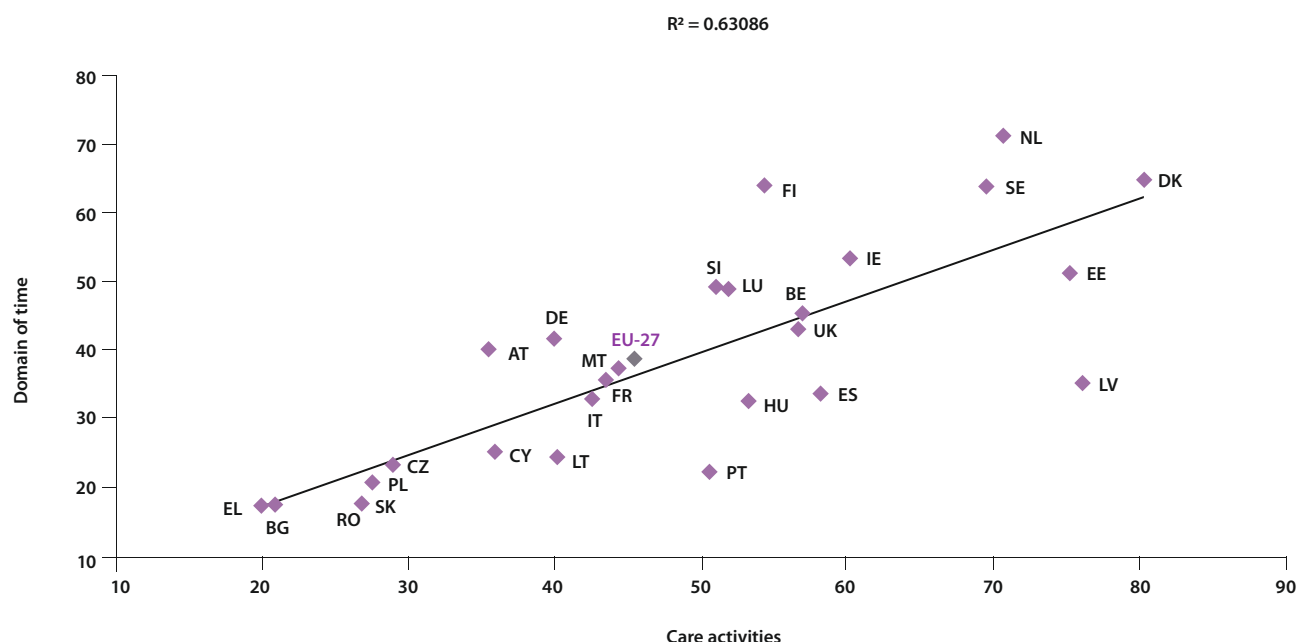
Source: EIGE's calculations

The sub-domain of *social activities*, measured by participation in sport, cultural and leisure activities as well as volunteer or charitable activities shows a significant level of gender inequality with an average EU score of 33.0. Scores are below 20.0 in 12 of the Member States (PT, SK, RO, BG, LT, EL, PL, LV, CY, CZ, ES and HU) with the vast majority of countries not reaching a score of 50.0. Exceptions to these low scores are the Netherlands and Finland, which achieve scores of 71.9 and 74.8, respectively. Figure 5.8. shows the contribution this sub-domain makes to the domain of time, with a very strong positive association (r = 0.94).

Figure 5.8. Relationship between the domain of *time* and *social activities*

R² = 0.88502
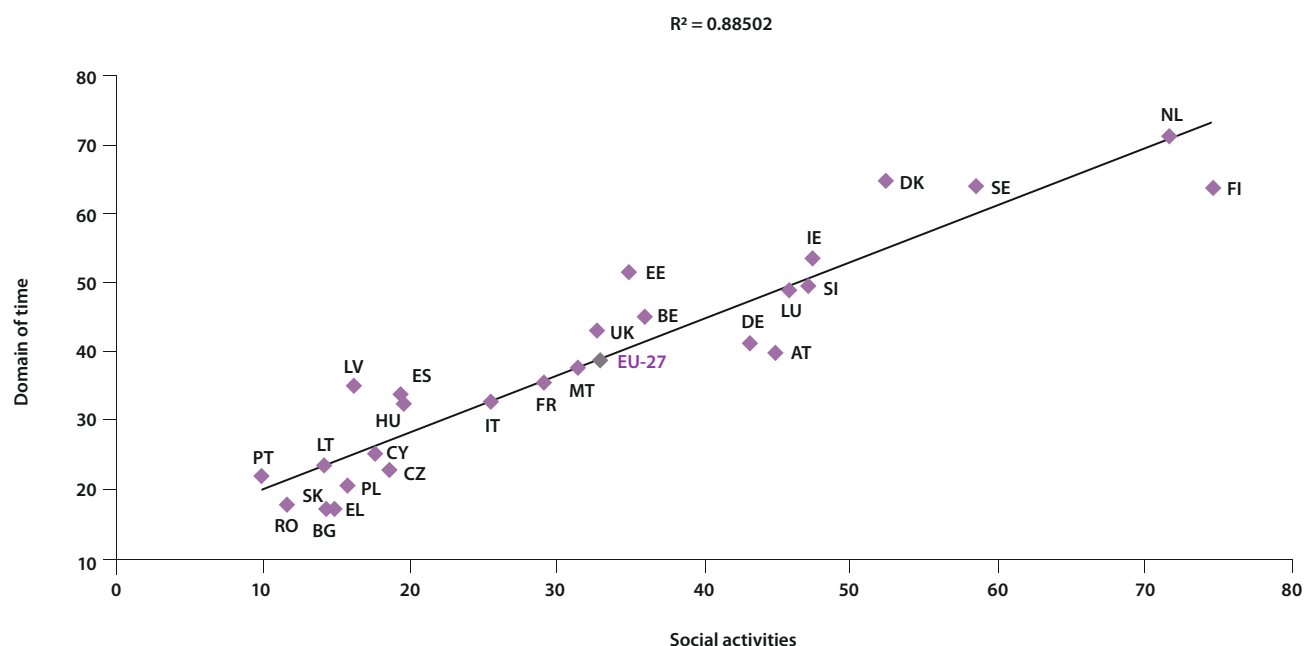
Source: EIGE's calculations

In conclusion, gender equality in terms of the division of time proves to be one of the most challenging areas. Although some Member States achieve a relatively high score, it should be noted that the indicator used to measure involvement in care activities refer to a short period of time during the course of a day (at least one hour a day). It therefore does not mean that high scores could be maintained for other indicators measuring greater periods of time spent in care activities. However, even with this low threshold, nearly half of Member States achieve relatively low scores. In addition, involvement in leisure, cultural and civic activities shows strong gender inequality. In order to transform the lives of both women and men, and importantly, to transform gender relations, it is crucial to start addressing the large gender gaps present in this domain.

5.2.5. Low power

Ensuring gender balance in decision-making, to safeguard the equal share of power between women and men, is positively associated with gender equality. The Gender Equality Index in this domain highlights a significant deficit in gender equality with an average score of 38.0 at EU level. Indeed, only five Member States have achieved a score that is above halfway towards gender equality in the domain of *power* (FR, NL, DK, FI and SE) with a maximum score of 74.3 in Sweden. Other Member States score below 20 in Cyprus, Luxembourg, Italy and Malta (Table 5.6.). A more detailed breakdown of scores is provided in Annex 12.

Table 5.6. Gender Equality Index scores for the domain of *power*

Country	Power	Political	Economic
SE	74.3	91.5	60.3
FI	68.8	85.9	55.1
DK	60.0	77.8	46.3
NL	52.2	69.2	39.4
FR	50.3	63.8	39.7
ES	47.2	75.4	29.6
BE	45.2	65.7	31.1
LV	38.6	38.9	38.3
SI	36.0	43.5	29.9
UK	35.2	52.4	23.6
PL	34.5	35.1	34.0
BG	33.8	47.9	23.9
SK	33.1	31.8	34.4
LT	32.1	35.6	29.0
PT	30.6	44.1	21.2
CZ	29.6	34.4	25.5
DE	28.0	59.4	13.2
EE	27.5	34.7	21.7
IE	26.5	30.4	23.0
RO	24.9	20.1	30.7
HU	24.4	15.1	39.4
EL	24.4	41.4	14.4
AT	24.3	63.1	9.3
MT	18.7	30.1	11.7
IT	18.6	31.2	11.1
LU	14.7	44.8	4.8
CY	12.2	31.9	4.7
EU-27	*38.0*	*49.9*	*29.0*

The first sub-domain of *power* measures political decision-making by measuring gender gaps in representation in ministries, parliaments and regional assemblies. The EU-27, on average, has almost reached the halfway point towards equality when it comes to political power, with a score of 49.9. However, the scores throughout Member States in terms of the *political representation* of women and men shows very wide differences. Scores range from 15.1 in Hungary to 91.5 in Sweden, showing the range of differences in national situations. In total, four Member States have reached scores above three-quarters of the way towards gender equality (ES, DK, FI and SE). There is a very strong association between *political representation* in decision-making and the domain of *power* (r = 0.83) as can be seen in Figure 5.9.

Figure 5.9. Relationship between the domain of *power* and *political decision-making*
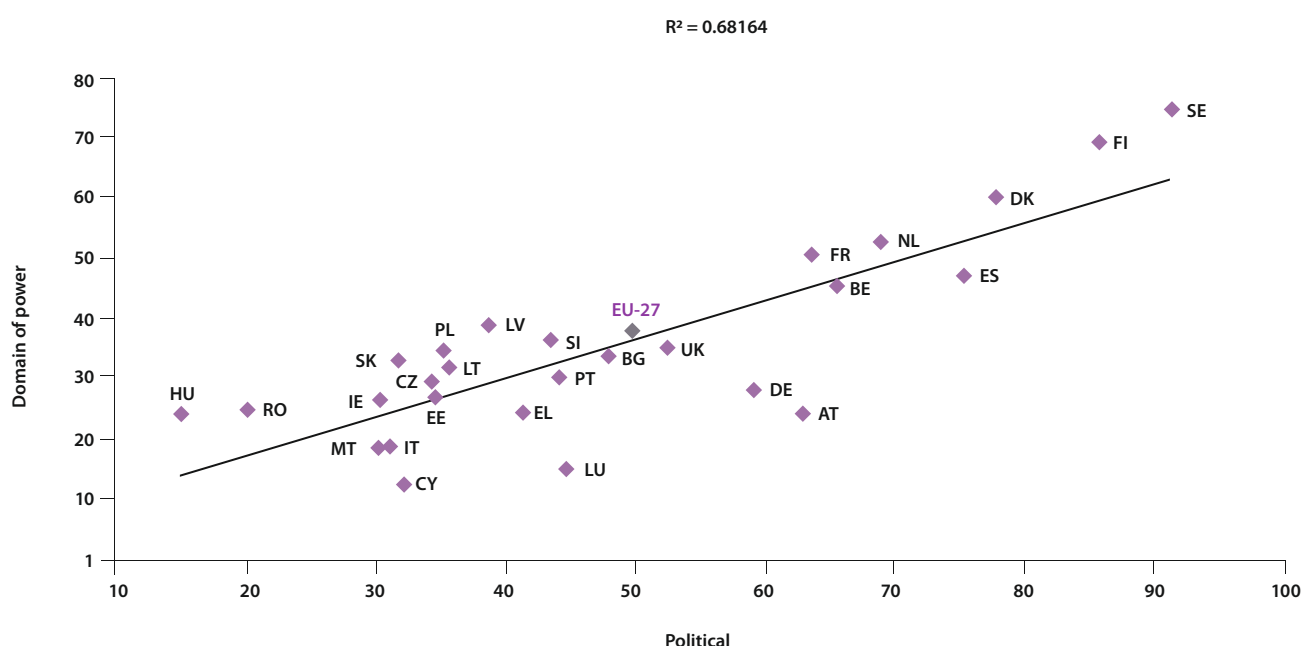
Source: EIGE's calculations

Distance towards gender equality is even farther in the sub-domain of equal representation in economic decision-making, measured by representation of women and men as members of boards in the largest quoted companies and as members of the central bank. The EU average value of only 29.0 stands for the lowest scores in the Gender Equality Index. In this subdomain, three Member States are extremely far from this gender equality score, with values below five in Cyprus and Luxembourg, and below 10 in Austria. An additional nine Member States (IT, MT, DE, EL, PT, EE, IE, UK and BG) stand below a quarter. Only Finland and Sweden make it past halfway towards gender equality with scores of 55.1 and 60.3 respectively. Figure 10 shows the strong correlation between this sub-domain and the domain of power (r = 0.88).

Figure 5.10. Relationship between the domain of *power* and e*conomic decision-making*
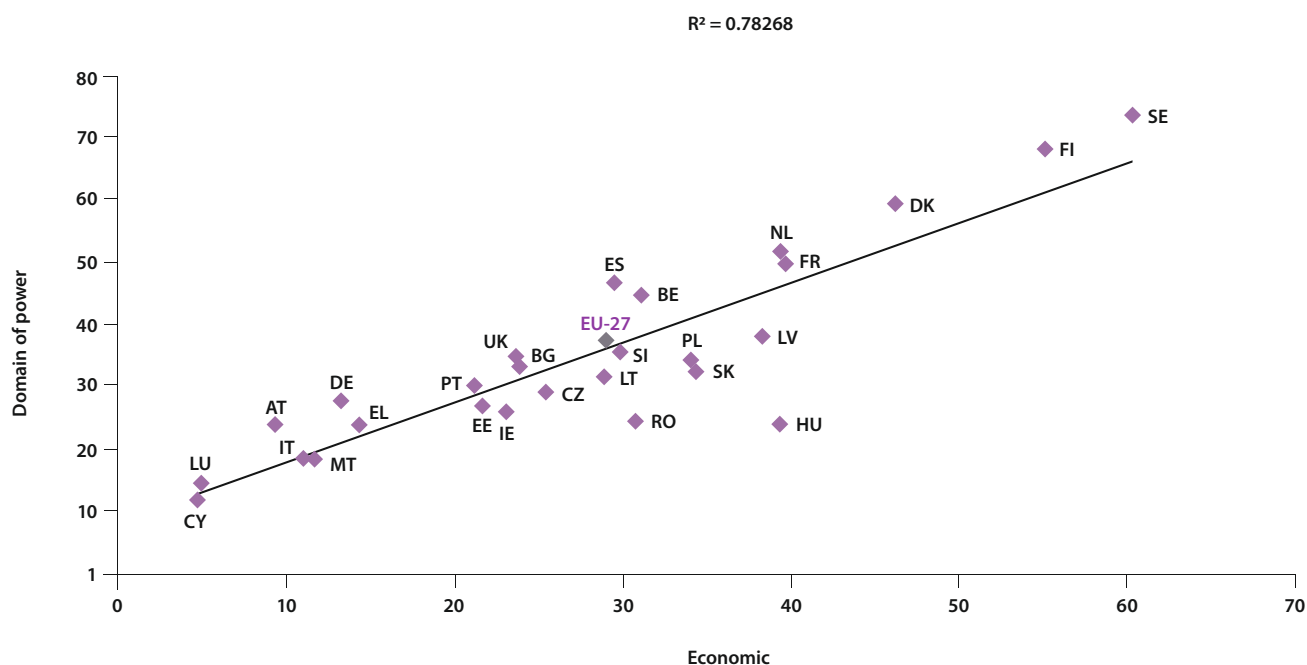
Source: EIGE's calculations

The domain of *power* calls for measures to increase gender equality in decision-making. Furthermore, the scores show the extent of the gender inequalities that exist in political and economic power. While less than a handful of Member States attain satisfactory gender equality scores in *political power*, the situation is even worse in the sub-domain of *economic power*. The low gender equality scores observed in this domain give a clear proof that urgent action is needed.

5.2.6. To good health

The scores of the Gender Equality Index show that EU Member States are, on average, close to gender equality when it comes to health issues, with a score of 90.1 towards gender equality, reflecting both the small gender gaps and high level of unmet needs that characterise health provision in the EU. As a result, both the United Kingdom and Ireland achieve nearly full equality with values at or above 95 (Table 5.7.). A more detailed breakdown of scores is provided in Annex 13.

Table 5.7. Gender Equality Index scores for the domain of *health*

Country	Health	Status	Access
IE	96.4	95.8	97.0
UK	95.4	93.9	97.0
NL	94.7	90.6	99.0
BE	94.1	89.1	99.3
LU	93.9	91.3	96.6
MT	93.2	91.4	95.0
SE	93.1	96.7	89.6
EL	92.4	92.2	92.6
DK	91.8	87.8	95.9
AT	91.6	86.4	97.2
CY	91.1	90.9	91.4
IT	90.8	89.4	92.2
ES	90.7	89.4	92.1
FR	90.6	86.7	94.6
FI	89.9	85.6	94.4
CZ	89.6	83.4	96.1
DE	89.5	84.5	94.7
SI	88.7	78.6	99.9
SK	85.8	77.3	95.3
LT	84.9	74.2	97.1
PT	84.5	75.4	94.7
BG	84.5	83.0	85.9
RO	84.0	81.9	86.2
EE	83.8	74.5	94.2
HU	83.7	75.8	92.4
PL	82.6	78.6	86.7
LV	77.1	71.0	83.7
EU-27	*90.1*	*86.6*	*93.7*

Similar patterns emerge among the scores of the Gender Equality Index that examine *health status* and absence of *unmet needs*. Health status combines indicators that measure self-perceived health, life expectancy and the number of healthy life years at birth. An average score of 86.6 at EU level shows that there is a small gender gap in *health status*, with two Member States achieving scores above 95 (IE, SE). In other Member States progress is needed with scores below three-quarters in Latvia (71.0), Lithuania (74.2) and Estonia (74.5). This combination of indicators is strongly associated with the domain of *health* (r = 0.91), as can be seen in Figure 5.11.

Figure 5.11. Relationship between the domain of *health* and *status*

R² = 0.83232
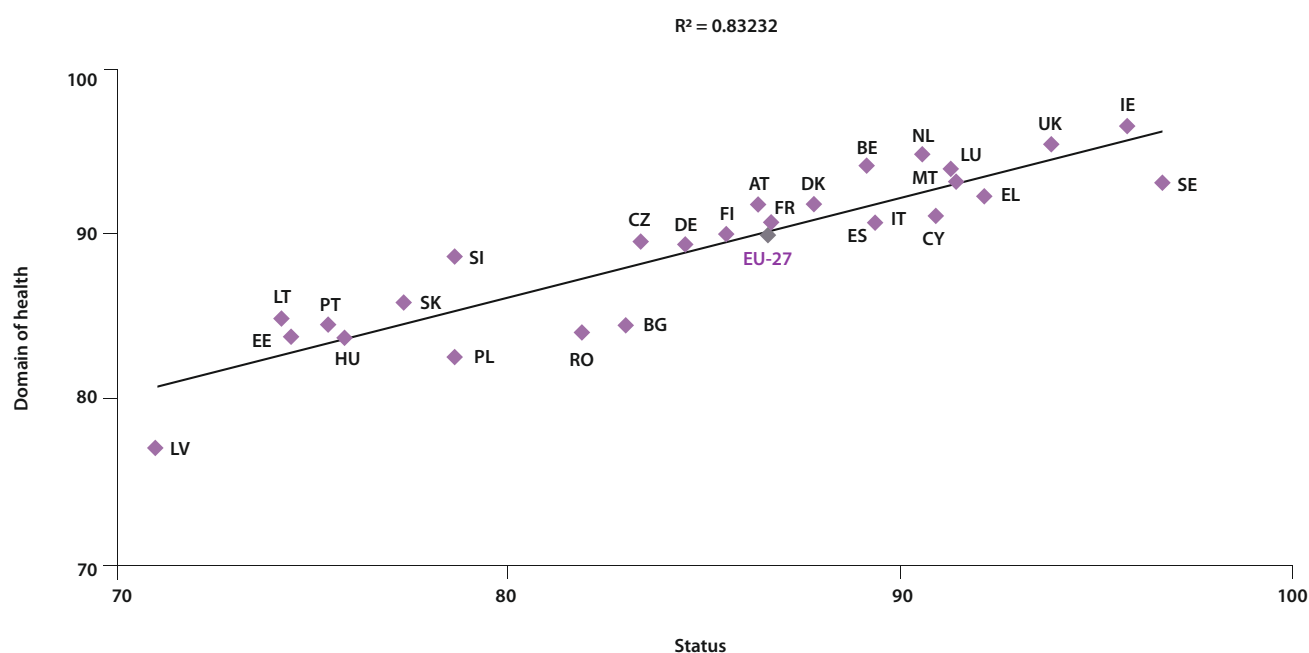
Source: EIGE's calculations

Absence of *unmet needs*, measured in the second sub-domain by how much both medical and dental needs of women and men were met, shows high achievements of gender equality, with an EU average score of 93.7. Gender equality in terms of fulfilment of needs is virtually achieved in the Netherlands (99.0), Belgium (99.3) and Slovenia (99.9), although a small level of gender inequality remains in Latvia (83.7), Bulgaria (85.9), Romania (86.2), Poland (86.7) and Sweden (89.6). Figure 12 shows the positive association that exists between the sub-domain of access and the domain of health (r = 0.63).

Figure 5.12. Relationship between the domain of *health* and *access*

R² = 0.39353
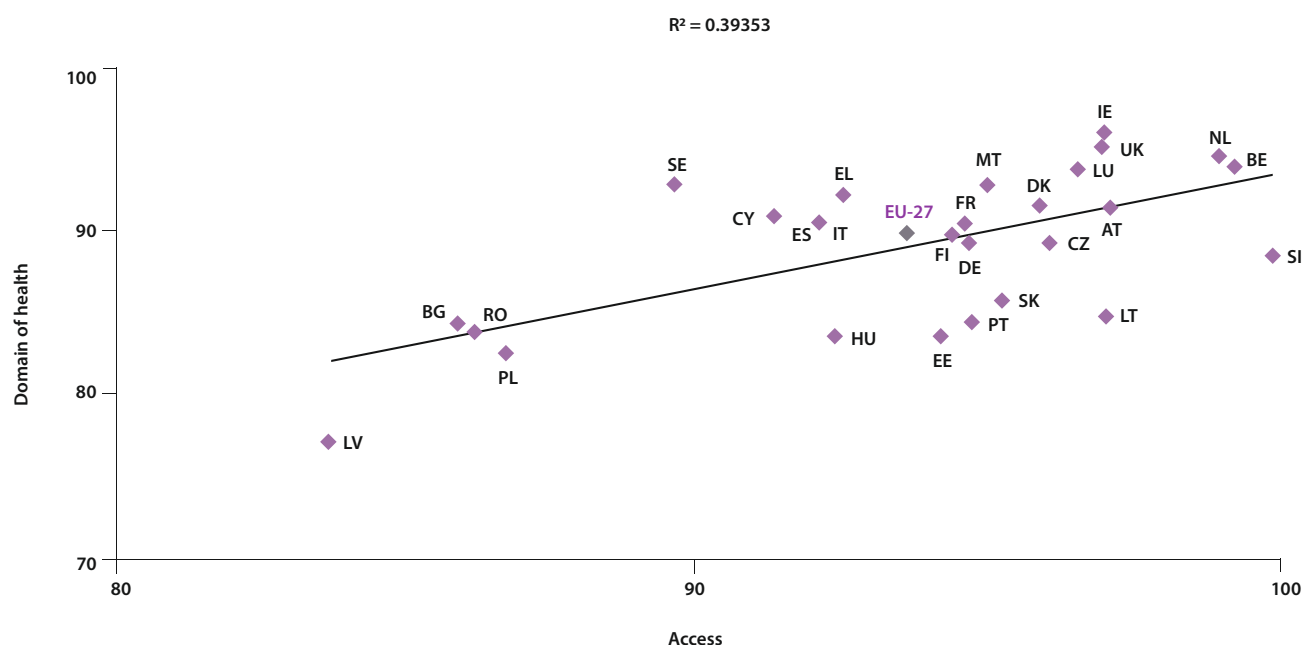
Source: EIGE's calculations

The domain of *health* shows a very optimistic picture of gender equality, with high scores in the vast majority of Member States overall and also for health status and access to health structures in particular. Although these high scores are heartening, it is essential that Member States with lower scores are attentive to improvements, and that the very small level of gender gaps is maintained or even decreased in the future.

5.2.7. Intersecting inequalities

Scores within the domain of *intersecting inequalities* were measured through gender gaps in employment rates among three groups of population: people that were foreign-born (as a proxy for belonging to an ethnic minority and/or being a migrant); older workers (aged 55 to 64); and people in households consisting of a single adult with one or more children (as a proxy for lone parents or carers). Since these represent illustrative groups only, and that this structure has not been reified with a multivariate analysis, the scores are not aggregated (nor by definition weight-

ed) into the core Gender Equality Index. They provide, individually, a measure of gender gaps in employment rates. They are, however, presented together with the scores calculated for employment rate among the population aged 15–64 to provide a comparative perspective.

The results presented in Table 5.8. show that for workers born in a foreign country, the overall gender equality score for the EU stands at just over three-quarters (75.6). The score is lowest for Slovakia (54.8) but reaches near equality in Cyprus, where employment rates for foreign-born workers are both relatively high and with a low gender gap.

Differences with the population aged 15 to 64 are mixed across Member States. The gender equality score is higher for foreign born individuals by over 10 points in Luxembourg (10.5), Malta (12.3), Cyprus (14.1) and Hungary (19.2). By contrast, there is a lower gender equality score of over 10 points in the other direction, pointing to greater gender inequality in eight other Member States (SK, SE, BE, FI, NL, DE, DK and FR).

Table 5.8. Gender Equality Index scores for the variable 'employment rate for people born in a foreign country'

Country	Intersecting inequalities Foreign born	Population 15–64
Employment rate		
CY	98.6	84.5
PT	90.2	82.0
HU	87.3	68.1
LU	87.3	76.8
DK	84.7	95.2
LT	84.7	76.4
LV	83.8	79.5
AT	83.7	89.0
SI	83.7	84.0
EE	81.2	81.3
UK	81.2	86.6
NL	80.9	92.8
CZ	78.6	75.6
RO	78.6	69.9
SE	78.6	93.2
DE	77.7	88.6
FI	77.2	89.7
IE	75.8	75.0

Country	Intersecting inequalities Foreign born	Population 15–64
	Employment rate	
ES	75.4	70.3
EL	71.8	64.7
FR	69.9	80.1
IT	69.4	62.1
BG	66.7	75.7
MT	65.4	53.1
BE	63.2	75.9
PL	61.7	71.2
SK	54.8	70.3
EU-27	*75.6*	*78.1*

Source: Eurostat, LFS (lfsa_ergacob)

The lowest scores for the domain of intersecting inequalities concern the gap in employment rate for older workers (55 to 64 years-old), with an average of 55.2 at EU level (Table 5.9.). This presents a very mixed picture throughout the EU with a very wide range. Malta appears to be very far from gender equality with a score of 19.3, while Sweden is at the other end of the spectrum with a score near equality of 94.7.

Gender equality scores for older workers (55 to 64) are consistently lower than those for the population aged 15 to 64 (with the exception of SE), with an EU average difference of 22.9. Differences in gender equality scores reach as much as 40.6 in Austria and 48.5 in Slovenia.

Table 5.9. Gender Equality Index scores for the variable 'employment rate for older workers'

Country	Intersecting inequalities Older workers	Population 15–64
	Employment rate	
SE	94.7	93.2
FI	79.1	89.7
DK	76.3	95.2
EE	74.4	81.3
DE	72.0	88.6
UK	70.6	86.6
LV	67.9	79.5
LT	65.4	76.4
PT	62.1	82.0
NL	61.1	92.8
CY	60.7	84.5
IE	60.2	75.0
BG	54.0	75.7
FR	53.7	80.1
CZ	50.9	75.6

Country	Intersecting inequalities Older workers	Population 15–64
Employment rate		
AT	48.4	89.0
ES	47.7	70.3
RO	47.4	69.9
LU	45.0	76.8
HU	43.3	68.1
BE	42.0	75.9
EL	41.6	64.7
SK	41.3	70.3
IT	37.8	62.1
SI	35.4	84.0
PL	35.0	71.2
MT	19.3	53.1
EU-27	*55.2*	*78.1*

Source: Eurostat, LFS (lfsa_ergacob)

Among households with a single adult and one or more children, the gender equality score for employment rate stands at 78.8 at EU level (Table 5.10.). While Luxembourg almost reaches the gender equality point with a score of 94.6, in other Member States, differences are more marked. This is the case of Malta (54.7), Ireland (55.6) and the UK (66.1).

Despite scores for lone parents or carers being close to gender equality, on average in the EU, the situation varies across Member States. The level of gender equality is higher for people living as a single adult with one or more children than for the population aged 15–64 in the majority of Member States, with the greatest differences registered in Luxembourg (17.8), Slovakia (18.8), Romania (18.9), Greece (19.7) and Italy (24.4). However, in Ireland or the United Kingdom the situation is reversed in favour of the population aged 15–64.

Table 5.10. Gender Equality Index scores for the variable 'employment rate for persons living in a household containing a single adult with one or more children'

Country	Intersecting inequalities Lone parents/carers	Population 15–64
	Employment rate	
LU	94.6	76.8
AT	93.3	89.0
SI	93.2	84.0
DK	92.3	95.2
LV	91.0	79.5
PT	90.9	82.0
SK	89.2	70.3
EE	89.0	81.3
RO	88.8	69.9
FI	86.6	89.7
IT	86.4	62.1
CY	85.7	84.5
CZ	85.6	75.6
EL	84.4	64.7
ES	84.2	70.3
LT	84.1	76.4
FR	84.0	80.1
HU	82.2	68.1
PL	82.0	71.2
BG	81.6	75.7
NL	80.4	92.8
SE	80.2	93.2
DE	79.8	88.6
BE	74.2	75.9
UK	66.1	86.6
IE	55.6	75.0
MT	54.7	53.1
EU-27	*78.8*	*78.1*

Source: Eurostat, LFS (lfst_hheredty)

The scores are provided on an illustrative basis only and it is important to note that the issue of heterogeneity of the population is a pertinent aspect to address within a gender equality perspective. The findings show that gender equality scores vary widely across Member States.

5.2.8. Violence

Table 5.11. Gender Equality Index scores for the domain of *violence*

Country	Violence
BE	
BG	
CZ	
DK	
DE	
EE	
IE	
EL	
ES	
FR	
IT	
CY	
LV	
LT	**No suitable indicators available**
LU	
HU	
MT	
NL	
AT	
PL	
PT	
RO	
SI	
SK	
FI	
SE	
UK	
EU-27	

The domain of *violence*, due to a lack of harmonised and comparable gender indicators at the EU level, remains empty. It nonetheless represents an indispensable domain for the measurement of gender equality. Maintaining this satellite domain is motivated by the pressing need to start measuring this void, which, supported by suitable indicators could provide essential information in this domain.

5.3. The bigger picture: the Gender Equality Index in context

In order to better understand the Gender Equality Index, scores are analysed together with other relevant variables. The identification of possible associations with other commonly used indicators is an important step to contextualise the information extracted from the Index, as outlined in the methodology developed by the OECD and the European Commission's Joint Research Centre, which were used to construct the Gender Equality Index.

Considering that the Gender Equality Index measures a complex concept that is related to both social and economic spheres, this comparative analysis examines its scores in the context of Gross Domestic Product (GDP), and in the context of spending on selected areas such as social protection, education, research and development and active labour market policies.

The Gender Equality Index uses economic prosperity as a measure of the situation and current development level of Member States. Economic affluence measured through GDP per inhabitant (in Purchasing Power Standard – PPS) is very varied in the EU, going from as little as 10,700 PPS in Bulgaria to six times as much in Luxembourg (65,200 PPS) in 2010. The relation between the Gender Equality Index and the GDP per capita (in PPS) shows a moderate positive correlation (r = 0.47). This means that there is a tendency for higher scores of gender equality among richer Member States, although this association is relatively low.

Figure 5.13. Relationship between the Index and GDP per inhabitant (PPS)
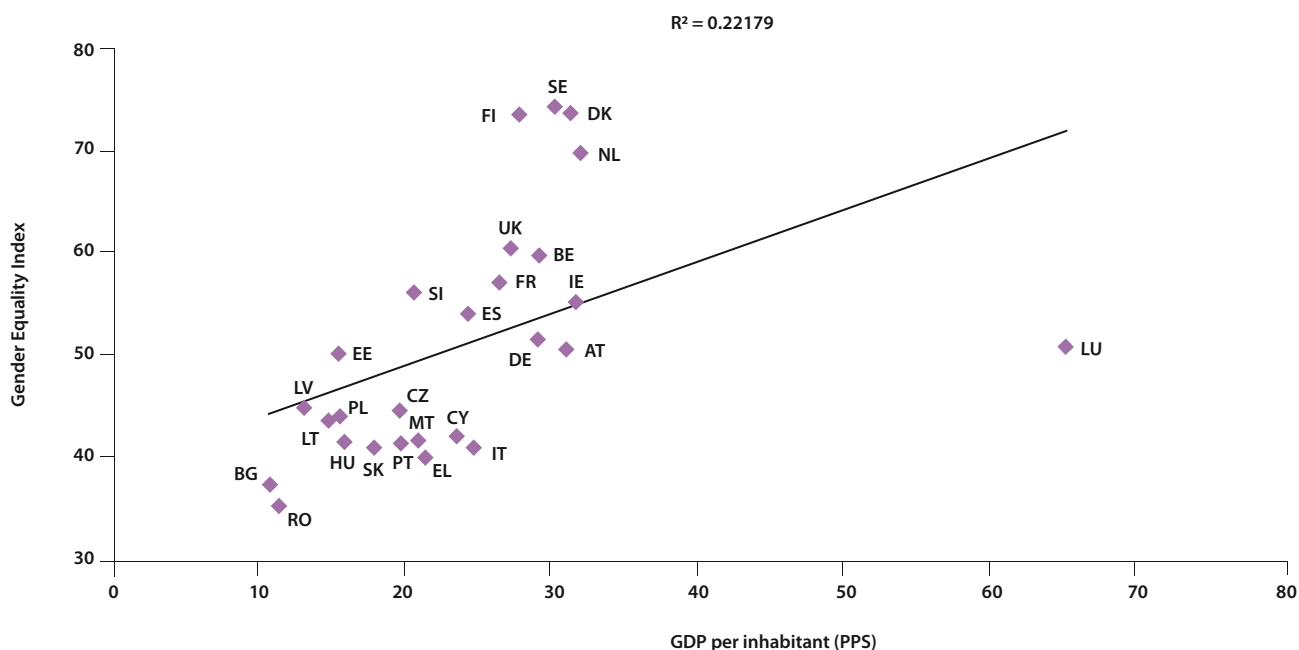
Source: EIGE's calculations; Eurostat, Annual National Accounts (nama_gdp_c)

The association between the score of the Gender Equality Index and GDP per inhabitant (PPS) is affected by Luxembourg, which appears to be a strong outlier. This is likely to be related to Luxembourg's atypical characteristics as a small Member State with sectoral labour market characteristics (large financial sector combined with international organisations) that result in very high GDP per capita relative to other Member States.

When Luxembourg is removed (see Figure 5.14.), there is a significant improvement in association (r = 0.57), which shows that richer Member States tend to have higher levels of gender equality, as measured by the Index. However, it is important to stress that the results of gender equality can vary for Member States that share similar levels of economic wealth. For example, the level of wealth in Scandinavian countries (DK, FI, NL and SE) is similar to that of other Western European Member States (AT, BE, DE, FR, IE and UK), but with significantly higher levels of gender equality in the former than the latter.

Figure 5.14. Relationship between the Index and GDP per inhabitant (PPS) – Luxembourg omitted
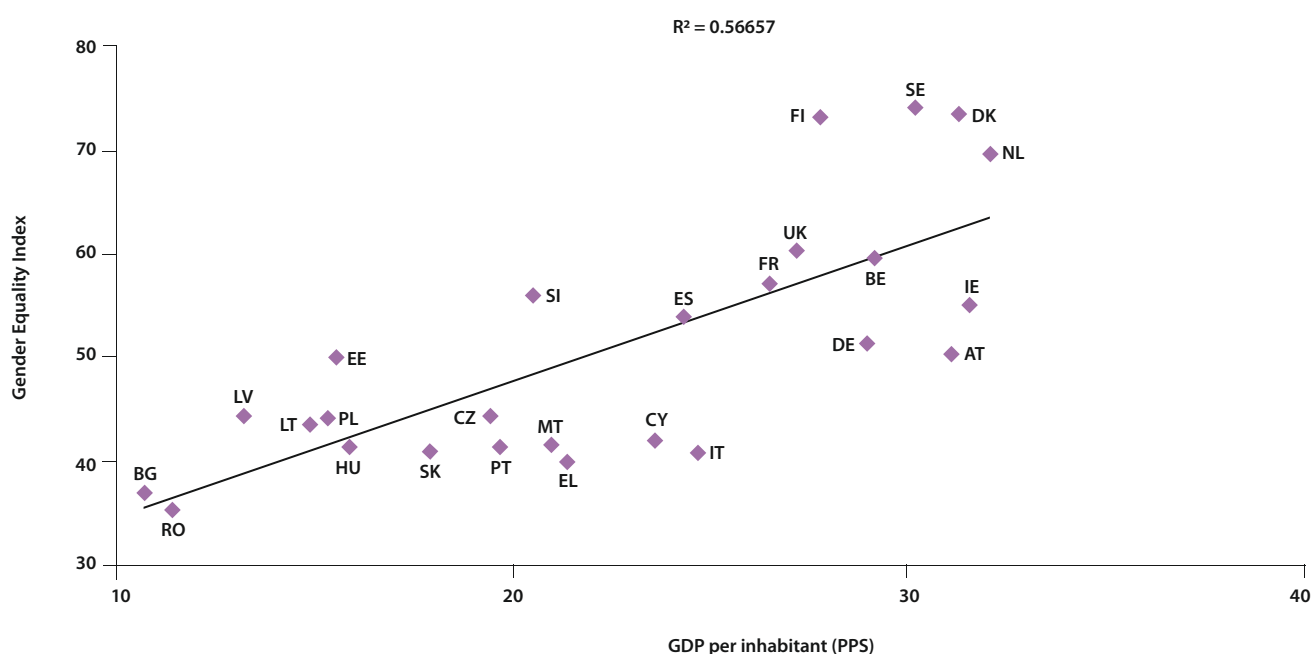
Source: EIGE's calculations; Eurostat, Annual National Accounts (nama_gdp_c)

Spending on social protection ranged, in 2010, from less than 20 % of GDP in Romania, Latvia, Bulgaria, Estonia, Slovakia, Poland, Lithuania and Malta, to as much as one-third of GDP in Denmark or France. Spending on social protection is a more important predictor of higher gender equality than GDP per person, given the positive association between the scores of the Gender Equality Index and spending by Member States (r = 0.69). This association shows that countries that generally spend more on social protection are also those with relatively higher scores of gender equality (Figure 5.15.).

Figure 5.15. Relationship between the Index and percentage of GDP on social protection

R² = 0.47648
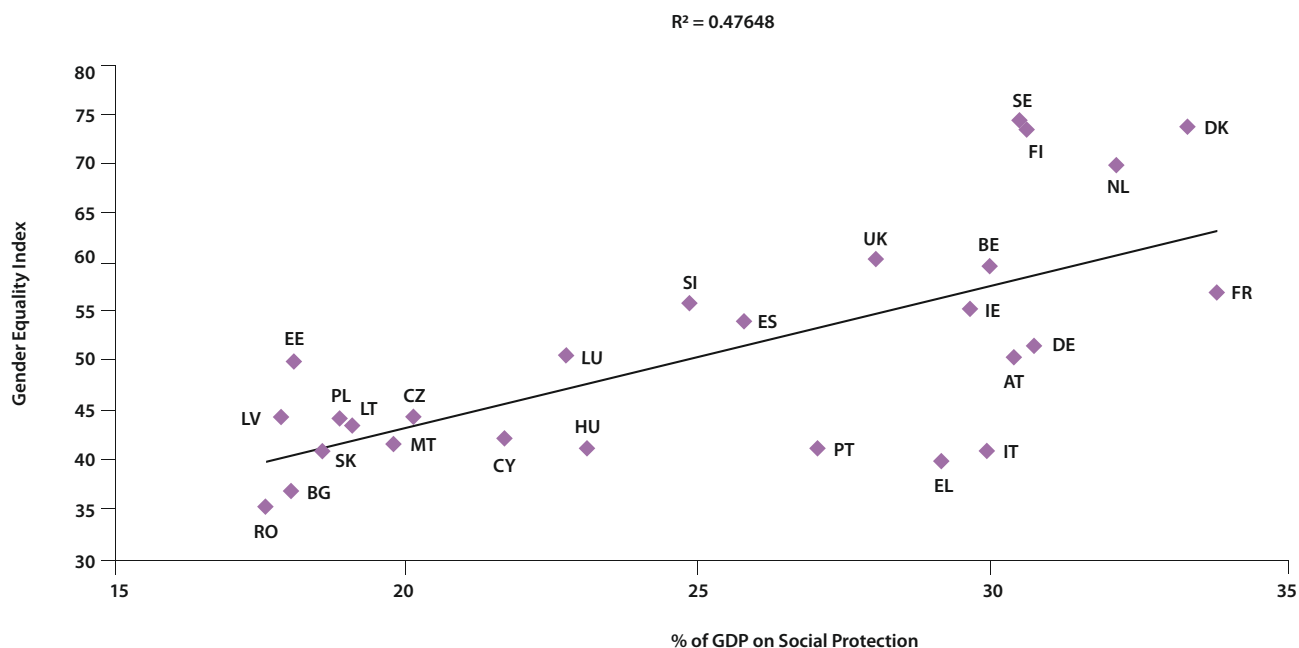
Source: EIGE's calculations; Eurostat, Social Protection statistics (spr_exp_sum)

Gender equality scores also tend to rise with the spending of Member States on education (r = 0.65) with Slovakia, Romania and the Czech Republic spending under 4% of their GDP on education in 2010, compared with nearly 9% in Denmark (Figure 5.16.). This shows that there is a general tendency for higher proportions of spending on education in Member States which have higher scores of gender equality. Data on Greece and Luxembourg are not available on Eurostat's database.

Figure 5.16. Relationship between the Index and percentage of GDP on Education

R² = 0.42633
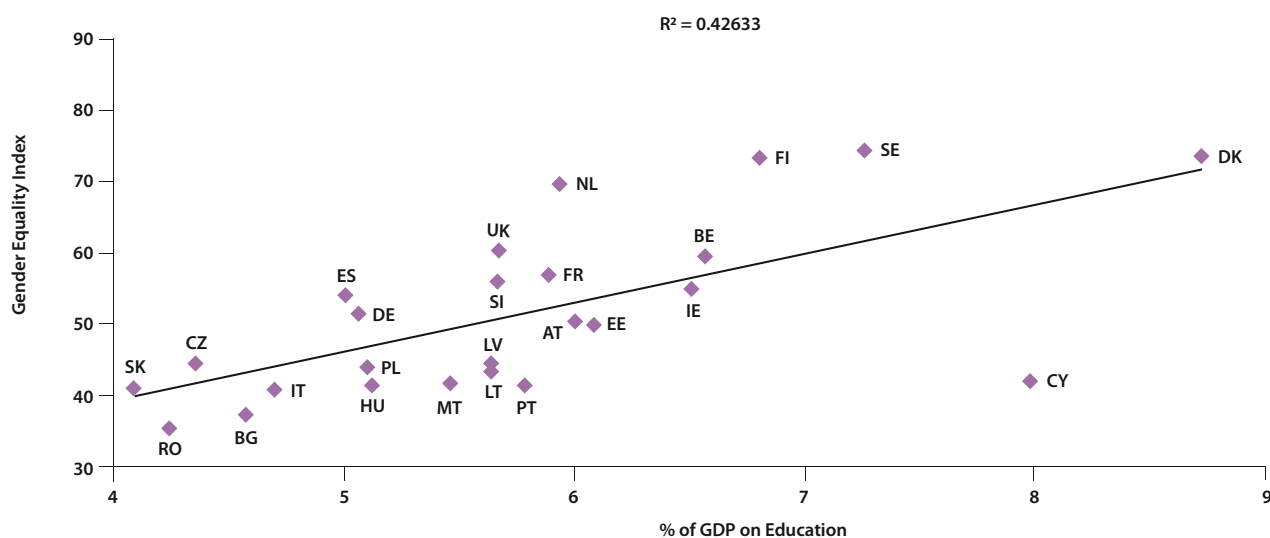
Source: EIGE's calculations; Eurostat, Education statistics (educ_figdp) (2009) Source: EIGE's calculations; Eurostat, Education statistics (educ_figdp) (2009)

There are large differences in the spending allocated on research and development (R&D), as a percentage of GDP, among Member States in 2010, with as little as 0.5 % in Romania and Cyprus, to nearly eight times as much (3.9 %) in Finland. This spending is strongly positively associated with higher levels of gender equality (r = 0.84) as can be seen in Figure 17. This is an important finding which suggests that Member States which spend a greater percentage of their GDP on R&D tend to have higher scores of gender equality. Data on Greece are not available on Eurostat's database.

Figure 5.17. Relationship between the Index and percentage of GDP on R&D
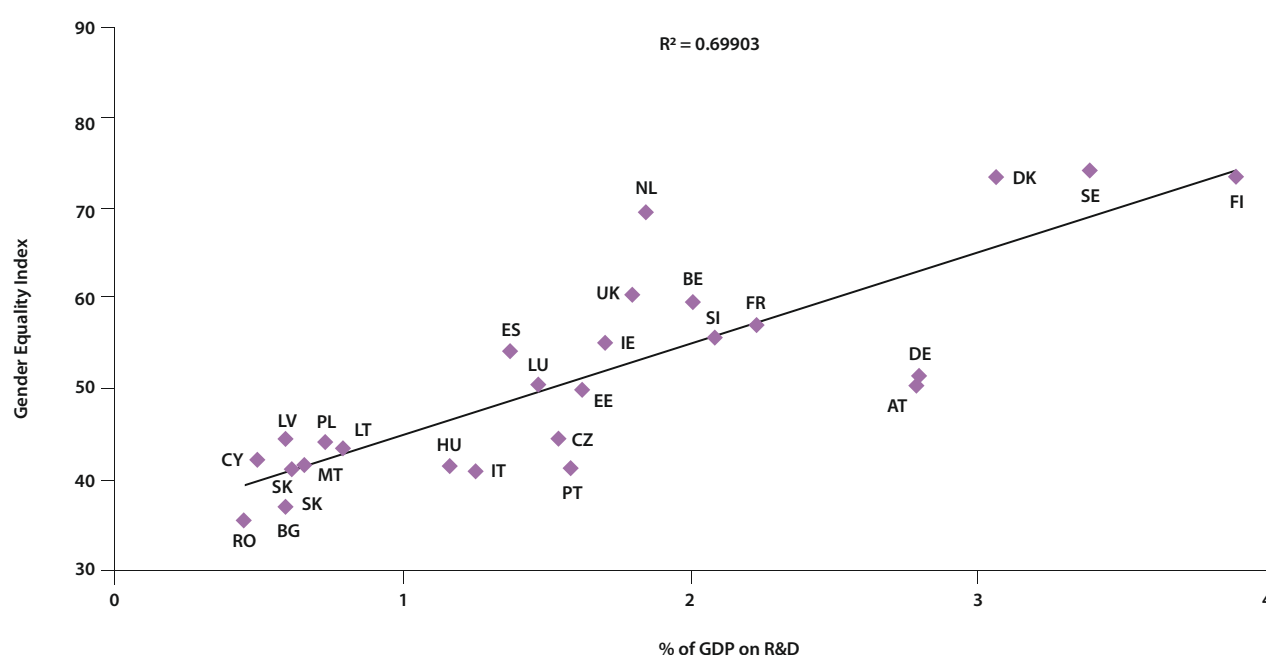
Source: EIGE's calculations; Eurostat, Statistics on research and development (rd_e_gerdtot)

Finally, spending on active labour market policies shows moderate association (r = 0.70) with levels of gender equality. Spending in Member States ranges from less than 0.1 % in Romania, Malta, the United Kingdom and Bulgaria, to more than 1 % in Belgium and Denmark (Figure 5.18.). This relationship shows that there is greater proportional spending on active labour market policies among Member States where scores show greater levels of gender equality.

Figure 5.18. Relationship between the Index and percentage of GDP on Active Labour Market Policies

R² = 0.49503

y-axis: Gender Equality Index

x-axis: % of GDP on Active Labour Market Policies
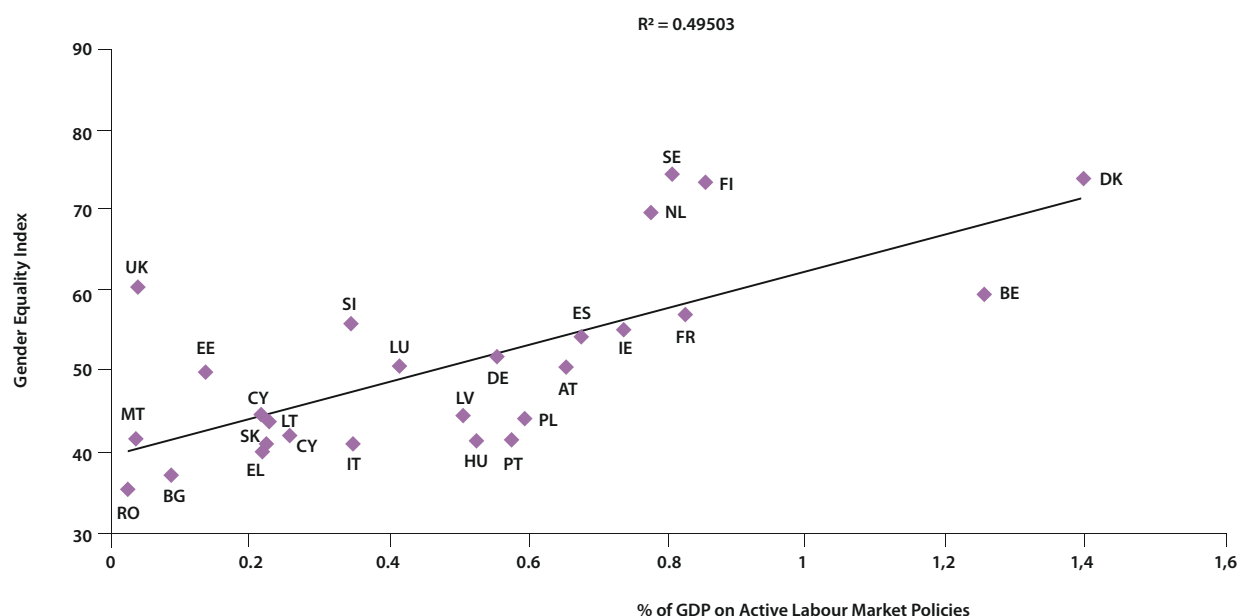
Source: EIGE's calculations; Eurostat, Labour market policy 2010 (lmp_ind_exp) (for UK year 2009)

The results show that, despite a relatively weak relationship between the overall economic development of Member States (measured by GDP per inhabitant) and gender equality, much stronger links exist between how close Member States are to achieving gender equality and their structure of public expenditure: percentage of GDP spent on social protection, education, research and development, as well as active labour market policies. The highest association was found between the Index and the spending on research and development, followed by spending on active labour market policies and social protection in general. These findings suggest that the structure of public expenditure – that is, the financial resources allocated to particular public policy areas – is more important for achieving gender equality than economic affluence itself.

5.4. Conclusion

This section has presented the overall scores of the Gender Equality Index at EU level, as well as for each Member State. Scores have, in addition, been provided at domain level, giving a comprehensive overview of how far Member States have come towards achieving gender equality.

Furthermore, these scores have been analysed in light of the economic situation of Member States, to assess the extent to which gender equality relates to levels of economic development and the structure of public expenditure. The next section closes the report by discussing the main findings of the report and some concluding comments.

6. Conclusion

The Gender Equality Index is a unique measurement tool of gender equality that combines indicators, according to a multidimensional framework, into a single composite indicator. It relies on sound and transparent methodological principles, and is easy to interpret and communicate.

The Gender Equality Index consists of six core domains: *work, money, knowledge, time, power, health* and two satellite domains: *intersecting inequalities* and *violence*. The satellite domains are conceptually related to the Index but are not included in the core Index because they measure specific population groups, such as lone parents or people with disabilities for intersecting inequalities, instead of the full population. The Index provides results on three levels: EU level (EU average), Member States level and scores in each domain and sub-domain. It measures gender equality in 2010 by showing how far (or close) each Member State is from achieving gender equality.

6.1. What value does it add?

The Gender Equality Index presents some unique features when it comes to measuring gender equality. Specifically, it adopts a gender approach (considering both women and men) rather than a women's empowerment approach, relies on a more comprehensive framework of gender equality than other women's or gender equality indices, and is specifically tailored towards the EU gender equality policy framework and objectives.

The Gender Equality Index aims to be as comprehensive as possible in terms of mapping gender equality issues within the frame of EU policy, and is not conceptually bound by concerns over data availability. As a result, it offers a powerful tool that highlights gaps in data, and calls for harmonised, comparable and reliable data that are both disaggregated by sex and available for all Member States.

In the European Pact for Gender Equality 2011–2020, the Council (2011) reaffirms its commitment to reinforce governance through gender mainstreaming by integrating a gender perspective into all policy areas and ensuring that gender equality effects are taken into account in impact assessments of EU policies. The Council encourages to further develop existing statistics and indicators disaggregated by sex to support this process. The Gender Equality Index can play an important role by allowing Member States to analyse the situation with regards to gender gaps and levels of achievement in indicators measured at the individual level, make comparisons with the EU average and assess how far a given Member State is from reaching gender equality. The scores within each domain, rather than solely in the overall Index, represent a valuable support in identifying the direction to take to tackle gender gaps within a specific policy area. Moreover, the results of the Index may suggest where policy action can be directed by allowing meaningful comparisons to be made between different domains.

Another added-value of the Gender Equality Index is that it complements a broader analysis of policy achievements at national level, by providing a measure of gender equality at individual level. Through analysing the impact on individual women and men, the Index can demonstrate the progress of the Member States in the implementation of EU policies, and add additional perspective to the process of assessing the achievement of targets defined in the European Semester.

In the future, each new release of the Index can also provide an overview of the progress made by Member States over time in closing gender gaps and improving the level of achievement in gender equality overall.

6.2. How is it built?

The Gender Equality Index is formed by combining gender indicators, according to a conceptual framework, into a single summary measure. The framework provides a conceptual map of what the critical domains of gender equality are within the remit of the EU gender policy agenda.

The Gender Equality Index relies on a statistical methodology that is both solid and transparent. The computation of the Index involves different steps where several choices have to be made. It is essential to work with a

methodology based on sound statistical principles. The methodology applied is based on the widespread and internatio-nally accepted procedure developed by the OECD and the European Commission's Joint Research Centre (Nardo et al., 2008).

Stringent quality criteria are applied to the gender indicators that can be included. The minimum requirements are that variables refer to the same year (the latest year for which all variables are available is 2010) and are also both available and comparable across all Member States. All the variables used are transformed by using a metric that measures gender gaps adjusted by levels of achievement. This takes into account the context of Member States, en-suring that gender gaps cannot be regarded positively when they point to an adverse situation for both women and men (for example low gender gaps combined with low levels of educational attainment.

The methodology creates a measurement framework, providing valuable information on which indicators are selected and how they are aggregated, based on the original conceptual framework. Finally, the Gender Equality Index distances itself from the subjectivity of choosing a weighting and aggregation method by relying on a ro-bustness analysis based on a multi-modelling procedure. This means calculating the set of all potential indices, and selecting the one that adheres most closely to the median score of all indices: in other words the most robust Index among them all.

The quality assessment of the Gender Equality Index con-firms that it is a robust measure with an internal structure that is both statistically coherent and consistent with the soundness of a strong theoretical framework. In order to ensure full transparency, every step followed in the con-struction of the Index is explained in detail in the report, facilitating the replication of the process to the users.

6.3. Main results

The scores of the Gender Equality Index, overall and in both domains and sub-domains, provide a detailed assess-ment of where EU Member States stand with achieving gender equality in selected policy areas. Scores represent the distance covered in reaching gender equality, with 100 representing full equality. These were supported by an analysis of the gender indicators selected for the domains

and sub-domains, which illustrates the key gender equal-ity issues identified by the conceptual framework of the Gender Equality Index.

The scores of the Gender Equality Index show that, overall in the EU, gender equality remains far from a reality, with the most problematic areas in the domains of *power, time* and *violence*.

6.4.1. Power: EU and Member States challenged by large imbalance in decision-making

Gender imbalance in decision-making remains an im-portant challenge at EU level and for all Member States. Women are greatly under-represented in top positions of decision-making in the majority of Member States. Despite the fact that women make up nearly half of the workforce and account for more than half of tertiary of level graduates, the proportion of women involved in top-level decision-making remains very low. This dis-crepancy shows a waste of highly-qualified and skilled human resources.

The domain of *power* shows the extent of the low levels of gender equality in decision-making, political and econom-ic, with an overall score at EU level of 38. This is the area where the lowest gender equality score can be observed, with the majority of Member States below this level.

Low levels of gender equality in political decision-making

In political decision-making, few Member States attain gender equality scores above 50 (up to a maximum score of nearly 75), despite the strong policy focus in this area at EU level or in wider international frameworks such as the Beijing Platform for Action (BPfA) or the Convention for the Elimination of All Forms of Discrimination against Women (CEDAW). This finding proves the importance of the key ac-tions to be taken by the Commission as underlined in the Strategy for Equality between Women and Men 2010–2015 (COM(2010) 491 final) to 'consider targeted initiatives to improve the gender balance in decision-making'; 'monitor progress towards the aim of 40 % of members of one sex in committees and expert groups established by the Com-mission' and 'support efforts to promote greater participa-tion by women in European Parliament elections including as candidates.'

The lowest gender equality score can be found in economic-decision making

In economic decision-making, women are even more greatly under-represented in the vast majority of Member States, with the lowest score of the Gender Equality Index observed in the context of the representation of women and men on the boards of the largest quoted companies. This is an important finding, given the launch by the European Commission in 2011 of the 'Women on the Board Pledge for Europe' – a call on publicly listed companies in Europe to sign a voluntary commitment to increase women's presence on corporate boards to 30 % by 2015 and 40 % by 2020, by means of actively recruiting qualified women to replace outgoing male members.

Indicators to measure social power in decision-making are of insufficient data quality

At present, the Gender Equality Index does not cover the sub-domain of social power because none of the available gender indicators in this area fulfill the statistical criteria, given that harmonised and comparable sex-disaggregated statistics are not available across all Member States.

Strategic policy documents focus on the potential of increased participation of women in science and research to increase competitiveness and maximise innovation potential, however, one of the EU goals of achieving at least a quarter of women in leading positions in the public research sector (Strategy for Equality between Women and Men 2010–2015 (COM(2010) 491 final), has not yet been achieved. Although data is available on decision-making in the social sphere, the data covering science and technology, academia, media, religious organisations or civil society does not meet the statistical criteria for inclusion in the Index.

The domain of *power* provides an opportunity to address gender inequality fast

The issue of power in decision-making is one of the most relevant measures of gender equality. Not only is it a domain where some of the lowest scores have been obtained, but it is also a domain that has a huge potential impact on all other domains of gender equality. Secondly, as opposed to other domains of gender equality, it has the potential to be changed within a relatively short time. For example, while increase in labour market participation takes place over the mid to long-term, the evidence from Member States with more women in top decision-making positions shows that political will and targeted measures (such as implementing a system of quotas) can make a difference in a relatively short amount of time.

6.4.2. Time: inequalities in the division of time between women and men persist

The use of *time* for work and private life is a particularly gendered issue because of the disproportionate amount of care time attributed to women. Personal time spent on care plays an important role in the individual's capability to integrate or balance work and private life. This is a key element which impacts on participation in employment, quality of work and care responsibilities. The domain of *time* presents the second lowest overall score of gender equality, with an average EU score of 38.8. The division of time is very uneven across Member States, with scores ranging from well below a quarter to nearly three-quarters of the way towards gender equality.

Women remain disproportionately responsible for caring activities

Women are, throughout all Member States, disproportionally responsible for caring and educating children, grandchildren and other dependents, as well as cooking and housework. The findings of time-use surveys in several countries offer some evidence that the gender gap in the allocation of time for caring activities may have gone up during the crisis, in countries where gender disparities in housework and care work are especially pronounced (European Commission, 2013).

The unequal division of time extends to other activities

Gender differences in how time is spent extend to other social activities such as cultural, leisure or civic activities. The division of time largely represents a trade-off between various activities. While women spend a disproportionate amount of time on caring activities, compared with men, they participate less in other social activities, such as sporting, cultural or leisure activities. Gender differences are uneven across Member States when it comes to voluntary or charitable activities, with instances where gaps are small or inexistent, but also Member States with large gaps that can either disadvantage women or men.

Addressing the division of time can provide an opportunity towards transformative change

The importance of gender inequality in the division of time and participation in different tasks, including the promotion of long-lasting changes and a fairer distribution in parental roles, family structures, institutional practices and organisation of work and time, for both women and men,

is an important area of gender equality, considered by the EU policy agenda. The findings of the Gender Equality Index reaffirms the importance of the measures to promote better work-life balance for women and men, namely the objectives set at the European Council in Barcelona in 2002 (SN 100/1/02 REV 1), with regard to adequate, affordable and high-quality childcare provision or the call to promote cohesion and employment opportunities for workers, including promoting men´s role in the family, equality between women and men and reconciliation of work and family life as stipulated in the Council Conclusions of June 2011 (EUCO/2311).

Improvements in indicators to measure time are needed

The domain of *time* would benefit from indicators produced in the Harmonised European Time Use Survey (HETUS), however, these indicators are thus far unusable because of a serious lack of reliable country and time coverage (data collection ranges from as early as 1990 in 8 countries to 2008 in 15 countries) combined with important concerns over data harmonisation and comparability.

Differences in the division of time among women and men have consistently been referred to as both a cause and a consequence of gender inequality. Women's disproportionate responsibilities for care impede their chances to fully participate in other domains such as work. At the same time, within a gender transformative approach, a greater involvement of men in care activities is to be welcomed, to facilitate the transformation of gender relations. These are therefore important aspects for measurement, analysis and transformation.

6.4.3. Violence: the biggest gap of all?

Gender-based violence against women remains one of the most pervasive human rights violations of our time, undermining women's dignity and integrity, as well as imposing serious harm on individuals, families, communities and societies. It is a manifestation of historically unequal power relations between women and men, which poses a major obstacle to the achievement of equality between women and men. In the EU, 9 out of 10 victims of intimate partner violence are women. Even if the data are scarce, it is estimated that up to one quarter of all women in the EU have suffered physical violence at least once during their adult lives (Council of Europe, 2006).

The domain of *violence* represents the largest statistical gaps in measuring the progress of gender equality at EU level in this area. It is a crucial domain of gender equality

that conceptually combines direct and indirect violence, recognising that women are exposed to higher risks of gender-based violence than men and that gender-based violence disproportionally affects women.

Insufficient gender indicators to measure gender-based violence against women

There are generally few indicators that can measure gender-based violence against women, since principles of crime classification systems for statistical use have yet to be established in the EU. The possibility of obtaining comparable administrative data on gender-based violence is also very limited at the EU level as there is no common methodology agreed within the Member States.

The norms, attitudes and stereotypes that largely underpin gender-based violence against women also remain critically under-measured, with, as a result, a strong dearth of potential indicators. There are to date no data sources that provide reliable, harmonised and comparable data for all Member States on these aspects.

Coupled with the methodological constraints of the Gender Equality Index that require harmonised, available data over time, it was not possible to identify suitable indicators. This is symptomatic of a deeper dearth of information and data at national and international level, although some of these data gaps may soon be partly addressed by the EU-wide survey on gender-based violence against women carried out by the European Union Agency for Fundamental Rights.

Statistical gaps in measuring gender-based violence against women is important evidence in supporting the European Parliament's resolution on priorities and the outline of a recent EU policy framework to fight violence against women. It calls on the European Commission to develop and provide annual statistics on violence against women. This resolution also calls on Member States to show clearly in their national statistics the magnitude of violence against women, including its gender-based nature, and to take steps to ensure that data is collected on the sex of the victims, the sex of the perpetrators, their relationship, age, crime scene, and injuries (2010/2209(INI)). The Council in its Conclusions of December 2012 (17444/12) also calls to improve the collection and dissemination of comparable, reliable and regularly updated data on victims and perpetrators of all forms of violence against women at both national and EU level.

The extent to which the absence of indicators reflects gender relations should be questioned. The issue of what

is being measured, or in this instance, not measured and why, are important questions. Therefore, the Gender Equality Index should be seen as a tool that calls for this data to be collected to fully measure gender equality within the framework of EU policy.

6.4.4. Knowledge: women's educational attainment overtakes men's but segregation patterns persist

The domain of *knowledge* combines different areas related to education and training. From a gender perspective, it is an important area since it appears to be a precursor to change in gender terms, with women now outnumbering men within third-level education, although gender segregation in different fields of education remains largely unchanged.

The scores in the domain of *knowledge* in the Gender Equality Index show that the Europe 2020 remains far from equality, with an EU average score of 48.8, just below halfway towards gender equality. There are different situations in Member States, where scores range as low as just above a quarter to three-quarters of the way towards equality.

The role of higher education in society is essential to foster knowledge and promote innovation. The Europe 2020 Strategy calls for Europe to act in the fields of education, training and lifelong learning to contribute to delivering smart, sustainable and inclusive growth. Gender equality in education is an important precondition to reach this objective. The results of the Gender Equality Index on educational attainment provides important findings, given one of the key targets of the Europe 2020 Strategy is to increase the share of the population aged 30–34 having completed tertiary education from 31 % to at least 40 % in 2020(IP/10/225).

Gender segregation in educational fields remain high

Despite the changes in educational attainment of women and men, segregation patterns remain deeply entrenched throughout Member States, with women over-represented in feminised sectors such as education, health and welfare, humanities and arts. The number of women graduates in technical sciences and engineering remains disproportionally low. It is important to tackle gender segregation in education as it translates into further inequalities in the labour market and contributes to differences in economic independence of women and men. Addressing patterns of segregation is an essential feature of building a more gender equal society.

Participation in lifelong learning remains low and is more feminised where participation is higher

Women are over-represented in lifelong learning, despite the fact that in many Member States, participation rates remain low. This trend points to the need to pay attention to both improvements in levels of achievement along with a reduction of disparities between Member States, and the elimination of gender gaps. To promote adaptability and employability, active citizenship, as well as personal and professional fulfilment, the policy agenda focuses on enabling women and men to take part in lifelong learning. The findings of the Gender Equality Index reaffirms the importance of one of the key targets of the European Cooperation in Education and Training (ET2020) to have at least 15 % of adults (25–64) involved in lifelong learning by 2020, a target that is currently still out of the reach in the majority of Member States.

The importance of lifelong learning in the policy agenda has also emerged, stemming from the necessity to increasingly adapt and shape a new environment, characterised by rapid advances in innovative technological advances, including but not limited to the emergence of new forms of information and communication technologies. The Digital Agenda for Europe, as a flagship initiative under the Europe 2020, aims to support growth and jobs by focusing on several areas, including ensuring the development of digital skills.

6.4.5. Work: gender disparities in how women and men are getting in and getting on in the labour market

The domain of *work* examines not only patterns of how women and men are getting into the labour market, but also how they are getting on there. It captures some of the gendered patterns that exist within the labour market: participation, segregation and quality of work. Although the domain presents a relatively high overall score of 69 on average at EU level, there remains much room for improvement before reaching full gender equality. The findings show that segregation patterns remain strong and that they are associated with quality issues such as training, health and safety at work, as well as flexible working arrangements, with a mixed picture across Member States. It also considers participation of women and men in the labour market, corroborating evidence that differences exist in terms of part-time work and duration of working life.

Despite an encouraging trend towards gender equality in employment at EU level, the gender gap in employment rates still persists. Given the fact that more women than men work on a part-time basis, gender gaps in employment may in fact be underestimated, without resorting to comparisons in the full-time equivalence. Full-time equivalent employment rates show that gender gaps in employment are even wider. Women continue to be less likely to participate in the labour force, throughout all EU Member States, they are working fewer hours when they do so, and spend fewer years overall in work than men. These trends show that women are at higher risk of economic dependence in terms of income, responsibility and power. However, it is important to note, that developments in employment and unemployment during the last four years of recession provide evidence of a downward leveling of gender gaps through greater employment losses and higher unemployment expansions among men (European Commission, 2013).

At policy level, the Gender Equality Index scores show that wide gender gaps remain in achieving the Europe 2020 target of ensuring that 75 % of the population aged 20–64 should be employed (IP/10/225). Experiences of working lives for women and men represent the heart of the EU policy agenda on gender equality. Incentives to increase women's participation in the labour market have been increasingly supported by ensuring that gender gaps in family-related entitlements, such as parental or carer's leave or measures to support greater work-life balance, are being addressed.

Large gender segregation in the labour market remain prevalent

Gender segregation of labour markets is another issue which exacerbates gender inequalities in terms of the gaps in earnings, impacts on career advancement, quality of work and eventually on economic independence of women and men. The scores show the level of gender inequality in terms of segregation, with women persistently representing a strong majority of those working in typically feminised sectors such as education, health services and social work.

The gendered nature of quality of work needs to be measured

The EU policy focuses not only on providing more jobs, but also on ensuring the provision of better jobs as part of the Europe 2020 Strategy. The Gender Equality Index includes indicators of quality of work, measuring flexibility of working time, health and safety at work and training at work, which show persisting gender inequalities which vary widely across Member States. Due to stringent statistical criteria, several other indicators of quality of work (e.g., work-life balance) were excluded from analysis. Nevertheless, the findings of the Index provide a qualitative contribution to the broader analysis of work-life balance provisions, such as flexible work arrangements, childcare, elderly care or parental leave provisions, which comprise a major focus area of the EU policy agenda and European Semester recommendations. Given that work-life balance is a highly gendered issue, the interpretation of the scores of the Gender Equality Index in relation to work-life balance provisions represents important avenues of further analyses.

6.4.6. Money: lower earnings and income among women lead to greater risk of poverty and higher disparities of income

Economic independence is seen as a prerequisite for European citizens, both women and men, to exercise control and make genuine choices in their lives. However, women remain in more precarious situations throughout the EU in terms of access to financial resources and economic situation. Women experience higher disadvantages in the labour market than men, women also earn less than men, with progress in closing the gender gaps in earnings painstakingly slow, the feminisation of poverty prevails.

The domain of *money* shows scores of gender equality that are similar to the domain of work, on average at the EU level. However, it is important to interpret these scores with caution since available indicators may underestimate the true extent of gender gaps in this area. The domain measures two key aspects: financial resources, that is, gender gaps in earnings and income, combined with economic situation by focusing on being at-risk-of-poverty and income distribution.

Women receive lower earnings and income than men in the EU

The focus on equal pay is prominent in key policy documents at EU and Member States' level. Despite the fact that Member States are required by the Lisbon Treaty (Article 157) to ensure that the principle of equal pay for women and men workers for equal work or work of equal value

is applied, there remains a long way to go towards full gender equality. Scores for gender gaps in earnings and income range enormously across Member States, from less than a quarter to near gender equality, with a gender gap that constantly works to the advantage of men.

In addition to pay, the policy focus extends to income in the form of social transfers, with for example the Europe 2020 Strategy emphasising the need to ensure adequate income support from social security and pension systems in Member States. However, the Gender Equality Index scores show the necessity to close gender gaps in this area, with women having less income after social transfers than men.

Women are at a disadvantage in terms of their economic situation

Difference in earnings and income do not translate in a straightforward manner to economic situation, where gender gaps range from nearly two-thirds to a level, close to equality, suggesting that there is more gender inequality in earnings and incomes than in the resulting economic situations. It is important to note, however, that when gaps remain in being at-risk-of-poverty, it is an issue that disproportionately touches women.

Tackling poverty remains a focus of EU policy, as defined by the Europe 2020 target (IP/10/225) to reduce the number of individuals at-risk-of-poverty by 20 million, by reducing the number of individuals living below the national poverty line by 25%, the majority of which are women. Lower earnings and income, however, appear to be related to higher income differences between the poorest and richest women and men, a finding which highlights how gender equality can be related to a fairer society for all.

Individual rather than household level indicators could measure gender differences in a more sensitive way

Serious concerns with indicators available to measure the domain of *money* also exist, with a dire need for data on income disaggregated at the individual level. Indeed, most of the gender indicators which are included in the domain of *money* (mean equivalised income, income distribution, at-risk-of-poverty) are collected at the household level and rely on the assumption of equal distribution of financial resources between members of the household. This is problematic since it ignores possible power relations within the family, and thus underestimates the true extent of gender gaps in this domain.

The need for better disaggregated data at individual level arises. Moreover, additional information, on access to microcredits, as well as the inflows from other financial assets (bonds, stock, real estate, etc.) would provide a better picture of gender gaps in terms of financial resources and economic situation.

6.4.7. Health: low gender gaps throughout most EU Member States

Gender gaps, coupled with high levels of achievement in the domain of *health* present a picture with a high score of gender equality (90.1) throughout the EU Members States. The challenge in this area is to ensure that needs of women and men are met with levels of achievement, in gender equality raised without increasing gender gaps, as health is directly linked not only to economic independence, but also to dignity and physical integrity.

Low gender gaps exist in access to health structures

The domain overall shows small or inexistent gender gaps in unmet medical or dental medical needs, although the scores in the latter are relatively lower. Ensuring better access to a healthcare system remains central to EU policy, specifically in relation to the demographic changes taking place across Europe.

The economic crisis also brought new challenges related to public healthcare provisions. Evidence exists that some countries have boosted health and long-term care facilities but many others have raised fees or reduced health or care related monetary benefits as part of public expenditure cuts. This has a disproportionate impact on women (European Commission, 2013) and means that it will be important to monitor gender gaps in the future.

The old adage that 'women get sicker and men die younger' remains largely true

Low gender gaps combined with high levels of achievement in meeting medical needs of women and men do not however fully translate into fewer differences in terms of health status. Indeed, healthy life years continue to show that small gender gaps remain. In line with EU policy in this area it is important to recognise the gender dimension in health and continue to address health outcomes, including gender-specific health risks and diseases.

It was not possible to identify suitable gender indicators on healthy or unhealthy behaviour of women and men that fulfilled the necessary criteria for inclusion in the Gender Equality Index (sex-disaggregated, harmonised and available for all Member States). Information of the smoking and drinking patterns of individuals, collected by WHO and Eurostat, does not provide sex-disaggregated data or the data are not available for the majority of the EU countries. This evidence reaffirms the importance of promotion and strengthening the comparability and compatibility of gender-specific information on health across Member States and at EU level through the development of appropriate data, as stipulated in the Council Conclusions on Women's Health in 2006 (2006/C 146/02).

6.4.8. Intersecting inequalities: disparities between women and men among different groups matter as these may be linked to different levels of gender equality

The principle of intersecting inequalities is enshrined in the EU Treaties. The Treaty of Amsterdam (97/C 340/05) marked a turning point by adding the grounds of race, ethnicity, religion and belief, age, disability and sexual orientation to the already present ground of nationality and sex. This principle is also reinforced in the Charter of Fundamental Rights of the European Union (2000).

Within the Gender Equality Index, illustrative scores are provided, showing that focusing on intersecting factors is a pertinent aspect of gender equality to consider, since they can greatly affect gender scores. The indicators considered were proxies that analysed employment rates among migrants and/or minority groups, older workers and lone parents or carers. The focus on gender patterns of specific groups of population is particularly relevant in times of major economic, social or demographic transformations. For example, it is noted by several studies, the most vulnerable group during the recent economic crisis is male migrants (from outside the EU), who were worst hit by job losses (European Commission, 2013).

The aim of inclusion of those indicators in the initial Gender Equality Index is to provide an initial reflection point. Although relying on illustrative groups is not in itself sufficient to draw on strong conclusions as to how intersect-

ing inequalities contribute to gender equality overall, they represent an opportunity to debate this important area in greater depth.

The process of building a composite indicator has been greatly impaired by working at macro-level, using a merged data set that merges several sources. A dedicated survey, collecting micro-data would facilitate significantly proper measuring of gender equality and would sufficiently expand current data collection efforts. Such data would also allow, sample size permitting, to calculate the index horizontally for different groups of people, following the principle of intersectionality.

6.5. Use and interpretation of the Gender Equality Index

The Gender Equality Index is a synthetic statistical tool that provides a measure of gender equality within the EU policy framework. However, since this measure is based on individual level variables, it needs to also be analysed further within the framework of wider gender policy perspectives, which are not bound by the stringent statistical considerations of building a composite indicator. It is therefore fundamental to analyse its general score, and scores at sub-domain level, in connection with institutional or macro level variables. For example, the results of the Gender Equality Index can be analysed in relation to the provision of legal frameworks, policy measures and services. To contextualise the Gender Equality Index on national level, a set of country profiles as an Annex to the publication is provided.

The Gender Equality Index can also become a very valuable tool of gender analysis by adopting a cross-domain perspective. The creation of the composite indicator allows measuring gender equality in relevant domains; however, the complexity of gender equality can indeed be better understood by analysing the links between two or more domains.

The interpretation of the Gender Equality Index and gender gaps in relevant domains requires a consideration of the impact of economic crisis on women and men. For example, an unintended consequence of the crisis has been a temporary reduction in certain gender gaps. This, however, has not been a sign of improved gender equality, but that of worsening conditions for both women and men (European Commission, 2013). It is therefore imperative to ana-

lyse gender gaps in conjunction with a thorough analysis of levels of achievement in gender equality, as they are prone to change in the context of the crisis or other social and economic transformations.

The Gender Equality Index provides a comprehensive measure of equality between women and men relevant to the EU policy framework. The results have shown that the EU is halfway towards gender equality, although there are large differences between Member States in how close they are to the equality point. The biggest gender gaps can be found in the areas of decision-making and the division of time, with the Gender Equality Index also pointing to the absence of suitable data to measure gender-based violence against women. These results show the extent of the work that remains to be done to make gender equality a reality.

The Gender Equality Index serves the decision-makers, policy implementers and individuals as reliable reference points, which present the current gaps between the women and men of Europe, in the context of EU policies. The Index can add a qualitative perspective to the macro-level analysis of achievements of the EU within the area of equality between women and men. Comparison over time, through the first update of the Gender Equality Index in 2015, will provide an invaluable assessment of progress of the Member States in reaching greater gender equality.

The Gender Equality Index provides decision-makers, policy implementers and other users with a reliable source of reference, which presents the current gaps between the women and men of Europe, in the context of EU policies. The Gender Equality Index enriches perspectives based on macro-level analyses by providing a synthetic, yet comprehensive and flexible, measure that can support the evaluation of the effectiveness of gender equality policies. Comparison over time, through the first update of the Gender Equality Index in 2015, will provide an invaluable assessment of the progress made by Member States in reaching greater gender equality.

7. Annexes

Annex 1: Domains of the Gender Equality Index within various theoretical frameworks and strategic policy documents

Table 1.1. Domains of the Index in various theoretical frameworks

Domain	Baker et al.	Fraser	Pascall & Lewis	Nussbaum	Robeyns
Work	Working and learning as equals	Anti-exploitation	Paid work	Control over one's environment	Paid work and other projects
Money	Equality of resources	Antipoverty Anti-exploitation Income equality	Income	Control over one's environment	
Power	Equality of power	Anti-marginalisation	Voice	Control over one's environment	Political empowerment
Knowledge	Working and learning as equals			Senses, imagination, and thought Practical reason	Education and knowledge
Time	Love, care and solidarity	Leisure time equality	Care work Time	Emotions Affiliation Play	Social relations Domestic work and non-market care Leisure activities Time-autonomy
Health	Equality of resources			Life Bodily health Bodily integrity	Life and physical health Mental well-being
Intersecting inequalities	Equal respect and recognition	Anti-exploitation Anti-marginalisation Equality of respect		Equal worth	Mobility Religion Equality of respect
Violence	Equal respect and recognition	Equality of respect Anti-androcentrism		Bodily integrity Affiliation	Bodily integrity and safety Respect

Table 1.2. Domains of the Index in EU strategic policy documents

Domain	Community Framework Strategy on Gender Equality (2001–2005)	Roadmap for Equality between Women and Men (2006–2010)	European Pact for Gender Equality (2006)	Women's Charter (2010)	Strategy for Equality between Women and Men (2010–2015)	Europe 2020 (2010–2020)	The New European Pact for Gender Equality (2011–2020)
Work	Equal participation and repre-sentation	Equal economic independence for women and men	Gender gaps in employment and social protection	Equal economic indepen-dence	Economic independence of women	75 % of the 20–64 year-olds to be employed	Promoting gender equality in the labour market
Money			Gender gaps in employment and social protection	Equal pay for equal work and work of equal value	Equal pay	Reducing the number of people in or at risk of poverty and social exclusion by at least 20 million	
Power	Equal participation and representation	Equal representation in decision-making		Equality in decision-making	Equality in decision-making		Ensuring equal access and participation of women and men in decision-making positions
Knowledge						Reducing school drop-out rates below 10 % Ensuring that at least 40 % of 30–34 year-olds have completed third level education or equivalent	Promoting gender equality in in education and training
Time	Equal access and full enjoy-ment of social rights for women and men	Reconciliation of private and professional life	Promoting better work-life balance				Promoting better work-life balance for both women and men
Health							
Inter-secting inequalities	Gender equality in civil life						
Violence	Change of gender roles and stereotypes	The eradication of all forms of gender-based violence; the elimination of gender stereotypes	Combat all forms of violence against women	Dignity, integrity and an end to gender-based violence	Dignity, integrity and an end to gender-based violence		Eliminate violence against women

Table 1.3. Domains of the Index in the third UN Millennium Development Goal (MDG3) and the fifth UNMillennium Development Goal (MDG5)

Domain	MDG 3.1 3.1 Ratios of girls to boys in primary, secondary and tertiary education	MDG 3.2 3.2 Share of women in wage employment in the non-agricultural sector	MDG 3.3 3.3 Proportion of seats held by women in national parliament	MDG 5.1 5.1 Maternal mortality ratio	MDG 5.2 5.2 Proportion of births attended by skilled health personnel	MDG 5.3 5.3 Contraceptive prevalence rate	MDG 5.4 5.4 Adolescent birth rate	MDG 5.5 5.5 Antenatal care coverage (at least one visit and at least four visits)	MDG 5.6 5.6 Unmet need for family planning
Work		X							
Money									
Power			X						
Knowledge	X								
Time									
Health				X	X	X	X		
Inter-secting inequalities							X		
Violence									

Table 1.4. Domains of the Index in Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)

CEDAW	Work	Money	Knowledge	Time	Power	Health	Intersecting inequalities	Violence
Art. I **Discrimination**							X	
Art. II **Policy Measures**					X		X	
Art. III **Guarantee of Basic Human Rights and Fundamental Freedoms**							X	X
Art. IV **Special measures**								
Art. V **Sex Role Stereotyping and Prejudice**							X	X
Art. VI **Prostitution**								X
Art. VII **Political and Public Life**				X	X			
Art. VIII **Representation**					X			
Art. IX **Nationality**							X	
Art X **Education**			X					
Art XI **Employment**	X	X						
Art XII **Health**						X		
Art. XIII **Economic and Social Benefits**		X						
Art XIV **Rural Women**							X	
Art. XV **Law**							X	
Art. XVI **Marriage and Family Life**				X			X	

Table 1.5. Domains of the Index covered by Beijing Platform for Action (BPfA)

Domain	A Women and poverty	B Education and training of women	C Women and health	D Violence against women	E Women and armed conflicts	F Women and the economy	G Women in power and decisi-on-making	H Institutional mechanisms for the advance-ment of women	I Human rights of women	J Women and the media	K Women and the environment	L The girl child
Work	A3a. A3b.	B2.				F1. F8b. F9c. F10b. F11a, c. F12a, b. F13a. F15. F16. F17.						
Money	A1. A2.					F8a, c, d, e, f. F9a. F10a. F11b, d. F12a, b, c. F14. F15. F16. F17.						
Power		B3b.			E2		G1. G2. G3. G4. G5. G6. G7. G8. G9. G10. G11. G12. G13.G14. G15. G16. G17. G18.				K1. K2. K3.	
Knowledge		B1. B3a.									K4.	L3.
Time						F2. F3. F4. F5. F6. F7. F9c. F17.						
Health			C1. C2. C3.									
Intersecting inequalities						F7.						
Violence				D1. D2. D3. D4. D5. D6. D7. D8. D9. D10.								L2.

Note: BPfA addresses 12 main areas of concern:

Women and Power (A)

A1. At-risk-of-poverty rate by age and sex

A2. At-risk-of-poverty rate by type of household and sex, including at-risk-of-povery rate of single parents with dependent children

A3a. Inactivity by age and sex: share of women and men who are inactive by age

A3b. Inactivity by age and sex: share of inactive women and men who are not looking for a job for family care reasons

Education and Training of Women (B)

B1. Proportion of female graduates and male graduates of all graduates in mathematics, the sciences and technical disciplines (tertiary education)

B2. Employment rate of women and men (aged between 25 and 39 years; and aged between 40 and 64) by highest level of education attained

B3a. Proportion of female/male ISCED 5a-graduates of all ISCED 5a-graduates and proportion of female/male PhD graduates of all PhD graduates by broad field of study and total

B3b. Proportion of female and male academic staff differentiated by level of seniority and in total

Women and Health (C)

C1. Healthy life years

C2. Access to healthcare (unmet demand)

C3. Cardio-vascular diseases

Violence Against Women (D)

D1. Domestic violence against women: profile of female victims of violence

D2. Domestic violence against women: profile of male perpetrators

D3. Domestic violence against women: victim support

D4. Domestic violence against women: measures addressing the male perpetrator to end the circle of violence

D5. Domestic violence against women: training of professionals

D6. Domestic violence against women: state measures to eliminate domestic violence against women

D7. Domestic violence against women: evaluation

D8. The number of employees who report incidents of sexual harassment at the workplace, as a percentage of the total workforce

D9. The number of private and public enterprises which have a preventive policy regarding sexual harassment at the workplace, as a percentage of the total number of employers

D10. The number of private and public enterprises which have procedures for sanctions in place for perpetrators of sexual harassment at the workplace, as a percentage of the total number of employers

Women and Armed Conflict (E)

E1. Proportion (number and percentage) of men and women trained specifically in gender equality among:
– diplomatic staff and civilian and military defence staff employed by the Member States and Community institutions;
– staff participating in UN peacekeeping operations (PKOs) and ESDP missions, including military and police staff.

E2. Proportion (number and percentage) of women and men among:
– heads of diplomatic missions and EC delegations;
– staff participating in UN peacekeeping operations and ESDP missions, including military and police staff.

E3. Funding (as a total amount and as a percentage of cooperation programmes) allocated by the Member States and the European Commission, in countries affected by armed conflict or in post-conflict situations, to support gender equality, broken down, where possible, to reflect funding to support:
– female victims of violence;
– the participation of women in peace-building and post-conflict reconstruction.

E3a. Proportion of funding for these programmes allocated to NGOs working for gender equality and women's empowerment

E4. Proportion (number and percentage) and country of origin of female and male asylum seekers who have obtained the status of refugee, or benefit from subsidiary protection

Women and the Economy (F)

F1.   Employed men and women on parental leave (paid and unpaid) within the meaning of Directive 96/34/EC on the framework agreement between the social partners on parental leave, as a proportion of all employed parents

F2.   Allocation of parental leave between employed women and men as a proportion of all parental leave

F3.   Children cared for (other than by the family) as a proportion of all children of the same age group:
- before entry into the non-compulsory pre-school system (during the day);
- in the non-compulsory or equivalent pre-school system (outside pre-school hours);
- in compulsory primary education (outside school hours).

F4.   Comprehensive and integrated policies, particularly employment policies, aimed at promoting a balance between work and family life for both men and women (including, for example, a description of available child care facilities, parental leave and flexible working time arrangements, of services offered by companies for their employees, and of flexible opening hours of public services such as local authority offices, post offices, crèches, and shops)

F5.   Dependent elderly men and women (unable to look after themselves on a daily basis) over 75
- living in specialised institutions;
- who have help (other than the family) at home;
- looked after by the family;
- as a proportion of men and women over 75

F6.   Total 'tied' time per day for each employed parent living with a partner, having one or more children under 12 years old or a dependent:
- paid working time;
- travelling time;
- basic time spent on domestic work;
- other time devoted to the family (upbringing and care of children and care of dependent adults).

F7.   Total 'tied' time per day for each employed parent living alone, having one or more children under 12 years old or a dependent
- paid working time;
- travelling time;
- basic time spent on domestic work;
- other time devoted to the family (upbringing and care of children and care of dependent adults).

F8.   Ratio for all employees

F8a.   Gender pay gap based on gross hourly male and female wages, full-time and part-time employees of all sectors

F8b.   Employment rate of women and men

F8c.   Gender pay gap based on gross hourly male and female wages, full-time and part-time employees of all sectors and separate for the private and public sectors

F8d.   Gender pay gap based on gross yearly male and female wages, full-time and part-time employees of all sectors and separate for the private and public sectors

F8e.   Gender pay gap based on gross monthly male and female wages, full-time

F8f.   Gender pay gap based on gross monthly male and female wages, full-time and part-time

F9.   Ratio for the total sum of wage

F9a.   Share of all wages by sex

F9b.   Repartition of the total number of wage-earners by sex

F9c.   Repartition of the total number of actual working days by sex

F10.   Ratio for part-time work

F10a. Gross hourly wages and pay gap: female (part-time) – male (part-time); female (part-time) – female (full-time); male (part-time) – male (full-time); female (part-time) – male (full-time)

F10b. Part-time employment rate by sex

F11.   Ratio by age and education

F11a. Employment rate by age and sex

F11b. Pay gap according to age group (< 24, 25–34, 35–44, 45–54, 55–64 and 65+) based on hourly wages of female and male workers, full-time and part-time workers

F11c. Employment rate by educational level (ISCED, 3 levels)

F11d. Pay gap by educational level (ISCED, 3 levels), full-time and part-time workers

F12. Segregation in the labour market

F12a. Average gross hourly wages of female and male workers in the five industry sectors (NACE, 2 digits) with the highest numbers of female workers and the highest numbers of male workers

F12b. Average gross hourly wages of female and male workers in the five professional categories (ISCO categories, 2 digits) with the highest numbers of female workers and the highest numbers of male workers

F12c. Pay gap in management (ISCO 12 and 13)

F13. Ratio according to personal characteristics

F13a. Employment rate by family situation and civil status (crossed)

F13b. Gender pay gap by family situation and civil status

F13c. Gender pay gap by country of birth

F14. Breakdown of the hourly wage gap between men and women using the Oaxaca technique

F15. Measures to promote equal pay and combat the gender pay gap

F16. Influence of collective bargaining on the promotion of equal pay and the elimination of the gender pay gap

F17. Effect of part-time work, parental leave, time credit systems and career breaks on the gender pay gap

Women in Power and Decision-making (G)

G1. The proportion of women in the single/lower houses of the national/federal parliaments of the Member States and in the European Parliament

G2. The proportion of women in the regional Parliaments of the Member States, where appropriate

G3. The proportion of women in local assemblies in the Member States

G4. Policies to promote a balanced participation in political elections

G5. The proportion of women among the members of the national/ federal governments and the proportion of women among members of the European Commission

G6. The number of women and men among senior/junior ministers in the different fields of action (portfolios/ministries) of the national/federal governments of the Member States

G7. The proportion of the highest ranking civil servants who are women

G8. The distribution of the highest ranking women civil servants in different fields of action

G9. The proportion of women among the members of the supreme courts of the Member States and the proportion of women among the members of the European Court of Justice and the Court of First Instance

G10. The proportion and number of women and men among governors and deputy/vice-governors of the central banks

G11. The proportion and number of women and men among members of the decision-making bodies of the central banks

G12. The proportion and number of women and men among ministers and deputy ministers/vice-ministers of the economic ministries

G13. The proportion and number of women and men among presidents and vice-presidents of the labour confederations

G14. The proportion and number of women and men among members of total governing bodies of the labour confederations

G15. The proportion and number of women and men among presidents and vice-presidents of the employer confederations

G16. The proportion and number of women and men among members of total governing bodies of the employer confederations

G17. The proportion and number of women and men among chiefs of executive boards of the top 50 firms publicly quoted on the national stock exchange

G18. The proportion and number of women and men among members of executive boards of the top 50 firms publicly quoted on the national stock exchange

Institutional Mechanisms for the Advancement of Women (H)

H1.   Status of governmental responsibility in promoting gender equality

H2a. Personnel resources of the governmental gender equality body

H2b. Personnel resources of the designated body or bodies for the promotion of equal treatment of women and men

H3.   Gender mainstreaming

Human Rights of Women (I)

Women and the Media (J)

Women and the Environment (K)

K1.   Proportion of women and men in climate change decision-making bodies at the national level in the EU Member States

K2.   Proportion of women and men in climate change decision-making in the European Parliament and the Commission

K3.   Proportion of women and men in climate change decision-making bodies at the international level

K4.   Proportion of women and men among tertiary graduates of all graduates (ISCED levels 5 and 6) in natural sciences and technologies at the EU and Member State level

The Girl Child (L)

L1.   Sex and relationship education: parameters of sexuality-related education in schooling (primary and secondary)

L2.   Body self-image: dissatisfaction of girls and boys with their bodies

L3.   Educational accomplishments: comparison of 15-year-old students' performance in mathematics and science and the proportion of girl students in tertiary education in the field of science, mathematics and computing and in the field of teacher training and education science

Annex 2: Descriptive of the final metric ΓX_{it} used in calculating the Gende Equality Index

ID	Indicators	N	mean	sd	min	p25	p50	p75	max
v1	Full-time equivalent employment	27	74.11	9.20	51.72	68.17	74.30	81.25	87.12
v2	Duration of working life	27	79.14	9.75	54.33	73.21	80.50	86.42	96.30
v3	Employment in Education, Human Health and Social Work activities	27	35.28	8.89	20.93	26.77	36.58	42.69	52.97
v4	Employees with a fixed start and end of a working day or varying working time as decided by the employer	27	54.20	17.67	25.83	41.78	49.82	68.29	91.62
v5	Workers perceiving that their health or safety is not at risk because of their work	27	79.53	11.84	53.21	71.41	77.72	89.37	99.52
v6	Workers having undergone training paid for or provided by their employer or by themselves if self-employed	27	63.21	21.36	17.01	48.01	63.14	82.59	95.02
v7	Mean monthly earnings – NACE Rev. 2, categories B-S excluding O	26	57.10	20.75	23.66	36.39	59.19	74.48	92.28
v8	Mean equivalised net income	27	49.43	19.75	14.46	29.72	49.38	64.55	97.75
v9	Not-at-risk-of-poverty, ≥60% of median income	27	91.73	3.63	85.61	88.90	92.29	94.13	98.65
v10	S20/S80 income quintile share	27	73.62	16.39	42.01	61.60	74.11	88.37	97.09
v11	Graduates of tertiary education	27	63.85	19.46	33.42	47.08	62.02	81.09	97.30
v12	Tertiary students in the fields of Education, Health and Welfare, Humanities and Art – ISCED 5–6	27	45.19	12.89	26.31	34.75	41.44	55.04	68.23
v13	People participating in formal or non-formal education and training	27	42.94	14.53	22.69	32.89	38.51	51.01	84.69
v14	Workers caring for and educating their children or grandchildren, every day for one hour or more	27	57.59	18.25	25.67	43.61	60.76	67.62	93.14
v15	Workers doing cooking and housework, every day for one hour or more	27	38.69	19.83	12.73	21.79	34.56	56.85	78.57
v16	Workers doing sporting, cultural or leisure activities outside of their home, at least every other day	27	28.23	19.59	4.23	13.95	23.56	37.51	99.01
v17	Workers involved in voluntary or charitable activities, at least once a month	27	35.68	20.90	8.38	18.85	30.53	46.17	94.87
v18	Share of ministers	27	48.11	24.17	1.00	32.51	44.42	63.46	98.93
v19	Share of members of parliament	27	45.05	20.26	18.45	33.47	38.27	59.34	92.81
v20	Share of members of regional assemblies	27	50.78	20.11	23.10	36.13	43.42	64.28	92.81
v21	Share of members of boards in largest quoted companies, supervisory board or board of directors	27	23.71	12.35	4.87	14.39	22.81	27.71	51.52
v22	Share of members in all key decision-making bodies in Central Bank	27	31.50	18.77	1.00	19.90	31.00	43.81	69.16
v23	Self-perceived health: good or very good	27	77.57	12.13	53.57	69.84	79.68	85.99	99.46
v24	Life expectancy in absolute value at birth	27	92.00	4.54	82.70	87.38	94.23	95.55	96.88
v25	Healthy life years in absolute value at birth	27	85.49	6.90	73.24	80.93	86.13	90.16	99.58
v26	Population without unmet needs for medical examination	27	93.39	5.11	77.80	92.10	94.19	96.62	99.95
v27	Population without unmet needs for dental examination	27	94.10	3.54	86.28	91.93	95.26	96.71	99.95

Annex 3: Correlation matrix of the final metric used in calculating the Gender Equality Index

|	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v15	v16	v17	v18	v19	v20	v21	v22	v23	v24	v25	v26	v27
v1	–																										
v2	0.80***	–																									
v3	-0.07	0.17	–																								
v4	0.14	0.35*	0.48***	–																							
v5	0.07	0.30	0.55***	0.60***	–																						
v6	0.40**	0.58**	0.29	0.48***	0.60***	–																					
v7	0.06	0.36*	0.82***	0.62***	0.75***	0.63***	–																				
v8	0.10	0.36*	0.87***	0.60***	0.69***	0.57***	0.93***	–																			
v9	0.19	0.27	0.27	0.26	0.56***	0.74***	0.43**	0.48***	–																		
v10	0.24	0.27	0.29	0.34*	0.42**	0.72***	0.42**	0.48***	0.88***	–																	
v11	0.33*	0.55***	0.63***	0.39**	0.41**	0.46**	0.71***	0.67***	0.23	0.19	–																
v12	0.27	0.48**	0.64***	0.29	0.38*	0.43**	0.72***	0.66***	0.22	0.17	0.96***	–															
v13	0.49***	0.72***	0.46**	0.50***	0.52***	0.80***	0.66***	0.63***	0.51***	0.50***	0.60***	0.57***	–														
v14	0.20	0.41**	0.32*	0.00	0.38*	0.44**	0.43**	0.35*	0.42**	0.29	0.34*	0.34*	0.54***	–													
v15	0.45***	0.73***	0.30	0.30	0.25	0.58***	0.54***	0.43**	0.22	0.15	0.69***	0.69***	0.75***	0.66***	–												
v16	0.32*	0.47**	0.43**	0.58***	0.50***	0.70***	0.68***	0.65***	0.52***	0.54***	0.59***	0.55***	0.78***	0.43**	0.66**	–											
v17	0.22	0.60***	0.49***	0.53***	0.57***	0.73***	0.72***	0.71***	0.58***	0.59***	0.52***	0.51***	0.80***	0.52***	0.63***	0.73***	–										
v18	0.41**	0.66***	0.51***	0.56***	0.39**	0.58***	0.62***	0.64***	0.27	0.38*	0.54***	0.52***	0.78***	0.22	0.59***	0.68***	0.65***	–									
v19	0.33*	0.69***	0.38**	0.49***	0.42**	0.55***	0.56***	0.53**	0.32*	0.37*	0.50***	0.51***	0.69***	0.40**	0.67***	0.62***	0.69***	0.79***	–								
v20	0.28	0.63***	0.52***	0.50***	0.34*	0.48**	0.58***	0.59***	0.30	0.36*	0.64***	0.64***	0.65***	0.29	0.65***	0.60***	0.64***	0.82***	0.82***	–							
v21	0.56***	0.61***	-0.10	0.34*	0.11	0.47**	0.13	0.08	0.34*	0.34*	0.26	0.24	0.52***	0.19	0.52***	0.48**	0.41**	0.53***	0.56***	0.46**	–						
v22	0.44**	0.53**	0.01	0.16	0.13	0.43**	0.18	0.08	0.39**	0.37*	0.36*	0.39*	0.54**	0.47**	0.60***	0.52*	0.36*	0.48***	0.55***	0.58***	0.67***	–					
v23	0.02	0.25	0.72***	0.67***	0.55***	0.49**	0.79***	0.76***	0.34*	0.38*	0.68***	0.69***	0.48**	0.10	0.37*	0.56***	0.59***	0.54***	0.44**	0.52***	0.24	0.13	–				
v24	-0.07	0.22	0.79***	0.65***	0.64***	0.52**	0.85***	0.84***	0.34*	0.45**	0.48**	0.46**	0.45**	0.27	0.27	0.49**	0.54***	0.57***	0.47***	0.54***	-0.05	0.07	0.7***	–			
v25	-0.13	0.02	0.73***	0.55***	0.39*	0.22	0.60***	0.61***	0.13	0.21	0.42**	0.48**	0.27	0.12	0.23	0.38**	0.33*	0.39**	0.33*	0.40**	0.00	0.12	0.76***	0.71***	–		
v26	0.19	0.34*	0.52***	0.35*	0.75***	0.61***	0.59***	0.61***	0.60***	0.54***	0.42**	0.40**	0.47**	0.38**	0.20	0.44**	0.47**	0.35*	0.31*	0.35*	-0.06	0.16	0.43**	0.59***	0.26	–	
v27	0.11	0.33*	0.45**	0.35*	0.64***	0.70***	0.60***	0.59***	0.63***	0.53***	0.45**	0.44**	0.55***	0.44**	0.37*	0.57***	0.59***	0.39**	0.33*	0.36*	0.12	0.21	0.41**	0.47***	0.18	0.87***	–

Level of significance for N=27: *** p<0.01; ** p<0.05, *p<0.10

Annex 4: Principal component analysis

Domain Work

Work	Participation	Segregation and quality of work
Full-time equivalent employment	-0.154	0.640
Duration of working life	0.104	0.632
Employment in Education, Human Health and Social Work activities	0.452	-0.245
Employees with a fixed start and end of a working day or varying working time as decided by the employer	0.509	0.039
Workers perceiving that their health or safety is not at risk because of their work	0.576	-0.042
Workers having undergone training paid for or provided by their employer or by themselves if self-employed	0.413	0.358

% of variance explained	0.70
KMO	0.62

Screeplot: Work
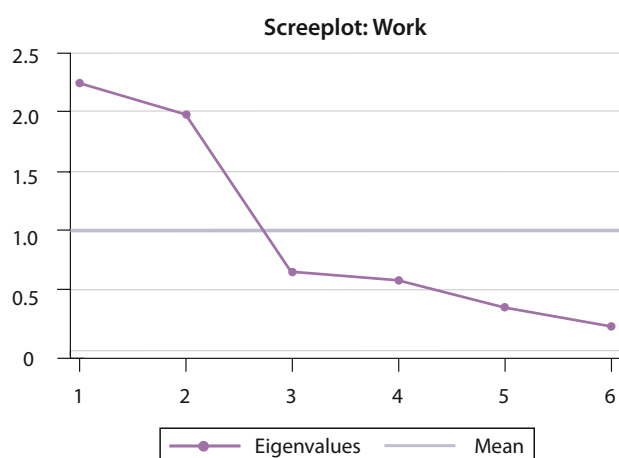
Domain Money

Money	Financial resources	Poverty
Mean hourly earnings	0.018	0.698
Mean equivalised net income	-0.019	0.714
Not-at-risk-of-poverty, ≥60 % of median income	0.721	-0.037
S20/S80 income quintile share	0.692	0.040

% of variance explained	0.87
KMO	0.52

Screeplot: Money
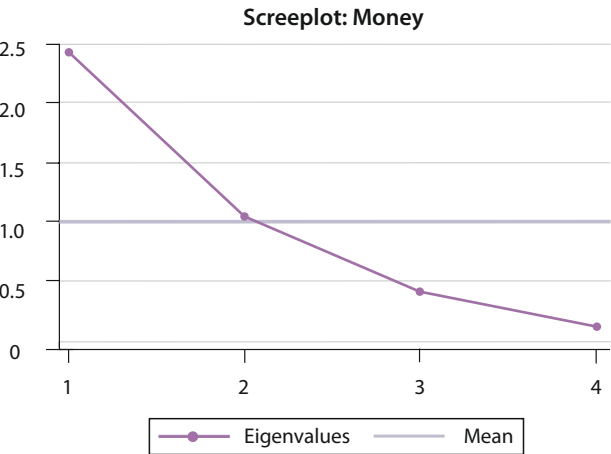
Domain Knowledge

Knowledge	Educational attainment and segregation	Lifelong learning
Graduates of tertiary education	0.694	0.036
Tertiary students in the fields of Education, Health and Welfare, Humanities and Art – ISCED 5–6	0.720	-0.034
People participating in formal or non-formal education and training	-0.001	0.999

% of variance explained	0.98
KMO	0.59

Screeplot: Knowledge
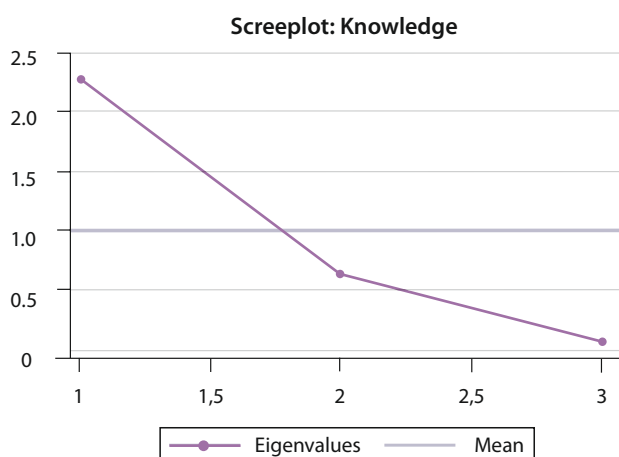
Domain Time

Time	Care activities	Social activities
Workers caring for and educating their children or grandchildren, every day for one hour or more	-0.095	0.864
Workers doing cooking and housework, every day for one hour or more	0.324	0.479
Workers doing sporting, cultural or leisure activities outside of their home, at least every other day	0.722	-0.145
Workers involved in voluntary or charitable activities, at least once a month	0.604	0.052

% of variance explained	0.83
KMO	0.68

Screeplot: Time
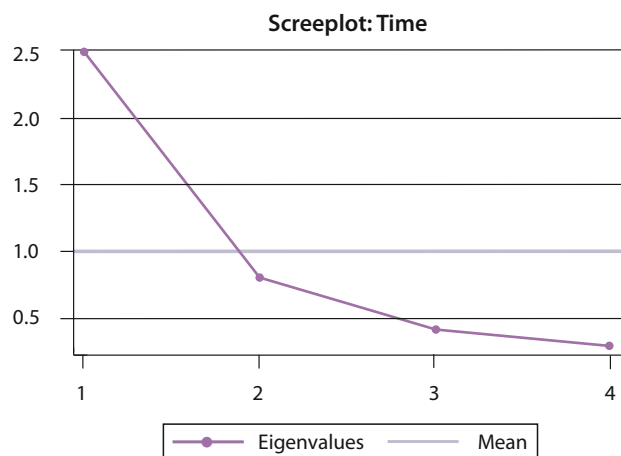
Domain Power

Power	Political	Economic
Share of ministers	0.596	-0.049
Share of members of parliament	0.549	0.059
Share of members of regional assemblies	0.586	-0.002
Share of members of boards in largest quoted companies, supervisory board or board of directors	-0.019	0.719
Share of members in all key decision-making bodies in Central Bank	0.018	0.691

% of variance explained	0.82
KMO	0.72

Screeplot: Power
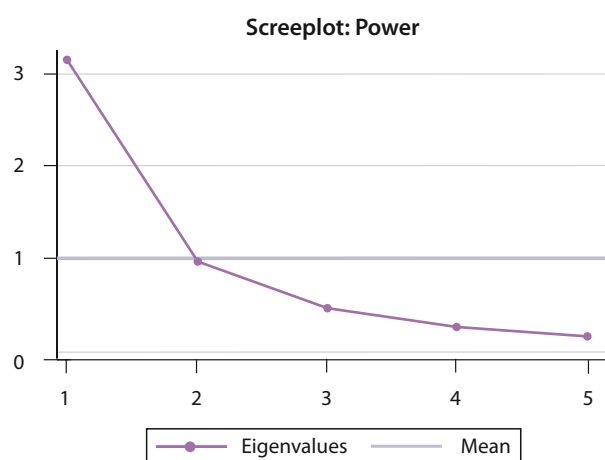
Domain Health

Health	Status	Access
Self-perceived health: good or very good	0.575	0.044
Life expectancy in absolute value at birth	0.523	0.196
Healthy life years in absolute value at birth	0.627	-0.178
Population without unmet needs for medical examination	0.021	0.674
Population without unmet needs for dental examination	-0.044	0.688

% of variance explained	0.87
KMO	0.65

Screeplot: Health
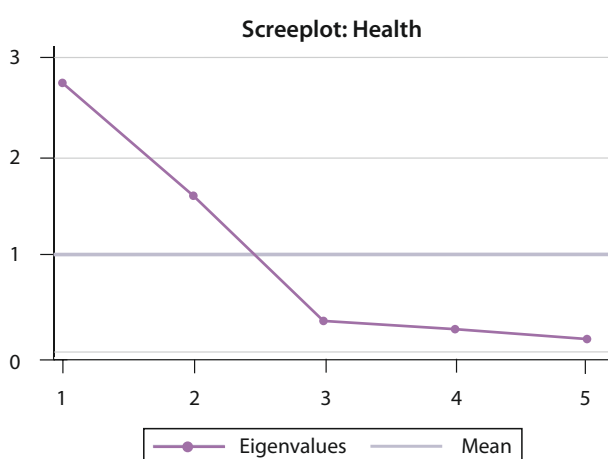
Annex 5: Indicators correspondence to Europe 2020 and BPfA indicators

Indicators	Europe 2020	BPfA indicators
Full-time equivalent employment rate (% 15+ population)	X	
Duration of working life (years)		
Employment in Education, Human Health and Social Work activities (% 15–64 employed in all NACE Rev. 2)	X	
Employees with a non-fixed start and end of a working day or varying working time as decided by the employer (% 15–64 employed)		
Workers perceiving that their health or safety is not at risk because of their work (% 15+ workers)		
Workers having undergone training paid for or provided by their employer or by themselves if self-employed (% 15+ workers)		
Mean monthly earnings – NACE Rev. 2, categories B-S excluding O (PPS)		
Mean equivalised net income, 16+ population (PPS)		
Not-at-risk-of-poverty, ≥60 % of median income (% 16+ population)	X	A1
S20/S80 income quintile share (total population)		
Graduates of tertiary education (% 15–74 population)		
Tertiary students in the fields of Education, Health and Welfare, Humanities and Arts (ISCED 5–6) (% tertiary students)	X	
People participating in formal or non-formal education and training (% 15–74 population)		
Workers caring for and educating their children or grandchildren, every day for one hour or more (% 15+ workers)		
Workers doing cooking and housework, every day for one hour or more (%15+ workers)		
Workers doing sporting, cultural or leisure activities outside of their home, at least every other day (%15+ workers)hour		
Workers involved in voluntary or charitable activities, at least once a month (%15+ workers)		
Share of ministers (%)		G6
Share of members of parliament (%)		G1
Share of members of regional assemblies (%)		G2+G3
Share of members of boards in largest quoted companies (supervisory board or board of directors) (%)		G17+G18
Share of members in all key decision-making bodies in Central Bank (%)		G10+G11
Self-perceived health, good or very good (%16+ population)		
Life expectancy in absolute value at birth (years)		
Healthy Life Years in absolute value at birth (years)		
Population without unmet needs for medical examination (% 16+ population)		C1
Population without unmet needs for dental examination (% 16+ population)		C2
Employment of people born in a foreign country (% 15–64 population born in a foreign country)		
Employment of people aged 55–64 (% 55–64 population)		
Employment rates of people living in a household with one adult and one or more children (% 15–64 corresponding population)		
Employment rates by sex, age and country of birth (% 15–64 population)		

Annex 6: Segregation by economic activity

Table 6.1. Percentage of women (15–64) by field of economic activity (from 2008, NACE Rev. 2) in EU Member States 2010 [lfsa_egan2]

Country	Human health and social work activities	Education	Other service activities	Accommodation and food service activities	Real estate activities	Financial and insurance activities	Wholesale and retail trade; repair of motor vehicles and motorcycles	Administrative and support service activities	Arts, entertainment and recreation	Professional, scientific and technical activities	Association index
EU27	78 %	72 %	66 %	55 %	52 %	51 %	49 %	49 %	48 %	47 %	2.8
BE	79 %	69 %	67 %	48 %	43 %	45 %	46 %	53 %	44 %	46 %	3.0
BG	81 %	82 %	60 %	62 %	64 %	64 %	55 %	29 %	48 %	64 %	2.9
CZ	80 %	77 %	66 %	57 %	53 %	58 %	55 %	46 %	50 %	50 %	2.7
DK	82 %	60 %	59 %	56 %	34 %	50 %	45 %	47 %	52 %	45 %	3.2
DE	77 %	69 %	70 %	58 %	51 %	51 %	53 %	48 %	49 %	52 %	2.8
EE	86 %	85 %	81 %	74 %	63 %	69 %	62 %	42 %	65 %	59 %	2.9
IE	82 %	74 %	73 %	56 %	46 %	52 %	50 %	49 %	45 %	41 %	2.6
EL	68 %	66 %	54 %	47 %	52 %	50 %	42 %	51 %	43 %	46 %	2.8
ES	78 %	66 %	69 %	54 %	47 %	46 %	49 %	56 %	43 %	49 %	3.6
FR	79 %	68 %	72 %	48 %	57 %	55 %	47 %	48 %	46 %	46 %	3.2
IT	69 %	76 %	63 %	51 %	45 %	43 %	41 %	58 %	42 %	45 %	2.9
CY	71 %	73 %	63 %	52 %	53 %	60 %	46 %	57 %	38 %	61 %	2.5
LV	87 %	87 %	74 %	78 %	45 %	67 %	65 %	40 %	69 %	60 %	2.9
LT	86 %	81 %	67 %	78 %	51 %	79 %	56 %	45 %	62 %	56 %	3.3
LU	76 %	60 %	58 %	47 %	:	41 %	46 %	48 %	35 %	43 %	3.0
HU	80 %	77 %	70 %	57 %	53 %	69 %	54 %	43 %	52 %	53 %	2.3
MT	58 %	66 %	67 %	32 %	:	58 %	32 %	33 %	35 %	42 %	3.1
NL	83 %	63 %	68 %	52 %	44 %	46 %	49 %	50 %	50 %	41 %	2.7
AT	78 %	70 %	71 %	62 %	61 %	48 %	54 %	57 %	46 %	51 %	2.6
PL	82 %	78 %	64 %	68 %	56 %	66 %	55 %	40 %	58 %	52 %	2.4
PT	84 %	77 %	73 %	61 %	55 %	43 %	44 %	48 %	47 %	57 %	3.1
RO	80 %	75 %	55 %	60 %	50 %	67 %	55 %	33 %	53 %	53 %	4.1
SI	81 %	78 %	73 %	56 %	52 %	66 %	54 %	50 %	52 %	49 %	2.6
SK	84 %	81 %	69 %	61 %	52 %	65 %	59 %	38 %	56 %	57 %	2.5
FI	89 %	67 %	68 %	71 %	44 %	63 %	51 %	52 %	50 %	45 %	2.7
SE	82 %	74 %	61 %	54 %	38 %	53 %	43 %	48 %	51 %	41 %	3.7
UK	79 %	73 %	61 %	53 %	57 %	47 %	47 %	44 %	48 %	42 %	2.5

: not available

Cells are highlighted when women are under/over-represented in a given economical sector

	30 % or below	Under-representation of women, below a critical mass of women
	Between 31 and 40 %	Under-representation of women above a critical mass of women
	Between 41 and 59 %	Equality or near-equality
	Between 60 and 69 %	Over-representation of women above a critical mass of men
	70 % and above	Over-representation of women below a critical mass of men

Table 6.2. Percentage of women (15–64) by field of economic activity (from 2008, NACE Rev. 2) in EU Member States 2010 [lfsa_egan2] (continued)

Country	Public administration and defence; compulsory social security	Agriculture, forestry and fishing	Information and communication	Manufacturing	Transportation and storage	Electricity, gas, steam and air conditioning supply	Water supply; sewerage, waste management and remediation activities	Mining and quarrying	Construction	Association Index
EU27	46%	37%	32%	30%	22%	22%	20%	12%	9%	2.8
BE	48%	30%	27%	25%	22%	26%	17%	:	8%	3.0
BG	45%	36%	44%	49%	23%	19%	25%	17%	8%	2.9
CZ	48%	27%	27%	34%	26%	17%	26%	17%	8%	2.7
DK	54%	17%	28%	30%	22%	26%	18%	:	8%	3.2
DE	47%	34%	34%	27%	25%	24%	21%	12%	13%	2.8
EE	59%	32%	34%	43%	28%	25%	:	21%	7%	2.9
IE	48%	11%	30%	29%	19%	26%	18%	:	7%	2.6
EL	38%	41%	34%	25%	14%	24%	15%	:	3%	2.8
ES	42%	26%	32%	25%	18%	21%	14%	7%	8%	3.6
FR	53%	29%	32%	29%	28%	20%	20%	:	9%	3.2
IT	34%	30%	33%	27%	19%	19%	14%	17%	6%	2.9
CY	39%	31%	37%	38%	30%	:	:	:	10%	2.5
LV	51%	33%	38%	42%	27%	20%	31%	:	11%	2.9
LT	52%	39%	45%	46%	26%	:	:	:	13%	3.3
LU	39%	27%	30%	21%	14%	:	:	:	12%	3.0
HU	52%	24%	32%	38%	25%	30%	18%	:	8%	2.3
MT	32%	:	26%	25%	15%	:	20%	:	4%	3.1
NL	40%	29%	23%	23%	24%	27%	17%	:	9%	2.7
AT	45%	46%	30%	27%	22%	15%	25%	:	12%	2.6
PL	50%	44%	34%	33%	21%	20%	24%	9%	6%	2.4
PT	37%	45%	32%	41%	19%	:	25%	:	6%	3.1
RO	39%	45%	36%	43%	18%	22%	28%	15%	9%	4.1
SI	49%	44%	33%	35%	19%	15%	19%	:	10%	2.6
SK	49%	24%	29%	37%	24%	18%	22%	:	4%	2.5
FI	57%	32%	34%	27%	21%	21%	21%	:	9%	2.7
SE	56%	23%	30%	24%	23%	28%	17%	15%	7%	3.7
UK	49%	23%	28%	23%	20%	25%	18%	15%	11%	2.5

: not available

Cells are highlighted when women are under/over-represented in a given economical sector

■ (orange)	30 % or below	Under-representation of women, below a critical mass of women
■ (light orange)	Between 31 and 40 %	Under-representation of women above a critical mass of women
■ (white)	Between 41 and 59 %	Equality or near-equality
■ (light purple)	Between 60 and 69 %	Over-representation of women above a critical mass of men
■ (purple)	70 % and above	Over-representation of women below a critical mass of men

Annex 7: Segregation by academic field. Female students (ISCED 5–6) enrolled by field as a percentage of male and female students in each field (2010) [educ_itertp]

Country	Education	Humanities and art	Social science, business and law	Science, mathematics and computing	Engineering, manufacturing, construction	Agriculture and veterinary	Health and welfare	Services	GINI coefficient
EU27	77	65	58	38	25	49	74	49	0.36
BE	72	56	54	29	23	53	73	51	0.35
BG	72	69	64	47	32	48	67	46	0.29
CZ	79	67	62	35	25	57	78	43	0.40
DK	72	63	52	34	35	59	81	25	0.38
DE	71	66	51	36	18	48	77	47	0.44
EE	92	74	66	38	24	53	88	51	0.47
IE	76	60	54	38	16	43	76	46	0.41
EL	63	70	54	38	26	45	67	51	0.33
ES	77	59	58	33	28	46	73	50	0.37
FR	81	68	60	36	25	44	71	44	0.34
IT	92	73	58	52	30	47	66	47	0.34
CY	77	68	40	36	24	56	60	64	0.31
LV	83	77	68	32	21	51	85	57	0.41
LT	76	73	67	35	21	54	82	44	0.42
LU	70	61	52	33	18	:	71	:	0.30
HU	80	64	64	32	18	45	73	60	0.37
MT	82	60	58	47	26	36	63	57	0.27
NL	73	54	48	20	17	51	74	48	0.37
AT	76	66	56	36	23	60	64	51	0.35
PL	77	70	64	38	30	53	74	51	0.34
PT	83	56	58	46	26	55	77	44	0.40
RO	93	65	63	53	30	37	68	42	0.27
SI	81	69	68	39	25	56	77	52	0.40
SK	75	65	66	39	29	48	78	44	0.38
FI	80	71	60	39	19	51	83	68	0.52
SE	77	61	61	42	29	63	80	58	0.38
UK	76	61	55	37	19	63	77	57	0.38

: not available

Cells are highlighted when women are under/over-represented in a given economical sector
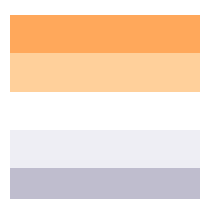
30 % or below	Under-representation of women, below a critical mass of women
Between 31 and 40 %	Under-representation of women above a critical mass of women
Between 41 and 59 %	Equality or near-equality
Between 60 and 69 %	Over-representation of women above a critical mass of men
70 % and above	Over-representation of women below a critical mass of men

Annex 8: Scores of the Gender Equality Index and the domain of work

Country	Index	Work	Participation	Gap adjusted by levels of achievement		Segregation and quality of work	Gap adjusted by levels of achievement		Gap adjusted by levels of achievement		
				FTE employment	Duration of working life		Sectoral segregation	Flexibility of working time	Health and safety	Training at work
AT	50.4	73.9	79.0	74.1	84.0	69.1	39.9	71.6	85.5	79.4
BE	59.6	66.4	70.7	66.5	74.8	62.3	41.2	51.6	89.1	67.3
BG	37.0	49.9	75.5	76.0	75.1	33.0	25.4	28.9	60.7	17.0
CY	42.0	68.7	84.9	87.1	82.7	55.6	49.1	47.7	76.0	49.6
CZ	44.4	71.6	77.3	78.4	76.1	66.4	25.9	60.5	89.6	89.7
DE	51.6	72.5	76.7	68.1	85.2	68.6	40.1	73.9	92.0	68.2
DK	73.6	81.6	90.1	85.8	94.3	73.9	45.8	64.6	99.5	85.8
EE	50.0	64.6	84.9	81.4	88.4	49.2	24.7	44.2	66.3	61.5
EL	40.0	59.7	65.4	62.0	68.9	54.4	44.0	82.2	64.2	27.2
ES	54.0	61.3	71.6	66.0	77.3	52.5	43.0	40.0	73.0	54.0
FI	73.4	82.0	88.3	86.3	90.4	76.1	31.8	91.6	88.1	92.8
FR	57.1	67.0	76.1	71.6	80.5	59.1	43.2	62.4	84.6	46.2
HU	41.4	55.9	68.3	68.2	68.4	45.7	31.9	26.9	73.6	50.4
IE	55.2	71.0	73.9	72.5	75.3	68.1	36.6	65.0	93.1	77.8
IT	40.9	60.6	57.8	54.9	60.7	63.4	35.8	75.7	93.9	48.4
LT	43.6	61.0	81.9	81.1	82.7	45.4	30.9	36.0	74.9	39.9
LU	50.7	66.4	70.3	70.2	70.4	62.7	53.0	45.3	88.1	64.2
LV	44.4	54.9	83.2	80.4	85.9	36.2	22.7	25.8	53.2	43.1
MT	41.6	55.0	53.0	51.7	54.3	57.0	45.5	45.6	77.7	59.4
NL	69.7	73.1	77.6	64.8	90.4	68.8	36.9	49.8	94.6	94.0
PL	44.1	61.4	73.4	74.3	72.6	51.3	25.2	46.4	70.4	63.1
PT	41.3	66.2	85.6	83.6	87.7	51.1	28.6	43.6	84.6	47.7
RO	35.3	60.4	74.5	76.7	72.3	49.0	20.9	63.6	75.1	36.3
SE	74.3	78.6	91.2	86.2	96.3	67.7	38.1	73.2	64.6	95.0
SI	56.0	69.1	82.7	83.9	81.5	57.7	27.7	39.4	70.6	93.1
SK	40.9	61.0	75.3	76.8	73.8	49.3	22.3	33.1	72.2	69.7
UK	60.4	76.6	79.7	72.4	86.9	73.7	42.4	74.9	91.7	85.9
EU-27	54.0	69.0	76.6	74.1	79.0	62.2	37.0	62.5	84.5	65.0

Annex 9: Scores of the Gender Equality Index and the domain of money

Country	Index	Money	Financial resources	Gap adjusted by levels of achievement		Economic situation	Gap adjusted by levels of achievement	
				Earnings	Income		Poverty	Income distribution
AT	50.4	77.9	65.9	62.0	81.1	92.1	94.7	89.5
BE	59.6	79.3	69.7	78.2	29.5	90.3	93.4	87.2
BG	37.0	40.7	23.2	23.7	28.5	71.3	85.6	57.1
CY	42.0	74.1	66.5	63.6	79.0	82.6	89.5	75.7
CZ	44.4	59.3	35.9	36.4	44.5	97.9	98.7	97.1
DE	51.6	76.3	70.6	76.0	38.0	82.6	91.1	74.1
DK	73.6	79.2	74.8	89.0	76.4	83.9	93.7	74.1
EE	50.0	49.1	31.0	33.6	35.7	77.9	91.3	64.5
EL	40.0	63.3	54.3	51.1	60.1	73.9	86.8	61.1
ES	54.0	60.7	54.2	59.2	62.1	67.9	86.8	49.0
FI	73.4	78.4	66.3	72.1	75.1	92.7	93.5	91.9
FR	57.1	75.9	67.0	65.5	86.5	86.1	94.8	77.4
HU	41.4	54.4	30.5	36.4	30.9	97.1	97.1	97.1
IE	55.2	77.0	76.8	89.7	31.8	77.2	92.3	62.1
IT	40.9	68.2	60.2	64.3	70.7	77.3	88.8	65.7
LT	43.6	41.5	26.8	29.1	30.7	64.3	86.6	42.0
LU	50.7	90.9	95.0	92.3	64.3	86.9	94.6	79.2
LV	44.4	42.0	26.7	29.5	30.1	66.0	86.8	45.3
MT	41.6	68.2	54.1	58.9	62.3	86.0	92.7	79.2
NL	69.7	82.5	71.8	75.5	37.5	94.8	97.7	91.9
PL	44.1	52.2	34.6	40.0	36.7	78.8	90.6	66.9
PT	41.3	56.3	42.3	45.8	18.3	75.0	89.0	61.1
RO	35.3	39.0	21.0	27.6	18.1	72.5	87.9	57.1
SE	74.3	80.2	67.7	73.5	40.0	95.1	93.0	97.1
SI	56.0	70.2	51.8	55.8	60.4	95.1	93.2	97.1
SK	40.9	53.7	31.7	33.2	38.1	90.9	96.7	85.1
UK	60.4	74.3	72.7	79.7	82.9	76.0	89.9	62.1
EU-27	54.0	68.9	59.5	65.2	68.0	79.6	91.0	68.3

Annex 10: Scores of the Gender Equality Index and the domain of knowledge

Country	Index	Knowledge	Educational attainment and segregation	Gap adjusted by levels of achievement		Lifelong learning	Gap adjusted by levels of achievement
				Tertiary education	Segregation		Lifelong learning
AT	50.4	44.6	39.5	45.2	33.8	50.2	50.2
BE	59.6	54.7	78.6	89.0	68.2	38.0	38.0
BG	37.0	32.0	45.2	49.0	41.4	22.7	22.7
CY	42.0	52.9	73.5	91.6	55.5	38.0	38.0
CZ	44.4	37.3	36.1	44.2	28.0	38.5	38.5
DE	51.6	44.1	49.7	60.4	39.0	39.0	39.0
DK	73.6	75.1	66.6	78.5	54.6	84.7	84.7
EE	50.0	53.0	57.3	70.3	44.4	49.0	49.0
EL	40.0	36.7	50.8	62.0	39.5	26.5	26.5
ES	54.0	53.5	69.3	81.7	56.9	41.3	41.3
FI	73.4	67.0	67.4	85.5	49.2	66.6	66.6
FR	57.1	49.4	64.3	75.4	53.2	38.0	38.0
HU	41.4	35.1	42.3	49.0	35.7	29.1	29.1
IE	55.2	52.8	78.5	90.9	66.1	35.4	35.4
IT	40.9	32.1	31.3	36.0	26.6	32.9	32.9
LT	43.6	47.4	58.3	67.1	49.5	38.5	38.5
LU	50.7	61.1	72.2	81.7	62.6	51.8	51.8
LV	44.4	38.8	45.7	54.1	37.4	32.9	32.9
MT	41.6	34.0	35.2	38.5	31.8	32.9	32.9
NL	69.7	65.5	67.5	80.5	54.5	63.5	63.5
PL	44.1	44.0	46.5	52.2	40.9	41.6	41.6
PT	41.3	30.4	29.9	33.4	26.3	30.9	30.9
RO	35.3	28.8	32.2	36.6	27.9	25.8	25.8
SE	74.3	66.3	68.3	76.3	60.2	64.3	64.3
SI	56.0	51.4	46.2	53.8	38.7	57.1	57.1
SK	40.9	35.0	38.0	43.6	32.5	32.1	32.1
UK	60.4	68.8	81.3	97.3	65.4	58.2	58.2
EU-27	54.0	48.9	57.2	69.0	45.4	41.8	41.8

Annex 11: Scores of the Gender Equality Index and the domain of time

Country	Index	Time	Care activities	Gap adjusted by levels of achievement			Gap adjusted by levels of achievement	
				Childcare activities	Domestic activities	Social activities	Sport, culture and leisure activities	Volunteering and charitable activities
AT	50.4	40.0	35.6	40.8	30.5	45.0	24.0	66.1
BE	59.6	45.3	56.9	67.1	46.8	36.1	29.6	42.6
BG	37.0	17.3	20.9	25.7	16.2	14.3	12.1	16.6
CY	42.0	25.3	35.9	50.3	21.5	17.8	10.9	24.8
CZ	44.4	23.2	28.9	41.2	16.7	18.7	16.7	20.6
DE	51.6	41.6	40.1	49.4	30.7	43.3	22.6	64.0
DK	73.6	64.9	80.4	93.1	67.7	52.4	42.3	62.5
EE	50.0	51.4	75.4	84.2	66.6	35.1	30.2	39.9
EL	40.0	17.4	20.0	26.9	13.1	15.1	16.3	13.8
ES	54.0	33.8	58.2	62.8	53.7	19.6	20.8	18.3
FI	73.4	63.8	54.4	47.4	61.4	74.8	99.0	50.6
FR	57.1	35.8	43.6	52.2	35.0	29.3	23.6	35.1
HU	41.4	32.5	53.5	82.3	24.8	19.7	15.7	23.8
IE	55.2	53.4	60.2	61.9	58.4	47.5	51.1	43.9
IT	40.9	33.0	42.5	68.2	16.9	25.6	23.8	27.5
LT	43.6	24.1	40.2	45.8	34.6	14.5	13.2	15.7
LU	50.7	48.9	52.0	63.0	41.0	46.0	48.1	44.0
LV	44.4	35.2	76.2	82.8	69.6	16.3	10.3	22.3
MT	41.6	37.5	44.4	66.7	22.1	31.6	32.7	30.5
NL	69.7	71.3	70.7	86.1	55.3	71.9	48.9	94.9
PL	44.1	20.9	27.6	33.1	22.1	15.8	14.0	17.7
PT	41.3	22.4	50.6	70.9	30.3	9.9	11.4	8.4
RO	35.3	17.8	27.0	34.3	19.6	11.8	4.2	19.4
SE	74.3	63.9	69.7	60.8	78.6	58.7	50.9	66.4
SI	56.0	49.1	51.1	65.5	36.6	47.2	46.1	48.4
SK	40.9	17.8	27.0	41.4	12.7	11.7	13.9	9.5
UK	60.4	43.2	56.6	51.1	62.1	32.9	29.6	36.3
EU-27	54.0	38.8	45.5	54.2	36.7	33.0	25.0	41.1

Annex 12: Scores of the Gender Equality Index and the domain of power

Country	Index	Power	Political	Gap adjusted by levels of achievement			Economic	Gap adjusted by levels of achievement	
				Ministerial representation	Parliamentary representation	Regional assemblies representation		Members of boards	Members of Central Bank
AT	50.4	24.3	63.1	74.7	55.4	59.2	9.3	17.6	1.0
BE	59.6	45.2	65.7	44.4	75.3	77.3	31.1	19.7	42.5
BG	37.0	33.8	47.9	54.9	41.6	47.3	23.9	21.1	26.7
CY	42.0	12.2	31.9	32.6	25.1	38.2	4.7	8.4	1.0
CZ	44.4	29.6	34.4	33.1	35.0	35.0	25.5	23.6	27.4
DE	51.6	28.0	59.4	54.2	61.9	61.9	13.2	25.5	1.0
DK	73.6	60.0	77.8	92.3	74.6	66.7	46.3	35.6	57.0
EE	50.0	27.5	34.7	14.1	39.7	50.4	21.7	12.4	31.0
EL	40.0	24.4	41.4	49.2	33.7	41.4	14.4	12.5	16.3
ES	54.0	47.2	75.4	78.0	66.3	81.9	29.6	20.0	39.2
FI	73.4	68.8	85.9	98.9	77.4	81.4	55.1	50.3	59.9
FR	57.1	50.3	63.8	62.2	37.7	91.3	39.7	22.8	56.5
HU	41.4	24.4	15.1	1.0	20.3	23.9	39.4	25.7	53.1
IE	55.2	26.5	30.4	27.8	29.8	33.6	23.0	16.3	29.8
IT	40.9	18.6	31.2	32.4	38.1	23.1	11.1	10.2	12.0
LT	43.6	32.1	35.6	35.0	33.3	38.6	29.0	22.9	35.0
LU	50.7	14.7	44.8	53.3	39.6	41.6	4.8	8.7	1.0
LV	44.4	38.6	38.9	41.8	38.3	36.5	38.3	40.0	36.5
MT	41.6	18.7	30.1	28.2	18.4	43.8	11.7	4.9	18.4
NL	69.7	52.2	69.2	64.7	76.4	66.6	39.4	29.7	49.1
PL	44.1	34.5	35.1	35.8	33.9	35.8	34.0	22.8	45.1
PT	41.3	30.6	44.1	34.1	56.7	41.6	21.2	10.1	32.2
RO	35.3	24.9	20.1	12.1	19.5	28.8	30.7	40.1	21.4
SE	74.3	74.3	91.5	88.9	92.8	92.8	60.3	51.5	69.2
SI	56.0	36.0	43.5	64.9	22.1	43.4	29.9	20.2	39.5
SK	40.9	33.1	31.8	32.5	34.3	28.7	34.4	41.9	26.8
UK	60.4	35.2	52.4	58.2	38.9	60.1	23.6	25.5	21.7
EU-27	54.0	38.0	49.9	47.9	44.1	57.5	29.0	23.3	34.6

Country	Index	Health	Status	Self-perceived health	Life expectancy	Healthy life years	Access	Unmet medical needs	Unmet dental needs
					Gap adjusted by levels of achievement			Gap adjusted by levels of achievement	
AT	50.4	91.6	86.4	81.1	94.6	83.5	97.2	97.7	96.7
BE	59.6	94.1	89.1	85.4	94.2	87.8	99.3	99.7	99.0
BG	37.0	84.5	83.0	75.3	85.5	88.4	85.9	85.5	86.3
CY	42.0	91.1	90.9	86.6	96.2	90.0	91.4	93.1	89.6
CZ	44.4	89.6	83.4	72.5	90.5	87.2	96.1	96.6	95.7
DE	51.6	89.5	84.5	77.5	94.7	81.3	94.7	93.8	95.6
DK	73.6	91.8	87.8	83.6	93.8	86.1	95.9	96.6	95.3
EE	50.0	83.8	74.5	61.6	85.8	76.0	94.2	94.2	94.3
EL	40.0	92.4	92.2	88.4	95.2	92.9	92.6	91.4	93.7
ES	54.0	90.7	89.4	82.5	96.0	89.6	92.1	92.5	91.7
FI	73.4	89.9	85.6	81.7	93.4	81.7	94.4	93.4	95.5
FR	57.1	90.6	86.7	78.5	95.0	86.7	94.6	95.3	94.0
HU	41.4	83.7	75.8	62.4	85.9	79.1	92.4	92.0	92.8
IE	55.2	96.4	95.8	99.5	95.6	92.4	97.0	97.1	97.0
IT	40.9	90.8	89.4	76.5	96.9	94.7	92.2	92.2	92.1
LT	43.6	84.9	74.2	58.8	82.7	81.1	97.1	96.7	97.5
LU	50.7	93.9	91.3	89.1	94.6	90.3	96.6	96.5	96.8
LV	44.4	77.1	71.0	54.4	83.4	75.2	83.7	77.8	89.7
MT	41.6	93.2	91.4	79.8	96.2	98.3	95.0	94.2	95.9
NL	69.7	94.7	90.6	91.5	95.8	84.5	99.0	99.3	98.8
PL	44.1	82.6	78.6	66.2	87.6	82.1	86.7	85.2	88.2
PT	41.3	84.5	75.4	53.6	93.2	79.5	94.7	97.3	92.2
RO	35.3	84.0	81.9	79.7	85.2	80.7	86.2	84.8	87.7
SE	74.3	93.1	96.7	93.9	96.6	99.6	89.6	87.8	91.5
SI	56.0	88.7	78.6	68.1	92.8	75.0	99.9	100.0	99.9
SK	40.9	85.8	77.3	71.6	87.1	73.2	95.3	94.8	95.8
UK	60.4	95.4	93.9	94.9	95.6	91.1	97.0	96.5	97.5
EU-27	54.0	90.1	86.6	79.4	93.5	86.8	93.7	93.4	94.0

8. References

Anker, R. (1998), Gender and jobs: sex segregation of occupations in the world, Geneva: ILO.

Annandale, E. and Hunt, K. (2000), 'Gender inequalities in health: research at the crossroads', in Annandale, E. and Hunt, K. (eds), Gender Inequalities in Health, Berkshire, UK: Open University Press. Available at: http://epp.eurostat. ec.europa.eu/cache/ITY_OFFPUB/KS-77-07-026/EN/KS-77-07-026-EN.PDF

Bacchi, C. (1996), The Politics of Affirmative Action, London: Sage.

Backhans, M. C., Lundberg, M., and Mansdotter, A. (2007), 'Does increased gender equality lead to a convergence of health outcomes for men and women? A study of Swedish municipalities', Social Science & Medicine, 64(9) pp.1892–1903.

Baker, J. Lynch, K., Cantillon, S. and Walsh, J. (2004), Equality: From Theory to Action, Basingstoke: Palgrave Macmillan.

Bárcena-Martín, E. and Moro-Egido, A. (2011), Country differences in the gender effect on poverty in Europe.

Bardhan, K and Klasen, S. (1999), 'UNDP's Gender-Related Indices: A Critical Review', World Development, 27(6) pp. 985–1010.

Bericat, E. (2011), 'The European Gender Equality Index: Conceptual and Analytical Issues', Social Indicators Research, 108 (1) pp.1–28.

Bittman, M., and Wajcman, J. (2000), 'The rush hour: The character of leisure time and gender equity', Social Forces, 79(1) pp.165–189.

Bradley, H. and Healy, G. (2008), Ethnicity and Gender at Work, Inequalities, Careers and Employment Relations, Basingstoke: Palgrave MacMillan.

Bunch, C. (2008), 'Feminist quandaries on gender and violence: agency, universality and human security', in Bahun-Radunović, S. and Rajan, V. G. Julie, Violence and Gender in the Globalized World: the Intimate and the Extimate, Surrey: Ahsgate.

Burda, M.C., D.S. Hamermesh and P. Weil (2007), Total Work, Gender, and Social Norms, IZA Discussion Paper No. 2705, Institute for the Study of Labor, Bonn, March.

Callens, M. and Croux, C. (2009), 'Poverty Dynamics in Europe A Multilevel Discrete-Time Recurrent Hazard Analysis', International Sociology, 24(3) pp. 368–396.

Chant, S. (2006), 'Re-thinking the "Feminization of Poverty" in Relation to Aggregate Gender Indices', Journal of Human Development, 7(2) pp. 201–220.

Chant, S. and Pedwell, C. (2008), Women, gender and the informal economy: An assessment of ILO research and sug gested ways forward. Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/ documents/publication/wcms_091228.pdf

Charles, M. and Bradley, K. (2002), 'Equal but separate? A cross-national study of sex segregation in higher education', American Social Review. 67(4) pp. 573–99.

Cockburn, C. (1991), In the Way of Women: Men's Resistance to Sex Equality in Organisations, Basingstoke: Macmillan.

Commission of the European Communities (1993), Growth, Competitiveness, Employment: The Challenges and Ways Forward into the 21st Century – White Paper (COM(94) 333 final)

Council of Europe (2006), Combating violence against women. Stocktaking study on the measures and actions taken in Council of Europe member States. Directorate General of Human Rights: Strasbourg. Available at: http://www.coe.int/t/dghl/standardsetting/equality/03themes/violence-against-women/CDEG%282006%293_en.pdf

Council of Europe (2011), Convention on preventing and combating violence against women and domestic violence (CM(2011)49 final), 7 April 2011. Availablew at: https://wcd.coe.int/ViewDoc.jsp?Ref=CM(2011)49&Language=lanEnglish&Ver=final Council of the European Union. Lisbon European Council 23 and 24 March 2000. Presidency Counclusions. Available at : http://www.europarl.europa.eu/summits/lis1_en.htm#

Council of the European Union, Council Resolution of 27 June 2002 on lifelong learning (2002/C 163/01). Available at: http://eurlex.europa.eu/JOHtml.do?uri=OJ:C:2002:163:SOM:en:HTML

Council of the European Union, European Pact for Gender Equality, 23/24 March 2006 (7775/1/06 REV 1.). Available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/89013.pdf

Council of the European Union, Council conclusions on women's health. 22 June 2006 (2006/C 146/02). Available at: http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/c_146/c_14620060622en00040005.pdf

Council of the European Union, Council Resolution, Conclusions of the Council and of the Representatives of the Gover-nments of the Member States, meeting within the Council of 15 November 2007, on improving the quality of teacher education. (2007/C300/01). Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2007:300:0006:0009:EN:PDF

Council of the European Union. Council Conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020) [Official Journal C 119 of 28.5.2009].Available at: http://europa.eu/legislation_summaries/education_training_youth/general_framework/ef0016_en.htm

Council of the European Union, Council Decision 21 October 2010 on guidelines for the employment policies of the Member States [Official Journal L of 24.11.2010]. (2010/707/EU) Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:308:0046:01:EN:HTML

Council of the European Union, 3073th Employment, Social Policy, Health and Consumer Affairs, Council meeting Brussels, 7 March 2011 Council Conclusions on the European Pact for gender equality for the period 2011–2020. Available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/lsa/119628.pdf

Council of the European Union. European Pact for gender equality for the period 2011–2020 (7349/11). Available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/lsa/119630.pdf

Council of the European Union, Combating Violence Against Women, and the Provision of Support Services for Victims of Domestic Violence – Council Conclusions Brussels, 6 December 2012. (17444/12). Available at: http://register.consilium.europa.eu/pdf/en/12/st17/st17444.en12.pdf

Crane, R. (2007), 'Is there a quiet revolution in women's travel? Revisiting the gender gap in commuting', Journal of the American Planning Association, 73(3) pp. 298–316.

Crompton, R. (1997), Women and Work in Modern Britain, Oxford: Oxford University Press.

Crompton, R. (2006), Employment and the family: the reconfiguration of work and family life in contemporary societies, Cambridge: Cambridge University Press.

Cueva, B. H. (2006), 'What is Missing in Measures of Gender Empowerment?' Journal of Human Development, 7(2) pp. 221–241.

Dahl, S., Nesheim,T., OlsenK, K.M. (2009), 'Quality of work – concept and measurement', REC-WP 05/2009, Working Papers on the Reconciliation of Work and Welfare in Europe, RECWOWE Publication, Dissemination and Dialogue Centre, Edinburgh.

Daly, M. (2005), 'Gender Mainstreaming in Theory and Practice', Social Politics: International Studies in Gender, State and Society, 12(3) Fall, pp. 433–450.

Davis, J., Buchanan, K., Katz, R and Lee Green, B. (2011), 'Gender Differences in Cancer Screening Beliefs, Behaviors, and Willingness to Participate: Implications for Health Promotion', American Journal of Men's Health, 6(3) pp. 211–217.

DeLamater, J.D. and Myers, D.J. (2007), Social Psychology (sixth edition), Belmont, CA: Thomson Wadsworth.

Dijkstra, A.G. and Hanmer, L.C. (2000), 'Measuring socio-economic gender equality: towards an alternative for UNDP's GDI', Feminist Economics, 6(2) pp. 41–75.

Dougherty, C. (2005), 'Why are Returns to Schooling Higher for Women than for Men?' Journal of Human Resources, 40 (Fall) pp. 969–88.

Doyal, L. (2000), 'Gender equity in health: debates and dilemmas', Social Science & Medicine, 51(6) pp. 931–939.

Doyal, L. (2001), Sex, gender, and health: the need for a new approach, BMJ, 323 (7320) pp.1061–1063.

EIGE (2010), Mid-Term Programme 2010–2012 Available at: http://www.eige.europa.eu/sites/default/files/Mid-term_Work_Programme%202010-2012_en.pdf

Ellsberg, M., Jansen, H., Heise, L., Watts, C. and García-Moreno, C. (2008), (on behalf of the WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team), Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study, Lancet 371, pp. 1165–1172.

EMCO Report (2010), Ad Hoc Group report on the 2010 thematic review [part 2. 'Quality in work'], 24 Novemeber 2010. Available at: http://ec.europa.eu/social/BlobServlet?docId=6441&langId=en

Epstein, C. (1988), Deceptive Distinctions: Sex, Gender and the Social Order, New Haven: Yale University Press.

Eurofound (2002), 'Quality of work and employment in Europe: Issues and challenges', Foundation Paper No. 1, Publications Office of the European Union, Luxembourg.

Eurofound (2006), 'Reconciliation of work and family life and collective bargaining in the European Union: An analysis of EIRO articles'. Available at: http://eurofound.europa.eu/pubdocs/2006/06/en/1/ef0606en.pdf

Eurofound (2009), European Company Survey 2009, Part-time work in Europe. Available at: http://www.eurofound.europa.eu/pubdocs/2010/86/en/3/EF1086EN.pdf

Eurofound (2012), Fifth European Working Conditions Survey, Luxembourg: Publications Office of the European Union.

European Association for the Education of Adults (EAEA) (2007), Gender Aspects in Lifelong Learning, Study for the European Parliament's Committee on Culture and Education, Brussels: European Parliament.

European Commission (1994), European Social Policy, 'A way forward the Union. A White paper on Social Policy' (COM(94) 333). Available at: http://aei.pitt.edu/1118/1/social_policy_white_paper_COM_94_333_A.pdf

European Commission (1996), 'Incorporating equal opportunities for women and men into all community policies and activities'. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:1996:0067:FIN:EN:PDF

European Commission (2000), Commission Communication of 7 June 2000,Towards a Community framework strategy on gender equality (2001–2005), (COM(2000) 335 final), not published in the Official Journal. Available at: http://europa.eu/legislation_summaries/other/c10932_en.htm

European Commission (2001), Communication from the commission, Employment and social policies: a framework for investing in quality, 30 October 2001 (COM(2001) 313 final). Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0313:FIN:EN:PDF

European Commission (2003), 'Improving quality in work: a review of recent progress', (COM(2003) 728 final) 26.11.2003. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0728:FIN:EN:PDF

European Commission (2003a), Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, The future of the European Employment Strategy (EES),'A strategy for full employment and better jobs for all' (COM(2003), 6 final).

European Commission (2005), Communication from the Commission, The Social Agenda 9 February 2005 (COM(2005) 33 final). Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0033:FIN:EN:PDF

European Commission (2005), Women and Science Excellence and Innovation – Gender Equality in Science, Commission Staff Working Document, Brussels: European Commission.

European Commission (2006), Indicators for Monitoring the Employment Guidelines, 2006 Compendium. Update from 01/08/2006. Brussels, European Commission.

European Commission (2006), Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, A Roadmap for equality between women and men 2006–2010 (COM(2006) 92 final). Available at: http://europa.eu/legislation_summaries/employment_and_social_policy/equality_between_men_and_women/c10404_en.htm

European Commission (2007), 'Key competences for lifelong learning', European Reference Framework. Available at: http://ec.europa.eu/dgs/education_culture/publ/pdf/ll-learning/keycomp_en.pdf

European Commission (2007a), 'Women and men in decision-making. Analysis of the situation and trends', European Communities, 2008, Luxembourg.

European Commission (2009), 'Expert Group on Gender and Employment' (EGGE), Gender segregation in the labour market Root causes, implications and policy responses in the EU, Publication of the European Union. Luxembourg.

European Commission (2010), Glossary. Available at: http://ec.europa.eu/justice/glossary/index_en.htm

European Commission (2010), Europe 2020, Commission proposes new economic strategy in Europe, Brussels, 3rd March 2010 (IP/10/225). Available at: http://ec.europa.eu/europe2020/index_en.htm

European Commission (2010), Communication from the Commission of 5 March 2010, A Strengthened Commitment to Equality between Women and Men. A Women's Charter – Declaration by the European Commission on the occasion of the 2010 International Women's Day in commemoration of the 15th anniversary of the adoption of a Declaration and Platform for Action at the Beijing UN World Conference on Women and of the 30th anniversary of the UN Convention on the Elimination of All Forms of Discrimination against Women (COM(2010) 78 final). Available at: http://ec.europa.eu/commission_2010-2014/president/news/documents/pdf/20100305_1_en.pdf

European Commission (2010), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'A Digital Agenda for Europe' (COM/2010/0245 final). Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN: HTML

European Commission (2010), Strategy for equality between women and men 2010–2015, Brussels, 21.9.2010 (COM(2010) 91 final). Available at: http://ec.europa.eu/justice/gender-equality/document/index_en.htm

European Commission (2010), Actions to implement the Strategy for Equality between Women and Men 2010–2015. (SEC(2010) 1079/2)

European Commission (2011), 'Women on the Board Pledge for Europe', Available at: http://ec.europa.eu/commissio _2010–2014/reding/womenpledge/index_en.htm

European Commission (2011a), Tackling the Gender Pay Gap in the European Union, Luxembourg: Publications Office of the European Union.

European Commission (2011b), Report on the progress on Equality between women and Men 2010. Available at: http:// www.europarl.europa.eu/meetdocs/2009_2014/documents/sec/com_sec(2011)0193_/com_sec(2011)0193_en.pdf

European Commission (2012a), Structural Change in Research Institutions: Enhancing Excellence, Gender Equality and Efficiency in Research and Innovation, Brussels: European Commission.

European Commission (2012b), 'Women in economic decision-making in the EU: Progress report', Justice, A Europe 2020 initiative, Luxembourg: Publications Office of the European Union.

European Commission (2013), The impact of the economic crisis on the situation of women and men and on gender equality policies, Luxembourg, Publications Office of the European Union. Available at: http://ec.europa.eu/ justice/gender-equality/files/documents/130410_crisis_report_en.pdfEuropean Economic Community, Treaty establishing the European Economic Community, EEC (Treaty, 25/03/1957), Rome. Available at: http://europa.eu/ legislation_summaries/institutional_affairs/treaties/treaties_eec_en.htm

European Council, Conclusion of the Presidency, Nice, 7–10 DECEMBER 2000. Available at: http://www.europarl.europa.eu/ summits/nice1_en.htm

European Council, Presidency Conclusion, Barcelona European Council 15–16 March 2002, (SN 100/1/02 REV1). Available at: http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/71025.pdf

European Council, Conclusions, (EUCO 23/11) 23–24 June 2011. Available at: http://ec.europa.eu/commission_2010–2014/ president/news/speeches-statements/pdf/20110624_1_en.pdf

European Parliament (2009), 'Women's Rights and Gender Equality: Basic Information'. Available at: http://www.europarl. europa.eu/document/activities/cont/200907/20090728ATT59207/20090728ATT59207EN.pdf 36:en:PDF

European Parliament, Directive 2006/54/EC of the European Parliament and the Council of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:204:0023:0036:en:PDF

European Parliament, European Parliament resolution of 5 April 2011 on priorities and outline of a new EU policy frame work to fight violence against women (2010/2209(INI). Available at: http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?id=587248#documentGateway

European Union, Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and related acts, Official Journal C 340, 10 November 1997. (97/C 340/05). Available at: http://eur-lex.europa.eu/en/treaties/dat/11997D/htm/11997D.html

European Union, Charter of Fundamental Rights of the European Union (2000/C 364/01), 7 December 2000, Official Journal of the European Communities, 18 December 2000. Available at: http://www.europarl.europa.eu/charter/pdf/text_en.pdf

European Union, Consolidated Version of the treaty on European Union and of the treaty establishing the European Community (C 321 E/1. 29.12.2006). Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:321E:0001:0331:EN:PDF

European Union, Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, 13 December 2007 (2007/C 306/01). Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0047:0200:en:PDF

European Union, EU guidelines on violence against women and girls and combating all forms of discrimination against them, General Affairs Council of 8 December 2008 (Not published in the Official Journal). Available at: http://europa.eu/legislation_summaries/human_rights/human_rights_in_third_countries/dh0003_en.htm

European Union, Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union (2010/C 83/01). Available at: http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2010:083:SOM:en:HTML

European Union, Consolidated version of the Treaty of the European Union and the Treaty on the Functioning of the European Union, TEU (2010), 2010/C 83/01. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0013:0046:en:PDF

Eurostat (2005), European Statistics Code of Practice for the National and Community Statistical Authorities. Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-77-07-026/EN/KS-77-07-026-EN.PDF

Eurostat (2012), Labour market participation by sex and age – Statistics Explained (2012/10/5). Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Labour_market_participation_by_sex_and_age

Eurydice (2010), Gender Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe, Brussels: Education, Audiovisual and Culture Executive Agency.

Folbre, N. (2006), 'Measuring Care: Gender, Empowerment, and the Care Economy', Journal of Human Development, 7(2) pp. 183–200.

Fraser, N. (1997), Justice Interruptus: Critical Reflections on the 'Postsocialist' Conditio, New York, Routledge.

Friedman, M. (2011), 'A holistic Approach to Gender Equality and Social Justice', OD Practitioner, 43(1), 12.

Green, F. (2006), Demanding Work. The Paradox of Job Quality in the Affluent Economy, Woodstock: Princeton University Press.

Hakim, C. (1996), Key Issues in women's work. Female heterogeneity and the polarisation of women's employment, London: Athlone.

Hooper, L. (2006), 'A look at the health dimension of the GDI', Background Paper, Produced for Revisiting UNDP's genderelated measures, HDRO, New York.

Hutton, W. (1995), The state we're in, London: Jonathan Cape.

Iceland, J. and Bauman, Kurt J. (2007), 'Income poverty and material hardship: how strong is the association?', in The Journal of Socio-Economics, 36(2) pp. 376–396.

Inglehart, R. and Norris, P. (2003), Rising tide : gender equality and cultural change around the world, Cambridge: Cambridge University Press.

Jaumotte, F. (2003), 'Labour Force Participation of Women: empirical evidence on the role of policy and other determinants in OECD countries', OECD Economic Studies, No. 37, pp. 51–108.

Kantola, J. (2000), Gender and the European Union, Basingstoke: Palgrave Macmillan.

Kirby, M. (2000), Sociology in Perspective, Oxford: Heinemann.

Klasen, S. (2006), 'UNDPs Gender Related Measures: Some Conceptual Problems and Possible Solutions', Journal of Human Development. 7(2) pp. 243–274.

Klasen, S., and Lamanna, F. (2009), 'The Impact of Gender Inequality in Education and Employment on Economic Growth: New Evidence for a Panel of Countries', Feminist Economics, 15(3) pp. 91–132.

Lämmermann, S. (2010),'Financial Exclusion and Access to Credit', European Social Watch Report, 2010. Available at: http://ww.socialwatch.eu/wcm/financial_exclusion.html

Leathwood, C. Francis, B. (ed) (2006), 'Gender and Lifelong Learning', Critical feminist engagements, New York: Routledge.

Leschke, J., Watt, A. and, with Finn, M. (2008), Putting a number on job quality? Constructing a European Job Quality Index, Working paper, ETUI-REHS.

Lynch, K. and Feeley M. (2009), Gender and Education (and employment) Gender imperatives and their implications for women and men Lessons from research for policy makers, Nesse Network of Experts, Brussels: European Commission.

Maddock, S. (1999), Challenging Women: Gender, Culture and Organisation, London: Sage Publications:.

Martin, J. (2003), 'Feminist theory and critical theory: unexplored synergies', in Alvesson, M. and Willmott, H. (eds) Studying Management Critically, pp. 66–91. London: Sage.

Martin, P. Y. (2003), 'Gender as a social institution', Social Forces, 82, pp.1249–1274.

McCall, L. (2005), 'The complexity of intersectionality', Signs, 30(3) pp. 1771–1800.

Meier, P., Lombardo, E., Bustelo, M. and Pantelidou Maloutas, M. (2004), 'Women in Political Decision-Making and Gender Mainstreaming: Obvious Partners?', Paper presented at 2nd Pan-European Conference on EU Politics of the ECPR Standing Group on the EU, Bologna, June 24–26.

Miranda, V. (2011), Cooking, caring and volunteering: Unpaid work around the world, OECD Publishing.

Nardo, M. M., Saisana, A., Saltelli, Tarantola, S., Hoffman, A. and E. Giovannini (2008), Handbook on Constructing Composite Indicators: Methodology and User Guide, OECD, European Commission, Joint Research Centre. Available at: http://composite-indicators.jrc.ec.europa.eu/Handbook.htm

Nussbaum, M. (2003), 'Capabilities as fundamental Entitlements: Sen and Social Justice', Feminist Economics 9/2-3, pp.33–59.

O'Toole, L., Schiffman, J. R.; Kiter, E. and Margie L. (2007), 'Preface: conceptualizing gender violence,' in O'Toole, Laura L., Schiffman, J. R.; Kiter, E. and Margie L. (eds) Gender Violence: Interdisciplinary Perspectives, Second Edition, New York: New York University Press.

OECD (2009),'Special Focus: Measuring Leisure in OECD Countries', Society at a Glance, Geneva: OECD.

OECD, Social Institutions and Gender Index (SIGI). Available at: http://genderindex.org/

Ono, H., & Zavodny, M. (2003), Gender and the Internet*, Social Science Quarterly, 84(1) pp.111–121.

Pascall, G., and Lewis, J. (2004), 'Emerging gender regimes and policies for gender equality in a wider Europe', Journal of Social Policy, 33(3)pp.373–394.

Payne, S. (2009), 'How can Gender Equity be addressed through Health Systems?', Health Systems and Policy analysis, Policy Brief 12, Copenhagen: WHO.

Permanyer, I. (2011), 'Are UNDP Indices Appropriate to Capture Inequalities in Europe?' Social Indicator Research, Springer, DOI 10.1007/s11205-011-9975-6.

Phoenix, A. (2009), 'Is there a crisis of masculinity?', Paper presented at Gender Differences in Educational Achievement, Uppsala, Sweden, 17–18 November 2009.

Plantenga, J. C. Fagan, Maier, F. and Remery, C. (2011), Study for the development of the basic structure of a European Union Gender Equality Index. Final report. Commissioned by the European Institute for Gender Equality (EIGE), unpublished.

Plantenga, J., Remery, C., Figueriredo, H. and Smith, M. (2009), 'Towards a European Union Gender Equality Index', Journal of European Social Policy, 19(1), pp. 19–33.

Plantenga, J.U, Figueiredo, C. Remery and M. Smith (2003), 'Towards an EU gender equality index', Feasibility study commissioned by and presented to the European Commission.

Popay, J. and Groves, K. (2000), 'Narrative' in research on gender inequalities in health, in Annandale, E. and Hunt, K. (eds), Gender Inequalities in Health, Berkshire, UK: Open University Press.

Rees, T. (1992), Women and the Labour Market, London: Routledge.

Richardson, D. and Monro, S. (2012), Sexuality, Equality and Diversity, Basingstoke: Palgrave Macmillan.

Robeyns, I. (2003), 'Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities', Feminist Economics, 9 (2) pp. 61–92.

Robeyns, I. (2007), 'When will society be gender just?', In J. Browne, ed., The Future of Gender, Cambridge, UK: Cambridge University Press. pp. 54–76

Rubery, J. (2002),'Gender mainstreaming and gender equality in the EU: the impact of the EU employment strategy', Industrial Relations Journal, 33(5), pp. 500–23.

Saaty, T. L. (1990), 'Eigenvector and logarithmic least squares', European Journal of Operational Research 48 (1990), pp 156–160.

Saisana, M. Saltelli A. (2011), 'Rankings and Ratings: Instructions for Use', Hague Journal on the Rule of Law, 3. pp. 247–268.

Sayer, L. (2005), 'Gender, time and inequality: Trends in women's and men's paid work, unpaid work and free time', Social forces, 84(1) pp. 285–303.

Schüler, D. (2006), 'The Uses and Misuses of the Gender-related Development Index and Gender Empowerment Measure: A Review of the Literature', Journal of Human Development and Capabilities. 7(2) pp. 161–82.

Sen, A. (1980), 'Equality of What?', in: McMurrin, Sterling M. ed. The Tanner Lectures on Human Values. Cambridge, Cambridge University Press. pp. 195–220.

Sen, A. (1993), 'Capability and Well-Being', in: M. Nussbaum and A. Sen, eds., The Quality of Life, New York: Oxford University Press, pp. 30–53.

Social Protection Committee (2004), Open Method of Co-ordination on social inclusion, health care and long-term care as well as pensions ('Social' OMC). Available at: http://ec.europa.eu/social/main.jsp?catId=758&langId=en

Squires, J. (2008), 'Intersecting Inequalities: Reflecting on the Subjects and Objects of Equality', The Political Quarterly, Vol. 79, No. 1, pp. 53–61.

Statistical Commission and Economic Commission for Europe, ECE/CES/BUR/2010/NOV/2/Add.2 (2010) TERMS OF REFERENCE FOR THE TASK FORCE ON TIME USE SURVEYS. Available at: http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/bur/2010/mtg1/2.add.2.e.pdf

Tinklin,T., Croxford, L., Ducklin, A. and Frame, B. (2005), 'Gender and attitudes to work and family roles: the views of young people at the millennium', Gender and Education, 17 (2) May, pp. 129–142.

Tremblay, M. (1998), 'Do Female MPs Substantively Represent Women?', Canadian Journal of Political Science, 31 (3) pp. 435–65.

UDHR (1948), The Universal Declaration of Human Rights. Available at: http://www.ohchr.org/en/udhr/pages/introduction.aspx

UN Office of the High Commissioner for Human Rights (2002), Draft Guidelines: A Human Rights Approach to Poverty Reduction Strategies, 10 September 2002. Available at: http://www.unhcr.org/refworld/docid/3f8298544.html

UNDP (1990), 'Concept and Measurement of Human Development', Human Development Report. Available at: http://hdr.undp.org/en/reports/global/hdr1990/

UNECE (2010), Developing Gender Statistics: A Practical Tool, United Nations: Geneva. Available at: http://www.unece.org/fileadmin/DAM/stats/publications/Developing_Gender_Statistics.pdf

UNECE (2010), 'Measuring Quality of Employment', Country Pilot Reports, Geneva: United Nations.

UNECE (2013), Indicators of Gender Equality in the UNECE Region, Conference of European Statisticians Task Force on Indicators of Gender Equality. Forthcoming

United Nations (1995), Beijing Declaration and Platform for Action. The Fourth World Conference on Women, Beijing from 4 to 15 September 1995. Available at: http://www.un.org/womenwatch/daw/beijing/platform/

United Nations (2000), United Nations Millennium Declaration (A/55/L.2). Available at: http://www.un.org/millennium/declaration/ares552e.htm

United Nations (2005), Resolution adopted by the General Assembly, 60/1, 2005 World Summit Outcome. Available at: http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N05/487/60/PDF/N0548760.pdf?OpenElement

United Nations (2009), Department of Economic and Social Affairs Division for the Advancement of Women, 2009 World Survey on the Role of Women in Development, Women's Control over Economic Resources and Access to Financial Resources, including Microfinance, New York. Available at: http://www.un.org/womenwatch/daw/public/WorldSurvey2009.pdf

United Nations General Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1979). Available at: http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm

Verloo, M. (2005), 'Displacement and Empowerment: Reflections on the Concept and Practice of the Council of Europe Approach to Gender Mainstreaming and Gender Equality', Social Politics: International Studies in Gender, State and Society, 12(3), Fall, pp. 344–365.

Verloo, M. (2006), 'Multiple Inequalities, Intersectionality and the European Union', European Journal of Women's Studies 13(3) pp.211–28.

Verloo, M., and Lombardo, E. (2007), 'Contested gender equality and policy variety in Europe: Introducing a critical frame analysis approach', Multiple Meanings of Gender Equality: a critical frame analysis of gender policies in Europe, Budapest: Central European University Press.

Walby, S. (1990), Theorising Patriarchy, Oxford: Blackwell.

Walby, S. (1997), Gender Transformations, London: Routledge.

Walby, S. (2005), 'Gender Mainstreaming: Productive Tensions in Theory and Practice', Social Politics: International Studies in Gender, State and Society, 12(3) Fall, pp. 321–343.

Walby, S. (2009), 'Beyond the Politics of Location', The Power of argument in gender equality politics, pp. 36–51 in E. Lombardo, P. Meier and M. Verloo (eds), The Discursive Politics of Gender Equality: Stretching, Bending and Policymaking. London: Routledge.

Waldron, I. (2000), 'Trends in gender differences in mortality: relationships to changing differences in behaviour and other causal factors', in Annandale, E. and Hunt, K. (eds), Gender Inequalities in Health, Berkshire: Open University Press.

World Bank, (2003), Gender Equality and the Millennium Development Goals, Gender and Development Group, Washington: World Bank.

World Economic Forum (2012), 'The Global Gender Gap Report 2012'. Available at: http://www.weforum.org/reports/global-gender-gap-report-2012

World Health Organization (2009), 'Health in the European Union Trends and analysis'. Mladovsky,P., Allin,S., Masseria,C., Hernández-Quevedo,C., McDaid,D. and Mossialos, E., Observatory Studies Series No 19, prepared at the request of the European Commission's Directorate-General for Employment, Social Affairs and Equal Opportunities, European Observatory on Health System and Policies.

EIGE

European Institute
for Gender Equality

http://eige.europa.eu